



Quarterly Groundwater Monitoring Report First Quarter (Q1) 2018

Sag Harbor Former MGP Site

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

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Table of Contents

1. Sag	g Harbor Site and Adjacent Offsite Areas	1
1.1	Monitoring Program	1
1.2	Monitoring Well Network	2
1.3	Hydrological Data	2
1.4	NAPL Thickness Data	3
1.5	Chemical Data	3
1.6	Data Trend Analysis	3
1.7	DNAPL Occurrence	4
1.8	Future Plans	5

Tables

- 1 Water Level Measurements and Calculated Groundwater Elevations
- 2 Summary of Historical NAPL Observations
- 3 Summary of BTEX, MTBE, and PAH Results
- 4 Summary of Historical Total BTEX Results
- 5 Summary of Historical Total PAH Results

Figures

- 1 Site Location Map
- 2 Monitoring Well Location Map
- 3 Shallow Groundwater Contours High Tide
- 4 Shallow Groundwater Contours Low Tide
- 5 Intermediate Groundwater Contours High Tide
- 6 Intermediate Groundwater Contours Low Tide

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1. Sag Harbor Site and Adjacent Offsite Areas

First Quarter (Q1) 2018 Groundwater Monitoring Event Summary

Event Date: March 12 and 15, 2018

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, 11 wells were eliminated from the sampling program and two 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 Well	Sampling	Frequency	Monitoring Well	Sampling	Frequency
wormoring weil	Former	Current	wormoring weil	Former	Current
SHMW-01SR	Annual	Eliminated	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

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

Implementation of the reduced sampling scope began in the second quarter (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 first quarter (Q1) 2018 quarterly sampling list.

At the request of the NYSDEC, three wells were sampled for 1,4-dioxane during the Q1 2018 sampling event. The wells included SHMW-02S, SHMW-04SR and SHMW-05SR. Excluding SHMW-02S, the wells were included in the 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 12, 2018 at all 25 monitoring wells during low tide. One well was inaccessible during high tide. Monitoring well SHMW-02IR was repaired during third quarter (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 2018, are provided in the following table:

		High Tide		DTW ¹ WLE ² 0.02 – 4.29 0.53 – 3.62 0.0061		
Depth Zone	Rai	nge	a "	Range		Q
	DTW ¹	WLE ²	Gradient ³	DTW ¹	WLE ²	Gradient ³
Shallow	0.02 - 4.58	0.18 - 3.67	0.0060	0.02 - 4.29	0.53 - 3.62	0.0061
Intermediate	0.01 - 4.60	0.79 - 2.47	0.0017	0.01 - 5.55	0.08 - 2.11	0.0006

Notes:

3: Feet/Feet

^{1:} Depth to water - Measured as feet below top of casing

^{2:} Water level elevation - Calculated as feet above mean sea level

1.4 NAPL Thickness Data

Table 2 provides a summary of historical non-aqueous phase liquid (NAPL) data. In Q1 2018, all 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 2018 was limited to approximately six inches of DNAPL in SHMW-02IR and blebs of DNAPL in SHMW-07SR.

1.5 Chemical Data

In Q1 2018, a total of six wells were sampled for benzene, toluene, ethylbenzene, 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. Two of the six wells, in addition to one other well, were sampled for 1,4-dioxane by EPA Method 8270. Selected Ion Monitoring (SIM). Well sampling was performed on March 15, 2018 and included all the wells on the quarterly sampling list and SHMW-02S, which was sampled for 1,4-dioxane exclusively.

Table 3 provides the chemical data for Q1 2018. The data indicate:

- Total BTEX concentrations in the six wells ranged from non-detect (ND) in SHMW-09I to 232.78 micrograms per liter (μg/L) in SHMW-12S.
- Total PAH concentrations ranged from ND in SHMW-09I to 279.6 μg/L in SHMW-12S.
- MTBE was detected in two of the six wells sampled. The maximum MTBE detection was in SHMW-08S with a concentration of 2.1 µg/L.
- 1,4-dioxane was not detected in any of the three wells in which it was analyzed.

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. Q1 2018 concentrations are generally similar to recent sampling events. Further discussion of the decreases is provided below. An analysis of the current and historical data in recent quarterly sampling events is presented in the table below.

Shallow Zone	Hist	orical	Q3 2017		Q4	2017	Q1 2018	
Shallow Zone	Max	Average	Max	Average	Max	Average	Max	Average
Total BTEX	25,860	689	358	62	251	71	232.8	61
Total PAHs	14,332	626	475	91	264	106	279.6	112

Concentrations in µg/L

Exceedances of the respective ambient water quality standards or guidance values (AWQS) for BTEX were identified in each of the five shallow wells sampled in Q1 2018, including SHMW-04SR (46.49 μ g/L), SHMW-05SR (3.39 μ g/L), SHMW-08S (10.81 μ g/L), SHMW-09S (11.7 μ g/L), and SHMW-12S (232.78 μ g/L). There were no BTEX exceedances in intermediate well SHMW-09I (ND). Benzene exceeded the AWQS of 1 μ g/L in each of the

shallow wells listed above. Total xylenes and ethylbenzene exceeded the standard of 5 μ g/L in SHMW-04SR and SHMW-12S. Total BTEX concentrations in SHMW-04SR, SHMW-05SR, SHMW-09S, and SHMW-09I decreased relative to Q4 2017. Total BTEX concentrations in these wells were all below their respective historical mean. The total BTEX concentrations in the SHMW-08S and SHMW-12S increased but remained within their respective historical concentration ranges.

MTBE was detected in two wells with a maximum of 2.1 μ g/L in SHMW-08S; below the guidance value of 10 μ g/L.

PAH exceedances of the AWQS concentrations were identified in the three shallow wells sampled in Q1 2018, including SHMW-08S (83 μ g/L), SHMW-09S (168.5 μ g/L), and SHMW-12S (279.6 μ g/L). The compounds exceeding the AWQS included naphthalene and acenaphthene. Naphthalene exceeded the AWQS of 10 μ g/L in SHMW-08S, SHMW-09S and SHMW-12S reaching a maximum concentration of 270 μ g/L in SHMW-12S. Acenaphthene slightly exceeded the AWQS of 20 μ g/L in SHMW-09S (31 μ g/L). Excluding SHMW-09S and SHMW-12S, the concentration of total PAHs decreased relative to Q4 2017. The total PAH concentrations in SHMW-09S and SHMW-12S increased but remained below their respective historical mean concentrations. PAH concentrations were below detection levels in intermediate well SHMW-09I.

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 Q4 2014. Since that time, DNAPL was measured at a thickness of approximately 0.13 feet in SHMW-04SR during first quarter (Q1) 2015 and has been measured sporadically and at a maximum thickness of approximately 0.17 feet in SHMW-07SR. During Q1 2018, no DNAPL was observed in SHMW-04SR or SHMW-07SR.

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 2018, approximately six inches of DNAPL were measured in SHMW-02IR. Due to the thickness measured, recovery operations were conducted and approximately 0.34 gallons were recovered. Recovery efforts were also conducted in Q4 2015 and Q2 2017, during which approximately one gallon of product was removed from SHMW-02IR during each event. Subsequent gauging events will continue to monitor the rebound in DNAPL thickness. Additional recovery efforts will be conducted as appropriate.

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 2018

	Ton of Ourie			3/12	2/2018	
Well ID	Top of Casing Elevation (ft)*	Tide	Time	Depth to	Groundwater	Notes
	Elevation (ft)"			Water (ft)	Elevation (ft)	
SHMW-01SR	3.71	High	0743	2.21	1.50	Well replaced in Q4 2010
SHIVIW-UISK	3.71	Low	1342	2.19	1.52	Well replaced III Q4 2010
SHMW-01IR	3.81	High	0744	3.02	0.79	Well replaced in Q4 2010
SI IIVIVV-0 I IIX	3.01	Low	1342	2.21	1.60	Well replaced III Q4 2010
SHMW-01D	3.67	High	0744	1.36	2.31	Well installed in Q4 2010
SI IIVIVV-01D	3.07	Low	1341	1.86	1.81	Well installed in Q4 2010
SHMW-02S	3.95	High	0739	2.11	1.84	Well installed in Q4 2010
OF INVIVO 020	0.00	Low	1338	2.01	1.94	Wolf installed in Q 2010
SHMW-02IR	3.92	High	0741	1.76	NC	Survey point altered
OT IIVIVV OZIIV	0.02	Low	1340	2.03	NC	Ourvey point aftered
SHMW-02DR	3.66	High	0738	2.17	1.49	Well replaced in Q4 2010
OF INVITATION OF DELICATION	0.00	Low	1338	2.22	1.44	Won replaced in Q 1 2010
SHMW-03S	3.83	High	0753	3.29	0.54	
S. 111177 000	0.00	Low	1352	2.61	1.22	
SHMW-03I	3.85	High	0754	2.71	1.14	
2	0.50	Low	1353	2.46	1.39	
SHMW-04SR	3.90	High	0746	3.72	0.18	Well replaced in Q4 2010
	0.00	Low	1345	2.43	1.47	
SHMW-05SR	5.03	High	0750	3.91	1.12	Well replaced in Q4 2010
	0.00	Low	1349	3.66	1.37	
SHMW-05IR	4.96	High	0749	3.01	1.95	Well replaced in Q4 2010
		Low	1348	3.23	1.73	
SHMW-07SR	3.48	High	0809	0.04	3.44	
	0.10	Low	1410	0.04	3.44	
SHMW-07IR	3.38	High	0809	1.21	2.17	
		Low	1411	1.42	1.96	
SHMW-08S	3.69	High	0811	0.02	3.67	
		Low	1406	0.07	3.62	
SHMW-08I	3.79	High	0810	1.41	2.38	
		Low	1407	2.94	0.85	
SHMW-09S	3.06	High		NM	NC	Car parked over well at high tide
		Low	1402	1.01	2.05	
SHMW-09I	2.82	High	0803	1.02	1.80	
		Low	1403	1.29	1.53	
SHMW-10S	4.75	High	0756	4.11	0.64	
		Low	1355 0757	4.22 3.24	0.53 1.51	
SHMW-10I	4.75	High Low	1355	4.23	0.52	
		High	0801	4.23	0.52	
SHMW-11S	5.32	Low	1359	4.58	1.03	
		High	0759	4.29	1.03	
SHMW-11I	5.63	Low	1357	5.55	0.08	
		High	0806	0.03	1.95	
SHMW-12S	1.98	Low	1402	0.03	1.96	
		High	0806	0.02	1.98	
SHMW-12I	1.99	Low	1402	0.01	1.98	
		High	0813	0.01	3.30	
SHMW-13S	3.36	Low	1409	0.05	3.31	
		High	0813	1.03	2.47	
SHMW-13I	3.50	Low	1408	1.39	2.11	

General Notes:

* Elevations were re-surveyed in November 2010.

NC = Not Calculated

NM = Not Measured

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2018

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
SHMW-05I/05IR	None Observed	None Observed	NR	NR	NR	NR	NR	NR	NR

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2018

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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-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 2018

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
SHMW-05I/05IR	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 2018

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-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 2018

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
SHMW-05I/05IR	NR	NR	None Observed	NR	NR	NR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2018

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-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 2018

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				
SHMW-05I/05IR	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 2018

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-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 2018

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								
SHMW-05I/05IR	None Observed								

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2018

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-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 2018

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					
SHMW-05I/05IR	None Observed	None Observed	None Observed	None Observed					

Table 2. Summary of Historical NAPL Observations Sag Harber Former MGP Site Groundwater Monitoring Program - Q1 2018

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-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 2018

Well ID	Jun/Q2 2016 Observations	Sep/Q3 2016 Observations	Dec/Q4 2016 Observations	Mar/Q1 2017 Observations	May/Q2 2017 Observations	Sep/Q3 2017 Observations	Dec/Q4 2017 Observations	Mar/Q1 2018 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	Approx. 4" of DNAPL	Approx. 2.5" of DNAPL	Approx. 4" of DNAPL	Approx. 4" of DNAPL	Approx. 12" of DNAPL	Approx. 1" of DNAPL	Approx. 2" of DNAPL	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							
SHMW-05I/05IR	None Observed							

Well ID	Jun/Q2 2016 Observations	Sep/Q3 2016 Observations	Dec/Q4 2016 Observations	Mar/Q1 2017 Observations	May/Q2 2017 Observations	Sep/Q3 2017 Observations	Dec/Q4 2017 Observations	Mar/Q1 2018 Observations
SHMW-06S	Well Abandoned							
SHMW-06I	Well Abandoned							
SHMW-07S/07SR	Blebs of DNAPL	DNAPL Blebs on tubing	None Observed	DNAPL Blebs on tubing				
SHMW-07I/07IR	None Observed							
SHMW-08S	None Observed							
SHMW-08I	None Observed							
SHMW-09S	None Observed							
SHMW-09I	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							

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 2018

		Sample Name		SHMW-04SR ft	SHMW-05SR ft	SHMW-08S ft	SHMW-09S ft	DUP-01	SHMW-09I	SHMW-12S ft
		Depth Unit Sample Date		π 3/15/2018	3/15/2018	π 3/15/2018	π 3/15/2018	ft 3/15/2018	ft 3/15/2018	3/15/2018
		Parent Sample	3/13/2016	3/13/2016	3/13/2016	3/13/2016	3/13/2016	SHMW-09S	3/13/2016	3/13/2016
		i arent Sample						311111111-033		
Analyte	Units	NYS AWQS								
BTEX	μg/L			•	•					
Benzene		1		1.9	2.4	8	7.3	6.7	1 U	190
Toluene		5		0.59 J	1 U	0.32 J	1 U	1 U	1 U	0.78 J
Ethylbenzene		5		24	1 U	0.89 J	1	0.97 J	1 U	12
Total Xylene		5		20	0.99 J	1.6 J	3.4	2.8	2 U	30
Total BTEX (ND=0)		NE		46.49	3.39	10.81	11.7	10.47	ND	232.78
Other VOCs	μg/L			•	•	-				
Methyl tert-butyl ether (MTBE)		10*		1 U	1 U	2.1	1 U	1 U	1 U	0.49 J
NYSDEC PAH17	μg/L									
Acenaphthene		20*		10 U	18	14	31	25	10 U	4.5 J
Acenaphthylene		NE		10 U	10 U	10 U	10 U	10 U	10 U	50 U
Anthracene		50*		10 U	10 U	1.4 J	1.2 J	1.2 J	10 U	50 U
Benzo(a)anthracene		0.002*		1 U	1 U	1 U	1 U	1 U	1 U	5 U
Benzo(b)fluoranthene		0.002*		2.1 U	2 U	2 U	2 U	2 U	2 U	10 U
Benzo(k)fluoranthene		0.002*		1 U	1 U	1 U	1 U	1 U	1 U	5 U
Benzo(g,h,i)perylene		NE		10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(a)pyrene		ND		1 U	1 U	1 U	1 U	1 U	1 U	5 U
Chrysene		0.002*		2.1 U	2 U	2 U	2 U	2 U	2 U	10 U
Dibenz(a,h)anthracene		NE		1 U	1 U	1 U	1 U	1 U	1 U	5 U
Fluoranthene		50*		10 U	10 U	1.8 J	10 U	10 U	10 U	50 U
Fluorene		50*		10 U	4.6 J	5.8 J	6.9 J	6.8 J	10 U	50 U
Indeno(1,2,3-cd)pyrene		0.002*		2.1 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U	10 U
2-Methylnaphthalene		NE		10 U	1.7 J	3.1 J	2.3 J	2.1 J	10 U	5.1 J
Naphthalene		10*		10 U	10 U	46	120	110	10 U	270
Phenanthrene		50*		10 U	1.8 J	9 J	7.1 J	6.9 J	10 U	50 U
Pyrene		50*		1.5 J	10 U	1.9 J	10 U	10 U	10 U	50 U
Total PAH (17) (ND=0)		NE		1.5	26.1	83	168.5	152	ND	279.6
NYSDEC PAH17 Other SVOCs	μg/L									
1,4-Dioxane	<u> </u>	NE	0.044 U	0.046 U	0.044 U					

Table 3. Summary of BTEX and PAH Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2018

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, Benza[a]anthracene, Benza[a]pyrene, Benza[b]fluoranthene, Benza[g,h,i]perylene, Benza[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indena[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 2018

	0								Total E	STEX Cond	entrations	(μg/L)							
Mall Na	Screen									Sampli	ng Date								
Well No.	Interval (feet)	1995	20	00	2002	20	04		20	05			20	06			20	07	
	(leet)	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	-	1	0	0	0	-		-		0				0				0
SHMW-08S	1.0 - 7.0			5	2	9	1	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 2018

	Coroon								Total E	STEX Cond	entrations	(µg/L)							
Well No.	Screen									Samplii	ng Date								
well no.	Interval (feet)		20	08			20	09			20	10			20	11		20	12
	(ICCI)	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
MW-01	1.50 - 7.32	337	141	208	-														
MW-02	0.50 - 7.25	8,865	7,415	2,240		1		1		-							1		
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	0	0
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	1	0
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	0	1
SHMW-03I	35.0 - 45.0				0		0		0				0				0		
SHMW-04S/04SR	2.0 - 12.0	7,567	8,059	7,561		-					-		2,717	702	469	292	572	391	709
SHMW-04I	35.0 - 45.0																		
SHMW-05S/05SR	2.0 - 12.0	77	83	64		-							20	22	25	27	45	25	29
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	1,418	670
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	5	7
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	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	0	0
SHMW-11I	35.0 - 45.0			-	0	1	0		0		-		0			-	0		
SHMW-12S	1.5 - 6.5	166	482	111	279	28	315	45	58	222	217	8	70	82	672	473	337	127	434
SHMW-12I	35.0 - 45.0			-	0				2		-	-	0				6		
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	12	0
SHMW-13I	35.0 - 45.0			-	0	1	0	-	0	-	-	-	0			-	0		

Table 4. Summary of Historical Total BTEX Results Sag Harbor Former MGP Site Groundwater Monitoring Program - Q1 2018

	Screen								Total E		entrations	(µg/L)							
Well No.	Interval										ng Date								
Well No.	(feet)	20	12		20	13			20	14			20	115			20	116	
	` '	Sep	Dec	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	1	8	0	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	0	0	0	5	0	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	1	0	6	0	0	2	3		5				47				9	
SHMW-03I	35.0 - 45.0		0			1	4	1		0				0					0
SHMW-04S/04SR	2.0 - 12.0	654	449	158	14	949	1,846	145	504	900	302	369	428	504	297	328	840	461	372
SHMW-04I	35.0 - 45.0																		
SHMW-05S/05SR	2.0 - 12.0	28	16	16	683	17	21	13	12	15	9	12	7	14	20	8	8	11	12
SHMW-05I/05IR	35.0 - 45.0		0				0			0				0					0
SHMW-06S	2.0 - 6.0		-			ł		-											
SHMW-06I	35.0 - 45.0																		
SHMW-07S/07SR	1.0 - 11.0	2,822	251	1,289	852	972	1,305	769	1991	3,508	840	0	1,777	1,938	1,362	577	2,600		1,047
SHMW-07I/07IR	35.0 - 45.0		0				0												
SHMW-08S	1.0 - 7.0	2	6	5	6	4	3	8	4	2	5	10	4	5	5	4	7	4	4
SHMW-08I	35.0 - 45.0		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	84	151	46	29
SHMW-09I	35.0 -45.0	0	0				2			4				408				10	3
SHMW-10S	5.0 -15.0	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	0	
SHMW-11I	35.0 - 45.0		0				0												
SHMW-12S	1.5 - 6.5	41	19	87	175	142	26	67	175	56	159	82	407	136	154	159	638	209	80
SHMW-12I	35.0 - 45.0		0				0												
SHMW-13S	1.5 - 6.5	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 2018

	0			То	tal BTEX C	Concentrati	ons (µg/L)		
MAZ - II. N.I	Screen		S	ampling Da	ite				
Well No.	Interval (feet)		20	17		2018	Min	Max	Mean
	(leet)	Mar	May	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	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	1					0	1,179	63
SHMW-02D/02DR	65.0 - 75.0						0	5	1
SHMW-03S	2.0 - 12.0			2			0	131	30
SHMW-03I	35.0 - 45.0			0			0	52	3
SHMW-04S/04SR	2.0 - 12.0	329	303	358	251	46.49	14	25,860	5,086
SHMW-04I	35.0 - 45.0	-					0	5	1
SHMW-05S/05SR	2.0 - 12.0	18	5	9	7	3.39	5	2,960	141
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	-					0	3,946	1,473
SHMW-07I/07IR	35.0 - 45.0						0	11	1
SHMW-08S	1.0 - 7.0	6	3	3	4	10.81	0	19	6
SHMW-08I	35.0 - 45.0			0			0	5	0
SHMW-09S	2.0 - 12.0	35	19	28	26	11.7	19	1,298	410
SHMW-09I	35.0 -45.0	0	0	14	19	0	0	408	23
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	8	0
SHMW-11I	35.0 - 45.0	ı					0	0	0
SHMW-12S	1.5 - 6.5	164	531	94	69	232.78	0	930	217
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 2018

	0	Total PAH Concentrations (μg/L)																	
Well No.	Screen	Sampling Date																	
	Interval (feet)	1995	20	000	2002 2004		2005				20	006		2007					
	(icet)	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	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	-		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 2018

Well No.	Screen	Total PAH Concentrations (μg/L)																	
		Sampling Date																	
	Interval (feet)	2008				2009				2010				2011				2012	
	(ICCI)	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
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	7	21
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	5	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	6	10
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	581	1,296
SHMW-04I	35.0 - 45.0																		
SHMW-05S/05SR	2.0 - 12.0	2	0	31									0	4	167	273	131	309	219
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	927	444
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	152	111
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	0	3
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	6	0
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	154	361
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	2	0
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 2018

	Screen Interval	Total PAH Concentrations (μg/L)																	
Well No.		Sampling Date																	
Well No.	(feet)	20	12		2013			2014			2015				2016				
	(ICCI)	Sep	Dec	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	8	0	0	0	67		0								0	
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	5	0	0	0	0		0				23				0	
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	22	2	23	14	16	6	5		3				16				18	
SHMW-03I	35.0 - 45.0		0				4			0				0					0
SHMW-04S/04SR	2.0 - 12.0	1,195	639	402	100	1,875	1,916	190	523	1,637	309	571	551	886	112	359	948	808	232
SHMW-04I	35.0 - 45.0																		
SHMW-05S/05SR	2.0 - 12.0	420	20	107	175	155	291	171	153	367	121	94	94	208	308	106	184	178	146
SHMW-05I/05IR	35.0 - 45.0		0				0			0				0					0
SHMW-06S	2.0 - 6.0																		
SHMW-06I	35.0 - 45.0																		
SHMW-07S/07SR	1.0 - 11.0	4,342	419	2,620	950	4,030	1,381	1733	5945	12,876	904	0	14,332	11,494	3,943	745	5,132		2,286
SHMW-07I/07IR	35.0 - 45.0		0				1												
SHMW-08S	1.0 - 7.0	113	182	95	151	180	148	147	174	250	160	116	213	140	157	132	161	153	146
SHMW-08I	35.0 - 45.0		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	373	673	317	363
SHMW-09I	35.0 -45.0	0	0				2			2				3				0	3
SHMW-10S	5.0 -15.0	0	0	0	0	0	1	0		0				0					
SHMW-10I	35.5 - 45.5		0				0												
SHMW-11S	3.5 - 13.5	0	2	1	0	7	16	1	0	1	201	2	1	5	3	0	1	6	
SHMW-11I	35.0 - 45.0		0				1												
SHMW-12S	1.5 - 6.5	217	104	62	410	604	133	0	353	493	247	76	523	502	317	227	670	601	312
SHMW-12I	35.0 - 45.0		0				0												
SHMW-13S	1.5 - 6.5	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 2018

	C	Total PAH Concentrations (μg/L)											
Well No.	Screen Interval		S	Sampling Da									
Well No.	(feet)		20	Min	Max	Mean							
	(ICCI)	Mar	May	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	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			29			0	430	62				
SHMW-03I	35.0 - 45.0			0			0	320	19				
SHMW-04S/04SR	2.0 - 12.0	68	170	2	49	1.5	0	6,669	2,020				
SHMW-04I	35.0 - 45.0						0	18	3				
SHMW-05S/05SR	2.0 - 12.0	171	107	48	62	26.1	0	420	117				
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						0	14,332	3,420				
SHMW-07I/07IR	35.0 - 45.0						0	2,212	222				
SHMW-08S	1.0 - 7.0	141	28	134	117	83	3	250	105				
SHMW-08I	35.0 - 45.0			0			0	13	1				
SHMW-09S	2.0 - 12.0	297	37	32	36	168.5	0	2,737	749				
SHMW-09I	35.0 -45.0	0	0	0	0	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			9			0	201	9				
SHMW-11I	35.0 - 45.0				-		0	4	0				
SHMW-12S	1.5 - 6.5	361	532	475	264	279.6	0	739	281				
SHMW-12I	35.0 - 45.0						0	20	2				
SHMW-13S	1.5 - 6.5						0	3	0				
SHMW-13I	35.0 - 45.0						0	1	0				
	•	NOTES:	•	•					•				

NOTES:

-- not analyzed or not applicable μg/L - micrograms per liter PAH - polycyclic aromatic hydrocarbons

Figures











