# SUMMARY REPORT 139 EAST LAUREL BAY BOULEVARD (FORMERLY 779 EAST LAUREL BAY BOULEVARD) 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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9324 Virginia Avenue Norfolk, Virginia 23511-3095 Prepared by:



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

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



Summary Report 139 East Laurel Bay Boulevard (Formerly 779 East Laurel Bay Boulevard) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort 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 139 East Laurel Bay Boulevard (Formerly 779 East Laurel Bay Boulevard). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

# 1.1 Background Information

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



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

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

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

# 1.2 UST Removal and Assessment Process

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

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

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



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

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

# 2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 139 East Laurel Bay Boulevard (Formerly 779 East Laurel Bay Boulevard). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 779 East Laurel Bay Boulevard* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B.

# 2.1 UST Removal and Soil Sampling

On March 20, 2013, a single 280 gallon heating oil UST was removed from the concrete porch area at 139 East Laurel Bay Boulevard (Formerly 779 East Laurel Bay Boulevard). 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 5'11" 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 139 East Laurel Bay Boulevard (Formerly 779 East Laurel Bay Boulevard) 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 139 East Laurel Bay Boulevard (Formerly 779 East Laurel Bay Boulevard). 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 – 779 East Laurel Bay Boulevard, 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 - Soil139 East Laurel Bay Boulevard (Formerly 779 East Laurel Bay Boulevard)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs <sup>(1)</sup>	Results Sample Collected 03/20/13				
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	Semivolatile Organic Compounds Analyzed 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 Use	Only	Submit Completed Form To: UST Program SCDHEC 2600 Bull Street Columbia, South Carolina 29201
OCT 2 3 SC DMEC - DI Land & Waste Mi	News of	Telephone (803) 896-7957 OF UST (S)
	anding Officer Attn: N dividual, Public Agency, Other)	REAO (Craig Ehde)
Beaufort,	South Carolina	29904-5001
City	State	Zip Code
843	228-7317	Craig Ehde
Area Code	Telephone Number	Contact Person

# II. SITE IDENTIFICATION AND LOCATION

City	County	
Beaufort,	Beaufort	
Street Address or State Ro	bad (as applicable)	
779 Laurel Bay B	lvd., Laurel Bay Military Housing Ar	ea
Facility Name or Company	y Site Identifier	
	ary Housing Area, Marine Corps Air St	tation, Beaufort, SC

Attachment 2

1

# **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

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

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

(Name)

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

# VI. UST INFORMATION

		LaurelBB
A.	Product(ex. Gas, Kerosene)	Heating oil
В.	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	5'11"
G.	Spill Prevention Equipment Y/N	No
H.	Overfill Prevention Equipment Y/N	No
Г	Method of Closure Removed/Filled	Removed
J	Date Tanks Removed/Filled	3/20/2013
К.	Visible Corrosion or Pitting Y/N	Yes
L.	Visible Holes Y/N	Yes

779

M. Method of disposal for any USTs removed from the ground (attach disposal manifests) <u>UST 779LaurelBB was removed from the ground and disposed at a</u> 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 779Laure1BB 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

		779 LaurelBB
		Steel
Α.	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 found on the surface of the steel vent pipe. Copper supply and return lines were sound.

# VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

	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>		х	
in yes, mateure depin and iocarion 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	1	x	
or boring waters?			
If yes, indicate location and thickness.	_		

# IX. SITE CONDITIONS

# X. SAMPLE INFORMATION

# A. SCDHEC Lab Certification Number 84009

Β.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
79 LaurelBB	Excav at fill end	Soil	Sandy	5'11"	3/20/13 1430 hrs	P. Shaw	
-	-					1	
						1	
8							
9				II			
10							
11							
12							
13						· · · · · ·	
14					A		
15							
16				. · · · · ·			
17			1.1.2				
18	_	11					
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 SBG-EEG, Inc. until they were transferred to Test America Incorporated for analysis as documented in the Chain of Custody Record.

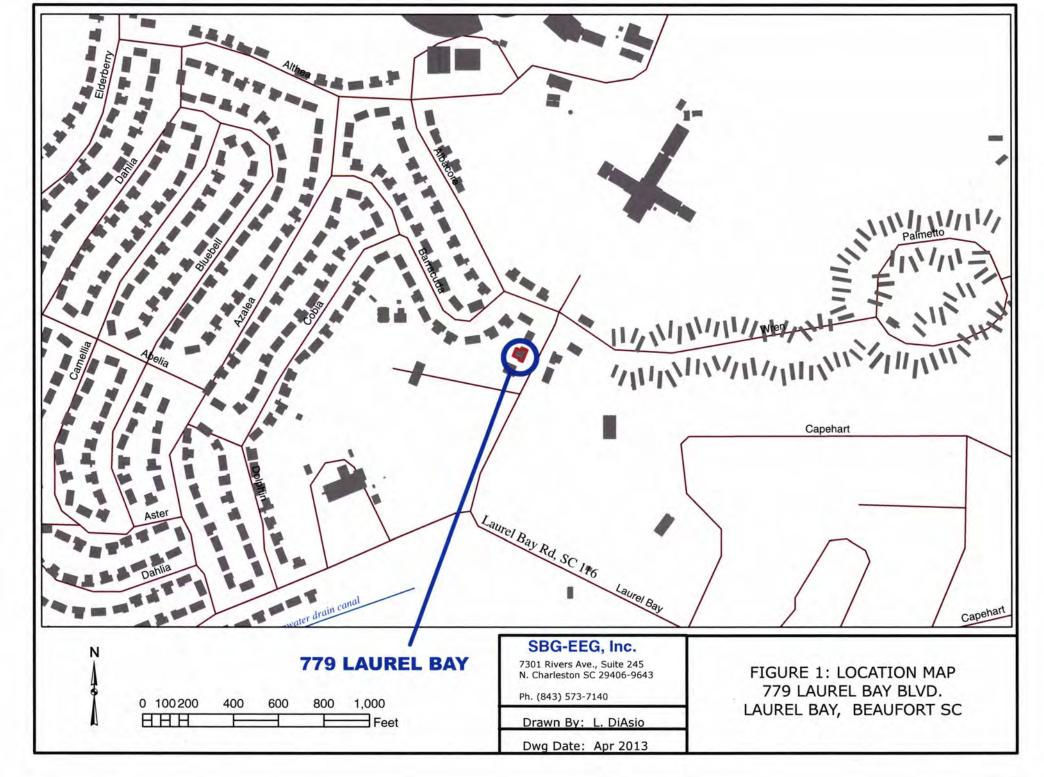
# XII. RECEPTORS

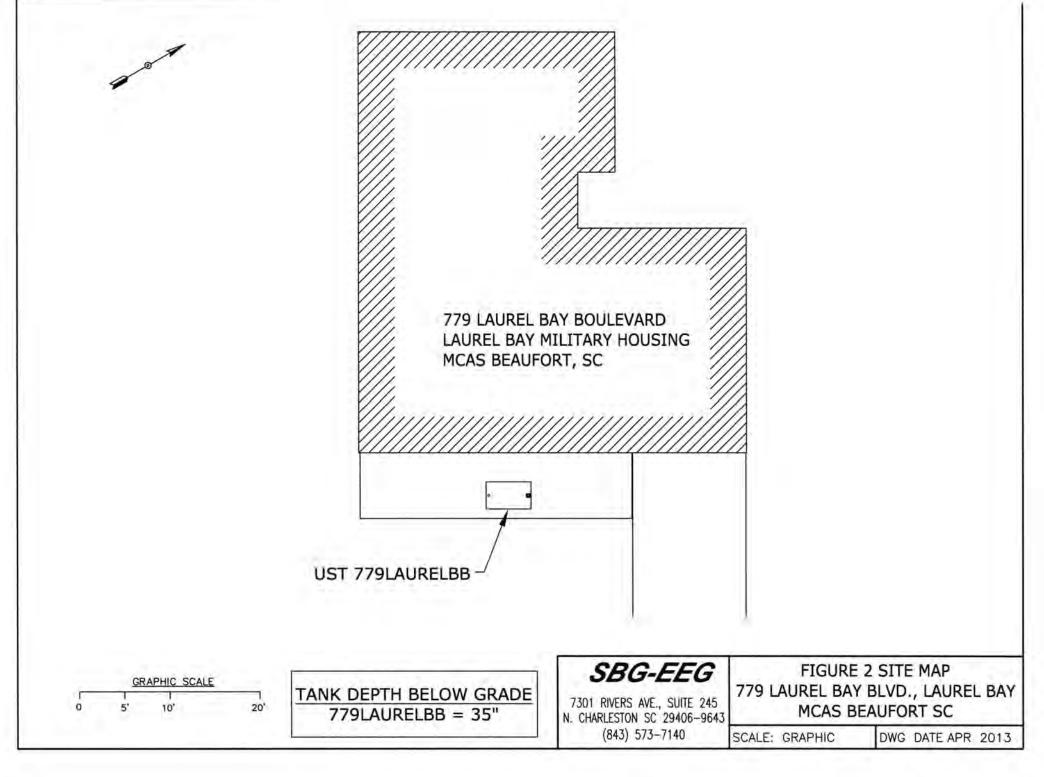
5		Yes	No
Α.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		х
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		х
	If yes, indicate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

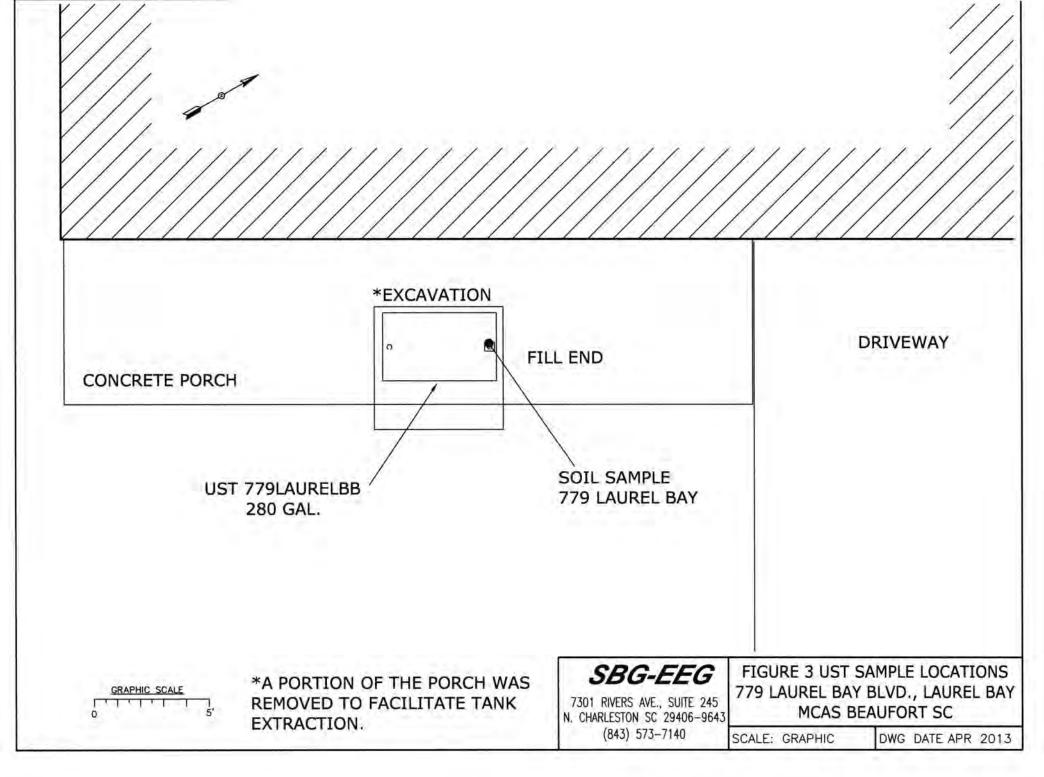
# XIII. SITE MAP

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

(Attach Site Map Here)









Picture 1: Location of UST 779LaureIBB.



Picture 2: UST 779LaurelBB 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	779LaurelBB			
Benzene	ND			
Toluene	ND			
Ethylbenzene	ND			
Xylenes	ND			
Naphthalene	ND			
Benzo (a) anthracene	ND			
Benzo (b) fluoranthene	ND			
Benzo (k) fluoranthene	ND			
Chrysene	ND	- 10		
Dibenz (a, h) anthracene	ND			
TPH (EPA 3550)				
CoC				
Benzene				
Toluene				
Ethylbenzene				
Xylenes		a di s		
Naphthalene	11. T			
Benzo (a) anthracene				
Benzo (b) fluoranthene				
Benzo (k) fluoranthene				
Chrysene				
Dibenz (a, h) anthracene				
TPH (EPA 3550)				-

SUMMARY OF ANALYSIS RESULTS (cont'd) Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

CoC	RBSL (µg/l)	<b>W-1</b>	W-2	W -3	W -4
Free Product Thickness	None				Č.,
Benzene	5				
Toluene	1,000				
Ethylbenzene	700			1.000	
Xylenes	10,000				
Total BTEX	N/A				
МТВЕ	40				
Naphthalene	25				
Benzo (a) anthracene	10		11-11		
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10				
Dibenz (a, h) anthracene	10				
EDB	.05				
1,2-DCA	5		1		
Lead	Site specific				

# XV. ANALYTICAL RESULTS

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

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



THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

# TestAmerica Laboratories, Inc.

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

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

# For:

Environmental Enterprise Group 10179 Highway 78 Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

Kuth Hay

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

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.

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## Sample Summary

Matrix

Solid

Solid

Solid

Solid

Solid

Solid

Solid

## 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

490-22932-2

490-22932-3

490-22932-4

490-22932-5

490-22932-6

490-22932-7

TestAmerica	Job	ID;	490-22932-1	۱
-------------	-----	-----	-------------	---

Collected

03/19/13 14:45

03/20/13 12:00

03/21/13 11:45

03/18/13 12:15

03/19/13 15:30

03/20/13 14:30

03/21/13 15:00

490-22932-1	2
Received	3
03/27/13 08:30	
03/27/13 08:30	
03/27/13 08:30	
03/27/13 08:30	10
03/27/13 08:30	
03/27/13 08:30	
03/27/13 08:30	
	9

P

TestAmerica Nashville

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.

# **Definitions/Glossary**

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

5

8

10

13

## Qualifiers

## GC/MS VOA

Q	ua	lifie	r	

001110 0011		
Qualifier	Qualifier Description	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	
GC/MS Semi	i VOA	
Qualifier	Qualifier Description	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CNF	Contains no Free Liquid	
000	Distingto entry with (normalized about de difference)	

CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Nashville

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00253	0.000848	mg/Kg	-02	03/28/13 16:10	04/01/13 21:51	1
Ethylbenzene	ND		0.00253	0.000848	mg/Kg	0	03/28/13 16:10	04/01/13 21:51	1
Naphthalene	ND		0.00633	0.00215	mg/Kg	Ø	03/28/13 16:10	04/01/13 21:51	1
Toluene	ND		0.00253	0.000937	mg/Kg	0	03/28/13 16:10	04/01/13 21:51	1
Xylenes, Total	ND		0.00633	0.000848	mg/Kg	12	03/28/13 16:10	04/01/13 21:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130				03/28/13 16:10	04/01/13 21:51	1
4-Bromofluorobenzene (Surr)	112		70 - 130				03/28/13 16:10	04/01/13 21:51	1
Dibromofluoromethane (Surr)	95		70 - 130				03/28/13 16:10	04/01/13 21:51	1
Toluene-d8 (Surr)	109		70 - 130				03/28/13 16:10	04/01/13 21:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0705	0.0105	mg/Kg	E1	03/30/13 08:16	03/30/13 23:36	1
Acenaphthylene	ND		0.0705	0.00947	mg/Kg	Ø	03/30/13 08:16	03/30/13 23:36	1
Anthracene	ND		0.0705	0.00947	mg/Kg	0	03/30/13 08:16	03/30/13 23:36	1
Benzo[a]anthracene	0.585		0.0705	0.0158	mg/Kg	a	03/30/13 08:16	03/30/13 23:36	1
Benzo[a]pyrene	0.292		0.0705	0.0126	mg/Kg	a.	03/30/13 08:16	03/30/13 23:36	1
Benzo[b]fluoranthene	0.678		0.0705	0.0126	mg/Kg	n	03/30/13 08:16	03/30/13 23:36	1
Benzo[g,h,i]perylene	0.143		0.0705	0.00947	mg/Kg	52	03/30/13 08:16	03/30/13 23:36	1
Benzo[k]fluoranthene	0.309		0.0705	0.0147	mg/Kg	5	03/30/13 08:16	03/30/13 23:36	1
1-Methylnaphthalene	ND		0.0705	0.0147	mg/Kg	n	03/30/13 08:16	03/30/13 23:36	1
Pyrene	0.698		0.0705	0.0126	mg/Kg	π	03/30/13 08:16	03/30/13 23:36	1
Phenanthrene	0.0429	J	0.0705	0.00947	mg/Kg	Ø	03/30/13 08:16	03/30/13 23:36	1
Chrysene	0.129		0.0705	0.00947	mg/Kg	D	03/30/13 08:16	03/30/13 23:36	1
Dibenz(a,h)anthracene	0.0531	J	0.0705	0.00737	mg/Kg	D	03/30/13 08:16	03/30/13 23:36	1
Fluoranthene	0.726		0.0705	0.00947	mg/Kg	p	03/30/13 08:16	03/30/13 23:36	1
Fluorene	ND		0.0705	0.0126	mg/Kg	Ø	03/30/13 08:16	03/30/13 23:36	1
Indeno[1,2,3-cd]pyrene	0.149		0.0705	0.0105	mg/Kg	12	03/30/13 08:16	03/30/13 23:36	1
Naphthalene	ND		0.0705	0.00947	mg/Kg	13	03/30/13 08:16	03/30/13 23:36	1
2-Methylnaphthalene	ND		0.0705	0.0168	mg/Kg	32	03/30/13 08:16	03/30/13 23:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	83		29 - 120				03/30/13 08:16	03/30/13 23:36	1
Terphenyl-d14 (Surr)	85		13 - 120				03/30/13 08:16	03/30/13 23:36	1
Nitrobenzene-d5 (Surr)	74		27 - 120				03/30/13 08:16	03/30/13 23:36	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10	0.10	%			03/29/13 08:10	1

TestAmerica Job ID: 490-22932-1

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

Percent Solids: 93.1

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TestAmerica Nashville

## Client Sample ID: 902 Barracuda

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

# Lab Sample ID: 490-22932-2 Matrix: Solid

Percent Solids: 95.8

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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		0.00223	0.000749	mg/Kg	57	03/28/13 16:10	04/02/13 14:57	1
Ethylbenzene	ND		0.00223	0.000749	mg/Kg	13	03/28/13 16:10	04/02/13 14:57	1
Naphthalene	ND		0.00559	0.00190	mg/Kg	82	03/28/13 16:10	04/02/13 14:57	1
Toluene	ND		0.00223	0.000827	mg/Kg	<b>D</b>	03/28/13 16:10	04/02/13 14:57	1
Xylenes, Total	ND		0.00559	0.000749	mg/Kg	5	03/28/13 16:10	04/02/13 14:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130				03/28/13 16:10	04/02/13 14:57	1
4-Bromofluorobenzene (Surr)	107		70 - 130				03/28/13 16:10	04/02/13 14:57	1
Dibromofluoromethane (Surr)	98		70 - 130				03/28/13 16:10	04/02/13 14:57	1
Toluene-d8 (Surr)	107		70 - 130				03/28/13 16:10	04/02/13 14:57	1
Method: 8270D - Semivolatile	Organic Compou	inds (GC/MS	5)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0696	0.0104	mg/Kg	Ð	03/30/13 08:16	03/31/13 02:39	1
Acenaphthylene	ND		0.0696	0.00935	mg/Kg	P	03/30/13 08:16	03/31/13 02:39	1
Anthracene	ND		0.0696	0.00935	mg/Kg	p)	03/30/13 08:16	03/31/13 02:39	1
Benzo[a]anthracene	ND		0.0696	0.0156	mg/Kg	17	03/30/13 08:16	03/31/13 02:39	1
	1.10				and the second sec			Construction of the	

Anunacene	ND		0.0050	0.00555	inging		03/30/13 00.10	00/01/10 02.00		
Benzo[a]anthracene	ND		0.0696	0.0156	mg/Kg	17	03/30/13 08:16	03/31/13 02:39	1	
Benzo[a]pyrene	ND		0.0696	0.0125	mg/Kg	171	03/30/13 08:16	03/31/13 02:39	1	
Benzo[b]fluoranthene	ND		0.0696	0.0125	mg/Kg	12	03/30/13 08:16	03/31/13 02:39	1	
Benzo[g,h,i]perylene	ND		0.0696	0.00935	mg/Kg	32	03/30/13 08:16	03/31/13 02:39	1	
Benzo[k]fluoranthene	ND		0.0696	0.0145	mg/Kg	0	03/30/13 08:16	03/31/13 02:39	1	
1-Methylnaphthalene	ND		0.0696	0.0145	mg/Kg	111	03/30/13 08:16	03/31/13 02:39	1	
Pyrene	ND		0.0696	0.0125	mg/Kg	ū	03/30/13 08:16	03/31/13 02:39	1	
Phenanthrene	ND		0.0696	0.00935	mg/Kg	ũ.	03/30/13 08:16	03/31/13 02:39	1	
Chrysene	ND		0.0696	0.00935	mg/Kg	E .	03/30/13 08:16	03/31/13 02:39	1	
Dibenz(a,h)anthracene	ND		0.0696	0.00727	mg/Kg	Ð	03/30/13 08:16	03/31/13 02:39	1	
Fluoranthene	ND		0.0696	0.00935	mg/Kg	п	03/30/13 08:16	03/31/13 02:39	1	
Fluorene	ND		0.0696	0.0125	mg/Kg	п	03/30/13 08:16	03/31/13 02:39	1	
Indeno[1,2,3-cd]pyrene	ND		0.0696	0.0104	mg/Kg	a	03/30/13 08:16	03/31/13 02:39	1	
Naphthalene	ND		0.0696	0.00935	mg/Kg	π	03/30/13 08:16	03/31/13 02:39	1	
2-Methylnaphthalene	ND		0.0696	0.0166	mg/Kg	×.	03/30/13 08:16	03/31/13 02:39	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
2-Fluorobiphenyl (Surr)	85		29 - 120				03/30/13 08:16	03/31/13 02:39	1	
Terphenyl-d14 (Surr)	81		13 - 120				03/30/13 08:16	03/31/13 02:39	1	
Nitrobenzene-d5 (Surr)	73		27 - 120				03/30/13 08:16	03/31/13 02:39	1	
General Chemistry										
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Percent Solids	96		0.10	0.10	%			03/29/13 08:10	1	

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

## Client Sample ID: 1233 Dove

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

# Lab Sample ID: 490-22932-3 Matrix: Solid

Percent Solids: 74.2

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00326	0.00109	mg/Kg	ü	03/28/13 16:10	04/02/13 15:24	1
Ethylbenzene	ND		0.00326	0.00109	mg/Kg	12	03/28/13 16:10	04/02/13 15:24	1
Naphthalene	ND		0.00816	0.00277	mg/Kg	12	03/28/13 16:10	04/02/13 15:24	1
Toluene	ND		0.00326	0.00121	mg/Kg	U	03/28/13 16:10	04/02/13 15:24	1
Xylenes, Total	ND		0.00816	0.00109	mg/Kg	Ш	03/28/13 16:10	04/02/13 15:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130				03/28/13 16:10	04/02/13 15:24	1
4-Bromofluorobenzene (Surr)	105		70 - 130				03/28/13 16:10	04/02/13 15:24	1
Dibromofluoromethane (Surr)	97		70 - 130				03/28/13 16:10	04/02/13 15:24	1
Toluene-d8 (Surr)	107		70 - 130				03/28/13 16:10	04/02/13 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0901	0.0134	mg/Kg	13	03/30/13 08:16	03/31/13 03:02	1
Acenaphthylene	ND		0.0901	0.0121	mg/Kg	1	03/30/13 08:16	03/31/13 03:02	1
Anthracene	ND		0.0901	0.0121	mg/Kg	- U	03/30/13 08:16	03/31/13 03:02	1
Benzo[a]anthracene	ND		0.0901	0.0202	mg/Kg	(12)	03/30/13 08:16	03/31/13 03:02	1
Benzo[a]pyrene	ND		0.0901	0.0161	mg/Kg	-13	03/30/13 08:16	03/31/13 03:02	1
Benzo[b]fluoranthene	ND		0.0901	0.0161	mg/Kg	12	03/30/13 08:16	03/31/13 03:02	1
Benzo[g,h,i]perylene	ND		0.0901	0.0121	mg/Kg	E.	03/30/13 08:16	03/31/13 03:02	1
Benzo[k]fluoranthene	ND		0.0901	0.0188	mg/Kg	11	03/30/13 08:16	03/31/13 03:02	1
1-Methylnaphthalene	ND		0.0901	0.0188	mg/Kg	11	03/30/13 08:16	03/31/13 03:02	1
Pyrene	ND		0.0901	0.0161	mg/Kg	13	03/30/13 08:16	03/31/13 03:02	1
Phenanthrene	ND		0.0901	0.0121	mg/Kg	-12	03/30/13 08:16	03/31/13 03:02	1
Chrysene	ND		0.0901	0.0121	mg/Kg	п	03/30/13 08:16	03/31/13 03:02	1
Dibenz(a,h)anthracene	ND		0.0901	0.00941	mg/Kg	11	03/30/13 08:16	03/31/13 03:02	1
Fluoranthene	ND		0.0901	0.0121	mg/Kg		03/30/13 08:16	03/31/13 03:02	1
Fluorene	ND		0.0901	0.0161	mg/Kg	11	03/30/13 08:16	03/31/13 03:02	1
Indeno[1,2,3-cd]pyrene	ND		0.0901	0.0134	mg/Kg	Ei.	03/30/13 08:16	03/31/13 03:02	1
Naphthalene	ND		0.0901	0.0121	mg/Kg	13	03/30/13 08:16	03/31/13 03:02	1
2-Methylnaphthalene	ND		0.0901	0.0215	mg/Kg	ш	03/30/13 08:16	03/31/13 03:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	79		29 - 120				03/30/13 08:16	03/31/13 03:02	1
Terphenyl-d14 (Surr)	81		13 - 120				03/30/13 08:16	03/31/13 03:02	1
Nitrobenzene-d5 (Surr)	73		27 - 120				03/30/13 08:16	03/31/13 03:02	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74		0.10	0.10	%			03/29/13 08:10	1

## Client Sample ID: 403 Elderberry

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

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

Percent Solids: 97.1

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Compounds	(GC/MS)							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.00227	0.000761	mg/Kg	12	03/28/13 16:10	04/01/13 17:48	1
ND		0.00227	0.000761	mg/Kg	17	03/28/13 16:10	04/01/13 17:48	1
ND		0.00568	0.00193	mg/Kg	35	03/28/13 16:10	04/01/13 17:48	1
ND		0.00227	0.000841	mg/Kg	12	03/28/13 16:10	04/01/13 17:48	1
ND		0.00568	0.000761	mg/Kg	Ω.	03/28/13 16:10	04/01/13 17:48	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
101		70 - 130				03/28/13 16:10	04/01/13 17:48	1
110		70 - 130				03/28/13 16:10	04/01/13 17:48	1
96		70 - 130				03/28/13 16:10	04/01/13 17:48	1
108		70 - 130				03/28/13 16:10	04/01/13 17:48	1
ganic Compou	nds (GC/MS)							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result ND ND ND %Recovery 101 110 96 108 ganic Compou	ND ND ND ND %Recovery Qualifier 101 110 96	Result         Qualifier         RL           ND         0.00227           ND         0.00227           ND         0.00568           ND         0.00568           ND         0.00568           MD         0.00568           %Recovery         Qualifier         Limits           101         70 - 130           110         70 - 130           96         70 - 130           108         70 - 130           108         70 - 130	Result ND         Qualifier         RL         MDL           ND         0.00227         0.000761           ND         0.00227         0.000761           ND         0.00568         0.00193           ND         0.00568         0.000841           ND         0.00568         0.000761           MD         0.00568         0.000761           WRecovery         Qualifier         Limits           101         70 - 130           110         70 - 130           96         70 - 130           108         70 - 130           108         70 - 130	Result         Qualifier         RL         MDL         Unit           ND         0.00227         0.000761         mg/Kg           ND         0.00227         0.000761         mg/Kg           ND         0.00568         0.00193         mg/Kg           ND         0.00227         0.000841         mg/Kg           ND         0.00568         0.000761         mg/Kg           MD1         70 - 130         mg/Kg           101         70 - 130         mg/Kg           96         70 - 130         mg/Kg           108         70 - 130         mg/Kg           ganic Compounds (GC/MS)         Mg/Kg         Mg/Kg	Result         Qualifier         RL         MDL         Unit         D           ND         0.00227         0.000761         mg/Kg         I           ND         0.00227         0.000761         mg/Kg         I           ND         0.00227         0.000761         mg/Kg         II           ND         0.00568         0.00193         mg/Kg         II           ND         0.00227         0.000841         mg/Kg         II           ND         0.00568         0.000761         mg/Kg         II           ND         0.00568         0.000761         mg/Kg         II           ND         0.00568         0.000761         mg/Kg         II           MD         0.00568         0.000761         mg/Kg         II           MD         70 - 130         III         IIII         IIIIIIIII           96         70 - 130         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Result         Qualifier         RL         MDL         Unit         D         Prepared           ND         0.00227         0.000761         mg/Kg         I         03/28/13 16:10           ND         0.00227         0.000761         mg/Kg         I         03/28/13 16:10           ND         0.00568         0.00193         mg/Kg         I         03/28/13 16:10           ND         0.00227         0.000841         mg/Kg         I         03/28/13 16:10           ND         0.00227         0.000841         mg/Kg         I         03/28/13 16:10           ND         0.00568         0.000761         mg/Kg         I         03/28/13 16:10           MRecovery         Qualifier         Limits         I         Prepared           101         70 - 130         03/28/13 16:10         03/28/13 16:10           96         70 - 130         03/28/13 16:10         03/28/13 16:10	Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           ND         0.00227         0.000761         mg/Kg         Img/Kg         <

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0685	0.0102	mg/Kg	Ū	03/30/13 08:16	03/31/13 03:25	1
Acenaphthylene	ND		0.0685	0.00920	mg/Kg	0	03/30/13 08:16	03/31/13 03:25	1
Anthracene	ND		0.0685	0.00920	mg/Kg	π	03/30/13 08:16	03/31/13 03:25	1
Benzo[a]anthracene	0.200		0.0685	0.0153	mg/Kg	D	03/30/13 08:16	03/31/13 03:25	1
Benzo[a]pyrene	0.120		0.0685	0.0123	mg/Kg	П	03/30/13 08:16	03/31/13 03:25	1
Benzo[b]fluoranthene	0.255		0.0685	0.0123	mg/Kg	π	03/30/13 08:16	03/31/13 03:25	1
Benzo[g,h,i]perylene	0.0508	J	0.0685	0.00920	mg/Kg	σ	03/30/13 08:16	03/31/13 03:25	1
Benzo[k]fluoranthene	0.110		0.0685	0.0143	mg/Kg	0	03/30/13 08:16	03/31/13 03:25	1
1-Methylnaphthalene	ND		0.0685	0.0143	mg/Kg	10	03/30/13 08:16	03/31/13 03:25	1
Pyrene	0.219		0.0685	0.0123	mg/Kg	30	03/30/13 08:16	03/31/13 03:25	1
Phenanthrene	ND		0.0685	0.00920	mg/Kg	33.	03/30/13 08:16	03/31/13 03:25	1
Chrysene	0.228		0.0685	0.00920	mg/Kg	10.	03/30/13 08:16	03/31/13 03:25	1
Dibenz(a,h)anthracene	ND		0.0685	0.00716	mg/Kg	12	03/30/13 08:16	03/31/13 03:25	1
Fluoranthene	0.229		0.0685	0.00920	mg/Kg	10	03/30/13 08:16	03/31/13 03:25	1
Fluorene	ND		0.0685	0.0123	mg/Kg	23	03/30/13 08:16	03/31/13 03:25	1
Indeno[1,2,3-cd]pyrene	0.0480	J	0.0685	0.0102	mg/Kg	63	03/30/13 08:16	03/31/13 03:25	1
Naphthalene	ND		0.0685	0.00920	mg/Kg	11	03/30/13 08:16	03/31/13 03:25	1
2-Methylnaphthalene	ND		0.0685	0.0164	mg/Kg	12	03/30/13 08:16	03/31/13 03:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	78		29 - 120				03/30/13 08:16	03/31/13 03:25	1
Terphenyl-d14 (Surr)	84		13 - 120				03/30/13 08:16	03/31/13 03:25	1
Nitrobenzene-d5 (Surr)	71		27 - 120				03/30/13 08:16	03/31/13 03:25	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	97		0.10	0.10	%			03/29/13 08:10	1

## Client Sample ID: 1330 Albatross

Date Collected: 03/19/13 15:30 Date Received: 03/27/13 08:30

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

Percent Solids: 95.9

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00230	0.000770	mg/Kg	X	03/28/13 16:10	04/02/13 14:30	1
Ethylbenzene	0.00191	J	0.00230	0.000770	mg/Kg	23	03/28/13 16:10	04/02/13 14:30	1
Naphthalene	0.0321		0.00575	0.00195	mg/Kg	12	03/28/13 16:10	04/02/13 14:30	1
Toluene	ND		0.00230	0.000850	mg/Kg	12	03/28/13 16:10	04/02/13 14:30	1
Xylenes, Total	0.00874		0.00575	0.000770	mg/Kg	11	03/28/13 16:10	04/02/13 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130				03/28/13 16:10	04/02/13 14:30	1
4-Bromofluorobenzene (Surr)	110		70 - 130				03/28/13 16:10	04/02/13 14:30	1
Dibromofluoromethane (Surr)	100		70 - 130				03/28/13 16:10	04/02/13 14:30	1
Toluene-d8 (Surr)	107		70 - 130				03/28/13 16:10	04/02/13 14:30	1

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

Analyte Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene 0.0178	J	0.0693	0.0103	mg/Kg	11	03/30/13 08:16	03/31/13 17:33	1
Acenaphthylene ND		0.0693	0.00931	mg/Kg	17	03/30/13 08:16	03/31/13 17:33	1
Anthracene ND		0.0693	0.00931	mg/Kg	11	03/30/13 08:16	03/31/13 17:33	1
Benzo[a]anthracene 0.0671	J	0.0693	0.0155	mg/Kg	13	03/30/13 08:16	03/31/13 17:33	1
Benzo[a]pyrene ND		0.0693	0.0124	mg/Kg	Ц	03/30/13 08:16	03/31/13 17:33	1
Benzo[b]fluoranthene 0.0549	J	0.0693	0.0124	mg/Kg	D.	03/30/13 08:16	03/31/13 17:33	1
Benzo[g,h,i]perylene ND		0.0693	0.00931	mg/Kg	n	03/30/13 08:16	03/31/13 17:33	1
Benzo[k]fluoranthene 0.0260	J	0.0693	0.0145	mg/Kg	5	03/30/13 08:16	03/31/13 17:33	1
1-Methylnaphthalene 0.221		0.0693	0.0145	mg/Kg	22	03/30/13 08:16	03/31/13 17:33	1
Pyrene 0.117		0.0693	0.0124	mg/Kg	12	03/30/13 08:16	03/31/13 17:33	1
Phenanthrene 0.117		0.0693	0.00931	mg/Kg	D	03/30/13 08:16	03/31/13 17:33	1
Chrysene 0.0733		0.0693	0.00931	mg/Kg	D	03/30/13 08:16	03/31/13 17:33	1
Dibenz(a,h)anthracene ND		0.0693	0.00724	mg/Kg	D	03/30/13 08:16	03/31/13 17:33	1
Fluoranthene 0.162		0.0693	0.00931	mg/Kg	α	03/30/13 08:16	03/31/13 17:33	1
Fluorene 0.0422	J	0.0693	0.0124	mg/Kg	n	03/30/13 08:16	03/31/13 17:33	1
Indeno[1,2,3-cd]pyrene ND		0.0693	0.0103	mg/Kg	30	03/30/13 08:16	03/31/13 17:33	1
Naphthalene 0.0377	J	0.0693	0.00931	mg/Kg	10	03/30/13 08:16	03/31/13 17:33	1
2-Methylnaphthalene 0.323		0.0693	0.0165	mg/Kg	æ	03/30/13 08:16	03/31/13 17:33	1
Surrogate %Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr) 77		29 - 120				03/30/13 08:16	03/31/13 17:33	1
Terphenyl-d14 (Surr) 81		13 - 120				03/30/13 08:16	03/31/13 17:33	1
Nitrobenzene-d5 (Surr) 71		27 - 120				03/30/13 08:16	03/31/13 17:33	1
General Chemistry								
Analyte Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids 96		0.10	0.10	%			03/29/13 08:10	1

## Client Sample ID: 779 Laurel Bay

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

## Lab Sample ID: 490-22932-6 Matrix: Solid

Percent Solids: 92.0

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Method: 8260B - Volatile Orga	nic Compounds	(GC/MS)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	15
Benzene	ND		0.00241	0.000809	mg/Kg	17	03/28/13 16:10	04/02/13 15:51	1	
Ethylbenzene	ND		0.00241	0.000809	mg/Kg	£1	03/28/13 16:10	04/02/13 15:51	1	6
Naphthalene	ND		0.00604	0.00205	mg/Kg	11	03/28/13 16:10	04/02/13 15:51	1	-
Toluene	ND		0.00241	0.000893	mg/Kg	11	03/28/13 16:10	04/02/13 15:51	1	
Xylenes, Total	ND		0.00604	0.000809	mg/Kg	g	03/28/13 16:10	04/02/13 15:51	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	101		70 - 130				03/28/13 16:10	04/02/13 15:51	1	
4-Bromofluorobenzene (Surr)	107		70 - 130				03/28/13 16:10	04/02/13 15:51	1	12
Dibromofluoromethane (Surr)	96		70 - 130				03/28/13 16:10	04/02/13 15:51	1	
Toluene-d8 (Surr)	106		70 - 130				03/28/13 16:10	04/02/13 15:51	1	
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	5)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Acenaphthene	ND		0.0723	0.0108	mg/Kg	12	03/30/13 08:16	03/31/13 17:55	1	
Acenaphthylene	ND		0.0723	0.00971	mg/Kg	171	03/30/13 08:16	03/31/13 17:55	1	

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0723	0.0108	mg/Kg	12	03/30/13 08:16	03/31/13 17:55	1
Acenaphthylene	ND		0.0723	0.00971	mg/Kg	1.1	03/30/13 08:16	03/31/13 17:55	1
Anthracene	ND		0.0723	0.00971	mg/Kg	11	03/30/13 08:16	03/31/13 17:55	1
Benzo[a]anthracene	ND		0.0723	0.0162	mg/Kg	12	03/30/13 08:16	03/31/13 17:55	1
Benzo[a]pyrene	ND		0.0723	0.0129	mg/Kg	13	03/30/13 08:16	03/31/13 17:55	1
Benzo[b]fluoranthene	ND		0.0723	0.0129	mg/Kg	a.	03/30/13 08:16	03/31/13 17:55	1
Benzo[g,h,i]perylene	ND		0.0723	0.00971	mg/Kg	12	03/30/13 08:16	03/31/13 17:55	1
Benzo[k]fluoranthene	ND		0.0723	0.0151	mg/Kg	13	03/30/13 08:16	03/31/13 17:55	1
1-Methylnaphthalene	ND		0.0723	0.0151	mg/Kg	12	03/30/13 08:16	03/31/13 17:55	1
Pyrene	ND		0.0723	0.0129	mg/Kg	13	03/30/13 08:16	03/31/13 17:55	1
Phenanthrene	ND		0.0723	0.00971	mg/Kg	12	03/30/13 08:16	03/31/13 17:55	1
Chrysene	ND		0.0723	0.00971	mg/Kg	ri.	03/30/13 08:16	03/31/13 17:55	1
Dibenz(a,h)anthracene	ND		0.0723	0.00755	mg/Kg	E.	03/30/13 08:16	03/31/13 17:55	1
Fluoranthene	ND		0.0723	0.00971	mg/Kg	10	03/30/13 08:16	03/31/13 17:55	1
Fluorene	ND		0.0723	0.0129	mg/Kg	12	03/30/13 08:16	03/31/13 17:55	1
Indeno[1,2,3-cd]pyrene	ND		0.0723	0.0108	mg/Kg	ar.	03/30/13 08:16	03/31/13 17:55	1
Naphthalene	ND		0.0723	0.00971	mg/Kg	12	03/30/13 08:16	03/31/13 17:55	1
2-Methylnaphthalene	ND		0.0723	0.0173	mg/Kg	Ū.	03/30/13 08:16	03/31/13 17:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	64		29 - 120				03/30/13 08:16	03/31/13 17:55	1
Terphenyl-d14 (Surr)	65		13 - 120				03/30/13 08:16	03/31/13 17:55	1
Nitrobenzene-d5 (Surr)	56		27 - 120				03/30/13 08:16	03/31/13 17:55	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10	0.10	%			03/29/13 08:10	1

## Client Sample ID: 1254 Dove

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00227	0.000759	mg/Kg	13	03/28/13 16:10	04/02/13 16:18	1
Ethylbenzene	ND		0.00227	0.000759	mg/Kg	17	03/28/13 16:10	04/02/13 16:18	1
Naphthalene	ND		0.00567	0.00193	mg/Kg	17	03/28/13 16:10	04/02/13 16:18	1
Toluene	ND		0.00227	0.000839	mg/Kg	12	03/28/13 16:10	04/02/13 16:18	1
Xylenes, Total	ND		0.00567	0.000759	mg/Kg	Ω.	03/28/13 16:10	04/02/13 16:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130				03/28/13 16:10	04/02/13 16:18	1
4-Bromofluorobenzene (Surr)	109		70 - 130				03/28/13 16:10	04/02/13 16:18	1
Dibromofluoromethane (Surr)	98		70 - 130				03/28/13 16:10	04/02/13 16:18	1
Toluene-d8 (Surr)	107		70 - 130				03/28/13 16:10	04/02/13 16:18	1
Method: 8270D - Semivolatile	Organic Compou	nds (GC/MS	5)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0677	0.0101	mg/Kg	65	03/30/13 08:16	03/31/13 18:18	1
Acenaphthylene	ND		0.0677	0.00910	mg/Kg	12	03/30/13 08:16	03/31/13 18:18	1
Anthracene	ND		0.0677	0.00910	mg/Kg	12	03/30/13 08:16	03/31/13 18:18	1
Benzo[a]anthracene	ND		0.0677	0.0152	mg/Kg	ĽI.	03/30/13 08:16	03/31/13 18:18	1
Benzo[a]pyrene	ND		0.0677	0.0121	mg/Kg	22	03/30/13 08:16	03/31/13 18:18	1
Benzo[b]fluoranthene	ND		0.0677	0.0121	mg/Kg	32	03/30/13 08:16	03/31/13 18:18	1
Benzo[g,h,i]perylene	ND		0.0677	0.00910	mg/Kg	12	03/30/13 08:16	03/31/13 18:18	1
Benzo[k]fluoranthene	ND		0.0677	0.0142	mg/Kg	12	03/30/13 08:16	03/31/13 18:18	1
1. Methylpaphthalene	ND		0.0677	0.0142		13	03/30/13 08-16	03/31/13 18-18	

%Recovery 79 82 69 Result	<i>Qualifier</i> Qualifier	Limits 29 - 120 13 - 120 27 - 120 RL 0.10	<b>RL</b> 0.10	Unit	D	Prepared 03/30/13 08:16 03/30/13 08:16 03/30/13 08:16 Prepared	Analyzed 03/31/13 18:18 03/31/13 18:18 03/31/13 18:18 03/31/13 18:18 Analyzed 03/29/13 08:10	Dil Fac 1 1 1 Dil Fac
79 82	Qualifier	29 - 120 13 - 120				03/30/13 08:16 03/30/13 08:16	03/31/13 18:18 03/31/13 18:18	Dil Fac 1 1 1
79 82	Qualifier	29 - 120 13 - 120				03/30/13 08:16 03/30/13 08:16	03/31/13 18:18 03/31/13 18:18	Dil Fac 1 1
79	Qualifier	29 - 120				03/30/13 08:16	03/31/13 18:18	Dil Fac 1
%Recovery	Qualifier					the set of the set of the set of the	the state of the second state of the	Dil Fac
ND		0.0677	0.0162	mg/Kg	P.	03/30/13 08:16	03/31/13 18:18	1
ND		0.0677	0.00910	mg/Kg	10	03/30/13 08:16	03/31/13 18:18	1
ND		0.0677	0.0101	mg/Kg	12	03/30/13 08:16	03/31/13 18:18	1
ND		0.0677	0.0121	mg/Kg	1	03/30/13 08:16	03/31/13 18:18	1
ND		0.0677	0.00910	mg/Kg	22	03/30/13 08:16	03/31/13 18:18	1
ND		0.0677	0.00708	mg/Kg	15	03/30/13 08:16	03/31/13 18:18	1
ND		0.0677	0.00910	mg/Kg	0	03/30/13 08:16	03/31/13 18:18	1
ND		0.0677	0.00910	mg/Kg		03/30/13 08:16	03/31/13 18:18	1
ND		0.0677	0.0121	mg/Kg	12	03/30/13 08:16	03/31/13 18:18	1
ND		0.0677	0.0142	mg/Kg	13	03/30/13 08:16	03/31/13 18:18	1
ND		0.0677	0.0142	mg/Kg	12	03/30/13 08:16	03/31/13 18:18	1
	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND ND	ND         0.0677           ND         0.0677	ND         0.0677         0.0142           ND         0.0677         0.0121           ND         0.0677         0.00910           ND         0.0677         0.0121           ND         0.0677         0.0121           ND         0.0677         0.0101           ND         0.0677         0.01910	ND         0.0677         0.0142         mg/Kg           ND         0.0677         0.0121         mg/Kg           ND         0.0677         0.00910         mg/Kg           ND         0.0677         0.0121         mg/Kg           ND         0.0677         0.0121         mg/Kg           ND         0.0677         0.0121         mg/Kg           ND         0.0677         0.0101         mg/Kg           ND         0.0677         0.0101         mg/Kg	ND         0.0677         0.0142         mg/kg           ND         0.0677         0.0142         mg/kg         P           ND         0.0677         0.0121         mg/kg         P           ND         0.0677         0.00910         mg/kg         P           ND         0.0677         0.0121         mg/kg         P           ND         0.0677         0.0121         mg/kg         P           ND         0.0677         0.0101         mg/kg         P           ND         0.0677         0.0101         mg/kg         P	ND         0.0077         0.0142         mg/kg         0.3/30/13         08:16           ND         0.0677         0.0142         mg/Kg         03/30/13         08:16           ND         0.0677         0.0121         mg/Kg         03/30/13         08:16           ND         0.0677         0.00910         mg/Kg         03/30/13         08:16           ND         0.0677         0.0121         mg/Kg         03/30/13         08:16           ND         0.0677         0.0121         mg/Kg         03/30/13         08:16           ND         0.0677         0.0101         mg/Kg         03/30/13         08:16           ND         0.0677         0.0101         mg/Kg         03/30/13	ND         0.0677         0.0142         mg/Kg         0.03/30/13         08:16         03/31/13         18:18           ND         0.0677         0.0142         mg/Kg         03/30/13         08:16         03/31/13         18:18           ND         0.0677         0.0121         mg/Kg         03/30/13         08:16         03/31/13         18:18           ND         0.0677         0.00910         mg/Kg         03/30/13         08:16         03/31/13         18:18           ND         0.0677         0.0121         mg/Kg         03/30/13         08:16         03/31/13         18:18           ND         0.0677         0.0121         mg/Kg         03/30/13         08:16         03/3

## Lab Sample ID: 490-22932-7 Matrix: Solid

Percent Solids: 96.0

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

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

**Client Sample ID: Method Blank** Prep Type: Total/NA

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	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	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			04/01/13 15:05	1
Toluene	ND		0.00200	0.000740	mg/Kg			04/01/13 15:05	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			04/01/13 15:05	1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130					04/01/13 15:05	1
4-Bromofluorobenzene (Surr)	106		70 - 130					04/01/13 15:05	1
Dibromofluoromethane (Surr)	99		70 - 130					04/01/13 15:05	1
Toluene-d8 (Surr)	107		70 - 130					04/01/13 15:05	1

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

		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	0.05272		mg/Kg		105	80 - 134
Naphthalene		0.0500	0.05468		mg/Kg		109	69 - 150
Toluene		0.0500	0.05512		mg/Kg		110	80 - 132
Xylenes, Total		0.150	0.1574		mg/Kg		105	80 - 137
	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
Toluene-d8 (Surr)	108		70 - 130

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

#### Analysis Batch: 69194

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

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

# Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

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

#### Lab Sample ID: MB 490-69466/7 Matrix: Solid Analysis Batch: 69466

## Client Sample ID: Method Blank Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

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Analysis Batch: 69466									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			04/02/13 12:42	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			04/02/13 12:42	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			04/02/13 12:42	1
Toluene	ND		0.00200	0.000740	mg/Kg			04/02/13 12:42	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			04/02/13 12:42	1
	МВ	МВ							
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	1
Dibromofluoromethane (Surr)	96		70 - 130					04/02/13 12:42	1
Toluene-d8 (Surr)	107		70 - 130					04/02/13 12:42	1

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

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

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

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

#### Analysis Batch: 69466

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

LCSD	LCSD	
%Recovery	Qualifier	Limits
101		70 - 130
110		70 - 130
99		70 - 130
107		70 - 130
	%Recovery 101 110 99	110 99

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

TestAmerica Nashville

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

#### Lab Sample ID: MB 490-68984/1-A Matrix: Solid Analysis Batch: 69035

TestAmerica Job	ID:	490-22932-1	۱
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#### Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 68984

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and a second second	MB	MB						a side a superior		
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		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Anthracene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Pyrene	ND		0.0670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Phenanthrene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Chrysene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Fluoranthene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Fluorene	ND		0.0670	0.0120	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
Naphthalene	ND		0.0670	0.00900	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		03/30/13 08:16	03/30/13 23:13	1	
	МВ	МВ								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
2-Fluorobiphenyl (Surr)	89		29 - 120				03/30/13 08:16	03/30/13 23:13	1	
Terphenyl-d14 (Surr)	92		13 - 120				03/30/13 08:16	03/30/13 23:13	1	
Nitrobenzene-d5 (Surr)	82		27 - 120				03/30/13 08:16	03/30/13 23:13	1	

## Lab Sample ID: LCS 490-68984/2-A Matrix: Solid Analysis Batch: 69035

# Client Sample ID: Lab Control Sample

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Prep Type: Total/NA Prep Batch: 68984

	Spike	LCS LCS	5			%Rec.	
Analyte	Added	Result Qua	alifier Unit	D	%Rec	Limits	
Acenaphthylene	1.67	1.560	mg/Kg		94	38 - 120	
Anthracene	1.67	1.494	mg/Kg		90	46 - 124	
Benzo[a]anthracene	1.67	1.504	mg/Kg		90	45 - 120	
Benzo[a]pyrene	1.67	1.467	mg/Kg		88	45 - 120	
Benzo[b]fluoranthene	1.67	1.505	mg/Kg		90	42 - 120	
Benzo[g,h,i]perylene	1.67	1.655	mg/Kg		99	38 - 120	
Benzo[k]fluoranthene	1.67	1.450	mg/Kg		87	42 - 120	
1-Methylnaphthalene	1.67	1.469	mg/Kg		88	32 - 120	
Pyrene	1.67	1.451	mg/Kg		87	43 - 120	
Phenanthrene	1,67	1.556	mg/Kg		93	45 - 120	
Chrysene	1.67	1.517	mg/Kg		91	43 - 120	
Dibenz(a,h)anthracene	1.67	1.632	mg/Kg		98	32 - 128	
Fluoranthene	1.67	1.505	mg/Kg		90	46 - 120	
Fluorene	1.67	1.490	mg/Kg		89	42 - 120	
Indeno[1,2,3-cd]pyrene	1.67	1.613	mg/Kg		97	41 - 121	
Naphthalene	1.67	1.537	mg/Kg		92	32 - 120	
2-Methylnaphthalene	1.67	1.510	mg/Kg		91	28 - 120	

TestAmerica Nashville

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

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#### Lab Sample ID: LCS 490-68984/2-A Matrix: Solid Analysis Batch: 69035

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

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

Analysis Batch: 69035									Drop Databy 69094
Analysis batch. 05055	Sample	Sample	Spike	MS	MS				Prep Batch: 68984 %Rec.
Analyte	(100) (10) (10) (10) (10) (10) (10) (10)	Qualifier	Added	Result		Unit	D	%Rec	Limits
Acenaphthylene	ND		1.79	1.511		mg/Kg	D?	84	25 - 120
Anthracene	ND		1.79	1.474		mg/Kg	D	82	28 - 125
Benzo[a]anthracene	0.585		1.79	1.879		mg/Kg	0	72	23 - 120
Benzo[a]pyrene	0.292		1.79	1.525		mg/Kg	0	69	15 - 128
Benzo[b]fluoranthene	0.678		1.79	1.682		mg/Kg	π	56	12 - 133
Benzo[g,h,i]perylene	0.143		1.79	1.579		mg/Kg	0	80	22 - 120
Benzo[k]fluoranthene	0.309		1.79	1.616		mg/Kg	0	73	28 - 120
1-Methylnaphthalene	ND		1.79	1.436		mg/Kg	30.	80	10 - 120
Pyrene	0.698		1.79	1.851		mg/Kg	a.	65	20 - 123
Phenanthrene	0.0429	J	1.79	1.576		mg/Kg	0	86	21 - 122
Chrysene	0.129		1.79	1.810		mg/Kg	12	94	20 - 120
Dibenz(a,h)anthracene	0.0531	J	1.79	1.535		mg/Kg	3	83	12 - 128
Fluoranthene	0.726		1.79	1.953		mg/Kg	0	69	10 - 143
Fluorene	ND		1.79	1.434		mg/Kg	3	80	20 - 120
Indeno[1,2,3-cd]pyrene	0.149		1.79	1.561		mg/Kg	-	79	22 - 121
Naphthalene	ND		1.79	1.500		mg/Kg		84	10 - 120
2-Methylnaphthalene	ND		1.79	1.502		mg/Kg	11	84	13 - 120
	MS	MS							
Surrogate	%Recovery	Qualifier	Limits						
2-Fluorobiphenyl (Surr)	63		29 - 120						

13.120

27 - 120

#### Lab Sample ID: 490-22932-1 MSD Matrix: Solid Analysis Batch: 69035

Terphenyl-d14 (Surr)

Nitrobenzene-d5 (Surr)

Analysis Batch: 69035									Prep	Batch:	68984
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	ND		1.76	1.672		mg/Kg	π	95	25 - 120	10	50
Anthracene	ND		1.76	1.647		mg/Kg	52	94	28 - 125	11	49
Benzo[a]anthracene	0.585		1.76	2.356		mg/Kg	n	101	23 - 120	23	50
Benzo[a]pyrene	0.292		1.76	1.863		mg/Kg	12	89	15 - 128	20	50
Benzo[b]fluoranthene	0.678		1.76	2.274		mg/Kg	11	91	12 - 133	30	50
Benzo[g,h,i]perylene	0.143		1.76	1.765		mg/Kg	Ö	92	22 - 120	11	50
Benzo[k]fluoranthene	0.309		1.76	1.846		mg/Kg	0	87	28 - 120	13	45
1-Methylnaphthalene	ND		1.76	1.470		mg/Kg	n	84	10 - 120	2	50
Pyrene	0.698		1.76	2.220		mg/Kg	13	86	20 - 123	18	50
Phenanthrene	0.0429	J	1.76	1.780		mg/Kg	52	99	21 - 122	12	50
Chrysene	0.129		1.76	2.246		mg/Kg	\$2	120	20 - 120	22	49

TestAmerica Nashville

Client Sample ID: 1337 Albatross

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 68984

Client Sample ID: Lab Control Sample

Client Sample ID: 1337 Albatross

Client Sample ID: 1337 Albatross

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

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

Matrix: Solid									Prop T	vpe: Tot	
Analysis Batch: 69035										Batch:	
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Dibenz(a,h)anthracene	0.0531	J	1.76	1.649		mg/Kg	12	91	12 - 128	7	50
Fluoranthene	0.726		1.76	2.466		mg/Kg	52	99	10 - 143	23	50
Fluorene	ND		1.76	1.586		mg/Kg	12	90	20 - 120	10	50
Indeno[1,2,3-cd]pyrene	0.149		1.76	1.761		mg/Kg	12	92	22 - 121	12	50
Naphthalene	ND		1.76	1.633		mg/Kg	23	93	10 - 120	8	50
2-Methylnaphthalene	ND		1.76	1.559		mg/Kg	53	89	13 - 120	4	50
	MSD	MSD									
Surrogate	&Recovery	Qualifier	Limits								
2-Fluorobiphenyl (Surr)	72		29 - 120								
Terphenyl-d14 (Surr)	82		13 - 120								
Nitrobenzene-d5 (Surr)	65		27 - 120								

#### Method: Moisture - Percent Moisture

Lab Sample ID: 490-22181-A-1 DU	
Matrix: Solid	
Analysis Batch: 68676	

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

## TestAmerica Nashville

## **Client Sample ID: Duplicate** Prep Type: Total/NA

# **QC** Association Summary

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

## GC/MS VOA

## Prep Batch: 68619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-1	1337 Albatross	Total/NA	Solid	5035	
490-22932-2	902 Barracuda	Total/NA	Solid	5035	
490-22932-3	1233 Dove	Total/NA	Solid	5035	
490-22932-4	403 Elderberry	Total/NA	Solid	5035	
490-22932-5	1330 Albatross	Total/NA	Solid	5035	
490-22932-6	779 Laurel Bay	Total/NA	Solid	5035	
490-22932-7	1254 Dove	Total/NA	Solid	5035	
nalysis Batch: 69194					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-1	1337 Albatross	Total/NA	Solid	8260B	68619
490-22932-4	403 Elderberry	Total/NA	Solid	8260B	68619
LCS 490-69194/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-69194/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-69194/7	Method Blank	Total/NA	Solid	8260B	
analysis Batch: 69466	3				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-2	902 Barracuda	Total/NA	Solid	8260B	68619
490-22932-3	1233 Dove	Total/NA	Solid	8260B	68619
490-22932-5	1330 Albatross	Total/NA	Solid	8260B	68619
490-22932-6	779 Laurel Bay	Total/NA	Solid	8260B	68619
490-22932-7	1254 Dove	Total/NA	Solid	8260B	68619
LCS 490-69466/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-69466/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-69466/7	Method Blank	Total/NA	Solid	8260B	

## GC/MS Semi VOA

## Prep Batch: 68984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-1	1337 Albatross	Total/NA	Solid	3550C	
490-22932-1 MS	1337 Albatross	Total/NA	Solid	3550C	
490-22932-1 MSD	1337 Albatross	Total/NA	Solid	3550C	
490-22932-2	902 Barracuda	Total/NA	Solid	3550C	
490-22932-3	1233 Dove	Total/NA	Solid	3550C	
490-22932-4	403 Elderberry	Total/NA	Solid	3550C	
490-22932-5	1330 Albatross	Total/NA	Solid	3550C	
490-22932-6	779 Laurel Bay	Total/NA	Solid	3550C	
490-22932-7	1254 Dove	Total/NA	Solid	3550C	
LCS 490-68984/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-68984/1-A	Method Blank	Total/NA	Solid	3550C	
Analysis Batch: 69035	5				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-1	1337 Albatross	Total/NA	Solid	8270D	68984

Lab Sample ID	client Sample ID	Fieb i Abe	Matrix	Methou	Frep batch
490-22932-1	1337 Albatross	Total/NA	Solid	8270D	68984
490-22932-1 MS	1337 Albatross	Total/NA	Solid	8270D	68984
490-22932-1 MSD	1337 Albatross	Total/NA	Solid	8270D	68984
490-22932-2	902 Barracuda	Total/NA	Solid	8270D	68984
490-22932-3	1233 Dove	Total/NA	Solid	8270D	68984

TestAmerica Nashville

# **QC** Association Summary

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

## GC/MS Semi VOA (Continued)

## Analysis Batch: 69035 (Continued)

Client: Environmental E Project/Site: Laurel Bay				TestAmerica Job	ID: 490-22932-1
GC/MS Semi VOA	(Continued)				
Analysis Batch: 69035	(Continued)				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-4	403 Elderberry	Total/NA	Solid	8270D	68984
LCS 490-68984/2-A	Lab Control Sample	Total/NA	Solid	8270D	68984
MB 490-68984/1-A	Method Blank	Total/NA	Solid	8270D	68984
Analysis Batch: 69123					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22932-5	1330 Albatross	Total/NA	Solid	8270D	68984
490-22932-6	779 Laurel Bay	Total/NA	Solid	8270D	68984
490-22932-7	1254 Dove	Total/NA	Solid	8270D	68984

## **General Chemistry**

#### Analysis Batch: 68676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
90-22181-A-1 DU	Duplicate	Total/NA	Solid	Moisture	
90-22932-1	1337 Albatross	Total/NA	Solid	Moisture	
90-22932-2	902 Barracuda	Total/NA	Solid	Moisture	100
90-22932-3	1233 Dove	Total/NA	Solid	Moisture	
90-22932-4	403 Elderberry	Total/NA	Solid	Moisture	
90-22932-5	1330 Albatross	Total/NA	Solid	Moisture	
90-22932-6	779 Laurel Bay	Total/NA	Solid	Moisture	
90-22932-7	1254 Dove	Total/NA	Solid	Moisture	

## Client Sample ID: 1337 Albatross

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

# Lab Sample ID: 490-22932-1

Lab Sample ID: 490-22932-2

Lab Sample ID: 490-22932-3

Matrix: Solid

Matrix: Solid

Percent Solids: 74.2

Percent Solids: 95.8

Matrix: Solid Percent Solids: 93.1

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

## Client Sample ID: 902 Barracuda

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

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

# Client Sample ID: 1233 Dove

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

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

## Client Sample ID: 403 Elderberry

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

## Lab Sample ID: 490-22932-4 Matrix: Solid Percent Solids: 97.1

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

## Client Sample ID: 1330 Albatross

Date Collected: 03/19/13 15:30 Date Received: 03/27/13 08:30

# Lab Sample ID: 490-22932-5

Lab Sample ID: 490-22932-6

Matrix: Solid

Percent Solids: 92.0

Matrix: Solid Percent Solids: 95.9

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

# Client Sample ID: 779 Laurel Bay

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

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

## Client Sample ID: 1254 Dove

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

## Lab Sample ID: 490-22932-7 Matrix: Solid Percent Solids: 96.0

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

#### Laboratory References:

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

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

#### Protocol References:

EPA = US Environmental Protection Agency

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

#### Laboratory References:

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

TestAmerica Nashville

TestAmerica Job ID: 490-22932-1

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## Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-14
Arkansas DEQ	State Program	6	88-0737	04-25-13
California	NELAP	9	1168CA	10-31-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-13
llinois	NELAP	5	200010	12-09-13
owa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAP	6	30613	06-30-13
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAP	1	2963	10-09-13
New Jersey	NELAP	2	TN965	06-30-13
New York	NELAP	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Dregon	NELAP	10	TN200001	04-30-13
Pennsylvania	NELAP	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	04-30-14
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
JSDA	Federal		S-48469	11-02-13
Utah	NELAP	8	TAN	06-30-13
Virginia	NELAP	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING	Charlestor
Nashville, TN COOLER RECEIPT FORM	
Cooler Received/Opened On: 03/27/13 @ 0830	
Tracking # 9983 (last 4 digits, FedEx)	490-22932 Chain of Custo
Courier: Fed-ex IR Gun ID: 95610068	-
1. Temperature of rep. sample or temp blank when opened: 29 Degrees Celsius	m
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? If yes, how many and where:	YES., NONA
5. Were the seals intact, signed, and dated correctly?	YES NONA
6. Were custody papers inside cooler?	YES NONA
I certify that I opened the cooler and answered questions 1-6 (intial)	
7. Were custody seals on containers: YES (10) and Intact	YES NO NA
Were these signed and dated correctly?	YESNO.
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Pap	
9. Cooling process:	and the second second
10. Did all containers arrive in good condition (unbroken)?	TES).NONA
11. Were all container labels complete (#, date, signed, pres., etc)?	ES).NONA
12. Did all container labels and tags agree with custody papers?	(C)NA
13a, Were VOA vials received?	ES.NONA
b. Was there any observable headspace present in any VOA vial?	YESNO.
14. Was there a Trip Blank in this cooler? YES NO.NA If multiple coolers, seque	(W)
I certify that I unloaded the cooler and answered questions 7-14 (initial)	
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level	
b. Did the bottle labels indicate that the correct preservatives were used	ESD.NONA
16. Was residual chlorine present?	YESNO.
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial	
17. Were custody papers properly filled out (ink, signed, etc)?	ES.NONA
18. Did you sign the custody papers in the appropriate place?	ES.NONA
19. Were correct containers used for the analysis requested?	(ES)NONA
	ES.NONA
20. Was sufficient amount of sample sent in each container?	-
20. Was sufficient amount of sample sent in each container?	@

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	LTESTING	Nashville 2960 Fost Nashville,	ter Crei	ighto	'n			т	oil Fr	ree:	800	-726- -765- -726-	0980	0					1		ds, is t	his wo		g cond	ucted	d for	1						
Client Name/Account #:	EEG # 2449 10179 Highway	70		*				-			-					-							Compli	ance M		107.00		Yes_	-	No_No	-		
	Ladson, SC 294			_				-			-	-		-		-		Site S	State:	SC			Childre	cemen	AC	ION?			-	NO_	-		
Project Manager:			ee@ee	eqinc.r	net						-		_		-				PO#:		10	13	5	-									
Telephone Number:				-		F	ax No	o.:	8	43	3_	8	29	0	4	01		TA Que	ote #:				1										
Sampler Name: (Print)	Christ	Funst	511									~		1				Proje	ct ID:	Laurel	Bay H	lousing	Proje	ct									
Sampler Signature:	ATVY	7						1ª	*			1	10			_		Proje	ect #:														
	707 5	t				1		3	Rese	ervativ	ve		1		Mat	bix						A	nalyze	For:					7	-			_
Sample 10 / Description 1337 1A/bAFR055 902 BARRACHDA	10 Date Sampled	Time Sampled	G V No. of Containers Shipped	X X Grab	Composite	Field Filtered	Ice		NaOH ( Orange Label)	H2SO4 Plastic (Yellow Label)	H2SO4 Glass(Yellow Label)	× 1	Groundwater	Wastewaler	Drinking Water	Sludge K Soil	r	x 🗙 BTEX + Napth - 82606	X X PAH - 8270D										-1 2	RUSH TAT (Pre-Schedule	Standerd TAT	Fax Results	Place 26eet cowith report
902 BARRACUDA 1233DOUR	3/21/13	1145	5	X				_	2			12	4			X		x	×							-			3				à
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Special Instructions:	3/2G	113	109		1000	eived t	y. /			ipme	nt		-	T	Da	Fate	EDE	X Time		Labo	Tem	peratu	nents: re Upor of Hea			3.92			T.	Y		N	
Relinquished by:	Date		Tin		Rece	ived to	y Tes	tAme	nica:	~				3.	Da 27	ute 1-13	6	Time 830															

		Nashville 2960 Fost Nashville,	er Crei	ighto	n			т	oll F	ree:	800	5-726- 0-765- 5-726-	-098	0						metho	sist us in ds, is th tory pur	n using	the pr	oper a	nalytica			1	Loc: 229 #1 A			1112.022.02
Client Name/Account #:			2.4-30	-							1		- 6	2										ince Mo	onitorin	Ig?	Yes	i	No			
Address:	10179 Highway	78								-				-									Enforc	ement.	Action	?	Yes		No			
City/State/Zip:	Ladson, SC 294	56																Site	State:	SC												
Project Manager:	Tom McElwee e	mail: mcelv	vee@ee	eginc.	net														PO#:	. 1	10	33										
Telephone Number:	843.412.2097				6	Fi	ax No	o.:	89	13	- 1	87	9-	0	40	1		TA Qu	ote #:					1								
Sampler Name: (Print)	P	RAH	SI	50	in	1		1	-											Laurel	Bay Ho	ousing	Projec	t								
Sampler Signature:	/	11/1	SI	/				5	t'			1	-						ject #:													
		1	1					1	Pres	ervat	ive	-	रा		Mat	rix	-	T	2			An	alyze	For.					1			
Sample ID / Description 403 Eldiza banky 1330 Albatross 779 Layer Bay 1254 Down	3/18/13 3/19/13 3/20/13 3/21/13 3/21/13	Paldues amit 1215 1530 1430 1500	1 4 4 4 No. of Containers Shipped	XXX Grab	Composite	J Field Filtered	Ice	-	No N N No Name and Street	H <sub>3</sub> SO <sub>4</sub> Plastic (Yellow Label)	Argue	(Label)	Community // (W/ // //	Valoritamente Vastevrater	Drinking Water	-	× ×	XXXX BTEX + Napth - 8260	XXX PAH-8270D									4597	RUSH TAT (Pre-Schedule	Standard TAT	Fax Results	Cond AC with second
		1.5					-	-	-	1			+	+		-	-				1					-						
						1											1							1				1				
Special Instructions:										1										12.0		erature	Upon	Receip		3.9c						
Relinquished by:	3/26/	13	тіп 090	2 A 11	Recei			D	of St		ent			Τ	Da		EDE	EX Time	9		VOCs	Free o	of Head	ispace?	?	C			Y		N	
Relinquished by:	Date		Tin		Recei	ved b	y Tes	stafn	erica:					T	Da	te	1	Time	Ð	1												
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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.	True		
The cooler's custody seal, if present, is intact.	True		
Sample custody seals, if present, are intact.	N/A		
The cooler or samples do not appear to have been compromised or tampered with.	True		
Samples were received on ice.	True		
Cooler Temperature is acceptable.	True		
Cooler Temperature is recorded.	True		
COC is present.	True		
COC is filled out in ink and legible.	True		
COC is filled out with all pertinent information.	True		
Is the Field Sampler's name present on COC?	True		
There are no discrepancies between the containers received and the COC.	True		
Samples are received within Holding Time.	True		
Sample containers have legible labels.	True		
Containers are not broken or leaking.	True		
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	N/A		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		

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

Job Number: 490-22932-1

List Source: TestAmerica Nashville

# ATTACHMENT A

ACAS BEAUFORT       WMNA       01519143         JAREL BAY HOUSING       B. State Generator's ID       B. State Generator's ID         Senerator's Phone       843-879-0411       D. Transporter's ID         Transporter 2 Company Kame       6.       US EPA ID Number       C. State Transporter's ID         Transporter 2 Company Kame       8.       US EPA ID Number       C. State Transporter's ID         Designated Facility Name and Site Address       10.       US EPA ID Number       C. State Facility One         CLONK CUNTRY DRIVE       10.       US EPA ID Number       C. State Facility Phone       E43-987-4643         ID Oscription of Waste Materials       No.       Top       No.       Top       Top         WM Profile #       No.       Top	NON-HAZARDOUS MANIFEST			2. Page 1 0	-	1.1			
EAUFORT, SC 29904       Senarator Phone       84.3879-0411         Transporter 1 Company Name       6.       US EPA ID Number       C. State Transporter's ID         Transporter 2 Company Name       8.       US EPA ID Number       C. State Transporter's ID         Transporter 2 Company Name       8.       US EPA ID Number       E. State Transporter's ID         Transporter 2 Company Name       8.       US EPA ID Number       E. State Transporter's ID         ICKORY HILL KANFFILL       G. State Facility Mone       843-987-4643         IDOELAND, SC 29936       ID.       US EPA ID Number       G. State Facility Mone         I. Description of Waste Materials       10.       US EPA ID Number       G. State Facility Mone         I. Description of Waste Materials       10.       US EPA ID Number       G. State Facility Mone         I. Description of Waste Materials       10.       US EPA ID Number       G. State Facility Mone         I. Description of Waste Materials       10.       US EPA ID Number       G. State Facility Mone         I. Description of Waste Materials       10.       US EPA ID Number       G. State Facility Mone         I. Description of Waste Materials       10.       US EPA ID Number       G. State Facility Mone         I. Description of Waste Materials       10.       10.       Mone	AGENERATOR AGENERATION	Generator's Site Address (If different than mailing):			MNA				
Transporter 2 Company Name       C. State Transporter's ID         Transporter 2 Company Name       8.       US EPA ID Number         Designated Facility Name and Site Address       10.       US EPA ID Number         C. State Facility Name and Site Address       10.       US EPA ID Number         C. State Facility Nome       5.       State Facility Nome         EACOMPTON COUNTRY DRIVE       10.       US EPA ID Number         IL Description of Waste Materials       10.       US EPA ID Number         IL Description of Waste Materials       10.       US EPA ID Number         IL Description of Waste Materials       10.       11. Tore       11. More Comments         WM Profile #       10.026555C       10.       10.       10.       10.         WM Profile #       10.026555C       10.       10.       10.       10.         Special Handling Instructions and Additional Information       777 L A H a & L       Bar, Albar, K.       11.       10.         Special Handling Instructions and Additional Information       777 L A H a & L       Bar, Albar, K.       1	BEAUFORT, SC 29904 B. Generator's Phone 843-879-0411		. I.I	b. state	Generators	D			
Transporter's Phone         Transporter's 2 Company Name         B.       US EPA ID Number         E. State Transporter's ID.         F. Transporter's Phone         Designated Fadility Name and Site Address         ILCKORY HILL LANDFILL         Designated Fadility Name and Site Address         ID.       US EPA ID Number         E. State Transporter's Phone         State Facility Thome         State Facility Prome         Response Term State Facility Phone         Response Term State Facility Phone         WM Profile #         WM Profile #         WM Profile #         WM Profile #         Multitional Descriptions for Materials Listed Above         K. Disposal Location         Cell         WM Profile #         Additional Information         Transporter 1 Advected Earchited materials are not heardous wastes as defined by 40 CFR Part 261 are any applicable state law, have been fully and countary descriptions for Materials Listed Materials         Morearet 1       Signature         Mored File	. Transporter 1 Company Name	6. US EP/	A ID Number						
Transporter 2 Company Name       8.       US EPA ID Number       E. State Transporter's ID         Designated Facility Name and Site Address       10.       US EPA ID Number       E. State Transporter's ID         IDGELAND, SC 29936       10.       US EPA ID Number       6. State Facility ID         IDGELAND, SC 29936       10.       US EPA ID Number       6. State Facility ID         IDGELAND, SC 29936       11.       US EPA ID Number       6. State Facility ID         IDGELAND, SC 29936       11.       US EPA ID Number       6. State Facility ID         IDGELAND, SC 29936       11.       US EPA ID Number       6. State Facility ID         IDGELAND, SC 29936       11.       US EPA ID Number       6. State Facility ID         IDGELAND, SC 29936       11.       US EPA ID Number       6. State Facility ID         IDGELAND, SC 29936       11.       US EPA ID Number       11.       Total IA         IDGELAND, SC 29936       11.       US EPA ID Number       11.       Total IA       14.       Maccomments         IDGELAND, SC 29936       11.       UM Profile #       11.       Maccomments       Maccomments         WM Profile #       10.       US EPA ID AL & AL & AL       Maccomments       Maccomments       Maccomments         Spacial Handling	10111 phay 28 - CIV-								
Designated Facility Name and Site Address HCKORY HILL LANDFILL 621 LOW COUNTRY DRIVE IDGELAND, SC 2936       10.       US EPA ID Number       G. State Facility ID G. State Facility Phone       843-987-4643         1. Description of Waste Materials       11. Containent New       11. Total VIDGELAND, SC 29365       11. Description of Waste Materials       11. Max Comments New Video       11. Max	. Transporter 2 Company Name	8. US EP/	A ID Number		b. Transporter's Phone				
Designate Facility Vame and Site Address       10.       US EPA ID Number         ICKORN HILL KANDFILL       G. State Facility ID         IDGELAND, SC 29936       H. State Facility ID         1. Description of Waste Materials       ID         I. Description of Waste Materials       ID         I. Description of Waste Materials       ID         I. HEATING OIL TANK FILLED WITH SAND       ID         WM Profile #       ID2655SC         Special Handling Instructions for Materials Usted Above       K. Disposal Location         Cell       Level         Grid       ID254D EVEC G) [321]         Additional Information <t< td=""><td></td><td>1.</td><td colspan="2"></td><td colspan="4"></td></t<>		1.							
IIICKORY HILL LANDFILL       G. State Facility ID         1621 LOW COUNTRY DRIVE       H. State Facility Phone       843-987-4643         IDGELAND, SC 29936       33. Totel       14. Unit       L. Muc Convents         IDGELAND, SC 29936       33. Totel       14. Unit       L. Muc Convents         ID Description of Waste Materials       10. Convents       14. Unit       L. Muc Convents         . HEATING OIL TANK FILLED WITH SAND       //       20. //       70.6.0.9.4         WM Profile #       10265555C       //       //       70.6.0.9.4         WM Profile #       1026555C       //       //       //       //         WM Profile #       1026555C       //       //       //       //       //         WM Profile #       1026555C       // <td< td=""><td>. Designated Facility Name and Site Address</td><td>10. US EI</td><td>PA ID Number</td><td></td><td>F. Transpo</td><td>orter's Phone</td><td>-</td><td></td><td>-</td></td<>	. Designated Facility Name and Site Address	10. US EI	PA ID Number		F. Transpo	orter's Phone	-		-
IDGELAND, SC 29936       In Nucle Yang, Yong Yong Yong Yong Yong Yong Yong Yong	ICKORY HILL LANDFILL				G. State Facility ID				
1. Description of Waste Materials       12. Container       13. Total       14. Unit       L. Mic. Comments         HEATING OIL TANK FILLED WITH SAND       ////////////////////////////////////	2621 LOW COUNTRY DRIVE							3	
1. Description of Waste Materials       No.       Yyer       Quantity       W. You       1. Mac. Comments         . HEATING OIL TANK FILLED WITH SAND       //       //       200       706094       706094         . WM Profile #       1026555C       //       200       706094       706094         . WM Profile #       //       200       706094       706094         . WM Profile #       //       200       200       706094         . Additional Descriptions for Materials Used Above       K. Disposal Location       200       200         . Additional Descriptions and Additional Information       7774       200       201       201         . Special Handling Instructions and Additional Information       7774       200       203       201       203         . Additional Descriptions for Materials Used Above       K. Disposal Location       Cell       Lewel       41       4	RIDGELAND, SC 29936		1						
WM Profile #       1026555C         WM Profile #       Image: Second Secon	1. Description of Waste Materials						I. Mi	sc. Commen	its
WM Profile #       1026555C         WM Profile #       Image: Strategy of the strat	. HEATING OIL TANK FILLED WITH SAND		12	400	1 2	1	FTA	600	-1
WM Profile #         WM Profile #         WM Profile #         WM Profile #         Additional Descriptions for Materials Listed Above         K. Disposal Location         Cell         Grid         J. J				204	6.00	TONI	10	001	./
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WM Profile #         Additional Descriptions for Materials Listed Above         E. Additional Descriptions for Materials Listed Above         S. Special Handling Instructions and Additional Information         J. 3.3.1         ALBATHORS CERTIFICATE:         hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and ccurately described, classified and packaged and are in proper condition for transportation according to applicable state law, have been fully and ccurately described, classified and packaged and are in proper condition for transportation according to applicable state law, have been fully and ccurately described, classified and packaged and are in proper condition for transportation according to applicable state law, have been fully and ccurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.         7. Transporter 1 Acknowledgement of Receipt of Materials         Printed Name         Signature         Month         Day         Year         James Baldown         Month         Day         Year         James Baldown         Signature         Month         Day         Year         James Baldown         Questions, regulations, permits and licenses on the dates listed above.         Questions, regul							1		
WM Profile #         Additional Descriptions for Materials Listed Above         E. Additional Descriptions for Materials Listed Above         S. Special Handling Instructions and Additional Information         J. 3.3.1         ALBATHORS CERTIFICATE:         hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and ccurately described, classified and packaged and are in proper condition for transportation according to applicable state law, have been fully and ccurately described, classified and packaged and are in proper condition for transportation according to applicable state law, have been fully and ccurately described, classified and packaged and are in proper condition for transportation according to applicable state law, have been fully and ccurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.         7. Transporter 1 Acknowledgement of Receipt of Materials         Printed Name         Signature         Month         Day         Year         James Baldown         Month         Day         Year         James Baldown         Signature         Month         Day         Year         James Baldown         Questions, regulations, permits and licenses on the dates listed above.         Questions, regul				_		-			
WM Profile #       K. Disposal Location         Cell       Level         Grid       Y         S. Special Handling Instructions and Additional Information       TMP LAHAUL BAY YIZ 54 Device O 1321         Mathematic Structure       Y         Mathematic Structure       Y         S. Special Handling Instructions and Additional Information       TMP LAHAUL BAY YIZ 54 Device O 1321         Mathematic Structure       Y         Structure Y       Y         Carling		- 20	-	0			-		
Additional Descriptions for Materials Listed Above       K. Disposal Location         Cell       Cell         Grid       Y 4) 12 5 4 Dove 6) 13 21         Albert       Albert         D1331 Albert       Albert         Excase Order #       EMERGENCY CONTACT / PHONE NO::         6. GENERATOR'S CERTIFICATE:       EMERGENCY CONTACT / PHONE NO::         6. GENERATOR'S CERTIFICATE:       Signature "On behalf of"         Printed Name       Signature "On behalf of"         Month       Day         Printed Name       Signature         Almers       Signature         Almers       Albert         Almes			105	1000					
Additional Descriptions for Materials Listed Above       K. Disposal Location         Cell       Cell         Grid       Y 4) 12 5 4 Dove 6) 13 21         Albert       Albert         D1331 Albert       Albert         Excase Order #       EMERGENCY CONTACT / PHONE NO::         6. GENERATOR'S CERTIFICATE:       EMERGENCY CONTACT / PHONE NO::         6. GENERATOR'S CERTIFICATE:       Signature "On behalf of"         Printed Name       Signature "On behalf of"         Month       Day         Printed Name       Signature         Almers       Signature         Almers       Albert         Almes	WM Profile #				-		1		
Grid	. Additional Descriptions for Materials Listed Above		K. Disposi	al Location			4		
Grid			Cell				Level	-	
Month       Day       Year         Alberta       Signature       Month       Day       Year         7. Transporter 1 Acknowledgement of Receipt of Materials       Signature       Month       Day       Year         8. Transporter 2 Acknowledgement of Receipt of Materials       Signature       Month       Day       Year         9. Certificate of Final Treatment/Disposal       Signature       Month       Day       Year         9. Certificate of Final Treatment/Disposal       Certificate of Final Treatment/Disposal       Signature       Month       Day       Year         0. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.       Signature       Month       Day       Year							V .		
6. GENERATOR'S CERTIFICATE:         hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and curately described, classified and packaged and are in proper condition for transportation according to applicable regulations.         rinted Name       Signature "On behalf of"       Month       Day       Year         7. Transporter 1 Acknowledgement of Receipt of Materials       Signature       Month       Day       Year         8. Transporter 2 Acknowledgement of Receipt of Materials       Signature       Month       Day       Year         9. Certificate of Final Treatment/Disposal       Signature       Month       Day       Year         9. Certificate of Final Treatment/Disposal       Certification of receipt of non-hazardous materials covered by this manifest.       Printed Name       Month       Day       Year         0. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.       Printed Name       Month       Day       Year	1) 1337 Albathoss 3) 902 BARRACUDA 5) 1233 DOUL								
hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and ccurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.  rinted Name Signature "On behalf of" Month Day Vear Printed Name Signature Month Day Vear Signature Signature Month Day Vear Signature Signature Signature Month Day Vear Signature Si	6. GENERATOR'S CERTIFICATE:							_	
rinted Name Signature "On behalf of" Month Day Year 7. Transporter 1 Acknowledgement of Receipt of Materials Printed Name PRAASAAN Signature Month Day Year 8. Transporter 2 Acknowledgement of Receipt of Materials Printed Name Signature Month Day Year JAMES RAILW. Month Day Year 9. Certificate of Final Treatment/Disposal certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all pplicable laws, regulations, permits and licenses on the dates listed above. 0. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest. Printed Name Signature Month Day Year JAMES RAILW. MONTH DAY JAMES RAILW. MONT	hereby certify that the above-described materials are r						w, have been	fully and	I
Printed Name       Signature       Month       Day       Year         8. Transporter 2 Acknowledgement of Receipt of Materials       Printed Name       Signature       Month       Day       Year         9. Certificate of Final Treatment/Disposal       Signature       Month       Day       Year         9. Certificate of Final Treatment/Disposal       Certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all pplicable laws, regulations, permits and licenses on the dates listed above.       O. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.         Printed Name       Signature       Month       Day       Year				ding to app	licable regu	ations.	Month	Dav	Year
Printed Name       Signature       Month       Day       Year         8. Transporter 2 Acknowledgement of Receipt of Materials       Signature       Month       Day       Year         Printed Name       Signature       Month       Day       Year         JAMES RAIdue       Year       Year       Year         JAMES RAIdue       Month       Day       Year         9. Certificate of Final Treatment/Disposal       Certificate of Final Treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all pplicable laws, regulations, permits and licenses on the dates listed above.       O. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.         Printed Name       Signature       Month       Day       Year         Month       Day       Year       To Month       Day       Year	Signature on benair of						2	11	
8. Transporter 2 Acknowledgement of Receipt of Materials Printed Name Signature Signat	()		~ 1A	01	-				
Printed Name       Signature       Month       Day       Year         JAMES RAIdue       James Raidue       4       18       3         9. Certificate of Final Treatment/Disposal       certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all pplicable laws, regulations, permits and licenses on the dates listed above.       0. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.         Printed Name       Signature       Month       Day       Year         John L       Signature       Month       Day       Year	Printed Name PRAASKA	Signature	1/2	4			Month	Day	Year
JAMES RAIdue       4       18       3         9. Certificate of Final Treatment/Disposal         certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all pplicable laws, regulations, permits and licenses on the dates listed above.       9       0. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.         Printed Name       Signature       Month       Day       Year         Town       Content of the day of the d	8. Transporter 2 Acknowledgement of Receipt of Mate	rials	1	/				-	
9. Certificate of Final Treatment/Disposal certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all pplicable laws, regulations, permits and licenses on the dates listed above. 0. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest. Printed Name Signature Month Day Year	Printed Name	Signature	C				Month	Day	Year
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0. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.         Printed Name       Signature         Month       Day         Year         TOWL       Concepton			wledge, the ab	ove-describ	ed waste wa	as managed	n compliance	e with all	
Town Coneld Tom Could 41813			s covered by th	is manifest.					
TONI COTELY TON While 4/18/2	Printed Name	Signature	<u></u>	11	A		Month	Day	Year
	White- TREATMENT, STORAGE, DISPOSAL FACILITY COP	1000		fiel		Inu CENER		15	13

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		
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		