SUMMARY REPORT
155 FOXGLOVE STREET (FORMERLY 1022 FOXGLOVE 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 SUMMARY REPORT
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Prepared by:



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

Contract Number: N62470-14-D-9016

CTO WE52

JUNE 2021



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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 155 Foxglove Street (Formerly 1022 Foxglove 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 155 Foxglove Street (Formerly 1022 Foxglove Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1022 Foxglove 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 – November and December 2015* (Resolution Consultants, 2016). 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 July 3, 2012, a single 280 gallon heating oil UST was removed from the rear patio area at 155 Foxglove Street (Formerly 1022 Foxglove 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' 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 155 Foxglove Street (Formerly 1022 Foxglove Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated July 1, 2015, SCDHEC requested an IGWA for 155 Foxglove Street (Formerly 1022 Foxglove 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 December 3, 2015, a temporary monitoring well was installed at 155 Foxglove Street (Formerly 1022 Foxglove 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 – November and December 2015* (Resolution Consultants, 2016).



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 – November and December 2015* (Resolution Consultants, 2016).

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 155 Foxglove Street (Formerly 1022 Foxglove 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 155 Foxglove Street (Formerly 1022 Foxglove Street). This NFA determination was obtained in a letter dated June 8, 2016. 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 – 1022 Foxglove Street, Laurel Bay Military Housing Area, October 2012.

Resolution Consultants, 2016. *Initial Groundwater Investigation Report – November and December 2015 for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina*, April 2016.





- 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 155 Foxglove Street (Formerly 1022 Foxglove Street) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort

Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Sample Collected 07/03/12				
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)						
Benzene	0.003	ND				
Ethylbenzene	1.15	ND				
Naphthalene	0.036	0.18				
Toluene	0.627	ND				
Xylenes, Total	13.01	ND				
Semivolatile Organic Compounds Ana	lyzed 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 155 Foxglove Street (Formerly 1022 Foxglove 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 12/03/15				
Volatile Organic Compounds Analyzed	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:

⁽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 1x10⁻⁶, 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

⁽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).

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

Data Dassissad			
Date Received			
	Ctata I	se Only	
	State C	SE CHILY	

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

I. OWNERSHIP OF UST (S)

II	nanding Officer Attn: NF Individual, Public Agency, Other)	REAO (Craig Ehde)
P.O. Box 55001 Mailing Address		
Beaufort,	South Carolina State	29904-5001 Zip Code
City 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
1022 Foxglove Street, Laurel Bay Military Housing Area
Street Address or State Road (as applicable)
Beaufort, Beaufort
City County

Attachment 2

III. INSURANCE INFORMATION

	Insurai	nce Statement
qualify to receive state monie	es to pay for appropriate p fund, written confirma	at Permit ID Number may e site rehabilitation activities. Before participation is ation of the existence or non-existence of an environmental completed.
,	here ever been an insura NO (check o	ance policy or other financial mechanism that covers this one)
If you answere	ed YES to the above que	estion, please complete the following information:
If you have this type	My policy provider is: The policy deductible is: The policy limit is: of insurance, please incl	is:lude a copy of the policy with this report.
	IV. REQUEST	FOR SUPERB FUNDING
I DO / DO NOT w	ish to participate in the	SUPERB Program. (Circle one.)
V.	CERTIFICATION	N (To be signed by the UST owner)
I certify that I have person attached documents; and t information, I believe that t	ally examined and am hat based on my inqu he submitted informat	a familiar with the information submitted in this and all uiry of those individuals responsible for obtaining this tion is true, accurate, and complete.
Name (Type or print.)		
Signature		
To be completed by No	otary Public:	
Sworn before me this	day of	, 20
(Name)		
Notary Public for the state of <i>Please affix State seal if you d</i>	are commissioned outsic	 de South Carolina

	VI. UST INFORMATION	1022Foxglove
P	roduct(ex. Gas, Kerosene)	Heating oil
(Capacity(ex. 1k, 2k)	280 gal
A	.ge	Late 1950s
C	Construction Material(ex. Steel, FRP)	Steel
N	Nonth/Year of Last Use	Mid 1980s
D	Pepth (ft.) To Base of Tank	6'
S	pill Prevention Equipment Y/N	No
О	Overfill Prevention Equipment Y/N	No
M.	Method of Closure Removed/Filled	Removed
D	ate Tanks Removed/Filled	7/3/2012
V	Tisible Corrosion or Pitting Y/N	Yes
V	isible Holes Y/N	Yes
	Method of disposal for any USTs removed from the UST 1022Foxglove was removed from See Attachment "A."	• • •
	Iethod of disposal for any liquid petroleum, sludges sposal manifests) Contaminated water was pumped fro by MCAS.	

VII. PIPING INFORMATION

	Steel
Construction Material(ex. Steel, FRP)	& Copper
Distance from UST to Dispenser	N/A
Number of Dispensers	N/A
Type of System Pressure or Suction	Suction
Was Piping Removed from the Ground? Y/N	No
Visible Corrosion or Pitting Y/N	Yes
Visible Holes Y/N	No
Age	Late 1950s
If any corrosion, pitting, or holes were observed,	describe the location and extent for each piping
Corrogion and nitting were four	nd on the surface of the steel ve
COLLOSION AND DICCING WOLC LOUI	
pipe. Copper supply and return	
pipe. Copper supply and return	lines were sound.
pipe. Copper supply and return VIII. BRIEF SITE DESCR	lines were sound. RIPTION AND HISTORY
pipe. Copper supply and return VIII. BRIEF SITE DESCE The USTs at the residences are constants.	RIPTION AND HISTORY constructed of single wall steel
pipe. Copper supply and return VIII. BRIEF SITE DESCR	RIPTION AND HISTORY constructed of single wall steel for heating. These USTs were
VIII. BRIEF SITE DESCET The USTs at the residences are cand formerly contained fuel oil	RIPTION AND HISTORY constructed of single wall steel for heating. These USTs were
VIII. BRIEF SITE DESCET The USTs at the residences are cand formerly contained fuel oil	RIPTION AND HISTORY constructed of single wall steel for heating. These USTs were
VIII. BRIEF SITE DESCET The USTs at the residences are cand formerly contained fuel oil	RIPTION AND HISTORY constructed of single wall steel for heating. These USTs were
VIII. BRIEF SITE DESCET The USTs at the residences are cand formerly contained fuel oil	RIPTION AND HISTORY constructed of single wall steel for heating. These USTs were

IX. SITE CONDITIONS

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

X. SAMPLE INFORMATION

A. SCDHEC Lab Certification Number 84009

В.

Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
1022 Foxglove	Excav at fill end	Soil	Sandy	6'	7/3/12 1245 hrs	P. Shaw	
			*				
		49 (4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
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 <u>and</u> store the samples. Also include the preservative used for each sample. Please use the space provided below.

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

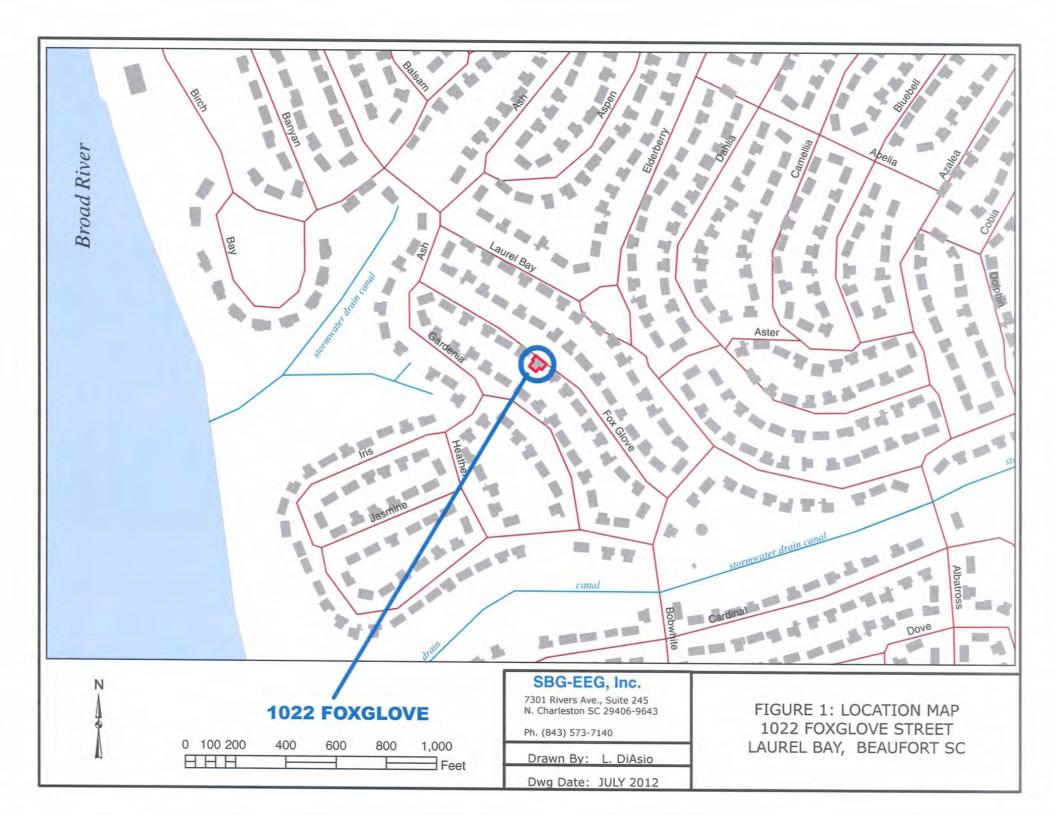
XII. RECEPTORS

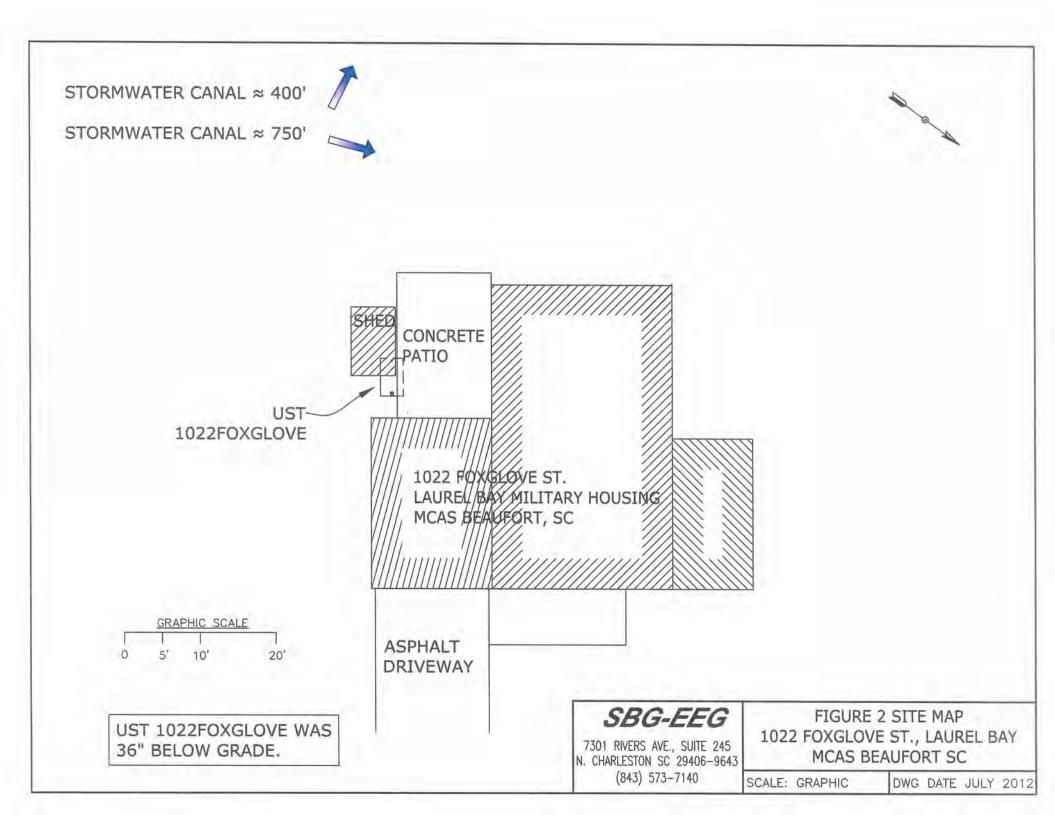
Yes No A. Are there any lakes, ponds, streams, or wetlands located within *X 1000 feet of the UST system? *Stormwater canals If yes, indicate type of receptor, distance, and direction on site map. B. Are there any public, private, or irrigation water supply wells within Χ 1000 feet of the UST system?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

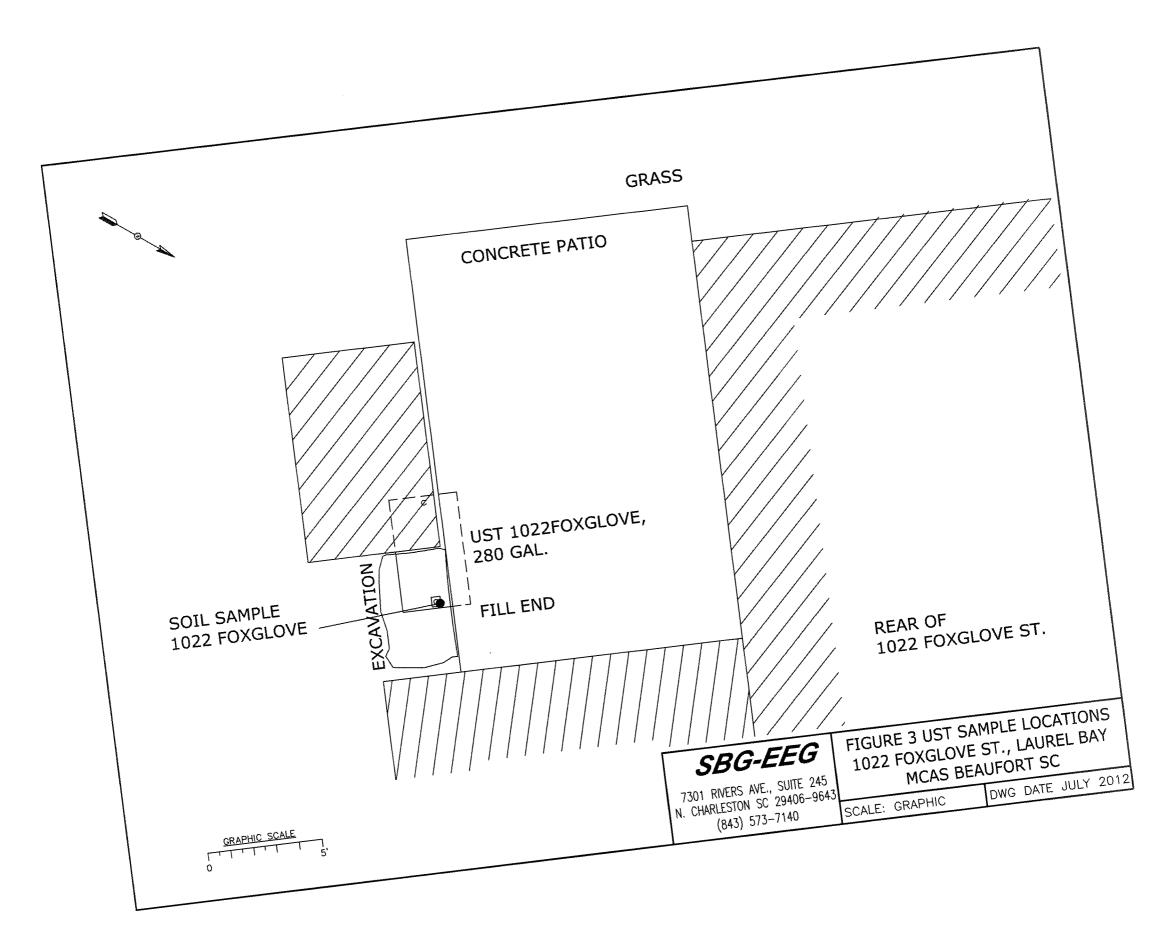
XIII. SITE MAP

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

(Attach Site Map Here)









Picture 1: Location of UST 1022Foxglove.



Picture 2: UST 1022Foxglove tank pit.

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.

<u> </u>	1			7		
CoC UST	1022Foxglove					
Benzene	ND					
Toluene	ND					
Ethylbenzene	ND					
Xylenes	ND					
Naphthalene) MD	.187				
Benzo (a) anthracene	ND					
Benzo (b) fluoranthene	ND					
Benzo (k) fluoranthene	ND					
Chrysene	ND					
Dibenz (a, h) anthracene	ND					
TPH (EPA 3550)						
			 1	1	1	
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	W-1		W -3	W -4
	(µg/l)		W-2		
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)



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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola 3355 McLemore Drive Pensacola, FL 32514 Tel: (850)474-1001

TestAmerica Job ID: 400-66850-1

Client Project/Site: Laurel Bay Housing Project

For:

Environmental Enterprise Group 10179 Highway 78 Ladson, South Carolina 29456

Attn: Mr. Tom McElwee

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Authorized for release by: 7/19/2012 5:54:33 PM

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

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Case Narrative

TestAmerica Job ID: 400-66850-1

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

Job ID: 400-66850-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-66850-1

GC/MS Semi VOA

Method(s) 8270D: The following sample was diluted due to the abundance of non-target analytes: 1353 CARDINAL (400-66850-1). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: Surrogate recovery for the following sample was outside control limits: 1353 CARDINAL (400-66850-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method Summary

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

TestAmerica Job ID: 400-66850-1

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: 400-66850-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-66850-1	1353 CARDINAL	Solid	07/02/12 16:15	07/06/12 10:14
400-66850-2	1022 FOXGLOVE	Solid	07/03/12 12:45	07/06/12 10:14

Client Sample Results

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-66850-1

Client Sample ID: 1353 CARDINAL

Date Collected: 07/02/12 16:15 Date Received: 07/06/12 10:14 Lab Sample ID: 400-66850-1

Matrix: Solid Percent Solids: 92.6

Jate Received: 07/06/12 10:1	4							Percent Sol	ds: 92.6
Method: 8260B - Volatile Or			-		000				Share.
Analyte	ND	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	100		1.6	0.16			07/09/12 15:57	07/12/12 17:49	100
Ethylbenzene		1	1.6	0.20	0 0	10	07/09/12 15:57	07/12/12 17:49	100
Toluene	ND		1.6	0.23		8	07/09/12 15:57	07/12/12 17:49	100
Xylenes, Total	7.1		3.2	0.61	0 0	Œ.	07/09/12 15:57	07/12/12 17:49	100
Naphthalene	35		1.6	0.32	mg/Kg	0	07/09/12 15:57	07/12/12 17:49	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	88		72 - 122				07/09/12 15:57	07/12/12 17:49	100
Dibromofluoromethane	92		79 - 118				07/09/12 15:57	07/12/12 17:49	100
Toluene-d8 (Surr)	93		80 - 120				07/09/12 15:57	07/12/12 17:49	100
Method: 8270D - Semivolati	le Organic Compou	inds (GC/M	S)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		7.1	0.71	mg/Kg	0	07/11/12 11:31	07/17/12 13:27	20
Acenaphthylene	ND		7.1	0.71	mg/Kg	0	07/11/12 11:31	07/17/12 13:27	20
Anthracene	ND		7.1	0.71	mg/Kg		07/11/12 11:31	07/17/12 13:27	20
Benzo[a]anthracene	ND		7.1	0.71	mg/Kg		07/11/12 11:31	07/17/12 13:27	20
Benzo[a]pyrene	ND		7.1	0.71	mg/Kg	-	07/11/12 11:31	07/17/12 13:27	20
Benzo[b]fluoranthene	ND		7.1	0.71	mg/Kg	0	07/11/12 11:31	07/17/12 13:27	20
Benzo[g,h,i]perylene	ND		7.1	0.71	mg/Kg	ib	07/11/12 11:31	07/17/12 13:27	20
Benzo[k]fluoranthene	ND		7.1	0.71	mg/Kg	10	07/11/12 11:31	07/17/12 13:27	20
Chrysene	ND		7.1	0.71	mg/Kg	0	07/11/12 11:31	07/17/12 13:27	20
Dibenz(a,h)anthracene	ND		7.1	0.71	mg/Kg	0	07/11/12 11:31	07/17/12 13:27	20
Fluoranthene	ND		7.1	0.71	mg/Kg	Q	07/11/12 11:31	07/17/12 13:27	20
Fluorene	ND		7.1	0.71	mg/Kg		07/11/12 11:31	07/17/12 13:27	20
Indeno[1,2,3-cd]pyrene	ND		7.1	0.71	mg/Kg	100	07/11/12 11:31	07/17/12 13:27	20
Naphthalene	15		7.1	0.71	mg/Kg	10	07/11/12 11:31	07/17/12 13:27	20
Phenanthrene	ND		7.1	0.71	mg/Kg	9	07/11/12 11:31	07/17/12 13:27	.20
Pyrene	1,6	1	7.1	0.71	mg/Kg	0	07/11/12 11:31	07/17/12 13:27	20
1-Methylnaphthalene	54		7.1	0.71	mg/Kg	0	07/11/12 11:31	07/17/12 13:27	20
2-Methylnaphthalene	70		7.1	0,71	mg/Kg	D	07/11/12 11:31	07/17/12 13:27	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	-147	X	44 - 108				07/11/12 11:31	07/17/12 13:27	20
Nitrobenzene-d5 (Surr)	96		27 - 114				07/11/12 11:31	07/17/12 13:27	20
Terphenyl-d14 (Surr)	60		36 - 134				07/11/12 11:31	07/17/12 13:27	20

Client Sample Results

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

TestAmerica Job ID: 400-66850-1

Client Sample ID: 1022 FOXGLOVE

Date Collected: 07/03/12 12:45 Date Received: 07/06/12 10:14 Lab Sample ID: 400-66850-2

Matrix: Solid Percent Solids: 93.1

								1 21 00-110 50-11	mar and
Method: 8260B - Volatile Or	ganic Compounds	(GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.29	0.028	mg/Kg	0	07/09/12 15:57	07/12/12 18:09	50
Ethylbenzene	ND		0.29	0.035	mg/Kg	-0	07/09/12 15:57	07/12/12 18:09	50
Toluene	ND		0.29	0.041	mg/Kg	0	07/09/12 15:57	07/12/12 18:09	50
Xylenes, Total	ND		0.58	0.11	mg/Kg	Ó	07/09/12 15:57	07/12/12 18:09	50
Naphthalene	0.18	7	0.29	0.058	mg/Kg	9	07/09/12 15:57	07/12/12 18:09	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	84		72 - 122				07/09/12 15:57	07/12/12 18:09	50
Dibromofluoromethane	90		79 - 118				07/09/12 15:57	07/12/12 18:09	50
Toluene-d8 (Surr)	94		80 - 120				07/09/12 15:57	07/12/12 18:09	50
Method: 8270D - Semivolati	le Organic Compou	nds (GC/M	S)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.35	0.035	mg/Kg	0	07/11/12 11:31	07/16/12 17:59	1
Acenaphthylene	ND		0.35	0.035	mg/Kg	0	07/11/12 11:31	07/16/12 17:59	1
Anthracene	ND		0.35	0.035	mg/Kg	*	07/11/12 11:31	07/16/12 17:59	1
Benzo[a]anthracene	ND		0.35	0.035	mg/Kg	*	07/11/12 11:31	07/16/12 17:59	1
Benzo[a]pyrene	ND		0.35	0.035	mg/Kg	8	07/11/12 11:31	07/16/12 17:59	1
Benzo[b]fluoranthene	ND		0.35	0.035	mg/Kg	0	07/11/12 11:31	07/16/12 17:59	1
Benzo[g,h,i]perylene	ND		0.35	0.035	mg/Kg	0	07/11/12 11:31	07/16/12 17:59	1
Benzo[k]fluoranthene	ND		0.35	0.035	mg/Kg	83	07/11/12 11:31	07/16/12 17:59	1
Chrysene	ND		0.35	0.035	mg/Kg	-875	07/11/12 11:31	07/16/12 17:59	1
Dibenz(a,h)anthracene	ND		0.35	0.035	mg/Kg	101	07/11/12 11:31	07/16/12 17:59	1
Fluoranthene	ND		0.35	0.035	mg/Kg	70	07/11/12 11:31	07/16/12 17:59	1
Fluorene	ND		0.35	0.035	mg/Kg	0	07/11/12 11:31	07/16/12 17:59	1
Indeno[1,2,3-cd]pyrene	ND		0.35	0.035	mg/Kg	0	07/11/12 11:31	07/16/12 17:59	1
Naphthalene	ND		0.35	0.035	mg/Kg	(0)	07/11/12 11:31	07/16/12 17:59	1
Phenanthrene	ND		0.35	0.035	mg/Kg	0	07/11/12 11:31	07/16/12 17:59	1
Pyrene	ND		0.35	0.035	mg/Kg	0	07/11/12 11:31	07/16/12 17:59	1
1-Methylnaphthalene	ND		0.35	0.035	mg/Kg	0	07/11/12 11:31	07/16/12 17:59	1
2-Methylnaphthalene	ND		0.35	0.035	mg/Kg	13	07/11/12 11:31	07/16/12 17:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	68		44 - 108				07/11/12 11:31	07/16/12 17:59	1
Nitrobenzene-d5 (Surr)	57		27 - 114				07/11/12 11:31	07/16/12 17:59	1
Terphenyl-d14 (Surr)	77		36 - 134				07/11/12 11:31	07/16/12 17:59	1

Definitions/Glossary

Client: Environmental Enterprise Group Project/Site: Laurel Bay Housing Project TestAmerica Job ID: 400-66850-1

Qualifiers

GC/MS VOA

Qualifier Description

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

GC/MS Semi VOA

Qualifier Qualifier Description

X Surrogate is outside control limits

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

Resolvery

%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: 400-66850-1

Client Sample ID: 1353 CARDINAL

Date Collected: 07/02/12 16:15 Date Received: 07/06/12 10:14 Lab Sample ID: 400-66850-1

Matrix: Solid Percent Solids: 92.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			158404	07/09/12 15:57	MG	TAL PEN
Total/NA	Analysis	8260B		100	158403	07/12/12 17:49	MG	TAL PEN
Total/NA	Prep	3550C			158295	07/11/12 11:31	RT	TAL PEN
Total/NA	Analysis	8270D		20	158553	07/17/12 13:27	JP	TAL PEN
Total/NA	Analysis	Moisture		1	158094	07/06/12 17:00	LEC	TAL PEN

Client Sample ID: 1022 FOXGLOVE

Date Collected: 07/03/12 12:45 Date Received: 07/06/12 10:14 Lab Sample ID: 400-66850-2

Matrix: Solid Percent Solids: 93.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			158404	07/09/12 15:57	MG	TAL PEN
Total/NA	Analysis	8260B		50	158403	07/12/12 18:09	MG	TAL PEN
Total/NA	Prep	3550C			158295	07/11/12 11:31	RT	TAL PEN
Total/NA	Analysis	8270D		1	158528	07/16/12 17:59	JP	TAL PEN
Total/NA	Analysis	Moisture		1	158094	07/06/12 17:00	LEC	TAL PEN

Laboratory References:

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

TestAmerica Job ID: 400-66850-1

Prep Batch

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

GC/MS VOA

Analysis Batch: 158403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-66850-1	1353 CARDINAL	Total/NA	Solid	8260B	158404
400-66850-2	1022 FOXGLOVE	Total/NA	Solid	8260B	158404
LCS 400-158404/2-A	Lab Control Sample	Total/NA	Solid	8260B	158404
LCSD 400-158404/22-A	Lab Control Sample Dup	Total/NA	Solid	8260B	158404
MB 400-158404/1-A	Method Blank	Total/NA	Solid	8260B	158404

Prep Batch: 158404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method
400-66850-1	1353 CARDINAL	Total/NA	Solid	5035
400-66850-2	1022 FOXGLOVE	Total/NA	Solid	5035
LCS 400-158404/2-A	Lab Control Sample	Total/NA	Solid	5035
LCSD 400-158404/22-A	Lab Control Sample Dup	Total/NA	Solid	5035
MB 400-158404/1-A	Method Blank	Total/NA	Solid	5035

GC/MS Semi VOA

Prep Batch: 158295

100 00000 4		
400-66850-1	3550C	
400-66850-2	3550C	
400-66850-2 MS	3550C	
400-66850-2 MSD	3550C	
LCS 400-158295/5-A	3550C	
MB 400-158295/6-A	3550C	
LCS 400-158295/5-A	7.577.5	

Analysis Batch: 158528

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1022 FOXGLOVE	Total/NA	Solid	8270D	158295
1022 FOXGLOVE	Total/NA	Solid	8270D	158295
1022 FOXGLOVE	Total/NA	Solid	8270D	158295
Lab Control Sample	Total/NA	Solid	8270D	158295
Method Blank	Total/NA	Solid	8270D	158295
	1022 FOXGLOVE 1022 FOXGLOVE 1022 FOXGLOVE Lab Control Sample	1022 FOXGLOVE Total/NA 1022 FOXGLOVE Total/NA 1022 FOXGLOVE Total/NA Lab Control Sample Total/NA	1022 FOXGLOVE Total/NA Solid 1022 FOXGLOVE Total/NA Solid 1022 FOXGLOVE Total/NA Solid Lab Control Sample Total/NA Solid	1022 FOXGLOVE Total/NA Solid 8270D 1022 FOXGLOVE Total/NA Solid 8270D 1022 FOXGLOVE Total/NA Solid 8270D Lab Control Sample Total/NA Solid 8270D

Analysis Batch: 158553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-66850-1	1353 CARDINAL	Total/NA	Solid	8270D	158295

General Chemistry

Analysis Batch: 158094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-66850-1	1353 CARDINAL	Total/NA	Solid	Moisture	
400-66850-2	1022 FOXGLOVE	Total/NA	Solid	Moisture	

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

MD MD

91

93

Lab Sample ID: MB 400-158404/1-A

Matrix: Solid

Analysis Batch: 158403

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 158404

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0050	0.00049	mg/Kg		07/12/12 08:00	07/12/12 17:05	1
Ethylbenzene	ND		0.0050	0.00061	mg/Kg		07/12/12 08:00	07/12/12 17:05	1
Toluene	ND		0.0050	0.00070	mg/Kg		07/12/12 08:00	07/12/12 17:05	1
Xylenes, Total	ND		0.010	0.0019	mg/Kg		07/12/12 08:00	07/12/12 17:05	1
Naphthalene	ND		0.0050	0.0010	mg/Kg		07/12/12 08:00	07/12/12 17:05	1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	85		72 - 122				07/12/12 08:00	07/12/12 17:05	1

79 - 118

80 - 120

Lab Sample ID: LCS 400-158404/2-A

Matrix: Solid

Toluene-d8 (Surr)

Dibromofluoromethane

Analysis Batch: 158403

Client Sample ID: Lab Control Sample

07/12/12 08:00

07/12/12 08:00

Prep Type: Total/NA

Prep Batch: 158404 %Rec. Limits

07/12/12 17:05

07/12/12 17:05

	Бріке	LUS	LCS				70Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.0500	0.0503		mg/Kg		101	74 - 119
Ethylbenzene	0.0500	0.0506		mg/Kg		101	78 - 116
Toluene	0.0500	0.0526		mg/Kg		105	76 - 116
Xylenes, Total	0.150	0.154		mg/Kg		102	77 - 118
Naphthalene	0.0500	0.0414		mg/Kg		83	64 - 126

Spike

Added

0.0500

0.0500

0.0500

0.150

0.0500

LCSD LCSD

0.0507

0.0494

0.0519

0.152

0.0406

Result Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

LCS LCS

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene	88	72 - 122
Dibromofluoromethane	96	79 - 118
Toluene-d8 (Surr)	92	80 - 120

Lab Sample ID: LCSD 400-158404/22-A

Matrix: Solid

Analyte

Benzene

Toluene

Ethylbenzene

Xylenes, Total

Naphthalene

Analysis Batch: 158403

Client Sample ID: Lab Control Sample Dup

101

Prep Type: Total/NA

Prep Batch: 158404

1

12

16

 %Rec.
 RPD

 %Rec
 Limits
 RPD
 Limit

 101
 74 - 119
 1
 10

 99
 78 - 116
 2
 12

 104
 76 - 116
 1
 11

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene	89	72 - 122
Dibromofluoromethane	95	79 - 118
Toluene-d8 (Surr)	94	80 - 120

77 - 118

64 - 126

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

Lab Sample ID: MB 400-158295/6-A

Matrix: Solid

Analysis Batch: 158528

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

Prep Batch: 158295

Parista and an arrange of								* / E * S S S S S S S S S S S S S S S S S S	
		MB							
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Acenaphthylene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Anthracene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Benzo[a]anthracene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Benzo[a]pyrene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Benzo[b]fluoranthene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Benzo[g,h,i]perylene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Benzo[k]fluoranthene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Chrysene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Dibenz(a,h)anthracene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	-1
Fluoranthene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Fluorene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Indeno[1,2,3-cd]pyrene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Naphthalene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Phenanthrene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
Pyrene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
1-Methylnaphthalene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
2-Methylnaphthalene	ND		0.33	0.033	mg/Kg		07/11/12 11:31	07/16/12 12:30	1
	10000	0.0							

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	78	44 - 108	07/11/12 11:31	07/16/12 12:30	1
Nitrobenzene-d5 (Surr)	68	27 - 114	07/11/12 11:31	07/16/12 12:30	1
Terphenyl-d14 (Surr)	79	36 - 134	07/11/12 11:31	07/16/12 12:30	1

Lab Sample ID: LCS 400-158295/5-A

Matrix: Solid

Analysis Batch: 158528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 158295

Allalysis Datch. 130320							rieh
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier U	Init	D	%Rec	Limits
Acenaphthene	1.67	1.42	n	ng/Kg		85	53 - 108
Acenaphthylene	1.67	1.46	n	ng/Kg		88	57 - 111
Anthracene	1.67	1.49	-n	ng/Kg		90	56 - 110
Benzo[a]anthracene	1.67	1.51	n	ng/Kg		90	52 - 105
Benzo[a]pyrene	1.67	1.22	n	ng/Kg		73	52 - 97
Benzo[b]fluoranthene	1.67	1.16	n	ng/Kg		70	49 - 95
Benzo[g,h,i]perylene	1.67	1.37	'n	ng/Kg		82	47 - 122
Benzo[k]fluoranthene	1.67	1.38	n	ng/Kg		83	57 - 113
Chrysene	1.67	1.44	n	ng/Kg		86	56 - 102
Dibenz(a,h)anthracene	1.67	1.37	n	ng/Kg		82	46 - 114
Fluoranthene	1,67	1.63	in	ig/Kg		98	56 - 120
Fluorene	1.67	1.33	п	ig/Kg		80	51 - 116
Indeno[1,2,3-cd]pyrene	1.67	1.41	m	ıg/Kg		84	48 - 119
Naphthalene	1,67	1.37	m	ig/Kg		82	52 - 99
Phenanthrene	1.67	1.51	m	ıg/Kg		91	56 - 113
Pyrene	1.67	1.29	m	ig/Kg		78	56 - 100
1-Methylnaphthalene	1.67	1.47	m	ıg/Kg		88	58 - 104
2-Methylnaphthalene	1.67	1.39	m	g/Kg		83	53 - 99

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

67

Lab Sample ID: LCS 400-158295/5-A

Matrix: Solid

2-Fluorobiphenyl

Nitrobenzene-d5 (Surr)

Surrogate

Analysis Batch: 158528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 158295

LCS LCS %Recovery Qualifier Limits 44 - 108

Terphenyl-d14 (Surr) 80 36 - 134

Client Sample ID: 1022 FOXGLOVE

Prep Type: Total/NA

Prep Batch: 158295

Lab Sample ID: 400-66850-2 MS Matrix: Solid

Analysis Batch: 158528

Analysis Datem 100020	4.5		Av Stades	11.12	649				212
	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthene	ND		1.79	1.37		mg/Kg	10	77	10 - 150
Acenaphthylene	ND		1.79	1.40		mg/Kg	Ď.	78	10 - 150
Anthracene	ND		1.79	1.45		mg/Kg	.0	81	10 - 150
Benzo[a]anthracene	ND		1.79	1.47		mg/Kg	9	82	10 - 150
Benzo[a]pyrene	ND		1.79	1.18		mg/Kg	0	66	10 - 150
Benzo[b]fluoranthene	ND		1.79	1.13		mg/Kg	0	63	10 - 150
Benzo[g,h,i]perylene	ND		1.79	1.24		mg/Kg	D	70	10 - 150
Benzo[k]fluoranthene	ND		1.79	1.39		mg/Kg	-378	78	10 - 150
Chrysene	ND		1.79	1.41		mg/Kg	-378	79	10 - 150
Dibenz(a,h)anthracene	ND		1.79	1.22		mg/Kg	0	68	32 - 111
Fluoranthene	ND		1.79	1.59		mg/Kg	0	89	10 - 150
Fluorene	ND		1.79	1.33		mg/Kg	0	74	10 - 150
Indeno[1,2,3-cd]pyrene	ND		1.79	1.27		mg/Kg	0	71	10 - 150
Naphthalene	ND		1.79	1.27		mg/Kg	9	71	10 - 150
Phenanthrene	ND		1.79	1.48		mg/Kg	0	83	10 - 150
Pyrene	ND		1.79	1.29		mg/Kg		72	10 - 150
1-Methylnaphthalene	ND		1.79	1.38		mg/Kg	0	77	10 - 150
2-Methylnaphthalene	ND		1.79	1.31		mg/Kg	0	73	10 - 150

27 - 114

	1110	1110	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	68		44 - 108
Nitrobenzene-d5 (Surr)	58		27 - 114
Terphenyl-d14 (Surr)	74		36 - 134

MS MS

Lab Sample ID: 400-66850-2 MSD

Matrix: Solid

								Prep	Batch: 1	58295
Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
ND		1.78	1.34		mg/Kg	0	76	10 - 150	2	36
ND		1.78	1.38		mg/Kg	0	77	10 - 150	2	29
ND		1.78	1.40		mg/Kg	0	79	10 - 150	4	30
ND		1.78	1.41		mg/Kg	ō.	79	10 - 150	4	33
ND		1.78	1.12		mg/Kg	0	63	10 - 150	5	30
ND		1.78	1.07		mg/Kg	0	60	10 - 150	5	31
ND		1.78	1.19		mg/Kg	0	67	10150	5	30
ND		1.78	1.36		mg/Kg	*	76	10 - 150	3	29
ND		1.78	1.34		mg/Kg	Ģ.	76	10 - 150	5	33
ND		1.78	1.17		mg/Kg	0	66	32 - 111	4	30
ND		1.78	1.56		mg/Kg	0	88	10 - 150	2	42
	Result ND	ND N	Result Qualifier Added ND 1.78 ND 1.78	Result Qualifier Added Result ND 1.78 1.34 ND 1.78 1.40 ND 1.78 1.41 ND 1.78 1.12 ND 1.78 1.07 ND 1.78 1.19 ND 1.78 1.36 ND 1.78 1.34 ND 1.78 1.34 ND 1.78 1.34 ND 1.78 1.17	Result ND Added 1.78 Result Qualifier Qualifier ND 1.78 1.34 ND 1.78 1.38 ND 1.78 1.40 ND 1.78 1.41 ND 1.78 1.12 ND 1.78 1.07 ND 1.78 1.19 ND 1.78 1.36 ND 1.78 1.34 ND 1.78 1.34 ND 1.78 1.17	Result Qualifier Added Nesult Qualifier Unit Unit Unit Unit Unit Unit Unit Mg/Kg ND 1.78 1.34 mg/Kg ND 1.78 1.40 mg/Kg ND 1.78 1.41 mg/Kg ND 1.78 1.12 mg/Kg ND 1.78 1.07 mg/Kg ND 1.78 1.19 mg/Kg ND 1.78 1.36 mg/Kg ND 1.78 1.34 mg/Kg ND 1.78 1.34 mg/Kg ND 1.78 1.17 mg/Kg	Result Qualifier Added Added Result Qualifier Unit Unit Unit Unit Unit Unit Unit Unit	Result Qualifier Added Added Result Qualifier Unit Unit Unit Unit Unit Unit Unit Unit	Sample Result Qualifier Spike Added Result Qualifier MSD WSD WRec. WRec. Limits ND 1.78 1.34 mg/Kg 76 10 - 150 10 - 150 ND 1.78 1.38 mg/Kg 77 10 - 150 ND 1.78 1.40 mg/Kg 79 10 - 150 ND 1.78 1.41 mg/Kg 79 10 - 150 ND 1.78 1.12 mg/Kg 63 10 - 150 ND 1.78 1.07 mg/Kg 60 10 - 150 ND 1.78 1.19 mg/Kg 67 10 - 150 ND 1.78 1.36 mg/Kg 76 10 - 150 ND 1.78 1.34 mg/Kg 66 32 - 111	Result Qualifier Added Nesult Qualifier Qualifier Unit Unit Unit Unit Unit Unit Unit Unit

Client Sample ID: 1022 FOXGLOVE

Prep Type: Total/NA

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

Lab Sample ID: 400-66850-2 MSD

Matrix: Solid

Analysis Batch: 158528

Client Sample ID: 1022 FOXGLOVE Prep Type: Total/NA

Prep Batch: 158295

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Fluorene	ND		1.78	1.28		mg/Kg	9	72	10 - 150	4	36
Indeno[1,2,3-cd]pyrene	ND		1.78	1.22		mg/Kg	-3	69	10 - 150	4	31
Naphthalene	ND		1.78	1.28		mg/Kg	50	72	10 - 150	0	33
Phenanthrene	ND		1.78	1.43		mg/Kg	0	80	10 - 150	3	34
Pyrene	ND		1.78	1.22		mg/Kg	0	69	10 - 150	5	45
1-Methylnaphthalene	ND		1.78	1.38		mg/Kg	0	77	10 - 150	0	29
2-Methylnaphthalene	ND		1.78	1.31		mg/Kg	0	73	10 - 150	0	32

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	69		44 - 108
Nitrobenzene-d5 (Surr)	58		27 - 114
Terphenyl-d14 (Surr)	70		36 - 134



Login Sample Receipt Checklist

Client: Environmental Enterprise Group

Job Number: 400-66850-1

Login Number: 66850 List Source: TestAmerica Pensacola

List Number: 1

Creator: Crawford, Lauren E

Greator. Grawford, Eddien E		
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	0.6°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	

TestAmerica Job ID: 400-66850-1

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

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

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.



Yes Yes Compliance Monitoring? Enforcement Action? To assist us in using the proper analytical methods, is this work being conducted for 26 J regulatory purposes? Site State: SC TA Quote #: ë ë Fax No.: 843-879-0401 Phone: 615-726-0177 Toll Free: 800-765-0980 Fax: 615-726-3404 TestAmerica Nashville Division
THE LEADER IN ENVIRONMENTAL TESTING Nashville, TN 37204 Project Manager: Tom McElwee email: mcelwee@eeginc.net Client Name/Account #: EEG - SBG # 2449 Address: 10179 Highway 78 City/State/Zip: Ladson, SC 29456 Telephone Number: 843,412,2097 Sampler Name: (Print)

Project ID: Laurel Bay Housing Project

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Sampler Signature:

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ATTACHMENT A

UST Certificate of Disposal

CONTRACTOR

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

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

TANK ID & LOCATION

UST 1022Foxglove; 1022 Foxglove St., Laurel Bay Housing Area, MCAS Beaufort, S.C.

DISPOSAL LOCATION

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

TV	DE	OF	TAI	MIL
LY	PE	OF	IA	NIV

SIZE (GAL)

Steel

280

CLEANING/DISPOSAL METHOD

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

DISPOSAL CERTIFICATION

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

(Name) (Date)

Appendix C Laboratory Analytical Report - Groundwater



Volatile Organic Compounds by GC/MS

Client: AECOM - Resolution Consultants

Description: BEALB1022TW01WG20151203

Laboratory ID: QL04022-007

Date Sampled: 12/03/2015 1215

Matrix: Aqueous

Date Received: 12/04/2015

Run Prep Method Analytical Method Dilution Analysis Date Analyst **Prep Date** Batch 5030B 12/09/2015 1528 ALL 91718

	CAS	Analytical						
Parameter	Number	Method	Result	Q	LOQ	LOD	DL	Units Run
Benzene	71-43-2	8260B	0.45	U	5.0	0.45	0.21	ug/L 1
Ethylbenzene	100-41-4	8260B	0.51	U	5.0	0.51	0.21	ug/L 1
Naphthalene	91-20-3	8260B	0.96	U	5.0	0.96	0.14	ug/L 1
Toluene	108-88-3	8260B	0.48	U	5.0	0.48	0.24	ug/L 1
Xylenes (total)	1330-20-7	8260B	0.57	U	5.0	0.57	0.32	ug/L 1

Run 1 Q % Recovery	Acceptance Limits
98	75-120
100	70-120
104	85-120
96	85-115
	Q % Recovery 98 100 104

PQL = Practical quantitation limit ND = Not detected at or above the MDL B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range P = The RPD between two GC columns exceeds 40%

H = Out of holding time N = Recovery is out of criteria

Q = Surrogate failure L = LCS/LCSD failure S = MS/MSD failure

J = Estimated result < PQL and ≥ MDL Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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 (SIM)

Client: AECOM - Resolution Consultants

Description: BEALB1022TW01WG20151203

Laboratory ID: QL04022-007

Matrix: Aqueous

Date Sampled: 12/03/2015 1215 Date Received: 12/04/2015

1

Run Prep Method Analytical Method Dilution Analysis Date Analyst Batch **Prep Date** 3520C 8270D (SIM) 12/11/2015 1957 DRB1 12/10/2015 0918 91795

	CAS	Analytical							
Parameter	Number	Method	Result	Q	LOQ	LOD	DL	Units Ru	ın
Benzo(a)anthracene	56-55-3	8270D (SIM)	0.040	U	0.20	0.040	0.019	ug/L 1	
Benzo(b)fluoranthene	205-99-2	8270D (SIM)	0.040	U	0.20	0.040	0.019	ug/L 1	
Benzo(k)fluoranthene	207-08-9	8270D (SIM)	0.040	U	0.20	0.040	0.024	ug/L 1	
Chrysene	218-01-9	8270D (SIM)	0.040	U	0.20	0.040	0.021	ug/L 1	
Dibenzo(a,h)anthracene	53-70-3	8270D (SIM)	0.080	U	0.20	0.080	0.040	ug/L 1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Methylnaphthalene-d10		65	15-139
Fluoranthene-d10		106	23-154

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 L = LCS/LCSD failure

ND = Not detected at or above the MDL Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

 $J = Estimated result < PQL and <math>\geq MDL$

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

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

Appendix D Regulatory Correspondence





Catherine E. Heigel, Director Promoting and protecting the health of the public and the environment

July 1, 2015

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

RE: IGWA

Laurel Bay Underground Storage Tank Assessment Reports for:

See attached sheet

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received the referenced Underground Storage Tank 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. 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 this site.

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

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

Sincerely,

Kent Krieg

Department of Defense Corrective Action Section

Bureau of Land and Waste Management

South Carolina Department of Health and Environmental Control

Cc: Russell Berry (via email)

Craig Ehde (via email) Bryan Beck (via email)



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Krieg to Drawdy **Attachment to:**

Subject: IGWA Dated 7/1/2015

Laurel Bay Underground Storage Tank Assessment Reports for: (97 addresses/110 tanks)

118 Banyan	343 Ash Tank 2
126 Banyan	344 Ash Tank 2
127 Banyan	347 Ash Tank 2
130 Banyan Tank 1	378 Aspen Tank 2
141 Laurel Bay	379 Aspen
151 Laurel Bay	382 Aspen Tank 1
224 Cypress	382 Aspen Tank 2
227 Cypress	394 Acorn Tank 2
256 Beech Tank 2	400 Elderberry
257 Beech Tank 2	432 Elderberry
257 Beech Tank 1 257 Beech Tank 2	436 Elderberry
264 Beech	473 Dogwood Tank 2
265 Beech Tank 2	482 Laurel Bay
265 Beech Tank 2	517 Laurel Bay
275 Birch	586 Aster
277 Birch Tank 1	632 Dahlia
285 Birch	639 Dahlia Tank 2
292 Birch Tank 3	643 Dahlia Tank 1
297 Birch	644 Dahlia Tank 1
301 Ash	644 Dahlia Tank 2
306 Ash	646 Dahlia Tank 1
310 Ash Tank 1	646 Dahlia Tank 2
313 Ash	665 Camellia
315 Ash Tank 2	699 Abelia
316 Ash	744 Blue Bell
319 Ash	745 Blue Bell Tank 1
320 Ash	747 Blue Bell Tank 1
321 Ash	747 Blue Bell Tank 2
329 Ash	747 Blue Bell Tank 3
330 Ash Tank 2	749 Blue Bell Tank 1
331 Ash	749 Blue Bell Tank 2
332 Ash	751 Blue Bell
333 Ash	762 Althea
335 Ash Tank 1	765 Althea Tank 2
335 Ash Tank 2	766 Althea Tank 4
341 Ash	767 Althea Tank 1
342 Ash Tank 1	768 Althea Tank 2
342 Ash Tank 2	768 Althea Tank 3

Laurel Bay Underground Storage Tank Assessment Reports for: (98 addresses/110 tanks) cont.

768 Althea Tank 4	1067 Gardenia
769 Althea Tank 1	1077 Heather
769 Althea Tank 2	1081 Heather
775 Althea	1101 Iris Tank 2
819 Azalea	1104 Iris
840 Azalea	1105 Iris Tank 2
878 Cobia	1124 Iris Tank 2
891 Cobia	1142 Iris Tank 2
913 Barracuda	1146 Iris Tank 2
916 Barracuda	1218 Cardinal
923 Albacore	1240 Dove
1004 Bobwhite	1266 Dove
1022 Foxglove	1292 Eagle
1031 Foxglove	1299 Eagle Tank 1
1034 Foxglove Tank 2	1302 Eagle
1061 Gardenia Tank 3	1336 Albatross
1064 Gardenia	1351 Cardinal



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

Division of Waste Management Bureau of Land and Waste Management

June 8, 2016

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

RE: Approval and Concurrence with Draft Final Initial Groundwater Investigation Report-November and December 2015

Laurel Bay Military Housing Area Multiple Properties

Dated April 2015

Dear Mr. Drawdy,

The South Carolina Department of Health and Environmental Control (the Department) received groundwater data in the above referenced Groundwater Investigation Report for the attached addresses on May 2, 2016. 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 the Department's request, groundwater samples were collected from the attached referenced addresses. The Department 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 wells should be installed at the 15 stated addresses. For the remaining 80 addresses, there is no indication of contamination on the property 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 <u>petruslb@dhec.sc.gov</u> or 803-898-0294.

Sincerely,

Laurel Petrus

NETS

RCRA Federal Facilities Section

Attachment: Specific Property Recommendations

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

Subject: Draft Final Initial Groundwater Investigation Report-November and December 2015

Specific Property Recommendations

Dated June 8, 2016

Draft Final Initial Groundwater Investigation Report for (95 addresses)

Permanent Moni	toring Well Investigation recommendation (15 addresses)
130 Banyan Drive	473 Dogwood Drive
256 Beech Street	747 Blue Bell Lane
285 Birch Drive	749 Blue Bell Lane
292 Birch Drive	775 Althea Street
330 Ash Street	1034 Foxglove Street
331 Ash Street	1104 Iris Lane
335 Ash Street	1124 Iris Lane
342 Ash Street	

118 Banyan Drive	644 Dahlia Drive	
126 Banyan Drive	646 Dahlia Drive	
127 Banyan Drive	665 Camellia Drive	
141 Laurel Bay Blvd	699 Abelia Street	
151 Laurel Bay Blvd	744 Blue Bell Lane	
224 Cypress Street	745 Blue Bell Lane	
227 Cypress Street	751 Blue Bell Lane	
257 Beech Street	762 Althea Street	
264 Beech Street	765 Althea Street	
265 Beech Street	766 Althea Street	
275 Birch Drive	767 Althea Street	
277 Birch Drive	768 Althea Street	
297 Birch Drive	769 Althea Street	
301 Ash Street	819 Azalea Drive	
306 Ash Street	840 Azalea Drive	
310 Ash Street	878 Cobia Drive	
313 Ash Street	891 Cobia Drive	
315 Ash Street	913 Barracuda Drive	-
316 Ash Street	916 Barracuda Drive	
319 Ash Street	923 Wren Lane	
320 Ash Street	1004 Bobwhite Drive	
321 Ash Street	1022 Foxglove Street	
329 Ash Street	1031 Foxglove Street	
332 Ash Street	1061 Gardenia Drive	
333 Ash Street	1064 Gardenia Drive	
341 Ash Street	1067 Gardenia Drive	
347 Ash Street	1077 Heather Street	
378 Aspen Street	1081 Heather Street	
379 Aspen Street	1101 Iris Lane	
382 Aspen Street	1105 Iris Lane	
394 Acorn Street	1142 Iris Lane	
400 Elderberry Drive	1146 Iris Lane	
432 Elderberry Drive	1218 Cardinal Lane	
436 Elderberry Drive	1240 Dove Lane	
482 Laurel Bay Blvd	1266 Dove Lane	
517 Laurel Bay Blvd	1292 Eagle Lane	
586 Aster Street	1299 Eagle Lane	
632 Dahlia Drive	1302 Eagle Lane	
639 Dahlia Drive	1336 Albatross Drive	
643 Dahlia Drive	1351 Cardinal Lane	

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