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Quarterly Groundwater Monitoring Report First Quarter (Q1) 2017

Sag Harbor Former MGP Site

Village of Sag Harbor Suffolk County, Long Island, NY Site ID No. 1-52-159

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1. Sag Harbor Site and Adjacent Offsite Areas

First Quarter (Q1) 2017 Groundwater Monitoring Event Summary

Event Date: March 20, 21 and 22, 2017

Site Phase: Quarterly groundwater monitoring

Location: The location of the Sag Harbor Former MGP site is depicted on Figure 1.

1.1 Monitoring Program

Criteria to reduce the scope of the groundwater monitoring program based on historical and future analytical results were proposed, and subsequently approved by the New York State Department of Environmental Conservation (NYSDEC) on March 21, 2014. The criteria and the resulting reductions to the program were detailed in a follow-up letter to NYSDEC dated May 13, 2014. NYSDEC has required that several monitoring wells in the intermediate zone be exempt from reduction criteria and be sampled annually. These wells include SHMW-03I, SHMW-05I, and SHMW-08I.

Based on the established criteria, 10 wells were eliminated from the sampling program and three shallow wells were reduced to annual sampling and quarterly sampling has resumed in one well. The reductions in the scope of work are shown in the table below. The sampling list will continue to be re-evaluated on a quarterly basis, with changes made, as appropriate.

Monitoring	Sampling	Frequency	Monitoring	Sampling	Frequency
Well	Former	Current	Well	Former	Current
SHMW-01SR	Quarterly	Annual	SHMW-01D	Annual	Eliminated
SHMW-02S	Quarterly	Annual	SHMW-02DR	Annual	Eliminated
SHMW-03S	Quarterly	Annual	SHMW-07IR	Annual	Eliminated
SHMW-09I	Annual	Quarterly	SHMW-10I	Annual	Eliminated
SHMW-10S	Quarterly	Eliminated	SHMW-11I	Annual	Eliminated
SHMW-13S	Quarterly	Eliminated	SHMW-12I	Annual	Eliminated
SHMW-01IR	Annual	Eliminated	SHMW-13I	Annual	Eliminated
SHMW-03I ¹	Quarterly	Annual	SHMW-05IR ¹	Quarterly	Annual
SHMW-08I ¹	Quarterly	Annual	SHMW-11S	Quarterly	Annual

Notes. 1: SHMW-03I, 05IR, and 08I are exempt from reduction from annual sampling

Implementation of the reduced sampling scope began in Q2 2014. Based on a review of seasonal data trends, the annual sampling rounds are to be conducted during the third quarter of each year. Seven wells were included in the Q1 2017 quarterly sampling list.



1.2 Monitoring Well Network

A total of 25 monitoring wells are currently located at or in the vicinity of the site (**Figure 2**). MW-05 was destroyed sometime between March and June 2007. Monitoring wells MW-01, MW-02, MW-03, MW-04, MW-06, SHMW-01S, SHMW-01I, SHMW-02I, SHMW-02D, SHMW-04S, SHMW-04I, SHMW-05S, SHMW-05I, SHMW-06S, and SHMW-06I were abandoned prior to the Q4 2008 sampling event due to the remediation activities being conducted at the site. Seven of the monitoring wells, including SHMW-01SR, SHMW-01IR, SHMW-02IR, SHMW-02DR, SHMW-04SR, SHMW-05SR, and SHMW-05IR, were replaced as part of the post-remediation monitoring well replacement/installation program in Q4 2010.

Monitoring wells SHMW-02IR and SHMW-04SR were installed as larger diameter wells for potential dense non-aqueous phase liquid (DNAPL) recovery. In addition to the installation of the replacement monitoring wells listed above, new monitoring wells SHMW-01D and SHMW-02S were also installed as part of this program. Monitoring wells SHMW-07S and SHMW-07I, which were damaged presumably during the remedial activities, were abandoned during the replacement well installation program and reinstalled.

1.3 Hydrological Data

Groundwater levels were measured on March 22, 2017 at all 25 of the monitoring wells, during low and high tides. Monitoring well SHMW-02IR was repaired during Q3 2011, altering the survey point. As a result, the groundwater level measurement was not calculated. Depth to groundwater measurements and calculated groundwater elevations are provided in **Table 1**. Shallow and intermediate groundwater contours for high and low tidal conditions are depicted on **Figures 3** through **6**.

The groundwater flow direction was generally to the west towards Sag Harbor Cove. The ranges in depth to water and water table elevation data, as well as calculated hydraulic gradients for the shallow and intermediate portions of the aquifer in Q1 2017, are provided in the following table:

		High Tide		Low Tide			
Depth Zone	Rar	nge	0 " 12	Rai			
·	DTW ¹	WLE ²	Gradient ³	DTW ¹	WLE ²	Gradient ³	
Shallow	0.01 – 4.31	0.77 - 3.09	0.0046	0.01 – 4.85	-0.10 - 3.27	0.0061	
Intermediate	0.01 – 4.71	0.49 - 2.09	0.0012	0.04 - 6.07	-0.45 – 1.95	0.0032	

Notes:

- 1: Depth to water Measured as feet below top of casing
- 2: Water level elevation Calculated as feet above mean sea level
- 3: Feet/Feet

1.4 NAPL Thickness Data

Table 2 provides a summary of historical non-aqueous phase liquid (NAPL) data. In Q1 2017, all of the 25 monitoring wells were monitored for NAPL as part of the groundwater monitoring program. Evidence of light non-aqueous phase liquid (LNAPL) or DNAPL in the



monitoring wells during Q1 2017 was limited to approximately 4 inches of DNAPL in SHMW-02IR and DNAPL blebs in SHMW-07SR.

1.5 Chemical Data

In Q1 2017, a total of 6 wells were sampled for benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tert-butyl ether (MTBE) by Environmental Protection Agency (EPA) Method 8260, as well as polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270. Well sampling was performed on March 20 and 21, 2017 and included all the wells on the quarterly sampling list excluding SHMW-02IR and SHMW-07SR which were not sampled due to the presence of NAPL.

Chemical data for Q1 2017 (Table 3) indicate:

- Total BTEX concentrations ranged from non-detect (ND) in one well to 328.8 micrograms per liter (μg/L) in SHMW-04SR.
- Total PAH concentrations ranged from ND in one well to 360.5 μg/L in SHMW-12S.
- MTBE was detected in one of the six wells sampled (SHMW-08S) with an estimated concentration of 3.7 μg/L.

1.6 Data Trend Analysis

Total BTEX and total PAH concentrations (see historical data in **Tables 4** and **5**) have been generally decreasing, but variable in shallow groundwater on and adjacent to the site. During Q1 2017 concentrations generally decreased relative to Q4 2016. Further discussion of the decreases is provided below. An analysis of the current and historical data in the recent quarterly sampling events is presented in the table below.

Shallow Zone	Historical		Q3 2016		Q4 2016		Q1 2017	
	Max	Average	Max	Average	Max	Average	Max	Average
Total BTEX	25,860	757	461	75	1,047	155	329	92
Total PAHs	14,332	658	808	208	2,286	349	361	173

Note:

Concentrations in µg/L

Concentrations of total BTEX and total PAHs were below detection levels in one of the six monitoring wells, SHMW-09I (ND), sampled during in Q1 2017.

Elevated total BTEX concentrations were identified in three of the remaining shallow wells in Q1 2017, including SHMW-04SR (328.8 μ g/L), SHMW-09S (35.1 μ g/L), and SHMW-12S (164.1 μ g/L). The total BTEX concentrations in SHMW-05SR (18 μ g/L) and SHMW-08S (6 μ g/L) were relatively low; however, the concentrations of benzene exceeded the groundwater standard. Total BTEX concentrations in these wells during Q1 2017 were generally similar to Q4 2016 and were either at, or below their respective historical mean.



Elevated total PAH concentrations were identified in the remaining five shallow wells sampled in Q1 2017, including SHMW-04SR (67.8 μ g/L), SHMW-05SR (170.6 μ g/L), SHMW-08S (140.8 μ g/L), SHMW-09S (297.1 μ g/L), and SHMW-12S (360.5 μ g/L). The concentrations of total PAHs in Q1 2017 were similar to previous sampling events excluding SHMW-04S, which has continued to decrease. The Q1 2017 total PAH concentrations were all within their respective historical means.

1.7 DNAPL Occurrence

The historical NAPL data (**Table 2**) indicates that measurable quantities of NAPL have primarily been found in two onsite shallow monitoring wells (MW-02 and MW-05), one onsite intermediate well (SHMW-02I), and one offsite shallow well (SHMW-04S). Non-measurable (trace) amounts of NAPL have historically been found in two onsite shallow wells, MW-03 and MW-04, as well as in offsite shallow well SHMW-06S, and was intermittently found in SHMW-07S. All of the wells identified above in which NAPL has been historically detected were either destroyed or abandoned prior to, or during, remedial activities.

No measurable amounts of LNAPL and DNAPL had been observed in replacement monitoring wells SHMW-04SR and SHMW-07SR prior to recent gauging events. In recent events, DNAPL has been measured at a maximum thickness of approximately 0.13 feet in SHMW-04SR and a maximum thickness of approximately 0.17 feet in SHMW-07SR. During Q1 2017, no DNAPL was observed in SHMW-04SR and blebs of DNAPL were observed in SHMW-07SR. As a result of this observation, SHMW-07SR was not sampled.

To date, no significant evidence of NAPL has been found in these monitoring wells or any of the remaining monitoring wells post remediation, excluding SHMW-02IR. The DNAPL thickness in SHMW-02I was approximately 4 feet immediately prior to abandonment during the Q3 2008 monitoring event. SHMW-02IR was installed as a larger diameter well for potential DNAPL recovery.

During Q1 2017, approximately 0.33 feet of DNAPL was present in SHMW-02IR. Prior to a product removal test discussed in the Q4 2015 Quarterly Groundwater Monitoring Report, the DNAPL thickness in SHMW-02IR was significantly higher (approximately 1.75 feet in early Q4 2015). During October 2015, approximately one gallon of product was removed from SHMW-02IR. Subsequent gauging events have demonstrated minimal rebound in DNAPL thickness. No DNAPL could be recovered in SHMW-02IR in Q1 2017.

1.8 Future Plans

- Continue quarterly groundwater and NAPL monitoring at onsite and offsite monitoring wells.
- Attempt to recover DNAPL from SHMW-02IR, if the measured DNAPL thickness is greater than approximately 0.33 feet.



Tables



Table 1. Water Level Measurements and Calculated Groundwater Elevations Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2017

3/22/2017 Top of Casing Well ID Tide Time Depth to Groundwater Notes Elevation (ft)* Water (ft) Elevation (ft) High 6:29 2 55 2.22 SHMW-01SR 3.71 Well replaced in Q4 2010 Low 12:50 2.51 1 20 High 6.28 3.32 0.49 SHMW-01IR 3.81 Well replaced in Q4 2010 Low 12:49 2.89 0.92 High 6:30 1.60 2.07 SHMW-01D 3.67 Well installed in Q4 2010 Low 12:50 2.58 1.09 High 6:26 2.51 1.44 SHMW-02S 3.95 Well installed in Q4 2010 12:46 2.38 1.57 High 6:25 2.19 NC SHMW-02IR 3.92 Survey point altered 12:44 2.52 NC Low High 6:26 1.98 1.68 Well replaced in Q4 2010 SHMW-02DR 3.66 12:45 0.74 Low 2.92 High 6:35 2 99 0.84 SHMW-03S 3.83 12:57 3.29 0.54 Low High 6:36 2 22 1 63 SHMW-03I 3.85 Low 12:58 3.36 0.49 High 6:32 3.11 0.79 SHMW-04SR 3.90 Well replaced in Q4 2010 Low 12:53 3.01 0.89 High 6:34 3.87 1.16 SHMW-05SR 5.03 Well replaced in Q4 2010 Low 12:55 4.11 0.92 High 6:33 3.41 1.55 SHMW-05IR 4.96 Well replaced in Q4 2010 Low 12:54 3.92 1.04 High 6:55 0.56 2.92 SHMW-07SR 3 48 Low 13:18 0.71 2.77 1.80 High 6:55 1.58 SHMW-07IR 3 38 1.91 1.47 Low 13:19 High 6:49 0.60 3.09 SHMW-08S 3.69 13:13 0.70 2.99 Low 2.08 High 6:49 1.71 SHMW-081 3 79 13:12 2.60 Low 1.19 High 1.39 1.67 6:43 SHMW-09S 3.06 13:07 Low 1.52 1.54 1 51 High 6.44 1.31 SHMW-09I 2.82 Low 13:08 1 92 0.9 High 6:38 3.98 0.77 SHMW-10S 4.75 Low 13:01 4.85 -0.10 High 6:38 3.28 1.47 SHMW-10I 4.75 Low 13:00 5.20 -0.45 High 6:42 4.31 1.01 SHMW-11S 5.32 Low 13:05 3.71 1.61 High 6:41 4.71 0.92 SHMW-11I 5.63 13:04 6.07 -0.44 High 6:46 0.01 1.97 SHMW-12S 1.98 Low 13:10 0.01 1.97 High 6:46 0.01 1.98 SHMW-12I 1.99 Low 13:10 0.04 1.95 0.41 High 6:51 2.95 SHMW-13S 3 36 Low 13:17 0.09 3.27 High 6:51 1.41 2.09 SHMW-13I 3.50 2.01 13:16 1.49 Low

General Notes:

* Elevations were re-surveyed in November 2010.

NC = Not Calculated

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	May 2002 Observations	May 2004 Observations	Aug 2004 Observations	Oct 2004 Observations	Nov 2004 Observations	Dec 2004 Observations	Jan 2005 Observations	Feb 2005 Observations	Mar 2005 Observations
MW-01	None Observed	Odor	None Observed	Not Checked	NR	NR	NR	NR	NR
MW-02	Approx. 0.16' of DNAPL, sheen on surface	Approx. 0.15' of DNAPL, sheen on surface	Approx. 0.29' of DNAPL	Approx. 0.2' of DNAPL	Approx. 0.01' of DNAPL, 1.0' intermittent DNAPL	Approx. 0.1' of DNAPL	Approx. 0.11' of DNAPL	Approx. 0.16' of DNAPL	Approx. 0.15' of DNAPL
MW-03	Intermittent DNAPL for 1.5'	Approx. 0.03' of DNAPL, naphthalene- like odor	NR	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape
MW-04	None Observed	Approx. 0.02' of DNAPL, naphthalene- like odor	NR	Trace DNAPL at bottom of tape	None Observed	None Observed	Trace DNAPL at bottom of tape	Not Checked (under snow pile)	None Observed
MW-05	Blebs of LNAPL	Approx. 1.0' of DNAPL, naphthalene-like odor	Approx. 0.75' of DNAPL	Approx. 4.5' of LNAPL/NAPL	Approx. 0.35' of DNAPL, 3.6' intermittent DNAPL	Trace DNAPL at bottom of tape, bubbles in WC	Trace DNAPL at bottom of tape	Approx. 0.6' of DNAPL, approx. 0.02' of LNAPL	Sporadic DNAPL, approx. 0.1' of LNAPL.
MW-06	None Observed	Slight naphthalene- like odor	NR	NR	NR	NR	NR	NR	NR
SHMW-01S/01SR	None Observed	Slight naphthalene- like odor	NR	NR	NR	NR	NR	NR	NR
SHMW-01I/01IR	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR
SHMW-01D	NI	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02S	NI	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02I/02IR	None Observed	Approx. 4.9' of DNAPL, sheen	Approx. 4.7' of DNAPL	Approx. 4.9' of DNAPL	Approx. 1.0' of DNAPL, 3.0' intermittent DNAPL	Approx. 0.6' of DNAPL	Approx. 0.65' of DNAPL	Approx. 0.5' of DNAPL	Approx. 0.45' of DNAPL
SHMW-02D/02DR	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR
SHMW-03S	None Observed	Odor	NR	NR	NR	NR	NR	NR	NR
SHMW-03I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR
SHMW-04S/04SR	None Observed	Approx. 0.6' of DNAPL, naphthalene- like odor	NR	Approx. 0.7' of DNAPL, 2.3' intermittent DNAPL	Approx. 0.55' of DNAPL	Approx. 0.29' of DNAPL	Approx. 0.35' of DNAPL	Approx. 0.22' of DNAPL	Approx. 0.25' of DNAPL
SHMW-04I	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR
SHMW-05S/05SR	None Observed	Blebs of DNAPL in purge water, odor	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	May 2002 Observations	May 2004 Observations	Aug 2004 Observations	Oct 2004 Observations	Nov 2004 Observations	Dec 2004 Observations	Jan 2005 Observations	Feb 2005 Observations	Mar 2005 Observations
SHMW-05I/05IR	None Observed	None Observed	NR						
SHMW-06S	Slight sheen and naphthalene-like odor	Naphthalene-like odor	NR						
SHMW-06I	None Observed	None Observed	NR						
SHMW-07S/07SR	Sheen and naphthalene-like odor	Slight odor	NR						
SHMW-07I/07IR	None Observed	None Observed	NR						
SHMW-08S	None Observed	None Observed	NR						
SHMW-08I	None Observed	None Observed	NR						
SHMW-09S	None Observed	Slight naphthalene- like odor	NR						
SHMW-09I	None Observed	None Observed	NR						
SHMW-10S	None Observed	None Observed	NR						
SHMW-10I	None Observed	None Observed	NR						
SHMW-11S	None Observed	None Observed	NR						
SHMW-11I	None Observed	None Observed	NR						
SHMW-12S	None Observed	Sheen, strong sulfur- like odor	NR						
SHMW-12I	None Observed	None Observed	NR						
SHMW-13S	None Observed	None Observed	NR						
SHMW-13I	None Observed	None Observed	NR						

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Apr/Q1 2005 Observations	Jun/Q2 2005 Observations	Sep/Q3 2005 Observations	Dec/Q4 2005 Observations	Mar/Q1 2006 Observations	Jun/Q2 2006 Observations	Sep/Q3 2006 Observations	Dec/Q4 2006 Observations	Mar/Q1 2007 Observations
MW-01	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-02	Approx. 0.15' of DNAPL	Trace DNAPL at bottom of tape	Approx. 0.13' of DNAPL	Approx. 0.09' DNAPL, naphthalene-like odor	Approx. 0.01' DNAPL	Approx. 0.12 ' of DNAPL	Approx. 0.15' DNAPL	Approx. 0.10' DNAPL	Approx.0.20' DNAPL
MW-03	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	None, naphthalene- like odor	No DNAPL observed	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	No DNAPL observed	Trace DNAPL (coating on tubes)
MW-04	None Observed	None Observed	Trace DNAPL at bottom of tape	Trace DNAPL at bottom of tape	Trace DNAPL	Trace DNAPL	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)
MW-05	Sporadic DNAPL, approx. 0.1' of LNAPL.	Approx. 3.0' of DNAPL	Approx. 0.75' of DNAPL, approx. 0.12' of LNAPL	DNAPL blebs in purge H2O, 0.5' DNAPL coating on tubes	Approx. 0.15' of DNAPL, approx. 0.1' of LNAPL	Approx. 0.22' DNAPL; 0.05' of LNAPL	Approx. 0.55' DNAPL; 0.06' of LNAPL	Trace LNAPL; DNAPL in purge water (not measurable)	Trace LNAPL; DNAPL in purge water (not measurable)
MW-06	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-01S/01SR	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-01I/01IR	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-01D	NI	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02S	NI	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02I/02IR	Approx. 1.1' of DNAPL	Approx. 0.75' of DNAPL	Approx. 0.4' of DNAPL	Approx. 1.3' of DNAPL, naphthalene-like odor	Approx. 0.35' of DNAPL	Approx. 0.43' of DNAPL	Approx. 0.5' of DNAPL	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)
SHMW-02D/02DR	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-03S	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-03I	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-04S/04SR	Approx. 0.25' of DNAPL	Approx. 0.90' of DNAPL	Approx. 0.26' of DNAPL	Approx. 0.5' DNAPL, naphthalene-like odor	Approx. 0.25' of DNAPL	Approx. 0.5' of DNAPL	Approx. 0.25' of DNAPL	Approx. 0.30' of DNAPL	Approx.0.40' DNAPL
SHMW-04I	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-05S/05SR	None Observed	None Observed	None Observed	None Observed	No DNAPL observed	None Observed	None Observed	None Observed	None Observed

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Apr/Q1 2005 Observations	Jun/Q2 2005 Observations	Sep/Q3 2005 Observations	Dec/Q4 2005 Observations	Mar/Q1 2006 Observations	Jun/Q2 2006 Observations	Sep/Q3 2006 Observations	Dec/Q4 2006 Observations	Mar/Q1 2007 Observations
SHMW-05I/05IR	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-06S	NR	NR	Trace DNAPL at bottom of tape	Approx. 0.10' DNAPL, naphthalene-like odor	Trace DNAPL	Approx. 0.2' of DNAPL	Approx. 0.2' of DNAPL	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)
SHMW-06I	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-07S/07SR	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-07I/07IR	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-08S	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-08I	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-09S	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-09I	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-10S	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-10I	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-11S	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-11I	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-12S	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-12I	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-13S	NR	NR	NR	NR	NR	NR	NR	NR	None Observed
SHMW-13I	NR	NR	NR	NR	NR	NR	NR	NR	None Observed

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Jun/Q2 2007 Observations	Sep/Q3 2007 Observations	Dec/Q4 2007 Observations	Mar/Q1 2008 Observations	Jun/Q2 2008 Observations	Sep/Q3 2008 Obsevations	Dec/Q4 2008 Obsevations	Mar/Q1 2009 Observations	Jun/Q2 2009 Observations
MW-01	NR	NR	None Observed	None Observed	Trace DNAPL	Trace DNAPL (at bottom of tubing)	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
MW-02	Approx.0.07' DNAPL	Approx. 0.11' DNAPL	Approx. ~0.08'	Trace DNAPL	Moderate DNAPL; not measureable	Trace DNAPL	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
MW-03	None Observed	Trace DNAPL (coating on tubes)	Trace	Trace DNAPL (On bottom 1.5' of tubes)	Trace DNAPL	Trace DNAPL (0.05' at bottom of tubing)	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
MW-04	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Approx. ~0.02'	NR	Trace DNAPL	Trace DNAPL (at bottom of tubing)	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
MW-05	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed
MW-06	NR	NR	None Observed	None Observed	None Observed	None Observed	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
SHMW-01S/01SR	NR	NR	None Observed	None Observed	None Observed	None Observed	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
SHMW-01I/01IR	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
SHMW-01D	NI	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02S	NI	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02I/02IR	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Approx. ~0.60'	Approx. 3' DNAPL	Approx. 1.5' DNAPL	Approx. 4' DNAPL	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
SHMW-02D/02DR	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
SHMW-03S	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-03I	NR	NR	None Observed	NR	NR	NR	None Observed	NR	None Observed
SHMW-04S/04SR	Approx.0.50' DNAPL	Approx. 0.5' DNAPL	Approx. ~0.61'	Approx. 1.05' DNAPL	Approx.0.6' DNAPL	Approx.0.75' DNAPL	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
SHMW-04I	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
SHMW-05S/05SR	None Observed	NR	None Observed	None Observed	None Observed	None Observed	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Jun/Q2 2007 Observations	Sep/Q3 2007 Observations	Dec/Q4 2007 Observations	Mar/Q1 2008 Observations	Jun/Q2 2008 Observations	Sep/Q3 2008 Obsevations	Dec/Q4 2008 Obsevations	Mar/Q1 2009 Observations	Jun/Q2 2009 Observations
SHMW-05I/05IR	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
SHMW-06S	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace	Trace DNAPL (on tubing)	Trace DNAPL	Trace DNAPL (on tubing)	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
SHMW-06I	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned
SHMW-07S/07SR	NR	NR	Trace	NR	NR	Trace DNAPL (on side of tubing approx 1' off bottom)	Well Inaccessible or Abandoned	Well Inaccessible	None Observed
SHMW-07I/07IR	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Inaccessible	None Observed
SHMW-08S	NR	NR	None Observed	None Observed	None Observed	None Observed	Well Inaccessible or Abandoned	Well Inaccessible	None Observed
SHMW-08I	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Inaccessible	None Observed
SHMW-09S	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	Well Inaccessible	None Observed
SHMW-09I	NR	NR	None Observed	NR	NR	NR	NR	NR	NR
SHMW-10S	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-10I	NR	NR	None Observed	NR	NR	NR	NR	NR	NR
SHMW-11S	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-11I	NR	NR	None Observed	NR	NR	NR	NR	NR	NR
SHMW-12S	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-12I	NR	NR	None Observed	NR	NR	NR	NR	NR	NR
SHMW-13S	NR	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-13I	NR	NR	None Observed	NR	NR	NR	NR	NR	NR

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Sep/Q3 2009 Observations	Dec/Q4 2009 Observations	Mar/Q1 2010 Observations	Jun/Q2 2010 Observations	Sep/Q3 2010 Observations	Dec/Q4 2010 Observations	Mar/Q1 2011 Observations	Jun/Q2 2011 Observations	Sep/Q3 2011 Observations
MW-01	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
MW-02	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
MW-03	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
MW-04	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
MW-05	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed					
MW-06	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
SHMW-01S/01SR	Well Abandoned	None Observed	None Observed	None Observed	None Observed				
SHMW-01I/01IR	Well Abandoned	None Observed	None Observed	None Observed	None Observed				
SHMW-01D	NI	NI	NI	NI	NI	None Observed	None Observed	None Observed	None Observed
SHMW-02S	NI	NI	NI	NI	NI	None Observed	None Observed	None Observed	None Observed
SHMW-02I/02IR	Well Abandoned	None Observed	Well Damaged	Well Damaged	Well Damaged				
SHMW-02D/02DR	Well Abandoned	None Observed	None Observed	None Observed	None Observed				
SHMW-03S	None Observed	None Observed	None Observed	None Observed					
SHMW-03I	NR	None Observed	None Observed	None Observed	None Observed				
SHMW-04S/04SR	Well Abandoned	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	None Observed				
SHMW-04I	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
SHMW-05S/05SR	Well Abandoned	None Observed	None Observed	None Observed	None Observed				

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Sep/Q3 2009 Observations	Dec/Q4 2009 Observations	Mar/Q1 2010 Observations	Jun/Q2 2010 Observations	Sep/Q3 2010 Observations	Dec/Q4 2010 Observations	Mar/Q1 2011 Observations	Jun/Q2 2011 Observations	Sep/Q3 2011 Observations
SHMW-05I/05IR	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	None Observed	None Observed	None Observed	None Observed
SHMW-06S	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-06I	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-07S/07SR	Trace DNAPL (on side of tubing)	None Observed	None Observed	Well Inaccessible	Well Inaccessible	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	None Observed
SHMW-07I/07IR	NR	None Observed (approximately 10 feet of sand present in well)	None Observed (approximately 10 feet of sand present in well)	Well Inaccessible	Well Inaccessible	None Observed	None Observed	None Observed	None Observed
SHMW-08S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-08I	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-09S	None Observed	None Observed	Well Inaccessible	None Observed	None Observed	No access	No access	No access	No access
SHMW-09I	NR	None Observed	None Observed	None Observed	None Observed	No access	No access	No access	No access
SHMW-10S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-10I	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-11S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-11I	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-12S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-12I	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-13S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-13I	NR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Dec/Q4 2011 Observations	Mar/Q1 2012 Observations	Jun/Q2 2012 Observations	Sep/Q3 2012 Observations	Dec/Q4 2012 Observations	Mar/Q1 2013 Observations	Jun/Q2 2013 Observations	Sep/Q3 2013 Observations	Dec/Q4 2013 Observations
MW-01	Well Abandoned								
MW-02	Well Abandoned								
MW-03	Well Abandoned								
MW-04	Well Abandoned								
MW-05	Well Destroyed								
MW-06	Well Abandoned								
SHMW-01S/01SR	None Observed								
SHMW-01I/01IR	None Observed								
SHMW-01D	None Observed								
SHMW-02S	None Observed								
SHMW-02I/02IR	None Observed	Approx. 6" of DNAPL							
SHMW-02D/02DR	None Observed								
SHMW-03S	None Observed								
SHMW-03I	None Observed								
SHMW-04S/04SR	None Observed								
SHMW-04I	Well Abandoned								
SHMW-05S/05SR	None Observed								

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Dec/Q4 2011 Observations	Mar/Q1 2012 Observations	Jun/Q2 2012 Observations	Sep/Q3 2012 Observations	Dec/Q4 2012 Observations	Mar/Q1 2013 Observations	Jun/Q2 2013 Observations	Sep/Q3 2013 Observations	Dec/Q4 2013 Observations
SHMW-05I/05IR	None Observed								
SHMW-06S	Well Abandoned								
SHMW-06I	Well Abandoned								
SHMW-07S/07SR	None Observed								
SHMW-07I/07IR	None Observed								
SHMW-08S	None Observed								
SHMW-08I	None Observed								
SHMW-09S	No access	None Observed	None Observed	None Observed					
SHMW-09I	No access	None Observed	None Observed	None Observed					
SHMW-10S	None Observed								
SHMW-10I	None Observed								
SHMW-11S	None Observed								
SHMW-11I	None Observed								
SHMW-12S	None Observed								
SHMW-12I	None Observed								
SHMW-13S	None Observed								
SHMW-13I	None Observed								

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Mar/Q1 2014 Observations	Jun/Q2 2014 Observations	Sep/Q3 2014 Observations	Dec/Q4 2014 Observations	Mar/Q1 2015 Observations	June/Q2 2015 Observations	Sep/Q3 2015 Observations	Dec/Q4 2015 Observations	Mar/Q1 2016 Observations
MW-01	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
MW-02	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
MW-03	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
MW-04	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
MW-05	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed					
MW-06	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
SHMW-01S/01SR	None Observed	None Observed	None Observed	None Observed					
SHMW-01I/01IR	None Observed	None Observed	None Observed	None Observed					
SHMW-01D	None Observed	None Observed	None Observed	None Observed					
SHMW-02S	None Observed	None Observed	None Observed	None Observed					
SHMW-02I/02IR	None Observed	None Observed	None Observed	None Observed	Approx. 14" of DNAPL	Approx. 19" of DNAPL	Approx. 18" of DNAPL	Approx. 21" of DNAPL	Approx. 1" of DNAPL
SHMW-02D/02DR	None Observed	None Observed	None Observed	None Observed					
SHMW-03S	None Observed	None Observed	None Observed	None Observed					
SHMW-03I	None Observed	None Observed	None Observed	None Observed					
SHMW-04S/04SR	None Observed	None Observed	None Observed	None Observed	Approx. 1.5" of DNAPL	None Observed	None Observed	None Observed	None Observed
SHMW-04I	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
SHMW-05S/05SR	None Observed	None Observed	None Observed	None Observed					

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Mar/Q1 2014 Observations	Jun/Q2 2014 Observations	Sep/Q3 2014 Observations	Dec/Q4 2014 Observations	Mar/Q1 2015 Observations	June/Q2 2015 Observations	Sep/Q3 2015 Observations	Dec/Q4 2015 Observations	Mar/Q1 2016 Observations
SHMW-05I/05IR	None Observed	None Observed	None Observed	None Observed					
SHMW-06S	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
SHMW-06I	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned					
SHMW-07S/07SR	None Observed	DNAPL Blebs on tubing	DNAPL Blebs on tubing	Approx. 1" of DNAPL	None Observed	DNAPL Blebs on tubing	DNAPL Blebs on tubing	DNAPL Blebs on tubing	Approx. 2" of DNAPL
SHMW-07I/07IR	None Observed	None Observed	None Observed	None Observed					
SHMW-08S	None Observed	None Observed	None Observed	None Observed					
SHMW-08I	None Observed	None Observed	None Observed	None Observed					
SHMW-09S	None Observed	Approx. 0.25" of DNAPL	None Observed	None Observed	None Observed				
SHMW-09I	None Observed	None Observed	None Observed	None Observed					
SHMW-10S	None Observed	None Observed	None Observed	None Observed					
SHMW-10I	None Observed	None Observed	None Observed	None Observed					
SHMW-11S	None Observed	None Observed	None Observed	None Observed					
SHMW-11I	None Observed	None Observed	None Observed	None Observed					
SHMW-12S	None Observed	None Observed	None Observed	None Observed					
SHMW-12I	None Observed	None Observed	None Observed	None Observed					
SHMW-13S	None Observed	None Observed	None Observed	None Observed					
SHMW-13I	None Observed	None Observed	None Observed	None Observed					

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2017

Well ID	Jun/Q2 2016 Observations	Sep/Q3 2016 Observations	Dec/Q4 2016 Observations	Mar/Q1 2017 Observations
MW-01	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-02	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-03	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-04	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-05	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed
MW-06	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-01S/01SR	None Observed	None Observed	None Observed	None Observed
SHMW-01I/01IR	None Observed	None Observed	None Observed	None Observed
SHMW-01D	None Observed	None Observed	None Observed	None Observed
SHMW-02S	None Observed	None Observed	None Observed	None Observed
SHMW-02I/02IR	Approx. 4" of DNAPL	Approx. 2.5" of DNAPL	Approx. 4" of DNAPL	Approx. 4" of DNAPL
SHMW-02D/02DR	None Observed	None Observed	None Observed	None Observed
SHMW-03S	None Observed	None Observed	None Observed	None Observed
SHMW-03I	None Observed	None Observed	None Observed	None Observed
SHMW-04S/04SR	None Observed	None Observed	None Observed	None Observed
SHMW-04I	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-05S/05SR	None Observed	None Observed	None Observed	None Observed

Well ID	Jun/Q2 2016 Observations	Sep/Q3 2016 Observations	Dec/Q4 2016 Observations	Mar/Q1 2017 Observations
SHMW-05I/05IR	None Observed	None Observed	None Observed	None Observed
SHMW-06S	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-06I	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-07S/07SR	Blebs of DNAPL	DNAPL Blebs on tubing	None Observed	DNAPL Blebs on tubing
SHMW-07I/07IR	None Observed	None Observed	None Observed	None Observed
SHMW-08S	None Observed	None Observed	None Observed	None Observed
SHMW-08I	None Observed	None Observed	None Observed	None Observed
SHMW-09S	None Observed	None Observed	None Observed	None Observed
SHMW-09I	None Observed	None Observed	None Observed	None Observed
SHMW-10S	None Observed	None Observed	None Observed	None Observed
SHMW-10I	None Observed	None Observed	None Observed	None Observed
SHMW-11S	None Observed	None Observed	None Observed	None Observed
SHMW-11I	None Observed	None Observed	None Observed	None Observed
SHMW-12S	None Observed	None Observed	None Observed	None Observed
SHMW-12I	None Observed	None Observed	None Observed	None Observed
SHMW-13S	None Observed	None Observed	None Observed	None Observed
SHMW-13I	None Observed	None Observed	None Observed	None Observed

General Notes:

DNAPL = Dense Non-aqueous Phase Liquid
LNAPL = Light Non-aqueous Phase Liquid
WC = Water Column NR = Gauging Not Required NI = Not Installed

Table 3. Summary of BTEX and PAH Results Sag Harbor Former MGP Site **Groundwater Monitoring Program - Q1 2017**

	Sample Name Sample Date Parent Sample		SHMW-04SR 3/20/2017	DUP-01 3/20/2017 SHMW-04SR	SHMW-05SR 3/20/2017	SHMW-08S 3/21/2017	SHMW-09S 3/20/2017	SHMW-09I 3/20/2017	SHMW-12S 3/21/2017
Analyte	Units	NYS AWQS							
BTEX	μg/L								
Benzene		1	26.8	23.6	14.6	4.6	24	1 U	137
Toluene		5	7	6.3	1 U	1 U	1 U	1 U	1 U
Ethylbenzene		5	152	136	1 U	1.4	3.9	1 U	5.8
Total Xylene		5	143	130	3.4 J	1 U	7.2	1 U	21.3
Total BTEX (ND=0)		NE	328.8	295.9	18	6	35.1	ND	164.1
Other VOCs	μg/L								
Methyl tert-butyl ether (MTBE)		10*	5 U	5 U	5 U	3.7 J	5 U	5 U	5 U
NYSDEC PAH17	μg/L								
Acenaphthene		20*	56.5 J	79.6 J	35.7	22.7	33.7	10 U	4.3 J
Acenaphthylene		NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene		50*	10 U	5.3 J	10 U	3.8 J	10 U	10 U	10 U
Benzo(a)anthracene		0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene		0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene		0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene		NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene		ND	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene		0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene		NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene		50*	3.3 J	3.7 J	10 U	2.7 J	10 U	10 U	10 U
Fluorene		50*	3.7 J	18.3 J	7.1 J	11.3	7.1 J	10 U	10 U
Indeno(1,2,3-cd)pyrene		0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene		NE	10 U	11.7	10.3 J	4.3 J	3 J	10 U	3.2 J
Naphthalene		10*	10 UJ	136 J	112	69.9	244	10 U	353
Phenanthrene		50*	10 U	11.5	5.5 J	23.2	9.3 J	10 U	10 U
Pyrene		50*	4.3 J	4.8 J	10 U	2.9 J	10 U	10 U	10 U
Total PAH (17) (ND=0)		NE	67.8	270.9	170.6	140.8	297.1	ND	360.5

Table 3. Summary of BTEX and PAH Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2017

Notes:

μg/L = micrograms per liter or parts per billion (ppb)

BTEX = benzene, toluene, ethylbenzene, and xylenes PAH = polycyclic aromatic hydrocarbons VOCs = volatile organic compounds

Total BTEX and Total PAHs are calculated using detects only.

Total PAH16 is calculated using the EPA16 list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, Phenanthrene, and Pyrene

Total PAH17 is calculated using the EPA16 list of analytes plus 2-Methylnaphthalene

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA groundwater * indicates the value is a guidance value and not a standard

MGP = Manufactured Gas Plant
ND = not detected
NE = not established
NYSDEC = New York State Department of Environmental Conservation

Bolding indicates a detected result concentration

Gray shading and bolding indicates that the detected result value exceeds the NYS AWQS

Validator Qualifiers:

J = estimated value

U = indicates not detected to the reporting limit

Table 4. Summary of Historical Total BTEX Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2017

	C								Total E	STEX Cond	centrations	(µg/L)							
Mall Na	Screen									Sampli	ng Date								
Well No.	Interval (feet)	1995	20	000	2002	20	04		20	05			20	006			20	007	
	(ICCI)	Nov	Mar	Apr	May	May	Aug	Mar/Apr	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
MW-01	1.50 - 7.32	2,720	10	68	9	4	0	0	12	67	0	21	47	310	190	160	240	150	270
MW-02	0.50 - 7.25	5,429	8,840	7,940	5,840	13,287	8,740	7,333	13,010		13,720	7,591		14,174	12,267	8,678	12,810	15,181	98
MW-03	2.17 - 10.17	1,222	668	1,553	1,363	2,573	-	2,050	2,867	560	2,622	4,880	1,971	4,965	2,398	1,680	2,930	3,225	2,831
MW-04	1.25 - 6.81	864	35		10	208		0	0	225	299	268	193	181	101	0	51	89	66
MW-05	2.46 - 7.46	9,100	170	5	102	11,600	2,938	2,697	18,900										
MW-06	2.47 - 7.47	334	47	30	91	49		33	55	39	36	74	37	11	54	0	37	31	0
SHMW-01S/01SR	1.0 - 6.0			1,413	874	2,102		1,367	1,810	406	1,313	2,562	2,085	5,183	2,915	691	2,460	2,600	1,684
SHMW-01I/01IR	35.0 - 45.0			5	0	0					0				0	0			
SHMW-01D	65.0 - 75.0																		
SHMW-02S	1.0 - 6.0																		
SHMW-02I/02IR	35.0 - 45.0			26	0	1,179	16	20	20	19	25	0	0	0	0		11	12	15
SHMW-02D/02DR	65.0 - 75.0			5	4	0					0				0				0
SHMW-03S	2.0 - 12.0			63	0	110		48	53	46	75	131	67	97	13	122	80	12	50
SHMW-03I	35.0 - 45.0			0	52	0	-				0				0				0
SHMW-04S/04SR	2.0 - 12.0			7,940	3,154	12,180		9,369	17,730	8,960	21,920	25,860	9,361	18,398	10,489	6,883	20,488	16,120	10,378
SHMW-04I	35.0 - 45.0			5	0	0					0				0				0
SHMW-05S/05SR	2.0 - 12.0			37	69	83		107	282	2,960	115	202	45	43	26	35	458	676	98
SHMW-05I/05IR	35.0 - 45.0	-		0	0	0	-				0				0				0
SHMW-06S	2.0 - 6.0	-		2,392	2,463	3,057	-	2,630	1,950		2,910	2,622	1,702	4,289	2,196	1,475	2,285	2,162	1,565
SHMW-06I	35.0 - 45.0			0	0	0					0				0				0
SHMW-07S/07SR	1.0 - 11.0			2,011	1,562	414		1,482	3,340	2,458	1,722	1,400	1,060		1,137	185		2,139	726
SHMW-07I/07IR	35.0 - 45.0			0	0	0					0				0				0
SHMW-08S	1.0 - 7.0			5	2	9		0	14	0	15	11	0	19	0	0	0	0	12
SHMW-08I	35.0 - 45.0			0	0	0					0				0				0
SHMW-09S	2.0 - 12.0			1,024	506	1,100		500	1,000		920	1,130	770	768	500	418	1,240	178	600
SHMW-09I	35.0 -45.0			0	0	0					0				0				0
SHMW-10S	5.0 -15.0				0	0		0	0	0	0	0	0	0	0	0	0	0	0
SHMW-10I	35.5 - 45.5				0	0					0				0				0
SHMW-11S	3.5 - 13.5				0	0		0	0	0	0	0	0	0	0	0	0	0	0
SHMW-11I	35.0 - 45.0				0	0					0				0				0
SHMW-12S	1.5 - 6.5				0	344		142	930	69	290	140	463	581	182	85	623	81	0
SHMW-12I	35.0 - 45.0				0	0	-			-	0				0				23
SHMW-13S	1.5 - 6.5				0	0		0	0	0	0	0	0	0	0	0	0	0	0
SHMW-13I	35.0 - 45.0				0	0					0				0				0

Table 4. Summary of Historical Total BTEX Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2017

	Screen							Total E		entrations	(μg/L)						
Well No.	Interval								Sampli	ng Date							
WCII IVO.	(feet)		20	008			20	09			20	10			20	111	
	(ICCI)	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
MW-01	1.50 - 7.32	337	141	208													
MW-02	0.50 - 7.25	8,865	7,415	2,240													
MW-03	2.17 - 10.17	2,842	2,241	2,875													
MW-04	1.25 - 6.81	-	15	79													-
MW-05	2.46 - 7.46	-															
MW-06	2.47 - 7.47	1	33	7													
SHMW-01S/01SR	1.0 - 6.0	1,595	306	243									0	1	0	0	3
SHMW-01I/01IR	35.0 - 45.0	-											0				3
SHMW-01D	65.0 - 75.0	-											0				3
SHMW-02S	1.0 - 6.0	-											3	0	3	0	5
SHMW-02I/02IR	35.0 - 45.0	18	41	29									4	0			14
SHMW-02D/02DR	65.0 - 75.0	-											0				0
SHMW-03S	2.0 - 12.0	3	0	5	13	111	24	4	9	40	5	0	9	24	2	3	18
SHMW-03I	35.0 - 45.0	1			0		0		0				0				0
SHMW-04S/04SR	2.0 - 12.0	7,567	8,059	7,561									2,717	702	469	292	572
SHMW-04I	35.0 - 45.0																
SHMW-05S/05SR	2.0 - 12.0	77	83	64									20	22	25	27	45
SHMW-05I/05IR	35.0 - 45.0	-											0				0
SHMW-06S	2.0 - 6.0	1,296	1,343	1,298													
SHMW-06I	35.0 - 45.0																
SHMW-07S/07SR	1.0 - 11.0		1,075	1,374			1,500	3,472	2,183	1,825	3,946		858	455	1,172	607	700
SHMW-07I/07IR	35.0 - 45.0	-											0				11
SHMW-08S	1.0 - 7.0	8	9	10			5	5	4	6	13	4	9	7	10	5	9
SHMW-08I	35.0 - 45.0						0		0				0				5
SHMW-09S	2.0 - 12.0	1,039	1,298	671	483		584	455	224								
SHMW-09I	35.0 -45.0				0		0		0								
SHMW-10S	5.0 -15.0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-10I	35.5 - 45.5				0		0		0				0				5
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
SHMW-11I SHMW-12S	35.0 - 45.0	400	400		0		0		0				0			470	0
SHMW-12S SHMW-12I	1.5 - 6.5 35.0 - 45.0	166	482	111	279 0	28	315	45	58 2	222	217	8	70	82	672	473	337 6
SHMW-12I SHMW-13S	35.0 - 45.0 1.5 - 6.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
SHMW-135 SHMW-13I	1.5 - 6.5 35.0 - 45.0				0		0		0				0			3	0
OLIMAN-191	JJ.U - 45.U	-			U		U		U				U				U

Table 4. Summary of Historical Total BTEX Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2017

	Screen							Total I		entrations	(µg/L)						
Well No.	Interval								Sampli	ng Date							
	(feet)		20	12			20	13			20)14			20)15	
	` ′	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
MW-01	1.50 - 7.32																
MW-02	0.50 - 7.25																
MW-03	2.17 - 10.17																
MW-04	1.25 - 6.81																
MW-05	2.46 - 7.46																
MW-06	2.47 - 7.47		-														
SHMW-01S/01SR	1.0 - 6.0	0	0	0	0	1	8	0	0	0		0				0	
SHMW-01I/01IR	35.0 - 45.0				0				1								
SHMW-01D	65.0 - 75.0				0				0								
SHMW-02S	1.0 - 6.0	1	0	0	0	0	5	0	0	0		0				0	
SHMW-02I/02IR	35.0 - 45.0				0				11			0				115	
SHMW-02D/02DR	65.0 - 75.0				0				0								
SHMW-03S	2.0 - 12.0	0	1	1	0	6	0	0	2	3		5				47	
SHMW-03I	35.0 - 45.0		-		0				4			0				0	
SHMW-04S/04SR	2.0 - 12.0	391	709	654	449	158	14	949	1,846	145	504	900	302	369	428	504	297
SHMW-04I	35.0 - 45.0		-														
SHMW-05S/05SR	2.0 - 12.0	25	29	28	16	16	683	17	21	13	12	15	9	12	7	14	20
SHMW-05I/05IR	35.0 - 45.0		-		0	-			0			0				0	
SHMW-06S	2.0 - 6.0		-														
SHMW-06I	35.0 - 45.0		-														
SHMW-07S/07SR	1.0 - 11.0	1,418	670	2,822	251	1,289	852	972	1,305	769	1991	3,508	840	0	1,777	1,938	1,362
SHMW-07I/07IR	35.0 - 45.0				0				0								
SHMW-08S	1.0 - 7.0	5	7	2	6	5	6	4	3	8	4	2	5	10	4	5	5
SHMW-08I	35.0 - 45.0		-		0				0			0				0	
SHMW-09S	2.0 - 12.0		-	130	165	167	198	118	93	155	193	136	53	92	136	102	86
SHMW-09I	35.0 -45.0	-		0	0				2			4				408	
SHMW-10S	5.0 -15.0	0	0	0	0	0	0	0	0	0		0				0	
SHMW-10I	35.5 - 45.5	-	-		0				0								
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-11I	35.0 - 45.0		-		0				0								
SHMW-12S	1.5 - 6.5	127	434	41	19	87	175	142	26	67	175	56	159	82	407	136	154
SHMW-12I	35.0 - 45.0				0				0								
SHMW-13S	1.5 - 6.5	12	0	0	0	0	0	0	0	0		0				0	
SHMW-13I	35.0 - 45.0				0				0								

Table 4. Summary of Historical Total BTEX Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2017

	0					Total BTE	X Concentrat	tions (µg/L)	
Well No.	Screen Interval		S	ampling Da	ate				
well no.	(feet)		20	16		2017	Min	Max	Mean
	(leet)	Mar	Jun	Sep	Dec	Mar			
MW-01	1.50 - 7.32						0	2,720	236
MW-02	0.50 - 7.25						98	15,181	9,129
MW-03	2.17 - 10.17						560	4,965	2,416
MW-04	1.25 - 6.81						0	864	149
MW-05	2.46 - 7.46						5	18,900	5,689
MW-06	2.47 - 7.47						0	334	50
SHMW-01S/01SR	1.0 - 6.0			0			0	5,183	903
SHMW-01I/01IR	35.0 - 45.0						0	5	1
SHMW-01D	65.0 - 75.0						0	3	1
SHMW-02S	1.0 - 6.0			0			0	5	1
SHMW-02I/02IR	35.0 - 45.0						0	1,179	63
SHMW-02D/02DR	65.0 - 75.0						0	5	1
SHMW-03S	2.0 - 12.0			9			0	131	30
SHMW-03I	35.0 - 45.0				0		0	52	4
SHMW-04S/04SR	2.0 - 12.0	328	840	461	372	329	14	25,860	5,412
SHMW-04I	35.0 - 45.0						0	5	1
SHMW-05S/05SR	2.0 - 12.0	8	8	11	12	18	7	2,960	150
SHMW-05I/05IR	35.0 - 45.0				0		0	0	0
SHMW-06S	2.0 - 6.0						1,296	4,289	2,214
SHMW-06I	35.0 - 45.0						0	0	0
SHMW-07S/07SR	1.0 - 11.0	577	2,600		1,047		0	3,946	1,473
SHMW-07I/07IR	35.0 - 45.0						0	11	1
SHMW-08S	1.0 - 7.0	4	7	4	4	6	0	19	6
SHMW-08I	35.0 - 45.0				0		0	5	0
SHMW-09S	2.0 - 12.0	84	151	46	29	35	29	1,298	439
SHMW-09I	35.0 -45.0			10	3	0	0	408	25
SHMW-10S	5.0 -15.0						0	1	0
SHMW-10I	35.5 - 45.5						0	5	0
SHMW-11S	3.5 - 13.5	0	0	0			0	8	0
SHMW-11I	35.0 - 45.0						0	0	0
SHMW-12S	1.5 - 6.5	159	638	209	80	164	0	930	216
SHMW-12I	35.0 - 45.0						0	23	3
SHMW-13S	1.5 - 6.5						0	12	0
SHMW-13I	35.0 - 45.0						0	0	0

NOTES:

-- not analyzed or not applicable

μg/L - micrograms per liter

BTEX - benzene, toluene, ethylbenzene, and xylenes

Table 5. Summary of Historic Total PAH Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2017

	_								Total	PAH Conc	entrations	(µq/L)							
	Screen										ng Date	(10)							
Well No.	Interval	1995	20	000	2002	20	04		20		<u> </u>		20	06			20	007	
	(feet)	Nov	Mar	Apr	Mav	Mav	Aua	Mar/Apr	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
MW-01	1.50 - 7.32	4,906	1,548	257	402	30	24	0	61	200	0	0	0	97	95	0	54	87	39
MW-02	0.50 - 7.25	6,991	5,511	5,114	10,729	25,167	4,414	5,809	10,504		6,919	5,209		0	8,617	3,150	7,421	5,398	165
MW-03	2.17 - 10.17	7,034	3,065	3,433	3,774	3,522		2,272	4,557	516	92	1,256	565	4,831	6,212	349	489	463	2,904
MW-04	1.25 - 6.81	3,612	75		0	90		0	22	1,098	103	11	37	66	31	0	66	238	6
MW-05	2.46 - 7.46	16,386	779	101	1,160	431,600	2,049	918	188,200										
MW-06	2.47 - 7.47	5,416	894	653	258	33		90	79	204	0	22	0	0	645	35	46	17	0
SHMW-01S/01SR	1.0 - 6.0	-		4.147	2.663	2.424		1.989	2.185	840	0	42	115	3.989	3.874	0	1.058	1.691	42
SHMW-01I/01IR	35.0 - 45.0			32	0	0					0				0				
SHMW-01D	65.0 - 75.0																		
SHMW-02S	1.0 - 6.0																		
SHMW-02I/02IR	35.0 - 45.0			266	0	580,200	41	185	124	271	30	74	32	91	89	0	10	175	32
SHMW-02D/02DR	65.0 - 75.0	-		308	76	89					0				0				15
SHMW-03S	2.0 - 12.0			422	0	295		79	130	117	339	0	0	147	118	430	191	12	154
SHMW-03I	35.0 - 45.0	1		2	320	0					0				0				0
SHMW-04S/04SR	2.0 - 12.0	-		4,275	5,107	5,965		3,959	6,669	4,684	5,879	2,364	3,572	4,196	6,250	2,632	3,999	4,693	4,305
SHMW-04I	35.0 - 45.0	-		18	0	0					0				0				0
SHMW-05S/05SR	2.0 - 12.0			13	170	94		82	91	26	53	17	11	11	110	0	0	14	8
SHMW-05I/05IR	35.0 - 45.0	-		0	17	0					0				0				0
SHMW-06S	2.0 - 6.0			4,130	4,694	3,024		3,162	2,366		4,157	120	201	3,900	4,062	1,703	3,574	4,368	380
SHMW-06I	35.0 - 45.0	-		2	0	0					0				0				0
SHMW-07S/07SR	1.0 - 11.0			7,211	6,585	2,708		3,224	4,604	6,187	3,507	2,004	3,119		3,721	0		3,902	4
SHMW-07I/07IR	35.0 - 45.0			0	0	0					0				2,212				0
SHMW-08S	1.0 - 7.0			110	71	94		25	70	33	83	112	57	77	99	13	90	10	13
SHMW-08I	35.0 - 45.0			13	0	0					0				0				0
SHMW-09S	2.0 - 12.0			1,787	2,472	1,697		1,463	1,600		2,609	94	1,935	1,138	2,737	48	206	2,246	130
SHMW-09I	35.0 -45.0			3	0	0					0				0				0
SHMW-10S	5.0 -15.0				22	6		0	0	0	0	0	0	0	0	0	0	0	1
SHMW-10I	35.5 - 45.5				0	0					0				0				0
SHMW-11S	3.5 - 13.5				0	3		173	0	0	0	0	0	0	0	0	0	0	0
SHMW-11I	35.0 - 45.0				0	0					0				0				4
SHMW-12S	1.5 - 6.5				60	218		71	600	230	260	110	470	310	280	15	560	0	155
SHMW-12I	35.0 - 45.0				0	0					0				0				20
SHMW-13S	1.5 - 6.5				0	0		0	0	0	0	0	0	0	0	0	0	0	0
SHMW-13I	35.0 - 45.0	-			0	0					0				0				0

Table 5. Summary of Historic Total PAH Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2017

Well No.	Screen Interval (feet)	Total PAH Concentrations (μg/L) Sampling Date															
																2008	
		Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
		MW-01	1.50 - 7.32	145	2	35											
MW-02	0.50 - 7.25	400	3,455	3,488													
MW-03	2.17 - 10.17	508	96	1,109													
MW-04	1.25 - 6.81		0	22													
MW-05	2.46 - 7.46																
MW-06	2.47 - 7.47	0	0	10													
SHMW-01S/01SR	1.0 - 6.0	0	0	0									0	0	0	0	4
SHMW-01I/01IR	35.0 - 45.0												0				0
SHMW-01D	65.0 - 75.0												0				0
SHMW-02S	1.0 - 6.0												0	0	0	0	0
SHMW-02I/02IR	35.0 - 45.0	8	42	209									9	3			0
SHMW-02D/02DR	65.0 - 75.0												0				0
SHMW-03S	2.0 - 12.0	0	0	17	29	0	20	0	0	0	22	0	0	2	7	25	22
SHMW-03I	35.0 - 45.0	-			0		0		0			-	0				0
SHMW-04S/04SR	2.0 - 12.0	0	1,328	1,868	-							-	3,598	1,440	978	811	942
SHMW-04I	35.0 - 45.0																
SHMW-05S/05SR	2.0 - 12.0	2	0	31									0	4	167	273	131
SHMW-05I/05IR	35.0 - 45.0	-			-	-						-	0	-			0
SHMW-06S	2.0 - 6.0	0	44	5,848		-											
SHMW-06I	35.0 - 45.0	-			-	-						-		-			
SHMW-07S/07SR	1.0 - 11.0		54	3,252			2,919	4,722	5,286	3,410	4,547		1,456	0	1,736	885	955
SHMW-07I/07IR	35.0 - 45.0												0				4
SHMW-08S	1.0 - 7.0	14	21	55			59	60	112	129	201	34	3	11	185	195	35
SHMW-08I	35.0 - 45.0						1		0				0				0
SHMW-09S	2.0 - 12.0	0	92	485	503		68	39	389								
SHMW-09I	35.0 -45.0				0		0		0								
SHMW-10S	5.0 -15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
SHMW-10I	35.5 - 45.5				0		0		0				0				0
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	4
SHMW-11I	35.0 - 45.0				0		0		0				0				0
SHMW-12S	1.5 - 6.5	9	137	259	280	0	332	4	216	177	585	3	0	0	584	739	513
SHMW-12I	35.0 - 45.0				0				0				0				2
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2
SHMW-13I	35.0 - 45.0				0		0		0				0				1

Table 5. Summary of Historic Total PAH Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2017

Well No.	Screen Interval (feet)	Total PAH Concentrations (µg/L)															
		Sampling Date															
		2012				20)13		2014				2015				
		Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
MW-01	1.50 - 7.32																
MW-02	0.50 - 7.25						-										
MW-03	2.17 - 10.17						-		-	-							
MW-04	1.25 - 6.81						-		-	-							
MW-05	2.46 - 7.46						-		-								
MW-06	2.47 - 7.47						-		-								
SHMW-01S/01SR	1.0 - 6.0	7	21	0	0	8	0	0	0	67		0					
SHMW-01I/01IR	35.0 - 45.0				0		-		0	-							
SHMW-01D	65.0 - 75.0				0				0								
SHMW-02S	1.0 - 6.0	5	0	0	0	5	0	0	0	0		0				23	
SHMW-02I/02IR	35.0 - 45.0				56		-		245	-		11				25	
SHMW-02D/02DR	65.0 - 75.0				0				0								
SHMW-03S	2.0 - 12.0	6	10	22	2	23	14	16	6	5		3				16	
SHMW-03I	35.0 - 45.0				0				4			0				0	
SHMW-04S/04SR	2.0 - 12.0	581	1,296	1,195	639	402	100	1,875	1,916	190	523	1,637	309	571	551	886	112
SHMW-04I	35.0 - 45.0						1		-								
SHMW-05S/05SR	2.0 - 12.0	309	219	420	20	107	175	155	291	171	153	367	121	94	94	208	308
SHMW-05I/05IR	35.0 - 45.0				0		1		0	-		0				0	
SHMW-06S	2.0 - 6.0																
SHMW-06I	35.0 - 45.0						-		-	-							
SHMW-07S/07SR	1.0 - 11.0	927	444	4,342	419	2,620	950	4,030	1,381	1733	5945	12,876	904	0	14,332	11,494	3,943
SHMW-07I/07IR	35.0 - 45.0				0				1								
SHMW-08S	1.0 - 7.0	152	111	113	182	95	151	180	148	147	174	250	160	116	213	140	157
SHMW-08I	35.0 - 45.0				0		-		0			0				0	
SHMW-09S	2.0 - 12.0			787	690	721	575	603	211	560	832	1,315	360	529	909	121	107
SHMW-09I	35.0 -45.0			0	0		-		2			2				3	
SHMW-10S	5.0 -15.0	0	3	0	0	0	0	0	1	0		0				0	
SHMW-10I	35.5 - 45.5				0				0								
SHMW-11S	3.5 - 13.5	6	0	0	2	1	0	7	16	1	0	1	201	2	1	5	3
SHMW-11I	35.0 - 45.0				0				1								
SHMW-12S	1.5 - 6.5	154	361	217	104	62	410	604	133	0	353	493	247	76	523	502	317
SHMW-12I	35.0 - 45.0				0				0								
SHMW-13S	1.5 - 6.5	2	0	0	0	0	0	0	0	0		1				0	
SHMW-13I	35.0 - 45.0				0				0								

Table 5. Summary of Historic Total PAH Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2017

	-	Total PAH Concentrations (µg/L)										
	Screen			Sampling D	1							
Well No.	Interval			016	2017	Min	Max	Mean				
	(feet)	Mar	Jun	Sep	Dec	Mar						
MW-01	1.50 - 7.32						0	4,906	380			
MW-02	0.50 - 7.25						0	25,167	6,235			
MW-03	2.17 - 10.17						92	7,034	2,352			
MW-04	1.25 - 6.81						0	3,612	304			
MW-05	2.46 - 7.46						101	431,600	80,149			
MW-06	2.47 - 7.47						0	5,416	420			
SHMW-01S/01SR	1.0 - 6.0			0			0	4,147	740			
SHMW-01I/01IR	35.0 - 45.0						0	32	4			
SHMW-01D	65.0 - 75.0						0	0	0			
SHMW-02S	1.0 - 6.0			0			0	23	2			
SHMW-02I/02IR	35.0 - 45.0	-				-	0	580,200	22,393			
SHMW-02D/02DR	65.0 - 75.0						0	308	49			
SHMW-03S	2.0 - 12.0			18			0	430	63			
SHMW-03I	35.0 - 45.0				0		0	320	20			
SHMW-04S/04SR	2.0 - 12.0	359	948	808	232	68	0	6,669	2,153			
SHMW-04I	35.0 - 45.0	-				-	0	18	3			
SHMW-05S/05SR	2.0 - 12.0	106	184	178	146	171	0	420	121			
SHMW-05I/05IR	35.0 - 45.0				0		0	17	1			
SHMW-06S	2.0 - 6.0						0	5,848	2,690			
SHMW-06I	35.0 - 45.0						0	2	0			
SHMW-07S/07SR	1.0 - 11.0	745	5,132		2,286		0	14,332	3,420			
SHMW-07I/07IR	35.0 - 45.0						0	2,212	222			
SHMW-08S	1.0 - 7.0	132	161	153	146	141	3	250	106			
SHMW-08I	35.0 - 45.0				0		0	13	1			
SHMW-09S	2.0 - 12.0	373	673	317	363	297	0	2,737	802			
SHMW-09I	35.0 -45.0			0	3	0	0	3	1			
SHMW-10S	5.0 -15.0						0	22	1			
SHMW-10I	35.5 - 45.5						0	0	0			
SHMW-11S	3.5 - 13.5	0	1	6			0	201	9			
SHMW-11I	35.0 - 45.0						0	4	0			
SHMW-12S	1.5 - 6.5	227	670	601	312	361	0	739	273			
SHMW-12I	35.0 - 45.0						0	20	2			
SHMW-13S	1.5 - 6.5						0	3	0			
SHMW-13I	35.0 - 45.0	NOTES:					0	1	0			

NOTES:

-- not analyzed or not applicable

μg/L - micrograms per liter

PAH - polycyclic aromatic hydrocarbons

Figures













