

**SUMMARY REPORT
166 ASPEN STREET (FORMERLY 377 ASPEN STREET)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC**

**Revision: 0
Prepared for:**

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

and



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

JUNE 2021

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Prepared by:

CDM - AECOM
Multimedia Joint Venture

**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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List of Acronyms

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CTO	Contract Task Order
COPC	constituents of potential concern
ft	feet
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 166 Aspen Street (Formerly 377 Aspen Street). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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

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

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

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

1.2 UST Removal and Assessment Process

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

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

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

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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 166 Aspen Street (Formerly 377 Aspen Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 377 Aspen Street* (MCAS Beaufort, 2012). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017). The laboratory report that includes the pertinent IGWA analytical results for this site is presented in Appendix C.

2.1 UST Removal and Soil Sampling

On February 1, 2012, a single 280 gallon heating oil UST was removed from underneath the front concrete walk adjacent to the front concrete porch at 166 Aspen Street (Formerly 377 Aspen Street). The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). The UST was removed, cleaned, and shipped offsite for recycling. There

was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removal. According to the UST Assessment Report (Appendix B), the depth to the base of the UST was 6'0" 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 166 Aspen Street (Formerly 377 Aspen Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated August 24, 2016, SCDHEC requested an IGWA for 166 Aspen Street (Formerly 377 Aspen Street) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On March 2, 2017, a temporary monitoring well was installed at 166 Aspen Street (Formerly 377 Aspen Street), in accordance with the South Carolina Well Standards and Regulations (R.61-71.H-I, updated June 24, 2016). In order to provide data that can be used to determine whether COPCs are migrating to underlying groundwater, the monitoring well was placed in the same general location as the former heating oil UST. The former UST location is indicated on Figures 2 and 3 of the UST Assessment Report (Appendix B). Further details are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017).

The sampling strategy for this phase of the investigation required a one-time sampling event of the temporarily installed monitoring well. Following well installation and development, groundwater samples were collected using low-flow methods and shipped to an offsite laboratory for analysis of the petroleum COPCs. Upon completion of groundwater sampling, the temporary well was abandoned in accordance with the South Carolina Well Standards and Regulations R.61-71 (SCDHEC, 2016). Field forms are provided in the *Initial Groundwater Investigation Report – February and March 2017* (Resolution Consultants, 2017).

2.4 Groundwater Analytical Results

A summary of the laboratory analytical results and SCDHEC RBSLs is presented in Table 2. A copy of the laboratory analytical data report is included in Appendix C.

The groundwater results collected from 166 Aspen Street (Formerly 377 Aspen Street) were less than the SCDHEC RBSLs and the site specific groundwater VISLs (Table 2), which indicated that the groundwater was not impacted by COPCs associated with the former UST at concentrations that present a potential risk to human health and the environment.

3.0 PROPERTY STATUS

Based on the analytical results for groundwater, SCDHEC made the determination that NFA was required for 166 Aspen Street (Formerly 377 Aspen Street). This NFA determination was obtained in a letter dated July 27, 2017. SCDHEC's NFA letter is provided in Appendix D.

4.0 REFERENCES

Marine Corps Air Station Beaufort, 2012. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 377 Aspen Street, Laurel Bay Military Housing Area*, April 2012.

Resolution Consultants, 2017. *Initial Groundwater Investigation Report – February and March 2017 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, June 2017.

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.

South Carolina Department of Health and Environmental Control Bureau of Water, 2016. *R.61-71, Well Standards*, June 2016.

Tables

Table 1
Laboratory Analytical Results - Soil
166 Aspen Street (Formerly 377 Aspen Street)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Results Sample Collected 02/01/12
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	ND
Benzo(k)fluoranthene	0.66	ND
Chrysene	0.66	ND
Dibenz(a,h)anthracene	0.66	ND

Notes:

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 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 - milligrams per kilogram

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

Table 2
Laboratory Analytical Results - Groundwater
166 Aspen Street (Formerly 377 Aspen Street)
Laurel Bay Military Housing Area
Marine Corps Air Station Beaufort
Beaufort, South Carolina

Constituent	SCDHEC RBSLs ⁽¹⁾	Site-Specific Groundwater VISLs (µg/L) ⁽²⁾	Results Sample Collected 03/02/17
Volatile Organic Compounds Analyzed by EPA Method 8260B (µg/L)			
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	ND
Naphthalene	25	29.33	ND
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	ND
Semivolatile Organic Compounds Analyzed by EPA Method 8270D (µg/L)			
Benzo(a)anthracene	10	NA	ND
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	ND
Dibenz(a,h)anthracene	10	NA	ND

Notes:

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 3.1 (SCDHEC, February 2016).

⁽²⁾ Site-specific groundwater VISLs were calculated using the EPA JE Model Spreadsheets (Version 3.1, February 2004) and conservative modeling inputs representative of a small single-story house with an 8 foot ceiling. Site-specific groundwater VISLs were developed based on a target risk level of 1×10^{-6} , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

Bold font and shading indicates the concentration exceeds the SCDHEC RBSL and/or the Site-Specific Groundwater VISL.

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

µg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

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

Attachment 2

III. INSURANCE INFORMATION

Insurance Statement

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

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

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

My policy provider is: _____

The policy deductible is: _____

The policy limit is: _____

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

IV. REQUEST FOR SUPERB FUNDING

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

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

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

Name (Type or print.)

Signature

To be completed by Notary Public:

Sworn before me this _____ day of _____, 20____

(Name)

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

VI. UST INFORMATION

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

377Aspen				
Heating oil				
280 gal				
Late 1950s				
Steel				
Mid 1980s				
6'				
No				
No				
Removed				
2/1/2012				
Yes				
Yes				

- M. Method of disposal for any USTs removed from the ground (attach disposal manifests)
UST 377Aspen was removed from the ground, and disposed in 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 377Aspen had been previously filled with sand by others.
-
- O. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST
Corrosion, pitting and holes were found throughout the tank.

VII. PIPING INFORMATION

- A. Construction Material..(ex. Steel, FRP).....
- B. Distance from UST to Dispenser.....
- C. Number of Dispensers.....
- D. Type of System Pressure or Suction.....
- E. Was Piping Removed from the Ground? Y/N
- F. Visible Corrosion or Pitting Y/N.....
- G. Visible Holes Y/N.....
- H. Age.....
- I. If any corrosion, pitting, or holes were observed, describe the location and extent for each piping run.

377Aspen				
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 #
377 Aspen	Excav at fill end	Soil	Sandy	6'	2/1/12 1400 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.

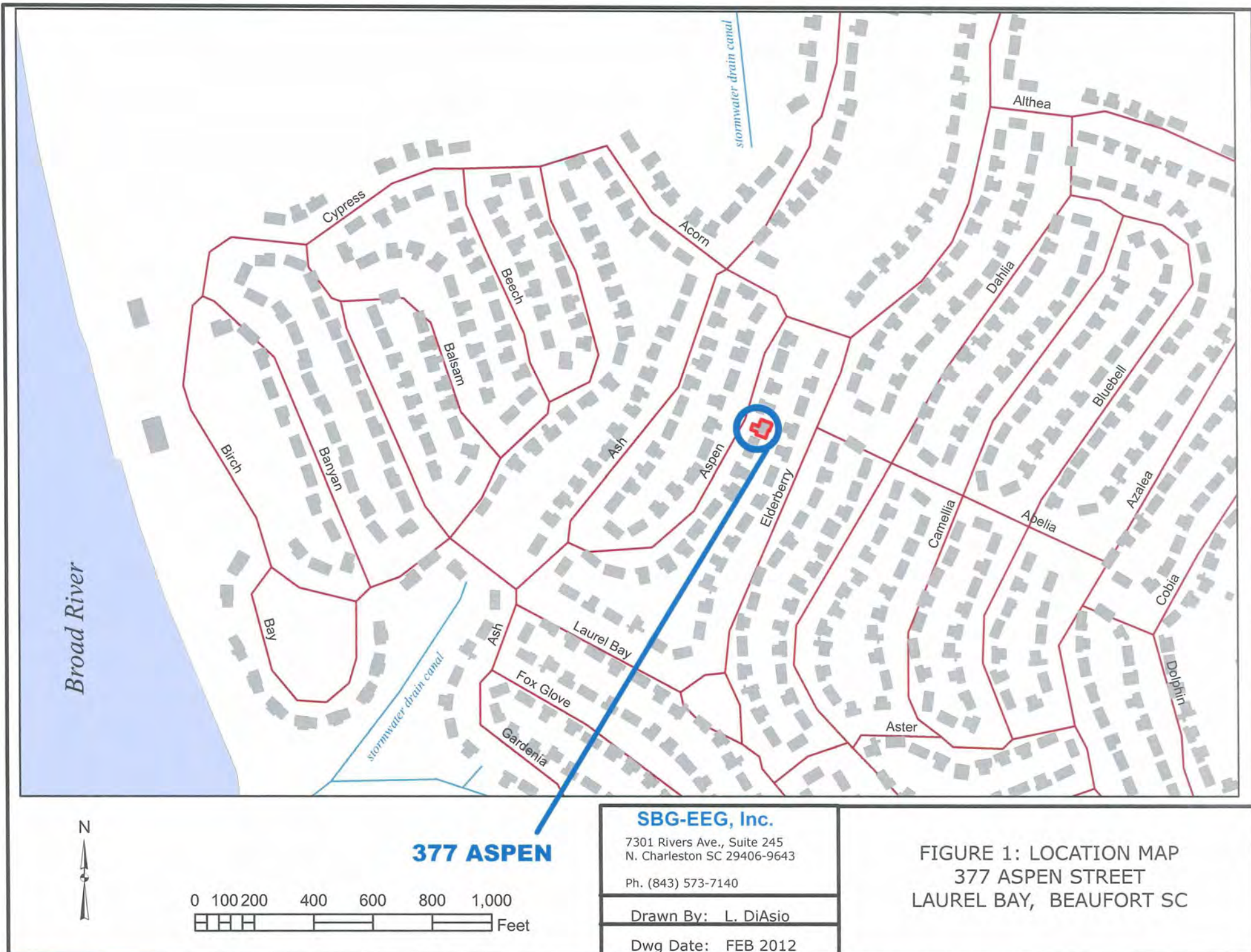
XII. RECEPTORS

	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;">*~ 925' to drainage 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)





377 ASPEN STREET
LAUREL BAY MILITARY HOUSING
MCAS BEAUFORT, SC

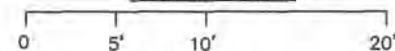
CONCRETE
PORCH

UST 377ASPEN,
280 GAL.

CONCRETE WALK

ASPHALT
DRIVEWAY

GRAPHIC SCALE



STORMWATER DRAINAGE
CANAL \approx 925'

SBG-EEG

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

FIGURE 2 SITE MAP
377 ASPEN ST., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

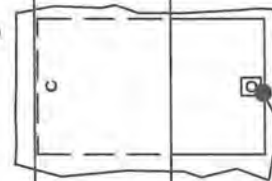
DWG DATE FEB 2012

377 ASPEN STREET



STORMWATER DRAINAGE
CANAL \approx 925'

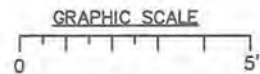
FILL END



*EXCAVATION

SOIL SAMPLE
377 ASPEN-1

*A PORTION OF THE SIDEWALK WAS REMOVED
TO FACILITATE EXTRACTING THE TANK.



TANK DEPTH BELOW GRADE
377ASPEN = 36"

SBG-EEG

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

FIGURE 3 UST SAMPLE LOCATIONS
377 ASPEN ST., LAUREL BAY
MCAS BEAUFORT SC

SCALE: GRAPHIC

DWG DATE FEB 2012



Picture 1: Location of UST 377Aspen.



Picture 2: UST 377Aspen 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	377Aspen						
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 Road

Nashville, TN 37204

Tel: 800-765-0980

TestAmerica Job ID: NWB0747

Client Project/Site: [none]

Client Project Description: Laurel Bay Housing Project

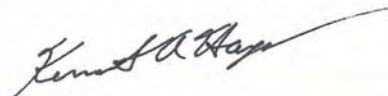
For:

EEG - Small Business Group, Inc. (2449)

10179 Highway 78

Ladson, SC 29456

Attn: Tom McElwee



Authorized for release by:

2/20/2012 4:57:00 PM

Ken A. Hayes

Senior Project Manager

ken.hayes@testamericainc.com

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

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

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Sample Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
NWB0747-01	1452 Cardinal	Soil	01/31/12 15:45	02/04/12 08:30
NWB0747-02	377 Aspen	Soil	02/01/12 14:00	02/04/12 08:30

Definitions/Glossary

Client: EEG - Small Business Group, Inc. (2449)

TestAmerica Job ID: NWB0747

Project/Site: [none]

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
RL1	Reporting limit raised due to sample matrix effects.

GCMS Semivolatiles

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.
B	Analyte was detected in the associated Method Blank.
B1	Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.

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)

Client Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Client Sample ID: 1452 Cardinal

Lab Sample ID: NWB0747-01

Date Collected: 01/31/12 15:45

Matrix: Soil

Date Received: 02/04/12 08:30

Percent Solids: 91.6

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00121	J	0.00194	0.00107	mg/kg dry	☼	01/31/12 15:45	02/13/12 15:43	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	99		70 - 130				01/31/12 15:45	02/13/12 15:43	1.00
Dibromofluoromethane	113		70 - 130				01/31/12 15:45	02/13/12 15:43	1.00
Toluene-d8	139	ZX	70 - 130				01/31/12 15:45	02/13/12 15:43	1.00
4-Bromofluorobenzene	411	ZX	70 - 130				01/31/12 15:45	02/13/12 15:43	1.00

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.0507	J RL1	0.0540	0.0297	mg/kg dry	☼	01/31/12 15:45	02/13/12 16:14	50.0
Naphthalene	0.727		0.135	0.0675	mg/kg dry	☼	01/31/12 15:45	02/13/12 16:14	50.0
Toluene	ND	RL1	0.0540	0.0297	mg/kg dry	☼	01/31/12 15:45	02/13/12 16:14	50.0
Xylenes, total	0.322		0.135	0.0675	mg/kg dry	☼	01/31/12 15:45	02/13/12 16:14	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	72		70 - 130				01/31/12 15:45	02/13/12 16:14	50.0
Dibromofluoromethane	88		70 - 130				01/31/12 15:45	02/13/12 16:14	50.0
Toluene-d8	104		70 - 130				01/31/12 15:45	02/13/12 16:14	50.0
4-Bromofluorobenzene	83		70 - 130				01/31/12 15:45	02/13/12 16:14	50.0

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.657		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Acenaphthylene	0.462		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Anthracene	0.350		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Benzo (a) anthracene	0.199		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Benzo (a) pyrene	0.105		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Benzo (b) fluoranthene	0.143		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Benzo (g,h,i) perylene	0.0430	J	0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Benzo (k) fluoranthene	0.0936		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Chrysene	0.297		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Dibenz (a,h) anthracene	ND		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Fluoranthene	0.407	B	0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Fluorene	2.06		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Indeno (1,2,3-cd) pyrene	0.0434	J	0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Naphthalene	0.817		0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Pyrene	0.735	B	0.0721	0.0366	mg/kg dry	☼	02/08/12 12:10	02/09/12 20:37	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	40		18 - 120				02/08/12 12:10	02/09/12 20:37	1.00
2-Fluorobiphenyl	29		14 - 120				02/08/12 12:10	02/09/12 20:37	1.00
Nitrobenzene-d5	31		17 - 120				02/08/12 12:10	02/09/12 20:37	1.00

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	4.66	B1 B	0.360	0.183	mg/kg dry	☼	02/08/12 12:10	02/10/12 11:02	5.00
1-Methylnaphthalene	8.34		0.360	0.183	mg/kg dry	☼	02/08/12 12:10	02/10/12 11:02	5.00
2-Methylnaphthalene	11.5		0.360	0.183	mg/kg dry	☼	02/08/12 12:10	02/10/12 11:02	5.00

Client Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Client Sample ID: 1452 Cardinal

Lab Sample ID: NWB0747-01

Date Collected: 01/31/12 15:45

Matrix: Soil

Date Received: 02/04/12 08:30

Percent Solids: 91.6

Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	91.6		0.500	0.500	%		02/06/12 12:40	02/07/12 08:21	1.00

Client Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Client Sample ID: 377 Aspen

Lab Sample ID: NWB0747-02

Date Collected: 02/01/12 14:00

Matrix: Soil

Date Received: 02/04/12 08:30

Percent Solids: 85.4

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00198	0.00109	mg/kg dry	☒	02/01/12 14:00	02/13/12 14:43	1.00
Ethylbenzene	ND		0.00198	0.00109	mg/kg dry	☒	02/01/12 14:00	02/13/12 14:43	1.00
Toluene	ND		0.00198	0.00109	mg/kg dry	☒	02/01/12 14:00	02/13/12 14:43	1.00
Xylenes, total	ND		0.00494	0.00247	mg/kg dry	☒	02/01/12 14:00	02/13/12 14:43	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	103		70 - 130				02/01/12 14:00	02/13/12 14:43	1.00
Dibromofluoromethane	113		70 - 130				02/01/12 14:00	02/13/12 14:43	1.00
Toluene-d8	109		70 - 130				02/01/12 14:00	02/13/12 14:43	1.00
4-Bromofluorobenzene	122		70 - 130				02/01/12 14:00	02/13/12 14:43	1.00

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B - RE2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	RL1	0.124	0.0618	mg/kg dry	☒	02/01/12 14:00	02/13/12 15:13	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	74		70 - 130				02/01/12 14:00	02/13/12 15:13	50.0
Dibromofluoromethane	87		70 - 130				02/01/12 14:00	02/13/12 15:13	50.0
Toluene-d8	102		70 - 130				02/01/12 14:00	02/13/12 15:13	50.0
4-Bromofluorobenzene	89		70 - 130				02/01/12 14:00	02/13/12 15:13	50.0

Method: SW846 8270D - Polycyclic Aromatic Hydrocarbons by EPA 8270D

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Acenaphthylene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Anthracene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Benzo (a) anthracene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Benzo (a) pyrene	0.151		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Benzo (b) fluoranthene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Benzo (g,h,i) perylene	0.0455 J		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Benzo (k) fluoranthene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Chrysene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Dibenz (a,h) anthracene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Fluoranthene	0.0494 J B		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Fluorene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Indeno (1,2,3-cd) pyrene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Naphthalene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Phenanthrene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Pyrene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
1-Methylnaphthalene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
2-Methylnaphthalene	ND		0.0782	0.0397	mg/kg dry	☒	02/08/12 12:10	02/09/12 21:00	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Terphenyl-d14	75		18 - 120				02/08/12 12:10	02/09/12 21:00	1.00
2-Fluorobiphenyl	54		14 - 120				02/08/12 12:10	02/09/12 21:00	1.00
Nitrobenzene-d5	58		17 - 120				02/08/12 12:10	02/09/12 21:00	1.00

Method: SW-846 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
% Dry Solids	85.4		0.500	0.500	%		02/06/12 12:40	02/07/12 08:21	1.00

QC Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B

Lab Sample ID: 12B1201-BLK1

Matrix: Soil

Analysis Batch: V002485

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 12B1201_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200	0.00110	mg/kg wet		02/13/12 10:37	02/13/12 13:42	1.00
Ethylbenzene	ND		0.00200	0.00110	mg/kg wet		02/13/12 10:37	02/13/12 13:42	1.00
Naphthalene	ND		0.00500	0.00250	mg/kg wet		02/13/12 10:37	02/13/12 13:42	1.00
Toluene	ND		0.00200	0.00110	mg/kg wet		02/13/12 10:37	02/13/12 13:42	1.00
Xylenes, total	ND		0.00500	0.00250	mg/kg wet		02/13/12 10:37	02/13/12 13:42	1.00
Surrogate	Blank %Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	82		70 - 130				02/13/12 10:37	02/13/12 13:42	1.00
Dibromofluoromethane	103		70 - 130				02/13/12 10:37	02/13/12 13:42	1.00
Toluene-d8	104		70 - 130				02/13/12 10:37	02/13/12 13:42	1.00
4-Bromofluorobenzene	87		70 - 130				02/13/12 10:37	02/13/12 13:42	1.00

Lab Sample ID: 12B1201-BLK2

Matrix: Soil

Analysis Batch: V002485

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 12B1201_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100	0.0550	mg/kg wet		02/13/12 10:37	02/13/12 14:12	50.0
Ethylbenzene	ND		0.100	0.0550	mg/kg wet		02/13/12 10:37	02/13/12 14:12	50.0
Naphthalene	ND		0.250	0.125	mg/kg wet		02/13/12 10:37	02/13/12 14:12	50.0
Toluene	ND		0.100	0.0550	mg/kg wet		02/13/12 10:37	02/13/12 14:12	50.0
Xylenes, total	ND		0.250	0.125	mg/kg wet		02/13/12 10:37	02/13/12 14:12	50.0
Surrogate	Blank %Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4	80		70 - 130				02/13/12 10:37	02/13/12 14:12	50.0
Dibromofluoromethane	102		70 - 130				02/13/12 10:37	02/13/12 14:12	50.0
Toluene-d8	101		70 - 130				02/13/12 10:37	02/13/12 14:12	50.0
4-Bromofluorobenzene	83		70 - 130				02/13/12 10:37	02/13/12 14:12	50.0

Lab Sample ID: 12B1201-BS1

Matrix: Soil

Analysis Batch: V002485

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12B1201_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	48.8		ug/kg		98	75 - 127
Ethylbenzene	50.0	49.0		ug/kg		98	80 - 134
Naphthalene	50.0	35.2		ug/kg		70	69 - 150
Toluene	50.0	49.3		ug/kg		99	80 - 132
Xylenes, total	150	152		ug/kg		101	80 - 137
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4	90		70 - 130				
Dibromofluoromethane	107		70 - 130				
Toluene-d8	99		70 - 130				
4-Bromofluorobenzene	76		70 - 130				

QC Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Method: SW846 8260B - Volatile Organic Compounds by EPA Method 8260B (Continued)

Lab Sample ID: 12B1201-MS1							Client Sample ID: Matrix Spike			
Matrix: Soil							Prep Type: Total			
Analysis Batch: V002485							Prep Batch: 12B1201_P			
	Sample	Sample	Spike	Matrix Spike	Matrix Spike			%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	ND		1.21	1.24		mg/kg dry	☼	102	31 - 143	
Ethylbenzene	0.0326		1.21	1.46		mg/kg dry	☼	118	23 - 161	
Naphthalene	0.128		1.21	1.09		mg/kg dry	☼	79	10 - 176	
Toluene	ND		1.21	1.26		mg/kg dry	☼	104	30 - 155	
Xylenes, total	0.160		3.63	4.38		mg/kg dry	☼	116	25 - 162	
	Matrix Spike	Matrix Spike								
Surrogate	%Recovery	Qualifier	Limits							
1,2-Dichloroethane-d4	70		70 - 130							
Dibromofluoromethane	91		70 - 130							
Toluene-d8	95		70 - 130							
4-Bromofluorobenzene	83		70 - 130							

Lab Sample ID: 12B1201-MSD1							Client Sample ID: Matrix Spike Duplicate				
Matrix: Soil							Prep Type: Total				
Analysis Batch: V002485							Prep Batch: 12B1201_P				
	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup			%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		1.21	1.17		mg/kg dry	☼	97	31 - 143	6	50
Ethylbenzene	0.0326		1.21	1.51		mg/kg dry	☼	122	23 - 161	3	50
Naphthalene	0.128		1.21	1.15		mg/kg dry	☼	84	10 - 176	5	50
Toluene	ND		1.21	1.36		mg/kg dry	☼	112	30 - 155	7	50
Xylenes, total	0.160		3.63	4.47		mg/kg dry	☼	119	25 - 162	2	50
	Matrix Spike Dup	Matrix Spike Dup									
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4	72		70 - 130								
Dibromofluoromethane	95		70 - 130								
Toluene-d8	97		70 - 130								
4-Bromofluorobenzene	86		70 - 130								

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D

Lab Sample ID: 12B1309-BLK1							Client Sample ID: Method Blank			
Matrix: Soil							Prep Type: Total			
Analysis Batch: 12B1309							Prep Batch: 12B1309_P			
Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Acenaphthene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Acenaphthylene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Anthracene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Benzo (a) anthracene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Benzo (a) pyrene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Benzo (b) fluoranthene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Benzo (g,h,i) perylene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Benzo (k) fluoranthene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Chrysene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Dibenz (a,h) anthracene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Fluoranthene	0.0460	J	0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Fluorene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	
Indeno (1,2,3-cd) pyrene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00	

QC Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D (Continued)

Lab Sample ID: 12B1309-BLK1

Matrix: Soil

Analysis Batch: 12B1309

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 12B1309_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00
Phenanthrene	0.0503	J	0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00
Pyrene	0.0417	J	0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00
1-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00
2-Methylnaphthalene	ND		0.0670	0.0340	mg/kg wet		02/08/12 12:10	02/09/12 15:10	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	85		18 - 120	02/08/12 12:10	02/09/12 15:10	1.00
2-Fluorobiphenyl	67		14 - 120	02/08/12 12:10	02/09/12 15:10	1.00
Nitrobenzene-d5	65		17 - 120	02/08/12 12:10	02/09/12 15:10	1.00

Lab Sample ID: 12B1309-BS1

Matrix: Soil

Analysis Batch: 12B1309

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12B1309_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1.67	1.31		mg/kg wet		78	36 - 120
Acenaphthylene	1.67	1.07		mg/kg wet		64	38 - 120
Anthracene	1.67	1.36		mg/kg wet		82	46 - 124
Benzo (a) anthracene	1.67	1.48		mg/kg wet		89	45 - 120
Benzo (a) pyrene	1.67	1.52		mg/kg wet		91	45 - 120
Benzo (b) fluoranthene	1.67	1.39		mg/kg wet		83	42 - 120
Benzo (g,h,i) perylene	1.67	1.34		mg/kg wet		80	38 - 120
Benzo (k) fluoranthene	1.67	1.46		mg/kg wet		88	42 - 120
Chrysene	1.67	1.41		mg/kg wet		85	43 - 120
Dibenz (a,h) anthracene	1.67	1.40		mg/kg wet		84	32 - 128
Fluoranthene	1.67	1.44	B	mg/kg wet		86	46 - 120
Fluorene	1.67	1.34		mg/kg wet		80	42 - 120
Indeno (1,2,3-cd) pyrene	1.67	1.38		mg/kg wet		83	41 - 121
Naphthalene	1.67	1.35		mg/kg wet		81	32 - 120
Phenanthrene	1.67	1.42	B	mg/kg wet		85	45 - 120
Pyrene	1.67	1.40	B	mg/kg wet		84	43 - 120
1-Methylnaphthalene	1.67	0.886		mg/kg wet		53	32 - 120
2-Methylnaphthalene	1.67	1.20		mg/kg wet		72	28 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	84		18 - 120
2-Fluorobiphenyl	62		14 - 120
Nitrobenzene-d5	63		17 - 120

Lab Sample ID: 12B1309-MS1

Matrix: Soil

Analysis Batch: 12B1309

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 12B1309_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
Acenaphthene	ND		1.87	1.16		mg/kg dry		62	19 - 120
Acenaphthylene	ND		1.87	0.998		mg/kg dry		53	25 - 120
Anthracene	ND		1.87	1.26		mg/kg dry		67	28 - 125
Benzo (a) anthracene	ND		1.87	1.34		mg/kg dry		72	23 - 120

QC Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Method: SW846 8270D - Polyaromatic Hydrocarbons by EPA 8270D (Continued)

Lab Sample ID: 12B1309-MS1

Matrix: Soil

Analysis Batch: 12B1309

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 12B1309_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
Benzo (a) pyrene	ND		1.87	1.36		mg/kg dry	☼	73	15 - 128
Benzo (b) fluoranthene	ND		1.87	1.28		mg/kg dry	☼	68	12 - 133
Benzo (g,h,i) perylene	ND		1.87	1.18		mg/kg dry	☼	63	22 - 120
Benzo (k) fluoranthene	ND		1.87	1.36		mg/kg dry	☼	73	28 - 120
Chrysene	ND		1.87	1.22		mg/kg dry	☼	65	20 - 120
Dibenz (a,h) anthracene	ND		1.87	1.29		mg/kg dry	☼	69	12 - 128
Fluoranthene	ND		1.87	1.31	B	mg/kg dry	☼	70	10 - 143
Fluorene	ND		1.87	1.20		mg/kg dry	☼	64	20 - 120
Indeno (1,2,3-cd) pyrene	ND		1.87	1.28		mg/kg dry	☼	69	22 - 121
Naphthalene	ND		1.87	1.22		mg/kg dry	☼	65	10 - 120
Phenanthrene	ND		1.87	1.25	B	mg/kg dry	☼	67	21 - 122
Pyrene	ND		1.87	1.37	B	mg/kg dry	☼	73	20 - 123
1-Methylnaphthalene	ND		1.87	0.801		mg/kg dry	☼	43	10 - 120
2-Methylnaphthalene	ND		1.87	1.12		mg/kg dry	☼	60	13 - 120
Matrix Spike Matrix Spike									
Surrogate	%Recovery	Qualifier	Limits						
Terphenyl-d14	67		18 - 120						
2-Fluorobiphenyl	46		14 - 120						
Nitrobenzene-d5	47		17 - 120						

Lab Sample ID: 12B1309-MSD1

Matrix: Soil

Analysis Batch: 12B1309

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 12B1309_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthene	ND		1.90	1.29		mg/kg dry	☼	68	19 - 120	10	50
Acenaphthylene	ND		1.90	1.03		mg/kg dry	☼	54	25 - 120	3	50
Anthracene	ND		1.90	1.41		mg/kg dry	☼	74	28 - 125	11	49
Benzo (a) anthracene	ND		1.90	1.42		mg/kg dry	☼	75	23 - 120	6	50
Benzo (a) pyrene	ND		1.90	1.54		mg/kg dry	☼	81	15 - 128	12	50
Benzo (b) fluoranthene	ND		1.90	1.42		mg/kg dry	☼	74	12 - 133	10	50
Benzo (g,h,i) perylene	ND		1.90	1.41		mg/kg dry	☼	74	22 - 120	18	50
Benzo (k) fluoranthene	ND		1.90	1.59		mg/kg dry	☼	84	28 - 120	16	45
Chrysene	ND		1.90	1.40		mg/kg dry	☼	73	20 - 120	14	49
Dibenz (a,h) anthracene	ND		1.90	1.36		mg/kg dry	☼	71	12 - 128	5	50
Fluoranthene	ND		1.90	1.48	B	mg/kg dry	☼	78	10 - 143	12	50
Fluorene	ND		1.90	1.31		mg/kg dry	☼	69	20 - 120	9	50
Indeno (1,2,3-cd) pyrene	ND		1.90	1.36		mg/kg dry	☼	71	22 - 121	6	50
Naphthalene	ND		1.90	1.33		mg/kg dry	☼	70	10 - 120	9	50
Phenanthrene	ND		1.90	1.38	B	mg/kg dry	☼	72	21 - 122	10	50
Pyrene	ND		1.90	1.49	B	mg/kg dry	☼	78	20 - 123	8	50
1-Methylnaphthalene	ND		1.90	1.00		mg/kg dry	☼	53	10 - 120	22	50
2-Methylnaphthalene	ND		1.90	1.23		mg/kg dry	☼	65	13 - 120	9	50
Matrix Spike Dup Matrix Spike Dup											
Surrogate	%Recovery	Qualifier	Limits								
Terphenyl-d14	69		18 - 120								
2-Fluorobiphenyl	52		14 - 120								
Nitrobenzene-d5	52		17 - 120								

QC Sample Results

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Method: SW-846 - General Chemistry Parameters

Lab Sample ID: 12B1350-DUP1

Matrix: Soil

Analysis Batch: 12B1350

Client Sample ID: Duplicate

Prep Type: Total

Prep Batch: 12B1350_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
% Dry Solids	89.5		89.6		%	-	0.1	20

QC Association Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

GCMS Volatiles

Analysis Batch: V002485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12B1201-BLK1	Method Blank	Total	Soil	SW846 8260B	12B1201_P
12B1201-BLK2	Method Blank	Total	Soil	SW846 8260B	12B1201_P
12B1201-BS1	Lab Control Sample	Total	Soil	SW846 8260B	12B1201_P
12B1201-MS1	Matrix Spike	Total	Soil	SW846 8260B	12B1201_P
12B1201-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8260B	12B1201_P
NWB0747-01 - RE1	1452 Cardinal	Total	Soil	SW846 8260B	12B1201_P
NWB0747-01 - RE2	1452 Cardinal	Total	Soil	SW846 8260B	12B1201_P
NWB0747-02 - RE1	377 Aspen	Total	Soil	SW846 8260B	12B1201_P
NWB0747-02 - RE2	377 Aspen	Total	Soil	SW846 8260B	12B1201_P

Prep Batch: 12B1201_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12B1201-BLK1	Method Blank	Total	Soil	EPA 5035	
12B1201-BLK2	Method Blank	Total	Soil	EPA 5035	
12B1201-BS1	Lab Control Sample	Total	Soil	EPA 5035	
12B1201-MS1	Matrix Spike	Total	Soil	EPA 5035	
12B1201-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 5035	
NWB0747-01 - RE1	1452 Cardinal	Total	Soil	EPA 5035	
NWB0747-01 - RE2	1452 Cardinal	Total	Soil	EPA 5035	
NWB0747-02 - RE1	377 Aspen	Total	Soil	EPA 5035	
NWB0747-02 - RE2	377 Aspen	Total	Soil	EPA 5035	

GCMS Semivolatiles

Analysis Batch: 12B1309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12B1309-BLK1	Method Blank	Total	Soil	SW846 8270D	12B1309_P
12B1309-BS1	Lab Control Sample	Total	Soil	SW846 8270D	12B1309_P
12B1309-MS1	Matrix Spike	Total	Soil	SW846 8270D	12B1309_P
12B1309-MSD1	Matrix Spike Duplicate	Total	Soil	SW846 8270D	12B1309_P
NWB0747-01	1452 Cardinal	Total	Soil	SW846 8270D	12B1309_P
NWB0747-01 - RE1	1452 Cardinal	Total	Soil	SW846 8270D	12B1309_P
NWB0747-02	377 Aspen	Total	Soil	SW846 8270D	12B1309_P

Prep Batch: 12B1309_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12B1309-BLK1	Method Blank	Total	Soil	EPA 3550B	
12B1309-BS1	Lab Control Sample	Total	Soil	EPA 3550B	
12B1309-MS1	Matrix Spike	Total	Soil	EPA 3550B	
12B1309-MSD1	Matrix Spike Duplicate	Total	Soil	EPA 3550B	
NWB0747-01	1452 Cardinal	Total	Soil	EPA 3550B	
NWB0747-01 - RE1	1452 Cardinal	Total	Soil	EPA 3550B	
NWB0747-02	377 Aspen	Total	Soil	EPA 3550B	

Extractions

Analysis Batch: 12B1350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12B1350-DUP1	Duplicate	Total	Soil	SW-846	12B1350_P
NWB0747-01	1452 Cardinal	Total	Soil	SW-846	12B1350_P
NWB0747-02	377 Aspen	Total	Soil	SW-846	12B1350_P

QC Association Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Extractions (Continued)

Prep Batch: 12B1350_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12B1350-DUP1	Duplicate	Total	Soil	% Solids	
NWB0747-01	1452 Cardinal	Total	Soil	% Solids	
NWB0747-02	377 Aspen	Total	Soil	% Solids	

Lab Chronicle

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Client Sample ID: 1452 Cardinal

Lab Sample ID: NWB0747-01

Date Collected: 01/31/12 15:45

Matrix: Soil

Date Received: 02/04/12 08:30

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035	RE1	0.890	12B1201_P	01/31/12 15:45	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	1.00	V002485	02/13/12 15:43	KKK	TAL NSH
Total	Prep	EPA 5035	RE2	0.495	12B1201_P	01/31/12 15:45	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE2	50.0	V002485	02/13/12 16:14	KKK	TAL NSH
Total	Prep	EPA 3550B		0.986	12B1309_P	02/08/12 12:10	AJM	TAL NSH
Total	Analysis	SW846 8270D		1.00	12B1309	02/09/12 20:37	BES	TAL NSH
Total	Prep	EPA 3550B	RE1	0.986	12B1309_P	02/08/12 12:10	AJM	TAL NSH
Total	Analysis	SW846 8270D	RE1	5.00	12B1309	02/10/12 11:02	BES	TAL NSH
Total	Prep	% Solids		1.00	12B1350_P	02/06/12 12:40	MAH	TAL NSH
Total	Analysis	SW-846		1.00	12B1350	02/07/12 08:21	MAH	TAL NSH

Client Sample ID: 377 Aspen

Lab Sample ID: NWB0747-02

Date Collected: 02/01/12 14:00

Matrix: Soil

Date Received: 02/04/12 08:30

Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 5035	RE1	0.843	12B1201_P	02/01/12 14:00	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE1	1.00	V002485	02/13/12 14:43	KKK	TAL NSH
Total	Prep	EPA 5035	RE2	0.422	12B1201_P	02/01/12 14:00	AAN	TAL NSH
Total	Analysis	SW846 8260B	RE2	50.0	V002485	02/13/12 15:13	KKK	TAL NSH
Total	Prep	EPA 3550B		0.996	12B1309_P	02/08/12 12:10	AJM	TAL NSH
Total	Analysis	SW846 8270D		1.00	12B1309	02/09/12 21:00	BES	TAL NSH
Total	Prep	% Solids		1.00	12B1350_P	02/06/12 12:40	MAH	TAL NSH
Total	Analysis	SW-846		1.00	12B1350	02/07/12 08:21	MAH	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

Method Summary

Client: EEG - Small Business Group, Inc. (2449)

TestAmerica Job ID: NWB0747

Project/Site: [none]

Method	Method Description	Protocol	Laboratory
SW-846	General Chemistry Parameters		TAL NSH
SW846 8260B	Volatile Organic Compounds by EPA Method 8260B		TAL NSH
SW846 8270D	Polyaromatic Hydrocarbons by EPA 8270D		TAL NSH

Protocol References:

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Road, Nashville, TN 37204, TEL 800-765-0980

Certification Summary

Client: EEG - Small Business Group, Inc. (2449)
Project/Site: [none]

TestAmerica Job ID: NWB0747

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Nashville		ACIL		393
TestAmerica Nashville	A2LA	ISO/IEC 17025		0453.07
TestAmerica Nashville	A2LA	WY UST		453.07
TestAmerica Nashville	Alabama	State Program	4	41150
TestAmerica Nashville	Alaska	Alaska UST	10	UST-087
TestAmerica Nashville	Arizona	State Program	9	AZ0473
TestAmerica Nashville	Arkansas	State Program	6	88-0737
TestAmerica Nashville	California	NELAC	9	1168CA
TestAmerica Nashville	Canada (CALA)	Canada (CALA)		3744
TestAmerica Nashville	Colorado	State Program	8	N/A
TestAmerica Nashville	Connecticut	State Program	1	PH-0220
TestAmerica Nashville	Florida	NELAC	4	E87358
TestAmerica Nashville	Illinois	NELAC	5	200010
TestAmerica Nashville	Iowa	State Program	7	131
TestAmerica Nashville	Kansas	NELAC	7	E-10229
TestAmerica Nashville	Kentucky	Kentucky UST	4	19
TestAmerica Nashville	Kentucky	State Program	4	90038
TestAmerica Nashville	Louisiana	NELAC	6	30613
TestAmerica Nashville	Louisiana	NELAC	6	LA110014
TestAmerica Nashville	Maryland	State Program	3	316
TestAmerica Nashville	Massachusetts	State Program	1	M-TN032
TestAmerica Nashville	Mississippi	State Program	4	N/A
TestAmerica Nashville	Montana	MT DEQ UST	8	NA
TestAmerica Nashville	New Hampshire	NELAC	1	2963
TestAmerica Nashville	New Jersey	NELAC	2	TN965
TestAmerica Nashville	New York	NELAC	2	11342
TestAmerica Nashville	North Carolina	North Carolina DENR	4	387
TestAmerica Nashville	North Dakota	State Program	8	R-146
TestAmerica Nashville	Ohio	OVAP	5	CL0033
TestAmerica Nashville	Oklahoma	State Program	6	9412
TestAmerica Nashville	Oregon	NELAC	10	TN200001
TestAmerica Nashville	Pennsylvania	NELAC	3	68-00585
TestAmerica Nashville	Rhode Island	State Program	1	LAO00268
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	South Carolina	State Program	4	84009
TestAmerica Nashville	Tennessee	State Program	4	2008
TestAmerica Nashville	Texas	NELAC	6	T104704077-09-TX
TestAmerica Nashville	USDA	USDA		S-48469
TestAmerica Nashville	Utah	NELAC	8	TAN
TestAmerica Nashville	Virginia	NELAC Secondary AB	3	460152
TestAmerica Nashville	Virginia	State Program	3	00323
TestAmerica Nashville	Washington	State Program	10	C789
TestAmerica Nashville	West Virginia	West Virginia DEP	3	219
TestAmerica Nashville	Wisconsin	State Program	5	998020430

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Name/Account #: EEG - SBG # 2449

Address: 10179 Highway 78

City/State/Zip: Ladson, SC 29456

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

Telephone Number: 843.412.2097

Sampler Name: (Print)

Sampler Signature:

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

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

Site State: SC

PO#: 1035

TA Quote #:

Project ID: Laurel Bay Housing Project

Project #:

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

Compliance Monitoring?

Enforcement Action?

Yes No
Yes No

NWB0747
02/20/12 23:59

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO ₃ (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	BTEX + Napth - 8260E	PAH - 8270D	Analyze For:	RUSH TAT (Pre-Schedule)
1452 Cardinal	1/31/12	1545	5	X																				
377 Aspen	2/1/12	1400	5	X																				

Special Instructions:

Method of Shipment:

FEDEX

Laboratory Comments:

Temperature Upon Receipt
VOCs Free of Headspace?

Y

Relinquished by:	Date	Time	Received by:	Date	Time
[Signature]	2/3/12	1000	FEDEX		
Relinquished by:			Received by TestAmerica:		
			[Signature]	2-4-12	08:30

3.9

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 00316823			
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.	15. Misc. Comments	
				No.	Type				
	a. HEATING OIL TANKS FILLED WITH SAND WM Profile # 102655SC								
	b. WM Profile #								
	c. WM Profile #								
d. WM Profile #									
J. Additional Descriptions for Materials Listed Above				K. Disposal Location					
				Cell		Level			
				Grid					
15. Special Handling Instructions and Additional Information 1) 371 A=pen 4) 377 A=pen 2) 518 Laurel 3) 325 Ash-2 5) 1452 Cardinal									
Purchase Order #				EMERGENCY CONTACT / PHONE NO.:					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.									
Printed Name Timothy Whaley				Signature "On behalf of" Timothy Whaley			Month 02	Day 29	Year 12
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials								
	Printed Name James Baldwin		Signature James Baldwin		Month 3	Day 1	Year 12		
	18. Transporter 2 Acknowledgement of Receipt of Materials								
Printed Name		Signature		Month	Day	Year			
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.								
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.								
	Printed Name Toni Cotfield		Signature Toni Cotfield			Month 3	Day 1	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
Laboratory Analytical Report - Groundwater

Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants				Laboratory ID: SC03027-013			
Description: BEALB377TW01WG20170302				Matrix: Aqueous			
Date Sampled: 03/02/2017 1340							
Date Received: 03/03/2017							

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	03/07/2017 1339	PMV		36403			

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzene	71-43-2	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Ethylbenzene	100-41-4	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Naphthalene	91-20-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Toluene	108-88-3	8260B	0.80	U	1.0	0.80	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	0.80	U	1.0	0.80	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		106	85-114
Dibromofluoromethane		109	80-119
1,2-Dichloroethane-d4		100	81-118
Toluene-d8		99	89-112

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time Q = Surrogate failure
 ND = Not detected at or above the MDL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria L = LCS/LCSD failure
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" S = MS/MSD failure

Shealy Environmental Services, Inc.
 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Semivolatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants	Laboratory ID: SC03027-013
Description: BEALB377TW01WG20170302	Matrix: Aqueous
Date Sampled: 03/02/2017 1340	
Date Received: 03/03/2017	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	03/15/2017 1016	RBH	03/07/2017 1304	36374

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Benzo(a)anthracene	56-55-3	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Chrysene	218-01-9	8270D	0.10	U	0.20	0.10	0.040	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	0.10	U	0.20	0.10	0.040	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Nitrobenzene-d5		57	44-120
2-Fluorobiphenyl		49	44-119
Terphenyl-d14		82	50-134

PQL = Practical quantitation limit B = Detected in the method blank E = Quantitation of compound exceeded the calibration range H = Out of holding time Q = Surrogate failure
 ND = Not detected at or above the MDL J = Estimated result < PQL and ≥ MDL P = The RPD between two GC columns exceeds 40% N = Recovery is out of criteria L = LCS/LCSD failure
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" S = MS/MSD failure

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Appendix D

Regulatory Correspondence



August 24, 2016

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

RE: IGWA
Laurel Bay Underground Tank Assessment Reports

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 reports. The submitted analytical results indicate that petroleum constituents are above established Risk-Based Screening Levels and additional investigation is warranted. Specifically, the Department requests that a groundwater sampling proposal be generated to determine if there has been an impact to groundwater at these sites.

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,

A handwritten signature in blue ink, appearing to read 'L Petrus', is written above the typed name.

Laurel Petrus, Environmental Engineer Associate
RCRA Federal Facilities Section

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

Attachment to: Petrus to Drawdy, August 24, 2016

Subject: IGWA, Laurel Bay Underground Tank Assessment Reports

Draft Final Initial Groundwater Investigation Report for (41 addresses)

Monitoring Well Investigation Recommendation	
122 Banyan	905 Barracuda
159 Cypress Tank 2	921 Barracuda
221 Cypress	935 Albacore
283 Birch Tank 2	946 Albacore
328 Ash Tank 2	1037 Iris
346 Ash	1039 Iris
359 Aspen	1110 Iris
370 Aspen	1134 Iris
377 Aspen	1143 Iris
409 Elderberry	1202 Cardinal
486 Laurel Bay	1212 Cardinal
515 Laurel Bay	1222 Cardinal
542 Laurel Bay	1224 Cardinal
593 Aster	1226 Dove
630 Dahlia	1236 Dove
693 Camellia	1245 Dove
723 Blue Bell	1247 Dove
774 Althea	1274 Albatross
860 Dolphin	1319 Albatross
873 Cobia	1337 Albatross
883 Cobia	



July 27, 2017

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

RE: Draft Final Initial Groundwater Investigation Report, February and March 2017

Dear Mr. Drawdy:

The South Carolina Department of Health and Environmental Control (DHEC) received groundwater data from temporary monitoring well installations in the Draft Final Groundwater Investigation Report, Laurel Bay Military Housing Area for the fifty two (52) addresses shown 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).

Per DHEC's request, groundwater samples were collected from the attached referenced addresses. DHEC reviewed the groundwater data and previous investigations and it agrees with the conclusions and recommendations included in the document. To further assess the impact to groundwater, permanent groundwater monitoring wells should be installed at the three (3) stated addresses. For the remaining forty nine (49) addresses, there is no indication of contamination on the property and therefore no further investigation is required at this time.

Please note that DHEC'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, DHEC 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
Shawn Dolan, Resolution Consultants
Bryan Beck, NAVFAC MIDLANT

Attachment to: Petrus to Drawdy Dated July 27, 2017

Draft Final Initial Groundwater Investigation Report for (52 addresses)

Permanent Well Installation recommendation (3 Addresses):

- 254 Beech Street (110 ug/L)
- 268 Beech Street (28 ug/L)
- 774 Althea Street (35 ug/L)

No Further Action recommendation (49 addresses):

- 113 Birch Drive
- 121 Banyan Drive
- 122 Banyan Drive
- 159 Cypress Street
- 221 Cypress Street
- 274 Birch Drive
- 279 Birch Drive
- 283 Birch Drive
- 328 Ash Street
- 346 Ash Street
- 359 Aspen Street
- 370 Aspen Street
- 377 Aspen Street
- 409 Elderberry Drive
- 465 Dogwood Drive
- 480 Laurel Bay Boulevard
- 486 Laurel Bay Boulevard
- 515 Laurel Bay Boulevard
- 542 Laurel Bay Boulevard
- 593 Aster Street
- 630 Dahlia Drive
- 641 Dahlia Drive
- 693 Camelia Drive
- 723 Bluebell Lane
- 860 Dolphin Street
- 873 Cobia Drive
- 883 Cobia Drive
- 905 Barracuda Drive
- 921 Barracuda Drive
- 935 Albacore Street
- 946 Albacore Street
- 1037 Iris Lane
- 1039 Iris Lane
- 1110 Iris Lane
- 1134 Iris Lane
- 1143 Iris Lane
- 1177 Bobwhite Drive
- 1202 Cardinal Lane
- 1212 Cardinal Lane
- 1222 Cardinal Lane
- 1224 Cardinal Lane
- 1226 Dove Lane
- 1236 Dove Lane
- 1245 Dove Lane
- 1247 Dove Lane
- 1274 Albatross Drive
- 1319 Albatross Drive
- 1337 Albatross Drive
- 1346 Cardinal Lane