SUMMARY REPORT
252 IRIS LANE (FORMERLY 1113 IRIS LANE)
LAUREL BAY MILITARY HOUSING AREA
MARINE CORPS AIR STATION BEAUFORT
BEAUFORT, SC

Revision: 0 Prepared for:

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

and



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

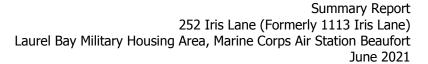
CTO WE52

JUNE 2021



Table of Contents

1.0	INTRODUC	CTION	1
1.1 1.2		ND INFORMATION	
2.0	SAMPLING	ACTIVITIES AND RESULTS	3
2.1 2.2 2.3 2.4	SOIL ANAL GROUNDW	OVAL AND SOIL SAMPLING YTICAL RESULTS ATER SAMPLING ATER ANALYTICAL RESULTS	4 4
3.0	PROPERTY	Y STATUS	5
4.0	REFERENC	ES!	5
Table Table		Tables Laboratory Analytical Results - Soil Laboratory Analytical Results - Groundwater	
		Appendices	
Apper	ndix A	Multi-Media Selection Process for LBMH	
Apper	ndix B	UST Assessment Report	
Apper	ndix C	Laboratory Analytical Report - Groundwater	
Apper	ndix D	Regulatory Correspondence	





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).

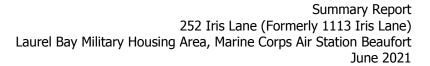
As of January 2014, the LBMH addresses were re-numbered to comply with the E-911 emergency response addressing system; however, in order to remain consistent with historical sampling and reporting for LBMH area, the residences will continue to be referenced with their original address numbers in sample 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 252 Iris Lane (Formerly 1113 Iris Lane). This NFA determination indicates that there are no unacceptable risks to human health or the environment for the petroleum constituents associated with the home heating oil USTs. The following information is included in this report:

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

1.1 Background Information

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





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

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

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

1.2 UST Removal and Assessment Process

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

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

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



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

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

2.0 SAMPLING ACTIVITIES AND RESULTS

The following section presents the sampling activities and associated results for 252 Iris Lane (Formerly 1113 Iris Lane). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1113 Iris Lane* (MCAS Beaufort, 2008). The UST Assessment Report is provided in Appendix B. Details regarding the IGWA sampling activities at this site are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008). 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 September 26, 2007, a single 280 gallon heating oil UST was removed from the front of the house at 252 Iris Lane (Formerly 1113 Iris Lane). The former UST location is indicated in the figure 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 5'6" bgs and a single soil sample was collected from that depth. An additional soil sample was collected from the side of the excavation at a depth of 3'8" bgs. The samples were collected from the fill port side of the former UST to represent a worst case scenario.

Following UST removal, soil samples were collected from the base and the side 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.

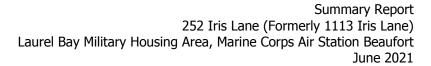
2.2 Soil Analytical Results

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 252 Iris Lane (Formerly 1113 Iris Lane) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated August 13, 2008, SCDHEC requested an IGWA for 252 Iris Lane (Formerly 1113 Iris Lane) to determine if the groundwater was impacted by petroleum COPCs. SCDHEC's request letter is provided in Appendix D.

2.3 Groundwater Sampling

On July 28, 2008, a temporary monitoring well was installed at 252 Iris Lane (Formerly 1113 Iris Lane), 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 in the figure of the UST Assessment Report (Appendix B). Further details are provided in the *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008).





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 *Investigation of Ground Water at Leaking Heating Oil UST Sites Report* (Resolution Consultants, 2008).

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 252 Iris Lane (Formerly 1113 Iris Lane) 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 252 Iris Lane (Formerly 1113 Iris Lane). This NFA determination was obtained in a letter dated December 19, 2008. SCDHEC's NFA letter is provided in Appendix D.

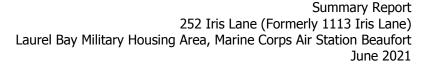
4.0 REFERENCES

Marine Corps Air Station Beaufort, 2008. South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1113

Iris Lane, Laurel Bay Military Housing Area, January 2008.

Resolution Consultants, 2008. *Investigation of Ground Water at Leaking Heating Oil UST Sites*Report for Laurel Bay Military Housing Area, Multiple Properties, Laurel Bay Military

Housing Area, Marine Corps Air Station Beaufort, Beaufort, South Carolina, November 2008.





- 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 252 Iris Lane (Formerly 1113 Iris Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

	(1)	Results Samples Collected 09/26/07					
Constituent	SCDHEC RBSLs (1)	1113 Iris Bottom 01	1113 Iris Side 02				
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)							
Benzene	0.003	ND	ND				
Ethylbenzene	1.15	0.000332	ND				
Naphthalene	0.036	0.00234	0.0958				
Toluene	0.627	0.000482	0.0214				
Xylenes, Total	13.01	0.00183	0.0118				
Semivolatile Organic Compounds Anal	lyzed by EPA Method 8270D (mg/kg)						
Benzo(a)anthracene	0.66	ND	0.0549				
Benzo(b)fluoranthene	0.66	ND	0.054				
Benzo(k)fluoranthene	0.66	ND	ND				
Chrysene	0.66	ND	0.0591				
Dibenz(a,h)anthracene	0.66	ND	ND				

Notes:

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 1.0 and 1.1 (SCDHEC, May 2001 and SCDHEC, February 2011) 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 252 Iris Lane (Formerly 1113 Iris Lane) 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 07/28/08
Volatile Organic Compounds Analyzed	l by EPA Method 8260B (μg/L)	
Benzene	5	16.24	ND
Ethylbenzene	700	45.95	3.7
Naphthalene	25	29.33	ND
Toluene	1000	105,445	ND
Xylenes, Total	10,000	2,133	8.8
Semivolatile Organic Compounds Ana	lyzed by EPA Method 82	70D (μg/L)	
Benzo(a)anthracene	10	NA	0.12
Benzo(b)fluoranthene	10	NA	ND
Benzo(k)fluoranthene	10	NA	ND
Chrysene	10	NA	0.12
Dibenz(a,h)anthracene	10	NA	ND

Notes:

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

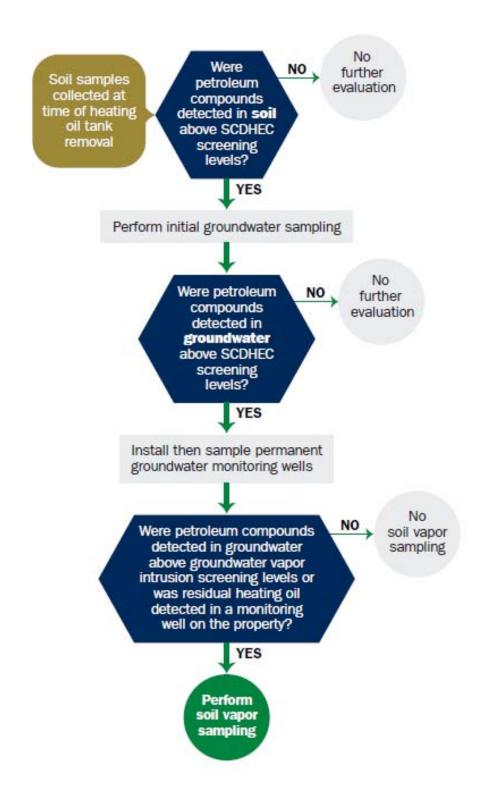
VISL - Vapor Intrusion Screening Level

⁽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).

⁽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.

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



Submit Completed Form To:
UST Program
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803) 896-6240

Owner Name (Corporation, Individual, Public Agency, Other)

Beaufort Military Complex Family Housing

Mailing Address

1510 Laurel Bay Blvd.

City State Zip Code

Beaufort SC 29906

Area Code Telephone Number Contact Person

843-379-3305 Luke Asterman

II. SITE IDENTIFICATION AND LOCATION

Permit I.D. #

Actus Lend Lease, LLC

Facility Name or Company Site Identifier

Street Address or State Road (as applicable)

Beaufort, SC 29906

City

Beaufort

County

Attachment 2 III. INSURANCE INFORMATION

Insura	ace Statement
The petroleum release reported to DHEC on monies to pay for appropriate site rehabilitation actifund, written confirmation of the existence or non-exisection must be completed.	N/A at Permit ID # may qualify to receive state vities. Before participation is allowed in the State Clean-up stence of an environmental insurance policy is required. This
Is there now, or has there ever been an insura UST release? YESNO (check o	nce policy or other financial mechanism that covers this
If you answered YES to the above que	stion, please complete the following information:
My policy provider is: The policy deductible is The policy limit is	
The policy deductible is	3:
The policy limit is:	
If you have this type of insurance, please inclu	de a copy of the policy with this report.
I do/do not (circle one) wish to	And participate in the Superb Program.
IV. CERTIFICATION (To be signed	
TO DE SIGNE	d by the UST owner/operator.)
tracked documents; and that based on my inquiry of ormation, I believe that the submitted information	miliar with the information submitted in this and all of those individuals responsible for obtaining this on is true, accurate, and complete.
ame (Type or print.)	
ignature	
o be completed by Notary Public:	
worn before me this day of day of	20
(Name)	
otary Public for the state of	
ease affix State seal if you are commissioned outside	South Carolina
	. I

	V. USI INFORMATION			7			<u>.</u>
•		Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Α.	Product(ex. Gas, Kerosene)	#2 Fuel					
В.	•	280 G					
C.	Age						 -
D.	Construction Material(ex. Steel, FRP)	Steel					
E.	Month/Year of Last Use					.	
F.	Depth (ft.) To Base of Tank	46"					
G.	Spill Prevention Equipment Y/N	N	,				
H.	Overfill Prevention Equipment Y/N	N					
I.	Method of Closure Removed/Filled	Remova	1				
J. ,	Date Tanks Removed/Filled					<u> </u>	
K.	Visible Corrosion or Pitting Y/N	9/24/07					
L.	Visible Holes Y/N	N				-	
M.	Method of disposal for any USTs removed from the	e ground (att	ach disp	osal man	ifests)		
	Recycling: Scrap Steel				,		
N.	Method of disposal for any liquid petroleum, sludge disposal manifests). Republic-Broadhur.	es, or wastew	aters ren	noved fr	om the U	STs (atta	ıch
TO WITH PROJECT	negotic- broadiur	st _w Landt			***************************************		· · · · · · · · · · · · · · · · · · ·
	Solidification & Sul	otitle D	Landí	<u>ill</u>			
O.	If any corrosion, pitting, or holes were observed, des	scribe the loc	ation an	d extent	for each	UST	

VI. PIPING INFORMATION

		•		ļ	Tank 2	Tank 3	Tank 4	Tank 5	T
Const	ruction Material(ex. Steel, FRI	P)	Steel					
Distan	nce from UST to I	Dispenser		<u> </u>		<u>·</u>			-
	er of Dispensers			NIR	-				
	of System Pressure			-0-		'			
Was Pi	ping Removed fro	om the Ground	1? Y/N	Suction					
Visible	Corrosion or Pitt	ing Y/N	• .	Y					
Visible	Holes Y/N	i.s z	*	N					
Age	***************************************	***************************************	•••••	N					_
			•						
If any c	corrosion, pitting,	or holes were	observed, de	escribe the	location	and exter	nt for eac	h piping	rur
If any c	orrosion, pitting,	or holes were	observed, de	escribe the	location	and exter	it for eac	h piping	rui
If any c	corrosion, pitting,	or holes were	observed, de	escribe the	location	and exter	nt for eac	h piping	rur
If any c	orrosion, pitting,	or holes were	observed, de	escribe the	location	and exter	nt for eac	h piping	rur
	BRIEF SITE I					and exter	nt for eac	h piping	TUI
	BRIEF SITE I		ION AND	HISTOI	RY		nt for eac	h piping	rur
	BRIEF SITE I	DESCRIPT	ION AND	HISTOI	RY		nt for each		rur
	BRIEF SITE I	DESCRIPT	ION AND	HISTOI	RY OIL T				TUI

VIII. SITE CONDITIONS

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

SCDHEC Lab Certification Number_

DW: 84009002

В.	,						
Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
					9/26/07		
1	Bottom	5012	SAND	66"	15:30	EcheVARRIA	ND
2	SIDE	501L 501L	SAND	66" 44"	15:30	ECHEVACON	14 .
3							
4							
5							
6							
7		·		1			
8			·:	Ĭ			
9					-		
10			· · · · · · · · · · · · · · · · · · ·	 			
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16			<u> </u>				
17							
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19		A Company of the Assessment of the Company of the C	a dali se saga sebelagan sebesar s <u>ali sali</u>				
20							
20				·			

* = Depth Below the Surrounding Land Surface

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.

EPA Method 8260B : Volatile Organic Compounds
- Preservatives: 2 ea. Sodium Bisulfate; 1 ea. Methanol
EPA Method 8270 : Polyaromatic Hydrocarbons - No Preservative
One (1) sidewall and one (1) bottom sample were secured
from each UST excavation. Samples were stored and shipped in an insulated cooler with wet Ice.

XI. RECEPTORS

	And the control of th	Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		
	If yes, indicate type of receptor, distance, and direction on site map.		
В.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		
ļ	If yes, indicate type of well, distance, and direction on site map.		
C	Are there any underground structures (e.g., basements) Located within 100 feet of the UST system?		
	If yes, indicate type of structure, distance, and direction on site map.		
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?		
	If yes, indicate the type of utility, distance, and direction on the site map.		
E.	Has contaminated soil been identified at a depth less than 3 feet below land surface in an area that is not capped by asphalt or concrete?	` ,	
	If yes, indicate the area of contaminated soil on the site map.		

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)

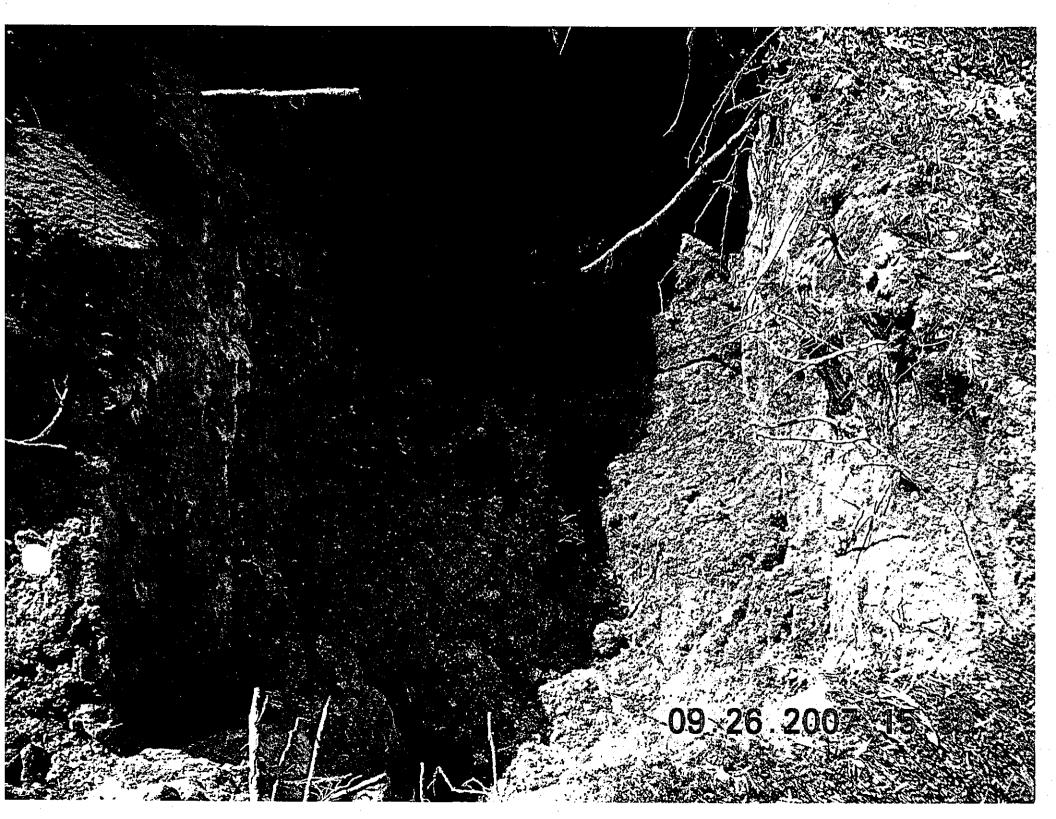
A B TANK I BASE 66"

IRIS LANE

TANK I EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 44" B-SOIL TEST BOTTOM SAMPLE @ 66" N A

CUSTOMER:	SCALE: 1/16'=1'-0'	EPG INC.
BEAUTORT MILITARY COMPLEX FAMILY HOUSING	SUPPLIER: EPG INC.	P.O. BOX 1096
SITE ADDRESS: 1113 IRIS LANE	DATE:	MOUNT PLEASANT, SC 29465-1096



SUMMARY OF ANALYSIS RESULTS

Mld

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

CoC	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	dowing pag
Benzene			<u> </u>	<u> </u>		05-0	3D-7	SB-8
Toluene		 	 		ļ <u> </u>			<u> </u>
Ethylbenzene			<u> </u>			 	 	<u> </u>
Xylenes	<u> </u>				<u> </u>			<u> </u>
Naphthalene								
Benzo(a)anthracene		 						<u> </u>
Benzo(b)flouranthene								
Benzo(k)flouranthene							<u> </u>	
Chrysene			 					
Dibenz(a.h)anthracene								
TPH (EPA 3550)					<u> </u>			. ·
	<u> </u>						<u> </u>	

								
CoC	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16
Benzene	·							
Toluene				 -				
Ethylbenzene							<u> </u>	<u> </u>
Xylenes								· .
Naphthalene								<u> </u>
Benzo(a)anthracene			<u></u>			<u> </u>		
Benzo(b)flouranthene						::		
Benzo(k)flouranthene						den evizere	WWW.TRATES	Tame of the entire state of the
Chrysene		·						
Dibenz(a,h)anthracene				<u> </u>			<u> </u>	
TPH (EPA 3550)								



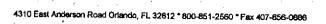
Enter the ground water analytical data for each sample for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

present, indicate the measure	d thickness to	o the nearest (0.01 feet.		
СоС	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	i		 	
MTBE	40				
Naphthalene	25				
Benzo(a)anthracene	10				
Benzo(b)flouranthene	10				
Benzo(k)flouranthene	10				
Chrysene	10				
Dibenz(a,h)anthracen e	10				
ED8	05	The state of the s	The state of the s	AMARIA A PARA A A A A A A A A A A A A A A A A	
1,2-DCA	.05				
Lead	Site specific				

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)





Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465

Attn: JOHN MAHONEY

Work Order:

OQI0667

Project:

LAUREL BAY

Project Number:

EP2362

Sampled: 09/26/07-09/27/07

Received: 09/29/07

LABORATORY REPORT

Sample ID: 1101 IRIS SIDE 02 - Lab Number: OQI0667-02 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Volatile (Organic Compounds by EPA M	ethod 8260B - C	ont.	•••		••		••••			•••••
91-20-3	Naphthalene	0.161	U	ug/kg dry	0.161	0.291	1	10/03/07 14:07	JWT	EPA 8260B	7J03029
108-88-3	Toluene	0.251	ប	ug/kg dry	0.251	0.291	1	10/03/07 14:07	JWT	EPA 8260B	7303029
1330-20-7	Xylenes, total	0.151	U	ug/kg dry	0.151	0.291	1	10/03/07 14:07	JWT	EPA 8260B	7J03029
Surrogate: I	,2-Dichloroethane-d4 (73-137%)	119 %					_	10.02.07 11.07	J 11 1	LI A 020011	7303029
Surrogate: 4	-Bromofluorobenzene (59-118%)	97 %							•		
Surrogate: D	dibromofluoromethane (55-145%)	100 %								,	
lurrogate: T	oluene-d8 (80-117%)	94 %									
?olynucie	ar Aromatic Hydrocarbons by	EPA Method 82	70					•		•	
3-32-9	Acenaphthene	84,4	U	ug/kg dry	84.4	191	1	10/02/07 09:03	REM	EPA 8270C	7J01012
08-96-8	Acenaphthylene	111	U.	ug/kg dry	111	191	1	10/02/07 09:03	REM	EPA 8270C	7J01012
20-12-7	Anthracene	60.8	ប	ug/kg dry	60.8	191	1	10/02/07 09:03	REM	EPA 8270C	7501012
5-5 5- 3	Benzo (a) anthracene	86.7	I	ug/kg dry	20.6	191	1	10/02/07 09:03	REM	EPA 8270C	7301012
)5-99-2	Benzo (b) fluoranthene	71.9	I	ug/kg dry	20.1	191	1	10/02/07 09:03	REM	EPA 8270C	7301012
7-08-9	Benzo (k) fluoranthene	30.0		ug/kg dry	20.1	191	1	10/02/07 09:03	REM	EPA 8270C	7301012
71-24-2	Benzo (g,h,i) perylene	19.8	บ	ug/kg dry	19.8	191	1	10/02/07 09:03	REM	EPA 8270C	
-32-8	Benzo (a) pyrene	39.9	1 .	ug/kg dry	23.4	191	1	10/02/07 09:03	REM	EPA 8270C	7J01012
-12 - 0	1-Methylnaphthalene	95.6	บ	ug/kg dry	95.6	191	1	10/02/07 09:03			7J01012
8-01-9	Chrysene	90,5	ī	ug/kg dry	22.8	191	1	10/02/07 09:03	REM REM	EPA 8270C	7J01012
-70-3	Dibenz (a,h) anthracene	25.0	י ט	ug/kg dry	25.0	191	1	10/02/07 09:03		EPA 8270C	7J01012
6-44-0	Fluoranthene	27.4	U	ug/kg dry	27.4	191		10/02/07 09:03	REM	EPA 8270C	7J01012
-73-7	Fluorene	74.6	· u	ug/kg dry	74.6	191			REM	EPA 8270C	7J01012
3-39-5	Indeno (1,2,3-cd) pyrene	24.7	ט	ug/kg dry	24.7	191	1	10/02/07 09:03	REM	EPA 8270C	7J01012
-57-6	2-Methylnaphthalene	81.2	บ	ug/kg dry	81.2	191		10/02/07 09:03	REM	EPA 8270C	7301012
-20-3	Naphthalene	76.5	u ·	ug/kg dry	76.5	•		10/02/07 09:03	REM	EPA 8270C	7J01012
-01-8	Phenanthrene	44.9	υ	ug/kg dry	76.5 44,9	191		10/02/07 09:03	REM	EPA 8270C	7J01012
9-00-0	Pyrene	38.7	U			191		10/02/07 09:03	REM	EPA 8270C	7J01012
rrogate: 2-F	Fluorobiphenyl (24-121%)	69 %	. 0	ug/kg dry	38,7	191	1	10/02/07 09:03	REM	EPA 8270C	7J01012
	robenzene-d5 (19-111%)	69 %									•
	phenyl-d14 (44-171%)	96 %									

LABORATORY REPORT

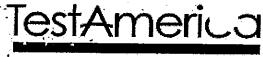
Sample ID: 1113 IRIS BOTTOM 01 - Lab Number: OQI0667-03 - Matrix: Solid/Soil

	And the state of t						Dil				
CAS#	Analyte	Result	Q	Units	MDL	PQL	Factor	Analyzed Date/Time	Ву	Method	Batch
General C	hemistry Parameters	*************				••••	•		• •		· • •
NA	% Solids	90.3		%.	0.100	0.100	1	10/02/07 17:20	RRP	EPA 160.3	7J02048
Volatile O	rganic Compounds by EPA N	fethod 8260B					-	10.0207 17.20	re,et	L. (A 100.5	7302048
71-43-2	Benzene	0.115	υ	ug/kg dry	0.115	0.313	. 1	10/03/07 14:23	TWI	EPA 8260B	7J03029
100-41-4	Ethylbenzene	0.332		ug/kg dry	0.132	0.313	1	10/03/07 14:23	JWT	EPA 8260B	7303029
91-20-3	Naphthalene	2.34		ug/kg dry	0.173	0.313	1	10/03/07 14:23	JWT	EPA 8260B	7303029
108-88-3	Toluene	0.482	v	ug/kg dry	0.270	0.313	1	10/03/07 14:23	JWT	EPA 8260B	
1330-20 - 7	Xylenes, total	1.83	v	ug/kg dry	0.163	0.313	1	10/03/07 14:23	=		7J03029
Surrogate: 1,2	P-Dichloroethane-d4 (73-137%)	123 %	·		0.105	0.515	•	10/03/07 14:23	JWT	EPA 8260B	7J03029

TestAmerica - Orlando, FL

Shali Brown

Project Manager



THE LEADER IN ENVIRONMENTAL TESTING

4310 East Anderson Road Orlando, FL 32812 *800-851-2560 * Fax 407-856-0886

Client: EPG, INC.

Attn:

PO BOX 1096

MT PLEASANT, SC 29465

JOHN MAHONEY

Work Order:

Project:

OQI0667

LAUREL BAY

Project Number: EP2362

Sampled:

09/26/07-09/27/07

Received:

09/29/07

LABORATORY REPORT

Sample ID: 1113 IRIS BOTTOM 01 - Lab Number: OQI0667-03 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Volatile (Organic Compounds by EPA M	ethod 8260B - C	ont.	· · · · · · · · · · · · · · · · · · ·	•	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • •		*********	
	f-Bromofluorobenzene (59-118%)	99 %		•							
Surrogate: L	Dibromofluoromethane (55-145%)	101 %	,								
Surrogate: 1	Toluene-d8 (80-117%)	94 %									
Polynucle	ear Aromatic Hydrocarbons by	EPA Method 82	70								
83-32-9	Acenaphthene	81.9	U	ug/kg dry	81.9	185	1	10/02/07 09:25	REM	EPA 8270C	7J01012
208-96-8	Acenaphthylene	801	U	ug/kg dry	108	185	1	10/02/07 09:25	REM	EPA 8270C	7J01012
120-12-7	Anthracene	59.0	U	ug/kg dry	59.0	185	1	10/02/07 09:25	REM	EPA 8270C	7 J01012
56-55-3	Benzo (a) anthracene	20.0	U	ug/kg dry	20.0	185	1	10/02/07 09:25	REM	EPA 8270C	7301012
205-99-2	Benzo (b) fluoranthene	19.5	υ	ug/kg dry	19.5	185	1	10/02/07 09:25	REM	EPA 8270C	7J01012
207-08-9	Benzo (k) fluoranthene	19,5	ซ	ug/kg dry	19,5	185	1	10/02/07 09:25	REM	EPA 8270C	7301012
191-24-2	Benzo (g,h,i) perylene	19.2	U	ug/kg dry	19.2	185	1	10/02/07 09:25	REM	EPA 8270C	7J01012
0-32-8	Benzo (a) pyrene	22.8	ប	ug/kg dry	22.8	185	1	10/02/07 09:25	REM	FPA 8270C	7/01012
0-12-0	1-Methylnaphthalene	355		ug/kg dry	92.8	185	1	10/02/07 09:25	REM	EPA 8270C	7J01012
18-01-9	Chrysene	22.1	U	ug/kg dry	22.1	185	1	10/02/07 09:25	REM	EPA 8270C	7J01012
3-70-3	Dibenz (a,h) anthracene	24.3	U	ug/kg dry	24.3	185	ı	10/02/07 09:25	REM	EPA 8270C	7J01012
06-44-0	Fluoranthene	26.6	U	ug/kg dry	26.6	185	1	10/02/07 09:25	REM	EPA 8270C	7301012
6-73-7	Fluorene	72.4	U	ug/kg dry .	72.4	185	1	10/02/07 09:25	REM	EPA 8270C	7301012
93-39-5	Indeno (1,2,3-cd) pyrene	23.9	υ	ug/kg dry	23.9	185	1	10/02/07 09:25	REM	EPA 8270C	7J01012
1-57-6	2-Methylnaphthalene	455		ug/kg dry	78.8	185	1	10/02/07 09:25	REM	EPA 8270C	7J01012
1-20-3	Naphthalene	74.3	U	ug/kg dry	74.3	185	ì	10/02/07 09:25	REM	EPA 8270C	7J01012
5-01-8	Phenanthrene	142	1	ug/kg dry	43.6	185	1	10/02/07 09:25	REM	EPA 8270C	7J01012
29-00-0	Ругеле	37.6	υ	ug/kg dry	37.6	185	1	10/02/07 09:25	REM	EPA 8270C	7301012
urrogate: 2-,	Fluorobiphenyl (24-121%)	72 %		J J			•	20.02/01 07.23	KINI	LI'M 02/0C	1301012
urrogate: Ni	trobenzene-d5 (19-111%)	73 %									
urrogate: Te	rphenyl-d14 (44-171%)	94 %									

LABORATORY REPORT

Sample ID: 1113 IRIS SIDE 02 - Lab Number: OQI0667-04 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General (Chemistry Parameters	·	••••••				• • • • • • • • • • • • • • • • • • • •				
NA	% Solids	72.8		_%	0.100	0.100	1	10/02/07 17:20 -	RRP	EPA 160.3	7J02048
Volatile C	organic Compounds by EPA M	ethod 8260B						75/02/07 17,20		E1 A 100.3	/302048
71-43-2	Benzene	7.69	RL2 U	ug/kg dry	7.69	21.0	50	10/03/07 21:04	JWT	EPA 8260B	7J03029
100-41-4	Ethylbenzene	8.89	RL2,U	ug/kg dry	8.89	21,0	50	10/03/07 21:04	JWT	EPA 8260B	7J03029
91-20-3	Naphthalene	95.8	RL2	ug/kg dry	11.6	21.0	50	10/03/07 21:04	JWT	EPA 8260B	7J03029
108-88-3	Toluene	21.4	V,RL2	ug/kg dry	18.2	21.0	50	10/03/07 21:04	JWT	EPA 8260B	7J03029
1330-20-7	Xylenes, total	11.8	V,RL2,I	ug/kg dry	10.9	21.0	50	10/03/07 21:04	JWT	EPA 8260B	7J03029
Surrogate: 1,	2-Dichloroethane-d4 (73-137%)	94 %						20102/01 221/07	J 17 I	L1 A 0200D	1103023
Surrogate: 4-	Bromofluorobenzene (59-118%)	95 %									
Surrogate: Di	ibromofluoromethane (55-145%)	93 %									
Surrogate: To	luene-d8 (80-117%)	93 %									
								*			

Polynuclear Aromatic Hydrocarbons by EPA Method 8270

TestAmerica - Orlando, FL Shali Brown

DIMUI DIOWII

Project Manager



THE LEADER IN ENVIRONMENTAL TESTING

4310 East Anderson Road Orlando, FL 32812 * 800-851-2560 * Fax 407-856-0886

Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465

Attn: JOHN MAHONEY

Work Order:

OQI0667

Project: Project Number: LAUREL BAY EP2362 Sampled:

09/26/07-09/27/07

Received:

09/29/07

LABORATORY REPORT

Sample ID: 1113 IRIS SIDE 02 - Lab Number: OQI0667-04 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Polynuclea	ar Aromatic Hydrocarbons	by EPA Method 827	0		·	• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	•			· • • • •
83-32-9	Acenaphthene	102	υ	ug/kg dry	102	229	1	10/02/07 09:48	REM	EPA 8270C	7J01012
208-96-8	Acenaphthylene	134	U	ug∕kg dry	134	229	1	10/02/07 09:48	REM	EPA 8270C	7J01012
120-12-7	Anthracene	73.1	U	ug/kg dry	73.1	229	1	10/02/07 09:48	REM	EPA 8270C	7301012
56-55-3	Benzo (a) anthracene	54.9	· I	ug/kg dry	24.8	229	1	10/02/07 09:48	REM	EPA 8270C	7301012
205-99-2	Benzo (b) fluoranthene	54.0	ı	ug/kg dry	24.1	229	1	10/02/07 09:48	REM	EPA 8270C	7 J 01012
207-08-9	Benzo (k) fluoranthene	24 .1	U	ug/kg dry	24.1 .	229	ı	10/02/07 09:48	REM	EPA 8270C	7301012
191-24-2	Benzo (g,h,i) perylene	23.8	U	ug/kg dry	23.8	229	1	10/02/07 09:48	REM	EPA 8270C	7301012
50-32-8	Benzo (a) pyrene	31.6	1	ug/kg dry	28.2	229	1.	10/02/07 09:48	REM	EPA 8270C	7301012
90-12-0	1-Methylnaphthalene	115	υ	ug/kg dry	115	229	1	10/02/07 09:48	REM	EPA 8270C	7J01012
218-01-9	Chrysene	59.1	r	ug/kg dry	27.4	229	- 1	10/02/07 09:48	REM	EPA 8270C	7301012
53-70-3	Dibenz (a,h) anthracene	30.1	U	ug/kg dry	30.1	229		10/02/07 09:48	REM	EPA 8270C	7J01012
206-44-0	Fluoranthene	33.0	ย	سوايج طي	22.0	222		10/02/07 09:48	REM	EPA 8270C	7301012 7301012
86-73-7	Fluorene	89.8	U	ug/kg dry	89.8	229		10/02/07 09:48	REM	EPA 8270C	7301012
193-39-5	Indeno (1,2,3-cd) pyrene	29.7	U	ug/kg dry	29.7	229		10/02/07 09:48	REM	EPA 8270C	7301012
91-57-6	2-Methylnaphthalene	97.8	U .	ug/kg dry	97.8	229		10/02/07 09:48	REM	EPA 8270C	7J01012
91-20-3	Naphthalene	92.1	U	ug/kg dry	9 2 .1	229		10/02/07 09:48	REM	EPA 8270C	7J01012
85-01-8	Phenanthrene	159	I	ug/kg dry	54.1	229		10/02/07 09:48	REM	EPA 8270C	7J01012
129-00-0	Ругепе	46.6	บ	ug/kg dry	46.6	229		10/02/07 09:48	REM	EPA 8270C	7301012
Surrogate: 2-Fl	luorobiphenyl (24-121%)	68 %		- - -			-		KLLIVI	M A 62/00	7301012
Surrogate: Nitr	obenzene-d5 (19-111%)	69 %			•				•		
Surrogate: Terp	ohenyl-d14 (44-171%)	86 %		•							

LABORATORY REPORT

Sample ID: 1160 JASMINE BOTTOM 01 - Lab Number: OQI0667-05 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General C	hemistry Parameters							•••••		••••••	
NA	% Solids	86,9		%. ·	0.100	0.100	1	10/02/07 17:20	RRP	EPA 160.3	7J02048
Volatile O	rganic Compounds by EPA M	Cethod 8260B						-			7702010
71-43-2	Benzene	0.146	ช	ug/kg đry	0.146	0.400	1	10/03/07 14:40	JWT	EPA 8260B	7J03029
100-41-4	Ethylbenzene	2.61		ug/kg dry	0.169	0.400	1	10/03/07 14:40	JWT	EPA 8260B	7J03029
91-20-3	Naphthalene			ug/kg dry	0.221	= 0.400 -		•	JWT	EPA 8260B	7J03029
108-88-3	Toluene	0.345	v.v	ug/kg dry	0.345	0.400	1	10/03/07 14:40	JWT	EPA 8260B	7303029
1330-20-7	Xylenes, total	6.77	ν.	ug/kg dry	0.208	0.400	1	10/03/07 14:40	JWT	EPA 8260B	7303029
Surrogate: 1,2	2-Dichloroethane-d4 (73-137%)	116 %					•	10.02/01 11.40		LI A 0200D	7303029
Surrogate: 4-1	Bromofluorobenzene (59-118%)	102 %									
Surrogate: Di	bromofluoromethane (55-145%)	101 %									
Surrogate: To	luene-d8 (80-117%)	. 94%									
Polynuclea	er Aromatic Hydrocarbons by	EPA Method 827	70								
83-32-9	Acenaphthene	94.0	I	ug/kg dry	85.2	192	1	10/02/07 10:10	REM	EPA 8270C	7J01012
208-96-8	Acenaphthylene	112	ប	ug/kg dry	112	192	1	10/02/07 10:10	REM	EPA 8270C	7301012
120-12-7	Anthracens	61.3	ט	ug/kg dry	61.3	192	1	10/02/07 10:10	REM	EPA 8270C	7301012
56-55-3	Benzo (a) anthracene	29.9	I	ug/kg dry	20.8	192	1	10/02/07 10:10	REM	EPA 8270C	7J01012 7J01012
							_			2.7102700	. 301012

Shali Brown

Project Manager

Testamerica
ANALYTICAL TESTING CORPORATION

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

Compliance Monitoring

Client Name	-1	25	<u>.</u>						(Client	t#: '	24	11					•					·	
Address									•		-	-		-	Pmin	ct Name	.]	-AU) 	R				
City/State/Zip Code:	·										·····					Project#	. <u>- </u>	<u></u>	らざん		4		· · · · · · · · · · · · · · · · · · ·	
Project Manager:	7.7	JEHY.	N	ξY														4	4:3	<u> </u>		·		
Telephone Number:				-1-			-	 Fax							Site/Loc							_ Stat	le:	
Sampler Name: (Print Name)	Line	<u>V</u>	K	-\JF	<i>YUD.</i>	IA	- . `									eport To						 -		
Sampler Signature:		$\Delta L_{\rm g}$				···.										voice To	-							
		7		77 P	Matri	y Pr	oean.		P # c	1000	م ماده			-	· · · · · · · · · · · · · · · · · · ·	Quote #					PO#	¥:		·
101 i Ris Side oz 113 I Ris Bottom o 1 113 I Ris Side oz 60 dosinive Bottom o 1	725-07 126-07	100 1536 1530 110			St Sludge DW - Drinking Water GW - Grountwater S. Soll/Sold WW - Wastewater Snow-to-thi-	one of the second		HC#N			S Constant		A P			Anai)	yzə Fo						CC Defive None None Level (Batch Level Other: REMARKS	2 90) 3 4
			╾╁			╟	-		+	+	-	<u> </u>	 											
ecial instructions:	<u></u>					<u> </u>	Д,	┩-	<u> Т.</u>		<u></u>	Ļ <u>.</u>		<u> </u>				LABO	RATOR	Y COM	AMENTS			
Marx	 -	0/-	/	····		/ -	·	.			1	1		,				l ir	iit Lab	Temn	<i>L</i>			
Inquished By:	7-7-	9/28	104	المالم:	30	Neve	lvoch	21	u	برال	41		/	81	8/07	1/6	3/	100	1.0		Carlot and			
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Appendix C Laboratory Analytical Report - Groundwater





Pace Analytical Services, Inc. 2225 Riverside Dr. Asheville, NC 28804 (828)254-7176 Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

ANALYTICAL RESULTS

Project:

LAUREL BAY SAMPLING 7/28/08

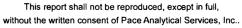
Pace Project No.: 9224472

Sample: 1113 IRIS A	Lab ID:	9224472001	Collected:	07/28/0	08 17:00	Received: 07	//30/08 17:00	Matrix: Water	
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM SPE	Analytical	Method: EPA 8	270 by SIM I	Preparat	ion Meth	od: EPA 3535			
Acenaphthene	N) ug/L		2.0	1	07/31/08 00:00	08/12/08 05:3	2 83-32-9	
Acenaphthylene	N	ug/L		1.5	1	07/31/08 00:00	08/12/08 05:3	2 208-96-8	
Anthracene	N	O ug/L		0.050	1	07/31/08 00:00	08/12/08 05:3	2 120-12-7	
Benzo(a)anthracene	0.13	2 ug/L		0.10	1	07/31/08 00:00	08/12/08 05:3	2 56-55-3	
Benzo(a)pyrene	N) ug/L		0.20	1	07/31/08 00:00	08/12/08 05:3	2 50-32-8	
Benzo(b)fluoranthene	N	ug/L		0.30	1	07/31/08 00:00	08/12/08 05:3	2 205-99-2	
Benzo(g,h,i)perylene	N) ug/L		0.20	1	07/31/08 00:00	08/12/08 05:3	2 191-24-2	
Benzo(k)fluoranthene	N	ug/L		0.20	1	07/31/08 00:00	08/12/08 05:3	2 207-08-9	
Chrysene	0.13	2 ug/L		0.10	1	07/31/08 00:00	08/12/08 05:3	2 218-01-9	
Dibenz(a,h)anthracene	N	ug/L		0.20	1	07/31/08 00:00	08/12/08 05:3	2 53-70-3	
Fluoranthene	NI	ug/L		0.30	1	07/31/08 00:00	08/12/08 05:3	2 206-44-0	
Fluorene) ug/L		0.31	1	07/31/08 00:00	08/12/08 05:3	2 86-73-7	
Indeno(1,2,3-cd)pyrene		O ug/L		0.20	1	07/31/08 00:00			
1-Methylnaphthalene		ug/L		2.0	1	07/31/08 00:00			
2-Methylnaphthalene		ug/L		2.0	1	07/31/08 00:00			
Naphthalene		ug/L		1.5	1	07/31/08 00:00	08/12/08 05:3	2 91-20-3	
Phenanthrene) ug/L		0.20	1	07/31/08 00:00			
Pyrene) ug/L		0.10	1	07/31/08 00:00			
Nitrobenzene-d5 (S)		2 %		50-150	1	07/31/08 00:00			
2-Fluorobiphenyl (S)		7 %		50-150	1	07/31/08 00:00			
Terphenyl-d14 (S)		1 %		50-150	1	07/31/08 00:00			
8260 MSV Low Level	Analytical	Method: EPA 8	260						
Benzene	NI) ug/L		1.0	1		08/01/08 05:2	9 71-43-2	
Ethylbenzene		7 ug/L		1.0	1		08/01/08 05:2		
Naphthalene		ug/L		1.0	1		08/01/08 05:2		
Toluene		ug/L		1.0	1		08/01/08 05:2		
m&p-Xylene		7 ug/L		2.0	1		08/01/08 05:2		
o-Xylene		lug/L	,	1.0	1		08/01/08 05:2		
4-Bromofluorobenzene (S)		5 %	:	87-109	i		08/01/08 05:2		
Dibromofluoromethane (S)		1 %		85-115	1		08/01/08 05:2		
1,2-Dichloroethane-d4 (S)		1 %		79-120	1			9 17060-07-0	
Toluene-d8 (S)) %		70-120	1		08/01/08 05:29		
Sample: 1115 IRIS A	I ah ID:	9224472002	Collected:	07/28/0	08 17·15	Received: 07	//30/08 17:00	Matrix: Water	
Parameters	Results	Units		t Limit		Prepared	Analyzed	CAS No.	Qual
- aramotoro			— Tehor	-	DΓ	i repareu	Analyzeu		- Quai
8270 MSSV PAH by SIM SPE	Analytical	Method: EPA 82	270 by SIM 1	Preparat	ion Meth	od: EPA 3535			
Acenaphthene		ug/L		4.0	1	07/31/08 00:00			
Acenaphthylene	NE) ug/L		3.0	1	07/31/08 00:00	08/12/08 05:5	5 - 208-96-8	
Anthracene	NE) ug/L		0.10	1	07/31/08 00:00	08/12/08 05:5	5 120-12-7	
Benzo(a)anthracene	NE) ug/L		0.20	1	07/31/08 00:00	08/12/08 05:5	5 56-55 - 3	
Benzo(a)pyrene	NE	ug/L		0.40	1	07/31/08 00:00	08/12/08 05:5	5 50-32-8	
Benzo(b)fluoranthene	NE	ug/L		0.60	1	07/31/08 00:00	08/12/08 05:59	5 205-99-2	

Date: 08/13/2008 05:36 PM

REPORT OF LABORATORY ANALYSIS

Page 5 of 38





Appendix D Regulatory Correspondence



BOARD: Paul C. Aughtry, III Chairman Edwin H. Cooper, III Vice Chairman Steven G. Kisner

Secretary



13 August 2008

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

BOARD: Henry C. Scott

M. David Mirchell, MD

Glenn A. McCall

Coleman F. Buckhouse, MD

'

Beaufort Military Complex Family Housing ATTN: Kyle Broadfoot 1510 Laurel Bay Blvd. Beaufort, SC 29906

Re:

MCAS - Laurel Bay Housing - 1113 Iris

Site ID # 03985

UST Closure Reports received 31 January 2008

Beaufort County

Dear Mr. Broadfoot:

The purpose of this letter is to verify a release of fuel oil at the referenced residence. According to information received by the Department, the source of the release is from past onsite use of fuel oil USTs. To date, initial activities by the facility have included tank removal and soil sampling. Based on the information contained in the closure report, a potential violation of the South Carolina Pollution Control Act has occurred in that there has been an unauthorized release of petroleum to the environment.

Additional assessment activities are required for this site. Specifically the Department requests that a groundwater sample be collected from this site. Please note, the Department approved a groundwater sampling proposal for Laurel Bay submitted by MCAS under separate cover dated 16 June 2008.

Should you have any questions, please contact me at 803-898-3553 (office phone), 803-898-2893 (fax) or bishopma@dhec.sc.gov.

Sincerely,

Michael Bishop, Hydrogeologist Groundwater Quality Section

Bureau of Water

cc:

Region 8 District EQC (via pdf)

MCAS, Commanding Officer, Attention: S-4 NREAO (William Drawdy) (via pdf)

Technical File



C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

19 December 2008

Commanding Officer ATTN: S-4 NREAO (Craig Ehde) MCAS PO Box 55001 Beaufort, SC 29904-5001

Re:

MCAS - Laurel Bay Housing - 1113 Iris

Site ID # 03985

Groundwater Sampling Results received 6 November 2008

Beaufort County

Dear Mr. Ehde:

Per the Department's request, a groundwater sample was collected from the referenced site. The groundwater results were reported as non-detect and/or below EPA PRG's. Based on the information and analytical data submitted, the Department recognizes that MCAS has adequately addressed the known environmental contamination identified on the property to date in accordance with the approved scope of work. Consequently, no further investigation is required at this time. Please note, this statement pertains only to the portion of the site addressed in the referenced report and does not apply to other areas of the site and/or any other potential regulatory violations. Further, the Department retains the right to request further investigation if deemed necessary.

Should you have any questions, please contact me at 803-896-4179 (office phone), 803-896-6245 (fax) or cookeit@dhec.sc.gov.

Sincerely,
AST Petroleum Restoration
& Site Environmental Investigations Section
Land Revitalization Division
Bureau of Land and Waste Management
SC Dept. of Health & Environmental Control

Jan T. Cooke, Hydrogeologist

B. Thomas Knight, Manager

cc: Region 8 District EQC

Tri-Command Communities; Attn: Mr. Robert Bible; 600 Laurel Bay Road Beaufort, SC

29906

Technical File