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

November 05, 2014

Project: MHIC Annual Sampling

Submittal Date: 10/22/2014
Group Number: 1512973
PO Number: MHIC ANNUAL SAMPLING
State of Sample Origin: PA

Client Sample Description	Lancaster Labs (LL) #
MW-298_20141022 Grab Groundwater	7646910
MW-8_20141022 Grab Groundwater	7646911
MW-378_20141022 Grab Groundwater	7646912
MW-454_20141022 Grab Groundwater	7646913
MW-28_20141022 Grab Groundwater	7646914
MW-29_20141022 Grab Groundwater	7646915
MW-102_20141022 Grab Groundwater	7646916
MW-30_20141022 Grab Groundwater	7646917
MW-24_20141022 Grab Groundwater	7646918
Field Blank Grab Water	7646919

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

ELECTRONIC COPY TO Stantec Attn: Stephanie Andrews

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

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Analysis Report

Sample Description: MW-298_20141022 Grab Groundwater
MHIC Annual Sampling MW-298

LL Sample # WW 7646910
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 10:20 by CD

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

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1060 Andrew Drive
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West Chester PA 19380

MH298

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Isopropylbenzene	98-82-8	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.5	1
10943	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	Anthracene	120-12-7	N.D.	0.1	1
07805	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
07805	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
07805	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
07805	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
07805	Chrysene	218-01-9	N.D.	0.1	1
07805	Fluorene	86-73-7	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
07805	Phenanthrene	85-01-8	N.D.	0.1	1
07805	Pyrene	129-00-0	N.D.	0.1	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0095	1
Metals Dissolved	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	N.D.	0.082	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/15.
This sample was filtered in the lab for dissolved metals.
Trip blank vials were not received by the laboratory for this sample group.

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
10943	UST Unleaded/Leaded minus NAPH	SW-846 8260B	1	Z142992AA	10/26/2014 20:15	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z142992AA	10/26/2014 20:15	Daniel H Heller	1
07805	PAHs by 8270	SW-846 8270C	1	14298WAE026	11/01/2014 12:26	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	14298WAE026	10/27/2014 08:20	Katheryne V Sponheimer	1
10398	EDB in Wastewater	SW-846 8011	1	142970027A	10/28/2014 11:26	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	142970027A	10/25/2014 08:15	Kelli M Barto	1

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Analysis Report

Sample Description: MW-298_20141022 Grab Groundwater
MHIC Annual Sampling MW-298

LL Sample # WW 7646910
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 10:20 by CD

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

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1060 Andrew Drive
Suite 140
West Chester PA 19380

MH298

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	142976050003A	10/27/2014 06:04	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	142976050003	10/26/2014 21:30	Annamaria Kuhns	1

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Analysis Report

Sample Description: MW-8_20141022 Grab Groundwater
MHIC Annual Sampling MW-8

LL Sample # WW 7646911
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 11:30 by CD

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

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West Chester PA 19380

MH008

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	
10943	Benzene	71-43-2	3		0.5	1
10943	1,2-Dichloroethane	107-06-2	N.D.		0.5	1
10943	Ethylbenzene	100-41-4	N.D.		0.5	1
10943	Isopropylbenzene	98-82-8	2		0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	13		0.5	1
10943	Toluene	108-88-3	N.D.		0.5	1
10943	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.5	1
10943	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.5	1
10943	Xylene (Total)	1330-20-7	2		0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	
07805	Anthracene	120-12-7	0.1	J	0.1	1
07805	Benzo(a)anthracene	56-55-3	N.D.		0.1	1
07805	Benzo(a)pyrene	50-32-8	N.D.		0.1	1
07805	Benzo(b)fluoranthene	205-99-2	N.D.		0.1	1
07805	Benzo(g,h,i)perylene	191-24-2	N.D.		0.1	1
07805	Chrysene	218-01-9	N.D.		0.1	1
07805	Fluorene	86-73-7	0.8		0.1	1
07805	Naphthalene	91-20-3	N.D.		0.1	1
07805	Phenanthrene	85-01-8	0.8		0.1	1
07805	Pyrene	129-00-0	N.D.		0.1	1
GC Miscellaneous	**SW-846 8011**		**ug/l**		**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.		0.0097	1
Metals Dissolved	**SW-846 6020**		**ug/l**		**ug/l**	
06035	Lead	7439-92-1	0.67	J	0.082	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/15.
This sample was filtered in the lab for dissolved metals.
Trip blank vials were not received by the laboratory for this sample group.

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
10943	UST Unleaded/Leaded minus NAPH	SW-846 8260B	1	Z142992AA	10/26/2014 20:39	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z142992AA	10/26/2014 20:39	Daniel H Heller	1
07805	PAHs by 8270	SW-846 8270C	1	14298WAE026	11/01/2014 12:56	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	14298WAE026	10/27/2014 08:20	Katheryne V Sponheimer	1
10398	EDB in Wastewater	SW-846 8011	1	142970027A	10/28/2014 11:41	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	142970027A	10/25/2014 08:15	Kelli M Barto	1

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Analysis Report

Sample Description: **MW-8_20141022 Grab Groundwater**
MHIC Annual Sampling MW-8

LL Sample # WW 7646911
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 11:30 by CD

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

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Suite 140
West Chester PA 19380

MH008

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	142976050003A	10/27/2014 06:06	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	142976050003	10/26/2014 21:30	Annamaria Kuhns	1

Sample Description: MW-378_20141022 Grab Groundwater
MHIC Annual Sampling MW-378

LL Sample # WW 7646912
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 12:15 by CD

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

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West Chester PA 19380

MH379

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Isopropylbenzene	98-82-8	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.5	1
10943	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	Anthracene	120-12-7	N.D.	0.1	1
07805	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
07805	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
07805	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
07805	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
07805	Chrysene	218-01-9	N.D.	0.1	1
07805	Fluorene	86-73-7	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
07805	Phenanthrene	85-01-8	N.D.	0.1	1
07805	Pyrene	129-00-0	N.D.	0.1	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
Metals Dissolved	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	N.D.	0.082	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/15.
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Trip blank vials were not received by the laboratory for this sample group.

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Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	UST Unleaded/Leaded minus NAPH	SW-846 8260B	1	Z142992AA	10/26/2014 21:03	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z142992AA	10/26/2014 21:03	Daniel H Heller	1
07805	PAHs by 8270	SW-846 8270C	1	14298WAE026	11/01/2014 13:26	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	14298WAE026	10/27/2014 08:20	Katheryne V Sponheimer	1
10398	EDB in Wastewater	SW-846 8011	1	142970027A	10/28/2014 12:28	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	142970027A	10/25/2014 08:15	Kelli M Barto	1

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Analysis Report

Sample Description: MW-378_20141022 Grab Groundwater
MHIC Annual Sampling MW-378

LL Sample # WW 7646912
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 12:15 by CD

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

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1060 Andrew Drive
Suite 140
West Chester PA 19380

MH379

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	142976050003A	10/27/2014 06:07	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	142976050003	10/26/2014 21:30	Annamaria Kuhns	1

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Analysis Report

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Sample Description: MW-454_20141022 Grab Groundwater
MHIC Annual Sampling MW-454

LL Sample # WW 7646913
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 13:30 by CD

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

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1060 Andrew Drive
Suite 140
West Chester PA 19380

MH454

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	
10943	Benzene	71-43-2	1		0.5	1
10943	1,2-Dichloroethane	107-06-2	N.D.		0.5	1
10943	Ethylbenzene	100-41-4	N.D.		0.5	1
10943	Isopropylbenzene	98-82-8	0.9	J	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	10		0.5	1
10943	Toluene	108-88-3	N.D.		0.5	1
10943	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.5	1
10943	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.5	1
10943	Xylene (Total)	1330-20-7	N.D.		0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	
07805	Anthracene	120-12-7	0.3	J	0.1	1
07805	Benzo(a)anthracene	56-55-3	N.D.		0.1	1
07805	Benzo(a)pyrene	50-32-8	N.D.		0.1	1
07805	Benzo(b)fluoranthene	205-99-2	N.D.		0.1	1
07805	Benzo(g,h,i)perylene	191-24-2	N.D.		0.1	1
07805	Chrysene	218-01-9	N.D.		0.1	1
07805	Fluorene	86-73-7	2		0.1	1
07805	Naphthalene	91-20-3	N.D.		0.1	1
07805	Phenanthrene	85-01-8	0.9		0.1	1
07805	Pyrene	129-00-0	N.D.		0.1	1
GC Miscellaneous	**SW-846 8011**		**ug/l**		**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.		0.0096	1
Metals Dissolved	**SW-846 6020**		**ug/l**		**ug/l**	
06035	Lead	7439-92-1	N.D.		0.082	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/15.
This sample was filtered in the lab for dissolved metals.
Trip blank vials were not received by the laboratory for this sample group.

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
10943	UST Unleaded/Leaded minus NAPH	SW-846 8260B	1	Z142992AA	10/26/2014 21:27	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z142992AA	10/26/2014 21:27	Daniel H Heller	1
07805	PAHs by 8270	SW-846 8270C	1	14298WAE026	11/01/2014 13:56	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	14298WAE026	10/27/2014 08:20	Katheryne V Sponheimer	1
10398	EDB in Wastewater	SW-846 8011	1	142970027A	10/28/2014 12:43	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	142970027A	10/25/2014 08:15	Kelli M Barto	1

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Analysis Report

Sample Description: **MW-454_20141022 Grab Groundwater**
MHIC Annual Sampling MW-454

LL Sample # WW 7646913
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 13:30 by CD

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH454

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	142976050003A	10/27/2014 06:09	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	142976050003	10/26/2014 21:30	Annamaria Kuhns	1

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Analysis Report

Sample Description: MW-28_20141022 Grab Groundwater
MHIC Annual Sampling MW-28

LL Sample # WW 7646914
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 10:58 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH028

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Isopropylbenzene	98-82-8	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.5	1
10943	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	Anthracene	120-12-7	N.D.	0.1	1
07805	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
07805	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
07805	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
07805	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
07805	Chrysene	218-01-9	N.D.	0.1	1
07805	Fluorene	86-73-7	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
07805	Phenanthrene	85-01-8	N.D.	0.1	1
07805	Pyrene	129-00-0	N.D.	0.1	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1
Metals Dissolved	**SW-846 6020**		**ug/l**	**ug/l**	
06035	Lead	7439-92-1	N.D.	0.082	1

General Sample Comments

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Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10943	UST Unleaded/Leaded minus NAPH	SW-846 8260B	1	Z142992AA	10/26/2014 21:51	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z142992AA	10/26/2014 21:51	Daniel H Heller	1
07805	PAHs by 8270	SW-846 8270C	1	14298WAE026	11/01/2014 14:26	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	14298WAE026	10/27/2014 08:20	Katheryne V Sponheimer	1
10398	EDB in Wastewater	SW-846 8011	1	142970027A	10/28/2014 12:59	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	142970027A	10/25/2014 08:15	Kelli M Barto	1

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Analysis Report

Sample Description: MW-28_20141022 Grab Groundwater
MHIC Annual Sampling MW-28

LL Sample # WW 7646914
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 10:58 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH028

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	142976050003A	10/27/2014 06:11	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	142976050003	10/26/2014 21:30	Annamaria Kuhns	1

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Analysis Report

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Sample Description: MW-29_20141022 Grab Groundwater
MHIC Annual Sampling MW-29

LL Sample # WW 7646915
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 11:33 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH029

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	
10943	Benzene	71-43-2	N.D.		0.5	1
10943	1,2-Dichloroethane	107-06-2	N.D.		0.5	1
10943	Ethylbenzene	100-41-4	N.D.		0.5	1
10943	Isopropylbenzene	98-82-8	0.8	J	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.5	1
10943	Toluene	108-88-3	N.D.		0.5	1
10943	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.5	1
10943	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.5	1
10943	Xylene (Total)	1330-20-7	N.D.		0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	
07805	Anthracene	120-12-7	N.D.		0.1	1
07805	Benzo(a)anthracene	56-55-3	N.D.		0.1	1
07805	Benzo(a)pyrene	50-32-8	N.D.		0.1	1
07805	Benzo(b)fluoranthene	205-99-2	N.D.		0.1	1
07805	Benzo(g,h,i)perylene	191-24-2	N.D.		0.1	1
07805	Chrysene	218-01-9	N.D.		0.1	1
07805	Fluorene	86-73-7	N.D.		0.1	1
07805	Naphthalene	91-20-3	0.2	J	0.1	1
07805	Phenanthrene	85-01-8	N.D.		0.1	1
07805	Pyrene	129-00-0	0.2	J	0.1	1
GC Miscellaneous	**SW-846 8011**		**ug/l**		**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.		0.0097	1
Metals Dissolved	**SW-846 6020**		**ug/l**		**ug/l**	
06035	Lead	7439-92-1	0.33	J	0.082	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/15.
This sample was filtered in the lab for dissolved metals.
Trip blank vials were not received by the laboratory for this sample group.

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
10943	UST Unleaded/Leaded minus NAPH	SW-846 8260B	1	Z142992AA	10/26/2014 22:15	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z142992AA	10/26/2014 22:15	Daniel H Heller	1
07805	PAHs by 8270	SW-846 8270C	1	14298WAE026	11/01/2014 14:56	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	14298WAE026	10/27/2014 08:20	Katheryne V Sponheimer	1
10398	EDB in Wastewater	SW-846 8011	1	142970027A	10/28/2014 13:14	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	142970027A	10/25/2014 08:15	Kelli M Barto	1

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Analysis Report

Sample Description: MW-29_20141022 Grab Groundwater
MHIC Annual Sampling MW-29

LL Sample # WW 7646915
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 11:33 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH029

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	142976050003A	10/27/2014 06:13	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	142976050003	10/26/2014 21:30	Annamaria Kuhns	1

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Analysis Report

Sample Description: MW-102_20141022 Grab Groundwater
MHIC Annual Sampling MW-102

LL Sample # WW 7646916
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 09:50 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH102

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	
10943	Benzene	71-43-2	N.D.		0.5	1
10943	1,2-Dichloroethane	107-06-2	N.D.		0.5	1
10943	Ethylbenzene	100-41-4	N.D.		0.5	1
10943	Isopropylbenzene	98-82-8	N.D.		0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	7		0.5	1
10943	Toluene	108-88-3	N.D.		0.5	1
10943	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.5	1
10943	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.5	1
10943	Xylene (Total)	1330-20-7	N.D.		0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	
07805	Anthracene	120-12-7	N.D.		0.1	1
07805	Benzo(a)anthracene	56-55-3	N.D.		0.1	1
07805	Benzo(a)pyrene	50-32-8	N.D.		0.1	1
07805	Benzo(b)fluoranthene	205-99-2	N.D.		0.1	1
07805	Benzo(g,h,i)perylene	191-24-2	N.D.		0.1	1
07805	Chrysene	218-01-9	N.D.		0.1	1
07805	Fluorene	86-73-7	N.D.		0.1	1
07805	Naphthalene	91-20-3	N.D.		0.1	1
07805	Phenanthrene	85-01-8	N.D.		0.1	1
07805	Pyrene	129-00-0	0.3	J	0.1	1
GC Miscellaneous	**SW-846 8011**		**ug/l**		**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.		0.0096	1
Metals Dissolved	**SW-846 6020**		**ug/l**		**ug/l**	
06035	Lead	7439-92-1	0.65	J	0.082	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/15.
This sample was filtered in the lab for dissolved metals.
Trip blank vials were not received by the laboratory for this sample group.

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
10943	UST Unleaded/Leaded minus NAPH	SW-846 8260B	1	D142971AA	10/24/2014 16:33	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D142971AA	10/24/2014 16:33	Daniel H Heller	1
07805	PAHs by 8270	SW-846 8270C	1	14298WAE026	11/01/2014 15:26	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	14298WAE026	10/27/2014 08:20	Katheryne V Sponheimer	1
10398	EDB in Wastewater	SW-846 8011	1	142970027A	10/28/2014 13:30	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	142970027A	10/25/2014 08:15	Kelli M Barto	1

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Analysis Report

Sample Description: **MW-102_20141022 Grab Groundwater**
MHIC Annual Sampling MW-102

LL Sample # WW 7646916
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 09:50 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH102

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	142976050003A	10/27/2014 06:14	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	142976050003	10/26/2014 21:30	Annamaria Kuhns	1

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Analysis Report

Sample Description: MW-30_20141022 Grab Groundwater
MHIC Annual Sampling MW-30

LL Sample # WW 7646917
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 12:18 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH030

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	
10943	Benzene	71-43-2	12		0.5	1
10943	1,2-Dichloroethane	107-06-2	N.D.		0.5	1
10943	Ethylbenzene	100-41-4	2		0.5	1
10943	Isopropylbenzene	98-82-8	N.D.		0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.5	1
10943	Toluene	108-88-3	2		0.5	1
10943	1,2,4-Trimethylbenzene	95-63-6	1	J	0.5	1
10943	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.5	1
10943	Xylene (Total)	1330-20-7	5		0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	
07805	Anthracene	120-12-7	N.D.		0.1	1
07805	Benzo(a)anthracene	56-55-3	N.D.		0.1	1
07805	Benzo(a)pyrene	50-32-8	N.D.		0.1	1
07805	Benzo(b)fluoranthene	205-99-2	N.D.		0.1	1
07805	Benzo(g,h,i)perylene	191-24-2	N.D.		0.1	1
07805	Chrysene	218-01-9	N.D.		0.1	1
07805	Fluorene	86-73-7	0.1	J	0.1	1
07805	Naphthalene	91-20-3	2		0.1	1
07805	Phenanthrene	85-01-8	N.D.		0.1	1
07805	Pyrene	129-00-0	N.D.		0.1	1
GC Miscellaneous	**SW-846 8011**		**ug/l**		**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.		0.0096	1
Metals Dissolved	**SW-846 6020**		**ug/l**		**ug/l**	
06035	Lead	7439-92-1	0.12	J	0.082	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/15.
This sample was filtered in the lab for dissolved metals.
Trip blank vials were not received by the laboratory for this sample group.

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
10943	UST Unleaded/Leaded minus NAPH	SW-846 8260B	1	D142971AA	10/24/2014 16:56	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D142971AA	10/24/2014 16:56	Daniel H Heller	1
07805	PAHs by 8270	SW-846 8270C	1	14298WAE026	11/01/2014 15:55	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	14298WAE026	10/27/2014 08:20	Katheryne V Sponheimer	1
10398	EDB in Wastewater	SW-846 8011	1	142970027A	10/28/2014 13:46	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	142970027A	10/25/2014 08:15	Kelli M Barto	1

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Analysis Report

Sample Description: MW-30_20141022 Grab Groundwater
MHIC Annual Sampling MW-30

LL Sample # WW 7646917
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 12:18 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH030

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	142976050003A	10/27/2014 06:16	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	142976050003	10/26/2014 21:30	Annamaria Kuhns	1

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Analysis Report

Sample Description: MW-24_20141022 Grab Groundwater
MHIC Annual Sampling MW-24

LL Sample # WW 7646918
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 13:30 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH024

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	
10943	Benzene	71-43-2	3		0.5	1
10943	1,2-Dichloroethane	107-06-2	N.D.		0.5	1
10943	Ethylbenzene	100-41-4	N.D.		0.5	1
10943	Isopropylbenzene	98-82-8	1	J	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	1		0.5	1
10943	Toluene	108-88-3	N.D.		0.5	1
10943	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.5	1
10943	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.5	1
10943	Xylene (Total)	1330-20-7	N.D.		0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	
07805	Anthracene	120-12-7	0.1	J	0.1	1
07805	Benzo(a)anthracene	56-55-3	0.2	J	0.1	1
07805	Benzo(a)pyrene	50-32-8	0.3	J	0.1	1
07805	Benzo(b)fluoranthene	205-99-2	0.5	J	0.1	1
07805	Benzo(g,h,i)perylene	191-24-2	0.3	J	0.1	1
07805	Chrysene	218-01-9	0.5		0.1	1
07805	Fluorene	86-73-7	0.2	J	0.1	1
07805	Naphthalene	91-20-3	N.D.		0.1	1
07805	Phenanthrene	85-01-8	0.2	J	0.1	1
07805	Pyrene	129-00-0	0.6		0.1	1
GC Miscellaneous	**SW-846 8011**		**ug/l**		**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.		0.0095	1
Metals Dissolved	**SW-846 6020**		**ug/l**		**ug/l**	
06035	Lead	7439-92-1	0.12	J	0.082	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/15.
This sample was filtered in the lab for dissolved metals.
Trip blank vials were not received by the laboratory for this sample group.

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
10943	UST Unleaded/Leaded minus NAPH	SW-846 8260B	1	D142971AA	10/24/2014 17:19	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D142971AA	10/24/2014 17:19	Daniel H Heller	1
07805	PAHs by 8270	SW-846 8270C	1	14298WAE026	11/01/2014 16:25	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	14298WAE026	10/27/2014 08:20	Katheryne V Sponheimer	1
10398	EDB in Wastewater	SW-846 8011	1	142970027A	10/28/2014 14:01	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	142970027A	10/25/2014 08:15	Kelli M Barto	1

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Analysis Report

Sample Description: MW-24_20141022 Grab Groundwater
MHIC Annual Sampling MW-24

LL Sample # WW 7646918
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 13:30 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MH024

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06035	Lead	SW-846 6020	1	142976050003A	10/27/2014 06:23	Choon Y Tian	1
06050	ICP/MS SW-846 Water Digest	SW-846 3010A modified	1	142976050003	10/26/2014 21:30	Annamaria Kuhns	1

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Analysis Report

Sample Description: Field Blank Grab Water
MHIC Annual Sampling FB

LL Sample # WW 7646919
LL Group # 1512973
Account # 11183

Project Name: MHIC Annual Sampling

Collected: 10/22/2014 13:43 by CC

Submitted: 10/22/2014 17:45
Reported: 11/05/2014 08:33

Stantec
1060 Andrew Drive
Suite 140
West Chester PA 19380

MHFBL

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10943	Benzene	71-43-2	N.D.	0.5	1
10943	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10943	Ethylbenzene	100-41-4	N.D.	0.5	1
10943	Isopropylbenzene	98-82-8	N.D.	0.5	1
10943	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10943	Toluene	108-88-3	N.D.	0.5	1
10943	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.5	1
10943	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.5	1
10943	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**	**ug/l**	
07805	Anthracene	120-12-7	N.D.	0.1	1
07805	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
07805	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
07805	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
07805	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
07805	Chrysene	218-01-9	N.D.	0.1	1
07805	Fluorene	86-73-7	N.D.	0.1	1
07805	Naphthalene	91-20-3	N.D.	0.1	1
07805	Phenanthrene	85-01-8	N.D.	0.1	1
07805	Pyrene	129-00-0	N.D.	0.1	1
GC Miscellaneous	**SW-846 8011**		**ug/l**	**ug/l**	
10398	Ethylene dibromide	106-93-4	N.D.	0.0097	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/15.
Trip blank vials were not received by the laboratory for this sample group.

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
10943	UST Unleaded/Leaded minus NAPH	SW-846 8260B	1	D142971AA	10/24/2014 17:42	Daniel H Heller	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D142971AA	10/24/2014 17:42	Daniel H Heller	1
07805	PAHs by 8270	SW-846 8270C	1	14298WAE026	11/01/2014 16:55	Brian K Graham	1
07807	BNA Water Extraction	SW-846 3510C	1	14298WAE026	10/27/2014 08:20	Katheryne V Sponheimer	1
10398	EDB in Wastewater	SW-846 8011	1	142970027A	10/28/2014 14:17	Jessica L Miller	1
07786	EDB Extraction	SW-846 8011	1	142970027A	10/25/2014 08:15	Kelli M Barto	1

Quality Control Summary

Client Name: Stantec Group Number: 1512973
Reported: 11/05/14 at 08:33 AM

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.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: D142971AA	Sample number(s): 7646916-7646919							
Benzene	N.D.	0.5	ug/l	116		78-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	108		65-135		
Ethylbenzene	N.D.	0.5	ug/l	111		79-120		
Isopropylbenzene	N.D.	0.5	ug/l	113		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	111		75-120		
Toluene	N.D.	0.5	ug/l	111		80-120		
1,2,4-Trimethylbenzene	N.D.	0.5	ug/l	109		80-120		
1,3,5-Trimethylbenzene	N.D.	0.5	ug/l	109		80-120		
Xylene (Total)	N.D.	0.5	ug/l	115		80-120		
Batch number: Z142992AA	Sample number(s): 7646910-7646915							
Benzene	N.D.	0.5	ug/l	92		78-120		
1,2-Dichloroethane	N.D.	0.5	ug/l	94		65-135		
Ethylbenzene	N.D.	0.5	ug/l	99		79-120		
Isopropylbenzene	N.D.	0.5	ug/l	101		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	85		75-120		
Toluene	N.D.	0.5	ug/l	100		80-120		
1,2,4-Trimethylbenzene	N.D.	0.5	ug/l	103		80-120		
1,3,5-Trimethylbenzene	N.D.	0.5	ug/l	101		80-120		
Xylene (Total)	N.D.	0.5	ug/l	100		80-120		
Batch number: 14298WAE026	Sample number(s): 7646910-7646919							
Anthracene	N.D.	0.1	ug/l	101		82-116		
Benzo(a)anthracene	N.D.	0.1	ug/l	96		81-126		
Benzo(a)pyrene	N.D.	0.1	ug/l	104		82-116		
Benzo(b)fluoranthene	N.D.	0.1	ug/l	109		82-121		
Benzo(g,h,i)perylene	N.D.	0.1	ug/l	106		76-128		
Chrysene	N.D.	0.1	ug/l	99		81-120		
Fluorene	N.D.	0.1	ug/l	100		80-117		
Naphthalene	N.D.	0.1	ug/l	92		75-108		
Phenanthrene	N.D.	0.1	ug/l	93		81-114		
Pyrene	N.D.	0.1	ug/l	97		81-112		
Batch number: 142970027A	Sample number(s): 7646910-7646919							
Ethylene dibromide	N.D.	0.010	ug/l	106	102	60-140	4	20
Batch number: 142976050003A	Sample number(s): 7646910-7646918							
Lead	N.D.	0.082	ug/l	104		80-120		

Sample Matrix Quality Control

*- 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.

Quality Control Summary

Client Name: Stantec Group Number: 1512973
Reported: 11/05/14 at 08:33 AM
Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: D142971AA	Sample number(s): 7646916-7646919 UNSPK: P646628								
Benzene	120	121	72-134	1	30				
1,2-Dichloroethane	106	108	63-142	2	30				
Ethylbenzene	116	115	71-134	1	30				
Isopropylbenzene	118	118	75-128	0	30				
Methyl Tertiary Butyl Ether	112	113	72-126	1	30				
Toluene	116	117	80-125	1	30				
1,2,4-Trimethylbenzene	116	115	72-130	0	30				
1,3,5-Trimethylbenzene	115	116	65-132	2	30				
Xylene (Total)	120	119	79-125	0	30				
Batch number: Z142992AA	Sample number(s): 7646910-7646915 UNSPK: P646388								
Benzene	103	98	72-134	4	30				
1,2-Dichloroethane	101	100	63-142	2	30				
Ethylbenzene	110	107	71-134	2	30				
Isopropylbenzene	113	110	75-128	3	30				
Methyl Tertiary Butyl Ether	95	91	72-126	4	30				
Toluene	110	107	80-125	3	30				
1,2,4-Trimethylbenzene	112	108	72-130	3	30				
1,3,5-Trimethylbenzene	112	107	65-132	4	30				
Xylene (Total)	111	109	79-125	1	30				
Batch number: 14298WAE026	Sample number(s): 7646910-7646919 UNSPK: P648530								
Anthracene	101	92	78-114	10	30				
Benzo(a)anthracene	97	84	77-122	16	30				
Benzo(a)pyrene	103	87	73-125	17	30				
Benzo(b)fluoranthene	104	90	73-126	15	30				
Benzo(g,h,i)perylene	103	87	66-134	18	30				
Chrysene	98	86	78-128	14	30				
Fluorene	98	92	77-122	7	30				
Naphthalene	95	91	68-118	5	30				
Phenanthrene	92	85	76-112	10	30				
Pyrene	95	85	79-111	12	30				
Batch number: 142970027A	Sample number(s): 7646910-7646919 UNSPK: P647609								
Ethylene dibromide	101	103	60-140	2	20				
Batch number: 142976050003A	Sample number(s): 7646910-7646918 UNSPK: P646243 BKG: P646243								
Lead	104	103	75-125	1	20	0.39 J	0.37 J	3 (1)	20

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: UST Unleaded/Leaded minus NAPH
Batch number: D142971AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7646916	111	102	95	99

*- 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.

Quality Control Summary

Client Name: Stantec Group Number: 1512973
Reported: 11/05/14 at 08:33 AM

Surrogate Quality Control

7646917	109	99	96	98
7646918	107	99	96	101
7646919	109	99	96	96
Blank	109	100	95	96
LCS	106	103	94	101
MS	104	100	96	99
MSD	105	102	95	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST Unleaded/Leaded minus NAPH
Batch number: Z142992AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7646910	101	98	98	96
7646911	96	95	101	100
7646912	100	97	100	96
7646913	98	95	100	98
7646914	100	95	102	94
7646915	98	96	98	98
Blank	99	98	99	94
LCS	96	96	98	104
MS	96	98	97	102
MSD	95	96	99	103
Limits:	80-116	77-113	80-113	78-113

Analysis Name: PAHs by 8270
Batch number: 14298WAE026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7646910	79	70	35*
7646911	87	83	47
7646912	89	85	67
7646913	90	86	64
7646914	88	85	58
7646915	85	77	73
7646916	88	82	62
7646917	88	80	78
7646918	86	77	73
7646919	86	80	84
Blank	88	89	101
LCS	89	89	97
MS	92	88	62
MSD	89	84	47
Limits:	60-123	67-116	40-147

Analysis Name: EDB in Wastewater
Batch number: 142970027A

	1,1,2,2-Tetrachloroethane
7646910	109
7646911	108
7646912	105
7646913	109
7646914	105
7646915	110
7646916	110
7646917	118

*- 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.

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Quality Control Summary

Client Name: Stantec
Reported: 11/05/14 at 08:33 AM

Group Number: 1512973

Surrogate Quality Control

7646918	135
7646919	107
Blank	93
LCS	97
LCSD	94
MS	95
MSD	94
Limits:	46-136

*- 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.

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 11183 For Eurofins Lancaster Laboratories use only Group # 1512973 Sample # 7646910-19
Instructions on reverse side correspond with circled numbers.

COC # 324402

1 Client Information

Client: Stantec Consulting Svcs
Acct. #:
Project Name/#: MHIC Annual Sampling
PWSID #:
Project Manager: Stephanie Andrews
P.O. #:
Sampler: C. Dubinski
Quote #:
Name of state where samples were collected: PA

For Lab Use Only
FSC:
SCR#:

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

2 Sample Identification | **3 Collected** (Date, Time) | Grab | Composite | **4 Matrix** (Soil, Sediment, Water: Potable, Ground, Surface, NPDES, Other) | Total # of Containers | **5 Analysis Requested** (Preservation Codes)

Sample Identification	Date	Time	Grab	Composite	Soil	Sediment	Potable	Ground	Surface	NPDES	Other	Total # of Containers	Lead (dissolved) SW846 6010C	1,2 Dichloroethane	1,2,4 Trimethylbenzene	1,3,5 Trimethylbenzene	Cumene	Ethylbenzene	MTBE	Toluene	Xylenes	Ethylene Dibromide SW846 8011	Anthracene	Benzo(a)anthracene	Benzo(g,h,i) Perylene	Benzo(a) Pyrene	Benzo(b) Fluoranthene	Chrysene	Fluorene	Phenanthrene	Naphthalene	Pyrene	Remarks
														SW846 8260B									SW846 8270C									
MW-298_20141022	10-22-14	1020					X					8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
MW-8_20141022	↓	1130					X					8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
MW-378_20141022	↓	1215					X					8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
MW-454_20141022	↓	1330					X					8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

7 Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)

Date results are needed: _____

E-mail address: stephanie.andrews@stantec.com

8 Data Package Options (circle if required)
Type I (Validation/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) TX TRRP-13
Type IV (CLP SOW) MA MCP CT RCP

9

Relinquished by	Date	Time	Received by	Date	Time
[signature]	10/22/14	1433	[signature]		1433
[signature]		1745			
			[signature]	10/22/14	1745

EDD Required? Yes No
If yes, format: EQUIS

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 4.0 °C

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 11183 For Eurofins Lancaster Laboratories use only Group # 1512973 Sample # 1646910-19
Instructions on reverse side correspond with circled numbers.

COC # 324401

1 Client Information

Client: Stantec Consulting Svs
Acct. #:
Project Name/#: MHIC Annual Sampling
PWSID #:
Project Manager: Stephanie Andrews
P.O. #:
Sampler: C. Correll
Quote #:
Name of state where samples were collected: PA

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

5 Analysis Requested — Preservation Codes

For Lab Use Only
FSC:
SCR#:

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

2 Sample Identification / **3 Grab** / **Composite**

Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	Lead (dissolved) SW846 6010	1,2 Dichloroethane	1,3,5 Trimethylbenzene	Benzene	Cumene	Ethylbenzene	MTBE	Toluene	Xylenes	Ethylene Dibromide SW846 8011	Anthracene	Benzo(a)anthracene	Benzo(g,h,i)Perylene	Benzo(a)Pyrene	Benzo(b)Fluoranthene	Chrysene	Fluoranthene	Naphthalene	Phenanthrene	Pyrene	Remarks
							SW846 8260B									SW846 8270C										
MW-28-20141022	10-22-14	1058	X		8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MW-29-20141022	↓	1133	X		8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MW-102-20141022		0950	X		8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MW-30-20141022		1218	X		8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MW-24-20141022		1330	X		8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Field blank	↓	1343	X		5		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Trip Blank					4		X	X	X	X	X	X	X	X	X	~~X~~ CRC	~~X~~ CRC	~~X~~ CRC	~~X~~ CRC							

7 Turnaround Time (TAT) Requested (please circle)
Standard Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)

Date results are needed: ____

E-mail address: stephanie.andrews@stantec.com

8 Data Package Options (circle if required)
Type I (Validation/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) TX TRRP-13
Type IV (CLP SOW) MA MCP CT RCP

9

Relinquished by	Date	Time	Received by	Date	Time
[signature]	10-22-14	1430	[signature]		
[signature]	10/22/14	1700			
			[signature]	10/22/14	1745

EDD Required? Yes No
If yes, format: EQUIS

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 2.9 °C

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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 - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> 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.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC 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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