SUMMARY REPORT
401 IRIS LANE (FORMERLY 1140 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:

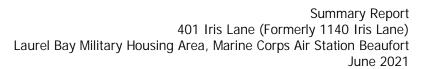


CDM - AECOM Multimedia Joint Venture 10560 Arrowhead Drive, Suite 500 Fairfax, Virginia 22030

Contract Number: N62470-14-D-9016

CTO WE52

**JUNE 2021** 





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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

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 401 Iris Lane (Formerly 1140 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 401 Iris Lane (Formerly 1140 Iris Lane). Details regarding the soil investigation at this site are provided in the *SCDHEC UST Assessment Report – 1140 Iris Lane* (MCAS Beaufort, 2009). The UST Assessment Report is provided in Appendix B.

### 2.1 UST Removal and Soil Sampling

On July 25, 2007, two 280 gallon heating oil USTs were removed from the front yard adjacent to the house at 401 Iris Lane (Formerly 1140 Iris Lane). The former UST locations are indicated on the figures of the UST Assessment Report (Appendix B). The USTs were removed and properly disposed of (i.e., shipped offsite for recycling or transported to a landfill). There was no visual evidence (i.e., staining or sheen) of petroleum impact at the time of the UST removals. According to the UST Assessment Report (Appendix B), the depths to the bases of the USTs was 5'0" bgs (Tank 1) and 4'7" bgs (Tank 2) and a single soil sample was collected for each from those depths. An additional sample was collected from the side of each excavation at a depth of 3'10" (Tank 1) and 3'9" (Tank 2). The samples were collected from the fill port side of the former USTs to represent a worst case scenario.





Following UST removal, a soil sample was collected from the bases and sides of each 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 locations (Tanks 1 and 2) 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 the former UST locations (Tanks 1 and 2) at 401 Iris Lane (Formerly 1140 Iris Lane) were less than the SCDHEC RBSLs, which indicated the subsurface was not impacted by COPCs associated with the former UST at concentrations that presented a potential risk to human health and the environment.

## 3.0 PROPERTY STATUS

Based on the analytical results for soil, SCDHEC made the determination that NFA was required for 401 Iris Lane (Formerly 1140 Iris Lane). This NFA determination was obtained in a letter dated April 8, 2009. SCDHEC's NFA letter is provided in Appendix C.

#### 4.0 REFERENCES

Marine Corps Air Station Beaufort, 2009. *South Carolina Department of Health and Environmental Control (SCDHEC) Underground Storage Tank Assessment Report – 1140 Iris Lane, Laurel Bay Military Housing Area*, March 2009.

South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2013. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 2.0*, April 2013.





- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2015. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.0*, May 2015.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2016. *Quality Assurance Program Plan for the Underground Storage Tank Management* Division, *Revision 3.1*, February 2016.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2017. *R.61-92, Part 280, Underground Storage Tank Control Regulations*, March 2017.
- South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management, 2018. *Underground Storage Tank Assessment Instructions for Permanent Closure and Change-In-Service*, March 2018.

## **Table**



# Table 1 Laboratory Analytical Results - Soil 401 Iris Lane (Formerly 1140 Iris Lane) Laurel Bay Military Housing Area Marine Corps Air Station Beaufort Beaufort, South Carolina

Constituent	SCDHEC RBSLs (1)	Results Samples Collected 07/25/07					
Volatile Organic Compounds Analyzed	1140 Iris Bottom 01	1130 Iris Side 02	1140 Iris Bottom 03	1140 Iris Side 04			
Benzene	0.003	ND	ND	ND	ND		
Ethylbenzene	1.15	ND	ND	ND	ND		
Naphthalene	0.036	0.000351	0.00553	0.000232	ND		
Toluene	0.627	ND	ND	ND	ND		
Xylenes, Total	13.01	ND	0.000146	ND	ND		
Semivolatile Organic Compounds Ana	yzed by EPA Method 8270D (mg/kg)						
Benzo(a)anthracene	0.66	ND	0.0845	ND	ND		
Benzo(b)fluoranthene	0.66	ND	0.057	ND	ND		
Benzo(k)fluoranthene	0.66	ND	0.0391	ND	ND		
Chrysene	0.66	ND	0.0774	ND	ND		
Dibenz(a,h)anthracene	0.66	ND	ND	ND	ND		

### Notes:

Bold font indicates the analyte was detected.

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

EPA - United States Environmental Protection Agency

mg/kg - milligram per kilogram

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

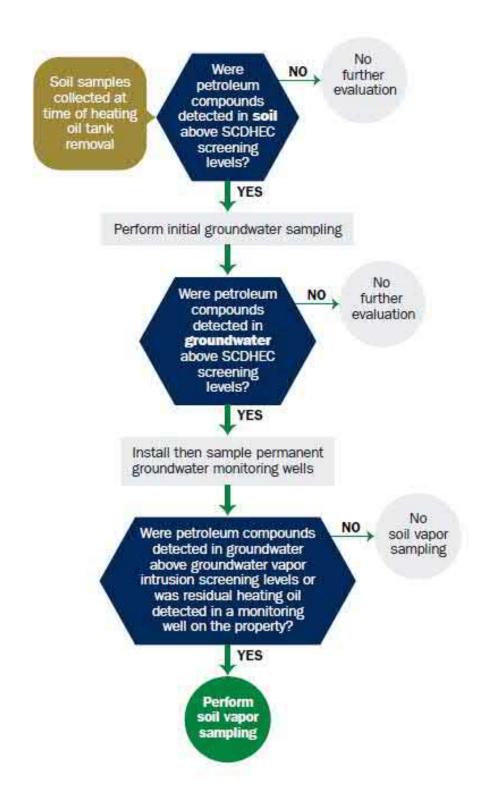
RBSL - Risk-Based Screening Level

SCDHEC - South Carolina Department Of Health and Environmental Control

<sup>&</sup>lt;sup>(1)</sup> 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).

## 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

04756

RECEIVED

MAR 2 4 2009

LAND REVITALIZATION DIVISION - BLWM

1.	OWNERSHIP OF USI (5)	
Beaufor Owner Name (Co	orporation, Individual, Public Agency, Other)	¥
1510 Mailing Address	LAUREL BAY BRID.	<u> </u>
Beau	Fort SC 29900	;
City 843	State Zip Code 379-3305 Ky	le BROADFOOT
Area Code		ct Person

II. SITE IDENTIFICATION AND LOCATION

N/A

Permit 1.D. # Actus Lend Lease Construction

Facility Name or Company Site Identifier

VSNO WARNEN BAY BLUE 14() | 215 Lm.

Street Address or State Road (as applicable)

Bean fort, SC 29906

City

ZIP

County

## III. INSURANCE INFORMATION

<u> </u>	
	nce Statement
	wities. 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 insurant UST release? YESNO (check or	nce policy or other financial mechanism that covers this ne)
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:	3:
If you have this type of insurance, please inclu	de a copy of the policy with this report.
	And
I do/do not (circle one) wish to	participate in the Superb Program.
IV. CERTIFICATION (To be signe	d by the UST owner/operator.)
Name (Type or print.)	
Signature  To be completed by Notary Public:	
Sworn before me this day of	, 20
(Name)	<del></del>
Notary Public for the state of	South Carolina

	V. UST INFORMATION		7				
		Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A	Product(ex. Gas, Kerosene)	#Z	SAME				
B.		350g.					
C.			SAME		-		
D.	Construction Material(ex. Steel, FRP)	Steel					
E.	Month/Year of Last Use	Steel	STEEL				
F.	Depth (ft.) To Base of Tank						
G.	Spill Prevention Equipment Y/N	T	55"		•		
H.	Overfill Previous:	N	N				
I.		N	N				
J.	Method of Closure Removed/Filled  Date Tanks Removed/Filled	Removed	HOVED				
K.	Visible Comeria	7-25-07 7-	- 1				
L.	Visible Holes Y/N	7	1				
	2/41	7	,	-			
M.	Method of disposal for any USTs removed from the	e ground (attach	J. 1'				
•	Recueling - 5	A Ground (attac	n disposa	l manife	sts) .		
_	Recycling - Scrap Ste						
- N d	Method of disposal for any liquid petroleum, sludges isposal manifests)	s, or wastewate	ers remov	red from	th - Trom		
<del></del> -	TREATMENT FACIL	-174 B	ROADI	tu ec		s (attach	
	Solidification A	nd Sul	stitl.	e D	/41	DELL	
If	any corrosion pitting on 1-1						<del>-</del>
	SOME SMALL HOLES HAD DEVE UST OI. UST 02 HAD PREVIOUS	WOPED (	on and ex	tent for e	ach UST BASE	OF	
	UST OI. UST OZ HAD PREVIOUS W/SAND.	OLY BEEN	OUT	OPEN	JUNG (	FILL	ED -
	15						

V.

## VI. PIPING NFORMATION

	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank
Construction Material(ex. Steel, FRP)	Steel	STEEL				
Distance from UST to Dispenser	NIA	,				
Number of Dispensers	- //	NA				
Type of System Pressure or Suction	-0-	0				
Was Piping Removed from the Ground? Y/N	Electra	PUMP				
Visible Corrosion or Pitting Y/N	4	7				
Visible Holes Y/N	2	. \				
Age		2				
	N	7				
TALL FULL OLDER MANNE	KOTI					
CONSIDERABLE PITTING	ANT	Cole	ROSI	SN P	leser	4
Both FILL PIPES And CONSIDERABLE PITTING	BOTH ANT	Cole	ROSIG	sn p	RLSU	4
·			CROSIC	sn p	Reser	+
CONSIDERABLE PIH ING  VII. BRIEF SITE DESCRIPTION AND			ROSIO	SN P	leses	1
VII. BRIEF SITE DESCRIPTION AND	) HISTO	PRY				£
·	) HISTO	PRY				1
VII. BRIEF SITE DESCRIPTION AND	) HISTO	PRY				4
VII. BRIEF SITE DESCRIPTION AND	) HISTO	PRY				4

## VIII. SITE COND IONS

	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.		*	
<ul> <li>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</li> <li>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</li> </ul>		*	
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:		*	
E. Was a petroleum sheen or free product detected on any excavation or boring waters?  If yes, indicate location and thickness.		*	

## IX. SAMP INFORMATION

SCDHEC Lab Certification Number DW: 8400900Z

В

A.

В.							
Sample #	Location	Sample Type (Soil/Water)	Soil Type (Sand/Clay)	Depth*	Date/Time of Collection	Collected by	OVA#
					7-25-07	ECHEVAPRY	
1	BUTTOM	5	SAND	<i>eo.,</i>	930	XI. MANUG RMANGG	ND
2	SIDE	5		46"		RMANY	ND
3	BOTTOM	5		55"	940		
4	SIDE	5	1	45"	940		
5							
6							
7							
8							
9							
10		_					
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

<sup>\* =</sup> Depth Below the Surrounding Land Surface

## SAMPLING METHODOLOG

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 - Presendative: Zea Sodium Bisulfate lea
- Preserdative: ZEA SODIUM BISUPFATE LEA
EPA METHOD 8270 Poly Aromatic Hydro CARBONS
- No Preservative
DNE (1) SIDEWALF And ONE (1) Bottom
SAmple were secured from tank excavation
ONE (1) SiDEWALF And ONE (1) Bottom  SAMPLE WERE SECURED FROM TANK EXCAVATION  SAMPLES WERE STORED AND Shipped IN AN  INSULATED Cooled W/ ICE.
INSUlated cooled w/ ICE.
·

## XI. RECEPTOR.

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. 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. 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. 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.

SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
		<b>7</b>					
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				



IRIS LANE

TANK I EXCAVATION

A-SOIL TEST SIDE SAMPLE @ 46" B-SOIL TEST BOTTOM SAMPLE @ 60"

TANK 2 EXCAVATION

C-SOIL TEST SIDE SAMPLE @ 45" D-SOIL TEST BOTTOM SAMPLE @ 55"



CUSTOMER:

BEAUFORT MILITARY COMPLEX FAMILY HOUSING

SITE ADDRESS:

1140 IRIS LANE

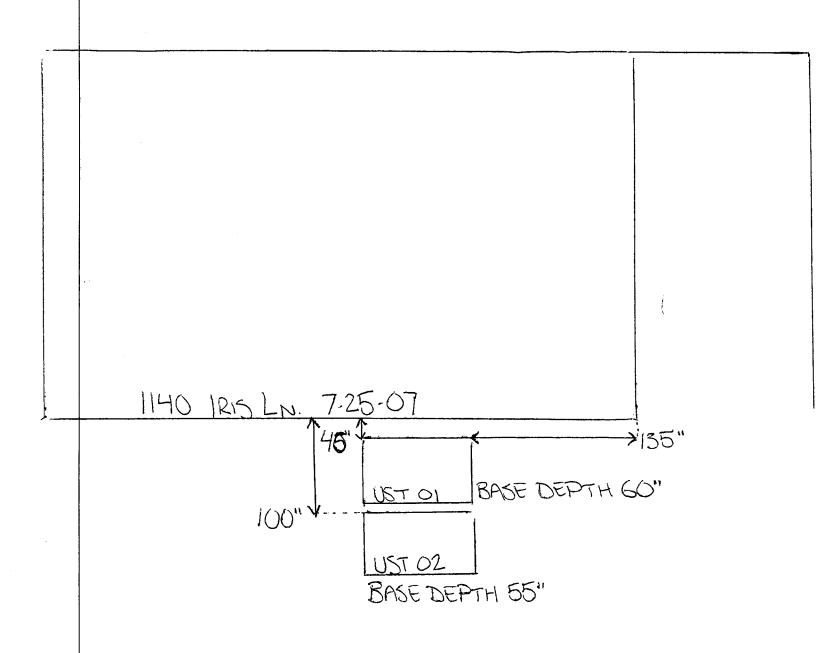
SCALE:

1/16"=1'-0"

SUPPLIER:

P.O. BOX 1096

MOUNT PLEASANT, SC 29465-1096



## **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)



PO BOX 1096

MT PLEASANT, SC 29465

JOHN MAHONEY Attn:

Work Order:

Project:

OQH0044

LAUREL BAY

Project Number: EP2362 Sampled: 07/23/07-07/27/07

Received: 08/02/07

### LABORATORY REPORT

Sample ID: 1130 IRIS SIDE 02 - Lab Number: OQH0044-04 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Polynucl	ear Aromatic Hydrocarbo	ons by EPA Metl	nod 827	70							
83-32-9	Acenaphthene	85.8	Q,U	ug/kg dry	85.8	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
208-96-8	Acenaphthylene	113	Q,U	ug/kg dry	113	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
120-12-7	Anthracene	61.7	Q,U	ug/kg dry	61.7	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
56-55-3	Benzo (a) anthracene	21.0	Q,U	ug/kg dry	21.0	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
205-99-2	Benzo (b) fluoranthene	20.4	Q,U	ug/kg dry	20.4	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
207-08-9	Benzo (k) fluoranthene	20.4	Q,U	ug/kg dry	20.4	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
191-24-2	Benzo (g,h,i) perylene	20.1	Q,U	ug/kg dry	20.1	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
50-32-8	Benzo (a) pyrene	23.8	Q,U	ug/kg dry	23.8	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
90-12-0	I-Methylnaphthalene	97.1	Q,U	ug/kg dry	97.1	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
218-01-9	Chrysene	23.2	Q,U	ug/kg dry	23.2	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
53-70-3	Dibenz (a,h) anthracene	25.4	Q,U	ug/kg dry	25.4	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
206-44-0	Fluoranthene	27.8	Qп	ng/kg dry	27.8	194	1	08/10/07 07:47	REM	EPA 8270C	71106004 71106004
86-73-7	Fluorene	75.7	Q,U	ug/kg dry	75.7	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
193-39-5	Indeno (1,2,3-cd) pyrene	25.1	Q,U	ug/kg dry	25.1	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
91-57-6	2-Methylnaphthalene	82.5	Q,U	ug/kg dry	82.5	194	1	08/10/07 07:47	REM	EPA 8270C	7H06004
91-20-3	Naphthalene	77.7	Q,U	ug/kg dry	77.7	194		08/10/07 07:47	REM	EPA 8270C	7H06004 7H06004
85-01-8	Phenanthrene	45.6	Q,U	ug/kg dry	45.6	194		08/10/07 07:47	REM	EPA 8270C	7H06004 7H06004
129-00-0	Pyrene	39.3	Q,U	ug/kg dry	39.3	194		08/10/07 07:47	REM	EPA 8270C	7H06004 7H06004
Surrogate: 2-	-Fluorobiphenyl (24-121%)	46 %		J J	27.5	-27	•	00/10/07 07.47	KISIVI	DI A 02/00	/17/00/04
	itrobenzene-d5 (19-111%)	48 %									
Surrogate: Te	erphenyl-d14 (44-171%)	94 %									

### LABORATORY REPORT

Sample ID: 1140 IRIS BOTTOM 01 - Lab Number: OQH0044-05 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General	Chemistry Parameters			A							
JA	% Solids	87.4	Q	%.	0.100	0.100	1	08/02/07 17:45	RRP	EPA 160.3	7H02038
/olatile	Organic Compounds by EPA	Method 826	_				-	00/02/07/17/10	144	D111 100.5	/1102036
1-43-2	Benzene	0.0932	U	ug/kg dry	0.0932	0.255	1	08/03/07 19:57	JWT	EPA 8260B	7H03050
00-41-4	Ethylbenzene	0.108	′ን <sup>ፈ\</sup> ሀ	ug/kg dry	0.108	0.255	1	08/03/07_19:57	JWT	EPA 8260B	7H03050
1-20-3	Naphthalene	0.351,00	D 751200 - 12200	ug/kg dry	0.141	0.255	1	08/03/07 19:57	JWT	EPA 8260B	7H03050
<b>08-88-3</b>	Toluene	0.220	บ	ug/kg dry	0.220	0.255	1	08/03/07 19:57	JWT	EPA 8260B	7H03050
330-20-7	Xylenes, total	0.132	U	ug/kg dry	0.132	0.255	1	08/03/07 19:57	JWT	EPA 8260B	7H03030 7H03050
ırrogate: 1	1,2-Dichloroethane-d4 (73-137%)	126 %		0 0 7		0.205	•	00/05/01 17.51	3 44 1	LI A 6200B	71103030
ırrogate: 4	4-Bromofluorobenzene (59-118%)	107 %									
ırrogate: L	Dibromofluoromethane (55-145%)	111 %									
ırrogate: T	Toluene-d8 (80-117%)	104 %									
olynucle	ear Aromatic Hydrocarbons b	v EPA Meth	od 827	0 .							
-32-9	Acenaphthene	84.7	U	ug/kg dry	84.7	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
8-96-8	Acenaphthylene	112	U	ug/kg dry	112	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
0-12-7	Anthracene	61.0	U	ug/kg dry	61.0	191	1	08/10/07 08:09	RFM	FPA 8270C	7H06004

61.0

20.7

191

191

Benzo (a) anthracene

20.7

ug/kg dry

ug/kg dry

Enid Ortiz For Shali Brown

Project Manager

-55-3

08/10/07 08:09 REM EPA 8270C 7H06004

08/10/07 08:09 REM EPA 8270C 7H06004



PO BOX 1096

MT PLEASANT, SC 29465

Attn: JOHN MAHONEY

Work Order:

Project:

OQH0044

LAUREL BAY

Project Number: EP2362

Sampled: 07/23/07-07/27/07

Received: 08/02/07

## LABORATORY REPORT

Sample ID: 1140 IRIS BOTTOM 01 - Lab Number: OQH0044-05 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Polynucle	ear Aromatic Hydrocarb	ons by EPA Meth	od 827	70 - Cont.		~					
205-99-2	Benzo (b) fluoranthene	20.1	U	ug/kg dry	20.1	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
207-08-9	Benzo (k) fluoranthene	20.1	U	ug/kg dry	20.1	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
191-24-2	Benzo (g,h,i) perylene	19.8	U	ug/kg dry	19.8	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
50-32-8	Benzo (a) pyrene	23.5	U	ug/kg dry	23.5	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
90-12-0	1-Methylnaphthalene	96.0	U	ug/kg dry	96.0	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
218-01-9	Chrysene	22.9	U	ug/kg dry	22.9	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
53-70-3	Dibenz (a,h) anthracene	25.1	U	ug/kg dry	25.1	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
206-44-0	Fluoranthene	27.5	U	ug/kg dry	27.5	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
86-73-7	Fluorene	74.8	U	ug/kg dry	74.8	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
193-39-5	Indeno (1,2,3-cd) pyrene	24.7	U	ug/kg dry	24.7	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
91-57-6	2-Methylnaphthalene	81.5	U	ug/kg dry	81.5	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
91-20-3	Naphthalene	76.8	ίì	ug/kg dry	76.8	101	•	08/10/07 08:09	REM	EPA 8270C	7H06004
85-01-8	Phenanthrene	45.1	U	ug/kg dry	45.1	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
129-00-0	Pyrene	38.8	U	ug/kg dry	38.8	191	1	08/10/07 08:09	REM	EPA 8270C	7H06004
Surrogate: 2-	Fluorobiphenyl (24-121%)	46 %		3-6-7			•	33, 10, 07, 00.09	I/T71AI	LI A 02/0C	/1100004
	itrobenzene-d5 (19-111%)	45 %									
Surrogate: Te	rphenyl-d14 (44-171%)	91 %									

## LABORATORY REPORT

Sample ID: 1140 IRIS SIDE 02 - Lab Number: OQH0044-06 - Matrix: Solid/Soil

CAS#	Analyte		Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General (	Chemistry Parameters											~
JA	% Solids		80.1	Q	%.	0.100	0.100	1	08/02/07 17:45	RRP	EPA 160.3	7H02038
Volatile (	Organic Compounds by EPA	A M	ethod 8260F	<u> </u>				_	00,020, 17.15	144	DI 11 100.5	71102030
1-43-2	Benzene		0.0919	U	ug/kg dry	0.0919	0.251	1	08/03/07 20:14	JWT	EPA 8260B	7H03050
00-41-4	Ethylbenzene		0.106	U	ug/kg dry	0.106	0.251	1	08/03/07 20:14	JWT	EPA 8260B	7H03050
1-20-3	Naphthalene	J	5.53 , o o t	LC.	ug/kg dry	0.139	0.251	1	08/03/07 20:14	JWT	EPA 8260B	
8-88-3	Toluene		0.217	U	ug/kg dry	0.217	0.251	1				7H03050
330-20-7	Xylenes, total		0.146 .00	ī	ug/kg dry	0.130		1	08/03/07 20:14	JWT	EPA 8260B	7H03050
irrogate: 1	,2-Dichloroethane-d4 (73-137%)		131 %	1	ug/kg ury	0.130	0.251	1	08/03/07 20:14	JWT	EPA 8260B	7H03050
*	-Bromofluorobenzene (59-118%)	er manere	106%	7 1 2		14.50						A STANTE OF
-	Dibromofluoromethane (55-145%)		110%									
_	oluene-d8 (80-117%)		103 %									
•	' '	L. 1		1.005								
-32-9	ar Aromatic Hydrocarbons Acenaphthene	Dy 1	BPA Metho 92.4			00.4	***	_				
8-96-8	Acenaphthylene			U	ug/kg dry	92.4	209	1.	08/10/07 08:31	REM	EPA 8270C	7H06004
0-12-7	Anthracene		122	U	ug/kg dry	122	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
			66.5	U	ug/kg dry	66.5	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
-55-3	Benzo (a) anthracene		84.5	I	ug/kg dry	22.6	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
5-99-2	Benzo (b) fluoranthene	/	57.0 0	1	ug/kg dry	22.0	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
7-08-9	Benzo (k) fluoranthene	ر	/39.1	I	ug/kg dry	22.0	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
1-24-2	Benzo (g,h,i) perylene		21.6	U	ug/kg dry	21.6	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
32-8	Benzo (a) pyrene		25.7	U	ug/kg dry	25.7	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
								•	JS. 10. 07 00.51	141	D11102/00	71100004



PO BOX 1096

MT PLEASANT, SC 29465

Attn: JOHN MAHONEY

Work Order:

Project:

OQH0044

LAUREL BAY

Project Number: EP2362

Sampled: 07/23/07-07/27/07

Received: 08/02/07

## LABORATORY REPORT

Sample ID: 1140 IRIS SIDE 02 - Lab Number: OQH0044-06 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Polynucle	ear Aromatic Hydrocarbons by	EPA Meth	od 827	70 - Cont.							·
90-12-0	l-Methylnaphthalene	105 م <b>ر</b> وک	· U	ug/kg dry	105	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
218-01-9	Chrysene	77.4	· I	ug/kg dry	25.0	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
53-70-3	Dibenz (a,h) anthracene		ę U	ug/kg dry	27.4	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
206-44-0	Fluoranthene	55.4	I	ug/kg dry	30.0	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
86-73-7	Fluorene	81.6	U	ug/kg dry	81.6	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
193-39-5	Indeno (1,2,3-cd) pyrene	27.0	U	ug/kg dry	27.0	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
91-57-6	2-Methylnaphthalene	88.9	U	ug/kg dry	88.9	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
91-20-3	Naphthalene	83.8	U	ug/kg dry	83.8	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
85-01-8	Phenanthrene	49.2	U	ug/kg dry	49.2	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
129-00-0	Pyrene	65.4	I	ug/kg dry	42.4	209	1	08/10/07 08:31	REM	EPA 8270C	7H06004
Surrogate: 2-	Fluorobiphenyl (24-121%)	46 %									
Surrogate: N	itrobenzene-d5 (19-111%)	45 %									
Surrogate: Te	erphenyl-d14 (44-171%)	93 %									

## LABORATORY REPORT

Sample ID: 1140 IRIS BOTTOM 03 - Lab Number: OQH0044-07 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General	Chemistry Parameters					-					
٧A	% Solids	87.3	Q	<b>%</b> .	0.100	0.100	1	08/02/07 17:45	RRP	EPA 160.3	7H02039
Volatile (	Organic Compounds by EPA	Method 826	0B								
71-43-2	Benzene	0.106	U	ug/kg dry	0.106	0.290	1	08/03/07 20:31	JWT	EPA 8260B	7H03050
00-41-4	Ethylbenzene	0.123	U	ug/kg dry	0.123	0.290	1	08/03/07 20:31	JWT	EPA 8260B	7H03050
11-20-3	Naphthalene	0.232	I	ug/kg dry	0.160	0.290	1	08/03/07 20:31	JWT	EPA 8260B	7H03050
08-88-3	Toluene	0.251	U	ug/kg dry	0.251	0.290	1	08/03/07 20:31	JWT	EPA 8260B	7H03050
330-20-7	Xylenes, total	0.151	U	ug/kg dry	0.151	0.290	1	08/03/07 20:31	JWT	EPA 8260B	7H03050
'urrogate: 1	,2-Dichloroethane-d4 (73-137%)	126%		00,		0.2.0	•	00.03.07 20.31	3 11 1	DI A 0200D	/1103030
urrogate: 4	-Bromofluorobenzene (59-118%)	111%									
urrogate: D	ibromofluoromethane (55-145%)	109 %		•							
urrogate: T	oluene-d8 (80-117%)	103 %									
'olynucle	ar Aromatic Hydrocarbons l	ov EPA Meth	od 827	0							
3-32-9	Acenaphthene	84.7	U	ug/kg dry	84.7	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
08-96-8	Acenaphthylene	112	U .	ug/kg dry	112	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
20-12-7	Anthracene	61.0	U	ug/kg dry	61.0	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
5-55-3	Benzo (a) anthracene	20.7	U	ug/kg dry	20.7	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
)5-99-2	Benzo (b) fluoranthene	20.1	U	ug/kg dry	20.1	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
)7-08-9	Benzo (k) fluoranthene	20.1	U	ug/kg dry	20.1	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
11-24-2	Benzo (g,h,i) perylene	19.8	U	ug/kg dry	19.8	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004 7H06004
)-32-8	Benzo (a) pyrene	23.5	U	ug/kg dry	23.5	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
1-12-0	1-Methylnaphthalene	96.0	U	ug/kg dry	96.0	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004 7H06004
8-01-9	Chrysene	22.9	U	ug/kg dry	22.9	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004 7H06004
-70-3	Dibenz (a,h) anthracene	25.1	U	ug/kg dry	25.1	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004 7H06004
6-44-0	Fluoranthene	27.5	U	ug/kg dry	27.5	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004 7H06004
			-	J J J	2,	-/-	•	00/10/07/00/34	ICICIAI	EFA 02/00	/ NU0UU4



Attn:

PO BOX 1096

MT PLEASANT, SC 29465

JOHN MAHONEY

Work Order: Project:

OQH0044

LAUREL BAY

Project Number: EP2362

Sampled: 07/23/07-07/27/07

Received: 08/02/07

## LABORATORY REPORT

Sample ID: 1140 IRIS BOTTOM 03 - Lab Number: OQH0044-07 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Polynucl	ear Aromatic Hydrocarbor	s by EPA Metl	hod 827	0 - Cont.							
86-73-7	Fluorene	74.8	U	ug/kg dry	74.8	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
193-39-5	Indeno (1,2,3-cd) pyrene	24.8	U	ug/kg dry	24.8	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
91-57-6	2-Methylnaphthalene	81.5	U	ug/kg dry	81.5	191	I	08/10/07 08:54	REM	EPA 8270C	7H06004
91-20-3	Naphthalene	76.8	U	ug/kg dry	76.8	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
85-01-8	Phenanthrene	45.1	U	ug/kg dry	45.1	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
129-00-0	Pyrene	38.8	U	ug/kg dry	38.8	191	1	08/10/07 08:54	REM	EPA 8270C	7H06004
Surrogate: 2	?-Fluorobiphenyl (24-121%)	41 %					-	00/10/07 00/51	T.C.I.I	DI 11 02/00	11100004
Surrogate: N	Vitrobenzene-d5 (19-111%)	42 %									
Surrogate: T	Ferphenyl-d14 (44-171%)	69 %									

### LABORATORY REPORT

Sample ID: 1140 IRIS SIDE 04 - Lab Number: OQH0044-08 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General (	Chemistry Parameters					**-					
٧A	% Solids	87.6	Q	%.	0.100	0.100	1	08/02/07 17:45	RRP	EPA 160.3	7H02039
Volatile (	Organic Compounds by EPA	Method 8260	B								
<sup>7</sup> 1-43-2	Benzene	0.104	U	ug/kg dry	0.104	0.285	1	08/03/07 20:48	JWT	EPA 8260B	7H03050
00-41-4	Ethylbenzene	0.120	U	ug/kg dry	0.120	0.285	1	08/03/07 20:48	JWT	EPA 8260B	7H03050
11-20-3	Naphthalene	0.157	U	ug/kg dry	0.157	0.285	1	08/03/07 20:48	JWT	EPA 8260B	7H03050
08-88-3	Toluene	0.246	U	ug/kg dry	0.246	0.285	1	08/03/07 20:48	JWT	EPA 8260B	7H03050
330-20-7	Xylenes, total	0.148	U	ug/kg dry	0.148	0.285	1	08/03/07 20:48	JWT	EPA 8260B	7H03050
'urrogate: 1	,2-Dichloroethane-d4 (73-137%)	122 %									
urrogate: 4	-Bromofluorobenzene (59-118%)	104 %									
urrogate: D	ibromofluoromethane (55-145%)	108 %									
urrogate: Te	oluene-d8 (80-117%)	103 %									
<b>Polynucle</b>	ar Aromatic Hydrocarbons ł	v EPA Meth	od 827	0							
3-32-9	Acenaphthene	84.4	U	ug/kg dry	84.4	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
38-96-8	Acenaphthylene	111	U	ug/kg dry	111	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
20-12-7	Anthracene	60.8	U	ug/kg dry	60.8	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
5-55-3	Benzo (a) anthracene	20.6	U	ug/kg dry	20.6	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
)5-99-2	Benzo (b) fluoranthene	20.1	U	ug/kg dry	20.1	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
)7-08-9	Benzo (k) fluoranthene	20.1	U	ug/kg dry	20.1	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
1-24-2	Benzo (g,h,i) perylene	19.8	U	ug/kg dry	19.8	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
)-32-8	Benzo (a) pyrene	23.4	U	ug/kg dry	23.4	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
1-12-0	I-Methylnaphthalene	95.6	U	ug/kg dry	95.6	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
8-01-9	Chrysene	22.8	U	ug/kg dry	22.8	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
-70-3	Dibenz (a,h) anthracene	25.0	U	ug/kg dry	25.0	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004 7H06004
6-44-0	Fluoranthene	27.4	U	ug/kg dry	27.4	191	-	08/10/07 09:16	REM	EPA 8270C	7H06004
73-7	Fluorene	74.6	<del>-</del>	ug/kg dry	74.6	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004 7H06004
3-39-5	Indeno (1,2,3-cd) pyrene	24.7	บ	ug/kg dry	24.7	191	_	08/10/07 09:16	REM	EPA 8270C	7H06004 7H06004
-57-6	2-Methylnaphthalene	81.2	U	ug/kg dry	81.2	191	-	08/10/07 09:16	REM		7H06004 7H06004
-20-3	Naphthalene	76.5	U	ug/kg dry	76.5	191		08/10/07 09:16	REM	EPA 8270C	
	•		Ü	-9 6 1	10.5	171	1	00/10/07 09:10	KEM	EPA 8270C	7H06004

Dil



Client: EPG, INC.

PO BOX 1096

MT PLEASANT, SC 29465

Attn: JOHN MAHONEY

Work Order:

Project:

OQH0044

LAUREL BAY

Project Number: EP2362 Sampled: 07/23/07-07/27/07

Received: 08/02/07

## LABORATORY REPORT

Sample ID: 1140 IRIS SIDE 04 - Lab Number: OQH0044-08 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
Polynucle	ear Aromatic Hydrocarbo	ns by EPA Metl	nod 827	70 - Cont.							
85-01-8	Phenanthrene	44.9	U	ug/kg dry	44.9	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
129-00-0	Pyrene	38.7	U	ug/kg dry	38.7	191	1	08/10/07 09:16	REM	EPA 8270C	7H06004
Surrogate: 2	-Fluorobiphenyl (24-121%)	54 %									
Surrogate: N	litrobenzene-d5 (19-111%)	50 %									
Surrogate: T	erphenyl-d14 (44-171%)	84 %									

## LABORATORY REPORT

Sample ID: 1142 IRIS BOTTOM 01 - Lab Number: OQH0044-09 - Matrix: Solid/Soil

CAS#	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	Ву	Method	Batch
General	Chemistry Parameters					······				, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
NA	% Solids	81.7	Q	%	<b>0 100</b>	9,100	1	08/02/07 17:45	DDD	EPA 160.3	7H02039
Volatile	Organic Compounds by EPA	Method 826	0B								
71-43-2	Benzene	0.122	U	ug/kg dry	0.122	0.333	1	08/03/07 23:01	JWT	EPA 8260B	7H03050
100-41-4	Ethylbenzene	0.141	U	ug/kg dry	0.141	0.333	1	08/03/07 23:01	JWT	EPA 8260B	7H03050
91-20-3	Naphthalene	0.184	U	ug/kg dry	0.184	0.333	1	08/03/07 23:01	JWT	EPA 8260B	7H03050
108-88-3	Toluene	0.288	U	ug/kg dry	0.288	0.333	1	08/03/07 23:01	JWT	EPA 8260B	7H03050
1330-20-7	Xylenes, total	0.173	U	ug/kg dry	0.173	0.333	1	08/03/07 23:01	JWT	EPA 8260B	7H03050
Surrogate:	1,2-Dichloroethane-d4 (73-137%)	121 %									
Surrogate:	4-Bromofluorobenzene (59-118%)	108 %									
Surrogate:	Dibromofluoromethane (55-145%)	109 %									
Surrogate:	Toluene-d8 (80-117%)	103 %									
Polynucl	ear Aromatic Hydrocarbons	by EPA Metl	hod 827	70							
33-32-9	Acenaphthene	90.5	U	ug/kg dry	90.5	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
208-96-8	Acenaphthylene	120	U	ug/kg dry	120	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
120-12-7	Anthracene	65.2	U	ug/kg dry	65.2	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
i6-55-3	Benzo (a) anthracene	22.1	U	ug/kg dry	22.1	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
!05-99-2	Benzo (b) fluoranthene	21.5	U	ug/kg dry	21.5	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
:07-08-9	Benzo (k) fluoranthene	21.5	U	ug/kg dry	21.5	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
91-24-2	Benzo (g,h,i) perylene	21.2	U	ug/kg dry	21.2	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
0-32-8	Benzo (a) pyrene	25.1	U	ug/kg dry	25.1	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
0-12-0	I-Methylnaphthalene	103	U	ug/kg dry	103	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
18-01-9	Chrysene	24.4	U	ug/kg dry	24.4	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
3-70-3	Dibenz (a,h) anthracene	26.8	บ	ug/kg dry	26.8	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
06-44-0	Fluoranthene	29.4	บ	ug/kg dry	29.4	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
6-73-7	Fluorene	80.0	U	ug/kg dry	80.0	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
93-39-5	Indeno (1,2,3-cd) pyrene	26.5	U	ug/kg dry	26.5	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
1-57-6	2-Methylnaphthalene	87.1	U	ug/kg dry	87.1	204	1	08/10/07 09:38	REM	EPA 8270C	7H06004
1-20-3	Naphthalene	82.1	U	ug/kg dry	82.1	204	-	08/10/07 09:38	REM	EPA 8270C	7H06004
5-01-8	Phenanthrene	48.2	U	ug/kg dry	48.2	204		08/10/07 09:38	REM	EPA 8270C	7H06004
29-00-0	Pyrene	41.5	U	ug/kg dry	41.5	204		08/10/07 09:38	REM	EPA 8270C	7H06004 7H06004
ırrogate: 2-	Fluorobiphenyl (24-121%)	47 %		J 6 7	· = · <del>-</del>	,	•	00.10.07 07.50	141	DIA 02/0C	/1100004

43 %

Project Manager

ırrogate: Nitrobenzene-d5 (19-111%)

#### Datooyy Test/America To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes? Compliance Monitoring Client Name \_\_\_\_\_\_Client#: 241) Project Name: LAUREL BAY City/State/Zip Code: Project#: EP 2362 Project Manager: 20HN MAHONEY Site/Location ID: State: Telephone Number: Report To: ECHEVARRIA Sampler Name: (Print Name) Invoice To: order 28 Sampler Signature: Quote #: Matrix Preservation & # of Containers Analyze For: Standard QC Deliverables Rush (surcharges may apply) None Level 2 Date Needed: (Batch QC) Level 3 Fax Results: Y N Level 4 Other: VEOH SAMPLE ID 24 1215 BOTTOMOI REMARKS 01 1215 SIDE 02

Relinquished By:

| Date: | | Pare: | | Pare: | | Pare: | | Pare: | Pa

B

Special instructions:

LABORATORY COMMENTS:
Init Lab Temp;

Rec Lab Temps:

Custody Seals: Y N N/A
Bottles Supplied by Test America: Y

86 23 259 1 1725 Method of Shipment: Fo 112X 107A

08H0044 Test/America To assist us in using the proper analytical methods. is this work being conducted for regulatory purposes? Compliance Monitoring Client Name EPG \_\_\_\_\_\_Client#: 2411 Project Name: LAUREL BAY Address: City/State/Zip Code: Project#: EP 2362 OHU MAHONEY Project Manager: Site/Location ID: State: Telephone Number: Fax: Report To: HRIS ECHEVARRIA Sampler Name: (Print Name) Invoice To: Milmin Sampler Signature: Quote #: Matrix Preservation & # of Containers Analyze For: QC Deliverables Standard Rush (surcharges may apply) None G = Grab, C = Composite ★ Level 2 (Batch QC) Date Needed: Level 3 Fax Results: Y N Level 4 Other: SAMPLE ID REMARKS 1056 GARDEN A BOTTONOI × 1056GARDENIA SIDE OZ SHARDENIA BATTOM B 1720 2 1056 CARDENIA SINE OH Special instructions: LABORATORY COMMENTS: Init Lab Temp: Rec Lab Temp: be work a sol, hat to 900 ho Custody Seals: Y 02 Time 73 Received By: Bottles Supplied by Test America: Y

Received By

Relinquished By:

Date

Date:

Time:

8623 2591 )736 Method of Shipment: Fed 5%

Test/America To assist us in using the proper analytical methods. is this work being conducted for regulatory purposes? Compliance Monitoring \_\_\_\_\_ Client#: 2411 Client Name Project Name: LAUREL BAY Address: City/State/Zip Code: Project #: EP 2362 WHO MAHONEY Project Manager: Site/Location ID: State Telephone Number: Report To: ECHEVARRIA Sampler Name: (Print Name) Invoice To: Sampler Signature: Quote #: Matrix Preservation & # of Containers Analyze For: TAT Standard QC Deliverables Rush (surcharges may apply) None Level 2 Date Needed: (Batch QC) Level 3 Fax Results: Y N Level 4 Other: SAMPLE ID REMARKS PORTON 01 1-23-07 1010 36 1215 SINE 02 7-23/07/07/0 17.22.07/1140 LABORATORY COMMENTS: Init Lab Temp: Rec Lab Temp: Custody Seals: Y

Received By:

Received By

Relinquished By

Bottles Supplied by Test America;

Method of Shipment: Fed EX HOTA

Time 100

Time:

Date:

Date:

## Appendix C Regulatory Correspondence





#### C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

April 8, 2009

Commanding Officer

ATTN: S-4 NREAO (Craig Ehde)

**MCAS** 

PO Box 55001

Beaufort, SC 29904-5001

Re:

MCAS - Laurel Bay Housing - 1140 Iris Lane

Site ID # 04156

Soil Sampling Results received March 24, 2009

**Beaufort County** 

Dear Mr. Ehde:

The Department has reviewed the referenced assessment report. Based upon the geotechnical data in the referenced report, the soil samples are below risk based screening levels and there is no evidence of ground water contamination on the property.

As the Department did not specifically request this data, and the work conducted at this site received no prior review by the Department, we cannot provide any comments on the completeness of the work performed or the overall environmental conditions of the site. Based on the information and analytical data submitted, there is no evidence to indicate that a violation of the Pollution Control Act has occurred. Consequently, no investigation will be required at this time. Please note, this statement pertains only to the data submitted 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,

Jan T. Cooke, Hydrogeologist

and Cooke

B. Thomas Knight, Manager

AST Petroleum Restoration & Site Environmental Investigations Section

Division of Site Assessment, Remediation & Revitalization

Bureau of Land and Waste Management

cc: Region 8 District EQC

Tri-Command Communities; Attn: Mr. Robert Bible; 600 Laurel Bay Road Beaufort, SC 29906