SUMMARY REPORT
81 EAST CYPRESS STREET (FORMERLY 225 EAST CYPRESS 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:



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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 81 East Cypress Street (Formerly 225 East Cypress 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 81 East Cypress Street (Formerly 225 East Cypress Street). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 225 Cypress Street* (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 July 12, 2007, a single 280 gallon heating oil UST was removed from the south east area of the front yard, adjacent to the house at 81 East Cypress Street (Formerly 225 East Cypress Street). The former UST location is indicated on the figures 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 6'4" 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 4'9". The samples were 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 and 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 81 East Cypress Street (Formerly 225 East Cypress Street) were greater than the SCDHEC RBSLs, which indicated further investigation was required. In a letter dated September 3, 2008, SCDHEC requested an IGWA for 81 East Cypress Street (Formerly 225 East Cypress 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 July 30, 2008, a temporary monitoring well was installed at 81 East Cypress Street (Formerly 225 East Cypress 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 the figures 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 81 East Cypress Street (Formerly 225 East Cypress 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 81 East Cypress Street (Formerly 225 East Cypress Street). 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 – 225 Cypress Street, 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 81 East Cypress Street (Formerly 225 East Cypress Street) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort

Beaufort, South Carolina

	(0)	Results Sample Collected 07/12/07					
Constituent	SCDHEC RBSLs (1)	225 East Cypress Bottom 01	225 East Cypress Side 02				
Volatile Organic Compounds Analyzed by EPA Method 8260B (mg/kg)							
Benzene	0.003	ND	ND				
Ethylbenzene	1.15	ND	ND				
Naphthalene	0.036	ND	ND				
Toluene	0.627	ND	ND				
Xylenes, Total	13.01	ND	ND				
Semivolatile Organic Compounds Ana	lyzed by EPA Method 8270D (mg/kg)						
Benzo(a)anthracene	0.66	ND	ND				
Benzo(b)fluoranthene	0.66	ND	ND				
Benzo(k)fluoranthene	0.66	ND	ND				
Chrysene	0.66	ND	ND				
Dibenz(a,h)anthracene	0.66	ND	ND				

Notes:

⁽¹⁾ South Carolina Risk-Based Screening Levels from the Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 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 81 East Cypress Street (Formerly 225 East Cypress 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 07/30/08					
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 Ana	lyzed by EPA Method 8	3270D (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 1×10^{-6} , a target hazard quotient of 1 (per target organ), and a default residential exposure scenario, assuming exposure for 24 hours/day, 350 days/year, for 26 years. Modeling was performed for a range of depths to groundwater for application as appropriate in different areas of the Laurel Bay Military Housing Area. The most conservative levels are presented for comparison. Refer to Appendix H of the Uniform Federal Policy Sampling Analysis and Sampling Plan for Vapor Media, Revision 4 (Resolution Consultants, April 2017) for additional information.

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

JE - Johnson & Ettinger

NA - Not Applicable

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

RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

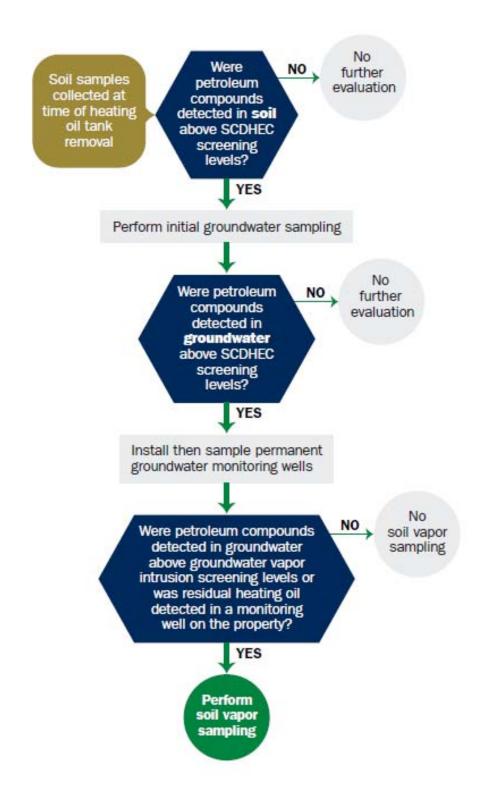
μg/L - micrograms per liter

VISL - Vapor Intrusion Screening Level

⁽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



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

I. OWNE	ERSHIP OF UST (S)	
Beaufort N Owner Name (Corporation	on, Individual, Public Agency, Other)	Housing
1510 LAN Mailing Address	nel Bay BerD.	
Beau for		29906
City 843	379-3305	
Area Code	Telephone Number	Contact Person

II. SITE IDENTIFICATION AND LOCATION

N/A

Permit I.D. # Actus Lend Lease Construction

Facility Name or Company Site Identifier

VSNA GARRAN BARR BARR 225 CYPDESS

Street Address or State Road (as applicable)

Beaufort SC 29906

City ZIP County

III. INSURANCE INFORMATION

Insurance S	Statement
The petroleum release reported to DHEC on	
Is there now, or has there ever been an insurance p UST release? YES NO (check one)	olicy or other financial mechanism that covers this
If you answered YES to the above question	, please complete the following information:
My policy provider is: The policy deductible is: The policy limit is:	
If you have this type of insurance, please include a	copy of the policy with this report.
And	ı
I do/do nor (circle one) wish to par	ticipate in the Superb Program.
IV. CERTIFICATION (To be signed by	v the UST owner/operator.)
I certify that I have personally examined and am famil attached documents; and that based on my inquiry of t information, I believe that the submitted information is	
Name (Type or print.)	
Signature To be completed by Notary Public:	
Sworn before me this day of	_, 20
(Name)	_·
Notary Public for the state of	uth Carolina

	V. UST I DRMATION	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A.	Product(ex. Gas, Kerosene)	#Z DIESEL					
B.	Capacity(ex. 1k, 2k)(APPROY)	350g					
Ξ.	Age	·					
Э.	Construction Material(ex. Steel, FRP)	Steel					
<u>.</u>	Month/Year of Last Use						
•	Depth (ft.) To Base of Tank	64"					
r.	Spill Prevention Equipment Y/N	N					
[.	Overfill Prevention Equipment Y/N	N					
	Method of Closure Removed Filled	Removed					
	Date Tanks Removed/Filled						
	Visible Corrosion or Pitting Y/N	7-12-07					
	Visible Holes Y/N	N					·
÷		N				_	
	Method of disposal for any USTs removed from the	e ground (att	ach disp	osal man	ifests)		
	Recycling - Scap Ste.	el					
	Method of disposal for any liquid petroleum, sludge disposal manifests) TREATMENT FACILITY Solud I fication	es, or wastew	vaters rei Brove	noved fr	om the U	STs (atta	nch S
	Soled fication	1 83	5u61	Little	\supset	2 An	Sh
		•					0

VI. PIPING INFORMATION

	Tank I	Tank 2	Tank 3	Tank 4	Tank 5	
Construction Material(ex. Steel, FRP)	Stee.l	٠.				
Distance from UST to Dispenser	NIA					
Number of Dispensers	-0-					
Type of System Pressure or Suction	Electric	•				
Was Piping Removed from the Ground? Y/N	Pump					<u> </u>
Visible Corrosion or Pitting Y/N	Y			<u>u</u>		
Visible Holes Y/N	N					
Age	7					
	2					
If any corrosion, pitting, or holes were observed, d Fill Dipe + Vent						g rui
If any corrosion, pitting, or holes were observed, d						g rui
Fill pipe + Vent)	Die ipe	Weke	. C	ophoc		g rui
Fill pipe + Vent	Die ipe	Weke	. C	ophoc		g rur
VII. BRIEF SITE DESCRIPTION AND	D HISTO	Weke ORY	<u>e</u> c	ONNOC	Ped	g rui
Fill pipe + Vent)	D HISTO	Weke ORY	<u>e</u> c	ONNOC	Ped	g rui
VII. BRIEF SITE DESCRIPTION AND	D HISTO	Weke ORY	<u>e</u> c	ONNOC	Ped	g rui

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.		メ	•
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.)		ブ	
C. Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth)?		*	
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:		7	
E. Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness.		*	

SAMPLE INFORMATION IX.

SCDHEC Lab Certification Number DW: 8400900Z

В.				·	<u> </u>		
Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
						ECHEVARRY	· · · · · · · · · · · · · · · · · · ·
1	BOTTOM	5	SAND	64"	7-12-07 1030	A MATACY	
2	JIDE	5	SAND	49"	1040	A MATERY	ND
3							
4							
5				<u> </u>	·		
6							·
7							
8							
9							
10							
11							•
12							
13				<u> </u>		· · · · · · · · · · · · · · · · · · ·	
14		ļ					
15				<u> </u>	<u> </u>		
16							
17							
18							
19	į						
20					I - I Charles		

^{* =} 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 8260 B Volatile ORGANIC Compounds
EPA Method 8260 B Volatile ORGANIC Compounds - Presendative: Zea Sodium Bisulfate lea
EPA METHOD 8270 Poly AROMATIC HYDROCHABONS
- No Preservative
ONE (1) SIDEWALF And ONE (1) Bottom
SAMPLE WERE SECURED FROM TANK EXCAVATION
ONE (1) SiDEWALL And ONE (1) Bottom SAMPLE WERE SECURED FROM TANK EXCAVATION SAMPLES WERE STORED AND Shipped IN AN INSULATED COOLER W/ ICE.
INSUlated cooler w/ ICE.
•
9

XI. RECEPTORS

-		Yes	No
Ä.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?	:	ξ
	If yes, indicate type of receptor, distance, and direction on site map.		メ
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		,
	If yes, indicate type of well, distance, and direction on site map.		
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.	,	1
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.	! 	

SUMMARY OF ANALYSIS RESULTS

NIA

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	SB-8
Benzene								
Toluene								
Ethylbenzene								
Xylenes			;					-
Naphthalene								
Benzo(a)anthracene								
Вепzo(b)flouranthene								
Benzo(k)flouranthene								
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)								
		-				-		
CoC	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16

CoC	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16
Benzene								
Toluene	-							
Ethylbenzene								
Xylenes							·	
Naphthalene			-					:
Benzo(a)anthracene								
Benzo(b)flouranthene								
Benzo(k)flouranthene			:		•			
Chrysene								
Dibenz(a,h)anthracene								
TPH (EPA 3550)								

SUMMARY OF ANALYSIS RESULTS (cont'd)

NIA

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

CoC	RBSL (µg/l)	W-1	W-2	W -3	W -4
Free Product Thickness	None		·		
Benzene	5	· · · · · · · · · · · · · · · · · · ·			
Toluene	1,000				
Ethylbenzene	700				-
Xylenes	10,000	•			
Total BTEX	N/A				
мтве	40				
Naphthalene	25				
Benzo(a)anthracene	10				
Benzo(b)flouranthene	10				
Benzo(k)flouranthene	10				
Chrysene	10		-		•
Dibenz(a,h)anthracen e	10		_		
EDB	.05	,			
1,2-DCA	.05				
Lead	Site specific	1		·	

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)

0060323

Test/America

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

Compliance Monitoring

	Client Name	EP	<u>E</u>							Clie	ent#	: 2	241										-		
	Address:															Projec	t Name	: L	A 12.1	EV 1	30~				
Cit	y/State/Zip Code:									_						P	roject #	Fi	2 2:	36	7				
•	Project Manager.	<u> </u>	Mu	£Ν	ÓΝ	Y31						. '			 S	ite/Loc	ation ID	 :			 -		State:		
Те	ephone Number:							F	ex:						To-Thir		port To:						_ ••••		·
Sampler Na	me: (Print Name)	HQ	SEO	HE.	(A)	2PIP	`										oice To		····						
s	ampier Signature;	M	me	Ni		<u> </u>	·								~		Quote #:					PO#;			
		- 70				Matrix	Pres	erva	tion &	# of (onta	inen	<u> </u>		y			ze For						1	·
Standard Rush (surchar Date Needed: Fax Results:	ges may apply)	Sempled	mpled	, C = Composite	peu	a DW - Drinking Weter ntweler S - Sou'Solid tevaler Specify Other							 -		\$270									None Level 2 (Batch QC, Level 3 Level 4	
SAMPLE ID		O Sec	Time Sampled	G = Grab,	Field Filter	SL - Sludge GW - Grou WW - Was	HNO,	ᅙ	N-OH H-SO,	Methanol	None	Other (Specify)	(X						/ .					Other:	
225 Cyppers	POLLOW OI	7-12-07	1050	Ġ				\downarrow		1	2	2	7	7											01
225 CIPRES	JUE OS					ļ		\perp		1	2	2	Ж	76											0.2
538 CADSER		7-12-07					Щ	_		1	2	2	*	*						Ţ					US
226C7PES	210205	1-14-01	1150	2				4	_	1	2	2	7.	*		<u> </u>								11 ,	104
262 BEECH T	O MOTTO	7-1 <u>5</u> 01		Ĝ			igspace	_	_ _	ì	2	2	*	*	<u> </u>	<u> </u>									
262 BEECH	510€ OS	7-13-07		Č				_	_ _	1)	2	1	7	1		<u> </u>								· ·	106
258 BEECH	DOTTOM 01	<u> 14301</u>	4	હ				4	_	11	2	2	*	7	<u> </u>		<u> </u> -								07
258 BEECH		7-13-07	1110	ķ.				1	_ _	1	2	2	+	7											<u> </u>
258 DEECH P	OTTOM 03			攵				4	<u> </u>	1	2	2	*	*	_	<u> </u>									709
258 BEECH S		7-13-67	250							1	2	2	<u>'</u> F_	LK		<u> </u>									7,3
opeoin menucial				/ _1	***			٠	· //- —			W	_/,	2	.)	<i>j</i>	T		ir	iit Lab	RY COM Temp: Temp:	\ <	s: 		
Relinquished By:	LOXIS GO	2100	Date: 0	107	Time:	109	Rece	ived	2人	CL	4	Ka	K	1	Date:	14	Tig/d:	10		i.	• . •			***	
Roginquiding By.	elife)		Bale: 6		Time	730	Rece	ved	Ву_	1		W	Mu	5	Date:/	1/17	Time:	-	Bottle:	s Supp 7 ス	100	7 /	N/A merica: /4/	Y N	
Relinquished By:		78' 7	Date:		Time):	Rece	ivec	<u>В</u> :		1				Date:		Time:		Metho	d of SI	nipmen	ı Fe		40 TH-	Olaa



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:

OQG0323

LAUREL BAY

Project Number:

EP2362

Sampled:

07/12/07-07/13/07

07/17/07 Received:

LABORATORY REPORT

Sample ID: 225 CYPRESS BOTTOM 01 - Lab Number: OQG0323-01 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General C	hemistry Parameters		••••		*		• • • • • • •				• • • • • • • • • • • • • • • • • • • •
NA	% Solids	93.2		%.	0.100	0.100	1	07/18/07 16:50	RRP	EPA 160,3	7G18042
Volatile O	rganic Compounds by EPA	Method 8260B									
71-43-2	Benzene	0.140	U	ug/kg dry	0.140	0,382	1	07/17/07 17:21	JWT	EPA 8260B	7G17048
100-41-4	Ethylbenzena	0.162	U	ug/kg dry	0.162	0.382	1	07/17/07 17;21	JWT	EPA 8260B	7G17048
91-20-3	Naphthalene	0.211	U	ug/kg dry	0.211	0.382	1	07/17/07 17:21	JWT	EPA 8260B	7G17048
108-88-3	Toluene	0.330	υ	ug/kg dry	0,330	0.382	1	07/17/07 [7:21	JWT	EPA 8260B	7G17048
1330-20-7	Xylenes, total	0.198	U	ug/kg dry	0.198	0.382	1	07/17/07 17:21	JWT	EPA 8260B	7G17048
	-Dickloroethane-d4 (73-137%)	113 %									
Surrogate: 4-B	tromofluorobenzene (59-118%)	97 %							-		
-	promofluoromethane (55-145%)	109 %									
	uene-d8 (80-117%)	102 %									
	r Aromatic Hydrocarbons b	y EPA Method 827	70								
83-32-9	Acenaphthene	79.4	U	ug/kg dry	79.4	179	1	07/24/07 08:55	JLS	EPA 8270C	7G19004
208-96-8	Acenaphthylene	105	U	ug/kg dry	105	179	1	07/24/07 08:55	ЛLS	EPA 8270C	7G19004
120-12-7	Anthracene	57.1	U	ug/kg dry	57.1	179	1	07/24/07 08:55	ЛLS	EPA 8270C	7G19004
56-55-3	Benzo (a) authracene	520	34	ug/kg dry	19.4	179	1	07/24/07 08:55	ЛS	EPA 8270C	7G19004
205-99-2	Benzo (h) fluoranthene	367	34	ug/kg dry	18.9	179	1	07/24/07 08:55	ЛLS	EPA 8270C	7G19004
207-08-9	Benzo (k) fluoranthene	146	J 4,I	ug/kg dry	18.9	179	1	07/24/07 08:55	ЛLS	EPA 8270C	7G19004
191-24-2	Benzo (g,h,i) perylene	61.1	Į.	ug/kg dry	18.6	179	i	07/24/07 08:55	ЛS	EPA 8270C	7G19004
50-32-8	Benzo (a) pyrene	210	34	ug/kg dry	22.0	179	1	07/24/07 08:55	ЛS	EPA 8270C	7G19004
90-12-0	1-Methylnaphthalene	89.9	U	ug/kg dry	89.9	179	ŧ	07/24/07 08:55	JLS	EPA 8270C	7G19004
218-01-9	Сыгузепе	556	34	ug/kg dry	21.4	179	, 1	07/24/07 08:55	JLS	EPA 8270C	7G19004
53-70-3	Dibenz (a,h) anthracene	23.5	ប	ug/kg dry	23.5	179	1	07/24/07 08:55	JLS	EPA 8270C	7G19004
206-44-0	Fluoranthene	516	34	ug/kg dry	25.8	179	1	07/24/07 08:55	ЛLS	EPA 8270C	7G19004
86-73-7	Fluorene	70.1	U	ug/kg dry	70.1	179	1	07/24/07 08:55	JLS	EPA 8270C	7G19004
193-39-5	Indeno (1,2,3-cd) pyrene	77.2	34, I	ug/kg dry	23.2	179	1	07/24/07 08:55	ЛLS	EPA 8270C	7G19004
91-57-6	2-Methylnaphthalene	76,4	U	ug/kg dry	76.4	179		07/24/07 08:55	ЛLS	EPA 8270C	7G19004
91-20-3	Naphthalene	71.9	Ų	ug/kg dry	71.9	179		07/24/07 08:55	ЛS	EPA 8270C	7G19004
85-01 -8	Phenanthrene	42.3	U	ug/kg dry	42.3	179	1	07/24/07 08:55	ЛS	EPA 8270C	7G19004
129-00-0	Pyrene	471	J4	ug/kg dry	36.4	179		07/24/07 08:55	лs	EPA 8270C	7G19004
Surrogate: 2-Fli	uorobiphenyl (24-121%)	78 %		, ,			-				, 31,7007
	obernene-d5 (19-111%)		en i memberas	Water and the second	5, 2 www. m. r. 2 r	ಕಾರ್ಯಾಫಿಸುಗ		and the second			

LABORATORY REPORT

120 %

Sample ID: 225 CYPRESS SIDE 02 - Lab Number: OQG0323-02 - Matrix: Solid/Soil

CAS #	Analyte	Result	Q	បល់ង	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General (Chemistry Parameters	••••••••	••	•••••						• • • • • • • • • • • • • • • • • • • •	
NA.	Solids	75.7		٥ <u>/</u>	-0.100-	0.100	r	-07/18 /07 16:50	RRP	EPA 160.3	7G18042
Volatile 0	Organic Compounds by EPA	Method 8260B		741	- 0/100	7,, (3		\$1710/07 10.30	M	LI II 100.5	7010042
71-43-2	Benzene	0.188	U	ug/kg dry	0,188	0.513	ı	07/17/07 17:38	JWT	EPA 8260B	7G17048
100-41-4	Ethylbenzene	0.217	U	ug∕kg dry	0.217	0.513	ı i	07/17/07 17:38	JWT	EPA 8260B	7G17048

TestAmerica - Orlando, FL

Shali Brown

Project Manager

Surrogate: Terphenyl-d14 (44-171%)



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:

OQG0323

Project.
Project Number:

LAUREL BAY EP2362 Sampled:

07/12/07-07/13/07

Received: 07/17/07

LABORATORY REPORT

Sample ID: 225 CYPRESS SIDE 02 - Lab Number: OQG0323-02 - Matrix: Solid/Soil

CAS#	Analyte	Result	, Q	Units	· MDL	PQL	Díl Factor	Analyzed Date/Time	Ву	Method	Batch
Volatile O	rganic Compounds by EPA Me	ethod 8260B - Co	nt.				• • • • • •	•		•	
91-20-3	Naphthalene	0.283	ช	ug/kg dry	0.283	0.513	1	07/17/07 17:38	JWT	EPA 8260B	7G17048
108-88-3	Toluese	0.443	υ	ug∕kg dry	0,443	0.513	1	07/17/07 17:38	JWT	EPA 8260B	7G17048
1330-20-7	Xylenes, total	0.266	บ	ug/kg dry	0.266	0.513	1	07/17/07 17:38	TWI	EPA 8260B	7G17048
Surrogate: 1,2	2-Dichloroethane-d4 (73-137%)	113 %									
Surrogate: 4-1	Bromofluorobenzene (59-118%)	93 %						i			
Surrogate: Di	bromofluoromethane (55-145%)	105 %									
Surrogate: To	luene-d8 (80-117%)	101 %									
Polynucles	r Aromatic Hydrocarbons by l	EPA Method 827	0								
83-32-9	Acensphthene	97.8	ט	ug/kg dry	97.8	221	1	07/24/07 09:18	ЛS	EPA 8270C	7G19004
208-96-8	Acensphthylene	129	บ	ug/kg dry	129	221	1	07/24/07 09:18	ЛS	EPA 8270C	7G19004
120-12-7	Anthracene	70.4	บ	ug/kg dry	70.4	221	1	07/24/07 09:18	JLS	EPA 8270C	7G19004
56-55-3	Benzo (a) anthracene	23.9	U	nα/kä qu∧	23.9	221	1	07/24/07 09:18	JLS	EPA 8270C	7G19004
205-99-2	Benzo (b) fluoranthene	23.2	U	ug/kg dry	23.2	22 I	1	07/24/07 09:18	ЛS	EPA 8270C	7G19004
207-08-9	Benzo (k) fluoranthene	23.2	υ	ug/kg dry	23.2	221	1	07/24/07 09:18	JLS	EPA 8270C	7G19004
191-24-2	Benzo (g.h.i) perylene	22.9	U	ug∕kg dry	22.9	221	1	07/24/07 09:18	JLS	EPA 8270C	7G19004
50-32 -8	Вепго (а) ругено	27.2	υ	ug∕kg dry	27.2	221	1	07/24/07 09:18	ЛS	EPA 8270C	7G19004
0-12-0	1-Methylnaphthalene	111	U	ug/kg dry	111	221	ı	07/24/07 09:18	ЛS	EPA 8270C	7G19004
!18 - 01-9	Chrysene	26.4	บ	ug/kg dry	26.4	221	1	07/24/07 09:18	ЛS	EPA 8270C	7G19004
3-70-3	Dibenz (a,h) anthracene	29.0	U	ug/kg dry	29.0	221	1	07/24/07 09:18	ЛS	EPA 8270C	7G19004
06-44-0	Fluoranthene	31.7	U	ug/kg dry	31.7	221	1	07/24/07 09:18	JLS	EPA 8270C	7G19004
6-73-7	Fluorene	86,4	U	ug/kg dry	86,4	221	1	07/24/07 09:18	лs	EPA 8270C	7G19004
93-39-5	Indeno (1,2,3-cd) pyrene	28.6	U	ug/kg dry	28.6	221	_	07/24/07 09:18	лs	EPA 8270C	7G19004
1-57-6	2-Methylnaphthalene	94.1	U	ug/kg dry	94.1	221		07/24/07 09:18	ЛS	EPA 8270C	7G19004 7G19004
1-20-3	Naphthalene	88.6	U	ug/kg dry	88.6	221		07/24/07 09:18	ILS	EPA 8270C	
5-01-8	Phenanthrene	52.0	U	ug/kg dry	52.0	221		07/24/07 09:18	ЛS	_	7G19004
29-00-0	Рутеле	44.8	U	ug/kg dry	44.8	221	1	07/24/07 09:18	ЛS	EPA 8270C	7G19004
urrogate: 2-Fl	luorobiphenyl (24-12196)	71 %	J	-6, sq. m.)	77.0	161	R.	01174/01 03:19	יוני	EPA 8270C	7G19004
-	obenzene-d5 (19-111%)	71%									
_	ohenyl-d14 (44-171%)	116%						,			

LABORATORY REPORT

Sample ID: 226 CYPRESS BOTTOM 01 - Lab Number: OQG0323-03 - Matrix: Solid/Soil

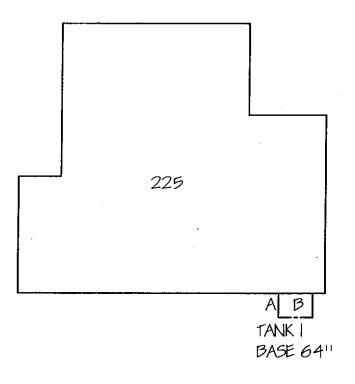
والأمام المحاط الماشيط ما	a de la ballaca e la ballaca de la caractería de la calenda de la calenda de la calenda de la calenda de la ca	. 1 1 L	in a carrier and							_	
CAS#	Апајуtе	Regult	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General (Chemistry Parameters						• • • • • • •	*************	• • • • • • •	**********	
NA	% Solids	85.6		% .	0.100	0.100	1	07/18/07 16:50	RRP	EPA 160.3	7G18042
Volatile O	rganic Compounds by EPA M	Aethod 8260B									
71-43-2	Benzene	0.129	ប	ug/kg dry	0.129	0.351	1	07/17/07 17:54	JWT	EPA 8260B	7G17048
100-41-4	Ethylbenzene	0.149	U :	: ug/kg dry	0.149	0.351	1	07/17/07 17:54	JWT	EPA 8260B	7G17048
91-20-3	Naphthalene	0.194	υ.	ug/kg dry	0.194	0.351	ι	07/17/07 17:54	TWI	EPA 8260B	7G17048
E-88-801	Toluene	0.304	U	ug/kg dry	0.304	0.351	1	07/17/07 17:54	JWT	EPA 8260B	7G17048
1330-20-7	Xylenes, total	0.183	U	ug/kg dry	0.183	0.351	1	07/17/07 17:54	JWT	EPA 8260B	7G17048
Surrogate: 1,2	2-Dichloroethane-d4 (73-137%)	104 %					•			LI / CZCCD	7017070

TestAmerica - Orlando, FL

Shali Brown

Project Manager





CYPRESS STREET

TANK I EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 49'' B-SOIL TEST BOTTOM SAMPLE @ 64''



CUSTOMER:	SCALE:	FPG INC
BEAUFORT MILITARY COMPLEX FAMILY HOUSING	1/16'=1'-0"	CFG INC.
DEVOLOKI MITTEVI COMITETY LVMITE HOODILO	SUPPLIER:	P.O. BOX 1096
SITE ADDRESS :	EPG INC.	MOINT DICACANT CO COACE 1000
225 CYPRESS STREET	DATE:	MOUNT PLEASANT, SC 29465-1096

225 CYPRESS 7-12-07 BASE DEPTH 64"

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 7/30/08

Pace Project No.: 9224584

Sample: 229 CYPRESS A	Lab ID: 9224	584001	Collected:	07/30/0	08:30	Received: 08	/01/08 07:55	Matrix: Water	
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qua
270 MSSV PAH by SIM SPE	Analytical Metho	d: EPA 82	70 by SIM F	Preparat	ion Meth	od: EPA 3535			
Acenaphthene	ND ug/L			2.0	1	08/04/08 00:00	08/13/08 07:34	4 83-32-9	
Acenaphthylene	ND ug/L			1.5	1	08/04/08 00:00	08/13/08 07:34	4 208-96-8	
Anthracene	ND ug/L			0.050	1	08/04/08 00:00	08/13/08 07:34	1 120-12-7	
Benzo(a)anthracene	ND ug/L			0.10	1	08/04/08 00:00	08/13/08 07:34	1 56-55-3	
Benzo(a)pyrene	ND ug/L	11		0.20	1	08/04/08 00:00	08/13/08 07:34	4 50-32-8	
Benzo(b)fluoranthene	ND ug/L			0.30	1	08/04/08 00:00	08/13/08 07:34	1 205-99-2	
Benzo(g,h,i)perylene	ND ug/L	10 10		0.20	1	08/04/08 00:00	08/13/08 07:34	1 191-24-2	
Benzo(k)fluoranthene	ND ug/L			0.20	1	08/04/08 00:00	08/13/08 07:34	1 207-08-9	
Chrysene	ND ug/L			0.10	1	08/04/08 00:00	08/13/08 07:34	1 218-01-9	
Dibenz(a,h)anthracene	ND ug/L			0.20	1	08/04/08 00:00	08/13/08 07:34	53-70-3	
luoranthene	ND ug/L			0.30	1	08/04/08 00:00	08/13/08 07:34	1 206-44-0	
luorene	ND ug/L			0.31	1	08/04/08 00:00	08/13/08 07:34	4 86-73-7	
ndeno(1,2,3-cd)pyrene	ND ug/L			0.20	1	08/04/08 00:00	08/13/08 07:34	1 193-39-5	
-Methylnaphthalene	ND ug/L			2.0	1	08/04/08 00:00	08/13/08 07:34	90-12-0	
2-Methylnaphthalene	ND ug/L			2.0	1	08/04/08 00:00			
Naphthalene	ND ug/L			1.5	1	08/04/08 00:00			
Phenanthrene	ND ug/L			0.20	1	08/04/08 00:00			
ryrene	ND ug/L			0.10	1	08/04/08 00:00			
litrobenzene-d5 (S)	55 %			50-150	1	08/04/08 00:00			
-Fluorobiphenyl (S)	65 %			50-150	1	08/04/08 00:00			
erphenyl-d14 (S)	73 %			50-150	1	08/04/08 00:00			
260 MSV Low Level	Analytical Metho	d: EPA 82					3, 13, 33, 31, 3		
	9 (1900)			4.0	4		00/05/00 45:0	1 74 40 0	
denzene	ND ug/L			1.0	1		08/05/08 15:34		
thylbenzene	ND ug/L			1.0	1		08/05/08 15:34		
laphthalene	ND ug/L			2.0	1		08/05/08 15:34		
oluene	ND ug/L			1.0	1		08/05/08 15:34		
n&p-Xylene	ND ug/L			2.0	1		08/05/08 15:34		
-Xylene	ND ug/L			1.0	1		08/05/08 15:34		
-Bromofluorobenzene (S)	99 %			37-109 95-115	1		08/05/08 15:34		
bibromofluoromethane (S)	95 %			85-115	1		08/05/08 15:34		
,2-Dichloroethane-d4 (S)	98 %			79-120	1		08/05/08 15:34		
oluene-d8 (S)	101 %			70-120	1		08/05/08 15:34	2037-26-5	
ample: 225 CYPRESS A	Lab ID: 92245	84002	Collected:	07/30/0	08 08:55	Received: 08	/01/08 07:55	Matrix: Water	
HO33									
Parameters	Results	Units	Report	Limit	DF	Prepared	Analyzed	CAS No.	Qua
270 MSSV PAH by SIM SPE	Analytical Metho	d: EPA 82	70 by SIM F	Preparati	ion Meth	od: EPA 3535			
cenaphthene	ND ug/L			2.0	1	08/04/08 00:00	08/13/08 07:57	83-32-9	
cenaphthylene	ND ug/L			1.5	1	08/04/08 00:00	08/13/08 07:57	208-96-8	
nthracene	0.051 ug/L			0.050	1	08/04/08 00:00	08/13/08 07:57	120-12-7	
enzo(a)anthracene	ND ug/L			0.10	1	08/04/08 00:00	08/13/08 07:57	56-55-3	
enzo(a)pyrene	ND ug/L			0.20	1	08/04/08 00:00	08/13/08 07:57	50-32-8	
(1-)(1	ND/I			0.30	1	09/04/09 00:00	00/40/00 07 55		

Date: 08/14/2008 04:21 PM

Benzo(b)fluoranthene

REPORT OF LABORATORY ANALYSIS

0.30

ND ug/L

Page 4 of 29

08/04/08 00:00 08/13/08 07:57 205-99-2

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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 7/30/08

Pace Project No.:

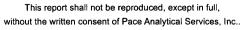
9224584

Sample: 225 CYPRESS A	Lab ID:	9224584002	Collected: 07/30/0	8 08:55	Received: 08	/01/08 07:55	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
270 MSSV PAH by SIM SPE	Analytical	Method: EPA 82	270 by SIM Preparati	ion Meth	od: EPA 3535			
Benzo(g,h,i)perylene	N	D ug/L	0.20	1	08/04/08 00:00	08/13/08 07:57	191-24-2	
Benzo(k)fluoranthene	N	D ug/L	0.20	1	08/04/08 00:00	08/13/08 07:57	207-08-9	
Chrysene	N	D ug/L	0.10	1	08/04/08 00:00	08/13/08 07:57	218-01-9	
Dibenz(a,h)anthracene	N	D ug/L	0.20	1	08/04/08 00:00	08/13/08 07:57	7 53-70-3	
Fluoranthene	N	D ug/L	0.30	1	08/04/08 00:00	08/13/08 07:57	206-44-0	
luorene	N	D ug/L	0.31	1	08/04/08 00:00	08/13/08 07:57	86-73-7	
ndeno(1,2,3-cd)pyrene		D ug/L	0.20	1	08/04/08 00:00	08/13/08 07:57	7 193-39-5	
-Methylnaphthalene		D ug/L	2.0	1	08/04/08 00:00	08/13/08 07:57	90-12-0	
-Methylnaphthalene		D ug/L	2.0	1	08/04/08 00:00			
Vaphthalene		D ug/L	1.5	1	08/04/08 00:00			
Phenanthrene		1 ug/L	0.20	1	08/04/08 00:00			
Pyrene		Dug/L	0.10	1	08/04/08 00:00			
litrobenzene-d5 (S)		0 %	50-150	1	08/04/08 00:00			
2-Fluorobiphenyl (S)		4 %	50-150	1	08/04/08 00:00			
erphenyl-d14 (S)		3 %	50-150 50-150	1		08/13/08 07:57		
260 MSV Low Level		Method: EPA 8		ı	00/04/00 00.00	00/10/00 07:37	1710-51-0	
	•							
Senzene		D ug/L	1.0	1		08/05/08 15:57	7 71-43-2	
thylbenzene		D ug/L	1.0	1		08/05/08 15:57	7 100-41-4	
laphthalene		D ug/L	2.0	1		08/05/08 15:57	91-20-3	
oluene	N	D ug/L	1.0	1		08/05/08 15:57	7 108-88-3	
n&p-Xylene	N	D ug/L	2.0	1		08/05/08 15:57	1330-20-7	
-Xylene	N	D ug/L	1.0	1		08/05/08 15:57	95-47-6	
-Bromofluorobenzene (S)	9	7 %	87-109	1		08/05/08 15:57	460-00-4	
Dibromofluoromethane (S)	9	5 %	85-115	1		08/05/08 15:57	1868-53-7	
,2-Dichloroethane-d4 (S)	9	9 %	79-120	1		08/05/08 15:57	17060-07-0	
oluene-d8 (S)	10	0 %	70-120	1		08/05/08 15:57	2037-26-5	
Sample: 276 BIRCH A	I ah ID:	9224584003	Collected: 07/30/0	B 10·35	Received: 08	/01/08 07:55	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
<u> </u>					· · · · · · · · · · · · · · · · · · ·	Analyzeu	- CAS NO.	
270 MSSV PAH by SIM SPE	Analytical	Method: EPA 82	270 by SIM Preparati	on Meth	od: EPA 3535			
Acenaphthene		D ug/L	2.0	1	08/04/08 00:00	08/13/08 08:21	83-32-9	
cenaphthylene		D ug/L	1.5	1	08/04/08 00:00			
nthracene	N	D ug/L	0.050	1	08/04/08 00:00			
senzo(a)anthracene		D ug/L	0.10	1	08/04/08 00:00			
senzo(a)pyrene	N	D ug/L	0.20	1	08/04/08 00:00			
enzo(b)fluoranthene	N	D ug/L	0.30	1	08/04/08 00:00	08/13/08 08:21	205-99-2	
lenzo(g,h,i)perylene	N	D ug/L	0.20	1	08/04/08 00:00	08/13/08 08:21	191-24-2	
enzo(k)fluoranthene	N	D ug/L	0.20	1	08/04/08 00:00	08/13/08 08:21	207-08-9	
Chrysene	N	D ug/L	0.10	1	08/04/08 00:00	08/13/08 08:21	218-01-9	
Dibenz(a,h)anthracene	N	D ug/L	0.20	1	08/04/08 00:00	08/13/08 08:21	53-70-3	
luoranthene	N	O ug/L	0.30	1	08/04/08 00:00	08/13/08 08:21	206-44-0	
1401411110110								

Date: 08/14/2008 04:21 PM

REPORT OF LABORATORY ANALYSIS

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Appendix D Regulatory Correspondence



BOARD: Paul C. Aughtry, III Chairman

Edwin H. Cooper, III Vice Chairman

Steven G. Kisner Secretary



C. Earl Hunter, Commissioner

Coleman F. Buckhouse, MD

M. David Mitchell, MD

Henry C. Scott

Glenn A. McCall

Promoting and protecting the health of the public and the environment

3 September 2008

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

Re:

MCAS - Laurel Bay Housing - 225 Cypress

Site ID # 04033

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 (via pdf)



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 - 225 Cypress

Site ID # 04033

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 cookejt@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