SUMMARY REPORT
574 ELDERBERRY DRIVE (FORMERLY 459 ELDERBERRY DRIVE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0

Prepared for:

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

and

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

JUNE 2021

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Prepared by:

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

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

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Appendices

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 574 Elderberry Drive (Formerly 459 Elderberry Drive). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

The LBMH area is located approximately 3.5 miles west of MCAS Beaufort. The area is approximately 970 acres in size and serves as an enlisted and officer family housing area. The area is configured with single family and duplex residential structures, and includes recreation, open space, and community facilities. The community includes approximately 1,300 housing units, including legacy Capehart style homes and newer duplex style homes. The housing area is bordered on the west by salt marshes and the Broad River, and to the north, east and south by uplands. Forested areas lie along the northern and northeastern borders.

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

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

1.2 UST Removal and Assessment Process

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

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

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

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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 574 Elderberry Drive (Formerly 459 Elderberry Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 459 Elderberry Drive* (MCAS Beaufort, 2015). The UST Assessment Report is provided in Appendix B.

2.1 UST Removal and Soil Sampling

On July 28, 2015 a single 280 gallon heating oil UST was removed from the landscaped area adjacent to the concrete patio at 574 Elderberry Drive (Formerly 459 Elderberry Drive). The former UST location is indicated on Figures 1 and 2 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 5’6” 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 574 Elderberry Drive (Formerly 459 Elderberry Drive) were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for soil, SCDHEC made the determination that NFA was required for 574 Elderberry Drive (Formerly 459 Elderberry Drive). This NFA determination was obtained in a letter dated August 3, 2016. SCDHEC's NFA letter is provided in Appendix C.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2015. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 459 Elderberry Drive, Laurel Bay Military Housing Area*, November 2015.

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

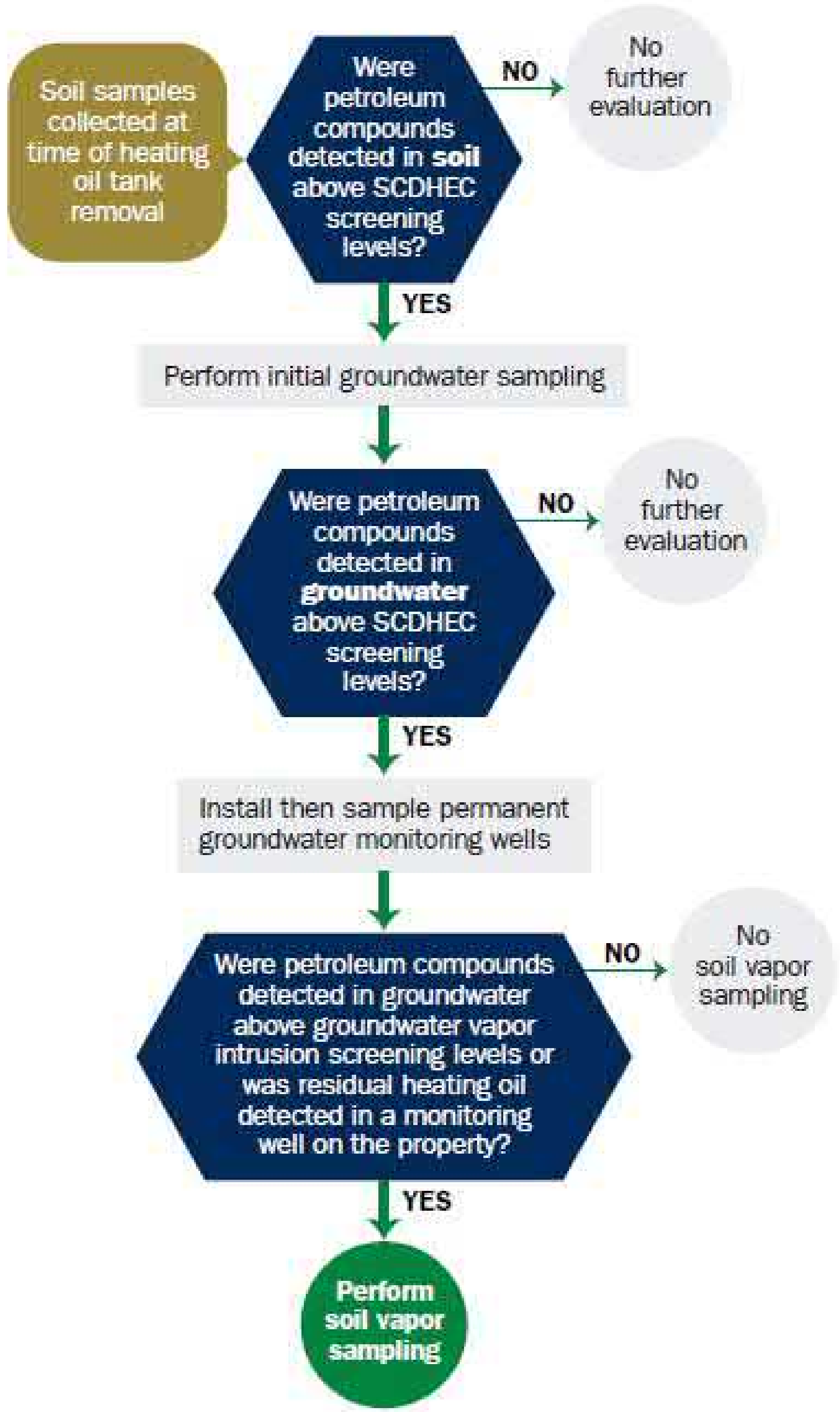
Table 1
Laboratory Analytical Results - Soil
574 Elderberry Drive (Formerly 459 Elderberry Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [1]	Results Sample Collected 07/28/15
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	**0.0289**
Benzo(b)fluoranthene	0.66	**0.0714**
Benzo(k)fluoranthene	0.66	**0.0247**
Chrysene	0.66	**0.0526**
Dibenz(a,h)anthracene	0.66	ND

Notes:
[1] South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.0 and 3.1 (SCDHEC, May 2015 and SCDHEC, February 2016) and the Underground Storage Tank Assessment Guidelines (SCDHEC, February 2006).
Bold font indicates the analyte was detected.
Bold font and shading indicates the concentration exceeds the SCDHEC RBSL.
EPA - United States Environmental Protection Agency
mg/kg - milligram per kilogram
ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The laboratory report is provided in Appendix B.
RBSL - Risk-Based Screening Level
SCDHEC - South Carolina Department Of Health and Environmental Control

Appendix A

Multi-Media Selection Process for LBMH



Appendix A - Multi-Media Selection Process for LBMH

Appendix B

UST Assessment Report

CDM - AECOM
Multimedia Joint Venture

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

459 Elderberry Drive, Laurel Bay Military Housing Area
Street Address or State Road (as applicable)

Beaufort,	Beaufort
City	County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

The petroleum release reported to DHEC on ____________ 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

	459 Elderberry				
A. Product...(ex. Gas, Kerosene)......................	Heating oil				
B. Capacity..(ex. 1k, 2k)................................	280 gal				
C. Age..	Late 1950s				
D. Construction Material..(ex. Steel, FRP)......	Steel				
E. Month/Year of Last Use..............................	Mid 1980s				
F. Depth (ft.) To Base of Tank........................	5'6"				
G. Spill Prevention Equipment Y/N.............	No				
H. Overfill Prevention Equipment Y/N........	No				
I. Method of Closure Removed/Filled.........	Removed				
J. Date Tanks Removed/Filled........................	7/28/2015				
K. Visible Corrosion or Pitting Y/N.............	Yes				
L. Visible Holes Y/N................................	Yes				

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)

UST 459Elderberry 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 459Elderberry 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

		459 Elderberry				
A.	Construction Material..(ex. Steel, FRP).........	Steel & Copper				
B.	Distance from UST to Dispenser..................	N/A				
C.	Number of Dispensers................................	N/A				
D.	Type of System Pressure or Suction..........	Suction				
E.	Was Piping Removed from the Ground? Y/N	Yes				
F.	Visible Corrosion or Pitting Y/N..............	Yes				
G.	Visible Holes Y/N......................................	No				
H.	Age...	Late 1950s				

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. Copper supply and return lines were sound.

VIII. BRIEF SITE DESCRIPTION AND HISTORY

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

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 #
459 Elderb'y	Excav at fill end	Soil	Sandy	5'6"	7/28/15 1315 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.

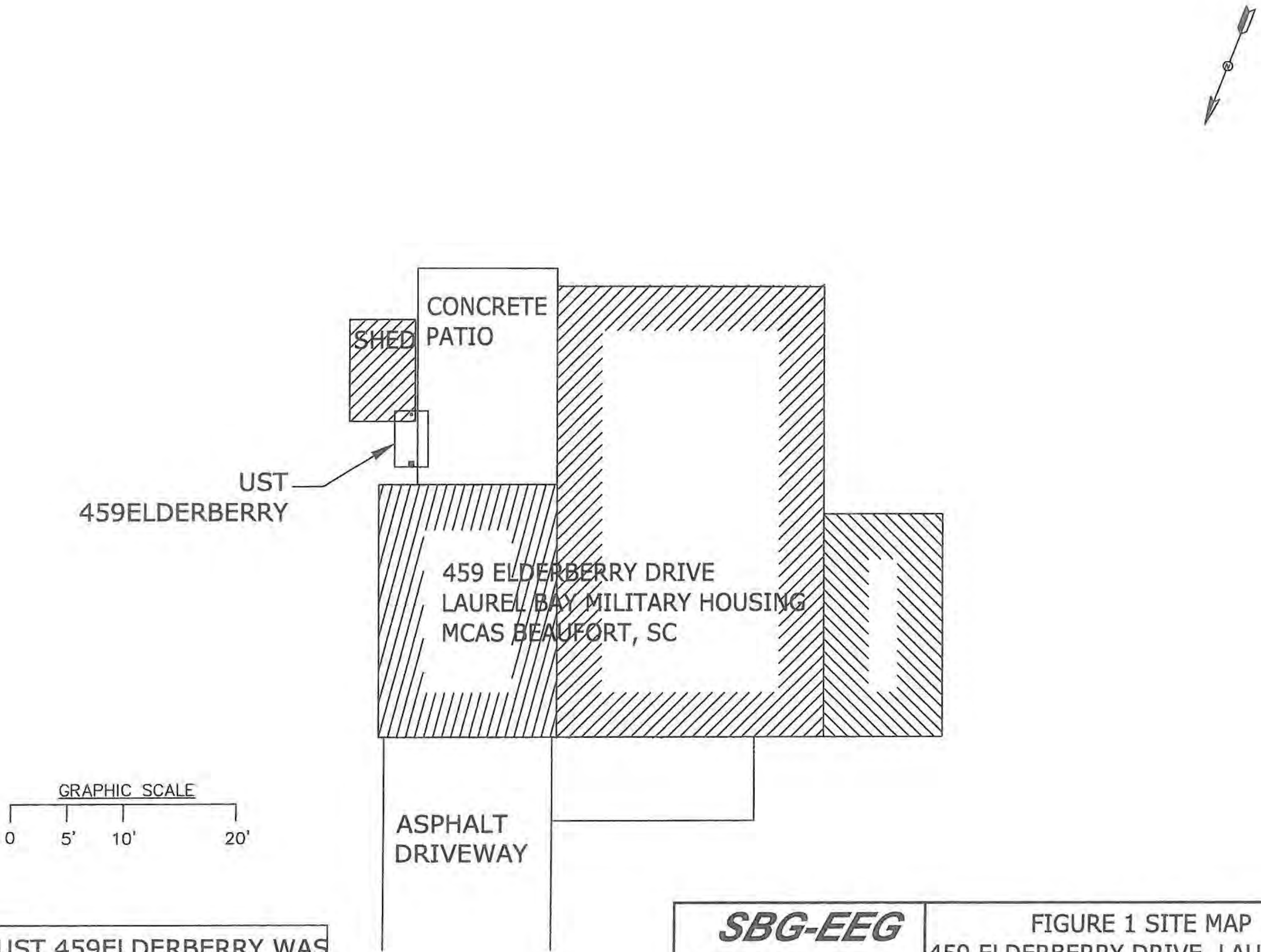
XII. RECEPTORS

	Yes	No
A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? 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

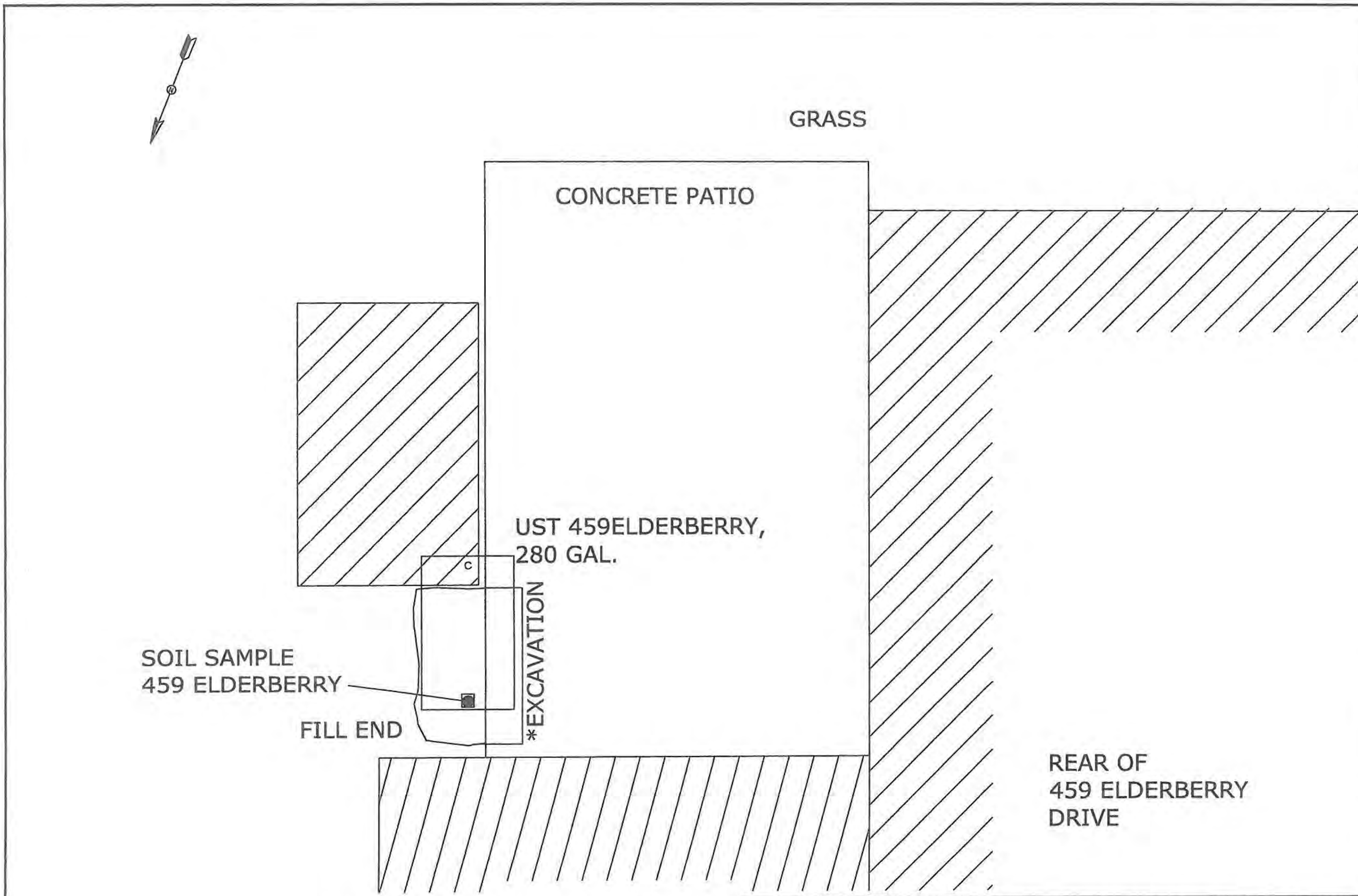
You must supply a <u>scaled</u> site map. It should include all buildings, road names, utilities, tank and dispenser island locations, labeled sample locations, extent of excavation, and any other pertinent information.

(Attach Site Map Here)



UST 459ELDERBERRY WAS 30" BELOW GRADE.

SBG-EEG 7301 RIVERS AVE., SUITE 245 N. CHARLESTON SC 29406-9643 (843) 573-7140	FIGURE 1 SITE MAP 459 ELDERBERRY DRIVE, LAUREL BAY MCAS BEAUFORT SC
SCALE: GRAPHIC	DWG DATE SEPT 2015



GRAPHIC SCALE
0 5'

*NOTE: 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 2 UST SAMPLE LOCATION 459 ELDERBERRY DRIVE, LAUREL BAY MCAS BEAUFORT SC
SCALE: GRAPHIC	DWG DATE SEPT 2015

Picture 1: Location of UST 459Elderberry.

Picture 2: UST 459Elderberry excavation in progress.

Picture 3: Tank pit.

Picture 4: Site after completion of work.

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	459Elderberry						
Benzene	ND						
Toluene	ND						
Ethylbenzene	ND						
Xylenes	ND						
Naphthalene	ND						
Benzo (a) anthracene	0.0289 mg/kg						
Benzo (b) fluoranthene	0.0714 mg/kg						
Benzo (k) fluoranthene	0.0247 mg/kg						
Chrysene	0.0526 mg/kg						
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: 490-84152-1
Client Project/Site: Laurel Bay Housing Project
Revision: 1

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

Attn: Tom McElwee

Authorized for release by:
8/27/2015 12:36:07 PM

Ken Hayes, Project Manager II
(615)301-5035
ken.hayes@testamericainc.com

LINKS

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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.

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Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-84152-1	1220 Cardinal	Soil	07/27/15 13:45	08/01/15 08:45
490-84152-2	459 Elderberry	Soil	07/28/15 13:15	08/01/15 08:45
490-84152-3	1332 Albatross	Soil	07/29/15 11:45	08/01/15 08:45

Job ID: 490-84152-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-84152-1

REVISED REPORT: Revised to correct the sample time for 1332 Albatross (490-84152-3) from 14:45 to 11:45 as listed on the Chain of Custody. This report replaces the one generated on 08/07/15 @ 1639.

Comments
No additional comments.

Receipt
The samples were received on 8/1/2015 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

GC/MS VOA
Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-270885.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-271208.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS Semi VOA

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

Glossary

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

Client Sample Results

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

TestAmerica Job ID: 490-84152-1

Client Sample ID: 1220 Cardinal

Date Collected: 07/27/15 13:45
Date Received: 08/01/15 08:45

Lab Sample ID: 490-84152-1
Matrix: Soil

6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00252	0.000843	mg/Kg	☼	07/27/15 13:45	08/05/15 23:53	1
Ethylbenzene	ND		0.00252	0.000843	mg/Kg	☼	07/27/15 13:45	08/05/15 23:53	1
Naphthalene	ND		0.00629	0.00214	mg/Kg	☼	07/27/15 13:45	08/05/15 23:53	1
Toluene	ND		0.00252	0.000931	mg/Kg	☼	07/27/15 13:45	08/05/15 23:53	1
Xylenes, Total	ND		0.00629	0.00155	mg/Kg	☼	07/27/15 13:45	08/05/15 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*	*07/27/15 13:45*	*08/05/15 23:53*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*07/27/15 13:45*	*08/05/15 23:53*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*07/27/15 13:45*	*08/05/15 23:53*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*07/27/15 13:45*	*08/05/15 23:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0909	0.0136	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Acenaphthylene	ND		0.0909	0.0122	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Anthracene	ND		0.0909	0.0122	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Benzo[a]anthracene	ND		0.0909	0.0204	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Benzo[a]pyrene	ND		0.0909	0.0163	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Benzo[b]fluoranthene	ND		0.0909	0.0163	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Benzo[g,h,i]perylene	ND		0.0909	0.0122	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Benzo[k]fluoranthene	ND		0.0909	0.0190	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
1-Methylnaphthalene	ND		0.0909	0.0190	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Pyrene	ND		0.0909	0.0163	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Phenanthrene	ND		0.0909	0.0122	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Chrysene	ND		0.0909	0.0122	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Dibenz(a,h)anthracene	ND		0.0909	0.00950	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Fluoranthene	ND		0.0909	0.0122	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Fluorene	ND		0.0909	0.0163	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Indeno[1,2,3-cd]pyrene	ND		0.0909	0.0136	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
Naphthalene	ND		0.0909	0.0122	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1
2-Methylnaphthalene	ND		0.0909	0.0217	mg/Kg	☼	08/04/15 11:17	08/06/15 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*29 - 120*	*08/04/15 11:17*	*08/06/15 20:36*	*1*
Terphenyl-d14 (Surr)	*74*		*13 - 120*	*08/04/15 11:17*	*08/06/15 20:36*	*1*
Nitrobenzene-d5 (Surr)	*59*		*27 - 120*	*08/04/15 11:17*	*08/06/15 20:36*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10	0.10	%			08/04/15 16:21	1

Client Sample Results

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

TestAmerica Job ID: 490-84152-1

Client Sample ID: 459 Elderberry

Date Collected: 07/28/15 13:15
Date Received: 08/01/15 08:45

Lab Sample ID: 490-84152-2
Matrix: Soil

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00218	0.000730	mg/Kg	☼	07/28/15 13:15	08/06/15 00:23	1
Ethylbenzene	ND		0.00218	0.000730	mg/Kg	☼	07/28/15 13:15	08/06/15 00:23	1
Naphthalene	ND		0.00545	0.00185	mg/Kg	☼	07/28/15 13:15	08/06/15 00:23	1
Toluene	ND		0.00218	0.000806	mg/Kg	☼	07/28/15 13:15	08/06/15 00:23	1
Xylenes, Total	ND		0.00545	0.00134	mg/Kg	☼	07/28/15 13:15	08/06/15 00:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*	*07/28/15 13:15*	*08/06/15 00:23*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*07/28/15 13:15*	*08/06/15 00:23*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*07/28/15 13:15*	*08/06/15 00:23*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*07/28/15 13:15*	*08/06/15 00:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0714	0.0106	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Acenaphthylene	ND		0.0714	0.00958	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Anthracene	ND		0.0714	0.00958	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Benzo[a]anthracene	0.0289	J	0.0714	0.0160	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Benzo[a]pyrene	0.0476	J	0.0714	0.0128	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Benzo[b]fluoranthene	0.0714		0.0714	0.0128	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Benzo[g,h,i]perylene	0.101		0.0714	0.00958	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Benzo[k]fluoranthene	0.0247	J	0.0714	0.0149	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
1-Methylnaphthalene	ND		0.0714	0.0149	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Pyrene	ND		0.0714	0.0128	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Phenanthrene	ND		0.0714	0.00958	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Chrysene	0.0526	J	0.0714	0.00958	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Dibenz(a,h)anthracene	ND		0.0714	0.00745	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Fluoranthene	ND		0.0714	0.00958	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Fluorene	ND		0.0714	0.0128	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Indeno[1,2,3-cd]pyrene	0.0645	J	0.0714	0.0106	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
Naphthalene	ND		0.0714	0.00958	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1
2-Methylnaphthalene	ND		0.0714	0.0170	mg/Kg	☼	08/03/15 13:40	08/04/15 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	*64*		*29 - 120*	*08/03/15 13:40*	*08/04/15 18:24*	*1*
Terphenyl-d14 (Surr)	*71*		*13 - 120*	*08/03/15 13:40*	*08/04/15 18:24*	*1*
Nitrobenzene-d5 (Surr)	*51*		*27 - 120*	*08/03/15 13:40*	*08/04/15 18:24*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10	0.10	%			08/04/15 16:21	1

Client Sample Results

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

TestAmerica Job ID: 490-84152-1

Client Sample ID: 1332 Albatross

Date Collected: 07/29/15 11:45
Date Received: 08/01/15 08:45

Lab Sample ID: 490-84152-3
Matrix: Soil

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00203	0.000680	mg/Kg	☼	07/29/15 14:45	08/06/15 16:28	1
Ethylbenzene	ND		0.00203	0.000680	mg/Kg	☼	07/29/15 14:45	08/06/15 16:28	1
Naphthalene	ND		0.00508	0.00173	mg/Kg	☼	07/29/15 14:45	08/06/15 16:28	1
Toluene	ND		0.00203	0.000751	mg/Kg	☼	07/29/15 14:45	08/06/15 16:28	1
Xylenes, Total	ND		0.00508	0.00125	mg/Kg	☼	07/29/15 14:45	08/06/15 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*	*07/29/15 14:45*	*08/06/15 16:28*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*07/29/15 14:45*	*08/06/15 16:28*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*07/29/15 14:45*	*08/06/15 16:28*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*07/29/15 14:45*	*08/06/15 16:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0700	0.0104	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Acenaphthylene	ND		0.0700	0.00940	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Anthracene	ND		0.0700	0.00940	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Benzo[a]anthracene	ND		0.0700	0.0157	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Benzo[a]pyrene	ND		0.0700	0.0125	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Benzo[b]fluoranthene	ND		0.0700	0.0125	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Benzo[g,h,i]perylene	ND		0.0700	0.00940	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Benzo[k]fluoranthene	ND		0.0700	0.0146	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
1-Methylnaphthalene	ND		0.0700	0.0146	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Pyrene	0.0436	J	0.0700	0.0125	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Phenanthrene	ND		0.0700	0.00940	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Chrysene	ND		0.0700	0.00940	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Dibenz(a,h)anthracene	ND		0.0700	0.00731	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Fluoranthene	0.0454	J	0.0700	0.00940	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Fluorene	ND		0.0700	0.0125	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Indeno[1,2,3-cd]pyrene	ND		0.0700	0.0104	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
Naphthalene	ND		0.0700	0.00940	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1
2-Methylnaphthalene	ND		0.0700	0.0167	mg/Kg	☼	08/04/15 11:17	08/06/15 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*	*08/04/15 11:17*	*08/06/15 21:01*	*1*
Terphenyl-d14 (Surr)	*81*		*13 - 120*	*08/04/15 11:17*	*08/06/15 21:01*	*1*
Nitrobenzene-d5 (Surr)	*63*		*27 - 120*	*08/04/15 11:17*	*08/06/15 21:01*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10	0.10	%			08/04/15 16:21	1

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

Lab Sample ID: MB 490-270885/7
Matrix: Solid
Analysis Batch: 270885

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			08/05/15 15:34	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			08/05/15 15:34	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			08/05/15 15:34	1
Toluene	ND		0.00200	0.000740	mg/Kg			08/05/15 15:34	1
Xylenes, Total	ND		0.00500	0.00123	mg/Kg			08/05/15 15:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*08/05/15 15:34*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/05/15 15:34*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/05/15 15:34*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/05/15 15:34*	*1*

Lab Sample ID: LCS 490-270885/3
Matrix: Solid
Analysis Batch: 270885

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	0.04455		mg/Kg		89	75 - 127
Ethylbenzene	0.0500	0.04757		mg/Kg		95	80 - 134
Naphthalene	0.0500	0.04963		mg/Kg		99	69 - 150
Toluene	0.0500	0.04577		mg/Kg		92	80 - 132
Xylenes, Total	0.100	0.09432		mg/Kg		94	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 490-270885/4
Matrix: Solid
Analysis Batch: 270885

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04427		mg/Kg		89	75 - 127	1	50
Ethylbenzene	0.0500	0.04673		mg/Kg		93	80 - 134	2	50
Naphthalene	0.0500	0.05022		mg/Kg		100	69 - 150	1	50
Toluene	0.0500	0.04526		mg/Kg		91	80 - 132	1	50
Xylenes, Total	0.100	0.09262		mg/Kg		93	80 - 137	2	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 490-271208/7
Matrix: Solid
Analysis Batch: 271208

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000670	mg/Kg			08/06/15 15:59	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			08/06/15 15:59	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			08/06/15 15:59	1
Toluene	ND		0.00200	0.000740	mg/Kg			08/06/15 15:59	1
Xylenes, Total	ND		0.00500	0.00123	mg/Kg			08/06/15 15:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/06/15 15:59*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/06/15 15:59*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/06/15 15:59*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/06/15 15:59*	*1*

Lab Sample ID: LCS 490-271208/3
Matrix: Solid
Analysis Batch: 271208

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	0.04191		mg/Kg		84	75 - 127
Ethylbenzene	0.0500	0.04358		mg/Kg		87	80 - 134
Naphthalene	0.0500	0.04514		mg/Kg		90	69 - 150
Toluene	0.0500	0.04247		mg/Kg		85	80 - 132
Xylenes, Total	0.100	0.08665		mg/Kg		87	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 490-271208/4
Matrix: Solid
Analysis Batch: 271208

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04935		mg/Kg		99	75 - 127	16	50
Ethylbenzene	0.0500	0.05194		mg/Kg		104	80 - 134	18	50
Naphthalene	0.0500	0.05263		mg/Kg		105	69 - 150	15	50
Toluene	0.0500	0.05052		mg/Kg		101	80 - 132	17	50
Xylenes, Total	0.100	0.1022		mg/Kg		102	80 - 137	17	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 490-270351/1-A
Matrix: Solid
Analysis Batch: 270566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270351

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Anthracene	ND		0.0670	0.00900	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Pyrene	ND		0.0670	0.0120	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Chrysene	ND		0.0670	0.00900	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Fluorene	ND		0.0670	0.0120	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		08/03/15 13:40	08/04/15 15:36	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		08/03/15 13:40	08/04/15 15:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*	*08/03/15 13:40*	*08/04/15 15:36*	*1*
Terphenyl-d14 (Surr)	*85*		*13 - 120*	*08/03/15 13:40*	*08/04/15 15:36*	*1*
Nitrobenzene-d5 (Surr)	*69*		*27 - 120*	*08/03/15 13:40*	*08/04/15 15:36*	*1*

Lab Sample ID: LCS 490-270351/2-A
Matrix: Solid
Analysis Batch: 270566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270351

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.273		mg/Kg		76	38 - 120
Anthracene	1.67	1.368		mg/Kg		82	46 - 124
Benzo[a]anthracene	1.67	1.344		mg/Kg		81	45 - 120
Benzo[a]pyrene	1.67	1.379		mg/Kg		83	45 - 120
Benzo[b]fluoranthene	1.67	1.345		mg/Kg		81	42 - 120
Benzo[g,h,i]perylene	1.67	1.502		mg/Kg		90	38 - 120
Benzo[k]fluoranthene	1.67	1.351		mg/Kg		81	42 - 120
1-Methylnaphthalene	1.67	1.317		mg/Kg		79	32 - 120
Pyrene	1.67	1.265		mg/Kg		76	43 - 120
Phenanthrene	1.67	1.294		mg/Kg		78	45 - 120
Chrysene	1.67	1.366		mg/Kg		82	43 - 120
Dibenz(a,h)anthracene	1.67	1.572		mg/Kg		94	32 - 128
Fluoranthene	1.67	1.401		mg/Kg		84	46 - 120
Fluorene	1.67	1.388		mg/Kg		83	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.486		mg/Kg		89	41 - 121
Naphthalene	1.67	1.207		mg/Kg		72	32 - 120
2-Methylnaphthalene	1.67	1.234		mg/Kg		74	28 - 120

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

TestAmerica Job ID: 490-84152-1

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

Lab Sample ID: LCS 490-270351/2-A
Matrix: Solid
Analysis Batch: 270566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270351

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	76		29 - 120
Terphenyl-d14 (Surr)	79		13 - 120
Nitrobenzene-d5 (Surr)	69		27 - 120

Lab Sample ID: LCSD 490-270351/3-A
Matrix: Solid
Analysis Batch: 270566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 270351

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	1.67	1.575		mg/Kg		94	38 - 120	21	50
Anthracene	1.67	1.659		mg/Kg		100	46 - 124	19	49
Benzo[a]anthracene	1.67	1.660		mg/Kg		100	45 - 120	21	50
Benzo[a]pyrene	1.67	1.694		mg/Kg		102	45 - 120	20	50
Benzo[b]fluoranthene	1.67	1.703		mg/Kg		102	42 - 120	24	50
Benzo[g,h,i]perylene	1.67	1.815		mg/Kg		109	38 - 120	19	50
Benzo[k]fluoranthene	1.67	1.572		mg/Kg		94	42 - 120	15	45
1-Methylnaphthalene	1.67	1.704		mg/Kg		102	32 - 120	26	50
Pyrene	1.67	1.498		mg/Kg		90	43 - 120	17	50
Phenanthrene	1.67	1.582		mg/Kg		95	45 - 120	20	50
Chrysene	1.67	1.623		mg/Kg		97	43 - 120	17	49
Dibenz(a,h)anthracene	1.67	1.927		mg/Kg		116	32 - 128	20	50
Fluoranthene	1.67	1.740		mg/Kg		104	46 - 120	22	50
Fluorene	1.67	1.672		mg/Kg		100	42 - 120	19	50
Indeno[1,2,3-cd]pyrene	1.67	1.826		mg/Kg		110	41 - 121	20	50
Naphthalene	1.67	1.543		mg/Kg		93	32 - 120	24	50
2-Methylnaphthalene	1.67	1.587		mg/Kg		95	28 - 120	25	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	89		29 - 120
Terphenyl-d14 (Surr)	88		13 - 120
Nitrobenzene-d5 (Surr)	86		27 - 120

Lab Sample ID: 490-84171-F-1-B MS
Matrix: Solid
Analysis Batch: 270566

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270351

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	ND		1.92	1.718		mg/Kg	☼	89	25 - 120
Anthracene	ND		1.92	1.832		mg/Kg	☼	95	28 - 125
Benzo[a]anthracene	0.0459	J	1.92	1.830		mg/Kg	☼	93	23 - 120
Benzo[a]pyrene	0.0438	J	1.92	1.917		mg/Kg	☼	97	15 - 128
Benzo[b]fluoranthene	0.0863		1.92	1.930		mg/Kg	☼	96	12 - 133
Benzo[g,h,i]perylene	ND		1.92	2.008		mg/Kg	☼	104	22 - 120
Benzo[k]fluoranthene	0.0345	J	1.92	1.871		mg/Kg	☼	95	28 - 120
1-Methylnaphthalene	ND		1.92	1.817		mg/Kg	☼	94	10 - 120
Pyrene	0.0868		1.92	1.714		mg/Kg	☼	85	20 - 123
Phenanthrene	ND		1.92	1.760		mg/Kg	☼	91	21 - 122
Chrysene	0.0622	J	1.92	1.828		mg/Kg	☼	92	20 - 120

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

TestAmerica Job ID: 490-84152-1

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

Lab Sample ID: 490-84171-F-1-B MS
Matrix: Solid
Analysis Batch: 270566

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270351

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	ND		1.92	2.133		mg/Kg	☼	111	12 - 128
Fluoranthene	ND		1.92	1.954		mg/Kg	☼	102	10 - 143
Fluorene	ND		1.92	1.885		mg/Kg	☼	98	20 - 120
Indeno[1,2,3-cd]pyrene	ND		1.92	2.039		mg/Kg	☼	106	22 - 121
Naphthalene	ND		1.92	1.608		mg/Kg	☼	84	10 - 120
2-Methylnaphthalene	ND		1.92	1.708		mg/Kg	☼	89	13 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*82*		*29 - 120*
Terphenyl-d14 (Surr)	*84*		*13 - 120*
Nitrobenzene-d5 (Surr)	*73*		*27 - 120*

Lab Sample ID: 490-84171-F-1-C MSD
Matrix: Solid
Analysis Batch: 270566

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 270351

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	ND		1.96	1.632		mg/Kg	☼	83	25 - 120	5	50
Anthracene	ND		1.96	1.767		mg/Kg	☼	90	28 - 125	4	49
Benzo[a]anthracene	0.0459	J	1.96	1.749		mg/Kg	☼	87	23 - 120	5	50
Benzo[a]pyrene	0.0438	J	1.96	1.848		mg/Kg	☼	92	15 - 128	4	50
Benzo[b]fluoranthene	0.0863		1.96	1.888		mg/Kg	☼	92	12 - 133	2	50
Benzo[g,h,i]perylene	ND		1.96	1.898		mg/Kg	☼	97	22 - 120	6	50
Benzo[k]fluoranthene	0.0345	J	1.96	1.765		mg/Kg	☼	88	28 - 120	6	45
1-Methylnaphthalene	ND		1.96	1.674		mg/Kg	☼	85	10 - 120	8	50
Pyrene	0.0868		1.96	1.612		mg/Kg	☼	78	20 - 123	6	50
Phenanthrene	ND		1.96	1.685		mg/Kg	☼	86	21 - 122	4	50
Chrysene	0.0622	J	1.96	1.733		mg/Kg	☼	85	20 - 120	5	49
Dibenz(a,h)anthracene	ND		1.96	2.017		mg/Kg	☼	103	12 - 128	6	50
Fluoranthene	ND		1.96	1.908		mg/Kg	☼	97	10 - 143	2	50
Fluorene	ND		1.96	1.759		mg/Kg	☼	90	20 - 120	7	50
Indeno[1,2,3-cd]pyrene	ND		1.96	1.916		mg/Kg	☼	98	22 - 121	6	50
Naphthalene	ND		1.96	1.490		mg/Kg	☼	76	10 - 120	8	50
2-Methylnaphthalene	ND		1.96	1.567		mg/Kg	☼	80	13 - 120	9	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*
Terphenyl-d14 (Surr)	*78*		*13 - 120*
Nitrobenzene-d5 (Surr)	*69*		*27 - 120*

Lab Sample ID: MB 490-270536/1-A
Matrix: Solid
Analysis Batch: 271198

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270536

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Anthracene	ND		0.0670	0.00900	mg/Kg		08/04/15 11:17	08/06/15 15:12	1

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

Lab Sample ID: MB 490-270536/1-A
Matrix: Solid
Analysis Batch: 271198

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270536

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Pyrene	ND		0.0670	0.0120	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Chrysene	ND		0.0670	0.00900	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Fluorene	ND		0.0670	0.0120	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		08/04/15 11:17	08/06/15 15:12	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		08/04/15 11:17	08/06/15 15:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*29 - 120*	*08/04/15 11:17*	*08/06/15 15:12*	*1*
Terphenyl-d14 (Surr)	*89*		*13 - 120*	*08/04/15 11:17*	*08/06/15 15:12*	*1*
Nitrobenzene-d5 (Surr)	*77*		*27 - 120*	*08/04/15 11:17*	*08/06/15 15:12*	*1*

Lab Sample ID: LCS 490-270536/2-A
Matrix: Solid
Analysis Batch: 271198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270536

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.404		mg/Kg		84	38 - 120
Anthracene	1.67	1.618		mg/Kg		97	46 - 124
Benzo[a]anthracene	1.67	1.645		mg/Kg		99	45 - 120
Benzo[a]pyrene	1.67	1.646		mg/Kg		99	45 - 120
Benzo[b]fluoranthene	1.67	1.589		mg/Kg		95	42 - 120
Benzo[g,h,i]perylene	1.67	1.677		mg/Kg		101	38 - 120
Benzo[k]fluoranthene	1.67	1.751		mg/Kg		105	42 - 120
1-Methylnaphthalene	1.67	1.689		mg/Kg		101	32 - 120
Pyrene	1.67	1.630		mg/Kg		98	43 - 120
Phenanthrene	1.67	1.552		mg/Kg		93	45 - 120
Chrysene	1.67	1.581		mg/Kg		95	43 - 120
Dibenz(a,h)anthracene	1.67	1.703		mg/Kg		102	32 - 128
Fluoranthene	1.67	1.657		mg/Kg		99	46 - 120
Fluorene	1.67	1.636		mg/Kg		98	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.678		mg/Kg		101	41 - 121
Naphthalene	1.67	1.560		mg/Kg		94	32 - 120
2-Methylnaphthalene	1.67	1.587		mg/Kg		95	28 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*87*		*29 - 120*
Terphenyl-d14 (Surr)	*98*		*13 - 120*

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

Lab Sample ID: LCS 490-270536/2-A
Matrix: Solid
Analysis Batch: 271198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270536

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	*99*		*27 - 120*

Lab Sample ID: LCSD 490-270536/3-A
Matrix: Solid
Analysis Batch: 271198

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 270536

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	1.67	1.112		mg/Kg		67	38 - 120	23	50
Anthracene	1.67	1.279		mg/Kg		77	46 - 124	23	49
Benzo[a]anthracene	1.67	1.316		mg/Kg		79	45 - 120	22	50
Benzo[a]pyrene	1.67	1.306		mg/Kg		78	45 - 120	23	50
Benzo[b]fluoranthene	1.67	1.310		mg/Kg		79	42 - 120	19	50
Benzo[g,h,i]perylene	1.67	1.366		mg/Kg		82	38 - 120	20	50
Benzo[k]fluoranthene	1.67	1.340		mg/Kg		80	42 - 120	27	45
1-Methylnaphthalene	1.67	1.327		mg/Kg		80	32 - 120	24	50
Pyrene	1.67	1.346		mg/Kg		81	43 - 120	19	50
Phenanthrene	1.67	1.242		mg/Kg		75	45 - 120	22	50
Chrysene	1.67	1.273		mg/Kg		76	43 - 120	22	49
Dibenz(a,h)anthracene	1.67	1.400		mg/Kg		84	32 - 128	20	50
Fluoranthene	1.67	1.349		mg/Kg		81	46 - 120	21	50
Fluorene	1.67	1.290		mg/Kg		77	42 - 120	24	50
Indeno[1,2,3-cd]pyrene	1.67	1.347		mg/Kg		81	41 - 121	22	50
Naphthalene	1.67	1.177		mg/Kg		71	32 - 120	28	50
2-Methylnaphthalene	1.67	1.202		mg/Kg		72	28 - 120	28	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*
Terphenyl-d14 (Surr)	*77*		*13 - 120*
Nitrobenzene-d5 (Surr)	*72*		*27 - 120*

Lab Sample ID: 490-84145-E-1-B MS
Matrix: Solid
Analysis Batch: 271198

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270536

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	ND		1.66	1.139		mg/Kg		69	25 - 120
Anthracene	ND		1.66	1.302		mg/Kg		79	28 - 125
Benzo[a]anthracene	ND		1.66	1.339		mg/Kg		81	23 - 120
Benzo[a]pyrene	ND		1.66	1.306		mg/Kg		79	15 - 128
Benzo[b]fluoranthene	ND		1.66	1.309		mg/Kg		79	12 - 133
Benzo[g,h,i]perylene	ND		1.66	1.357		mg/Kg		82	22 - 120
Benzo[k]fluoranthene	ND		1.66	1.371		mg/Kg		83	28 - 120
1-Methylnaphthalene	ND		1.66	1.328		mg/Kg		80	10 - 120
Pyrene	ND		1.66	1.334		mg/Kg		81	20 - 123
Phenanthrene	ND		1.66	1.267		mg/Kg		77	21 - 122
Chrysene	ND		1.66	1.301		mg/Kg		79	20 - 120
Dibenz(a,h)anthracene	ND		1.66	1.419		mg/Kg		86	12 - 128
Fluoranthene	ND		1.66	1.379		mg/Kg		83	10 - 143

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

Lab Sample ID: 490-84145-E-1-B MS
Matrix: Solid
Analysis Batch: 271198

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270536

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	ND		1.66	1.313		mg/Kg		79	20 - 120
Indeno[1,2,3-cd]pyrene	ND		1.66	1.383		mg/Kg		84	22 - 121
Naphthalene	ND		1.66	1.230		mg/Kg		74	10 - 120
2-Methylnaphthalene	ND		1.66	1.251		mg/Kg		76	13 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*
Terphenyl-d14 (Surr)	*80*		*13 - 120*
Nitrobenzene-d5 (Surr)	*77*		*27 - 120*

Lab Sample ID: 490-84145-E-1-C MSD
Matrix: Solid
Analysis Batch: 271198

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 270536

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	ND		1.62	0.9026		mg/Kg		56	25 - 120	23	50
Anthracene	ND		1.62	1.034		mg/Kg		64	28 - 125	23	49
Benzo[a]anthracene	ND		1.62	1.043		mg/Kg		64	23 - 120	25	50
Benzo[a]pyrene	ND		1.62	1.043		mg/Kg		64	15 - 128	22	50
Benzo[b]fluoranthene	ND		1.62	1.042		mg/Kg		64	12 - 133	23	50
Benzo[g,h,i]perylene	ND		1.62	1.077		mg/Kg		67	22 - 120	23	50
Benzo[k]fluoranthene	ND		1.62	1.047		mg/Kg		65	28 - 120	27	45
1-Methylnaphthalene	ND		1.62	1.035		mg/Kg		64	10 - 120	25	50
Pyrene	ND		1.62	1.055		mg/Kg		65	20 - 123	23	50
Phenanthrene	ND		1.62	1.019		mg/Kg		63	21 - 122	22	50
Chrysene	ND		1.62	1.029		mg/Kg		64	20 - 120	23	49
Dibenz(a,h)anthracene	ND		1.62	1.092		mg/Kg		67	12 - 128	26	50
Fluoranthene	ND		1.62	1.066		mg/Kg		66	10 - 143	26	50
Fluorene	ND		1.62	1.032		mg/Kg		64	20 - 120	24	50
Indeno[1,2,3-cd]pyrene	ND		1.62	1.078		mg/Kg		67	22 - 121	25	50
Naphthalene	ND		1.62	0.9487		mg/Kg		59	10 - 120	26	50
2-Methylnaphthalene	ND		1.62	0.9672		mg/Kg		60	13 - 120	26	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*
Terphenyl-d14 (Surr)	*64*		*13 - 120*
Nitrobenzene-d5 (Surr)	*60*		*27 - 120*

Method: Moisture - Percent Moisture

Lab Sample ID: 490-84208-A-6 DU
Matrix: Solid
Analysis Batch: 270638

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	74		74		%		0.9	20

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

TestAmerica Job ID: 490-84152-1

GC/MS VOA

Prep Batch: 270186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84152-1	1220 Cardinal	Total/NA	Soil	5035	
490-84152-2	459 Elderberry	Total/NA	Soil	5035	
490-84152-3	1332 Albatross	Total/NA	Soil	5035	

Analysis Batch: 270885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84152-1	1220 Cardinal	Total/NA	Soil	8260B	270186
490-84152-2	459 Elderberry	Total/NA	Soil	8260B	270186
LCS 490-270885/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-270885/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-270885/7	Method Blank	Total/NA	Solid	8260B	

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Analysis Batch: 271208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84152-3	1332 Albatross	Total/NA	Soil	8260B	270186
LCS 490-271208/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-271208/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-271208/7	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 270351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84152-2	459 Elderberry	Total/NA	Soil	3550C	
490-84171-F-1-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-84171-F-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
LCS 490-270351/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 490-270351/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
MB 490-270351/1-A	Method Blank	Total/NA	Solid	3550C	

Prep Batch: 270536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84145-E-1-B MS	Matrix Spike	Total/NA	Solid	3550C	
490-84145-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
490-84152-1	1220 Cardinal	Total/NA	Soil	3550C	
490-84152-3	1332 Albatross	Total/NA	Soil	3550C	
LCS 490-270536/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 490-270536/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
MB 490-270536/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 270566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84152-2	459 Elderberry	Total/NA	Soil	8270D	270351
490-84171-F-1-B MS	Matrix Spike	Total/NA	Solid	8270D	270351
490-84171-F-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	270351
LCS 490-270351/2-A	Lab Control Sample	Total/NA	Solid	8270D	270351
LCSD 490-270351/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	270351
MB 490-270351/1-A	Method Blank	Total/NA	Solid	8270D	270351

GC/MS Semi VOA (Continued)

Analysis Batch: 271198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84145-E-1-B MS	Matrix Spike	Total/NA	Solid	8270D	270536
490-84145-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	270536
490-84152-1	1220 Cardinal	Total/NA	Soil	8270D	270536
490-84152-3	1332 Albatross	Total/NA	Soil	8270D	270536
LCS 490-270536/2-A	Lab Control Sample	Total/NA	Solid	8270D	270536
LCSD 490-270536/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	270536
MB 490-270536/1-A	Method Blank	Total/NA	Solid	8270D	270536

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General Chemistry

Analysis Batch: 270638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-84134-A-1 MS	Matrix Spike	Total/NA	Solid	Moisture	
490-84134-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	
490-84152-1	1220 Cardinal	Total/NA	Soil	Moisture	
490-84152-2	459 Elderberry	Total/NA	Soil	Moisture	
490-84152-3	1332 Albatross	Total/NA	Soil	Moisture	
490-84208-A-6 DU	Duplicate	Total/NA	Solid	Moisture	

Client Sample ID: 1220 Cardinal

Date Collected: 07/27/15 13:45
Date Received: 08/01/15 08:45

Lab Sample ID: 490-84152-1
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.423 g	5.0 mL	270186	07/27/15 13:45	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5.423 g	5.0 mL	270885	08/05/15 23:53	AK1	TAL NSH
Total/NA	Prep	3550C			30.16 g	1 mL	270536	08/04/15 11:17	LDC	TAL NSH
Total/NA	Analysis	8270D		1	30.16 g	1 mL	271198	08/06/15 20:36	SNR	TAL NSH
Total/NA	Analysis	Moisture		1			270638	08/04/15 16:21	HMV	TAL NSH

Client Sample ID: 459 Elderberry

Date Collected: 07/28/15 13:15
Date Received: 08/01/15 08:45

Lab Sample ID: 490-84152-2
Matrix: Soil

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Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5.0 mL	270186	07/28/15 13:15	JLP	TAL NSH
Total/NA	Analysis	8260B		1	4.95 g	5.0 mL	270885	08/06/15 00:23	AK1	TAL NSH
Total/NA	Prep	3550C			30.38 g	1 mL	270351	08/03/15 13:40	RMS	TAL NSH
Total/NA	Analysis	8270D		1	30.38 g	1 mL	270566	08/04/15 18:24	SNR	TAL NSH
Total/NA	Analysis	Moisture		1			270638	08/04/15 16:21	HMV	TAL NSH

Client Sample ID: 1332 Albatross

Date Collected: 07/29/15 11:45
Date Received: 08/01/15 08:45

Lab Sample ID: 490-84152-3
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.297 g	5.0 mL	270186	07/29/15 14:45	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5.297 g	5.0 mL	271208	08/06/15 16:28	SLM	TAL NSH
Total/NA	Prep	3550C			30.89 g	1 mL	270536	08/04/15 11:17	LDC	TAL NSH
Total/NA	Analysis	8270D		1	30.89 g	1 mL	271198	08/06/15 21:01	SNR	TAL NSH
Total/NA	Analysis	Moisture		1			270638	08/04/15 16:21	HMV	TAL NSH

Laboratory References:

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

Method Summary

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

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
South Carolina	State Program	4	84009 (001)	02-28-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8270D	3550C	Soil	1-Methylnaphthalene
Moisture		Soil	Percent Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN

COOLER RECEIPT FORM

490-84152 Chain of Custody

Cooler Received/Opened On 8/1/2015 @ 0845

1. Tracking # 4001 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 3.4 *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 (intial) MDW

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 (intial) DA

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 (intial) DA

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 (intial) DA

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

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

BIS = Broken in shipment

Cooler Receipt Form.doc

Loc: 490
84152

8/27/2015

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

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

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

Compliance Monitoring? Yes ____ No ____
Enforcement Action? Yes ____ No ____

Client Name/Account #: SBG - 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
Sampler Name: (Print) Pratt Shaw
Sampler Signature: [signature]

Site State: SC
PO#: 1406
TA Quote #:
Project ID: Laurel Bay Housing Project
Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	~~HCl (Blue Label)~~ Sodium Bisulfate	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass (Yellow Label)	None (Black Label)	Other (Specify) Methanol	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	Analyze For: BTEX + Napth - 8260	PAH - 8270D	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
1220 Cardinal	7/27/15	1345	5	X					2				2	1					X		X	X				
459 Elderberry	7/28/15	1315	5	X					2				2	1					X		X	X				
1332 Albatross	7/29/15	1145	5	X					2				2	1					X		X	X				

Special Instructions:

Method of Shipment: FEDEX

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	7/31/15	1000	FedEx		
Relinquished by:	Date	Time	Received by TestAmerica: [signature] TAN	8-1-15	0845

Laboratory Comments:
Temperature Upon Receipt: 3.6
VOCs Free of Headspace? Y N

Login Sample Receipt Checklist

Client: Small Business Group Inc.

Job Number: 490-84152-1

Login Number: 84152
List Number: 1
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	3.6C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ATTACHMENT A

NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

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 29904	Generator's Site Address (If different than mailing):		A. Manifest Number WMNA 01519125
4. Generator's Phone 843-879-0411			B. State Generator's ID
5. Transporter 1 Company Name	6. US EPA ID Number		C. State Transporter's ID
			D. Transporter's Phone
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 DRIVE, 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 No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
a. HEATING OIL TANK FILLED WITH SAND WM Profile # 102655SC					
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

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	Signature "On behalf of"	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year

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

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

Healthy People. Healthy Communities.

August 3, 2016

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
Dated July 2015, November 2015

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (the Department) received the Underground Storage Tanks (USTs) Assessment Reports for the addresses listed in the attachment. 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 petruslb@dhec.sc.gov or 803-898-0294.

Sincerely,

Laurel Petrus, Environmental Engineer Associate
Bureau of Land and Waste Management

Cc: Russell Berry, EQC Region 8 (via email)
Bryan Beck, NAVFAC MIDATLANTIC (via email)
Craig Ehde (via email)

Attachment to: Petrus to Drawdy
Subject: No Further Action
Dated August 3, 2016

Laurel Bay Underground Assessment Reports for (28 addresses/29 tanks)

No Further Action recommendation:	
309 Ash	1001 Bobwhite
477 Dogwood Tank 2	1020 Foxglove
563 Dahlia	1063 Gardenia
659 Camellia	1065 Gardenia Tank 2
1213 Cardinal	1100 Iris Tank 3*
114 Banyan	1139 Iris
158 Cypress	1141 Iris Tank 2
459 Elderberry	1174 Bobwhite
611 Dahlia	1184 Bobwhite Tank 1
656 Camellia	1184 Bobwhite Tank 2
671 Camellia	1220 Cardinal
678 Camellia	1253 Dove
724 Bluebell	1332 Albatross
732 Bluebell	1387 Dove
934 Albacore	
*1100 Iris Tank 1-NFA 12/19/2008, Tank 2-NFA 7/1/15; Paperwork for Tank 3 is labeled Tank 2	