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**Quarterly Groundwater Monitoring Report
Second Quarter (Q2) 2018**

Sag Harbor Former MGP Site

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

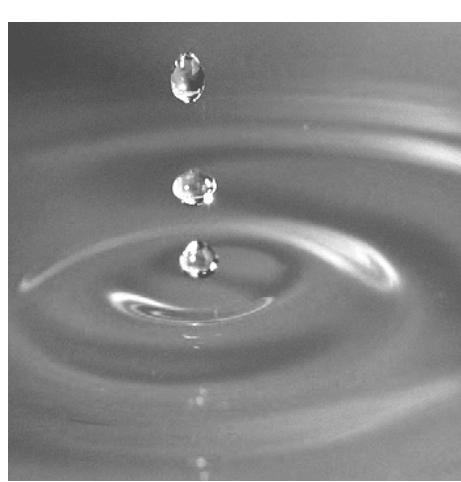
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September 2018
1702897.13.3




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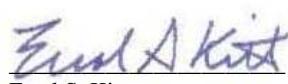

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1. Sag Harbor Site and Adjacent Offsite Areas

Second Quarter (Q2) 2018 Groundwater Monitoring Event Summary

Event Date: May 9 and 10, 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	
	Former	Current		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 second quarter (Q2) 2018 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 May 10, 2018 at all 25 monitoring wells, during high and low tides. 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 Q2 2018, are provided in the following table:

Depth Zone	High Tide			Low Tide		
	Range		Gradient ³	Range		Gradient ³
	DTW ¹	WLE ²		DTW ¹	WLE ²	
Shallow	0.01 – 4.26	0.49 – 4.44	0.0047	0.02 – 4.51	0.34 – 2.86	0.0011
Intermediate	0.01 – 4.91	0.72 – 2.11	0.0017	0.01 – 5.49	0.04 – 1.71	0.0029

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 Q2 2018, 22 of the 25 monitoring wells were monitored for NAPL as part of the groundwater monitoring program. A car was parked over wells SHMW-02S, SHMW-02I and SHMW-02D,

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preventing access. Evidence of light non-aqueous phase liquid (LNAPL) or DNAPL in the monitoring wells during Q2 2018 was limited to blebs of DNAPL in SHMW-07SR.

1.5 Chemical Data

In Q2 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. Well sampling was performed on May 9, 2018 and included all the wells on the quarterly sampling list excluding SHMW-07SR, which was not sampled due to the presence of DNAPL.

Table 3 provides the chemical data for Q2 2018. The data indicate:

- Total BTEX concentrations in the six wells ranged from non-detect (ND) in SHMW-09I to 375.1 micrograms per liter ($\mu\text{g}/\text{L}$) in SHMW-12S.
- Total PAH concentrations ranged from ND in two wells to 551.8 $\mu\text{g}/\text{L}$ 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 3.3 $\mu\text{g}/\text{L}$.

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. Q2 2018 concentrations are generally lower than or similar to Q4 2017 and Q1 2018 with the exception of increasing concentrations in one well (SHMW-12S). Further discussion of the trends is provided below. An analysis of the current and historical data in recent quarterly sampling events is presented in the table below.

Shallow Zone	Historical		Q4 2017		Q1 2018		Q2 2018	
	Max	Average	Max	Average	Max	Average	Max	Average
Total BTEX	25,860	679	251	71	232.8	61	375.1	85.96
Total PAHs	14,332	621	264	106	279.6	112	551.8	154

Note: Concentrations in $\mu\text{g}/\text{L}$

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 Q2 2018, including SHMW-04SR, SHMW-05SR, SHMW-08S, SHMW-09S, and SHMW-12S. There were no BTEX exceedances in intermediate well SHMW-09I. Benzene exceeded the AWQS of 1 $\mu\text{g}/\text{L}$ in each of the shallow wells listed above, with a maximum detection of 310 $\mu\text{g}/\text{L}$ in SHMW-12S. Total xylenes exceeded the standard of 5 $\mu\text{g}/\text{L}$ in SHMW-04SR (20 $\mu\text{g}/\text{L}$) and SHMW-12S (45 $\mu\text{g}/\text{L}$). Ethylbenzene exceedances were limited to SHMW-12S (19 $\mu\text{g}/\text{L}$). Total BTEX concentrations in SHMW-04SR (29.77 $\mu\text{g}/\text{L}$) continued a recently established decreasing trend, while the concentrations in SHMW-12S (375.1 $\mu\text{g}/\text{L}$) increased and continue to be variable. Total BTEX concentrations in the remaining wells were relatively stable. Excluding SHMW-12S, the Q2 2018 concentrations remained below the respective historical mean for each well.

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MTBE was detected in two wells with a maximum of 3.3 µg/L in SHMW-08S; below the guidance value of 10 µg/L.

PAH exceedances of the AWQS concentrations were identified in the three shallow wells sampled in Q2 2018, including SHMW-05SR, SHMW-09S, and SHMW-12S. The compounds exceeding the AWQS included naphthalene and acenaphthene. Naphthalene exceeded the AWQS of 10 µg/L in SHMW-09S (46 µg/L) and SHMW-12S (530 µg/L). Acenaphthene exceeded the AWQS of 20 µg/L in SHMW-05SR (29 µg/L) and SHMW-09S (41 µg/L). Decreasing total PAH trends recently established in SHMW-04SR (ND in Q2 2018) and SHMW-08S (56 µg/L) continued in Q2 2018. Q2 2018 total PAH concentrations decreased in SHMW-09S (108.3 µg/L) and increased in SHMW-12S (551.8 µg/L); however, both wells remain variable. Total PAH concentrations increased slightly in SHMW-05SR (52.3 µg/L) but remain relatively stable. PAHs in intermediate well SHMW-09I were ND. Similar to total BTEX, the Q2 2018 concentrations remained below the respective historical mean for each well excluding SHMW-12S.

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 Q2 2018, DNAPL was not observed in SHMW-04SR, but DNAPL blebs were present in 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. SHMW-02I could not be accessed and was not gauged during the Q2 2018 event due to a

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car being parked over the well. Subsequent gauging events will continue to monitor the rebound in DNAPL thickness. Additional recovery efforts will be conducted as appropriate.

1.8 Future Plans

- Groundwater monitoring was reduced to semi-annual with NYSDEC approval. The annual sampling event will be conducted in Q3 2018, which will be followed by the first semi-annual sampling event in Q1 2019.
- Continue quarterly 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.

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Tables

Table 1. Water Level Measurements and Calculated Groundwater Elevations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q2 2018

Well ID	Top of Casing Elevation (ft)*	Tide	Time	5/10/2018		Notes
				Depth to Water (ft)	Groundwater Elevation (ft)	
SHMW-01SR	3.71	High	650	2.47	1.24	Well replaced in Q4 2010
		Low	1315	2.27	1.44	
SHMW-01IR	3.81	High	651	2.39	1.42	Well replaced in Q4 2010
		Low	1316	2.69	1.12	
SHMW-01D	3.67	High	650	1.71	1.96	Well installed in Q4 2010
		Low	1316	2.31	1.36	
SHMW-02S	3.95	High	647	2.32	1.63	Well installed in Q4 2010
		Low	1312	2.24	1.71	
SHMW-02IR	3.92	High	647	2.11	NC	Survey point altered
		Low	1313	2.27	NC	
SHMW-02DR	3.66	High	646	2.13	1.53	Well replaced in Q4 2010
		Low	1312	2.64	1.02	
SHMW-03S	3.83	High	658	3.10	0.73	
		Low	1324	3.24	0.59	
SHMW-03I	3.85	High	658	2.22	1.63	
		Low	1325	2.89	0.96	
SHMW-04SR	3.90	High	653	3.14	0.76	Well replaced in Q4 2010
		Low	1318	3.06	0.84	
SHMW-05SR	5.03	High	655	3.11	1.92	Well replaced in Q4 2010
		Low	1321	3.33	1.70	
SHMW-05IR	4.96	High	656	3.36	1.60	Well replaced in Q4 2010
		Low	1322	3.68	1.28	
SHMW-07SR	3.48	High	711	0.67	2.81	
		Low	13.4	0.64	2.84	
SHMW-07IR	3.38	High	711	1.61	1.77	
		Low	1339	2.98	0.40	
SHMW-08S	3.69	High	713	0.81	2.88	
		Low	1342	0.81	2.88	
SHMW-08I	3.79	High	713	1.79	2.00	
		Low	1343	2.28	1.51	
SHMW-09S	3.06	High	706	1.51	1.55	
		Low	1334	1.61	1.45	
SHMW-09I	2.82	High	707	1.43	1.39	
		Low	1335	1.71	1.11	
SHMW-10S	4.75	High	700	4.26	0.49	
		Low	1327	4.41	0.34	
SHMW-10I	4.75	High	701	3.61	1.14	
		Low	1328	4.71	0.04	
SHMW-11S	5.32	High	705	3.72	1.60	
		Low	1330	4.51	0.81	
SHMW-11I	5.63	High	703	4.91	0.72	
		Low	1330	5.49	0.14	
SHMW-12S	1.98	High	708	0.01	1.97	
		Low	1337	0.02	1.96	
SHMW-12I	1.99	High	708	0.01	1.98	
		Low	1337	0.01	1.98	
SHMW-13S	3.36	High	715	0.51	2.85	
		Low	1345	0.50	2.86	
SHMW-13I	3.50	High	715	1.39	2.11	
		Low	1344	1.79	1.71	

General Notes:

* Elevations were re-surveyed in November 2010.

NC = Not Calculated

Table 2. Summary of Historical NAPL Observations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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 Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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
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 Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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 H ₂ O, 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
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Groundwater Monitoring Program - Q2 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 Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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 Observations	Dec/Q4 2008 Observations	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 Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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 Observations	Dec/Q4 2008 Observations	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 Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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 Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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 Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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 Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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								
SHMW-09I	No access								
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 Harbor Former MGP Site
Groundwater Monitoring Program - Q2 2018

Well ID	Mar/Q1 2014 Observations	Jun/Q2 2014 Observations	Sep/Q3 2014 Observations	Dec/Q4 2014 Observations	Mar/Q1 2015 Observations	Jun/Q2 2015 Observations	Sep/Q3 2015 Observations	Dec/Q4 2015 Observations	Mar/Q1 2016 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	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								
SHMW-03S	None Observed								
SHMW-03I	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								
SHMW-05S/05SR	None Observed								
SHMW-05I/05IR	None Observed								

Table 2. Summary of Historical NAPL Observations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q2 2018

Well ID	Mar/Q1 2014 Observations	Jun/Q2 2014 Observations	Sep/Q3 2014 Observations	Dec/Q4 2014 Observations	Mar/Q1 2015 Observations	Jun/Q2 2015 Observations	Sep/Q3 2015 Observations	Dec/Q4 2015 Observations	Mar/Q1 2016 Observations
SHMW-06S	Well Abandoned								
SHMW-06I	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								
SHMW-08S	None Observed								
SHMW-08I	None Observed								
SHMW-09S	None Observed	Approx. 0.25" of DNAPL	None Observed	None Observed	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								

Table 2. Summary of Historical NAPL Observations
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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	May/Q2 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	Not Measured							
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	Not Measured (inaccessible)
SHMW-02D/02DR	None Observed	Not Measured							
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 Harbor Former MGP Site
Groundwater Monitoring Program - Q2 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	May/Q2 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, MTBE, and PAH Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q2 2018

Sample Name		SHMW-04SR	DUP-01	SHMW-05SR	SHMW-08S	SHMW-09S	SHMW-09I	SHMW-12S
Start Depth	2	2	2	2	1	2	35	1.5
End Depth	12	12	12	7	7	12	45	6.5
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018	5/9/2018
Parent Sample	SHMW-04SR							
Analyte	Units	CAS No.	NYS AWQS					
BTEX	µg/L							
Benzene		71-43-2	1	5.8	6	2.3	3.8	12
Toluene		108-88-3	5	0.77 J	0.85 J	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	3.2	2.7	1 U	0.32 J	1.2
Total Xylene		1330-20-7	5	20	21	0.63 J	1.3 J	3.4
Total BTEX (ND=0)		TBTEX_ND0	NE	29.77	30.55	2.93	5.42	16.6
Other VOCs	µg/L							
Methyl tert-butyl ether (MTBE)		1634-04-4	10*	1 U	1 U	1 U	1 U	0.61 J
NYSDEC PAH17	µg/L							
Acenaphthene		83-32-9	20*	10 U	10 U	29	20	41
Acenaphthylene		208-96-8	NE	10 U	10 U	10 U	1.2 J	10 U
Anthracene		120-12-7	50*	10 U	10 U	10 U	2.8 J	1.6 J
Benzo(a)anthracene		56-55-3	0.002*	1 U	1 U	1 U	1 U	1 U
Benzo(b)fluoranthene		205-99-2	0.002*	2 U	2 U	2 U	2 U	2 U
Benzo(k)fluoranthene		207-08-9	0.002*	1 U	1 U	1 U	1 U	1 U
Benzo(g,h,i)perylene		191-24-2	NE	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene		50-32-8	ND	1 U	1 U	1 U	1 U	1 U
Chrysene		218-01-9	0.002*	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene		53-70-3	NE	1 U	1 U	1 U	1 U	1 U
Fluoranthene		206-44-0	50*	10 U	10 U	10 U	3.3 J	10 U
Fluorene		86-73-7	50*	10 U	10 U	7.1 J	8.6 J	9.7 J
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	2.4 J	1.5 J	1.3 J
Naphthalene		91-20-3	10*	10 U	10 U	8.1 J	7.7 J	46
Phenanthrene		85-01-8	50*	10 U	10 U	5.7 J	7.4 J	8.7 J
Pyrene		129-00-0	50*	10 U	10 U	10 U	3.5 J	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	ND	52.3	56	108.3
NYSDEC PAH17 Other SVOCs	µg/L							
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	2.4 J	1.5 J	1.3 J

Table 3. Summary of BTEX, MTBE, and PAH Results**Sag Harbor Former MGP Site****Groundwater Monitoring Program - Q2 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, Benz[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 - Q2 2018

Well No.	Screen Interval (feet)	Total BTEX Concentrations ($\mu\text{g/L}$)																			
		Sampling Date																			
		1995	2000		2002	2004		2005				2006				2007					
		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 - Q2 2018

Well No.	Screen Interval (feet)	Total BTEX Concentrations ($\mu\text{g/L}$)											
		Sampling Date				2008				2009			
		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
SHMW-01I/01IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	0
SHMW-01D	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	0
SHMW-02S	1.0 - 6.0	--	--	--	--	--	--	--	--	--	--	--	3
SHMW-02I/02IR	35.0 - 45.0	18	41	29	--	--	--	--	--	--	--	--	4
SHMW-02D/02DR	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	0
SHMW-03S	2.0 - 12.0	3	0	5	13	111	24	4	9	40	5	0	9
SHMW-03I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	--	0
SHMW-04S/04SR	2.0 - 12.0	7,567	8,059	7,561	--	--	--	--	--	--	--	--	2,717
SHMW-04I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-05S/05SR	2.0 - 12.0	77	83	64	--	--	--	--	--	--	--	--	20
SHMW-05I/05IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	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
SHMW-07I/07IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	0
SHMW-08S	1.0 - 7.0	8	9	10	--	--	5	5	4	6	13	4	9
SHMW-08I	35.0 - 45.0	--	--	--	--	--	0	--	0	--	--	--	0
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
SHMW-10I	35.5 - 45.5	--	--	--	0	--	0	--	0	--	--	--	0
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-11I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	--	0
SHMW-12S	1.5 - 6.5	166	482	111	279	28	315	45	58	222	217	8	70
SHMW-12I	35.0 - 45.0	--	--	--	0	--	--	--	2	--	--	--	0
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-13I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	--	0

Table 4. Summary of Historical Total BTEX Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q2 2018

Well No.	Screen Interval (feet)	Total BTEX Concentrations ($\mu\text{g/L}$)											
		Sampling Date				2011				2012			
		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	1	0	0	3	0	0	0	0	1	8	0	0
SHMW-01I/01IR	35.0 - 45.0	--	--	--	3	--	--	--	0	--	--	--	1
SHMW-01D	65.0 - 75.0	--	--	--	3	--	--	--	0	--	--	--	0
SHMW-02S	1.0 - 6.0	0	3	0	5	1	0	0	0	0	5	0	0
SHMW-02I/02IR	35.0 - 45.0	0	--	--	14	--	--	--	0	--	--	--	11
SHMW-02D/02DR	65.0 - 75.0	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-03S	2.0 - 12.0	24	2	3	18	0	1	1	0	6	0	0	2
SHMW-03I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	4
SHMW-04S/04SR	2.0 - 12.0	702	469	292	572	391	709	654	449	158	14	949	1,846
SHMW-04I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-05S/05SR	2.0 - 12.0	22	25	27	45	25	29	28	16	16	683	17	21
SHMW-05I/05IR	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-06S	2.0 - 6.0	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-06I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-07S/07SR	1.0 - 11.0	455	1,172	607	700	1,418	670	2,822	251	1,289	852	972	1,305
SHMW-07I/07IR	35.0 - 45.0	--	--	--	11	--	--	--	0	--	--	--	0
SHMW-08S	1.0 - 7.0	7	10	5	9	5	7	2	6	5	6	4	3
SHMW-08I	35.0 - 45.0	--	--	--	5	--	--	--	0	--	--	--	0
SHMW-09S	2.0 - 12.0	--	--	--	--	--	--	130	165	167	198	118	93
SHMW-09I	35.0 - 45.0	--	--	--	--	--	--	0	0	--	--	--	2
SHMW-10S	5.0 - 15.0	0	0	0	0	0	0	0	0	0	0	0	0
SHMW-10I	35.5 - 45.5	--	--	--	5	--	--	--	0	--	--	--	0
SHMW-11S	3.5 - 13.5	0	0	0	8	0	0	0	0	0	0	0	0
SHMW-11I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	0
SHMW-12S	1.5 - 6.5	82	672	473	337	127	434	41	19	87	175	142	26
SHMW-12I	35.0 - 45.0	--	--	--	6	--	--	--	0	--	--	--	0
SHMW-13S	1.5 - 6.5	0	0	3	3	12	0	0	0	0	0	0	0
SHMW-13I	35.0 - 45.0	--	--	--	0	--	--	--	0	--	--	--	0

Table 4. Summary of Historical Total BTEX Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q2 2018

Well No.	Screen Interval (feet)	Total BTEX Concentrations ($\mu\text{g/L}$)															
		Sampling Date															
		2014				2015				2016				2017			
		Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	May	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	--	--	--	--	--
SHMW-01I/01IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-01D	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-02S	1.0 - 6.0	0	--	0	--	--	--	0	--	--	--	0	--	--	--	0	--
SHMW-02I/02IR	35.0 - 45.0	--	--	0	--	--	--	115	--	--	--	--	--	--	--	--	--
SHMW-02D/02DR	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-03S	2.0 - 12.0	3	--	5	--	--	--	47	--	--	--	9	--	--	--	2	--
SHMW-03I	35.0 - 45.0	--	--	0	--	--	--	0	--	--	--	0	--	--	0	--	--
SHMW-04S/04SR	2.0 - 12.0	145	504	900	302	369	428	504	297	328	840	461	372	329	303	358	251
SHMW-04I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-05S/05SR	2.0 - 12.0	13	12	15	9	12	7	14	20	8	8	11	12	18	5	9	7
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	769	1991	3,508	840	0	1,777	1,938	1,362	577	2,600	--	1,047	--	--	--	--
SHMW-07I/07IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-08S	1.0 - 7.0	8	4	2	5	10	4	5	5	4	7	4	4	6	3	3	4
SHMW-08I	35.0 - 45.0	--	--	0	--	--	--	0	--	--	--	0	--	--	0	--	--
SHMW-09S	2.0 - 12.0	155	193	136	53	92	136	102	86	84	151	46	29	35	19	28	26
SHMW-09I	35.0 - 45.0	--	--	4	--	--	--	408	--	--	--	10	3	0	0	14	19
SHMW-10S	5.0 - 15.0	0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--
SHMW-10I	35.5 - 45.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	0	0	0	0	0	0	--	--	0	--
SHMW-11I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-12S	1.5 - 6.5	67	175	56	159	82	407	136	154	159	638	209	80	164	531	94	69
SHMW-12I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SHMW-13S	1.5 - 6.5	0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--
SHMW-13I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4. Summary of Historical Total BTEX Results
Sag Harbor Former MGP Site
Groundwater Monitoring Program - Q2 2018

Well No.	Screen Interval (feet)	Total BTEX Concentrations ($\mu\text{g}/\text{L}$)				
		Sampling Date		Min	Max	Mean
		2018	Mar May			
MW-01	1.50 - 7.32	--	--	0	2,720	112
MW-02	0.50 - 7.25	--	--	98	15,181	9,335
MW-03	2.17 - 10.17	--	--	560	4,965	2,479
MW-04	1.25 - 6.81	--	--	0	864	107
MW-05	2.46 - 7.46	--	--	5	18,900	5,202
MW-06	2.47 - 7.47	--	--	0	334	35
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	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	--	--	0	131	30
SHMW-03I	35.0 - 45.0	--	--	0	52	3
SHMW-04S/04SR	2.0 - 12.0	46.49	29.77	14	25,860	5,086
SHMW-04I	35.0 - 45.0	--	--	0	5	1
SHMW-05S/05SR	2.0 - 12.0	3.39	2.93	5	2,960	141
SHMW-05I/05IR	35.0 - 45.0	--	--	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	10.81	5.42	0	19	6
SHMW-08I	35.0 - 45.0	--	--	0	5	0
SHMW-09S	2.0 - 12.0	11.7	16.6	19	1,298	410
SHMW-09I	35.0 - 45.0	0	0	0	408	22
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	8	0
SHMW-11I	35.0 - 45.0	--	--	0	0	0
SHMW-12S	1.5 - 6.5	232.78	375.1	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

$\mu\text{g}/\text{L}$ - 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 - Q2 2018

Well No.	Screen Interval (feet)	Total PAH Concentrations ($\mu\text{g/L}$)																	
		Sampling Date																	
		1995	2000		2002	2004		2005				2006				2007			
		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 - Q2 2018

Well No.	Screen Interval (feet)	Total PAH Concentrations ($\mu\text{g/L}$)																	
		Sampling Date																	
		2008				2009				2010				2011				2012	
		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 - Q2 2018

Well No.	Screen Interval (feet)	Total PAH Concentrations ($\mu\text{g/L}$)													
		Sampling Date													
		2013				2014				2015					
		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	--	--	--	--	--
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	--
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	--
SHMW-03I	35.0 - 45.0	--	0	--	--	--	4	--	--	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
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
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	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	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	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
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
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 - Q2 2018

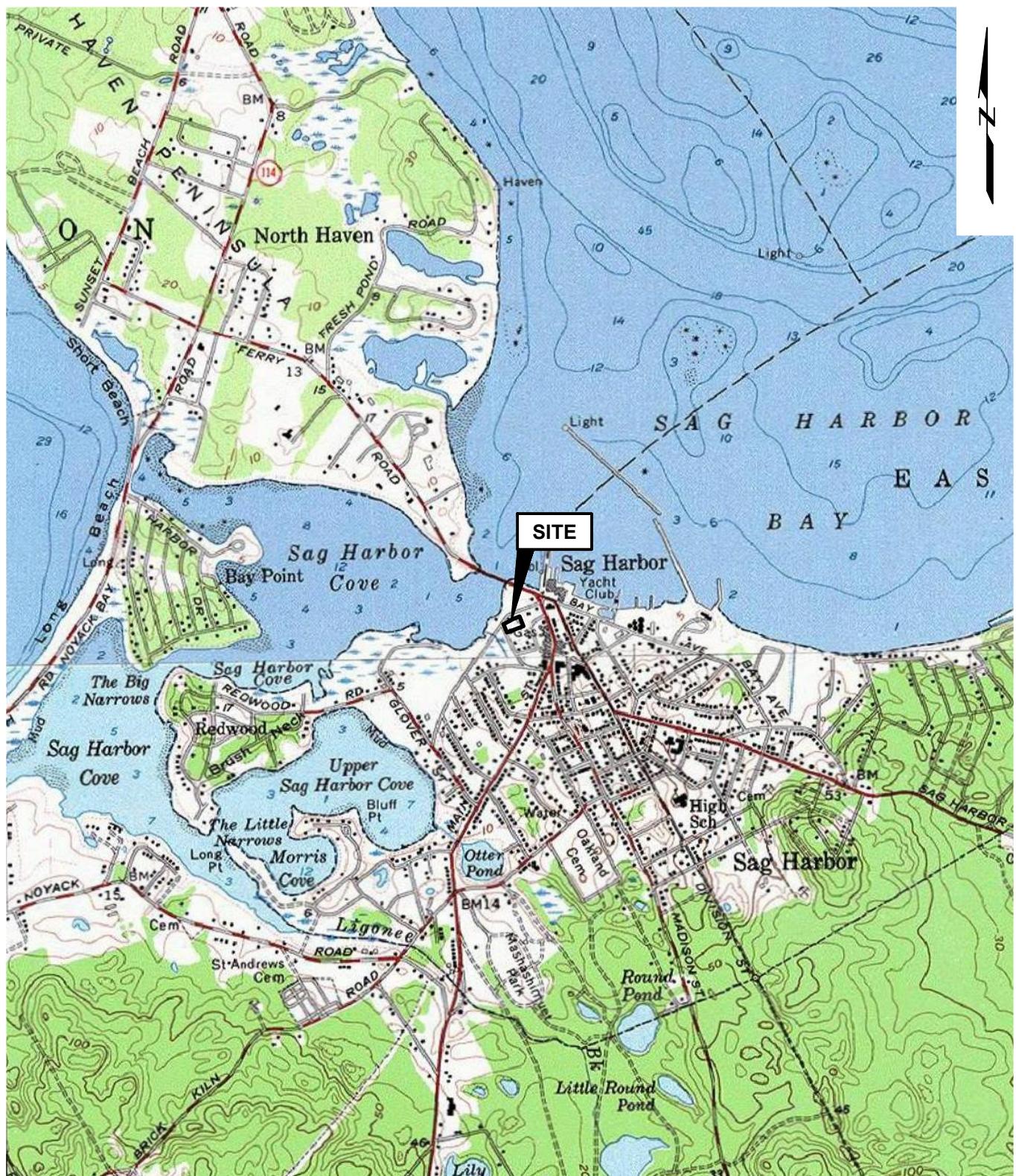
Well No.	Screen Interval (feet)	Total PAH Concentrations ($\mu\text{g/L}$)										Min	Max	Mean	
		Sampling Date					2017				2018				
		2016		Mar	May	Sep	Dec	Mar	May	Sep	Dec	Mar	May		
MW-01	1.50 - 7.32	--	--	--	--	--	--	--	--	--	--	--	0	4,906	380
MW-02	0.50 - 7.25	--	--	--	--	--	--	--	--	--	--	--	0	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	--	--	--	--	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	--	--	--	29	--	--	--	--	0	430	62
SHMW-03I	35.0 - 45.0	--	--	--	0	--	--	0	--	--	--	--	0	320	19
SHMW-04S/04SR	2.0 - 12.0	359	948	808	232	68	170	2	49	1.5	0	0	0	6,669	1,978
SHMW-04I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	0	18	3
SHMW-05S/05SR	2.0 - 12.0	106	184	178	146	171	107	48	62	26.1	52.3	0	0	420	117
SHMW-05I/05IR	35.0 - 45.0	--	--	--	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	28	134	117	83	56	3	3	250	105
SHMW-08I	35.0 - 45.0	--	--	--	0	--	--	0	--	--	--	--	0	13	1
SHMW-09S	2.0 - 12.0	373	673	317	363	297	37	32	36	168.5	108.3	0	0	2,737	749
SHMW-09I	35.0 - 45.0	--	--	0	3	0	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	0	1	6	--	--	--	9	--	--	--	--	0	201	9
SHMW-11I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	0	4	0
SHMW-12S	1.5 - 6.5	227	670	601	312	361	532	475	264	279.6	551.8	0	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:

-- not analyzed or not applicable
 $\mu\text{g/L}$ - micrograms per liter
PAH - polycyclic aromatic hydrocarbons

QUARTERLY GROUNDWATER MONITORING REPORT
SECOND QUARTER (Q2) 2018
SAG HARBOR FORMER MGP SITE
NATIONAL GRID
SEPTEMBER 2018
WWW.SAGHARBORMGPSITE.COM

Figures



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0 2000 4000
SCALE: 1" = 2000'

Sag Harbor Former MGP Site
Sag Harbor, New York



SITE LOCATION MAP

nationalgrid

Project 1702897

SEPTEMBER 2018

Fig. 1

