From:	"Brien, Jason" <jason.brien@arcadis-us.com></jason.brien@arcadis-us.com>
To:	jtspellm@gw.dec.state.ny.us
CC:	jjruspantini@nyseg.com
Date:	6/17/2013 2:07 PM
Subject:	NYSEG Clark St Semi-Annual NAPL
Attachments:	1011311022_Memo_Semi-annual NAPL monitoring_FINAL.pdf

John,

Please see the attached semi-annual NAPL monitoring summary memorandum for the NAPL monitoring that was conducted in December 2012 at the NYSEG Clark St. site.

The next round of semi-annual monitoring is currently due and NYSEG is proposing to complete the monitoring event on June 27, 2013. The monitoring will be conducted in accordance with ARCADIS June 13, 2012 letter work plan with the modified list of monitoring wells as proposed in NYSEG's August 15, 2012 summary memorandum and approved by NYSDEC in their September 6, 2012 letter. Please confirm that this date is acceptable to the NYSDEC. Thanks.

Jason

Jason Brien | Principal Engineer | jason.brien@arcadis-us.com<mailto:jason.brien@arcadis-us.com>

ARCADIS U.S., Inc. | 6723 Towpath Road | Syracuse, NY, 13214-0066 T: 315.671.9114 | M: 315.263.5898 | F: 315. 671.9114 Connect with us! www.arcadis-us.com<http://www.arcadis-us.com/> | LinkedIn<http://www.linkedin.com/company/2906179?trk=tyah> | Twitter<http://www.twitter.com/arcadis_us> | Facebook<http://www.facebook.com/ArcadisUS>

Professional Affiliate / ARCADIS of New York, Inc. ENV Professional Registration / P.E.- NY, 084067-1

ARCADIS, Imagine the result

Please consider the environment before printing this email. [arc_125_small]

NOTICE: This e-mail and any files transmitted with it are the property of ARCADIS U.S., Inc. and its affiliates. All rights, including without limitation copyright, are reserved. The proprietary information contained in this e-mail message, and any files transmitted with it, is intended for the use of the recipient(s) named above. If the reader of this e-mail is not the intended recipient, you are hereby notified that you have received this e-mail in error and that any review, distribution or copying of this e-mail or any files transmitted with it is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately and delete the original message and any files transmitted. The unauthorized use of this e-mail or any files transmitted with it is prohibited and disclaimed by ARCADIS U.S., Inc. and its affiliates. Nothing herein is intended to constitute the offering or performance of services where otherwise restricted by law.



MEMO

To: John Spellman, P.E. NYSDEC Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233-7017 ^{Copies:} John Ruspantini, NYSEG David Cornell, ARCADIS

From: Jason Brien, P.E.

Date: June 17, 2013 ARCADIS Project No.: B00013091 #5

Subject: NYSEG Clark Street Former MGP Site December 2012 Semi-Annual NAPL Monitoring

On behalf of NYSEG, this memorandum summarizes the results of the second semi-annual non-aqueous phase liquid (NAPL) monitoring event conducted at the Clark Street Former Manufactured Gas Plant (MGP) Site (the site) located in Auburn, New York (Site No. 7-06-008).

A year-long monthly NAPL monitoring program was conducted at the site from January 2010 to May 2011 in general accordance with the New York State Department of Environmental Conservation (NYSDEC) Record of Decision (ROD) (NYSDEC, 2009) and the NYSDEC-approved February 2012 *Remedial Design Work Plan* (RDWP) (ARCADIS, 2010). The objective of the NAPL monitoring program was to gather data related to the presence and location of NAPL collecting in existing site bedrock monitoring wells. Detailed results of the year-long NAPL monitoring program were presented to NYSDEC in a January 25, 2012 Monthly NAPL Monitoring Program – Annual Report. Upon receipt of the annual report, NYSDEC requested (via a February 24, 2012 email to NYSEG) that NAPL monitoring continue at the site until remedial construction commences (anticipated late 2013).

As indicated in a June 13, 2012 Additional NAPL Monitoring Activities letter work plan to NYSDEC, additional NAPL monitoring activities will be conducted on a semi-annual basis until upland remedial construction activities begin. The second semi-annual NAPL monitoring event was conducted in December 2012. NAPL monitoring activities and results are summarized in the following subsection.

ARCADIS of New York, Inc. 6723 Towpath Road P O Box 66 Syracuse New York 13214-0066 Tel 315 446 9120 Fax 315 449 0017

ARCADIS

NAPL Monitoring Activities and Results

Semi-annual NAPL monitoring activities were conducted on December 28, 2012. Per NYSEG's August 15, 2012 Semi-Annual NAPL Monitoring memorandum and NYSDEC's September 6, 2012 response letter, the number of wells monitored during the semi-annual NAPL gauging events was limited to those wells where NAPL has been visually observed since January 2010 (i.e., monitoring wells MW-03B, MW-04B, MW-04D, MW-05B, MW-06B, MW-07B, and MW-11D). The results of the NAPL monitoring activities are provided in the attached Table 1. Additionally, monitoring well locations where NAPL was observed are presented in Figure 1. As summarized in the table below, visual evidence of NAPL was observed in seven monitoring wells. NAPL was unable to be recovered from the monitoring wells due to the small quantities encountered.

Monitoring Well	December 2012 Observations
MW-03B	0.15 ft of NAPL
MW-04B	0.05 ft of NAPL
MW-04D	0.20 ft of NAPL
MW-05B	Trace NAPL blebs
MW-06B	0.20 ft of NAPL
MW-07B	0.12 ft of NAPL
MW-11D	0.20 ft of NAPL

Disposable sampling equipment was containerized in labeled, DOT-certified 55-gallon drums that are stored in a secured drum locker at the site.

Path Forward

NYSEG will continue to monitor these wells on a semi-annual basis until remedial actions commence at the site. The next semi-annual monitoring event is scheduled for June 2013.

			Depth to	Approximate NAPL Thickness	Approximate NAPL Volume Removed
Well ID/Date	Depth to Water	Depth to NAPL	Bottom	(ft)	(gal)
MW-01B					
6/11/2010	10.70		32.68		0.0
7/7/2010	11.53		32.69		0.0
8/3/2010	11.97		32.69		0.0
9/22/2010	12.27		32.68		0.0
10/28/2010	10.11		32.68		0.0
12/13/2010	9.82		32.70		0.0
12/28/2010	9.99		32.70		0.0
1/31/2011	10.42		32.70		0.0
3/2/2011	9.28		32.69		0.0
4/1/2011	10.37		32.69		0.0
4/28/2011	8.03		32.70		0.0
5/25/2011	10.85		32.70		0.0
6/28/2012	11.47		32.68		0.0
12/28/2012	10.40		32.68		0.0
		Approx	imate Volume F	Removed from MW-01B	0.0
MW-01D		11			
6/11/2010	12.91		81.85		0.0
7/7/2010	13.86		81.85		0.0
8/3/2010	14.45		81.62		0.0
9/22/2010	15.22		81.50		0.0
10/28/2010	12.25		81.41		0.0
12/13/2010	11.75		81.85		0.0
12/28/2010	12.01		81.85		0.0
1/31/2011					
3/2/2011	12.63 11.17		81.80 81.80		0.0
					0.0
4/1/2011	12.44		81.80		0.0
4/28/2011	9.61		81.79		0.0
5/25/2011	12.70		81.79		0.0
6/28/2012	12.69		81.56		0.0
12/28/2012	12.25		81.65		0.0
		Approx	mate Volume F	Removed from MW-01D	0.0
MW-02B		1			
6/11/2010	7.35		31.15		0.0
7/7/2010	7.86		31.16		0.0
8/3/2010	8.29		31.17		0.0
9/22/2010	8.14		31.12		0.0
10/28/2010	6.76		31.17		0.0
12/13/2010	6.59		31.16		0.0
12/28/2010	6.98		31.17		0.0
1/31/2011	7.79		31.17		0.0
3/2/2011	6.28		31.16		0.0
4/1/2011	6.61		31.16		0.0
4/28/2011	4.85		31.17		0.0
5/25/2011	6.72		31.17		0.0
6/28/2012	8.07		31.16		0.0
12/28/2012	6.72		31.16		0.0
		Approx	imate Volume F	Removed from MW-02B	0.0
MW-02D					
6/11/2010	7.45		72.43		0.0
7/7/2010	8.09		72.63		0.0
8/3/2010	8.47		72.27		0.0
9/22/2010	8.65		72.60		0.0
10/28/2010	7.01		72.61		0.0
12/13/2010	6.87		72.46		0.0
12/28/2010	6.99		72.46		0.0
1/31/2011	8.70		72.46		0.0
3/2/2011	6.44		72.60		0.0
4/1/2011	7.04		72.60		0.0
	4.60		72.60		
4/28/2011					0.0
5/25/2011	7.45		72.60		0.0
6/28/2012	8.38		72.46		0.0
12/28/2012	7.01		72.46		0.0
		Approx	imate volume F	Removed from MW-02D	0.0

Table 1 NAPL Collection Well Placement Study - NAPL Monitoring Summary

			Depth to	Approximate NAPL Thickness	Approximate NAP Volume Removed
Well ID/Date	Depth to Water	Depth to NAPL	Bottom	(ft)	(gal)
MW-03B	1	1 1			
6/11/2010		30.51	31.11	0.60	0.4
7/7/2010	7.24	30.86	31.11	0.25	0.2
8/3/2010	7.62	30.34	31.09	0.75	0.5
9/22/2010	7.70	30.72	31.12	0.40	0.15
10/28/2010	6.25	31.00	31.20	0.20	0.0
12/13/2010			31.07	trace blebs	0.0
12/28/2010			31.05	trace blebs	0.0
1/31/2011			31.08	trace blebs	0.0
3/2/2011		31.03	31.13	0.10	0.0
4/1/2011		31.02	31.12	0.10	0.0
4/28/2011	4.31	30.94	31.09	0.15	0.0
5/25/2011	8.27	30.94	31.09	0.15	0.02
6/28/2012				trace blebs	0.0
12/28/2012	5.49	30.92	31.07	0.15	0.0
12/20/2012	5.49			Removed from MW-03B	0.0
		Approxi	mate volume r	kemoved from www-03B	1.2
MW-04B	=	00.05		0.07	
6/11/2010	7.09	29.25	29.30	0.05	0.0
7/7/2010	5.67		29.36	trace blebs	0.0
8/3/2010	7.90		29.30	trace blebs	0.0
9/22/2010	8.05		29.28	trace blebs	0.0
10/28/2010	6.43		29.31	trace blebs	0.0
12/13/2010	6.30		29.40	trace blebs	0.0
12/28/2010	7.01		29.41	trace blebs	0.0
1/31/2011	7.69		29.41	trace blebs	0.0
3/2/2011	6.03	29.33	29.38	0.05	0.0
4/1/2011	6.73	29.33	29.38	0.05	0.0
4/28/2011	4.52	29.37	29.42	0.05	0.0
5/25/2011	6.13	23.51	29.42	0.00	0.0
6/28/2012	7.95		29.36	trace blebs	0.0
12/28/2012	6.62		29.36		
12/20/2012	0.02	29.31		0.05	0.0
		Approxi	nate volume r	Removed from MW-04B	0
MW-04D	0.40			0.70	<u> </u>
6/11/2010	8.43	77.54	78.24	0.70	0.1
7/7/2010	9.49		78.64	trace blebs	0.0
8/3/2010	9.30		78.24	trace blebs	0.0
9/22/2010	9.55		78.24	trace blebs	0.0
10/28/2010	7.47		78.27	trace blebs	0.0
12/13/2010	7.48	77.64	78.24	0.60	0.2
12/28/2010	7.48	78.16	78.26	0.10	0.0
1/31/2011	9.93	78.14	78.64	0.50	0.25
3/2/2011	7.36	78.04	78.64	0.60	0.1
4/1/2011	8.21	78.44	78.64	0.20	0.0
4/28/2011	5.41	78.04	78.24	0.20	0.0
5/25/2011	7.22	78.04	78.24	0.20	0.05
6/28/2012	8.97		78.24	trace NAPL	0.03
			78.24		
12/28/2012	7.48	78.04		0.2	0.0
		Approxi	mate volume r	Removed from MW-04D	0.7
MW-05B					
6/11/2010	5.10	28.18	28.28	0.10	0.0
7/7/2010	5.84		28.50	trace blebs	0.0
8/3/2010	6.21	28.00	28.50	0.50	0.3
9/22/2010	6.24	28.20	28.50	0.30	0.0
10/28/2010	4.53	28.00	28.50	0.50	0.3
12/13/2010	4.31		28.50	trace blebs	0.0
12/28/2010	4.61		28.51	trace blebs	0.0
1/31/2011	5.11		28.51	trace blebs	0.0
3/2/2011	4.00		28.50	trace blebs	0.0
4/1/2011	4.81		28.50	trace blebs	0.0
4/28/2011	2.54		28.50	trace blebs	0.0
5/25/2011	5.30		28.50	trace blebs	0.0
6/28/2012	6.25		28.50	trace blebs	0.0
12/28/2012	4.91		28.50	trace blebs	0.0
12/20/2012				Removed from MW-05B	0.6

	_		Depth to	Approximate NAPL Thickness	Approximate NAPL Volume Removed
Well ID/Date	Depth to Water	Depth to NAPL	Bottom	(ft)	(gal)
MW-06B	1			1	1
6/11/2010	7.89		27.61		0.0
7/7/2010	5.40		27.71		0.0
8/3/2010	7.17	27.63	27.73	0.10	0.0
9/22/2010	7.25		27.80		0.0
10/28/2010	7.04	27.68	27.78	0.10	0.0
12/13/2010		27.55	27.75	0.20	0.5
12/28/2010		27.62	27.72	0.10	0.0
1/31/2011		27.62	27.72	0.10	0.0
3/2/2011		27.38	27.69	0.31	0.0
4/1/2011	7.05	27.49	27.69	0.20	0.0
4/28/2011	4.96	27.60	27.80	0.20	0.0
5/25/2011	7.70	27.60	27.80	0.20	0.05
6/28/2012	6.34	29.68	29.83	0.15	0.0
12/28/2012	5.02	25.73	25.93	0.2	0.0
		Approxi	mate Volume I	Removed from MW-06B	0.5
MW-07B					
6/11/2010	6.26	28.82	28.92	0.10	0.0
7/7/2010	8.73	29.00	29.10	0.10	0.0
8/3/2010	9.04	29.00	29.10	0.10	0.0
9/22/2010	7.05	29.01	29.11	0.10	0.0
10/28/2010	5.60		29.11	trace blebs	0.0
12/13/2010	5.59		28.94	trace blebs	0.0
12/28/2010	5.81		28.94	trace blebs	0.0
1/31/2011	6.91	29.01	29.11	0.10	0.0
3/2/2011	5.19	20.02	20.12	0.10	0.0
4/1/2011	5.66				
		28.97	29.12	0.15	0.0
4/28/2011	3.81	28.99	29.11	0.12	0.0
5/25/2011	5.85	28.91	29.11	0.20	0.05
6/28/2012	6.94		29.10	trace blebs	0.0
12/28/2012	5.66	28.98	29.10	0.12	0.0
		Approxi	mate Volume F	Removed from MW-07B	0.03
MW-08D	1	и – – – – – – – – – – – – – – – – – – –		1	1
6/11/2010	5.99		65.34		0.0
7/7/2010	6.51		65.35		0.0
8/3/2010	6.79		65.30		0.0
9/22/2010	0.07		65.35		0.0
10/28/2010	5.31		65.35		0.0
12/13/2010	5.24		65.34		0.0
12/28/2010	5.58		65.34		0.0
1/31/2011	6.10		65.34		0.0
3/2/2011	4.37		65.37		0.0
4/1/2011	5.36		65.37		0.0
4/28/2011	2.88		65.38		0.0
5/25/2011	5.78		65.38		0.0
6/28/2012	6.42		65.36		0.0
12/28/2012	5.19		65.36		0.0
		Approxii	mate Volume I	Removed from MW-08B	0.0
MW-08S					
6/11/2010	6.35		6.75		0.0
7/7/2010	Dry		6.76		0.0
8/3/2010	Dry		6.75		0.0
10/28/2010	5.72		6.76		0.0
12/13/2010	5.72		6.78		0.0
12/28/2010	6.01		6.78		0.0
1/31/2011	6.76		6.78		0.0
3/2/2011	5.24		6.79		0.0
4/1/2011	6.09		6.80		0.0
4/28/2011	4.51		6.78		0.0
5/25/2011	6.70		6.78		0.0
6/28/2012	Dry		6.78		0.0
01=01=0.1=					
12/28/2012	Dry		6.78	 Removed from MW-08S	0.0

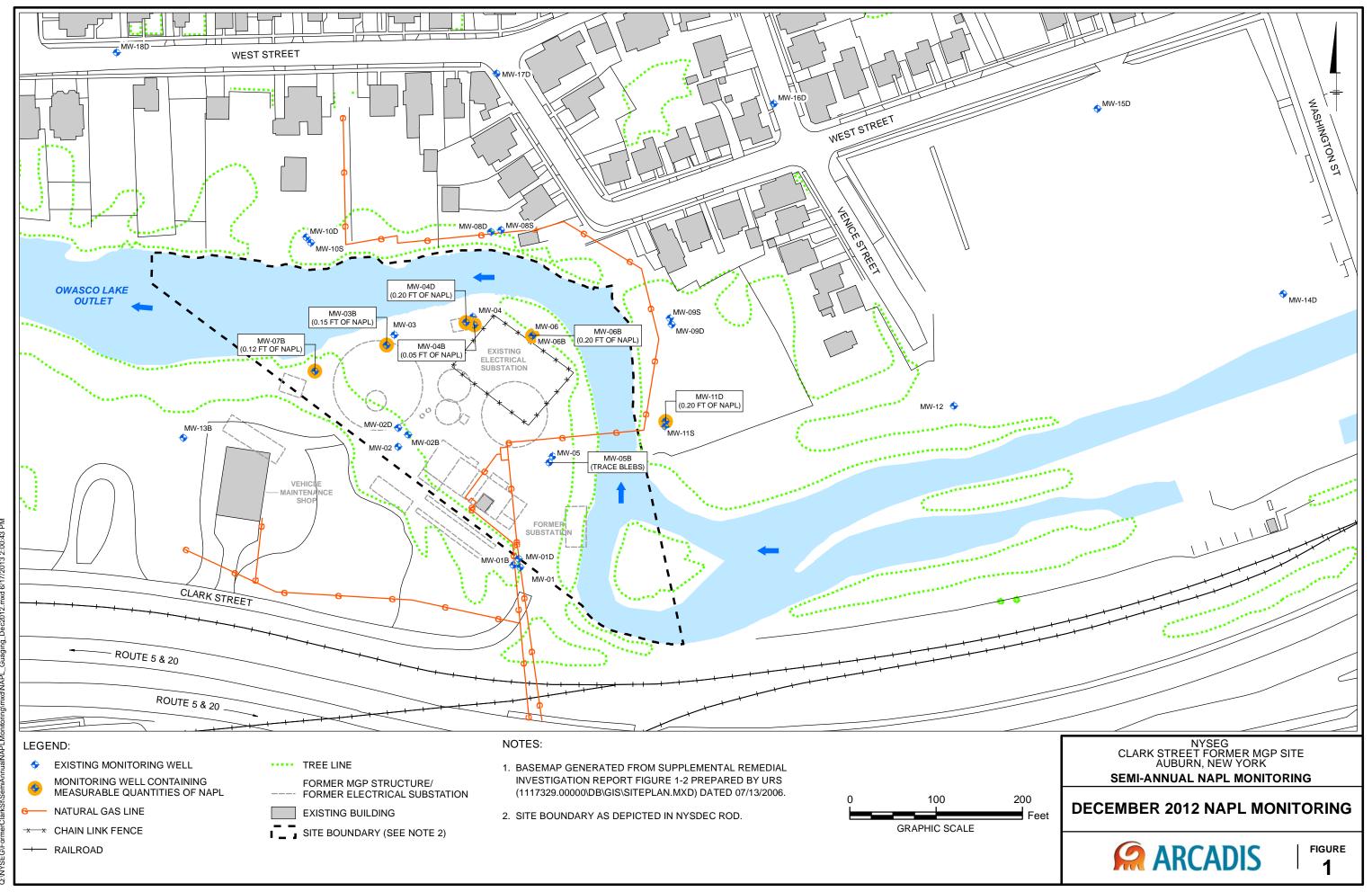
			Depth to	Approximate NAPL Thickness	Approximate NAPI Volume Removed
Well ID/Date	Depth to Water	Depth to NAPL	Bottom	(ft)	(gal)
MW-09D					
6/11/2010	5.91		39.81		0.0
7/7/2010	6.90		39.81		0.0
8/3/2010	6.86		39.80		0.0
9/22/2010	7.09		39.80		0.0
10/28/2010	5.18		39.80		0.0
12/13/2010	4.92		39.80		0.0
12/28/2010	5.10		39.81		0.0
1/31/2011	5.86		39.79		0.0
3/2/2011	4.19		39.80		0.0
4/1/2011	5.42		39.80		0.0
4/28/2011	3.07		39.81		0.0
5/25/2011	5.23		39.81		0.0
6/28/2012	6.91		39.80		0.0
12/28/2012	4.89		39.80		0.0
12,20,2012		Approxi		Removed from MW-09D	0.
MW-09S					
6/11/2010	6.45		10.70		0.0
7/7/2010	7.15		10.67		0.0
8/3/2010	7.34		10.65		0.0
10/28/2010	4.80		10.66		0.0
12/13/2010	5.58		10.65		0.0
12/28/2010	6.07		10.66		0.0
1/31/2011	6.81		10.66		0.0
3/2/2011	5.28		10.65		0.0
4/1/2011	6.12		10.66		0.0
4/1/2011	4.88		10.67		0.0
	6.55		10.67		
5/25/2011 6/28/2012	7.85		10.67		0.0
12/28/2012			10.68		
12/20/2012	5.71			Removed from MW-09S	0.0
MW-10D		Арргохі		temoveu nom www-095	0.
6/11/2010	2.95		59.70		0.0
7/7/2010	3.79 4.01		59.71		0.0
8/3/2010	4.01		59.74		0.0
9/22/2010	-		59.74		0.0
10/28/2010	2.80		59.73		0.0
12/13/2010	2.52		59.67		0.0
12/28/2010	2.78		59.67		0.0
1/31/2011	3.14		59.67		0.0
3/2/2011	2.21		59.74		0.0
4/1/2011	3.04		59.73		0.0
4/28/2011	0.78		59.74		0.0
5/25/2011	3.40		59.74		0.0
6/28/2012	3.85		59.72		0.0
12/28/2012	2.61		59.72		0.0
		Approxi	mate Volume F	Removed from MW-10D	0.
MW-10S	-	1		-1	
6/11/2010	2.45		6.25		0.0
7/7/2010	3.12		6.30		0.0
8/3/2010	3.34		6.27		0.0
10/28/2010	2.65		6.31		0.0
12/13/2010	2.80		6.30		0.0
12/28/2010	2.90		6.30		0.0
1/31/2011	2.99		6.30		0.0
3/2/2011	1.68		6.26		0.0
4/1/2011	2.65		6.26		0.0
4/28/2011	1.97		6.27		0.0
5/25/2011	3.17		6.27		0.0
6/28/2012	3.34		6.29		0.0
	2.22		6.29		0.0
12/28/2012	<u>Z.</u> ZZ				0.0

			Depth to	Approximate NAPL Thickness	Approximate NAPL Volume Removed
Well ID/Date	Depth to Water	Depth to NAPL	Bottom	(ft)	(gal)
MW-11D		•		-	
6/11/2010	3.48		39.82	trace blebs	0.0
7/7/2010	4.10	39.71	39.81	0.10	0.0
8/3/2010	4.35		39.81	trace blebs	0.0
9/22/2010	4.50	39.71	39.81	0.10	0.0
10/28/2010	2.78	39.70	39.80	0.10	0.0
12/13/2010	2.65	39.76	39.81	0.05	0.0
12/28/2010	2.71	39.76	39.81	0.05	0.0
1/31/2011	3.44	39.71	39.81	0.10	0.0
3/2/2011	2.32	39.63	39.83	0.20	0.0
4/1/2011	3.14	39.61	39.81	0.20	0.0
4/28/2011	1.01	39.64	39.84	0.20	0.0
5/25/2011	3.78	39.64	39.84	0.20	0.05
6/28/2012	4.54		39.82	trace NAPL	0.0
12/28/2012	3.23	39.62	39.82	0.2	0.0
		Approxi	mate Volume F	Removed from MW-11D	0.05
MW-11S		1			
6/11/2010	3.48		10.50		0.0
7/7/2010	3.92		10.51		0.0
8/3/2010	4.03		10.50		0.0
10/28/2010	2.56		10.51		0.0
12/13/2010	2.50		10.52		0.0
12/28/2010	2.77		10.52		0.0
1/31/2011	3.43		10.52		0.0
3/2/2011	2.30		10.52		0.0
4/1/2011	3.03		10.52		0.0
4/28/2011		. Unable to access			0.0
5/25/2011	3.34		10.52		0.0
6/28/2012	4.05		10.50		0.0
12/28/2012	2.93		10.52	 Domoved from MIN/ 116	0.0
MW-12D		Арргохі	male volume r	Removed from MW-11S	0.0
6/11/2010	9.42		44.58		0.0
7/7/2010	10.86		44.57		0.0
8/3/2010	11.15				
			44.60		0.0
9/22/2010	11.75		44.56		0.0
10/28/2010	8.68		44.57		0.0
12/13/2010	Could not locate				0.0
12/28/2010	Could not locate				0.0
1/31/2011	Could not locate				0.0
3/2/2011	7.65		44.57		0.0
4/1/2011	9.14		44.56		0.0
4/28/2011	Well under water	. Unable to access			0.0
5/25/2011	10.43		44.56		0.0
6/28/2012	11.45		44.58		0.0
12/28/2012	9.00		44.58		0.0
		Approxi	mate Volume F	Removed from MW-12D	0.0
MW-13B					
6/11/2010	24.69		44.60		0.0
7/7/2010	25.01		44.55		0.0
8/3/2010	25.36		44.55		0.0
9/22/2010	25.34		44.55		0.0
10/28/2010	24.09		44.58		0.0
12/13/2010	23.98		44.55		0.0
12/28/2010	24.00		44.57		0.0
12/20/2010	25.11		44.57		0.0
1/31/2011			44.57		0.0
	24.10				0.0
1/31/2011	24.10 24.72		44.57		0.0
1/31/2011 3/2/2011 4/1/2011 4/28/2011	24.72 21.99		44.58		0.0
1/31/2011 3/2/2011 4/1/2011 4/28/2011 5/25/2011	24.72 21.99 24.06		44.58 44.58		0.0 0.0
1/31/2011 3/2/2011 4/1/2011 4/28/2011 5/25/2011 6/28/2012	24.72 21.99 24.06 25.27		44.58 44.58 44.54		0.0 0.0 0.0
1/31/2011 3/2/2011 4/1/2011 4/28/2011 5/25/2011	24.72 21.99 24.06	 	44.58 44.58 44.54 44.54		0.0 0.0

			Depth to	Approximate NAPL Thickness	Approximate NAPL Volume Removed
Well ID/Date	Depth to Water	Depth to NAPL	Bottom	(ft)	(gal)
MW-14D					
6/11/2010	22.76		63.10		0.0
7/7/2010	24.63		63.10		0.0
8/3/2010	30.75		63.08		0.0
9/22/2010	34.78		63.08		0.0
10/28/2010	20.57		63.08		0.0
12/13/2010	18.85		63.08		0.0
12/28/2010	19.10		63.10		0.0
1/31/2011	19.79		63.10		0.0
3/2/2011	18.03		63.08		0.0
4/1/2011	22.75		63.08		0.0
4/28/2011	14.26		63.14		0.0
5/25/2011	28.71		63.12		0.0
6/28/2012	31.60		63.10		0.0
12/28/2012	23.29		63.10		0.0
		Approxi	imate Volume R	emoved from MW-14D	0.0
MW-15D					
6/11/2010	Covered with asp	halt debris pile			0.0
7/7/2010	Covered with asp	halt debris pile			0.0
8/3/2010	Covered with asp				0.0
9/22/2010	16.47		61.71		0.0
10/28/2010	Unable to locate				0.0
12/13/2010	Buried with debri	s			0.0
12/28/2010	Buried with debri	-			0.0
1/31/2011	Covered with asp				0.0
3/2/2011	Covered with asp				0.0
4/1/2011	Buried with debri				0.0
4/28/2011	Buried with debri				0.0
5/25/2011	Buried with debri				0.0
6/28/2012	Buried with debri				
12/28/2012		5			0.0
12/26/2012	Destroyed	Ammroya		 Removed from MW-15D	0.0
MW 16D		Арргохі			0.0
MW-16D 6/11/2010	9.45		64.37		0.0
7/7/2010	10.31		64.40		0.0
8/3/2010	10.62		64.35		0.0
9/22/2010	11.19		64.34		0.0
10/28/2010	8.80		64.34		
					0.0
12/13/2010	Car parked over	1			0.0
12/28/2010	10.02		64.34		0.0
1/31/2011	10.17		64.34		0.0
3/2/2011	9.76		64.34		0.0
4/1/2011	9.83		64.34		0.0
4/28/2011	Car parked over	well			0.0
5/25/2011	9.99		64.34		0.0
6/28/2012	9.99 10.56		64.34 64.34		0.0
	9.99		64.34 		0.0 0.0
6/28/2012 12/28/2012	9.99 10.56		64.34 	 Pemoved from MW-16D	0.0
6/28/2012 12/28/2012 MW-17D	9.99 10.56 Car/Snow on wel	 Approxi	64.34 imate Volume R	 Removed from MW-16D	0.0 0.0 0.0
6/28/2012 12/28/2012 MW-17D 6/11/2010	9.99 10.56 Car/Snow on wel		64.34 imate Volume R 65.40		0.0 0.0 0.0
6/28/2012 12/28/2012 MW-17D 6/11/2010 7/7/2010	9.99 10.56 Car/Snow on wel 9.31 9.65	 Approxi	64.34 imate Volume R 65.40 65.20	 Removed from MW-16D	0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 MW-17D 6/11/2010 7/7/2010 8/3/2010	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88	 Approxi	64.34 imate Volume R 65.40 65.20 65.20	 emoved from MW-16D	0.0 0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 MW-17D 6/11/2010 7/7/2010 8/3/2010 9/22/2010	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88 10.05	 Approxi	64.34 imate Volume R 65.40 65.20 65.20 65.22	 emoved from MW-16D 	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 MW-17D 6/11/2010 7/7/2010 8/3/2010 9/22/2010 12/13/2010	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88 10.05 8.37	 Approxi	64.34 imate Volume R 65.40 65.20 65.20 65.22 65.20	 emoved from MW-16D	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 MW-17D 6/11/2010 7/7/2010 8/3/2010 9/22/2010	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88 10.05	 Approxi	64.34 imate Volume R 65.40 65.20 65.20 65.22	 Removed from MW-16D 	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 MW-17D 6/11/2010 7/7/2010 8/3/2010 9/22/2010 12/13/2010	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88 10.05 8.37	 Approxi	64.34 imate Volume R 65.40 65.20 65.20 65.22 65.20	 emoved from MW-16D	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 MW-17D 6/11/2010 7/7/2010 8/3/2010 9/22/2010 12/13/2010 12/28/2010	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88 10.05 8.37 8.66	 Approxi	64.34 imate Volume R 65.40 65.20 65.20 65.22 65.20 65.20		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 MW-17D 6/11/2010 7/7/2010 8/3/2010 9/22/2010 12/13/2010 1/31/2011	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88 10.05 8.37 8.66 9.11	 Approxi 	64.34 imate Volume R 65.40 65.20 65.20 65.22 65.20 65.20 65.20 65.20		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 MW-17D 6/11/2010 7/7/2010 8/3/2010 9/22/2010 12/13/2010 12/28/2010 1/31/2011 3/2/2011	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88 10.05 8.37 8.66 9.11 8.15	 Approxi 	64.34 imate Volume R 65.40 65.20 65.22 65.20 65.20 65.20 65.20 65.20 65.20	 emoved from MW-16D	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 6/11/2010 7/7/2010 8/3/2010 9/22/2010 12/13/2010 1/31/2011 3/2/2011 4/1/2011	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88 10.05 8.37 8.66 9.11 8.15 2.92	 Approxi	64.34 imate Volume R 65.40 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.20	 emoved from MW-16D	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 6/11/2010 7/7/2010 8/3/2010 9/22/2010 12/13/2010 12/28/2010 1/31/2011 3/2/2011 4/1/2011 4/28/2011	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88 10.05 8.37 8.66 9.11 8.15 2.92 6.34	 Approxi	64.34 imate Volume R 65.40 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.20	 emoved from MW-16D	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
6/28/2012 12/28/2012 6/11/2010 7/7/2010 8/3/2010 9/22/2010 12/13/2010 12/28/2010 1/31/2011 3/2/2011 4/1/2011 4/28/2011 5/25/2011	9.99 10.56 Car/Snow on wel 9.31 9.65 9.88 10.05 8.37 8.66 9.11 8.15 2.92 6.34 9.32	 Approxi	64.34 imate Volume R 65.40 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.20 65.22 65.22	 emoved from MW-16D	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

Table 1 NAPL Collection Well Placement Study - NAPL Monitoring Summary

Well ID/Date	Depth to Water	Depth to NAPL	Depth to Bottom	Approximate NAPL Thickness (ft)	Approximate NAPL Volume Removed (gal)
MW-18D					
6/11/2010	Obstruction at 13	.3			0.0
7/7/2010	Obstruction at 13	.3			0.0
8/3/2010	Dry		13.30		0.0
10/28/2010	Dry - Well caved	in	13.30		0.0
12/13/2010	Dry - Well caved in		13.30		0.0
12/28/2010	Dry - Well caved in				0.0
1/31/2011	Dry - Well caved in		13.30		0.0
3/2/2011	Dry		13.30		0.0
4/1/2011	Dry		13.30		0.0
4/28/2011	Dry - Well caved in				0.0
5/25/2011	Dry - Well caved in				0.0
6/28/2012	Dry - Well caved in		12.50		0.0
12/28/2012	Dry		13.30		0.0
	·	Approx	imate Volume R	Removed from MW-18B	0.0
		Т	otal Recovered	NAPL volume to date:	3.23



City: SYR Div/Group: SWG Created By: J.RAPP Last Saved By: jrapp NVSEE (B0013091:002:00170) NVSEE (SPC13091:002:00170)