

SUMMARY REPORT
197 ASTER STREET (FORMERLY 581 ASTER STREET)
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
197 ASTER STREET (FORMERLY 581 ASTER STREET)
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 197 Aster Street (Formerly 581 Aster Street). 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 197 Aster Street (Formerly 581 Aster Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 581 Aster Street* (MCAS Beaufort, 2013). The UST Assessment Report is provided in Appendix B.

2.1 UST Removal and Soil Sampling

On March 12, 2013, a single 280 gallon heating oil UST was removed from the front concrete porch area at 197 Aster Street (Formerly 581 Aster Street). 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 6'5" 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 single 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 197 Aster Street (Formerly 581 Aster Street) 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 197 Aster Street (Formerly 581 Aster Street). 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 – 581 Aster Street, 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
197 Aster Street (Formerly 581 Aster Street)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 03/12/13
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 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

Attachment 1

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

Date Received
State Use Only

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

I. OWNERSHIP OF UST (S)

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	
581 Aster Street, Laurel Bay Military Housing Area	
Street Address or State Road (as applicable)	
Beaufort,	Beaufort
City	County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

The petroleum release reported to DHEC on _____ 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.....

581Aster		
Heating oil		
280 gal		
Late 1950s		
Steel		
Mid 80s		
6'5"		
No		
No		
Removed		
3/12/2013		
Yes		
Yes		

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 581Aster 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 581Aster 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 present 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.

581Aster		
Steel & Copper		
N/A		
N/A		
Suction		
No		
Yes		
No		
Late 1950s		

Corrosion and pitting were found on the steel vent piping,
but the copper supply and return piping were sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

IX. SITE CONDITIONS

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

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 #
581Aster	Excav at fill end	Soil	Sandy	6'5"	3/12/13 1340 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
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? *Stormwater drainage canal If yes, indicate type of receptor, distance, and direction on site map.	*X	
B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system? If yes, indicate type of well, distance, and direction on site map.		X
C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system? If yes, indicate type of structure, distance, and direction on site map.		X
D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? *Sewer, water, electricity, cable, fiber optic & geothermal If yes, indicate the type of utility, distance, and direction on the site map.	*X	
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? If yes, indicate the area of contaminated soil on the site map.		X

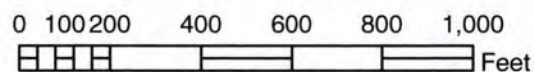
XIII. SITE MAP

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)



581 ASTER



SBG-EEG, Inc.

7301 Rivers Ave., Suite 245
N. Charleston SC 29406-9643

Ph. (843) 573-7140

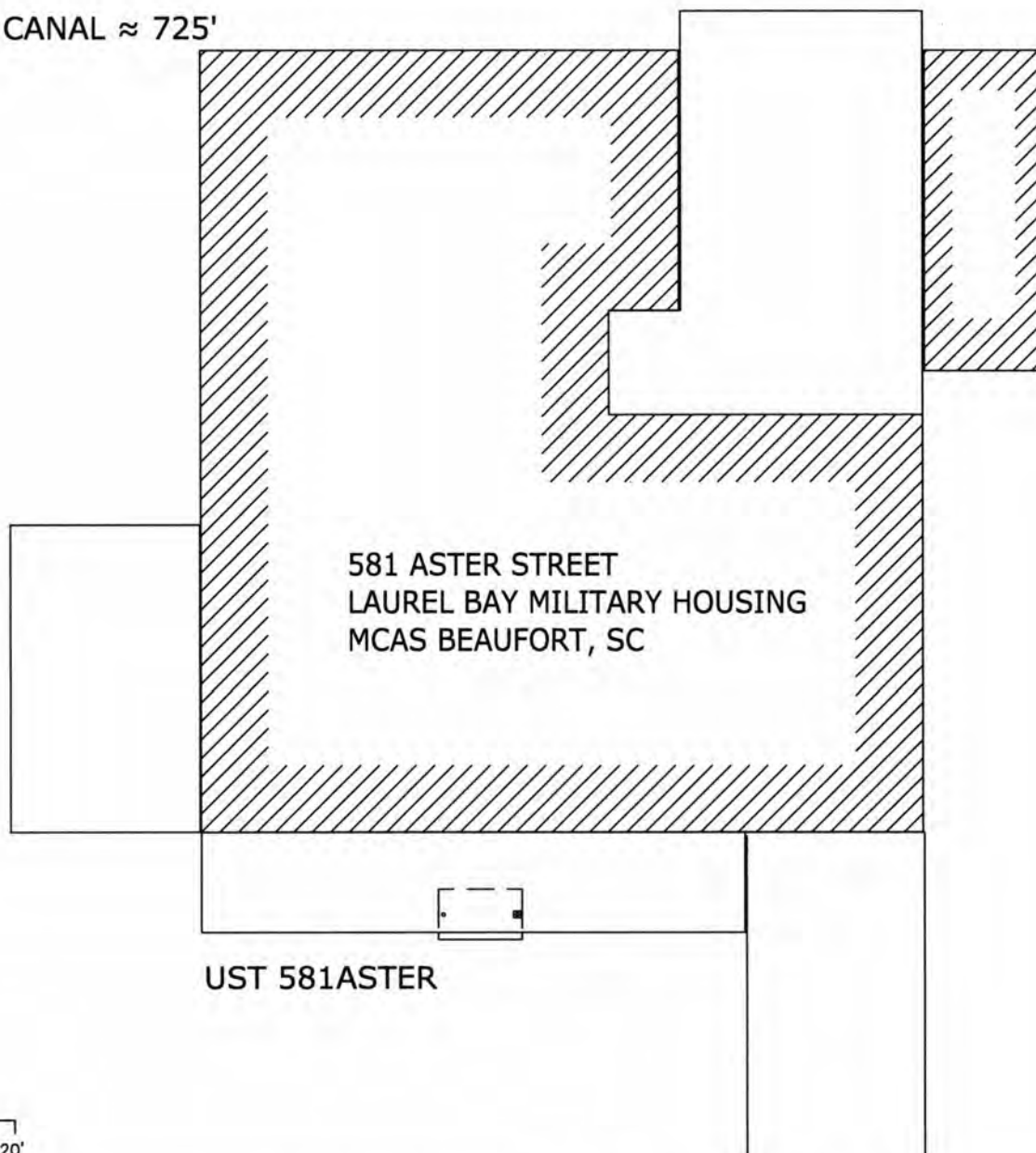
Drawn By: L. DiAsio

Dwg Date: Apr 2013

FIGURE 1: LOCATION MAP
581 ASTER STREET
LAUREL BAY, BEAUFORT SC



STORMWATER CANAL $\approx$ 725'



581 ASTER STREET
LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SC

UST 581ASTER

GRAPHIC SCALE

0 5' 10' 20'

TANK DEPTH BELOW GRADE
581ASTER = 41"

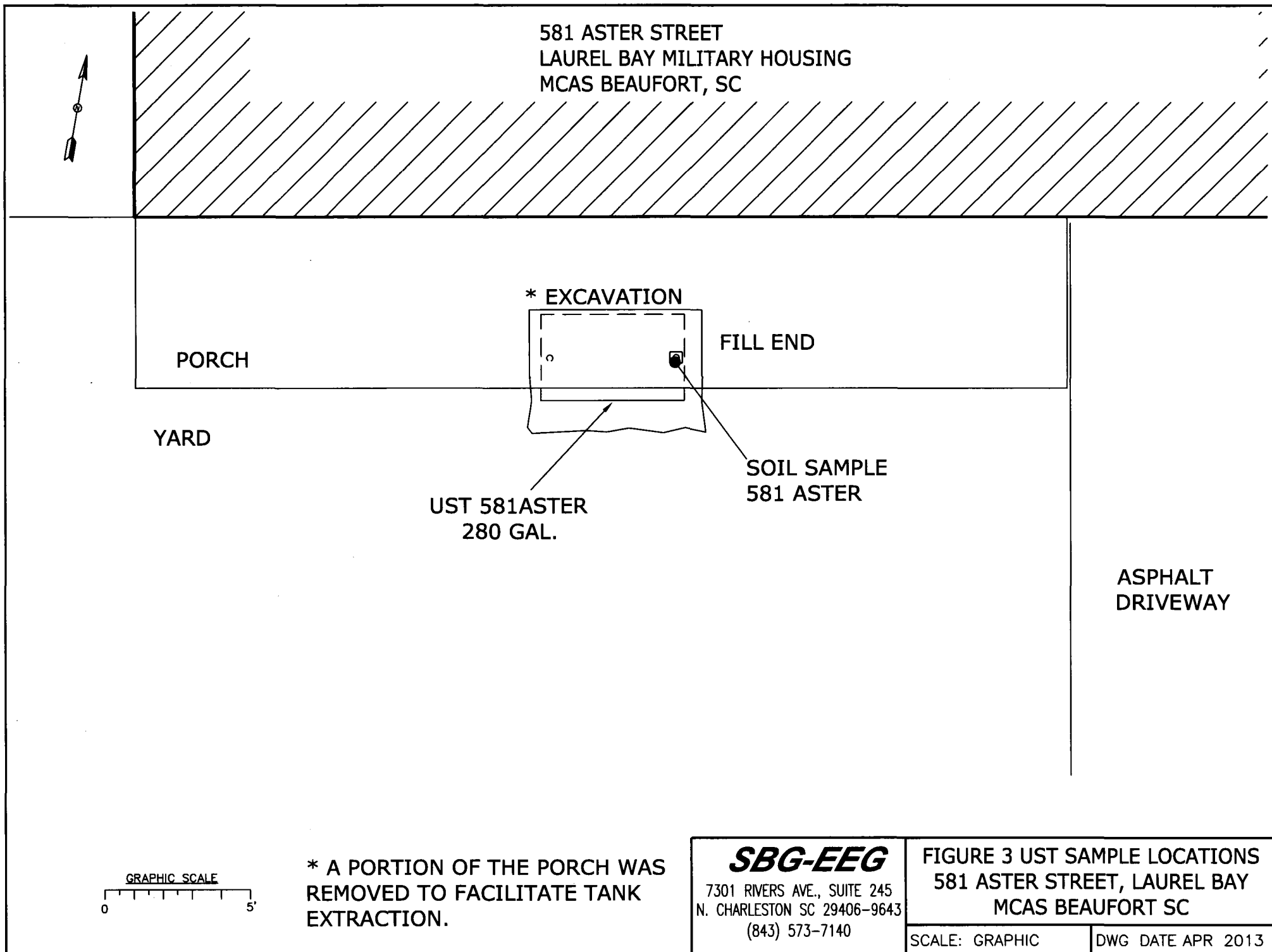
SBG-EEG

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

FIGURE 2 SITE MAP
581 ASTER STREET, LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE APR 2013





Picture 1: Location of UST 581Aster.



Picture 2: UST 581Aster 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	581Aster					
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)							

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

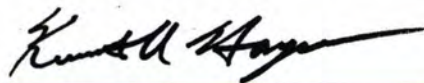
TestAmerica Job ID: 490-22235-1

Client Project/Site: Laurel Bay Housing

For:

Environmental Enterprise Group
10179 Highway 78
Ladson, South Carolina 29456

Attn: Mr. Tom McElwee



Authorized for release by:
4/2/2013 3:50:12 PM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?

**Ask
The
Expert**

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.

1
2
3
4
5
6
7
8
9
10
11
12
13

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	13
QC Association	19
Chronicle	21
Method Summary	23
Certification Summary	24
Chain of Custody	25
Receipt Checklists	28



Sample Summary

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

TestAmerica Job ID: 490-22235-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-22235-1	581 Aster	Solid	03/12/13 13:40	03/20/13 08:30
490-22235-2	1289 Eagle	Solid	03/13/13 13:30	03/20/13 08:30
490-22235-3	1333 Albatross	Solid	03/14/13 12:00	03/20/13 08:30
490-22235-4	582 Aster	Solid	03/12/13 13:45	03/20/13 08:30
490-22235-5	864 Dolphin	Solid	03/13/13 15:45	03/20/13 08:30
490-22235-6	1299 Eagle-1	Solid	03/14/13 12:15	03/20/13 08:30
490-22235-7	1299 Eagle-2	Solid	03/14/13 14:15	03/20/13 08:30

Case Narrative

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

TestAmerica Job ID: 490-22235-1

Job ID: 490-22235-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-22235-1

Comments

No additional comments.

Receipt

The samples were received on 3/20/2013 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° 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 66946.

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

TestAmerica Job ID: 490-22235-1

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	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, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

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

TestAmerica Job ID: 490-22235-1

Client Sample ID: 581 Aster

Date Collected: 03/12/13 13:40

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-1

Matrix: Solid

Percent Solids: 76.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00281	0.000940	mg/Kg	☐	03/21/13 09:34	03/22/13 17:50	1
Ethylbenzene	ND		0.00281	0.000940	mg/Kg	☐	03/21/13 09:34	03/22/13 17:50	1
Naphthalene	ND		0.00702	0.00239	mg/Kg	☐	03/21/13 09:34	03/22/13 17:50	1
Toluene	ND		0.00281	0.00104	mg/Kg	☐	03/21/13 09:34	03/22/13 17:50	1
Xylenes, Total	ND		0.00702	0.000940	mg/Kg	☐	03/21/13 09:34	03/22/13 17:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 130	03/21/13 09:34	03/22/13 17:50	1
4-Bromofluorobenzene (Surr)	110		70 - 130	03/21/13 09:34	03/22/13 17:50	1
Dibromofluoromethane (Surr)	97		70 - 130	03/21/13 09:34	03/22/13 17:50	1
Toluene-d8 (Surr)	109		70 - 130	03/21/13 09:34	03/22/13 17:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0862	0.0129	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Acenaphthylene	ND		0.0862	0.0116	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Anthracene	ND		0.0862	0.0116	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Benzo[a]anthracene	ND		0.0862	0.0193	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Benzo[a]pyrene	ND		0.0862	0.0154	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Benzo[b]fluoranthene	ND		0.0862	0.0154	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Benzo[g,h,i]perylene	ND		0.0862	0.0116	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Benzo[k]fluoranthene	ND		0.0862	0.0180	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
1-Methylnaphthalene	ND		0.0862	0.0180	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Pyrene	ND		0.0862	0.0154	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Phenanthrene	ND		0.0862	0.0116	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Chrysene	ND		0.0862	0.0116	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Dibenz(a,h)anthracene	ND		0.0862	0.00900	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Fluoranthene	ND		0.0862	0.0116	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Fluorene	ND		0.0862	0.0154	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Indeno[1,2,3-cd]pyrene	ND		0.0862	0.0129	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
Naphthalene	ND		0.0862	0.0116	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1
2-Methylnaphthalene	ND		0.0862	0.0206	mg/Kg	☐	03/21/13 11:04	03/23/13 19:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	54		29 - 120	03/21/13 11:04	03/23/13 19:31	1
Terphenyl-d14 (Surr)	74		13 - 120	03/21/13 11:04	03/23/13 19:31	1
Nitrobenzene-d5 (Surr)	45		27 - 120	03/21/13 11:04	03/23/13 19:31	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	77		0.10	0.10	%			03/21/13 09:58	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22235-1

Client Sample ID: 1289 Eagle

Date Collected: 03/13/13 13:30

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-2

Matrix: Solid
Percent Solids: 96.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00228	0.000765	mg/Kg	☐	03/21/13 09:34	03/22/13 18:17	1
Ethylbenzene	ND		0.00228	0.000765	mg/Kg	☐	03/21/13 09:34	03/22/13 18:17	1
Naphthalene	ND		0.00571	0.00194	mg/Kg	☐	03/21/13 09:34	03/22/13 18:17	1
Toluene	ND		0.00228	0.000845	mg/Kg	☐	03/21/13 09:34	03/22/13 18:17	1
Xylenes, Total	ND		0.00571	0.000765	mg/Kg	☐	03/21/13 09:34	03/22/13 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/21/13 09:34	03/22/13 18:17	1
4-Bromofluorobenzene (Surr)	117		70 - 130	03/21/13 09:34	03/22/13 18:17	1
Dibromofluoromethane (Surr)	95		70 - 130	03/21/13 09:34	03/22/13 18:17	1
Toluene-d8 (Surr)	111		70 - 130	03/21/13 09:34	03/22/13 18:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0689	0.0103	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Acenaphthylene	ND		0.0689	0.00925	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Anthracene	ND		0.0689	0.00925	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Benzo[a]anthracene	0.0459	J	0.0689	0.0154	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Benzo[a]pyrene	0.0607	J	0.0689	0.0123	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Benzo[b]fluoranthene	0.0440	J	0.0689	0.0123	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Benzo[g,h,i]perylene	ND		0.0689	0.00925	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Benzo[k]fluoranthene	ND		0.0689	0.0144	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
1-Methylnaphthalene	ND		0.0689	0.0144	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Pyrene	ND		0.0689	0.0123	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Phenanthrene	ND		0.0689	0.00925	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Chrysene	ND		0.0689	0.00925	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Dibenz(a,h)anthracene	ND		0.0689	0.00719	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Fluoranthene	ND		0.0689	0.00925	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Fluorene	ND		0.0689	0.0123	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Indeno[1,2,3-cd]pyrene	ND		0.0689	0.0103	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
Naphthalene	ND		0.0689	0.00925	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1
2-Methylnaphthalene	ND		0.0689	0.0164	mg/Kg	☐	03/21/13 11:04	03/23/13 19:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	59		29 - 120	03/21/13 11:04	03/23/13 19:53	1
Terphenyl-d14 (Surr)	79		13 - 120	03/21/13 11:04	03/23/13 19:53	1
Nitrobenzene-d5 (Surr)	47		27 - 120	03/21/13 11:04	03/23/13 19:53	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10	0.10	%			03/21/13 09:58	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22235-1

Client Sample ID: 1333 Albatross

Date Collected: 03/14/13 12:00

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-3

Matrix: Solid

Percent Solids: 88.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00256	0.000858	mg/Kg	☐	03/21/13 09:34	03/22/13 18:44	1
Ethylbenzene	ND		0.00256	0.000858	mg/Kg	☐	03/21/13 09:34	03/22/13 18:44	1
Naphthalene	ND		0.00640	0.00218	mg/Kg	☐	03/21/13 09:34	03/22/13 18:44	1
Toluene	ND		0.00256	0.000947	mg/Kg	☐	03/21/13 09:34	03/22/13 18:44	1
Xylenes, Total	ND		0.00640	0.000858	mg/Kg	☐	03/21/13 09:34	03/22/13 18:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	03/21/13 09:34	03/22/13 18:44	1
4-Bromofluorobenzene (Surr)	124		70 - 130	03/21/13 09:34	03/22/13 18:44	1
Dibromofluoromethane (Surr)	94		70 - 130	03/21/13 09:34	03/22/13 18:44	1
Toluene-d8 (Surr)	110		70 - 130	03/21/13 09:34	03/22/13 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0754	0.0113	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Acenaphthylene	ND		0.0754	0.0101	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Anthracene	ND		0.0754	0.0101	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Benzo[a]anthracene	0.412		0.0754	0.0169	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Benzo[a]pyrene	0.104		0.0754	0.0135	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Benzo[b]fluoranthene	0.424		0.0754	0.0135	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Benzo[g,h,i]perylene	0.0640	J	0.0754	0.0101	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Benzo[k]fluoranthene	0.179		0.0754	0.0158	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
1-Methylnaphthalene	ND		0.0754	0.0158	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Pyrene	1.26		0.0754	0.0135	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Phenanthrene	0.533		0.0754	0.0101	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Chrysene	0.548		0.0754	0.0101	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Dibenz(a,h)anthracene	ND		0.0754	0.00788	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Fluoranthene	1.45		0.0754	0.0101	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Fluorene	ND		0.0754	0.0135	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Indeno[1,2,3-cd]pyrene	0.0788		0.0754	0.0113	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
Naphthalene	ND		0.0754	0.0101	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1
2-Methylnaphthalene	ND		0.0754	0.0180	mg/Kg	☐	03/21/13 11:04	03/23/13 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	55		29 - 120	03/21/13 11:04	03/23/13 20:15	1
Terphenyl-d14 (Surr)	75		13 - 120	03/21/13 11:04	03/23/13 20:15	1
Nitrobenzene-d5 (Surr)	42		27 - 120	03/21/13 11:04	03/23/13 20:15	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10	0.10	%			03/21/13 09:58	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22235-1

Client Sample ID: 582 Aster

Date Collected: 03/12/13 13:45

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-4

Matrix: Solid

Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00219	0.000732	mg/Kg	☐	03/21/13 09:34	03/22/13 19:11	1
Ethylbenzene	ND		0.00219	0.000732	mg/Kg	☐	03/21/13 09:34	03/22/13 19:11	1
Naphthalene	ND		0.00546	0.00186	mg/Kg	☐	03/21/13 09:34	03/22/13 19:11	1
Toluene	ND		0.00219	0.000808	mg/Kg	☐	03/21/13 09:34	03/22/13 19:11	1
Xylenes, Total	ND		0.00546	0.000732	mg/Kg	☐	03/21/13 09:34	03/22/13 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130	03/21/13 09:34	03/22/13 19:11	1
4-Bromofluorobenzene (Surr)	113		70 - 130	03/21/13 09:34	03/22/13 19:11	1
Dibromofluoromethane (Surr)	96		70 - 130	03/21/13 09:34	03/22/13 19:11	1
Toluene-d8 (Surr)	109		70 - 130	03/21/13 09:34	03/22/13 19:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0725	0.0108	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Acenaphthylene	ND		0.0725	0.00974	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Anthracene	ND		0.0725	0.00974	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Benzo[a]anthracene	ND		0.0725	0.0162	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Benzo[a]pyrene	ND		0.0725	0.0130	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Benzo[b]fluoranthene	ND		0.0725	0.0130	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Benzo[g,h,i]perylene	ND		0.0725	0.00974	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Benzo[k]fluoranthene	ND		0.0725	0.0151	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
1-Methylnaphthalene	ND		0.0725	0.0151	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Pyrene	ND		0.0725	0.0130	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Phenanthrene	ND		0.0725	0.00974	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Chrysene	ND		0.0725	0.00974	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Dibenz(a,h)anthracene	ND		0.0725	0.00757	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Fluoranthene	ND		0.0725	0.00974	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Fluorene	ND		0.0725	0.0130	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Indeno[1,2,3-cd]pyrene	ND		0.0725	0.0108	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
Naphthalene	ND		0.0725	0.00974	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1
2-Methylnaphthalene	ND		0.0725	0.0173	mg/Kg	☐	03/21/13 11:04	03/23/13 20:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	45		29 - 120	03/21/13 11:04	03/23/13 20:37	1
Terphenyl-d14 (Surr)	76		13 - 120	03/21/13 11:04	03/23/13 20:37	1
Nitrobenzene-d5 (Surr)	36		27 - 120	03/21/13 11:04	03/23/13 20:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10	0.10	%			03/21/13 09:58	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22235-1

Client Sample ID: 864 Dolphin

Date Collected: 03/13/13 15:45

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-5

Matrix: Solid
Percent Solids: 93.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00231	0.000775	mg/Kg	☒	03/21/13 09:34	03/22/13 20:05	1
Ethylbenzene	ND		0.00231	0.000775	mg/Kg	☒	03/21/13 09:34	03/22/13 20:05	1
Naphthalene	ND		0.00579	0.00197	mg/Kg	☒	03/21/13 09:34	03/22/13 20:05	1
Toluene	ND		0.00231	0.000856	mg/Kg	☒	03/21/13 09:34	03/22/13 20:05	1
Xylenes, Total	ND		0.00579	0.000775	mg/Kg	☒	03/21/13 09:34	03/22/13 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	03/21/13 09:34	03/22/13 20:05	1
4-Bromofluorobenzene (Surr)	112		70 - 130	03/21/13 09:34	03/22/13 20:05	1
Dibromofluoromethane (Surr)	96		70 - 130	03/21/13 09:34	03/22/13 20:05	1
Toluene-d8 (Surr)	109		70 - 130	03/21/13 09:34	03/22/13 20:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0698	0.0104	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Acenaphthylene	ND		0.0698	0.00937	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Anthracene	ND		0.0698	0.00937	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Benzo[a]anthracene	0.113		0.0698	0.0156	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Benzo[a]pyrene	0.0520	J	0.0698	0.0125	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Benzo[b]fluoranthene	0.108		0.0698	0.0125	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Benzo[g,h,i]perylene	0.0371	J	0.0698	0.00937	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Benzo[k]fluoranthene	0.0418	J	0.0698	0.0146	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
1-Methylnaphthalene	ND		0.0698	0.0146	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Pyrene	0.193		0.0698	0.0125	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Phenanthrene	0.0433	J	0.0698	0.00937	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Chrysene	0.112		0.0698	0.00937	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Dibenz(a,h)anthracene	ND		0.0698	0.00729	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Fluoranthene	0.223		0.0698	0.00937	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Fluorene	ND		0.0698	0.0125	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Indeno[1,2,3-cd]pyrene	ND		0.0698	0.0104	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
Naphthalene	ND		0.0698	0.00937	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1
2-Methylnaphthalene	ND		0.0698	0.0167	mg/Kg	☒	03/21/13 11:04	03/23/13 20:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	56		29 - 120	03/21/13 11:04	03/23/13 20:59	1
Terphenyl-d14 (Surr)	83		13 - 120	03/21/13 11:04	03/23/13 20:59	1
Nitrobenzene-d5 (Surr)	46		27 - 120	03/21/13 11:04	03/23/13 20:59	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10	0.10	%			03/21/13 09:58	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22235-1

Client Sample ID: 1299 Eagle-1

Date Collected: 03/14/13 12:15

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-6

Matrix: Solid
Percent Solids: 95.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00228	0.000764	mg/Kg	☐	03/21/13 09:34	03/22/13 19:38	1
Ethylbenzene	ND		0.00228	0.000764	mg/Kg	☐	03/21/13 09:34	03/22/13 19:38	1
Naphthalene	0.00243	J	0.00570	0.00194	mg/Kg	☐	03/21/13 09:34	03/22/13 19:38	1
Toluene	ND		0.00228	0.000844	mg/Kg	☐	03/21/13 09:34	03/22/13 19:38	1
Xylenes, Total	0.000787	J	0.00570	0.000764	mg/Kg	☐	03/21/13 09:34	03/22/13 19:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	03/21/13 09:34	03/22/13 19:38	1
4-Bromofluorobenzene (Surr)	111		70 - 130	03/21/13 09:34	03/22/13 19:38	1
Dibromofluoromethane (Surr)	95		70 - 130	03/21/13 09:34	03/22/13 19:38	1
Toluene-d8 (Surr)	109		70 - 130	03/21/13 09:34	03/22/13 19:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.132		0.0696	0.0104	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
Acenaphthylene	ND		0.0696	0.00936	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
Anthracene	0.586		0.0696	0.00936	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
Benzo[a]anthracene	5.22		0.348	0.0780	mg/Kg	☐	03/21/13 11:04	03/25/13 19:36	5
Benzo[a]pyrene	1.87		0.0696	0.0125	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
Benzo[b]fluoranthene	3.28		0.0696	0.0125	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
Benzo[g,h,i]perylene	0.752		0.0696	0.00936	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
Benzo[k]fluoranthene	1.57		0.0696	0.0146	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
1-Methylnaphthalene	0.0374	J	0.0696	0.0146	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
Pyrene	9.29		0.348	0.0624	mg/Kg	☐	03/21/13 11:04	03/25/13 19:36	5
Phenanthrene	5.93		0.348	0.0468	mg/Kg	☐	03/21/13 11:04	03/25/13 19:36	5
Chrysene	5.44		0.348	0.0468	mg/Kg	☐	03/21/13 11:04	03/25/13 19:36	5
Dibenz(a,h)anthracene	0.293		0.0696	0.00728	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
Fluoranthene	11.5		0.348	0.0468	mg/Kg	☐	03/21/13 11:04	03/25/13 19:36	5
Fluorene	0.163		0.0696	0.0125	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
Indeno[1,2,3-cd]pyrene	0.755		0.0696	0.0104	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
Naphthalene	0.114		0.0696	0.00936	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1
2-Methylnaphthalene	0.0358	J	0.0696	0.0166	mg/Kg	☐	03/21/13 11:04	03/23/13 21:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	56		29 - 120	03/21/13 11:04	03/23/13 21:20	1
2-Fluorobiphenyl (Surr)	64		29 - 120	03/21/13 11:04	03/25/13 19:36	5
Terphenyl-d14 (Surr)	98		13 - 120	03/21/13 11:04	03/23/13 21:20	1
Terphenyl-d14 (Surr)	90		13 - 120	03/21/13 11:04	03/25/13 19:36	5
Nitrobenzene-d5 (Surr)	46		27 - 120	03/21/13 11:04	03/23/13 21:20	1
Nitrobenzene-d5 (Surr)	64		27 - 120	03/21/13 11:04	03/25/13 19:36	5

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10	0.10	%			03/21/13 09:58	1

TestAmerica Nashville

Client Sample Results

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

TestAmerica Job ID: 490-22235-1

Client Sample ID: 1299 Eagle-2

Date Collected: 03/14/13 14:15

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-7

Matrix: Solid

Percent Solids: 89.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00249	0.000834	mg/Kg	☒	03/21/13 09:34	03/22/13 20:32	1
Ethylbenzene	ND		0.00249	0.000834	mg/Kg	☒	03/21/13 09:34	03/22/13 20:32	1
Naphthalene	ND		0.00623	0.00212	mg/Kg	☒	03/21/13 09:34	03/22/13 20:32	1
Toluene	ND		0.00249	0.000921	mg/Kg	☒	03/21/13 09:34	03/22/13 20:32	1
Xylenes, Total	ND		0.00623	0.000834	mg/Kg	☒	03/21/13 09:34	03/22/13 20:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	03/21/13 09:34	03/22/13 20:32	1
4-Bromofluorobenzene (Surr)	113		70 - 130	03/21/13 09:34	03/22/13 20:32	1
Dibromofluoromethane (Surr)	94		70 - 130	03/21/13 09:34	03/22/13 20:32	1
Toluene-d8 (Surr)	109		70 - 130	03/21/13 09:34	03/22/13 20:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0735	0.0110	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Acenaphthylene	ND		0.0735	0.00988	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Anthracene	ND		0.0735	0.00988	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Benzo[a]anthracene	ND		0.0735	0.0165	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Benzo[a]pyrene	ND		0.0735	0.0132	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Benzo[b]fluoranthene	ND		0.0735	0.0132	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Benzo[g,h,i]perylene	ND		0.0735	0.00988	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Benzo[k]fluoranthene	ND		0.0735	0.0154	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
1-Methylnaphthalene	ND		0.0735	0.0154	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Pyrene	ND		0.0735	0.0132	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Phenanthrene	ND		0.0735	0.00988	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Chrysene	ND		0.0735	0.00988	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Dibenz(a,h)anthracene	ND		0.0735	0.00768	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Fluoranthene	ND		0.0735	0.00988	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Fluorene	ND		0.0735	0.0132	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Indeno[1,2,3-cd]pyrene	ND		0.0735	0.0110	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
Naphthalene	ND		0.0735	0.00988	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1
2-Methylnaphthalene	ND		0.0735	0.0176	mg/Kg	☒	03/21/13 12:52	03/21/13 22:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	57		29 - 120	03/21/13 12:52	03/21/13 22:01	1
Terphenyl-d14 (Surr)	80		13 - 120	03/21/13 12:52	03/21/13 22:01	1
Nitrobenzene-d5 (Surr)	57		27 - 120	03/21/13 12:52	03/21/13 22:01	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10	0.10	%			03/21/13 09:58	1

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22235-1

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

Lab Sample ID: MB 490-66946/7

Matrix: Solid

Analysis Batch: 66946

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			03/22/13 14:39	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			03/22/13 14:39	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			03/22/13 14:39	1
Toluene	ND		0.00200	0.000740	mg/Kg			03/22/13 14:39	1
Xylenes, Total	ND		0.00500	0.000670	mg/Kg			03/22/13 14:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130		03/22/13 14:39	1
4-Bromofluorobenzene (Surr)	110		70 - 130		03/22/13 14:39	1
Dibromofluoromethane (Surr)	94		70 - 130		03/22/13 14:39	1
Toluene-d8 (Surr)	110		70 - 130		03/22/13 14:39	1

Lab Sample ID: LCS 490-66946/3

Matrix: Solid

Analysis Batch: 66946

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04651		mg/Kg		93	75 - 127
Ethylbenzene	0.0500	0.04757		mg/Kg		95	80 - 134
Naphthalene	0.0500	0.05365		mg/Kg		107	69 - 150
Toluene	0.0500	0.05005		mg/Kg		100	80 - 132
Xylenes, Total	0.150	0.1432		mg/Kg		95	80 - 137

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
4-Bromofluorobenzene (Surr)	112		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
Toluene-d8 (Surr)	111		70 - 130

Lab Sample ID: LCSD 490-66946/4

Matrix: Solid

Analysis Batch: 66946

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.0500	0.04850		mg/Kg		97	75 - 127	4	50
Ethylbenzene	0.0500	0.04934		mg/Kg		99	80 - 134	4	50
Naphthalene	0.0500	0.05463		mg/Kg		109	69 - 150	2	50
Toluene	0.0500	0.05191		mg/Kg		104	80 - 132	4	50
Xylenes, Total	0.150	0.1495		mg/Kg		100	80 - 137	4	50

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 130
4-Bromofluorobenzene (Surr)	111		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
Toluene-d8 (Surr)	110		70 - 130

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22235-1

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

Lab Sample ID: MB 490-66640/1-A

Matrix: Solid

Analysis Batch: 67211

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66640

Analyte	Result	MB MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Anthracene	ND		0.0670	0.00900	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Pyrene	ND		0.0670	0.0120	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Chrysene	ND		0.0670	0.00900	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Fluorene	ND		0.0670	0.0120	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		03/21/13 11:04	03/23/13 13:02	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		03/21/13 11:04	03/23/13 13:02	1

Surrogate	%Recovery	MB MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	64		29 - 120	03/21/13 11:04	03/23/13 13:02	1
Terphenyl-d14 (Surr)	83		13 - 120	03/21/13 11:04	03/23/13 13:02	1
Nitrobenzene-d5 (Surr)	62		27 - 120	03/21/13 11:04	03/23/13 13:02	1

Lab Sample ID: LCS 490-66640/2-A

Matrix: Solid

Analysis Batch: 67211

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.041		mg/Kg		62	38 - 120
Anthracene	1.67	1.085		mg/Kg		65	46 - 124
Benzo[a]anthracene	1.67	1.128		mg/Kg		68	45 - 120
Benzo[a]pyrene	1.67	1.082		mg/Kg		65	45 - 120
Benzo[b]fluoranthene	1.67	1.150		mg/Kg		69	42 - 120
Benzo[g,h,i]perylene	1.67	1.229		mg/Kg		74	38 - 120
Benzo[k]fluoranthene	1.67	1.082		mg/Kg		65	42 - 120
1-Methylnaphthalene	1.67	0.8838		mg/Kg		53	32 - 120
Pyrene	1.67	1.134		mg/Kg		68	43 - 120
Phenanthrene	1.67	1.133		mg/Kg		68	45 - 120
Chrysene	1.67	1.130		mg/Kg		68	43 - 120
Dibenz(a,h)anthracene	1.67	1.231		mg/Kg		74	32 - 128
Fluoranthene	1.67	1.099		mg/Kg		66	46 - 120
Fluorene	1.67	1.036		mg/Kg		62	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.210		mg/Kg		73	41 - 121
Naphthalene	1.67	0.8737		mg/Kg		52	32 - 120
2-Methylnaphthalene	1.67	0.8932		mg/Kg		54	28 - 120

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22235-1

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

Lab Sample ID: LCS 490-66640/2-A

Matrix: Solid

Analysis Batch: 67211

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66640

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	48		29 - 120
Terphenyl-d14 (Surr)	72		13 - 120
Nitrobenzene-d5 (Surr)	36		27 - 120

Lab Sample ID: 490-22195-G-5-B MSD

Matrix: Solid

Analysis Batch: 67211

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 66640

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthylene	ND		2.34	1.716		mg/Kg	☒	73	25 - 120	18	50
Anthracene	ND		2.34	1.733		mg/Kg	☒	74	28 - 125	21	49
Benzo[a]anthracene	ND		2.34	1.787		mg/Kg	☒	76	23 - 120	20	50
Benzo[a]pyrene	ND		2.34	1.752		mg/Kg	☒	75	15 - 128	24	50
Benzo[b]fluoranthene	ND		2.34	1.875		mg/Kg	☒	80	12 - 133	29	50
Benzo[g,h,i]perylene	ND		2.34	1.741		mg/Kg	☒	74	22 - 120	31	50
Benzo[k]fluoranthene	ND		2.34	1.730		mg/Kg	☒	74	28 - 120	15	45
1-Methylnaphthalene	ND		2.34	1.426		mg/Kg	☒	61	10 - 120	12	50
Pyrene	ND		2.34	1.780		mg/Kg	☒	76	20 - 123	21	50
Phenanthrene	ND		2.34	1.806		mg/Kg	☒	77	21 - 122	21	50
Chrysene	ND		2.34	1.809		mg/Kg	☒	77	20 - 120	15	49
Dibenz(a,h)anthracene	ND		2.34	1.835		mg/Kg	☒	78	12 - 128	33	50
Fluoranthene	ND		2.34	1.752		mg/Kg	☒	75	10 - 143	18	50
Fluorene	ND		2.34	1.644		mg/Kg	☒	70	20 - 120	18	50
Indeno[1,2,3-cd]pyrene	ND		2.34	1.761		mg/Kg	☒	75	22 - 121	32	50
Naphthalene	ND		2.34	1.509		mg/Kg	☒	64	10 - 120	23	50
2-Methylnaphthalene	ND		2.34	1.481		mg/Kg	☒	63	13 - 120	16	50

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	59		29 - 120
Terphenyl-d14 (Surr)	84		13 - 120
Nitrobenzene-d5 (Surr)	50		27 - 120

Lab Sample ID: 490-22195-I-5-A MS

Matrix: Solid

Analysis Batch: 67211

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66640

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	ND		2.40	1.427		mg/Kg	☒	60	25 - 120
Anthracene	ND		2.40	1.402		mg/Kg	☒	58	28 - 125
Benzo[a]anthracene	ND		2.40	1.459		mg/Kg	☒	61	23 - 120
Benzo[a]pyrene	ND		2.40	1.376		mg/Kg	☒	57	15 - 128
Benzo[b]fluoranthene	ND		2.40	1.396		mg/Kg	☒	58	12 - 133
Benzo[g,h,i]perylene	ND		2.40	1.271		mg/Kg	☒	53	22 - 120
Benzo[k]fluoranthene	ND		2.40	1.495		mg/Kg	☒	62	28 - 120
1-Methylnaphthalene	ND		2.40	1.262		mg/Kg	☒	53	10 - 120
Pyrene	ND		2.40	1.437		mg/Kg	☒	60	20 - 123
Phenanthrene	ND		2.40	1.462		mg/Kg	☒	61	21 - 122
Chrysene	ND		2.40	1.557		mg/Kg	☒	65	20 - 120

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22235-1

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

Lab Sample ID: 490-22195-I-5-A MS

Matrix: Solid

Analysis Batch: 67211

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66640

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	ND		2.40	1.319		mg/Kg	☐	55	12 - 128
Fluoranthene	ND		2.40	1.462		mg/Kg	☐	61	10 - 143
Fluorene	ND		2.40	1.378		mg/Kg	☐	57	20 - 120
Indeno[1,2,3-cd]pyrene	ND		2.40	1.277		mg/Kg	☐	53	22 - 121
Naphthalene	ND		2.40	1.203		mg/Kg	☐	50	10 - 120
2-Methylnaphthalene	ND		2.40	1.259		mg/Kg	☐	53	13 - 120
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
2-Fluorobiphenyl (Surr)	46		29 - 120						
Terphenyl-d14 (Surr)	68		13 - 120						
Nitrobenzene-d5 (Surr)	35		27 - 120						

Lab Sample ID: MB 490-66691/1-A

Matrix: Solid

Analysis Batch: 66721

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 66691

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Anthracene	ND		0.0670	0.00900	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Pyrene	ND		0.0670	0.0120	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Chrysene	ND		0.0670	0.00900	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Fluorene	ND		0.0670	0.0120	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		03/21/13 12:52	03/21/13 16:49	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
2-Fluorobiphenyl (Surr)	48		29 - 120	03/21/13 12:52	03/21/13 16:49	1			
Terphenyl-d14 (Surr)	75		13 - 120	03/21/13 12:52	03/21/13 16:49	1			
Nitrobenzene-d5 (Surr)	55		27 - 120	03/21/13 12:52	03/21/13 16:49	1			

Lab Sample ID: LCS 490-66691/2-A

Matrix: Solid

Analysis Batch: 66721

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66691

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.194		mg/Kg		72	38 - 120
Anthracene	1.67	1.315		mg/Kg		79	46 - 124

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22235-1

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

Lab Sample ID: LCS 490-66691/2-A

Matrix: Solid

Analysis Batch: 66721

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 66691

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	1.67	1.270		mg/Kg		76	45 - 120
Benzo[a]pyrene	1.67	1.269		mg/Kg		76	45 - 120
Benzo[b]fluoranthene	1.67	1.329		mg/Kg		80	42 - 120
Benzo[g,h,i]perylene	1.67	1.218		mg/Kg		73	38 - 120
Benzo[k]fluoranthene	1.67	1.194		mg/Kg		72	42 - 120
1-Methylnaphthalene	1.67	1.313		mg/Kg		79	32 - 120
Pyrene	1.67	1.271		mg/Kg		76	43 - 120
Phenanthrene	1.67	1.305		mg/Kg		78	45 - 120
Chrysene	1.67	1.272		mg/Kg		76	43 - 120
Dibenz(a,h)anthracene	1.67	1.277		mg/Kg		77	32 - 128
Fluoranthene	1.67	1.301		mg/Kg		78	46 - 120
Fluorene	1.67	1.104		mg/Kg		66	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.256		mg/Kg		75	41 - 121
Naphthalene	1.67	1.305		mg/Kg		78	32 - 120
2-Methylnaphthalene	1.67	1.380		mg/Kg		83	28 - 120

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

Lab Sample ID: 490-22250-F-1-B MS

Matrix: Solid

Analysis Batch: 66721

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 66691

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	ND		1.73	1.161		mg/Kg	☐	67	25 - 120
Anthracene	ND		1.73	1.374		mg/Kg	☐	79	28 - 125
Benzo[a]anthracene	ND		1.73	1.297		mg/Kg	☐	75	23 - 120
Benzo[a]pyrene	ND		1.73	1.292		mg/Kg	☐	75	15 - 128
Benzo[b]fluoranthene	ND		1.73	1.377		mg/Kg	☐	79	12 - 133
Benzo[g,h,i]perylene	ND		1.73	1.278		mg/Kg	☐	74	22 - 120
Benzo[k]fluoranthene	ND		1.73	1.310		mg/Kg	☐	76	28 - 120
1-Methylnaphthalene	ND		1.73	1.224		mg/Kg	☐	71	10 - 120
Pyrene	ND		1.73	1.547		mg/Kg	☐	89	20 - 123
Phenanthrene	ND		1.73	1.385		mg/Kg	☐	80	21 - 122
Chrysene	ND		1.73	1.394		mg/Kg	☐	80	20 - 120
Dibenz(a,h)anthracene	ND		1.73	1.282		mg/Kg	☐	74	12 - 128
Fluoranthene	ND		1.73	1.348		mg/Kg	☐	78	10 - 143
Fluorene	ND		1.73	1.185		mg/Kg	☐	68	20 - 120
Indeno[1,2,3-cd]pyrene	ND		1.73	1.189		mg/Kg	☐	69	22 - 121
Naphthalene	ND		1.73	1.152		mg/Kg	☐	66	10 - 120
2-Methylnaphthalene	ND		1.73	1.246		mg/Kg	☐	72	13 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl (Surr)	54		29 - 120
Terphenyl-d14 (Surr)	89		13 - 120

TestAmerica Nashville

QC Sample Results

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

TestAmerica Job ID: 490-22235-1

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

Lab Sample ID: 490-22250-F-1-B MS
Matrix: Solid
Analysis Batch: 66721

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 66691

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Nitrobenzene-d5 (Surr)	55		27 - 120

Lab Sample ID: 490-22250-F-1-C MSD
Matrix: Solid
Analysis Batch: 66721

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 66691

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	ND		1.75	1.393		mg/Kg	☒	79	25 - 120	18	50
Anthracene	ND		1.75	1.341		mg/Kg	☒	77	28 - 125	2	49
Benzo[a]anthracene	ND		1.75	1.405		mg/Kg	☒	80	23 - 120	8	50
Benzo[a]pyrene	ND		1.75	1.366		mg/Kg	☒	78	15 - 128	6	50
Benzo[b]fluoranthene	ND		1.75	1.370		mg/Kg	☒	78	12 - 133	1	50
Benzo[g,h,i]perylene	ND		1.75	1.369		mg/Kg	☒	78	22 - 120	7	50
Benzo[k]fluoranthene	ND		1.75	1.310		mg/Kg	☒	75	28 - 120	0	45
1-Methylnaphthalene	ND		1.75	1.321		mg/Kg	☒	75	10 - 120	8	50
Pyrene	ND		1.75	1.405		mg/Kg	☒	80	20 - 123	10	50
Phenanthrene	ND		1.75	1.343		mg/Kg	☒	77	21 - 122	3	50
Chrysene	ND		1.75	1.346		mg/Kg	☒	77	20 - 120	4	49
Dibenz(a,h)anthracene	ND		1.75	1.315		mg/Kg	☒	75	12 - 128	3	50
Fluoranthene	ND		1.75	1.206		mg/Kg	☒	69	10 - 143	11	50
Fluorene	ND		1.75	1.230		mg/Kg	☒	70	20 - 120	4	50
Indeno[1,2,3-cd]pyrene	ND		1.75	1.287		mg/Kg	☒	73	22 - 121	8	50
Naphthalene	ND		1.75	1.319		mg/Kg	☒	75	10 - 120	14	50
2-Methylnaphthalene	ND		1.75	1.426		mg/Kg	☒	81	13 - 120	13	50

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	59		29 - 120
Terphenyl-d14 (Surr)	79		13 - 120
Nitrobenzene-d5 (Surr)	59		27 - 120

Method: Moisture - Percent Moisture

Lab Sample ID: 490-22235-1 DU
Matrix: Solid
Analysis Batch: 66580

Client Sample ID: 581 Aster
Prep Type: Total/NA

	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	77		77		%		0.1	20

TestAmerica Nashville

QC Association Summary

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

TestAmerica Job ID: 490-22235-1

GC/MS VOA

Prep Batch: 66559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22235-1	581 Aster	Total/NA	Solid	5035	
490-22235-2	1289 Eagle	Total/NA	Solid	5035	
490-22235-3	1333 Albatross	Total/NA	Solid	5035	
490-22235-4	582 Aster	Total/NA	Solid	5035	
490-22235-5	864 Dolphin	Total/NA	Solid	5035	
490-22235-6	1299 Eagle-1	Total/NA	Solid	5035	
490-22235-7	1299 Eagle-2	Total/NA	Solid	5035	

Analysis Batch: 66946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22235-1	581 Aster	Total/NA	Solid	8260B	66559
490-22235-2	1289 Eagle	Total/NA	Solid	8260B	66559
490-22235-3	1333 Albatross	Total/NA	Solid	8260B	66559
490-22235-4	582 Aster	Total/NA	Solid	8260B	66559
490-22235-5	864 Dolphin	Total/NA	Solid	8260B	66559
490-22235-6	1299 Eagle-1	Total/NA	Solid	8260B	66559
490-22235-7	1299 Eagle-2	Total/NA	Solid	8260B	66559
LCS 490-66946/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-66946/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-66946/7	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 66640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22195-G-5-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
490-22195-I-5-A MS	Matrix Spike	Total/NA	Solid	3550C	
490-22235-1	581 Aster	Total/NA	Solid	3550C	
490-22235-2	1289 Eagle	Total/NA	Solid	3550C	
490-22235-3	1333 Albatross	Total/NA	Solid	3550C	
490-22235-4	582 Aster	Total/NA	Solid	3550C	
490-22235-5	864 Dolphin	Total/NA	Solid	3550C	
490-22235-6	1299 Eagle-1	Total/NA	Solid	3550C	
LCS 490-66640/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-66640/1-A	Method Blank	Total/NA	Solid	3550C	

Prep Batch: 66691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22235-7	1299 Eagle-2	Total/NA	Solid	3550C	
490-22250-F-1-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-22250-F-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
LCS 490-66691/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-66691/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 66721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22235-7	1299 Eagle-2	Total/NA	Solid	8270D	66691
490-22250-F-1-B MS	Matrix Spike	Total/NA	Solid	8270D	66691
490-22250-F-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	66691
LCS 490-66691/2-A	Lab Control Sample	Total/NA	Solid	8270D	66691

TestAmerica Nashville

QC Association Summary

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

TestAmerica Job ID: 490-22235-1

GC/MS Semi VOA (Continued)

Analysis Batch: 66721 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-66691/1-A	Method Blank	Total/NA	Solid	8270D	66691

Analysis Batch: 67211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22195-G-5-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	66640
490-22195-I-5-A MS	Matrix Spike	Total/NA	Solid	8270D	66640
490-22235-1	581 Aster	Total/NA	Solid	8270D	66640
490-22235-2	1289 Eagle	Total/NA	Solid	8270D	66640
490-22235-3	1333 Albatross	Total/NA	Solid	8270D	66640
490-22235-4	582 Aster	Total/NA	Solid	8270D	66640
490-22235-5	864 Dolphin	Total/NA	Solid	8270D	66640
490-22235-6	1299 Eagle-1	Total/NA	Solid	8270D	66640
LCS 490-66640/2-A	Lab Control Sample	Total/NA	Solid	8270D	66640
MB 490-66640/1-A	Method Blank	Total/NA	Solid	8270D	66640

Analysis Batch: 67393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22235-6	1299 Eagle-1	Total/NA	Solid	8270D	66640

General Chemistry

Analysis Batch: 66580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-22235-1	581 Aster	Total/NA	Solid	Moisture	
490-22235-1 DU	581 Aster	Total/NA	Solid	Moisture	
490-22235-2	1289 Eagle	Total/NA	Solid	Moisture	
490-22235-3	1333 Albatross	Total/NA	Solid	Moisture	
490-22235-4	582 Aster	Total/NA	Solid	Moisture	
490-22235-5	864 Dolphin	Total/NA	Solid	Moisture	
490-22235-6	1299 Eagle-1	Total/NA	Solid	Moisture	
490-22235-7	1299 Eagle-2	Total/NA	Solid	Moisture	

Lab Chronicle

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

TestAmerica Job ID: 490-22235-1

Client Sample ID: 581 Aster

Date Collected: 03/12/13 13:40

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-1

Matrix: Solid

Percent Solids: 76.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			66559	03/21/13 09:34	ML	TAL NSH
Total/NA	Analysis	8260B		1	66946	03/22/13 17:50	MH	TAL NSH
Total/NA	Prep	3550C			66640	03/21/13 11:04	AK	TAL NSH
Total/NA	Analysis	8270D		1	67211	03/23/13 19:31	JS	TAL NSH
Total/NA	Analysis	Moisture		1	66580	03/21/13 09:58	RS	TAL NSH

Client Sample ID: 1289 Eagle

Date Collected: 03/13/13 13:30

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-2

Matrix: Solid

Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			66559	03/21/13 09:34	ML	TAL NSH
Total/NA	Analysis	8260B		1	66946	03/22/13 18:17	MH	TAL NSH
Total/NA	Prep	3550C			66640	03/21/13 11:04	AK	TAL NSH
Total/NA	Analysis	8270D		1	67211	03/23/13 19:53	JS	TAL NSH
Total/NA	Analysis	Moisture		1	66580	03/21/13 09:58	RS	TAL NSH

Client Sample ID: 1333 Albatross

Date Collected: 03/14/13 12:00

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-3

Matrix: Solid

Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			66559	03/21/13 09:34	ML	TAL NSH
Total/NA	Analysis	8260B		1	66946	03/22/13 18:44	MH	TAL NSH
Total/NA	Prep	3550C			66640	03/21/13 11:04	AK	TAL NSH
Total/NA	Analysis	8270D		1	67211	03/23/13 20:15	JS	TAL NSH
Total/NA	Analysis	Moisture		1	66580	03/21/13 09:58	RS	TAL NSH

Client Sample ID: 582 Aster

Date Collected: 03/12/13 13:45

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-4

Matrix: Solid

Percent Solids: 89.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			66559	03/21/13 09:34	ML	TAL NSH
Total/NA	Analysis	8260B		1	66946	03/22/13 19:11	MH	TAL NSH
Total/NA	Prep	3550C			66640	03/21/13 11:04	AK	TAL NSH
Total/NA	Analysis	8270D		1	67211	03/23/13 20:37	JS	TAL NSH
Total/NA	Analysis	Moisture		1	66580	03/21/13 09:58	RS	TAL NSH

TestAmerica Nashville

Lab Chronicle

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

TestAmerica Job ID: 490-22235-1

Client Sample ID: 864 Dolphin

Date Collected: 03/13/13 15:45

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-5

Matrix: Solid

Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			66559	03/21/13 09:34	ML	TAL NSH
Total/NA	Analysis	8260B		1	66946	03/22/13 20:05	MH	TAL NSH
Total/NA	Prep	3550C			66640	03/21/13 11:04	AK	TAL NSH
Total/NA	Analysis	8270D		1	67211	03/23/13 20:59	JS	TAL NSH
Total/NA	Analysis	Moisture		1	66580	03/21/13 09:58	RS	TAL NSH

Client Sample ID: 1299 Eagle-1

Date Collected: 03/14/13 12:15

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-6

Matrix: Solid

Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			66559	03/21/13 09:34	ML	TAL NSH
Total/NA	Analysis	8260B		1	66946	03/22/13 19:38	MH	TAL NSH
Total/NA	Prep	3550C			66640	03/21/13 11:04	AK	TAL NSH
Total/NA	Analysis	8270D		1	67211	03/23/13 21:20	JS	TAL NSH
Total/NA	Analysis	8270D		5	67393	03/25/13 19:36	SCS	TAL NSH
Total/NA	Analysis	Moisture		1	66580	03/21/13 09:58	RS	TAL NSH

Client Sample ID: 1299 Eagle-2

Date Collected: 03/14/13 14:15

Date Received: 03/20/13 08:30

Lab Sample ID: 490-22235-7

Matrix: Solid

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			66559	03/21/13 09:34	ML	TAL NSH
Total/NA	Analysis	8260B		1	66946	03/22/13 20:32	MH	TAL NSH
Total/NA	Prep	3550C			66691	03/21/13 12:52	AK	TAL NSH
Total/NA	Analysis	8270D		1	66721	03/21/13 22:01	BS	TAL NSH
Total/NA	Analysis	Moisture		1	66580	03/21/13 09:58	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

TestAmerica Job ID: 490-22235-1

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

TestAmerica Job ID: 490-22235-1

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
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAP	4	E87358	06-30-13
Illinois	NELAP	5	200010	12-09-13
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-13
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAP	6	30613	06-30-13
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAP	5	047-999-345	12-31-13
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	07-31-13
New Hampshire	NELAP	1	2963	10-09-13
New Jersey	NELAP	2	TN965	06-30-13
New York	NELAP	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-13
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
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)	04-30-14
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAP	8	TAN	06-30-13
Virginia	NELAP	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

TestAmerica Nashville





490-22235 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 3/20/2013 @ 0830

1. Tracking # 9825 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 4.4 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? YES...NO...NA

If yes, how many and where: (2) Front/Back

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

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

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)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

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

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 YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

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

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (Initial) W

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

TestAmerica

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

Phone: 615-728-0177
Toll Free: 800-765-0980
Fax: 615-728-3404

Client Name/Account #: EEG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2097

Fax No.: 843-879-0401

Sample Name: (Print) CWS Tunstall

Sampler Signature: [Signature]

Site State: SC

PO#: 1035

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

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

Compliance Monitoring?

Enforcement Action?

Yes ___ No ___
Yes ___ No ___

Loc: 490
22235

4/2/2013

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO ₃ (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	BTEX + Naph - 8260E	PAH - 8270D	Analyze For:	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
1018 Grandview	3/11/13		5	X																							
381 Astor	3/12/13	1340	5	X																							
1289 E 95th	3/13/13	1330	5	X																							
1333 H 6th	3/14/13	1200	5	X																							

Special Instructions:

Method of Shipment:

FEDEX

Laboratory Comments:

Temperature Upon Receipt: 44c
VOCs Free of Headspace?

Relinquished by: [Signature]

Date: 3/19/13

Time: 0900

Received by: [Signature]

Date: 3/20/13

Time: 0630



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2097

Sampler Name: (Print)

Sampler Signature:

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

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

Site State: SC

PO#:

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

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

Compliance Monitoring?
Enforcement Action?

Yes ___ No ___
Yes ___ No ___

Loc: 490
22235
#1
A

4/2/2013

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO ₃ (Red Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify)	BTEX + Naph - 8260	PAH - 8270D	Analyze For:	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report	
582 Astar	3/12/13	1345	5	X																X	X		4			
864 Dolphin	3/13/13	1545	5	X																X	X		5			
1299 Eagle-1	3/14/13	1215	5	X																X	X		6			
1299 Eagle-2	3/14/13	1415	5	X																X	X		7			

Special Instructions:

Relinquished by: *[Signature]* Date: 3/19/13 Time: 0900 Received by: *[Signature]* Date: 3-20-13 Time: 0830

Method of Shipment: *Fedex*

Relinquished by: *[Signature]* Date: 3-20-13 Time: 0830

Laboratory Comments: Temperature Upon Receipt: 44°C VOA's Free of Headspace? Y N

Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 490-22235-1

Login Number: 22235

List Source: TestAmerica Nashville

List Number: 1

Creator: McBride, Mike

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.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (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-HAZARDOUS MANIFEST		1. Generator's US EPA ID No. Generator's US EPA ID No.		Manifest Doc No. Manifest Doc No.		2. Page 1 of 1			
3. Generator's Mailing Address: MCAS BEAUFORT LAUREL BAY HOUSING BEAUFORT, SC 29904				Generator's Site Address (If different than mailing): Generator's Site Address (If different than mailing):		A. Manifest Number WMNA 01519114			
4. Generator's Phone 843-879-0411						B. State Generator's ID State Generator's ID			
5. Transporter 1 Company Name Small business group 10179 Hwy 78 Edison SC 29435				6. US EPA ID Number US EPA ID Number		C. State Transporter's ID State Transporter's ID			
7. Transporter 2 Company Name Transporter 2 Company Name				8. US EPA ID Number US EPA ID Number		D. Transporter's Phone Transporter's Phone			
9. Designated Facility Name and Site Address HICKORY HILL LANDFILL 2621 LOW COUNTRY DRIVE RIDGELAND, SC 29936				10. US EPA ID Number US EPA ID Number		E. State Transporter's ID State Transporter's ID			
						F. Transporter's Phone Transporter's Phone			
						G. State Facility ID State Facility ID			
						H. State Facility Phone 843-987-4643			
GENERATOR	11. Description of Waste Materials				12. Containers		13. Total Quantity		
	a. HEATING OIL TANK FILLED WITH SAND WM Profile # 102655SC				No. Type		14. Unit Wt./Vol.		
					1 204		2.44 TON		
							706081		
TRANSPORTER	b. WM Profile #								
	c. WM Profile #								
	d. WM Profile #								
	J. Additional Descriptions for Materials Listed Above				K. Disposal Location				
FACILITY					Cell				
					Grid				
	15. Special Handling Instructions and Additional Information UST's from: 2) 715 Bluebell 4) 1256 Dover 6) 581 Astoria 1) 1375 Dover 3) 710 Bluebell 5) 582 Astoria								
	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 40 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 W.C. Dutton				Signature "On behalf of" W.C. Dutton				Month Day Year 4 16 13	
17. Transporter 1 Acknowledgement of Receipt of Materials				Printed Name Pratt Shaw				Signature Pratt Shaw	
								Month Day Year 4 16 13	
18. Transporter 2 Acknowledgement of Receipt of Materials				Printed Name JAMES BALDWIN				Signature James Baldwin	
								Month Day Year 4 18 13	
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 Tom Coffield				Signature Tom Coffield				Month Day Year 4 18 13	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Pink- FACILITY USE ONLY

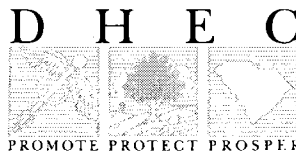
Blue- GENERATOR #2 COPY

Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

Appendix C

Regulatory Correspondence



Catherine B. Templeton, Director

Promoting and protecting 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

Promoting 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	