SUMMARY REPORT 60 EAST DOVE LANE (FORMERLY 1254 EAST DOVE LANE) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



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

JUNE 2021

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Prepared by:



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

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



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# List of Acronyms

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
СТО	Contract Task Order
COPC	constituents of potential concern
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 60 East Dove Lane (Formerly 1254 East Dove Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

The LBMH area is located approximately 3.5 miles west of MCAS Beaufort. The area is approximately 970 acres in size and serves as an enlisted and officer family housing area. The area is configured with single family and duplex residential structures, and includes recreation, open space, and community facilities. The community includes approximately 1,300 housing units, including legacy Capehart style homes and newer duplex style homes. The housing area is bordered on the west by salt marshes and the Broad River, and to the north, east and south by uplands. Forested areas lie along the northern and northeastern borders.



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

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

#### 1.2 UST Removal and Assessment Process

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

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

Soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form. In accordance with SCDHEC's *QAPP for the UST Management Division* (SCDHEC, 2016), the soil screening levels consists of SCDHEC risk-based screening levels (RBSLs). It should be noted that the RBSLs for select PAHs were revised in Revision 2.0 of the QAPP (SCDHEC, 2013) and were revised again in Revision 3.0 (SCDHEC, 2015). The screening levels



used for evaluation at each site were those levels that were in effect at the time of reporting and review by SCDHEC.

The results of the soil sampling at each former UST location were used to determine if a potential for groundwater contamination exists (i.e., soil results greater than RBSLs) and subsequently to select properties for follow-up initial groundwater assessment (IGWA) sampling. The results of the IGWA sampling (if necessary) are used to determine the presence or absence of the aforementioned COPCs in groundwater and identify whether former UST locations will require additional delineation of COPCs in groundwater. In order to delineate the extent of impact to groundwater, permanent wells are installed and a sampling program is established for those former UST locations where IGWA sampling has indicated the presence of COPCs in excess of the SCDHEC RBSLs for groundwater. Groundwater analytical results are also compared to the site specific groundwater vapor intrusion screening levels (VISLs) to evaluate the potential for vapor intrusion 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 60 East Dove Lane (Formerly 1254 East Dove Lane). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1254 East Dove Lane* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B.

#### 2.1 UST Removal and Soil Sampling

On March 21, 2013, a single 280 gallon heating oil UST was removed from the front yard under the porch area at 60 East Dove Lane (Formerly 1254 East Dove Lane). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6'1" bgs and a single soil sample was collected from that depth. The sample was collected from the fill port side of the former UST to represent a worst case scenario.

Following UST removal, a soil sample was collected from the base of the excavation and shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in



accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

#### 2.2 Soil Analytical Results

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

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 60 East Dove Lane (Formerly 1254 East Dove Lane) were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment.

#### 3.0 PROPERTY STATUS

Based on the analytical results for soil, SCDHEC made the determination that NFA was required for 60 East Dove Lane (Formerly 1254 East Dove Lane). This NFA determination was obtained in a letter dated July 1, 2015. SCDHEC's NFA letter is provided in Appendix C.

# 4.0 REFERENCES

- Marine Corps Air Station Beaufort, 2013. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1254 East Dove Lane, Laurel Bay Military Housing Area, October 2013.
- 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.

Table



# Table 1Laboratory Analytical Results - Soil60 East Dove Lane (Formerly 1254 East Dove Lane)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Sample Collected 03/21/13				
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)						
Benzene	0.003	ND				
Ethylbenzene	1.15	ND				
Naphthalene	0.036	ND				
Toluene	0.627	ND				
Xylenes, Total	13.01	ND				
Semivolatile Organic Compounds Anal	yzed by EPA Method 8270D (mg/kg)					
Benzo(a)anthracene	0.66	ND				
Benzo(b)fluoranthene	0.66	ND				
Benzo(k)fluoranthene	0.66	ND				
Chrysene	0.66	ND				
Dibenz(a,h)anthracene	0.66	ND				

#### Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligram per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Appendix A Multi-Media Selection Process for LBMH





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

Appendix B UST Assessment Report



Attachment 1

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

Date Received State I	Use Only	Submit Completed Form To: UST Program SCDHEC 2600 Bull Street Columbia, South Carolina 29201		
OCT 2 3 2014 SC DHEC - BURGEN	Cof	Telephone (803) 896-7957		
	manding Officer Attn: N			
MCAS Beaufort, Com	I. OWNERSHIP			
MCAS Beaufort, Com Owner Name (Corporation, P.O. Box 55001	manding Officer Attn: N			
MCAS Beaufort, Com Dwner Name (Corporation,	manding Officer Attn: N			
MCAS Beaufort, Com Dwner Name (Corporation, P.O. Box 55001 Mailing Address Beaufort,	manding Officer Attn: N	REAO (Craig Ehde) 29904-5001		
MCAS Beaufort, Com Dwner Name (Corporation, P.O. Box 55001 Mailing Address	I. OWNERSHIP manding Officer Attn: N. Individual, Public Agency, Other)	REAO (Craig Ehde)		
MCAS Beaufort, Com Dwner Name (Corporation, P.O. Box 55001 Mailing Address Beaufort,	I. OWNERSHIP manding Officer Attn: N. Individual, Public Agency, Other) South Carolina	REAO (Craig Ehde) 29904-5001		

# II. SITE IDENTIFICATION AND LOCATION

Permit I.D. # Laurel Bay Milita Facility Name or Company	ry Housing Area, Marine Corps .	Air Station, Beaufort, SC
	aurel Bay Military Housing Are	ea
<u>Beaufort,</u> City	<u>Beaufort</u> County	
		Attachment ?

Attachment 2

#### **III. INSURANCE INFORMATION**

#### **Insurance Statement**

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

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

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

My policy provider is: \_\_\_\_\_\_ The policy deductible is: \_\_\_\_\_\_ The policy limit is:

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

#### **IV. REQUEST FOR SUPERB FUNDING**

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

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

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

Name (Type or print.)

Signature

### To be completed by Notary Public:

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

(Name)

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

#### **VI. UST INFORMATION**

		1254Dove
A٠	Product(ex. Gas, Kerosene)	Heating oil
B.	Capacity(ex. 1k, 2k)	280 gal
C.	Age	Late 1950s
D.	Construction Material(ex. Steel, FRP)	Steel
E٠	Month/Year of Last Use	Mid 1980s
F.	Depth (ft.) To Base of Tank	6'1"
G.	Spill Prevention Equipment Y/N	мо
Н·	Overfill Prevention Equipment Y/N	No
ŀ	Method of Closure Removed/Filled	Removed
J	Date Tanks Removed/Filled	3/21/2013
K.	Visible Corrosion or Pitting Y/N	Yes
L.	Visible Holes Y/N	Yes

M. Method of disposal for any USTs removed from the ground (attach disposal manifests) UST 1254Dove was removed from the ground and disposed at a Subtitle "D" landfill. See Attachment "A."

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)

UST 1254Dove had been previously filled with sand by others.

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

# VII. PIPING INFORMATION

		1254Dove
		Steel
A.	Construction Material(ex. Steel, FRP)	& Copper
B.	Distance from UST to Dispenser	N/A
C.	Number of Dispensers	N/A
D.	Type of System Pressure or Suction	Suction
E.	Was Piping Removed from the Ground? Y/N	No
F.	Visible Corrosion or Pitting Y/N	Yes
G.	Visible Holes Y/N	No
H.	Age	Late 1950s
I.	If any corrosion, pitting, or holes were observed,	describe the location and extent for each piping run.
	Corrosion and pitting were four	nd on the surface of the steel vent

pipe. The copper supply and return Times were sound.

# **VIII. BRIEF SITE DESCRIPTION AND HISTORY**

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

	Yes	No	Unk
<ul> <li>A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</li> <li>If yes, indicate depth and location on the site map.</li> </ul>		x	
Tryes, 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?		x	
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?		x	
If yes, indicate location and thickness.			

# IX. SITE CONDITIONS

# X. SAMPLE INFORMATION

# A. SCDHEC Lab Certification Number 84009

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1254 Dove	Excav at fill end	Soil	Sandy	6'1"	3/21/13 1500 hrs	P. Shaw	
-			-				-
				-			
1.1.1	-						-
							-
	-	-					-
8							-
9		-					
10				1			
11							
12				-			
13							
14			den en de				
15		1					_
16							
17			-				
18							
19							
20				1			

\* = 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.

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

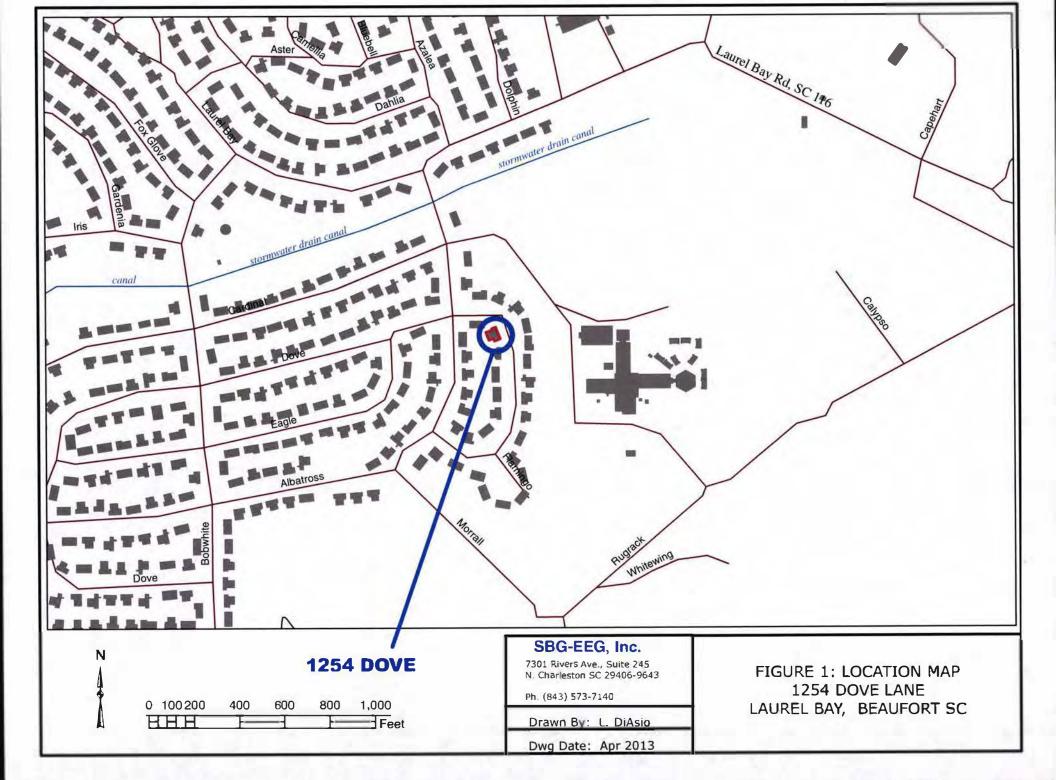
# XII. RECEPTORS

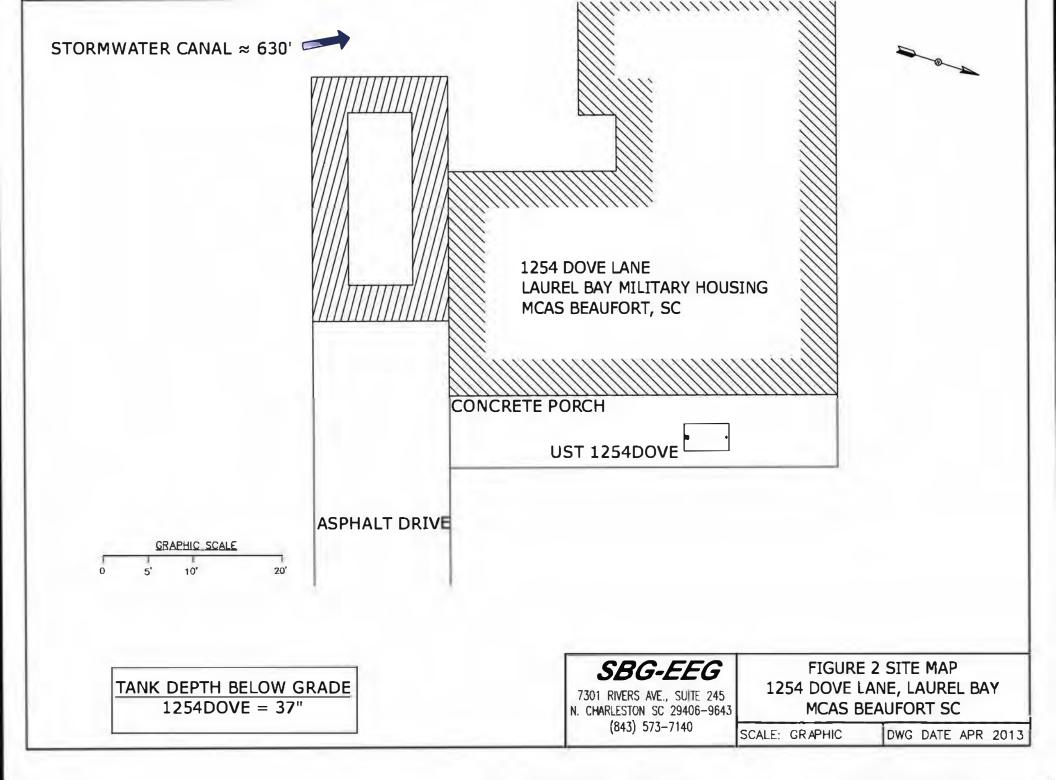
		Yes	No
Α.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *stormwater draina	*X age c	anal
	If yes, indicate type of receptor, distance, and direction on site map.		
₿.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		х
	If yes, indicate type of well, distance, and direction on site map.	1	
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, electrici cable, fiber optic & geo		a1
	If yes, indicate the type of utility, distance, and direction on the site map.		
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.		

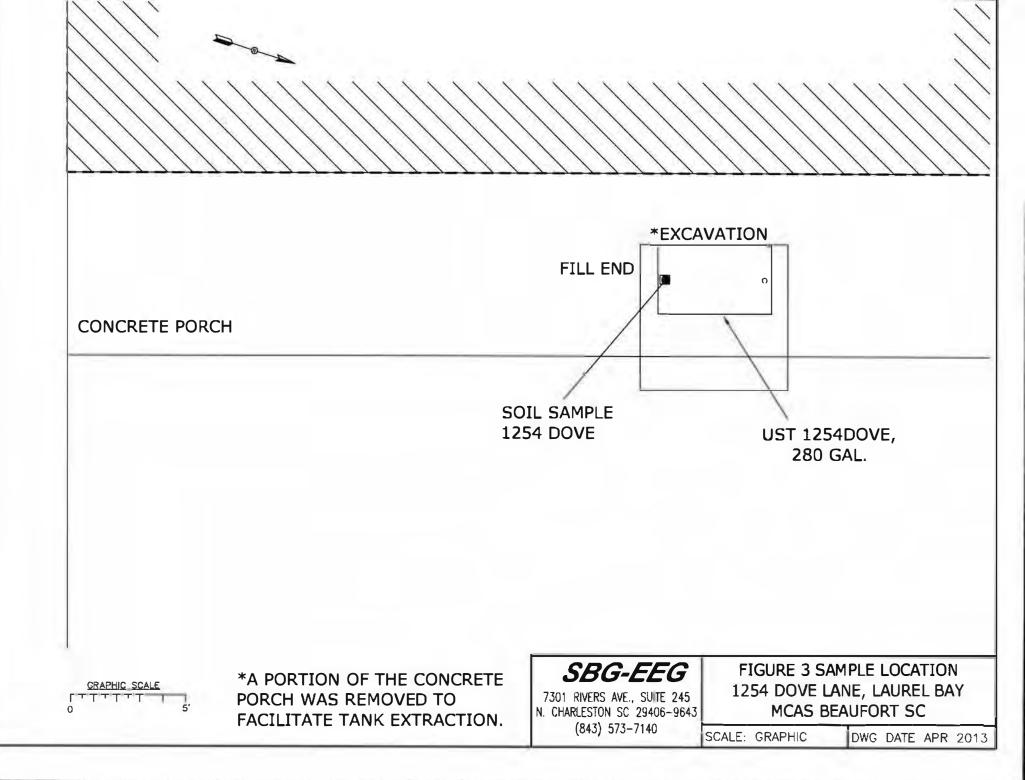
# XIII. SITE MAP

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 1254Dove.



Picture 2: UST 1254Dove 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	1254Dove				
Benzene	ND				
Toluene	ND				
Ethylbenzene	ND				
Xylenes	ND				
Naphthalene	ND				
Benzo (a) anthracene	ND				
Benzo (b) fluoranthene	ND				
Benzo (k) fluoranthene	ND				
Chrysene	ND				
Dibenz (a, h) anthracene	ND		Ť	<b>†</b>	
ТРН (ЕРА 3550)					
CoC				TT	-
Benzene		-	12.1		
Toluene					
Ethylbenzene					
Xylenes					
Naphthalene					
Benzo (a) anthracene					
Benzo (b) fluoranthene					
Benzo (k) fluoranthene					_
Chrysene					
Dibenz (a, h) anthracene		-			
ТРН (ЕРА 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, in dcate 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			100	
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
МТВЕ	40				
Naphthalene	25				
Benzo (a) anthracene	10				
Benzo (b) flouranthene	10			1	
Benzo (k) flouranthene	10				
Chrysene	10				1
Dibenz (a, h) anthracene	10	- 60			
EDB	.05			1	
1,2-DCA	5				
Lead	Site specific		<b>1</b>		

#### XV. ANALYTICAL RESULTS

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

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

# **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

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

TestAmerica Job ID: 490-22932-1 Client Project/Site: Laurel Bay Housing Project

For:

..... LINKS .....

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Have a Question?

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The

www.testamericainc.com

Visit us at:

Expert

Environmental Enterprise Group 10179 Highway 78 Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

Kuth Hay

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

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

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

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

Authorized for release by: 4/10/2013 12:34:58 PM

2

5 6

8

9

10

12 13

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#### **Sample Summary**

Matrix

Sold

Solid

Solid

Selid

Solid

Solid

Sold

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

**Client Sample ID** 

1337 Albatross

902 Barracuda

403 Elderberry

1330 Albatross

779 Laurel Bay

1254 Dove

1233 Dove

Lab Sample ID

490 22932-1

490-229322

490229323

49022932-4

49022932-5

490-22932-6

49022932-7

#### TestAmerica Job ID: 490-22932-1

Collected	Received	3
03/19/13 14:45	03/27/13 08:30	
03/20/13 12:00	03/27/13 08:30	
03/21/13 11:45	03/27/13 08:30	
03/18/13 12:15	03/27/13 08.30	9
03/19/13 15:30	03/27/13 08:30	-
03/20/13 14:30	03/27/13 08:30	•
03/21/13 15:00	03/27/13 08:30	7

5

13

TestAmerica Nashville

4/10/2013

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

#### Job ID: 490-22932-1

#### Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-22932-1

#### Comments

No additional comments.

#### Receipt

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

#### GC/MS VOA

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

No other analytical or quality issues were noted.

GC/MS Semi VOA No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

#### **VOA Prep**

No analytical or quality issues were noted.

TestAmerica Job ID: 49022932-1

#### **Definitions/Glossary**

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

#### TestAmerica Job ID: 490-22932-1

#### Qualifiers

GC/MS VO	A
Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC/MS Sen	ni VOA
Qualifier	Qualifier Description

J Result is less than the RL but greater than or equal to the MI	DL and the concentration is an approximate value.
--	---

#### Glossary

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

#### **Client Sample Results**

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

#### Client Sample ID: 1337 Albatross

Date Collected: 03/19/13 14:45 Date Received: 03/27/13 08:30

Method: 8260B - Volatile Orga			1.1			_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00253	0.000848	mg/Kg	Ø	03/28/13 16:10	04/01/13 21:51	1
Éthylbenzene	ND		000253	0.000848	mg/ikg	32	03/28/13 16:10	04/01/13 21:51	1
Naphthalene	ND		0.00633	0.00215	mg/Kg	12	03/28/13 16:10	04/01/13 21:51	1
Toluene	ND		0.00253	0.000937	mg/Kg	Ø	03/28/13 16-10	04/01/13 21:51	1
Xylenes. Total	ND		0.00633	0.000848	mg/Kg	13	03/28/13 16:10	04/01/13 21:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
1.2-Dichloroethane.d4 (Surr)	102		70.130				03/28/13 16.10	04/01/13 21:51	1
4-Bromofluorobenzene (Surr)	112		70-130				03/28/13 16:10	04/01/13 21:51	7
Dibromofluoromethane (Surr)	95		70-130				03/28/13 16:10	04/01/13 21:51	1
Toluene-d8 (Surr)	109		70. 130				03/28/13 16:10	04/01/13 21:51	1

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

Method: 8260B - Volatile Orga Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	K
Benzene	ND		0.00253	0.000848	mg/Kg	Ø	03/28/13 16:10	04/01/13 21:51	1	
Ethylbenzene	ND		000253	0.000848	mg/ikg	323	03/28/13 16:10	04/01/13 21:51	1	
Naphthalene	ND		0.00633	0.00215	mg/Kg	ζ <u>α</u>	03/28/13 16:10	04/01/13 21:51	1	-
Toluene	ND		0.00253	0.000937	mg/Kg	Ø	03/28/13 16:10	04/01/13 21:51	1	
Xylenes. Total	ND		0.00633	0.000848	mg/Kg	121	03/28/13 16:10	04/01/13 21:51	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac	
1.2-Dichloroethane.d4 (Surr)	102		70.130				03/28/13 16.10	04/01/13 21:51	1	
4-Bromofluorobenzene (Surr)	112		70-130				03/28/13 16:10	04/01/13 21:51	1	
Dibromofluoromethane (Surr)	95		70-130				03/28/13 16:10	04/01/13 21:51	1	
Toluene-d8 (Surr)	109		70. 130				03/28/13 16:10	04/01/13 21:51	1	
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	5)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	-
Acenaphthene	ND		0.0705	0.0105	mg/Kg	ā	03/30/13 08:16	03/30/13 23:36	1	
Acenaphthylene	ND		00705	0.00947	mg/Kg	11	03/30/13 08:16	03/30/13 23:36	1	
Anthracene	ND		0 0705	0.00947	mg/Kg	38	03/30/13 08:16	03/30/13 23:36	1	
Benzo[a]anthracene	0.585		00705	0.0158	mg/Kg	325	03/30/13 08:16	03/30/13 23:36	1	1
Benzo[a]pyrene	0 2 9 2		0.0705	0.0126	mg/Kg		03/30/13 08:16	03/30/13 23.36	5	
Benzo[b]fluoranthene	0.678		00705	0.0126	mg/kg	(H)	03/30/13 08:16	03/30/13 23:36	1	
Benzo[g,h,i]perylene	0 143		0.0705	0.00947	mg/Kg	a	03/30/13 08:16	03/30/13 23:36	1	
Benzo[k]fluoranthene	0.309		00705	0.0147	mg/Kg	Ø	03/30/13 08:16	03/30/13 23:36		
I-Methylnaphthalene	ND		0.0705	0.0147	mg/Kg	- 12	03/30/13 08:16	03/30/13 23:36	1	
Pyrene	0.698		00705	0.0126	mg/Kg	- 11	03/30/13 08 16	03/30/13 23:36	1	
Phenanthrene	0.0429	J	0.0705	0.00947	mg/Kg	***	03/30/13 08:16	03/30/13 23:36	. 1	
Chrysene	0.129		00705	000947	mg/Kg	ŭ	03/30/13 08:16	03/30/13 23:36	1	
Dibenz(a, h)anthracene	0.0531	J	00705	0.00737	mg/Kg	12	03/30/13 08:16	03/30/13 23:36	. 1	
Fluoranthene	0.726		00705	0.00947	mg/Kg	Â	03/30/13 08-16	03/30/13 23:36	1	
Fluorene	ND		00705	0.0126	mg/Kg	-	03/30/13 08:16	03/30/13 23:36	1	
ndeno[1,2,3-cd]pyrene	0.149		00705	0.0105	mg/Kg	Ø	03/30/13 08:16	03/30/13 23:36	. 1	
Naphthalene	ND		0.0705	000947	mg/Kg	Ø	03/30/13 08:16	03/30/13 23:36	1	
2-Methylnaphthalene	ND		00705	0.0168	mg/Kg	ġ.	03/30/13 08:16	03/30/13 23:36	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac	
2-Fluorobiphenyl (Surr)	83		29.120				03/30/13 08:16	03/30/13 23:36	. 1	
Terphenyl.d14 (Surr)	85		13-120				03/30/13 08 16	03/30/13 23.36	1	
Nitrobenzene-d5 (Surr)	74		27.120				03/30/13 08:16	03/30/13 23:36	1	
General Chemistry										
Analyte	Result	Qualifier	RL	RL		D	Prepared	Analyzed	Dil Fac	
Percent Solids	93		0.10	0.10	%			03/29/13 08:10	. 1	

#### Lab Sample ID: 490-22932-1

Matrix: Solid Percent Solids: 93.1

**TestAmerica Nashville** 

# Client Sample ID: 902 Barracuda

Date Collected: 03/20/13 12:00 Date Received: 03/27/13 08:30

Method: 8260B - Volatile Organic Co	mpounds	(GC/MS)						1000	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00223	0.000749	mg/Kg	12	03/28/13 16:10	04/02/13 14:57	1
Ethylbenzene	ND		0.00223	0.000749	mg/Kg	103	03/28/13 16:10	04/02/13 14 57	1
Naphthalene	ND		000559	0 00 190	mg/Kg	Œ	03/28/13 16:10	04/02/13 14:57	1
Toluene	ND		0.00223	0.000827	mg/Kg	ü	03/28/13 16:10	04/02/13 14:57	1
Xyenes, Total	ND		0.00559	0.000749	mg/Kg	<u>a</u>	03/28/13 16:10	04/02/13 14:57	1
Surrogate	%Recovery	Qualifier	Limite				Prepared	Analyzed	DilFac
1.2-Dichloroethane-d4 (Surr)	101		70-130				03/28/13 16:10	04/02/13 14:57	1
4-Biomotluorobenzene (Sum)	107		70.130				03/28/13 16:10	04/02/13 14:57	1
Dibromofluoromethane (Suir)	98		70_130				03/28/13 16:10	04/02/13 14:57	1
Toluened 8 (Sur")	107		70-130				03/28/13 16.10	04/02/13 14:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		00696	0.0104	mg/Kg	ß	03/30/13 08:16	03/31/13 02:39	1
Acenaphthylene	ND		0.0696	0.00935	mg/Kg	ß	03/30/13 08:16	03/31/13 02:39	
Anthracene	ND		0.0696	000935	mg/Kg	0	03/30/13 08:16	03/31/13 02.39	- 8
Benzo(a)anthracene	ND		0.0696	0.0156	mg/Kg	\$2	03/30/13 08:16	03/31/13 02:39	1
Benzo(a)pyrene	ND		00696	0.0125	mg/Kg	Œ	03/30/13 08:16	03/31/13 02:39	1
Benzo[b]lluoranthene	ND		0.0696	0 0 1 2 5	mg/Kg	Ω.	03/30/13 08:16	03/31/13 02:39	5
Benzo[g,h, ]pervene	ND		0.0696	000935	mg/Kg	Ø	03/30/13 08:16	03/31/13 02:39	1
Benzo(k)lluoranthene	ND		0.0696	0.0145	mg/Kg	521	03/30/13 08:16	03/31/13 02:39	1
1-Methylnaphthalene	ND		0.0696	0.0145	mg/Kg	口	03/30/13 08:16	03/31/13 02:39	1
Pyrene	ND		00696	0.0125	mg/Kg	<u>a</u>	03/30/13 08:16	03/31/13 02:39	.1
Phenanthrene	ND		00696	000935	mg/Kg	ü	03/30/13 08:16	03/31/13 02:39	1
Chrysene	ND		0.0696	0.00935	mg/Kg	ß	03/30/13 08:16	03/31/13 02:39	1
Dibenz(a,h)anthracene	ND		00696	000727	mg/Kg	₩	03/30/13 08:16	03/31/13 02:39	1
Fluoranthene	ND		0.0696	0.00935	mg/Kg	a	03/30/13 08:16	03/31/13 02 39	1
Fluorene	ND		0.0696	0.0125	mg/Kg	22	03/30/13 08:16	03/31/13 02:39	1
Indeno[1,2,3-cd]pyrene	ND		00696	0 0 1 0 4	mg/Kg	Œ	03/30/13 08:16	03/31/13 02:39	1
Naphthalene	ND		0.0696	000935	mg/Kg	Œ	03/30/13 08:16	03/31/13 02:39	1
2-Methylnaphthalene	ND		00696	0.0166	mg/Kg	ß	03/30/13 08:16	03/31/13 02:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
2-Fluorobiphenyl (Surr)	85		29.120				03/30/13 08 16	03/31/13 02:39	1
Terphenyld14 (Surr)	81		13 - 120				03/30/13 08:16	03/31/13 02:39	1
Nitrobenzene d5 (Sun")	73		27.120				03/30/13 08-16	03/31/13 02:39	1
General Chemistry					4. 4	_	Deserved	Analyzed	Dil Fac
Analyte		Qualifier	RL		Unit	D	Prepared	03/29/13 08:10	Unrat
Percent Solids	96		0.10	0.10	%			03/29/13 08:10	1

# Lab Sample ID: 490-22932-2

Matrix: Solid Percent Solids: 95.8

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13

TestAmerica Nashville

# **Client Sample ID: 1233 Dove**

Date Collected: 03/21/13 11:45 Date Received: 03/27/13 08:30

Matrix: Solid Percent Solids: 74.2

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Method: 8260B - Volatile Orga	nic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00326	0.00109	mg/kg	ä	03/28/13 16:10	04/02/13 15:24	1
Ethylbenzene	ND		0.00326	0.00109	mg/Kg	ŭ	03/28/13 16:10	04/02/13 15.24	1
Naphthalene	ND		0.00816	0.00277	mg/Kg	2	03/28/13 16:10	04/02/13 15:24	1
Toluene	ND		0.00326	0.00121	mg/Kg	ж	03/28/13 16:10	04/02/13 15-24	1
Xylenes, Total	ND		0.00816	0.00109	mg/Kg	2	03/28/13 16:10	04/02/13 15:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
1,2-Dichloroethane-d4 (Surr)	101		70 _ 130				03/28/13 16:10	04/02/13 15.24	1
4-Biomofluorobenzene (Sum)	105		70- 130				03/28/13 16:10	04/02/13 15:24	1
Dibromofluoromethane (Surr)	97		70- 130				03/28/13 16:10	04/02/13 15.24	1
Toluene-dB (Suir)	107		70-130				03/28/13 16:10	04,102/13 15:24	1

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

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	D#Fac	
1,2-Dichloroethane-d4 (Surr)	101		70 _ 130				03/28/13 16:10	04/02/13 15.24	1	7
4-Biomofluorobenzene (Sun)	105	(	70- 130				03/28/13 16:10	04/02/13 15:24	Ť	F
Dibromofiluoromethane (Surr)	97		70- 130				03/28/13 16:10	04/02/13 15.24	1	
Toluene-d8 (Suir)	107		70-130				03/28/13 16:10	04/102/13 15:24	1	
Method: 8270D - Semivolatile				MDI				4 - stunged	Dil Fac	
Analyte		Qualifier	RL		. Unit	D	Prepared	Analyzed	Dir Fac	
Acenaphthene	ND		0 0 9 0 1		mg/Kg		03/30/13 08:16	03/31/13 03.02		
Acenaphthylene	ND		0.0901	0.0121		ri ri	03/30/13 08:16	03/31/13 03:02		-
Anthracene	ND		0.0901	0 0121	0 0	53 29	03/30/13 08:16	03/31/13 03:02	1	V
Benzo[a]anthracene	ND		0 0 9 0 1			22	03/30/13 08:16	03/31/13 03:02	1	
Benzo[a]pyrene	ND		00901		mg/Kg	12	03/30/13 08:16	03/31/13 03 02		
Benzo[b]fluoranthene	ND		0.0901		mg/Kg	21	03/30/13 08:16	03/31/13 03:02	1	
Benzo[g,h, ]perylene	ND		0.0901		mg/Kg	39	03/30/13 08:16	03/31/13 03:02	1	
Benzo[k]/luoranthene	ND		0.0901		mg/Kg	2	03/30/13 08:16	03/31/13 03:02	1	
1 Methylnaphthalene	ND		0.0901	0.0188	mg/Kg	22	03/30/13 08:16	03/31/13 03:02	1	
Pyrene	ND		0.0901	0 0 1 6 1	mg/Kg	đ	03/30/13 08:16	03/31/13 03:02		
Phenanthrene	ND		0.0901	0.0121	mg/Kg	Ø	03/30/13 08:16	03/31/13 03:02	1	
Chrysene	ND	4	0.0901	0.0121	mg/Kg	ä	03/30/13 08:16	03/31/13 03:02	1	
Dibenz(a,h)anthracene	ND		0.0901	000941	mg/Kg	ŭ	03/30/13 08:16	03/31/13 03.02	1	
Fluoranthene	ND		0.0901	0.0121	mg/Kg	2	03/30/13 08:16	03/31/13 03:02	1	
Fluorene	ND		0.0901	0.0161	mg/Kg	2	03/30/13 08:16	03/31/13 03.02	1	
Indeno[1,2,3-cd]pyrene	ND	1	0.0901	0.0134	mg/Kg	10:	03/30/13 08:16	03/31/13 03:02	1	
Naphthalene	ND	1	0 0 9 0 1	0.0121	mg/Kg	<b>A</b>	03/30/13 08:16	03/31/13 03:02	1	
2 Methy naphthalene	ND		0 0 9 0 1	0.0215	mg/Kg	ŭ	03/30/13 08:16	03/31/13 03 02	1	
Suriogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac	
2-Fluorobiphenyl (Suir)	79	1	29_120				03/30/13 08:16	03/31/13 03.02	1	
Terphenytd14 (Surr)	81		13-120				03/30/13 08:16	03/31/13 03.02	1	
Nitrobenzene d5 (Sun')	73		27 _ 120				03/30/13 08:16	03/31/13 03.02	1	
General Chemistry										
Analyte		Qualifier	RL		. Unit	D	Prepared	Analyzed	Dil Fac	
Percent Solids	74	,	0.10	0.10	%			03/29/13 08:10	1	

# **Client Sample Results**

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

# Client Sample ID: 403 Elderberry

Date Collected: 03/18/13 12:15 Date Received: 03/27/13 08:30

Method: 8260B - Volatile Organi	c Compounds (	GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Anaiyzed	Dil Fac
Benzene	ND		000227	0.000761	mg/Kg		03/28/13 16:10	04/01/13 17:48	1
Ethylbenzene	ND		0.00227	0.000761	mg/Kg	-	03/28/13 16:10	04/01/13 17:48	1
Naphthalene	ND		0.00568	0.00193	mg/Kg	5	03/28/13 16:10	04/01/13 17:48	1
Toluene	ND		000227	0.000841	mg/Kg		03/28/13 16:10	04/01/13 17 48	1
Xylenes. Total	ND		0.00568	0.000761	mg/Kg	÷¢	03/28/13 16:10	04/01/13 17:48	1
Şurrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
1.2-Dichloroethane.d4 (Surr)	101		70_130				03/28/13 16:10	04/01/13 17.48	1
4 Bromofluorobenzene (Surr)	110		70-130				03/28/13 16:10	04/01/13 17.48	1
Dibromofluoromethane (Surr)	96		70-130				03/28/13 16:10	04/01/13 17.48	1
Toluene-d8 (Surr)	108		70-130				03/28/13 1610	04/01/13 17.48	1

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

Ethybenzene         ND         0.00227         0.000761         mg/kg         =         03/28/13         04/0/13           Naphthalene         ND         0.00558         0.00193         mg/kg         =         03/28/13         16:10         04/0/13           Toluene         ND         0.00581         0.00193         mg/kg         =         03/28/13         16:10         04/0/13           Surrogate         %Recovery         Qualifier         Limits         =         03/28/13         16:10         04/0/13           Surrogate         %Recovery         Qualifier         Limits         =         Prepared         Analy           1.2.Dichloroethane.d4 (Surr)         101         70.130         -         03/28/13         16:10         04/07/13           1.2.Dichloroethane.d4 (Surr)         108         70.130         -         03/28/13         16:10         04/07/13           Method: 8270D - Semivolatile Organic Compounds (GC/MS)         Analy         -         03/28/13         16:10         04/07/13           Acenaphthylene         ND         0.0685         0.00920         mg/kg         =         03/30/13         08/16         03/31/13           Benzolgalphtacene         0.220         0.06855         0.	ed Dil Fac	Anaiyzed	Prepared	D	Unit	MDL	Qualifier RL		od: 8260B - Volatile Organic Compounds ( Result	Analyte
Lingbolde         ND         Outstall	17:48 1	04/01/13 17:48	03/28/13 16:10		mg/Kg	0.000761	000227	)	ne ND	Benzene
Non-Induction         ND         000227         0.000841         img/kg         D         03/28/13         16:10         04/01/13           Xylenes. Total         ND         0.00568         0.000761         mg/kg         D         03/28/13         16:10         04/01/13           Surrogate         Y/Recovery         Qualifier         Limits         Prepared         Analy           12.Dichiaroethane.dl (Surr)         101         70.130         03/28/13         16:10         04/01/13           Adromofluorobenzene (Surr)         96         70.130         03/28/13         16:10         04/01/13           Toluene.dl (Surr)         108         70.130         03/28/13         16:10         04/01/13           Method:         8270D - Semivolatile Organic Compounds (GC/MS)           03/28/13         16:10         04/01/13           Acenaphthene         ND         0.0685         0.00920         mg/kg         03/30/13         08:16         03/31/13           Acenaphthene         ND         0.0685         0.00920         mg/kg         03/30/13         08:16         03/31/13           Benzolghptrace         0.200         0.0685         0.0123         mg/kg         03/30/13         08/16         03/31/	17:48	04/01/13 17:48	03/28/13 16:10	-	mg/Kg	0.000761	0.00227	)	enzene ND	Ethylbenzene
Concerne         ND         Colorest         C	17:48 1	04/01/13 17:48	03/28/13 16:10	-25	mg/Kg	0.00193	0.00568	)	halene ND	Naphthalene
Surragate         %Recovery         Qualifier         Limits         Prepared         Analy           12.Dickionethane.d4 (Surr)         101         70.130         0.328/13 16:10         0.470/13           12.Dickionethane.d4 (Surr)         101         70.130         0.328/13 16:10         0.470/13           Ditromolucomethane (Surr)         96         70.130         0.328/13 16:10         0.470/13           Analyte         Result Qualifier         RL         MDL         Unit         D         Prepared         Analy           Acenaphthyle         Result Qualifier         RL         MDL         Unit         D         Prepared         Analy           Acenaphthyle         ND         0.0685         0.0022         mg/kg         0.330/13 08:16         03/31/13           Anatyte         Result Qualifier         RL         MDL         Unit         D         Prepared         Analy           Acenaphthyle         ND         0.0685         0.0022         mg/kg         0.330/13 08:16         03/31/13           Analyte         Result Qualifier         RL         MDL         Unit         D         Prepared         Analy           Acenaphthyle         ND         0.0685         0.0122         mg/kg	17 48 1	04/01/13 17 48	03/28/13 16:10		mg/Kg	0.000841	000227	)	ne ND	Toluene
1.2.Dicklaroethane.d4 (Surr)       101       70.130       03/28/13 16.10       04/07/13         4.Bromofluoromethane (Surr)       110       70.130       03/28/13 16.10       04/07/13         7.duene.d8 (Surr)       108       70.130       03/28/13 16.10       04/07/13         7.duene.d8 (Surr)       108       70.130       03/28/13 16.10       04/07/13         Method: 8270D - Semivolatile Organic Compounds (GC/MS)       Analyte       ND       0.0685       0.0002       mg/kg       03/30/13 08.16       03/31/13         Acenaphthere       ND       0.0685       0.00920       mg/kg       03/30/13 08.16       03/31/13         Acenaphthylene       ND       0.0685       0.00920       mg/kg       03/30/13 08.16       03/31/13         Benzolajantracene       0.200       0.0685       0.0123       mg/kg       03/30/13 08.16       03/31/13         Benzolb/fluoranthene       0.120       0.0685       0.0123       mg/kg       03/30/13 08.16       03/31/13         Benzolb/fluoranthene       0.110       0.0685       0.0123       mg/kg       03/30/13 08.16       03/31/13         Benzolb/fluoranthene       0.110       0.0685       0.0123       mg/kg       03/30/13 08.16       03/31/13         Dyrene </td <td>17:48 1</td> <td>04/01/13 17:48</td> <td>03/28/13 16:10</td> <td>£2</td> <td>mg/Kg</td> <td>0.000761</td> <td>0.00568</td> <td>)</td> <td>es. Total ND</td> <td>Xylenes. Total</td>	17:48 1	04/01/13 17:48	03/28/13 16:10	£2	mg/Kg	0.000761	0.00568	)	es. Total ND	Xylenes. Total
Bromofiluorobenzere (Surr)       110       70.130       03/28/13 16.10       04/01/13         Disromofiluorobenzere (Surr)       96       70.130       03/28/13 16.10       04/01/13         Toluene dB (Surr)       108       70.130       03/28/13 16.10       04/01/13         Method: 8270D - Semivolatile Organic Compounds (GC/MS)       naly       03/32/13 08.16       03/31/13         Nabyte       Result Qualifier       RL       MDL       Unit       D       Prepared       Analy         Accenaphiltene       ND       0.0685       0.00920       mg/kg       03/30/13 08.16       03/31/13         Senzolajanthracene       ND       0.0685       0.0123       mg/kg       03/30/13 08.16       03/31/13         Benzolajanthracene       0.200       0.0685       0.0123       mg/kg       03/30/13 08.16       03/31/13         Benzolajintracene       0.200       0.0685       0.0123       mg/kg       03/30/13 08.16       03/31/13         Benzolajintracene       0.200       0.0685       0.0123       mg/kg       03/30/13 08.16       03/31/13         Benzolajintracene       0.228       0.0685       0.0123       mg/kg       03/30/13 08.16       03/31/13         Benzolajinutracene       ND       0.	ed DilFac	Analyzed	Prepared				Qualifier Limits	, q	gate %Recovery	Surrogate
Dibromofitoromethane (Surr)         96         70.130         03/28/13 16:10         04/01/13           Toluene-d8 (Surr)         108         70.130         03/28/13 16:10         04/01/13           Method: 8270D - Semivolatile Organic Compounds (GC/MS)          03/28/13 16:10         04/01/13           Analyte         Result Qualifier         RL         MDL         Unit         D         Prepared         Analyt           Acenaphthylene         ND         0.0685         0.0102         mg/Kg         03/30/13 08:16         03/31/13           Acenaphthylene         ND         0.0685         0.0102         mg/Kg         03/30/13 08:16         03/31/13           Benzo[a]anthracene         0.200         0.0685         0.0123         mg/Kg         03/30/13 08:16         03/31/13           Benzo[a]pyrene         0.120         0.0685         0.0123         mg/Kg         03/30/13 08:16         03/31/13           Benzo[b/fluoranthene         0.255         0.0685         0.0133         mg/Kg         03/30/13 08:16         03/31/13           Benzo[b/fluoranthene         0.110         0.0685         0.0143         mg/Kg         03/30/13 08:16         03/31/13           Benzo[b/fluoranthene         0.219         0.0685         0.0123 <td>17:48 1</td> <td>04/01/13 17.48</td> <td>03/28/13 16:10</td> <td></td> <td></td> <td></td> <td>70_130</td> <td></td> <td>chloroethane.d4 (Surr) 101</td> <td>1.2.Dichloroethane.d4 (Surr)</td>	17:48 1	04/01/13 17.48	03/28/13 16:10				70_130		chloroethane.d4 (Surr) 101	1.2.Dichloroethane.d4 (Surr)
Toduened (Surr)         108         70.130         03/28/13 1610         04/01/13           Method: 8270D - Semivolatile Organic Compounds (GC/MS) Analyte         Result Qualifier         RL         MDL         Unit         D         Prepared         Analyte           Acenaphthene         ND         0.0665         0.00920         mg/Kg         0.03/30/13 08.16         03/31/13           Acenaphthylene         ND         0.0665         0.00920         mg/Kg         0.3/30/13 08.16         03/31/13           Benzolajanthracene         0.200         0.0665         0.0153         mg/Kg         0.3/30/13 08.16         03/31/13           Benzolajanthracene         0.225         0.0665         0.0123         mg/Kg         0.3/30/13 08.16         03/31/13           Benzolajiprene         0.120         0.0665         0.0123         mg/Kg         0.3/30/13 08.16         03/31/13           Benzolajiprene         0.212         0.0665         0.0123         mg/Kg         0.3/30/13 08.16         03/31/13           Benzolajiprene         0.219         0.0665         0.0143         mg/Kg         0.3/30/13 08.16         03/31/13           Methylnaphthalene         ND         0.0665         0.0020         mg/Kg         0.3/30/13 08.16         03/31/13	17.48 1	04/01/13 17.48	03/28/13 16:10				70.130	)	mofluorobenzene (Surr) 110	Bromofluorobenzene (Surr)
Method: 8270D - Semivolatile Organic Compounds (GC/MS) analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyte           Acenaphilipene         ND         0.6685         0.0092         mg/kg         0.3/30/13.08.16         0.3/31/13           Auhracene         ND         0.6685         0.00920         mg/kg         0.3/30/13.08.16         0.3/31/13           Anhracene         ND         0.6685         0.00920         mg/kg         0.3/30/13.08.16         0.3/31/13           Benzolajantracene         0.200         0.0685         0.0123         mg/kg         0.3/30/13.08.16         0.3/31/13           Benzolajantracene         0.200         0.0685         0.0123         mg/kg         0.3/30/13.08.16         0.3/31/13           Benzolg/hurgenthene         0.120         0.6685         0.0123         mg/kg         0.3/30/13.08.16         0.3/31/13           Benzolg/hurgenthene         0.110         0.0685         0.0143         mg/kg         0.3/30/13.08.16         0.3/31/13           Benzolg/hurgenthalene         ND         0.0685         0.0143         mg/kg         0.3/30/13.08.16         0.3/31/13           Pyrene         0.219         0.6685         0.0123         m	17.48	04/01/13 17.48	03/28/13 16:10				70-130	5	nofluoromethane (Surr) 96	Dibromofluoromethane (Surr)
Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyte           Accenaphthene         ND         0.0685         0.0102         mg/Kg         I         03/30/13 08:16         03/31/13           Accenaphthylene         ND         0.0685         0.00920         mg/Kg         I         03/30/13 08:16         03/31/13           Anthracene         0.200         0.0685         0.00920         mg/Kg         I         03/30/13 08:16         03/31/13           Benzolajanthracene         0.200         0.0685         0.0123         mg/Kg         I         03/30/13 08:16         03/31/13           Benzolghfhoranthene         0.120         0.0685         0.0123         mg/Kg         I         03/30/13 08:16         03/31/13           Benzolghfhoranthene         0.100         0.0685         0.0123         mg/Kg         I         03/30/13 08:16         03/31/13           Benzolghfhoranthene         0.110         0.0685         0.0123         mg/Kg         I         03/30/13 08:16         03/31/13           Pyrene         0.219         0.0685         0.0123         mg/Kg         I         03/30/13 08:16         03/31/13           Pyrene	17.48 1	04/01/13 17.48	03/28/13 1610				70-130	3	ne-d8 (Surr) 108	Toluene-d8 (Surr)
Accenaphithene         ND         00685         0.0102         mg/kg         =         03/30/13         08.16         03/31/13           Accenaphithylene         ND         0.0685         0.00920         mg/kg         =         03/30/13         08.16         03/31/13           Anthracene         ND         0.0685         0.00920         mg/kg         =         03/30/13         08.16         03/31/13           Benzo[a]anthracene         0.200         0.0685         0.0123         mg/kg         =         03/30/13         08.16         03/31/13           Benzo[a]pyrene         0.120         0.0685         0.0123         mg/kg         =         03/30/13         08.16         03/31/13           Benzo[g.h.]perylene         0.0508         J         0.0685         0.0123         mg/kg         =         03/30/13         03/31/13           Benzo[k]fluoranthene         0.110         0.0685         0.0143         mg/kg         =         03/30/13         08.16         03/31/13           Benzo[k]fluoranthene         ND         0.0685         0.0143         mg/kg         =         03/30/13         08.16         03/31/13           Prehenathrene         ND         0.0685         0.00920         mg/kg<							ds (GC/MS)	unc	od: 8270D - Semivolatile Organic Compou	Method: 8270D - Semivola
ND         0.0685         0.0092         mg/kg         0.03/30/13 08:16         0.03/31/13           Senzo[a]anthracene         ND         0.0685         0.00920         mg/kg         0.3/30/13 08:16         03/31/13           Senzo[a]anthracene         0.200         0.0685         0.0123         mg/kg         0.3/30/13 08:16         03/31/13           Senzo[a]anthracene         0.200         0.0685         0.0123         mg/kg         0.3/30/13 08:16         03/31/13           Senzo[a]htperse         0.120         0.0685         0.0123         mg/kg         0.3/30/13 08:16         03/31/13           Senzo[b]fluoranthene         0.255         0.0685         0.0123         mg/kg         03/30/13 08:16         03/31/13           Senzo[k]fluoranthene         0.110         0.0685         0.0143         mg/kg         03/30/13 08:16         03/31/13           Methylnaphthalene         ND         0.0685         0.0143         mg/kg         03/30/13 08:16         03/31/13           Pyrene         0.219         0.0685         0.00920         mg/kg         03/30/13 08:16         03/31/13           Oberz(a.h)anthracene         ND         0.0685         0.00920         mg/kg         03/30/13 08:16         03/31/13	ed Dil Fac	Analyzed	Prepared	D	Unit	MDL	Qualifier RL	t Q	Result	Analyte
Construint/ferte         ND         Construction         Construction <thconstruction< th=""> <thconstruction< th=""></thconstruction<></thconstruction<>	03.25	03/31/13 03-25	03/30/13 08:16	Π	mg/Kg	0.0102	00685	)	nphihene ND	cenaphthene
Number         No         Output         No <th< td=""><td>03:25 1</td><td>03/31/13 03:25</td><td>03/30/13 08:16</td><td>10</td><td>mg/Kg</td><td>0.00920</td><td>0.0685</td><td>)</td><td>ND ND</td><td>cenaphthylene</td></th<>	03:25 1	03/31/13 03:25	03/30/13 08:16	10	mg/Kg	0.00920	0.0685	)	ND ND	cenaphthylene
Detriction         0.120         0.0685         0.0123         mg/Kg         0.03/30/13 08:16         0.03/31/13           Benzo[a]pyrene         0.255         0.0685         0.0123         mg/Kg         0.03/30/13 08:16         0.03/31/13           Benzo[k]fluoranthene         0.255         0.0685         0.0123         mg/Kg         0.03/30/13 08:16         0.03/31/13           Benzo[k]fluoranthene         0.110         0.0685         0.0123         mg/Kg         0.03/30/13 08:16         0.03/31/13           Benzo[k]fluoranthene         0.110         0.0685         0.0123         mg/Kg         0.03/30/13 08:16         0.03/31/13           Benzo[k]fluoranthene         ND         0.0685         0.0123         mg/Kg         0.03/30/13 08:16         0.03/31/13           Pyrene         0.219         0.0685         0.0123         mg/Kg         0.03/30/13 08:16         0.03/31/13           Chrysene         0.228         0.0685         0.00920         mg/Kg         0.03/30/13 08:16         0.03/31/13           Chrysene         0.229         0.0685         0.00920         mg/Kg         0.3/30/13 08:16         03/31/13           Buoranthene         0.229         0.0685         0.0123         mg/Kg         0.3/30/13 08:16         03/31/13	03:25 1	03/31/13 03:25	03/30/13 08:16	Ω	mgi/Kg	0.00920	00685	)	ND ND	Anthracene
Detrocipy Prefer         D. 120         D. 00005         D. 0123         mg/kg         D. 013 0.116         D. 013 1.13           Benzo [b]huoranthene         0.255         0.0665         0.0123         mg/kg         0.3/30/13 08:16         0.3/31/13           Benzo [b]huoranthene         0.110         0.06655         0.0123         mg/kg         0.3/30/13 08:16         0.3/31/13           Benzo [b]huoranthene         0.110         0.06655         0.0123         mg/kg         0.3/30/13 08:16         0.3/31/13           Benzo [b]huoranthene         ND         0.0685         0.0123         mg/kg         0.3/30/13 08:16         0.3/31/13           Methylinaphthalene         ND         0.0685         0.0123         mg/kg         0.3/30/13 08:16         0.3/31/13           Pyrene         0.219         0.0685         0.0123         mg/kg         0.3/30/13 08:16         0.3/31/13           Chrysene         0.228         0.0685         0.00920         mg/kg         0.3/30/13 08:16         0.3/31/13           Dibenz(a.h)anthracene         ND         0.0685         0.0123         mg/kg         0.3/30/13 08:16         0.3/31/13           Buoranthene         0.229         0.0685         0.0102         mg/kg         0.3/30/13 08:16         0.	03:25	03/31/13 03:25	03/30/13 08:16	Σ	mg/Kg	0.0153	0.0685		a)anthracene 0.200	Benzo[a]anthracene
Serzo[g,h,l]perylene         0.0508         J         0.0605         0.0121         mg/rg         Constrained         0.033/13/13	03-25	03/31/13 03.25	03/30/13 08-16		mg/Kg	0.0123	0 0685		o[a]pyrene 0.120	Benzo[a]pyrene
Senzolk)fluoranthene         0.0000         0.0000         0.000000         0.000000         0.000000         0.000000<	03:25 1	03/31/13 03:25	03/30/13 08:16	- 00	mg/Kg	0.0123	0.0685	5	b]fluoranthene 0.255	Benzo(b)fluoranthene
Defection (not an interference)         0.110         0.00000         0.00000         0.0143         mg/kg         0.03/30/13         0.016         0.3/31/13           Pyrene         0.219         0.0685         0.0123         mg/kg         0.03/30/13         0.8:16         0.3/31/13           Phenanthrene         ND         0.0685         0.00920         mg/kg         0.03/30/13         0.8:16         0.3/31/13           Chrysene         0.228         0.0685         0.00920         mg/kg         0.03/30/13         0.8:16         0.3/31/13           Obenz(a.h)anthracene         ND         0.0685         0.00920         mg/kg         0.03/30/13         0.8:16         0.3/31/13           Obenz(a.h)anthracene         ND         0.0685         0.00920         mg/kg         0.3/30/13         0.8:16         0.3/31/13           Huoranthene         0.229         0.0685         0.00920         mg/kg         0.3/30/13         0.8:16         0.3/31/13           Huoranthene         ND         0.0685         0.0102         mg/kg         0.3/30/13         0.8:16         0.3/31/13           Huoranthene         ND         0.0685         0.0102         mg/kg         0.3/30/13         0.8:16         0.3/31/13	03.25	03/31/13 03.25	03/30/13 08:16		mg/Kg	0.00920	00685	J	g,h,l]perylene 0.0508	Benzo{g,h,l]perylene
New ymap in halene         ND         0.0000         0.0112         mg/kg         0.01010         0.0111           Pyrene         0.219         0.0685         0.0123         mg/Kg         0.3/30/13         0.816         0.3/31/13           Phenanthrene         ND         0.0685         0.00920         mg/Kg         0.3/30/13         0.816         0.3/31/13           Chrysene         0.228         0.0685         0.00920         mg/Kg         0.3/30/13         0.816         0.3/31/13           Dibenz(a.h)anthracene         ND         0.0685         0.00920         mg/Kg         0.3/30/13         0.816         0.3/31/13           Bluoranthene         0.229         0.0685         0.00920         mg/Kg         0.3/30/13         0.816         0.3/31/13           Fluoranthene         0.229         0.0685         0.0123         mg/Kg         0.3/30/13         0.816         0.3/31/13           Bluorene         ND         0.0685         0.0102         mg/Kg         0.3/30/13         0.816         0.3/31/13           ND         0.0685         0.0102         mg/Kg         0.3/30/13         0.816         0.3/31/13           Surrogate         ND         0.0685         0.0164         mg/Kg	03:25	03/31/13 03:25	03/30/13 08:16	23	mg/Kg	0.0143	0.0685		[k]fluoranthene 0.110	Benzo[k]fluoranthene
Chrysene         0.219         0.0003         0.0013         mmm         0.0013         mmm         0.00011         0.00111         0.000111         0.000111         0.000111	03:25	03/31/13 03:25	03/30/13 08:16	12	mg/Kg	0.0143	00685	)	nylnaphthalene ND	-Methylnaphthalene
International feature         Indian         Course         Course of the feature         Course of the feature           Chrysene         0.228         0.0685         000920         mg/Kg         0.03/30/13 08:16         03/31/13           Dibenz(a,h)anthracene         ND         0.0685         0.00920         mg/Kg         0.03/30/13 08:16         03/31/13           Fluoranthene         0.229         0.0685         0.00920         mg/Kg         0.03/30/13 08:16         03/31/13           Fluorene         ND         0.0685         0.0123         mg/Kg         0.03/30/13 08:16         03/31/13           Indeno[1,2,3-cd]pyrene         0.0480         J         0.0685         0.012         mg/Kg         0.03/30/13 08:16         03/31/13           ND         0.0685         0.0102         mg/Kg         0.03/30/13 08:16         03/31/13           ND         0.0685         0.0102         mg/Kg         0.03/30/13 08:16         03/31/13           ND         0.0685         0.0164         mg/Kg         0.03/30/13 08:16         03/31/13           Surrogate         %Recovery         Qualifier         Limits           Prepared         Analy           2-Fluorobiphenyl (Surr)         84         13.120	03:25 1	03/31/13 03:25	03/30/13 08:16	Ω	mg/Kg	0.0123	00685		e 0.219	Pyrene
Nityselle         0.120         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.0000         0.00000         mg/Kg         0.03/30/13.08:16         0.03/31/13         0.03/31/13.08:16         0.03/31/13         <	03:25	03/31/13 03:25	03/30/13 08:16	325	mg/Kg	000920	0.0685	)	nthrene ND	henanthrene
Non-tellinguningenite         ND         0.0000         0.0000         mg/rsg         consolid of the optimized optimized of the optimized optim	03:25	03/31/13 03:25	03/30/13 08:16		mg/Kg	000920	0.0685	3	ene 0.228	Chrysene
ND         0.0685         0.0123         mg/kg         coron of coron         coron of coron           iluorene         ND         0.0685         0.0123         mg/kg         =         03/30/13         08:16         03/31/13           indeno[1,2,3-cd]pyrene         0.0480         J         0.0685         0.0102         mg/kg         =         03/30/13         08:16         03/31/13           Naphthalene         ND         0.0685         0.00920         mg/kg         =         03/30/13         08:16         03/31/13           R-Methylnaphthalene         ND         0.0685         0.0164         mg/Kg         =         03/30/13         08:16         03/31/13           Surrogate         %Recovery         Qualifier         Limits          Prepared         Analy           P-Fluorobiphenyl (Surr)         78         29-120         03/30/13         08:16         03/31/13           fibrobenzene-d5 (Suri)         71         27-120         03/30/13         08:16         03/31/13	03:25	03/31/13 03:25	03/30/13 08:16	1	mg/Kg	0.00716	0.0685	)	z(a,h)anthracene ND	Dibenz(a,h)anthracene
ND         0.0685         0.0102         mg/Kg         0.03/30/13         0.03/31/13           Naphthalene         ND         0.0685         0.00920         mg/Kg         0.03/30/13         0.03/31/13           R-Methylnaphthalene         ND         0.0685         0.0164         mg/Kg         0.03/30/13         0.8:16         03/31/13           R-Methylnaphthalene         ND         0.0685         0.0164         mg/Kg         0.03/30/13         0.8:16         03/31/13           Surrogate         %Recovery         Qualifier         Limits         Prepared         Analy           R-Fluorobiphenyl (Surr)         78         29.120         03/30/13         08:16         03/31/13           ferphenyl-d14 (Surr)         84         13.120         03/30/13         08:16         03/31/13           fibrobenzene-d5 (Surr)         71         27.120         03/30/13         08:16         03/31/13	03:25 1	03/31/13 03:25	03/30/13 08-16	21	mg/Kg	0.00920	0.0685		anthene 0.229	luoranthene
ND         0.0660         5         0.0600         5         0.0600         0.0730/13 0.8:16         0.03/31/13           Surrogate         %Recovery         Qualifier         Limits         Prepared         Analy           Surrogate         %Recovery         Qualifier         Limits         0.03/30/13 0.8:16         0.3/31/13           Felloworbiphenyl (Surr)         78         29.120         0.3/30/13 0.8:16         0.3/31/13           Vitrobenzene-d5 (Surr)         71         27.120         0.3/30/13 0.8:16         0.3/31/13	03:25	03/31/13 03:25	03/30/13 08:16	$\equiv$	mg/Kg	0.0123	0.0685	)	ne ND	luorene
ND         0.0685         0.00920         mg/Kg         Image: Maphthalene         0.3/30/13         0.8:16         0.3/31/13         0.3/31/1	03:25	03/31/13 03:25	03/30/13 08:16	R	mg/Kg	00102	0.0685	J	o[1,2,3-cd]pyrene 0.0480	ndeno[1.2.3-cd]pyrene
No         Excess         Globble         Globle         Globble         Globb	03:25 1	03/31/13 03:25	03/30/13 08:16	E	mg/Kg	000920	00685	)		
Z-Fluorobiphenyl (Surr)         78         29-120         03/30/13 08.16         03/31/13           Terphenyl-d14 (Surr)         84         13-120         03/30/13 08.16         03/31/13           Vitrobenzene-d5 (Sunt)         71         27-120         03/30/13 08.16         03/31/13	03:25	03/31/13 03:25	03/30/13 08:16	121	mg/Kg	0.0164	0.0685	)	hylnaphthalene ND	2-Methylnaphthalene
Ferphenyl-d14 (Surr)         84         13_120         03/30/13 08.16         03/31/13           hitrobenzene-d5 (Surr)         71         27_120         03/30/13 08.16         03/31/13	zed Dil Fac	Analyzed	Prepared				Qualifier Limits	4	gate %Recovery	Surrogate
litrobenzene-d5 (Sun) 71 27.120 03/30/13 08.16 03/31/13	03.25 1	03/31/13 03.25	03/30/13 08.16				29-120	3	probiphenyl (Surr) 78	P-Fluorobiphenyl (Surr)
	03:25	03/31/13 03:25	03/30/13 08.16				13_120	1	en)4.d14 (Surr) 84	Terphenyl-d14 (Surr)
General Chemistry	03:25	03/31/13 03:25	0 <b>3/30/1</b> 3 08.16				27.120	1	enzene-d5 (Sun) 71	Nitrobenzene-d5 (Sun')
										General Chemistry
		Analyzed 03/29/13 08:10	Prepared	D				t Q	Result	Analyte

# Lab Sample 1D: 490-22932-4

Matrix: Solid Percent Solids: 97.1

Lab Sample ID: 490-22932-5

Matrix: Solid

6

3

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

# Client Sample ID: 1330 Albatross

Date Collected: 03/19/13 15:30 Date

Date Received: 03/27/13 08:30								Percent Soli	ds: 95.9
Method: 8260B - Volatile Orga	nic Compounds (	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	<b>Dil Fac</b>
Benzene	ND		0.00230	0.000770	mg/Kg	ŭ	03/28/13 16:10	04/02/13 14:30	1
Ethylbenzene	0.00191	J	0.00230	0.000770	mg/Kg	ũ	03/28/13 16:10	04/02/13 14:30	1
Naphthalene	0.0321		0.00575	0.00195	mg/Kg	ж.	03/28/13 16:10	04/02/13 14:30	1
Toluene	ND		0.00230	0000850	mg/Kg	ü	03/28/13 16:10	04/02/13 14:30	1
Xylenes, Total	0.00874		000575	0.000770	mg/Kg	ŭ	03/28/13 16:10	04/02/13 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
1.2-Dichloroethane-d4 (Surr)	103		70_ 130				03/28/13 16.10	04/02/13 14.30	1
4-Bromofluorobenzene (Suir)	110		70_130				03/28/13 16:10	04/02/13 14:30	1
Dibiomofluoromethane (Surr)	100		70. 130				03/28/13 16.10	04/02/13 14:30	1
Toluened 8 (Sun)	107		70-130				03/28/13 16:10	04/02/13 14:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0178	3	00693	0.0103	mg/Kg	i i i i i i i i i i i i i i i i i i i	03/30/13 08:16	03/31/13 17:33	1
Acenaphthylene	ND		0.0693	000931	mg/Kg	τά.	03/30/13 08:16	03/31/13 17:33	1
Anthracene	ND		00693	000931	mg/Kg	a	03/30/13 08:16	03/31/13 17:33	1
Benzo[a]anthracene	0.0671	J	00693	0 0 1 5 5	mg/Kg	32	03/30/13 08:16	03/31/13 17:33	1
Benze[a]pyrene	ND		0.0693	0 0124	mg/Kg	Ø	03/30/13 08:16	03/31/13 17:33	1
Benzo[b]fluoranthene	0.0549	J	0.0693	0.0124	mg/Kg	12	03/30/13 08:16	03/31/13 17:33	1
Benzo[g,h.]perylene	ND		0.0693	0.00931	mg/Kg	-63	03/30/13 08:16	03/31/13 17:33	1
Benzo[k]fluoranthene	0.0260	J	0.0693	0.0145	mg/Kg	n	03/30/13 08:16	03/31/13 17 33	1
1-Methylnaphthalene	0.221		0.0693	00145	mg/Kg	ಭ	03/30/13 08:16	03/31/13 17:33	1
Pyrene	0.117		0.0693	0.0124	mg/Kg	ŭ	03/30/13 08:16	03/31/13 17:33	
Phenanthrene	0.117		00693	0.00931	mg/Kg		03/30/13 08:16	03/31/13 17:33	
Chrysene	0.0733		0.0693	0.00931	mg/Kg	<b>*</b>	03/30/13 08:16	03/31/13 17:33	1
Dibenz(a,h)anIhracene	ND		00693	000724	mg/Kg	ж	03/30/13 08:16	03/31/13 17:33	1
Fluoranthene	0.162		00693	000931	mg/Kg	±	03/30/13 08:16	03/31/13 17:33	.1
Fluorene	00422	J	00693	0.0124	mg/Kg	306	03/30/13 08:16	03/31/13 17:33	1
Indeno[1,2,3 cd]pyrene	ND		0.0693	0 0 1 0 3	mg/Kg	12	03/30/13 08:16	03/31/13 17:33	1
Naphthalene	0.0377	J	0.0693	0.00931	mg/Kg	1	03/30/13 08:16	03/31/13 17:33	1
2-MethyInaphthalene	0.323		0.0693	0.0165	mg/Kg	Ω.	03/30/13 08:16	03/31/13 17:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
2-Fluorobiphenyl (Surr)	77		29_120				03/30/13 08:16	03/31/13 17:33	1
Terphenyld14 (Suir)	81		13_120				03/30/13 08:16	03/31/13 17:33	1
Nitrobenzene-d5 (Surr)	71		27 - 120				03/30/13 08:16	03/31/13 17:33	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10	0 10	%			03/29/13 08:10	1

# Client Sample ID: 779 Laurel Bay

Date Collected: 03/20/13 14:30 Date Received: 03/27/13 08:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0 0 0 2 4 1	0.000809	mg/Kg	₽	03/28/13 16:10	04/02/13 15.51	1
Ethylbenzene	ND		000241	0.000809	mg/Kg	INE	03/28/13 16:10	04/02/13 15:51	1
Naphthalene	ND		0.00604	000205	mg/Kg	¤	03/28/13 16:10	04/02/13 15:51	1
Toluene	ND		000241	0.000893	mg/Kg	¤	03/28/13 16:10	04/02/13 15:51	1
Xylenes, Total	ND		000604	0.000809	mg/Kg	ili:	03/28/13 16:10	04/02/13 15:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
1.2-Dichloroethane-d4 (Surr)	101		70.130				03/28/13 16:10	04/02/13 15:51	- 1
4-Bromofluorobenzene (Surr)	107		70 - 130				03/28/13 16:10	04/02/13 15:51	1
Dibromofluoromethane (Surr)	96		70-130				03/28/13 16:10	04/02/13 15:51	1
Toluened& (Surr)	106		70.130				03/28/13 16:10	04/02/13 15:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0723	0.0108	mg/Kg	Ø	03/30/13 08:16	03/31/13 17:55	1
Acenaphthylene	ND		00723	0.00971	mg/Kg	12	03/30/13 08:16	03/31/13 17:55	1
Anthracene	ND		0.0723	000971	mg/Kg	12	03/30/13 08:16	03/31/13 17:55	1
Benzo[a]anthracene	ND		00723	0.0162	mg/Kg	Þ	03/30/13 08:16	03/31/13 17:55	
Benzo[a]pyrene	ND		00723	0.0129	mg/Kg	¤	03/30/13 08:16	03/31/1317:55	1
Benzo[b]iluoranthene	ND		0.0723	0.0129	mg/Kg		03/30/13 08:16	03/31/13 17:55	1
Benzo(g,h.i)perylene	ND		0.0723	0.00971	mg/Kg	¤	03/30/13 08:16	03/31/13 17:55	1
Benzo[k]fluoranthene	ND		0.0723	0.0151	mg/Kg	90	03/30/13 08:16	03/31/1317:55	1
1-Methy naphthalene	ND		00723	0.0151	mg/Kg	¤	03/30/13 08:16	03/31/13 17:55	1
Pyrene	ND		0.0723	0.0129	mg/Kg	90	03/30/13 08:16	03/31/13 17:55	1
Phenanthrene	ND		0.0723	000971	mg/Kg	a	03/30/13 08:16	03/31/1317:55	1
Chiysene	ND		00723	0.00971	mg/Kg	*	03/30/13 08:16	03/31/13 17:55	1
Dibenz(a,h)an thracene	ND		0.0723	000755	mg/Kg	Ľ	03/30/13 08:16	03/31/13 17:55	1
Fluoranthene	ND		00723	0.00971	mg/Kg	INE	03/30/13 08:16	03/31/13 17:55	
Fuorene	ND		0.0723	0.0129	mg/Kg	拉	03/30/13 08:16	03/31/13 17:55	1
Indeno[1,2,3cd]pyrene	ND		00723	0 0108	mg/Kg	II	03/30/13 08:16	03/31/13 17:55	1
Naphthalene	ND		00723	0.00971	mg/Kg	Ø	03/30/13 08:16	03/31/13 17:55	1
2 Methylnaphthalene	ND		0.0723	0 0173	mg/Kg	Ø	03/30/13 08:16	03/31/13 17:55	3
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
2-Fluoiobiphenyt (Surr)	64		29-120				03/30/13 08:16	03/31/13 17:55	1
Terphenyl-d14 (Surr)	65		13 - 120				03/30/13 08:16	03/31/13 17:55	1
Nitrobenzened5 (Surr)	56		27 _ 120				03/30/13 08:16	03/31/13 17:55	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10	0.10	%			03/29/13 08:10	1

# Lab Sample ID: 490-22932-6

Matrix: Solid Percent Solids: 92.0

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TestAmerica Nashville

# Client Sample ID: 1254 Dove

Date Collected: 03/21/13 15:00 Date Received: 03/27/13 08:30

Matrix: Solid Percent Solids: 96.0

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00227	0.000759	mg/Kg	12	03/28/13 16:10	04/02/13 16:18	1
Ethylbenzene	ND		0.00227	0.000759	mg/Kg	₩	03/28/13 16:10	04/02/13 16:18	1
Naphthaiene	ND		0 00567	0.00193	mg/Kg	**	03/28/13 16:10	04/02/13 16:18	1
Toluene	ND		0.00227	0.000839	mg/Kg	¢,	03/28/13 16:10	04/02/13 16:18	- (t
Xylenes, Total	ND		0.00567	0.000759	mg/Kg	ä	03/28/13 16:10	04/02/13 16:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
1.2-Dichloroethane.d4 (Surr)	102		70 - 130				03/28/13 16:10	04/02/13 16:18	1
4-Bromofluorobenzene (Surr)	109		70-130				03/28/13 16:10	04/02/13 16:18	5
Dibromofluoromethane (Surr)	98		70-130				03/28/13 16 10	04/02/13 16:18	1
Toluene-d8 (Surr)	107		70-130				03'28/13 16:10	04/02/13 16:18	.*

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

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac	
1.2-Dichloroethane-d4 (Surr)	102		70_ 130				03/28/13 16:10	04/02/13 16.18	1	
4-Bromofluorobenzene (Surr)	109		70-130				03'28/13 16:10	04/02/13 16:18	8	2
Dibromofluoromethane (Surr)	98		70_130				03/28/13 16 10	04/02/13 16:18	1	
Toluene-d8 (Surr)	107		70- 130				03'28/13 16:10	04/02/13 16:18	.1	
Method: 8270D - Semivolatile	-									
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac	100
Acenaphthene	ND		0.0677		0 0	¥	03/30/13 08:16	03/31/13 18:18	1	12
Acenaphthylene	ND		00677	0.00910		ä	03/30/13 08:16	03/31/13 18:18	1	and the second
Anthracene	ND		0.0677	0.00910		Ħ	03/30/13 08:16	03/31/13 18:18	3	13
Benzo[a]anthracene	ND		00677	0 0 1 5 2	mg/Kg	102	03/30/13 08:16	03/31/13 18:18	1	
Benzo[a]pyrene	ND		00677	0.0121	5 5	m	03/30/13 08:16	03/31/13 18:18	1	
Benzo[b]Ilueranthene	ND		00677	0 0121	mg/Kg	12	03/30/13 08:16	03/31/13 18:18	1	
Benzo[g,h,ijperylene	ND		0.0677	0.00910	mg/Kg	X	03/30/13 08:16	03/31/13 18:18		
Benzo[k]Iluoranthene	ND		0.0677	0 0 1 4 2	mg/Kg	17	03/30/13 08:16	03/31/13 18:18	4	
1 Methylnaphthalene	ND		0.0677	0.0142	mg/Kg	ä	03/30/13 08:16	03/31/13 18:18	1	
Pyrene	ND		0.0677	0 0121	mg/Kg	Ľ	03/30/13 08:16	03/31/13 18:18	1	
Phenanthrene	ND		00677	0 0 0 9 1 0	mg/Kg	12	03/30/13 08:16	03/31/13 18:18	1	
Chrysene	ND		0.0677	0.00910	mg/Kg		03/30/13 08:16	03/31/13 18:18	1	
Dibenz(a,h)anthracene	ND		00677	000708	mg/Kg	12	03/30/13 08:16	03/31/13 18:18	1	
Fluoranthene	ND		0.0677	0.00910	mg/Kg	2	03/30/13 08:16	03/31/13 18:18	1	
Fluorene	ND		00677	0 0121	mg/Kg	12	03/30/13 08:16	03/31/13 18:18		
Indeno[1.2.3-cd]pyrene	ND		00677	0 0101	mg/Kg	Ø	03/30/13 08:16	03/31/13 18:18	1	
Naphthalene	ND		00677	0 0 0 9 1 0	mg/Kg	n	03/30/13 08:16	03/31/13 18:18	1	
2 Methylnaphthalene	ND		0.0677	0.0162	mg/Kg	n	03/30/13 08:16	03/31/13 18:18	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	D#Fac	
2 Fluorobiphenyl (Surr)	79		29-120				03//30/13 08:16	03/31/13 18.18	1	
Terphenyl d14 (Surr)	82		13 - 120				03/301/13 08 16	03/31/13 18.18	1	
Nitrobenzene-d5 (Surr)	69		27 - 120				03/30/13 08.16	03/31/13 18.18	1	
General Chemistry										
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac	
Percent Solids	96		0.10	0.10	%			03/29/13 08:10	1	

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

Lab Sample ID: MB 490-69194/7
Matrix: Solid
Analysis Batch: 69194

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			04/01/13 15 05	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			04/01/13 15:05	t
Naphthalene	ND		000500	0.00170	mg/Kg			04/01/13 15:05	1
Toluene	ND		0.00200	0000740	mg/Kg			04/01/13 15:05	1
Xylenes, Total	ND		000500	0.000670	mg/Kg			04/01/13 15:05	1
	мв	мв							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
1.2 Dichloroethane d4 (Surr)	103		70.130					04/01/13 15:05	1
4-Bromofluorobenzene (Surr)	106		70-130					04/01/13 15:05	*
Dibromofluoromethane (Surr)	99		70_ 130					04/01/13 15:05	1
Toluene d8 (Surr)	107		70-130					04/01/13 15:05	1

### Lab Sample ID: LCS 490-69194/3 Matrix: Solid Analysis Batch: 69194

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0 05191		mg/Kg		104	75.127	
Ethylbenzene	0.0500	005272		mg/Kg		105	80-134	
Naphtha ene	0.0500	0.05468		mg/Kg		109	69-150	
Toluene	0.0500	005512		mg/Kg		110	80-132	
Xylenes, Total	0.150	0.1574		mg/Kg		105	80-137	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2 Dichloroethane d4 (Surr)	99		70-130
4-Bromofluorobenzene (Surr)	107		70.130
Dibromofluoromethane (Surr)	97		70-130
Toluened 8 (Surr)	108		70-130

### Lab Sample ID: LCSD 490-69194/4 Matrix: Solid

### Analysis Batch: 69194

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Resuit	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	005272		mg/Kg		105	75-127	2	50
Ethylbenzene	00500	005284		mg/Kg		106	80-134	0	50
Naphthalene	00500	0.05485		mg/Kg		110	69.150	0	50
Toluene	0.0500	0.05476		mg/Kg		110	80-132	1	50
Xylenes. Total	0 150	0.1592		mg/Kg		106	80-137	1	50

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1.2-Dichloroethane d4 (Suir)	103		70-130
4 Bromofluorobenzene (Surr)	108		70.130
Dibromofluoromethane (Suir)	98		70_ 130
Toluene d 8 (Surr)	107		70-130

# TestAmerica Nashville

Client Sample ID: Method Blank

Prep Type: Total/NA

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3

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

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

TestAmer ca Job ID: 490 22932-1

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

Lab Sample ID: MB 490-69466/7							Client Sa	ample ID: Metho	d Blank
Matrix: Solid								Prep Type: T	otal/NA
Analysis Batch: 69466									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		000200	0.000670	mg/Kg			04/02/13 12:42	1
Ethylbenzene	ND		0.00200	0000670	mg/Kg			04/02/13 12:42	1
Naphthalene	ND		000500	0.00170	mg/Kg			04/02/13 12:42	1
Teluene	ND		000200	0.000740	mg/Kg			04/02/13 12:42	1
Xylenes, Total	ND		0.00500	0000670	mg/Kg			04/02/13 12:42	.1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1.2-Dichloroethane-d4 (Surr)	103		70-130					04/02/13 12:42	1
4-Bromofluorobenzene (Surr)	109		70_130					04/02/13 12:42	
Dibiomofluoromethane (Surr)	96		70-130					04/02/13 12:42	7
Toluened8 (Surr)	107		70_130					04/02/13 12:42	Ŧ

# Lab Sample ID: LCS 490-69466/3 Matrix: Solid

### Analysis Batch: 69466

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.05031		mg/Kg		101	75-127	
Ethylbenzene	0.0500	0 0 5 0 6 7		mg/Kg		101	80 - 134	
Naphthalene	00500	0 05598		mg/Kg		112	69-150	
Toluene	00500	005235		mg/Kg		105	80-132	
Xylenes, Total	0.150	0.1535		mg/Kg		102	80-137	

	LCS LCS	
Surrogate	%Recovery Quali	fier Limits
1.2-Dichloroethane-d4 (Surr)	101	70-130
4-Bromefluorobenzene (Surr)	109	70-130
Dibromofluoromethane (Surr)	98	70-130
Toluened8 (Surr)	107	70_130

### Lab Sample ID: LCSD 490-69466/4 Matrix: Solid

### Analysis Batch: 69466

	S	Dike LCSD	LCSD				%Rec.		RPD
Analyte	Ad	ded Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0	500 0.04884		mg/Kg		98	75.127	3	50
Ethylbenzene	0.0	500 0.04800		mg/Kg		96	80-134	5	50
Naphthalene	0.0	500 0.05643		mg/Kg		113	69-150		50
Teluene	0.0	500 0.04997		mg/Kg		100	80-132	5	50
Xylenes. Total	0	150 0.1457		mg/Kg		97	80_137	5	50
LCSD	LCSD								
Surrogate %Recovery	Qualifier Lim	its							

Surroyate	/artecovery	Quanner	Linits
1.2 Dichloroethane-d4 (Surr)	101		70-130
4-Bromoliuorobenzene (Surr)	110		70-130
Dibromofluoromethane (Surr)	99		70- 130
Toluene-d8 (Surr)	107		70- 130

# TestAmerica Nashville

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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

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

Lab Sample ID: MB 490-68984/1-	A						Client Sa	mple ID: Metho	
Matrix: Solid								Prep Type: T	otal/NA
Analysis Batch: 69035								Prep Batch	1: 68984
	MB	MB							1.0
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Acenaphthylene	ND		00670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Anthracene	ND		00670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Benzola)pyrene	ND		00670	0 0120	mg/Kg		03/30/13 08:16	03/30/1323:13	- B
Benzo[b]lluoranthene	ND		0.0670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
1 Methylnaphthalene	ND		0.0670	0 0140	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Pyrene	ND		0.0670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Phenanthrene	ND		00670	000900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Chiysene	ND		00670	000900	mg/Kg		03/30/13 08:16	03/30/13 23:13	- t
Dibenz(a,h)anthracene	ND		00670	0.00700	mg/Kg		03/30/13 08:16	03/30/13 23:13	- t
Fluoranthene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Fluorene	ND		00670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Indeno[1.2,3-cd]pyrene	ND		00670	0 0 1 0 0	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	
2 Methylnaphthalene	ND		0.0670	0 0160	mg/Kg		03/30/13 08:16	03/30/13 23:13	1
	мв	MB							e
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	DilFac
2 Fluorobiphenyl (Surr)	89		29_120				03/30/13 08:16	03/30/13 23.13	1
Teiphenyld14 (Surr)	92		13-120				03/30/13 08:16	03/30/13 23:13	1
Nitroberzened 5 (Surr)	82		27 - 120				03/30/13 08 16	03/30/13 23:13	1

### Nitrobenzened5 (Surr)

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

# Matrix: Solid

2-Methylnaphthalene

### An

Matrix: Solid							Dese Detal + COOR
Analysis Batch: 69035	Spike	ICS	LCS				Prep Batch: 68984 %Rec.
	Added	Result		Unit	Ð	%Rec	Limits
Analyte	1.67	1.560		mg/Kg		94	38-120
Acenaphthylene						90	46-124
Anthracene	1.67	1.494		mg/Kg			
Benzo[a]anthracene	1.67	1 504		mg/Kg		90	45-120
Benzo[a]pyrene	1.67	1.467		mg/Kg		88	45.120
Benzo b]iluoranthene	1.67	1.505		mg/Kg		90	42 - 120
Benzo[g.h.]pery ene	1 67	1.655		mg/Kg		99	38.120
Benzo[k]fluoranthene	1.67	1.450		mg/Kg		87	42-120
1 Methylnaphthalene	1.67	1.469		mg/Kg		88	32-120
Pyrene	1.67	1 451		mg/Kg		87	43-120
Phenanthrene	167	1.556		mg/Kg		93	45 - 120
Chrysene	1.67	1.517		mg/Kg		91	43.120
Dibenz(a,h)anthracene	1.67	1.632		mg/Kg		98	32 - 128
Fluoranthene	167	1.505		mg/Kg		90	46.120
Fluorene	1.67	1.490		mg/Kg		89	42.120
Indeno[1,2,3:cd]pyrene	1.67	1.613		mg/Kg		97	41.121
Naphthalene	1 67	1.537		mg/Kg		92	32 - 120
2-Methylnaphthalene	1.67	1.510		mg/Kg		91	28-120

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

4 5

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TestAmerica Nashville

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

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyi (Surr)	76		29.120
Terphenyl-d14 (Surr)	93		13_120
Nitrobenzene-d5 (Suir)	65		27-120

### Lab Sample ID: 490-22932-1 MS Matrix: Solid

Analysis Batch: 69035									Prep Batch: 68984
	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	ND		1.79	1.511		mg/Kg	Ø	84	25-120
Anthracene	ND		1.79	1.474		mg/Kg	ŭ	82	28.125
Benzo(a)anthracene	0.585		1.79	1 879		mg/Kg	22	72	23- 120
Benzo(a)pyrene	0.292		1.79	1.525		mg/Kg	☆	69	15.128
Benzo(b)fluoranthene	0.678		1.79	1.682		mg/Kg	ß	56	12 - 133
Benzo[g,h,i]peryene	0.143		1.79	1.579		mg/Kg	Ŕ	80	22.120
Benzo[k]fluoranthene	0.309		1.79	1.616		mg/Kg	ġ	73	28-120
1-Methylnaphthalene	ND		1.79	1.436		mg/Kg	23	80	10.120
Pyrene	0698		1.79	1.851		mg/Kg	ġ	65	20- 123
Phenanthrene	00429	J	1.79	1.576		mg/Kg	Ω	86	21 - 122
Chrysene	0.129		1.79	1.810		mg/Kg	₽	94	20.120
Dibenz(a,h)anthracene	0 0 5 3 1	J	1.79	1.535		mg/Kg	II	83	12 - 128
Fluoranthene	0.726		1.79	1.953		mg/Kg	¤	69	10 - 143
Fluorene	ND		1.79	1 434		mg/Kg	R	80	20.120
Indeno[1,2,3-cd]pyrene	0.149		1.79	1.561		mg/Kg	¢î.	79	22 - 121
Naphthalene	ND		1.79	1.500		mg/Kg	II	84	10.120
2-Methylnaphthalene	ND		1.79	1.502		mg/Kg	\$	84	13 - 120
	MS	MS							
Surrogate	%Recovery	Qualifier	Umite						

29.120

13\_120

27 . 120

63

76

56

### Lab Sample ID: 490-22932-1 MSD Matrix: Solid

2-Fluorobiphenyl (Surr)

Terphenyl-d14 (Surr)

Nitrobenzene-d5 (Suit)

								3 T	
Analysis Batch: 69035							Prep	Batch:	68984
And Joie Datem Cooce	Sample Sample	Spike	MSD MSD				%Rec.		RPD
Analyte	<b>Result</b> Qualifier	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	ND	1.76	1.672	mg/Kg	12	95	25-120	10	50
Anthracene	ND	1.76	1.647	mg/Kg	역	94	28.125	11	49
Benzo[a]anthracene	0.585	1.76	2356	mg/Kg	D.	101	23. 120	23	50
Benzo[a]pyrene	0.292	1.76	1 863	mg/Kg	Ø	89	15.128	20	50
Benzo[b]fluoranthene	0.678	1.76	2.274	mg/Kg	22	91	12. 133	30	50
Benzo[g,h,i]perylene	0.143	1.76	1.765	mg/Kg	32	92	22. 120	11	50
Benzo[k]fluoranthene	0.309	1.76	1 846	mg/Kg	¤	87	28-120	13	45
1 Methylnaphthalene	ND	1.76	1.470	mg/Kg	Ω	84	10_120	2	50
Pyrene	0.698	1.76	2.220	mg/Kg	¢	86	20 - 12 3	18	50
Phenanthrene	0.0429 J	1.76	1.780	mg/Kg	₽	99	21 - 122	12	50
Chrysene	0.129	1.76	2.246	mg/Kg	ţ	120	20.120	22	49

TestAmerica Job ID: 490 22932-1

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 68984

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: 1337 Albatross** 

TestAmerica Nashville

Client Sample ID: 1337 Albatross

Prep Type: Total/NA

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

Lab Sample ID: 490-22932-1 MSD							C	lient Sa	mple ID: 13 Prep T	337 Alba ype: Tot	
Matrix: Solid										Batch:	
Analysis Batch: 69035	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Dibenz(a,h)anlhracene	0.0531	Ŀ	1.76	1 649		mg/Kg	ŭ	91	12.128	7	50
Fluoranthene	0.726		1.76	2.466		mg/Kg	G.	99	10.143	23	50
Fluorene	ND		1.76	1.586		mg/Kg	Ħ	90	20 - 120	10	50
indeno[1,2,3 cd]pyrene	0.149		1.76	1.761		mg/Kg	23	92	22 - 121	12	50
Naphthalene	ND		1.76	1.633		mg/Kg	츴	93	10-120	8	50
2-Methylnaphthalene	ND		1.76	1.559		mg/Kg	Æ	89	13 - 120	4	50
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
2 Fluorobiphenyl (Surr)	72		29-120								
Terphenyld14 (Surr)	82		13-120								
Nitrobenzene-d5 (Surr)	65		27 - 120								

### Method: Moisture - Percent Moisture

Lab Sample ID: 490-22181-A-1 DU Matrix: Solid							Client Sample ID: Dup Prep Type: Tot	
Analysis Batch: 68676								
	Sampie	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Solids	83		85		%		1	20

11 12

13

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13

# GC/MS VOA

Pren	Batch:	68619
riep	Datti.	00015

Tota//NA Tota//NA Tota//NA Tota//NA Tota//NA Tota//NA <b>Prep Type</b> Tota//NA Tota//NA Tota//NA	Solid Solid Solid Solid Solid Solid Solid Solid Solid	5035 5035 5035 5035 5035 5035 5035 5035	Prep Batch 68619 68619
Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid Solid Matrix Solid Solid	5035 5035 5035 5035 5035 5035 <b>Method</b> 8260B 8260B	6861
Total/NA Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA Total/NA	Solid Solid Solid Solid Matrix Solid Solid	5035 5035 5035 5035 5035 <b>Method</b> 8260B 8260B	68619
Total/NA Total/NA Total/NA <b>Prep Type</b> Total/NA Total/NA Total/NA	Solid Solid Solid <b>Matrix</b> Solid Solid	5035 5035 5035 <b>Method</b> 8260B 8260B	6861
Total/NA Total/NA <b>Prep Type</b> Total/NA Total/NA Total/NA	Solid Solid Matrix Solid Solid	5035 5035 Method 8260B 8260B	6861
Total/NA Prep Type Total/NA Total/NA Total/NA	Solid Matrix Solid Solid	5035 Method 8260B 8260B	6861
Prep Type Totel/NA Total/NA Total/NA	Matrix Solid Solid	Method 8260B 82608	6861
Totel/NA Total/NA Total/NA	Solid Solid	8260B 8260B	6861
Totel/NA Total/NA Total/NA	Solid Solid	8260B 8260B	68619
Total/NA Total/NA	Sold	82608	
Total/NA			6861
	Solid	00000	0001
Totol/NA		8260B	
I OTANIAN	Solid	8260B	
Totali/NA	Solid	8260B	
Ргер Туре	Matrix	Method	Prep Batc
Total/NA	Solid	8260B	6861
Total/NA	So id	8260B	6861
Total/NA	Solid	8260B	6861
Total/NA	Solid	8260B	6861
Tota /NA	Sold	8260B	6861
Total/NA	Solid	8260B	
Total/NA	Solid	8260B	
Total/NA	Sold	8260B	
	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Total/NASolidTotal/NASolidTotal/NASolidTotal/NASolidTotal/NASolidTotal/NASolidTotal/NASolidTotal/NASolidTotal/NASolid	Total/NASolid8260BTotal/NASolid8260BTotal/NASolid8260BTotal/NASolid8260BTotal/NASolid8260BTotal/NASolid8260BTotal/NASolid8260BTotal/NASolid8260BTotal/NASolid8260BTotal/NASolid8260B

ab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
90 2293 2 1	1337 Albatross	Total/NA	Solid	3550C	
190-22932-1 MS	1337 Albatross	Total/NA	Solid	3550C	
490-22932-1 MSD	1337 Albatross	Total/NA	Solid	3550C	
19022932-2	902 Barracuda	Tota /NA	Solid	3550C	
190-22932-3	1233 Dove	Tota /NA	Solid	3550C	
19022932-4	403 Elderberry	Tota /NA	Sod	3550C	
90-229325	1330 Albatross	Total/NA	Solid	3550C	
190 229326	779 Laurel Bay	Total/NA	Solid	3550C	
90-22932-7	1254 Dove	Total/NA	Solid	3550C	
_CS 490.68984/2 A	Lab Control Sample	Total/NA	Sold	3550C	
MB 490-68984/1-A	Method Blank	Total/NA	Solid	3550C	

### Analysis Batch: 69035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-1	1337 Albatross	Total/NA	Solid	8270D	68984
49022932-1 MS	1337 Albatross	Tota /NA	Solid	82700	68984
490-22932-1 MSD	1337 Abatross	Tota /NA	Solid	8270D	68984
49022932-2	902 Barracuda	Total/NA	Solid	8270D	68984
49022932-3	1233 Dove	Total/NA	Solid	8270D	68984

TestAmerica Nashville

# **QC** Association Summary

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

# GC/MS Semi VOA (Continued)

### Analysis Batch: 69035 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
49022932-4	403 Elderberry	Total/NA	Solid	82700	68984
LCS 490-68984/2 A	Lab Control Sample	Total/NA	Solid	8270D	68984
MB 49068984/1-A	Method Blank	Tota/NA	Solid	8270D	68984
nalysis Batch: 6912: Lab Sample ID		Ргер Туре	Matrix	Method	Prep Batch
Lab Sample ID 49022932-5	3 Client Sample ID 1330 Albatross	Prep Type Totel/NA	Matrix Solid	Method 8270D	Prep Batch 68984
Lab Sample ID	Client Sample ID				

# **General Chemistry**

### Analysis Batch: 68676

Lab Sample 1D	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22181-A 1 DU	Duplicate	Total/NA	Solid	Moisture	
490-22932-1	1337 Albatross	Total/NA	Sold	Moisture	
49022932-2	902 Barracuda	Total/NA	Solid	Moisture	
490-22932 3	1233 Dove	Total/NA	Solid	Moisture	
49022932-4	403 Elderberry	Total/NA	Solid	Moisture	
49022932-5	1330 Albatross	Total/NA	Solid	Moisture	
49022932-6	779 Laurel Bay	Total/NA	Sold	Moisture	
490-229327	1254 Dove	Total/NA	Solid	Mosture	

3

TestAmerica Job ID: 490-22932-1

Dilution

Factor

٦

1

Run

Batch

68619

68984

69035

Number

Prepared

or Analyzed

69194 04/01/13 21:51

03/28/13 16:10

03/30/13 08 16

03/30/13 23:36

68676 03/29/13 08:10 RS

Analyst

M

MH

AK

KP

Lab

TAL NSH

TAL NSH

TALNSH

TAL NSH

TALNSH

Lab Sample ID:

# Client Sample ID: 1337 Albatross

Batch

Туре

Prep

Prep

Analysis

Analysis

Analysis

Batch

5035

8260B

3550C

8270D

Moisture

Method

Date Collected: 03/19/13 14:45 Date Received: 03/27/13 08:30

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

# Lab Sample ID: 490-22932-1

Matrix: Solid
ent Solids: 93.1
490-22932-2
Matrix: Solid

9

Percent Solids: 95.8

### Date Collected: 03/20/13 12:00 Date Received: 03/27/13 08:30

Client Sample ID: 902 Barracuda

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

# Client Sample ID: 1233 Dove

Date Collected: 03/21/13 11:45 Date Received: 03/27/13 08:30

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

# **Client Sample ID: 403 Elderberry**

Date Collected: 03/18/13 12:15 Date Received: 03/27/13 08:30

### Lab Sample ID: 490-22932-4 Matrix: Solid

Lab Sample ID: 490-22932-3

Matrix: Solid

Percent Solids: 74.2

Percent Solids: 97.1

Ргер туре	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			68619	03/28/13 16:10	ML	TAL NSH
Total/NA	Analysis	82608		1	69194	04/01/13 17:48	мн	TALNSH
Total/NA	Prep	3550C			68984	03/30/13 08:16	AK	TAL NSH
Total/NA	Analysis	8270D		1	69035	03/31/13 03:25	KP	TAL NSH
Tota!/NA	Analysis	Moisture		4	68676	03/29/13 08:10	RS	TALNSH

# **Client Sample ID: 1330 Albatross**

Date Collected: 03/19/13 15:30

### Lab Sample ID: 490-22932-5 Matrix: Solid

Lab Sample ID: 490-22932-6

Lab Sample ID: 490-22932-7

Matrix: Solid

Percent Solids: 96.0

TestAmerica Job ID: 49022932-1

Percent Solids: 95.9

Date Received: 03/27/13 08:30

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

# Client Sample ID: 779 Laurel Bay

Date Collected: 03/20/13 14:30 Date Received: 03/27/13 08:30

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

# Client Sample ID: 1254 Dove

Date Collected: 03/21/13 15:00 Date Received: 03/27/13 08:30

Ргер Туре	Batch Type	Batch Method	Run	Dilution Factor	Batch Nu <i>m</i> ber	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			68619	03/28/13 16:10	ML	TALNSH
Total/NA	Analysis	8260B		1	69466	04/02/13 16:18	MH	TAL NSH
Total/NA	Prep	3550C			68984	03/30/13 08:16	AK	TAL NSH
Total/NA	Analysis	8270D		1	69123	03/31/13 18:18	КР	TAL NSH
Total/NA	Analysis	Moisture		-1	68676	03/29/13 08:10	RS	TALNSH

Laboratory References:

TAL NSH = TeslAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)7260177

# **Method Summary**

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

TestAmerica Job ID: 490-22932-1

Method	Method Description	Protocol	Laboratory
82608	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Sem volatile Organic Compounds (GC/MS)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

#### **Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Fest 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)7260177

TestAmerica Nashville

# **Certification Summary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-229321

### Laboratory: TestAmerica Nashville

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

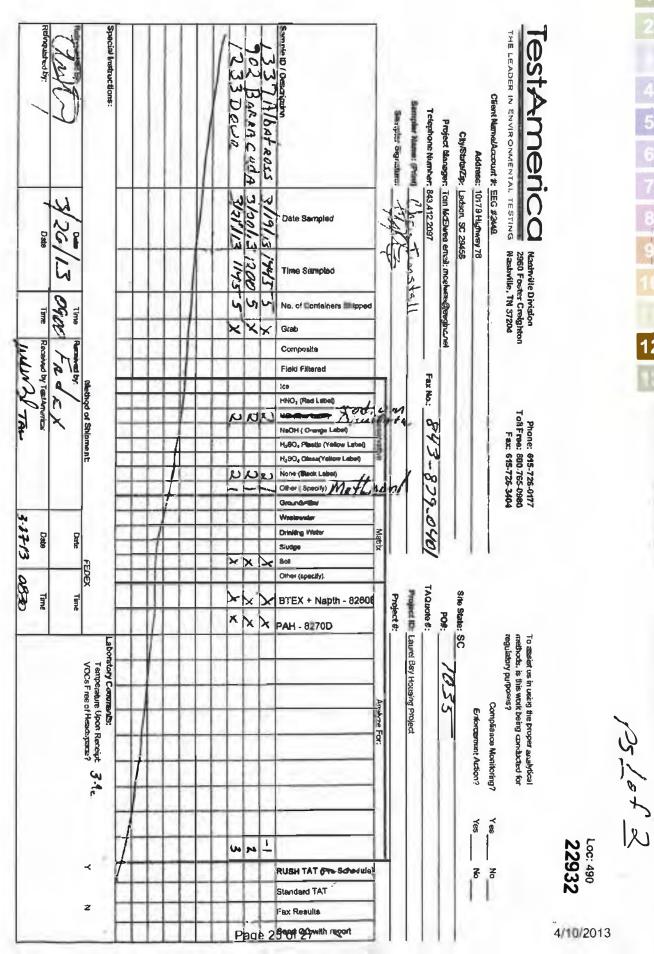
Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Aabama	State Program	4	41150	05-31-13
Alaska (UST)	State Pregram	10	UST 087	07-24-13
Arizona	State Program	9	AZ0473	05-05-14
Arkansas DEQ	State Program	6	880737	04 25-13
California	NELAP	9	1168CA	10-31-13
Connecticut	State Program	. 1	PH-0220	12 31-13
ior da	NELAP	4	E87358	06 30-13
linois	NELAP	5	200010	12 09-13
owa	State Program	7	131	05-01-14
ansas	NELAP	7	E-10229	10 31-13
entucky (UST)	State Program	4	19	09-15-13
ouisiana	NELAP	6	30613	063013
laryland	State Program	3	316	03-31-14
lassachusetts	State Pregram	1	M-TN032	06 30 13
linnesota	NELAP	5	047999345	12-31-13
lississippi	State Program	4	N/A	0630-13
Iontana (UST)	State Program	8	NA	01-01-15
evada	State Program	9	TN00032	07-31-13
ew Hampshire	NELAP	1	2963	10 09-13
ew Jersey	NELAP	2	TN965	06-30-13
ew York	NELAP	2	11342	04-01-13
orth Carolina DENR	State Program	4	387	12-31-13
orth Dakota	State Program	8	R-146	0630-13
hioVAP	State Program	5	CL0033	01-19-14
klanoma	State Program	6	9412	0831-13
regon	NELAP	10	TN200001	04-30-13
ennsylvania	NELAP	3	68-00585	06 30 13
hode Island	State Program	1	LAO00268	12-30-13
outh Carolina	State Program	4	84009 (001)	04-30-14
outh Carotina	State Program	4	84009 (002)	0223-14
ennessee	State Program	4	2008	02-23-14
exas	NELAP	6	T10470407709TX	08-31-13
SDA	Federal		S 48469	11-02-13
tah	NELAP	8	TAN	06-30-13
irginia	NELAP	3	460152	06-14-13
ashington	State Program	10	C789	07-19-13
/est Virginia DEP	State Program	3	219	02-28-14
/isconsin	State Program	5	998020430	0831-13
/yoming (UST)	A2LA	8	453.07	12 31-13

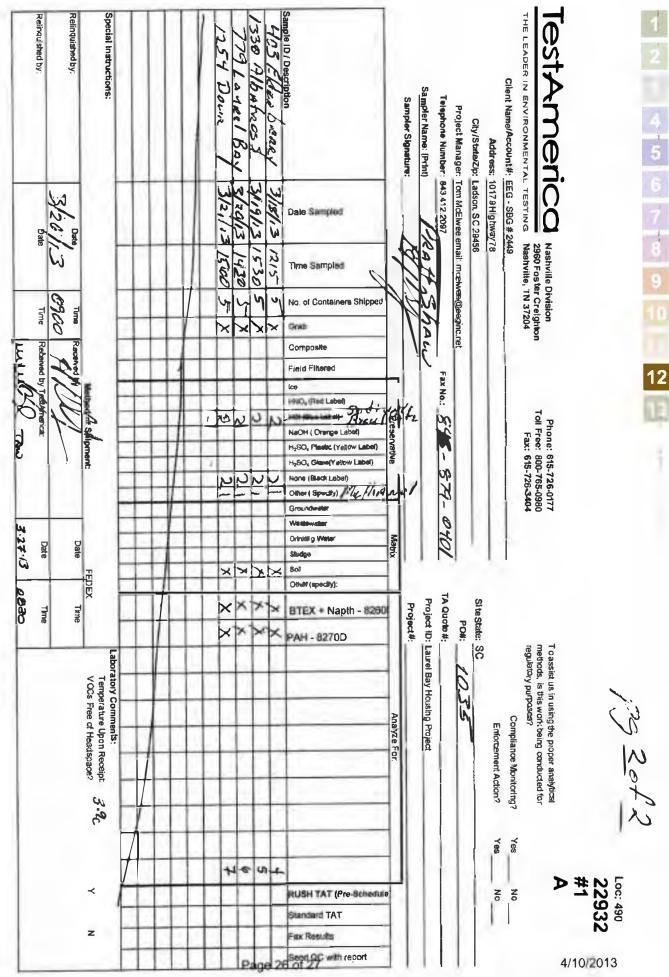
TestAmerica	Charleston
THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN COOLER RECEIPT FORM	
Cooler Received/Opened On: 03/27/13 @ 0830	
Tracking # 9983 (last 4 digits, FedEx)	49022932 Chain of Custody
Courter: Fed-ex IR Gun ID: 95610068	3431 - 0
1. Temperature of rep. sample or temp blank when opened: <u>29</u> Degrees Celsius	
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?	YES NO NA
4. Were custody seals on outside of cooler?	VES.NONA
If yes, how many and where:	
5. Were the seals Intact, signed, and dated correctly?	YES)NONA
6. Were custody papers inside cooler?	YES NO NA
Icertify that I opened the cooler and answered <u>questions 1-6 (intia)</u>	the second
7. Were custody seals on containers: YES 🐠 and Intact	YES NO R
Were these signed and dated correctly?	YESNO.
8. Packing mat'l used? 20 Diewrap Plastic bag Peanuts Vermiculite Foam Insert Pape	r Other None
9. Cooling process: (direct contact) Dry ice	Other None
10. Did all containers arrive in good condition (unbroken)?	ES.NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	ES.NONA
12. Did all container labels and tags agree with custody papers?	ES.NONA
13a. Were VOA vials received?	TESI.NONA
b. Was there any observable headspace present in any VOA viat?	YESNO.
14. Was there a Trlp Blank in this cooler? YES. MO.NA If multiple coolers, sequence	ce #
I certify that I unloaded the cooler and answered guestions 7-14 (initial)	(A)
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?	YESNO (A)
b. Did the bottle labels indicate that the correct preservatives were used	ES .NONA
16. Was residual chlorine present?	YESNO.
I certify that I checked for chlorine and pH as per SOP and answered guestions 15-16 (intial)	æ)
17. Were custody papers properly filled out (ink, signed, etc)?	ES.NONA
18. Did you sign the custody papers in the appropriate place?	VES.NONA
19. Were correct containers used for the analysis requested?	(ES)NONA
20. Was sufficient amount of sample sent In each container?	ESNONA
I certify that I entered this project into LIMS and answered guestlions 17-20 (intial)	Ø
I certify that I attached a label with the unique LIMS number to each container (intlai)	(B)
21. Were there Non-Conformance issues at login? YES. (NO) Was a NCM generated? YES. (	NO#

BIS = Broken in shipment Cooler Receipt Form.doc -----

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# Login Sample Receipt Checklist

### Client: Environmental Enterprise Group

### Login Number: 22932 List Number: 1 Creator: McBride, Mike

Question	Answer	Comment	
Radioactivity wasn't checked or is = background as measured by a<br survey meter.	Тше		
The cooler's custody seal, if present, is intact.	True		
Sample custody seals, if present, are intact.	N/A		
The cooler or samples do not appear to have been compromised or tampered with.	True		
Samples were received on ice.	True		
Cooler Temperature is acceptable.	Тице		
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.	Tiue		
Appropriate sample containers are used.	Tiue		
Sample bottles are completely filled.	Tiue		
Sample Preservation Verified.	N/A		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	Tiue		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		

Job Number: 490 22932-1

List Source: TestAmerica Nashville

# ATTACHMENT A

NON-HAZARDOUS MANIFEST	erator's US EP	A ID No.	Manifest Doo	: No.	2. Page 1	of 1			
Generator's Mailing Address: ICAS BEAUFORT	Gen	Generator's Site Address (If different than mailing):				est Number	01519	143	
AUREL BAY HOUSING EAUFORT, SC 29904						8. State	Generator's		
Generator's Phone 843-879041 Transporter 1 Company Name		6. US EPA	ID Number	_	1				
mall he and G a					C. State T	ransporter's	ID		-
1977 then 7 7 9 4 10					D. Transp	orter's Phone	2	_	_
Transporter 2 Company Name		8. US EPA	ID Number			ransporter's		3	-
Designated Facility Name and Site Address		10. US EP	A ID Number		F. Transp	orter's Phone	2	2000	
ICKORY HILL LANDFILL					G. State Facility ID				
621 LOW COUNTRY DRIVE IDGELAND, SC 29936			-		H. State F	acility Phone	843-9	87464	3
. Description of Waste Materials			12. C	ortainers	13. Total Quantity	14. Unit Wt./Vol.	L.M	sc: Commen	25
HEATING OIL TANK FILLED WITH SA	AND		NO	Type	quantity	WC/VOL	TH MA	(	
			1	234	16,60	TON,	10	609	1
WM Profile # 1	02655SC				+		-		
			1.00	1.5	1		-		
			-	-	1		(* 15) 34 <sup>0</sup>		-
WM Profile #			*		· · · · · · · · · · · · · · · · · · ·			_	
							_		
WM Profile #			1	17 21		-		_	
				1			1		
				1.11				_	
WM Profile #	141-				Sec.	S 1			
Additional Descriptions for Materials Liste	a Above		K. Uispo	sal Location					
			Cell	I			Level		
5. Special Handling Instructions and Addition 21575 FRCCC 1337 AIBA+K	1 7	) 779 LAU 902 BA	Grid CAR CAR CONTACT/PH	BA-1 L dA	4)12	233]	DOUR 6	)/32 A12	el anti
GENERATOR'S CERTIFICATE:									
nereby certify that the above-described mate curately described, classified and packaged							w, have beer	tully and	1
inted Name	01 Jr.	Signature "On be	nalf of	The			Month	Day	Yea
7. Transporter 1 Acknow edgement of Receip	pt of Materials	and the second sec	1.1	At		_	1		
Printed Name PR. M. S.	kps.	Signature	712	XJ-			Month	Day	Yea
3. Transporter 2 Acknowledgement of Receip	pt of Materials	; · · · · · · · · · · · · · · · · · · ·	/	7					
Printed Name		Signature	C	-			Month	Day	Yea
JAMES RAININ		- Grane	Rol	O.L.	_		4	18	1
3. Certificate of Final Treatment/Disposal			wledge, the a	bove-descr	ibed waste w	was managed	in complianc	e with all	
ertify, on behalf of the above listed treatme	cocosth-det								_
<ol> <li>Certificate of Final Treatment/Disposal certify, on behalf of the above listed treatme oplicable laws, regulations, permits and licen</li> <li>Facility Owner or Operator: Certification</li> </ol>			covered by	this manife	st.				
ertify, on behalf of the above listed treatme			covered by	this manife	st.		Month	Day	Туеа

Appendix C 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: No Further Action 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 Tanks (USTs) 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 and agrees there is no indication of soil or groundwater contamination on these properties, 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 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

Attachment to:	Krieg to Drawdy
	Subject: NFA
	Dated 7/1/2015

# Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks)

111 Birch	363 Aspen
123 Banyan	364 Aspen
131 Banyan	366 Aspen
134 Banyan	369 Aspen
145 Laurel Bay	373 Aspen
150 Laurel Bay	381 Aspen
153 Laurel Bay	401 Elderberry
154 Laurel Bay	402 Elderberry
155 Laurel Bay	404 Elderberry
200 Balsam	410 Elderberry
202 Balsam	420 Elderberry
203 Balsam	424 Elderberry
208 Balsam	435 Elderberry Tank 3
210 Balsam	452 Elderberry
211 Balsam	460 Elderberry
220 Cypress	465 Dogwood
222 Cypress	477 Laurel Bay
223 Cypress	487Laurel Bay
252 Beech Tank 2	513 Laurel Bay
271 Beech Tank 1	519 Laurel Bay
271 Beech Tank 2	524 Laurel Bay
284 Birch Tank 1	535 Laurel Bay
284 Birch Tank 2	553 Dahlia
308 Ash	590 Aster
311 Ash	591 Aster
312 Ash	610 Dahlia
317 Ash	612 Dahlia
318 Ash	628 Dahlia
337 Ash	636 Dahlia
351 Ash Tank 1	637 Dahlia Tank 1
351 Ash Tank 2	637 Dahlia Tank 2
355 Ash Tank 1	641 Dahlia
355 Ash Tank 2	642 Dahlia Tank 1
360 Aspen	642 Dahlia Tank 2

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL 2600 Bull Street • Columbia, SC 29201 • Phone: (803) 898-3432 • www.scdhec.gov Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks) cont.

655 Camellia	920 Albacore
662 Camellia	922 Barracuda Tank 1
683 Camellia	922 Barracuda Tank 2
684 Camellia	924 Albacore
689 Abelia	925 Albacore
694 Abelia	926 Albacore
695 Abelia	930 Albacore
741 Blue Bell	931 Albacore
742 Blue Bell	933 Albacore
755 Althea	936 Albacore
757 Althea	938 Albacore
776 Laurel Bay	939 Albacore
777 Azalea	940 Albacore
779 Laurel Bay	1010 Foxglove
781 Laurel Bay	1066 Gardenia
802 Azalea	1068 Gardenia
816 Azalea	1071 Heather Tank 2
822 Azalea	1100 Iris Tank 2
823 Azalea	1128 Iris
825 Azalea	1178 Bobwhite
828 Azalea	1204 Cardinal
837 Azalea	1208 Cardinal
851 Dolphin	1209 Cardinal
856 Dolphin	1210 Cardinal
857 Dolphin	1215 Cardinal
861 Dolphin	1216 Cardinal
864 Dolphin	1217 Cardinal Tank 1
868 Dolphin	1217 Cardinal Tank 2
872 Dolphin	1233 Dove
879 Cobia	1244 Dove
886 Cobia	1250 Dove
888 Cobia	1252 Dove
889 Cobia	1254 Dove
901 Barracuda	1256 Dove
902 Barracuda	1258 Dove
903 Barracuda	1263 Dove
904 Barracuda	1269 Dove
909 Barracuda	1276 Dove
910 Barracuda	1283 Dove
914 Barracuda	1285 Dove
915 Barracuda	1288 Eagle

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks) cont.

1296 Eagle	1330 Albatross
1307 Eagle	1331 Albatross
1321 Albatross	1333 Albatross
1322 Albatross	1334 Albatross
1327 Albatross	1335 Albatross
1328 Albatross	