Atlantic Richfield Company

Paul G. Johnson
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September 8, 2016

Mr. Richard Mustico, P.E.
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233-7016

RE: Monthly Progress Report, August 2016
Former Anaconda Plant (a.k.a. Harbor at Hastings Site) Site No. 3-60-022
Hastings-On-Hudson, New York

Dear Mr. Mustico:

Enclosed is the August 2016 Monthly Progress Report for the Former Anaconda Plant (a.k.a. Harbor at Hastings Site), New York State Department of Environmental Conservation (NYSDEC) Site No. 3-60-022, Hastings-on-Hudson, New York. This progress report has been prepared in accordance with Section XI of the AMENDED ORDER ON CONSENT and ADMINISTRATIVE SETTLEMENT between Atlantic Richfield Company and NYSDEC, dated November 6, 2013. The time period covered is August 1, 2016 through August 31, 2016.

If you have any questions or comments on this submittal, please feel free to contact me at 630-420-5992.

Sincerely,

Paul G. Johnson
Operations Project Manager

Enclosure

cc: Maureen Schuck, New York State Department of Health

Jim Lucari, BP
Francis Frobel, Hastings-On-Hudson
Mark Chertok, Hastings-On-Hudson
Karl Coplan, Pace/Riverkeeper
Wayne Hardison, Haley and Aldrich
File

ecc: Jacquelyn Nealon, New York State Department of Health
William Daigle, New York State Department of Environmental Conservation
George Heitzman, New York State Department of Environmental Conservation
Donald Hesler, New York State Department of Environmental Conservation
Benjamin Conlon, Esq. New York State Department of Environmental Conservation, Office of General Counsel

FORMER ANACONDA WIRE AND CABLE PLANT SITE
(a.k.a. HARBOR AT HASTINGS SITE) OU1
NYSDEC SITE 360022
MONTHLY PROGRESS REPORT 134

PREPARED BY: **Atlantic Richfield Company**
Paul Johnson

REPORTING PERIOD: **August 1, 2016 through August 31, 2016**

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1. PROGRESS MADE THIS REPORTING PERIOD:

- DNAPL gauging and recovery was performed on August 1st HARW-1 to HARW-8 and HAOW-12A were gauged and pumped as required by the August 2011 Design Basis Memorandum.

- LNAPL monitoring was conducted on August 1st in accordance with the IRM Work Plan (Fluor Daniel GTI, December 1997), Fluor Daniel GTI correspondence to the NYSDEC dated May 18, 1998 and Atlantic Richfield correspondence with the NYSDEC on September 2, 2010; and the schedule modification request, changing monthly to quarterly, sent by Atlantic Richfield to NYSDEC on June 4, 2012, and the NYSDEC approval letter dated April 2, 2013.

2. UNANTICIPATED PROBLEM AREAS AND RECOMMENDED SOLUTIONS

- None this reporting period

3. PROBLEMS RESOLVED

- None this reporting period.

4. DELIVERABLES SUBMITTED/RECEIVED

- August 2, 2016 – Atlantic Richfield to NYSDEC: *July 2016 Monthly Progress Report*

5. UPCOMING EVENTS/ACTIVITIES PLANNED

- Continue the Water Tower LNAPL IRM activities, as allowable, in accordance with the IRM Work Plan (Fluor Daniel GTI, December 1997), Fluor Daniel GTI correspondence to the NYSDEC dated May 18, 1998 and Atlantic Richfield correspondence with the NYSDEC on September 2, 2010. The upcoming LNAPL IRM events are scheduled to occur the week of October 3rd and the week of February 6th in

accordance with the schedule modification request, from monthly to quarterly, sent by Atlantic Richfield to NYSDEC on June 4, 2012, and received approval letter from NYSDEC dated April 2, 2013.

- The next two DNAPL gauging and recovery events are scheduled to occur the week of September 12th 2016 and October 3rd 2016.
- Baseline groundwater sampling event is scheduled to occur the week of September 26th.

6. KEY STAFFING

- Haley and Aldrich of New York
- Antea Group (OM&M)
- Antea Group (security)

7. PERCENTAGE COMPLETE

- DNAPL gauging and recovery – ongoing
- LNAPL IRM – ongoing

8. DATA

- Final data not generated during this reporting period.

9. CITIZEN PARTICIPATION ACTIVITIES

- None this reporting period.

LIST OF ACRONYMS

Acronym	*Description*
NYSDEC	New York State Department of Environmental Conservation
LNAPL	Light Non-Aqueous Phase Liquid
DNAPL	Dense Non-Aqueous Phase Liquid
OU	Operable Unit
IRM	Interim Remedial Measure
O&M	Operations and Maintenance

LIST OF REFERENCES

FLUOR Daniel GTI, 1997. *Draft Interim Remedial Measure Work Plan – Separate Phase Liquid Recovery.* December.

TABLE 1
AUGUST DNAPL PUMPING SUMMARY (WEEK OF 8/1/2016)
ATLANTIC RICHFIELD
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

Well ID	Date Gauged/ Pumped	Installation Angle (deg)	Pre-Pumping Uncorrected Apparent Height (inches)	Pre-Pumping Corrected Apparent Height (inches)	Post-Pumping Uncorrected Apparent Height (inches)	Post-Pumping Corrected Apparent Height (inches)	Total Fluids Removed (gallons)[4]	Total DNAPL Removed (gallons)[6]	Post-Purging Distance of DNAPL Surface Below MS/Fill Interface (ft)[5]
HARW-1	8/1/2016 [1]	0	0*	0*	NA**	NA**	NA**	NA**	NA**
HARW-2	8/1/2016 [2]	0	23.0	23.0			NA**	NA**	2.8
	NA** [3]				NA**	NA**			
HARW-3	8/1/16 [2]	16.5	20.0	19.2			NA**	NA**	2.7
	NA** [3]				NA**	NA**			
HARW-4	8/1/2016 [2]	24.5	22.0	20.0			NA**	NA**	2.4
	NA** [3]				NA**	NA**			
HARW-5	8/1/2016 [2]	23.5	60.0	55.0			168.0	13.1	4.3
	8/2/2016 [3]				0.0	0.0			
HARW-6	8/1/16 [2]	14.0	15.0	14.6			NA**	NA**	3.4
	NA** [3]				NA**	NA**			
HARW-7	8/1/16 [2]	0	30.0	30.0			126.0	6.5	4.7
	8/2/16 [3]				0.0	0.0			
HARW-8	8/1/2016 [2]	0	14.0	14.0			NA**	NA**	3.5
	NA** [3]				NA**	NA**			
HAOW-12A	8/1/2016 [2]	0	16.0	16.0			NA**	NA**	3.9
	NA** [3]				NA**	NA**			

Total Gallons of DNAPL Removed: 19.6

Notes:

[1]DNAPL not present, pumping not completed in this well

[2]Pre-pumping gauge date

[3]Post-pumping gauge date

[4]Total gallons of fluid (DNAPL and groundwater) removed from well based on measurement in container.

[5]Represents the distance of the post-purging DNAPL material interface from the top of the MS/Fill interface.

[6]Unless otherwise noted, this column refers to the total volume of DNAPL removed based calculation of volume based on well diameter and height of DNAPL in the well.

*DNAPL is present but is under 6-inches and discontinuous.

**Volume in the well is less than threshold required to perform DNAPL pumping procedures.

Apparent Height: refers to the distance between the DNAPL surface and the bottom of the well sump which includes all fluids (groundwater and DNAPL) in the matrix.

NA: Not Applicable

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
NYSDEC #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
MW-12	10/9/2006	34.3	2.7	-	-	0	threaded rod	-
	11/29/2006	34.3	2.7	-	-	52	threaded rod	-
	1/10/2007	33.8	3.2	2.0	0.3	42	threaded rod	stainless-steel cups
	1/11/2007	-	2.0	-	-	1	threaded rod	-
	1/17/2007	-	1.9	-	-	6	threaded rod	-
	2/21/2008	-	1.6	-	-	36	threaded rod	-
	3/27/2007	34.5	2.5	2.5	0.0	35	threaded rod	stainless-steel cups
	11/20/2007	-	2.4	-	-	239	threaded rod	-
	2/21/2008	-	2.6	-	-	93	threaded rod	-
	4/16/2008	-	2.3	-	-	55	threaded rod	-
	5/22/2008	-	2.4	-	-	37	threaded rod	-
	5/23/2008	34.6	2.4	1.0	0.2	1	threaded rod	stainless-steel cups
	7/10/2008	35.5	1.5	1.3	0.4	49	threaded rod	stainless-steel cups
	12/2/2008	0.7	-	-	0.2	145	threaded rod	stainless-steel cups
	3/23/2009	35.5	2.5	2.5	0.6	111	threaded rod	downhole pump
	6/22/2009	-	2.8	-	1.0	92	threaded rod	downhole pump
	7/29/2009	34.0	3.0	2.5	0.3	38	threaded rod	downhole pump
	7/30/2009	34.5	2.5	-	-	1	threaded rod	-
	8/11/2009	34.1	2.9	-	-	12	threaded rod	-
	8/18/2009	34.0	3.0	-	-	7	threaded rod	-
	9/9/2009	34.0	3.0	2.4	0.2	23	threaded rod	downhole pump
	10/13/2009	32.7	3.3	NM [1]	0.5	34	threaded rod	downhole pump
	11/10/2009	34.5	2.6	NM [1]	0.5	27	threaded rod	downhole pump
	12/8/2009	-	3.3	NM [1]	0.2	29	threaded rod	downhole pump
	1/13/2010	33.0	3.0	NM [1]	-	36	threaded rod	downhole pump
	2/18/2010	32.9	3.1	NM [1]	0.5	36	threaded rod	downhole pump
	3/23/2010	31.9	4.1	NM [1]	0.0	33	threaded rod	downhole pump
	5/7/2010	33.3	2.7	NM [1]	0.1	45	threaded rod	bailer
	6/15/2010	33.0	3.0	NM [1]	-	39	threaded rod	-
	7/29/2010	32.8	3.2	NM [1]	0.1	44	threaded rod	bailer
	TOTAL VOLUME RECOVERED TO DATE FROM MW-12 (GALLONS)				***5.0***			
HAOW-12A	3/23/2009	39.1	3.9	-	-	0	threaded rod	downhole pump
	6/22/2009	-	3.5	-	6	92	threaded rod	downhole pump
	7/28/2009	38.4	5.2	1.1	5	37	threaded rod	downhole pump
	7/29/2009	42.4	-	1.3	-	1	threaded rod	-
	7/30/2009	42.4	-	1.3	-	1	threaded rod	-
	8/5/2009	42.1	-	1.5	-	6	threaded rod	-
	8/11/2009	41.9	-	1.7	-	6	threaded rod	-
	8/19/2009	41.9	-	1.8	-	8	threaded rod	-
	8/25/2009	41.5	-	2.1	-	6	threaded rod	-
	9/9/2009	41.5	2.1	0.3	3.5	18	threaded rod	downhole pump
	10/13/2009	41.9	1.6	0.1	2.2	34	threaded rod	downhole pump
	11/11/2009	41.9	1.5	0.2	1.8	27	threaded rod	downhole pump
	12/8/2009	-	1.2	0.0	1.7	29	threaded rod	downhole pump
	1/13/2010	-	1.2	0.1	0.5	36	threaded rod	downhole pump
	2/18/2010	41.8	1.8	0.0	2.4	36	threaded rod	downhole pump
	3/23/2010	42.2	1.4	0.0 [2]	0.5	33	threaded rod	downhole pump
	5/7/2010	42.1	1.5	NM [1]	1.7	45	threaded rod	bailer
	6/15/2010	42.3	1.3	0.0 [2]	1.7	39	threaded rod	downhole pump
	7/29/2010	42.6	1.0	0.0 [2]	1.9	44	threaded rod	downhole pump
	9/29/2010	42.5	1.1	0.0	2.8	61	weighted tape	double diaphragm pump
	9/30/2010	43.3	0.3	-	-	1	weighted tape	-
	10/14/2010	43.0	0.6	-	-	14	weighted tape	-
	11/9/2010	42.4	1.2	0.3	2.2	26	weighted tape	positive displacement piston pump
	12/8/2010	42.6	1.0	-	-	29	DMT [4]	-
	12/15/2010	-	-	0.1	1.3	7	DMT [4]	double diaphragm pump
	1/17/2011	42.8	0.8	-	-	33	DMT [4]	-
	1/19/2011	-	-	0.3	1.4	-	DMT [4]	piston pump

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
NYSDEC #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HAOW-12A Continued	2/28/2011	42.9	0.7	-	-	40	DMT [4]	-
	3/3/2011	-	-	0.3	1.1	-	DMT [4]	piston pump
	4/11/2011	43.0	0.6	-	-	39	DMT [4]	-
	4/12/2011	-	-	0.2	1.1	-	DMT [4]	piston pump
	5/16/2011	42.9	0.7	-	-	34	DMT [4]	-
	5/18/2011	-	-	0.3	1.1	-	DMT [4]	piston pump
	6/13/2011	43.0	0.6	-	-	26	DMT [4]	-
	6/15/2011	-	-	0.0	1.5	-	DMT [4]	piston pump
	7/19/2011	43.5	0.1	-	-	34	DMT [4]	-
	8/22/2011	43.1	0.5	-	-	34	DMT [4]	-
	8/25/2011	-	-	0.1	0.7	-	DMT [4]	double diaphragm pump
	9/26/2011	43.5	0.1	-	-	32	DMT [4]	-
	10/24/2011	43.5	0.1	-	-	28	DMT [4]	-
	11/28/2011	43.5	0.1	-	-	35	DMT [4]	-
	1/4/2012	42.2	1.4	-	-	37	DMT [4]	-
	1/31/2012	42.1	1.5	-	-	27	DMT [4]	-
	3/6/2012	41.9	1.7	-	-	35	DMT [4]	-
	4/4/2012	41.5	2.1	-	-	29	DMT [4]	-
	4/6/2012	-	-	0.5	2.3	-	DMT [4]	double diaphragm pump
	5/2/2012	42.9	0.7	-	-	26	DMT [4]	-
	6/4/2012	43.0	0.6	-	-	33	DMT [4]	-
	7/9/2012	42.7	0.9	-	-	35	DMT [4]	-
	8/7/2012	42.3	1.3	-	-	29	DMT [4]	-
	9/10/2012	42.2	1.4	-	-	34	DMT [4]	-
	10/8/2012	42.0	1.6	-	-	28	DMT [4]	-
	11/5/2012	recovery data not compiled due to extreme weather events (Hurricane Sandy), which occurred in late October					DMT [4]	-
	12/3/2012	41.8	1.8	-	-	56	DMT [4]	-
	1/9/2013	41.3	2.3	0.3	2.9	37	DMT [4]	-
	2/4/2013	43.3	0.3	-	-	26	DMT [4]	-
	3/4/2013	43.3	0.3	-	-	28	DMT [4]	-
	4/2/2013	43.3	0.3	-	-	29	DMT [4]	-
	5/7/2013	43.2	0.4	-	-	35	DMT [4]	-
	6/4/2013	43.2	0.4	-	-	28	DMT [4]	-
	7/8/2013	42.4	1.3	-	-	34	DMT [4]	-
	8/5/2013	43.2	0.4	-	-	28	DMT [4]	-
	9/10/2013	43.2	0.4	-	-	36	DMT [4]	-
	10/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	12/9/2013	42.9	0.7	-	-	90	DMT [4]	-
	1/8/2014	42.2	1.4	-	-	30	DMT [4]	-
	2/6/2014	42.0	1.6	-	-	29	DMT [4]	-
	3/3/2014	41.9	1.7	-	-	25	DMT [4]	-
	4/7/2014	41.7	1.9	-	-	35	DMT [4]	-
	5/7/2014	41.6	2.0	0.3	2.6	30	DMT [4]	-
	6/7/2014	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	7/22/2014	43.4	0.3	-	-	76	DMT [4]	-
	8/12/2014	43.4	0.3	-	-	21	DMT [4]	-
	9/9/2014	43.4	0.3	-	-	28	DMT [4]	-
	10/7/2014	43.4	0.3	-	-	28	DMT [4]	-
	11/10/2014	43.1	0.5	-	-	34	DMT [4]	-
	12/10/2014	DNAPL pumping not required to be completed					DMT [4]	-
	1/6/2015	43.0	0.6	-	-	57	DMT [4]	-
	2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions					DMT [4]	-
	3/24/2015	42.8	0.8	-	-	77	DMT [4]	-
	4/21/2015	42.8	0.8	-	-	28	DMT [4]	-
	5/11/2015	42.6	1	-	-	20	DMT [4]	-

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
NYSDEC #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-pumping (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HAOW-12A Continued	6/8/2015	42.6	1	-	-	28	DMT [4]	-
	7/8/2015	42.6	1	-	-	30	DMT [4]	-
	8/4/2015	42.6	1	-	-	27	DMT [4]	-
	9/8/2015	42.6	1	-	-	35	DMT [4]	-
	10/12/2015	42.6	1	-	-	34	DMT [4]	-
	11/9/2015	42.6	1	-	-	28	DMT [4]	-
	12/4/2015	DNAPL pumping not required to be completed					DMT [4]	-
	1/4/2016	42.4	1.2	-	-	56	DMT [4]	-
	2/8/2016	42.4	1.2	-	-	35	DMT [4]	-
	3/8/2016	42.4	1.2	-	-	29	DMT [4]	-
	4/4/2016	42.4	1.2	-	-	27	DMT [4]	-
	5/2/2016	42.4	1.2	-	-	28	DMT [4]	-
	6/13/2016	42.3	1.3	-	-	42	DMT [4]	-
	7/11/2016	42.3	1.3	-	-	28	DMT [4]	-
	8/1/2016	42.3	1.3	-	-	21	DMT [4]	-
	TOTAL VOLUME RECOVERED TO DATE FROM HAOW-12A (GALLONS)				***49.7***			
HARW-1	9/29/2010	42.0	0.0	-	-	0	weighted tape	-
	9/30/2010	42.0	0.0	-	-	1	weighted tape	-
	10/14/2010	42.0	0.0	-	-	14	weighted tape	-
	11/9/2010	42.0	0.0	-	-	26	DMT [4]	-
	12/8/2010	42.0	0.0	-	-	29	DMT [4]	-
	1/17/2011	42.0	0.0	-	-	40	DMT [4]	-
	2/28/2011	42.0	0.0	-	-	42	DMT [4]	-
	4/11/2011	42.0	0.0	-	-	42	DMT [4]	-
	5/16/2011	42.0	0.0	-	-	35	DMT [4]	-
	6/13/2011	42.0	0.0	-	-	28	DMT [4]	-
	7/19/2011	42.0	0.0	-	-	36	DMT [4]	-
	8/22/2011	42.0	0.0	-	-	34	DMT [4]	-
	9/26/2011	42.0	0.0	-	-	35	DMT [4]	-
	10/24/2011	42.0	0.0	-	-	28	DMT [4]	-
	11/28/2011	42.0	0.0	-	-	35	DMT [4]	-
	1/4/2012	42.0	0.0	-	-	37	DMT [4]	-
	1/31/2012	42.0	0.0	-	-	27	DMT [4]	-
	3/5/2012	42.0	0.0	-	-	34	DMT [4]	-
	4/4/2012	42.0	0.0	-	-	30	DMT [4]	-
	5/2/2012	42.0	0.0	-	-	28	DMT [4]	-
	6/4/2012	42.0	0.0	-	-	33	DMT [4]	-
	7/9/2012	42.0	0.0	-	-	35	DMT [4]	-
	8/8/2012	42.0	0.0	-	-	30	DMT [4]	-
	9/10/2012	42.0	0.0	-	-	33	DMT [4]	-
	10/8/2012	42.0	0.0	-	-	28	DMT [4]	-
	11/5/2012	recovery data not compiled due to extreme weather events (Hurricane Sandy), which occurred in late October					DMT [4]	-
	12/3/2012	42.0	0.0	-	-	56	DMT [4]	-
	1/7/2013	42.0	0.0	-	-	35	DMT [4]	-
	2/4/2013	42.0	0.0	-	-	28	DMT [4]	-
	3/4/2013	42.0	0.0	-	-	28	DMT [4]	-
	4/2/2013	42.0	0.0	-	-	29	DMT [4]	-
	5/9/2013	42.0	0.0	-	-	37	DMT [4]	-
	6/4/2013	42.0	0.0	-	-	26	DMT [4]	-
	7/10/2013	42.0	0.0	-	-	36	DMT [4]	-
	8/5/2013	42.0	0.0	-	-	26	DMT [4]	-
	9/10/2013	42.0	0.0	-	-	36	DMT [4]	-
	10/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	12/10/2013	42.0	0.0	-	-	91	DMT [4]	-
	1/8/2014	42.0	0.0	-	-	29	DMT [4]	-
	2/6/2014	42.0	0.0	-	-	29	DMT [4]	-
	3/5/2014	42.0	0.0	-	-	27	DMT [4]	-
	4/10/2014	42.0	0.0	-	-	36	DMT [4]	-
	5/7/2014	42.0	0.0	-	-	27	DMT [4]	-
	6/7/2014	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	7/22/2014	42.0	0.0	-	-	76	DMT [4]	-
	8/12/2014	42.0	0.0	-	-	21	DMT [4]	-

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
NYSDEC #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HARW-1 Continued	9/9/2014	42.0	0.0	-	-	28	DMT [4]	-
	10/7/2014	42.0	0.0	-	-	28	DMT [4]	-
	11/12/2014	42.0	0.0	-	-	36	DMT [4]	-
	12/12/2014	DNAPL pumping not required to be completed					DMT [4]	-
	1/6/2015	42.0	0.0	-	-	55	DMT [4]	-
	2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions					DMT [4]	-
	3/24/2015	42.0	0.0	-	-	77	DMT [4]	-
	4/21/2015	42.0	0.0	-	-	28	DMT [4]	-
	5/11/2015	42.0	0.0	-	-	20	DMT [4]	-
	6/8/2015	42.0	0.0	-	-	28	DMT [4]	-
	7/8/2015	42.0	0.0	-	-	30	DMT [4]	-
	8/4/2015	42.0	0.0	-	-	27	DMT [4]	-
	9/8/2015	42.0	0.0	-	-	35	DMT [4]	-
	10/12/2015	42.0	0.0	-	-	34	DMT [4]	-
	11/9/2015	42.0	0.0	-	-	28	DMT [4]	-
	12/4/2015	DNAPL pumping not required to be completed					DMT [4]	-
	1/4/2016	42.0	0.0	-	-	56	DMT [4]	-
	2/8/2016	42.0	0.0	-	-	35	DMT [4]	-
	3/8/2016	42.0	0.0	-	-	29	DMT [4]	-
	4/4/2016	42.0	0.0	-	-	27	DMT [4]	-
	5/2/2016	42.0	0.0	-	-	28	DMT [4]	-
	6/13/2016	42.0	0.0	-	-	42	DMT [4]	-
	7/11/2016	42.0	0.0	-	-	28	DMT [4]	-
	8/1/2016	42.0	0.0	-	-	21	DMT [4]	-
	TOTAL VOLUME RECOVERED TO DATE FROM HARW-1 (GALLONS)				***0.0***			
HARW-2	9/29/2010	38.5	1.5	-	-	0	weighted tape	-
	9/30/2010	38.5	1.5	-	-	1	weighted tape	-
	10/14/2010	38.3	1.8	-	-	14	weighted tape	-
	11/10/2010	37.6	2.4	1.5	2.3	27	weighted tape	positive displacement piston pump
	12/8/2010	34.7	5.3	-	-	28	DMT [4]	-
	12/14/2010	-	-	0	5.1	6	DMT [4]	positive displacement piston pump
	1/17/2011	35.4	4.6	-	-	34	DMT [4]	-
	1/20/2011	-	-	0.3	4.0	-	DMT [4]	piston pump
	2/28/2011	37.6	2.4	-	-	39	DMT [4]	-
	3/2/2011	-	-	0.8	2.3	-	DMT [4]	piston pump
	4/11/2011	33.8	6.3	-	-	40	DMT [4]	-
	4/12/2011	-	-	0.3	5.5	-	DMT [4]	piston pump
	4/14/2011	-	-	0.0	0.7	-	DMT [4]	positive displacement piston pump
	5/16/2011	33.8	6.2	-	-	32	DMT [4]	-
	5/19/2011	-	-	0.4	15.8	-	DMT [4]	piston pump
	6/13/2011	34.3	5.8	-	-	25	DMT [4]	-
	6/16/2011	-	-	0.2	15.0	-	DMT [4]	double diaphragm pump
	7/19/2011	34.1	5.9	-	-	33	DMT [4]	-
	7/20/2011	-	-	0.3	14.8	-	DMT [4]	double diaphragm pump
	8/22/2011	33.9	6.1	-	-	33	DMT [4]	-
	8/23/2011	-	-	0.3	15.0	-	DMT [4]	double diaphragm pump
	9/26/2011	33.9	6.1	-	-	34	DMT [4]	-
	9/28/2011	-	-	0.3	15.0	-	DMT [4]	double diaphragm pump
	10/24/2011	34.2	5.8	-	-	26	DMT [4]	-
	10/25/2011	-	-	0.1	15.7	-	DMT [4]	double diaphragm pump
	11/28/2011	33.9	6.1	-	-	34	DMT [4]	-
	11/30/2011	-	-	0.1	15.7	-	DMT [4]	double diaphragm pump
	1/4/2012	33.9	6.1	-	-	35	DMT [4]	-
	1/6/2012	-	-	0.2	15.4	-	DMT [4]	double diaphragm pump
	1/31/2012	34.2	5.8	-	-	25	DMT [4]	-
	1/31/2012	-	-	0.2	14.8	-	DMT [4]	double diaphragm pump
	3/6/2012	34.0	6.0	0.1	15.4	35	DMT [4]	double diaphragm pump
	4/6/2012	34.1	5.9	0.4	14.5	31	DMT [4]	double diaphragm pump
	5/2/2012	33.9	6.1	0.1	15.7	26	DMT [4]	double diaphragm pump
	6/6/2012	34.0	6.0	0.1	15.3	35	DMT [4]	double diaphragm pump
	7/11/2012	34.2	5.8	0.1	15.0	35	DMT [4]	double diaphragm pump
	8/6/2012	34.3	5.7	0.1	14.6	26	DMT [4]	double diaphragm pump
	9/10/2012	33.9	6.1	0.1	15.7	35	DMT [4]	double diaphragm pump
	10/10/2012	34.3	5.7	0.4	13.7	30	DMT [4]	double diaphragm pump
	11/5/2012	recovery data not compiled due to extreme weather events (Hurricane Sandy), which occurred in late October					DMT [4]	double diaphragm pump
	12/5/2012	33.9	6.1	0.2	15.4	56	DMT [4]	double diaphragm pump
	1/9/2013	34.0	6.0	0.8	13.7	35	DMT [4]	double diaphragm pump
	2/6/2013	34.0	6.0	0.0	15.6	28	DMT [4]	double diaphragm pump
	3/6/2013	34.4	5.6	0.1	14.4	28	DMT [4]	double diaphragm pump
	4/4/2013	34.4	5.6	0.4	13.5	29	DMT [4]	double diaphragm pump

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
NYSDEC #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HARW-2 Continued	5/8/2013	34.3	5.8	0.4	13.9	34	DMT [4]	double diaphragm pump
	6/5/2013	35.0	5.0	0.2	12.6	28	DMT [4]	double diaphragm pump
	7/9/2013	35.7	4.3	0.2	10.9	34	DMT [4]	double diaphragm pump
	8/5/2013	34.8	5.3	0.1	13.4	27	DMT [4]	double diaphragm pump
	9/9/2013	34.3	5.8	0.4	13.9	35	DMT [4]	double diaphragm pump
	10/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	double diaphragm pump
	11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	double diaphragm pump
	12/11/2013	33.9	6.1	0.2	15.4	93	DMT [4]	double diaphragm pump
	1/9/2014	34.6	5.4	2.7	7.2	29	DMT [4]	double diaphragm pump
	2/7/2014	34.3	5.7	0.4	13.7	29	DMT [4]	double diaphragm pump
	3/6/2014	35.2	4.8	0.2	12.2	27	DMT [4]	double diaphragm pump
	4/7/2014	34.8	5.3	0.1	13.5	32	DMT [4]	double diaphragm pump
	5/5/2014	35.7	4.3	0.3	10.7	28	DMT [4]	double diaphragm pump
	6/7/2014	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	7/23/2014	34.4	5.6	1.3	14.3	79	DMT [4]	double diaphragm pump
	8/12/2014	36.3	3.7	0.2	9.1	20	DMT [4]	double diaphragm pump
	9/9/2014	35.7	4.3	0.2	10.9	28	DMT [4]	double diaphragm pump
	10/7/2014	35.8	4.3	0.2	10.7	28	DMT [4]	double diaphragm pump
	11/10/2014	35.3	4.8	0.1	12.2	34	DMT [4]	double diaphragm pump
	12/10/2014	DNAPL pumping not required to be completed					DMT [4]	double diaphragm pump
	1/5/2015	34.5	5.5	0.3	13.5	56	DMT [4]	double diaphragm pump
	2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions					DMT [4]	double diaphragm pump
	3/25/2015	35.2	4.8	0.1	12.4	79	DMT [4]	double diaphragm pump
	4/21/2015	37.3	2.7	0.1	6.7	27	DMT [4]	double diaphragm pump
	5/12/2015	37.7	2.3	0.1	5.9	21	DMT [4]	double diaphragm pump
	6/9/2015	37.2	2.8	0.4	6.3	28	DMT [4]	double diaphragm pump
	7/8/2015	35.9	4.1	0.8	8.5	29	DMT [4]	double diaphragm pump
	8/4/2015	36.0	4.0	0.1	10.2	27	DMT [4]	double diaphragm pump
	9/10/2015	36.0	4.0	0.2	10.0	37	DMT [4]	double diaphragm pump
	10/13/2015	36.4	3.6	0.1	9.1	33	DMT [4]	double diaphragm pump
	11/9/2015	37.0	3.0	1.0	7.6	27	DMT [4]	double diaphragm pump
	12/4/2015	DNAPL pumping not required to be completed					DMT [4]	-
	1/6/2016	35.0	5.0	0.2	12.6	58	DMT [4]	double diaphragm pump
	2/8/2016	36.3	3.7	0.1	9.4	33	DMT [4]	double diaphragm pump
	3/8/2016	37.0	3.0	0.1	7.6	29	DMT [4]	double diaphragm pump
	4/4/2016	37.7	2.3	0.1	5.9	27	DMT [4]	double diaphragm pump
	5/2/2016	37.6	2.4	0.1	6.1	28	DMT [4]	double diaphragm pump
	6/14/2016	36.3	3.7	0.2	9.1	43	DMT [4]	double diaphragm pump
	7/12/2016	37.7	2.3	0.2	5.7	28	DMT [4]	double diaphragm pump
	8/1/2016	38.1	1.9	-	-	20	DMT [4]	double diaphragm pump
	TOTAL VOLUME RECOVERED TO DATE FROM HARW-2 (GALLONS)				***690.8***			
HARW-3	10/14/2010	39.0	0.0	-	-	0	DMT [4]	-
	11/11/2010	38.8	0.2	-	-	28	DMT [4]	-
	12/8/2010	38.0	1.0	-	-	27	DMT [4]	-
	12/15/2010	-	-	0.3	1.7	7	DMT [4]	double diaphragm pump
	1/17/2011	38.2	0.8	-	-	33	DMT [4]	-
	1/19/2011	-	-	0.2	0.6	-	DMT [4]	piston pump
	2/28/2011	38.0	1.0	-	-	40	DMT [4]	-
	3/3/2011	-	-	0.7	0.6	-	DMT [4]	piston pump
	4/11/2011	38.0	1.0	-	-	39	DMT [4]	-
	4/13/2011	-	-	0.5	1.2	-	DMT [4]	piston pump
	5/16/2011	38.6	0.4	-	-	33	DMT [4]	-
	5/19/2011	-	-	0.0	1.0	-	DMT [4]	piston pump
	6/13/2011	38.5	0.5	-	-	25	DMT [4]	-
	6/14/2011	-	-	0.2	0.6	-	DMT [4]	piston pump
	7/19/2011	37.6	1.4	-	-	35	DMT [4]	-
	7/20/2011	-	-	0.5	2.6	-	DMT [4]	double diaphragm pump
	8/22/2011	37.8	1.2	-	-	33	DMT [4]	-
	8/25/2011	-	-	0.2	2.8	-	DMT [4]	double diaphragm pump
	9/26/2011	38.6	0.4	-	-	32	DMT [4]	-
	10/24/2011	38.3	0.7	-	-	28	DMT [4]	-
	11/28/2011	38.0	1.0	-	-	35	DMT [4]	-
	1/4/2012	37.7	1.3	-	-	37	DMT [4]	-
	1/31/2012	37.5	1.5	-	-	27	DMT [4]	-
	3/6/2012	37.4	1.6	-	-	35	DMT [4]	-
	4/4/2012	37.0	2.0	-	-	29	DMT [4]	-
	4/5/2012	-	-	0.3	4.7	-	DMT [4]	double diaphragm pump
	5/2/2012	38.6	0.4	-	-	27	DMT [4]	-
	6/4/2012	38.3	0.7	-	-	33	DMT [4]	-
	7/9/2012	38.3	0.7	-	-	35	DMT [4]	-

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
NYSDEC #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HARW-3 Continued	8/8/2012	38.1	0.9	-	-	30	DMT [4]	-
	9/10/2012	37.9	1.1	-	-	33	DMT [4]	-
	10/8/2012	37.8	1.2	-	-	28	DMT [4]	-
	11/5/2012	recovery data not compiled due to extreme weather events (Hurricane Sandy), which occurred in late October					DMT [4]	-
	12/3/2012	37.4	1.6	-	-	56	DMT [4]	-
	1/10/2013	37.2	1.8	0.8	-	38	DMT [4]	-
	2/4/2013	37.7	1.3	-	-	25	DMT [4]	-
	3/4/2013	37.7	1.3	-	-	28	DMT [4]	-
	4/2/2013	37.7	1.3	-	-	29	DMT [4]	-
	5/7/2013	37.6	1.4	-	-	35	DMT [4]	-
	6/4/2013	37.6	1.4	-	-	28	DMT [4]	-
	7/8/2013	37.5	1.5	-	-	34	DMT [4]	-
	8/5/2013	37.4	1.6	-	-	28	DMT [4]	-
	9/10/2013	37.2	1.8	-	-	36	DMT [4]	-
	10/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	12/9/2013	37.2	1.8	-	-	90	DMT [4]	-
	1/9/2014	36.6	2.4	0.6	4.8	31	DMT [4]	-
	2/6/2014	38.0	1.0	-	-	28	DMT [4]	-
	3/3/2014	38.0	1.0	-	-	25	DMT [4]	-
	4/9/2014	38.0	1.0	-	-	37	DMT [4]	-
	5/7/2014	37.8	1.2	-	-	28	DMT [4]	-
	6/7/2014	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	7/22/2014	37.6	1.4	-	-	76	DMT [4]	-
	8/12/2014	37.3	1.7	-	-	21	DMT [4]	-
	9/9/2014	37.3	1.7	-	-	28	DMT [4]	-
	10/7/2014	37.3	1.7	-	-	28	DMT [4]	-
	11/10/2014	37.2	1.8	-	-	34	DMT [4]	-
	12/10/2014	DNAPL pumping not required to be completed					DMT [4]	-
	1/6/2015	37.3	1.7	-	-	57	DMT [4]	-
	2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions					DMT [4]	-
	3/25/2015	37.1	1.9	-	-	78	DMT [4]	-
	4/21/2015	37.2	1.8	-	-	27	DMT [4]	-
	5/12/2015	36.9	2.1	0.4	4.6	21	DMT [4]	-
	6/8/2015	38.0	1.0	-	-	27	DMT [4]	-
	7/8/2015	38.0	1.0	-	-	30	DMT [4]	-
	8/4/2015	38.0	1.0	-	-	27	DMT [4]	-
	9/8/2015	38.0	1.0	-	-	35	DMT [4]	-
	10/12/2015	37.8	1.2	-	-	34	DMT [4]	-
	11/9/2015	37.8	1.2	-	-	28	DMT [4]	-
	12/4/2015	DNAPL pumping not required to be completed					DMT [4]	-
	1/4/2016	37.8	1.2	-	-	56	DMT [4]	-
	2/8/2016	37.8	1.2	-	-	35	DMT [4]	-
	3/8/2016	37.8	1.2	-	-	29	DMT [4]	-
	4/4/2016	37.8	1.2	-	-	27	DMT [4]	-
	5/2/2016	37.7	1.3	-	-	28	DMT [4]	-
	6/13/2016	37.7	1.3	-	-	42	DMT [4]	-
	7/11/2016	37.7	1.3	-	-	28	DMT [4]	-
	7/11/2016	37.4	1.6	-	-	0	DMT [4]	-
	TOTAL VOLUME RECOVERED TO DATE FROM HARW-3 (GALLONS)				***25.3***			
HARW-4	10/14/2010	34.8	6.2	-	-	0	DMT [4]	-
	11/10/2010	33.7	7.3	6.9	1.0	27	DMT [4]	positive displacement piston pump
	12/8/2010	32.7	8.3	-	-	28	DMT [4]	-
	12/15/2010	-	-	2.9	20.8	7	DMT [4]	piston pump & bailer
	1/17/2011	34.3	6.7	-	-	33	DMT [4]	-
	1/21/2011	-	-	0.2	14.6	-	DMT [4]	piston pump
	2/28/2011	35.3	5.7	-	-	38	DMT [4]	-
	3/1/2011	-	-	0.5	7.4	-	DMT [4]	piston pump
	4/11/2011	33.5	7.5	-	-	41	DMT [4]	-
	4/13/2011	-	-	0.2	9.5	-	DMT [4]	piston pump
	5/16/2011	36.2	4.9	-	-	33	DMT [4]	-
	5/18/2011	-	-	0.3	16.9	-	DMT [4]	piston pump
	6/13/2011	35.9	5.1	-	-	26	DMT [4]	-
	6/16/2011	-	-	0.4	14.6	-	DMT [4]	double diaphragm pump
	7/18/2011	38.3	2.7	-	-	32	DMT [4]	-
	7/19/2011	-	-	0.2	7.2	-	DMT [4]	double diaphragm pump
	8/22/2011	39.0	2.0	-	-	34	DMT [4]	-
	8/23/2011	-	-	0.3	4.8	-	DMT [4]	double diaphragm pump

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
NYSDEC #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [2]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HARW-4 Continued	9/27/2011	39.1	1.9	-	-	35	DMT[4]	-
	9/29/2011	-	-	0.3	4.6	-	DMT[4]	double diaphragm pump
	10/24/2011	39.6	1.4	-	-	25	DMT[4]	-
	11/28/2011	38.1	2.9	-	-	35	DMT[4]	-
	11/30/2011	-	-	0.3	7.3	-	DMT[4]	double diaphragm pump
	1/4/2012	39.3	1.7	-	-	35	DMT[4]	-
	1/6/2012	-	-	0.3	3.9	-	DMT[4]	double diaphragm pump
	1/31/2012	40.5	0.5	-	-	25	DMT[4]	-
	3/6/2012	39.0	2.0	0.3	4.8	35	DMT[4]	double diaphragm pump
	4/4/2012	40.6	0.4	-	-	29	DMT[4]	-
	5/2/2012	39.7	1.3	-	-	28	DMT[4]	-
	6/4/2012	11.9	29.1	-	-	33	DMT[4]	-
	6/5/2012	-	-	0.2	6.5	-	DMT[4]	double diaphragm pump
	7/9/2012	40.2	0.8	-	-	34	DMT[4]	-
	8/6/2012	38.8	2.2	0.0	6.2	28	DMT[4]	double diaphragm pump
	9/10/2012	40.2	0.8	0.0	-	35	DMT[4]	double diaphragm pump
	10/8/2012	39.7	1.3	0.0	-	28	DMT[4]	double diaphragm pump
	11/5/2012	recovery data not compiled due to extreme weather events (Hurricane Sandy), which occurred in late October					DMT[4]	double diaphragm pump
	12/3/2012	36.9	4.1	0.4	10.7	56	DMT[4]	double diaphragm pump
	1/7/2013	40.6	0.4	-	-	35	DMT[4]	-
	2/4/2013	39.5	1.5	-	-	28	DMT[4]	-
	3/4/2013	38.8	2.2	0.2	5.7	28	DMT[4]	double diaphragm pump
	4/2/2013	40.8	0.2	-	-	29	DMT[4]	-
	5/7/2013	40.2	0.8	-	-	35	DMT[4]	-
	6/4/2013	40.2	0.8	-	-	28	DMT[4]	-
	7/8/2013	37.7	3.3	0.6	7.8	34	DMT[4]	-
	8/5/2013	37.7	3.3	-	-	28	DMT[4]	-
	9/10/2013	40.3	0.7	-	-	36	DMT[4]	-
	10/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT[4]	-
	11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT[4]	-
	12/9/2013	38.3	2.7	0.5	6.5	90	DMT[4]	-
	1/8/2014	40.5	0.5	-	-	30	DMT[4]	-
	2/6/2014	40.4	0.6	-	-	29	DMT[4]	-
	3/3/2014	40.4	0.6	-	-	25	DMT[4]	-
	4/9/2014	40.1	0.9	-	-	37	DMT[4]	-
	5/7/2014	38.3	2.7	0.3	6.7	28	DMT[4]	-
	6/7/2014	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT[4]	-
	7/23/2014	40.1	0.9	-	-	77	DMT[4]	-
	8/12/2014	39.7	1.3	-	-	20	DMT[4]	-
	9/9/2014	39.6	1.4	-	-	28	DMT[4]	-
	10/7/2014	38.6	2.4	0.6	5.0	28	DMT[4]	-
	11/11/2014	39.6	1.4	-	-	35	DMT[4]	-
	12/11/2014	DNAPL pumping not required to be completed					DMT[4]	-
	1/6/2015	DNAPL not pumped due to adverse weather conditions					DMT[4]	-
	2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions					DMT[4]	-
	3/24/2015	38.0	3.0	0.7	6.1	133	DMT[4]	-
	4/21/2015	38.3	2.7	0.3	7.0	28	DMT[4]	-
	5/11/2015	40.6	0.4	-	-	20	DMT[4]	-
	6/8/2015	40.6	0.4	-	-	28	DMT[4]	-
	7/8/2015	40.5	0.5	-	-	30	DMT[4]	-
	8/4/2015	40.2	0.8	-	-	27	DMT[4]	-
	9/8/2015	39.5	1.5	-	-	35	DMT[4]	-
	10/13/2015	38.7	2.3	0.2	5.9	35	DMT[4]	-
	11/9/2015	40.7	0.3	-	-	27	DMT[4]	-
	12/4/2015	DNAPL pumping not required to be completed					DMT[4]	-
	1/4/2016	40.2	0.8	-	-	56	DMT[4]	-
	2/8/2016	40.1	0.9	-	-	35	DMT[4]	-
	3/8/2016	39.3	1.7	-	-	29	DMT[4]	-
	4/4/2016	39.3	1.7	-	-	27	DMT[4]	-
	5/2/2016	39.3	1.7	-	-	28	DMT[4]	-
	6/14/2016	38.9	2.1	0.2	5.4	43	DMT[4]	-
	7/11/2016	39.3	1.7	-	-	27	DMT[4]	-
	8/1/2016	39.3	1.7	-	-	21	DMT[4]	-
	TOTAL VOLUME RECOVERED TO DATE FROM HARW-4 (GALLONS)				***196.9***			
HARW-5	7/18/2011	38.9	1.5	-	-	0	DMT[4]	-
	8/22/2011	36.7	3.6	-	-	35	DMT[4]	-

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
NYSDEC #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HARW-5 Continued	8/25/2011	-	-	0.1	10.0	-	DMT [4]	double diaphragm pump
	9/26/2011	34.5	5.8	-	-	32	DMT [4]	-
	9/27/2011	-	-	0.3	15.7	-	DMT [4]	double diaphragm pump
	10/24/2011	35.3	5.0	-	-	27	DMT [4]	-
	10/25/2011	-	-	0.2	13.9	-	DMT [4]	double diaphragm pump
	11/28/2011	34.3	6.0	-	-	34	DMT [4]	-
	11/29/2011	-	-	0.2	16.5	-	DMT [4]	double diaphragm pump
	1/4/2012	34.3	6.0	-	-	36	DMT [4]	-
	1/5/2012	-	-	0.3	16.2	-	DMT [4]	double diaphragm pump
	1/30/2012	34.5	5.8	-	-	25	DMT [4]	-
	1/30/2012	-	-	0.3	15.8	-	DMT [4]	double diaphragm pump
	3/5/2012	34.3	6.0	0.2	16.3	35	DMT [4]	double diaphragm pump
	4/4/2012	34.4	5.9	0.2	16.3	30	DMT [4]	double diaphragm pump
	5/2/2012	34.4	5.9	0.4	15.7	28	DMT [4]	double diaphragm pump
	6/5/2012	34.6	5.7	0.2	15.7	34	DMT [4]	double diaphragm pump
	7/10/2012	34.3	6.0	0.3	16.1	35	DMT [4]	double diaphragm pump
	8/7/2012	34.5	5.8	0.2	16.0	28	DMT [4]	double diaphragm pump
	9/10/2012	34.4	5.9	0.3	15.9	34	DMT [4]	double diaphragm pump
	10/9/2012	34.5	5.8	0.2	16.0	29	DMT [4]	double diaphragm pump
	11/5/2012	recovery data not compiled due to extreme weather events (Hurricane Sandy), which occurred in late October					DMT [4]	double diaphragm pump
	12/3/2012	34.6	5.7	0.8	13.9	55	DMT [4]	double diaphragm pump
	1/8/2013	34.6	5.7	0.3	15.2	36	DMT [4]	double diaphragm pump
	2/5/2013	34.6	5.7	0.2	15.7	28	DMT [4]	double diaphragm pump
	3/5/2013	34.5	5.9	0.1	16.4	28	DMT [4]	double diaphragm pump
	4/3/2013	34.3	6.0	0.3	16.1	29	DMT [4]	double diaphragm pump
	5/7/2013	35.1	5.2	0.5	13.3	34	DMT [4]	double diaphragm pump
	6/4/2013	34.6	5.7	0.2	15.4	28	DMT [4]	double diaphragm pump
	7/8/2013	34.6	5.7	0.2	15.4	34	DMT [4]	double diaphragm pump
	8/6/2013	34.6	5.7	0.4	15.0	29	DMT [4]	double diaphragm pump
	9/10/2013	34.6	5.7	0.3	15.2	35	DMT [4]	double diaphragm pump
	10/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	double diaphragm pump
	11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	double diaphragm pump
	12/10/2013	34.6	5.7	0.2	15.9	91	DMT [4]	double diaphragm pump
	1/10/2014	34.8	5.5	0.2	15.0	31	DMT [4]	double diaphragm pump
	2/4/2014	34.8	5.5	0.2	15.0	25	DMT [4]	double diaphragm pump
	3/5/2014	34.8	5.5	0.4	14.6	29	DMT [4]	double diaphragm pump
	4/8/2014	34.8	5.5	0.2	15.2	34	DMT [4]	double diaphragm pump
	5/6/2014	34.8	5.5	0.8	13.5	28	DMT [4]	double diaphragm pump
	6/7/2014	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	7/21/2014	34.8	5.5	0.6	13.9	76	DMT [4]	double diaphragm pump
	8/11/2014	34.4	5.9	0.2	16.1	21	DMT [4]	double diaphragm pump
	9/8/2014	34.8	5.5	0.2	15.0	28	DMT [4]	double diaphragm pump
	10/6/2014	34.9	5.4	0.2	14.8	28	DMT [4]	double diaphragm pump
	11/11/2014	35.7	4.6	0.2	12.4	36	DMT [4]	double diaphragm pump
	12/11/2014	DNAPL pumping not required to be completed					DMT [4]	double diaphragm pump
	1/6/2015	35.0	5.4	0.3	14.4	56	DMT [4]	double diaphragm pump
	2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions					DMT [4]	double diaphragm pump
	3/24/2015	34.4	5.9	0.9	13.1	77	DMT [4]	double diaphragm pump
	4/21/2015	35.9	4.4	0.1	12.4	28	DMT [4]	double diaphragm pump
	5/11/2015	35.2	5.1	0.5	13.3	20	DMT [4]	double diaphragm pump
	6/9/2015	36.3	4.0	0.4	10.2	29	DMT [4]	double diaphragm pump
	7/8/2015	35.1	5.2	0.1	14.6	29	DMT [4]	double diaphragm pump
	8/5/2015	34.8	5.5	0.1	15.4	28	DMT [4]	double diaphragm pump
	9/9/2015	35.6	4.7	0.1	13.3	35	DMT [4]	double diaphragm pump
	10/12/2015	35.0	5.3	0.2	14.4	33	DMT [4]	double diaphragm pump
	11/10/2015	35.1	5.2	0.2	14.4	29	DMT [4]	double diaphragm pump
	12/4/2015	DNAPL pumping not required to be completed					DMT [4]	-
	1/6/2016	35.1	5.2	0.2	14.1	57	DMT [4]	double diaphragm pump
	2/9/2016	36.5	3.8	0.1	10.7	34	DMT [4]	double diaphragm pump
	3/9/2016	35.3	5.0	0.2	13.7	29	DMT [4]	double diaphragm pump
	4/5/2016	35.3	5.0	0.0	14.4	27	DMT [4]	double diaphragm pump
	5/3/2016	35.4	4.9	0.2	13.5	28	DMT [4]	double diaphragm pump
	6/14/2016	34.8	5.5	0.2	15.2	42	DMT [4]	double diaphragm pump
	7/12/2016	34.8	5.5	0.3	14.8	28	DMT [4]	double diaphragm pump
	8/2/2016	35.7	4.6	-	13.1	21	DMT [4]	double diaphragm pump
	TOTAL VOLUME RECOVERED TO DATE FROM HARW-5 (GALLONS)				***774.1***			
HARW-6	7/19/2011	40.6	0.2	-	-	0	DMT [4]	-
	8/22/2011	40.6	0.2	-	-	34	DMT [4]	-
	9/26/2011	40.6	0.2	-	-	35	DMT [4]	-

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
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1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HARW-6 Continued	10/24/2011	40.3	0.5	-	-	28	DMT[4]	-
	11/28/2011	40.3	0.5	-	-	35	DMT[4]	-
	1/4/2012	40.2	0.6	-	-	37	DMT[4]	-
	1/31/2012	40.2	0.6	-	-	27	DMT[4]	-
	3/6/2012	40.2	0.6	-	-	35	DMT[4]	-
	4/4/2012	40.3	0.5	-	-	29	DMT[4]	-
	5/2/2012	40.3	0.5	-	-	28	DMT[4]	-
	6/4/2012	40.3	0.5	-	-	33	DMT[4]	-
	7/9/2012	40.3	0.5	-	-	35	DMT[4]	-
	8/8/2012	40.2	0.6	-	-	30	DMT[4]	-
	9/10/2012	40.2	0.6	-	-	33	DMT[4]	-
	10/8/2012	40.2	0.6	-	-	28	DMT[4]	-
	11/5/2012	recovery data not compiled due to extreme weather events (Hurricane Sandy), which occurred in late October					DMT[4]	-
	12/3/2012	40.2	0.6	-	-	56	DMT[4]	-
	1/7/2013	40.1	0.7	-	-	35	DMT[4]	-
	2/4/2013	40.1	0.7	-	-	28	DMT[4]	-
	3/4/2013	40.1	0.7	-	-	28	DMT[4]	-
	4/2/2013	40.1	0.7	-	-	29	DMT[4]	-
	5/7/2013	40.4	0.4	-	-	35	DMT[4]	-
	6/4/2013	40.4	0.4	-	-	28	DMT[4]	-
	7/8/2013	40.2	0.6	-	-	34	DMT[4]	-
	8/5/2013	40.2	0.6	-	-	28	DMT[4]	-
	9/10/2013	40.2	0.6	-	-	36	DMT[4]	-
	10/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT[4]	-
	11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT[4]	-
	12/9/2013	40.2	0.6	-	-	90	DMT[4]	-
	1/8/2014	40.2	0.6	-	-	30	DMT[4]	-
	2/6/2014	40.2	0.6	-	-	29	DMT[4]	-
	3/3/2014	40.2	0.7	-	-	25	DMT[4]	-
	4/9/2014	40.2	0.7	-	-	37	DMT[4]	-
	5/7/2014	40.1	0.7	-	-	28	DMT[4]	-
	6/7/2014	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT[4]	-
	7/22/2014	40.1	0.7	-	-	76	DMT[4]	-
	8/12/2014	40.1	0.7	-	-	21	DMT[4]	-
	9/9/2014	40.1	0.7	-	-	28	DMT[4]	-
	10/7/2014	40.1	0.7	-	-	28	DMT[4]	-
	11/11/2014	40.1	0.7	-	-	35	DMT[4]	-
	12/11/2014	DNAPL pumping not required to be completed					DMT[4]	-
	1/6/2015	40.1	0.7	-	-	56	DMT[4]	-
	2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions					DMT[4]	-
	3/24/2015	40.1	0.7	-	-	77	DMT[4]	-
	4/21/2015	40.1	0.7	-	-	28	DMT[4]	-
	5/11/2015	40.1	0.7	-	-	20	DMT[4]	-
	6/8/2015	40.1	0.7	-	-	28	DMT[4]	-
	7/8/2015	40.1	0.7	-	-	30	DMT[4]	-
	8/4/2015	40.1	0.7	-	-	27	DMT[4]	-
	9/8/2015	40.1	0.7	-	-	35	DMT[4]	-
	10/12/2015	40.1	0.7	-	-	34	DMT[4]	-
	11/9/2015	40.0	0.8	-	-	28	DMT[4]	-
	12/4/2015	DNAPL pumping not required to be completed					DMT[4]	-
	1/4/2016	40.0	0.8	-	-	56	DMT[4]	-
	2/8/2016	40.0	0.8	-	-	35	DMT[4]	-
	3/8/2016	40.0	0.8	-	-	29	DMT[4]	-
	4/4/2016	39.6	1.2	-	-	27	DMT[4]	-
	5/2/2016	39.6	1.2	-	-	28	DMT[4]	-
	6/13/2016	39.6	1.2	-	-	42	DMT[4]	-
	7/11/2016	39.6	1.2	-	-	28	DMT[4]	-
	8/1/2016	39.6	1.2	-	-	21	DMT[4]	-
	TOTAL VOLUME RECOVERED TO DATE FROM HARW-6 (GALLONS)				***0.0***			
HARW-7	7/18/2011	40.5	1.5	-	-	0	DMT[4]	-
	8/22/2011	36.9	5.1	-	-	35	DMT[4]	-
	8/24/2011	-	-	0.3	12.4	-	DMT[4]	double diaphragm pump
	9/26/2011	36.1	5.9	-	-	33	DMT[4]	-

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
NYSDEC #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HARW-7 Continued	9/28/2011	-	-	0.3	14.6	-	DMT [4]	double diaphragm pump
	10/24/2011	36.4	5.6	-	-	26	DMT [4]	-
	10/24/2011	-	-	0.0	14.5	-	DMT [4]	double diaphragm pump
	11/28/2011	35.8	6.2	-	-	35	DMT [4]	-
	11/29/2011	-	-	0.4	15.1	-	DMT [4]	double diaphragm pump
	1/4/2012	35.8	6.3	-	-	36	DMT [4]	-
	1/5/2012	-	-	0.2	15.9	-	DMT [4]	double diaphragm pump
	1/31/2012	37.3	4.7	-	-	26	DMT [4]	-
	1/31/2012	-	-	0.2	11.7	-	DMT [4]	double diaphragm pump
	3/6/2012	36.0	6.0	0.2	15.2	35	DMT [4]	double diaphragm pump
	4/5/2012	36.3	5.7	0.1	14.6	30	DMT [4]	double diaphragm pump
	5/2/2012	37.0	5.0	0.2	12.6	27	DMT [4]	double diaphragm pump
	6/6/2012	36.6	5.4	0.1	13.8	35	DMT [4]	double diaphragm pump
	7/10/2012	36.2	5.8	0.3	14.6	34	DMT [4]	double diaphragm pump
	8/7/2012	36.8	5.2	0.3	12.6	28	DMT [4]	double diaphragm pump
	9/10/2012	36.2	5.8	0.4	13.9	34	DMT [4]	double diaphragm pump
	10/9/2012	36.2	5.8	0.2	12.6	29	DMT [4]	double diaphragm pump
	11/5/2012	recovery data not compiled due to extreme weather events (Hurricane Sandy), which occurred in late October					DMT [4]	double diaphragm pump
	12/3/2012	35.0	7.0	0.1	18.0	55	DMT [4]	double diaphragm pump
	1/8/2013	41.5	0.5	-	-	36	DMT [4]	-
	2/5/2013	35.8	6.3	0.1	16.1	28	DMT [4]	double diaphragm pump
	3/5/2013	41.8	0.3	-	-	28	DMT [4]	-
	4/3/2013	37.0	5.0	0.4	12.0	29	DMT [4]	double diaphragm pump
	5/7/2013	41.4	0.6	-	-	34	DMT [4]	-
	6/4/2013	36.2	5.8	0.6	13.5	28	DMT [4]	double diaphragm pump
	7/8/2013	36.6	5.4	0.3	13.5	34	DMT [4]	double diaphragm pump
	8/6/2013	38.0	4.0	0.3	9.8	29	DMT [4]	double diaphragm pump
	9/10/2013	41.7	0.3	-	-	35	DMT [4]	double diaphragm pump
	10/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	double diaphragm pump
	11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	double diaphragm pump
	12/12/2013	35.8	6.2	0.2	15.7	93	DMT [4]	double diaphragm pump
	1/10/2014	37.4	4.6	0.2	11.5	29	DMT [4]	double diaphragm pump
	2/7/2014	38.2	3.8	0.2	9.6	28	DMT [4]	double diaphragm pump
	3/5/2014	40.4	1.6	-	-	26	DMT [4]	double diaphragm pump
	4/8/2014	36.0	6.0	0.2	15.2	34	DMT [4]	double diaphragm pump
	5/6/2014	41.7	0.3	-	-	28	DMT [4]	double diaphragm pump
	6/7/2014	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	7/22/2014	36.0	6.0	0.2	15.2	77	DMT [4]	double diaphragm pump
	8/12/2014	41.0	1.0	-	-	21	DMT [4]	double diaphragm pump
	9/8/2014	36.4	5.6	0.8	12.6	27	DMT [4]	double diaphragm pump
	10/6/2014	40.7	1.3	-	-	28	DMT [4]	double diaphragm pump
	11/11/2014	35.8	6.2	0.1	15.9	36	DMT [4]	double diaphragm pump
	12/11/2014	DNAPL pumping not required to be completed					DMT [4]	double diaphragm pump
	1/6/2015	DNAPL not pumped due to adverse weather conditions					DMT [4]	-
	2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions					DMT [4]	-
	3/23/2015	35.8	6.3	0.3	15.4	132	DMT [4]	double diaphragm pump
	4/21/2015	41.5	0.5	-	-	29	DMT [4]	double diaphragm pump
	5/11/2015	39.9	2.1	0.1	5.2	20	DMT [4]	double diaphragm pump
	6/8/2015	40.0	2.0	0.1	5.0	28	DMT [4]	double diaphragm pump
	7/8/2015	39.9	2.1	0.1	5.2	30	DMT [4]	double diaphragm pump
	8/4/2015	40.2	1.8	-	-	27	DMT [4]	double diaphragm pump
	9/8/2015	37.0	5.0	0.1	12.8	35	DMT [4]	double diaphragm pump
	10/12/2015	39.1	2.9	0.1	7.4	34	DMT [4]	double diaphragm pump
	11/9/2015	40.2	1.8	-	-	28	DMT [4]	double diaphragm pump
	12/4/2015	DNAPL pumping not required to be completed					DMT [4]	-
	1/4/2016	36.8	5.2	0.3	12.8	56	DMT [4]	double diaphragm pump
	2/8/2016	39.3	2.7	0.2	6.5	35	DMT [4]	double diaphragm pump
	3/8/2016	41.7	0.3	-	-	29	DMT [4]	double diaphragm pump
	4/4/2016	41.7	0.3	-	-	27	DMT [4]	double diaphragm pump
	5/2/2016	37.0	5.0	0.1	12.8	28	DMT [4]	double diaphragm pump
	6/13/2016	40.2	1.8	-	-	42	DMT [4]	double diaphragm pump
	7/11/2016	38.5	3.5	0.3	8.3	28	DMT [4]	double diaphragm pump
	8/1/2016	39.5	2.5	-	6.5	21	DMT [4]	double diaphragm pump
	TOTAL VOLUME RECOVERED TO DATE FROM HARW-7 (GALLONS)				***470.6***			
HARW-8	7/19/2011	42.6	0.4	-	-	0	DMT [4]	-
	8/22/2011	42.9	0.1	-	-	34	DMT [4]	-
	9/26/2011	42.9	0.1	-	-	35	DMT [4]	-

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
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1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HARW-8 Continued	10/24/2011	42.8	0.3	-	-	28	DMT [4]	-
	11/28/2011	42.8	0.3	-	-	35	DMT [4]	-
	1/4/2012	42.8	0.3	-	-	37	DMT [4]	-
	1/31/2012	42.8	0.3	-	-	27	DMT [4]	-
	3/6/2012	42.8	0.3	-	-	35	DMT [4]	-
	4/4/2012	42.8	0.3	-	-	29	DMT [4]	-
	5/3/2012	42.8	0.3	-	-	29	DMT [4]	-
	6/4/2012	42.8	0.3	-	-	32	DMT [4]	-
	7/9/2012	42.1	0.9	-	-	35	DMT [4]	-
	8/8/2012	42.7	0.3	-	-	30	DMT [4]	-
	9/10/2012	42.7	0.3	-	-	33	DMT [4]	-
	10/8/2012	42.7	0.3	-	-	28	DMT [4]	-
	11/5/2012	recovery data not compiled due to extreme weather events (Hurricane Sandy), which occurred in late October					DMT [4]	-
	12/3/2012	42.7	0.3	-	-	56	DMT [4]	-
	1/7/2013	42.7	0.3	-	-	35	DMT [4]	-
	2/4/2013	43.0	0.0	-	-	28	DMT [4]	-
	3/4/2013	43.0	0.0	-	-	28	DMT [4]	-
	4/2/2013	43.0	0.0	-	-	29	DMT [4]	-
	5/9/2013	43.0	0.0	-	-	37	DMT [4]	-
	6/4/2013	43.0	0.0	-	-	26	DMT [4]	-
	7/10/2013	43.0	0.0	-	-	36	DMT [4]	-
	8/5/2013	43.0	0.0	-	-	26	DMT [4]	-
	9/10/2013	43.0	0.0	-	-	36	DMT [4]	-
	10/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	12/10/2013	43.0	0.0	-	-	91	DMT [4]	-
	1/8/2014	43.0	0.0	-	-	29	DMT [4]	-
	2/6/2014	43.0	0.0	-	-	29	DMT [4]	-
	3/5/2014	43.0	0.0	-	-	27	DMT [4]	-
	4/10/2014	43.0	0.0	-	-	36	DMT [4]	-
	5/7/2014	43.0	0.0	-	-	27	DMT [4]	-
	6/7/2014	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers					DMT [4]	-
	7/22/2014	43.0	0.0	-	-	76	DMT [4]	-
	8/12/2014	43.0	0.0	-	-	21	DMT [4]	-
	9/9/2014	43.0	0.0	-	-	28	DMT [4]	-
	10/7/2014	43.0	0.0	-	-	28	DMT [4]	-
	11/12/2014	43.0	0.0	-	-	36	DMT [4]	-
	12/12/2014	DNAPL pumping not required to be completed					DMT [4]	-
	1/6/2015	43.0	0.0	-	-	55	DMT [4]	-
	2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions					DMT [4]	-
	3/24/2015	37.0	6.0	2.9	8.1	77	DMT [4]	-
	4/21/2015	39.9	3.1	2.3	2.0	28	DMT [4]	-
	5/11/2015	40.9	2.1	0.1	3.3	20	DMT [4]	-
	6/8/2015	41.8	1.2	-	-	28	DMT [4]	-

TABLE II
SUMMARY OF DNAPL MEASUREMENTS
NYSDEC #3-60-022
1 RIVER STREET
HASTINGS-ON-HUDSON, NEW YORK

	Date	Depth to Product (ft)	Product Apparent Height - Pre-puming (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) [3]	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HARW-8 Continued	7/8/2015	41.8	1.2	-	-	30	DMT [4]	-
	8/4/2015	41.7	1.3	-	-	27	DMT [4]	-
	9/8/2015	41.3	1.7	-	-	35	DMT [4]	-
	10/12/2015	42.0	1.0	-	-	34	DMT [4]	-
	11/11/2015	41.0	2.0	0.3	4.6	30	DMT [4]	-
	12/4/2015	DNAPL pumping not required to be completed					DMT [4]	-
	1/4/2016	42.7	0.3	-	-	54	DMT [4]	-
	2/8/2016	42.7	0.3	-	-	35	DMT [4]	-
	3/8/2016	42.7	0.3	-	-	29	DMT [4]	-
	4/4/2016	42.7	0.3	-	-	27	DMT [4]	-
	5/2/2016	42.7	0.3	-	-	28	DMT [4]	-
	6/13/2016	42.7	0.3	-	-	42	DMT [4]	-
	7/11/2016	42.0	1.0	-	-	28	DMT [4]	-
	8/1/2016	41.8	1.2	-	-	21	DMT [4]	-
	TOTAL VOLUME RECOVERED TO DATE FROM HARW-8 (GALLONS)				***18.0***			

TOTAL VOLUME RECOVERED TO DATE FROM ALL WELLS (GALLONS) ***2230.5***

Notes:
DNAPL pumping was not conducted in any of the wells due to equipment availability and shortages caused by extreme weather extreme weather events (Hurricane Sandy) which occurred in late October. The NYSDEC was notified of this issue prior to the scheduled start of the work.

Notes:

MW-12
Depth to Top of Screen: 33 ft
Depth to Bottom: 36 ft

HAOW-12A
Depth to Top of Screen: 28.6 ft
Depth to Bottom: 43.6 ft

HARW-1
Depth to Top of Screen: 24 ft
Depth to Bottom: 42 ft

HARW-2
Depth to Top of Screen: 26 ft
Depth to Bottom: 40 ft

HARW-3
Angle from Vertical: 16.5°
Vertical Depth to Top of Screen: 25.4 ft
Vertical Depth to Bottom: 39 ft

HARW-4
Angle from Vertical: 24.5°
Vertical Depth to Top of Screen: 28.7 ft
Vertical Depth to Bottom: 41 ft

HARW-5
Angle from Vertical: 23.5°
Vertical Depth to Top of Screen: 27 ft
Vertical Depth to Bottom: 40.3 ft

HARW-6
Angle from Vertical: 14°
Vertical Depth to Top of Screen: 26.7 ft
Vertical Depth to Bottom: 40.8 ft

HARW-7
Depth to Top of Screen: 27.5 ft
Depth to Bottom: 42 ft

HARW-8
Depth to Top of Screen: 28.5 ft
Depth to Bottom: 43 ft

DMT = DNAPL Measurement Tool, consisting of a copper tubing handle, a spacer section to prevent the probe from contacting the sides of the well riser, and an all-thread rod probe to extend into the DNAPL.

[1] Unable to measure product thickness due to product smearing on side of well.

[2] Pump shut down when water begins to be purged from well. Assumed all product pumped from the well.

[3] Volume of product recovered by downwell pump is estimated by approximating the volume discharged to the drum and additional product in tubing and on pump.
Volume of product recovered by bailer is estimated using the bailer volume and number of times bailed.
Volume of product recovered by double diaphragm and positive displacement pison pumps are estimated by approximating the volume discharged to the drum or by using the pre- and post-pumping apparent height of product and the well dimensions (8" diameter well).

[4] All depth and thickness values for HARW-3, HARW-4 HARW-5 and HARW-6 are provided as vertical equivalents of the field measurements based on the angle of the installed well.