SUMMARY REPORT 300 DAHLIA DRIVE (FORMERLY 607 DAHLIA DRIVE) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

> Revision: 0 Prepared for:

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

and



Naval Facilities Engineering Command Atlantic 9324 Virginia Avenue Norfolk, Virginia 23511-3095 SUMMARY REPORT 300 DAHLIA DRIVE (FORMERLY 607 DAHLIA DRIVE) LAUREL BAY MILITARY HOUSING AREA MARINE CORPS AIR STATION BEAUFORT BEAUFORT, SC

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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** 





#### **Table of Contents**

1.0	INTRODUC	TION1
1.1 1.2		ND INFORMATION
2.0	SAMPLING	ACTIVITIES AND RESULTS3
2.1 2.2		VAL AND SOIL SAMPLING
3.0	PROPERTY	STATUS4
4.0	REFERENC	ES4
Table	1	Table  Laboratory Analytical Results - Soil
Table	1	Laboratory Arranytical Nesarts - Soil
		Appendices
Appen	dix A	Multi-Media Selection Process for LBMH
Appen	dix B	UST Assesment Report
Appen	dix C	Regulatory Correspondence



Summary Report 300 Dahlia Drive (Formerly 607 Dahlia Drive) Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort June 2021

#### List of Acronyms

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO 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 300 Dahlia Drive (Formerly 607 Dahlia 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 300 Dahlia Drive (Formerly 607 Dahlia Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 607 Dahlia Drive* (MCAS Beaufort, 2012). The UST Assessment Report is provided in Appendix B.

#### 2.1 UST Removal and Soil Sampling

On July 12, 2012, a single 280 gallon heating oil UST was removed from the rear patio area at 300 Dahlia Drive (Formerly 607 Dahlia 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





5'11" bgs and one 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 300 Dahlia Drive (Formerly 607 Dahlia 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 300 Dahlia Drive (Formerly 607 Dahlia Drive). This NFA determination was obtained in a letter dated May 15, 2014. SCDHEC's NFA letter is provided in Appendix C.

#### 4.0 REFERENCES

Marine Corps Air Station Beaufort, 2012. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 607 Dahlia Drive, Laurel Bay Military Housing Area, October 2012.

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 1 Laboratory Analytical Results - Soil 300 Dahlia Drive (Formerly 607 Dahlia Drive) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 07/12/12					
/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:**

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

<sup>(1)</sup> South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 2.0 (SCDHEC, April 2013).

# 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 Telephone (803) 896-7957

I. OWNERSHIP OF UST (S)

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

## II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #
Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC
Facility Name or Company Site Identifier
607 Dahlia Drive, Laurel Bay Military Housing Area Street Address or State Road (as applicable)
Beaufort, Beaufort
City County

Attachment 2

# III. INSURANCE INFORMATION

Insurance Statement						
The petroleum release reported to DHEC on qualify to receive state monies to pay for appropriate site allowed in the State Clean-up fund, written confirmation insurance policy is required. This section must be comp	of the existence or non-existence of an environmental					
Is there now, or has there ever been an insurance UST release? YES NO (check one)	policy or other financial mechanism that covers this					
If you answered YES to the above question	on, 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 FO	OR SUPERB FUNDING					
I <b>DO</b> / DO <b>NOT</b> wish to participate in the SUI	PERB Program. (Circle one.)					
V. CERTIFICATION (	To be signed by the UST owner)					
I certify that I have personally examined and am far attached documents; and that based on my inquiry information, I believe that the submitted information	niliar with the information submitted in this and all of those individuals responsible for obtaining this 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	outh Carolina					

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te 1950s eel id 1980s				
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# VII. PIPING INFORMATION

	Steel	
Construction Material(ex. Steel, FRP)	& Copper	
Distance from UST to Dispenser	N/A	
Number of Dispensers	N/A	
Type of System Pressure or Suction	Suction	
Was Piping Removed from the Ground? Y/N	No	
Visible Corrosion or Pitting Y/N	Yes	
Visible Holes Y/N	No	
Age	Late 1950s	
If any corrosion, pitting, or holes were observed,  Corrosion and pitting were found		-
If any corrosion, pitting, or holes were observed,  Corrosion and pitting were found pipe. Copper supply and return	d on the surface of the steel	-
Corrosion and pitting were found	d on the surface of the steel	-
Corrosion and pitting were found	d on the surface of the steel	-
Corrosion and pitting were found pipe. Copper supply and return in the value of the	on the surface of the steel lines were sound.	L ve
Corrosion and pitting were found pipe. Copper supply and return to the visit BRIEF SITE DESCRIBED The USTs at the residences are contact.	d on the surface of the steel lines were sound.  SIPTION AND HISTORY constructed of single wall steel	L ve
Corrosion and pitting were found pipe. Copper supply and return in the variable of the variabl	an the surface of the steel lines were sound.  EIPTION AND HISTORY constructed of single wall steel for heating. These USTs were	L ve
Corrosion and pitting were found pipe. Copper supply and return  VIII. BRIEF SITE DESCR The USTs at the residences are cand formerly contained fuel oil	an the surface of the steel lines were sound.  EIPTION AND HISTORY constructed of single wall steel for heating. These USTs were	L ve
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Corrosion and pitting were found pipe. Copper supply and return  VIII. BRIEF SITE DESCR The USTs at the residences are cand formerly contained fuel oil	an the surface of the steel lines were sound.  EIPTION AND HISTORY constructed of single wall steel for heating. These USTs were	L ve

# IX. SITE CONDITIONS

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

# X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
607 Dahlia	Excav at fill end	Soil	Sandy	5'11"	7/12/12 1045 hrs	P. Shaw	
			-				·
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

<sup>\* =</sup> 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 th
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.

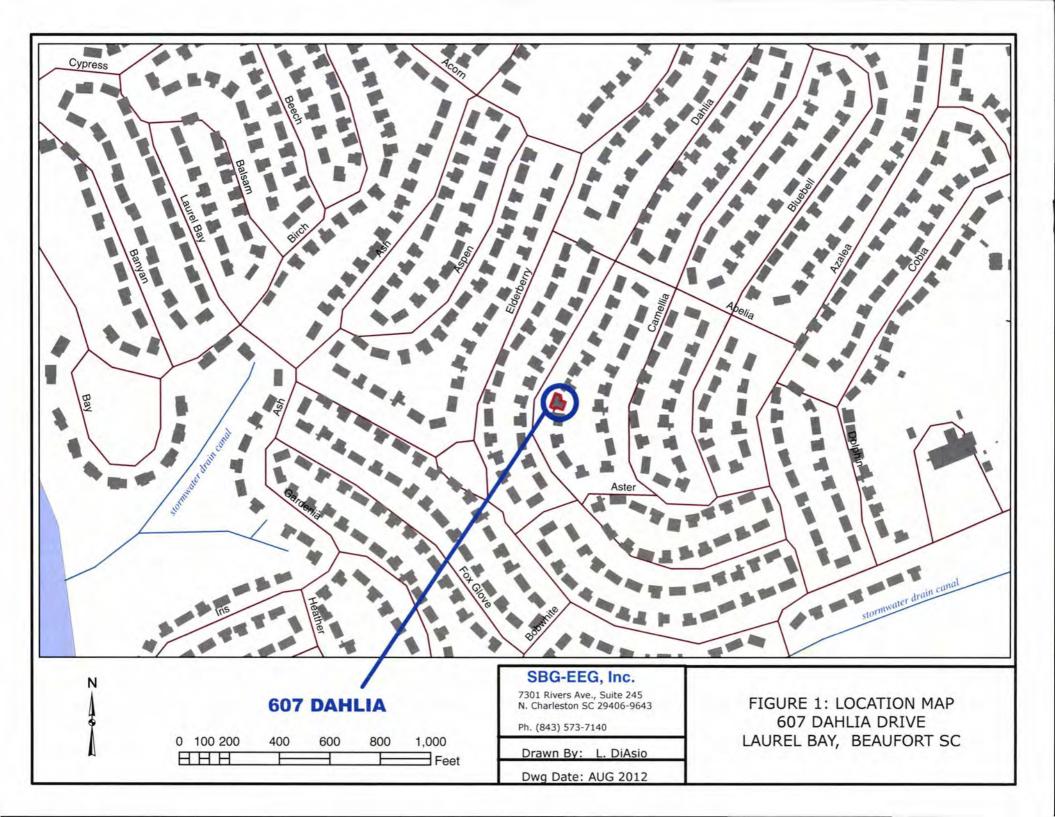
# XII. RECEPTORS

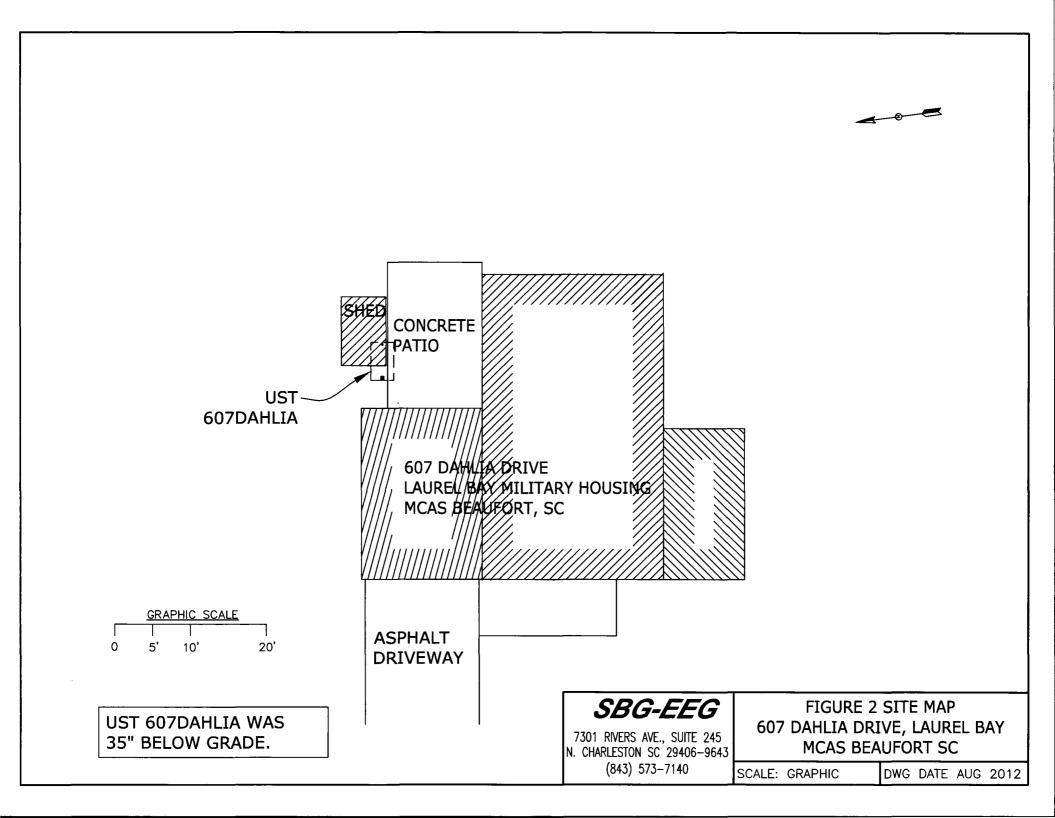
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		Х
	If yes, indicate type of receptor, distance, and direction on site map.		
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		Х
	If yes, indicate 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, electricable & fiber optic	*X city,	
	If yes, indicate the type of utility, distance, and direction on the site map.		
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		Х
	If yes, indicate the area of contaminated soil on the site map.		

## XIII. SITE MAP

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

(Attach Site Map Here)

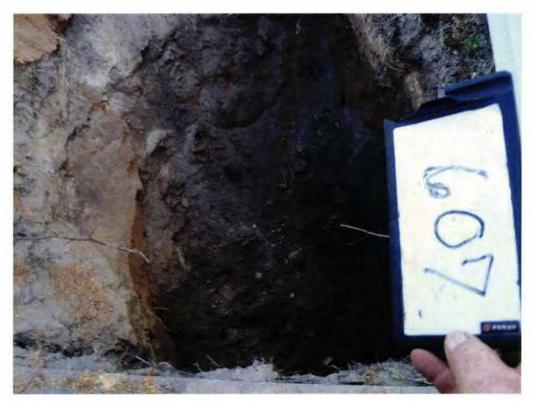




**GRASS CONCRETE PATIO** UST 607DAHLIA, 280 GAL. EXCAVATION FILL END SOIL SAMPLE 607 DAHLIA **REAR OF 607 DAHLIA DRIVE** SBG-EEG FIGURE 3 UST SAMPLE LOCATIONS 607 DAHLIA DRIVE, LAUREL BAY 7301 RIVERS AVE., SUITE 245 N. CHARLESTON SC 29406-9643 MCAS BEAUFORT SC (843) 573-7140 SCALE: GRAPHIC DWG DATE AUG 2012



Picture 1: Location of UST 607Dahlia.



Picture 2: UST 607Dahlia 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	607Dahlia	 		
Benzene	ND		 	
Toluene	ND		 	 
Ethylbenzene	ND			
Xylenes	ND			
Naphthalene	ND			
Benzo (a) anthracene	ND			
Benzo (b) fluoranthene	ND			
Benzo (k) fluoranthene	ND			
Chrysene	ND			
Dibenz (a, h) anthracene	ND			
TPH (EPA 3550)				
СоС				
Benzene			 	
Toluene				
Ethylbenzene		· ·		
Xylenes				
Naphthalene				
Benzo (a) anthracene				
Benzo (b) fluoranthene				
Benzo (k) fluoranthene				
Chrysene				
Dibenz (a, h) anthracene				
TPH (EPA 3550)				

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

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

## XV. ANALYTICAL RESULTS

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

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



# **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

# **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc.

TestAmerica Pensacola 3355 McLemore Drive Pensacola, FL 32514 Tel: (850)474-1001

TestAmerica Job ID: 400-67078-1

Client Project/Site: Laurel Bay Housing Project

For:

Environmental Enterprise Group 10179 Highway 78 Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

Chayernerwhitmin

Authorized for release by: 7/27/2012 5:06:56 PM

Cheyenne Whitmire
Project Manager II
cheyenne.whitmire@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																	
Method Summary				 						 					 		3
Sample Summary																	
Client Sample Results																	
Definitions	 						 										9
Chronicle								 									10
QC Association	 																11
QC Sample Results .	 											 					13
Chain of Custody																	
Receipt Checklists																	
Certification Summary																	20

## **Method Summary**

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

TestAmerica Job ID: 400-67078-1

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

#### **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 PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

# **Sample Summary**

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

TestAmerica Job ID: 400-67078-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-67078-1	1366 CARDINAL	Solid	07/10/12 10:45	07/14/12 09:02
400-67078-2	616 DAHLIA	Solid	07/10/12 15:15	07/14/12 09:02
400-67078-3	614 DAHLIA	Solid	07/11/12 14:15	07/14/12 09:02
400-67078-4	607 DAHLIA	Solid	07/12/12 10:45	07/14/12 09:02

## **Client Sample Results**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

Client Sample ID: 1366 CARDINAL

Date Collected: 07/10/12 10:45 Date Received: 07/14/12 09:02 Lab Sample ID: 400-67078-1

Matrix: Solid Percent Solids: 78.1

ate received. Offithing 03.02								i cicciii oon	us. 10.1
Method: 8260B - Volatile Oro	anic Compounds	(GC/MS)							
Analyte	A STATE OF THE PARTY OF THE PAR	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0056	0.00055	mg/Kg	0	07/16/12 14:00	07/20/12 00:28	1
Ethylbenzene	ND		0.0056	0.00068	mg/Kg	30:	07/16/12 14:00	07/20/12 00:28	1
Toluene	ND		0.0056	0.00078	mg/Kg	0	07/16/12 14:00	07/20/12 00:28	1
Xylenes, Total	ND		0.011	0.0021	mg/Kg	0	07/16/12 14:00	07/20/12 00:28	1
Naphthalene	ND		0.0056	0.0011	mg/Kg	**	07/16/12 14:00	07/20/12 00:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		72 - 122				07/16/12 14:00	07/20/12 00:28	1
Dibromofluoromethane	105		79 - 118				07/16/12 14:00	07/20/12 00:28	1
Toluene-d8 (Surr)	96		80 - 120				07/16/12 14:00	07/20/12 00:28	1
Method: 8270D - Semivolatil	e Organic Compou	inds (GC/M	S)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.42	0.042	mg/Kg	**	07/16/12 13:30	07/19/12 14:13	1
Acenaphthylene	ND		0.42	0.042	mg/Kg	0	07/16/12 13:30	07/19/12 14:13	1
Anthracene	ND		0.42	0.042	mg/Kg	0	07/16/12 13:30	07/19/12 14:13	1
Benzo[a]anthracene	ND		0.42	0.042	mg/Kg	-	07/16/12 13:30	07/19/12 14:13	1
Benzo[a]pyrene	0.36	J	0.42	0.042	mg/Kg	0	07/16/12 13:30	07/19/12 14:13	1
Benzo[b]fluoranthene	0.20	J	0.42	0.042	mg/Kg	0	07/16/12 13:30	07/19/12 14:13	1
Benzo[g,h,i]perylene	0.14	J	0.42	0.042	mg/Kg	0	07/16/12 13:30	07/19/12 14:13	1
Benzo[k]fluoranthene	ND		0.42	0.042	mg/Kg	42	07/16/12 13:30	07/19/12 14:13	1
Chrysene	ND		0.42	0.042	mg/Kg	10	07/16/12 13:30	07/19/12 14:13	1
Dibenz(a,h)anthracene	ND		0.42	0.042	mg/Kg	-03	07/16/12 13:30	07/19/12 14:13	1
Fluoranthene	ND		0.42	0.042	mg/Kg	80	07/16/12 13:30	07/19/12 14:13	1
Fluorene	ND		0.42	0.042	mg/Kg	0	07/16/12 13:30	07/19/12 14:13	1
Indeno[1,2,3-cd]pyrene	0.14	J	0.42	0.042	mg/Kg	403	07/16/12 13:30	07/19/12 14:13	1
Naphthalene	ND		0.42	0.042	mg/Kg	0	07/16/12 13:30	07/19/12 14:13	1
Phenanthrene	ND		0.42	0.042	mg/Kg	-05	07/16/12 13:30	07/19/12 14:13	1
Pyrene	ND		0.42	0.042	mg/Kg	-0	07/16/12 13:30	07/19/12 14:13	1
1-Methylnaphthalene	ND		0.42	0.042	mg/Kg	章	07/16/12 13:30	07/19/12 14:13	1
2-Methylnaphthalene	ND		0.42	0.042	mg/Kg	ø	07/16/12 13:30	07/19/12 14:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	90		44 - 108				07/16/12 13:30	07/19/12 14:13	1
Nitrobenzene-d5 (Surr)	82		27 - 114				07/16/12 13:30	07/19/12 14:13	1
Terphenyl-d14 (Surr)	89		36 - 134				07/16/12 13:30	07/19/12 14:13	1

## **Client Sample Results**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

Lab Sample ID: 400-67078-2

Matrix: Solid Percent Solids: 96.1

#### Client Sample ID: 616 DAHLIA

Date Collected: 07/10/12 15:15 Date Received: 07/14/12 09:02

Phenanthrene

1-Methylnaphthalene

2-Methylnaphthalene

Pyrene

Date Received: 07/14/12 09:0	2							Percent Soli	ds: 96.1
Method: 8260B - Volatile Or	ganic Compounds (	GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0054	0.00053	mg/Kg	0	07/16/12 13:00	07/18/12 12:46	1
Ethylbenzene	ND		0.0054	0.00066	mg/Kg	O.	07/16/12 13:00	07/18/12 12:46	1
Toluene	ND		0.0054	0.00075	mg/Kg	-12	07/16/12 13:00	07/18/12 12:46	1
Xylenes, Total	ND		0.011	0.0020	mg/Kg	-0-	07/16/12 13:00	07/18/12 12:46	1
Naphthalene	ND		0.0054	0.0011	mg/Kg	Ö-	07/16/12 13:00	07/18/12 12:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		72 - 122				07/16/12 13:00	07/18/12 12:46	1
Dibromofluoromethane	102		79 - 118				07/16/12 13:00	07/18/12 12:46	1
Toluene-d8 (Surr)	98		80 - 120				07/16/12 13:00	07/18/12 12:46	1
Method: 8270D - Semivolati	le Organic Compou	nds (GC/MS	2)						
Analyte	the same of the sa	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.34	0.034	mg/Kg	-	07/16/12 13:30	07/19/12 14:47	1
Acenaphthylene	ND		0.34	0.034	mg/Kg	Ø	07/16/12 13:30	07/19/12 14:47	1
Anthracene	ND		0.34	0.034	mg/Kg	O	07/16/12 13:30	07/19/12 14:47	1
Benzo[a]anthracene	ND		0.34	0.034	mg/Kg	**	07/16/12 13:30	07/19/12 14:47	1
Benzo[a]pyrene	ND		0.34	0.034	mg/Kg	0	07/16/12 13:30	07/19/12 14:47	1
Benzo[b]fluoranthene	ND		0.34	0.034	mg/Kg	0	07/16/12 13:30	07/19/12 14:47	1
Benzo[g,h,i]perylene	ND		0.34	0.034	mg/Kg	-0	07/16/12 13:30	07/19/12 14:47	1
Benzo[k]fluoranthene	ND		0.34	0.034	mg/Kg	Ø	07/16/12 13:30	07/19/12 14:47	1
Chrysene	ND		0.34	0.034	mg/Kg	- 0	07/16/12 13:30	07/19/12 14:47	1
Dibenz(a,h)anthracene	ND		0.34	0.034	mg/Kg	٥	07/16/12 13:30	07/19/12 14:47	1
Fluoranthene	ND		0.34	0.034	mg/Kg	43	07/16/12 13:30	07/19/12 14:47	1
Fluorene	ND		0.34	0.034	mg/Kg	Ø	07/16/12 13:30	07/19/12 14:47	1
Indeno[1,2,3-cd]pyrene	ND		0.34		mg/Kg	0	07/16/12 13:30	07/19/12 14:47	1
Naphthalene	ND		0.34	0.034	mg/Kg	0	07/16/12 13:30	07/19/12 14:47	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69	44 - 108	07/16/12 13:30	07/19/12 14:47	1
Nitrobenzene-d5 (Surr)	62	27 - 114	07/16/12 13:30	07/19/12 14:47	1
Terphenyl-d14 (Surr)	71	36 - 134	07/16/12 13:30	07/19/12 14:47	1

0.34

0.34

0.34

0.34

0.034 mg/Kg

0.034 mg/Kg

0.034 mg/Kg

0.034 mg/Kg

ND

ND

ND

ND

335

07/16/12 13:30

07/16/12 13:30

07/16/12 13:30

07/16/12 13:30

07/19/12 14:47

07/19/12 14:47

07/19/12 14:47

07/19/12 14:47

## **Client Sample Results**

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

TestAmerica Job ID: 400-67078-1

Client Sample ID: 614 DAHLIA

Date Collected: 07/11/12 14:15 Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-3

Matrix: Solid

Percent Solids: 98.0

Date Neceived. 07/14/12 05:02								reiceilt 30ii	us. 30.0
Method: 8260B - Volatile Org	ganic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0054	0.00053	mg/Kg	30	07/16/12 13:00	07/18/12 13:07	1
Ethylbenzene	ND		0.0054	0.00066	mg/Kg	100	07/16/12 13:00	07/18/12 13:07	1
Toluene	ND		0.0054	0.00076	mg/Kg	-339	07/16/12 13:00	07/18/12 13:07	1
Xylenes, Total	ND		0.011	0.0020	mg/Kg	-01	07/16/12 13:00	07/18/12 13:07	1
Naphthalene	ND		0.0054	0.0011	mg/Kg	D	07/16/12 13:00	07/18/12 13:07	-1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		72 - 122				07/16/12 13:00	07/18/12 13:07	1
Dibromofluoromethane	105		79 - 118				07/16/12 13:00	07/18/12 13:07	1
Toluene-d8 (Surr)	100		80 - 120				07/16/12 13:00	07/18/12 13:07	1
Method: 8270D - Semivolatil	e Organic Compou	inds (GC/M	S)						
Analyte	The state of the s	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.33	0.033	mg/Kg	0	07/16/12 13:30	07/19/12 15:21	1
Acenaphthylene	ND		0.33	0.033	mg/Kg	-01	07/16/12 13:30	07/19/12 15:21	1
Anthracene	ND		0.33	0.033	mg/Kg	0	07/16/12 13:30	07/19/12 15:21	1
Benzo[a]anthracene	ND		0.33	0.033	mg/Kg	-75	07/16/12 13:30	07/19/12 15:21	1
Benzo[a]pyrene	ND		0.33	0.033	mg/Kg	- 10	07/16/12 13:30	07/19/12 15:21	1
Benzo[b]fluoranthene	ND		0.33	0.033	mg/Kg	-50	07/16/12 13:30	07/19/12 15:21	1
Benzo[g,h,i]perylene	ND		0.33	0.033	mg/Kg	0	07/16/12 13:30	07/19/12 15:21	1
Benzo[k]fluoranthene	ND		0.33	0.033	mg/Kg	Ø.	07/16/12 13:30	07/19/12 15:21	1
Chrysene	ND		0.33	0.033	mg/Kg	-0	07/16/12 13:30	07/19/12 15:21	1
Dibenz(a,h)anthracene	ND		0.33	0.033	mg/Kg	D	07/16/12 13:30	07/19/12 15:21	1
Fluoranthene	ND		0.33	0.033	mg/Kg	-0:	07/16/12 13:30	07/19/12 15:21	1
Fluorene	ND		0.33	0.033	mg/Kg	- 0	07/16/12 13:30	07/19/12 15:21	1
Indeno[1,2,3-cd]pyrene	ND		0.33	0.033	mg/Kg	125	07/16/12 13:30	07/19/12 15:21	1
Naphthalene	ND		0.33	0.033	mg/Kg	-0	07/16/12 13:30	07/19/12 15:21	1
Phenanthrene	ND		0.33	0.033	mg/Kg	0	07/16/12 13:30	07/19/12 15:21	1
Pyrene	ND		0.33	0.033	mg/Kg	0	07/16/12 13:30	07/19/12 15:21	1
1-Methylnaphthalene	ND		0.33	0.033	mg/Kg	P	07/16/12 13:30	07/19/12 15:21	1
2-Methylnaphthalene	ND		0.33	0.033	mg/Kg	æ	07/16/12 13:30	07/19/12 15:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		44 - 108				07/16/12 13:30	07/19/12 15:21	1
Nitrobenzene-d5 (Surr)	64		27 - 114				07/16/12 13:30	07/19/12 15:21	1
Terphenyl-d14 (Surr)	65		36 - 134				07/16/12 13:30	07/19/12 15:21	1

## **Client Sample Results**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

Client Sample ID: 607 DAHLIA

Date Collected: 07/12/12 10:45 Date Received: 07/14/12 09:02 Lab Sample ID: 400-67078-4

Matrix: Solid Percent Solids: 95.4

202 202 22122 517501701702 2222									
Method: 8260B - Volatile Org	ganic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0061	0.00059	mg/Kg	Ø.	07/16/12 13:00	07/18/12 13:27	1
Ethylbenzene	ND		0.0061	0.00074	mg/Kg	0	07/16/12 13:00	07/18/12 13:27	1
Toluene	ND		0.0061	0.00085	mg/Kg	翠	07/16/12 13:00	07/18/12 13:27	1
Xylenes, Total	ND		0.012	0.0023	mg/Kg	0	07/16/12 13:00	07/18/12 13:27	1
Naphthalene	ND		0.0061	0.0012	mg/Kg	0	07/16/12 13:00	07/18/12 13:27	- 1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		72 - 122				07/16/12 13:00	07/18/12 13:27	1
Dibromofluoromethane	104		79 - 118				07/16/12 13:00	07/18/12 13:27	1
Toluene-d8 (Surr)	99		80 - 120				07/16/12 13:00	07/18/12 13:27	1
Method: 8270D - Semivolati	le Organic Compou	nds (GC/MS	5)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.34	0.034	mg/Kg	٥	07/16/12 13:30	07/19/12 22:09	1
Acenaphthylene	ND		0.34	0.034	mg/Kg	0	07/16/12 13:30	07/19/12 22:09	1
Anthracene	ND		0.34	0.034	mg/Kg	O	07/16/12 13:30	07/19/12 22:09	1
Benzo[a]anthracene	ND		0.34	0.034	mg/Kg	P	07/16/12 13:30	07/19/12 22:09	1
Benzo[a]pyrene	ND		0.34	0.034	mg/Kg	*	07/16/12 13:30	07/19/12 22:09	
Benzo[b]fluoranthene	ND		0.34	0.034	mg/Kg	O	07/16/12 13:30	07/19/12 22:09	11
Benzo[g,h,i]perylene	ND		0.34	0.034	mg/Kg	Ø	07/16/12 13:30	07/19/12 22:09	1
Benzo[k]fluoranthene	ND		0.34	0.034	mg/Kg	**	07/16/12 13:30	07/19/12 22:09	1
Chrysene	ND		0.34	0.034	mg/Kg	0	07/16/12 13:30	07/19/12 22:09	1
Dibenz(a,h)anthracene	ND		0.34	0.034	mg/Kg	0	07/16/12 13:30	07/19/12 22:09	1
Fluoranthene	ND		0.34	0.034	mg/Kg	0	07/16/12 13:30	07/19/12 22:09	1
Fluorene	ND		0.34	0.034	mg/Kg	Q	07/16/12 13:30	07/19/12 22:09	1
Indeno[1,2,3-cd]pyrene	ND		0.34	0.034	mg/Kg	305	07/16/12 13:30	07/19/12 22:09	1
Naphthalene	ND		0.34	0.034	mg/Kg	0	07/16/12 13:30	07/19/12 22:09	1
Phenanthrene	ND		0.34	0.034	mg/Kg	40	07/16/12 13:30	07/19/12 22:09	1
Pyrene	ND		0.34	0.034	mg/Kg	0	07/16/12 13:30	07/19/12 22:09	1
1-Methylnaphthalene	ND		0.34	0.034	mg/Kg	0.	07/16/12 13:30	07/19/12 22:09	1
2-Methylnaphthalene	ND		0.34	0.034	mg/Kg	40	07/16/12 13:30	07/19/12 22:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	60		44 - 108				07/16/12 13:30	07/19/12 22:09	1
Nitrobenzene-d5 (Surr)	64		27 - 114				07/16/12 13:30	07/19/12 22:09	1
Terphenyl-d14 (Surr)	62		36 - 134				07/16/12 13:30	07/19/12 22:09	1

# **Definitions/Glossary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

#### Qualifiers

#### GC/MS Semi VOA

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

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	
₩.	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CNF	Contains no Free Liquid	
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
EDL	Estimated Detection Limit	
EPA	United States Environmental Protection Agency	
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	
RL	Reporting Limit	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

#### Lab Chronicle

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

Client Sample ID: 1366 CARDINAL

Date Collected: 07/10/12 10:45 Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-1

Matrix: Solid

Percent Solids: 78.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			158802	07/16/12 14:00	MG	TAL PEN
Total/NA	Analysis	8260B		1	158805	07/20/12 00:28	MG	TAL PEN
Total/NA	Prep	3550C			158525	07/16/12 13:30	RT	TAL PEN
Total/NA	Analysis	8270D		1	158702	07/19/12 14:13	JP	TAL PEN
Total/NA	Analysis	Moisture		1	158522	07/14/12 17:00	MS	TAL PEN

Client Sample ID: 616 DAHLIA

Date Collected: 07/10/12 15:15 Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-2

Matrix: Solid Percent Solids: 96.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			158676	07/16/12 13:00	MG	TAL PEN
Total/NA	Analysis	8260B		1	158674	07/18/12 12:46	MG	TAL PEN
Total/NA	Prep	3550C			158525	07/16/12 13:30	RT	TAL PEN
Total/NA	Analysis	8270D		1	158702	07/19/12 14:47	JP	TAL PEN
Total/NA	Analysis	Moisture		1	158522	07/14/12 17:00	MS	TAL PEN

Client Sample ID: 614 DAHLIA

Date Collected: 07/11/12 14:15 Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-3

Matrix: Solid Percent Solids: 98.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			158676	07/16/12 13:00	MG	TAL PEN
Total/NA	Analysis	8260B		1	158674	07/18/12 13:07	MG	TAL PEN
Total/NA	Prep	3550C			158525	07/16/12 13:30	RT	TAL PEN
Total/NA	Analysis	8270D		1	158702	07/19/12 15:21	JP	TAL PEN
Total/NA	Analysis	Moisture		1	158522	07/14/12 17:00	MS	TAL PEN

Client Sample ID: 607 DAHLIA

Date Collected: 07/12/12 10:45 Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-4 Matrix: Solid

Percent Solids: 95.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			158676	07/16/12 13:00	MG	TAL PEN
Total/NA	Analysis	8260B		1	158674	07/18/12 13:27	MG	TAL PEN
Total/NA	Prep	3550C			158525	07/16/12 13:30	RT	TAL PEN
Total/NA	Analysis	8270D		1	158702	07/19/12 22:09	JP	TAL PEN
Total/NA	Analysis	Moisture		1	158522	07/14/12 17:00	MS	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

# **QC Association Summary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

### GC/MS VOA

Anal	ysis	Batc	h: 1	158674
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-2	616 DAHLIA	Total/NA	Solid	8260B	158676
400-67078-3	614 DAHLIA	Total/NA	Solid	8260B	158676
400-67078-4	607 DAHLIA	Total/NA	Solid	8260B	158676
LCS 400-158676/2-A	Lab Control Sample	Total/NA	Solid	8260B	158676
LCSD 400-158676/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	158676
MB 400-158676/1-A	Method Blank	Total/NA	Solid	8260B	158676

#### Prep Batch: 158676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-2	616 DAHLIA	Total/NA	Solid	5035	
400-67078-3	614 DAHLIA	Total/NA	Solid	5035	
400-67078-4	607 DAHLIA	Total/NA	Solid	5035	
LCS 400-158676/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 400-158676/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 400-158676/1-A	Method Blank	Total/NA	Solid	5035	

### Prep Batch: 158802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-1	1366 CARDINAL	Total/NA	Solid	5035	
LCS 400-158802/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 400-158802/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 400-158802/1-A	Method Blank	Total/NA	Solid	5035	

### Analysis Batch: 158805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-1	1366 CARDINAL	Total/NA	Solid	8260B	158802
LCS 400-158802/2-A	Lab Control Sample	Total/NA	Solid	8260B	158802
LCSD 400-158802/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	158802
MB 400-158802/1-A	Method Blank	Total/NA	Solid	8260B	158802

### GC/MS Semi VOA

#### Prep Batch: 158525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67074-D-4-B MS	Matrix Spike	Total/NA	Solid	3550C	
400-67074-D-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
400-67078-1	1366 CARDINAL	Total/NA	Solid	3550C	
400-67078-2	616 DAHLIA	Total/NA	Solid	3550C	
400-67078-3	614 DAHLIA	Total/NA	Solid	3550C	
400-67078-4	607 DAHLIA	Total/NA	Solid	3550C	
LCS 400-158525/7-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 400-158525/8-A	Method Blank	Total/NA	Solid	3550C	

#### Analysis Batch: 158609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67074-D-4-B MS	Matrix Spike	Total/NA	Solid	8270D	158525
400-67074-D-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	158525
LCS 400-158525/7-A	Lab Control Sample	Total/NA	Solid	8270D	158525
MB 400-158525/8-A	Method Blank	Total/NA	Solid	8270D	158525

## **QC Association Summary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

## GC/MS Semi VOA (Continued)

#### Analysis Batch: 158702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-1	1366 CARDINAL	Total/NA	Solid	8270D	158525
400-67078-2	616 DAHLIA	Total/NA	Solid	8270D	158525
400-67078-3	614 DAHLIA	Total/NA	Solid	8270D	158525
400-67078-4	607 DAHLIA	Total/NA	Solid	8270D	158525

### **General Chemistry**

#### Analysis Batch: 158522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-1	1366 CARDINAL	Total/NA	Solid	Moisture	
400-67078-2	616 DAHLIA	Total/NA	Solid	Moisture	
400-67078-3	614 DAHLIA	Total/NA	Solid	Moisture	
400-67078-4	607 DAHLIA	Total/NA	Solid	Moisture	

## **QC Sample Results**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

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

Lab Sample ID: MB 400-158676/1-A

Matrix: Solid

Analysis Batch: 158674

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

Prep Batch: 158676

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0050	0.00049	mg/Kg		07/18/12 08:00	07/18/12 09:54	1
Ethylbenzene	ND		0.0050	0.00061	mg/Kg		07/18/12 08:00	07/18/12 09:54	1
Toluene	ND		0.0050	0.00070	mg/Kg		07/18/12 08:00	07/18/12 09:54	1
Xylenes, Total	ND		0.010	0.0019	mg/Kg		07/18/12 08:00	07/18/12 09:54	1
Naphthalene	ND		0.0050	0.0010	mg/Kg		07/18/12 08:00	07/18/12 09:54	1

%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
93	72 - 122	07/18/12 08:00	07/18/12 09:54	1
99	79 - 118	07/18/12 08:00	07/18/12 09:54	1
98	80 - 120	07/18/12 08:00	07/18/12 09:54	1
	93 99	%Recovery         Qualifier         Limits           93         72 - 122           99         79 - 118	%Recovery         Qualifier         Limits         Prepared           93         72 - 122         07/18/12 08:00           99         79 - 118         07/18/12 08:00	%Recovery         Qualifier         Limits         Prepared         Analyzed           93         72 - 122         07/18/12 08:00         07/18/12 09:54           99         79 - 118         07/18/12 08:00         07/18/12 09:54

Lab Sample ID: LCS 400-158676/2-A

Matrix: Solid

Analysis Batch: 158674

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 158676

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.0500	0.0532		mg/Kg		106	74 - 119
Ethylbenzene	0.0500	0.0557		mg/Kg		111	78 - 116
Toluene	0.0500	0.0534		mg/Kg		107	76 - 116
Xylenes, Total	0.150	0.165		mg/Kg		110	77 - 118
Naphthalene	0.0500	0.0469		mg/Kg		94	64 - 126

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	96		72 - 122
Dibromofluoromethane	100		79 - 118
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCSD 400-158676/3-A

Matrix: Solid

Analysis Batch: 158674

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 158676

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.0540		mg/Kg		108	74 - 119	1	10
Ethylbenzene	0.0500	0.0564		mg/Kg		113	78 - 116	1	12
Toluene	0.0500	0.0541		mg/Kg		108	76 - 116	1	11
Xylenes, Total	0.150	0.171		mg/Kg		114	77 - 118	4	12
Naphthalene	0.0500	0.0453		mg/Kg		91	64 - 126	3	16

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	97		72 - 122
Dibromofluoromethane	101		79 - 118
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: MB 400-158802/1-A

Matrix: Solid

Analysis Batch: 158805

Client	Sample	ID:	Meth	nod	Blank
			-	-	

Prep Type: Total/NA

Prep Batch: 158802

	мв	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0050	0.00049	mg/Kg		07/19/12 08:00	07/19/12 16:49	1

TestAmerica Pensacola 7/27/2012

## **QC Sample Results**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

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

Lab Sample ID: MB 400-158802/1-A

Matrix: Solid

Analysis Batch: 158805

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

Prep Batch: 158802

	mD.	INIO							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.0050	0.00061	mg/Kg		07/19/12 08:00	07/19/12 16:49	1
Toluene	ND		0.0050	0.00070	mg/Kg		07/19/12 08:00	07/19/12 16:49	1
Xylenes, Total	ND		0.010	0.0019	mg/Kg		07/19/12 08:00	07/19/12 16:49	1
Naphthalene	ND		0.0050	0.0010	mg/Kg		07/19/12 08:00	07/19/12 16:49	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91	72 - 122	07/19/12 08:00	07/19/12 16:49	1
Dibromofluoromethane	100	79 - 118	07/19/12 08:00	07/19/12 16:49	1
Toluene-d8 (Surr)	101	80 - 120	07/19/12 08:00	07/19/12 16:49	1

Lab Sample ID: LCS 400-158802/2-A

Matrix: Solid

Analysis Batch: 158805

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 158802

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.0500	0.0553		mg/Kg		111	74 - 119
Ethylbenzene	0.0500	0.0560		mg/Kg		112	78 - 116
Toluene	0.0500	0.0556		mg/Kg		111	76 - 116
Xylenes, Total	0.150	0.167		mg/Kg		111	77 - 118
Naphthalene	0.0500	0.0496		mg/Kg		99	64 - 126

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	96		72 - 122
Dibromofluoromethane	101		79 - 118
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCSD 400-158802/3-A

Matrix: Solid

Analysis Batch: 158805

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 158802

	Spike	LCSD LCSD				%Rec.		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.0557	mg/Kg		111	74 - 119	1	10
Ethylbenzene	0.0500	0.0577	mg/Kg		115	78 - 116	3	12
Toluene	0.0500	0.0556	mg/Kg		111	76 - 116	0	11
Xylenes, Total	0.150	0.174	mg/Kg		116	77 - 118	4	12
Naphthalene	0.0500	0.0443	mg/Kg		89	64 - 126	11	16

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	98		72 - 122
Dibromofluoromethane	102		79 - 118
Toluene-d8 (Surr)	100		80 - 120

TestAmerica Job ID: 400-67078-1

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

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

MR MR

%Recovery Qualifier

78

72

76

Lab Sample ID: MB 400-158525/8-A

Matrix: Solid

Analysis Batch: 158609

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

Prep Batch: 158525

IND IN	ND .							
Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
MB N	ИВ							
	Result O	Result Qualifier  ND	Result         Qualifier         RL           ND         0.33           ND         0.33	Result         Qualifier         RL         MDL           ND         0.33         0.033           ND         0.33         0.033	Result         Qualifier         RL         MDL         Unit           ND         0.33         0.033         mg/kg           ND         0.33         0.033         mg/kg<	Result         Qualifier         RL         MDL         Unit         D           ND         0.33         0.033         mg/Kg           ND         0.33         0.033	Result         Qualifier         RL         MDL         Unit         D         Prepared           ND         0.33         0.033         mg/Kg         07/16/12 09:00           ND         0.33	Result ND         Qualifier         RL         MDL Unit         D Prepared         Analyzed           ND         0.33         0.033 mg/Kg         07/16/12 09:00         07/17/12 16:16           ND

Limits

44 - 108

27 - 114

36 - 134

Lab Sample ID: LCS 400-158525/7-A

Matrix: Solid

Surrogate

2-Fluorobiphenyl

Nitrobenzene-d5 (Surr)

Terphenyl-d14 (Surr)

Analysis Batch: 158609

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

Analyzed

07/17/12 16:16

07/17/12 16:16

07/17/12 16:16

Prepared

07/16/12 09:00

07/16/12 09:00

07/16/12 09:00

Prep Batch: 158525

Dil Fac

The state of the s	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1.67	1.30		mg/Kg		78	53 - 108
Acenaphthylene	1.67	1.24		mg/Kg		75	57 - 111
Anthracene	1.67	1.27		mg/Kg		76	56 - 110
Benzo[a]anthracene	1.67	1.52		mg/Kg		91	52 - 105
Benzo[a]pyrene	1.67	1.21		mg/Kg		72	52 - 97
Benzo[b]fluoranthene	1.67	1.31		mg/Kg		78	49 - 95
Benzo[g,h,i]perylene	1.67	1.46		mg/Kg		88	47 - 122
Benzo[k]fluoranthene	1.67	1.35		mg/Kg		81	57 - 113
Chrysene	1.67	1.46		mg/Kg		88	56 - 102
Dibenz(a,h)anthracene	1.67	1.34		mg/Kg		81	46 - 114
Fluoranthene	1.67	1.24		mg/Kg		74	56 - 120
Fluorene	1.67	1.34		mg/Kg		80	51 - 116
Indeno[1,2,3-cd]pyrene	1.67	1.42		mg/Kg		85	48 - 119
Naphthalene	1.67	1.15		mg/Kg		69	52 - 99
Phenanthrene	1.67	1.24		mg/Kg		74	56 - 113
Pyrene	1.67	1.43		mg/Kg		86	56 - 100
1-Methylnaphthalene	1.67	1.23		mg/Kg		74	58 - 104
2-Methylnaphthalene	1.67	1.09		mg/Kg		65	53 - 99

TestAmerica Job ID: 400-67078-1

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

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

Lab Sample ID: LCS 400-158525/7-A

Matrix: Solid

Analysis Batch: 158609

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

Prep Batch: 158525

L	CS	L	CS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	68		44 - 108
Nitrobenzene-d5 (Surr)	70		27 - 114
Terphenyl-d14 (Surr)	86		36 - 134

Lab Sample ID: 400-67074-D-4-B MS

Matrix: Solid

Analysis Batch: 158609

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 158525

Allarysis Batch. 130003	Sample	Sample	Spike	MS	MS				%Rec.
Analyte		Qualifier	Added	Result		Unit	D	%Rec	Limits
Acenaphthene	ND	Qualifici	1.76	1.47	- Common	mg/Kg	ø	84	10 - 150
Acenaphthylene	ND		1.76	1.48		mg/Kg	0	84	10 - 150
Anthracene	ND		1.76	1.59		mg/Kg	*	91	10 - 150
Benzo[a]anthracene	ND		1.76	1.79		mg/Kg	\$	102	10 - 150
Benzo[a]pyrene	ND		1.76	1.33		mg/Kg	0	75	10 - 150
Benzo[b]fluoranthene	ND		1.76	1.53		mg/Kg	25	87	10 - 150
Benzo[g,h,i]perylene	ND		1.76	1.73		mg/Kg	0	98	10 - 150
Benzo[k]fluoranthene	ND		1.76	1.60		mg/Kg	Ċ.	91	10 - 150
Chrysene	ND		1.76	1.65		mg/Kg	立	94	10 - 150
Dibenz(a,h)anthracene	ND		1.76	1.54		mg/Kg	*	88	32 - 111
Fluoranthene	ND		1.76	1.58		mg/Kg	\$	90	10 - 150
Fluorene	0.037	J	1.76	1.56		mg/Kg	0	86	10 - 150
Indeno[1,2,3-cd]pyrene	ND		1.76	1.64		mg/Kg	0	93	10 - 150
Naphthalene	ND		1.76	1.32		mg/Kg	\$	75	10 - 150
Phenanthrene	ND		1.76	1.52		mg/Kg	0	86	10 - 150
Pyrene	ND		1.76	1.70		mg/Kg	0	97	10 - 150
1-Methylnaphthalene	ND		1.76	1.38		mg/Kg	益	78	10 - 150
2-Methylnaphthalene	ND		1.76	1.37		mg/Kg	30	78	10 - 150

MS	MS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	77		44 - 108
Nitrobenzene-d5 (Surr)	77		27 - 114
Terphenyl-d14 (Surr)	93		36 - 134

Lab Sample ID: 400-67074-D-4-C MSD

Matrix: Solid

Analysis Batch: 158609

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 158525

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthene	ND		1.75	1.44		mg/Kg	0	82	10 - 150	2	36
Acenaphthylene	ND		1.75	1.45		mg/Kg	0	83	10 - 150	2	29
Anthracene	ND		1.75	1.49		mg/Kg	0	85	10 - 150	7	30
Benzo[a]anthracene	ND		1.75	1.72		mg/Kg	0	98	10 - 150	4	33
Benzo[a]pyrene	ND		1.75	1.45		mg/Kg	0	83	10 - 150	9	30
Benzo[b]fluoranthene	ND		1.75	1.48		mg/Kg	437	85	10 - 150	3	31
Benzo[g,h,i]perylene	ND		1.75	1.69		mg/Kg	0	96	10 - 150	2	30
Benzo[k]fluoranthene	ND		1.75	1.66		mg/Kg	0	95	10 - 150	4	29
Chrysene	ND		1.75	1.72		mg/Kg	0	98	10 - 150	4	33
Dibenz(a,h)anthracene	ND		1.75	1.61		mg/Kg	42	92	32 - 111	4	30
Fluoranthene	ND		1.75	1.59		mg/Kg	0	91	10 - 150	0	42

## **QC Sample Results**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

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

Lab Sample ID: 400-67074-D-4-C MSD

Matrix: Solid

Analysis Batch: 158609

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 158525

								· · · · · ·	Jucoii. I	COOLO
Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
0.037	J	1.75	1.58		mg/Kg	*	88	10 - 150	2	36
ND		1.75	1.72		mg/Kg	*	98	10 - 150	4	31
ND		1.75	1.28		mg/Kg	*	73	10 - 150	4	33
ND		1.75	1.55		mg/Kg	**	88	10 - 150	2	34
ND		1.75	1.67		mg/Kg	*	95	10 - 150	2	45
ND		1.75	1.30		mg/Kg	0	74	10 - 150	5	29
ND		1.75	1.24		mg/Kg	*	71	10 - 150	10	32
	Result 0.037 ND ND ND ND ND ND	ND ND ND ND	Result         Qualifier         Added           0.037         J         1.75           ND         1.75	Result         Qualifier         Added         Result           0.037         J         1.75         1.58           ND         1.75         1.72           ND         1.75         1.28           ND         1.75         1.55           ND         1.75         1.67           ND         1.75         1.30	Result         Qualifier         Added         Result         Qualifier           0.037         J         1.75         1.58           ND         1.75         1.72           ND         1.75         1.28           ND         1.75         1.55           ND         1.75         1.67           ND         1.75         1.30	Result         Qualifier         Added         Result         Qualifier         Unit           0.037         J         1.75         1.58         mg/Kg           ND         1.75         1.72         mg/Kg           ND         1.75         1.28         mg/Kg           ND         1.75         1.55         mg/Kg           ND         1.75         1.67         mg/Kg           ND         1.75         1.30         mg/Kg	Result         Qualifier         Added         Result         Qualifier         Unit         D           0.037         J         1.75         1.58         mg/Kg            ND         1.75         1.72         mg/Kg            ND         1.75         1.28         mg/Kg            ND         1.75         1.55         mg/Kg            ND         1.75         1.67         mg/Kg            ND         1.75         1.30         mg/Kg	Result Qualifier         Added Added         Result Qualifier         Qualifier         Unit D %Rec           0.037 J         1.75         1.58         mg/Kg         ∅         88           ND         1.75         1.72         mg/Kg         ∅         98           ND         1.75         1.28         mg/Kg         ∅         73           ND         1.75         1.55         mg/Kg         ∅         88           ND         1.75         1.67         mg/Kg         ∅         95           ND         1.75         1.30         mg/Kg         ∅         74	Sample         Sample         Spike         MSD         MSD         %Rec.           Result         Qualifier         Unit         D         %Rec         Limits           0.037         J         1.75         1.58         mg/Kg         %         88         10 - 150           ND         1.75         1.72         mg/Kg         %         98         10 - 150           ND         1.75         1.28         mg/Kg         %         73         10 - 150           ND         1.75         1.55         mg/Kg         %         88         10 - 150           ND         1.75         1.67         mg/Kg         %         95         10 - 150           ND         1.75         1.30         mg/Kg         %         74         10 - 150	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec         Limits         RPD           0.037         J         1.75         1.58         mg/Kg         \$\frac{10}{2}\$         88         10 - 150         2           ND         1.75         1.72         mg/Kg         \$\frac{10}{2}\$         10 - 150         4           ND         1.75         1.28         mg/Kg         \$\frac{10}{2}\$         88         10 - 150         2           ND         1.75         1.55         mg/Kg         \$\frac{10}{2}\$         10 - 150         2           ND         1.75         1.67         mg/Kg         \$\frac{10}{2}\$         10 - 150         2           ND         1.75         1.30         mg/Kg         \$\frac{74}{2}\$         10 - 150         5

MSD	MACO

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	71		44 - 108
Nitrobenzene-d5 (Surr)	75		27 - 114
Terphenyl-d14 (Surr)	97		36 - 134

## **Login Sample Receipt Checklist**

Client: Environmental Enterprise Group

Job Number: 400-67078-1

Login Number: 67078

List Source: TestAmerica Pensacola

List Number: 1

Creator: Serratore, Maria

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is 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	2.4°C
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 sample IDs on the containers 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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## **Certification Summary**

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-67078-1

## Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-13
Arizona	State Program	9	AZ0710	01-11-13
Arkansas DEQ	State Program	6	88-0689	09-01-13
Florida	NELAC	4	E81010	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAC	5	200041	10-09-12
lowa	State Program	7	367	08-01-12
Kansas	NELAC	7	E-10253	10-31-12
Kentucky (UST)	State Program	4	53	07-05-13
Louisiana	NELAC	6	30976	06-30-13
Maryland	State Program	3	233	12-30-12
Massachusetts	State Program	1	M-FL094	06-30-13
Michigan	State Program	5	9912	06-30-12
New Hampshire	NELAC	1	2505	08-16-12
New Jersey	NELAC	2	FL006	06-30-13
North Carolina DENR	State Program	4	314	12-31-12
Oklahoma	State Program	6	9810	08-31-12
Pennsylvania	NELAC	3	68-00467	12-31-12
Rhode Island	State Program	1	LAO00307	12-30-12
South Carolina	State Program	4	96026	06-30-12
Tennessee	State Program	4	TN02907	06-30-13
Texas	NELAC	6	T104704286-12-4	09-30-12
USDA	Federal		P330-10-00407	12-10-13
Virginia	NELAC	3	460166	06-14-13
Washington	State Program	10	C915	08-08-12
West Virginia DEP	State Program	3	136	06-30-13



**TestAmerica** 

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78 City/State/Zip: Ladson, SC 29456

Nashville Division 2960 Foster Creighton Nashville, TN 37204 THE LEADER IN ENVIRONMENTAL TESTING

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

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

Yes Yes Compliance Monitoring? Enforcement Action?

o' e'

> Site State: SC PO#:

Project ID: Laurel Bay Housing Project TA Quote #: Project #:

040-

Fax No.: 843-879

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

Telephone Number: 843.412.2097

Sampler Name: (Print) Sampler Signature:

829

Analyze For

RUSH TAT (Pre-Schedule)

**G0728 - HA9** BTEX + Napth - 82608 Ofper (specify): XX lios X Sludge Drinking Water Vastewater 3 H2SO, Plastic (Yellow Label)

RAA

6 3

7/12/12 1045

1415

12

1

ALLIAA DAKI: 4

ď

DAN

016

1/0/12

NaOH ( Orange Label)

HNO<sub>3</sub> (Red Label)

Field Filtered Composite

Time Sampled

Date Sampled

No. of Containers Shipped,

lce

Grab

5/10/

ARdi JA

OSample ID / Description

Temperature Upon Receipt: VOCs Free of Headspace? Laboratory Comments: Гіте FEDEX Date

Method of Shipment:

Received by:

Time

Special Instructions:

Relinquished by

2.4°C

7/14/17 Jourson Je Received by TestAmerica 1000 Time 13 at C

9,02

7/27/2012

## ATTACHMENT A



Pink- FACILITY USE ONLY

# **NON-HAZARDOUS MANIFEST**

	THE TENNESTER STATE OF THE STAT						- Children Children		COLUMN TO SERVICE AND ADDRESS OF THE PARTY O	make the same of		
	NON-HAZARDOUS MANIFEST	1. Generator's US EP	A ID No. Ma	nifest Doc I	No.	2. Page 1						
	3. Generator's Mailing Address: MCAS, BEAUFORT LAUREL BAY HOUSING	Gen	erator's Site Address (If d	fferent than m	ailing):	The National Property	A, Manifest Number WMNA 00316829					
	BEAUFORT, SC 29907	28-6461					B. State (	Generator's	i ID			
	5. Transporter 1 Company Name EEG, INC.		6. US EPA ID	Number		C. State T	ransporter's II	D				
	7. Transporter 2 Company Name		8. US EPA ID	Number		D. Transp	orter's Phone	843-8	379-041	1		
			O. OSEFAID	- Number		E. State T	ransporter's II	)		- 15		
						F. Transp	orter's Phone		82.1			
T.	9. Designated Facility Name and Site HICKORY HILL LANDFILL	Address	10. US EPA I	D Number		G. State F	acility ID					
	2621 LOW COUNTRY ROAD					TAXABLE DAY	acility Phone	843-9	987-464	3		
	RIDGELAND, SC 29936											
G	11. Description of Waste Materials			No.	ntainers Type	13. Total Quantity	14. Unit Wt./Vol.	1.0	lisc. Commen	its		
EN	a. HEATING OIL TANKS FILLED	WITH SAND			7,10	Commer Commercial Comm			And or to			
E R	WM Profi	ile# 102655SC							Turns.			
ATO	b.								della			
R	c. WM Profile #	With Street										
	WM Profile #											
	d.						L.					
	WM Profile #	Of the Local							Barry.	TO S		
	J. Additional Descriptions for Materi		K. Disposal Location									
		linal >	CARdival	Cell Grid					Level			
	3) G16 Dahling Instructions and	DESCRIPTION OF THE PROPERTY OF		5	126	1 DA	th lia	-2				
	Purchase Order #		EMERGENCY CON	ITACT / PHO		10.75						
	16. GENERATOR'S CERTIFICATE:			WW Tableson				L.Dis.				
	I hereby certify that the above-describ accurately described, classified and pa							ive been fu	lly and			
	Printed Name	1. 16.14	Signature "On behalt		77	1	11-0-	Month	Day	Year		
7	17. Transporter 1 Acknowledgement	of Receipt of Materials	Y	res	non		Justine 1	18	2	12		
RAZN	Printed Name PRAH	Shaw !	Signature 8	118	1		0	Month	Day 22	Year /2		
0	18. Transporter 2 Acknowledgement	of Receipt of Materials	1	//								
Ţ	Printed Name	1	Signature	21	1			Month	Day	Year		
R	JAMES Baldwin		Hames	bale	Nece			8	23	12		
f A	19. Certificate of Final Treatment/Displacements of the above listed		to the best of my knowle	dge, the ah	ove-describ	ed waste w	as managed in	complianc	e with all			
10	applicable laws, regulations, permits a			877 1110 00	0000110		- Topedill	35.mp.idite	- The same			
L	20. Facility Owner or Operator: Certif	fication of receipt of no		vered by th	is manifest.							
Ý	Printed Name Mana Lus		Signature	Ann	1/11	7		Month	Day 2	Year /		
-	White- TREATMENT, STORAGE, DISPO	SAL FACILITY COPY	Blue- GENERATOR #	2 COPY	WW.	Ye	low- GENERA	TOR #1 COF	PY	10		

Gold-TRANSPORTER #1 COPY

# Appendix C Regulatory Correspondence





Catherine B. Templeton, Director

Programing and preserving the health of the public and the environment

May 15, 2014

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 above 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)



Catherine B. Templeton, Director

Promosting and protecting the health of the public and the environment

Attachment to:

Krieg to Drawdy Subject: NFA Dated 5/15/2014

## Laurel Bay Underground Storage Tank Assessment Reports for: (143 addresses/146 tanks)

503 Laurel Bay
508 Laurel Bay
510 Laurel Bay
523 Laurel Bay
525 Laurel Bay
529 Laurel Bay
533 Laurel Bay
537 Laurel Bay
556 Dahlia
557 Dahlia
559 Dahlia
562 Dahlia
568 Dahlia
581 Aster
582 Aster
584 Aster
602 Dahlia
607 Dahlia
614 Dahlia
616 Dahlia
619 Dahlia
625 Dahlia
629 Dahlia
631 Dahlia
634 Dahlia
660 Camellia
661 Camellia
666 Camellia
669 Camellia
672 Camellia

## Laurel Bay Underground Storage Tank Assessment Reports for: (143 addresses/146 tanks) cont.

674 Camellia	880 Cobia
677 Camellia	890 Cobia
679 Camellia	892 Cobia
686 Camellia	900 Barracuda
690 Camellia	906 Barracuda
698 Abelia	911 Barracuda
700 Bluebell	912 Barracuda
704 Bluebell	917 Barracuda
705 Bluebell	919 Barracuda
708 Bluebell	928 Albacore
710 Bluebell	1024 Foxglove
711 Bluebell	1028 Foxglove
714 Bluebell	1029 Foxglove
715 Bluebell	1038 Iris
726 Bluebell	1049 Gardenia
728 Bluebell	1079 Heather
731 Bluebell	1103 Iris
734 Bluebell	1122 Iris
759 Althea	1136 Iris
761 Althea	1173 Bobwhite
773 Althea	1200 Cardinal
778 Laurel Bay	1221 Cardinal
807 Azalea	1238 Dove
814 Azalea	1241 Dove
815 Azalea	1242 Dove
818 Azalea	1248 Dove
820 Azalea	1262 Dove
821 Azalea	1265 Dove
831 Azalea	1267 Dove
832 Azalea	1289 Eagle
834 Azalea	1298 Eagle
835 Azalea	1300 Eagle
841 Azalea	1303 Eagle
853 Dolphin	1304 Eagle
858 Dolphin	1315 Albatross
869 Cobia	1316 Albatross
874 Cobia	1320 Albatross
875 Cobia	1338 Albatross

## Laurel Bay Underground Storage Tank Assessment Reports for: (143 addresses/146 tanks) cont.

1340 Albatross			 
1342 Albatross			
1344 Cardinal			
1345 Cardinal		*	
1349 Cardinal			 
1355 Cardinal			
1366 Cardinal			
1374 Dove	}		
1375 Dove			
1415 Albatross			 