SUMMARY REPORT 173 COBIA DRIVE (FORMERLY 886 COBIA DRIVE) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



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

JUNE 2021

SUMMARY REPORT 173 COBIA DRIVE (FORMERLY 886 COBIA DRIVE) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



Naval Facilities Engineering Command Atlantic

9324 Virginia Avenue Norfolk, Virginia 23511-3095 Prepared by:



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

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



Table of Contents

1.0	INTRODUCTION	. 1
1.1 1.2	Background Information UST Removal and Assessment Process	
2.0	SAMPLING ACTIVITIES AND RESULTS	. 3
2.1 2.2	UST REMOVAL AND SOIL SAMPLING Soil Analytical Results	
3.0	PROPERTY STATUS	. 4
4.0	REFERENCES	. 4

Table

Table 1	Laboratory	Analytical	Results - Soil
	Laboratory	ranaryticar	Results Soll

Appendices

- Appendix A Multi-Media Selection Process for LBMH
- Appendix B UST Assesment Report
- Appendix C Regulatory Correspondence



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 173 Cobia Drive (Formerly 886 Cobia Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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



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

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

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

1.2 UST Removal and Assessment Process

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

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

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



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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 173 Cobia Drive (Formerly 886 Cobia Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 886 Cobia Drive* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B.

2.1 UST Removal and Soil Sampling

On June 12, 2013, a single 280 gallon heating oil UST was removed from the front yard under the porch area at 173 Cobia Drive (Formerly 886 Cobia Drive). 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 5'9" 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 173 Cobia Drive (Formerly 886 Cobia Drive) 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 173 Cobia Drive (Formerly 886 Cobia Drive). 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 – 886 Cobia Drive, 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 - Soil173 Cobia Drive (Formerly 886 Cobia Drive)Laurel Bay Military Housing AreaMarine Corps Air Station BeaufortBeaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 06/12/13								
olatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)										
Benzene	0.003	ND								
Ethylbenzene	1.15	ND								
Naphthalene	0.036	ND								
Toluene	0.627	ND								
Xylenes, Total	13.01	ND								
Semivolatile Organic Compounds Anal	yzed by EPA Method 8270D (mg/kg)									
Benzo(a)anthracene	0.66	ND								
Benzo(b)fluoranthene	0.66	ND								
Benzo(k)fluoranthene	0.66	ND								
Chrysene	0.66	ND								
Dibenz(a,h)anthracene	0.66	ND								

Notes:

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

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligram per kilogram

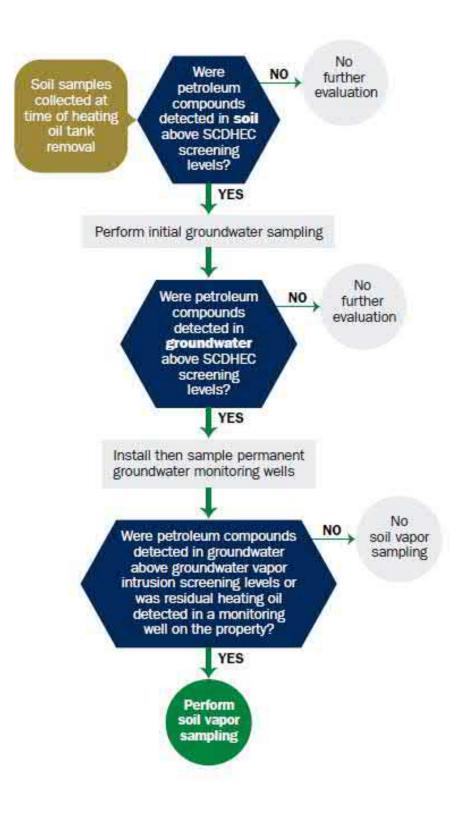
ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The laboratory report is provided in Appendix B.

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

I. OWNERSHIP OF UST (S)MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)Owner Name (Corporation, Individual, Public Agency, Other)P.O. Box 55001Mailing AddressBeaufort,South Carolina29904-5001CityStateZip Code843228-7317Area CodeCraig Ehde			Submit Completed Form To: UST Program SCDHEC 2600 Bull Street Columbia, South Carolina 29201 Telephone (803) 896-7957
Owner Name (Corporation, Individual, Public Agency, Other) P.O. Box 55001 Mailing Address Beaufort, South Carolina City State 843 228-7317 Craig Ehde	1.50.00 State 203	I. OWNERSHIP	OF UST (S)
P.O. Box 55001Mailing AddressBeaufort,South Carolina29904-5001CityStateZip Code843228-7317Craig Ehde			REAO (Craig Ehde)
Mailing AddressBeaufort,South Carolina29904-5001CityStateZip Code843228-7317Craig Ehde		, Individual, Public Agency, Other)	
CityStateZip Code843228-7317Craig Ehde			
843 228-7317 Craig Ehde	Beaufort,	South Carolina	29904-5001
	City	State	Zip Code
Area CodeTelephone NumberContact Person	843	228-7317	Craig Ehde
	Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #						~~
Laurel Bay Milita	ry Housing Area,	Marine Cor	os Air S	tation,	Beaufort,	SC
Facility Name or Compan	Site Identifier					
	Laurel Bay Milita:	ry Housing	Area			
Street Address or State Ro	ad (as applicable)					
Beaufort,	Beaufort					
City	County					
				Attac	hment 7	

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

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

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

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

My policy provider is:_____ The policy deductible is: _____ The policy limit is:

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this _____ day of _____, 20___

(Name)

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

VI. UST INFORMATION

		886Cobia
A.	Product(ex. Gas, Kerosene)	Heating oil
B.	Capacity(ex. 1k, 2k)	280 gal
C.	Age	Late 1950s
D.	Construction Material(ex. Steel, FRP)	Steel
E.	Month/Year of Last Use	Mid 1980s
F.	Depth (ft.) To Base of Tank	5'9"
G.	Spill Prevention Equipment Y/N	No
H·	Overfill Prevention Equipment Y/N	No
r	Method of Closure Removed/Filled	Removed
J_	Date Tanks Removed/Filled	6/12/2013
K.	Visible Corrosion or Pitting Y/N	Yes
L.	Visible Holes Y/N	Yes
		al al a a a a

M. Method of disposal for any USTs removed from the ground (attach disposal manifests) UST 886Cobia was removed from the ground and disposed at a "Subtitle D" landfill. See Attachment "A".

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests) UST 886Cobia was 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 scattered about the tank.

VII. PIPING INFORMATION

		886Cobia
		Steel
Ā.	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
1.	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
 A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map. 		x	
 B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? If yes, indicate location on site map and describe the odor (strong, mild, etc.) 		х	
C. Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth)?		x	
 D. Did contaminated soils remain stockpiled on site after closure? If yes, indicate the stockpile location on the site map. Name of DHEC representative authorizing soil removal: 		X	
 E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness. 		x	

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 #
386 Cobia	Excav at fill end	Soil	Sandy	5'9"	6/12/13 1415 hrs	P. Shaw	
							_
		÷					
			1				
8	1		1			4	
9		· · · · · · · · · · · · · · · · · · ·	1 1 1 1 1			1	
10							
11	1						
12				· · · · · · · · · · · · · · · · · · ·			
13							
14							
15			1				
16							
17							
18							
19	0						
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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

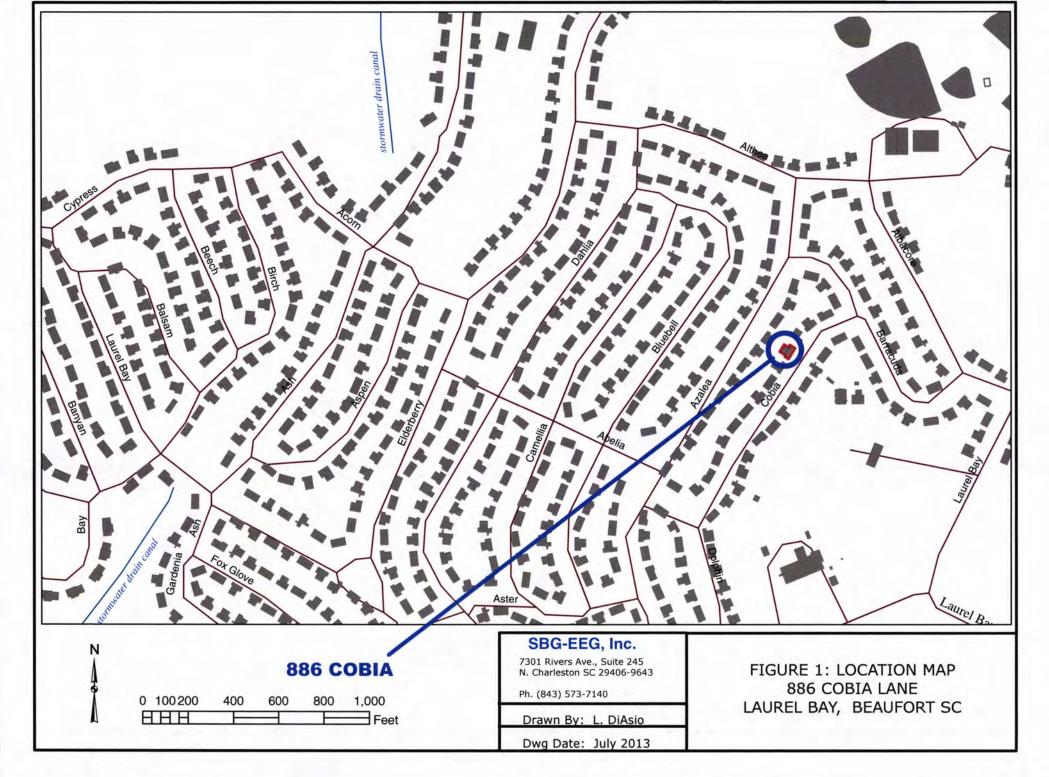
XII. RECEPTORS

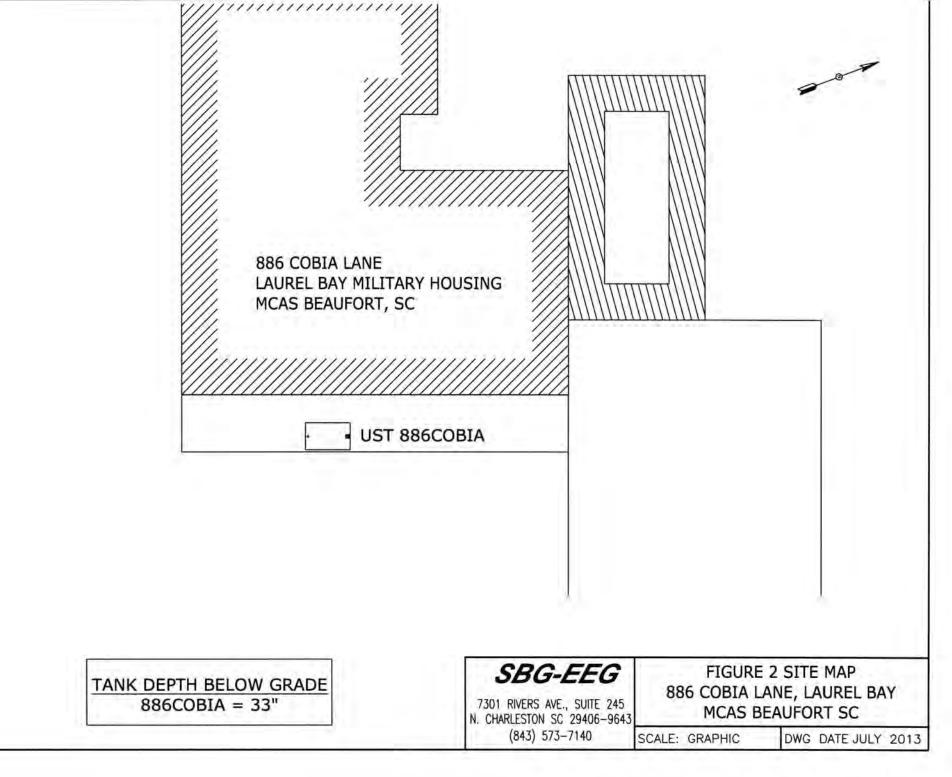
		Yes	No
Α.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		X
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate type of well, distance, and direction on site map.		
C.	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		х
	If yes, indicate type of structure, distance, and direction on site map.		
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, electric	1210 2 201	
	cable, fiber optic & ge If yes, indicate the type of utility, distance, and direction on the site map.	othei	mal
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?		X
	If yes, indicate the area of contaminated soil on the site map.		

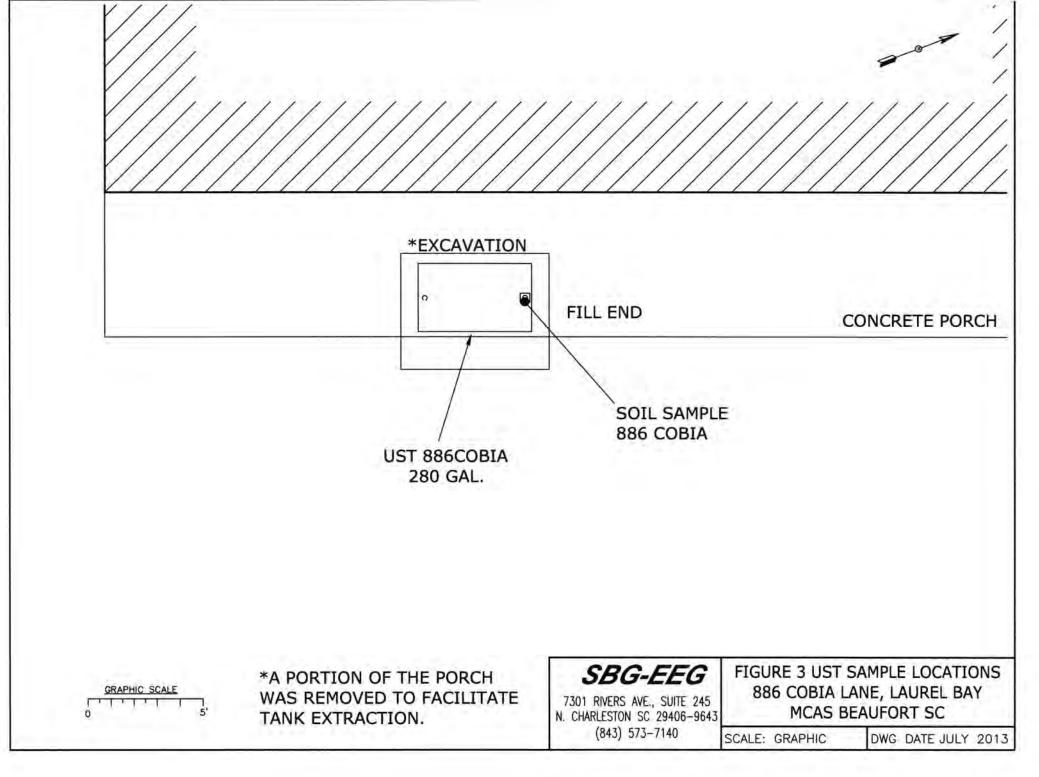
XIII. SITE MAP

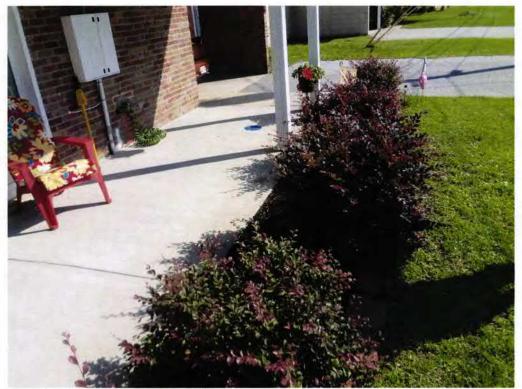
You must supply a <u>scaled</u> site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.

(Attach Site Map Here)









Picture 1: Location of UST 886Cobia.



Picture 2: UST 886Cobia 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	886Cobia			
Benzene	ND			
Toluene	ND			
Ethylbenzene	ND	11		
Xylenes	ND			
Naphthalene	ND			
Benzo (a) anthracene	ND			
Benzo (b) fluoranthene	ND			
Benzo (k) fluoranthene	ND			
Chrysene	ND		1/	 -
Dibenz (a, h) anthracene	ND	-		
TPH (EPA 3550)			4	
CoC			1	
Benzene		-4		
Toluene				
Ethylbenzene				
Xylenes				1
Naphthalene		1.12		
Benzo (a) anthracene				
Benzo (b) fluoranthene				
Benzo (k) fluoranthene				
Chrysene			-	
Dibenz (a, h) anthracene				
TPH (EPA 3550)				

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

CoC	RBSL (µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5				
Toluene	1,000				11
Ethylbenzene	700				
Xylenes	10,000	-			
Total BTEX	N/A				1
МТВЕ	40			1	1
Naphthalene	25		1.00	t t	-
Benzo (a) anthracene	10			1.11	1
Benzo (b) flouranthene	10				
Benzo (k) flouranthene	10				
Chrysene	10			5 <u>1</u>	
Dibenz (a, h) anthracene	10				
EDB	.05	1. 34	¥	(a. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	
1,2-DCA	5				
Lead	Site specific				

XV. ANALYTICAL RESULTS

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-29203-1 Client Project/Site: Laurel Bay Housing Project

For:

Small Business Group Inc. 10179 Highway 78 Ladson, South Carolina 29456

Attn: Tom McElwee

Authorized for release by: 7/3/2013 7:20:06 AM Shali Brown, Project Manager I (615)301-5031 shali.brown@testamericainc.com

Designee for

..... LINKS

Review your project results through

Total Access

Have a Question?

www.testamericainc.com

Visit us at:

Ask-

he

Expert

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.

Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	9
QC Association	14
Chronicle	15
Method Summary	16
Certification Summary	17
Chain of Custody	18
Receipt Checklists	20

Sample Summary

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project

TestAmerica Job ID: 490-29203-1

8

9

10

2

3

ab Sample ID	Client Sample ID	Matrix	Collected	Received	
190-29203-1	868 Cobia	Solid	06/11/13 15:45	06/19/13 08:15	
490-29203-2	886 Cobia	Solid	06/12/13 14:15	06/19/13 08:15	
490-29203-3	828 Azalea	Solid	06/13/13 12:00	06/19/13 08:15	

TestAmerica Nashville

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project

Job ID: 490-29203-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-29203-1

Comments

No additional comments.

Receipt

The samples were received on 6/19/2013 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

GC/MS VOA

No analytical or quality issues were noted.

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

Organic Prep No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

TestAmerica Job ID: 490-29203-1

TestAmerica Nashville 7/3/2013

Definitions/Glossary

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project

5

13

Qualifiers

GC/MS Semi VOA

INIS Sen	NI VOA
lifier	Qualifier Description
	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Client Sample ID: 868 Cobia

Date Collected: 06/11/13 15:45 Date Received: 06/19/13 08:15

Lab Sample ID: 490-29203-1 Matrix: Solid

Percent Solids: 94.9

6

9 10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	_	0.00228	0.000763	mg/Kg	-	06/20/13 06:46	06/21/13 21:20	1
Ethylbenzene	ND		0.00228	0.000763	mg/Kg	ü	06/20/13 06:46	06/21/13 21:20	1
Naphthalene	ND		0.00569	0.00193	mg/Kg	33	06/20/13 06:46	06/21/13 21:20	1
Toluene	ND		0.00228	0.000842	mg/Kg	-	06/20/13 06:46	06/21/13 21:20	1
Xylenes, Total	ND		0.00569	0.000763	mg/Kg	a	06/20/13 06:46	06/21/13 21:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 130				06/20/13 06:46	06/21/13 21:20	1
4-Bromofluorobenzene (Surr)	99		70 - 130				06/20/13 06:46	06/21/13 21:20	1
Dibromofluoromethane (Surr)	103		70 - 130				06/20/13 06:46	06/21/13 21:20	1
Toluene-d8 (Surr)	95		70 - 130				06/20/13 06:46	06/21/13 21:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0666	0.00994	mg/Kg	a	06/22/13 11:22	06/22/13 21:52	1
Acenaphthylene	ND		0.0666	0.00895	mg/Kg	a	06/22/13 11:22	06/22/13 21:52	1
Anthracene	ND		0.0666	0.00895	mg/Kg	12	06/22/13 11:22	06/22/13 21:52	1
Benzo[a]anthracene	0.0502	J	0.0666	0.0149	mg/Kg	0	06/22/13 11:22	06/22/13 21:52	1
Benzo[a]pyrene	0.0424	J	0.0666	0.0119	mg/Kg	12	06/22/13 11:22	06/22/13 21:52	1
Benzo[b]fluoranthene	0.0702		0.0666	0.0119	mg/Kg	32	06/22/13 11:22	06/22/13 21:52	1
Benzo[g,h,i]perylene	ND		0.0666	0.00895	mg/Kg	ä	06/22/13 11:22	06/22/13 21:52	1
Benzo[k]fluoranthene	0.0185	J	0.0666	0.0139	mg/Kg	23	06/22/13 11:22	06/22/13 21:52	1
1-Methylnaphthalene	ND		0.0666	0.0139	mg/Kg	12	06/22/13 11:22	06/22/13 21:52	1
Pyrene	0.0858		0.0666	0.0119	mg/Kg	2	06/22/13 11:22	06/22/13 21:52	1
Phenanthrene	ND		0.0666	0.00895	mg/Kg	a	06/22/13 11:22	06/22/13 21:52	1
Chrysene	0.0556	J	0.0666	0.00895	mg/Kg	12	06/22/13 11:22	06/22/13 21:52	1
Dibenz(a,h)anthracene	ND		0.0666	0.00696	mg/Kg	12	06/22/13 11:22	06/22/13 21:52	1
Fluoranthene	0.0998		0.0666	0.00895	mg/Kg	\$	06/22/13 11:22	06/22/13 21:52	1
Fluorene	ND		0.0666	0.0119	mg/Kg	-	06/22/13 11:22	06/22/13 21:52	1
Indeno[1,2,3-cd]pyrene	ND		0.0666	0.00994	mg/Kg	-	06/22/13 11:22	06/22/13 21:52	1
Naphthalene	ND		0.0666	0.00895	mg/Kg	-12	06/22/13 11:22	06/22/13 21:52	1
2-Methylnaphthalene	ND		0.0666	0.0159	mg/Kg	12	06/22/13 11:22	06/22/13 21:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	51		29 - 120				06/22/13 11:22	06/22/13 21:52	1
Terphenyl-d14 (Surr)	78		13 - 120				06/22/13 11:22	06/22/13 21:52	1
Nitrobenzene-d5 (Surr)	50		27 - 120				06/22/13 11:22	06/22/13 21:52	1
General Chemistry		0			11-14				Dil Fee
Analyte	ottoxatt	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10	0.10	%			06/20/13 12:14	1

Client Sample ID: 886 Cobia

Date Collected: 06/12/13 14:15 Date Received: 06/19/13 08:15

Lab Sample ID: 490-29203-2

Analyzed

06/21/13 21:50

06/21/13 21:50

06/21/13 21:50

06/21/13 21:50

06/21/13 21:50

Matrix: Solid Percent Solids: 95.0

Dil Fac

1

1

1

1

1

Dil Fac 1 1 1 6

Method: 8260B - Volatile Organic Compounds (GC/MS) Analyte **Result Qualifier** RL MDL Unit D Prepared Benzene ND 0.00236 0.000792 mg/Kg 125 06/20/13 06:46 Ethylbenzene ND 0.000792 mg/Kg 33 06/20/13 06:46 0.00236 12 Naphthalene ND 0.00591 0.00201 mg/Kg 06/20/13 06:46 0.000874 mg/Kg Toluene ND 0.00236 12 06/20/13 06:46 ND 0.00591 0.000792 mg/Kg 12 06/20/13 06:46 Xylenes, Total

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Ľ
1,2-Dichloroethane-d4 (Surr)	92	-	70 - 130	06/20/13 06:46	06/21/13 21:50	1
4-Bromofluorobenzene (Surr)	97		70 - 130	06/20/13 06:46	06/21/13 21:50	
Dibromofluoromethane (Surr)	102		70 - 130	06/20/13 06:46	06/21/13 21:50	
Toluene-d8 (Surr)	93		70 - 130	06/20/13 06:46	06/21/13 21:50	

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0668	0.00997	mg/Kg	a	06/22/13 11:22	06/22/13 22:18	1
Acenaphthylene	ND		0.0668	0.00897	mg/Kg	a	06/22/13 11:22	06/22/13 22:18	1
Anthracene	ND		0.0668	0.00897	mg/Kg	12	06/22/13 11:22	06/22/13 22:18	1
Benzo[a]anthracene	ND		0.0668	0.0150	mg/Kg	12	06/22/13 11:22	06/22/13 22:18	1
Benzo[a]pyrene	0.0374	J	0.0668	0.0120	mg/Kg	22	06/22/13 11:22	06/22/13 22:18	1
Benzo[b]fluoranthene	ND		0.0668	0.0120	mg/Kg	13	06/22/13 11:22	06/22/13 22:18	1
Benzo[g,h,i]perylene	0.147		0.0668	0.00897	mg/Kg	12	06/22/13 11:22	06/22/13 22:18	1
Benzo[k]fluoranthene	ND		0.0668	0.0140	mg/Kg	12	06/22/13 11:22	06/22/13 22:18	1
1-Methylnaphthalene	ND		0.0668	0.0140	mg/Kg	12	06/22/13 11:22	06/22/13 22:18	1
Pyrene	ND		0.0668	0.0120	mg/Kg	ü	06/22/13 11:22	06/22/13 22:18	1
Phenanthrene	ND		0.0668	0.00897	mg/Kg	12	06/22/13 11:22	06/22/13 22:18	1
Chrysene	ND		0.0668	0.00897	mg/Kg	12	06/22/13 11:22	06/22/13 22:18	1
Dibenz(a,h)anthracene	ND		0.0668	0.00698	mg/Kg	n	06/22/13 11:22	06/22/13 22:18	1
Fluoranthene	ND		0.0668	0.00897	mg/Kg	12	06/22/13 11:22	06/22/13 22:18	1
Fluorene	ND		0.0668	0.0120	mg/Kg	11	06/22/13 11:22	06/22/13 22:18	1
Indeno[1,2,3-cd]pyrene	0.0904		0.0668	0.00997	mg/Kg	11	06/22/13 11:22	06/22/13 22:18	1
Naphthalene	ND		0.0668	0.00897	mg/Kg	11	06/22/13 11:22	06/22/13 22:18	1
2-Methylnaphthalene	ND		0.0668	0.0160	mg/Kg	13	06/22/13 11:22	06/22/13 22:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	59		29 - 120				06/22/13 11:22	06/22/13 22:18	1
Terphenyl-d14 (Surr)	69		13 - 120				06/22/13 11:22	06/22/13 22:18	1
Nitrobenzene-d5 (Surr)	51		27 - 120				06/22/13 11:22	06/22/13 22:18	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10	0.10	%			06/20/13 12:14	1

Client Sample ID: 828 Azalea

Date Collected: 06/13/13 12:00 Date Received: 06/19/13 08:15

Lab Sample ID: 490-29203-3

Matrix: Solid Percent Solids: 96.8

6

9

3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00226	0.000756	mg/Kg	12	06/20/13 06:46	06/21/13 23:51	1
Ethylbenzene	ND		0.00226	0.000756	mg/Kg	377	06/20/13 06:46	06/21/13 23:51	1
Naphthalene	ND		0.00564	0.00192	mg/Kg	52	06/20/13 06:46	06/21/13 23:51	1
Toluene	ND		0.00226	0.000835	mg/Kg	12	06/20/13 06:46	06/21/13 23:51	1
Xylenes, Total	ND		0.00564	0.000756	mg/Kg	Ц.	06/20/13 06:46	06/21/13 23:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 130				06/20/13 06:46	06/21/13 23:51	1
4-Bromofluorobenzene (Surr)	95		70 - 130				06/20/13 06:46	06/21/13 23:51	1
Dibromofluoromethane (Surr)	102		70 - 130				06/20/13 06:46	06/21/13 23:51	1
Toluene-d8 (Surr)	95		70 - 130				06/20/13 06:46	06/21/13 23:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0668	0.00998	mg/Kg	22	06/22/13 11:22	06/24/13 13:55	1
Acenaphthylene	ND		0.0668	0.00898	mg/Kg	13	06/22/13 11:22	06/24/13 13:55	1
Anthracene	ND		0.0668	0.00898	mg/Kg	a	06/22/13 11:22	06/24/13 13:55	1
Benzo[a]anthracene	ND		0.0668	0.0150	mg/Kg	321	06/22/13 11:22	06/24/13 13:55	1
Benzo[a]pyrene	ND		0.0668	0.0120	mg/Kg	a	06/22/13 11:22	06/24/13 13:55	1
Benzo[b]fluoranthene	ND		0.0668	0.0120	mg/Kg	a	06/22/13 11:22	06/24/13 13:55	1
Benzo[g,h,i]perylene	ND		0.0668	0.00898	mg/Kg	52	06/22/13 11:22	06/24/13 13:55	1
Benzo[k]fluoranthene	ND		0.0668	0.0140	mg/Kg	\$3	06/22/13 11:22	06/24/13 13:55	1
1-Methylnaphthalene	ND		0.0668	0.0140	mg/Kg	322	06/22/13 11:22	06/24/13 13:55	1
Pyrene	ND		0.0668	0.0120	mg/Kg	22	06/22/13 11:22	06/24/13 13:55	1
Phenanthrene	ND		0.0668	0.00898	mg/Kg	12	06/22/13 11:22	06/24/13 13:55	1
Chrysene	ND		0.0668	0.00898	mg/Kg	12	06/22/13 11:22	06/24/13 13:55	1
Dibenz(a,h)anthracene	ND		0.0668	0.00698	mg/Kg	57	06/22/13 11:22	06/24/13 13:55	1
Fluoranthene	ND		0.0668	0.00898	mg/Kg	33	06/22/13 11:22	06/24/13 13:55	1
Fluorene	ND		0.0668	0.0120	mg/Kg	12	06/22/13 11:22	06/24/13 13:55	1
Indeno[1,2,3-cd]pyrene	ND		0.0668	0.00998	mg/Kg	D	06/22/13 11:22	06/24/13 13:55	1
Naphthalene	ND		0.0668	0.00898	mg/Kg	53	06/22/13 11:22	06/24/13 13:55	1
2-Methylnaphthalene	ND		0.0668	0.0160	mg/Kg	32	06/22/13 11:22	06/24/13 13:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	57		29 - 120				06/22/13 11:22	06/24/13 13:55	1
Terphenyl-d14 (Surr)	67		13 - 120				06/22/13 11:22	06/24/13 13:55	1
Nitrobenzene-d5 (Surr)	57		27 - 120				06/22/13 11:22	06/24/13 13:55	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	97		0.10	0.10	%			06/20/13 12:14	1

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

Lab Sample ID: MB 490-88059/6 Matrix: Solid Analysis Batch: 88059

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			06/21/13 16:16	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			06/21/13 16:16	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			06/21/13 16:16	1
Toluene	ND		0.00200	0.000740	mg/Kg			06/21/13 16:16	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			06/21/13 16:16	1
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		70 - 130					06/21/13 16:16	1
4-Bromofluorobenzene (Surr)	96		70 - 130					06/21/13 16:16	1
Dibromofluoromethane (Surr)	100		70 - 130					06/21/13 16:16	1
Toluene-d8 (Surr)	93		70 - 130					06/21/13 16:16	1

Lab Sample ID: LCS 490-88059/3 Matrix: Solid Analysis Batch: 88059

a second to second a second	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.04575		mg/Kg		92	75 - 127	
Ethylbenzene	0.0500	0.04639		mg/Kg		93	80 - 134	
Naphthalene	0.0500	0.05215		mg/Kg		104	69 - 150	
Toluene	0.0500	0.04497		mg/Kg		90	80 - 132	
Xylenes, Total	0.150	0.1370		mg/Kg		91	80 - 137	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	95		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	90		70 - 130

Lab Sample ID: LCSD 490-88059/4 Matrix: Solid

Analysis Batch: 88059

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.04582		mg/Kg		92	75 - 127	0	50
Ethylbenzene	0.0500	0.04684		mg/Kg		94	80 - 134	1	50
Naphthalene	0.0500	0.05193		mg/Kg		104	69 - 150	0	50
Toluene	0.0500	0.04642		mg/Kg		93	80 - 132	3	50
Xylenes, Total	0.150	0.1376		mg/Kg		92	80 - 137	0	50

Surrogate	%Recovery	Qualifier	Limits
and the second of the second se		quanner	
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
4-Bromofluorobenzene (Surr)	95		70 - 130
Dibromofluoromethane (Surr)	102		70 - 130
Toluene-d8 (Surr)	92		70 - 130

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

5

7

TestAmerica Job ID: 490-29203-1

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

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

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

82

Lab Sample ID: MB 490-88209/1-A Matrix: Solid Analysis Batch: 88169

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 88209

7

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Anthracene	ND		0.0670	0.00900	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Pyrene	ND		0.0670	0.0120	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Chrysene	ND		0.0670	0.00900	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Fluorene	ND		0.0670	0.0120	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		06/22/13 11:22	06/22/13 17:22	1
	мв	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	74		29 - 120				06/22/13 11:22	06/22/13 17:22	1
Terphenyl-d14 (Surr)	98		13 - 120				06/22/13 11:22	06/22/13 17:22	1

Lab Sample ID: LCS 490-88209/2-A Matrix: Solid Analysis Batch: 88169

Nitrobenzene-d5 (Surr)

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

06/22/13 17:22

06/22/13 11:22

Prep Batch: 88209 Spike LCS LCS %Rec. Analyte Added **Result Qualifier** Unit D %Rec Limits 38 - 120 Acenaphthylene 1.67 1.576 mg/Kg 95 Anthracene 1.67 1.515 mg/Kg 91 46 - 124 Benzo[a]anthracene 45 - 120 1.67 1.503 mg/Kg 90 45 - 120 Benzo[a]pyrene 1.67 1.432 mg/Kg 86 Benzo[b]fluoranthene 1.67 1.436 mg/Kg 86 42 - 120 Benzo[g,h,i]perylene 1.67 1.355 mg/Kg 81 38 - 120 Benzo[k]fluoranthene 1.347 42 - 120 1.67 mg/Kg 81 1-Methylnaphthalene 32 - 120 1.67 1.252 mg/Kg 75 Pyrene 1.67 1.601 mg/Kg 96 43 - 120 mg/Kg 45 - 120 Phenanthrene 1.67 1.385 83 Chrysene 1.67 1.479 mg/Kg 89 43 - 120 Dibenz(a,h)anthracene 1.67 1.381 mg/Kg 83 32 - 128 89 46 - 120 Fluoranthene 1.67 1.481 mg/Kg mg/Kg 89 42 - 120 Fluorene 1.67 1.477 Indeno[1,2,3-cd]pyrene 1.67 1.280 mg/Kg 77 41 - 121 Naphthalene 1.67 1.201 mg/Kg 72 32 - 120 2-Methylnaphthalene 1.67 1.284 mg/Kg 77 28 - 120

27 - 120

TestAmerica Nashville

Prep Type: Total/NA Prep Batch: 88209

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

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

Lab Sample ID: LCS 490-88209/2-A Matrix: Solid Analysis Batch: 88169

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	66	-	29 - 120
Terphenyl-d14 (Surr)	81		13 - 120
Nitrobenzene-d5 (Surr)	56		27 - 120

Lab Sample ID: LCSD 490-88209/3-A Matrix: Solid

Matrix: Colla								ypc. 10	
Analysis Batch: 88169							Prep	Batch:	88209
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	1.67	1.429		mg/Kg		86	38 - 120	10	50
Anthracene	1.67	1.219		mg/Kg		73	46 - 124	22	49
Benzo[a]anthracene	1.67	1.432		mg/Kg		86	45 - 120	5	50
Benzo[a]pyrene	1.67	1.400		mg/Kg		84	45 - 120	2	50
Benzo[b]fluoranthene	1.67	1.441		mg/Kg		86	42 - 120	0	50
Benzo[g,h,i]perylene	1.67	1.389		mg/Kg		83	38 - 120	2	50
Benzo[k]fluoranthene	1.67	1.383		mg/Kg		83	42 - 120	3	45
1-Methylnaphthalene	1.67	1.101		mg/Kg		66	32 - 120	13	50
Pyrene	1.67	1.449		mg/Kg		87	43 - 120	10	50
Phenanthrene	1.67	1.319		mg/Kg		79	45 - 120	5	50
Chrysene	1.67	1.389		mg/Kg		83	43 - 120	6	49
Dibenz(a,h)anthracene	1.67	1.385		mg/Kg		83	32 - 128	0	50
Fluoranthene	1.67	1.473		mg/Kg		88	46 - 120	1	50
Fluorene	1.67	1.368		mg/Kg		82	42 - 120	8	50
Indeno[1,2,3-cd]pyrene	1.67	1.325		mg/Kg		80	41 - 121	3	50
Naphthalene	1.67	1.146		mg/Kg		69	32 - 120	5	50
2-Methylnaphthalene	1.67	1.150		mg/Kg		69	28 - 120	11	50

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	57		29 - 120
Terphenyl-d14 (Surr)	72		13 - 120
Nitrobenzene-d5 (Surr)	58		27 - 120

Lab Sample ID: 490-29340-F-1-B MS Matrix: Solid Analysis Batch: 88169

Analysis Batch: 88169	Sample	Sample	Spike	MS	MS				Prep Batch: 88 %Rec.	209
Analyte		Qualifier	Added	Result		Unit	D	%Rec	Limits	
Acenaphthylene	ND		1.81	1.400		mg/Kg	Ω.	77	25 - 120	
Anthracene	ND		1.81	1.440		mg/Kg	3 <u>2</u>	80	28 - 125	
Benzo[a]anthracene	ND		1.81	1.463		mg/Kg	α	81	23 - 120	
Benzo[a]pyrene	ND		1.81	1.425		mg/Kg	13	79	15 - 128	
Benzo[b]fluoranthene	ND		1.81	1.325		mg/Kg	12	73	12 - 133	
Benzo[g,h,i]perylene	ND		1.81	1.356		mg/Kg	\$3	75	22 - 120	
Benzo[k]fluoranthene	ND		1.81	1.325		mg/Kg	ü	73	28 - 120	
1-Methylnaphthalene	ND		1.81	1.184		mg/Kg	-	65	10 - 120	
Pyrene	ND		1.81	1.483		mg/Kg	12	82	20 - 123	
Phenanthrene	ND		1.81	1.349		mg/Kg	30	75	21 - 122	
Chrysene	ND		1.81	1.454		mg/Kg	22	80	20 - 120	

TestAmerica Nashville

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Prep Type: Total/NA

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

Lab Sample ID: 490-29340-F-1-B MS Matrix: Solid

Analysis Batch: 88169									Prep Batch: 88	209
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Dibenz(a,h)anthracene	ND		1.81	1.369		mg/Kg	a	76	12 - 128	
Fluoranthene	ND		1.81	1.452		mg/Kg	-12	80	10 - 143	
Fluorene	ND		1.81	1.376		mg/Kg		76	20 - 120	
Indeno[1,2,3-cd]pyrene	ND		1.81	1.317		mg/Kg	12	73	22 - 121	
Naphthalene	ND		1.81	1.134		mg/Kg	12	63	10 - 120	
2-Methylnaphthalene	ND		1.81	1.204		mg/Kg	a	67	13 - 120	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
2-Fluorobiphenyl (Surr)	50		29 - 120							
Terphenyl-d14 (Surr)	63		13 - 120							
Nitrobenzene-d5 (Surr)	47		27 - 120							

Lab Sample ID: 490-29340-F-1-C MSD Matrix: Solid Analysis Batch: 88169

Analysis Batch: 88169									Prep	Batch:	88209
and a second second	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	ND		1.79	1.440		mg/Kg	12	80	25 - 120	3	50
Anthracene	ND		1.79	1.435		mg/Kg	Ø	80	28 - 125	0	49
Benzo[a]anthracene	ND		1.79	1.458		mg/Kg	**	81	23 - 120	0	50
Benzo[a]pyrene	ND		1.79	1.360		mg/Kg	\$	76	15 - 128	5	50
Benzo[b]fluoranthene	ND		1.79	1.343		mg/Kg	12	75	12 - 133	1	50
Benzo[g,h,i]perylene	ND		1.79	1.305		mg/Kg	-	73	22 - 120	4	50
Benzo[k]fluoranthene	ND		1.79	1.269		mg/Kg	*	71	28 - 120	4	45
1-Methylnaphthalene	ND		1.79	1.264		mg/Kg	ü	71	10 - 120	7	50
Pyrene	ND		1.79	1.454		mg/Kg	a	81	20 - 123	2	50
Phenanthrene	ND		1.79	1.383		mg/Kg	x	77	21 - 122	3	50
Chrysene	ND		1.79	1.330		mg/Kg	12	74	20 - 120	9	49
Dibenz(a,h)anthracene	ND		1.79	1.336		mg/Kg	¤	75	12 - 128	2	50
Fluoranthene	ND		1.79	1.435		mg/Kg	22	80	10 - 143	1	50
Fluorene	ND		1.79	1.420		mg/Kg	321	79	20 - 120	3	50
Indeno[1,2,3-cd]pyrene	ND		1.79	1.259		mg/Kg	¹¹	70	22 - 121	4	50
Naphthalene	ND		1.79	1.153		mg/Kg	32	64	10 - 120	2	50
2-Methylnaphthalene	ND		1.79	1.221		mg/Kg	¤	68	13 - 120	1	50
	MSD	MSD									

WSD	MSD	
%Recovery	Qualifier	Limits
54		29 - 120
64		13 - 120
48		27 - 120
	%Recovery 54 64	%Recovery Qualifier 54 64

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

3

TestAmerica Job ID: 490-29203-1

8

9

12

Method: Moisture - Po	ercent Moisture			+				
Lab Sample ID: 490-291	91-H-14 DU					Clier	nt Sample ID: Dup	olicate
Matrix: Solid							Prep Type: Tot	
Analysis Batch: 87708								
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Solids	91		91		%		0.1	20

QC Association Summary

Client: Small Business Group Inc. Project/Site: Laurel Bay Housing Project

GC/MS VOA

Prep Batch: 87559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-29203-1	868 Cobia	Total/NA	Solid	5035	
490-29203-2	886 Cobia	Total/NA	Solid	5035	
490-29203-3	828 Azalea	Total/NA	Solid	5035	
Analysis Batch: 8805	9				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-29203-1	868 Cobia	Total/NA	Solid	8260B	87559
490-29203-2	886 Cobia	Total/NA	Solid	8260B	87559
490-29203-3	828 Azalea	Total/NA	Solid	8260B	87559
LCS 490-88059/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-88059/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Analysis Batch: 88169

Prep Batch: 87559						
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
490-29203-1	868 Cobia	Total/NA	Solid	5035		5
490-29203-2	886 Cobia	Total/NA	Solid	5035		
490-29203-3	828 Azalea	Total/NA	Solid	5035		6
Analysis Batch: 88059						
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
490-29203-1	868 Cobia	Total/NA	Solid	8260B	87559	•
490-29203-2	886 Cobia	Total/NA	Solid	8260B	87559	8
490-29203-3	828 Azalea	Total/NA	Solid	8260B	87559	
LCS 490-88059/3	Lab Control Sample	Total/NA	Solid	8260B		Ξ
LCSD 490-88059/4	Lab Control Sample Dup	Total/NA	Solid	8260B		
MB 490-88059/6	Method Blank	Total/NA	Solid	8260B		
GC/MS Semi VOA						
Analysis Batch: 88169					1	
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
490-29203-1	868 Cobia	Total/NA	Solid	8270D	88209	18
490-29203-2	886 Cobia	Total/NA	Solid	8270D	88209	-
490-29340-F-1-B MS	Matrix Spike	Total/NA	Solid	8270D	88209	
490-29340-F-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	88209	
LCS 490-88209/2-A	Lab Control Sample	Total/NA	Solid	8270D	88209	
LCSD 490-88209/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	88209	
MB 490-88209/1-A	Method Blank	Total/NA	Solid	8270D	88209	

Prep Batch: 88209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-29203-1	868 Cobia	Total/NA	Solid	3550C	
490-29203-2	886 Cobia	Total/NA	Solid	3550C	
490-29203-3	828 Azalea	Total/NA	Solid	3550C	
490-29340-F-1-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-29340-F-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
LCS 490-88209/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 490-88209/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
MB 490-88209/1-A	Method Blank	Total/NA	Solid	3550C	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-29203-3	828 Azalea	Total/NA	Solid	8270D	88209

General Chemistry

Analysis Batch: 87708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-29191-H-14 DU	Duplicate	Total/NA	Solid	Moisture	
490-29203-1	868 Cobia	Total/NA	Solid	Moisture	
490-29203-2	886 Cobia	Total/NA	Solid	Moisture	
490-29203-3	828 Azalea	Total/NA	Solid	Moisture	

Batch Number	Prepared or Analyzed			Matrix: Solid Percent Solids: 94.9
		GALLAN CAR		Percent Solids: 94.9
		a		
Number	or Analyzed	and the second second		
	or ranarj zou	Analyst	Lab	
87559	06/20/13 06:46	MLN	TAL NSH	
88059	06/21/13 21:20	ККК	TAL NSH	
88209	06/22/13 11:22	JLP	TAL NSH	
88169	06/22/13 21:52	BES	TAL NSH	
87708	06/20/13 12:14	MWT	TAL NSH	
	88169	88169 06/22/13 21:52	88169 06/22/13 21:52 BES	88169 06/22/13 21:52 BES TAL NSH

Client Sample ID: 886 Cobia Date Collected: 06/12/13 14:15

Date Received: 06/19/13 08:15

Ргер Туре	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			87559	06/20/13 06:46	MLN	TAL NSH
Total/NA	Analysis	8260B		1	88059	06/21/13 21:50	ккк	TAL NSH
Total/NA	Prep	3550C			88209	06/22/13 11:22	JLP	TAL NSH
Total/NA	Analysis	8270D		1	88169	06/22/13 22:18	BES	TAL NSH
Total/NA	Analysis	Moisture		1	87708	06/20/13 12:14	MWT	TAL NSH

Client Sample ID: 828 Azalea

Date Collected: 06/13/13 12:00 Date Received: 06/19/13 08:15

Lab Sample ID: 490-29203-3 Matrix: Solid Percent Solids: 96.8

Lab Sample ID: 490-29203-2

Matrix: Solid

Percent Solids: 95.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			87559	06/20/13 06:46	MLN	TAL NSH
Total/NA	Analysis	8260B		1	88059	06/21/13 23:51	KKK	TAL NSH
Total/NA	Prep	3550C			88209	06/22/13 11:22	JLP	TAL NSH
Total/NA	Analysis	8270D		1	88385	06/24/13 13:55	BES	TAL NSH
Total/NA	Analysis	Moisture		1	87708	06/20/13 12:14	MWT	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: 490-29203-1

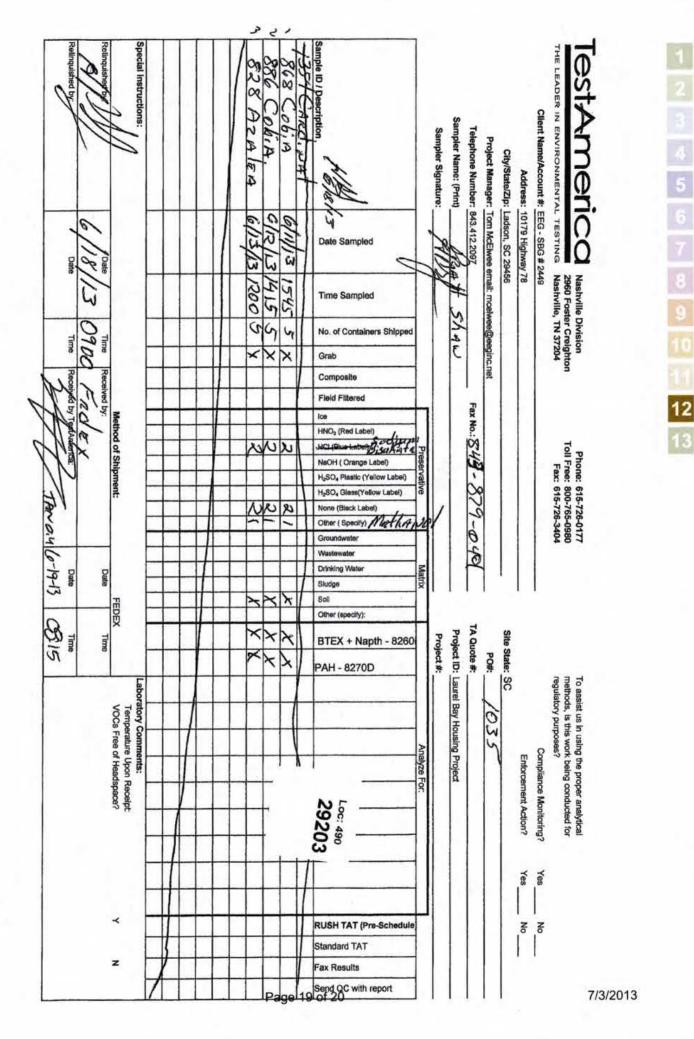
Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-13
A2LA	ISO/IEC 17025		0453.07	12-31-13
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	04-25-14
California	NELAP	9	1168CA	10-31-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-14
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
ouisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
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	10-10-13
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-13 *
Dhio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Dregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	02-28-14
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Jtah	NELAP	8	TAN	07-30-13 *
Virginia	NELAP	3	460152	06-14-14
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica			Charleston
THE LEADER IN ENVIRONMENTAL TESTING NASHVIILE, TN COOL	ER RECEIPT	FORM	Charleste
Cooler Received/Opened On6/19/2013 @ 081	5		
1. Tracking # (last 4 digit	ts, FedEx)		490-29203 Chain of Custody
Courier:Fedex IR Gun ID179603	58		
2. Temperature of rep. sample or temp blank when	opened: D. 4 De	egrees Celsius	
3. If Item #2 temperature is 0°C or less, was the repr	and the second		en? YES NO.
4. Were custody seals on outside of cooler?	10.		ES NONA
If yes, how many and where:	1 front		
5. Were the seals intact, signed, and dated correctly	n		ESNONA
6. Were custody papers inside cooler?			YESNONA
certify that I opened the cooler and answered ques	tions 1-6 (intial)	EA	
7. Were custody seals on containers:	YES NO	and Intact	YESNO.
Were these signed and dated correctly?			YESNO
B. Packing mat'l used? (Bubblewrap_Bastic bag F	Santa Santa Santa		
. Facking mat i used it bubblewrap Elastic bag	Peanuts Vermiculite	Foam Insert P	aper Other None
	Peanuts Vermiculite Pice-pack ice (dire		aper Other None rice Other None
0. Cooling process:	> Ice-pack Ice (dire		
9. Cooling process:	>lce-pack lce (dire roken)?		rice Other None
 D. Cooling process: I. Did all containers arrive in good condition (unbring) I. Were all container labels complete (#, date, signing) 	> Ice-pack Ice (dire roken)? ed, pres., etc)?		vice Other None
 D. Cooling process: O. Did all containers arrive in good condition (unbrin). 1. Were all container labels complete (#, date, sign 2. Did all container labels and tags agree with cust 	> Ice-pack Ice (dire roken)? ed, pres., etc)?		vice Other None
 D. Cooling process: IO. Did all containers arrive in good condition (unbrint). III. Were all container labels complete (#, date, sign). III. Did all container labels and tags agree with customer labels. 	>lce-pack Ice (dire roken)? ed, pres., etc)? cody papers?		vice Other None
 9. Cooling process: 10. Did all containers arrive in good condition (unbrint). Were all container labels complete (#, date, sign 12. Did all container labels and tags agree with cust 13a. Were VOA vials received? b. Was there any observable headspace present in 	> Ice-pack Ice (dire roken)? ed, pres., etc)? cody papers? in any VOA vial?	ect contact) Dry	vice Other None
 a). Cooling process: b). Did all containers arrive in good condition (unbrainer all container labels complete (#, date, sign c). Did all container labels and tags agree with cust c). Did all container labels and tags agree with cust c). Was there any observable headspace present in c). Was there a Trip Blank in this cooler? YES. 	Ice-pack Ice (dire roken)? ed, pres., etc)? tody papers? in any VOA vial? NO (NA) If mult		vice Other None
 a). Cooling process: b). Did all containers arrive in good condition (unbring). c). Did all container labels complete (#, date, sign 2). Did all container labels and tags agree with cust 3a. Were VOA vials received? b). Was there any observable headspace present in 4. Was there a Trip Blank in this cooler? YES. certify that I unloaded the cooler and answered que 	Core-pack Ice (dire roken)? ed, pres., etc)? ady papers? In any VOA vial? NO (NA) If mult estions 7-14 (Intial)	ect contact) Dry tiple coolers, seq	vice Other None
 a. Cooling process: b. Did all containers arrive in good condition (unbring). c. Did all container labels complete (#, date, sign). c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels and tags agree with cust. c. Did all container labels agree with cust. c. Did all container lab	Clee-pack Ice (dire roken)? ed, pres., etc)? cody papers? In any VOA vial? NO (NA) If mult estions 7-14 (intial) reservation reached i	ect contact) Dry tiple coolers, seq	vice Other None
 a. Cooling process: b. Did all containers arrive in good condition (unbrainter all container labels complete (#, date, sign 12. Did all container labels and tags agree with cust 13a. Were VOA vials received? b. Was there any observable headspace present in 14. Was there a Trip Blank in this cooler? YES. certify that I unloaded the cooler and answered qual 15a. On pres'd bottles, did pH test strips suggest problements. Did the bottle labels indicate that the correct process. 	Clee-pack Ice (dire roken)? ed, pres., etc)? cody papers? In any VOA vial? NO (NA) If mult estions 7-14 (intial) reservation reached i	ect contact) Dry tiple coolers, seq	vice Other None
 a. Cooling process: b. Did all containers arrive in good condition (unbring). c. Did all container labels complete (#, date, sign). c. Did all container labels and tags agree with custs. c. Did all container labels and tags agree with custs. c. Did all container labels received? b. Was there any observable headspace present in the second state of the second state. c. Cooling process: c. Did the bottle labels indicate that the correct present? c. Was residual chlorine present? 	 Ice-pack Ice (directore)? ed, pres., etc)? ady papers? any VOA vial? NO (NA) If multiple estions 7-14 (Intial) reservation reached to reservatives were used t	tiple coolers, seq	vice Other None
 a). Cooling process: b). Did all containers arrive in good condition (unbring). c). Did all container labels complete (#, date, signed). c). Did all container labels and tags agree with cust agree with cust and tags agree with cust agree with cust agree with the cust agree agree with the constant is a cust and tags agree a	Clee-pack Ice (dire roken)? ed, pres., etc)? ady papers? In any VOA vial? NO (NA) If mult estions 7-14 (Intial) reservation reached in reservatives were us P and answered que	tiple coolers, seq	vice Other None
 a). Cooling process: b). Did all containers arrive in good condition (unbracked) c). Did all container labels complete (#, date, sign c). Did all container labels and tags agree with cust c). Did all container labels and tags agree with cust c). Did all container labels and tags agree with cust c). Did all container labels and tags agree with cust c). Did all container labels and tags agree with cust c). Did all container labels and tags agree with cust c). Was there any observable headspace present if c). Was there a Trip Blank in this cooler? YES. c). Coertify that I unloaded the cooler and answered que c). Did the bottles, did pH test strips suggest pr c). Did the bottle labels indicate that the correct p c). Was residual chlorine present? c). Was residual chlorine properly filled out (ink, signal container). 	 Ice-pack Ice (directore)? ed, pres., etc)? edy papers? in any VOA vial? NO (NA) If multiple estrons 7-14 (initial) reservation reached in oreservatives were used in the sector of the sector	tiple coolers, seq	vice Other None
 a. Cooling process: b. Did all containers arrive in good condition (unbring). c. Did all container labels complete (#, date, sign). c. Did all container labels and tags agree with custs. c. Did all container labels and tags agree with custs. c. Did all container labels and tags agree with custs. c. Did all container labels and tags agree with custs. c. Did all container labels and tags agree with custs. c. Did all container labels and tags agree with custs. c. Did all container labels and tags agree with custs. c. Did stars arrive in good condition. c. Was there any observable headspace present in the scoler? YES. c. Certify that I unloaded the cooler and answered quets. c. Did the bottle labels indicate that the correct problematic bottle bottle labels indicate that the correct problematic bottle bot	 Ice-pack Ice (directore)? ed, pres., etc)? edy papers? in any VOA vial? in any VOA vial?<td>tiple coolers, seq</td><td>vice Other None</td>	tiple coolers, seq	vice Other None
 a. Cooling process: b. Did all containers arrive in good condition (unbring). c. Did all container labels complete (#, date, signed). c. Did all container labels and tags agree with cust of the second sec	 Ice-pack Ice (directore)? Ice, pres., etc)? Icody papers? In any VOA vial? In any VOA vial? If multiple intervention reached intervention reached interventives were used interventives were used interventives were distributed intervention? 	tiple coolers, seq	vice Other None
 9. Cooling process: 10. Did all containers arrive in good condition (unbrint). Were all container labels complete (#, date, sign 12. Did all container labels and tags agree with cust 13a. Were VOA vials received? b. Was there any observable headspace present in 14. Was there a Trip Blank in this cooler? YES. 11. Certify that I unloaded the cooler and answered que 15a. On pres'd bottles, did pH test strips suggest present in 14. 	 Ice-pack Ice (direction of the content of	ect contact) Dry tiple coolers, seq the correct pH lev sed	vice Other None



Login Sample Receipt Checklist

Client: Small Business Group Inc.

Login Number: 29203 List Number: 1

Creator: Ford, Easton

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

Job Number: 490-29203-1

List Source: TestAmerica Nashville

SDG Number:

ATTACHMENT A

NON-HAZARDOUS MANIFEST	PA ID No.	Manifest Doc	No.	2. Page 1		the second		
ACAS BEAUFORT	nerator's Site Address (f different than n	nailing):		st Number MNA B. State	01519 Generator's		
BEAUFORT, SC 29904 . Generator's Phone 843-879-0411								
Transporter 1 Company Name SEG	6. US EPA	ID Number			ransporter's l		0-10-4	Linc
Transporter 2 Company Name	8. US EPA	ID Number			orter's Phone ransporter's I)	6/1-0	1700
. Designated Facility Name and Site Address	10. US EP	A ID Number			orter's Phone		7 2	
IICKORY HILL LANDFILL 621 LOW COUNTRY DRIVE IDGELAND, SC 29936				G. State F H. State F	acility ID acility Phone	843-9	87-4643	3
		1 12 0	ontainers	12 7-101	1.0-1			
1. Description of Waste Materials		No.	Туре	13. Total Quantity	14. Unit Wt./Vol.	L M	isc. Comment	ts
. HEATING OIL TANK FILLED WITH SAND WM Profile # 102655SC		1	204	9.79	TON	715	074	
				-				
		-			-	-		-
WM Profile #				-	-	12		
WM Profile #								-
www.pronie #						1		
WM Profile #		-	-					
Additional Descriptions for Materials Listed Above		K. Dispo	sal Location	1	-			-
	. A	Cell		_		Level		
5. Special Handling Instructions and Additional Informatio	Richard	Grid	828	AZAL	EA16)	1204	Covedi	NA
5. Special Handling Instructions and Additional Informatio UST'S FROM: 280 1354 CARDINA (13) 8				RRACI	ida			
urchase Order # 6. GENERATOR'S CERTIFICATE:	EMERGENCY C	ONTACT / PH	IONE NO.:	-				
hereby certify that the above-described materials are not ccurately described, classified and packaged and are in pro						w, have beer	n fully and	
rinted Name Timothy whatey	Signature "On bel	half of"	notig	Wh	aly	Month	Day 14	Year
7. Transporter 1 Acknowledgement of Receipt of Material Printed Name	Signature	TAL	40		T	Month	Day	Year
TRATI ShAW	A	M	/		~	8	14	13
Transporter 2 Acknowledgement of Receipt of Material	Signature	U				Month	Day	Year
Printed Name	(N)	Rel				8	15	13
	- The mile		- Destantion					
JAMES DAILOURD 9. Certificate of Final Treatment/Disposal certify, on behalf of the above listed treatment facility, that		wledge, the a	bove-descr	ibed waste w	as managed	in compliand	e with all	
JAMES RAILWAR 9. Certificate of Final Treatment/Disposal certify, on behalf of the above listed treatment facility, tha pplicable laws, regulations, permits and licenses on the da	tes listed above.			14 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -	as managed	in complianc	e with all	
JAMES DAILOURD 9. Certificate of Final Treatment/Disposal certify, on behalf of the above listed treatment facility, that	tes listed above.			14 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -	vas managed	in complianc	e with all _{Day}	Year

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 <u>et seq</u>., as amended).

The Department has reviewed the referenced assessment reports and agrees there is no indication of soil or groundwater contamination on these properties, and therefore no further investigation is required at this time.

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

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

Sincerely,

Kent Krieg Department of Defense Corrective Action Section Bureau of Land and Waste Management South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email) Craig Ehde (via email) Bryan Beck (via email)



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

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

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

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

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

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

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

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