ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

EHS Support
4885 McKnight Road # 188
Pittsburgh PA 15237

Report Date: September 20, 2017

Project: SBA Shipyard Site, Jennings LA

Account #: 42328
Group Number: 1851015
SDG: SBA01
PO Number: C01860_2017-400-405
State of Sample Origin: LA

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Electronic Copy To	EHS Support LLC	Attn: Kathryn Cantone
Electronic Copy To	EHS Support LLC	Attn: Scott Lindenmuth

Respectfully Submitted,

Bonnie Stadelmann

Bonnie Stadelmann
Senior Project Manager

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SAMPLE INFORMATION

Client Sample Description	Collection Information	ELLE#
AOI-3-SS-1(0-1) Grab Soil	09/14/2017 11:21	9210977
AOI-4-SS-1(0-1) Grab Soil	09/14/2017 11:51	9210978

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Sample Description: AOI-3-SS-1(0-1) Grab Soil
SBA Shipyard Site

ELLE Sample # SW 9210977
ELLE Group # 1851015
Account # 42328

Project Name: SBA Shipyard Site, Jennings LA

Collected: 09/14/2017 11:21 by JM

Submitted: 09/15/2017 09:55
Reported: 09/20/2017 12:08

EHS Support
4885 McKnight Road # 188
Pittsburgh PA 15237

AOI-3 SDG#: SBA01-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**	**ug/kg**	**ug/kg**	
10726	Acenaphthylene	208-96-8	5,000	19	97	5
10726	Anthracene	120-12-7	17,000	19	97	5
10726	Benzo(a)anthracene	56-55-3	2,700	19	97	5
10726	Benzo(a)pyrene	50-32-8	4,500	19	97	5
10726	Benzo(b)fluoranthene	205-99-2	9,000	19	97	5
10726	Benzo(g,h,i)perylene	191-24-2	13,000	19	97	5
10726	Benzo(k)fluoranthene	207-08-9	2,700	19	97	5
10726	1,1'-Biphenyl	92-52-4	N.D.	95	190	5
10726	Carbazole	86-74-8	8,400	95	190	5
10726	Chrysene	218-01-9	5,100	19	97	5
10726	Dibenz(a,h)anthracene	53-70-3	1,500	19	97	5
10726	Dibenzofuran	132-64-9	200	95	190	5
10726	Fluoranthene	206-44-0	6,400	19	97	5
10726	Fluorene	86-73-7	350	19	97	5
10726	Indeno(1,2,3-cd)pyrene	193-39-5	7,700	19	97	5
10726	2-Methylnaphthalene	91-57-6	120	19	97	5
10726	Naphthalene	91-20-3	500	19	97	5
10726	Phenanthrene	85-01-8	2,300	19	97	5
10726	Pyrene	129-00-0	6,500	19	97	5
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	6.10	1.06	4.42	1
06946	Barium	7440-39-3	53.4	0.0486	1.10	1
06949	Cadmium	7440-43-9	N.D.	0.0596	1.10	1
06951	Chromium	7440-47-3	12.7	0.188	3.31	1
06952	Cobalt	7440-48-4	2.02	0.121	1.10	1
06953	Copper	7440-50-8	8.21	0.265	2.21	1
06955	Lead	7439-92-1	18.8	0.663	3.31	1
06958	Manganese	7439-96-5	190	0.0917	1.10	1
06961	Nickel	7440-02-0	3.81	0.166	2.21	1
06972	Zinc	7440-66-6	93.7	0.265	4.42	1
	SW-846 7471B		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0426 J	0.0112	0.112	1
Wet Chemistry	**%Moisture- Dry Wt Calculation**		**%**	**%**	**%**	
00111	Moisture	n.a.	12.1	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

The Sample Quantitation Limit (SQL) is equal to the Limit of Quantitation (LOQ).

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: AOI-3-SS-1(0-1) Grab Soil
SBA Shipyard Site

ELLE Sample # SW 9210977
ELLE Group # 1851015
Account # 42328

Project Name: SBA Shipyard Site, Jennings LA

Collected: 09/14/2017 11:21 by JM

Submitted: 09/15/2017 09:55
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EHS Support
4885 McKnight Road # 188
Pittsburgh PA 15237

AOI-3 SDG#: SBA01-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	SVOA 8270D (microwave)	SW-846 8270D	1	17259SLA026	09/18/2017 11:41	Linda M Hartenstine	5
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17259SLA026	09/16/2017 10:30	Michelle A Newswanger	1
06935	Arsenic	SW-846 6010C	1	172601063701	09/19/2017 14:20	Patrick J Engle	1
06946	Barium	SW-846 6010C	1	172601063701	09/19/2017 17:52	Cindy M Gehman	1
06949	Cadmium	SW-846 6010C	1	172601063701	09/19/2017 14:20	Patrick J Engle	1
06951	Chromium	SW-846 6010C	1	172601063701	09/19/2017 17:52	Cindy M Gehman	1
06952	Cobalt	SW-846 6010C	1	172601063701	09/19/2017 14:20	Patrick J Engle	1
06953	Copper	SW-846 6010C	1	172601063701	09/19/2017 17:52	Cindy M Gehman	1
06955	Lead	SW-846 6010C	1	172601063701	09/19/2017 14:20	Patrick J Engle	1
06958	Manganese	SW-846 6010C	1	172601063701	09/19/2017 17:52	Cindy M Gehman	1
06961	Nickel	SW-846 6010C	1	172601063701	09/19/2017 14:20	Patrick J Engle	1
06972	Zinc	SW-846 6010C	1	172601063701	09/19/2017 14:20	Patrick J Engle	1
00159	Mercury	SW-846 7471B	1	172601063801	09/19/2017 08:46	Damary Valentin	1
10637	ICP/ICPMS-SW, 3050B - U4	SW-846 3050B	1	172601063701	09/19/2017 05:54	James L Mertz	1
10638	Hg - SW, 7471B - U4	SW-846 7471B	1	172601063801	09/19/2017 07:32	James L Mertz	1
00111	Moisture	%Moisture- Dry Wt Calculation	1	17258820016B	09/16/2017 21:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Sample Description: AOI-4-SS-1(0-1) Grab Soil
SBA Shipyard Site

ELLE Sample # SW 9210978
ELLE Group # 1851015
Account # 42328

Project Name: SBA Shipyard Site, Jennings LA

Collected: 09/14/2017 11:51 by JM

Submitted: 09/15/2017 09:55
Reported: 09/20/2017 12:08

EHS Support
4885 McKnight Road # 188
Pittsburgh PA 15237

AOI-4 SDG#: SBA01-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/kg**		**ug/kg**	**ug/kg**	
10726	Acenaphthylene	208-96-8	4,000		20	100	5
10726	Anthracene	120-12-7	2,400		20	100	5
10726	Benzo(a)anthracene	56-55-3	4,400		20	100	5
10726	Benzo(a)pyrene	50-32-8	7,800		20	100	5
10726	Benzo(b)fluoranthene	205-99-2	9,600		20	100	5
10726	Benzo(g,h,i)perylene	191-24-2	9,900		20	100	5
10726	Benzo(k)fluoranthene	207-08-9	4,500		20	100	5
10726	1,1'-Biphenyl	92-52-4	N.D.		100	200	5
10726	Carbazole	86-74-8	1,000		100	200	5
10726	Chrysene	218-01-9	5,100		20	100	5
10726	Dibenz(a,h)anthracene	53-70-3	1,500		20	100	5
10726	Dibenzofuran	132-64-9	230		100	200	5
10726	Fluoranthene	206-44-0	7,500		20	100	5
10726	Fluorene	86-73-7	180		20	100	5
10726	Indeno(1,2,3-cd)pyrene	193-39-5	7,600		20	100	5
10726	2-Methylnaphthalene	91-57-6	140		20	100	5
10726	Naphthalene	91-20-3	1,800		20	100	5
10726	Phenanthrene	85-01-8	1,900		20	100	5
10726	Pyrene	129-00-0	6,900		20	100	5
Metals	**SW-846 6010C**		**mg/kg**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	5.19		1.09	4.53	1
06946	Barium	7440-39-3	255		0.0498	1.13	1
06949	Cadmium	7440-43-9	0.166	J	0.0612	1.13	1
06951	Chromium	7440-47-3	17.7		0.193	3.40	1
06952	Cobalt	7440-48-4	3.65		0.125	1.13	1
06953	Copper	7440-50-8	67.1		0.272	2.27	1
06955	Lead	7439-92-1	30.0		0.680	3.40	1
06958	Manganese	7439-96-5	139		0.0940	1.13	1
06961	Nickel	7440-02-0	9.96		0.170	2.27	1
06972	Zinc	7440-66-6	792		0.272	4.53	1
	SW-846 7471B		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0382	J	0.0116	0.116	1
Wet Chemistry	**%Moisture- Dry Wt Calculation**		**%**		**%**	**%**	
00111	Moisture	n.a.	16.7		0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

The Sample Quantitation Limit (SQL) is equal to the Limit of Quantitation (LOQ).

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: AOI-4-SS-1(0-1) Grab Soil
SBA Shipyard Site

ELLE Sample # SW 9210978
ELLE Group # 1851015
Account # 42328

Project Name: SBA Shipyard Site, Jennings LA

Collected: 09/14/2017 11:51 by JM

Submitted: 09/15/2017 09:55
Reported: 09/20/2017 12:08

EHS Support
4885 McKnight Road # 188
Pittsburgh PA 15237

AOI-4 SDG#: SBA01-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10726	SVOA 8270D (microwave)	SW-846 8270D	1	17259SLA026	09/18/2017 12:05	Linda M Hartenstine	5
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17259SLA026	09/16/2017 10:30	Michelle A Newswanger	1
06935	Arsenic	SW-846 6010C	1	172601063701	09/19/2017 14:42	Patrick J Engle	1
06946	Barium	SW-846 6010C	1	172601063701	09/19/2017 18:11	Cindy M Gehman	1
06949	Cadmium	SW-846 6010C	1	172601063701	09/19/2017 14:42	Patrick J Engle	1
06951	Chromium	SW-846 6010C	1	172601063701	09/19/2017 18:11	Cindy M Gehman	1
06952	Cobalt	SW-846 6010C	1	172601063701	09/19/2017 14:42	Patrick J Engle	1
06953	Copper	SW-846 6010C	1	172601063701	09/19/2017 18:11	Cindy M Gehman	1
06955	Lead	SW-846 6010C	1	172601063701	09/19/2017 14:42	Patrick J Engle	1
06958	Manganese	SW-846 6010C	1	172601063701	09/19/2017 18:11	Cindy M Gehman	1
06961	Nickel	SW-846 6010C	1	172601063701	09/19/2017 14:42	Patrick J Engle	1
06972	Zinc	SW-846 6010C	1	172601063701	09/19/2017 14:42	Patrick J Engle	1
00159	Mercury	SW-846 7471B	1	172601063801	09/19/2017 09:00	Damary Valentin	1
10637	ICP/ICPMS-SW, 3050B - U4	SW-846 3050B	1	172601063701	09/19/2017 05:54	James L Mertz	1
10638	Hg - SW, 7471B - U4	SW-846 7471B	1	172601063801	09/19/2017 07:32	James L Mertz	1
00111	Moisture	%Moisture- Dry Wt Calculation	1	17258820016B	09/16/2017 21:57	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: EHS Support
Reported: 09/20/2017 12:08

Group Number: 1851015

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/kg	ug/kg	ug/kg
Batch number: 17259SLA026	Sample number(s): 9210977-9210978		
Acenaphthylene	N.D.	3	17
Anthracene	N.D.	3	17
Benzo(a)anthracene	N.D.	3	17
Benzo(a)pyrene	N.D.	3	17
Benzo(b)fluoranthene	N.D.	3	17
Benzo(g,h,i)perylene	N.D.	3	17
Benzo(k)fluoranthene	N.D.	3	17
1,1'-Biphenyl	N.D.	17	33
Carbazole	N.D.	17	33
Chrysene	N.D.	3	17
Dibenz(a,h)anthracene	N.D.	3	17
Dibenzofuran	N.D.	17	33
Fluoranthene	N.D.	3	17
Fluorene	N.D.	3	17
Indeno(1,2,3-cd)pyrene	N.D.	3	17
2-Methylnaphthalene	N.D.	3	17
Naphthalene	N.D.	3	17
Phenanthrene	N.D.	3	17
Pyrene	N.D.	3	17
	mg/kg	mg/kg	mg/kg
Batch number: 172601063701	Sample number(s): 9210977-9210978		
Arsenic	N.D.	0.960	4.00
Barium	N.D.	0.0440	1.00
Cadmium	N.D.	0.0540	1.00
Chromium	N.D.	0.170	3.00
Cobalt	N.D.	0.110	1.00
Copper	N.D.	0.240	2.00
Lead	N.D.	0.600	3.00
Manganese	N.D.	0.0830	1.00
Nickel	N.D.	0.150	2.00
Zinc	N.D.	0.240	4.00
Batch number: 172601063801	Sample number(s): 9210977-9210978		
Mercury	N.D.	0.0100	0.100

LCS/LCSD

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: EHS Support
Reported: 09/20/2017 12:08

Group Number: 1851015

LCS/LCSD

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 17259SLA026	Sample number(s): 9210977-9210978								
Acenaphthylene	1666.67	1489.49			89		76-119		
Anthracene	1666.67	1700.57			102		82-118		
Benzo(a)anthracene	1666.67	1660.83			100		76-119		
Benzo(a)pyrene	1666.67	1709.07			103		78-117		
Benzo(b)fluoranthene	1666.67	1680.45			101		74-127		
Benzo(g,h,i)perylene	1666.67	1665.48			100		72-118		
Benzo(k)fluoranthene	1666.67	1854.8			111		71-123		
1,1'-Biphenyl	1666.67	1632.37			98		78-115		
Carbazole	1666.67	1622.79			97		74-118		
Chrysene	1666.67	1631.97			98		72-121		
Dibenz(a,h)anthracene	1666.67	1732.98			104		72-129		
Dibenzofuran	1666.67	1689.42			101		79-114		
Fluoranthene	1666.67	1637.04			98		72-120		
Fluorene	1666.67	1733.8			104		75-118		
Indeno(1,2,3-cd)pyrene	1666.67	1701.32			102		69-125		
2-Methylnaphthalene	1666.67	1674.31			100		77-116		
Naphthalene	1666.67	1661.39			100		75-113		
Phenanthrene	1666.67	1639.27			98		74-114		
Pyrene	1666.67	1559.27			94		74-112		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 172601063701	Sample number(s): 9210977-9210978								
Arsenic	15	14.59			97		80-120		
Barium	200	203.56			102		80-120		
Cadmium	5.00	5.00			100		80-120		
Chromium	20	19.82			99		80-120		
Cobalt	50	49.89			100		80-120		
Copper	25	26.03			104		80-120		
Lead	15	15.11			101		80-120		
Manganese	50	51.51			103		80-120		
Nickel	50	50.98			102		80-120		
Zinc	50	49.68			99		80-120		
Batch number: 172601063801	Sample number(s): 9210977-9210978								
Mercury	0.100	0.0956			96		80-120		
	%	%	%	%					
Batch number: 17258820016B	Sample number(s): 9210977-9210978								
Moisture	89.5	89.42			100		99-101		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: EHS Support
Reported: 09/20/2017 12:08

Group Number: 1851015

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 17259SLA026	Sample number(s): 9210977-9210978 UNSPK: P210689									
Acenaphthylene	54.45	1648.53	1397.63	1656.73	1325.86	81	77	76-119	5	30
Anthracene	86.66	1648.53	1762.62	1656.73	1590.96	102	91	82-118	10	30
Benzo(a)anthracene	183.9	1648.53	2049.32	1656.73	1668.67	113	90	76-119	20	30
Benzo(a)pyrene	162.35	1648.53	1996.54	1656.73	1668.76	111	91	78-117	18	30
Benzo(b)fluoranthene	196.44	1648.53	2159.5	1656.73	1643.84	119	87	74-127	27	30
Benzo(g,h,i)perylene	99.36	1648.53	1767.09	1656.73	1590.42	101	90	72-118	11	30
Benzo(k)fluoranthene	120.6	1648.53	1693.79	1656.73	1718.25	95	96	71-123	1	30
1,1'-Biphenyl	N.D.	1648.53	1418.37	1656.73	1437.84	86	87	78-115	1	30
Carbazole	35.36	1648.53	1481.86	1656.73	1446.07	88	85	74-118	2	30
Chrysene	179.67	1648.53	1887.55	1656.73	1588.18	104	85	72-121	17	30
Dibenz(a,h)anthracene	24.59	1648.53	1499.26	1656.73	1483.85	89	88	72-129	1	30
Dibenzofuran	19.58	1648.53	1461.43	1656.73	1439.94	87	86	79-114	1	30
Fluoranthene	554.47	1648.53	3198.92	1656.73	2199.33	160*	99	72-120	37*	30
Fluorene	51.73	1648.53	1622.73	1656.73	1525.67	95	89	75-118	6	30
Indeno(1,2,3-cd)pyrene	95.41	1648.53	1731.99	1656.73	1602.92	99	91	69-125	8	30
2-Methylnaphthalene	9.59	1648.53	1450.18	1656.73	1447.27	87	87	77-116	0	30
Naphthalene	12.98	1648.53	1506.39	1656.73	1492.98	91	89	75-113	1	30
Phenanthrene	429.78	1648.53	2934.77	1656.73	2178.81	152*	106	74-114	30	30
Pyrene	398.62	1648.53	2726.46	1656.73	1974.43	141*	95	74-112	32*	30
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 172601063701	Sample number(s): 9210977-9210978 UNSPK: 9210977									
Arsenic	5.36	13.76	20.71	11.81	15.47	112	86	75-125	29*	20
Barium	46.98	183.49	261.28	157.48	208.89	117	103	75-125	22*	20
Cadmium	N.D.	4.59	4.35	3.94	3.73	95	95	75-125	15	20
Chromium	11.19	18.35	35.59	15.75	28.72	133*	111	75-125	21*	20
Cobalt	1.78	45.87	46.1	39.37	39.37	97	95	75-125	16	20
Copper	7.21	22.94	35.54	19.69	28.06	124	106	75-125	24*	20
Lead	16.53	13.76	35.12	11.81	26.06	135*	81	75-125	30*	20
Manganese	167.04	45.87	265.59	39.37	216.17	215*	125 (2)	75-125	21*	20
Nickel	3.35	45.87	49.61	39.37	42.71	101	100	75-125	15	20
Zinc	82.36	45.87	148.94	39.37	104.01	145*	55*	75-125	36*	20
Batch number: 172601063801	Sample number(s): 9210977-9210978 UNSPK: 9210977									
Mercury	0.0374	0.159	0.224	0.167	0.209	118	103	80-120	7	20

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: EHS Support
Reported: 09/20/2017 12:08

Group Number: 1851015

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
	mg/kg	mg/kg		
Batch number: 172601063701	Sample number(s): 9210977-9210978 BKG: 9210977			
Arsenic	5.36	7.92	39* (1)	20
Barium	46.98	39.42	17	20
Cadmium	N.D.	N.D.	0 (1)	20
Chromium	11.19	26.66	82* (1)	20
Cobalt	1.78	3.39	62* (1)	20
Copper	7.21	26.02	113* (1)	20
Lead	16.53	17.3	5	20
Manganese	167.04	298.64	57*	20
Nickel	3.35	9.19	93* (1)	20
Zinc	82.36	96.67	16	20
Batch number: 172601063801	Sample number(s): 9210977-9210978 BKG: 9210977			
Mercury	0.0374	0.0653	54* (1)	20
	%	%		
Batch number: 17258820016B	Sample number(s): 9210977-9210978 BKG: P211036			
Moisture	63.99	67.08	5	5

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: SVOA 8270D (microwave)
Batch number: 17259SLA026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9210977	83	89	75	80	88	86
9210978	87	94	79	87	95	89
Blank	87	96	98	86	96	101
LCS	103	105	102	93	93	96
MS	86	88	71	80	83	81
MSD	88	90	72	82	83	81
Limits:	46-125	51-123	34-129	49-118	57-116	55-118

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Environmental Analysis Request/Chain of Custody

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For Eurofins Lancaster Laboratories Environmental use only

Acct. # 42328 Group # 185105 Sample # 9210977-78

COC # 555056

Client Information

Client: EHS Support	Acct. #:
Project Name/#: SBA shipyard site	PWSID #:
Project Manager: Scott Lindenmuth	P.O. #:
Sampler: Jacob Miller & Jay Sudduth	Quote #:
State where samples were collected: Louisiana	For Compliance: Yes ☒ No ☐

Matrix

Soil ☒ Sediment ☐ Tissue ☐ Water ☐ Ground ☐ Potable ☐ Surface ☐ NPDES ☐ Other: ____

Analysis Requested

Preservation and Filtration Codes

For Lab Use Only

FSC: ____

SCR#: 212188

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 P=H_3PO_4
F=Field Filtered O=Other

Remarks

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	PAHs	TAL metals
AoI-3-SS-1(0-1)	9/14/17	1121	X		1	X	X
AoI-4-SS-1(0-1)	9/14/17	1151	X		1	X	X

Turnaround Time (TAT) Requested (please circle)

Standard Rush 48-hr. turnaround

(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: 9/18/17

E-mail address: scott.lindenmuth@ehs-support.com

Data Package Options (circle if required)

Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only)

Type III (Reduced non-CLP) NJ DKQP TX TRRP-13

NYSDEC Category A or B MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
Chelsea West	9/12/17	15:16			
Jacob J Miller	9/14/17	1217			
			Received by	9.15.17	955

EDD Required? Yes No

If yes, format: ____

Site-Specific QC (MS/MSD/Dup)? Yes (No)

(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier: UPS ____ FedEx X Other ____

Temperature upon receipt 1.5 °C

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Sample Administration Receipt Documentation Log

Doc Log ID: 194534

Group Number(s): 1851015

Client: EHS

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	09/15/2017 9:55
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	LA		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Timothy Cubberley (6520) at 11:01 on 09/15/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	1.5	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	non-detect
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.