SUMMARY REPORT
112 DOGWOOD DRIVE (FORMERLY 477 DOGWOOD 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 112 Dogwood Drive (Formerly 477 Dogwood 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 112 Dogwood Drive (Formerly 477 Dogwood Drive). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 477 Dogwood Drive* (MCAS Beaufort, March 2015) and *SCDHEC UST Assessment Report – 477 Dogwood Drive* (MCAS Beaufort, July 2015). The UST Assessment Reports are provided in Appendix B.

2.1 UST Removal and Soil Sampling

Two 280 gallon heating oil USTs were removed at 112 Dogwood Drive (Formerly 477 Dogwood Drive). Tank 1 was removed on October 13, 2014, from the landscaped area adjacent to the concrete porch. Tank 2 was removed on February 3, 2015, from the to the concrete porch area. The UST locations are indicated on Figures 1 and 2 of the UST Assessment Reports (Appendix B). The USTs were 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 removals. According to the UST Assessment Reports (Appendix B), the depth to the bases of the USTs were 4'4" (Tank 1) and 5'8" (Tank 2) bgs and a single soil sample was collected for each from that depth. The samples were collected from the fill port side of the former USTs 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 reports are included in the UST Assessment Reports 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 112 Dogwood Drive (Formerly 477 Dogwood 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 112 Dogwood Drive (Formerly 477 Dogwood Drive). This NFA determination was obtained in letters dated July 1, 2015 and August 3, 2016 (Tank 2). SCDHEC's NFA letters are 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 – 477 Dogwood Drive, Laurel Bay Military Housing Area*, March 2015.

Marine Corps Air Station Beaufort, 2015. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 477 Dogwood Drive, Laurel Bay Military Housing Area*, July 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
112 Dogwood Drive (Formerly 477 Dogwood Drive)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs [1]	Results Samples Collected 10/13/14 and 02/03/15	
		477 Dogwood-1	477 Dogwood-2
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)			
Benzene	0.003	ND	ND
Ethylbenzene	1.15	ND	ND
Naphthalene	0.036	**0.00487**	ND
Toluene	0.627	ND	ND
Xylenes, Total	13.01	ND	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)			
Benzo(a)anthracene	0.66	ND	ND
Benzo(b)fluoranthene	0.66	ND	ND
Benzo(k)fluoranthene	0.66	ND	ND
Chrysene	0.66	ND	ND
Dibenz(a,h)anthracene	0.66	ND	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

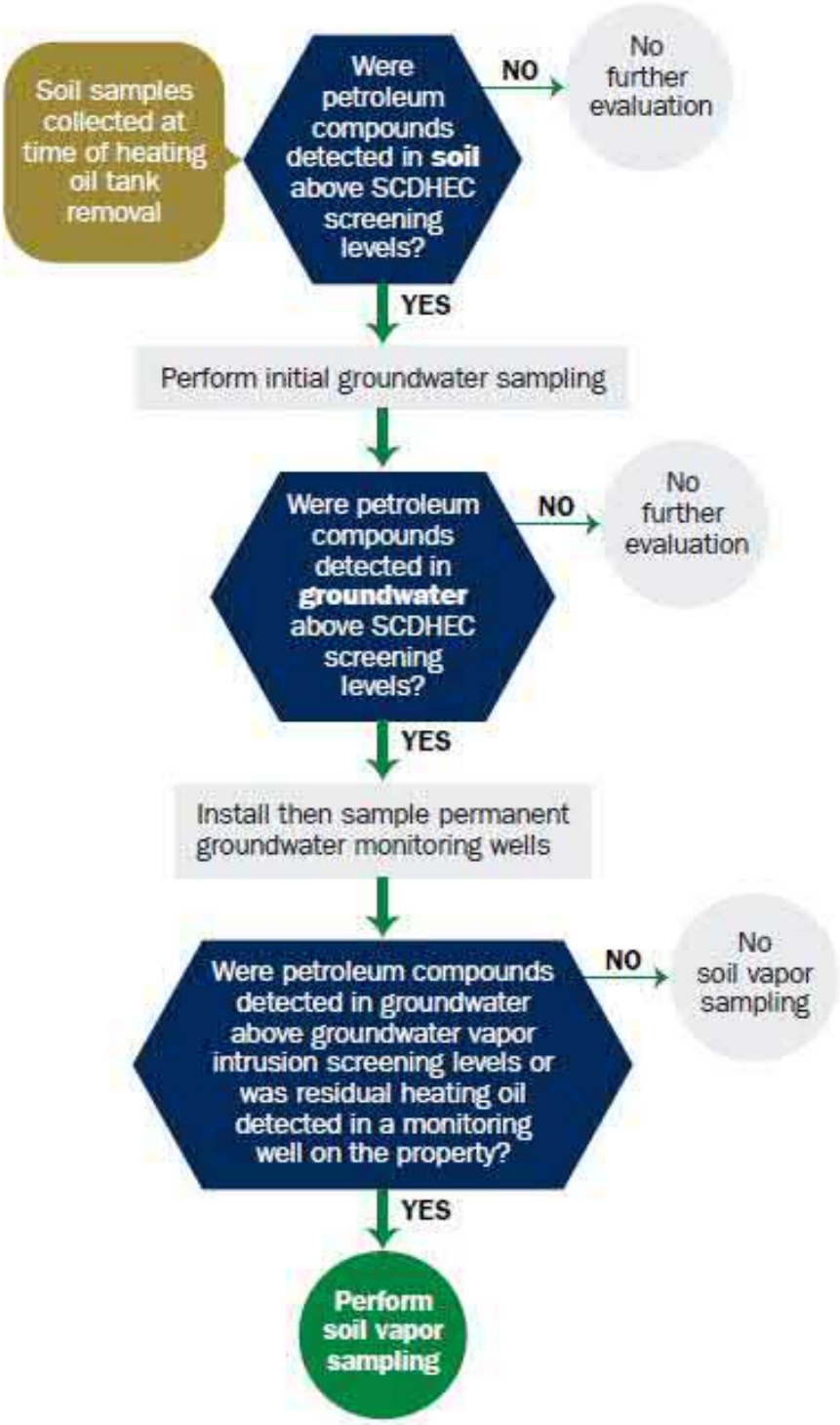
ND - not detected at the reporting limit (or method detection limit if shown on the laboratory report). The laboratory report is provided in Appendix B.

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Appendix A
Multi-Media Selection Process for LBMH

CDM - AECOM
Multimedia Joint Venture



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Reports

CDM - AECOM
Multimedia Joint Venture

Attachment 1

South Carolina Department of Health and Environmental Control (SCDHEC)

Underground Storage Tank (UST) Assessment Report

Date Received RECEIVED

State Use Only

MAR 17 2015

SC DHEC - Bureau of Land & Waste Management

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

477 Dogwood 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

A.	Product...(ex. Gas, Kerosene).....	477Dogwood-1				
B.	Capacity..(ex. 1k, 2k).....	Heating oil				
C.	Age.....	280 gal				
D.	Construction Material..(ex. Steel, FRP).....	Late 1950s				
E.	Month/Year of Last Use.....	Steel				
F.	Depth (ft.) To Base of Tank.....	Mid 1980s				
G.	Spill Prevention Equipment Y/N.....	4'4"				
H.	Overfill Prevention Equipment Y/N.....	No				
I.	Method of Closure Removed/Filled.....	No				
J.	Date Tanks Removed/Filled.....	Removed				
K.	Visible Corrosion or Pitting Y/N.....	10/13/2014				
L.	Visible Holes Y/N.....	Yes				
		Yes				

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 477Dogwood-1 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 477Dogwood-1 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

477Dogwood-1				
Steel & Copper				
N/A				
N/A				
Suction				
No				
Yes				
No				
Late 1950s				

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

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

C. Number of Dispensers.....

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

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

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

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

H. Age.....

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

Corrosion and pitting were found on the surface of the steel vent pipe. 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 #
477 Dogwood1	Excav at fill end	Soil	Sandy-clay	4'4"	10/13/14 1500 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect 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.

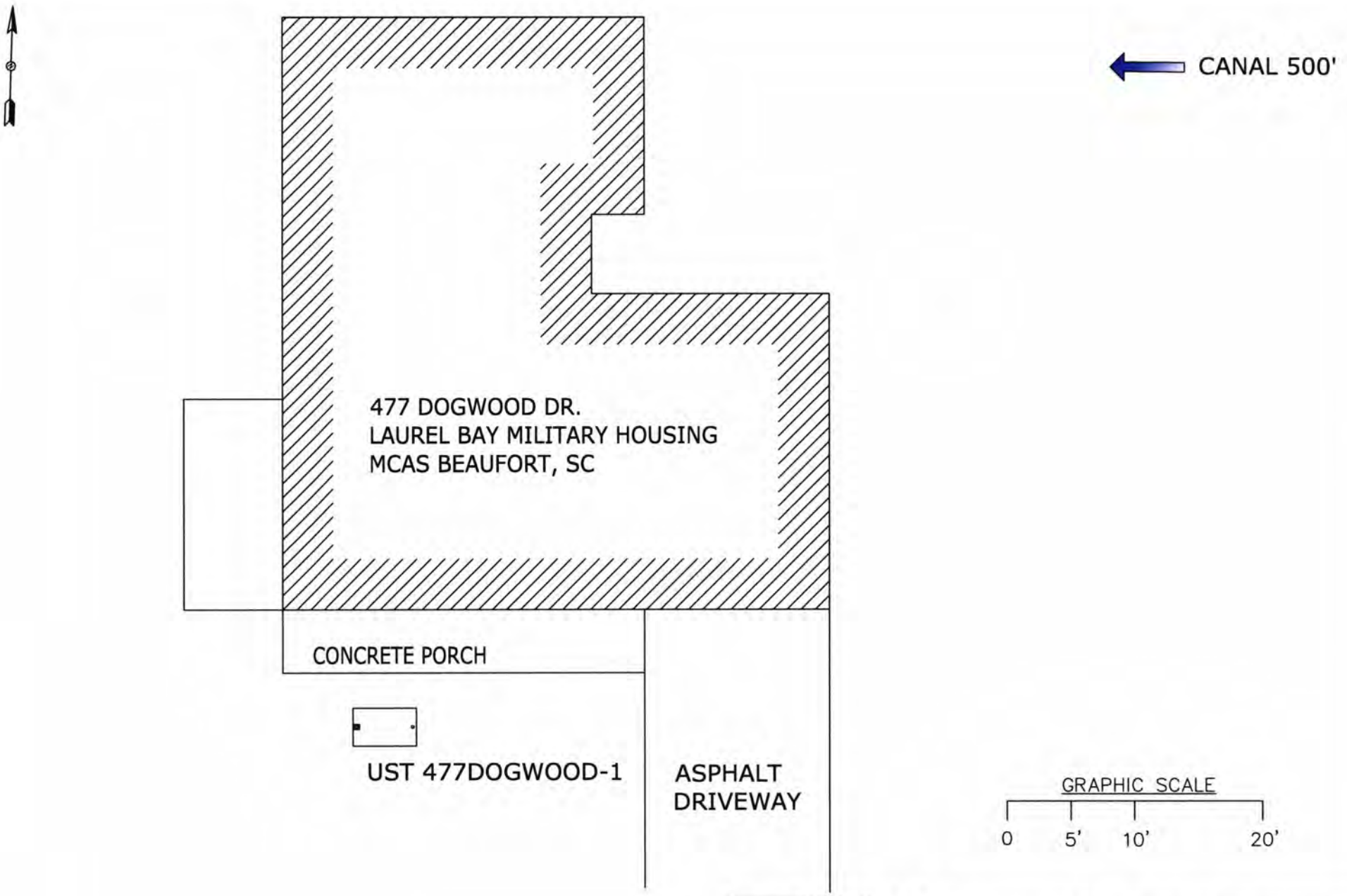
XII. RECEPTORS

	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.

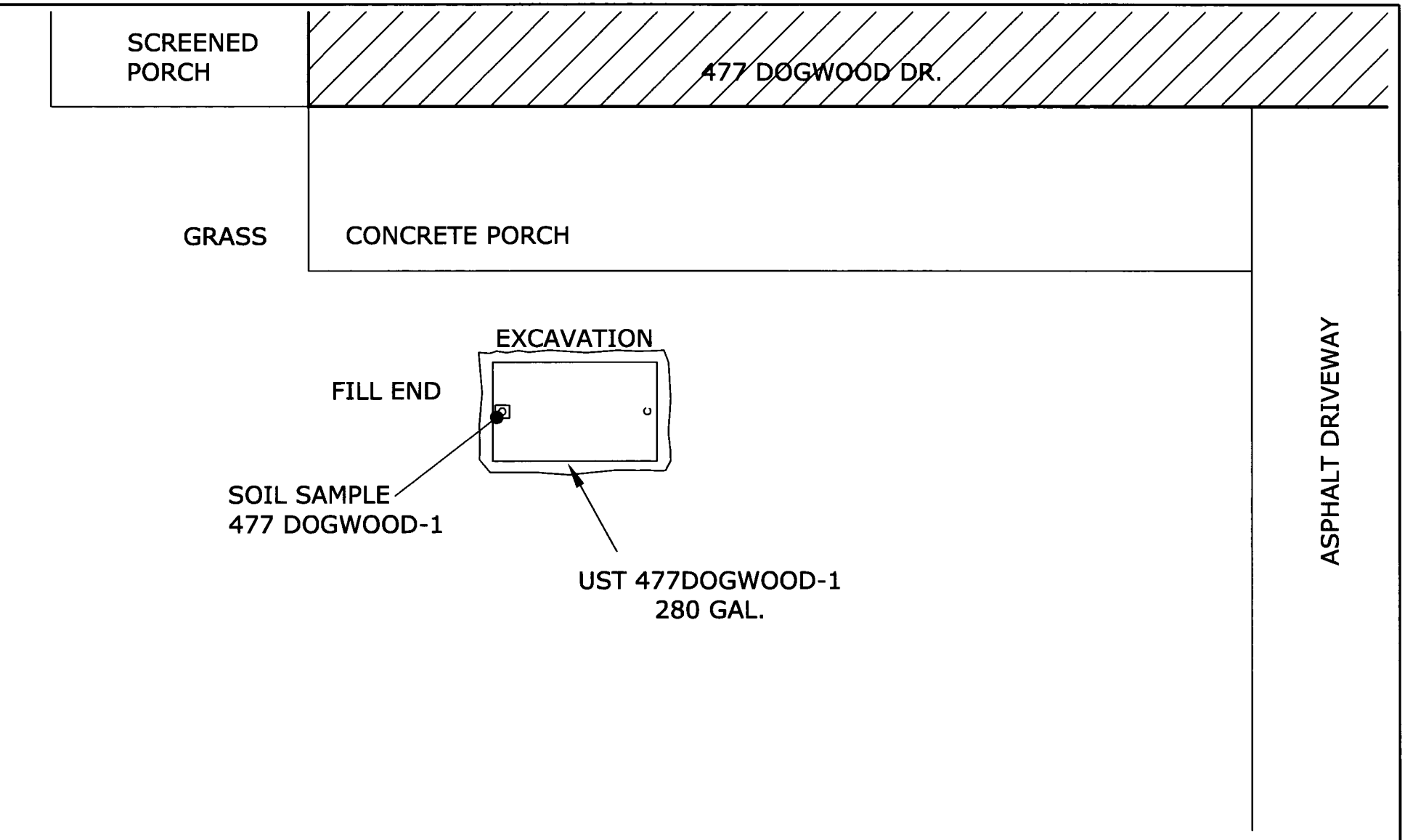
(Attach Site Map Here)



SBG-EEG
10179 HWY 78
LADSON, SC 29456
ph. (843) 879-0400

FIGURE 1 SITE MAP
477 DOGWOOD DR., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE NOV 2014



GRAPHIC SCALE
0 5'

UST 477DOGWOOD-1 WAS 16" BELOW GRADE.

SBG-EEG
10179 HWY 78
LADSON, SC 29456
ph. (843) 879-0400

FIGURE 2 UST SAMPLE LOCATION
477 DOGWOOD DR., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE NOV 2014

Picture 1: Location of UST 477Dogwood-1.

Picture 2: UST 477Dogwood-1 tank pit.

Picture 3: Site at 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	477Dogwood-1						
Benzene	ND						
Toluene	ND						
Ethylbenzene	ND						
Xylenes	ND						
Naphthalene	0.00487 mg/kg						
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: 490-63822-1
Client Project/Site: Laurel Bay Site

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

Attn: Tom McElwee

Authorized for release by:
10/30/2014 1:08:12 PM

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

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

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

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Table of Contents

Sample Summary

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

TestAmerica Job ID: 490-63822-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-63822-1	1462 Cardinal	Soil	10/09/14 12:15	10/15/14 08:20
490-63822-2	477 Dogwood-1	Soil	10/13/14 15:00	10/15/14 08:20

Case Narrative

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

TestAmerica Job ID: 490-63822-1

Job ID: 490-63822-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-63822-1

Comments
No additional comments.

Receipt
The samples were received on 10/15/2014 8:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

GC/MS VOA
Method(s) 8260B: The method blank for batch 199730 contained naphthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

GC/MS Semi VOA
Method(s) 8270D: The surrogate recovery for the laboratory control sample (LCS) associated with batch 201160 was outside the upper control limits. All associated sample surrogates fell within acceptance criteria; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or 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.

Definitions/Glossary

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

TestAmerica Job ID: 490-63822-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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
X	Surrogate is outside control limits

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

TestAmerica Job ID: 490-63822-1

Client Sample ID: 1462 Cardinal
Date Collected: 10/09/14 12:15
Date Received: 10/15/14 08:20

Lab Sample ID: 490-63822-1
Matrix: Soil
Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00265	0.000887	mg/Kg	☼	10/17/14 14:17	10/21/14 18:37	1
Ethylbenzene	ND		0.00265	0.000887	mg/Kg	☼	10/17/14 14:17	10/21/14 18:37	1
Naphthalene	0.00337	J B	0.00662	0.00225	mg/Kg	☼	10/17/14 14:17	10/21/14 18:37	1
Toluene	ND		0.00265	0.000979	mg/Kg	☼	10/17/14 14:17	10/21/14 18:37	1
Xylenes, Total	ND		0.00397	0.000887	mg/Kg	☼	10/17/14 14:17	10/21/14 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*	*10/17/14 14:17*	*10/21/14 18:37*	*1*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*10/17/14 14:17*	*10/21/14 18:37*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*	*10/17/14 14:17*	*10/21/14 18:37*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*10/17/14 14:17*	*10/21/14 18:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0666	0.00994	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Acenaphthylene	ND		0.0666	0.00895	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Anthracene	ND		0.0666	0.00895	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Benzo[a]anthracene	ND		0.0666	0.0149	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Benzo[a]pyrene	ND		0.0666	0.0119	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Benzo[b]fluoranthene	ND		0.0666	0.0119	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Benzo[g,h,i]perylene	ND		0.0666	0.00895	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Benzo[k]fluoranthene	ND		0.0666	0.0139	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
1-Methylnaphthalene	ND		0.0666	0.0139	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Pyrene	ND		0.0666	0.0119	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Phenanthrene	ND		0.0666	0.00895	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Chrysene	ND		0.0666	0.00895	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Dibenz(a,h)anthracene	ND		0.0666	0.00696	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Fluoranthene	ND		0.0666	0.00895	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Fluorene	ND		0.0666	0.0119	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Indeno[1,2,3-cd]pyrene	ND		0.0666	0.00994	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
Naphthalene	ND		0.0666	0.00895	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1
2-Methylnaphthalene	ND		0.0666	0.0159	mg/Kg	☼	10/21/14 17:49	10/24/14 20:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*49*		*29 - 120*	*10/21/14 17:49*	*10/24/14 20:29*	*1*
Terphenyl-d14 (Surr)	*58*		*13 - 120*	*10/21/14 17:49*	*10/24/14 20:29*	*1*
Nitrobenzene-d5 (Surr)	*48*		*27 - 120*	*10/21/14 17:49*	*10/24/14 20:29*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	79		0.10	0.10	%			10/15/14 16:55	1

Client Sample ID: 477 Dogwood-1

Date Collected: 10/13/14 15:00
Date Received: 10/15/14 08:20

Lab Sample ID: 490-63822-2

Matrix: Soil
Percent Solids: 73.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00340	0.00114	mg/Kg	¤	10/17/14 14:17	10/21/14 18:08	1
Ethylbenzene	ND		0.00340	0.00114	mg/Kg	¤	10/17/14 14:17	10/21/14 18:08	1
Naphthalene	0.00487	J B	0.00850	0.00289	mg/Kg	¤	10/17/14 14:17	10/21/14 18:08	1
Toluene	ND		0.00340	0.00126	mg/Kg	¤	10/17/14 14:17	10/21/14 18:08	1
Xylenes, Total	ND		0.00510	0.00114	mg/Kg	¤	10/17/14 14:17	10/21/14 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*	*10/17/14 14:17*	*10/21/14 18:08*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*10/17/14 14:17*	*10/21/14 18:08*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*	*10/17/14 14:17*	*10/21/14 18:08*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*10/17/14 14:17*	*10/21/14 18:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.134	0.0200	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Acenaphthylene	ND		0.134	0.0180	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Anthracene	ND		0.134	0.0180	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Benzo[a]anthracene	ND		0.134	0.0300	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Benzo[a]pyrene	ND		0.134	0.0240	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Benzo[b]fluoranthene	ND		0.134	0.0240	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Benzo[g,h,i]perylene	ND		0.134	0.0180	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Benzo[k]fluoranthene	ND		0.134	0.0280	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
1-Methylnaphthalene	ND		0.134	0.0280	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Pyrene	ND		0.134	0.0240	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Phenanthrene	ND		0.134	0.0180	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Chrysene	ND		0.134	0.0180	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Dibenz(a,h)anthracene	ND		0.134	0.0140	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Fluoranthene	ND		0.134	0.0180	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Fluorene	ND	*	0.134	0.0240	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Indeno[1,2,3-cd]pyrene	ND		0.134	0.0200	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
Naphthalene	ND		0.134	0.0180	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2
2-Methylnaphthalene	ND		0.134	0.0320	mg/Kg	¤	10/27/14 09:14	10/29/14 16:47	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*	*10/27/14 09:14*	*10/29/14 16:47*	*2*
Terphenyl-d14 (Surr)	*83*		*13 - 120*	*10/27/14 09:14*	*10/29/14 16:47*	*2*
Nitrobenzene-d5 (Surr)	*71*		*27 - 120*	*10/27/14 09:14*	*10/29/14 16:47*	*2*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10	0.10	%			10/15/14 16:55	1

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

Lab Sample ID: 490-63897-A-13-D MS
Matrix: Solid
Analysis Batch: 199730

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 199131

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		0.0500	0.03520		mg/Kg	☼	70	31 - 143
Ethylbenzene	ND		0.0500	0.03606		mg/Kg	☼	72	23 - 161
Naphthalene	0.00225	J B	0.0500	0.01753		mg/Kg	☼	31	10 - 176
Toluene	ND		0.0500	0.03318		mg/Kg	☼	66	30 - 155
Xylenes, Total	ND		0.150	0.09053		mg/Kg	☼	60	25 - 162

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: 490-63897-A-13-E MSD
Matrix: Solid
Analysis Batch: 199730

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 199131

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		0.0526	0.03553		mg/Kg	☼	67	31 - 143	1	50
Ethylbenzene	ND		0.0526	0.03348		mg/Kg	☼	64	23 - 161	7	50
Naphthalene	0.00225	J B	0.0526	0.01198		mg/Kg	☼	18	10 - 176	38	50
Toluene	ND		0.0526	0.03406		mg/Kg	☼	65	30 - 155	3	50
Xylenes, Total	ND		0.158	0.08487		mg/Kg	☼	54	25 - 162	6	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: MB 490-199730/7
Matrix: Solid
Analysis Batch: 199730

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			10/21/14 17:39	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			10/21/14 17:39	1
Naphthalene	0.003141	J	0.00500	0.00170	mg/Kg			10/21/14 17:39	1
Toluene	ND		0.00200	0.000740	mg/Kg			10/21/14 17:39	1
Xylenes, Total	ND		0.00300	0.000670	mg/Kg			10/21/14 17:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*10/21/14 17:39*	*1*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*10/21/14 17:39*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*10/21/14 17:39*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*10/21/14 17:39*	*1*

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

Lab Sample ID: LCS 490-199730/3
Matrix: Solid
Analysis Batch: 199730

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	0.04973		mg/Kg		99	75 - 127
Ethylbenzene	0.0500	0.05567		mg/Kg		111	80 - 134
Naphthalene	0.0500	0.05030		mg/Kg		101	69 - 150
Toluene	0.0500	0.05079		mg/Kg		102	80 - 132
Xylenes, Total	0.150	0.1553		mg/Kg		104	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 490-199730/4
Matrix: Solid
Analysis Batch: 199730

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	0.04954		mg/Kg		99	75 - 127	0	50
Ethylbenzene	0.0500	0.05417		mg/Kg		108	80 - 134	3	50
Naphthalene	0.0500	0.04806		mg/Kg		96	69 - 150	5	50
Toluene	0.0500	0.05141		mg/Kg		103	80 - 132	1	50
Xylenes, Total	0.150	0.1520		mg/Kg		101	80 - 137	2	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 490-199849/1-A
Matrix: Solid
Analysis Batch: 200687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 199849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Anthracene	ND		0.0670	0.00900	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Pyrene	ND		0.0670	0.0120	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		10/21/14 17:49	10/24/14 19:43	1

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

Lab Sample ID: MB 490-199849/1-A
Matrix: Solid
Analysis Batch: 200687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 199849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.0670	0.00900	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Fluorene	ND		0.0670	0.0120	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		10/21/14 17:49	10/24/14 19:43	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		10/21/14 17:49	10/24/14 19:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*29 - 120*	*10/21/14 17:49*	*10/24/14 19:43*	*1*
Terphenyl-d14 (Surr)	*63*		*13 - 120*	*10/21/14 17:49*	*10/24/14 19:43*	*1*
Nitrobenzene-d5 (Surr)	*55*		*27 - 120*	*10/21/14 17:49*	*10/24/14 19:43*	*1*

Lab Sample ID: LCS 490-199849/2-A
Matrix: Solid
Analysis Batch: 200687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 199849

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	0.9230		mg/Kg		55	38 - 120
Anthracene	1.67	0.8838		mg/Kg		53	46 - 124
Benzo[a]anthracene	1.67	0.9195		mg/Kg		55	45 - 120
Benzo[a]pyrene	1.67	0.8865		mg/Kg		53	45 - 120
Benzo[b]fluoranthene	1.67	0.9114		mg/Kg		55	42 - 120
Benzo[g,h,i]perylene	1.67	0.8795		mg/Kg		53	38 - 120
Benzo[k]fluoranthene	1.67	0.8869		mg/Kg		53	42 - 120
1-Methylnaphthalene	1.67	0.9199		mg/Kg		55	32 - 120
Pyrene	1.67	0.8305		mg/Kg		50	43 - 120
Phenanthrene	1.67	0.8760		mg/Kg		53	45 - 120
Chrysene	1.67	0.8596		mg/Kg		52	43 - 120
Dibenz(a,h)anthracene	1.67	0.9353		mg/Kg		56	32 - 128
Fluoranthene	1.67	0.9194		mg/Kg		55	46 - 120
Fluorene	1.67	0.9483		mg/Kg		57	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	0.8989		mg/Kg		54	41 - 121
Naphthalene	1.67	0.9058		mg/Kg		54	32 - 120
2-Methylnaphthalene	1.67	0.9091		mg/Kg		55	28 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*48*		*29 - 120*
Terphenyl-d14 (Surr)	*51*		*13 - 120*
Nitrobenzene-d5 (Surr)	*46*		*27 - 120*

Lab Sample ID: 490-63822-1 MS
Matrix: Soil
Analysis Batch: 200687

Client Sample ID: 1462 Cardinal
Prep Type: Total/NA
Prep Batch: 199849

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	ND		2.10	1.399		mg/Kg	☼	67	25 - 120
Anthracene	ND		2.10	1.400		mg/Kg	☼	67	28 - 125

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

Lab Sample ID: 490-63822-1 MS
Matrix: Soil
Analysis Batch: 200687

Client Sample ID: 1462 Cardinal
Prep Type: Total/NA
Prep Batch: 199849

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	ND		2.10	1.456		mg/Kg	☼	69	23 - 120
Benzo[a]pyrene	ND		2.10	1.376		mg/Kg	☼	66	15 - 128
Benzo[b]fluoranthene	ND		2.10	1.433		mg/Kg	☼	68	12 - 133
Benzo[g,h,i]perylene	ND		2.10	1.306		mg/Kg	☼	62	22 - 120
Benzo[k]fluoranthene	ND		2.10	1.451		mg/Kg	☼	69	28 - 120
1-Methylnaphthalene	ND		2.10	1.371		mg/Kg	☼	65	10 - 120
Pyrene	ND		2.10	1.347		mg/Kg	☼	64	20 - 123
Phenanthrene	ND		2.10	1.368		mg/Kg	☼	65	21 - 122
Chrysene	ND		2.10	1.397		mg/Kg	☼	67	20 - 120
Dibenz(a,h)anthracene	ND		2.10	1.387		mg/Kg	☼	66	12 - 128
Fluoranthene	ND		2.10	1.476		mg/Kg	☼	70	10 - 143
Fluorene	ND		2.10	1.472		mg/Kg	☼	70	20 - 120
Indeno[1,2,3-cd]pyrene	ND		2.10	1.338		mg/Kg	☼	64	22 - 121
Naphthalene	ND		2.10	1.327		mg/Kg	☼	63	10 - 120
2-Methylnaphthalene	ND		2.10	1.366		mg/Kg	☼	65	13 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*55*		*29 - 120*
Terphenyl-d14 (Surr)	*64*		*13 - 120*
Nitrobenzene-d5 (Surr)	*51*		*27 - 120*

Lab Sample ID: 490-63822-1 MSD
Matrix: Soil
Analysis Batch: 200687

Client Sample ID: 1462 Cardinal
Prep Type: Total/NA
Prep Batch: 199849

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	ND		2.10	1.220		mg/Kg	☼	58	25 - 120	14	50
Anthracene	ND		2.10	1.229		mg/Kg	☼	59	28 - 125	13	49
Benzo[a]anthracene	ND		2.10	1.289		mg/Kg	☼	61	23 - 120	12	50
Benzo[a]pyrene	ND		2.10	1.204		mg/Kg	☼	57	15 - 128	13	50
Benzo[b]fluoranthene	ND		2.10	1.285		mg/Kg	☼	61	12 - 133	11	50
Benzo[g,h,i]perylene	ND		2.10	1.159		mg/Kg	☼	55	22 - 120	12	50
Benzo[k]fluoranthene	ND		2.10	1.229		mg/Kg	☼	58	28 - 120	17	45
1-Methylnaphthalene	ND		2.10	1.235		mg/Kg	☼	59	10 - 120	10	50
Pyrene	ND		2.10	1.201		mg/Kg	☼	57	20 - 123	11	50
Phenanthrene	ND		2.10	1.211		mg/Kg	☼	58	21 - 122	12	50
Chrysene	ND		2.10	1.182		mg/Kg	☼	56	20 - 120	17	49
Dibenz(a,h)anthracene	ND		2.10	1.215		mg/Kg	☼	58	12 - 128	13	50
Fluoranthene	ND		2.10	1.325		mg/Kg	☼	63	10 - 143	11	50
Fluorene	ND		2.10	1.306		mg/Kg	☼	62	20 - 120	12	50
Indeno[1,2,3-cd]pyrene	ND		2.10	1.190		mg/Kg	☼	57	22 - 121	12	50
Naphthalene	ND		2.10	1.177		mg/Kg	☼	56	10 - 120	12	50
2-Methylnaphthalene	ND		2.10	1.223		mg/Kg	☼	58	13 - 120	11	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*50*		*29 - 120*
Terphenyl-d14 (Surr)	*56*		*13 - 120*

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

Lab Sample ID: 490-63822-1 MSD
Matrix: Soil
Analysis Batch: 200687

Client Sample ID: 1462 Cardinal
Prep Type: Total/NA
Prep Batch: 199849

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Nitrobenzene-d5 (Surr)	*48*		*27 - 120*

Lab Sample ID: MB 490-201160/1-A
Matrix: Solid
Analysis Batch: 201496

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Anthracene	ND		0.0670	0.00900	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Pyrene	ND		0.0670	0.0120	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Chrysene	ND		0.0670	0.00900	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Fluorene	ND		0.0670	0.0120	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		10/27/14 09:14	10/28/14 23:34	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		10/27/14 09:14	10/28/14 23:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	*74*		*29 - 120*	*10/27/14 09:14*	*10/28/14 23:34*	*1*
Terphenyl-d14 (Surr)	*95*		*13 - 120*	*10/27/14 09:14*	*10/28/14 23:34*	*1*
Nitrobenzene-d5 (Surr)	*65*		*27 - 120*	*10/27/14 09:14*	*10/28/14 23:34*	*1*

Lab Sample ID: LCS 490-201160/2-A
Matrix: Solid
Analysis Batch: 201496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.621		mg/Kg		97	38 - 120
Anthracene	1.67	1.646		mg/Kg		99	46 - 124
Benzo[a]anthracene	1.67	1.687		mg/Kg		101	45 - 120
Benzo[a]pyrene	1.67	1.684		mg/Kg		101	45 - 120
Benzo[b]fluoranthene	1.67	1.811		mg/Kg		109	42 - 120
Benzo[g,h,i]perylene	1.67	1.564		mg/Kg		94	38 - 120
Benzo[k]fluoranthene	1.67	1.667		mg/Kg		100	42 - 120
1-Methylnaphthalene	1.67	1.601		mg/Kg		96	32 - 120
Pyrene	1.67	1.671		mg/Kg		100	43 - 120
Phenanthrene	1.67	1.602		mg/Kg		96	45 - 120
Chrysene	1.67	1.611		mg/Kg		97	43 - 120
Dibenz(a,h)anthracene	1.67	1.688		mg/Kg		101	32 - 128

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

Lab Sample ID: LCS 490-201160/2-A
Matrix: Solid
Analysis Batch: 201496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	1.67	1.718		mg/Kg		103	46 - 120
Fluorene	1.67	1.745		mg/Kg		105	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.451		mg/Kg		87	41 - 121
Naphthalene	1.67	1.591		mg/Kg		95	32 - 120
2-Methylnaphthalene	1.67	1.638		mg/Kg		98	28 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*100*		*29 - 120*
Terphenyl-d14 (Surr)	*122*	*X*	*13 - 120*
Nitrobenzene-d5 (Surr)	*94*		*27 - 120*

Method: Moisture - Percent Moisture

Lab Sample ID: 490-63804-A-16 DU
Matrix: Solid
Analysis Batch: 198272

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	86		87		%		0.3	20

GC/MS VOA

Prep Batch: 198904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-63822-1	1462 Cardinal	Total/NA	Soil	5035	
490-63822-2	477 Dogwood-1	Total/NA	Soil	5035	

Prep Batch: 199131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-63897-A-13-D MS	Matrix Spike	Total/NA	Solid	5030B	
490-63897-A-13-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Analysis Batch: 199730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-63822-1	1462 Cardinal	Total/NA	Soil	8260B	198904
490-63822-2	477 Dogwood-1	Total/NA	Soil	8260B	198904
490-63897-A-13-D MS	Matrix Spike	Total/NA	Solid	8260B	199131
490-63897-A-13-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	199131
LCS 490-199730/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-199730/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-199730/7	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 199849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-63822-1	1462 Cardinal	Total/NA	Soil	3550C	
490-63822-1 MS	1462 Cardinal	Total/NA	Soil	3550C	
490-63822-1 MSD	1462 Cardinal	Total/NA	Soil	3550C	
LCS 490-199849/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-199849/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 200687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-63822-1	1462 Cardinal	Total/NA	Soil	8270D	199849
490-63822-1 MS	1462 Cardinal	Total/NA	Soil	8270D	199849
490-63822-1 MSD	1462 Cardinal	Total/NA	Soil	8270D	199849
LCS 490-199849/2-A	Lab Control Sample	Total/NA	Solid	8270D	199849
MB 490-199849/1-A	Method Blank	Total/NA	Solid	8270D	199849

Prep Batch: 201160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-63822-2	477 Dogwood-1	Total/NA	Soil	3550C	
LCS 490-201160/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-201160/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 201496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-201160/2-A	Lab Control Sample	Total/NA	Solid	8270D	201160
MB 490-201160/1-A	Method Blank	Total/NA	Solid	8270D	201160

Analysis Batch: 201771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-63822-2	477 Dogwood-1	Total/NA	Soil	8270D	201160

QC Association Summary

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

TestAmerica Job ID: 490-63822-1

General Chemistry

Analysis Batch: 198272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-63804-A-16 DU	Duplicate	Total/NA	Solid	Moisture	
490-63822-1	1462 Cardinal	Total/NA	Soil	Moisture	
490-63822-2	477 Dogwood-1	Total/NA	Soil	Moisture	

Lab Chronicle

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

TestAmerica Job ID: 490-63822-1

Client Sample ID: 1462 Cardinal

Date Collected: 10/09/14 12:15
Date Received: 10/15/14 08:20

Lab Sample ID: 490-63822-1

Matrix: Soil
Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.788 g	5.0 mL	198904	10/17/14 14:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	4.788 g	5.0 mL	199730	10/21/14 18:37	KKK	TAL NSH
Total/NA	Prep	3550C			38.24 g	1.00 mL	199849	10/21/14 17:49	RMS	TAL NSH
Total/NA	Analysis	8270D		1	38.24 g	1.00 mL	200687	10/24/14 20:29	KKH	TAL NSH
Total/NA	Analysis	Moisture		1			198272	10/15/14 16:55	RRS	TAL NSH

Client Sample ID: 477 Dogwood-1

Date Collected: 10/13/14 15:00
Date Received: 10/15/14 08:20

Lab Sample ID: 490-63822-2

Matrix: Soil
Percent Solids: 73.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.007 g	5.0 mL	198904	10/17/14 14:17	JLP	TAL NSH
Total/NA	Analysis	8260B		1	4.007 g	5.0 mL	199730	10/21/14 18:08	KKK	TAL NSH
Total/NA	Prep	3550C			40.93 g	1.00 mL	201160	10/27/14 09:14	LDC	TAL NSH
Total/NA	Analysis	8270D		2	40.93 g	1.00 mL	201771	10/29/14 16:47	SNR	TAL NSH
Total/NA	Analysis	Moisture		1			198272	10/15/14 16:55	RRS	TAL NSH

Laboratory References:

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

Method Summary

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

TestAmerica Job ID: 490-63822-1

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

TestAmerica Job ID: 490-63822-1

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
North Carolina (WW/SW)	State Program	4	387	12-31-14

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Soil	Percent Solids

South Carolina	State Program	4	84009 (001)	02-28-15

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

490-63822 Chain of Custody

Cooler Received/Opened On: 10/15/2014 @ 8:20

1. Tracking # 3957 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 0.4 *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: 1 Front 1 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) AJH

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) AJH

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) AJH

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) AJH

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

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

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

10/30/2014

Loc: 490
63822

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 #: EEG - SBG # 2449
Address: 10179 Highway 78
City/State/Zip: Ladson, SC 29456
Site State: SC
Project Manager: Tom McElwee email: mcelwee@eeginc.net
PO#: 1406
Telephone Number: 843.412.2697 Fax No.: (843)-879-0401
TA Quote #:
Sampler Name: (Print) Pratt Shaw
Project ID: Laurel Bay Housing Project
Sampler Signature:
Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	~~NH (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
1462 Cardinal	10/9/14	1215	5	X					2				2	1					X		X	X				
1477 Dogwood 4	10/13/14	1500	5	X					2				2	1					X		X	X				

Page 20 of 21

Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 0.4
VOCs Free of Headspace? Y N

Method of Shipment: FEDEX

Relinquished by:	Date	Time	Received by:	Date	Time
	10/14/14	0900	FedEx		
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time
				10/15/14	8:20

10/30/2014

Login Sample Receipt Checklist

Client: Small Business Group Inc.

Job Number: 490-63822-1

Login Number: 63822
List Number: 1
Creator: Huskey, Adam

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	
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").	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

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

4. Generator's Phone 843-879-0411

Generator's Site Address (If different than mailing):

A. Manifest Number: **WMNA** 01519117

B. State Generator's ID

5. Transporter 1 Company Name 843-522-1500
Carolina Containers
P.O. Box 1925
Beaufort SC 29901

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	1	20	6.58	TON	749149
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
UST's from: 1) 477 Dogwood 2) 473 Dogwood ✓ 3) 1459 Cardinal ✓ 4) 1479 Cardinal-2

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
		12	01	14

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
Matt Shaw		12	1	14

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name	Signature	Month	Day	Year
Michael Brotch		12	2	14

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
Shawn Cotrell		12	2	14

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Blue- GENERATOR #2 COPY
Yellow- GENERATOR #1 COPY
Pink- FACILITY USE ONLY
Gold- TRANSPORTER #1 COPY

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

477 Dogwood 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

A.	Product...(ex. Gas, Kerosene).....	477Dogwood-2			
B.	Capacity..(ex. 1k, 2k).....	Heating oil			
C.	Age.....	280 gal			
D.	Construction Material..(ex. Steel, FRP).....	Late 1950s			
E.	Month/Year of Last Use.....	Steel			
F.	Depth (ft.) To Base of Tank.....	Mid 1980s			
G.	Spill Prevention Equipment Y/N.....	5'8"			
H.	Overfill Prevention Equipment Y/N.....	No			
I.	Method of Closure Removed/Filled.....	No			
J.	Date Tanks Removed/Filled.....	Removed			
K.	Visible Corrosion or Pitting Y/N.....	2/3/2015			
L.	Visible Holes Y/N.....	Yes			
		Yes			

M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 477Dogwood-2 was removed from the ground, cleaned and recycled. See Attachment "A".

N. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs (attach disposal manifests)
Contaminated water was pumped from UST 477Dogwood-2 and disposed by MCAS.

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

	477Dogwood-2				
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	No				
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.

This is the second tank removed from 477 Dogwood Drive.

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 #
477 Dogwood2	Excav at fill end	Soil	Sandy	5'8"	2/3/15 1500 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect 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.

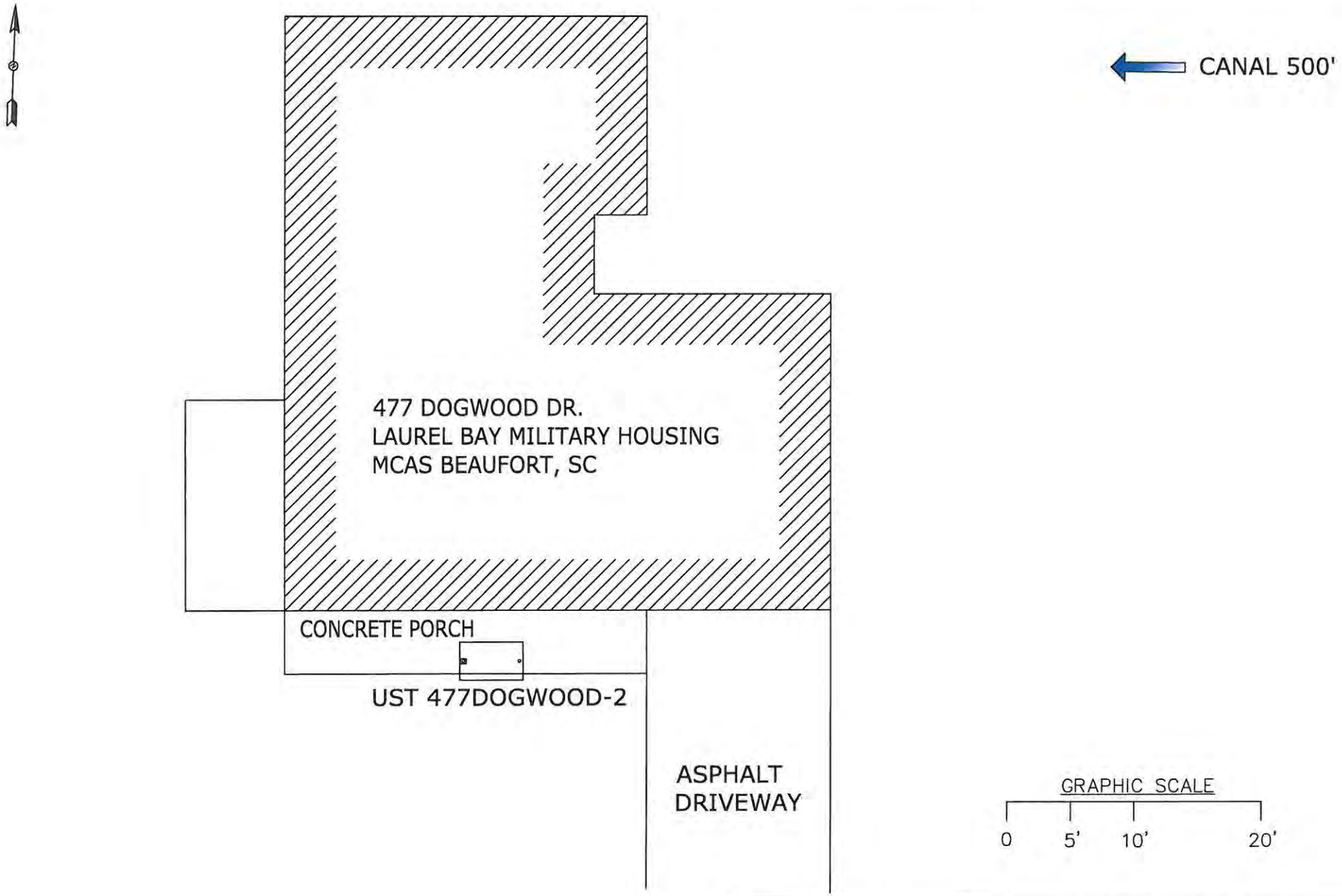
XII. RECEPTORS

		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 <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.

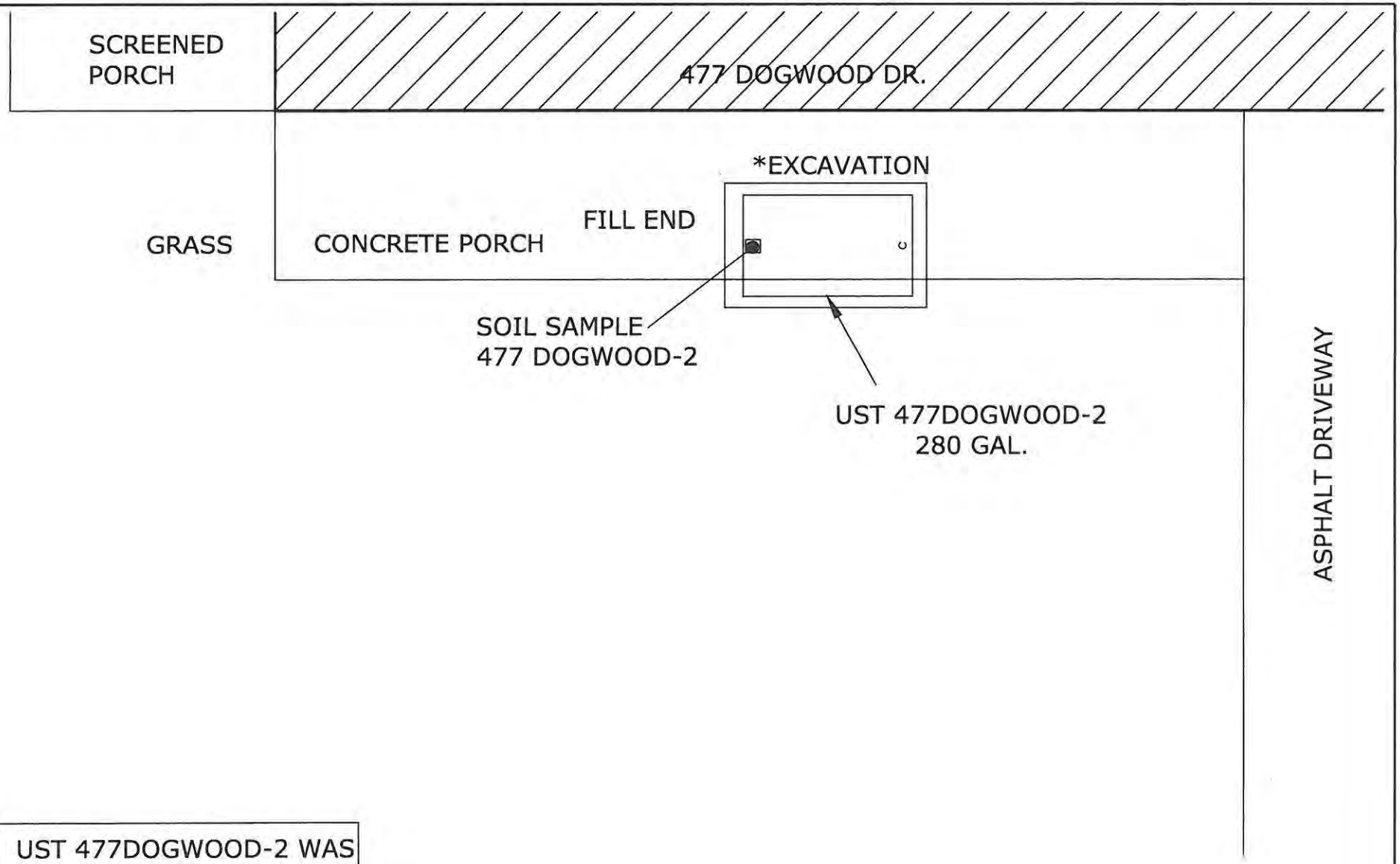
(Attach Site Map Here)



SBG-EEG
10179 HWY 78
LADSON, SC 29456
ph. (843) 879-0400

FIGURE 1 SITE MAP
477 DOGWOOD DR., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE MAR 2015



UST 477DOGWOOD-2 WAS
32" BELOW GRADE.

GRAPHIC SCALE
0 5'

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

SBG-EEG
10179 HWY 78
LADSON, SC 29456
ph. (843) 879-0400

FIGURE 2 UST SAMPLE LOCATION
477 DOGWOOD DR., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC | DWG DATE MAR 2015

Picture 1: Location of UST 477Dogwood-2.


Picture 2: Wastewater being pumped from the tank.

Picture 3:UST 477Dogwood-2 being removed from the excavation.

Picture 4: Site after completion of tank removal.

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	477Dogwood-2						
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: 490-72080-1
Client Project/Site: Laurel Bay Housing Project

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

Attn: Tom McElwee

Authorized for release by:
2/13/2015 11:24:10 AM

Ken Hayes, Project Manager II
(615)301-5035
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.

Table of Contents

Sample Summary

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

TestAmerica Job ID: 490-72080-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-72080-1	477 Dogwood - 2	Soil	02/03/15 15:00	02/07/15 08:30
490-72080-2	309 Ash	Soil	02/05/15 14:15	02/07/15 08:30

Job ID: 490-72080-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-72080-1

Comments
No additional comments.

Receipt
The samples were received on 2/7/2015 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

GC/MS VOA
Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 226828 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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 VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

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 ID: 477 Dogwood - 2

Date Collected: 02/03/15 15:00
Date Received: 02/07/15 08:30

Lab Sample ID: 490-72080-1

Matrix: Soil
Percent Solids: 76.8

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	☼	02/03/15 15:00	02/11/15 19:01	1
Ethylbenzene	ND		0.00256	0.000858	mg/Kg	☼	02/03/15 15:00	02/11/15 19:01	1
Naphthalene	ND		0.00640	0.00218	mg/Kg	☼	02/03/15 15:00	02/11/15 19:01	1
Toluene	ND		0.00256	0.000948	mg/Kg	☼	02/03/15 15:00	02/11/15 19:01	1
Xylenes, Total	ND		0.00384	0.000858	mg/Kg	☼	02/03/15 15:00	02/11/15 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*	*02/03/15 15:00*	*02/11/15 19:01*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*02/03/15 15:00*	*02/11/15 19:01*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*	*02/03/15 15:00*	*02/11/15 19:01*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*02/03/15 15:00*	*02/11/15 19:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0869	0.0130	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Acenaphthylene	ND		0.0869	0.0117	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Anthracene	ND		0.0869	0.0117	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Benzo[a]anthracene	ND		0.0869	0.0195	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Benzo[a]pyrene	ND		0.0869	0.0156	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Benzo[b]fluoranthene	ND		0.0869	0.0156	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Benzo[g,h,i]perylene	ND		0.0869	0.0117	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Benzo[k]fluoranthene	ND		0.0869	0.0182	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
1-Methylnaphthalene	ND		0.0869	0.0182	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Pyrene	ND		0.0869	0.0156	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Phenanthrene	ND		0.0869	0.0117	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Chrysene	ND		0.0869	0.0117	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Dibenz(a,h)anthracene	ND		0.0869	0.00908	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Fluoranthene	ND		0.0869	0.0117	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Fluorene	ND		0.0869	0.0156	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Indeno[1,2,3-cd]pyrene	ND		0.0869	0.0130	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
Naphthalene	ND		0.0869	0.0117	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1
2-Methylnaphthalene	ND		0.0869	0.0207	mg/Kg	☼	02/09/15 10:52	02/10/15 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*29 - 120*	*02/09/15 10:52*	*02/10/15 19:35*	*1*
Terphenyl-d14 (Surr)	*64*		*13 - 120*	*02/09/15 10:52*	*02/10/15 19:35*	*1*
Nitrobenzene-d5 (Surr)	*51*		*27 - 120*	*02/09/15 10:52*	*02/10/15 19:35*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	77		0.10	0.10	%			02/07/15 16:40	1

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

TestAmerica Job ID: 490-72080-1

Client Sample ID: 309 Ash

Date Collected: 02/05/15 14:15
Date Received: 02/07/15 08:30

Lab Sample ID: 490-72080-2

Matrix: Soil
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.000671	mg/Kg	☼	02/05/15 14:15	02/11/15 19:29	1
Ethylbenzene	ND		0.00200	0.000671	mg/Kg	☼	02/05/15 14:15	02/11/15 19:29	1
Naphthalene	ND		0.00501	0.00170	mg/Kg	☼	02/05/15 14:15	02/11/15 19:29	1
Toluene	ND		0.00200	0.000741	mg/Kg	☼	02/05/15 14:15	02/11/15 19:29	1
Xylenes, Total	ND		0.00300	0.000671	mg/Kg	☼	02/05/15 14:15	02/11/15 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*	*02/05/15 14:15*	*02/11/15 19:29*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*02/05/15 14:15*	*02/11/15 19:29*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*02/05/15 14:15*	*02/11/15 19:29*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*	*02/05/15 14:15*	*02/11/15 19:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0774	0.0116	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Acenaphthylene	ND		0.0774	0.0104	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Anthracene	ND		0.0774	0.0104	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Benzo[a]anthracene	ND		0.0774	0.0173	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Benzo[a]pyrene	ND		0.0774	0.0139	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Benzo[b]fluoranthene	ND		0.0774	0.0139	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Benzo[g,h,i]perylene	ND		0.0774	0.0104	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Benzo[k]fluoranthene	ND		0.0774	0.0162	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
1-Methylnaphthalene	ND		0.0774	0.0162	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Pyrene	ND		0.0774	0.0139	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Phenanthrene	ND		0.0774	0.0104	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Chrysene	ND		0.0774	0.0104	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Dibenz(a,h)anthracene	ND		0.0774	0.00809	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Fluoranthene	ND		0.0774	0.0104	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Fluorene	ND		0.0774	0.0139	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Indeno[1,2,3-cd]pyrene	ND		0.0774	0.0116	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
Naphthalene	ND		0.0774	0.0104	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1
2-Methylnaphthalene	ND		0.0774	0.0185	mg/Kg	☼	02/09/15 10:52	02/10/15 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*29 - 120*	*02/09/15 10:52*	*02/10/15 19:57*	*1*
Terphenyl-d14 (Surr)	*61*		*13 - 120*	*02/09/15 10:52*	*02/10/15 19:57*	*1*
Nitrobenzene-d5 (Surr)	*48*		*27 - 120*	*02/09/15 10:52*	*02/10/15 19:57*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10	0.10	%			02/07/15 16:40	1

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

Lab Sample ID: 490-72069-D-14-A MS
Matrix: Solid
Analysis Batch: 226828

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 226230

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		0.0571	0.05973		mg/Kg	¤	105	31 - 143
Ethylbenzene	ND		0.0571	0.05971		mg/Kg	¤	105	23 - 161
Naphthalene	ND		0.0571	0.06535		mg/Kg	¤	114	10 - 176
Toluene	ND		0.0571	0.05735		mg/Kg	¤	100	30 - 155
Xylenes, Total	ND		114	0.1223	F1	mg/Kg	¤	0.1	25 - 162

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: 490-72069-D-14-B MSD
Matrix: Solid
Analysis Batch: 226828

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 226230

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		0.0578	0.06024		mg/Kg	¤	104	31 - 143	1	50
Ethylbenzene	ND		0.0578	0.06132		mg/Kg	¤	106	23 - 161	3	50
Naphthalene	ND		0.0578	0.06261		mg/Kg	¤	108	10 - 176	4	50
Toluene	ND		0.0578	0.05925		mg/Kg	¤	103	30 - 155	3	50
Xylenes, Total	ND		116	0.1247	F1	mg/Kg	¤	0.1	25 - 162	2	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: MB 490-226828/8
Matrix: Solid
Analysis Batch: 226828

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			02/11/15 12:48	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			02/11/15 12:48	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			02/11/15 12:48	1
Toluene	ND		0.00200	0.000740	mg/Kg			02/11/15 12:48	1
Xylenes, Total	ND		0.00300	0.000670	mg/Kg			02/11/15 12:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*02/11/15 12:48*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*02/11/15 12:48*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*02/11/15 12:48*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*02/11/15 12:48*	*1*

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

Lab Sample ID: LCS 490-226828/4
Matrix: Solid
Analysis Batch: 226828

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	0.05219		mg/Kg		104	75 - 127
Ethylbenzene	0.0500	0.04995		mg/Kg		100	80 - 134
Naphthalene	0.0500	0.05366		mg/Kg		107	69 - 150
Toluene	0.0500	0.04864		mg/Kg		97	80 - 132
Xylenes, Total	0.100	0.1037		mg/Kg		104	80 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*109*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

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

Lab Sample ID: MB 490-226322/1-A
Matrix: Solid
Analysis Batch: 226554

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 226322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0670	0.0100	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Acenaphthylene	ND		0.0670	0.00900	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Anthracene	ND		0.0670	0.00900	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Benzo[a]anthracene	ND		0.0670	0.0150	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Benzo[a]pyrene	ND		0.0670	0.0120	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Benzo[b]fluoranthene	ND		0.0670	0.0120	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Benzo[g,h,i]perylene	ND		0.0670	0.00900	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Benzo[k]fluoranthene	ND		0.0670	0.0140	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
1-Methylnaphthalene	ND		0.0670	0.0140	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Pyrene	ND		0.0670	0.0120	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Phenanthrene	ND		0.0670	0.00900	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Chrysene	ND		0.0670	0.00900	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Dibenz(a,h)anthracene	ND		0.0670	0.00700	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Fluoranthene	ND		0.0670	0.00900	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Fluorene	ND		0.0670	0.0120	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0100	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
Naphthalene	ND		0.0670	0.00900	mg/Kg		02/09/15 10:52	02/10/15 12:05	1
2-Methylnaphthalene	ND		0.0670	0.0160	mg/Kg		02/09/15 10:52	02/10/15 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*83*		*29 - 120*	*02/09/15 10:52*	*02/10/15 12:05*	*1*
Terphenyl-d14 (Surr)	*81*		*13 - 120*	*02/09/15 10:52*	*02/10/15 12:05*	*1*
Nitrobenzene-d5 (Surr)	*78*		*27 - 120*	*02/09/15 10:52*	*02/10/15 12:05*	*1*

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

Lab Sample ID: LCS 490-226322/2-A
Matrix: Solid
Analysis Batch: 226554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 226322

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	1.67	1.381		mg/Kg		83	38 - 120
Anthracene	1.67	1.337		mg/Kg		80	46 - 124
Benzo[a]anthracene	1.67	1.451		mg/Kg		87	45 - 120
Benzo[a]pyrene	1.67	1.393		mg/Kg		84	45 - 120
Benzo[b]fluoranthene	1.67	1.349		mg/Kg		81	42 - 120
Benzo[g,h,i]perylene	1.67	1.675		mg/Kg		101	38 - 120
Benzo[k]fluoranthene	1.67	1.425		mg/Kg		85	42 - 120
1-Methylnaphthalene	1.67	1.350		mg/Kg		81	32 - 120
Pyrene	1.67	1.553		mg/Kg		93	43 - 120
Phenanthrene	1.67	1.282		mg/Kg		77	45 - 120
Chrysene	1.67	1.395		mg/Kg		84	43 - 120
Dibenz(a,h)anthracene	1.67	1.629		mg/Kg		98	32 - 128
Fluoranthene	1.67	1.361		mg/Kg		82	46 - 120
Fluorene	1.67	1.386		mg/Kg		83	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.583		mg/Kg		95	41 - 121
Naphthalene	1.67	1.321		mg/Kg		79	32 - 120
2-Methylnaphthalene	1.67	1.388		mg/Kg		83	28 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*
Terphenyl-d14 (Surr)	*90*		*13 - 120*
Nitrobenzene-d5 (Surr)	*76*		*27 - 120*

Lab Sample ID: LCSD 490-226322/3-A
Matrix: Solid
Analysis Batch: 226554

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 226322

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	1.67	1.387		mg/Kg		83	38 - 120	0	50
Anthracene	1.67	1.298		mg/Kg		78	46 - 124	3	49
Benzo[a]anthracene	1.67	1.441		mg/Kg		86	45 - 120	1	50
Benzo[a]pyrene	1.67	1.388		mg/Kg		83	45 - 120	0	50
Benzo[b]fluoranthene	1.67	1.227		mg/Kg		74	42 - 120	9	50
Benzo[g,h,i]perylene	1.67	1.458		mg/Kg		88	38 - 120	14	50
Benzo[k]fluoranthene	1.67	1.204		mg/Kg		72	42 - 120	17	45
1-Methylnaphthalene	1.67	1.373		mg/Kg		82	32 - 120	2	50
Pyrene	1.67	1.290		mg/Kg		77	43 - 120	18	50
Phenanthrene	1.67	1.283		mg/Kg		77	45 - 120	0	50
Chrysene	1.67	1.383		mg/Kg		83	43 - 120	1	49
Dibenz(a,h)anthracene	1.67	1.426		mg/Kg		86	32 - 128	13	50
Fluoranthene	1.67	1.386		mg/Kg		83	46 - 120	2	50
Fluorene	1.67	1.446		mg/Kg		87	42 - 120	4	50
Indeno[1,2,3-cd]pyrene	1.67	1.396		mg/Kg		84	41 - 121	13	50
Naphthalene	1.67	1.323		mg/Kg		79	32 - 120	0	50
2-Methylnaphthalene	1.67	1.357		mg/Kg		81	28 - 120	2	50

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

Lab Sample ID: LCSD 490-226322/3-A
Matrix: Solid
Analysis Batch: 226554

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 226322

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*
Terphenyl-d14 (Surr)	*72*		*13 - 120*
Nitrobenzene-d5 (Surr)	*68*		*27 - 120*

Method: Moisture - Percent Moisture

Lab Sample ID: 490-72075-D-2 DU
Matrix: Solid
Analysis Batch: 226186

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	84		84		%		0	20

GC/MS VOA

Prep Batch: 226228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-72080-1	477 Dogwood - 2	Total/NA	Soil	5035	
490-72080-2	309 Ash	Total/NA	Soil	5035	

Prep Batch: 226230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-72069-D-14-A MS	Matrix Spike	Total/NA	Solid	5035	
490-72069-D-14-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 226828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-72069-D-14-A MS	Matrix Spike	Total/NA	Solid	8260B	226230
490-72069-D-14-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	226230
490-72080-1	477 Dogwood - 2	Total/NA	Soil	8260B	226228
490-72080-2	309 Ash	Total/NA	Soil	8260B	226228
LCS 490-226828/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 490-226828/8	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 226322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-72080-1	477 Dogwood - 2	Total/NA	Soil	3550C	
490-72080-2	309 Ash	Total/NA	Soil	3550C	
LCS 490-226322/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 490-226322/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
MB 490-226322/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 226554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-72080-1	477 Dogwood - 2	Total/NA	Soil	8270D	226322
490-72080-2	309 Ash	Total/NA	Soil	8270D	226322
LCS 490-226322/2-A	Lab Control Sample	Total/NA	Solid	8270D	226322
LCSD 490-226322/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	226322
MB 490-226322/1-A	Method Blank	Total/NA	Solid	8270D	226322

General Chemistry

Analysis Batch: 226186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-72075-D-2 DU	Duplicate	Total/NA	Solid	Moisture	
490-72080-1	477 Dogwood - 2	Total/NA	Soil	Moisture	
490-72080-2	309 Ash	Total/NA	Soil	Moisture	

Lab Chronicle

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

TestAmerica Job ID: 490-72080-1

Client Sample ID: 477 Dogwood - 2

Date Collected: 02/03/15 15:00
Date Received: 02/07/15 08:30

Lab Sample ID: 490-72080-1

Matrix: Soil
Percent Solids: 76.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.082 g	5.0 mL	226228	02/03/15 15:00	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5.082 g	5.0 mL	226828	02/11/15 19:01	KKK	TAL NSH
Total/NA	Prep	3550C			30.11 g	1 mL	226322	02/09/15 10:52	LDC	TAL NSH
Total/NA	Analysis	8270D		1	30.11 g	1 mL	226554	02/10/15 19:35	SNR	TAL NSH
Total/NA	Analysis	Moisture		1			226186	02/07/15 16:40	LOJ	TAL NSH

Client Sample ID: 309 Ash

Date Collected: 02/05/15 14:15
Date Received: 02/07/15 08:30

Lab Sample ID: 490-72080-2

Matrix: Soil
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.847 g	5.0 mL	226228	02/05/15 14:15	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5.847 g	5.0 mL	226828	02/11/15 19:29	KKK	TAL NSH
Total/NA	Prep	3550C			30.40 g	1 mL	226322	02/09/15 10:52	LDC	TAL NSH
Total/NA	Analysis	8270D		1	30.40 g	1 mL	226554	02/10/15 19:57	SNR	TAL NSH
Total/NA	Analysis	Moisture		1			226186	02/07/15 16:40	LOJ	TAL NSH

Laboratory References:

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

Method Summary

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

TestAmerica Job ID: 490-72080-1

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

TestAmerica Job ID: 490-72080-1

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
North Carolina (WW/SW)	State Program	4	387	12-31-15

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

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Soil	Percent Solids

South Carolina	State Program	4	84009 (001)	02-28-15

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

490-72080 Chain of Custody

Cooler Received/Opened On 2/7/2015 @ 8:30

1. Tracking # 4012 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 1.1 *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: 1 Front

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) AJH

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) AJH

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) AJH

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) AJH

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

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

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

2/13/2015

Loc: 490
72080

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

Site State: SC

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

PO#: 1406

Telephone Number: 843.412.2097 Fax No: (843) 879-0401

TA Quote #:

Sampler Name: (Print) Pratt Shaw

Project ID: Laurel Bay Housing Project

Sampler Signature:

Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	~~NaOH (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
477 Dogwood - 2	2/3/15	1500	5	X					2				2	1					X		X	X				
309 Ash	2/5/15	1415	5	X					2				2	1					X		X	X				

Special Instructions:

Method of Shipment: FEDEX

Relinquished by:	Date	Time	Received by:	Date	Time
	2/6/15	0900	FedEx		
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time
				2/7/15	8:30

Laboratory Comments:
Temperature Upon Receipt: 1.1
VOCs Free of Headspace? Y N

Login Sample Receipt Checklist

Client: Small Business Group Inc.

Job Number: 490-72080-1

Login Number: 72080
List Number: 1
Creator: Huskey, Adam

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	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT A

UST Certificate of Disposal

CONTRACTOR

Small Business Group, Inc.
10179 Highway 78
Ladson, SC 29456

TEL (843) 879-0403
FAX (843) 879-0401

TANK ID & LOCATION

UST 477Dogwood-2, 477 Dogwood Drive, Laurel Bay Housing Area, MCAS Beaufort, S.C.

DISPOSAL LOCATION

Coastal Auto Salvage Co., Inc.
130 Laurel Bay Road
Beaufort, S.C. 29906

TYPE OF TANK	SIZE (GAL)
Steel	280

CLEANING/DISPOSAL METHOD

The tank and piping were unearthed, cut open, cleaned with a pressure washer, cut into sections, and recycled.

DISPOSAL CERTIFICATION

I certify that the above tank, piping and equipment has been properly cleaned and disposed of.

T.D. McElveen , 3/6/15
(Name) (Date)

Appendix C
Regulatory Correspondence

CDM - AECOM
Multimedia Joint Venture

D H E C
PROMOTE PROTECT PROSPER
Catherine E. Heigel, Director
Promoting and protecting the health of the public and the environment

July 1, 2015

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 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)
Bryan Beck (via email)

D H E C
PROMOTE PROTECT PROSPER
Catherine E. Heigel, Director
Promoting and protecting the health of the public and the environment

Attachment to: Krieg to Drawdy
Subject: NFA
Dated 7/1/2015

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks)

111 Birch	363 Aspen
123 Banyan	364 Aspen
131 Banyan	366 Aspen
134 Banyan	369 Aspen
145 Laurel Bay	373 Aspen
150 Laurel Bay	381 Aspen
153 Laurel Bay	401 Elderberry
154 Laurel Bay	402 Elderberry
155 Laurel Bay	404 Elderberry
200 Balsam	410 Elderberry
202 Balsam	420 Elderberry
203 Balsam	424 Elderberry
208 Balsam	435 Elderberry Tank 3
210 Balsam	452 Elderberry
211 Balsam	460 Elderberry
220 Cypress	465 Dogwood
222 Cypress	477 Laurel Bay
223 Cypress	487Laurel Bay
252 Beech Tank 2	513 Laurel Bay
271 Beech Tank 1	519 Laurel Bay
271 Beech Tank 2	524 Laurel Bay
284 Birch Tank 1	535 Laurel Bay
284 Birch Tank 2	553 Dahlia
308 Ash	590 Aster
311 Ash	591 Aster
312 Ash	610 Dahlia
317 Ash	612 Dahlia
318 Ash	628 Dahlia
337 Ash	636 Dahlia
351 Ash Tank 1	637 Dahlia Tank 1
351 Ash Tank 2	637 Dahlia Tank 2
355 Ash Tank 1	641 Dahlia
355 Ash Tank 2	642 Dahlia Tank 1
360 Aspen	642 Dahlia Tank 2

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks) cont.

655 Camellia	920 Albacore
662 Camellia	922 Barracuda Tank 1
683 Camellia	922 Barracuda Tank 2
684 Camellia	924 Albacore
689 Abelia	925 Albacore
694 Abelia	926 Albacore
695 Abelia	930 Albacore
741 Blue Bell	931 Albacore
742 Blue Bell	933 Albacore
755 Althea	936 Albacore
757 Althea	938 Albacore
776 Laurel Bay	939 Albacore
777 Azalea	940 Albacore
779 Laurel Bay	1010 Foxglove
781 Laurel Bay	1066 Gardenia
802 Azalea	1068 Gardenia
816 Azalea	1071 Heather Tank 2
822 Azalea	1100 Iris Tank 2
823 Azalea	1128 Iris
825 Azalea	1178 Bobwhite
828 Azalea	1204 Cardinal
837 Azalea	1208 Cardinal
851 Dolphin	1209 Cardinal
856 Dolphin	1210 Cardinal
857 Dolphin	1215 Cardinal
861 Dolphin	1216 Cardinal
864 Dolphin	1217 Cardinal Tank 1
868 Dolphin	1217 Cardinal Tank 2
872 Dolphin	1233 Dove
879 Cobia	1244 Dove
886 Cobia	1250 Dove
888 Cobia	1252 Dove
889 Cobia	1254 Dove
901 Barracuda	1256 Dove
902 Barracuda	1258 Dove
903 Barracuda	1263 Dove
904 Barracuda	1269 Dove
909 Barracuda	1276 Dove
910 Barracuda	1283 Dove
914 Barracuda	1285 Dove
915 Barracuda	1288 Eagle

Laurel Bay Underground Storage Tank Assessment Reports for: (153 addresses/161 tanks) cont.

1296 Eagle	1330 Albatross
1307 Eagle	1331 Albatross
1321 Albatross	1333 Albatross
1322 Albatross	1334 Albatross
1327 Albatross	1335 Albatross
1328 Albatross	

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	