SUMMARY REPORT
72 AZALEA DRIVE (FORMERLY 807 AZALEA 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

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Prepared by:



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

Contract Number: N62470-14-D-9016

CTO WE52

JUNE 2021



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List of Acronyms

bgs below ground surface

BTEX benzene, toluene, ethylbenzene, and xylenes

CTO Contract Task Order

COPC constituents of potential concern

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 72 Azalea Drive (Formerly 807 Azalea 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 72 Azalea Drive (Formerly 807 Azalea Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 807 Azalea Drive* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B.

2.1 UST Removal and Soil Sampling

On January 3, 2013, a single 280 gallon heating oil UST was removed from the concrete porch area at 72 Azalea Drive (Formerly 807 Azalea 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





6'8" 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 72 Azalea Drive (Formerly 807 Azalea 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 72 Azalea Drive (Formerly 807 Azalea 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, 2013. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 807 Azalea Drive, Laurel Bay Military Housing Area, June 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 1 Laboratory Analytical Results - Soil 72 Azalea Drive (Formerly 807 Azalea Drive) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 01/03/13				
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)						
Benzene	0.003	ND				
Ethylbenzene	1.15	ND				
Naphthalene	0.036	ND				
Toluene	0.627	ND				
Xylenes, Total	13.01	ND				
Semivolatile Organic Compounds Anal	yzed by EPA Method 8270D (mg/kg)					
Benzo(a)anthracene	0.66	ND				
Benzo(b)fluoranthene	0.66	ND				
Benzo(k)fluoranthene	0.66	ND				
Chrysene	0.66	ND				
Dibenz(a,h)anthracene	0.66	ND				

Notes:

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.

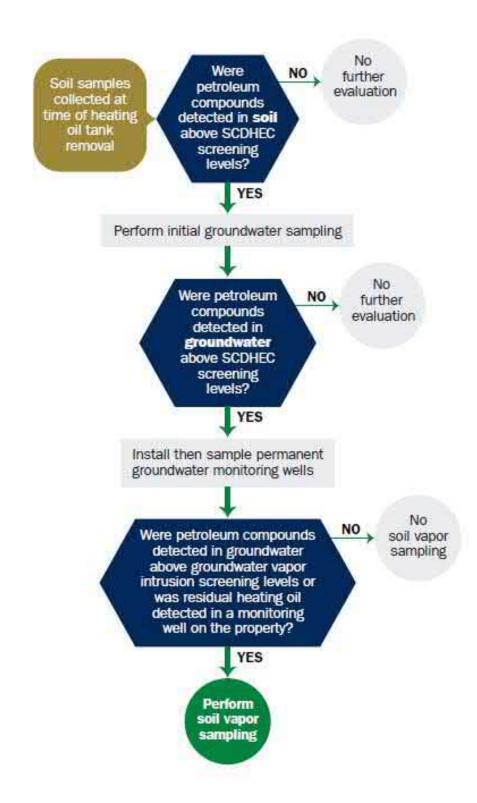
RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

⁽¹⁾ 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



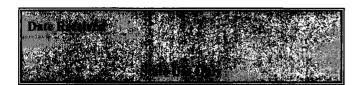


Appendix A - Multi-Media Selection Process for LBMH

Appendix B UST Assessment Report



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



Submit Completed Form To: UST Program SCDHEC 2600 Bull Street Columbia, South Carolina 29201 Telephone (803) 896-7957

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (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. #				
<u>Laurel Bay Mil</u>	itary Housing Area,	<u> Marine Corps</u>	<u> Air Station,</u>	Beaufort, SC
Facility Name or Comp	oany Site Identifier			
807 Azalea Dri Street Address or State	ve, Laurel Bay Mili Road (as applicable)	tary Housing	Area	
Beaufort,	Beaufort			
City	County			

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					
Sworn before me this, 20					

VI. UST INFORMATION	
	807Azalea
	Heating oil
Product(ex. Gas, Kerosene)	neacing off
Capacity(ex. 1k, 2k)	280 gal
Age	Late 1950s
Construction Material(ex. Steel, FRP)	Steel
Month/Year of Last Use	Mid 1980s
Depth (ft.) To Base of Tank	6'8"
Spill Prevention Equipment Y/N	No
Overfill Prevention Equipment Y/N	No
Method of Closure Removed/Filled	Removed
Date Tanks Removed/Filled	1/3/2013
Visible Corrosion or Pitting Y/N	Yes
Visible Holes Y/N	Yes
Method of disposal for any USTs removed from tust 807Azalea was removed from t	
"Subtitle D" landfill. See Attac	
Method of disposal for any liquid petroleum, sluddisposal manifests) UST 807Azalea was previously fil	

VII. PIPING INFORMATION

	807Azalea
	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, or	describe the location and extent for each nining ru
	on the surface of the steel vent
Corrosion and pitting were found	on the surface of the steel vent
Corrosion and pitting were found	on the surface of the steel vent
Corrosion and pitting were found pipe. Copper supply and return l	on the surface of the steel ventaines were sound. IPTION AND HISTORY
Corrosion and pitting were found pipe. Copper supply and return leading to the complex of the USTs at the residences are contact.	i on the surface of the steel ventaines were sound. IPTION AND HISTORY CONSTRUCTED OF SINGLE WALL STEEL
Corrosion and pitting were found pipe. Copper supply and return leading to the company of the USTs at the residences are contained fuel oil to the c	ines were sound. IPTION AND HISTORY Onstructed of single wall steel for heating. These USTs were
Corrosion and pitting were found pipe. Copper supply and return leading to the complex of the USTs at the residences are contact.	ines were sound. IPTION AND HISTORY Onstructed of single wall steel for heating. These USTs were
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IX. SITE CONDITIONS

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map.		Х	
11 yes, indicate depth and location on the site map.			<u> </u>
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?		х	
If yes, indicate location on site map and describe the odor (strong, mild, etc.)			
C. Was water present in the UST excavation, soil borings, or trenches?		х	
If yes, how far below land surface (indicate location and depth)?			
D. Did contaminated soils remain stockpiled on site after closure? 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?		х	
If yes, indicate location and thickness.			

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

В.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
807 Azalea	Excav at fill end	Soil	Sandy	6'8"	1/3/13 1500 hrs	P. Shaw	

					,		
8				:			
9							
10							
11							
12	_						
13							
14	_						
15	_						
16							
17							
18							
19							
20							

^{* =} Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

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.

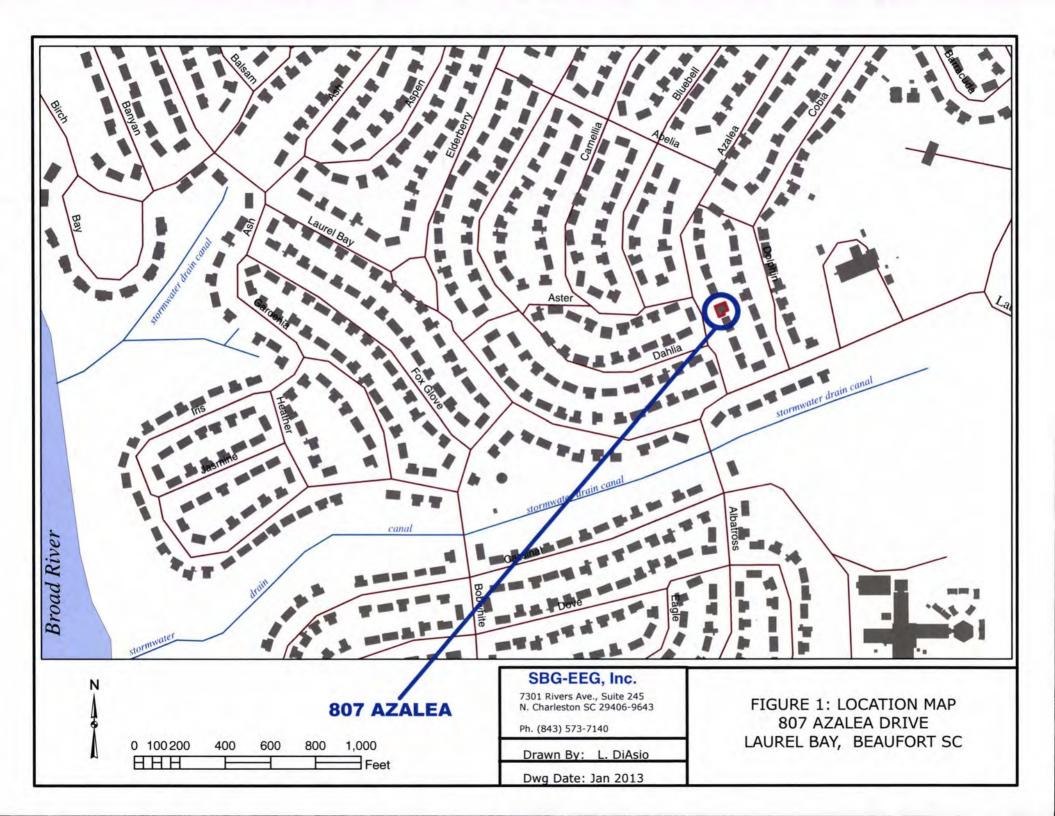
XII. RECEPTORS

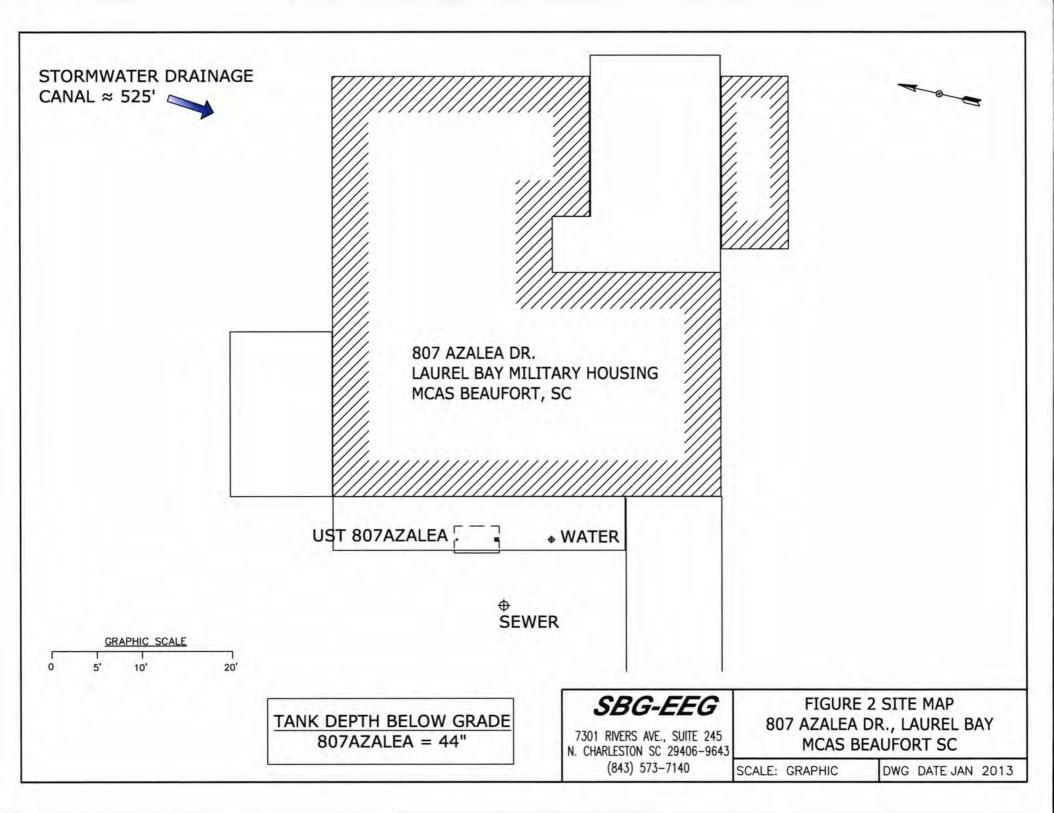
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	*X	_
	*Stormwater drainag	e can	al
	If yes, indicate type of receptor, distance, and direction on site map.		
В.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		X
	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	_	
	cable, fiber optic & ge	other	rmal
	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		X
	below land surface in an area that is not capped by asphalt or concrete?		Λ
	If yes, indicate the area of contaminated soil on the site map.		

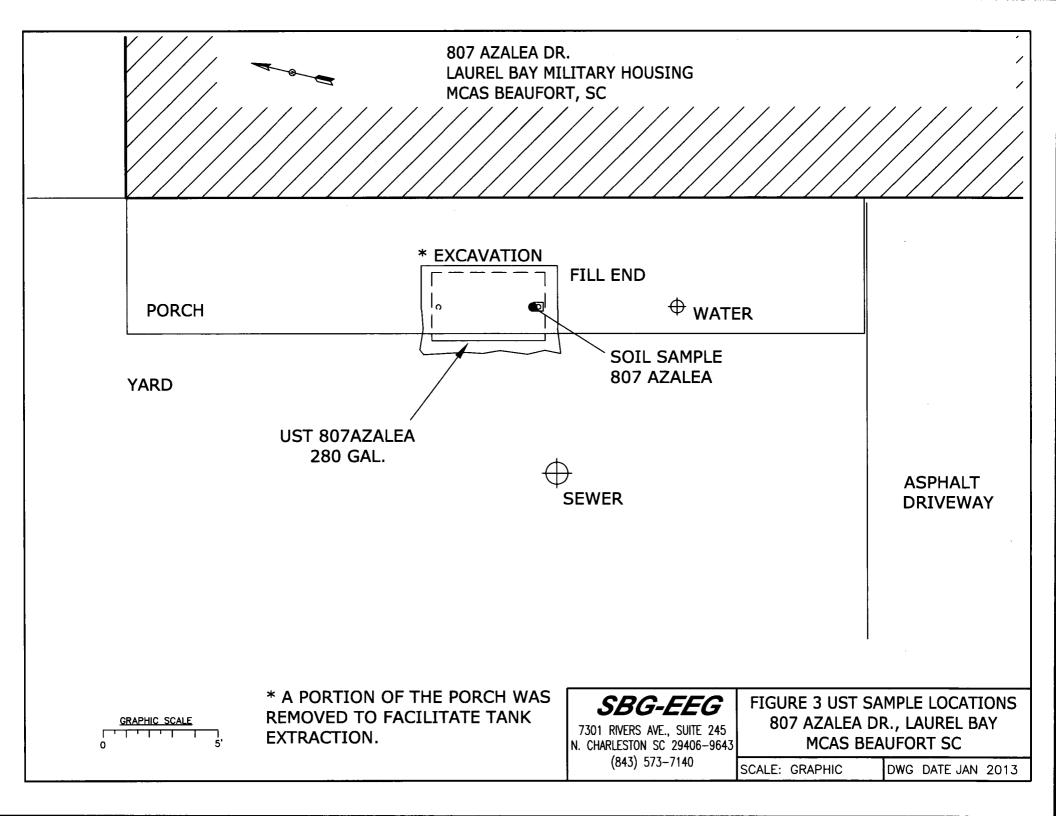
XIII. SITE MAP

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 807Azalea.



Picture 2: UST 807Azalea 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.

Enter the son analytical date		 	 T	
CoC UST	807Azalea			
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)				
		 	 1	
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				
	(µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None				
Benzene	5				
Toluene	1,000				
Ethylbenzene	700				
Xylenes	10,000				
Total BTEX	N/A				
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 Nashville 2960 Foster Creighton Drive Nashville, TN 37204 Tel: (615)726-0177

TestAmerica Job ID: 490-16591-1

Client Project/Site: Laurel Bay Housing Project

For:

Environmental Enterprise Group 10179 Highway 78 Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

Kuth Hay

Authorized for release by: 1/17/2013 6:08:53 PM

Ken Hayes Project Manager I

ken.hayes@testamericainc.com

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

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

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

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QC Association																								
Chronicle																								
Method Summary																								
Certification Summary																								
Chain of Custody																								
Receipt Checklists																								

TestAmerica Job ID: 490-16591-1

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-16591-1	559 Dahlia	Solid	01/03/13 13:45	01/10/13 08:30
490-16591-2	553 Dahlia	Solid	01/07/13 13:45	01/10/13 08:30
490-16591-3	807 Azalea	Solid	01/03/13 15:00	01/10/13 08:30
490-16591-4	556 Dahlia	Solid	01/07/13 14:30	01/10/13 08:30

Case Narrative

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

Job ID: 490-16591-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-16591-1

Comments

No additional comments.

Receipt

The samples were received on 1/10/2013 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.2° C.

GC/MS VOA

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 50431.

No other analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

Qualifiers

GC/MS 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.

GC/MS Semi VOA

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
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 Results

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

Client Sample ID: 559 Dahlia Date Collected: 01/03/13 13:45

Date Received: 01/10/13 08:30

Lab Sample ID: 490-16591-1

Matrix: Solid Percent Solids: 96.9

Method:	8260B - Vola	tile Organic C	omnounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00239	0.000801	mg/Kg	0	01/11/13 13:02	01/12/13 14:53	1
Ethylbenzene	ND		0.00239	0.000801	mg/Kg	0	01/11/13 13:02	01/12/13 14:53	1
Naphthalene	0.00259	J	0.00598	0.00203	mg/Kg	0	01/11/13 13:02	01/12/13 14:53	1
Toluene	ND		0.00239	0.000884	mg/Kg	Ö	01/11/13 13:02	01/12/13 14:53	1
Xylenes, Total	ND		0.00598	0.000801	mg/Kg	0	01/11/13 13:02	01/12/13 14:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130				01/11/13 13:02	01/12/13 14:53	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102	70 - 130	01/11/13 13:02	01/12/13 14:53	1
4-Bromofluorobenzene (Surr)	105	70 - 130	01/11/13 13:02	01/12/13 14:53	1
Dibromofluoromethane (Surr)	97	70 - 130	01/11/13 13:02	01/12/13 14:53	1
Toluene-d8 (Surr)	91	70 - 130	01/11/13 13:02	01/12/13 14:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0663	0.00990	mg/Kg	9	01/11/13 14:44	01/12/13 21:37	1
Acenaphthylene	ND		0.0663	0.00891	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Anthracene	ND		0.0663	0.00891	mg/Kg		01/11/13 14:44	01/12/13 21:37	1
Benzo[a]anthracene	ND		0.0663	0.0148	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Benzo[a]pyrene	ND		0.0663	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Benzo[b]fluoranthene	ND		0.0663	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Benzo[g,h,i]perylene	ND		0.0663	0.00891	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Benzo[k]fluoranthene	ND		0.0663	0.0139	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
1-Methylnaphthalene	ND		0.0663	0.0139	mg/Kg	9	01/11/13 14:44	01/12/13 21:37	1
Pyrene	ND		0.0663	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Phenanthrene	ND		0.0663	0.00891	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Chrysene	ND		0.0663	0.00891	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Dibenz(a,h)anthracene	ND		0.0663	0.00693	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Fluoranthene	ND		0.0663	0.00891	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Fluorene	ND		0.0663	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
Indeno[1,2,3-cd]pyrene	ND		0.0663	0.00990	mg/Kg		01/11/13 14:44	01/12/13 21:37	1
Naphthalene	ND		0.0663	0.00891	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1
2-Methylnaphthalene	ND		0.0663	0.0158	mg/Kg	0	01/11/13 14:44	01/12/13 21:37	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	74	29 - 120	01/11/13 14:44	01/12/13 21:37	1
Terphenyl-d14 (Surr)	103	13 - 120	01/11/13 14:44	01/12/13 21:37	1
Nitrobenzene-d5 (Surr)	70	27 - 120	01/11/13 14:44	01/12/13 21:37	1

General Chemistry							
Analyte	Result Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	97	0.10	0.10 %			01/10/13 15:35	1

Client Sample Results

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

Client Sample ID: 553 Dahlia

Date Collected: 01/07/13 13:45 Date Received: 01/10/13 08:30 Lab Sample ID: 490-16591-2 Matrix: Solid

Percent Solids: 97.2

Analyte Benzene Ethylbenzene Naphthalene Toluene Xylenes, Total	ND ND ND ND		0.00240 0.00240 0.00599	0.000803 0.000803	mg/Kg mg/Kg	0	01/11/13 13:02	01/12/13 15:23	1
Naphthalene Toluene	ND ND		0.00599	0.000803	ma/Ka	25			
Toluene	ND					- (40)	01/11/13 13:02	01/12/13 15:23	1
A CONTRACTOR OF THE CONTRACTOR			0.000.00	0.00204	mg/Kg	0	01/11/13 13:02	01/12/13 15:23	1
Xylenes, Total	ND		0.00240	0.000887	mg/Kg	0	01/11/13 13:02	01/12/13 15:23	1
			0.00599	0.000803	mg/Kg	0	01/11/13 13:02	01/12/13 15:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130				01/11/13 13:02	01/12/13 15:23	1
4-Bromofluorobenzene (Surr)	105		70 - 130				01/11/13 13:02	01/12/13 15:23	1
Dibromofluoromethane (Surr)	97		70 - 130				01/11/13 13:02	01/12/13 15:23	1
Toluene-d8 (Surr)	98		70 - 130				01/11/13 13:02	01/12/13 15:23	1
Method: 8270D - Semivolatile (The second secon	Contract to the second second	5)						
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0667	0.00995		٥	01/11/13 14:44	01/12/13 22:00	1
Acenaphthylene	ND		0.0667	0.00895	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
Anthracene	ND		0.0667	0.00895	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
Benzo[a]anthracene	ND		0.0667	0.0149	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
Benzo[a]pyrene	ND		0.0667	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
Benzo[b]fluoranthene	ND		0.0667	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
Benzo[g,h,i]perylene	ND		0.0667	0.00895	mg/Kg	*	01/11/13 14:44	01/12/13 22:00	1
Benzo[k]fluoranthene	ND		0.0667	0.0139	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
1-Methylnaphthalene	ND		0.0667	0.0139	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
Pyrene	ND		0.0667	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
Phenanthrene	ND		0.0667	0.00895	mg/Kg	益	01/11/13 14:44	01/12/13 22:00	1
Chrysene	ND		0.0667	0.00895	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
Dibenz(a,h)anthracene	ND		0.0667	0.00696	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
Fluoranthene	ND		0.0667	0.00895	mg/Kg	4	01/11/13 14:44	01/12/13 22:00	1
Fluorene	ND		0.0667	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 22:00	1
Indeno[1,2,3-cd]pyrene	ND		0.0667	0.00995	mg/Kg	¢	01/11/13 14:44	01/12/13 22:00	1
Naphthalene	ND		0.0667	0.00895	mg/Kg	Ø	01/11/13 14:44	01/12/13 22:00	1
2-Methylnaphthalene	ND		0.0667	0.0159	mg/Kg	-0	01/11/13 14:44	01/12/13 22:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	65		29 - 120				01/11/13 14:44	01/12/13 22:00	1
Terphenyl-d14 (Surr)	92		13 - 120				01/11/13 14:44	01/12/13 22:00	1
Nitrobenzene-d5 (Surr)	65		27 - 120				01/11/13 14:44	01/12/13 22:00	1
General Chemistry			1		4.7			24.23-5	02.12
Analyte	Result 97	Qualifier	RL 0.10	0.10	Unit	D	Prepared	Analyzed 01/10/13 15:35	Dil Fac

Client Sample Results

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

Client Sample ID: 807 Azalea

Date Collected: 01/03/13 15:00 Date Received: 01/10/13 08:30

Lab Sample ID: 490-16591-3

Matrix: Solid Percent Solids: 89.9

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

Analyte	Result Qual	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	0.00244	0.000816	mg/Kg	Ö	01/11/13 13:02	01/12/13 15:53	1
Ethylbenzene	ND	0.00244	0.000816	mg/Kg	Ď.	01/11/13 13:02	01/12/13 15:53	1
Naphthalene	ND	0.00609	0.00207	mg/Kg	0	01/11/13 13:02	01/12/13 15:53	1
Toluene	ND	0.00244	0.000901	mg/Kg	0	01/11/13 13:02	01/12/13 15:53	1
Xylenes, Total	ND	0.00609	0.000816	mg/Kg	C	01/11/13 13:02	01/12/13 15:53	1
Surrogate	%Recovery Qual	alifier Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Quali	ifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104	70 - 130	01/11/13 13:02	01/12/13 15:53	1
4-Bromofluorobenzene (Surr)	104	70 - 130	01/11/13 13:02	01/12/13 15:53	1
Dibromofluoromethane (Surr)	98	70 - 130	01/11/13 13:02	01/12/13 15:53	1
Toluene-d8 (Surr)	99	70 - 130	01/11/13 13:02	01/12/13 15:53	1

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

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	0.0660	0.00984	mg/Kg	0	01/11/13 14:44	01/12/13 22:23	1
Acenaphthylene	ND	0.0660	0.00886	mg/Kg	0	01/11/13 14:44	01/12/13 22:23	1
Anthracene	ND	0.0660	0.00886	mg/Kg	D	01/11/13 14:44	01/12/13 22:23	1
Benzo[a]anthracene	ND	0.0660	0.0148	mg/Kg	-0	01/11/13 14:44	01/12/13 22:23	1
Benzo[a]pyrene	ND	0.0660	0.0118	mg/Kg	-01	01/11/13 14:44	01/12/13 22:23	1
Benzo[b]fluoranthene	ND	0.0660	0.0118	mg/Kg	100	01/11/13 14:44	01/12/13 22:23	1
Benzo[g,h,i]perylene	0.0335 J	0.0660	0.00886	mg/Kg	0	01/11/13 14:44	01/12/13 22:23	1
Benzo[k]fluoranthene	ND	0.0660	0.0138	mg/Kg	0	01/11/13 14:44	01/12/13 22:23	1
1-Methylnaphthalene	ND	0.0660	0.0138	mg/Kg	1,5	01/11/13 14:44	01/12/13 22:23	1
Pyrene	ND	0.0660	0.0118	mg/Kg	P	01/11/13 14:44	01/12/13 22:23	1
Phenanthrene	ND	0.0660	0.00886	mg/Kg	E8	01/11/13 14:44	01/12/13 22:23	1
Chrysene	ND	0.0660	0.00886	mg/Kg	0	01/11/13 14:44	01/12/13 22:23	1
Dibenz(a,h)anthracene	ND	0.0660	0.00689	mg/Kg	-0	01/11/13 14:44	01/12/13 22:23	1
Fluoranthene	ND	0.0660	0.00886	mg/Kg	.0	01/11/13 14:44	01/12/13 22:23	1
Fluorene	ND	0.0660	0.0118	mg/Kg	0	01/11/13 14:44	01/12/13 22:23	1
Indeno[1,2,3-cd]pyrene	ND	0.0660	0.00984	mg/Kg	0	01/11/13 14:44	01/12/13 22:23	1
Naphthalene	ND	0.0660	0.00886	mg/Kg	0	01/11/13 14:44	01/12/13 22:23	1
2-Methylnaphthalene	ND	0.0660	0.0158	mg/Kg	0	01/11/13 14:44	01/12/13 22:23	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	67	29 - 120	01/11/13 14:44	01/12/13 22:23	1
Terphenyl-d14 (Surr)	86	13 - 120	01/11/13 14:44	01/12/13 22:23	1
Nitrobenzene-d5 (Surr)	62	27 - 120	01/11/13 14:44	01/12/13 22:23	1

Genera	I Chemis	strv

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Percent Solids	90		0.10	0.10	%			01/10/13 15:35	1	

Client Sample Results

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

Client Sample ID: 556 Dahlia Date Collected: 01/07/13 14:30 Lab Sample ID: 490-16591-4

Date Received: 01/10/13 08:30

Percent Solids

Matrix: Solid Percent Solids: 93.7

Pate Received: 01/10/13 08:30								Percent Soli	ds: 93.7
Method: 8260B - Volatile Orga									
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00217	0.000726	mg/Kg	0	01/11/13 13:02	01/12/13 16:24	1
Ethylbenzene	ND		0.00217	0.000726	mg/Kg	-0	01/11/13 13:02	01/12/13 16:24	1
Naphthalene	ND		0.00542	0.00184	mg/Kg	0	01/11/13 13:02	01/12/13 16:24	1
Toluene	ND		0.00217	0.000802	mg/Kg	-0	01/11/13 13:02	01/12/13 16:24	1
Xylenes, Total	ND		0.00542	0.000726	mg/Kg	0	01/11/13 13:02	01/12/13 16:24	-1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130				01/11/13 13:02	01/12/13 16:24	1
4-Bromofluorobenzene (Surr)	110		70 - 130				01/11/13 13:02	01/12/13 16:24	1
Dibromofluoromethane (Surr)	98		70 - 130				01/11/13 13:02	01/12/13 16:24	1
Toluene-d8 (Surr)	97		70 - 130				01/11/13 13:02	01/12/13 16:24	1
Method: 8270D - Semivolatile	Organic Compou	inds (GC/MS	S)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0665	0.00993	mg/Kg	0.	01/11/13 14:44	01/12/13 22:46	1
Acenaphthylene	ND		0.0665	0.00893	mg/Kg	-0	01/11/13 14:44	01/12/13 22:46	1
Anthracene	ND		0.0665	0.00893	mg/Kg	-65	01/11/13 14:44	01/12/13 22:46	1
Benzo[a]anthracene	ND		0.0665	0.0149	mg/Kg	0	01/11/13 14:44	01/12/13 22:46	1
Benzo[a]pyrene	ND		0.0665	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 22:46	1
Benzo[b]fluoranthene	ND		0.0665	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 22:46	1
Benzo[g,h,i]perylene	ND		0.0665	0.00893	mg/Kg	-62	01/11/13 14:44	01/12/13 22:46	1
Benzo[k]fluoranthene	ND		0.0665	0.0139	mg/Kg	Ď.	01/11/13 14:44	01/12/13 22:46	1
1-Methylnaphthalene	ND		0.0665	0.0139	mg/Kg	-03	01/11/13 14:44	01/12/13 22:46	- 1
Pyrene	ND		0.0665	0.0119	mg/Kg	0	01/11/13 14:44	01/12/13 22:46	1
Phenanthrene	ND		0.0665	0.00893	mg/Kg	-131	01/11/13 14:44	01/12/13 22:46	1
Chrysene	ND		0.0665	0.00893	mg/Kg	-0	01/11/13 14:44	01/12/13 22:46	1
Dibenz(a,h)anthracene	ND		0.0665	0.00695	mg/Kg	0	01/11/13 14:44	01/12/13 22:46	1
Fluoranthene	ND		0.0665	0.00893	mg/Kg	O	01/11/13 14:44	01/12/13 22:46	1
Fluorene	ND		0.0665	0.0119	mg/Kg	63	01/11/13 14:44	01/12/13 22:46	1
Indeno[1,2,3-cd]pyrene	ND		0.0665	0.00993	mg/Kg	0	01/11/13 14:44	01/12/13 22:46	1
Naphthalene	ND		0.0665	0.00893	mg/Kg	-03	01/11/13 14:44	01/12/13 22:46	1
2-Methylnaphthalene	ND		0.0665	0.0159	mg/Kg	-35	01/11/13 14:44	01/12/13 22:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	64		29 - 120				01/11/13 14:44	01/12/13 22:46	1
Terphenyl-d14 (Surr)	86		13 - 120				01/11/13 14:44	01/12/13 22:46	1
Nitrobenzene-d5 (Surr)	60		27 - 120				01/11/13 14:44	01/12/13 22:46	1
General Chemistry	1,270,744	0.115			11-16				Di F
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

01/10/13 15:35

0.10

94

0.10 %

QC Sample Results

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

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

Lab Sample ID: MB 490-50431/6

Matrix: Solid

Analysis Batch: 50431

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

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			01/12/13 09:49	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			01/12/13 09:49	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			01/12/13 09:49	1
Toluene	ND		0.00200	0.000740	mg/Kg			01/12/13 09:49	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			01/12/13 09:49	1

MB MB Dil Fac %Recovery Qualifier Limits Analyzed Surrogate Prepared 90 70 - 130 01/12/13 09:49 1,2-Dichloroethane-d4 (Surr) 01/12/13 09:49 108 70 - 130 4-Bromofluorobenzene (Surr) Dibromofluoromethane (Surr) 92 70 - 130 01/12/13 09:49 Toluene-d8 (Surr) 96 70 - 130 01/12/13 09:49

Lab Sample ID: LCS 490-50431/3

Matrix: Solid

Analysis Batch: 50431

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

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.0500	0.05075		mg/Kg		102	75 - 127
Ethylbenzene	0.0500	0.05093		mg/Kg		102	80 - 134
Naphthalene	0.0500	0.06377		mg/Kg		128	69 - 150
Toluene	0.0500	0.04938		mg/Kg		99	80 - 132
Xylenes, Total	0.150	0.1575		mg/Kg		105	80 - 137

LCS LCS Qualifier Limits Surrogate %Recovery 95 70 - 130 1,2-Dichloroethane-d4 (Surr) 4-Bromofluorobenzene (Surr) 99 70 - 130 Dibromofluoromethane (Surr) 103 70 - 130 Toluene-d8 (Surr) 93 70 - 130

Lab Sample ID: LCSD 490-50431/4

Matrix: Solid

Analysis Batch: 50431

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

Allalysis Batch. 50451	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	27726	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.0500	0.05161		mg/Kg		103	75 - 127	2	50
Ethylbenzene	0.0500	0.05207		mg/Kg		104	80 - 134	2	50
Naphthalene	0.0500	0.06537		mg/Kg		131	69 - 150	2	50
Toluene	0.0500	0.05109		mg/Kg		102	80 - 132	3	50
Xylenes, Total	0.150	0.1556		mg/Kg		104	80 - 137	1	50

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	99		70 - 130
Toluene-d8 (Surr)	97		70 - 130

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

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

Lab Sample ID: MB 490-50362/1-A

Matrix: Solid

Analysis Batch: 50512

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

Prep Batch: 50362

	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
AID.					7	riepareu	Analyzed	Dii i do
ND		0.0670	0.0100	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.00900	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.00900	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.0150	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.0120	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.0120	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.00900	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.0140	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.0140	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.0120	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.00900	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.00900	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.00700	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.00900	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.0120	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.0100	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.00900	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
ND		0.0670	0.0160	mg/Kg		01/11/13 14:44	01/12/13 20:05	1
	ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND 0.0670	ND 0.0670 0.00900 ND 0.0670 0.0150 ND 0.0670 0.0120 ND 0.0670 0.00900 ND 0.0670 0.0140 ND 0.0670 0.0140 ND 0.0670 0.0120 ND 0.0670 0.00900 ND 0.0670 0.00900 ND 0.0670 0.00900 ND 0.0670 0.00900 ND 0.0670 0.0120 ND 0.0670 0.0120 ND 0.0670 0.0120 ND 0.0670 0.0120 ND 0.0670 0.0100 ND 0.0670 0.0100 ND 0.0670 0.0100	ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0150 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0100 mg/Kg	ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0150 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0140 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.00900 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0120 mg/Kg ND 0.0670 0.0100 mg/Kg ND 0.0670 0.0100 mg/Kg	ND 0.0670 0.00900 mg/Kg 01/11/13 14:44 ND 0.0670 0.0150 mg/Kg 01/11/13 14:44 ND 0.0670 0.0120 mg/Kg 01/11/13 14:44 ND 0.0670 0.0120 mg/Kg 01/11/13 14:44 ND 0.0670 0.00900 mg/Kg 01/11/13 14:44 ND 0.0670 0.0140 mg/Kg 01/11/13 14:44 ND 0.0670 0.0140 mg/Kg 01/11/13 14:44 ND 0.0670 0.0140 mg/Kg 01/11/13 14:44 ND 0.0670 0.0120 mg/Kg 01/11/13 14:44 ND 0.0670 0.00900 mg/Kg 01/11/13 14:44	ND 0.0670 0.0150 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.0150 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.0120 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.0120 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.00900 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.0140 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.0140 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.0140 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.0120 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.00900 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.0100 mg/Kg 01/11/13 14:44 01/12/13 20:05 ND 0.0670 0.00900 mg/Kg 01/11/13 14:44 01/12/13 20:05

MB MB

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	64	29 - 120	01/11/13 14:44	01/12/13 20:05	1
Terphenyl-d14 (Surr)	82	13 - 120	01/11/13 14:44	01/12/13 20:05	1
Nitrobenzene-d5 (Surr)	59	27 - 120	01/11/13 14:44	01/12/13 20:05	1

Lab Sample ID: LCS 490-50362/2-A

Matrix: Solid

Analysis Batch: 50512

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50362

Analysis Batch: 50512							Frep
The state of the s	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	1.67	1.382		mg/Kg		83	38 - 120
Anthracene	1.67	1.357		mg/Kg		81	46 - 124
Benzo[a]anthracene	1.67	1.366		mg/Kg		82	45 - 120
Benzo[a]pyrene	1.67	1.328		mg/Kg		80	45 - 120
Benzo[b]fluoranthene	1.67	1.413		mg/Kg		85	42 - 120
Benzo[g,h,i]perylene	1.67	1.258		mg/Kg		75	38 - 120
Benzo[k]fluoranthene	1.67	1.331		mg/Kg		80	42 - 120
1-Methylnaphthalene	1.67	1.578		mg/Kg		95	32 - 120
Pyrene	1.67	1.388		mg/Kg		83	43 - 120
Phenanthrene	1.67	1.426		mg/Kg		86	45 - 120
Chrysene	1.67	1.329		mg/Kg		80	43 - 120
Dibenz(a,h)anthracene	1.67	1.304		mg/Kg		78	32 - 128
Fluoranthene	1.67	1.422		mg/Kg		85	46 - 120
Fluorene	1.67	1.408		mg/Kg		84	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.285		mg/Kg		77	41 - 121
Naphthalene	1.67	1.407		mg/Kg		84	32 - 120
2-Methylnaphthalene	1.67	1.403		mg/Kg		84	28 - 120

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

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

Lab Sample ID: LCS 490-50362/2-A

Matrix: Solid

Analysis Batch: 50512

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50362

L	CO	L	U
		-	

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	66		29 - 120
Terphenyl-d14 (Surr)	86		13 - 120
Nitrobenzene-d5 (Surr)	61		27 - 120

Lab Sample ID: 490-16380-A-1-C MS

Matrix: Solid

Analysis Batch: 50512

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 50362

Analysis Daton. 00012	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	ND		1.38	1.056		mg/Kg		77	25 - 120
Anthracene	ND		1.38	1.052		mg/Kg		76	28 - 125
Benzo[a]anthracene	ND		1.38	1.057		mg/Kg		77	23 - 120
Benzo[a]pyrene	ND		1.38	1.044		mg/Kg		76	15 - 128
Benzo[b]fluoranthene	ND		1.38	1.127		mg/Kg		82	12 - 133
Benzo[g,h,i]perylene	ND		1.38	0.9920		mg/Kg		72	22 - 120
Benzo[k]fluoranthene	ND		1.38	1.054		mg/Kg		77	28 - 120
1-Methylnaphthalene	ND		1.38	1.167		mg/Kg		85	10 - 120
Pyrene	ND		1.38	1.086		mg/Kg		79	20 - 123
Phenanthrene	ND		1.38	1.107		mg/Kg		80	21 - 122
Chrysene	ND		1.38	1.039		mg/Kg		75	20 - 120
Dibenz(a,h)anthracene	ND		1.38	1.018		mg/Kg		74	12 - 128
Fluoranthene	ND		1.38	1.087		mg/Kg		79	10 - 143
Fluorene	ND		1.38	1.073		mg/Kg		78	20 - 120
Indeno[1,2,3-cd]pyrene	ND		1.38	1.008		mg/Kg		73	22 - 121
Naphthalene	ND		1.38	1.056		mg/Kg		77	10 - 120
2-Methylnaphthalene	ND		1.38	1.039		mg/Kg		75	13 - 120

MS	MS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	62		29 - 120
Terphenyl-d14 (Surr)	83		13 - 120
Nitrobenzene-d5 (Surr)	56		27 - 120

Lab Sample ID: 490-16380-A-1-D MSD

Matrix: Solid

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Pren Batch: 50362

Analysis Batch: 50512									Prep	Batch:	50362
A CONTRACTOR OF THE PARTY OF TH	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	ND		1.39	1.150		mg/Kg		83	25 - 120	9	50
Anthracene	ND		1.39	1.141		mg/Kg		82	28 - 125	8	49
Benzo[a]anthracene	ND		1.39	1.123		mg/Kg		81	23 - 120	6	50
Benzo[a]pyrene	ND		1.39	1.100		mg/Kg		79	15 - 128	5	50
Benzo[b]fluoranthene	ND		1.39	1.186		mg/Kg		85	12 - 133	5	50
Benzo[g,h,i]perylene	ND		1.39	1.030		mg/Kg		74	22 - 120	4	50
Benzo[k]fluoranthene	ND		1.39	1.106		mg/Kg		79	28 - 120	5	45
1-Methylnaphthalene	ND		1.39	1.272		mg/Kg		91	10 - 120	9	50
Pyrene	ND		1.39	1.148		mg/Kg		82	20 - 123	6	50
Phenanthrene	ND		1.39	1.180		mg/Kg		85	21 - 122	6	50
Chrysene	ND		1.39	1.101		mg/Kg		79	20 - 120	6	49

QC Sample Results

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

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

Lab Sample ID: 490-16380-A-1-D MSD

Matrix: Solid

Analysis Batch: 50512

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Client Sample ID: Duplicate

Prep Batch: 50362

2.000	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Dibenz(a,h)anthracene	ND		1.39	1.071		mg/Kg		77	12 - 128	5	50
Fluoranthene	ND		1.39	1.162		mg/Kg		83	10 - 143	7	50
Fluorene	ND		1.39	1.166		mg/Kg		84	20 - 120	8	50
Indeno[1,2,3-cd]pyrene	ND		1.39	1.066		mg/Kg		76	22 - 121	6	50
Naphthalene	ND		1.39	1.153		mg/Kg		83	10 - 120	9	50
2-Methylnaphthalene	ND		1.39	1.145		mg/Kg		82	13 - 120	10	50

MSD MSD

	MOD	MOD	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	65		29 - 120
Terphenyl-d14 (Surr)	87		13 - 120
Nitrobenzene-d5 (Surr)	62		27 - 120

Method: Moisture - Percent Moisture

Lab Sample ID: 490-16515-A-1 DU

Matrix: Solid

Analysis Batch: 49943

Prep Type: Total/NA

QC Association Summary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

GC/MS VOA

Prep Batch: 50318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-16591-1	559 Dahlia	Total/NA	Solid	5035	
490-16591-2	553 Dahlia	Total/NA	Solid	5035	
490-16591-3	807 Azalea	Total/NA	Solid	5035	
490-16591-4	556 Dahlia	Total/NA	Solid	5035	

Analysis Batch: 50431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-16591-1	559 Dahlia	Total/NA	Solid	8260B	50318
490-16591-2	553 Dahlia	Total/NA	Solid	8260B	50318
490-16591-3	807 Azalea	Total/NA	Solid	8260B	50318
490-16591-4	556 Dahlia	Total/NA	Solid	8260B	50318
LCS 490-50431/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-50431/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-50431/6	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 50362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-16380-A-1-C MS	Matrix Spike	Total/NA	Solid	3550C	
490-16380-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
490-16591-1	559 Dahlia	Total/NA	Solid	3550C	
490-16591-2	553 Dahlia	Total/NA	Solid	3550C	
490-16591-3	807 Azalea	Total/NA	Solid	3550C	
490-16591-4	556 Dahlia	Total/NA	Solid	3550C	
LCS 490-50362/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-50362/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 50512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-16380-A-1-C MS	Matrix Spike	Total/NA	Solid	8270D	50362
490-16380-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	50362
490-16591-1	559 Dahlia	Total/NA	Solid	8270D	50362
490-16591-2	553 Dahlia	Total/NA	Solid	8270D	50362
490-16591-3	807 Azalea	Total/NA	Solid	8270D	50362
490-16591-4	556 Dahlia	Total/NA	Solid	8270D	50362
LCS 490-50362/2-A	Lab Control Sample	Total/NA	Solid	8270D	50362
MB 490-50362/1-A	Method Blank	Total/NA	Solid	8270D	50362

General Chemistry

Analysis Batch: 49943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-16515-A-1 DU	Duplicate	Total/NA	Solid	Moisture	
490-16591-1	559 Dahlia	Total/NA	Solid	Moisture	
490-16591-2	553 Dahlia	Total/NA	Solid	Moisture	
490-16591-3	807 Azalea	Total/NA	Solid	Moisture	
490-16591-4	556 Dahlia	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

Client Sample ID: 559 Dahlia

Date Collected: 01/03/13 13:45 Date Received: 01/10/13 08:30 Lab Sample ID: 490-16591-1

Matrix: Solid

Percent Solids: 96.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			50318	01/11/13 13:02	ML	TAL NSH
Total/NA	Analysis	8260B		1	50431	01/12/13 14:53	AF	TAL NSH
Total/NA	Prep	3550C			50362	01/11/13 14:44	PA	TAL NSH
Total/NA	Analysis	8270D		1	50512	01/12/13 21:37	KP	TAL NSH
Total/NA	Analysis	Moisture		1	49943	01/10/13 15:35	RS	TAL NSH

Client Sample ID: 553 Dahlia

Date Collected: 01/07/13 13:45 Date Received: 01/10/13 08:30 Lab Sample ID: 490-16591-2

Matrix: Solid

Percent Solids: 97.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			50318	01/11/13 13:02	ML	TAL NSH
Total/NA	Analysis	8260B		1	50431	01/12/13 15:23	AF	TAL NSH
Total/NA	Prep	3550C			50362	01/11/13 14:44	PA	TAL NSH
Total/NA	Analysis	8270D		1	50512	01/12/13 22:00	KP	TAL NSH
Total/NA	Analysis	Moisture		1	49943	01/10/13 15:35	RS	TAL NSH

Client Sample ID: 807 Azalea

Date Collected: 01/03/13 15:00 Date Received: 01/10/13 08:30 Lab Sample ID: 490-16591-3

Matrix: Solid

Percent Solids: 89.9

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			50318	01/11/13 13:02	ML	TAL NSH
Total/NA	Analysis	8260B		1	50431	01/12/13 15:53	AF	TAL NSH
Total/NA	Prep	3550C			50362	01/11/13 14:44	PA	TAL NSH
Total/NA	Analysis	8270D		1	50512	01/12/13 22:23	KP	TAL NSH
Total/NA	Analysis	Moisture		1	49943	01/10/13 15:35	RS	TAL NSH

Client Sample ID: 556 Dahlia

Date Collected: 01/07/13 14:30

Date Received: 01/10/13 08:30

Lab Sample ID: 490-16591-4

Matrix: Solid

Percent Solids: 93.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			50318	01/11/13 13:02	ML	TAL NSH
Total/NA	Analysis	8260B		1	50431	01/12/13 16:24	AF	TAL NSH
Total/NA	Prep	3550C			50362	01/11/13 14:44	PA	TAL NSH
Total/NA	Analysis	8270D		1	50512	01/12/13 22:46	KP	TAL NSH
Total/NA	Analysis	Moisture		1	49943	01/10/13 15:35	RS	TAL NSH

Laboratory References:

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

Method Summary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

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

Certification Summary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 490-16591-1

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
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-13
Arkansas DEQ	State Program	6	88-0737	04-25-13
California	NELAP	9	1168CA	10-31-13
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Colorado	State Program	8	N/A	02-28-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-13
llinois	NELAP	5	200010	12-09-13
owa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAP	6	30613	06-30-13
Maryland	State Program	3	316	03-31-13
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAP	1	2963	10-09-13
New Jersey	NELAP	2	TN965	06-30-13
New York	NELAP	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Oregon	NELAP	10	TN200001	04-30-13
Pennsylvania	NELAP	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-13
South Carolina	State Program	4	84009 (001)	02-28-13
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
JSDA	Federal		S-48469	11-02-13
Jtah	NELAP	8	TAN	06-30-13
/irginia	NELAP	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-13
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13



COOLER RECEIP.



Cooler Received/Opened On 1/10/2013 @ 0830	
1. Tracking #	
Courier: FedEx IR Gun ID 12080142	
2. Temperature of rep. sample or temp blank when opened: 5.2 Degrees Celsiu	s
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank froz	en? YES NONA
4. Were custody seals on outside of cooler? If yes, how many and where:	VESNONA
5. Were the seals intact, signed, and dated correctly?	YES NO NA
6. Were custody papers inside cooler?	YES NONA
I certify that I opened the cooler and answered questions 1-6 (intial)	
7. Were custody seals on containers: YES NO and Intact	YESNONA
Were these signed and dated correctly?	YESNONA
8. Packing mat'l used? Subblewrap Plastic bag Peanuts Vermiculite Foam Insert P	aper Other None
9. Cooling process: Ce lce-pack lce (direct contact) Dry	vice Other None
10. Did all containers arrive in good condition (unbroken)?	YESNONA
11. Were all container labels complete (#, date, signed, pres., etc)?	ES NONA
12. Did all container labels and tags agree with custody papers?	ESNONA
13a. Were VOA vials received?	YES NONA
b. Was there any observable headspace present in any VOA vial?	YES. NONA-
14. Was there a Trip Blank in this cooler? YESNONA If multiple coolers, seq	uence # NA
I certify that I unloaded the cooler and answered questions 7-14 (intial)	₽
15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH lev	vel? YESNO.NA
b. Did the bottle labels indicate that the correct preservatives were used	YESNONA
16. Was residual chlorine present?	YESNO. NA
certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (inti	al)
17. Were custody papers properly filled out (ink, signed, etc)?	ESNONA
18. Did you sign the custody papers in the appropriate place?	ESNONA
18. Did you sign the custody papers in the appropriate place? 19. Were correct containers used for the analysis requested?	ESNONA
17. Were custody papers properly filled out (ink, signed, etc)? 18. Did you sign the custody papers in the appropriate place? 19. Were correct containers used for the analysis requested? 20. Was sufficient amount of sample sent in each container? I certify that I entered this project into LIMS and answered questions 17-20 (intial)	(ES)NONA (YES)NONA (YES)NONA

	Relinquished by:	Reinquistrat		Special Instructions:					January Color	res Dalla	559 Dahlia	Sample ID / Description		Sampler Signature:	Sampler Name: (Print)	Telephone Number: 843.412.2097	Project Manager:	City/State/Zip: 1	Address:	Client Name/Account #: EEG - SBG # 2449	THE LEADER IN ENVIRONMENTAL TESTING
	Date Time Rec	1/9/13 C400 }							0/0	1 1 1 1 1 2 1 2 1 2 1 2 1 1 1 1 1 1 1 1	1/3/13 /345 4 1	Date Sampled Time Sampled No. of Containers Shipped Grab Composite	/ /	0000	Chris Tunstall	843.412.2097	Project Manager: Tom McElwee email: mcelwee@eeginc.net	City/State/Zip: Ladson, SC 29456	Address: 10179 Highway 78	EEG - SBG # 2449	Nashville Division 2960 Foster Creighton TESTING Nashville, TN 37204
0	Sector Circle Date	Received by: Date	lethod of Shipment						,	5	الم الم	Field Filtered ice HNO ₃ (Red Label) LiGH(Blog_Label) NaOH (Orange Label) H ₂ SO ₄ Plastic (Yellow Label) None (Black Label) Other (Specify) Groundwater Wastewater Drinking Water Sludge	Preservative Matrix			Fax No.: 843-879-0401					Phone: 615-726-0177 Toll Free: 800-765-0980 Fax: 615-726-3404
	8 08.80 1 08.30	Time	_	Laboratory		/			\hat{\}	<	XXX	Soil Other (specify): BTEX + Napth - 8260 PAH - 8270D		Project #:	Project ID: Laurel Bay Housing Project	TA Quote #:	PO#: 16	Site State: SC		,	To assist us in using t methods, is this work regulatory purposes?
			VOCs Free of Headspace?	Laboratory Comments: Temperature Upon Receipt	 /					16591	LOC: 490		Analyze For:		busing Project		063		Enforcement Action?	Compliance Monitoring?	To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
			4	/								RUSH TAT (Pre-Schedule	,						Yes No	Yes No	

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Relinquished by:	Relinquished by	special instructions							72.5	100 PR	A Descrip								Ω	THE LEADER IN
1	1							On Cliff	Dal Ica	Bales	vition		Sampler Signature:	Sampler Name: (Print)	Telephone Number: 843.412.2097	Project Manager: Tom McElwee email: mcelwee@eeginc.net	City/State/Zip:	Address:	Client Name/Account #: EEG - SBG # 2449	THE LEADER IN ENVIRONMENTAL TESTING
/ / Date	7/8/							11111	1,151,2	1/3/13	Date Sampled		10	1/2/	843.412.2097	Tom McElwee en	City/State/Zip: Ladson, SC 29456	Address: 10179 Highway 78	EEG - SBG # 244	
Plas	16/20		-				+	1 1000	7 0271	1500 4	Time Sampled No. of Containers Shipper	11	M	HIR	-	nail: mcelwee@	6	00	19	Nashville Division 2960 Foster Creighton Nashville, TN 37204
Time Room	Time Received by:						1	*	\ \ \	7	Grab Composite		1	hAN	1	eeginc.net				sion reighton 37204
red by Testrumers	Of L	Method of Shipment:				1			U	لع	Field Filtered Ice HNO ₃ (Red Label) HCI (Blue Label) Sul 12				Fax No.: 8					Tol
UT BOS		Shipment							-	1	NaOH (Orange Label) H ₂ SO ₄ Plastic (Yellow Label) H ₂ SO ₄ Glass(Yellow Label) None (Black Label)	eservative	1		43-81					Phone: 615-726-0177 Toll Free: 800-765-0980 Fax: 615-726-3404
ريو ح	Date								-7		Other (Specify) Mathematical Section (Specify) Mathematical	Matrix			19-04c					-0177 -0980 -3404
1-10-13 (8) 1me		FEDEX			1			3	4	ベーン	Skidge Soll Other (specify):	-	1		1 14		"	1	1	
(A)	Time	5	-					7	4	イイ	BTEX + Napth - 8260 PAH - 8270D	E I	Project #:	roject ID: Lau	TA Quote #:	PO#	Site State: SC			met regi
		Temperature Upor VOCs Free of Hea		1					_			,		Project ID: Laurel Bay Housing Project		1063				To assist us in using to methods, is this work or regulatory purposes?
		Temperature Upon Receipt: VOCs Free of Headspace?						-	+	1653	, b	Analyze For:		g Project				Enforcement Action?	Compliance Monitoring?	To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
			#					_	+					3				Yes	Yes	
		4	+						1		RUSH TAT (Pre-Schedule							No	No	

Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 490-16591-1

List Source: TestAmerica Nashville

Login Number: 16591 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 campered 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	
s 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 <6 mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT A



NON-HAZARDOUS MANIFEST

NON HAZARROUS MANUETST	1. Generator's	US EPA ID No).	Manifest Doc I	No.	2. Page 1	of		
NON-HAZARDOUS MANIFEST	T _B -	Tall to the state of a			rên (1	*		
3. Generator's Mailing Address:	<u> </u>	Generator	's Site Address (f different than m	ailing):	A. Manife	st Number		
MCAS BEAUFORT		on Wike				w	MNA	01519106	
LAUREL BAY HOUSING								Generator's ID	
BEAUFORT, SC 29904									ŀ
	79-0411								
5. Transporter 1 Company Name		6.	US EPA	ID Number		_			
The Mark States of the States							ransporter's II		raye (*)
7. Transporter 2 Company Name		8.	IIS FDA	ID Number	-		orter's Phone		(14)年
		J					ansporter's IC		
Magnetic State (Inc.)				ID fastella		-	rter's Phone	. S. J. 1818 b	
9. Designated Facility Name and Site	Address	10.	US EP	A ID Number					
HICKORY HILL LANDFILL				S		G. State F	acility ID	t - Reciff	1 1
2621 LOW COUNTRY DRIVE			AND ESTAT	-Ditter to the		H. State F	acility Phone	843-987-4	643
RIDGELAND, SC 29936									
				12.00	ntainers	13. Total	14. Unit	Т	
G 11. Description of Waste Materials				No.	Туре	Quantity	Wt./Vol.	i. Misc. Com	nments
a. HEATING OIL TANK FILLED V	VITH SAND			No.		:	n 1866	Cogner	w. ts
N E									
R WM Prof	ile# 102655	SC							
A b. passon is allow				ho.			State of State	dao	
T O									11.5
R WM Profile #	i Stelenstein	. (1949) - (1949)							
C				710	T gash	*071	terr ag		. [
1400 P. C. C.						F 24 51			
d. WM Profile #		· · · · · · · · · · · · · · · · · · ·							
4.				tar .	F + 4144	lots:	Talk Types	10000	
						Oilv			
J. Additional Descriptions for Mater	ials Listed Above			K Dispos	al Location			1	
Canada Descriptions for Mater	iais Listed Above			K. Dispos	ai Location				
				Cell				Level	
				Grid	\rightarrow		× 7 1		T / TI
15. Special Handling Instructions and	Additional Inforg	mation	O CAM	-11:0	4)	559	DAKIN	4-6772	3 DALI
UST'S FROM		2 00	7 Azz	1-11	5	556	DALL	4	
) 666 CAM	ElliAV	<u>3) 00</u>							
Purchase Order #	To a move		EMERGENCY (ONTACT / PHO	ONE NO.:				
16. GENERATOR'S CERTIFICATE:	h a al ar as a a a -1 - 1 -			C	'n n 251			ha h C #	
I hereby certify that the above-descril accurately described, classified and pa				•				i, nave been fully	and
Printed Name			gnature "On be					Month Day	y Year
	· Johns	<u>)- </u>			27/	7		20	173
17. Transporter 1 Acknowledgement	of Receipt of Ma				11/1	/ =====================================	-·		
A Printed Name	15%	a	gnature	A//	11/	Marketine of the same of		Month Day	Year
S P 18 Transporter 2 Askraydodomark		Aprila la		//				2 4	/
18. Transporter 2 Acknowledgement	or receipt or ivia		ignature	-/	<u>/</u>			Month Day	y Year
E 121	· n /	. 3	CIL.		AA			3 6	1001
JAMES BAL	-DWIN		Jum	w 150	Kalen				レム
19. Certificate of Final Treatment/Dis	•								
A I certify, on behalf of the above listed				wledge, the ab	ove-descrit	oed waste w	as managed ir	1 compliance with	ıall
applicable laws, regulations, permits a 20. Facility Owner or Operator: Certi				covered by th	is manifort				
Printed Name	/ /		ignature	Lovereu by th	/			Month Day	y Year
Toni Cotie	10]]	·D·Incolo	Tone.	(M)	V 0 . V		3 (- 73
White- TREATMENT, STORAGE, DISPO	SAL FACILITY CO	PY E	Blue- GENERATO	R #2 COPY		Ye	ow- GENERA	TOR #1 COPY	<u> </u>

Gold-TRANSPORTER #1 COPY

Pink- FACILITY USE ONLY

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)

212 Balsam	503 Laurel Bay
219 Balsam	508 Laurel Bay
260 Beech Tank 1	510 Laurel Bay
260 Beech Tank 2	523 Laurel Bay
267 Birch	525 Laurel Bay
287 Birch	529 Laurel Bay
302 Ash	533 Laurel Bay
305 Ash	537 Laurel Bay
334 Ash	556 Dahlia
338 Ash Tank 1	557 Dahlia
338 Ash Tank 2	559 Dahlia
361 Aspen	562 Dahlia
371 Aspen	568 Dahlia
372 Aspen Tank 1	581 Aster
372 Aspen Tank 2	582 Aster
375 Aspen	584 Aster
385 Aspen	602 Dahlia
403 Elderberry	607 Dahlia
407 Elderberry	614 Dahlia
411 Elderberry	616 Dahlia
414 Elderberry	619 Dahlia
415 Elderberry	625 Dahlia
421 Elderberry	629 Dahlia
427 Elderberry	631 Dahlia
428 Elderberry	634 Dahlia
431 Elderberry	660 Camellia
455 Elderberry	661 Camellia
484 Laurel Bay	666 Camellia
490 Laurel Bay	669 Camellia
502 Laurel Bay	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			