Haley & Aldrich of New York
200 Town Centre Drive
Suite 2
Rochester, NY 14623
585.359.9000

25 August 2015
File No. 28590-025

Ferry Landings, LLC
485 West Putnam Avenue
Greenwich, CT 06830

Attention: Carl Monheit
Senior Director of Development and Chief Engineer

Subject: Tarrytown Former MGP Site
Post-Remediation Groundwater Monitoring - 2014 Data
Tarrytown, New York
Brownfield Site #C3600069

Ladies and Gentlemen:

We are pleased to submit this report which documents groundwater monitoring operations at the Tarrytown Former Manufactured Gas Plant (MGP) Site for 2014. The report also documents repair of the two up-gradient wells in 2015. Remediation ended and construction of the Hudson Harbor development began in 2005; site development continues to date. See Figure 1 for the site location.

PURPOSE

This report summarizes groundwater monitoring activities, which are requirements of the Site Management Plan (SMP), dated 10 August 2010 and approved by the New York State Department of Environmental Conservation (NYSDEC) on 26 August 2010.

GROUNDWATER MONITORING NETWORK

Five monitoring wells are used for post-remediation monitoring, two up-gradient and three down-gradient. The well locations are shown on Figure 2, as follows:

Up-gradient Wells

- MW-29: near the eastern site property line, northern location, and
- MW-12: near the eastern site property line, southern location.

Down-gradient Wells

- MW-20: near the western site property line (near Hudson River), northern location,
- MW-21: near the western site property line (near Hudson River), central location, and
- MW-24: near the western site property line (near Hudson River), southern location.

In addition, observation and recovery wells associated with the northern DNAPL recovery system and the western DNAPL recovery system are also located on site. These wells are specific to the DNAPL systems (performance and operation), and they are not associated with post remediation site groundwater monitoring.

GROUNDWATER MONITORING

Groundwater monitoring has occurred at the site during and since completion of remediation in 2005. During 2014, groundwater monitoring was performed in accordance with the Groundwater Monitoring Plan included in the SMP. Samples were collected using Operating Procedure OP3013 - Monitored Natural Attenuation Groundwater Sample Collection Procedure, 2003, which is appended to the NYSDEC-approved Groundwater Monitoring Plan.

Samples collected were analyzed for required parameters listed on the attached Table 1 (which was derived from Table 2 of the NYSDEC-approved Groundwater Monitoring Plan), including:

- Volatile organic compounds (VOCs) benzene, toluene, ethylbenzene, and xylenes (BTEX);
- Semi-volatile organic compounds (SVOCs) classified as polycyclic aromatic hydrocarbons (PAHs); and
- Attenuation Indicators iron, manganese, nitrate, nitrite, sulfate, Total Organic Carbon (TOC), Dissolved Organic Carbon (DOC), sulfide, Biochemical Oxygen Demand (BOD), and Chemical Oxygen Demand (COD).

Chemical analyses were performed by Phoenix Environmental Laboratories, Inc. (Phoenix), a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory.

Results for the 2006 through 2014 sampling rounds are on Table 2 (attached). Results are compared to the Class GA Groundwater values listed in Division of Water Technical and Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, NYSDEC, June 1998 (TOGS 1.1.1). A summary of analytes detected during the three most current sampling rounds at concentrations greater than the TOGS 1.1.1 Class GA Groundwater Standards and Guidance Values (the comparison criteria) are on Table 3 (attached). Appendix A contains the laboratory reports for the groundwater sampling analyses.

For five PAH compounds (Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, and Indeno(1,2,3-cd)pyrene), the laboratory method detection limit of 0.02 ug/L is greater than the TOGS 1.1.1 Class GA Groundwater comparison criterion (0.002 ug/L). Phoenix reported that concentrations of these PAHs less than the reporting limit of 0.02 ug/L cannot be measured in NYSDOH ELAP laboratories.

2014 RESULTS SUMMARY

The 2014 groundwater sampling round was performed on 10 and 11 November 2014 using low flow procedures. Well purging, sampling, sample containment, chain of custody and sample shipping procedures, and laboratory analyses were completed as required by the SMP. Results, compared to the TOGS 1.1.1 Class GA Groundwater standards and guidance values are provided in Table 2 and Table 3 (attached) and are summarized as follows:

MW-29 (up-gradient): Iron and manganese concentrations were greater than the comparison criteria; however these concentrations were consistent with previous results since the inception of sampling in 2006. No VOC compounds were detected at concentrations greater than the comparison criteria, consistent with previous rounds. Concentrations of five PAH compounds (Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, and Indeno(1,2,3-cd)pyrene) were greater than the comparison criteria; these SVOC concentrations were consistent with previous results. These compounds are the five PAH's that laboratories cannot detect at concentrations as low as the comparison criteria. Benzo(a)pyrene, for which any detection exceeds the comparison criterion, had a concentration slightly greater than the detection limit. Ten other SVOCs were detected at concentrations less than the comparison criteria.

Concentrations of certain parameters (particularly 11 PAHS, nitrate as nitrogen, and sulfate) were observed to be significantly greater than the concentrations measured during the previous monitoring rounds. This is the first time that most of these PAH compounds were detected at concentrations greater than laboratory detection limits. These anomalies are likely due to high turbidity in the sample (initially greater than 1,000 NTU and stabilizing at about 129 NTU during purging prior to sampling) compared to previous turbidity levels at this well and contemporaneous turbidity levels at the other monitoring wells. PAHs bind tightly to fine particulates and the elevated concentrations detected are likely due to the extraction of the PAHs from the suspended particulates in the sample.

MW-12 (up-gradient): Iron concentration was greater than the comparison criteria; however the concentration was consistent with previous results. No VOC compounds were detected at concentrations greater than the comparison criteria. Since monitoring began, this is the first time there were no VOC exceedances. Four PAH compounds (Acenaphthene, Benz(a)anthracene, Chrysene, and Naphthalene) were detected at concentrations greater than the comparison criteria; these PAH concentrations were consistent with previous results. Current and past concentrations of PAHs have trended in a limited range greater the comparison criteria, indicating a general consistent quality of up-gradient groundwater coming onto the site.

MW-20 (down-gradient): Iron was detected at a concentration slightly greater than the comparison criteria; this concentration is consistent with previous results. No VOC compounds were detected at concentrations greater than the comparison criteria. Two PAH compounds (Benz(a)anthracene and Benzo(b)fluoranthene) were detected at concentrations greater than the comparison criteria; however the concentrations were less than concentrations measured in 2011 and 2013. Results of the duplicate sample from MW 20 compared well to the identified sample from well MW 20.

MW 21 (down-gradient): Iron was detected at a concentration slightly greater than the comparison criteria; this concentration is consistent with previous results. Benzene was detected at a concentration slightly greater than the comparison criteria; this is the first exceedance for benzene in 6 rounds (6 years). One PAH compound (Benz(a)anthracene) concentration was detected at a concentration greater than the comparison criteria. This is the first PAH exceedance in 3 rounds (3 years). In general, the PAH concentrations were consistent with previous rounds.

MW 24 (down-gradient): No metals, VOCs or PAH compounds were detected at concentrations greater than the comparison criteria, which is consistent with previous results.

COMPARISON OF UP-GRADIENT TO DOWN-GRADIENT WELLS

In general, concentrations of parameters in the down-gradient wells were less than or equal to the up-gradient concentrations, specifically:

- Detected BTEX compound concentrations in up-gradient wells were greater than down-gradient wells.
- Concentrations of detected PAH compounds in up-gradient wells were greater than down-gradient wells.
- Iron and Manganese concentrations in up-gradient wells were greater than or equivalent to down gradient wells.

WELL REPAIRS

To address elevated turbidity in up-gradient well MW-29, we inspected and repaired the two up-gradient wells (well head, well protection (stick-up pipe) and surface seal). The protector pipe for MW-12 was damaged and the protector pipe for MW-29 was broken. In January 2015, maintenance and repair of the two up-gradient wells (MW-12 and MW-29) consisted of removing the protective pipe, concrete securing the protective pipe, and bentonite seal and installing a new protective pipe, concrete to secure the protective pipe, and bentonite seal to prevent surface water from entering the well. The PVC risers were adjusted (raised/lowered) to accommodate the new protection pipe height and a new plug installed. The adjusted top of PVC elevation was surveyed.

On 14 August 2015, about 60 gallons was purged from MW-29 using a removable submersible pump to remove turbid water. The water was disposed with DNAPL removed from the DNAPL recovery wells on 14 August 2015. The riser for MW-29 was broken inside the protective pipe near the ground surface. The riser may have been broken when paving adjacent to the well. MW-12 was buried beneath a temporary soil stockpile and was not accessible for purging on 14 August 2015.

On 20 August 2015, about 20 gallons was purged from MW-29 and about 15 gallons was purged from MW-12 using a removable submersible pump to remove turbid water. The water was stored on site in covered 5-gallon pails for disposal with DNAPL in October 2015. The riser for MW-29 was stabilized using quick setting cement.

RECOMMENDATIONS

Based on several years of groundwater quality results which consistently indicate the site remedy is effective, we recommend that this report be submitted to NYSDEC with a request to decrease frequency of sampling to a biennial (once every two years) basis.

SUMMARY

This groundwater monitoring report summarizes the data for 2014. The pattern of overall groundwater quality at the site, where detected up-gradient concentrations were generally greater for selected compounds than down-gradient concentrations held true in 2014. Overall, groundwater concentrations for detected compounds at the down-gradient wells are not considered to be related to the former Manufactured Gas Plant (MGP).

The objective of groundwater monitoring is to determine if groundwater quality meets NYS groundwater standards and guidance values, assess achievement of the remedial performance criteria and evaluate site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment. Based on the results, while there are some exceedances of groundwater standards and guidance values, the consistency of results over the period of monitoring and consistency of down-gradient versus up-gradient water quality indicates the remedy continues to be effective.

The SMP and the Environmental Easement specify that the use of untreated groundwater from the Site for any purpose is not permitted. There continue to be no groundwater uses at the Site; given the monitoring results to date, and without the potential exposure pathway of groundwater use, the remedy at the site remains protective of human health with respect to groundwater quality.

CLOSING

Once site development is completed and assuming groundwater quality results continue to indicate the site remedy is effective, we expect to recommend a request be submitted to the NYSDEC to cease groundwater monitoring and that the monitoring wells be properly decommissioned.

In accordance with the OM&M Plan, groundwater monitoring will continue annually, until the NYSDEC approves an alternative schedule. The 2015 groundwater monitoring round is scheduled for late 2015.

Sincerely yours,
HALEY & ALDRICH OF NEW YORK

Gary F. Fuerstenberg, P.E.
Senior Project Manager

Vincent B. Dick
Senior Vice President

Attachments:

Table 1 – Sampling Parameters and Recommended Analytical Methods
Table 2 – 2006 - 2014 Groundwater Monitoring Results
Table 3 – 2012 - 2014 Groundwater Monitoring Results Summary
Figure 1 – Project Locus
Figure 2 – Site Plan
Appendix A – Laboratory Reports for the Groundwater Analyses

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TABLES

Tarrytown Former MGP Site
Source: Site Management Plan Appendix F - Table 2

Table 1 - Sampling Parameters and Recommended Analytical Methods

Analyte	Analytical Method
BTEX	
Benzene	8260B
Toluene	8260B
Ethlybenzene	8260B
O-Xylene	8260B
M&P-Xylene	8260B
Polyaromatic Hydrocarbons (PAH)	
Acenaphthene	8270C
Acenapthylene	8270C
Anthracene	8270C
Benz(a)anthracene	8270C
Benzo(a)pyrene	8270C
Benzo(b)fluoranthene	8270C
Benzo(ghi)fluoranthene	8270C
Chysene	8270C
Dibenz(a,h)anthracene	8270C
Fluoranthene	8270C
Fluorene	8270C
Indeno(1,2,3-cd)pyrene	8270C
Napthalene	8270C
Phenanthrene	8270C
Pyrene	8270C
Attenuation Indicators	
FIELD PARAMETERS	
Dissolved Oxygen	Field Probe
Oxygen-Reduction Potential	Field Probe
pH	Field Probe
Specific Conductance	Field Probe
Temperature	Field Probe
Ferrous Iron (Fe^{+2})	Field Probe
Carbon Dioxide	Field Probe
Alkalinity	Field Probe
Turbidity	Field Probe
LABORATORY PARAMETERS	
Biochemical Oxygen Demand	5210B
Chemical Oxygen Demand	5520C, 5520D
Dissolved Organic Carbon	415.1
Total Organic Carbon	9060
Sulfate	375.4
Sulfide	376.1, 376.2
Nitrate	353.2
Nitrite	353 .2
Total Iron	6010
Manganese	6010

Table - 2
Tarrytown Former MGP Site Groundwater Samples
2006 - 2014 Groundwater Monitoring Results
Tarrytown, New York

Parameter	NYSDEC TOGS 1.1.1 Class GA Groundwater[1] Date Sampled	MW-29 (Up-Gradient) 8/17/2006	12/17/2007	7/28/2008	12/8/2009	12/21/2010	12/20/2011	5/29/2013	11/19/2013	11/10/2014
BTEX[5]	**(ug/l)**									
Benzene	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	5	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
p&m-Xylene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0
Xylene (Total)	5	ND	ND	ND	ND	<1.0	<3.0	<3.0	<3.0	<3.0
PAH [7]	**(ug/L)**									
Acenaphthene	20	<10	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	**0.1**
Acenaphthylene	N/A[8,11]	<10	<10	<10	<0.3	<0.3	<0.3	<0.1	<0.1	**0.33**
Anthracene	50	<10	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	**0.23**
Benz(a)anthracene	0.002	<10	<10	<10	<0.06	<0.02	<0.02	**0.06**	**0.02**	**0.25**
Benzo(a)pyrene	ND	<10	<10	<10	<0.2	<0.02	<0.02	**0.05**	<0.02	**0.4**
Benzo(b)fluoranthene	0.002	<10	<10	<10	<0.08	<0.02	<0.02	<0.02	<0.02	**0.51**
Benzo(g,h,i)perylene	N/A[8,11]	<10	<10	<10	<4	<2.5	<2.5	<0.1	<0.1	**0.29**
Benzo(k)fluoranthene	0.002	<10	<10	<10	<0.3	<0.02	<0.02	<0.02	<0.02	**0.22**
Chrysene	0.002	<10	<10	<10	<2	<0.02	<0.02	**0.05**	<0.02	**0.3**
Dibenz(a,h)anthracene	N/A[8,11]	<10	<10	<10	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoranthene	50	<10	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	**0.63**
Fluorene	50	<10	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	**0.13**
Indeno(1,2,3-cd)pyrene	0.002	<10	<10	<10	<0.2	<0.02	<0.02	**0.05**	<0.02	**0.23**
Naphthalene	10	<10	<10	<10	<10	<2.5	<2.5	**0.13**	<0.1	<0.1
Phenanthrene	50	<10	<10	<10	<0.07	<0.07	<0.07	<0.07	<0.07	**0.35**
Pyrene	50	<10	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	**0.96**
ATTENUATION INDICATORS										
Field Parameters										
Dissolved Oxygen (mg/L)	N/A[10,11]							0.46	0.81	0.00
Oxygen-Reduction Potential (mV)	N/A[11]							-102	-22	-68
pH (Standard)	6.5 - 8.5[10]							7.0	7.0	7.2
Specific Conductance (mS/cm)	N/A[11]							5.93	5.80	10.30
Temperature (°C)	N/A[11]							20.5	16.2	18.8
Turbidity (NTU)	5[10]							22.7	6.5	129.0
Laboratory Parameters	**(mg/L)**									
Nitrate as Nitrogen	10	**0.06**	<0.05	**0.06**	**0.54**	<0.05	**0.14**	<0.05	<0.05	<0.05
Nitrite as Nitrogen	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**7.35**
Nitrate and Nitrite	10	**0.06**	<0.05	**0.06**	**0.54**	<0.05	**0.14**	<0.05	<0.05	**7.35**
Sulfate	250	**30**	**30**	**37**	**210**	**51**	**47.4**	**54**	**113**	**780**
Total Organic Carbon	N/A[11]	**4.2**	**31**	**5**	**3.2**	**3.4**	**2.8**	**3.4**	**12**	**7**
Dissolved Organic Carbon	N/A[11]	**2.8**	**20**	**2.9**	**3.1**	**3.2**	**2.8**	**2.9**	**12**	**7**
Sulfide	1	<0.05	<0.2	<0.1	<0.1	NR	NR	<0.1	<0.1	<0.1
B.O.D./5 day	N/A[11]	<2.0	**7.4**	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
C.O.D.	N/A[11]	**12**	**45**	**54**	**76**	**75**	**52**	**53**	**72**	**104**
Total Iron	0.3	**1.05**	**12.8**	**7.14**	**15.7**	**5.97**	**9.40**	**4.92**	**5.39**	**9.46**
Manganese	0.3	**1.01**	**0.71**	**1.25**	**1.45**	**1.17**	**1.10**	**1.01**	**0.93**	**2.05**
Iron and Manganese Total	0.5	**2.06**	**13.51**	**8.39**	**17.15**	**7.14**	**10.50**	**5.93**	**6.32**	**11.51**

Notes:
(A) Concentrations shown in bold were detected.
(B) <0.1, for example, means the analyte was not detected and the detection limit was 0.1.
(C) Concentrations greater than the NYSDEC TOGS 1.1.1 standards and guidance values are shaded gray.
Footnotes:
(1)NYSDEC Division of Water Technical Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998.
(6) 10 NYCRR Part 5-Subpart 5-1 Public Water Systems - Tables
(8) Not regulated by the Principal Organic Contaminant (POC) Groundwater Standard (TOGS 1.1.1 page 5).
(10) 6 NYCRR 703.3 Water quality standards for pH, dissolved oxygen, dissolved solids, odor, color and turbidity.
(11) N/A - No Class GA groundwater standard or guidance value.
Acronyms:
BTEX = volatile organic compounds: Benzene, Toluene, Ethylbenzene, and Xylene
ND - A non-detectable concentration by the approved analytical methods referenced in 6 NYCRR Part 700.3.
NR = Not Reported
NYSDEC = New York State Department of Environmental Conservation
PAH = semi-volatile organic compounds classified as Polycyclic Aromatic Hydrocarbons.
SVOC = Semivolatile Organic Compound
VOC = Volatile Organic Compound

Table - 2
Tarrytown Former MGP Site Groundwater Samples
2006 - 2014 Groundwater Monitoring Results
Tarrytown, New York

Parameter	NYSDEC TOGS 1.1.1 Class GA Groundwater[1] Date Sampled	MW-12 (Up-Gradient) 9/19/1996	8/17/2006	12/17/2007	12/8/2009	12/20/2010	12/21/2011	5/29/2013	11/19/2013	11/10/2014
BTEX[5]	**(ug/l)**									
Benzene	1	ND	<1.0	<1.0	<1.0	<10	<1.0	<1.0	< 2.0	<1.0
Toluene	5	ND	**1.6**	<5.0	<1.0	<10	<1.0	<1.0	< 2.0	<1.0
Ethyl Benzene	5	ND	**20**	**9.6**	**2.6**	<10	1.2	**4**	< 2.0	**1.2**
o-Xylene	5	N/A	**39**	**14**	**16**	<10	**7.9**	<2	**9.4**	**3.8**
p&m-Xylene	5	N/A	**14**	**6.1**	**4.5**	<10	**2.3**	**5.9**	< 4.0	<2.0
Xylene (Total)	5	**10**	**53**	**20.1**	**20.5**	<10	**10.2**	**17.9**	**9.4**	**3.8**
PAH [7]	**(ug/L)**									
Acenaphthene	20	**7**	**41**	**18**	**77**	**57**	**51**	<50	**72**	**36**
Acenaphthylene	N/A[8,11]	**9**	<10	<10	5	**8.1**	**7.3**	<50	**4.9**	**3**
Anthracene	50	ND	<10	<10	<10	<2.5	<2.8	<50	**1.5**	**1.3**
Benz(a)anthracene	0.002	ND	<10	<10	<0.06	**0.084**	**0.089**	<50	**0.06**	**0.04**
Benzo(a)pyrene	ND	N/A	<10	<10	<0.2	**0.068**	**0.078**	<50	<0.02	<0.02
Benzo(b)fluoranthene	0.002	N/A	<10	<10	<0.08	**0.074**	**0.089**	<50	**0.03**	<0.02
Benzo(g,h,i)perylene	N/A[8,11]	N/A	<10	<10	<4	<2.5	<2.8	<50	<0.1	<0.01
Benzo(k)fluoranthene	0.002	N/A	<10	<10	<0.3	**0.023**	<0.022	<50	<0.02	<0.02
Chrysene	0.002	ND	<10	<10	<2	**0.067**	**0.078**	<50	**0.04**	**0.03**
Dibenz(a,h)anthracene	N/A[8,11]	ND	<10	<10	<0.2	**0.015**	**<0.011**	<50	<0.01	<0.01
Fluoranthene	50	ND	<10	<10	<10	<2.5	<2.8	<50	**0.2**	**0.19**
Fluorene	50	ND	**13**	<10	<10	**13**	**8.8**	<50	**14**	**8.7**
Indeno(1,2,3-cd)pyrene	0.002	N/A	<10	<10	<0.2	**0.045**	**0.056**	<50	<0.02	<0.02
Naphthalene	10	**16**	**600**	**280**	**400**	**44**	**110**	**290**	**96**	**53**
Phenanthrene	50	ND	**11**	<10	**3.9**	**6.4**	**3**	<50	**7**	**4.7**
Pyrene	50	ND	<10	<10	<10	<2.5	<2.8	<50	**0.27**	**0.28**
ATTENUATION INDICATORS										
Field Parameters										
Dissolved Oxygen (mg/L)	N/A[10,11]							0.54	0.91	0.00
Oxygen-Reduction Potential (mV)	N/A[11]							-148	-13	-132
pH (Standard)	6.5 - 8.5[10]							6.8	6.9	7.3
Specific Conductance (mS/cm)	N/A[11]							1.06	0.95	0.69
Temperature (°C)	N/A[11]							16.4	15.7	19.5
Turbidity (NTU)	5[10]							3.2	0.0	4.8
Laboratory Parameters	**(mg/L)**									
Nitrate as Nitrogen	10	N/A	**0.05**	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05
Nitrite as Nitrogen	1	N/A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate and Nitrite	10	N/A	**0.05**	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05
Sulfate	250	N/A	**34**	**110**	<3.0	**7.1**	**13.1**	<3.0	**10.3**	<3.0
Total Organic Carbon	N/A[11]	N/A	**20**	**93**	**17**	**23**	**15**	**20**	**18**	**15**
Dissolved Organic Carbon	N/A[11]	N/A	**15**	**90**	**15**	**19**	**14**	**18**	**15**	**12**
Sulfide	1	N/A	<0.05	0.21	<0.1	NR	NR	0.1	<0.1	<0.1
B.O.D./5 day	N/A[11]	N/A	**8.7**	**16**	**8.3**	<4.0	<4.0	**12**	**7.6**	**7.8**
C.O.D.	N/A[11]	N/A	**51**	**100**	**55**	**68**	**43**	**62**	**52**	**46**
Total Iron	0.3	N/A	**17.2**	**52.5**	**17.2**	**22.9**	**23.0**	**27.8**	**15.8**	**18.1**
Manganese	0.3	N/A	**0.31**	**0.50**	**0.27**	**0.22**	**0.26**	**0.17**	**0.16**	**0.18**
Iron and Manganese Total	0.5	N/A	**17.51**	**53.00**	**17.47**	**23.12**	**23.26**	**27.97**	**15.96**	**18.28**

Notes:
(A) Concentrations shown in bold were detected.
(B) <0.1, for example, means the analyte was not detected and the detection limit was 0.1.
(C) Concentrations greater than the NYSDEC TOGS 1.1.1 standards and guidance values are shaded gray.
Footnotes:
(1)NYSDEC Division of Water Technical Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998.
(6) 10 NYCRR Part 5-Subpart 5-1 Public Water Systems - Tables
(8) Not regulated by the Principal Organic Contaminant (POC) Groundwater Standard (TOGS 1.1.1 page 5).
(10) 6 NYCRR 703.3 Water quality standards for pH, dissolved oxygen, dissolved solids, odor, color and turbidity.
(11) N/A - No Class GA groundwater standard or guidance value.
Acronyms:
BTEX = volatile organic compounds: Benzene, Toluene, Ethylbenzene, and Xylene
ND - A non-detectable concentration by the approved analytical methods referenced in 6 NYCRR Part 700.3.
NR = Not Reported
NYSDEC = New York State Department of Environmental Conservation
PAH = semi-volatile organic compounds classified as Polycyclic Aromatic Hydrocarbons.
SVOC = Semivolatile Organic Compound
VOC = Volatile Organic Compound

Table - 2
Tarrytown Former MGP Site Groundwater Samples
2006 - 2014 Groundwater Monitoring Results
Tarrytown, New York

Parameter	NYSDEC TOGS 1.1.1 Class GA Groundwater[1]	MW-20 (Down-Gradient)									MW-20 DUP-121807	MW-20 DUP-120809	MW-20 DUP-111913	MW-20 DUP-111114
	Date Sampled	8/17/2006	12/18/2007	7/29/2008	12/8/2009	12/22/2010	12/19/2011	5/30/2013	11/19/2013	11/11/2014	12/18/2007	12/8/2009	11/19/2013	11/11/2014
BTEX[5]	**(ug/l)**													
Benzene	1	<1.0	<1.0	**3.1**	<1.0	<1.0	<1.0	<0.7	<1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0
Toluene	5	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0
Ethyl Benzene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	< 1.0	< 1.0
o-Xylene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
p&m-Xylene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<2.0	<2.0
Xylene (Total)	5	<2.0	<2.0	<2.0	<2.0	<1.0	<3.0	<3.0	<3.0	<3.0	<2.0	<2.0	<3.0	<3.0
PAH [7]	**(ug/L)**													
Acenaphthene	20	<10	<10	<10	<10	<2.5	<2.5	**0.91**	<0.1	<0.1	<10	<10	<0.1	<0.1
Acenaphthylene	N/A[8,11]	<10	<10	<10	<0.3	<0.3	<0.3	**0.29**	<0.1	<0.1	<10	<0.3	<0.1	<0.1
Anthracene	50	<10	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	<0.1	<10	<10	<0.1	<0.1
Benz(a)anthracene	0.002	<10	<10	<10	<0.06	**0.023**	**0.09**	**0.06**	**0.02**	**0.02**	<10	<0.06	<0.02	**0.02**
Benzo(a)pyrene	ND	<10	<10	<10	<0.2	<0.02	**0.11**	**0.05**	<0.02	<0.02	<10	<0.2	<0.02	<0.02
Benzo(b)fluoranthene	0.002	<10	<10	<10	<0.08	<0.02	**0.13**	**0.04**	<0.02	**0.02**	<10	<0.08	<0.02	<0.02
Benzo(g,h,i)perylene	N/A[8,11]	<10	<10	<10	<4	<2.5	<2.5	<0.1	<0.1	<0.1	<10	<4.0	<0.1	<0.1
Benzo(k)fluoranthene	0.002	<10	<10	<10	<0.3	<0.02	**0.05**	<0.02	<0.02	<0.02	<10	<0.3	<0.02	<0.02
Chrysene	0.002	<10	<10	<10	<2	<0.02	**0.07**	**0.05**	<0.02	<0.02	<10	<2	<0.02	<0.02
Dibenz(a,h)anthracene	N/A[8,11]	<10	<10	<10	<0.2	<0.01	**0.01**	**0.01**	<0.01	<0.01	<10	<0.2	<0.01	<0.01
Fluoranthene	50	<10	<10	<10	<10	<2.5	<2.5	**0.24**	<0.1	<0.1	<10	<10	<0.1	<0.1
Fluorene	50	<10	<10	<10	<10	<2.5	<2.5	**0.1**	<0.1	<0.1	<10	<10	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	0.002	<10	<10	<10	<0.2	<0.02	**0.06**	<0.02	<0.02	<0.02	<10	<0.2	<0.02	<0.02
Naphthalene	10	<10	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	<0.1	<10	<10	<0.1	<0.1
Phenanthrene	50	<10	<10	<10	<0.07	<0.07	**0.07**	**0.07**	<0.07	<0.07	<10	<0.07	<0.07	<0.07
Pyrene	50	<10	<10	<10	<10	<2.5	<2.5	**0.17**	<0.1	<0.1	<10	<10	<0.1	<0.1
ATTENUATION INDICATORS														
Field Parameters														
Dissolved Oxygen (mg/L)	N/A[10,11]							0.40	1.69	0.00				
Oxygen-Reduction Potential (mV)	N/A[11]							-205	92	99				
pH (Standard)	6.5 - 8.5[10]							8.1	8.7	8.0				
Specific Conductance (mS/cm)	N/A[11]							4.77	8.32	13.30				
Temperature (°C)	N/A[11]							21.8	14.0	16.9				
Turbidity (NTU)	5[10]							152.0	21.2	5.4				
Laboratory Parameters	**(mg/L)**													
Nitrate as Nitrogen	10	<0.05	<0.05	**0.05**	**0.55**	NR	**0.39**	**0.07**	**0.27**	**0.57**	<0.05	**0.54**	**0.23**	**0.6**
Nitrite as Nitrogen	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate and Nitrite	10	<0.05	<0.05	**0.05**	**0.55**	NR	**0.39**	**0.07**	**0.27**	**0.57**	<0.05	**0.54**	**0.23**	**0.6**
Sulfate	250	**34**	**240**	**240**	**210**	**390**	**60.8**	**173**	**364**	**523**	**240**	**210**	**369**	**400**
Total Organic Carbon	N/A[11]	**3.5**	**12**	**4.6**	**3.2**	**3.5**	**4.1**	**3.3**	**2.7**	**2.7**	**5.7**	**3.2**	**2.4**	**2.6**
Dissolved Organic Carbon	N/A[11]	**2.2**	**11**	**3.9**	**3.3**	**3.0**	**3.3**	**3.2**	**2.6**	**2.7**	**4.9**	**3.1**	**2.4**	**2.3**
Sulfide	1	<0.05	<0.2	<0.1	<0.1	NR	NR	<0.01	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
B.O.D./5 day	N/A[11]	<2.0	<4.0	<4.0	<4.0	<4.0	<40	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
C.O.D.	N/A[11]	**120**	**58**	**69**	**67**	**110**	**28**	**66**	**100**	**125**	**52**	**76**	**100**	**161**
Total Iron	0.3	**0.06**	**0.14**	**0.37**	**0.32**	**0.44**	**18.40**	**1.68**	**0.24**	**0.34**	**0.13**	**0.32**	**0.23**	**0.31**
Manganese	0.3	**0.01**	**0.03**	**0.08**	**0.02**	**0.02**	**1.83**	**0.14**	**0.03**	**0.05**	**0.03**	**0.02**	**0.04**	**0.05**
Iron and Manganese Total	0.5	**0.06**	**0.17**	**0.44**	**0.34**	**0.46**	**20.23**	**1.82**	**0.27**	**0.39**	**0.16**	**0.34**	**0.26**	**0.35**

Notes:
(A) Concentrations shown in bold were detected.
(B) <0.1, for example, means the analyte was not detected and the detection limit was 0.1.
(C) Concentrations greater than the NYSDEC TOGS 1.1.1 standards and guidance values are shaded gray.
Footnotes:
(1)NYSDEC Division of Water Technical Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998.
(6) 10 NYCRR Part 5-Subpart 5-1 Public Water Systems - Tables
(8) Not regulated by the Principal Organic Contaminant (POC) Groundwater Standard (TOGS 1.1.1 page 5).
(10) 6 NYCRR 703.3 Water quality standards for pH, dissolved oxygen, dissolved solids, odor, color and turbidity.
(11) N/A - No Class GA groundwater standard or guidance value.
Acronyms:
BTEX = volatile organic compounds: Benzene, Toluene, Ethylbenzene, and Xylene
ND - A non-detectable concentration by the approved analytical methods referenced in 6 NYCRR Part 700.3.
NR = Not Reported
NYSDEC = New York State Department of Environmental Conservation
PAH = semi-volatile organic compounds classified as Polycyclic Aromatic Hydrocarbons.
SVOC = Semivolatile Organic Compound
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Table - 2
Tarrytown Former MGP Site Groundwater Samples
2006 - 2014 Groundwater Monitoring Results
Tarrytown, New York

	NYSDEC TOGS 1.1.1 Class GA Groundwater[1]	MW-21 (Down-Gradient)									MW-21 DUP-121911	MW-21 DUP-053013
Parameter	**Date Sampled**	**8/17/2006**	**12/18/2007**	**7/30/2008**	**12/8/2009**	**12/22/2010**	**12/19/2011**	**5/30/2013**	**11/19/2013**	**11/11/2014**	**12/19/2011**	**5/30/2013**
BTEX[5]	**(ug/l)**											
Benzene	1	<1.0	<1.0	**1.4**	<1.0	<1.0	<1.0	<0.7	<1.0	**1.5**	<1.0	<0.7
Toluene	5	<1.0	<3.0	<1.0	<1.0	**4.9**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
p&m-Xylene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0	<2.0	<2.0	<2.0
Xylene (Total)	5	ND	ND	ND	ND	<1.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
PAH [7]	**(ug/L)**											
Acenaphthene	20	<11	<10	<10	<10	<50	<2.5	<0.1	<0.1	**0.6**	<2.5	<0.1
Acenaphthylene	N/A[8,11]	<11	<10	<10	<0.3	<50	<0.3	**0.14**	**0.13**	**0.1**	<0.3	0.14
Anthracene	50	<11	<10	<10	<10	<50	<2.5	**0.17**	**0.2**	**0.12**	<2.5	0.17
Benz(a)anthracene	0.002	<11	<10	<10	<0.06	<50	**0.05**	<0.02	<0.02	**0.02**	**0.03**	<0.02
Benzo(a)pyrene	ND	<11	<10	<10	<0.2	<50	**0.04**	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(b)fluoranthene	0.002	<11	<10	<10	<0.08	<50	**0.04**	<0.02	<0.02	<0.02	**0.02**	<0.02
Benzo(g,h,i)perylene	N/A[8,11]	<11	<10	<10	<4	<50	<2.5	<0.1	<0.1	<0.1	<2.5	<0.1
Benzo(k)fluoranthene	0.002	<11	<10	<10	<0.3	<50	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chrysene	0.002	<11	<10	<10	<2	<50	**0.03**	<0.02	<0.02	<0.02	<0.02	<0.02
Dibenz(a,h)anthracene	N/A[8,11]	<11	<10	<10	<0.2	<50	<0.01	0.14	<0.01	<0.01	<0.01	<0.01
Fluoranthene	50	<11	<10	<10	<10	<50	<2.5	<0.1	**0.12**	**0.15**	<2.5	**0.33**
Fluorene	50	<11	<10	<10	<10	<50	<2.5	<0.1	<0.1	<0.1	<2.5	<0.1
Indeno(1,2,3-cd)pyrene	0.002	<11	<10	<10	<0.2	<50	**0.02**	<0.02	<0.02	<0.02	<0.02	<0.02
Naphthalene	10	<11	<10	<10	<10	<50	<2.5	<0.1	<0.1	<0.1	<2.5	0.15
Phenanthrene	50	<11	<10	<10	<0.07	<50	0.08	<0.07	<0.07	<0.07	<0.07	<0.07
Pyrene	50	<11	<10	<10	<10	<50	<2.5	**0.17**	**0.23**	**0.23**	<2.5	0.37
ATTENUATION INDICATORS												
Field Parameters												
Dissolved Oxygen (mg/L)	N/A[10,11]							0.53	0.74	0.00		
Oxygen-Reduction Potential (mV)	N/A[11]							-310	-119	-340		
pH (Standard)	6.5 - 8.5[10]							7.3	6.6	8.0		
Specific Conductance (mS/cm)	N/A[11]							2.99	4.29	2.99		
Temperature (°C)	N/A[11]							24.9	14.0	18.6		
Turbidity (NTU)	5[10]							24.6	8.2	0.0		
Laboratory Parameters	**(mg/L)**											
Nitrate as Nitrogen	10	**0.05**	<0.05	<0.05	<0.05	NR	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrite as Nitrogen	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Nitrate and Nitrite	10	**0.05**	<0.05	<0.05	<0.05	NR	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sulfate	250	**350**	**460**	**360**	**360**	**640**	**474**	**155**	**496**	**43.6**	**479**	**163**
Total Organic Carbon	N/A[11]	**6**	**12**	**11**	**11**	**9.1**	**12**	**14**	**8.1**	**14**	**13**	**13**
Dissolved Organic Carbon	N/A[11]	**4.5**	**12**	**9.8**	**9.8**	**9.0**	**12**	**13**	**11**	**15**	**12**	**13**
Sulfide	1	<0.05	<0.2	**0.38**	**0.38**	NR	NR	**3.1**	<0.1	<0.1	NR	**3**
B.O.D./5 day	N/A[11]	<2.0	6.4	<4.0	<4.0	19	<4.0	11	<4.0	10	<4.0	11
C.O.D.	N/A[11]	**38**	**27**	**54**	**54**	**82**	**82**	**66**	**52**	**50**	**66**	**64**
Total Iron	0.3	**2.74**	**2.42**	**1.32**	**12.70**	**15.80**	**15.40**	**1.88**	**9.01**	**0.62**	**15.0**	**2.10**
Manganese	0.3	**0.43**	**0.44**	**0.38**	**1.54**	**1.49**	**1.08**	**0.31**	**0.89**	**0.14**	**1.09**	**0.33**
Iron and Manganese Total	0.5	**3.17**	**2.86**	**1.70**	**14.24**	**17.29**	**16.48**	**2.19**	**9.90**	**0.76**	**16.09**	**2.43**

Notes:
(A) Concentrations shown in bold were detected.
(B) <0.1, for example, means the analyte was not detected and the detection limit was 0.1.
(C) Concentrations greater than the NYSDEC TOGS 1.1.1 standards and guidance values are shaded gray.
Footnotes:
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(6) 10 NYCRR Part 5-Subpart 5-1 Public Water Systems - Tables
(8) Not regulated by the Principal Organic Contaminant (POC) Groundwater Standard (TOGS 1.1.1 page 5).
(10) 6 NYCRR 703.3 Water quality standards for pH, dissolved oxygen, dissolved solids, odor, color and turbidity.
(11) N/A - No Class GA groundwater standard or guidance value.
Acronyms:
BTEX = volatile organic compounds: Benzene, Toluene, Ethylbenzene, and Xylene
ND - A non-detectable concentration by the approved analytical methods referenced in 6 NYCRR Part 700.3.
NR = Not Reported
NYSDEC = New York State Department of Environmental Conservation
PAH = semi-volatile organic compounds classified as Polycyclic Aromatic Hydrocarbons.
SVOC = Semivolatile Organic Compound
VOC = Volatile Organic Compound

Table - 2
Tarrytown Former MGP Site Groundwater Samples
2006 - 2014 Groundwater Monitoring Results
Tarrytown, New York

Parameter	NYSDEC TOGS 1.1.1 Class GA Groundwater[1]	MW-24 (Down-Gradient)									MW-24 DUP-081706	MW-24 DUP-073008
	Date Sampled	8/17/2006	12/18/2007	7/30/2008	12/8/2009	12/22/2010	12/19/2011	5/30/2013	11/20/2013	11/11/2014	8/17/2006	7/30/2008
BTEX[5]	**(ug/l)**											
Benzene	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.7	<1.0	<1.0	<1.0	<1.0
Toluene	5	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethyl Benzene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o-Xylene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
p&m-Xylene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Xylene (Total)	5	<2.0	<2.0	<2.0	<2.0	<2.0	<3.0	<3.0	<3.0	<3.0	<2.0	<2.0
PAH [7]	**(ug/L)**											
Acenaphthene	20	<50	<10	<10	<10	<2.5	<2.5	<0.1	< 0.1	< 0.1	<10	<10
Acenaphthylene	N/A[8,11]	<50	<10	<10	<0.3	<0.3	<0.3	<0.1	<0.1	<0.1	<10	<10
Anthracene	50	<50	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	<0.1	<10	<10
Benz(a)anthracene	0.002	<50	<10	<10	<0.06	**0.024**	<0.02	<0.02	<0.02	<0.02	<10	<10
Benzo(a)pyrene	ND	<50	<10	<10	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<10	<10
Benzo(b)fluoranthene	0.002	<50	<10	<10	<0.08	<0.02	<0.02	<0.02	<0.02	<0.02	<10	<10
Benzo(g,h,i)perylene	N/A[8,11]	<50	<10	<10	<4	<2.5	<2.5	<0.1	<0.1	<0.1	<10	<10
Benzo(k)fluoranthene	0.002	<50	<10	<10	<0.3	<0.02	<0.02	<0.02	<0.02	<0.02	<10	<10
Chrysene	0.002	<50	<10	<10	<2	<0.02	<0.02	<0.02	<0.02	<0.02	<10	<10
Dibenz(a,h)anthracene	N/A[8,11]	<50	<10	<10	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<10	<10
Fluoranthene	50	<50	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	<0.1	<10	<10
Fluorene	50	<50	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	<0.1	<10	<10
Indeno(1,2,3-cd)pyrene	0.002	<50	<10	<10	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<10	<10
Naphthalene	10	<50	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	<0.1	<10	<10
Phenanthrene	50	<50	<10	<10	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<10	<10
Pyrene	50	<50	<10	<10	<10	<2.5	<2.5	<0.1	<0.1	<0.1	<10	<10
ATTENUATION INDICATORS												
Field Parameters												
Dissolved Oxygen (mg/L)	N/A[10,11]							7.47	6.87	4.81		
Oxygen-Reduction Potential (mV)	N/A[11]							94	205	64		
pH (Standard)	6.5 - 8.5[10]							7.7	7.7	8.0		
Specific Conductance (mS/cm)	N/A[11]							3.41	8.05	13.60		
Temperature (°C)	N/A[11]							21.5	11.7	18.1		
Turbidity (NTU)	5[10]							17.6	28.1	4.4		
Laboratory Parameters	**(mg/L)**											
Nitrate as Nitrogen	10	**0.08**	**0.07**	**0.2**	**0.05**	NR	**0.43**	**0.59**	**0.63**	**0.81**	**0.08**	**0.2**
Nitrite as Nitrogen	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate and Nitrite	10	**0.08**	**0.07**	**0.2**	**0.05**	NR	**0.43**	**0.59**	**0.63**	**0.81**	**0.08**	**0.2**
Sulfate	250	**320**	**280**	**330**	**240**	**340**	**95**	**141**	**327**	<3.0	**290**	**340**
Total Organic Carbon	N/A[11]	**3.3**	**8.6**	**3.9**	**8**	**3.6**	**3.5**	**2.8**	**2.6**	**2.6**	**3.3**	**5.1**
Dissolved Organic Carbon	N/A[11]	**2.2**	**5.7**	**2.6**	**7.9**	**2.9**	**3.5**	**2.2**	**2.6**	**2.4**	**2.8**	**3**
Sulfide	1	<0.05	<0.2	<0.1	<0.1	NR	NR	<0.1	<0.1	<0.1	<0.05	<0.1
B.O.D./5 day	N/A[11]	<2.0	<4.0	<4.0	**4.2**	<4.0	<4.0	<4.0	<4.0	<4.0	<2.0	<4.0
C.O.D.	N/A[11]	**69**	**70**	**110**	**37**	**110**	<10	**58**	**89**	**180**	**46**	**83**
Total Iron	0.3	**0.07**	**0.11**	ND	**0.22**	**0.08**	**1.00**	**0.23**	**0.68**	**0.09**	**0.06**	ND
Manganese	0.3	**0.01**	**0.03**	**0.01**	**0.02**	**0.00**	**0.05**	**0.01**	**0.03**	**0.00**	**0.01**	**0.01**
Iron and Manganese Total	0.5	**0.08**	**0.14**	**0.01**	**0.24**	**0.08**	**1.04**	**0.23**	**0.72**	**0.10**	**0.07**	**0.01**

Notes:
(A) Concentrations shown in bold were detected.
(B) <0.1, for example, means the analyte was not detected and the detection limit was 0.1.
(C) Concentrations greater than the NYSDEC TOGS 1.1.1 standards and guidance values are shaded gray.
Footnotes:
(1)NYSDEC Division of Water Technical Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998.
(6) 10 NYCRR Part 5-Subpart 5-1 Public Water Systems - Tables
(8) Not regulated by the Principal Organic Contaminant (POC) Groundwater Standard (TOGS 1.1.1 page 5).
(10) 6 NYCRR 703.3 Water quality standards for pH, dissolved oxygen, dissolved solids, odor, color and turbidity.
(11) N/A - No Class GA groundwater standard or guidance value.
Acronyms:
BTEX = volatile organic compounds: Benzene, Toluene, Ethylbenzene, and Xylene
ND - A non-detectable concentration by the approved analytical methods referenced in 6 NYCRR Part 700.3.
NR = Not Reported
NYSDEC = New York State Department of Environmental Conservation
PAH = semi-volatile organic compounds classified as Polycyclic Aromatic Hydrocarbons.
SVOC = Semivolatile Organic Compound
VOC = Volatile Organic Compound

Table 3
Tarrytown Former MGP Site Groundwater Samples
2012-2014 Groundwater Monitoring Results Summary
Tarrytown, New York

Parameter	NYSDEC TOGS 1.1.1 Groundwater Standards	MW-29			MW-12			MW-20			MW-20 DUP	MW-20 DUP	MW-21			MW-21 DUP	MW-21 DUP	MW-24		
	Date Sampled	5/2013	11/2013	11/2014	5/2013	11/2013	11/2014	5/2013	11/2013	11/2014	11/2013	11/2014	5/2013	11/2013	11/2014	12/2011	5/2013	5/2013	11/2013	11/2014
VOCs	**(ug/L)**																			
o-Xylene	5	<1.0	< 1.0	<1.0	<2	**9.4**	**3.8**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
p&m-Xylene	5	<2.0	< 2.0	<2.0	**5.9**	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Xylene (Total)	5	<3.0	<3.0	<3.0	**17.9**	**9.4**	**3.8**	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
PAH	**(ug/L)**																			
Acenaphthene	20	<0.1	<0.1	**0.1**	<50	**72**	**36**	**0.91**	<0.1	<0.1	< 0.1	<0.1	<0.1	<0.1	**0.6**	<0.1	<0.1	<0.1	<0.1	< 0.1
Benz(a)anthracene	0.002	**0.06**	**0.02**	**0.25**	<50	**0.06**	**0.04**	**0.06**	**0.02**	**0.02**	<0.02	**0.02**	<0.02	<0.02	**0.02**	**0.03**	<0.02	<0.02	<0.02	<0.02
Benzo(a)pyrene	ND	0.05	<0.02	**0.4**	<50	<0.02	<0.02	**0.05**	<0.02	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(b)fluoranthene	0.002	<0.02	<0.02	**0.51**	<50	**0.03**	<0.02	**0.04**	<0.02	**0.02**	<0.02	<0.02	<0.02	<0.02	<0.02	**0.02**	<0.02	<0.02	<0.02	<0.02
Benzo(k)fluoranthene	0.002	<0.02	<0.02	**0.22**	<50	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chrysene	0.002	**0.05**	<0.02	**0.3**	<50	**0.04**	**0.03**	**0.05**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Indeno(1,2,3-cd)pyrene	0.002	**0.05**	<0.02	**0.23**	<50	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Naphthalene	10	**0.13**	<0.1	<0.1	**290**	**96**	**53**	<0.1	<0.1	<0.1	< 0.1	<0.1	<0.1	<0.1	<0.1	<2.5	**0.15**	<0.1	<0.1	<0.1
Metals	**(mg/L)**																			
Iron	0.3	**4.92**	**5.39**	**9.46**	**27.8**	**15.8**	**18.1**	**1.68**	**0.239**	**0.342**	**0.227**	**0.305**	**1.88**	**9.01**	**0.62**	**15**	**2.1**	**0.226**	**0.683**	**0.093**
Manganese	0.3	**1.01**	**0.929**	**2.05**	**0.166**	**0.155**	**0.183**	**0.139**	**0.034**	**0.052**	**0.036**	**0.047**	**0.313**	**0.894**	**0.143**	**1.09**	**0.33**	**0.006**	**0.033**	**0.004**

Notes:
(A) Reference: NYSDEC Division of Water Technical Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998.
(B) Concentrations shown in bold were detected.
(C) <0.1, for example, means the analyte was not detected and the detection limit was 0.1.
(D) Concentrations greater than the NYSDEC TOGS 1.1.1 standards and guidance values are shaded gray.

Acronyms:
BTEX = volatile organic compounds: Benzene, Toluene, Ethylbenzene, and Xylene
ND - A non-detectable concentration by the approved analytical methods referenced in 6 NYCRR Part 700.3.
NYSDEC = New York State Department of Environmental Conservation
PAH = semi-volatile organic compounds classified as Polycyclic Aromatic Hydrocarbons.
SVOC = Semivolatile Organic Compound
VOC = Volatile Organic Compound

FIGURES

HALEY & ALDRICH

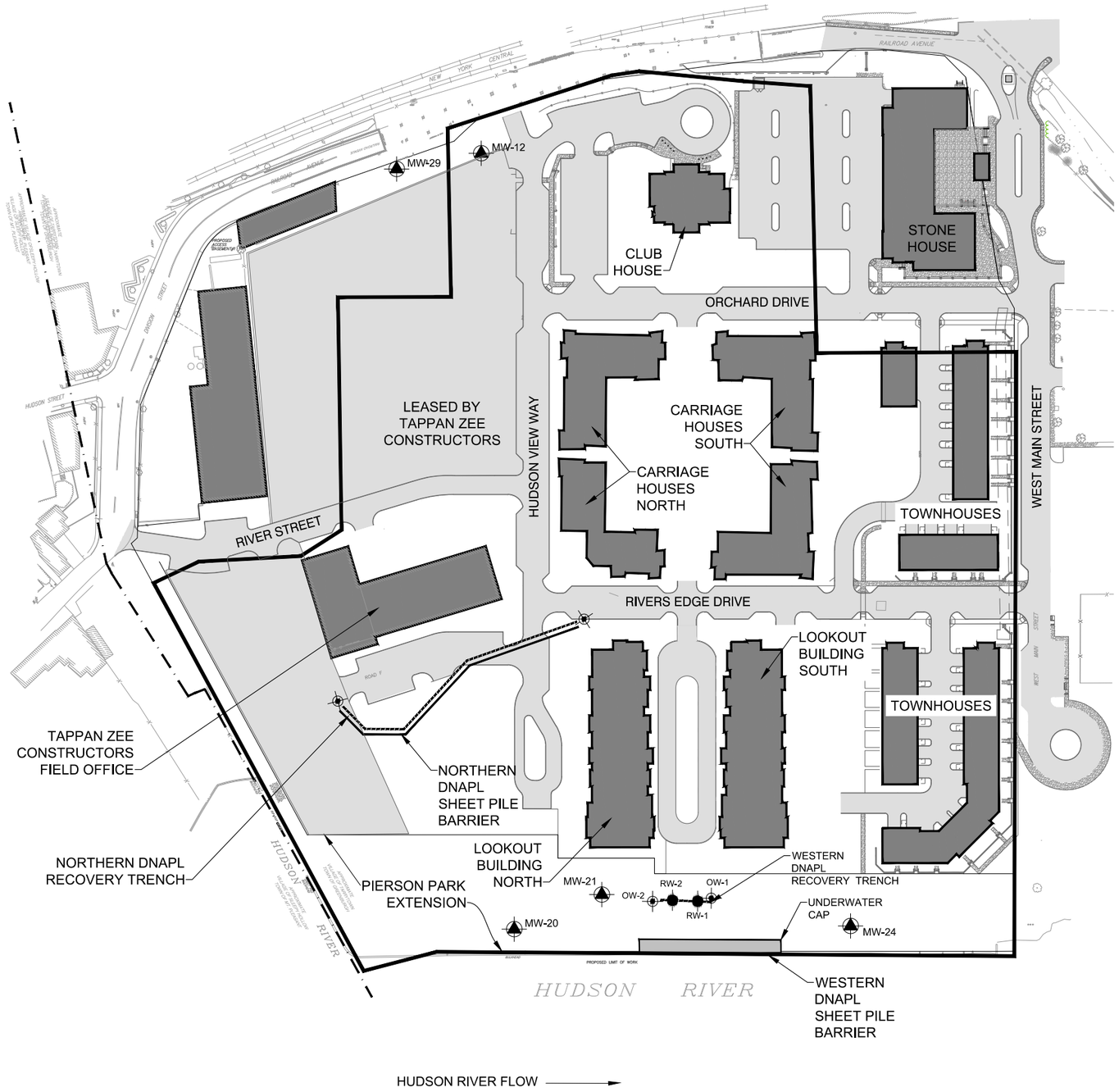
TARRYTOWN FORMER MGP SITE
TARRYTOWN, NEW YORK
FERRY LANDINGS, LLC
NYSDEC SITE NO. C360064

SITE LOCUS

SCALE: AS SHOWN
MAY 2013

FIGURE 1

G:\Projects\28590\Global\GIS\Map Documents\2013_0509_TJV_Locus_AP_D2.mxd



LEGEND:

- GROUNDWATER MONITORING WELL
- DNAPL RECOVERY WELL
- DNAPL OBSERVATION WELL
- APPROXIMATE AREA ENCOMPASSED BY THE BROWNFIELD CLEAN-UP AGREEMENT #C36OO64
- LANDSCAPED AREAS
- PAVED WALKS, PATIOS, OR COURTYARDS
- EXISTING BUILDINGS
- ROADS AND PARKING AREAS

NOTES:

1. BASEMAP BASED ON CAD DRAWING ENTTILED "PH1_10399-08_PHASE.DWG" DATED 1 JULY 2009 FROM CHAZEN COMPANIES OF GLENN FALLS, NEW YORK AND "PARKING ALLOCATION DIAGRAM" DATED 7 MARCH 2013 FROM LESSARD GROUP, INC., VIENNA, VIRGINIA.

N E S W

0 80 160 240 320

APPROXIMATE SCALE IN FEET

HALEY & ALDRICH

TARRYTOWN FORMER MGP SITE
TARRYTOWN, NEW YORK
FERRY LANDINGS, LLC
NYSDEC SITE No. C360064

SITE PLAN

SCALE: AS SHOWN
SEPTEMBER 2014

FIGURE 2

G:\28590\GLOBAL\CAD\DRAWINGS\28590-000-0015 SITE COVER PLAN.DWG

APPENDIX A

Laboratory Reports

PHOENIX
Environmental Laboratories, Inc.

Wednesday, November 19, 2014

Attn: Gary J Fuerstenberg, P.E.
Haley & Aldrich, Inc.
100 Corporate Place
Suite 105
Rocky Hill CT 06067-1803

Project ID: TARRYTOWN FORMER MGP SITE
Sample ID#s: BH38863 - BH38864

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

SDG Comments

November 19, 2014

SDG I.D.: GBH38863

SIM Analysis:
The lowest possible reporting limit under SIM conditions is 0.02 ug/L. The NY TOGS GA criteria for some PAHs is 0.002 ug/L. This level can not be achieved.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

November 19, 2014

FOR: Attn: Gary J Fuerstenberg, P.E.
Haley & Aldrich, Inc.
100 Corporate Place
Suite 105
Rocky Hill CT 06067-1803

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/10/14	12:35
Location Code:	HALEY-NY	Received by:	LB	11/10/14	16:11
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	28590-024				

Laboratory Data

SDG ID: GBH38863
Phoenix ID: BH38863

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: MW-12

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Iron	18.1	0.010	mg/L	11/11/14	EK	SW6010
Manganese	0.183	0.001	mg/L	11/11/14	EK	SW6010
B.O.D./5 day	7.8	4.0	mg/L	11/10/14 19:11	CB/RM	SM5210B
C.O.D.	46	10	mg/L	11/11/14	MSF	SM5220 D
Dissolved Organic Carbon	12	1.0	mg/L	11/14/14	RR/EG	SM5310C
Nitrite as Nitrogen	< 0.01	0.01	mg/L	11/10/14 21:52	BS/EG	300.0
Nitrate as Nitrogen	< 0.05	0.05	mg/L	11/10/14 21:52	BS/EG	300.0
Sulfate	< 3.0	3.0	mg/L	11/10/14	BS/EG	300.0
Sulfide	< 0.10	0.10	mg/L	11/13/14	EG	4500S-D
Total Organic Carbon	15	1.0	mg/L	11/13/14	RWR	SM 5310C
Semi-Volatile Extraction	Completed			11/10/14	E/W	SW3520
Total Metals Digestion	Completed			11/10/14	AG	SW846 - 3050
Aromatic Volatiles						
Benzene	ND	1.0	ug/L	11/11/14	HM	SW8260
Ethylbenzene	1.2	1.0	ug/L	11/11/14	HM	SW8260
m&p-Xylene	ND	2.0	ug/L	11/11/14	HM	SW8260
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	11/11/14	HM	SW8260
o-Xylene	3.8	1.0	ug/L	11/11/14	HM	SW8260
Toluene	ND	1.0	ug/L	11/11/14	HM	SW8260
QA/QC Surrogates						
% 1,2-dichlorobenzene-d4	103		%	11/11/14	HM	70 - 130 %
% Bromofluorobenzene	102		%	11/11/14	HM	70 - 130 %
% Dibromofluoromethane	105		%	11/11/14	HM	70 - 130 %
% Toluene-d8	101		%	11/11/14	HM	70 - 130 %
Semivolatiles by SIM						
2-Methylnaphthalene	6.7	0.10	ug/L	11/12/14	DD	8270(SIM)

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: MW-12

Phoenix I.D.: BH38863

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Acenaphthene	36	0.20	ug/L	11/13/14	DD	8270(SIM)
Acenaphthylene	3.0	0.10	ug/L	11/12/14	DD	8270(SIM)
Anthracene	1.3	0.10	ug/L	11/12/14	DD	8270(SIM)
Benz(a)anthracene	0.04	0.02	ug/L	11/12/14	DD	8270(SIM)
Benzo(a)pyrene	ND	0.02	ug/L	11/12/14	DD	8270(SIM)
Benzo(b)fluoranthene	ND	0.02	ug/L	11/12/14	DD	8270(SIM)
Benzo(ghi)perylene	ND	0.10	ug/L	11/12/14	DD	8270(SIM)
Benzo(k)fluoranthene	ND	0.02	ug/L	11/12/14	DD	8270(SIM)
Chrysene	0.03	0.02	ug/L	11/12/14	DD	8270(SIM)
Dibenz(a,h)anthracene	ND	0.01	ug/L	11/12/14	DD	8270(SIM)
Fluoranthene	0.19	0.10	ug/L	11/12/14	DD	8270(SIM)
Fluorene	8.7	0.10	ug/L	11/12/14	DD	8270(SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	ug/L	11/12/14	DD	8270(SIM)
Naphthalene	53	0.20	ug/L	11/13/14	DD	8270(SIM)
Phenanthrene	4.7	0.07	ug/L	11/12/14	DD	8270(SIM)
Pyrene	0.28	0.10	ug/L	11/12/14	DD	8270(SIM)
QA/QC Surrogates						
% 2-Fluorobiphenyl	67		%	11/12/14	DD	30 - 130 %
% Nitrobenzene-d5	86		%	11/12/14	DD	30 - 130 %
% Terphenyl-d14	58		%	11/12/14	DD	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
November 19, 2014
Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

Analysis Report

November 19, 2014

FOR: Attn: Gary J Fuerstenberg, P.E.
Haley & Aldrich, Inc.
100 Corporate Place
Suite 105
Rocky Hill CT 06067-1803

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/10/14	12:35
Location Code:	HALEY-NY	Received by:	LB	11/10/14	0:00
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	28590-024				

Laboratory Data

SDG ID: GBH38863
Phoenix ID: BH38864

Project ID: TARRYTOWN FORMER MGP SITE'
Client ID: TB-111014

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Aromatic Volatiles						
Benzene	ND	1.0	ug/L	11/10/14	HM	SW8260
Ethylbenzene	ND	1.0	ug/L	11/10/14	HM	SW8260
m&p-Xylene	ND	2.0	ug/L	11/10/14	HM	SW8260
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	11/10/14	HM	SW8260
o-Xylene	ND	1.0	ug/L	11/10/14	HM	SW8260
Toluene	ND	1.0	ug/L	11/10/14	HM	SW8260
QA/QC Surrogates						
% 1,2-dichlorobenzene-d4	102		%	11/10/14	HM	70 - 130 %
% Bromofluorobenzene	94		%	11/10/14	HM	70 - 130 %
% Dibromofluoromethane	105		%	11/10/14	HM	70 - 130 %
% Toluene-d8	101		%	11/10/14	HM	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
November 19, 2014
Reviewed and Released by: Bobbi Aloisa, Vice President

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

QA/QC Report

November 19, 2014

QA/QC Data

SDG I.D.: GBH38863

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 291870, QC Sample No: BH38863 (BH38863)												
ICP Metals - Aqueous												
Iron	BRL	18.1	18.6	2.70	104	105	1.0	102	109	6.6	75 - 125	20
Manganese	BRL	0.183	0.187	2.20	105	106	0.9	104	107	2.8	75 - 125	20

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NY # 11301

QA/QC Report

November 19, 2014

QA/QC Data

SDG I.D.: GBH38863

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 291928, QC Sample No: BH38311 (BH38863)												
C.O.D.	BRL	<10	<10	NC	92.0			102			85 - 115	20
QA/QC Batch 291861, QC Sample No: BH38549 (BH38863)												
B.O.D./5 day	BRL	<4.0	<4.0	NC	97.7			100			70 - 130	20
QA/QC Batch 291932, QC Sample No: BH38552 (BH38863)												
Sulfide	BRL	<0.10	<0.10	NC	109			114				
QA/QC Batch 292084, QC Sample No: BH38795 (BH38863)												
Nitrate as Nitrogen	BRL	0.07	0.06	NC	102			101			85 - 115	20
Nitrite as Nitrogen	BRL	<0.01	<0.01	NC	101			96.1			85 - 115	20
Sulfate	BRL	11.9	12.1	NC	94.9			108			85 - 115	20
QA/QC Batch 292271, QC Sample No: BH38951 (BH38863)												
Total Organic Carbon	BRL	1.2	<1.0	NC	100			97.0			85 - 115	20
QA/QC Batch 292575, QC Sample No: BH40773 (BH38863)												
Total Organic Carbon	BRL	1.3	1.3	NC	99.0			94.0			85 - 115	20

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Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

QA/QC Report

November 19, 2014

QA/QC Data

SDG I.D.: GBH38863

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 291913, QC Sample No: BH38337 (BH38864)									
Volatiles - Ground Water									
Benzene	ND	80	82	2.5	95	90	5.4	70 - 130	30
Ethylbenzene	ND	81	81	0.0	91	88	3.4	70 - 130	30
m&p-Xylene	ND	80	81	1.2	94	88	6.6	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	86	87	1.2	99	97	2.0	70 - 130	30
o-Xylene	ND	82	82	0.0	95	91	4.3	70 - 130	30
Toluene	ND	80	84	4.9	96	92	4.3	70 - 130	30
% 1,2-dichlorobenzene-d4	105	99	98	1.0	102	100	2.0	70 - 130	30
% Bromofluorobenzene	97	101	101	0.0	102	103	1.0	70 - 130	30
% Dibromofluoromethane	97	100	98	2.0	99	102	3.0	70 - 130	30
% Toluene-d8	101	99	102	3.0	102	103	1.0	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

QA/QC Batch 291852, QC Sample No: BH38767 (BH38863)

Polynuclear Aromatic HC - Ground Water

2-Methylnaphthalene	ND	68	69	1.5				30 - 130	20
Acenaphthene	ND	83	82	1.2				30 - 130	20
Acenaphthylene	ND	83	81	2.4				30 - 130	20
Anthracene	ND	87	87	0.0				30 - 130	20
Benz(a)anthracene	ND	78	78	0.0				30 - 130	20
Benzo(a)pyrene	ND	79	80	1.3				30 - 130	20
Benzo(b)fluoranthene	ND	86	89	3.4				30 - 130	20
Benzo(ghi)perylene	ND	74	73	1.4				30 - 130	20
Benzo(k)fluoranthene	ND	89	91	2.2				30 - 130	20
Chrysene	ND	81	82	1.2				30 - 130	20
Dibenz(a,h)anthracene	ND	76	75	1.3				30 - 130	20
Fluoranthene	ND	86	87	1.2				30 - 130	20
Fluorene	ND	87	86	1.2				30 - 130	20
Indeno(1,2,3-cd)pyrene	ND	76	75	1.3				30 - 130	20
Naphthalene	ND	68	67	1.5				30 - 130	20
Phenanthrene	ND	78	78	0.0				30 - 130	20
Pyrene	ND	88	89	1.1				30 - 130	20
% 2-Fluorobiphenyl	58	69	68	1.5				30 - 130	20
% Nitrobenzene-d5	85	77	78	1.3				30 - 130	20
% Terphenyl-d14	95	81	80	1.2				30 - 130	20

Comment:

Additional 8270 criteria:20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Data

SDG I.D.: GBH38863

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 291930, QC Sample No: BH38816 (BH38863)									
Volatiles - Ground Water									
Benzene	ND	80	86	7.2	98	100	2.0	70 - 130	30
Ethylbenzene	ND	79	84	6.1	93	97	4.2	70 - 130	30
m&p-Xylene	ND	78	83	6.2	94	98	4.2	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	85	91	6.8	101	102	1.0	70 - 130	30
o-Xylene	ND	80	84	4.9	96	101	5.1	70 - 130	30
Toluene	ND	82	87	5.9	98	101	3.0	70 - 130	30
% 1,2-dichlorobenzene-d4	104	100	101	1.0	96	100	4.1	70 - 130	30
% Bromofluorobenzene	96	102	101	1.0	104	104	0.0	70 - 130	30
% Dibromofluoromethane	102	99	98	1.0	97	96	1.0	70 - 130	30
% Toluene-d8	102	101	102	1.0	100	101	1.0	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
November 19, 2014

Sample Criteria Exceedences Report

GBH38863 - HALEY-NY

Criteria: None

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Temperature Narration

November 19, 2014

SDG I.D.: GBH38863

The samples in this delivery group were received at 4°C.
(Note acceptance criteria is above freezing up to 6°C)

Cooler: Yes ☑ No ☐
Coolant: IPK ☑ ICE ☐ No ☐

NY/NJ CHAIN OF CUSTODY RECORD

Temp 4 °C Pg of

PHOENIX
Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
☐ Fax:
☐ Phone:
☐ Email:

Customer: HALEY & ALDRICH, INC.
Address: 100 CORPORATE PL.
ROCKY HILL, CT 06067

Project: TARRYTOWN, FORMER MGP SITE Project P.O: 28590-024
Report to:
Invoice to:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 11/10/14

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs 8260 - BTEX	SVOCs 8270 - PAHs	BOD	COD	DOC	TOC	Sulfate	Sulfide	Nitrite + Nitrate	Total Fe, Mn	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [X] HCl	GL Amber 1000ml [X] As is [ ] H2SO4	PL As is [ ] 250ml [X] 500ml [X] 1000ml	PL H2SO4 [X] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH+ZnAc 250ml	Bacteria Bottle
388103	MW-12	GW	11/10/14	1235	X	X	X	X	X	X	X	X	X	X				3	3	2	1	1	1		
388104	TB-111014	W	11/10/14	—	X													1							

GL Amber 250ml H2SO4

Relinquished by:	Accepted by:	Date:	Time:
[signature] PRINT PERRY	[signature] PRINT	11/10/14	1415
	PRINT	11/10/14	10:11

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ 5 Days
☐ 10 Days
☐ Other
* SURCHARGE APPLIES
✓ STANDARD

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ GW Criteria

NY
☐ TAGM 4046 GW
☐ TAGM 4046 SOIL
☐ NY375 Unrestricted Use Soil
☐ NY375 Residential Soil
☐ Restricted/Residential
☐ Commercial
☐ Industrial

Data Format
☐ Phoenix Std Report
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other

Data Package
☐ NJ Reduced Deliv. *
☐ NY Enhanced (ASP B) *
☐ Other

State where samples were collected: NY

PHOENIX
Environmental Laboratories, Inc.

Wednesday, February 25, 2015

Attn:Gary J. Fuerstenberg, P.E.
Haley & Aldrich
100 Corporate Place
Suite 105
Rocky Hill, CT 06067-1803

Project ID: TARRYTOWN FORMER MGP SITE
Sample ID#s: BH39422 - BH39427

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

SDG Comments

February 25, 2015

SDG I.D.: GBH39422

Version 2:
A mistake was uncovered in the sulfate results for BH39425 (MW-24) and BH39426 (DUP-111114).

SIM Analysis:
The lowest possible reporting limit under SIM conditions is 0.02 ug/L. The NY TOGS GA criteria for some PAHs is 0.002 ug/L. This level can not be achieved.

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 25, 2015

FOR: Attn:Gary J. Fuerstenberg, P.E.
Haley & Aldrich
100 Corporate Place
Suite 105
Rocky Hill, CT 06067-1803

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/10/14	15:45
Location Code:	HALEY-NY	Received by:	SW	11/11/14	16:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	28590-024				

Laboratory Data

SDG ID: GBH39422
Phoenix ID: BH39422

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: MW-29

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Iron	9.46	0.010	mg/L	11/12/14	LK	SW6010C
Manganese	2.05	0.010	mg/L	11/12/14	EK	SW6010C
B.O.D./5 day	< 4.0	4.0	mg/L	11/11/14 19:14	CB/RM	SM5210B-01
C.O.D.	104	10	mg/L	11/13/14	MSF	SM5220D-97
Dissolved Organic Carbon	7.0	1.0	mg/L	11/14/14	RR/EG	SM5310C-00
Nitrite as Nitrogen	7.35	0.25	mg/L	11/11/14 23:05	BS/EG	E300.0
Nitrate as Nitrogen	< 0.05	0.05	mg/L	11/11/14 20:15	BS/EG	E300.0
Sulfate	780	75	mg/L	11/11/14	BS/EG	E300.0
Sulfide	< 0.10	0.10	mg/L	11/13/14	EG	SM4500S-D-00
Total Organic Carbon	7.0	1.0	mg/L	11/13/14	RWR	SM5310C-00
Semi-Volatile Extraction	Completed			11/11/14	E/D	SW3520C
Total Metals Digestion	Completed			11/11/14	AG	SW3050B
Aromatic Volatiles						
Benzene	ND	1.0	ug/L	11/13/14	HM	SW8260C
Ethylbenzene	ND	1.0	ug/L	11/13/14	HM	SW8260C
m&p-Xylene	ND	2.0	ug/L	11/13/14	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	11/13/14	HM	SW8260C
o-Xylene	ND	1.0	ug/L	11/13/14	HM	SW8260C
Toluene	ND	1.0	ug/L	11/13/14	HM	SW8260C
QA/QC Surrogates						
% 1,2-dichlorobenzene-d4	104		%	11/13/14	HM	70 - 130 %
% Bromofluorobenzene	93		%	11/13/14	HM	70 - 130 %
% Dibromofluoromethane	111		%	11/13/14	HM	70 - 130 %
% Toluene-d8	100		%	11/13/14	HM	70 - 130 %
Semivolatiles by SIM						
2-Methylnaphthalene	0.24	0.10	ug/L	11/16/14	DD	SW8270D (SIM)

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: MW-29

Phoenix I.D.: BH39422

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference	
Acenaphthene	0.10	0.10	ug/L	11/16/14	DD	SW8270D (SIM)	
Acenaphthylene	0.33	0.10	ug/L	11/16/14	DD	SW8270D (SIM)	
Anthracene	0.23	0.10	ug/L	11/16/14	DD	SW8270D (SIM)	
Benz(a)anthracene	0.25	0.02	ug/L	11/16/14	DD	SW8270D (SIM)	
Benzo(a)pyrene	0.40	0.02	ug/L	11/16/14	DD	SW8270D (SIM)	
Benzo(b)fluoranthene	0.51	0.02	ug/L	11/16/14	DD	SW8270D (SIM)	
Benzo(ghi)perylene	0.29	0.10	ug/L	11/16/14	DD	SW8270D (SIM)	
Benzo(k)fluoranthene	0.22	0.02	ug/L	11/16/14	DD	SW8270D (SIM)	
Chrysene	0.30	0.02	ug/L	11/16/14	DD	SW8270D (SIM)	
Dibenz(a,h)anthracene	ND	0.01	ug/L	11/16/14	DD	SW8270D (SIM)	
Fluoranthene	0.63	0.10	ug/L	11/16/14	DD	SW8270D (SIM)	
Fluorene	0.13	0.10	ug/L	11/16/14	DD	SW8270D (SIM)	
Indeno(1,2,3-cd)pyrene	0.23	0.02	ug/L	11/16/14	DD	SW8270D (SIM)	
Naphthalene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)	
Phenanthrene	0.35	0.07	ug/L	11/16/14	DD	SW8270D (SIM)	
Pyrene	0.96	0.10	ug/L	11/16/14	DD	SW8270D (SIM)	
QA/QC Surrogates							
% 2-Fluorobiphenyl	50		%	11/16/14	DD	30 - 130 %	
% Nitrobenzene-d5	41		%	11/16/14	DD	30 - 130 %	
% Terphenyl-d14	27		%	11/16/14	DD	30 - 130 %	3

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

Semi-Volatile Comment:
Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
February 25, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 25, 2015

FOR: Attn:Gary J. Fuerstenberg, P.E.
Haley & Aldrich
100 Corporate Place
Suite 105
Rocky Hill, CT 06067-1803

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/11/14	9:05
Location Code:	HALEY-NY	Received by:	SW	11/11/14	16:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	28590-024				

Laboratory Data

SDG ID: GBH39422
Phoenix ID: BH39423

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: MW-20

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Iron	0.342	0.010	mg/L	11/12/14	LK	SW6010C
Manganese	0.052	0.001	mg/L	11/12/14	LK	SW6010C
B.O.D./5 day	< 4.0	4.0	mg/L	11/11/14 19:14	CB/RM	SM5210B-01
C.O.D.	125	10	mg/L	11/13/14	MSF	SM5220D-97
Dissolved Organic Carbon	2.7	1.0	mg/L	11/14/14	RR/EG	SM5310C-00
Nitrite as Nitrogen	< 0.10	0.10	mg/L	11/12/14 19:57	BS/EG	E300.0
Nitrate as Nitrogen	0.57	0.50	mg/L	11/12/14 19:57	BS/EG	E300.0
Sulfate	523	30	mg/L	11/12/14	BS/EG	E300.0
Sulfide	< 0.10	0.10	mg/L	11/13/14	EG	SM4500S-D-00
Total Organic Carbon	2.7	1.0	mg/L	11/13/14	RWR	SM5310C-00
Semi-Volatile Extraction	Completed			11/11/14	E/D	SW3520C
Total Metals Digestion	Completed			11/11/14	AG	SW3050B
Aromatic Volatiles						
Benzene	ND	1.0	ug/L	11/13/14	HM	SW8260C
Ethylbenzene	ND	1.0	ug/L	11/13/14	HM	SW8260C
m&p-Xylene	ND	2.0	ug/L	11/13/14	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	11/13/14	HM	SW8260C
o-Xylene	ND	1.0	ug/L	11/13/14	HM	SW8260C
Toluene	ND	1.0	ug/L	11/13/14	HM	SW8260C
QA/QC Surrogates						
% 1,2-dichlorobenzene-d4	104		%	11/13/14	HM	70 - 130 %
% Bromofluorobenzene	94		%	11/13/14	HM	70 - 130 %
% Dibromofluoromethane	106		%	11/13/14	HM	70 - 130 %
% Toluene-d8	101		%	11/13/14	HM	70 - 130 %
Semivolatiles by SIM						
2-Methylnaphthalene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: MW-20

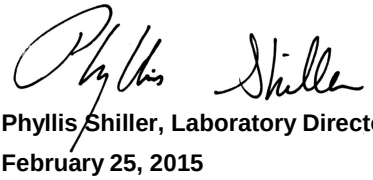
Phoenix I.D.: BH39423

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Acenaphthene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Acenaphthylene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Anthracene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Benz(a)anthracene	0.02	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Benzo(b)fluoranthene	0.02	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Chrysene	ND	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.01	ug/L	11/16/14	DD	SW8270D (SIM)
Fluoranthene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Fluorene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Naphthalene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Phenanthrene	ND	0.07	ug/L	11/16/14	DD	SW8270D (SIM)
Pyrene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
QA/QC Surrogates						
% 2-Fluorobiphenyl	50		%	11/16/14	DD	30 - 130 %
% Nitrobenzene-d5	36		%	11/16/14	DD	30 - 130 %
% Terphenyl-d14	94		%	11/16/14	DD	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director
February 25, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 25, 2015

FOR: Attn:Gary J. Fuerstenberg, P.E.
Haley & Aldrich
100 Corporate Place
Suite 105
Rocky Hill, CT 06067-1803

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/11/14	11:25
Location Code:	HALEY-NY	Received by:	SW	11/11/14	16:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	28590-024				

Laboratory Data

SDG ID: GBH39422
Phoenix ID: BH39424

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: MW-21

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Iron	0.620	0.010	mg/L	11/12/14	LK	SW6010C
Manganese	0.143	0.001	mg/L	11/12/14	LK	SW6010C
B.O.D./5 day	10	10	mg/L	11/11/14 19:14	CB/RM	SM5210B-01
C.O.D.	50	10	mg/L	11/13/14	MSF	SM5220D-97
Dissolved Organic Carbon	15	1.0	mg/L	11/14/14	RR/EG	SM5310C-00
Nitrite as Nitrogen	< 0.10	0.10	mg/L	11/12/14 20:06	BS/EG	E300.0
Nitrate as Nitrogen	< 0.50	0.50	mg/L	11/12/14 20:06	BS/EG	E300.0
Sulfate	43.6	30	mg/L	11/12/14	BS/EG	E300.0
Sulfide	< 0.10	0.10	mg/L	11/13/14	EG	SM4500S-D-00
Total Organic Carbon	14	1.0	mg/L	11/13/14	RWR	SM5310C-00
Semi-Volatile Extraction	Completed			11/11/14	E/D	SW3520C
Total Metals Digestion	Completed			11/11/14	AG	SW3050B
Aromatic Volatiles						
Benzene	1.5	1.0	ug/L	11/13/14	HM	SW8260C
Ethylbenzene	ND	1.0	ug/L	11/13/14	HM	SW8260C
m&p-Xylene	ND	2.0	ug/L	11/13/14	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	11/13/14	HM	SW8260C
o-Xylene	ND	1.0	ug/L	11/13/14	HM	SW8260C
Toluene	ND	1.0	ug/L	11/13/14	HM	SW8260C
QA/QC Surrogates						
% 1,2-dichlorobenzene-d4	104		%	11/13/14	HM	70 - 130 %
% Bromofluorobenzene	96		%	11/13/14	HM	70 - 130 %
% Dibromofluoromethane	108		%	11/13/14	HM	70 - 130 %
% Toluene-d8	101		%	11/13/14	HM	70 - 130 %
Semivolatiles by SIM						
2-Methylnaphthalene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: MW-21

Phoenix I.D.: BH39424

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Acenaphthene	0.60	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Acenaphthylene	0.10	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Anthracene	0.12	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Benz(a)anthracene	0.02	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Chrysene	ND	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.01	ug/L	11/16/14	DD	SW8270D (SIM)
Fluoranthene	0.15	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Fluorene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	ug/L	11/16/14	DD	SW8270D (SIM)
Naphthalene	ND	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
Phenanthrene	ND	0.07	ug/L	11/16/14	DD	SW8270D (SIM)
Pyrene	0.23	0.10	ug/L	11/16/14	DD	SW8270D (SIM)
QA/QC Surrogates						
% 2-Fluorobiphenyl	53		%	11/16/14	DD	30 - 130 %
% Nitrobenzene-d5	51		%	11/16/14	DD	30 - 130 %
% Terphenyl-d14	86		%	11/16/14	DD	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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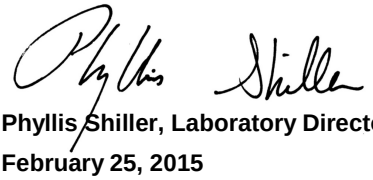

Phyllis Shiller, Laboratory Director
February 25, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 25, 2015

FOR: Attn:Gary J. Fuerstenberg, P.E.
Haley & Aldrich
100 Corporate Place
Suite 105
Rocky Hill, CT 06067-1803

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/11/14	13:40
Location Code:	HALEY-NY	Received by:	SW	11/11/14	16:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	28590-024				

Laboratory Data

SDG ID: GBH39422
Phoenix ID: BH39425

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: MW-24

Parameter	Result		RL/ PQL	Units	Date/Time	By	Reference
Iron	0.093		0.010	mg/L	11/12/14	LK	SW6010C
Manganese	0.004		0.001	mg/L	11/12/14	LK	SW6010C
B.O.D./5 day	< 4.0		4.0	mg/L	11/11/14 19:14	CB/RM	SM5210B-01
C.O.D.	180		10	mg/L	11/13/14	MSF	SM5220D-97
Dissolved Organic Carbon	2.4		1.0	mg/L	11/14/14	RR/EG	SM5310C-00
Nitrite as Nitrogen	< 0.01		0.01	mg/L	11/12/14 11:59	BS/EG	E300.0
Nitrate as Nitrogen	0.81		0.05	mg/L	11/12/14 11:59	BS/EG	E300.0
Sulfate	400	E	3.0	mg/L	11/12/14	BS/EG	E300.0
Sulfide	< 0.10		0.10	mg/L	11/13/14	EG	SM4500S-D-00
Total Organic Carbon	2.6		1.0	mg/L	11/13/14	RWR	SM5310C-00
Semi-Volatile Extraction	Completed				11/11/14	E/D	SW3520C
Total Metals Digestion	Completed				11/11/14	AG	SW3050B
Aromatic Volatiles							
Benzene	ND		1.0	ug/L	11/13/14	HM	SW8260C
Ethylbenzene	ND		1.0	ug/L	11/13/14	HM	SW8260C
m&p-Xylene	ND		2.0	ug/L	11/13/14	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND		2.0	ug/L	11/13/14	HM	SW8260C
o-Xylene	ND		1.0	ug/L	11/13/14	HM	SW8260C
Toluene	ND		1.0	ug/L	11/13/14	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	104			%	11/13/14	HM	70 - 130 %
% Bromofluorobenzene	94			%	11/13/14	HM	70 - 130 %
% Dibromofluoromethane	106			%	11/13/14	HM	70 - 130 %
% Toluene-d8	101			%	11/13/14	HM	70 - 130 %
Semivolatiles by SIM							
2-Methylnaphthalene	ND		0.10	ug/L	11/17/14	DD	SW8270D (SIM)

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: MW-24

Phoenix I.D.: BH39425

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference	
Acenaphthene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)	
Acenaphthylene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)	
Anthracene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)	
Benz(a)anthracene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)	
Benzo(a)pyrene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)	
Benzo(b)fluoranthene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)	
Benzo(ghi)perylene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)	
Benzo(k)fluoranthene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)	
Chrysene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)	
Dibenz(a,h)anthracene	ND	0.01	ug/L	11/17/14	DD	SW8270D (SIM)	
Fluoranthene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)	
Fluorene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)	
Naphthalene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)	
Phenanthrene	ND	0.07	ug/L	11/17/14	DD	SW8270D (SIM)	
Pyrene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)	
QA/QC Surrogates							
% 2-Fluorobiphenyl	40		%	11/17/14	DD	30 - 130 %	
% Nitrobenzene-d5	22		%	11/17/14	DD	30 - 130 %	3
% Terphenyl-d14	92		%	11/17/14	DD	30 - 130 %	

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

Semi-Volatile Comment:
Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

E - estimated value, the sulfate concentration is reported above the calibration range.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
February 25, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 25, 2015

FOR: Attn:Gary J. Fuerstenberg, P.E.
Haley & Aldrich
100 Corporate Place
Suite 105
Rocky Hill, CT 06067-1803

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/11/14	0:00
Location Code:	HALEY-NY	Received by:	SW	11/11/14	16:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	28590-024				

Laboratory Data

SDG ID: GBH39422
Phoenix ID: BH39426

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: DUP-111114

Parameter	Result		RL/ PQL	Units	Date/Time	By	Reference
Iron	0.305		0.010	mg/L	11/12/14	LK	SW6010C
Manganese	0.047		0.001	mg/L	11/12/14	LK	SW6010C
B.O.D./5 day	< 4.0		4.0	mg/L	11/11/14 19:14	CB/RM	SM5210B-01
C.O.D.	161		10	mg/L	11/13/14	MSF	SM5220D-97
Dissolved Organic Carbon	2.3		1.0	mg/L	11/14/14	RR/EG	SM5310C-00
Nitrite as Nitrogen	< 0.01		0.01	mg/L	11/12/14 12:08	BS/EG	E300.0
Nitrate as Nitrogen	0.60		0.05	mg/L	11/12/14 12:08	BS/EG	E300.0
Sulfate	400	E	3.0	mg/L	11/12/14	BS/EG	E300.0
Sulfide	< 0.10		0.10	mg/L	11/13/14	EG	SM4500S-D-00
Total Organic Carbon	2.6		1.0	mg/L	11/13/14	RWR	SM5310C-00
Semi-Volatile Extraction	Completed				11/11/14	E/D	SW3520C
Total Metals Digestion	Completed				11/11/14	AG	SW3050B
Aromatic Volatiles							
Benzene	ND		1.0	ug/L	11/13/14	HM	SW8260C
Ethylbenzene	ND		1.0	ug/L	11/13/14	HM	SW8260C
m&p-Xylene	ND		2.0	ug/L	11/13/14	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND		2.0	ug/L	11/13/14	HM	SW8260C
o-Xylene	ND		1.0	ug/L	11/13/14	HM	SW8260C
Toluene	ND		1.0	ug/L	11/13/14	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	104			%	11/13/14	HM	70 - 130 %
% Bromofluorobenzene	94			%	11/13/14	HM	70 - 130 %
% Dibromofluoromethane	106			%	11/13/14	HM	70 - 130 %
% Toluene-d8	101			%	11/13/14	HM	70 - 130 %
Semivolatiles by SIM							
2-Methylnaphthalene	ND		0.10	ug/L	11/17/14	DD	SW8270D (SIM)

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: DUP-111114

Phoenix I.D.: BH39426

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Acenaphthene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)
Acenaphthylene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)
Anthracene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)
Benz(a)anthracene	0.02	0.02	ug/L	11/17/14	DD	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)
Chrysene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.01	ug/L	11/17/14	DD	SW8270D (SIM)
Fluoranthene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)
Fluorene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	ug/L	11/17/14	DD	SW8270D (SIM)
Naphthalene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)
Phenanthrene	ND	0.07	ug/L	11/17/14	DD	SW8270D (SIM)
Pyrene	ND	0.10	ug/L	11/17/14	DD	SW8270D (SIM)
QA/QC Surrogates						
% 2-Fluorobiphenyl	56		%	11/17/14	DD	30 - 130 %
% Nitrobenzene-d5	48		%	11/17/14	DD	30 - 130 %
% Terphenyl-d14	105		%	11/17/14	DD	30 - 130 %

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

E - estimated value, the sulfate concentration is reported above the calibration range.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
February 25, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 25, 2015

FOR: Attn:Gary J. Fuerstenberg, P.E.
Haley & Aldrich
100 Corporate Place
Suite 105
Rocky Hill, CT 06067-1803

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:		11/11/14	0:00
Location Code:	HALEY-NY	Received by:	SW	11/11/14	16:14
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	28590-024				

Laboratory Data

SDG ID: GBH39422
Phoenix ID: BH39427

Project ID: TARRYTOWN FORMER MGP SITE
Client ID: TB-111114

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Aromatic Volatiles						
Benzene	ND	1.0	ug/L	11/13/14	HM	SW8260C
Ethylbenzene	ND	1.0	ug/L	11/13/14	HM	SW8260C
m&p-Xylene	ND	2.0	ug/L	11/13/14	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	11/13/14	HM	SW8260C
o-Xylene	ND	1.0	ug/L	11/13/14	HM	SW8260C
Toluene	ND	1.0	ug/L	11/13/14	HM	SW8260C
QA/QC Surrogates						
% 1,2-dichlorobenzene-d4	104		%	11/13/14	HM	70 - 130 %
% Bromofluorobenzene	91		%	11/13/14	HM	70 - 130 %
% Dibromofluoromethane	105		%	11/13/14	HM	70 - 130 %
% Toluene-d8	100		%	11/13/14	HM	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quanitation) ND=Not Detected
BRL=Below Reporting Level

Comments:

TRIP BLANK INCLUDED.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
February 25, 2015
Reviewed and Released by: Phyllis Shiller, Laboratory Director

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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QA/QC Report

February 25, 2015

QA/QC Data

SDG I.D.: GBH39422

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 291992, QC Sample No: BH39425 (BH39422, BH39423, BH39424, BH39425)													
ICP Metals - Aqueous													
Iron	BRL	0.093	0.094	1.10	104	102	1.9	99.2	95.8	3.5	75 - 125	20	
Manganese	BRL	0.004	0.004	NC	105	104	1.0	102	98.6	3.4	75 - 125	20	
QA/QC Batch 291993, QC Sample No: BH39426 (BH39426)													
ICP Metals - Aqueous													
Iron	BRL	0.305	0.233	26.8	99.3	103	3.7	88.6	86.1	2.9	75 - 125	20	r
Manganese	BRL	0.047	0.036	26.5	101	105	3.9	92.6	90.5	2.3	75 - 125	20	r

r = This parameter is outside laboratory rpd specified recovery limits.

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QA/QC Report

February 25, 2015

QA/QC Data

SDG I.D.: GBH39422

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 292406, QC Sample No: BH38961 (BH39422)												
Nitrate as Nitrogen	BRL	<0.05	<0.05	NC	101			109			85 - 115	20
Nitrite as Nitrogen	BRL	<0.01	<0.01	NC	102			118			85 - 115	20
Sulfate	BRL	28.1	29.2	3.80	93.8			111			85 - 115	20
QA/QC Batch 291981, QC Sample No: BH39423 (BH39422, BH39423, BH39424, BH39425, BH39426)												
B.O.D./5 day	BRL	<4.0	<4.0	NC	105			108			70 - 130	20
QA/QC Batch 292158, QC Sample No: BH39423 (BH39422, BH39423, BH39424, BH39425, BH39426)												
C.O.D.	BRL	125	123	1.60	95.5			81.0			85 - 115	20
QA/QC Batch 292272, QC Sample No: BH39426 (BH39422, BH39423, BH39424, BH39425, BH39426)												
Total Organic Carbon	BRL	2.6	2.8	NC	99.0			100			85 - 115	20
QA/QC Batch 292407, QC Sample No: BH39446 (BH39425, BH39426)												
Nitrate as Nitrogen	BRL	0.99	1.04	4.90	104			105			85 - 115	20
Nitrite as Nitrogen	BRL	<0.01	<0.01	NC	101			110			85 - 115	20
Sulfate	BRL	<3.0	<3.0	NC	99.9			97.6			85 - 115	20
QA/QC Batch 292382, QC Sample No: BH39547 (BH39423, BH39424)												
Nitrate as Nitrogen	BRL	0.11	0.12	NC	101			102			85 - 115	20
Nitrite as Nitrogen	BRL	<0.01	<0.01	NC	105			103			85 - 115	20
Sulfate	BRL	3.2	3.2	NC	94.4			98.4			85 - 115	20
QA/QC Batch 292173, QC Sample No: BH40323 (BH39422, BH39423, BH39424, BH39425, BH39426)												
Sulfide	BRL	<0.10	<0.10	NC	102			104				
QA/QC Batch 292575, QC Sample No: BH40773 (BH39422, BH39423, BH39424, BH39425, BH39426)												
Total Organic Carbon	BRL	1.3	1.3	NC	99.0			94.0			85 - 115	20

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QA/QC Report

February 25, 2015

QA/QC Data

SDG I.D.: GBH39422

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 291977, QC Sample No: BH39399 (BH39422, BH39423, BH39424, BH39425, BH39426)										
Polynuclear Aromatic HC - Ground Water										
2-Methylnaphthalene	ND	35	35	0.0				30 - 130	20	
Acenaphthene	ND	55	56	1.8				30 - 130	20	
Acenaphthylene	ND	54	54	0.0				30 - 130	20	
Anthracene	ND	72	72	0.0				30 - 130	20	
Benz(a)anthracene	ND	69	69	0.0				30 - 130	20	
Benzo(a)pyrene	ND	70	71	1.4				30 - 130	20	
Benzo(b)fluoranthene	ND	79	77	2.6				30 - 130	20	
Benzo(ghi)perylene	ND	66	66	0.0				30 - 130	20	
Benzo(k)fluoranthene	ND	76	82	7.6				30 - 130	20	
Chrysene	ND	73	73	0.0				30 - 130	20	
Dibenz(a,h)anthracene	ND	68	68	0.0				30 - 130	20	
Fluoranthene	ND	74	75	1.3				30 - 130	20	
Fluorene	ND	64	65	1.6				30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	68	68	0.0				30 - 130	20	
Naphthalene	ND	25	25	0.0				30 - 130	20	l
Phenanthrene	ND	65	65	0.0				30 - 130	20	
Pyrene	ND	76	76	0.0				30 - 130	20	
% 2-Fluorobiphenyl	39	40	40	0.0				30 - 130	20	
% Nitrobenzene-d5	57	28	28	0.0				30 - 130	20	l
% Terphenyl-d14	61	73	72	1.4				30 - 130	20	

Comment:

Additional 8270 criteria:20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 292184, QC Sample No: BH39891 (BH39422, BH39423, BH39424, BH39425, BH39426, BH39427)

Volatiles - Ground Water

Benzene	ND	115	118	2.6	120	121	0.8	70 - 130	30	
Ethylbenzene	ND	115	121	5.1	122	122	0.0	70 - 130	30	
m&p-Xylene	ND	115	119	3.4	124	124	0.0	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	122	123	0.8	125	124	0.8	70 - 130	30	
o-Xylene	ND	120	125	4.1	129	131	1.5	70 - 130	30	m
Toluene	ND	115	118	2.6	120	123	2.5	70 - 130	30	
% 1,2-dichlorobenzene-d4	105	102	99	3.0	100	99	1.0	70 - 130	30	
% Bromofluorobenzene	94	101	100	1.0	101	100	1.0	70 - 130	30	
% Dibromofluoromethane	108	106	104	1.9	99	99	0.0	70 - 130	30	
% Toluene-d8	100	101	100	1.0	100	101	1.0	70 - 130	30	

Comment:

A blank MS/MSD was analyzed with this batch.

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%.

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.

QA/QC Data

SDG I.D.: GBH39422

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
February 25, 2015

Sample Criteria Exceedences Report

GBH39422 - HALEY-NY

Criteria: None

State: NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY Temperature Narration

February 25, 2015

SDG I.D.: GBH39422

The samples in this delivery group were received at 4°C.
(Note acceptance criteria is above freezing up to 6°C)

Cooler: Yes (X) No ( )
Coolant: IPK (X) ICE ( ) No ( )

NY/NJ CHAIN OF CUSTODY RECORD

Temp 4 °C Pg 1 of 1

PHOENIX
Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
( ) Fax:
( ) Phone:
(X) Email: GFuerstenberg@haleyaldrich.com

Customer: HALEY & ALDRICH, INC.
Address: 100 CORPORATE PL.
ROCKY HILL, CT 06067

Project: TARRYTOWN FORMER MGP SITE
Report to: Gary Fuerstenberg
Invoice to: National Re/Sources

Project P.O: 28590-024

This section MUST be completed with Bottle Quantities.

Sampler's Signature: [signature] Date: 11/11/14

Client Sample - Information - Identification

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	VOCs-8260B(BTEX)	SVOCs-8270C(PAHs)	BOD-5210B	COD-5520C,5520D	DOC-415.1	TOC-9060	SULFATE-375.4	SULFIDE-376.1,376.2	NITRATE+NITRITE-353.2	TOTAL Fe, Mn-6010		Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [X] HCl	GL Amber 1000ml [X] As is [ ] H2SO4	PL As is [ ] 250ml [X] 500ml [X] 1000ml	PL H2SO4 [X] 250ml [ ] 500ml [ ] 1500ml	PL HNO3 250ml	~~PL NaOH 250ml~~ ~~250 TC~~ GL Amber H2SO4 Bacteria Bottle
	MW-29	GW	11/10/14	1545	X	X	X	X	X	X	X	X	X	X	30422		3	3	2	1	1	1		
~~XX~~	MW-20		11/11/14	0905	X	X	X	X	X	X	X	X	X	X	30423		3	3	2	1	1	1		
*	MW-21			1125	X	X	X	X	X	X	X	X	X	X	30424		3	3	2	1	1	1		
	MW-24			1340	X	X	X	X	X	X	X	X	X	X	30425		3	3	2	1	1	1		
	DUP-111114	GW		—	X	X	X	X	X	X	X	X	X	X	30426		3	3	2	1	1	1		
	TB-111114	W	—	—	X										30427		1							

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	11/11/14	1420
[signature]	[signature]	11/11/14	16:14

Comments, Special Requirements or Regulations:

*missing TBC bottle, will pick up tomorrow. 11/14/14 LC
**vial broken at laboratory 11-11-14 (C)

Turnaround:
( ) 1 Day*
( ) 2 Days*
( ) 3 Days*
( ) 5 Days
( ) 10 Days
( ) Other
* SURCHARGE APPLIES
*STANDARD

NJ
( ) Res. Criteria
( ) Non-Res. Criteria
( ) Impact to GW Soil Cleanup Criteria
( ) GW Criteria

NY
( ) TAGM 4046 GW
( ) TAGM 4046 SOIL
( ) NY375 Unrestricted Use Soil
( ) NY375 Residential Soil
( ) Restricted/Residential
( ) Commercial
( ) Industrial

Data Format
( ) Phoenix Std Report
( ) Excel
( ) PDF
( ) GIS/Key
( ) EQuIS
( ) NJ Hazsite EDD
( ) NY EZ EDD (ASP)
( ) Other

Data Package
( ) NJ Reduced Deliv. *
( ) NY Enhanced (ASP B) *
( ) Other

State where samples were collected: NY

Cooler: Yes [X] No [ ]
Coolant: IPK [ ] ICE [X] No [ ]

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 0° C Pg of

Data Delivery:
[ ] Fax #:
[✓] Email:

Customer: Haley + Aldrich
Address: 100 Corporate Place
Rocky Hill, CT 06033

Project: Tarrytown MGP
Report to: Gary Fuerstenberg
Invoice to: " "
Phone #: 860 290 3149
Fax #:

Project P.O: 00100-040

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

~~Sampler's~~ Signature: RJ Ryan for S. Puff Date: 11/11/14

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request: to be assigned

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
395105	MW-21	gw	11/11/14	1125

Soil VOA Vials [ ] methanol [ ] H2O
GL Soil container ( ) oz
GL Soil container ( ) oz
40 ml VOA Vial [ ] As is [ ] HCl
GL Amber 1000ml [ ] As is [ ] H2SO4
PL As is [ ] 250ml [ ] 1500ml [ ] 1000ml
PL H2SO4 [ ] 250ml [ ] 1500ml
PL HNO3 250ml
PL NaOH 250ml
Bacteria Bottle

Relinquished by:	Accepted by:	Date:	Time:
RJ Ryan		11/12/14	958
	TFarrell	11/12/14	13:30

Comments, Special Requirements or Regulations:

analysis to be assigned by H+A (pending).
Sample that was missing for TOC on 11/11/14 (LB)

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[ ] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: NY

Data Format
[ ] Excel
[ ] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[ ] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES