

SUMMARY REPORT
473 WEST CARDINAL LANE (FORMERLY 1366 WEST CARDINAL LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

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

and



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

JUNE 2021

SUMMARY REPORT
473 WEST CARDINAL LANE (FORMERLY 1366 WEST CARDINAL LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0
Prepared for:

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

and



Naval Facilities Engineering Command Atlantic

9324 Virginia Avenue
Norfolk, Virginia 23511-3095

Prepared by:



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

Contract Number: N62470-14-D-9016

CTO WE52

JUNE 2021

Table of Contents

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

Table

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

Appendices

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

List of Acronyms

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CTO	Contract Task Order
COPC	constituents of potential concern
IDIQ	Indefinite Delivery, Indefinite Quantity
IGWA	Initial Groundwater Assessment
JV	Joint Venture
LBMH	Laurel Bay Military Housing
MCAS	Marine Corps Air Station
NAVFAC Mid-Lant	Naval Facilities Engineering Command Mid-Atlantic
NFA	No Further Action
PAH	polynuclear aromatic hydrocarbon
QAPP	Quality Assurance Program Plan
RBSL	risk-based screening level
SCDHEC	South Carolina Department of Health and Environmental Control
Site	LBMH area at MCAS Beaufort, South Carolina
UST	underground storage tank
VISL	vapor intrusion screening level

1.0 INTRODUCTION

The CDM - AECOM Multimedia Joint Venture (JV) was contracted by the Naval Facilities Engineering Command, Mid-Atlantic (NAVFAC Mid-Lant) to provide reporting services for the heating oil underground storage tanks (USTs) located in Laurel Bay Military Housing (LBMH) area at the Marine Corps Air Station (MCAS) Beaufort, South Carolina (Site). This work has been awarded under Contract Task Order (CTO) WE52 of the Indefinite Delivery, Indefinite Quantity (IDIQ) Multimedia Environmental Compliance Contract (Contract No. N62470-14-D-9016).

As of January 2014, the LBMH addresses were re-numbered to comply with the E-911 emergency response addressing system; however, in order to remain consistent with historical sampling and reporting for LBMH area, the residences will continue to be referenced with their original address numbers in sample nomenclature and reporting documents.

This report summarizes the results the environmental investigation activities associated with the storage of home heating oil and the potential release of petroleum constituents at the referenced property. Based on the results of the investigation, a No Further Action (NFA) determination has been made by the South Carolina Department of Health and Environmental Control (SCDHEC) for 473 West Cardinal Lane (Formerly 1366 West Cardinal Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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

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

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

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

1.2 UST Removal and Assessment Process

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

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

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

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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 473 West Cardinal Lane (Formerly 1366 West Cardinal Lane). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1366 West Cardinal Lane* (MCAS Beaufort, 2012). The UST Assessment Report is provided in Appendix B.

2.1 UST Removal and Soil Sampling

On July 10, 2012, a single 280 gallon heating oil UST was removed from the back yard under the patio area at 473 West Cardinal Lane (Formerly 1366 West Cardinal Lane). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 5'10" bgs and a single soil sample was collected from that depth. The

sample was collected from the fill port side of the former UST to represent a worst case scenario.

Following UST removal, a soil sample was collected from the base of the excavation and shipped to an offsite laboratory for analysis of the petroleum COPCs. Sampling was performed in accordance with applicable South Carolina regulation R.61-92, Part 280 (SCDHEC, 2017) and assessment guidelines.

2.2 Soil Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 1. A copy of the laboratory analytical data report is included in the UST Assessment Report presented in Appendix B. The laboratory analytical data report includes the soil results for the additional PAHs that were analyzed, but do not have associated RBSLs.

The soil sample results were submitted by MCAS Beaufort to SCDHEC utilizing SCDHEC's UST Assessment Report form (Appendix B). The results of the soil sampling at the former UST location were used by MCAS Beaufort, in consultation with SCDHEC, to determine a path forward (i.e., additional sampling or NFA) for the property. The soil results collected from 473 West Cardinal Lane (Formerly 1366 West Cardinal Lane) were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for soil, SCDHEC made the determination that NFA was required for 473 West Cardinal Lane (Formerly 1366 West Cardinal Lane). This NFA determination was obtained in a letter dated May 15, 2014. SCDHEC's NFA letter is provided in Appendix C.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2012. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1366 West Cardinal Lane, Laurel Bay Military Housing Area*, October 2012.

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
473 West Cardinal Lane (Formerly 1366 West Cardinal Lane)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 07/10/12
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)		
Benzene	0.003	ND
Ethylbenzene	1.15	ND
Naphthalene	0.036	ND
Toluene	0.627	ND
Xylenes, Total	13.01	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (mg/kg)		
Benzo(a)anthracene	0.66	ND
Benzo(b)fluoranthene	0.66	0.20
Benzo(k)fluoranthene	0.66	ND
Chrysene	0.66	ND
Dibenz(a,h)anthracene	0.66	ND

Notes:

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 2.0 (SCDHEC, April 2013).

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

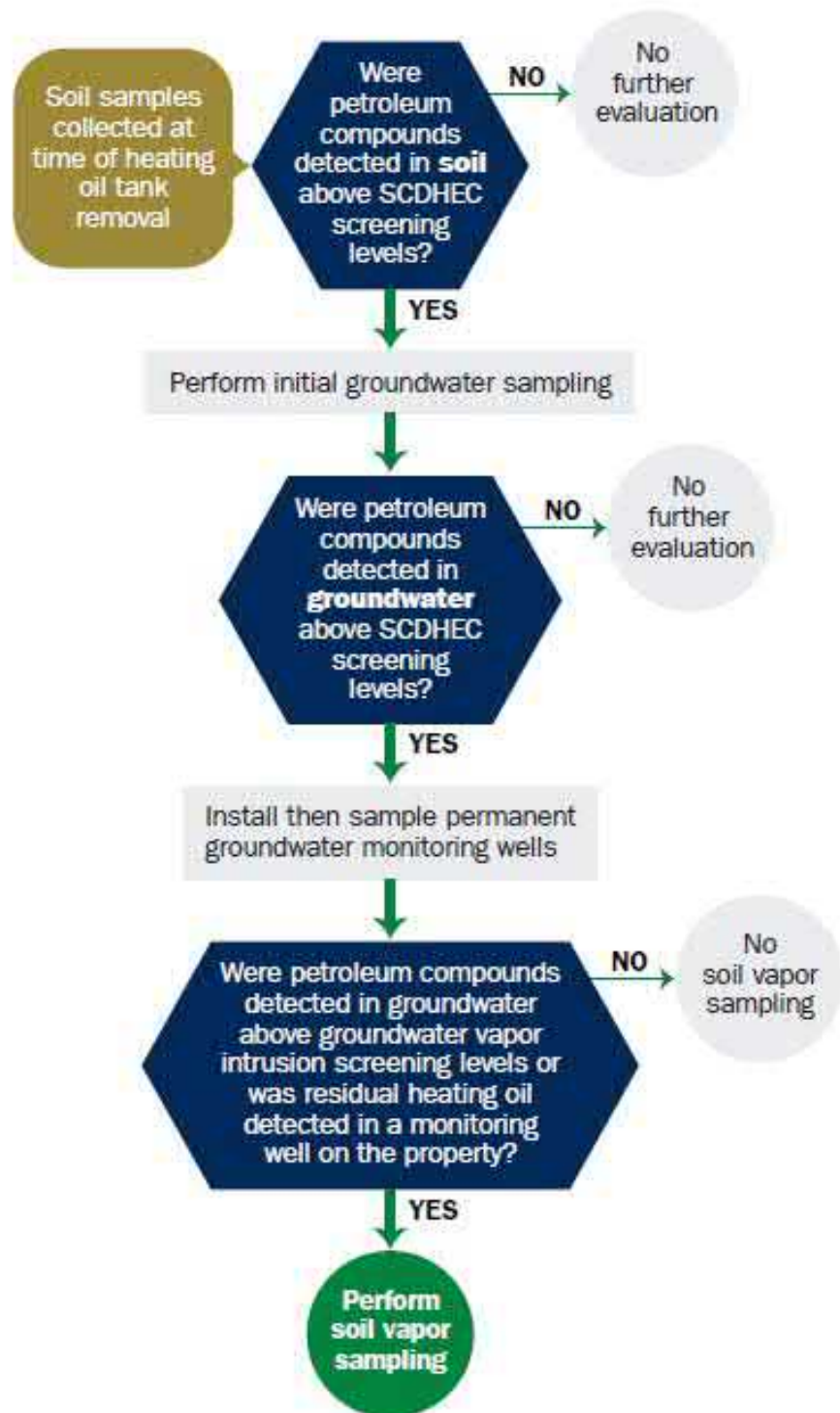
mg/kg - milligram per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Appendix A
Multi-Media Selection Process for LBMH



Appendix A - Multi-Media Selection Process for LBMH

Appendix B
UST Assessment Report

Attachment 1

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

Date Received

State Use Only

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

I. OWNERSHIP OF UST (S)

MCAS Beaufort, Commanding Officer Attn: NREAO (Craig Ehde)
 Owner Name (Corporation, Individual, Public Agency, Other)

P.O. Box 55001
 Mailing Address

Beaufort, South Carolina 29904-5001
 City State Zip Code

843 228-7317 Craig Ehde
 Area Code Telephone Number Contact Person

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #

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

1366 Cardinal Lane, Laurel Bay Military Housing Area
 Street Address or State Road (as applicable)

Beaufort, Beaufort
 City County

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

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

Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? YES____ NO____ (check one)

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

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

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this _____ day of _____, 20____

(Name)

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

VI. UST INFORMATION

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

1366 Cardinal		
Heating oil		
280 gal		
Late 1950s		
Steel		
Mid 80s		
5'10"		
No		
No		
Removed		
7/10/2012		
Yes		
Yes		

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 1366Cardinal 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 1366Cardinal was previously filled with sand by others.
- O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST
Corrosion, pitting and holes were found throughout the tank.

VII. PIPING INFORMATION

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

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

C. Number of Dispensers.....

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

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

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

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

H. Age.....

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

1366 Cardinal		
Steel & Copper		
N/A		
N/A		
Suction		
No		
Yes		
No		
Late 1950s		

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
<p>A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate depth and location on the site map.</p>		X	
<p>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</p>		X	
<p>C. Was water present in the UST excavation, soil borings, or trenches?</p> <p>If yes, how far below land surface (indicate location and depth)?</p>		X	
<p>D. Did contaminated soils remain stockpiled on site after closure?</p> <p>If yes, indicate the stockpile location on the site map.</p> <p>Name of DHEC representative authorizing soil removal:</p>		X	
<p>E. Was a petroleum sheen or free product detected on any excavation or boring waters?</p> <p>If yes, indicate location and thickness.</p>		X	

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

B.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA #
1366 Cardinal	Excav at fill end	Soil	Sandy	5'10"	7/10/12 1045 hrs	P. Shaw	
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

* = Depth Below the Surrounding Land Surface

XI. SAMPLING METHODOLOGY

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

Sampling was performed in accordance with SC DHEC R.61-92 Part 280 and SC DHEC Assessment Guidelines. Sample containers were prepared by the testing laboratory. The grab method was utilized to fill the sample containers leaving as little head space as possible and immediately capped. Soil samples were extracted from area below tank. The samples were marked, logged, and immediately placed in a sample cooler packed with ice to maintain an approximate temperature of 4 degrees Centigrade. Tools were thoroughly cleaned and decontaminated with the seven step decon process after each use. The samples remained in custody of SBG-EEG, Inc. until they were transferred to Test America Incorporated for analysis as documented in the Chain of Custody Record.

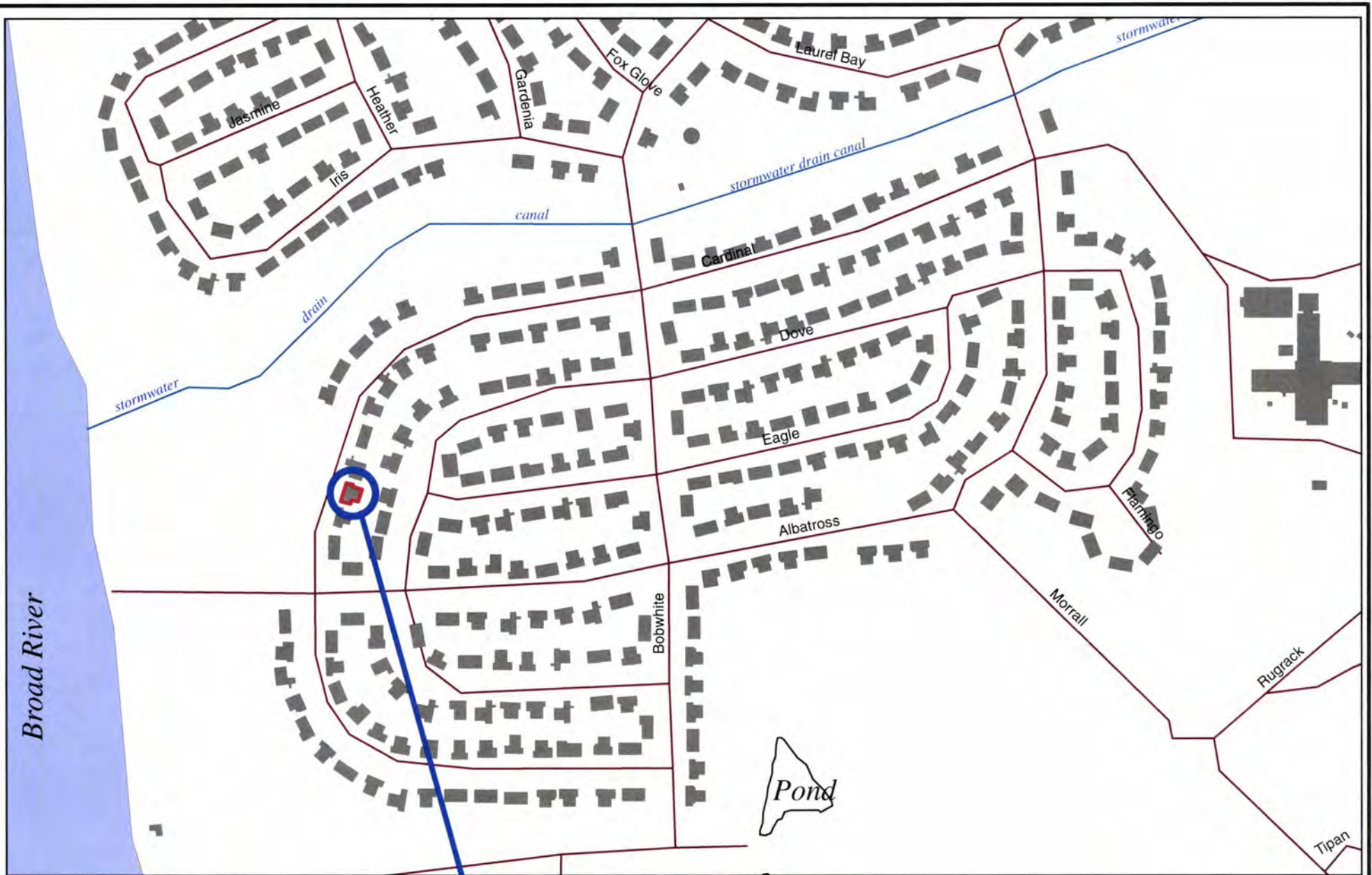
XII. RECEPTORS

	Yes	No
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?</p> <p style="text-align: right;">*Broad River & canal</p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>	*X	
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p> <p>If yes, indicate type of well, distance, and direction on site map.</p>		X
<p>C. Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?</p> <p>If yes, indicate type of structure, distance, and direction on site map.</p>		X
<p>D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination?</p> <p style="text-align: right;">*Sewer, water, electricity cable & fiber optic</p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>	*X	
<p>E. Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?</p> <p>If yes, indicate the area of contaminated soil on the site map.</p>		X

XIII. SITE MAP

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

(Attach Site Map Here)

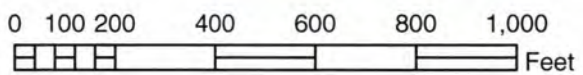


Broad River

Pond



1366 CARDINAL



SBG-EEG, Inc.

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

Ph. (843) 573-7140

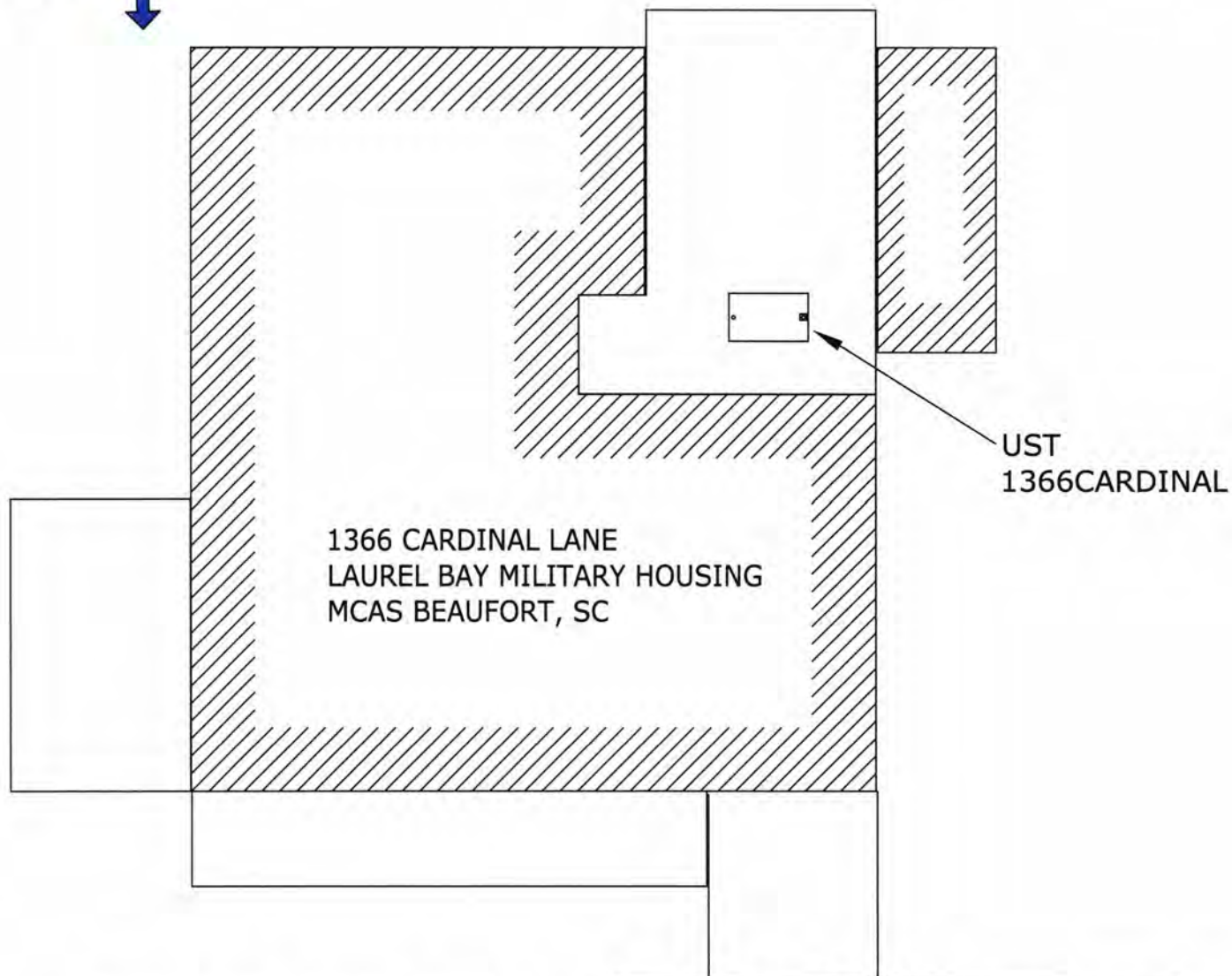
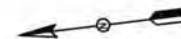
Drawn By: L. DiAsio

Dwg Date: AUG 2012

FIGURE 1: LOCATION MAP
1366 CARDINAL LANE
LAUREL BAY, BEAUFORT SC

STORMWATER CANAL ≈ 500'

BROAD RIVER ≈ 675'



GRAPHIC SCALE
0 5' 10' 20'

TANK DEPTH BELOW GRADE
1366CARDINAL = 34"

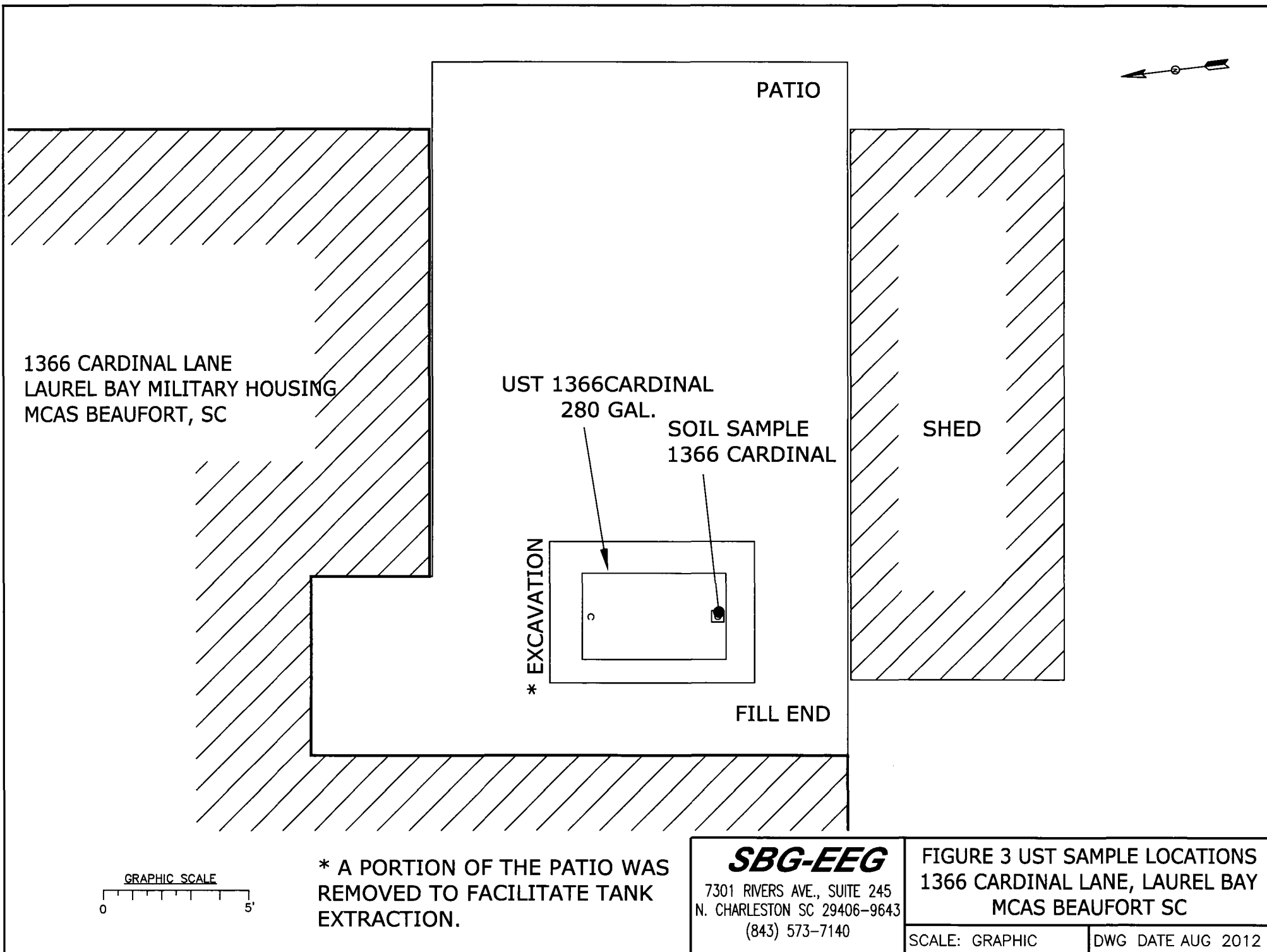
SBG-EEG

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

FIGURE 2 SITE MAP
1366 CARDINAL LANE, LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE AUG 2012





Picture 1: UST 1366Cardinal excavation in progress.



Picture 2: UST 1366Cardinal excavation.

XIV. SUMMARY OF ANALYSIS RESULTS

Enter the soil analytical data for each soil boring for all COC in the table below and on the following page.

CoC	UST	1366Cardinal					
Benzene		ND					
Toluene		ND					
Ethylbenzene		ND					
Xylenes		ND					
Naphthalene		ND					
Benzo (a) anthracene		ND					
Benzo (b) fluoranthene		0.20 mg/kg					
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 Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-67078-1

Client Project/Site: Laurel Bay Housing Project

For:

Environmental Enterprise Group

10179 Highway 78

Ladson, South Carolina 29456

Attn: Mr. Tom McElwee



Authorized for release by:

7/27/2012 5:06:56 PM

Cheyenne Whitmire

Project Manager II

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

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

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

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

Table of Contents

Cover Page	1
Table of Contents	2
Method Summary	3
Sample Summary	4
Client Sample Results	5
Definitions	9
Chronicle	10
QC Association	11
QC Sample Results	13
Chain of Custody	18
Receipt Checklists	19
Certification Summary	20

Method Summary

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

TestAmerica Job ID: 400-67078-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

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 PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

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

TestAmerica Job ID: 400-67078-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-67078-1	1366 CARDINAL	Solid	07/10/12 10:45	07/14/12 09:02
400-67078-2	616 DAHLIA	Solid	07/10/12 15:15	07/14/12 09:02
400-67078-3	614 DAHLIA	Solid	07/11/12 14:15	07/14/12 09:02
400-67078-4	607 DAHLIA	Solid	07/12/12 10:45	07/14/12 09:02

Client Sample Results

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

TestAmerica Job ID: 400-67078-1

Client Sample ID: 1366 CARDINAL

Lab Sample ID: 400-67078-1

Date Collected: 07/10/12 10:45

Matrix: Solid

Date Received: 07/14/12 09:02

Percent Solids: 78.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0056	0.00055	mg/Kg	☼	07/16/12 14:00	07/20/12 00:28	1
Ethylbenzene	ND		0.0056	0.00068	mg/Kg	☼	07/16/12 14:00	07/20/12 00:28	1
Toluene	ND		0.0056	0.00078	mg/Kg	☼	07/16/12 14:00	07/20/12 00:28	1
Xylenes, Total	ND		0.011	0.0021	mg/Kg	☼	07/16/12 14:00	07/20/12 00:28	1
Naphthalene	ND		0.0056	0.0011	mg/Kg	☼	07/16/12 14:00	07/20/12 00:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		72 - 122	07/16/12 14:00	07/20/12 00:28	1
Dibromofluoromethane	105		79 - 118	07/16/12 14:00	07/20/12 00:28	1
Toluene-d8 (Surr)	96		80 - 120	07/16/12 14:00	07/20/12 00:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Acenaphthylene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Anthracene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Benzo[a]anthracene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Benzo[a]pyrene	0.36	J	0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Benzo[b]fluoranthene	0.20	J	0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Benzo[g,h,i]perylene	0.14	J	0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Benzo[k]fluoranthene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Chrysene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Dibenz(a,h)anthracene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Fluoranthene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Fluorene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Indeno[1,2,3-cd]pyrene	0.14	J	0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Naphthalene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Phenanthrene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
Pyrene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
1-Methylnaphthalene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1
2-Methylnaphthalene	ND		0.42	0.042	mg/Kg	☼	07/16/12 13:30	07/19/12 14:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	90		44 - 108	07/16/12 13:30	07/19/12 14:13	1
Nitrobenzene-d5 (Surr)	82		27 - 114	07/16/12 13:30	07/19/12 14:13	1
Terphenyl-d14 (Surr)	89		36 - 134	07/16/12 13:30	07/19/12 14:13	1

Client Sample Results

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

TestAmerica Job ID: 400-67078-1

Client Sample ID: 616 DAHLIA

Date Collected: 07/10/12 15:15

Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-2

Matrix: Solid

Percent Solids: 96.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0054	0.00053	mg/Kg	☼	07/16/12 13:00	07/18/12 12:46	1
Ethylbenzene	ND		0.0054	0.00066	mg/Kg	☼	07/16/12 13:00	07/18/12 12:46	1
Toluene	ND		0.0054	0.00075	mg/Kg	☼	07/16/12 13:00	07/18/12 12:46	1
Xylenes, Total	ND		0.011	0.0020	mg/Kg	☼	07/16/12 13:00	07/18/12 12:46	1
Naphthalene	ND		0.0054	0.0011	mg/Kg	☼	07/16/12 13:00	07/18/12 12:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		72 - 122	07/16/12 13:00	07/18/12 12:46	1
Dibromofluoromethane	102		79 - 118	07/16/12 13:00	07/18/12 12:46	1
Toluene-d8 (Surr)	98		80 - 120	07/16/12 13:00	07/18/12 12:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Acenaphthylene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Anthracene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Benzo[a]anthracene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Benzo[a]pyrene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Benzo[b]fluoranthene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Benzo[g,h,i]perylene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Benzo[k]fluoranthene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Chrysene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Dibenz(a,h)anthracene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Fluoranthene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Fluorene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Indeno[1,2,3-cd]pyrene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Naphthalene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Phenanthrene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
Pyrene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
1-Methylnaphthalene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1
2-Methylnaphthalene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 14:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		44 - 108	07/16/12 13:30	07/19/12 14:47	1
Nitrobenzene-d5 (Surr)	62		27 - 114	07/16/12 13:30	07/19/12 14:47	1
Terphenyl-d14 (Surr)	71		36 - 134	07/16/12 13:30	07/19/12 14:47	1

Client Sample Results

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

TestAmerica Job ID: 400-67078-1

Client Sample ID: 614 DAHLIA

Date Collected: 07/11/12 14:15

Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-3

Matrix: Solid

Percent Solids: 98.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0054	0.00053	mg/Kg	☼	07/16/12 13:00	07/18/12 13:07	1
Ethylbenzene	ND		0.0054	0.00066	mg/Kg	☼	07/16/12 13:00	07/18/12 13:07	1
Toluene	ND		0.0054	0.00076	mg/Kg	☼	07/16/12 13:00	07/18/12 13:07	1
Xylenes, Total	ND		0.011	0.0020	mg/Kg	☼	07/16/12 13:00	07/18/12 13:07	1
Naphthalene	ND		0.0054	0.0011	mg/Kg	☼	07/16/12 13:00	07/18/12 13:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		72 - 122	07/16/12 13:00	07/18/12 13:07	1
Dibromofluoromethane	105		79 - 118	07/16/12 13:00	07/18/12 13:07	1
Toluene-d8 (Surr)	100		80 - 120	07/16/12 13:00	07/18/12 13:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Acenaphthylene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Anthracene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Benzo[a]anthracene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Benzo[a]pyrene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Benzo[b]fluoranthene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Benzo[g,h,i]perylene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Benzo[k]fluoranthene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Chrysene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Dibenz(a,h)anthracene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Fluoranthene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Fluorene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Indeno[1,2,3-cd]pyrene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Naphthalene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Phenanthrene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
Pyrene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
1-Methylnaphthalene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1
2-Methylnaphthalene	ND		0.33	0.033	mg/Kg	☼	07/16/12 13:30	07/19/12 15:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		44 - 108	07/16/12 13:30	07/19/12 15:21	1
Nitrobenzene-d5 (Surr)	64		27 - 114	07/16/12 13:30	07/19/12 15:21	1
Terphenyl-d14 (Surr)	65		36 - 134	07/16/12 13:30	07/19/12 15:21	1

Client Sample Results

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

TestAmerica Job ID: 400-67078-1

Client Sample ID: 607 DAHLIA

Date Collected: 07/12/12 10:45

Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-4

Matrix: Solid

Percent Solids: 95.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0061	0.00059	mg/Kg	☼	07/16/12 13:00	07/18/12 13:27	1
Ethylbenzene	ND		0.0061	0.00074	mg/Kg	☼	07/16/12 13:00	07/18/12 13:27	1
Toluene	ND		0.0061	0.00085	mg/Kg	☼	07/16/12 13:00	07/18/12 13:27	1
Xylenes, Total	ND		0.012	0.0023	mg/Kg	☼	07/16/12 13:00	07/18/12 13:27	1
Naphthalene	ND		0.0061	0.0012	mg/Kg	☼	07/16/12 13:00	07/18/12 13:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		72 - 122	07/16/12 13:00	07/18/12 13:27	1
Dibromofluoromethane	104		79 - 118	07/16/12 13:00	07/18/12 13:27	1
Toluene-d8 (Surr)	99		80 - 120	07/16/12 13:00	07/18/12 13:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Acenaphthylene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Anthracene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Benzo[a]anthracene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Benzo[a]pyrene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Benzo[b]fluoranthene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Benzo[g,h,i]perylene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Benzo[k]fluoranthene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Chrysene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Dibenz(a,h)anthracene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Fluoranthene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Fluorene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Indeno[1,2,3-cd]pyrene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Naphthalene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Phenanthrene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
Pyrene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
1-Methylnaphthalene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1
2-Methylnaphthalene	ND		0.34	0.034	mg/Kg	☼	07/16/12 13:30	07/19/12 22:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	60		44 - 108	07/16/12 13:30	07/19/12 22:09	1
Nitrobenzene-d5 (Surr)	64		27 - 114	07/16/12 13:30	07/19/12 22:09	1
Terphenyl-d14 (Surr)	62		36 - 134	07/16/12 13:30	07/19/12 22:09	1

Definitions/Glossary

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

TestAmerica Job ID: 400-67078-1

Qualifiers

GC/MS Semi VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

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

TestAmerica Job ID: 400-67078-1

Client Sample ID: 1366 CARDINAL

Date Collected: 07/10/12 10:45

Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-1

Matrix: Solid
Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			158802	07/16/12 14:00	MG	TAL PEN
Total/NA	Analysis	8260B		1	158805	07/20/12 00:28	MG	TAL PEN
Total/NA	Prep	3550C			158525	07/16/12 13:30	RT	TAL PEN
Total/NA	Analysis	8270D		1	158702	07/19/12 14:13	JP	TAL PEN
Total/NA	Analysis	Moisture		1	158522	07/14/12 17:00	MS	TAL PEN

Client Sample ID: 616 DAHLIA

Date Collected: 07/10/12 15:15

Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-2

Matrix: Solid
Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			158676	07/16/12 13:00	MG	TAL PEN
Total/NA	Analysis	8260B		1	158674	07/18/12 12:46	MG	TAL PEN
Total/NA	Prep	3550C			158525	07/16/12 13:30	RT	TAL PEN
Total/NA	Analysis	8270D		1	158702	07/19/12 14:47	JP	TAL PEN
Total/NA	Analysis	Moisture		1	158522	07/14/12 17:00	MS	TAL PEN

Client Sample ID: 614 DAHLIA

Date Collected: 07/11/12 14:15

Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-3

Matrix: Solid
Percent Solids: 98.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			158676	07/16/12 13:00	MG	TAL PEN
Total/NA	Analysis	8260B		1	158674	07/18/12 13:07	MG	TAL PEN
Total/NA	Prep	3550C			158525	07/16/12 13:30	RT	TAL PEN
Total/NA	Analysis	8270D		1	158702	07/19/12 15:21	JP	TAL PEN
Total/NA	Analysis	Moisture		1	158522	07/14/12 17:00	MS	TAL PEN

Client Sample ID: 607 DAHLIA

Date Collected: 07/12/12 10:45

Date Received: 07/14/12 09:02

Lab Sample ID: 400-67078-4

Matrix: Solid
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			158676	07/16/12 13:00	MG	TAL PEN
Total/NA	Analysis	8260B		1	158674	07/18/12 13:27	MG	TAL PEN
Total/NA	Prep	3550C			158525	07/16/12 13:30	RT	TAL PEN
Total/NA	Analysis	8270D		1	158702	07/19/12 22:09	JP	TAL PEN
Total/NA	Analysis	Moisture		1	158522	07/14/12 17:00	MS	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

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

TestAmerica Job ID: 400-67078-1

GC/MS VOA

Analysis Batch: 158674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-2	616 DAHLIA	Total/NA	Solid	8260B	158676
400-67078-3	614 DAHLIA	Total/NA	Solid	8260B	158676
400-67078-4	607 DAHLIA	Total/NA	Solid	8260B	158676
LCS 400-158676/2-A	Lab Control Sample	Total/NA	Solid	8260B	158676
LCSD 400-158676/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	158676
MB 400-158676/1-A	Method Blank	Total/NA	Solid	8260B	158676

Prep Batch: 158676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-2	616 DAHLIA	Total/NA	Solid	5035	
400-67078-3	614 DAHLIA	Total/NA	Solid	5035	
400-67078-4	607 DAHLIA	Total/NA	Solid	5035	
LCS 400-158676/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 400-158676/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 400-158676/1-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 158802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-1	1366 CARDINAL	Total/NA	Solid	5035	
LCS 400-158802/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 400-158802/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 400-158802/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 158805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-1	1366 CARDINAL	Total/NA	Solid	8260B	158802
LCS 400-158802/2-A	Lab Control Sample	Total/NA	Solid	8260B	158802
LCSD 400-158802/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	158802
MB 400-158802/1-A	Method Blank	Total/NA	Solid	8260B	158802

GC/MS Semi VOA

Prep Batch: 158525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67074-D-4-B MS	Matrix Spike	Total/NA	Solid	3550C	
400-67074-D-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
400-67078-1	1366 CARDINAL	Total/NA	Solid	3550C	
400-67078-2	616 DAHLIA	Total/NA	Solid	3550C	
400-67078-3	614 DAHLIA	Total/NA	Solid	3550C	
400-67078-4	607 DAHLIA	Total/NA	Solid	3550C	
LCS 400-158525/7-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 400-158525/8-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 158609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67074-D-4-B MS	Matrix Spike	Total/NA	Solid	8270D	158525
400-67074-D-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	158525
LCS 400-158525/7-A	Lab Control Sample	Total/NA	Solid	8270D	158525
MB 400-158525/8-A	Method Blank	Total/NA	Solid	8270D	158525

QC Association Summary

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

TestAmerica Job ID: 400-67078-1

GC/MS Semi VOA (Continued)

Analysis Batch: 158702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-1	1366 CARDINAL	Total/NA	Solid	8270D	158525
400-67078-2	616 DAHLIA	Total/NA	Solid	8270D	158525
400-67078-3	614 DAHLIA	Total/NA	Solid	8270D	158525
400-67078-4	607 DAHLIA	Total/NA	Solid	8270D	158525

General Chemistry

Analysis Batch: 158522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-67078-1	1366 CARDINAL	Total/NA	Solid	Moisture	
400-67078-2	616 DAHLIA	Total/NA	Solid	Moisture	
400-67078-3	614 DAHLIA	Total/NA	Solid	Moisture	
400-67078-4	607 DAHLIA	Total/NA	Solid	Moisture	

QC Sample Results

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

TestAmerica Job ID: 400-67078-1

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

Lab Sample ID: MB 400-158676/1-A

Matrix: Solid

Analysis Batch: 158674

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 158676

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.0050	0.00049	mg/Kg		07/18/12 08:00	07/18/12 09:54	1
Ethylbenzene	ND		0.0050	0.00061	mg/Kg		07/18/12 08:00	07/18/12 09:54	1
Toluene	ND		0.0050	0.00070	mg/Kg		07/18/12 08:00	07/18/12 09:54	1
Xylenes, Total	ND		0.010	0.0019	mg/Kg		07/18/12 08:00	07/18/12 09:54	1
Naphthalene	ND		0.0050	0.0010	mg/Kg		07/18/12 08:00	07/18/12 09:54	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	93		72 - 122	07/18/12 08:00	07/18/12 09:54	1
Dibromofluoromethane	99		79 - 118	07/18/12 08:00	07/18/12 09:54	1
Toluene-d8 (Surr)	98		80 - 120	07/18/12 08:00	07/18/12 09:54	1

Lab Sample ID: LCS 400-158676/2-A

Matrix: Solid

Analysis Batch: 158674

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 158676

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Benzene	0.0500	0.0532		mg/Kg		106	74 - 119
Ethylbenzene	0.0500	0.0557		mg/Kg		111	78 - 116
Toluene	0.0500	0.0534		mg/Kg		107	76 - 116
Xylenes, Total	0.150	0.165		mg/Kg		110	77 - 118
Naphthalene	0.0500	0.0469		mg/Kg		94	64 - 126

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	96		72 - 122
Dibromofluoromethane	100		79 - 118
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCSD 400-158676/3-A

Matrix: Solid

Analysis Batch: 158674

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 158676

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.0500	0.0540		mg/Kg		108	74 - 119	1	10
Ethylbenzene	0.0500	0.0564		mg/Kg		113	78 - 116	1	12
Toluene	0.0500	0.0541		mg/Kg		108	76 - 116	1	11
Xylenes, Total	0.150	0.171		mg/Kg		114	77 - 118	4	12
Naphthalene	0.0500	0.0453		mg/Kg		91	64 - 126	3	16

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	97		72 - 122
Dibromofluoromethane	101		79 - 118
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: MB 400-158802/1-A

Matrix: Solid

Analysis Batch: 158805

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 158802

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.0050	0.00049	mg/Kg		07/19/12 08:00	07/19/12 16:49	1

QC Sample Results

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

TestAmerica Job ID: 400-67078-1

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

Lab Sample ID: MB 400-158802/1-A

Matrix: Solid

Analysis Batch: 158805

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 158802

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.0050	0.00061	mg/Kg		07/19/12 08:00	07/19/12 16:49	1
Toluene	ND		0.0050	0.00070	mg/Kg		07/19/12 08:00	07/19/12 16:49	1
Xylenes, Total	ND		0.010	0.0019	mg/Kg		07/19/12 08:00	07/19/12 16:49	1
Naphthalene	ND		0.0050	0.0010	mg/Kg		07/19/12 08:00	07/19/12 16:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		72 - 122	07/19/12 08:00	07/19/12 16:49	1
Dibromofluoromethane	100		79 - 118	07/19/12 08:00	07/19/12 16:49	1
Toluene-d8 (Surr)	101		80 - 120	07/19/12 08:00	07/19/12 16:49	1

Lab Sample ID: LCS 400-158802/2-A

Matrix: Solid

Analysis Batch: 158805

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 158802

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0553		mg/Kg		111	74 - 119
Ethylbenzene	0.0500	0.0560		mg/Kg		112	78 - 116
Toluene	0.0500	0.0556		mg/Kg		111	76 - 116
Xylenes, Total	0.150	0.167		mg/Kg		111	77 - 118
Naphthalene	0.0500	0.0496		mg/Kg		99	64 - 126

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	96		72 - 122
Dibromofluoromethane	101		79 - 118
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCSD 400-158802/3-A

Matrix: Solid

Analysis Batch: 158805

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 158802

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.0557		mg/Kg		111	74 - 119	1	10
Ethylbenzene	0.0500	0.0577		mg/Kg		115	78 - 116	3	12
Toluene	0.0500	0.0556		mg/Kg		111	76 - 116	0	11
Xylenes, Total	0.150	0.174		mg/Kg		116	77 - 118	4	12
Naphthalene	0.0500	0.0443		mg/Kg		89	64 - 126	11	16

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	98		72 - 122
Dibromofluoromethane	102		79 - 118
Toluene-d8 (Surr)	100		80 - 120

QC Sample Results

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

TestAmerica Job ID: 400-67078-1

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

Lab Sample ID: MB 400-158525/8-A

Matrix: Solid

Analysis Batch: 158609

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 158525

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Acenaphthylene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Anthracene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Benzo[a]anthracene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Benzo[a]pyrene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Benzo[b]fluoranthene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Benzo[g,h,i]perylene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Benzo[k]fluoranthene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Chrysene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Dibenz(a,h)anthracene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Fluoranthene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Fluorene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Indeno[1,2,3-cd]pyrene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Naphthalene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Phenanthrene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
Pyrene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
1-Methylnaphthalene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1
2-Methylnaphthalene	ND		0.33	0.033	mg/Kg		07/16/12 09:00	07/17/12 16:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	78		44 - 108	07/16/12 09:00	07/17/12 16:16	1
Nitrobenzene-d5 (Surr)	72		27 - 114	07/16/12 09:00	07/17/12 16:16	1
Terphenyl-d14 (Surr)	76		36 - 134	07/16/12 09:00	07/17/12 16:16	1

Lab Sample ID: LCS 400-158525/7-A

Matrix: Solid

Analysis Batch: 158609

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 158525

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.67	1.30		mg/Kg		78	53 - 108
Acenaphthylene	1.67	1.24		mg/Kg		75	57 - 111
Anthracene	1.67	1.27		mg/Kg		76	56 - 110
Benzo[a]anthracene	1.67	1.52		mg/Kg		91	52 - 105
Benzo[a]pyrene	1.67	1.21		mg/Kg		72	52 - 97
Benzo[b]fluoranthene	1.67	1.31		mg/Kg		78	49 - 95
Benzo[g,h,i]perylene	1.67	1.46		mg/Kg		88	47 - 122
Benzo[k]fluoranthene	1.67	1.35		mg/Kg		81	57 - 113
Chrysene	1.67	1.46		mg/Kg		88	56 - 102
Dibenz(a,h)anthracene	1.67	1.34		mg/Kg		81	46 - 114
Fluoranthene	1.67	1.24		mg/Kg		74	56 - 120
Fluorene	1.67	1.34		mg/Kg		80	51 - 116
Indeno[1,2,3-cd]pyrene	1.67	1.42		mg/Kg		85	48 - 119
Naphthalene	1.67	1.15		mg/Kg		69	52 - 99
Phenanthrene	1.67	1.24		mg/Kg		74	56 - 113
Pyrene	1.67	1.43		mg/Kg		86	56 - 100
1-Methylnaphthalene	1.67	1.23		mg/Kg		74	58 - 104
2-Methylnaphthalene	1.67	1.09		mg/Kg		65	53 - 99

QC Sample Results

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

TestAmerica Job ID: 400-67078-1

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

Lab Sample ID: LCS 400-158525/7-A

Matrix: Solid

Analysis Batch: 158609

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 158525

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	68		44 - 108
Nitrobenzene-d5 (Surr)	70		27 - 114
Terphenyl-d14 (Surr)	86		36 - 134

Lab Sample ID: 400-67074-D-4-B MS

Matrix: Solid

Analysis Batch: 158609

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 158525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	ND		1.76	1.47		mg/Kg	☼	84	10 - 150
Acenaphthylene	ND		1.76	1.48		mg/Kg	☼	84	10 - 150
Anthracene	ND		1.76	1.59		mg/Kg	☼	91	10 - 150
Benzo[a]anthracene	ND		1.76	1.79		mg/Kg	☼	102	10 - 150
Benzo[a]pyrene	ND		1.76	1.33		mg/Kg	☼	75	10 - 150
Benzo[b]fluoranthene	ND		1.76	1.53		mg/Kg	☼	87	10 - 150
Benzo[g,h,i]perylene	ND		1.76	1.73		mg/Kg	☼	98	10 - 150
Benzo[k]fluoranthene	ND		1.76	1.60		mg/Kg	☼	91	10 - 150
Chrysene	ND		1.76	1.65		mg/Kg	☼	94	10 - 150
Dibenz(a,h)anthracene	ND		1.76	1.54		mg/Kg	☼	88	32 - 111
Fluoranthene	ND		1.76	1.58		mg/Kg	☼	90	10 - 150
Fluorene	0.037 J		1.76	1.56		mg/Kg	☼	86	10 - 150
Indeno[1,2,3-cd]pyrene	ND		1.76	1.64		mg/Kg	☼	93	10 - 150
Naphthalene	ND		1.76	1.32		mg/Kg	☼	75	10 - 150
Phenanthrene	ND		1.76	1.52		mg/Kg	☼	86	10 - 150
Pyrene	ND		1.76	1.70		mg/Kg	☼	97	10 - 150
1-Methylnaphthalene	ND		1.76	1.38		mg/Kg	☼	78	10 - 150
2-Methylnaphthalene	ND		1.76	1.37		mg/Kg	☼	78	10 - 150

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	77		44 - 108
Nitrobenzene-d5 (Surr)	77		27 - 114
Terphenyl-d14 (Surr)	93		36 - 134

Lab Sample ID: 400-67074-D-4-C MSD

Matrix: Solid

Analysis Batch: 158609

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 158525

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Acenaphthene	ND		1.75	1.44		mg/Kg	☼	82	10 - 150	2	36
Acenaphthylene	ND		1.75	1.45		mg/Kg	☼	83	10 - 150	2	29
Anthracene	ND		1.75	1.49		mg/Kg	☼	85	10 - 150	7	30
Benzo[a]anthracene	ND		1.75	1.72		mg/Kg	☼	98	10 - 150	4	33
Benzo[a]pyrene	ND		1.75	1.45		mg/Kg	☼	83	10 - 150	9	30
Benzo[b]fluoranthene	ND		1.75	1.48		mg/Kg	☼	85	10 - 150	3	31
Benzo[g,h,i]perylene	ND		1.75	1.69		mg/Kg	☼	96	10 - 150	2	30
Benzo[k]fluoranthene	ND		1.75	1.66		mg/Kg	☼	95	10 - 150	4	29
Chrysene	ND		1.75	1.72		mg/Kg	☼	98	10 - 150	4	33
Dibenz(a,h)anthracene	ND		1.75	1.61		mg/Kg	☼	92	32 - 111	4	30
Fluoranthene	ND		1.75	1.59		mg/Kg	☼	91	10 - 150	0	42

QC Sample Results

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

TestAmerica Job ID: 400-67078-1

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

Lab Sample ID: 400-67074-D-4-C MSD

Matrix: Solid

Analysis Batch: 158609

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 158525

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Fluorene	0.037	J	1.75	1.58		mg/Kg	☼	88	10 - 150	2	36
Indeno[1,2,3-cd]pyrene	ND		1.75	1.72		mg/Kg	☼	98	10 - 150	4	31
Naphthalene	ND		1.75	1.28		mg/Kg	☼	73	10 - 150	4	33
Phenanthrene	ND		1.75	1.55		mg/Kg	☼	88	10 - 150	2	34
Pyrene	ND		1.75	1.67		mg/Kg	☼	95	10 - 150	2	45
1-Methylnaphthalene	ND		1.75	1.30		mg/Kg	☼	74	10 - 150	5	29
2-Methylnaphthalene	ND		1.75	1.24		mg/Kg	☼	71	10 - 150	10	32
Surrogate	MSD	MSD			Limits						
	%Recovery	Qualifier									
2-Fluorobiphenyl	71				44 - 108						
Nitrobenzene-d5 (Surr)	75				27 - 114						
Terphenyl-d14 (Surr)	97				36 - 134						

Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 400-67078-1

Login Number: 67078

List Source: TestAmerica Pensacola

List Number: 1

Creator: Serratore, Maria

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4°C
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 sample IDs on the containers 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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

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

TestAmerica Job ID: 400-67078-1

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-13
Arizona	State Program	9	AZ0710	01-11-13
Arkansas DEQ	State Program	6	88-0689	09-01-13
Florida	NELAC	4	E81010	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAC	5	200041	10-09-12
Iowa	State Program	7	367	08-01-12
Kansas	NELAC	7	E-10253	10-31-12
Kentucky (UST)	State Program	4	53	07-05-13
Louisiana	NELAC	6	30976	06-30-13
Maryland	State Program	3	233	12-30-12
Massachusetts	State Program	1	M-FL094	06-30-13
Michigan	State Program	5	9912	06-30-12
New Hampshire	NELAC	1	2505	08-16-12
New Jersey	NELAC	2	FL006	06-30-13
North Carolina DENR	State Program	4	314	12-31-12
Oklahoma	State Program	6	9810	08-31-12
Pennsylvania	NELAC	3	68-00467	12-31-12
Rhode Island	State Program	1	LAO00307	12-30-12
South Carolina	State Program	4	96026	06-30-12
Tennessee	State Program	4	TN02907	06-30-13
Texas	NELAC	6	T104704286-12-4	09-30-12
USDA	Federal		P330-10-00407	12-10-13
Virginia	NELAC	3	460166	06-14-13
Washington	State Program	10	C915	08-08-12
West Virginia DEP	State Program	3	136	06-30-13

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

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2037

Sampler Name: (Print)

Sampler Signature:

Fax No.: 843-879-0401

Pratt Shaw

400-67078 Chain of Custody

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 ☐

Site State: SC

PO#:

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

1027

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO ₃ (Red Label)	Hot Blue Label	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (Specify)	BTEX + Napth - 82608	PAH - 8270D	Analyze For:	RUSH TAT (Pre-Schedule)
1366 CARDINAL	7/10/12	1045	5	X																				
616 DAHLIA	7/10/12	1255	5	X																				
614 DAHLIA	7/11/12	1415	5	X																				
607 DAHLIA	7/12/12	1045	5	X																				

Special Instructions:

Relinquished by: *[Signature]*
Relinquished by: *[Signature]*

Method of Shipment:

Received by:

Received by TestAmerica:

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

Date

Time

Time

Date

ATTACHMENT A



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of 1					
3. Generator's Mailing Address: MCAS, BEAUFORT LAUREL BAY HOUSING BEAUFORT, SC 29907		Generator's Site Address (If different than mailing):		A. Manifest Number WMNA		00316829					
4. Generator's Phone 843-228-6461				B. State Generator's ID							
5. Transporter 1 Company Name EEG, INC.		6. US EPA ID Number		C. State Transporter's ID							
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone 843-879-0411							
9. Designated Facility Name and Site Address HICKORY HILL LANDFILL 2621 LOW COUNTRY ROAD RIDGELAND, SC 29936		10. US EPA ID Number		E. State Transporter's ID							
				F. Transporter's Phone							
				G. State Facility ID							
				H. State Facility Phone 843-987-4643							
GENERATOR	11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments				
	a. HEATING OIL TANKS FILLED WITH SAND		No.	Type							
	WM Profile # 102655SC										
	b.										
	WM Profile #										
TRANSPORTER	c.										
	WM Profile #										
	d.										
	WM Profile #										
J. Additional Descriptions for Materials Listed Above		K. Disposal Location									
WASTE from: 1) 1353 CARDINAL 2) 1366 CARDINAL		Cell		Level							
		Grid									
15. Special Handling Instructions and Additional Information		5) 607 Dahlia 3) 616 Dahlia 4) 614 Dahlia 6) 260 Beech-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 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 Timothy Whaley		Signature "On behalf of" Timothy Whaley				Month 8	Day 22	Year 12			
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name PRATT SHAW				Signature [Signature]		Month 8	Day 22	Year 12
	18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name JAMES BALDWIN				Signature [Signature]		Month 8	Day 23	Year 12
	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.								
FACILITY	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.		Printed Name Keith Monelus				Signature [Signature]		Month 8	Day 23	Year 12

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

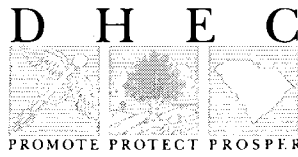
Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY

Appendix C

Regulatory Correspondence



Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

May 15, 2014

Commanding Officer
Attention: NREAO Mr. William A. Drawdy
United State Marine Corps Air Station
Post Office Box 55001
Beaufort, SC 29904-5001

RE: No Further Action
Laurel Bay Underground Storage Tank Assessment Reports for:
See attached sheet

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received the above referenced Underground Storage Tanks (USTs) Assessment Reports for the addresses listed above. The regulatory authority for the investigation and cleanup of releases from these tank systems is the South Carolina Pollution Control Act (S.C. Code Ann. §48-1-10 et seq., as amended).

The Department has reviewed the referenced assessment reports and agrees there is no indication of soil or groundwater contamination on these properties, and therefore no further investigation is required at this time.

Please note that the Department's decision is based on information provided by the Marine Corps Air Station (MCAS) to date. Any information found to be contradictory to this decision may require additional action. Furthermore, the Department retains the right to request further investigation if deemed necessary.

If you have any questions, please contact me at kriegkm@dhec.sc.gov or 803-898-0255.

Sincerely,

Kent Krieg
Department of Defense Corrective Action Section
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email)
Craig Ehde (via email)



Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

Attachment to: Krieg to Drawdy
Subject: NFA
Dated 5/15/2014

Laurel Bay Underground Storage Tank Assessment Reports for: (143 addresses/146 tanks)

212 Balsam	503 Laurel Bay
219 Balsam	508 Laurel Bay
260 Beech Tank 1	510 Laurel Bay
260 Beech Tank 2	523 Laurel Bay
267 Birch	525 Laurel Bay
287 Birch	529 Laurel Bay
302 Ash	533 Laurel Bay
305 Ash	537 Laurel Bay
334 Ash	556 Dahlia
338 Ash Tank 1	557 Dahlia
338 Ash Tank 2	559 Dahlia
361 Aspen	562 Dahlia
371 Aspen	568 Dahlia
372 Aspen Tank 1	581 Aster
372 Aspen Tank 2	582 Aster
375 Aspen	584 Aster
385 Aspen	602 Dahlia
403 Elderberry	607 Dahlia
407 Elderberry	614 Dahlia
411 Elderberry	616 Dahlia
414 Elderberry	619 Dahlia
415 Elderberry	625 Dahlia
421 Elderberry	629 Dahlia
427 Elderberry	631 Dahlia
428 Elderberry	634 Dahlia
431 Elderberry	660 Camellia
455 Elderberry	661 Camellia
484 Laurel Bay	666 Camellia
490 Laurel Bay	669 Camellia
502 Laurel Bay	672 Camellia

Laurel Bay Underground Storage Tank Assessment Reports for: (143 addresses/146 tanks) cont.

674 Camellia	880 Cobia
677 Camellia	890 Cobia
679 Camellia	892 Cobia
686 Camellia	900 Barracuda
690 Camellia	906 Barracuda
698 Abelia	911 Barracuda
700 Bluebell	912 Barracuda
704 Bluebell	917 Barracuda
705 Bluebell	919 Barracuda
708 Bluebell	928 Albacore
710 Bluebell	1024 Foxglove
711 Bluebell	1028 Foxglove
714 Bluebell	1029 Foxglove
715 Bluebell	1038 Iris
726 Bluebell	1049 Gardenia
728 Bluebell	1079 Heather
731 Bluebell	1103 Iris
734 Bluebell	1122 Iris
759 Althea	1136 Iris
761 Althea	1173 Bobwhite
773 Althea	1200 Cardinal
778 Laurel Bay	1221 Cardinal
807 Azalea	1238 Dove
814 Azalea	1241 Dove
815 Azalea	1242 Dove
818 Azalea	1248 Dove
820 Azalea	1262 Dove
821 Azalea	1265 Dove
831 Azalea	1267 Dove
832 Azalea	1289 Eagle
834 Azalea	1298 Eagle
835 Azalea	1300 Eagle
841 Azalea	1303 Eagle
853 Dolphin	1304 Eagle
858 Dolphin	1315 Albatross
869 Cobia	1316 Albatross
874 Cobia	1320 Albatross
875 Cobia	1338 Albatross

Laurel Bay Underground Storage Tank Assessment Reports for: (143 addresses/146 tanks) cont.

1340 Albatross	
1342 Albatross	
1344 Cardinal	
1345 Cardinal	
1349 Cardinal	
1355 Cardinal	
1366 Cardinal	
1374 Dove	
1375 Dove	
1415 Albatross	