ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

Report Date: April 15, 2016

Project: AOI5 MHIC Soil Borings

Submittal Date: 03/29/2016
Group Number: 1645141
PO Number: AOI5 MHIC
State of Sample Origin: PA

Client Sample Description	Lancaster Labs (LL) #
AOI5-BH-16-027(0-2) Grab Soil	8308170
AOI5-BH-16-027(2-3) Grab Soil	8308171
AOI5-BH-16-026(0-2) Grab Soil	8308172
AOI5-BH-16-026(2-3) Grab Soil	8308173
AOI5-BH-16-025(0-2) Grab Soil	8308174
AOI5-BH-16-024(0-2) Grab Soil	8308175
FB-20160329 Grab Water	8308176
TB-20160329 Water	8308177
AOI5-BH-16-023(0-2) Grab Soil	8308178
AOI5-BH-16-023(2-3) Grab Soil	8308179

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

Electronic Copy To Sunoco c/o Stantec Attn: Jenny DeBoer

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: AOI5-BH-16-027(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308170
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 07:30 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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B2700

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**		**mg/kg**	
10237	Benzene	71-43-2	0.049	J	0.031	53.47
10237	sec-Butylbenzene	135-98-8	0.23	J	0.063	53.47
10237	tert-Butylbenzene	98-06-6	0.20	J	0.063	53.47
10237	Cyclohexane	110-82-7	1.5		0.063	53.47
10237	1,2-Dibromoethane	106-93-4	N.D.		0.063	53.47
10237	1,2-Dichloroethane	107-06-2	N.D.		0.063	53.47
10237	Ethylbenzene	100-41-4	N.D.		0.063	53.47
10237	n-Hexane	110-54-3	0.64		0.063	53.47
10237	Isopropylbenzene	98-82-8	0.28	J	0.063	53.47
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.031	53.47
10237	Naphthalene	91-20-3	0.091	J	0.063	53.47
10237	Toluene	108-88-3	N.D.		0.063	53.47
10237	1,2,4-Trimethylbenzene	95-63-6	0.11	J	0.063	53.47
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.063	53.47
10237	Xylene (Total)	1330-20-7	0.19	J	0.063	53.47
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**		**mg/kg**	
10728	Acenaphthene	83-32-9	0.088		0.0039	1
10728	Anthracene	120-12-7	0.24		0.0039	1
10728	Benzo(a)anthracene	56-55-3	0.25		0.0039	1
10728	Benzo(a)pyrene	50-32-8	0.17		0.0039	1
10728	Benzo(b)fluoranthene	205-99-2	0.13		0.0039	1
10728	Benzo(g,h,i)perylene	191-24-2	0.24		0.0039	1
10728	Benzo(k)fluoranthene	207-08-9	0.041		0.0039	1
10728	1,1'-Biphenyl	92-52-4	0.11		0.020	1
10728	Di-n-butylphthalate	84-74-2	N.D.		0.078	1
10728	Chrysene	218-01-9	0.40		0.0039	1
10728	Dibenz(a,h)anthracene	53-70-3	0.041		0.0039	1
10728	Diethylphthalate	84-66-2	N.D.		0.078	1
10728	2,4-Dimethylphenol	105-67-9	N.D.		0.020	1
10728	2,4-Dinitrophenol	51-28-5	N.D.		0.35	1
10728	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		0.078	1
10728	Fluoranthene	206-44-0	0.29		0.0039	1
10728	Fluorene	86-73-7	0.23		0.0039	1
10728	Indeno(1,2,3-cd)pyrene	193-39-5	0.084		0.0039	1
10728	2-Methylnaphthalene	91-57-6	1.1		0.0039	1
10728	2-Methylphenol	95-48-7	N.D.		0.020	1
10728	4-Methylphenol	106-44-5	N.D.		0.020	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10728	4-Nitrophenol	100-02-7	N.D.		0.20	1
10728	Phenanthrene	85-01-8	1.4		0.0039	1
10728	Phenol	108-95-2	N.D.		0.020	1
10728	Pyrene	129-00-0	0.80		0.0039	1
10728	Pyridine	110-86-1	N.D.		0.078	1
10728	Quinoline	91-22-5	N.D.		0.039	1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	7.65		0.542	1
06946	Barium	7440-39-3	66.1		0.110	1

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Analysis Report

Sample Description: AOI5-BH-16-027(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308170
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 07:30 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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Suite 140
West Chester PA 19380

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CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	
06949	Cadmium	7440-43-9	N.D.		0.0450	1
06951	Chromium	7440-47-3	20.7		0.156	1
06952	Cobalt	7440-48-4	8.64		0.0744	1
06955	Lead	7439-92-1	36.8		0.377	1
06961	Nickel	7440-02-0	16.4		0.211	1
06936	Selenium	7782-49-2	1.16	J	0.772	1
06966	Silver	7440-22-4	1.90		0.165	1
06971	Vanadium	7440-62-2	30.5		0.211	1
06972	Zinc	7440-66-6	83.4		0.708	1
		SW-846 7471A	**mg/kg**		**mg/kg**	
00159	Mercury	7439-97-6	0.615		0.0116	1
Wet Chemistry		**SM 2540 G-1997**	**%**		**%**	
00111	Moisture	n.a.	15.0		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.

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Evergreen Comprehensive VOCs	SW-846 8260B	1	R160971AA	04/06/2016 13:57	Anita M Dale	53.47
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201609040616	03/29/2016 07:30	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201609040616	03/29/2016 07:30	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201609040616	03/29/2016 07:30	Client Supplied	1
10728	Skinner 8270 (microwave)	SW-846 8270C	1	16093SLH026	04/08/2016 02:59	Catherine E Bachman	1
10812	BNA Soil Microwave Skinner	SW-846 3546	1	16093SLH026	04/05/2016 09:00	Michelle A Newswanger	1
06935	Arsenic	SW-846 6010B	1	160955708004	04/07/2016 03:23	Matthew Machtinger	1
06946	Barium	SW-846 6010B	1	160955708004	04/07/2016 03:23	Matthew Machtinger	1
06949	Cadmium	SW-846 6010B	1	160955708004	04/07/2016 22:39	Elaine F Stoltzfus	1

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Analysis Report

Sample Description: AOI5-BH-16-027(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308170
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 07:30 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010B	1	160955708004	04/07/2016 03:23	Matthew Machtinger	1
06952	Cobalt	SW-846 6010B	1	160955708004	04/07/2016 03:23	Matthew Machtinger	1
06955	Lead	SW-846 6010B	1	160955708004	04/07/2016 03:23	Matthew Machtinger	1
06961	Nickel	SW-846 6010B	1	160955708004	04/07/2016 03:23	Matthew Machtinger	1
06936	Selenium	SW-846 6010B	1	160955708004	04/07/2016 22:39	Elaine F Stoltzfus	1
06966	Silver	SW-846 6010B	1	160955708004	04/07/2016 03:23	Matthew Machtinger	1
06971	Vanadium	SW-846 6010B	1	160955708004	04/07/2016 03:23	Matthew Machtinger	1
06972	Zinc	SW-846 6010B	1	160955708004	04/07/2016 03:23	Matthew Machtinger	1
00159	Mercury	SW-846 7471A	1	160955711002	04/05/2016 11:16	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	160955708004	04/05/2016 06:50	Lisa J Cooke	1
05711	Hg-SW, 7471A - U3	SW-846 7471A modified	1	160955711002	04/05/2016 10:17	Lisa J Cooke	1
00111	Moisture	SM 2540 G-1997	1	16092820008A	04/02/2016 21:35	Scott W Freisher	1

Sample Description: AOI5-BH-16-027(2-3) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308171
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 07:45 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**		**mg/kg**	
10237	Benzene	71-43-2	N.D.		0.039	63.92
10237	sec-Butylbenzene	135-98-8	0.14	J	0.078	63.92
10237	tert-Butylbenzene	98-06-6	0.13	J	0.078	63.92
10237	Cyclohexane	110-82-7	1.7		0.078	63.92
10237	1,2-Dibromoethane	106-93-4	N.D.		0.078	63.92
10237	1,2-Dichloroethane	107-06-2	N.D.		0.078	63.92
10237	Ethylbenzene	100-41-4	N.D.		0.078	63.92
10237	n-Hexane	110-54-3	0.84		0.078	63.92
10237	Isopropylbenzene	98-82-8	0.20	J	0.078	63.92
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.039	63.92
10237	Naphthalene	91-20-3	0.17	J	0.078	63.92
10237	Toluene	108-88-3	N.D.		0.078	63.92
10237	1,2,4-Trimethylbenzene	95-63-6	0.12	J	0.078	63.92
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.078	63.92
10237	Xylene (Total)	1330-20-7	0.35	J	0.078	63.92
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**		**mg/kg**	
10728	Acenaphthene	83-32-9	1.0	J	0.20	10
10728	Anthracene	120-12-7	2.6		0.20	10
10728	Benzo(a)anthracene	56-55-3	4.3		0.20	10
10728	Benzo(a)pyrene	50-32-8	4.0		0.20	10
10728	Benzo(b)fluoranthene	205-99-2	3.5		0.20	10
10728	Benzo(g,h,i)perylene	191-24-2	6.2		0.20	10
10728	Benzo(k)fluoranthene	207-08-9	0.93	J	0.20	10
10728	1,1'-Biphenyl	92-52-4	2.3		1.0	10
10728	Di-n-butylphthalate	84-74-2	N.D.		4.1	10
10728	Chrysene	218-01-9	5.2		0.20	10
10728	Dibenz(a,h)anthracene	53-70-3	0.82	J	0.20	10
10728	Diethylphthalate	84-66-2	N.D.		4.1	10
10728	2,4-Dimethylphenol	105-67-9	N.D.		1.0	10
10728	2,4-Dinitrophenol	51-28-5	N.D.		18	10
10728	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		4.1	10
10728	Fluoranthene	206-44-0	5.5		0.20	10
10728	Fluorene	86-73-7	1.9		0.20	10
10728	Indeno(1,2,3-cd)pyrene	193-39-5	1.9		0.20	10
10728	2-Methylnaphthalene	91-57-6	22		0.20	10
10728	2-Methylphenol	95-48-7	N.D.		1.0	10
10728	4-Methylphenol	106-44-5	N.D.		1.0	10
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10728	4-Nitrophenol	100-02-7	N.D.		10	10
10728	Phenanthrene	85-01-8	18		0.20	10
10728	Phenol	108-95-2	N.D.		1.0	10
10728	Pyrene	129-00-0	16		0.20	10
10728	Pyridine	110-86-1	N.D.		4.1	10
10728	Quinoline	91-22-5	N.D.		2.0	10
	Reporting limits were raised due to interference from the sample matrix.					
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	5.84		0.613	1

Sample Description: AOI5-BH-16-027(2-3) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308171
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 07:45 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010B**	**mg/kg**	**mg/kg**	
06946	Barium	7440-39-3	66.1	0.125	1
06949	Cadmium	7440-43-9	N.D.	0.0509	1
06951	Chromium	7440-47-3	15.1	0.177	1
06952	Cobalt	7440-48-4	4.31	0.0841	1
06955	Lead	7439-92-1	112	0.426	1
06961	Nickel	7440-02-0	10.0	0.239	1
06936	Selenium	7782-49-2	N.D.	0.872	1
06966	Silver	7440-22-4	1.37	0.187	1
06971	Vanadium	7440-62-2	19.4	0.239	1
06972	Zinc	7440-66-6	34.1	0.800	1
		SW-846 7471A	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.177	0.0117	1
Wet Chemistry		**SM 2540 G-1997**	**%**	**%**	
00111	Moisture	n.a.	18.4	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.

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Evergreen Comprehensive VOCs	SW-846 8260B	1	R160971AA	04/06/2016 14:20	Anita M Dale	63.92
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201609040616	03/29/2016 07:45	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201609040616	03/29/2016 07:45	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201609040616	03/29/2016 07:45	Client Supplied	1
10728	Skinner 8270 (microwave)	SW-846 8270C	1	16093SLH026	04/08/2016 03:25	Catherine E Bachman	10
10812	BNA Soil Microwave Skinner	SW-846 3546	1	16093SLH026	04/05/2016 09:00	Michelle A Newswanger	1
06935	Arsenic	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1
06946	Barium	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1
06949	Cadmium	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1

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Analysis Report

Sample Description: AOI5-BH-16-027(2-3) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308171
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 07:45 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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Suite 140
West Chester PA 19380

B2702

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1
06952	Cobalt	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1
06955	Lead	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1
06961	Nickel	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1
06936	Selenium	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1
06966	Silver	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1
06971	Vanadium	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1
06972	Zinc	SW-846 6010B	1	160955708004	04/07/2016 04:37	Matthew Machtinger	1
00159	Mercury	SW-846 7471A	1	160955711002	04/05/2016 11:57	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	160955708004	04/05/2016 06:50	Lisa J Cooke	1
05711	Hg-SW, 7471A - U3	SW-846 7471A modified	1	160955711002	04/05/2016 10:17	Lisa J Cooke	1
00111	Moisture	SM 2540 G-1997	1	16092820008A	04/02/2016 21:35	Scott W Freisher	1

Sample Description: AOI5-BH-16-026(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308172
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 07:55 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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1060 Andrew Drive
Suite 140
West Chester PA 19380

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CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**		**mg/kg**	
10237	Benzene	71-43-2	0.067	J	0.032	56.55
10237	sec-Butylbenzene	135-98-8	0.43		0.064	56.55
10237	tert-Butylbenzene	98-06-6	0.13	J	0.064	56.55
10237	Cyclohexane	110-82-7	0.39		0.064	56.55
10237	1,2-Dibromoethane	106-93-4	N.D.		0.064	56.55
10237	1,2-Dichloroethane	107-06-2	N.D.		0.064	56.55
10237	Ethylbenzene	100-41-4	N.D.		0.064	56.55
10237	n-Hexane	110-54-3	0.084	J	0.064	56.55
10237	Isopropylbenzene	98-82-8	0.51		0.064	56.55
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.032	56.55
10237	Naphthalene	91-20-3	0.22	J	0.064	56.55
10237	Toluene	108-88-3	N.D.		0.064	56.55
10237	1,2,4-Trimethylbenzene	95-63-6	0.12	J	0.064	56.55
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.064	56.55
10237	Xylene (Total)	1330-20-7	0.15	J	0.064	56.55
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**		**mg/kg**	
10728	Acenaphthene	83-32-9	1.0		0.018	1
10728	Anthracene	120-12-7	1.2		0.018	1
10728	Benzo(a)anthracene	56-55-3	1.1		0.018	1
10728	Benzo(a)pyrene	50-32-8	1.3		0.018	1
10728	Benzo(b)fluoranthene	205-99-2	0.69		0.018	1
10728	Benzo(g,h,i)perylene	191-24-2	1.7		0.018	1
10728	Benzo(k)fluoranthene	207-08-9	0.19		0.018	1
10728	1,1'-Biphenyl	92-52-4	0.75		0.093	1
10728	Di-n-butylphthalate	84-74-2	N.D.		0.37	1
10728	Chrysene	218-01-9	1.7		0.018	1
10728	Dibenz(a,h)anthracene	53-70-3	0.31		0.018	1
10728	Diethylphthalate	84-66-2	N.D.		0.37	1
10728	2,4-Dimethylphenol	105-67-9	N.D.		0.093	1
10728	2,4-Dinitrophenol	51-28-5	N.D.		1.7	1
10728	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		0.37	1
10728	Fluoranthene	206-44-0	1.4		0.018	1
10728	Fluorene	86-73-7	1.4		0.018	1
10728	Indeno(1,2,3-cd)pyrene	193-39-5	0.60		0.018	1
10728	2-Methylnaphthalene	91-57-6	7.2		0.018	1
10728	2-Methylphenol	95-48-7	N.D.		0.093	1
10728	4-Methylphenol	106-44-5	N.D.		0.093	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10728	4-Nitrophenol	100-02-7	N.D.		0.93	1
10728	Phenanthrene	85-01-8	6.9		0.018	1
10728	Phenol	108-95-2	N.D.		0.093	1
10728	Pyrene	129-00-0	5.8		0.018	1
10728	Pyridine	110-86-1	N.D.		0.37	1
10728	Quinoline	91-22-5	N.D.		0.19	1
	Reporting limits were raised due to interference from the sample matrix.					
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	6.82		0.446	1

Sample Description: AOI5-BH-16-026(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308172
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 07:55 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B2600

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals		**SW-846 6010B**	**mg/kg**	**mg/kg**	
06946	Barium	7440-39-3	191	0.0908	1
06949	Cadmium	7440-43-9	N.D.	0.0371	1
06951	Chromium	7440-47-3	35.9	0.129	1
06952	Cobalt	7440-48-4	10.1	0.0613	1
06955	Lead	7439-92-1	110	0.310	1
06961	Nickel	7440-02-0	26.9	0.174	1
06936	Selenium	7782-49-2	1.90	0.636	1
06966	Silver	7440-22-4	1.39	0.136	1
06971	Vanadium	7440-62-2	41.9	0.174	1
06972	Zinc	7440-66-6	246	0.583	1
		SW-846 7471A	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	2.11	0.0564	5
Wet Chemistry		**SM 2540 G-1997**	**%**	**%**	
00111	Moisture	n.a.	11.3	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.

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Evergreen Comprehensive VOCs	SW-846 8260B	1	R160971AA	04/06/2016 14:45	Anita M Dale	56.55
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201609040616	03/29/2016 07:55	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201609040616	03/29/2016 07:55	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201609040616	03/29/2016 07:55	Client Supplied	1
10728	Skinner 8270 (microwave)	SW-846 8270C	1	16093SLH026	04/08/2016 03:50	Catherine E Bachman	1
10812	BNA Soil Microwave Skinner	SW-846 3546	1	16093SLH026	04/05/2016 09:00	Michelle A Newswanger	1
06935	Arsenic	SW-846 6010B	1	160955708004	04/07/2016 04:41	Matthew Machtinger	1
06946	Barium	SW-846 6010B	1	160955708004	04/07/2016 04:41	Matthew Machtinger	1
06949	Cadmium	SW-846 6010B	1	160955708004	04/08/2016 02:18	Elaine F Stoltzfus	1

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Analysis Report

Sample Description: AOI5-BH-16-026(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308172
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 07:55 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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1060 Andrew Drive
Suite 140
West Chester PA 19380

B2600

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010B	1	160955708004	04/07/2016 04:41	Matthew Machtinger	1
06952	Cobalt	SW-846 6010B	1	160955708004	04/07/2016 04:41	Matthew Machtinger	1
06955	Lead	SW-846 6010B	1	160955708004	04/07/2016 04:41	Matthew Machtinger	1
06961	Nickel	SW-846 6010B	1	160955708004	04/07/2016 04:41	Matthew Machtinger	1
06936	Selenium	SW-846 6010B	1	160955708004	04/08/2016 02:18	Elaine F Stoltzfus	1
06966	Silver	SW-846 6010B	1	160955708004	04/07/2016 04:41	Matthew Machtinger	1
06971	Vanadium	SW-846 6010B	1	160955708004	04/07/2016 04:41	Matthew Machtinger	1
06972	Zinc	SW-846 6010B	1	160955708004	04/07/2016 04:41	Matthew Machtinger	1
00159	Mercury	SW-846 7471A	1	160955711002	04/05/2016 12:21	Damary Valentin	5
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	160955708004	04/05/2016 06:50	Lisa J Cooke	1
05711	Hg-SW, 7471A - U3	SW-846 7471A modified	1	160955711002	04/05/2016 10:17	Lisa J Cooke	1
00111	Moisture	SM 2540 G-1997	1	16092820008A	04/02/2016 21:35	Scott W Freisher	1

Sample Description: AOI5-BH-16-026(2-3) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308173
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 08:10 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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1060 Andrew Drive
Suite 140
West Chester PA 19380

B2602

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**		**mg/kg**	
10237	Benzene	71-43-2	N.D.		0.034	57.26
10237	sec-Butylbenzene	135-98-8	0.14	J	0.068	57.26
10237	tert-Butylbenzene	98-06-6	N.D.		0.068	57.26
10237	Cyclohexane	110-82-7	0.59		0.068	57.26
10237	1,2-Dibromoethane	106-93-4	N.D.		0.068	57.26
10237	1,2-Dichloroethane	107-06-2	N.D.		0.068	57.26
10237	Ethylbenzene	100-41-4	N.D.		0.068	57.26
10237	n-Hexane	110-54-3	N.D.		0.068	57.26
10237	Isopropylbenzene	98-82-8	0.18	J	0.068	57.26
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.036	J	0.034	57.26
10237	Naphthalene	91-20-3	0.23	J	0.068	57.26
10237	Toluene	108-88-3	N.D.		0.068	57.26
10237	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.068	57.26
10237	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.068	57.26
10237	Xylene (Total)	1330-20-7	0.090	J	0.068	57.26
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**		**mg/kg**	
10728	Acenaphthene	83-32-9	1.3		0.20	10
10728	Anthracene	120-12-7	1.7		0.20	10
10728	Benzo(a)anthracene	56-55-3	2.1		0.20	10
10728	Benzo(a)pyrene	50-32-8	2.5		0.20	10
10728	Benzo(b)fluoranthene	205-99-2	1.9		0.20	10
10728	Benzo(g,h,i)perylene	191-24-2	2.3		0.20	10
10728	Benzo(k)fluoranthene	207-08-9	0.38	J	0.20	10
10728	1,1'-Biphenyl	92-52-4	N.D.		0.98	10
10728	Di-n-butylphthalate	84-74-2	N.D.		3.9	10
10728	Chrysene	218-01-9	4.1		0.20	10
10728	Dibenz(a,h)anthracene	53-70-3	1.2		0.20	10
10728	Diethylphthalate	84-66-2	N.D.		3.9	10
10728	2,4-Dimethylphenol	105-67-9	N.D.		0.98	10
10728	2,4-Dinitrophenol	51-28-5	N.D.		18	10
10728	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		3.9	10
10728	Fluoranthene	206-44-0	1.8		0.20	10
10728	Fluorene	86-73-7	2.2		0.20	10
10728	Indeno(1,2,3-cd)pyrene	193-39-5	1.3		0.20	10
10728	2-Methylnaphthalene	91-57-6	13		0.20	10
10728	2-Methylphenol	95-48-7	N.D.		0.98	10
10728	4-Methylphenol	106-44-5	N.D.		0.98	10
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10728	4-Nitrophenol	100-02-7	N.D.		9.8	10
10728	Phenanthrene	85-01-8	10		0.20	10
10728	Phenol	108-95-2	N.D.		0.98	10
10728	Pyrene	129-00-0	7.1		0.20	10
10728	Pyridine	110-86-1	N.D.		3.9	10
10728	Quinoline	91-22-5	N.D.		2.0	10
	Reporting limits were raised due to interference from the sample matrix.					
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	11.8		0.510	1

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Analysis Report

Sample Description: AOI5-BH-16-026(2-3) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308173
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 08:10 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B2602

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06946	Barium	7440-39-3	273	0.104	1
06949	Cadmium	7440-43-9	1.09	0.0423	1
06951	Chromium	7440-47-3	34.1	0.147	1
06952	Cobalt	7440-48-4	6.80	0.0700	1
06955	Lead	7439-92-1	144	0.354	1
06961	Nickel	7440-02-0	23.4	0.199	1
06936	Selenium	7782-49-2	N.D.	3.63	5
	Reporting limits were raised due to interference from the sample matrix.				
06966	Silver	7440-22-4	1.97	0.155	1
06971	Vanadium	7440-62-2	29.2	0.199	1
06972	Zinc	7440-66-6	290	0.665	1
	SW-846 7471A		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	1.17	0.0291	2.5
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	15.5	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.				

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Evergreen Comprehensive VOCs	SW-846 8260B	1	R160971AA	04/06/2016 15:08	Anita M Dale	57.26
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201609040616	03/29/2016 08:10	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201609040616	03/29/2016 08:10	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201609040616	03/29/2016 08:10	Client Supplied	1
10728	Skinner 8270 (microwave)	SW-846 8270C	1	16093SLH026	04/08/2016 04:16	Catherine E Bachman	10
10812	BNA Soil Microwave Skinner	SW-846 3546	1	16093SLH026	04/05/2016 09:00	Michelle A Newswanger	1
06935	Arsenic	SW-846 6010B	1	160955708004	04/07/2016 04:44	Matthew Machtinger	1
06946	Barium	SW-846 6010B	1	160955708004	04/07/2016 04:44	Matthew Machtinger	1

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Analysis Report

Sample Description: AOI5-BH-16-026(2-3) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308173
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 08:10 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B2602

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06949	Cadmium	SW-846 6010B	1	160955708004	04/07/2016 04:44	Matthew Machtinger	1
06951	Chromium	SW-846 6010B	1	160955708004	04/07/2016 04:44	Matthew Machtinger	1
06952	Cobalt	SW-846 6010B	1	160955708004	04/07/2016 04:44	Matthew Machtinger	1
06955	Lead	SW-846 6010B	1	160955708004	04/07/2016 04:44	Matthew Machtinger	1
06961	Nickel	SW-846 6010B	1	160955708004	04/07/2016 04:44	Matthew Machtinger	1
06936	Selenium	SW-846 6010B	1	160955708004	04/08/2016 02:25	Elaine F Stoltzfus	5
06966	Silver	SW-846 6010B	1	160955708004	04/07/2016 04:44	Matthew Machtinger	1
06971	Vanadium	SW-846 6010B	1	160955708004	04/07/2016 04:44	Matthew Machtinger	1
06972	Zinc	SW-846 6010B	1	160955708004	04/07/2016 04:44	Matthew Machtinger	1
00159	Mercury	SW-846 7471A	1	160955711002	04/05/2016 12:23	Damary Valentin	2.5
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	160955708004	04/05/2016 06:50	Lisa J Cooke	1
05711	Hg-SW, 7471A - U3	SW-846 7471A modified	1	160955711002	04/05/2016 10:17	Lisa J Cooke	1
00111	Moisture	SM 2540 G-1997	1	16092820008A	04/02/2016 21:35	Scott W Freisher	1

Sample Description: AOI5-BH-16-025(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308174
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 08:25 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B2500

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	1.5	0.072	117.47
10237	sec-Butylbenzene	135-98-8	5.6	0.14	117.47
10237	tert-Butylbenzene	98-06-6	1.2	0.14	117.47
10237	Cyclohexane	110-82-7	2.4	0.14	117.47
10237	1,2-Dibromoethane	106-93-4	N.D.	0.14	117.47
10237	1,2-Dichloroethane	107-06-2	N.D.	0.14	117.47
10237	Ethylbenzene	100-41-4	3.8	0.14	117.47
10237	n-Hexane	110-54-3	2.9	0.14	117.47
10237	Isopropylbenzene	98-82-8	5.6	0.14	117.47
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.072	117.47
10237	Naphthalene	91-20-3	3.6	0.14	117.47
10237	Toluene	108-88-3	1.4	0.14	117.47
10237	1,2,4-Trimethylbenzene	95-63-6	1.8	0.14	117.47
10237	1,3,5-Trimethylbenzene	108-67-8	0.36 J	0.14	117.47
10237	Xylene (Total)	1330-20-7	10	0.14	117.47
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	
10728	Acenaphthene	83-32-9	5.8	0.020	1
10728	Anthracene	120-12-7	2.8	0.020	1
10728	Benzo(a)anthracene	56-55-3	1.2	0.020	1
10728	Benzo(a)pyrene	50-32-8	0.73	0.020	1
10728	Benzo(b)fluoranthene	205-99-2	0.81	0.020	1
10728	Benzo(g,h,i)perylene	191-24-2	1.2	0.020	1
10728	Benzo(k)fluoranthene	207-08-9	0.19	0.020	1
10728	1,1'-Biphenyl	92-52-4	0.87	0.10	1
10728	Di-n-butylphthalate	84-74-2	N.D.	0.40	1
10728	Chrysene	218-01-9	1.9	0.020	1
10728	Dibenz(a,h)anthracene	53-70-3	0.28	0.020	1
10728	Diethylphthalate	84-66-2	N.D.	0.40	1
10728	2,4-Dimethylphenol	105-67-9	N.D.	0.10	1
10728	2,4-Dinitrophenol	51-28-5	N.D.	1.8	1
10728	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	0.40	1
10728	Fluoranthene	206-44-0	2.0	0.020	1
10728	Fluorene	86-73-7	9.4	0.020	1
10728	Indeno(1,2,3-cd)pyrene	193-39-5	0.50	0.020	1
10728	2-Methylnaphthalene	91-57-6	69	0.20	10
10728	2-Methylphenol	95-48-7	N.D.	0.10	1
10728	4-Methylphenol	106-44-5	N.D.	0.10	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
10728	4-Nitrophenol	100-02-7	N.D.	1.0	1
10728	Phenanthrene	85-01-8	19	0.020	1
10728	Phenol	108-95-2	N.D.	0.10	1
10728	Pyrene	129-00-0	6.2	0.020	1
10728	Pyridine	110-86-1	N.D.	0.40	1
10728	Quinoline	91-22-5	N.D.	0.20	1
	Reporting limits were raised due to interference from the sample matrix.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06935	Arsenic	7440-38-2	9.42	0.561	1

Sample Description: AOI5-BH-16-025(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308174
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 08:25 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B2500

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06946	Barium	7440-39-3	97.5	0.114	1
06949	Cadmium	7440-43-9	0.717	0.0466	1
06951	Chromium	7440-47-3	18.3	0.162	1
06952	Cobalt	7440-48-4	10.7	0.0771	1
06955	Lead	7439-92-1	99.6	0.390	1
06961	Nickel	7440-02-0	19.0	0.219	1
06936	Selenium	7782-49-2	2.36	0.799	1
06966	Silver	7440-22-4	1.75	0.171	1
06971	Vanadium	7440-62-2	30.2	0.219	1
06972	Zinc	7440-66-6	162	0.733	1
	SW-846 7471A		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.502	0.0116	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	17.9	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.

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Evergreen Comprehensive VOCs	SW-846 8260B	1	R160991AA	04/08/2016 10:44	Anita M Dale	117.47
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201609040616	03/29/2016 08:25	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201609040616	03/29/2016 08:25	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201609040616	03/29/2016 08:25	Client Supplied	1
10728	Skinner 8270 (microwave)	SW-846 8270C	1	16093SLH026	04/08/2016 04:41	Catherine E Bachman	1
10728	Skinner 8270 (microwave)	SW-846 8270C	1	16093SLH026	04/08/2016 18:46	Catherine E Bachman	10
10812	BNA Soil Microwave Skinner	SW-846 3546	1	16093SLH026	04/05/2016 09:00	Michelle A Newswanger	1
06935	Arsenic	SW-846 6010B	1	160955708004	04/07/2016 04:48	Matthew Machtinger	1
06946	Barium	SW-846 6010B	1	160955708004	04/07/2016 04:48	Matthew Machtinger	1

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Analysis Report

Sample Description: AOI5-BH-16-025(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308174
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 08:25 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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1060 Andrew Drive
Suite 140
West Chester PA 19380

B2500

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06949	Cadmium	SW-846 6010B	1	160955708004	04/08/2016 02:28	Elaine F Stoltzfus	1
06951	Chromium	SW-846 6010B	1	160955708004	04/07/2016 04:48	Matthew Machtinger	1
06952	Cobalt	SW-846 6010B	1	160955708004	04/07/2016 04:48	Matthew Machtinger	1
06955	Lead	SW-846 6010B	1	160955708004	04/07/2016 04:48	Matthew Machtinger	1
06961	Nickel	SW-846 6010B	1	160955708004	04/07/2016 04:48	Matthew Machtinger	1
06936	Selenium	SW-846 6010B	1	160955708004	04/08/2016 02:28	Elaine F Stoltzfus	1
06966	Silver	SW-846 6010B	1	160955708004	04/07/2016 04:48	Matthew Machtinger	1
06971	Vanadium	SW-846 6010B	1	160955708004	04/07/2016 04:48	Matthew Machtinger	1
06972	Zinc	SW-846 6010B	1	160955708004	04/07/2016 04:48	Matthew Machtinger	1
00159	Mercury	SW-846 7471A	1	160955711002	04/05/2016 12:07	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	160955708004	04/05/2016 06:50	Lisa J Cooke	1
05711	Hg-SW, 7471A - U3	SW-846 7471A modified	1	160955711002	04/05/2016 10:17	Lisa J Cooke	1
00111	Moisture	SM 2540 G-1997	1	16092820008A	04/02/2016 21:35	Scott W Freisher	1

Sample Description: AOI5-BH-16-024(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308175
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 08:40 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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Suite 140
West Chester PA 19380

B2400

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**		**mg/kg**	
10237	Benzene	71-43-2	0.53	J	0.091	140.26
10237	sec-Butylbenzene	135-98-8	3.4		0.18	140.26
10237	tert-Butylbenzene	98-06-6	0.73	J	0.18	140.26
10237	Cyclohexane	110-82-7	0.98		0.18	140.26
10237	1,2-Dibromoethane	106-93-4	N.D.		0.18	140.26
10237	1,2-Dichloroethane	107-06-2	N.D.		0.18	140.26
10237	Ethylbenzene	100-41-4	0.82	J	0.18	140.26
10237	n-Hexane	110-54-3	0.64	J	0.18	140.26
10237	Isopropylbenzene	98-82-8	4.3		0.18	140.26
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.091	140.26
10237	Naphthalene	91-20-3	0.81	J	0.18	140.26
10237	Toluene	108-88-3	0.94		0.18	140.26
10237	1,2,4-Trimethylbenzene	95-63-6	0.71	J	0.18	140.26
10237	1,3,5-Trimethylbenzene	108-67-8	0.23	J	0.18	140.26
10237	Xylene (Total)	1330-20-7	2.4		0.18	140.26
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**		**mg/kg**	
10728	Acenaphthene	83-32-9	10		0.11	5
10728	Anthracene	120-12-7	4.6		0.11	5
10728	Benzo(a)anthracene	56-55-3	1.6		0.11	5
10728	Benzo(a)pyrene	50-32-8	0.91		0.11	5
10728	Benzo(b)fluoranthene	205-99-2	1.4		0.11	5
10728	Benzo(g,h,i)perylene	191-24-2	0.79		0.11	5
10728	Benzo(k)fluoranthene	207-08-9	0.40	J	0.11	5
10728	1,1'-Biphenyl	92-52-4	1.0	J	0.54	5
10728	Di-n-butylphthalate	84-74-2	N.D.		2.2	5
10728	Chrysene	218-01-9	2.6		0.11	5
10728	Dibenz(a,h)anthracene	53-70-3	0.29	J	0.11	5
10728	Diethylphthalate	84-66-2	N.D.		2.2	5
10728	2,4-Dimethylphenol	105-67-9	N.D.		0.54	5
10728	2,4-Dinitrophenol	51-28-5	N.D.		9.7	5
10728	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		2.2	5
10728	Fluoranthene	206-44-0	7.0		0.11	5
10728	Fluorene	86-73-7	12		0.11	5
10728	Indeno(1,2,3-cd)pyrene	193-39-5	0.40	J	0.11	5
10728	2-Methylnaphthalene	91-57-6	13		0.11	5
10728	2-Methylphenol	95-48-7	N.D.		0.54	5
10728	4-Methylphenol	106-44-5	N.D.		0.54	5
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10728	4-Nitrophenol	100-02-7	N.D.		5.4	5
10728	Phenanthrene	85-01-8	24		0.11	5
10728	Phenol	108-95-2	N.D.		0.54	5
10728	Pyrene	129-00-0	8.7		0.11	5
10728	Pyridine	110-86-1	N.D.		2.2	5
10728	Quinoline	91-22-5	N.D.		1.1	5
Reporting limits were raised due to interference from the sample matrix.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	1.62	J	0.605	1

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Analysis Report

Sample Description: AOI5-BH-16-024(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308175
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 08:40 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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Suite 140
West Chester PA 19380

B2400

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06946	Barium	7440-39-3	456	0.123	1
06949	Cadmium	7440-43-9	1.29	0.0502	1
06951	Chromium	7440-47-3	16.3	0.174	1
06952	Cobalt	7440-48-4	4.34	0.0830	1
06955	Lead	7439-92-1	61.5	0.420	1
06961	Nickel	7440-02-0	14.4	0.236	1
06936	Selenium	7782-49-2	N.D.	4.31	5
	Reporting limits were raised due to interference from the sample matrix.				
06966	Silver	7440-22-4	1.75	0.185	1
06971	Vanadium	7440-62-2	86.5	0.236	1
06972	Zinc	7440-66-6	243	0.789	1
	SW-846 7471A		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.391	0.0130	1
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	23.2	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.				

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Evergreen Comprehensive VOCs	SW-846 8260B	1	R160991AA	04/08/2016 11:08	Anita M Dale	140.26
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201609040616	03/29/2016 08:40	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201609040616	03/29/2016 08:40	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201609040616	03/29/2016 08:40	Client Supplied	1
10728	Skinner 8270 (microwave)	SW-846 8270C	1	16093SLH026	04/08/2016 05:07	Catherine E Bachman	5
10812	BNA Soil Microwave Skinner	SW-846 3546	1	16093SLH026	04/05/2016 09:00	Michelle A Newswanger	1
06935	Arsenic	SW-846 6010B	1	160955708004	04/07/2016 04:51	Matthew Machtinger	1
06946	Barium	SW-846 6010B	1	160955708004	04/07/2016 04:51	Matthew Machtinger	1

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Analysis Report

Sample Description: AOI5-BH-16-024(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308175
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 08:40 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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B2400

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06949	Cadmium	SW-846 6010B	1	160955708004	04/07/2016 04:51	Matthew Machtinger	1
06951	Chromium	SW-846 6010B	1	160955708004	04/07/2016 04:51	Matthew Machtinger	1
06952	Cobalt	SW-846 6010B	1	160955708004	04/07/2016 04:51	Matthew Machtinger	1
06955	Lead	SW-846 6010B	1	160955708004	04/07/2016 04:51	Matthew Machtinger	1
06961	Nickel	SW-846 6010B	1	160955708004	04/07/2016 04:51	Matthew Machtinger	1
06936	Selenium	SW-846 6010B	1	160955708004	04/08/2016 02:35	Elaine F Stoltzfus	5
06966	Silver	SW-846 6010B	1	160955708004	04/07/2016 04:51	Matthew Machtinger	1
06971	Vanadium	SW-846 6010B	1	160955708004	04/07/2016 04:51	Matthew Machtinger	1
06972	Zinc	SW-846 6010B	1	160955708004	04/07/2016 04:51	Matthew Machtinger	1
00159	Mercury	SW-846 7471A	1	160955711002	04/05/2016 12:09	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	160955708004	04/05/2016 06:50	Lisa J Cooke	1
05711	Hg-SW, 7471A - U3	SW-846 7471A modified	1	160955711002	04/05/2016 10:17	Lisa J Cooke	1
00111	Moisture	SM 2540 G-1997	1	16092820008A	04/02/2016 21:35	Scott W Freisher	1

Sample Description: FB-20160329 Grab Water
AOI5 MHIC Soil Borings

LL Sample # WW 8308176
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 09:00 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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Suite 140
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B24FB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Cyclohexane	110-82-7	N.D.	2	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	n-Hexane	110-54-3	N.D.	2	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
01476	Acenaphthene	83-32-9	N.D.	0.1	1
01476	Anthracene	120-12-7	N.D.	0.1	1
01476	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
01476	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
01476	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
01476	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
01476	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
01476	1,1'-Biphenyl	92-52-4	N.D.	0.5	1
01476	Di-n-butylphthalate	84-74-2	N.D.	2	1
01476	Chrysene	218-01-9	N.D.	0.1	1
01476	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
01476	Diethylphthalate	84-66-2	N.D.	2	1
01476	2,4-Dimethylphenol	105-67-9	N.D.	0.5	1
01476	2,4-Dinitrophenol	51-28-5	N.D.	10	1
01476	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	2	1
01476	Fluoranthene	206-44-0	N.D.	0.1	1
01476	Fluorene	86-73-7	N.D.	0.1	1
01476	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
01476	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
01476	2-Methylphenol	95-48-7	N.D.	0.5	1
01476	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
01476	Naphthalene	91-20-3	N.D.	0.1	1
01476	4-Nitrophenol	100-02-7	N.D.	10	1
01476	Phenanthrene	85-01-8	N.D.	0.1	1
01476	Phenol	108-95-2	N.D.	0.5	1
01476	Pyrene	129-00-0	N.D.	0.1	1
01476	Pyridine	110-86-1	N.D.	2	1
01476	Quinoline	91-22-5	N.D.	1	1
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0078	1

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Analysis Report

Sample Description: FB-20160329 Grab Water
AOI5 MHIC Soil Borings

LL Sample # WW 8308176
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 09:00 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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1060 Andrew Drive
Suite 140
West Chester PA 19380

B24FB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	
07046	Barium	7440-39-3	N.D.	0.0012	1
07049	Cadmium	7440-43-9	N.D.	0.00064	1
07051	Chromium	7440-47-3	N.D.	0.0020	1
07036	Selenium	7782-49-2	N.D.	0.0082	1
07066	Silver	7440-22-4	N.D.	0.0018	1
	SW-846 6010B		**ug/l**	**ug/l**	
07052	Cobalt	7440-48-4	N.D.	0.90	1
07055	Lead	7439-92-1	N.D.	6.2	1
07061	Nickel	7440-02-0	N.D.	2.5	1
07071	Vanadium	7440-62-2	N.D.	2.3	1
07072	Zinc	7440-66-6	N.D.	5.4	1
	SW-846 7470A		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000068 J	0.000050	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Evergreen Comprehensive VOCs	SW-846 8260B	1	N160972AA	04/07/2016 03:51	Caitlin M Carmody	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N160972AA	04/07/2016 03:51	Caitlin M Carmody	1
01476	Skinner List in Water by 8270C	SW-846 8270C	1	16092WAM026	04/06/2016 11:44	Holly B Ziegler	1
10467	BNA Water Extraction Skinner	SW-846 3510C	1	16092WAM026	04/04/2016 09:30	Jessica M Velez	1
07035	Arsenic	SW-846 6010B	1	160901848006	04/08/2016 22:36	Cindy M Gehman	1
07046	Barium	SW-846 6010B	1	160901848006	04/08/2016 22:36	Cindy M Gehman	1
07049	Cadmium	SW-846 6010B	1	160901848006	04/08/2016 22:36	Cindy M Gehman	1
07051	Chromium	SW-846 6010B	1	160901848006	04/08/2016 22:36	Cindy M Gehman	1
07052	Cobalt	SW-846 6010B	1	160901848006	04/08/2016 22:36	Cindy M Gehman	1
07055	Lead	SW-846 6010B	1	160901848006	04/11/2016 22:59	Suzanne M Will	1
07061	Nickel	SW-846 6010B	1	160901848006	04/08/2016 22:36	Cindy M Gehman	1
07036	Selenium	SW-846 6010B	1	160901848006	04/08/2016 22:36	Cindy M Gehman	1
07066	Silver	SW-846 6010B	1	160901848006	04/08/2016 22:36	Cindy M Gehman	1
07071	Vanadium	SW-846 6010B	1	160901848006	04/08/2016 22:36	Cindy M Gehman	1
07072	Zinc	SW-846 6010B	1	160901848006	04/11/2016 22:59	Suzanne M Will	1
00259	Mercury	SW-846 7470A	1	160955713005	04/06/2016 08:15	Damary Valentin	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	160901848006	03/31/2016 07:15	Lisa J Cooke	1

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Analysis Report

Sample Description: FB-20160329 Grab Water
AOI5 MHIC Soil Borings

LL Sample # WW 8308176
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 09:00 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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Suite 140
West Chester PA 19380

B24FB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	160955713005	04/05/2016 12:00	Christopher M Klumpp	1

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Analysis Report

Sample Description: TB-20160329 Water
AOI5 MHIC Soil Borings

LL Sample # WW 8308177
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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1060 Andrew Drive
Suite 140
West Chester PA 19380

B24TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Benzene	71-43-2	N.D.	0.5	1
10335	sec-Butylbenzene	135-98-8	N.D.	1	1
10335	tert-Butylbenzene	98-06-6	N.D.	1	1
10335	Cyclohexane	110-82-7	N.D.	2	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.5	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10335	Ethylbenzene	100-41-4	N.D.	0.5	1
10335	n-Hexane	110-54-3	N.D.	2	1
10335	Isopropylbenzene	98-82-8	N.D.	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10335	Naphthalene	91-20-3	N.D.	1	1
10335	Toluene	108-88-3	N.D.	0.5	1
10335	1,2,4-Trimethylbenzene	95-63-6	N.D.	1	1
10335	1,3,5-Trimethylbenzene	108-67-8	N.D.	1	1
10335	Xylene (Total)	1330-20-7	N.D.	0.5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	Evergreen Comprehensive VOCs	SW-846 8260B	1	N160981AA	04/07/2016 15:22	Nicole S Lamoreaux	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N160981AA	04/07/2016 15:22	Nicole S Lamoreaux	1

Sample Description: AOI5-BH-16-023(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308178
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 10:00 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B2300

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**		**mg/kg**	
10237	Benzene	71-43-2	0.012		0.0005	0.87
10237	sec-Butylbenzene	135-98-8	N.D.		0.001	0.87
10237	tert-Butylbenzene	98-06-6	N.D.		0.001	0.87
10237	Cyclohexane	110-82-7	0.001	J	0.001	0.87
10237	1,2-Dibromoethane	106-93-4	N.D.		0.001	0.87
10237	1,2-Dichloroethane	107-06-2	N.D.		0.001	0.87
10237	Ethylbenzene	100-41-4	0.003	J	0.001	0.87
10237	n-Hexane	110-54-3	0.004	J	0.001	0.87
10237	Isopropylbenzene	98-82-8	N.D.		0.001	0.87
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.0009	J	0.0005	0.87
10237	Naphthalene	91-20-3	0.006		0.001	0.87
10237	Toluene	108-88-3	0.008		0.001	0.87
10237	1,2,4-Trimethylbenzene	95-63-6	0.007		0.001	0.87
10237	1,3,5-Trimethylbenzene	108-67-8	0.003	J	0.001	0.87
10237	Xylene (Total)	1330-20-7	0.014		0.001	0.87
	The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken: The sample was re-analyzed and the QC is again outside of the acceptance limits, indicating a matrix effect. The data is reported from the initial trial.					
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**		**mg/kg**	
10728	Acenaphthene	83-32-9	0.12	J	0.037	10
10728	Anthracene	120-12-7	0.23		0.037	10
10728	Benzo(a)anthracene	56-55-3	0.31		0.037	10
10728	Benzo(a)pyrene	50-32-8	0.37		0.037	10
10728	Benzo(b)fluoranthene	205-99-2	0.35		0.037	10
10728	Benzo(g,h,i)perylene	191-24-2	0.43		0.037	10
10728	Benzo(k)fluoranthene	207-08-9	0.10	J	0.037	10
10728	1,1'-Biphenyl	92-52-4	N.D.		0.18	10
10728	Di-n-butylphthalate	84-74-2	N.D.		0.74	10
10728	Chrysene	218-01-9	0.55		0.037	10
10728	Dibenz(a,h)anthracene	53-70-3	0.097	J	0.037	10
10728	Diethylphthalate	84-66-2	N.D.		0.74	10
10728	2,4-Dimethylphenol	105-67-9	N.D.		0.18	10
10728	2,4-Dinitrophenol	51-28-5	N.D.		3.3	10
10728	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		0.74	10
10728	Fluoranthene	206-44-0	0.51		0.037	10
10728	Fluorene	86-73-7	0.12	J	0.037	10
10728	Indeno(1,2,3-cd)pyrene	193-39-5	0.23		0.037	10
10728	2-Methylnaphthalene	91-57-6	0.40		0.037	10
10728	2-Methylphenol	95-48-7	N.D.		0.18	10
10728	4-Methylphenol	106-44-5	N.D.		0.18	10
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10728	4-Nitrophenol	100-02-7	N.D.		1.8	10
10728	Phenanthrene	85-01-8	0.59		0.037	10
10728	Phenol	108-95-2	N.D.		0.18	10
10728	Pyrene	129-00-0	0.89		0.037	10
10728	Pyridine	110-86-1	N.D.		0.74	10

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Analysis Report

Sample Description: AOI5-BH-16-023(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308178
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 10:00 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B2300

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**		**mg/kg**	
10728	Quinoline	91-22-5	N.D.		0.37	10
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	4.43		0.441	1
06946	Barium	7440-39-3	147		0.0897	1
06949	Cadmium	7440-43-9	0.154	J	0.0366	1
06951	Chromium	7440-47-3	30.4		0.127	1
06952	Cobalt	7440-48-4	7.77		0.0605	1
06955	Lead	7439-92-1	63.9		0.306	1
06961	Nickel	7440-02-0	19.7		0.172	1
06936	Selenium	7782-49-2	1.08	J	0.628	1
06966	Silver	7440-22-4	0.789		0.135	1
06971	Vanadium	7440-62-2	36.2		0.172	1
06972	Zinc	7440-66-6	116		0.575	1
	SW-846 7471A		**mg/kg**		**mg/kg**	
00159	Mercury	7439-97-6	0.514		0.0110	1
Wet Chemistry	**SM 2540 G-1997**		**%**		**%**	
00111	Moisture	n.a.	10.2		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.

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Evergreen Comprehensive VOCs	SW-846 8260B	1	A160921AA	04/01/2016 16:52	Jennifer K Howe	0.87
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201609040616	03/29/2016 10:00	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201609040616	03/29/2016 10:00	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201609040616	03/29/2016 10:00	Client Supplied	1
10728	Skinner 8270 (microwave)	SW-846 8270C	1	16096SLD026	04/08/2016 06:50	Catherine E Bachman	10
10812	BNA Soil Microwave Skinner	SW-846 3546	1	16096SLD026	04/06/2016 09:30	David S Schrum	1
06935	Arsenic	SW-846 6010B	1	160955708004	04/07/2016 04:55	Matthew Machtinger	1

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Analysis Report

Sample Description: AOI5-BH-16-023(0-2) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308178
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 10:00 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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Suite 140
West Chester PA 19380

B2300

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06946	Barium	SW-846 6010B	1	160955708004	04/07/2016 04:55	Matthew Machtinger	1
06949	Cadmium	SW-846 6010B	1	160955708004	04/08/2016 02:38	Elaine F Stoltzfus	1
06951	Chromium	SW-846 6010B	1	160955708004	04/07/2016 04:55	Matthew Machtinger	1
06952	Cobalt	SW-846 6010B	1	160955708004	04/07/2016 04:55	Matthew Machtinger	1
06955	Lead	SW-846 6010B	1	160955708004	04/07/2016 04:55	Matthew Machtinger	1
06961	Nickel	SW-846 6010B	1	160955708004	04/07/2016 04:55	Matthew Machtinger	1
06936	Selenium	SW-846 6010B	1	160955708004	04/08/2016 02:38	Elaine F Stoltzfus	1
06966	Silver	SW-846 6010B	1	160955708004	04/07/2016 04:55	Matthew Machtinger	1
06971	Vanadium	SW-846 6010B	1	160955708004	04/07/2016 04:55	Matthew Machtinger	1
06972	Zinc	SW-846 6010B	1	160955708004	04/07/2016 04:55	Matthew Machtinger	1
00159	Mercury	SW-846 7471A	1	160955711002	04/05/2016 12:11	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	160955708004	04/05/2016 06:50	Lisa J Cooke	1
05711	Hg-SW, 7471A - U3	SW-846 7471A modified	1	160955711002	04/05/2016 10:17	Lisa J Cooke	1
00111	Moisture	SM 2540 G-1997	1	16092820008A	04/02/2016 21:35	Scott W Freisher	1

Sample Description: AOI5-BH-16-023(2-3) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308179
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 10:15 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B2302

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**		**mg/kg**	
10237	Benzene	71-43-2	0.20	J	0.033	52.44
10237	sec-Butylbenzene	135-98-8	0.19	J	0.066	52.44
10237	tert-Butylbenzene	98-06-6	N.D.		0.066	52.44
10237	Cyclohexane	110-82-7	0.25	J	0.066	52.44
10237	1,2-Dibromoethane	106-93-4	N.D.		0.066	52.44
10237	1,2-Dichloroethane	107-06-2	N.D.		0.066	52.44
10237	Ethylbenzene	100-41-4	0.21	J	0.066	52.44
10237	n-Hexane	110-54-3	0.076	J	0.066	52.44
10237	Isopropylbenzene	98-82-8	0.11	J	0.066	52.44
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.033	52.44
10237	Naphthalene	91-20-3	1.4		0.066	52.44
10237	Toluene	108-88-3	0.25	J	0.066	52.44
10237	1,2,4-Trimethylbenzene	95-63-6	1.3		0.066	52.44
10237	1,3,5-Trimethylbenzene	108-67-8	0.48		0.066	52.44
10237	Xylene (Total)	1330-20-7	1.6		0.066	52.44
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**		**mg/kg**	
10728	Acenaphthene	83-32-9	0.62		0.041	10
10728	Anthracene	120-12-7	0.90		0.041	10
10728	Benzo(a)anthracene	56-55-3	1.4		0.041	10
10728	Benzo(a)pyrene	50-32-8	1.1		0.041	10
10728	Benzo(b)fluoranthene	205-99-2	0.89		0.041	10
10728	Benzo(g,h,i)perylene	191-24-2	0.73		0.041	10
10728	Benzo(k)fluoranthene	207-08-9	0.24		0.041	10
10728	1,1'-Biphenyl	92-52-4	0.35	J	0.21	10
10728	Di-n-butylphthalate	84-74-2	N.D.		0.83	10
10728	Chrysene	218-01-9	2.9		0.041	10
10728	Dibenz(a,h)anthracene	53-70-3	0.29		0.041	10
10728	Diethylphthalate	84-66-2	N.D.		0.83	10
10728	2,4-Dimethylphenol	105-67-9	N.D.		0.21	10
10728	2,4-Dinitrophenol	51-28-5	N.D.		3.7	10
10728	bis(2-Ethylhexyl)phthalate	117-81-7	0.97	J	0.83	10
10728	Fluoranthene	206-44-0	1.3		0.041	10
10728	Fluorene	86-73-7	1.2		0.041	10
10728	Indeno(1,2,3-cd)pyrene	193-39-5	0.27		0.041	10
10728	2-Methylnaphthalene	91-57-6	7.9		0.041	10
10728	2-Methylphenol	95-48-7	N.D.		0.21	10
10728	4-Methylphenol	106-44-5	N.D.		0.21	10
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10728	4-Nitrophenol	100-02-7	N.D.		2.1	10
10728	Phenanthrene	85-01-8	4.7		0.041	10
10728	Phenol	108-95-2	N.D.		0.21	10
10728	Pyrene	129-00-0	3.5		0.041	10
10728	Pyridine	110-86-1	N.D.		0.83	10
10728	Quinoline	91-22-5	N.D.		0.41	10
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	
06935	Arsenic	7440-38-2	8.69		0.607	1
06946	Barium	7440-39-3	126		0.123	1

Sample Description: AOI5-BH-16-023(2-3) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308179
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 10:15 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

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Suite 140
West Chester PA 19380

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.336 J	0.0504	1
06951	Chromium	7440-47-3	49.4	0.175	1
06952	Cobalt	7440-48-4	7.94	0.0833	1
06955	Lead	7439-92-1	161	0.422	1
06961	Nickel	7440-02-0	22.2	0.237	1
06936	Selenium	7782-49-2	N.D.	0.864	1
06966	Silver	7440-22-4	1.61	0.185	1
06971	Vanadium	7440-62-2	38.1	0.237	1
06972	Zinc	7440-66-6	223	0.792	1
	SW-846 7471A		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	1.28	0.0597	5
Wet Chemistry	**SM 2540 G-1997**		**%**	**%**	
00111	Moisture	n.a.	20.3	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.

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/17.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	Evergreen Comprehensive VOCs	SW-846 8260B	1	R160971AA	04/06/2016 15:32	Anita M Dale	52.44
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201609040616	03/29/2016 10:15	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201609040616	03/29/2016 10:15	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201609040616	03/29/2016 10:15	Client Supplied	1
10728	Skinner 8270 (microwave)	SW-846 8270C	1	16096SLD026	04/08/2016 07:15	Catherine E Bachman	10
10812	BNA Soil Microwave Skinner	SW-846 3546	1	16096SLD026	04/06/2016 09:30	David S Schrum	1
06935	Arsenic	SW-846 6010B	1	160955708004	04/07/2016 04:58	Matthew Machtinger	1
06946	Barium	SW-846 6010B	1	160955708004	04/07/2016 04:58	Matthew Machtinger	1
06949	Cadmium	SW-846 6010B	1	160955708004	04/08/2016 02:45	Elaine F Stoltzfus	1

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Analysis Report

Sample Description: AOI5-BH-16-023(2-3) Grab Soil
AOI5 MHIC Soil Borings

LL Sample # SW 8308179
LL Group # 1645141
Account # 16657

Project Name: AOI5 MHIC Soil Borings

Collected: 03/29/2016 10:15 by D

Submitted: 03/29/2016 17:40
Reported: 04/15/2016 11:38

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

B2302

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010B	1	160955708004	04/07/2016 04:58	Matthew Machtinger	1
06952	Cobalt	SW-846 6010B	1	160955708004	04/07/2016 04:58	Matthew Machtinger	1
06955	Lead	SW-846 6010B	1	160955708004	04/07/2016 04:58	Matthew Machtinger	1
06961	Nickel	SW-846 6010B	1	160955708004	04/07/2016 04:58	Matthew Machtinger	1
06936	Selenium	SW-846 6010B	1	160955708004	04/07/2016 04:58	Matthew Machtinger	1
06966	Silver	SW-846 6010B	1	160955708004	04/07/2016 04:58	Matthew Machtinger	1
06971	Vanadium	SW-846 6010B	1	160955708004	04/07/2016 04:58	Matthew Machtinger	1
06972	Zinc	SW-846 6010B	1	160955708004	04/07/2016 04:58	Matthew Machtinger	1
00159	Mercury	SW-846 7471A	1	160955711002	04/05/2016 12:25	Damary Valentin	5
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	160955708004	04/05/2016 06:50	Lisa J Cooke	1
05711	Hg-SW, 7471A - U3	SW-846 7471A modified	1	160955711002	04/05/2016 10:17	Lisa J Cooke	1
00111	Moisture	SM 2540 G-1997	1	16092820008A	04/02/2016 21:35	Scott W Freisher	1

Quality Control Summary

Client Name: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

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 mg/kg	MDL mg/kg
Batch number: A160921AA	Sample number(s): 8308178	
Benzene	N.D.	0.0005
sec-Butylbenzene	N.D.	0.001
tert-Butylbenzene	N.D.	0.001
Cyclohexane	N.D.	0.001
1,2-Dibromoethane	N.D.	0.001
1,2-Dichloroethane	N.D.	0.001
Ethylbenzene	N.D.	0.001
n-Hexane	N.D.	0.001
Isopropylbenzene	N.D.	0.001
Methyl Tertiary Butyl Ether	N.D.	0.0005
Naphthalene	N.D.	0.001
Toluene	N.D.	0.001
1,2,4-Trimethylbenzene	N.D.	0.001
1,3,5-Trimethylbenzene	N.D.	0.001
Xylene (Total)	N.D.	0.001
Batch number: R160971AA	Sample number(s): 8308170-8308173,8308179	
Benzene	N.D.	0.025
sec-Butylbenzene	N.D.	0.050
tert-Butylbenzene	N.D.	0.050
Cyclohexane	N.D.	0.050
1,2-Dibromoethane	N.D.	0.050
1,2-Dichloroethane	N.D.	0.050
Ethylbenzene	N.D.	0.050
n-Hexane	N.D.	0.050
Isopropylbenzene	N.D.	0.050
Methyl Tertiary Butyl Ether	N.D.	0.025
Naphthalene	N.D.	0.050
Toluene	N.D.	0.050
1,2,4-Trimethylbenzene	N.D.	0.050
1,3,5-Trimethylbenzene	N.D.	0.050
Xylene (Total)	N.D.	0.050
Batch number: R160991AA	Sample number(s): 8308174-8308175	
Benzene	N.D.	0.025
sec-Butylbenzene	N.D.	0.050
tert-Butylbenzene	N.D.	0.050
Cyclohexane	N.D.	0.050
1,2-Dibromoethane	N.D.	0.050
1,2-Dichloroethane	N.D.	0.050
Ethylbenzene	N.D.	0.050
n-Hexane	N.D.	0.050
Isopropylbenzene	N.D.	0.050
Methyl Tertiary Butyl Ether	N.D.	0.025

*- Outside of specification
(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: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	Result	MDL
	mg/kg	mg/kg
Naphthalene	N.D.	0.050
Toluene	N.D.	0.050
1,2,4-Trimethylbenzene	N.D.	0.050
1,3,5-Trimethylbenzene	N.D.	0.050
Xylene (Total)	N.D.	0.050
	ug/l	ug/l
Batch number: N160972AA	Sample number(s): 8308176	
Benzene	N.D.	0.5
sec-Butylbenzene	N.D.	1
tert-Butylbenzene	N.D.	1
Cyclohexane	N.D.	2
1,2-Dibromoethane	N.D.	0.5
1,2-Dichloroethane	N.D.	0.5
Ethylbenzene	N.D.	0.5
n-Hexane	N.D.	2
Isopropylbenzene	N.D.	1
Methyl Tertiary Butyl Ether	N.D.	0.5
Naphthalene	N.D.	1
Toluene	N.D.	0.5
1,2,4-Trimethylbenzene	N.D.	1
1,3,5-Trimethylbenzene	N.D.	1
Xylene (Total)	N.D.	0.5
Batch number: N160981AA	Sample number(s): 8308177	
Benzene	N.D.	0.5
sec-Butylbenzene	N.D.	1
tert-Butylbenzene	N.D.	1
Cyclohexane	N.D.	2
1,2-Dibromoethane	N.D.	0.5
1,2-Dichloroethane	N.D.	0.5
Ethylbenzene	N.D.	0.5
n-Hexane	N.D.	2
Isopropylbenzene	N.D.	1
Methyl Tertiary Butyl Ether	N.D.	0.5
Naphthalene	N.D.	1
Toluene	N.D.	0.5
1,2,4-Trimethylbenzene	N.D.	1
1,3,5-Trimethylbenzene	N.D.	1
Xylene (Total)	N.D.	0.5
	mg/kg	mg/kg
Batch number: 16093SLH026	Sample number(s): 8308170-8308175	
Acenaphthene	N.D.	0.0033
Anthracene	N.D.	0.0033
Benzo(a)anthracene	N.D.	0.0033
Benzo(a)pyrene	N.D.	0.0033
Benzo(b)fluoranthene	N.D.	0.0033
Benzo(g,h,i)perylene	N.D.	0.0033
Benzo(k)fluoranthene	N.D.	0.0033
1,1'-Biphenyl	N.D.	0.017
Di-n-butylphthalate	N.D.	0.067
Chrysene	N.D.	0.0033
Dibenz(a,h)anthracene	N.D.	0.0033
Diethylphthalate	N.D.	0.067

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.
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Quality Control Summary

Client Name: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	Result	MDL
	mg/kg	mg/kg
2,4-Dimethylphenol	N.D.	0.017
2,4-Dinitrophenol	N.D.	0.30
bis(2-Ethylhexyl)phthalate	N.D.	0.067
Fluoranthene	N.D.	0.0033
Fluorene	N.D.	0.0033
Indeno(1,2,3-cd)pyrene	N.D.	0.0033
2-Methylnaphthalene	N.D.	0.0033
2-Methylphenol	N.D.	0.017
4-Methylphenol	N.D.	0.017
4-Nitrophenol	N.D.	0.17
Phenanthrene	N.D.	0.0033
Phenol	N.D.	0.017
Pyrene	N.D.	0.0033
Pyridine	N.D.	0.067
Quinoline	N.D.	0.033
Batch number: 16096SLD026	Sample number(s): 8308178-8308179	
Acenaphthene	N.D.	0.0033
Anthracene	N.D.	0.0033
Benzo(a)anthracene	N.D.	0.0033
Benzo(a)pyrene	N.D.	0.0033
Benzo(b)fluoranthene	N.D.	0.0033
Benzo(g,h,i)perylene	N.D.	0.0033
Benzo(k)fluoranthene	N.D.	0.0033
1,1'-Biphenyl	N.D.	0.017
Di-n-butylphthalate	N.D.	0.067
Chrysene	N.D.	0.0033
Dibenz(a,h)anthracene	N.D.	0.0033
Diethylphthalate	N.D.	0.067
2,4-Dimethylphenol	N.D.	0.017
2,4-Dinitrophenol	N.D.	0.30
bis(2-Ethylhexyl)phthalate	N.D.	0.067
Fluoranthene	N.D.	0.0033
Fluorene	N.D.	0.0033
Indeno(1,2,3-cd)pyrene	N.D.	0.0033
2-Methylnaphthalene	N.D.	0.0033
2-Methylphenol	N.D.	0.017
4-Methylphenol	N.D.	0.017
4-Nitrophenol	N.D.	0.17
Phenanthrene	N.D.	0.0033
Phenol	N.D.	0.017
Pyrene	N.D.	0.0033
Pyridine	N.D.	0.067
Quinoline	N.D.	0.033
	ug/l	ug/l
Batch number: 16092WAM026	Sample number(s): 8308176	
Acenaphthene	N.D.	0.1
Anthracene	N.D.	0.1
Benzo(a)anthracene	N.D.	0.1
Benzo(a)pyrene	N.D.	0.1
Benzo(b)fluoranthene	N.D.	0.1
Benzo(g,h,i)perylene	N.D.	0.1
Benzo(k)fluoranthene	N.D.	0.1
1,1'-Biphenyl	N.D.	0.5

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Quality Control Summary

Client Name: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	Result	MDL
	ug/l	ug/l
Di-n-butylphthalate	N.D.	2
Chrysene	N.D.	0.1
Dibenz(a,h)anthracene	N.D.	0.1
Diethylphthalate	N.D.	2
2,4-Dimethylphenol	N.D.	0.5
2,4-Dinitrophenol	N.D.	10
bis(2-Ethylhexyl)phthalate	N.D.	2
Fluoranthene	N.D.	0.1
Fluorene	N.D.	0.1
Indeno(1,2,3-cd)pyrene	N.D.	0.1
2-Methylnaphthalene	N.D.	0.1
2-Methylphenol	N.D.	0.5
4-Methylphenol	N.D.	0.5
Naphthalene	N.D.	0.1
4-Nitrophenol	N.D.	10
Phenanthrene	N.D.	0.1
Phenol	N.D.	0.5
Pyrene	N.D.	0.1
Pyridine	N.D.	2
Quinoline	N.D.	1
	mg/kg	mg/kg
Batch number: 160955708004	Sample number(s): 8308170-8308175,8308178-8308179	
Arsenic	N.D.	0.590
Barium	N.D.	0.120
Cadmium	N.D.	0.0490
Chromium	0.191 J	0.170
Cobalt	N.D.	0.0810
Lead	N.D.	0.410
Nickel	N.D.	0.230
Selenium	N.D.	0.840
Silver	N.D.	0.180
Vanadium	N.D.	0.230
Zinc	N.D.	0.770
Batch number: 160955711002	Sample number(s): 8308170-8308175,8308178-8308179	
Mercury	N.D.	0.0100
	mg/l	mg/l
Batch number: 160901848006	Sample number(s): 8308176	
Arsenic	N.D.	0.0078
Barium	N.D.	0.0012
Cadmium	N.D.	0.00064
Chromium	N.D.	0.0020
Selenium	N.D.	0.0082
Silver	N.D.	0.0018
Batch number: 160955713005	Sample number(s): 8308176	
Mercury	N.D.	0.000050
	ug/l	ug/l
Batch number: 160901848006	Sample number(s): 8308176	
Cobalt	N.D.	0.90
Lead	N.D.	6.2
Nickel	N.D.	2.5

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Quality Control Summary

Client Name: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	Result ug/l	MDL ug/l
Vanadium	N.D.	2.3
Zinc	N.D.	5.4

LCS/LCSD

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: A160921AA	Sample number(s): 8308178								
Benzene	0.0200	0.0192	0.0200	0.0188	96	94	80-120	2	30
sec-Butylbenzene	0.0200	0.0180	0.0200	0.0180	90	90	64-122	0	30
tert-Butylbenzene	0.0200	0.0175	0.0200	0.0175	88	87	68-120	0	30
Cyclohexane	0.0200	0.0200	0.0200	0.0198	100	99	58-120	1	30
1,2-Dibromoethane	0.0200	0.0188	0.0200	0.0177	94	89	80-120	6	30
1,2-Dichloroethane	0.0200	0.0172	0.0200	0.0166	86	83	77-130	4	30
Ethylbenzene	0.0200	0.0186	0.0200	0.0185	93	92	80-120	1	30
n-Hexane	0.0200	0.0192	0.0200	0.0198	96	99	38-135	3	30
Isopropylbenzene	0.0200	0.0182	0.0200	0.0180	91	90	70-120	1	30
Methyl Tertiary Butyl Ether	0.0200	0.0181	0.0200	0.0173	91	87	72-120	4	30
Naphthalene	0.0200	0.0172	0.0200	0.0156	86	78	53-120	10	30
Toluene	0.0200	0.0191	0.0200	0.0188	95	94	80-120	2	30
1,2,4-Trimethylbenzene	0.0200	0.0179	0.0200	0.0180	90	90	74-120	1	30
1,3,5-Trimethylbenzene	0.0200	0.0179	0.0200	0.0181	90	90	73-120	1	30
Xylene (Total)	0.0600	0.0549	0.0600	0.0541	91	90	80-120	1	30
Batch number: R160971AA	Sample number(s): 8308170-8308173,8308179								
Benzene	1.00	0.987	1.00	0.946	99	95	80-120	4	30
sec-Butylbenzene	1.00	0.962	1.00	0.956	96	96	64-122	1	30
tert-Butylbenzene	1.00	0.920	1.00	0.935	92	93	68-120	2	30
Cyclohexane	1.00	1.00	1.00	0.956	100	96	58-120	5	30
1,2-Dibromoethane	1.00	0.990	1.00	0.958	99	96	80-120	3	30
1,2-Dichloroethane	1.00	0.984	1.00	0.945	98	94	77-130	4	30
Ethylbenzene	1.00	0.954	1.00	0.939	95	94	80-120	2	30
n-Hexane	1.00	1.04	1.00	1.00	104	100	38-135	4	30
Isopropylbenzene	1.00	0.976	1.00	0.943	98	94	70-120	3	30
Methyl Tertiary Butyl Ether	1.00	1.00	1.00	0.966	100	97	72-120	4	30
Naphthalene	1.00	1.01	1.00	0.976	101	98	53-120	4	30
Toluene	1.00	0.972	1.00	0.945	97	95	80-120	3	30
1,2,4-Trimethylbenzene	1.00	0.943	1.00	0.941	94	94	74-120	0	30
1,3,5-Trimethylbenzene	1.00	0.962	1.00	0.944	96	94	73-120	2	30
Xylene (Total)	3.00	2.89	3.00	2.85	96	95	80-120	2	30
Batch number: R160991AA	Sample number(s): 8308174-8308175								
Benzene	1.00	0.914	1.00	0.941	91	94	80-120	3	30
sec-Butylbenzene	1.00	0.902	1.00	0.912	90	91	64-122	1	30
tert-Butylbenzene	1.00	0.835	1.00	0.912	84	91	68-120	9	30
Cyclohexane	1.00	0.951	1.00	0.912	95	91	58-120	4	30
1,2-Dibromoethane	1.00	0.946	1.00	0.919	95	92	80-120	3	30
1,2-Dichloroethane	1.00	0.891	1.00	0.916	89	92	77-130	3	30
Ethylbenzene	1.00	0.897	1.00	0.912	90	91	80-120	2	30
n-Hexane	1.00	0.980	1.00	0.918	98	92	38-135	7	30
Isopropylbenzene	1.00	0.964	1.00	0.950	96	95	70-120	2	30

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Quality Control Summary

Client Name: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	1.00	0.922	1.00	0.948	92	95	72-120	3	30
Naphthalene	1.00	0.903	1.00	0.931	90	93	53-120	3	30
Toluene	1.00	0.921	1.00	0.926	92	93	80-120	1	30
1,2,4-Trimethylbenzene	1.00	0.882	1.00	0.876	88	88	74-120	1	30
1,3,5-Trimethylbenzene	1.00	0.827	1.00	0.886	83	89	73-120	7	30
Xylene (Total)	3.00	2.74	3.00	2.80	91	93	80-120	2	30
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: N160972AA	Sample number(s): 8308176								
Benzene	20	22.7	20	22.16	114	111	78-120	2	30
sec-Butylbenzene	20	19.99	20	19.43	100	97	68-124	3	30
tert-Butylbenzene	20	19.77	20	19.02	99	95	74-121	4	30
Cyclohexane	20	23.72	20	23.03	119	115	65-123	3	30
1,2-Dibromoethane	20	20.17	20	19.7	101	99	80-120	2	30
1,2-Dichloroethane	20	21.26	20	20.97	106	105	72-127	1	30
Ethylbenzene	20	20.51	20	19.73	103	99	78-120	4	30
n-Hexane	20	24.98	20	24.11	125	121	57-131	4	30
Isopropylbenzene	20	21.17	20	20.49	106	102	80-120	3	30
Methyl Tertiary Butyl Ether	20	21.87	20	21.45	109	107	75-120	2	30
Naphthalene	20	16.61	20	17.02	83	85	59-120	2	30
Toluene	20	20.44	20	19.74	102	99	80-120	3	30
1,2,4-Trimethylbenzene	20	19.96	20	19.52	100	98	75-120	2	30
1,3,5-Trimethylbenzene	20	20.09	20	19.54	100	98	75-120	3	30
Xylene (Total)	60	60.72	60	59.23	101	99	80-120	2	30
Batch number: N160981AA	Sample number(s): 8308177								
Benzene	20	20.42	20	20.32	102	102	78-120	1	30
sec-Butylbenzene	20	20.88	20	20.61	104	103	68-124	1	30
tert-Butylbenzene	20	19.69	20	20.2	98	101	74-121	3	30
Cyclohexane	20	21.18	20	20.82	106	104	65-123	2	30
1,2-Dibromoethane	20	20.36	20	20.49	102	102	80-120	1	30
1,2-Dichloroethane	20	19.44	20	19.01	97	95	72-127	2	30
Ethylbenzene	20	20.57	20	20.37	103	102	78-120	1	30
n-Hexane	20	22.11	20	21.74	111	109	57-131	2	30
Isopropylbenzene	20	21.18	20	21.1	106	105	80-120	0	30
Methyl Tertiary Butyl Ether	20	19.85	20	19.7	99	99	75-120	1	30
Naphthalene	20	18.92	20	18.06	95	90	59-120	5	30
Toluene	20	20.43	20	20.44	102	102	80-120	0	30
1,2,4-Trimethylbenzene	20	20.72	20	20.71	104	104	75-120	0	30
1,3,5-Trimethylbenzene	20	20.93	20	20.67	105	103	75-120	1	30
Xylene (Total)	60	61.6	60	60.95	103	102	80-120	1	30
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**					
Batch number: 16093SLH026	Sample number(s): 8308170-8308175								
Acenaphthene	1.67	1.64			98		83-116		
Anthracene	1.67	1.67			100		82-118		
Benzo(a)anthracene	1.67	1.63			98		76-119		
Benzo(a)pyrene	1.67	1.61			97		85-117		
Benzo(b)fluoranthene	1.67	1.61			97		78-129		
Benzo(g,h,i)perylene	1.67	1.52			91		77-118		
Benzo(k)fluoranthene	1.67	1.65			99		79-120		
1,1'-Biphenyl	1.67	1.59			95		76-111		
Di-n-butylphthalate	1.67	1.60			96		84-120		

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Quality Control Summary

Client Name: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chrysene	1.67	1.67			100		80-121		
Dibenz(a,h)anthracene	1.67	1.57			94		81-123		
Diethylphthalate	1.67	1.54			92		81-118		
2,4-Dimethylphenol	1.67	1.51			91		83-120		
2,4-Dinitrophenol	3.33	2.24			67		16-132		
bis(2-Ethylhexyl)phthalate	1.67	1.51			91		81-121		
Fluoranthene	1.67	1.63			98		81-117		
Fluorene	1.67	1.65			99		86-118		
Indeno(1,2,3-cd)pyrene	1.67	1.48			89		81-118		
2-Methylnaphthalene	1.67	1.66			100		83-109		
2-Methylphenol	1.67	1.80			108		80-133		
4-Methylphenol	1.67	1.64			98		73-125		
4-Nitrophenol	1.67	1.34			80		52-133		
Phenanthrene	1.67	1.60			96		80-114		
Phenol	1.67	1.76			106		73-122		
Pyrene	1.67	1.57			94		81-114		
Pyridine	1.67	1.29			78		55-109		
Quinoline	1.67	1.56			94		80-119		
Batch number: 16096SLD026	Sample number(s): 8308178-8308179								
Acenaphthene	1.67	1.67			100		83-116		
Anthracene	1.67	1.68			101		82-118		
Benzo(a)anthracene	1.67	1.67			100		76-119		
Benzo(a)pyrene	1.67	1.59			95		85-117		
Benzo(b)fluoranthene	1.67	1.68			101		78-129		
Benzo(g,h,i)perylene	1.67	1.57			94		77-118		
Benzo(k)fluoranthene	1.67	1.51			91		79-120		
1,1'-Biphenyl	1.67	1.63			98		76-111		
Di-n-butylphthalate	1.67	1.66			100		84-120		
Chrysene	1.67	1.69			101		80-121		
Dibenz(a,h)anthracene	1.67	1.63			98		81-123		
Diethylphthalate	1.67	1.60			96		81-118		
2,4-Dimethylphenol	1.67	1.56			94		83-120		
2,4-Dinitrophenol	3.33	1.59			48		16-132		
bis(2-Ethylhexyl)phthalate	1.67	1.61			97		81-121		
Fluoranthene	1.67	1.65			99		81-117		
Fluorene	1.67	1.68			101		86-118		
Indeno(1,2,3-cd)pyrene	1.67	1.54			93		81-118		
2-Methylnaphthalene	1.67	1.60			96		83-109		
2-Methylphenol	1.67	1.75			105		80-133		
4-Methylphenol	1.67	1.64			98		73-125		
4-Nitrophenol	1.67	1.51			90		52-133		
Phenanthrene	1.67	1.61			96		80-114		
Phenol	1.67	1.77			106		73-122		
Pyrene	1.67	1.57			94		81-114		
Pyridine	1.67	1.47			88		55-109		
Quinoline	1.67	1.57			94		80-119		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16092WAM026	Sample number(s): 8308176								
Acenaphthene	50	50.68	50	50.45	101	101	69-123	0	30
Anthracene	50	50.99	50	50.37	102	101	68-126	1	30
Benzo(a)anthracene	50	53.41	50	53.67	107	107	69-133	0	30

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Quality Control Summary

Client Name: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(a)pyrene	50	50.92	50	52.47	102	105	68-126	3	30
Benzo(b)fluoranthene	50	51.7	50	50.57	103	101	71-131	2	30
Benzo(g,h,i)perylene	50	50.31	50	50.99	101	102	62-132	1	30
Benzo(k)fluoranthene	50	50.74	50	53.17	101	106	72-128	5	30
1,1'-Biphenyl	50	48.64	50	48	97	96	59-124	1	30
Di-n-butylphthalate	50	49.46	50	49.92	99	100	61-125	1	30
Chrysene	50	53.49	50	53.03	107	106	71-136	1	30
Dibenz(a,h)anthracene	50	51.61	50	51.35	103	103	64-133	1	30
Diethylphthalate	50	50.22	50	49.93	100	100	55-124	1	30
2,4-Dimethylphenol	50	42.5	50	42.86	85	86	63-117	1	30
2,4-Dinitrophenol	100	77.84	100	77.25	78	77	42-129	1	30
bis(2-Ethylhexyl)phthalate	50	50.72	50	51.44	101	103	66-130	1	30
Fluoranthene	50	51.56	50	51.55	103	103	68-129	0	30
Fluorene	50	50.05	50	50.37	100	101	71-127	1	30
Indeno(1,2,3-cd)pyrene	50	49.07	50	49.76	98	100	62-128	1	30
2-Methylnaphthalene	50	48.22	50	48.43	96	97	61-117	0	30
2-Methylphenol	50	47.64	50	46.92	95	94	54-122	2	30
4-Methylphenol	50	43.01	50	42.33	86	85	44-114	2	30
Naphthalene	50	48.27	50	48.03	97	96	62-121	1	30
4-Nitrophenol	50	18.61	50	21.64	37	43	11-88	15	30
Phenanthrene	50	48.37	50	48	97	96	65-120	1	30
Phenol	50	27.36	50	26.72	55	53	19-82	2	30
Pyrene	50	48.28	50	48.51	97	97	68-118	0	30
Pyridine	50	33.65	50	33.92	67	68	18-100	1	30
Quinoline	50	48.83	50	49.31	98	99	82-109	1	30
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**					
Batch number: 160955708004	Sample number(s): 8308170-8308175,8308178-8308179								
Arsenic	15	15.31			102		80-120		
Barium	200	209.84			105		80-120		
Cadmium	5.00	5.25			105		80-120		
Chromium	20	20.03			100		80-120		
Cobalt	50	51.98			104		80-120		
Lead	15	16.25			108		80-120		
Nickel	50	52.73			105		80-120		
Selenium	15	15.46			103		80-120		
Silver	5.00	4.91			98		80-120		
Vanadium	50	53.1			106		80-120		
Zinc	50	50.26			101		80-120		
Batch number: 160955711002	Sample number(s): 8308170-8308175,8308178-8308179								
Mercury	0.100	0.100			100		80-120		
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 160901848006	Sample number(s): 8308176								
Arsenic	0.150	0.152			102		80-120		
Barium	2.00	2.03			101		80-120		
Cadmium	0.0500	0.0515			103		80-120		
Chromium	0.200	0.198			99		80-120		
Selenium	0.150	0.146			98		80-120		
Silver	0.0500	0.0450			90		80-120		
Batch number: 160955713005	Sample number(s): 8308176								

*- Outside of specification
(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: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Mercury	0.00100	0.000947			95		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 160901848006	Sample number(s): 8308176								
Cobalt	500	506.71			101		80-120		
Lead	150	155.06			103		80-120		
Nickel	500	520.1			104		80-120		
Vanadium	500	500.09			100		80-120		
Zinc	500	496.87			99		80-120		
	%	%	%	%					
Batch number: 16092820008A	Sample number(s): 8308170-8308175,8308178-8308179								
Moisture	89.5	89.46			100		99-101		

MS/MSD

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

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: R160991AA	Sample number(s): 8308174-8308175 UNSPK: P308974									
Benzene	N.D.	2.10	1.09	2.10	1.22	52*	58*	80-120	11	30
sec-Butylbenzene	N.D.	2.10	1.10	2.10	1.20	52*	57*	64-122	9	30
tert-Butylbenzene	N.D.	2.10	1.11	2.10	1.26	53*	60*	68-120	12	30
Cyclohexane	N.D.	2.10	0.914	2.10	0.833	43*	40*	58-120	9	30
1,2-Dibromoethane	N.D.	2.10	1.18	2.10	1.32	56*	63*	80-120	11	30
1,2-Dichloroethane	21.78	2.10	7.16	2.10	50.98	-694 (2)	1388 (2)	77-130	151*	30
Ethylbenzene	N.D.	2.10	1.11	2.10	1.26	53*	60*	80-120	12	30
n-Hexane	N.D.	2.10	0.566	2.10	0.555	27*	26*	38-135	2	30
Isopropylbenzene	N.D.	2.10	1.15	2.10	1.32	55*	63*	70-120	14	30
Methyl Tertiary Butyl Ether	N.D.	2.10	1.27	2.10	1.33	60*	63*	72-120	5	30
Naphthalene	N.D.	2.10	0.808	2.10	0.929	38*	44*	53-120	14	30
Toluene	N.D.	2.10	1.11	2.10	1.26	53*	60*	80-120	13	30
1,2,4-Trimethylbenzene	N.D.	2.10	0.964	2.10	1.08	46*	52*	74-120	12	30
1,3,5-Trimethylbenzene	N.D.	2.10	1.03	2.10	1.13	49*	54*	73-120	10	30
Xylene (Total)	N.D.	6.31	3.26	6.31	3.65	52*	58*	80-120	11	30
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: N160972AA	Sample number(s): 8308176 UNSPK: P304787									
Benzene	N.D.	400	450.15	400	456.48	113	114	78-120	1	30
sec-Butylbenzene	N.D.	400	410.86	400	412.86	103	103	68-124	0	30
tert-Butylbenzene	N.D.	400	399.54	400	407.8	100	102	74-121	2	30
Cyclohexane	N.D.	400	491.95	400	495.71	123	124*	65-123	1	30
1,2-Dibromoethane	N.D.	400	389.07	400	392.02	97	98	80-120	1	30
1,2-Dichloroethane	N.D.	400	411.99	400	415.43	103	104	72-127	1	30
Ethylbenzene	N.D.	400	408.04	400	412.64	102	103	78-120	1	30
n-Hexane	N.D.	400	522.8	400	529.84	131	132*	57-131	1	30
Isopropylbenzene	N.D.	400	427.35	400	433.73	107	108	80-120	1	30

*- Outside of specification
(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: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	N.D.	400	417.87	400	426.39	104	107	75-120	2	30
Naphthalene	N.D.	400	319.73	400	342.6	80	86	59-120	7	30
Toluene	N.D.	400	406.79	400	408.58	102	102	80-120	0	30
1,2,4-Trimethylbenzene	N.D.	400	397.01	400	404.12	99	101	75-120	2	30
1,3,5-Trimethylbenzene	N.D.	400	402.21	400	407.52	101	102	75-120	1	30
Xylene (Total)	N.D.	1200	1219.62	1200	1239.24	102	103	80-120	2	30
Batch number: N160981AA	Sample number(s): 8308177 UNSPK: P311959									
Benzene	N.D.	400	413.16	400	414.13	103	104	78-120	0	30
sec-Butylbenzene	N.D.	400	401.87	400	411.2	100	103	68-124	2	30
tert-Butylbenzene	N.D.	400	385.6	400	399.09	96	100	74-121	3	30
Cyclohexane	N.D.	400	402.15	400	410.48	101	103	65-123	2	30
1,2-Dibromoethane	N.D.	400	403.15	400	413.27	101	103	80-120	2	30
1,2-Dichloroethane	N.D.	400	401.7	400	403.98	100	101	72-127	1	30
Ethylbenzene	N.D.	400	408.35	400	416.18	102	104	78-120	2	30
n-Hexane	N.D.	400	408.29	400	420.37	102	105	57-131	3	30
Isopropylbenzene	N.D.	400	415.42	400	422.39	104	106	80-120	2	30
Methyl Tertiary Butyl Ether	N.D.	400	383.65	400	393.82	96	98	75-120	3	30
Naphthalene	N.D.	400	325.66	400	346.54	81	87	59-120	6	30
Toluene	N.D.	400	407.68	400	413.85	102	103	80-120	2	30
1,2,4-Trimethylbenzene	N.D.	400	410.63	400	414.12	103	104	75-120	1	30
1,3,5-Trimethylbenzene	N.D.	400	409.85	400	413.07	102	103	75-120	1	30
Xylene (Total)	N.D.	1200	1222.96	1200	1232.01	102	103	80-120	1	30
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 16093SLH026	Sample number(s): 8308170-8308175 UNSPK: P305985									
Acenaphthene	7.18	1.64	10.16	1.65	13.17	181 (2)	362 (2)	83-116	26	30
Anthracene	1.84	1.64	5.33	1.65	7.46	213*	340*	82-118	33*	30
Benzo(a)anthracene	2.97	1.64	5.70	1.65	7.18	166*	255*	76-119	23	30
Benzo(a)pyrene	2.63	1.64	5.41	1.65	6.15	169*	213*	85-117	13	30
Benzo(b)fluoranthene	1.98	1.64	4.57	1.65	6.10	157*	249*	78-129	29	30
Benzo(g,h,i)perylene	3.05	1.64	5.59	1.65	7.02	155*	241*	77-118	23	30
Benzo(k)fluoranthene	0.578	1.64	3.13	1.65	3.17	155*	157*	79-120	1	30
1,1'-Biphenyl	1.42	1.64	3.61	1.65	4.90	133*	210*	76-111	30	30
Di-n-butylphthalate	N.D.	1.64	N.D.	1.65	4.02	0*	243*	84-120	200*	30
Chrysene	4.04	1.64	6.55	1.65	9.13	153*	308*	80-121	33*	30
Dibenz(a,h)anthracene	0.715	1.64	3.51	1.65	3.53	170*	170*	81-123	1	30
Diethylphthalate	N.D.	1.64	4.08	1.65	4.65	249*	281*	81-118	13	30
2,4-Dimethylphenol	N.D.	1.64	N.D.	1.65	3.26	0*	197*	83-120	200*	30
2,4-Dinitrophenol	N.D.	3.28	17.11	3.31	16.46	521*	498*	16-132	4	30
bis(2-Ethylhexyl)phthalate	N.D.	1.64	4.51	1.65	4.31	275*	261*	81-121	5	30
Fluoranthene	3.46	1.64	6.82	1.65	9.50	205*	365*	81-117	33*	30
Fluorene	3.80	1.64	7.35	1.65	8.54	216*	287*	86-118	15	30
Indeno(1,2,3-cd)pyrene	1.07	1.64	3.83	1.65	4.81	168*	226*	81-118	23	30
2-Methylnaphthalene	17.54	1.64	18.33	1.65	29.11	48 (2)	699 (2)	83-109	45*	30
2-Methylphenol	N.D.	1.64	2.23	1.65	2.84	136*	171*	80-133	24	30
4-Methylphenol	N.D.	1.64	2.14	1.65	2.62	131*	158*	73-125	20	30
4-Nitrophenol	N.D.	1.64	34.01	1.65	33.64	2072*	2034*	52-133	1	30
Phenanthrene	12.48	1.64	14.34	1.65	23.13	113 (2)	644 (2)	80-114	47*	30
Phenol	N.D.	1.64	1.85	1.65	2.33	113	141*	73-122	23	30
Pyrene	12.28	1.64	15.3	1.65	20.97	184 (2)	525 (2)	81-114	31*	30
Pyridine	N.D.	1.64	N.D.	1.65	N.D.	0*	0*	55-109	0	30
Quinoline	N.D.	1.64	2.65	1.65	3.05	162*	184*	80-119	14	30

*- Outside of specification
(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: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 16096SLD026	Sample number(s): 8308178-8308179 UNSPK: P310265									
Acenaphthene	11.13	1.67	15.59	1.66	12.48	268 (2)	81 (2)	83-116	22	30
Anthracene	6.17	1.67	8.71	1.66	7.51	153*	81*	82-118	15	30
Benzo(a)anthracene	6.95	1.67	9.05	1.66	8.43	126 (2)	89 (2)	76-119	7	30
Benzo(a)pyrene	4.14	1.67	7.17	1.66	6.41	181*	137*	85-117	11	30
Benzo(b)fluoranthene	2.41	1.67	4.34	1.66	4.24	116	111	78-129	2	30
Benzo(g,h,i)perylene	2.67	1.67	4.74	1.66	4.60	124*	117	77-118	3	30
Benzo(k)fluoranthene	0.446	1.67	2.03	1.66	1.66	95	73*	79-120	20	30
1,1'-Biphenyl	N.D.	1.67	1.80	1.66	1.80	108	108	76-111	0	30
Di-n-butylphthalate	N.D.	1.67	N.D.	1.66	N.D.	0*	0*	84-120	0	30
Chrysene	12.54	1.67	15.8	1.66	13.34	195 (2)	48 (2)	80-121	17	30
Dibenz(a,h)anthracene	1.23	1.67	3.26	1.66	2.82	122	96	81-123	14	30
Diethylphthalate	N.D.	1.67	N.D.	1.66	N.D.	0*	0*	81-118	0	30
2,4-Dimethylphenol	N.D.	1.67	1.76	1.66	1.45	106	87	83-120	20	30
2,4-Dinitrophenol	N.D.	3.33	16.63	3.32	16.23	499*	489*	16-132	2	30
bis(2-Ethylhexyl)phthalate	N.D.	1.67	N.D.	1.66	N.D.	0*	0*	81-121	0	30
Fluoranthene	2.67	1.67	5.66	1.66	5.16	180*	150*	81-117	9	30
Fluorene	14.16	1.67	17.3	1.66	16.5	189 (2)	141 (2)	86-118	5	30
Indeno(1,2,3-cd)pyrene	0.786	1.67	2.68	1.66	2.51	114	104	81-118	6	30
2-Methylnaphthalene	1.05	1.67	2.15	1.66	2.39	66*	81*	83-109	11	30
2-Methylphenol	N.D.	1.67	1.87	1.66	1.76	112	106	80-133	6	30
4-Methylphenol	N.D.	1.67	1.48	1.66	1.41	89	85	73-125	5	30
4-Nitrophenol	N.D.	1.67	17.95	1.66	17.31	1078*	1044*	52-133	4	30
Phenanthrene	39.84	1.67	45.37	1.66	40.01	332 (2)	10 (2)	80-114	13	30
Phenol	N.D.	1.67	1.57	1.66	1.53	94	92	73-122	2	30
Pyrene	15.24	1.67	17.38	1.66	15.68	128 (2)	27 (2)	81-114	10	30
Pyridine	N.D.	1.67	N.D.	1.66	N.D.	0*	0*	55-109	0	30
Quinoline	N.D.	1.67	2.20	1.66	1.98	132*	119	80-119	10	30
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 160955708004	Sample number(s): 8308170-8308175,8308178-8308179 UNSPK: 8308170									
Arsenic	6.51	10.49	15.95	14.85	20.47	90	94	75-125	25*	20
Barium	56.2	139.86	196.64	198.02	266.93	100	106	75-125	30*	20
Cadmium	N.D.	3.50	3.48	4.95	5.70	100	115	75-125	48*	20
Chromium	17.59	13.99	33.62	19.8	39.42	115	110	75-125	16	20
Cobalt	7.35	34.97	41.62	49.5	61.36	98	109	75-125	38*	20
Lead	31.25	10.49	57.42	14.85	50.57	250*	130*	75-125	13	20
Nickel	13.98	34.97	48.53	49.5	67.1	99	107	75-125	32*	20
Selenium	0.985	10.49	10.77	14.85	15.77	93	100	75-125	38*	20
Silver	1.62	3.50	4.71	4.95	6.14	88	91	75-125	26*	20
Vanadium	25.93	34.97	64.28	49.5	81.15	110	112	75-125	23*	20
Zinc	70.93	34.97	126.97	49.5	229.74	160*	321*	75-125	58*	20
Batch number: 160955711002	Sample number(s): 8308170-8308175,8308178-8308179 UNSPK: 8308170									
Mercury	0.523	0.163	0.487	0.158	0.524	-21*	1*	80-120	7	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 160901848006	Sample number(s): 8308176 UNSPK: P302520									
Arsenic	N.D.	0.150	0.0731	0.150	0.0606	49*	40*	75-125	19	20
Barium	0.0236	2.00	1.69	2.00	1.62	83	80	75-125	4	20
Cadmium	0.0862	0.0500	0.123	0.0500	0.125	74*	78	75-125	2	20
Chromium	0.106	0.200	0.270	0.200	0.281	82	87	75-125	4	20

*- Outside of specification
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Quality Control Summary

Client Name: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Selenium	0.101	0.150	0.236	0.150	0.225	90	83	75-125	5	20
Silver	0.120	0.0500	0.164	0.0500	0.165	87	89	75-125	1	20
Batch number: 160955713005	Sample number(s): 8308176 UNSPK: P304976									
Mercury	N.D.	0.00100	0.000925	0.00100	0.000924	93	92	80-120	0	20
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: 160901848006	Sample number(s): 8308176 UNSPK: P302520									
Cobalt	648.5	500	1136.7	500	1230.8	98	116	75-125	8	20
Lead	58.7	150	199	150	204.9	94	97	75-125	3	20
Nickel	701.4	500	1190.9	500	1276.15	98	115	75-125	7	20
Vanadium	13.8	500	502.65	500	507.35	98	99	75-125	1	20
Zinc	2306	500	2788.75	500	3157.4	97 (2)	170 (2)	75-125	12	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
Batch number: 160955708004	Sample number(s): 8308170-8308175,8308178-8308179 BKG: 8308170			
Arsenic	6.51	3.90	50* (1)	20
Barium	56.2	55.72	1	20
Cadmium	N.D.	N.D.	0 (1)	20
Chromium	17.59	19.09	8	20
Cobalt	7.35	7.99	8	20
Lead	31.25	27.41	13	20
Nickel	13.98	15.12	8	20
Selenium	0.985	N.D.	200* (1)	20
Silver	1.62	1.39	15 (1)	20
Vanadium	25.93	28.27	9	20
Zinc	70.93	69.96	1	20
Batch number: 160955711002	Sample number(s): 8308170-8308175,8308178-8308179 BKG: 8308170			
Mercury	0.523	0.636	20	20
	mg/l	mg/l		
Batch number: 160901848006	Sample number(s): 8308176 BKG: P302520			
Arsenic	N.D.	N.D.	0 (1)	20
Barium	0.0236	0.0230	3 (1)	20
Cadmium	0.0862	0.0789	9 (1)	20
Chromium	0.106	0.0865	20 (1)	20
Selenium	0.101	0.0724	33* (1)	20
Silver	0.120	0.109	10 (1)	20
Batch number: 160955713005	Sample number(s): 8308176 BKG: P304976			
Mercury	N.D.	N.D.	0 (1)	20
	ug/l	ug/l		
Batch number: 160901848006	Sample number(s): 8308176 BKG: P302520			
Cobalt	648.5	702.5	8	20

*- Outside of specification
(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: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
	ug/l	ug/l		
Lead	58.7	N.D.	200* (1)	20
Nickel	701.4	733.25	4	20
Vanadium	13.8	18.4	29* (1)	20
Zinc	2306	2594.8	12	20
	%	%		
Batch number: 16092820008A	Sample number(s): 8308170-8308175,8308178-8308179 BKG: 8308173			
Moisture	15.51	14.62	6*	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.

Analysis Name: Evergreen Comprehensive VOCs
Batch number: A160921AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8308178	98	104	118	75
Blank	99	101	100	92
LCS	96	102	102	99
LCSD	95	98	103	98
Limits:	50-141	54-135	52-141	50-131

Analysis Name: Evergreen Comprehensive VOCs
Batch number: N160972AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8308176	108	104	92	95
Blank	105	103	92	96
LCS	103	101	94	102
LCSD	104	102	94	100
MS	104	101	94	101
MSD	103	102	94	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: Evergreen Comprehensive VOCs
Batch number: N160981AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8308177	104	102	97	92
Blank	101	102	98	93
LCS	100	99	99	99
LCSD	100	100	99	100
MS	101	101	99	99
MSD	101	101	100	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: Evergreen Comprehensive VOCs
Batch number: R160971AA

*- Outside of specification
(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: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8308170	83	78	87	91
8308171	72	72	70	69
8308172	87	83	87	98
8308173	75	73	72	84
8308179	66	68	66	70
Blank	82	80	79	77
LCS	82	79	79	80
LCSD	84	80	78	79
Limits:	50-141	54-135	52-141	50-131

Analysis Name: Evergreen Comprehensive VOCs
Batch number: R160991AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8308174	75	72	66	74
8308175	68	65	57	68
Blank	92	89	84	81
LCS	78	75	74	70
LCSD	84	80	77	77
MS	59	56	50*	42*
MSD	60	58	55	47*
Limits:	50-141	54-135	52-141	50-131

Analysis Name: Skinner List in Water by 8270C
Batch number: 16092WAM026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
8308176	42	64	97	90	97	99
Blank	50	68	99	89	93	106
LCS	51	61	105	91	93	97
LCSD	48	66	105	93	93	97
Limits:	10-85	10-103	22-150	46-128	61-112	41-125

Analysis Name: Skinner 8270 (microwave)
Batch number: 16093SLH026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
8308170	73	79	61	108	88	76
8308171	84	92	73	93	94	102
8308172	83	89	68	104	91	87
8308173	76	82	74	91	85	94
8308174	87	87	71	62	90	91
8308175	76	80	59	103	87	89
Blank	89	95	92	90	94	98
LCS	102	103	88	89	91	93
MS	108	114	93	152*	122*	134*
MSD	131*	137*	101	190*	146*	157*
Limits:	58-122	57-126	35-136	54-123	63-117	59-129

Analysis Name: Skinner 8270 (microwave)
Batch number: 16096SLD026

*- Outside of specification
(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: Stantec
Reported: 04/15/2016 11:38

Group Number: 1645141

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
8308178	80	83	65	79	83	88
8308179	75	67	16*	78	80	85
Blank	94	103	102	96	99	101
LCS	104	109	96	97	95	94
MS	90	101	66	123	99	111
MSD	79	86	69	96	93	100
Limits:	58-122	57-126	35-136	54-123	63-117	59-129

*- Outside of specification
(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. # 16657 Group # 1645141 Sample # 8308170-79

COC # 387998

Client Information

Client: Evergreen

Acct. #:

Project Name/#: AOIS MHIC Soil Borings

PWSID #:

Project Manager: Jenny Deboer

P.O. #:

Sampler: Dublinski

Quote #:

State where samples were collected: PA

For Compliance: Yes ☐ No ☐

For Lab Use Only

FSC:

SCR#:

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

Remarks

*See attached list of compounds and analyses to be tested for (Comprehensive

Sample Identification	Collected Date	Collected Time	Grab	Composite	Matrix: Soil	Sediment	Ground Water	Potable	Surface	NPDES	Other:	Total # of Containers	VOCs by 8260K	SVOCs by 8270K	Metals by 6010/6020K	RCRA Metals
AOIS-BH-16-027(0-2)	3/29/16	0730	X									5	X	X	X	X
AOIS-BH-16-027(2-3)		0745	X									5	X	X	X	X
AOIS-BH-16-026(0-2)		0755	X									5	X	X	X	X
AOIS-BH-16-026(2-3)		0810	X									5	X	X	X	X
AOIS-BH-16-025(0-2)		0825	X									5	X	X	X	X
AOIS-BH-16-024(0-2)		0840	X									5	X	X	X	X
FB-20160329		0900	X									6	X	X	X	X
TB-20160329												2	X			
AOIS-BH-16-023(0-2)		1000	X									5	X	X	X	X
AOIS-BH-16-023(2-3)		1015	X									5	X	X	X	X

Turnaround Time (TAT) Requested (please circle)

Standard Rush

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

Date results are needed:

E-mail address: jenny.deboer@stantec.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) TX TRRP-13

NYSDEC Category A or B MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
[signature]	3/29/16	1500	[signature]	3/29/16	1500
[signature]	3/29/16	1740			
			[signature]	3/29/16	1740

EDD Required? Yes No

If yes, format: EQUIS EFW Stantec

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

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

Relinquished by Commercial Carrier:

UPS ____ FedEx ____ Other ____

Temperature upon receipt 1.0 °C

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0615

16657/1645141/8308170-79

Comprehensive COC List for Evergreen Characterizations (August 2015)

VOCs by EPA Method 8260	CAS No.
Benzene	71-43-2
Butylbenzene, sec-	135-98-8
Butylbenzene, tert-	98-06-6
Cumene	98-82-8
Cyclohexane	110-82-7
Dichloroethane, 1,2-	107-06-2
Ethylbenzene	100-41-4
Ethylene Dibromide*	106-93-4
Hexane	110-54-3
Methyl tert butyl ether	1634-04-4
Toluene	108-88-3
Trimethylbenzene, 1,2,4-	95-63-6
Trimethylbenzene, 1,3,5-	108-67-8
Xylenes	1330-20-7

Metals by Method 6010/6020	CAS No.
Cobalt ***	7440-48-4
Lead***	7439-92-1
Nickel***	7440-02-0
Vanadium***	7440-62-2
Zinc***	7440-66-6

SVOCs by EPA Method 8270	CAS No.
Acenaphthene	83-32-9
Anthracene	120-12-7
Benzo(a)anthracene	56-55-3
Benzo(a)pyrene	50-32-8
Benzo(b)fluroranthene	205-99-2
Benzo(g,h,i)perylene	191-24-2
Benzo(k)fluoranthene	207-08-9
Biphenyl, 1,1-	92-52-4
Bis(2-ethylhexyl) phthalate	117-81-7
Chrysene	218-01-9
Cresol, m- (3-methylphenol)	108-39-4
Cresol, o- (2-methylphenol)	95-48-7
Cresol, p- (4-methylphenol)	106-44-5
Dibenz(a,h)anthracene	53-70-3
Diethyl phthalate	84-66-2
Dimethylphenol, 2,4-	105-67-9
Dibutyl phthalate, n-	84-74-2
Dinitrophenol, 2,4-	51-28-5
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno(1,2,3-cd)pyrene	193-39-5
Methylnaphthalene, 2-	91-57-6
Naphthalene**	91-20-3
Nitrophenol, 4-	100-02-7
Phenanthrene	85-01-8
Phenol	108-95-2
Pyrene	129-00-0
Pyridine	110-86-1
Quinoline	91-22-5

*Ethylene Dibromide should be analyzed by EPA Method 8011 instead of 8260 in soil for tank investigations and in **all groundwater samples**.

**Naphthalene should be analyzed by EPA Method 8260 instead of 8270 for tank investigations.

***Metals analysis should be total in soil and dissolved in groundwater.

This list is generated from the PADEP SERO Crude Oil Parameters for Corrective Action (CDB|SERO|PADEP|9 Aug 2013) combined with PADEP Short List of Petroleum Products (leaded and unleaded gasoline and No. 1, 2, 4, 5, 6 Fuel Oils).

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Sample Administration Receipt Documentation Log

Doc Log ID: 140978

Group Number(s): 1645141

Client: Stantec

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	03/29/2016 17:40
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	PA		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	2
Samples Intact:	Yes	Trip Blank Type:	HCl
Missing Samples:	No	Air Quality Samples Present:	No
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Maritza Fernandez (9906) at 20:23 on 03/29/2016

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	DT146	1.0	DT	Wet	Y	Loose	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:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< 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.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
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…

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.

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.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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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