

SUMMARY REPORT
556 WEST DOVE LANE (FORMERLY 1443 WEST DOVE LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

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

and



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

JUNE 2021

SUMMARY REPORT
556 WEST DOVE LANE (FORMERLY 1443 WEST DOVE LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

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

and



Naval Facilities Engineering Command Atlantic

9324 Virginia Avenue
Norfolk, Virginia 23511-3095

Prepared by:



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

Contract Number: N62470-14-D-9016

CTO WE52

JUNE 2021

Table of Contents

1.0	INTRODUCTION.....	1
1.1	BACKGROUND INFORMATION.....	1
1.2	UST REMOVAL AND ASSESSMENT PROCESS.....	2
2.0	SAMPLING ACTIVITIES AND RESULTS.....	3
2.1	UST REMOVAL AND SOIL SAMPLING	3
2.2	SOIL ANALYTICAL RESULTS.....	4
3.0	PROPERTY STATUS	4
4.0	REFERENCES.....	4

Table

Table 1	Laboratory Analytical Results - Soil
---------	--------------------------------------

Appendices

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

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 556 West Dove Lane (Formerly 1443 West Dove Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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

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

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

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

1.2 UST Removal and Assessment Process

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

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

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

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

The results of the soil sampling at each former UST location were used to determine if a potential for groundwater contamination exists (i.e., soil results greater than RBSLs) and subsequently to select properties for follow-up initial groundwater assessment (IGWA) sampling. The results of the IGWA sampling (if necessary) are used to determine the presence or absence of the aforementioned COPCs in groundwater and identify whether former UST locations will require additional delineation of COPCs in groundwater. In order to delineate the extent of impact to groundwater, permanent wells are installed and a sampling program is established for those former UST locations where IGWA sampling has indicated the presence of COPCs in excess of the SCDHEC RBSLs for groundwater. Groundwater analytical results are also compared to the site specific groundwater vapor intrusion screening levels (VISLs) to evaluate the potential for vapor intrusion 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 556 West Dove Lane (Formerly 1443 West Dove Lane). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1443 West Dove Lane* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B.

2.1 UST Removal and Soil Sampling

On November 28, 2012, a single 280 gallon heating oil UST was removed from the back yard under the patio area at 556 West Dove Lane (Formerly 1443 West Dove Lane). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 5'5" 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 556 West Dove Lane (Formerly 1443 West Dove Lane) were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for soil, SCDHEC made the determination that NFA was required for 556 West Dove Lane (Formerly 1443 West Dove Lane). This NFA determination was obtained in a letter dated March 31, 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 – 1443 West Dove Lane, Laurel Bay Military Housing Area*, April 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
556 West Dove Lane (Formerly 1443 West Dove Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 11/28/12
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	0.000965
Xylenes, Total	13.01	0.00266
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)		
Benzo(a)anthracene	0.66	ND
Benzo(b)fluoranthene	0.66	ND
Benzo(k)fluoranthene	0.66	ND
Chrysene	0.66	ND
Dibenz(a,h)anthracene	0.66	ND

Notes:

⁽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).

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligram per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Appendix A
Multi-Media Selection Process for LBMH



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

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)

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. #

Laurel Bay Military Housing Area, Marine Corps Air Station, Beaufort, SC
 Facility Name or Company Site Identifier

1443 Dove Lane, Laurel Bay Military Housing Area

Street Address or State Road (as applicable)

Beaufort,

Beaufort

City

County

III. INSURANCE INFORMATION

Insurance Statement

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

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

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

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

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this _____ day of _____, 20____

(Name)

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

VI. UST INFORMATION

- A. Product...(ex. Gas, Kerosene).....
- B. Capacity..(ex. 1k, 2k).....
- C. Age.....
- D. Construction Material..(ex. Steel, FRP).....
- E. Month/Year of Last Use.....
- F. Depth (ft.) To Base of Tank.....
- G. Spill Prevention Equipment Y/N.....
- H. Overfill Prevention Equipment Y/N.....
- I. Method of Closure Removed/Filled.....
- J. Date Tanks Removed/Filled.....
- K. Visible Corrosion or Pitting Y/N.....
- L. Visible Holes Y/N.....

1443Dove				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
5'5"				
No				
No				
Removed				
11/28/2012				
Yes				
Yes				

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 1248Dove was removed from the ground and disposed at a
Subtitle "D" landfill. See Attachment "A."
- N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
UST 1248Dove had been previously filled with sand by others.
- O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST
Corrosion, pitting and holes were found throughout the tank.

VII. PIPING INFORMATION

A. Construction Material..(ex. Steel, FRP).....

B. Distance from UST to Dispenser.....

C. Number of Dispensers.....

D. Type of System Pressure or Suction.....

E. Was Piping Removed from the Ground? Y/N

F. Visible Corrosion or Pitting Y/N.....

G. Visible Holes Y/N.....

H. Age.....

I. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.

Corrosion and pitting were found on the surface of the steel vent pipe. The copper supply and return lines were sound.

1443Dove				
Steel & Copper				
N/A				
N/A				
Suction				
No				
Yes				
No				
Late 1950s				

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS

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

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 #
1443 Dove	Excav at fill end	Soil	Sandy	5'5"	11/28/12 1445 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 and 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.

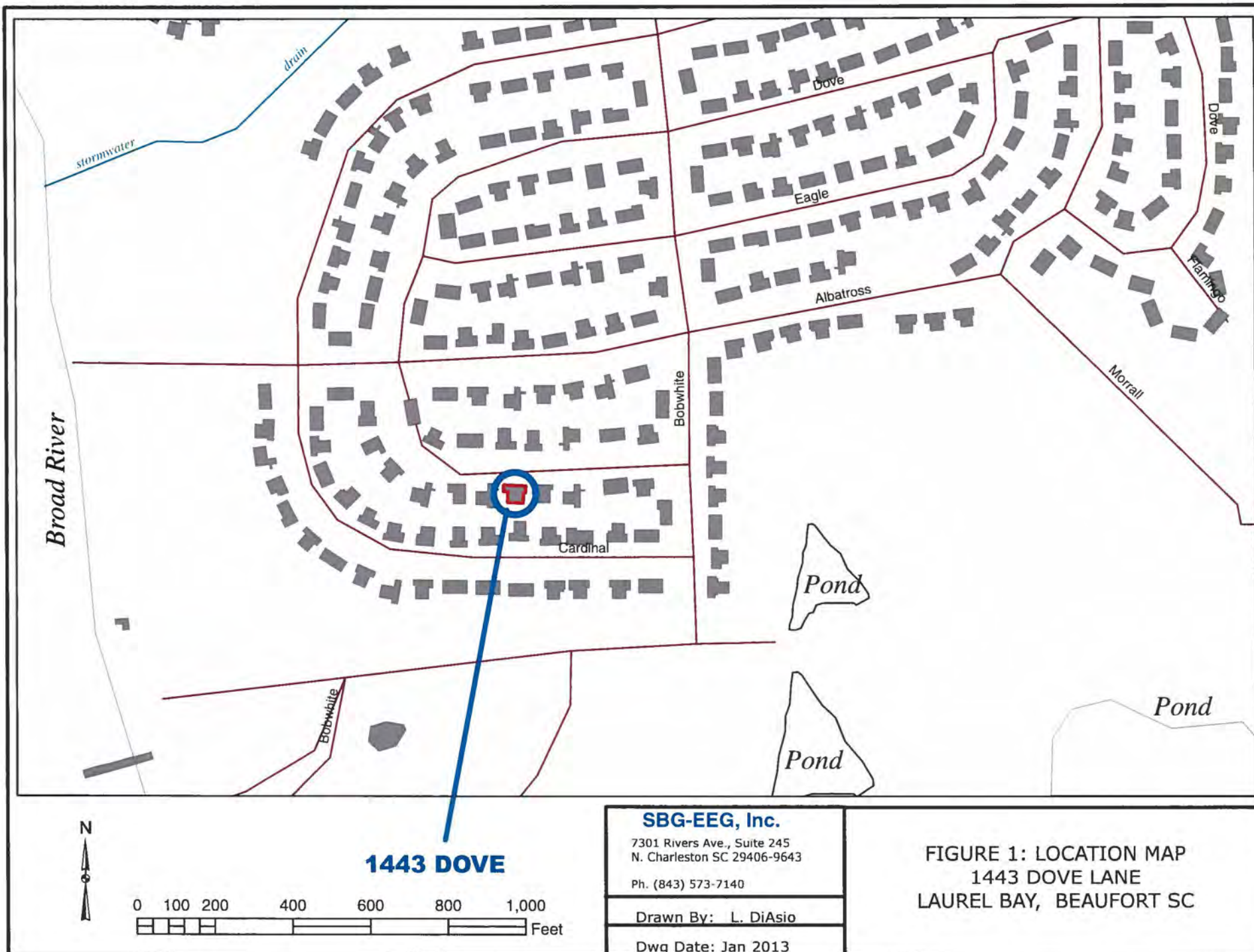
XII. RECEPTORS

	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?</p> <p style="text-align: right;">*River & pond</p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>	*X	
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p> <p>If yes, indicate type of well, distance, and direction on site map.</p>		X
<p>C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?</p> <p>If yes, indicate type of structure, distance, and direction on site map.</p>		X
<p>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?</p> <p style="text-align: right;">*Sewer, water, electricity, cable & fiber optic</p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>	*X	
<p>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?</p> <p>If yes, indicate the area of contaminated soil on the site map.</p>		X

XIII. SITE MAP

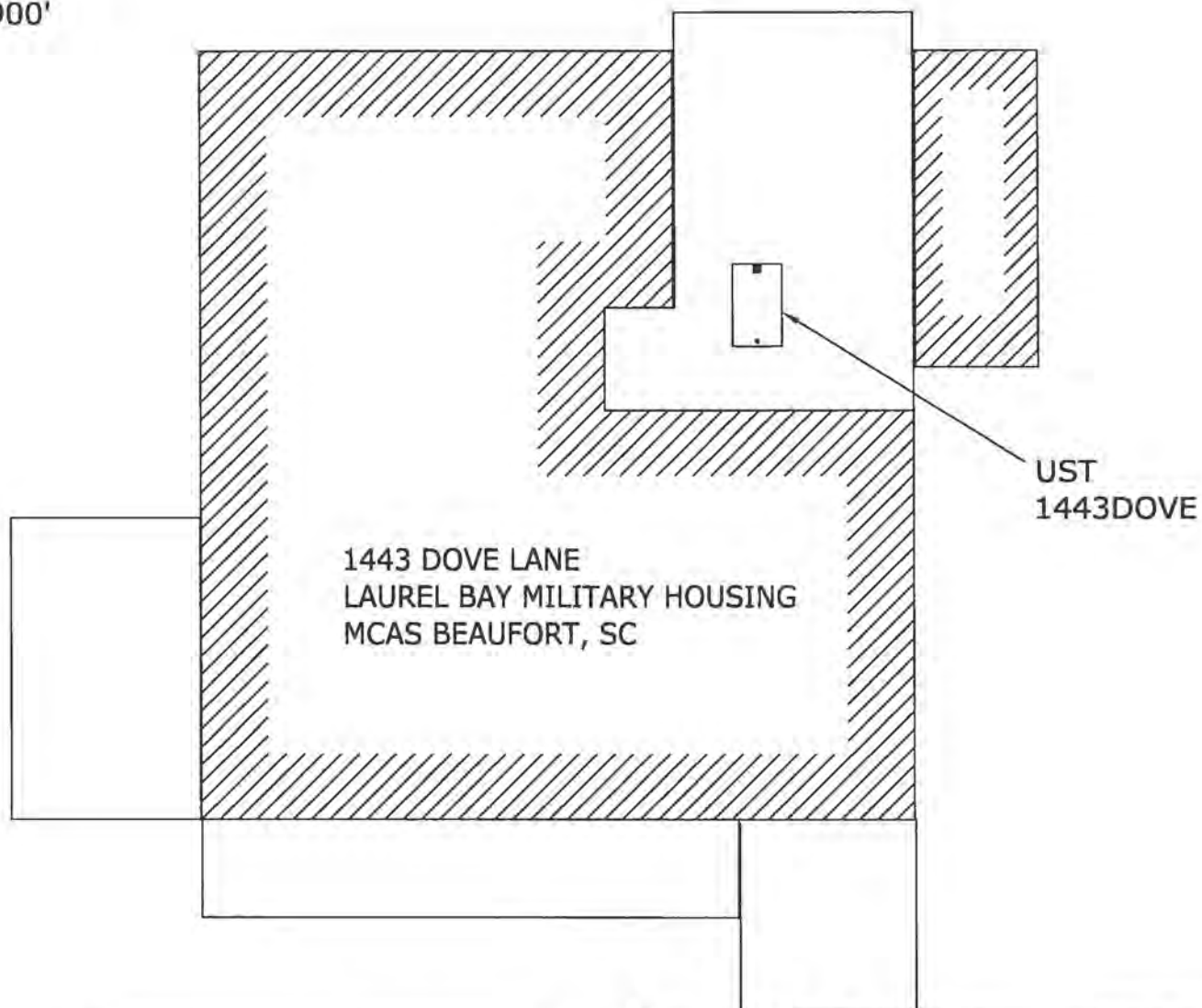
You must supply a scaled site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.

(Attach Site Map Here)



BROAD RIVER $\approx 1,000'$

POND $\approx 900'$



1443 DOVE LANE
LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SC

UST
1443DOVE

GRAPHIC SCALE

0 5' 10' 20'

TANK DEPTH BELOW GRADE
1443DOVE = 29"

SBG-EEG

7301 RIVERS AVE., SUITE 245
N. CHARLESTON SC 29406-9643
(843) 573-7140

FIGURE 2 SITE MAP
1443 DOVE LANE, LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE JAN 2013

1443 DOVE LANE
LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SC

PATIO

UST 1443DOVE
280 GAL.

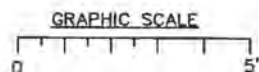
FILL END

* EXCAVATION

SOIL SAMPLE
1443 DOVE

SHED

* A PORTION OF THE PATIO WAS
REMOVED TO FACILITATE TANK
EXTRACTION.



SBG-EEG

7301 RIVERS AVE., SUITE 245
N. CHARLESTON SC 29406-9643
(843) 573-7140

FIGURE 3 UST SAMPLE LOCATIONS
1443 DOVE LANE, LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE JAN 2013



Picture 1: Location of UST 1443Dove.



Picture 2: UST 1443Dove 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	1443Dove						
Benzene		ND						
Toluene		0.000965 mg/kg						
Ethylbenzene		ND						
Xylenes		0.00266 mg/kg						
Naphthalene		ND						
Benzo (a) anthracene		ND						
Benzo (b) fluoranthene		ND						
Benzo (k) fluoranthene		ND						
Chrysene		ND						
Dibenz (a, h) anthracene		ND						
TPH (EPA 3550)								

CoC								
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

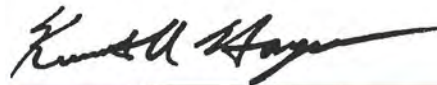
ANALYTICAL REPORT

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

TestAmerica Job ID: 490-13293-1
TestAmerica Sample Delivery Group: 1063
Client Project/Site: Laurel Bay Housing Project

For:
Environmental Enterprise Group
10179 Highway 78
Ladson, South Carolina 29456

Attn: Mr. Tom McElwee



Authorized for release by:
12/11/2012 11:12:36 AM

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

LINKS

Review your project
results through
Total Access

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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

Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	10
QC Association	14
Chronicle	15
Method Summary	16
Certification Summary	17
Chain of Custody	18
Receipt Checklists	20

Sample Summary

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-13293-1	1242 Dove	Solid	11/26/12 15:00	12/04/12 08:15
490-13293-2	1460 Cardinal	Solid	11/27/12 14:00	12/04/12 08:15
490-13293-3	1443 Dove	Solid	11/28/12 14:45	12/04/12 08:15
490-13293-4	1316 Albatross	Solid	11/29/12 15:45	12/04/12 08:15

Case Narrative

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

Job ID: 490-13293-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-13293-1

Comments

No additional comments.

Receipt

The samples were received on 12/4/2012 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° 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 41199. See LCS/LCSD

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: 490-13293-1
SDG: 1063

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	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: 490-13293-1
SDG: 1063

Client Sample ID: 1242 Dove

Date Collected: 11/26/12 15:00

Date Received: 12/04/12 08:15

Lab Sample ID: 490-13293-1

Matrix: Solid

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00242	0.000810	mg/Kg		12/05/12 10:12	12/05/12 17:28	1
Ethylbenzene	ND		0.00242	0.000810	mg/Kg		12/05/12 10:12	12/05/12 17:28	1
Naphthalene	ND		0.00604	0.00206	mg/Kg		12/05/12 10:12	12/05/12 17:28	1
Toluene	ND		0.00242	0.000895	mg/Kg		12/05/12 10:12	12/05/12 17:28	1
Xylenes, Total	ND		0.00604	0.000810	mg/Kg		12/05/12 10:12	12/05/12 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130	12/05/12 10:12	12/05/12 17:28	1
4-Bromofluorobenzene (Surr)	101		70 - 130	12/05/12 10:12	12/05/12 17:28	1
Dibromofluoromethane (Surr)	99		70 - 130	12/05/12 10:12	12/05/12 17:28	1
Toluene-d8 (Surr)	94		70 - 130	12/05/12 10:12	12/05/12 17:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0790	0.0118	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Acenaphthylene	ND		0.0790	0.0106	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Anthracene	ND		0.0790	0.0106	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Benzo[a]anthracene	ND		0.0790	0.0177	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Benzo[a]pyrene	ND		0.0790	0.0141	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Benzo[b]fluoranthene	ND		0.0790	0.0141	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Benzo[g,h,i]perylene	ND		0.0790	0.0106	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Benzo[k]fluoranthene	ND		0.0790	0.0165	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
1-Methylnaphthalene	ND		0.0790	0.0165	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Pyrene	ND		0.0790	0.0141	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Phenanthrene	ND		0.0790	0.0106	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Chrysene	ND		0.0790	0.0106	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Dibenz(a,h)anthracene	ND		0.0790	0.00825	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Fluoranthene	ND		0.0790	0.0106	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Fluorene	ND		0.0790	0.0141	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Indeno[1,2,3-cd]pyrene	ND		0.0790	0.0118	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
Naphthalene	ND		0.0790	0.0106	mg/Kg		12/06/12 05:49	12/06/12 16:43	1
2-Methylnaphthalene	ND		0.0790	0.0189	mg/Kg		12/06/12 05:49	12/06/12 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	67		29 - 120	12/06/12 05:49	12/06/12 16:43	1
Terphenyl-d14 (Surr)	87		13 - 120	12/06/12 05:49	12/06/12 16:43	1
Nitrobenzene-d5 (Surr)	61		27 - 120	12/06/12 05:49	12/06/12 16:43	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10	0.10	%			12/05/12 08:22	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

Client Sample ID: 1460 Cardinal

Lab Sample ID: 490-13293-2

Date Collected: 11/27/12 14:00

Matrix: Solid

Date Received: 12/04/12 08:15

Percent Solids: 94.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00209	0.000701	mg/Kg		12/05/12 10:12	12/05/12 17:55	1
Ethylbenzene	ND		0.00209	0.000701	mg/Kg		12/05/12 10:12	12/05/12 17:55	1
Naphthalene	ND		0.00523	0.00178	mg/Kg		12/05/12 10:12	12/05/12 17:55	1
Toluene	ND		0.00209	0.000774	mg/Kg		12/05/12 10:12	12/05/12 17:55	1
Xylenes, Total	ND		0.00523	0.000701	mg/Kg		12/05/12 10:12	12/05/12 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 130	12/05/12 10:12	12/05/12 17:55	1
4-Bromofluorobenzene (Surr)	102		70 - 130	12/05/12 10:12	12/05/12 17:55	1
Dibromofluoromethane (Surr)	97		70 - 130	12/05/12 10:12	12/05/12 17:55	1
Toluene-d8 (Surr)	94		70 - 130	12/05/12 10:12	12/05/12 17:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0702	0.0105	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Acenaphthylene	ND		0.0702	0.00943	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Anthracene	ND		0.0702	0.00943	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Benzo[a]anthracene	ND		0.0702	0.0157	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Benzo[a]pyrene	ND		0.0702	0.0126	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Benzo[b]fluoranthene	ND		0.0702	0.0126	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Benzo[g,h,i]perylene	ND		0.0702	0.00943	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Benzo[k]fluoranthene	ND		0.0702	0.0147	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
1-Methylnaphthalene	ND		0.0702	0.0147	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Pyrene	ND		0.0702	0.0126	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Phenanthrene	ND		0.0702	0.00943	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Chrysene	ND		0.0702	0.00943	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Dibenz(a,h)anthracene	ND		0.0702	0.00733	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Fluoranthene	ND		0.0702	0.00943	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Fluorene	ND		0.0702	0.0126	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Indeno[1,2,3-cd]pyrene	ND		0.0702	0.0105	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
Naphthalene	ND		0.0702	0.00943	mg/Kg		12/06/12 05:49	12/06/12 17:47	1
2-Methylnaphthalene	ND		0.0702	0.0168	mg/Kg		12/06/12 05:49	12/06/12 17:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	75		29 - 120	12/06/12 05:49	12/06/12 17:47	1
Terphenyl-d14 (Surr)	88		13 - 120	12/06/12 05:49	12/06/12 17:47	1
Nitrobenzene-d5 (Surr)	67		27 - 120	12/06/12 05:49	12/06/12 17:47	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10	0.10	%			12/05/12 08:22	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

Client Sample ID: 1443 Dove

Date Collected: 11/28/12 14:45

Date Received: 12/04/12 08:15

Lab Sample ID: 490-13293-3

Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00240	0.000803	mg/Kg		12/05/12 10:12	12/05/12 18:22	1
Ethylbenzene	ND		0.00240	0.000803	mg/Kg		12/05/12 10:12	12/05/12 18:22	1
Naphthalene	ND		0.00599	0.00204	mg/Kg		12/05/12 10:12	12/05/12 18:22	1
Toluene	0.000965	J	0.00240	0.000887	mg/Kg		12/05/12 10:12	12/05/12 18:22	1
Xylenes, Total	0.00266	J	0.00599	0.000803	mg/Kg		12/05/12 10:12	12/05/12 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 130	12/05/12 10:12	12/05/12 18:22	1
4-Bromofluorobenzene (Surr)	103		70 - 130	12/05/12 10:12	12/05/12 18:22	1
Dibromofluoromethane (Surr)	100		70 - 130	12/05/12 10:12	12/05/12 18:22	1
Toluene-d8 (Surr)	94		70 - 130	12/05/12 10:12	12/05/12 18:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0716	0.0107	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Acenaphthylene	ND		0.0716	0.00962	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Anthracene	ND		0.0716	0.00962	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Benzo[a]anthracene	ND		0.0716	0.0160	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Benzo[a]pyrene	ND		0.0716	0.0128	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Benzo[b]fluoranthene	ND		0.0716	0.0128	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Benzo[g,h,i]perylene	ND		0.0716	0.00962	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Benzo[k]fluoranthene	ND		0.0716	0.0150	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
1-Methylnaphthalene	ND		0.0716	0.0150	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Pyrene	ND		0.0716	0.0128	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Phenanthrene	ND		0.0716	0.00962	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Chrysene	ND		0.0716	0.00962	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Dibenz[a,h]anthracene	ND		0.0716	0.00748	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Fluoranthene	ND		0.0716	0.00962	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Fluorene	ND		0.0716	0.0128	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Indeno[1,2,3-cd]pyrene	ND		0.0716	0.0107	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
Naphthalene	ND		0.0716	0.00962	mg/Kg		12/06/12 05:49	12/06/12 18:08	1
2-Methylnaphthalene	ND		0.0716	0.0171	mg/Kg		12/06/12 05:49	12/06/12 18:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	60		29 - 120	12/06/12 05:49	12/06/12 18:08	1
Terphenyl-d14 (Surr)	73		13 - 120	12/06/12 05:49	12/06/12 18:08	1
Nitrobenzene-d5 (Surr)	50		27 - 120	12/06/12 05:49	12/06/12 18:08	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10	0.10	%			12/05/12 08:22	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

Client Sample ID: 1316 Albatross

Lab Sample ID: 490-13293-4

Date Collected: 11/29/12 15:45

Matrix: Solid

Date Received: 12/04/12 08:15

Percent Solids: 95.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00211	0.000708	mg/Kg		12/05/12 10:12	12/05/12 18:49	1
Ethylbenzene	ND		0.00211	0.000708	mg/Kg		12/05/12 10:12	12/05/12 18:49	1
Naphthalene	ND		0.00528	0.00180	mg/Kg		12/05/12 10:12	12/05/12 18:49	1
Toluene	ND		0.00211	0.000782	mg/Kg		12/05/12 10:12	12/05/12 18:49	1
Xylenes, Total	ND		0.00528	0.000708	mg/Kg		12/05/12 10:12	12/05/12 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 130	12/05/12 10:12	12/05/12 18:49	1
4-Bromofluorobenzene (Surr)	103		70 - 130	12/05/12 10:12	12/05/12 18:49	1
Dibromofluoromethane (Surr)	98		70 - 130	12/05/12 10:12	12/05/12 18:49	1
Toluene-d8 (Surr)	95		70 - 130	12/05/12 10:12	12/05/12 18:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0700	0.0105	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Acenaphthylene	ND		0.0700	0.00941	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Anthracene	ND		0.0700	0.00941	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Benzo[a]anthracene	ND		0.0700	0.0157	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Benzo[a]pyrene	ND		0.0700	0.0125	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Benzo[b]fluoranthene	ND		0.0700	0.0125	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Benzo[g,h,i]perylene	ND		0.0700	0.00941	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Benzo[k]fluoranthene	ND		0.0700	0.0146	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
1-Methylnaphthalene	ND		0.0700	0.0146	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Pyrene	ND		0.0700	0.0125	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Phenanthrene	ND		0.0700	0.00941	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Chrysene	ND		0.0700	0.00941	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Dibenz(a,h)anthracene	ND		0.0700	0.00732	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Fluoranthene	ND		0.0700	0.00941	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Fluorene	ND		0.0700	0.0125	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Indeno[1,2,3-cd]pyrene	ND		0.0700	0.0105	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
Naphthalene	ND		0.0700	0.00941	mg/Kg		12/06/12 05:49	12/06/12 18:30	1
2-Methylnaphthalene	ND		0.0700	0.0167	mg/Kg		12/06/12 05:49	12/06/12 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	64		29 - 120	12/06/12 05:49	12/06/12 18:30	1
Terphenyl-d14 (Surr)	81		13 - 120	12/06/12 05:49	12/06/12 18:30	1
Nitrobenzene-d5 (Surr)	57		27 - 120	12/06/12 05:49	12/06/12 18:30	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10	0.10	%			12/05/12 08:22	1

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

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

Lab Sample ID: MB 490-41199/6

Matrix: Solid

Analysis Batch: 41199

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND				0.100	0.0335	mg/Kg			12/05/12 11:52	1
Ethylbenzene	ND				0.100	0.0335	mg/Kg			12/05/12 11:52	1
Naphthalene	ND				0.250	0.0850	mg/Kg			12/05/12 11:52	1
Toluene	ND				0.100	0.0370	mg/Kg			12/05/12 11:52	1
Xylenes, Total	ND				0.250	0.0335	mg/Kg			12/05/12 11:52	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84				70 - 130		12/05/12 11:52	1
4-Bromofluorobenzene (Surr)	106				70 - 130		12/05/12 11:52	1
Dibromofluoromethane (Surr)	96				70 - 130		12/05/12 11:52	1
Toluene-d8 (Surr)	98				70 - 130		12/05/12 11:52	1

Lab Sample ID: LCS 490-41199/3

Matrix: Solid

Analysis Batch: 41199

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	%Rec.	Limits
Benzene	Added	0.0500	0.05602			mg/Kg		112	75 - 127	
Ethylbenzene	0.0500	0.05780				mg/Kg		116	80 - 134	
Naphthalene	0.0500	0.06223				mg/Kg		124	69 - 150	
Toluene	0.0500	0.05604				mg/Kg		112	80 - 132	
Xylenes, Total	0.150	0.1696				mg/Kg		113	80 - 137	

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97				70 - 130
4-Bromofluorobenzene (Surr)	102				70 - 130
Dibromofluoromethane (Surr)	100				70 - 130
Toluene-d8 (Surr)	96				70 - 130

Lab Sample ID: LCSD 490-41199/4

Matrix: Solid

Analysis Batch: 41199

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	%Rec.	Limits	RPD	RPD	Limit
Benzene	Added	0.0500	0.05251			mg/Kg		105	75 - 127		6	50	
Ethylbenzene	0.0500	0.05448				mg/Kg		109	80 - 134		6	50	
Naphthalene	0.0500	0.05883				mg/Kg		118	69 - 150		6	50	
Toluene	0.0500	0.05383				mg/Kg		108	80 - 132		4	50	
Xylenes, Total	0.150	0.1591				mg/Kg		106	80 - 137		6	50	

Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96				70 - 130
4-Bromofluorobenzene (Surr)	102				70 - 130
Dibromofluoromethane (Surr)	97				70 - 130
Toluene-d8 (Surr)	96				70 - 130

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

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

Lab Sample ID: MB 490-41535/1-A

Matrix: Solid

Analysis Batch: 41642

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 41535

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Anthracene	ND		0.0670	0.00900	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Pyrene	ND		0.0670	0.0120	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Chrysene	ND		0.0670	0.00900	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Fluorene	ND		0.0670	0.0120	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		12/06/12 05:49	12/06/12 16:01	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		12/06/12 05:49	12/06/12 16:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	68		29 - 120	12/06/12 05:49	12/06/12 16:01	1
Terphenyl-d14 (Surr)	86		13 - 120	12/06/12 05:49	12/06/12 16:01	1
Nitrobenzene-d5 (Surr)	64		27 - 120	12/06/12 05:49	12/06/12 16:01	1

Lab Sample ID: LCS 490-41535/2-A

Matrix: Solid

Analysis Batch: 41642

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 41535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.362		mg/Kg		82	38 - 120
Anthracene	1.67	1.311		mg/Kg		79	46 - 124
Benzo[a]anthracene	1.67	1.313		mg/Kg		79	45 - 120
Benzo[a]pyrene	1.67	1.271		mg/Kg		76	45 - 120
Benzo[b]fluoranthene	1.67	1.233		mg/Kg		74	42 - 120
Benzo[g,h,i]perylene	1.67	1.279		mg/Kg		77	38 - 120
Benzo[k]fluoranthene	1.67	1.368		mg/Kg		82	42 - 120
1-Methylnaphthalene	1.67	1.339		mg/Kg		80	32 - 120
Pyrene	1.67	1.361		mg/Kg		82	43 - 120
Phenanthrene	1.67	1.361		mg/Kg		82	45 - 120
Chrysene	1.67	1.282		mg/Kg		77	43 - 120
Dibenz(a,h)anthracene	1.67	1.302		mg/Kg		78	32 - 128
Fluoranthene	1.67	1.304		mg/Kg		78	46 - 120
Fluorene	1.67	1.304		mg/Kg		78	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.291		mg/Kg		77	41 - 121
Naphthalene	1.67	1.338		mg/Kg		80	32 - 120
2-Methylnaphthalene	1.67	1.357		mg/Kg		81	28 - 120

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

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

Lab Sample ID: LCS 490-41535/2-A
Matrix: Solid
Analysis Batch: 41642

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41535

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	65		29 - 120
Terphenyl-d14 (Surr)	82		13 - 120
Nitrobenzene-d5 (Surr)	59		27 - 120

Lab Sample ID: 490-13293-1 MS
Matrix: Solid
Analysis Batch: 41642

Client Sample ID: 1242 Dove
Prep Type: Total/NA
Prep Batch: 41535

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	ND		1.97	1.662		mg/Kg		84	25 - 120
Anthracene	ND		1.97	1.683		mg/Kg		85	28 - 125
Benzo[a]anthracene	ND		1.97	1.671		mg/Kg		85	23 - 120
Benzo[a]pyrene	ND		1.97	1.714		mg/Kg		87	15 - 128
Benzo[b]fluoranthene	ND		1.97	1.656		mg/Kg		84	12 - 133
Benzo[g,h,i]perylene	ND		1.97	1.709		mg/Kg		87	22 - 120
Benzo[k]fluoranthene	ND		1.97	1.812		mg/Kg		92	28 - 120
1-Methylnaphthalene	ND		1.97	1.544		mg/Kg		78	10 - 120
Pyrene	ND		1.97	1.754		mg/Kg		89	20 - 123
Phenanthrene	ND		1.97	1.737		mg/Kg		88	21 - 122
Chrysene	ND		1.97	1.633		mg/Kg		83	20 - 120
Dibenz(a,h)anthracene	ND		1.97	1.756		mg/Kg		89	12 - 128
Fluoranthene	ND		1.97	1.603		mg/Kg		81	10 - 143
Fluorene	ND		1.97	1.581		mg/Kg		80	20 - 120
Indeno[1,2,3-cd]pyrene	ND		1.97	1.737		mg/Kg		88	22 - 121
Naphthalene	ND		1.97	1.552		mg/Kg		79	10 - 120
2-Methylnaphthalene	ND		1.97	1.563		mg/Kg		79	13 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl (Surr)	65		29 - 120
Terphenyl-d14 (Surr)	89		13 - 120
Nitrobenzene-d5 (Surr)	57		27 - 120

Lab Sample ID: 490-13293-1 MSD
Matrix: Solid
Analysis Batch: 41642

Client Sample ID: 1242 Dove
Prep Type: Total/NA
Prep Batch: 41535

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Acenaphthylene	ND		1.97	1.668		mg/Kg		85	25 - 120	0	50
Anthracene	ND		1.97	1.659		mg/Kg		84	28 - 125	1	49
Benzo[a]anthracene	ND		1.97	1.664		mg/Kg		84	23 - 120	0	50
Benzo[a]pyrene	ND		1.97	1.685		mg/Kg		85	15 - 128	2	50
Benzo[b]fluoranthene	ND		1.97	1.548		mg/Kg		79	12 - 133	7	50
Benzo[g,h,i]perylene	ND		1.97	1.680		mg/Kg		85	22 - 120	2	50
Benzo[k]fluoranthene	ND		1.97	1.731		mg/Kg		88	28 - 120	5	45
1-Methylnaphthalene	ND		1.97	1.573		mg/Kg		80	10 - 120	2	50
Pyrene	ND		1.97	1.706		mg/Kg		87	20 - 123	3	50
Phenanthrene	ND		1.97	1.719		mg/Kg		87	21 - 122	1	50
Chrysene	ND		1.97	1.667		mg/Kg		85	20 - 120	2	49

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

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

Lab Sample ID: 490-13293-1 MSD

Matrix: Solid

Analysis Batch: 41642

Client Sample ID: 1242 Dove

Prep Type: Total/NA

Prep Batch: 41535

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Dibenz(a,h)anthracene	ND		1.97	1.692		mg/Kg		86	12 - 128	4	50
Fluoranthene	ND		1.97	1.607		mg/Kg		82	10 - 143	0	50
Fluorene	ND		1.97	1.596		mg/Kg		81	20 - 120	1	50
Indeno[1,2,3-cd]pyrene	ND		1.97	1.700		mg/Kg		86	22 - 121	2	50
Naphthalene	ND		1.97	1.562		mg/Kg		79	10 - 120	1	50
2-Methylnaphthalene	ND		1.97	1.590		mg/Kg		81	13 - 120	2	50

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl (Surr)	72		29 - 120
Terphenyl-d14 (Surr)	91		13 - 120
Nitrobenzene-d5 (Surr)	62		27 - 120

Method: Moisture - Percent Moisture

Lab Sample ID: 490-13293-1 DU

Matrix: Solid

Analysis Batch: 41176

Client Sample ID: 1242 Dove

Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Percent Solids	84		84		%		0.1	20

QC Association Summary

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

GC/MS VOA

Analysis Batch: 41199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-13293-1	1242 Dove	Total/NA	Solid	8260B	41247
490-13293-2	1460 Cardinal	Total/NA	Solid	8260B	41247
490-13293-3	1443 Dove	Total/NA	Solid	8260B	41247
490-13293-4	1316 Albatross	Total/NA	Solid	8260B	41247
LCS 490-41199/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-41199/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-41199/6	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 41247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-13293-1	1242 Dove	Total/NA	Solid	5035	
490-13293-2	1460 Cardinal	Total/NA	Solid	5035	
490-13293-3	1443 Dove	Total/NA	Solid	5035	
490-13293-4	1316 Albatross	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 41535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-13293-1	1242 Dove	Total/NA	Solid	3550C	
490-13293-1 MS	1242 Dove	Total/NA	Solid	3550C	
490-13293-1 MSD	1242 Dove	Total/NA	Solid	3550C	
490-13293-2	1460 Cardinal	Total/NA	Solid	3550C	
490-13293-3	1443 Dove	Total/NA	Solid	3550C	
490-13293-4	1316 Albatross	Total/NA	Solid	3550C	
LCS 490-41535/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-41535/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 41642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-13293-1	1242 Dove	Total/NA	Solid	8270D	41535
490-13293-1 MS	1242 Dove	Total/NA	Solid	8270D	41535
490-13293-1 MSD	1242 Dove	Total/NA	Solid	8270D	41535
490-13293-2	1460 Cardinal	Total/NA	Solid	8270D	41535
490-13293-3	1443 Dove	Total/NA	Solid	8270D	41535
490-13293-4	1316 Albatross	Total/NA	Solid	8270D	41535
LCS 490-41535/2-A	Lab Control Sample	Total/NA	Solid	8270D	41535
MB 490-41535/1-A	Method Blank	Total/NA	Solid	8270D	41535

General Chemistry

Analysis Batch: 41176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-13293-1	1242 Dove	Total/NA	Solid	Moisture	
490-13293-1 DU	1242 Dove	Total/NA	Solid	Moisture	
490-13293-2	1460 Cardinal	Total/NA	Solid	Moisture	
490-13293-3	1443 Dove	Total/NA	Solid	Moisture	
490-13293-4	1316 Albatross	Total/NA	Solid	Moisture	
490-13296-A-1 MS	Matrix Spike	Total/NA	Solid	Moisture	
490-13296-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	

TestAmerica Nashville

Lab Chronicle

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

Client Sample ID: 1242 Dove

Date Collected: 11/26/12 15:00

Date Received: 12/04/12 08:15

Lab Sample ID: 490-13293-1

Matrix: Solid

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			41247	12/05/12 10:12	ML	TAL NSH
Total/NA	Analysis	8260B		1	41199	12/05/12 17:28	KK	TAL NSH
Total/NA	Prep	3550C			41535	12/06/12 05:49	AK	TAL NSH
Total/NA	Analysis	8270D		1	41642	12/06/12 16:43	WS	TAL NSH
Total/NA	Analysis	Moisture		1	41176	12/05/12 08:22	RS	TAL NSH

Client Sample ID: 1460 Cardinal

Date Collected: 11/27/12 14:00

Date Received: 12/04/12 08:15

Lab Sample ID: 490-13293-2

Matrix: Solid

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			41247	12/05/12 10:12	ML	TAL NSH
Total/NA	Analysis	8260B		1	41199	12/05/12 17:55	KK	TAL NSH
Total/NA	Prep	3550C			41535	12/06/12 05:49	AK	TAL NSH
Total/NA	Analysis	8270D		1	41642	12/06/12 17:47	WS	TAL NSH
Total/NA	Analysis	Moisture		1	41176	12/05/12 08:22	RS	TAL NSH

Client Sample ID: 1443 Dove

Date Collected: 11/28/12 14:45

Date Received: 12/04/12 08:15

Lab Sample ID: 490-13293-3

Matrix: Solid

Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			41247	12/05/12 10:12	ML	TAL NSH
Total/NA	Analysis	8260B		1	41199	12/05/12 18:22	KK	TAL NSH
Total/NA	Prep	3550C			41535	12/06/12 05:49	AK	TAL NSH
Total/NA	Analysis	8270D		1	41642	12/06/12 18:08	WS	TAL NSH
Total/NA	Analysis	Moisture		1	41176	12/05/12 08:22	RS	TAL NSH

Client Sample ID: 1316 Albatross

Date Collected: 11/29/12 15:45

Date Received: 12/04/12 08:15

Lab Sample ID: 490-13293-4

Matrix: Solid

Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			41247	12/05/12 10:12	ML	TAL NSH
Total/NA	Analysis	8260B		1	41199	12/05/12 18:49	KK	TAL NSH
Total/NA	Prep	3550C			41535	12/06/12 05:49	AK	TAL NSH
Total/NA	Analysis	8270D		1	41642	12/06/12 18:30	WS	TAL NSH
Total/NA	Analysis	Moisture		1	41176	12/05/12 08:22	RS	TAL NSH

Laboratory References:

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

TestAmerica Nashville

Method Summary

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

TestAmerica Job ID: 490-13293-1
SDG: 1063

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: 490-13293-1
SDG: 1063

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	NELAC	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	NELAC	4	E87358	06-30-13
Illinois	NELAC	5	200010	12-09-12
Iowa	State Program	7	131	05-01-14
Kansas	NELAC	7	E-10229	10-31-13
Kentucky	State Program	4	90038	12-31-12
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAC	6	LA120025	12-31-12
Louisiana	NELAC	6	30613	06-30-13
Maryland	State Program	3	316	03-31-13
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAC	5	047-999-345	12-31-12
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	NELAC	1	2963	10-09-13
New Jersey	NELAC	2	TN965	06-30-13
New York	NELAC	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-12
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	NELAC	10	TN200001	04-30-13
Pennsylvania	NELAC	3	68-00585	06-30-13
Rhode Island	State Program	1	LA000268	12-30-12
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	NELAC	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAC	8	TAN	06-30-13
Virginia	NELAC	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 RECEIPT FORM



490-13293 Chain of Custody

Cooler Received/Opened On 12/4/2012 @ 0815

1. Tracking # 6080 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 1.6 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler?

If yes, how many and where:

1 Front + Back

5. Were the seals intact, signed, and dated correctly?

6. Were custody papers inside cooler?

I certify that I opened the cooler and answered questions 1-6 (Initial)

7. Were custody seals on containers:

YES NO

and Intact

YES...NO...NA

Were these signed and dated correctly?

YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process:

Ice

Ice-pack

Ice (direct contact)

Dry Ice

Other

None

10. Did all containers arrive in good condition (unbroken)?

11. Were all container labels complete (#, date, signed, pres., etc)?

12. Did all container labels and tags agree with custody papers?

13a. Were VOA vials received?

b. Was there any observable headspace present in any VOA vial?

14. Was there a Trip Blank in this cooler?

YES...NO...NA

If multiple coolers, sequence #

NA

I certify that I unloaded the cooler and answered questions 7-14 (Initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used

16. Was residual chlorine present?

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (Initial)

17. Were custody papers properly filled out (ink, signed, etc)?

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 (Initial)

I certify that I attached a label with the unique LIMS number to each container (Initial)

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO..#

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

Page 19 of 20

Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 490-13293-1

SDG Number: 1063

Login Number: 13293

List Number: 1

Creator: Ford, Easton

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
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-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of 1			
3. Generator's Mailing Address: MCAS, BEAUFORT LAUREL BAY HOUSING BEAUFORT, SC 29907		4. Generator's Phone 843-228-6461		Generator's Site Address (if different than mailing):		A. Manifest Number WMNA 00316844			
5. Transporter 1 Company Name EEG, INC.		6. US EPA ID Number		C. State Transporter's ID		D. Transporter's Phone 843-879-0411			
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone			
9. Designated Facility Name and Site Address HICKORY HILL LANDFILL 2621 LOW COUNTRY ROAD RIDGELAND, SC 29936		10. US EPA ID Number		G. State Facility ID		H. State Facility Phone 843-987-4643			
GENERATOR	11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	Misc Comments		
	a. HEATING OIL TANKS FILLED WITH SAND WM Profile # 1026555C		No.	Type					
	b. WM Profile #								
	c. WM Profile #								
	d. WM Profile #								
J. Additional Descriptions for Materials Listed Above		K. Disposal Location		Cell	Level				
				Grid					
15. Special Handling Instructions and Additional Information LISTS & REMARKS: 1) 1443 Cardinal ✓ 2) 1460 Cardinal ✓ 3) 1436 Dove ✓ 4) 1316 Albino ✓ 5) 593 Aster ✓ 6) 643 Cardinal ✓									
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:							
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.									
Printed Name		Signature "On behalf of"				Month	Day	Year	
						12	1	12	
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name		Signature		Month	Day	Year
							12	5	12
TRANSPORTER	18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name		Signature		Month	Day	Year
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.								
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.								
Printed Name		Signature				Month	Day	Year	
						12	1	12	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY

Appendix C

Regulatory Correspondence



Catherine B. Templeton, Director

Promoting and protecting the health of the people of South Carolina

March 31, 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:

1428 Albatross	1458 Cardinal	1466 Cardinal
1443 Dove	1460 Cardinal	1476 Cardinal
1445 Dove	1464 Cardinal	

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@gmail.com 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)