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**Quarterly Groundwater Monitoring Report  
Second Quarter (Q2) 2012**

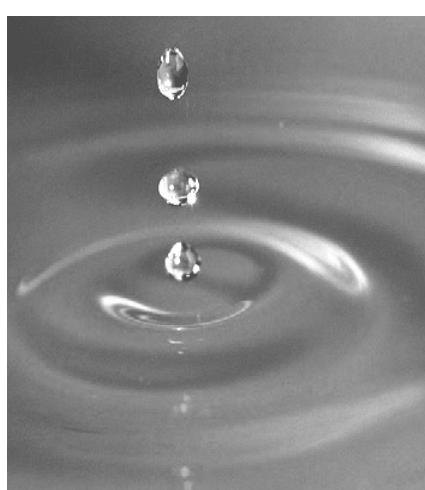
**Sag Harbor  
Former MGP Site**

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

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August 2012  
Project 093190-2-1203



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# 1. Sag Harbor Site and Adjacent Offsite Areas

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## Second Quarter (Q2) 2012 Groundwater Monitoring Event Summary

Event Date: June 18, 19 and 20, 2012

Site Phase: Quarterly groundwater monitoring

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

### 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, potential dense non-aqueous phase liquid (DNAPL) recovery wells. 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.

Access to monitoring wells SHMW-09S and SHMW-09I could not be obtained for the Q2 2012 groundwater monitoring event.

### Hydrological Data

Groundwater levels were measured on June 18, 2012 at 22 of the 25 monitoring wells, during low and high tide. Monitoring well SHMW-02I was repaired during Q3 2011, altering the survey point. As a result, a groundwater level measurement was not taken. Depth to groundwater 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 2012, are provided in the following table:

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Depth Zone	High Tide			Low Tide		
	Range		Gradient <sup>3</sup>	Range		Gradient <sup>3</sup>
	DTW <sup>1</sup>	WLE <sup>2</sup>		DTW <sup>1</sup>	WLE <sup>2</sup>	
Shallow	0.00 – 4.65	0.67 – 2.97	0.0029	0.02 – 5.30	0.02 – 2.98	0.0035
Intermediate	0.06 – 4.78	0.85 – 2.11	0.0012	0.01 – 5.67	-0.04 – 1.98	0.0024

<sup>1</sup>: Depth to water - Measured as feet below top of casing

<sup>2</sup>: Water level elevation - Calculated as feet above mean sea level

<sup>3</sup>: feet/foot

## NAPL Thickness Data

**Table 2** provides a summary of historical non-aqueous phase liquid (NAPL) data. In Q2 2012, all 23 of the accessible monitoring wells were monitored for NAPL as part of the groundwater monitoring program. There was no evidence of light non-aqueous phase liquid (LNAPL) or DNAPL in any of the monitoring wells during Q2 2012.

## Chemical Data

In Q2 2012, a total of 11 wells were sampled for benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tert-butyl ether (MTBE) by Environmental Protection Agency (EPA) Method 8260, and for polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270. Well sampling was performed on June 19 and 20, 2012 and included all accessible wells on the quarterly sampling list.

Chemical data for Q2 2012 (**Table 3**) indicate:

- BTEX concentrations ranged from below method detection limits (ND) in 5 of the 11 wells sampled to 709 micrograms per liter ( $\mu\text{g}/\text{L}$ ) in SHMW-04SR.
- Total PAH concentrations ranged from ND in 3 of the 11 wells sampled to 1,296  $\mu\text{g}/\text{L}$  in SHMW-04SR.
- MTBE concentrations ranged from ND in 9 of the 11 wells sampled to 4  $\mu\text{g}/\text{L}$  in SHMW-08S.

## Data Trend Analysis

In general, BTEX and total PAH concentrations (see historical data in **Tables 4** and **5**) are decreasing in shallow groundwater on and adjacent to the site as indicated in the table below. BTEX concentrations in shallow wells, which had been slightly increasing in recent sampling events, decreased in Q2 2012. Average total PAH concentrations during Q2 2012 in shallow wells slightly increased relative to Q1 2012, but have continued to decrease relative to prior sampling events. Overall, the concentrations observed during recent sampling events remain significantly below historical levels (see table below).

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Shallow Zone	Historical*		Q4 2011		Q1 2012		Q2 2012	
	Max	Average	Max	Average	Max	Average	Max	Average
BTEX	25,860	1,213	700	155	1,418	180	709	168
Total PAHs	7,211**	732	955	237	927	195	1,296	224

Concentrations in µg/L

\*: Including data from existing wells only.

\*\*: Historical maximum for all depth zones is 580,200 µg/L (total PAH) in SHMW-02I.

Concentrations of BTEX were identified in 6 shallow monitoring wells in Q2 2012. The concentrations in monitoring wells SHMW-03S (1 µg/L), SHMW-05SR (29 µg/L) and SHMW-08S (7 µg/L) were relatively low (below 50 µg/L). The Q2 2012 detections in these wells remained similar to, or below, their respective historical mean concentrations.

Elevated BTEX concentrations in the remaining shallow wells in Q2 2012 were limited to SHMW-04SR, SHMW-07SR and SHMW-12S. The concentrations in SHMW-04SR (709 µg/L) and SHMW-12S (434 µg/L) increased compared to Q1 2012, but remained within their respective historical concentration range, with SHMW-04SR also being significantly below the historical mean concentration. The concentration in SHMW-07SR (670 µg/L) decreased relative to Q1 2012, and remains below the historical mean concentration (1,547 µg/L).

For total PAH concentrations, 8 shallow wells had detections in Q2 2012, with three of the 10 detections being near detection levels in wells SHMW-01SR, SHMW-03S and SHMW-10S. The maximum detection in these wells in Q2 2012 was 21 µg/L in SHMW-01SR.

The total PAH concentrations in Q2 2012 in SHMW-05SR (219 µg/L), SHMW-07SR (444 µg/L) and SHMW-08S (111 µg/L) all decreased from Q1 2012 levels. The Q2 2012 concentrations in each of these wells were within the respective historical concentration range and the concentration in SHMW-07SR was also below its historical mean concentration. The Q2 2012 total PAH concentrations in monitoring wells SHMW-04SR (1,296 µg/L) and SHMW-12S (361 µg/L) increased relative to Q1 2012 levels, but both remained within their respective historical concentration range, with the concentration in SHMW-04SR also remaining below its historical mean concentration.

Variable dissolved constituent concentrations detected in shallow groundwater over the past sampling events are likely due, in part, to the rise and fall of the water table resulting in periods of both decreased and increased dissolution of adsorbed BTEX and PAHs trapped beneath the groundwater/soil vapor interface.

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/04SR). Historically, trace amounts of NAPL have been found in two onsite shallow wells, MW-03 and MW-04, and two offsite shallow wells, SHMW-06S and SHMW-02IR, and intermittently in SHMW-07S and SHMW-07SR. Excluding SHMW-07S and SHMW-07SR, all of the wells identified above in which NAPL has been historically detected were either destroyed or abandoned prior to the start of remedial activities. Monitoring well SHMW-07S was damaged presumably during remedial activities and subsequently replaced.

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Trace amounts of LNAPL and DNAPL have historically been found in monitoring wells SHMW-04SR and SHMW-07SR. However, there was no evidence of NAPL in these monitoring wells or any of the remaining monitoring wells during Q2 2012.

### **Future Plans**

Continue quarterly groundwater and NAPL monitoring at onsite and offsite monitoring wells.

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## Tables

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Table 1  
Water Level Measurements and Calculated Water Elevations  
Sag Harbor Former MGP Site  
Groundwater Monitoring Program - Q2 2012

Well ID	Top of Casing Elevation (ft)*	Tide	Time	6/18/2012		Notes
				Depth to Water (ft)	Groundwater Elevation (ft)	
MW-01	5.09	High	--	--	--	Well abandoned
		Low	--	--	--	
MW-02	4.48	High	--	--	--	Well abandoned
		Low	--	--	--	
MW-03	4.59	High	--	--	--	Well abandoned
		Low	--	--	--	
MW-04	4.13	High	--	--	--	Well abandoned
		Low	--	--	--	
MW-05	5.07	High	--	--	--	Well destroyed
		Low	--	--	--	
MW-06	5.38	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-01SR	3.71	High	1012	2.35	1.36	Well replaced in Q4 2010
		Low	1549	2.41	1.30	
SHMW-01IR	3.81	High	1043	2.36	1.45	Well replaced in Q4 2010
		Low	1550	2.61	1.20	
SHMW-01D	3.67	High	1046	1.70	1.97	Well installed in Q4 2010
		Low	1550	2.21	1.46	
SHMW-02S	3.95	High	1010	2.40	1.55	Well installed in Q4 2010
		Low	1545	2.42	1.53	
SHMW-02IR	3.92	High	NM	NM	NM	Survey point altered
		Low	NM	NM	NM	
SHMW-02DR	3.66	High	1010	2.02	1.64	Well replaced in Q4 2010
		Low	NM	NM	NM	
SHMW-03S	3.83	High	1020	2.94	0.89	
		Low	1603	3.07	0.76	
SHMW-03I	3.85	High	1020	2.19	1.66	
		Low	1604	2.78	1.07	
SHMW-04SR	3.90	High	1015	2.95	0.95	Well replaced in Q4 2010
		Low	1553	2.93	0.97	
SHMW-04I	5.71	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-05SR	5.03	High	1017	3.74	1.29	Well replaced in Q4 2010
		Low	1600	3.73	1.30	
SHMW-05IR	4.96	High	1018	3.46	1.50	Well replaced in Q4 2010
		Low	1559	3.71	1.25	
SHMW-06S	4.44	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-06I	4.43	High	--	--	--	Well abandoned
		Low	--	--	--	
SHMW-07SR	3.48	High	1035	0.89	2.59	
		Low	1630	0.91	2.57	
SHMW-07IR	3.38	High	1034	1.68	1.70	
		Low	1625	1.90	1.48	
SHMW-08S	3.69	High	1040	0.72	2.97	
		Low	1638	0.71	2.98	
SHMW-08I	3.79	High	1041	1.75	2.04	
		Low	1640	2.29	1.50	
SHMW-09S	3.06	High	--	--	--	Access not provided
		Low	--	--	--	
SHMW-09I	2.82	High	--	--	--	Access not provided
		Low	--	--	--	
SHMW-10S	4.75	High	1022	3.99	0.76	
		Low	1607	4.41	0.34	
SHMW-10I	4.75	High	1023	3.42	1.33	
		Low	1608	4.57	0.18	
SHMW-11S	5.32	High	1025	4.65	0.67	
		Low	1613	5.30	0.02	
SHMW-11I	5.63	High	1027	4.78	0.85	
		Low	1615	5.67	-0.04	
SHMW-12S	1.98	High	1030	0.00	1.98	
		Low	1619	0.02	1.96	
SHMW-12I	1.99	High	10.31	0.06	1.93	Artesian
		Low	1620	0.01	1.98	
SHMW-13S	3.36	High	1037	0.77	2.59	
		Low	1634	0.79	2.57	
SHMW-13I	3.50	High	1038	1.39	2.11	
		Low	1635	1.83	1.67	

**Notes:**

\* Elevations were re-surveyed in November 2010.

-- = Not Available

NM = Not Measured

Table 2  
 Summary of Historical NAPL Observations  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

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
MW-01	None Observed	Odor	None Observed	Not Checked	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
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
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)
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
MW-06	None Observed	Slight naphthalene-like odor	NR	NR	NR	NR	NR	NR
SHMW-01S/01SR	None Observed	Slight naphthalene-like odor	NR	NR	NR	NR	NR	NR
SHMW-01I/01IR	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-01D	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02S	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
SHMW-02D/02DR	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-03S	None Observed	Odor	NR	NR	NR	NR	NR	NR
SHMW-03I	None Observed	None Observed	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
SHMW-04I	None Observed	None Observed	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
SHMW-05I/05IR	None Observed	None Observed	NR	NR	NR	NR	NR	NR

Table 2  
 Summary of Historical NAPL Observations  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

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
SHMW-06S	Slight sheen and naphthalene-like odor	Naphthalene-like odor	NR	NR	NR	NR	NR	NR
SHMW-06I	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-07S/07SR	Sheen and naphthalene-like odor	Slight odor	NR	NR	NR	NR	NR	NR
SHMW-07I/07IR	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-08S	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-08I	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-09S	None Observed	Slight naphthalene-like odor	NR	NR	NR	NR	NR	NR
SHMW-09I	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-10S	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-10I	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-11S	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-11I	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-12S	None Observed	Sheen, strong sulfur-like odor	NR	NR	NR	NR	NR	NR
SHMW-12I	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-13S	None Observed	None Observed	NR	NR	NR	NR	NR	NR
SHMW-13I	None Observed	None Observed	NR	NR	NR	NR	NR	NR

Table 2  
 Summary of Historical DNAPL Observations  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

Well ID	Mar 2005 Observations	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
MW-01	NR	NR	NR	NR	NR	NR	NR	NR
MW-02	Approx. 0.15' of DNAPL	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
MW-03	Trace DNAPL at bottom of tape	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)
MW-04	None Observed	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)
MW-05	Sporadic DNAPL, approx. 0.1' of LNAPL	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 <sub>2</sub> 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
MW-06	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-01S/01SR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-01I/01IR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-01D	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02S	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02I/02IR	Approx. 0.45' of DNAPL	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
SHMW-02D/02DR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-03S	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-03I	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-04S/04SR	Approx. 0.25' of DNAPL	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
SHMW-04I	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-05S/05SR	None Observed	None Observed	None Observed	None Observed	None Observed	No DNAPL observed	None Observed	None Observed
SHMW-05I/05IR	NR	NR	NR	NR	NR	NR	NR	NR

Table 2  
 Summary of Historical NAPL Observations  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

Well ID	Mar 2005 Observations	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
SHMW-06S	NR	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
SHMW-06I	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-07S/07SR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-07I/07IR	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-08S	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-08I	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-09S	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-09I	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-10S	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-10I	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-11S	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-11I	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-12S	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-12I	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-13S	NR	NR	NR	NR	NR	NR	NR	NR
SHMW-13I	NR	NR	NR	NR	NR	NR	NR	NR

Table 2  
 Summary of Historical DNAPL Observations  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

Well ID	Dec/Q4 2006 Observations	Mar/Q1 2007 Observations	Jun/Q2 2007 Observations	Sep/Q3 2007 Observations	Dec/Q4 2007 Observations	Mar/Q1 2008 Observations	Jun/Q2 2008 Observations	Sep/Q3 2008 Observations
MW-01	NR	NR	NR	NR	None Observed	None Observed	Trace DNAPL	Trace DNAPL (at bottom of tubing)
MW-02	Approx. 0.10' DNAPL	Approx. 0.20' DNAPL	Approx. 0.07' DNAPL	Approx. 0.11' DNAPL	Approx. ~0.08'	Trace DNAPL	Moderate DNAPL; not measurable	Trace DNAPL
MW-03	No DNAPL observed	Trace DNAPL (coating on tubes)	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)
MW-04	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Approx. ~0.02'	NR	Trace DNAPL	Trace DNAPL (at bottom of tubing)
MW-05	Trace LNAPL; DNAPL in purge water (not measurable)	Trace LNAPL; DNAPL in purge water (not measurable)	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed
MW-06	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed
SHMW-01S/01SR	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed
SHMW-01I/01IR	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-01D	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02S	NI	NI	NI	NI	NI	NI	NI	NI
SHMW-02I/02IR	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Trace DNAPL (coating on tubes)	Approx. ~0.60'	Approx. 3' DNAPL	Approx. 1.5' DNAPL	Approx. 4' DNAPL
SHMW-02D/02DR	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-03S	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed
SHMW-03I	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-04S/04SR	Approx. 0.30' of DNAPL	Approx. 0.40' DNAPL	Approx. 0.50' DNAPL	Approx. 0.5' DNAPL	Approx. ~0.61'	Approx. 1.05' DNAPL	Approx. 0.6' DNAPL	Approx. 0.75' DNAPL
SHMW-04I	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-05S/05SR	None Observed	None Observed	None Observed	NR	None Observed	None Observed	None Observed	None Observed
SHMW-05I/05IR	NR	None Observed	NR	NR	None Observed	NR	NR	NR

Table 2  
 Summary of Historical NAPL Observations  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

Well ID	Dec/Q4 2006 Observations	Mar/Q1 2007 Observations	Jun/Q2 2007 Observations	Sep/Q3 2007 Observations	Dec/Q4 2007 Observations	Mar/Q1 2008 Observations	Jun/Q2 2008 Observations	Sep/Q3 2008 Observations
SHMW-06S	Trace DNAPL (coating on tubes)	Trace	Trace DNAPL (on tubing)	Trace DNAPL	Trace DNAPL (on tubing)			
SHMW-06I	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-07S/07SR	NR	None Observed	NR	NR	Trace	NR	NR	Trace DNAPL (on side of tubing approx 1' off bottom)
SHMW-07I/07IR	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-08S	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed
SHMW-08I	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-09S	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed
SHMW-09I	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-10S	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed
SHMW-10I	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-11S	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed
SHMW-11I	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-12S	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed
SHMW-12I	NR	None Observed	NR	NR	None Observed	NR	NR	NR
SHMW-13S	NR	None Observed	NR	NR	None Observed	None Observed	None Observed	None Observed
SHMW-13I	NR	None Observed	NR	NR	None Observed	NR	NR	NR

Table 2  
 Summary of Historical NAPL Observations  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

<b>Well ID</b>	<b>Dec/Q4 2008 Observations</b>	<b>Mar/Q1 2009 Observations</b>	<b>Jun/Q2 2009 Observations</b>	<b>Sep/Q3 2009 Observations</b>	<b>Dec/Q4 2009 Observations</b>	<b>Mar/Q1 2010 Observations</b>	<b>Jun/Q2 2010 Observations</b>	<b>Sep/Q3 2010 Observations</b>
MW-01	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-02	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-03	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-04	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-05	Well Destroyed							
MW-06	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-01S/01SR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-01I/01IR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-01D	NI							
SHMW-02S	NI							
SHMW-02I/02IR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-02D/02DR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-03S	None Observed							
SHMW-03I	None Observed	NR	None Observed	NR	None Observed	None Observed	None Observed	None Observed
SHMW-04S/04SR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-04I	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-05S/05SR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-05I/05IR	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned

Table 2  
 Summary of Historical NAPL Observations  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

Well ID	Dec/Q4 2008 Observations	Mar/Q1 2009 Observations	Jun/Q2 2009 Observations	Sep/Q3 2009 Observations	Dec/Q4 2009 Observations	Mar/Q1 2010 Observations	Jun/Q2 2010 Observations	Sep/Q3 2010 Observations
SHMW-06S	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-06I	Well Inaccessible or Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-07S/07SR	Well Inaccessible or Abandoned	Well Inaccessible	None Observed	Trace DNAPL (on side of tubing)	None Observed	None Observed	Well Inaccessible	Well Inaccessible
SHMW-07I/07IR	Well Inaccessible or Abandoned	Well Inaccessible	None Observed	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
SHMW-08S	Well Inaccessible or Abandoned	Well Inaccessible	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-08I	Well Inaccessible or Abandoned	Well Inaccessible	None Observed	NR	None Observed	None Observed	None Observed	None Observed
SHMW-09S	None Observed	Well Inaccessible	None Observed	None Observed	None Observed	Well Inaccessible	None Observed	None Observed
SHMW-09I	NR	NR	NR	NR	None Observed	None Observed	None Observed	None Observed
SHMW-10S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-10I	NR	NR	NR	NR	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
SHMW-11I	NR	NR	NR	NR	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
SHMW-12I	NR	NR	NR	NR	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
SHMW-13I	NR	NR	NR	NR	None Observed	None Observed	None Observed	None Observed

Table 2  
 Summary of Historical NAPL Observations  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

<b>Well ID</b>	<b>Dec/Q4 2010 Observations</b>	<b>Mar/Q1 2011 Observations</b>	<b>Jun/Q2 2011 Observations</b>	<b>Sep/Q3 2011 Observations</b>	<b>Dec/Q4 2011 Observations</b>	<b>Mar/Q1 2012 Observations</b>	<b>June/Q2 2012 Observations</b>
MW-01	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-02	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-03	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-04	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
MW-05	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed	Well Destroyed
MW-06	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-01S/01SR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-01I/01IR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-01D	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-02S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-02I/02IR	None Observed	Well Damaged	Well Damaged	Well Damaged	None Observed	None Observed	None Observed
SHMW-02D/02DR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-03S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-03I	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-04S/04SR	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	None Observed	None Observed	None Observed	None Observed
SHMW-04I	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned	Well Abandoned
SHMW-05S/05SR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-05I/05IR	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 2012

Well ID	Dec/Q4 2010 Observations	Mar/Q1 2011 Observations	Jun/Q2 2011 Observations	Sep/Q3 2011 Observations	Dec/Q4 2011 Observations	Mar/Q1 2012 Observations	June/Q2 2012 Observations
SHMW-06S	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
SHMW-07S/07SR	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	Trace LNAPL - DNAPL observed on tubing	None Observed	None Observed	None Observed	None Observed
SHMW-07I/07IR	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-08S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-08I	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-09S	No access	No access	No access	No access	No access	No access	No access
SHMW-09I	No access	No access	No access	No access	No access	No access	No access
SHMW-10S	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed
SHMW-10I	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
SHMW-11I	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
SHMW-12I	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
SHMW-13I	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed	None Observed

**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 2012

					Duplicate of:						Duplicate of:				
	Location Name	SHMW-01SR	SHMW-02S	SHMW-03S	SHMW-03S	SHMW-04SR	SHMW-05SR	SHMW-07SR	SHMW-08S	SHMW-10S	SHMW-11S	SHMW-11S	SHMW-12S	SHMW-13S	
Analyte	Sample Date	6/20/2012	6/20/2012	6/19/2012	6/19/2012	6/20/2012	6/19/2012	6/19/2012	6/19/2012	6/20/2012	6/20/2012	6/20/2012	6/19/2012	6/19/2012	
<b>BTEX (ug/L)</b>															
Benzene	1	1 U	1 U	1	1	360 D	16	260	5	1 U	1 U	1 U	360 D	1 U	
Toluene	5	1 U	1 U	1 U	1 U	19	1 U	10	1 U	1 U	1 U	1 U	2	1 U	
Ethylbenzene	5	1 U	1 U	1 U	1 U	180	6	240	1 U	1 U	1 U	1 U	14	1 U	
Total Xylene	5	1 U	1 U	1 U	1 U	150	7	160	2	1 U	1 U	1 U	58	1 U	
Total BTEX	NE	ND	ND	1	1	709	29	670	7	ND	ND	ND	434	ND	
<b>Other VOCs (ug/L)</b>															
Methyl tert-butyl ether	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	4 J	10 U	10 U	10 U	1 J	10 U	
Total VOCs	NE	ND	ND	1	1	709	29	670	11	ND	ND	ND	435	ND	
<b>Non-carcinogenic PAHs (ug/L)</b>															
Acenaphthene	20*	10 U	10 U	6 J	7 J	210 D	28 J	26	19	10 U	10 U	10 U	1 J	5 J	10 U
Acenaphthylene	NE	10 U	10 U	10 U	10 U	4 J	10 U	1 J	10 U	10 U	10 U	10 U	10 U	10 U	
Anthracene	50*	1 J	10 U	10 U	10 U	11	10 U	4 J	3 J	10 U	10 U	10 U	10 U	10 U	
Benzo[g,h,i]perylene	NE	2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Fluoranthene	50*	2 J	10 U	10 U	10 U	6 J	10 U	4 J	3 J	10 U	10 U	10 U	10 U	10 U	
Fluorene	50*	10 U	10 U	2 J	2 J	45	7 J	9 J	10	10 U	10 U	10 U	10 U	10 U	
2-Methylnaphthalene	NE	10 U	10 U	10 U	10 U	220 D	10	34	2 J	10 U	10 U	10 U	6 J	10 U	
Naphthalene	10*	10 U	10 U	10 U	1 J	730 D	170	340	50	10 U	10 U	10 U	350 D	10 U	
Phenanthrene	50*	10 U	10 U	2 J	2 J	63	4 J	20	21	10 U	10 U	10 U	10 U	10 U	
Pyrene	50*	2 J	10 U	10 U	10 U	7 J	10 U	6 J	3 J	3 J	10 U	10 U	10 U	10 U	
<b>Carcinogenic PAHs (ug/L)</b>															
Benz[a]anthracene	0.002*	2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Benzo[a]pyrene	ND	2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Benzo[b]fluoranthene	0.002*	2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Benzo[k]fluoranthene	0.002*	2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Chrysene	0.002*	2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Dibenz[a,h]anthracene	NE	2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Indeno[1,2,3-cd]pyrene	0.002*	2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
<b>Total PAHs (ug/L)</b>															
Total PAHs	NE	21	ND	10	12	1296	219	444	111	3	ND	1	361	ND	

**Notes:**

ug/L - micrograms per liter or parts per billion (ppb)

BTEX - benzene, toluene, ethylbenzene, and xylenes

VOCs - volatile organic compounds

PAHs - polycyclic aromatic hydrocarbons

Total BTEX, Total VOCs, and Total PAHs are calculated using detects only.

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

NE - not established

ND - not detected; total concentration is listed as ND because no compounds were detected in the group

Bolding indicates a detected concentration

Gray shading indicates that the detected result value exceeds NYS AWQS

**Data Qualifiers:**

D - Results for dilution

J - estimated value

U - indicates not detected to the reporting limit

Table 4  
 Summary of Historical BTEX Results  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

Well No.	Screen Interval (feet)	BTEX Concentrations (µg/L)																					
		Sampling Date																					
		1995			2000			2002		2004			2005				2006				2007		
		Nov	Mar	Apr	May	May	Aug	Mar/Apr	June	Sept	Dec	March	June	Sept	Dec	March	June	Sept	Dec	March	June	Sept	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 BTEX Results  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

Well No.	Screen Interval (feet)	BTEX Concentrations ( $\mu\text{g/L}$ )																		Min	Max	Mean				
		Sampling Date						2008						2009												
		March	June	Sep	Dec	March	June	Sept	Dec	March	June	Sept	Dec	March	June	Sept	Dec	March	June							
MW-01	1.50 - 7.32	337	141	208	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2,720	236				
MW-02	0.50 - 7.25	8,865	7,415	2,240	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	98	15,181	9,129				
MW-03	2.17 - 10.17	2,842	2,241	2,875	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	560	4,965	2,416				
MW-04	1.25 - 6.81	--	15	79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	864	149				
MW-05	2.46 - 7.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5	18,900	5,689					
MW-06	2.47 - 7.47	1	33	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	334	50				
SHMW-01S/01SR	1.0 - 6.0	1,595	306	243	--	--	--	--	--	--	--	--	--	0	1	0	0	3	0	0	0	5,183	1,265			
SHMW-01I/01IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	3	--	--	0	5	1			
SHMW-01D	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	3	--	--	0	3	2			
SHMW-02S	1.0 - 6.0	--	--	--	--	--	--	--	--	--	--	--	--	3	0	3	0	5	1	0	0	5	2			
SHMW-02I/02IR	35.0 - 45.0	18	41	29	--	--	--	--	--	--	--	--	--	4	0	--	--	14	--	--	0	1,179	69			
SHMW-02D/02DR	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	0	5	1			
SHMW-03S	2.0 - 12.0	3	0	5	13	111	24	4	9	40	5	0	9	24	2	3	18	0	1	0	131	38				
SHMW-03I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	0	--	--	--	0	--	--	0	--	0	52	5			
SHMW-04S/04SR	2.0 - 12.0	7,567	8,059	7,561	--	--	--	--	--	--	--	--	--	2,717	702	469	292	572	391	709	292	25,860	9,131			
SHMW-04I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	5	1				
SHMW-05S/05SR	2.0 - 12.0	77	83	64	--	--	--	--	--	--	--	--	--	20	22	25	27	45	25	29	20	2,960	226			
SHMW-05I/05IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	0	0	0			
SHMW-06S	2.0 - 6.0	1,296	1,343	1,298	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,296	4,289	2,214				
SHMW-06I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	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	185	3,946	1,514				
SHMW-07I/07IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	11	--	--	0	11	1				
SHMW-08S	1.0 - 7.0	8	9	10	--	--	5	5	4	6	13	4	9	7	10	5	9	5	7	0	19	7				
SHMW-08I	35.0 - 45.0	--	--	--	--	--	0	--	0	--	--	--	0	--	--	--	5	--	--	0	5	1				
SHMW-09S	2.0 - 12.0	1,039	1,298	671	483	--	584	455	224	--	--	--	--	--	--	--	--	--	--	178	1,298	734				
SHMW-09I	35.0 - 45.0	--	--	--	0	--	0	--	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	0	0	1				
SHMW-10I	35.5 - 45.5	--	--	--	0	--	0	--	0	--	--	--	0	--	--	--	5	--	--	0	5	1				
SHMW-11S	3.5 - 13.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0				
SHMW-11I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	--	0	--	--	--	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	0	930	252				
SHMW-12I	35.0 - 45.0	--	--	--	0	--	--	--	2	--	--	--	0	--	--	--	6	--	--	0	23	3				
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	12	0	0	12				
SHMW-13I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	--	0	--	--	--	0	--	--	0	0	0				

**NOTES:**

-- not analyzed or not applicable

$\mu\text{g/L}$  - micrograms per liter

BTEX - benzene, toluene, ethylbenzene, and xylene

Table 5  
 Summary of Historical Total PAH Results  
 Sag Harbor Former MGP Site  
 Groundwater Monitoring Program - Q2 2012

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	June	Sept	Dec	March	June	Sept	Dec	March	June	Sept	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 Historical Total PAH Results  
Sag Harbor Former MGP Site  
Groundwater Monitoring Program - Q2 2012

Well No.	Screen Interval (feet)	Total PAH Concentrations ( $\mu\text{g/L}$ )																		Min	Max	Mean			
		Sampling Date								2010								2011		2012					
		2008				2009				2010				2011			2012								
		March	June	Sep	Dec	March	June	Sept	Dec	March	June	Sept	Dec	March	June	Sept	Dec	March	June						
MW-01	1.50 - 7.32	145	2	35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4,906	380			
MW-02	0.50 - 7.25	400	3,455	3,488	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	25,167	6,235			
MW-03	2.17 - 10.17	508	96	1,109	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	92	7,034	2,352			
MW-04	1.25 - 6.81	--	0	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3,612	304			
MW-05	2.46 - 7.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	101	431,600	80,149			
MW-06	2.47 - 7.47	0	0	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	5,416	420			
SHMW-01S/01SR	1.0 - 6.0	0	0	0	--	--	--	--	--	--	--	--	0	0	0	0	4	7	21	0	4,147	1,004			
SHMW-01I/01IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	0	32	5			
SHMW-01D	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	0	0	0			
SHMW-02S	1.0 - 6.0	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	5	0	0	5	1			
SHMW-02I/02IR	35.0 - 45.0	8	42	209	--	--	--	--	--	--	--	--	9	3	--	--	0	--	--	0	580,200	26,450			
SHMW-02D/02DR	65.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	0	308	61			
SHMW-03S	2.0 - 12.0	0	0	17	29	0	20	0	0	0	22	0	0	2	7	25	22	6	10	0	430	79			
SHMW-03I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	--	0	--	--	--	0	--	--	0	320	29			
SHMW-04S/04SR	2.0 - 12.0	0	1,328	1,868	--	--	--	--	--	--	--	--	3,598	1,440	978	811	942	581	1,296	0	6,669	3,256			
SHMW-04I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--	--	--	--	0	18	3			
SHMW-05S/05SR	2.0 - 12.0	2	0	31	--	--	--	--	--	--	--	--	0	4	167	273	131	309	219	0	309	73			
SHMW-05I/05IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	0	17	2			
SHMW-06S	2.0 - 6.0	0	44	5,848	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	5,848	2,690			
SHMW-06I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	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	0	7,211	2,866			
SHMW-07I/07IR	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	4	--	--	0	2,212	277			
SHMW-08S	1.0 - 7.0	14	21	55	--	--	59	60	112	129	201	34	3	11	185	195	35	152	111	3	201	75			
SHMW-08I	35.0 - 45.0	--	--	--	--	--	1	--	0	--	--	0	--	--	--	--	0	--	--	0	13	1			
SHMW-09S	2.0 - 12.0	0	92	485	503	--	68	39	389	--	--	--	--	--	--	--	--	--	--	0	2,737	1,035			
SHMW-09I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--	--	--	--	0	3	0			
SHMW-10S	5.0 - 15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	22			
SHMW-10I	35.5 - 45.5	--	--	--	0	--	0	--	0	--	--	--	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	0	2	4	6	0	0	173			
SHMW-11I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	0	--	--	--	--	0	--	--	0	4	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	0	739	240			
SHMW-12I	35.0 - 45.0	--	--	--	0	--	--	0	--	--	--	0	--	--	--	--	2	--	--	0	20	2			
SHMW-13S	1.5 - 6.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	2	0	0	3			
SHMW-13I	35.0 - 45.0	--	--	--	0	--	0	--	0	--	--	0	--	--	--	--	1	--	--	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) 2012  
SAG HARBOR FORMER MGP SITE  
NATIONAL GRID  
AUGUST 2012  
[WWW.SAGHARBORMGPSITE.COM](http://WWW.SAGHARBORMGPSITE.COM)

## Figures

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SAG HARBOR FORMER MGP SITE  
SAG HARBOR, NEW YORK



SITE LOCATION MAP

nationalgrid

Project 093190-2-1203

August 2012

Figure 1

