

Atlantic Richfield Company

Paul G. Johnson
Operations Project Manager



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April 5, 2017

Jessica LaClair
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, March 2017
Former Anaconda Plant (a.k.a. Harbor at Hastings Site) Site No. 3-60-022
Hastings-On-Hudson, New York

Dear Ms. LaClair:

Enclosed is the March 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 March 1, 2017 through March 31, 2017.

If you have any questions or comments on this submittal, please feel free to contact me at 832-619-5825.

Sincerely,

Paul G. Johnson
Operations Project Manager

Enclosure

cc: Maureen Schuck, New York State Department of Health
Francis Frobels, Hastings-On-Hudson
Mark Chertok, Hastings-On-Hudson
Karl Coplan, Pace/Riverkeeper
Martha Gopal, Sovereign Consulting Inc.
File

ecc: Jacquelyn Nealon, New York State Department of Health
George Heitzman, New York State Department of Environmental Conservation
Kevin Farrar, New York State Department of Environmental Conservation
Benjamin Conlon, Esq. New York State Department of Environmental Conservation,
Office of General Counsel
Jim Lucari, BP
Michael Daneker, Arnold & Porter

**FORMER ANACONDA WIRE AND CABLE PLANT SITE
(a.k.a. HARBOR AT HASTINGS SITE) OU1
NYSDEC SITE 360022
MONTHLY PROGRESS REPORT 141**

PREPARED BY: Atlantic Richfield Company
Paul Johnson

REPORTING PERIOD: March 1, 2017 through March 31, 2017

1. PROGRESS MADE THIS REPORTING PERIOD:

- DNAPL gauging and recovery was performed on March 6th and 7th. HARW-2 and HARW-5 were gauged and pumped as required by the August 2011 Design Basis Memorandum.

2. UNANTICIPATED PROBLEM AREAS AND RECOMMENDED SOLUTIONS

- None this reporting period.

3. PROBLEMS RESOLVED

- None this reporting period.

4. DELIVERABLES SUBMITTED / RECEIVED

- March 2, 2017 – Atlantic Richfield to NYSDEC: *February 2017 Monthly Progress Report*.
- March 17, 2017 - Atlantic Richfield to NYSDEC and NYDOH: *Building 52 Draft Decommissioning and Demolition Workplan; Building 52 Draft Community Air Monitoring Plan*.

5. UPCOMING EVENTS/ACTIVITIES PLANNED

- The next two DNAPL gauging and recovery events are tentatively scheduled to occur the week of April 3rd 2017 and the week of May 2nd 2017.
- 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 tentatively scheduled to occur the week of April 3rd 2017 and the week of August 7th 2017 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.

6. KEY STAFFING

- Sovereign Consulting Inc.
- Parsons Environment and Infrastructure Group, Inc. (OM&M)
- Parsons Environment and Infrastructure Group, Inc. (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

<i>Acronym</i>	<i>Description</i>
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

MARCH DNAPL PUMPING SUMMARY (WEEK OF 3/6/2017)
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	3/6/2017 ¹	0	0*	0*	NA**	NA**	NA**	NA**	NA**
HARW-2	3/6/2017 ²	0	44.0	44.0					
	3/7/2017 ³				2.0	NA**	147.0	9.1	4.5
HARW-3	3/6/17 ²	16.5	13.5	12.9					
	NA** ³				NA**	NA**	NA**	NA**	3.2
HARW-4	3/6/2017 ²	24.5	20.0	18.2					
	NA** ³				NA**	NA**	NA**	NA**	2.6
HARW-5	3/6/2017 ²	23.5	41.0	37.6					
	3/6/2017 ³				1.0	0.9	189.0	8.7	4.2
HARW-6	3/6/17 ²	14.0	10.0	9.7					
	NA** ³				NA**	NA**	NA**	NA**	3.8
HARW-7	3/6/17 ²	0	12.0	12.0					
	NA** ³				NA**	NA**	NA**	NA**	3.7
HARW-8	3/6/2017 ²	0	4.0	4.0					
	NA** ³				NA**	NA**	NA**	NA**	4.4
HAOW-12A	3/6/2017 ²	0	16.0	16.0					
	NA** ³				NA**	NA**	NA**	NA**	3.9

Total Gallons of DNAPL Removed: 17.8

Notes:

¹DNAPL not present, pumping not completed in this well

²Pre-pumping gauge date

³Post-pumping gauge date

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

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

⁶Unless 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-pumping (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) *	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	baller
	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	baller
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	-	8	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	baller
	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	28	weighted tape	positive displacement piston pump
	12/8/2010	42.6	1.0	-	-	29	DMT ⁴	-

	Product Apparent											Recovery Procedure Used
	Depth to Product (ft)		Product Apparent Height - Pre-pumping (ft)		Product Apparent Height - Post-pumping (ft)		Approximate Volume of Product Recovered (gallons) ^a		Days Elapsed Between Measurement Readings		Measurement Tool Used	
HAOW-12A Continued	12/15/2010	-	-	-	-	0.1	-	1.3	7	DMT ⁴	double diaphragm pump	
	1/17/2011	42.8	0.8	-	-	-	-	-	33	DMT ⁴	-	
	1/18/2011	-	-	-	-	0.3	-	1.4	-	DMT ⁴	piston pump	
	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	-	-	0.3	-	-	34	DMT ⁴	-	
	5/18/2011	-	-	-	-	-	-	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										
	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											
11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers											
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											
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	-		

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)	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HAOW-12A Continued	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	-
	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	-
	9/12/2016	42.3	1.3	-	-	42	DMT ⁴	-
	10/24/2016	42.3	1.3	-	-	42	DMT ⁴	-
HARW-1	11/10/2016	-	-	DNAPL pumping not required to be completed	-	-	DMT ⁴	-
	12/10/2016	-	-	DNAPL pumping not required to be completed	-	-	DMT ⁴	-
	1/16/2017	42.0	1.6	-	-	84	DMT ⁴	-
	2/20/2017	-	-	DNAPL gauging or pumping not completed due to adverse weather conditions	-	-	DMT ⁴	-
	3/6/2017	42.3	1.3	-	-	49	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	-

Date	Depth to Product (ft)	Product Apparent Height -		Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) *	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
		Pre-pumping (ft)	Post-pumping (ft)					
HARW-1 Continued	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	-
	9/8/2014	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	-

	Product Apparent			Product Apparent			Product Apparent			Approximate Volume of Product Recovered (gallons) *	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
	Date	Depth to Product (ft)	Height - Pre-pumping (ft)	Height - Post-pumping (ft)	Height - Pre-pumping (ft)	Height - Post-pumping (ft)	Height - Pre-pumping (ft)	Height - Post-pumping (ft)	Height - Post-pumping (ft)				
HARW-1 Continued	7/11/2016	42.0	0.0	-	-	-	-	-	-	-	28	DMT ⁴	-
	8/1/2016	42.0	0.0	-	-	-	-	-	-	-	21	DMT ⁴	-
	9/12/2016	42.0	0.0	-	-	-	-	-	-	-	42	DMT ⁴	-
	10/24/2016	42.0	0.0	-	-	-	-	-	-	-	42	DMT ⁴	-
	11/10/2016											DMT ⁴	-
	12/10/2016											DMT ⁴	-
	1/16/2017	42.0	0.0	-	-	-	-	-	-	-	84	DMT ⁴	-
	2/20/2017											DMT ⁴	-
	3/6/2017	42.0	0.0	-	-	-	-	-	-	-	49	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	-	-	-	-	-	-	14.8	33	DMT ⁴	-
	7/20/2011	-	-	0.3	-	-	-	-	-	-	-	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	-	-	-	-	-	16.7	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											DMT ⁴	double diaphragm pump

recovery data not compiled due to extreme weather events (Hurricane Sandy), which occurred in late October

Date	Depth to Product (ft)	Product Apparent Height -		Product Apparent Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) *	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
		Pre-pumping (ft)	Height -					
HARW-2								
Continued								
12/5/2012	33.9	6.1	0.2	0.2	15.4	56	DMT ⁴	double diaphragm pump
1/9/2013	34.0	6.0	0.8	0.8	13.7	35	DMT ⁴	double diaphragm pump
2/6/2013	34.0	6.0	0.0	0.0	15.6	28	DMT ⁴	double diaphragm pump
3/6/2013	34.4	5.6	0.1	0.1	14.4	28	DMT ⁴	double diaphragm pump
4/4/2013	34.4	5.6	0.4	0.4	13.5	29	DMT ⁴	double diaphragm pump
5/8/2013	34.3	5.8	0.4	0.4	13.9	34	DMT ⁴	double diaphragm pump
6/5/2013	35.0	5.0	0.2	0.2	12.6	28	DMT ⁴	double diaphragm pump
7/9/2013	35.7	4.3	0.2	0.2	10.9	34	DMT ⁴	double diaphragm pump
8/5/2013	34.8	5.3	0.1	0.1	13.4	27	DMT ⁴	double diaphragm pump
9/9/2013	34.3	5.8	0.4	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							
11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers							
12/11/2013	33.9	6.1	0.2	0.2	15.4	93	DMT ⁴	double diaphragm pump
1/9/2014	34.6	5.4	2.7	2.7	7.2	29	DMT ⁴	double diaphragm pump
2/7/2014	34.3	5.7	0.4	0.4	13.7	29	DMT ⁴	double diaphragm pump
3/6/2014	35.2	4.8	0.2	0.2	12.2	27	DMT ⁴	double diaphragm pump
4/7/2014	34.8	5.3	0.1	0.1	13.5	32	DMT ⁴	double diaphragm pump
5/5/2014	35.7	4.3	0.3	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							
7/23/2014	34.4	5.6	1.3	1.3	14.3	79	DMT ⁴	double diaphragm pump
8/12/2014	36.3	3.7	0.2	0.2	9.1	20	DMT ⁴	double diaphragm pump
9/9/2014	35.7	4.3	0.2	0.2	10.9	28	DMT ⁴	double diaphragm pump
10/7/2014	35.8	4.3	0.2	0.2	10.7	28	DMT ⁴	double diaphragm pump
11/10/2014	35.3	4.8	0.1	0.1	12.2	34	DMT ⁴	double diaphragm pump
12/10/2014	DNAPL pumping not required to be completed							
1/5/2015	34.5	5.5	0.3	0.3	13.5	56	DMT ⁴	double diaphragm pump
2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions							
3/25/2015	35.2	4.8	0.1	0.1	12.4	79	DMT ⁴	double diaphragm pump
4/21/2015	37.3	2.7	0.1	0.1	6.7	27	DMT ⁴	double diaphragm pump
5/12/2015	37.7	2.3	0.1	0.1	5.9	21	DMT ⁴	double diaphragm pump
6/9/2015	37.2	2.8	0.4	0.4	6.3	28	DMT ⁴	double diaphragm pump
7/8/2015	35.9	4.1	0.8	0.8	8.5	29	DMT ⁴	double diaphragm pump
8/4/2015	36.0	4.0	0.1	0.1	10.2	27	DMT ⁴	double diaphragm pump
9/10/2015	36.0	4.0	0.2	0.2	10.0	37	DMT ⁴	double diaphragm pump
10/13/2015	36.4	3.6	0.1	0.1	9.1	33	DMT ⁴	double diaphragm pump
11/9/2015	37.0	3.0	1.0	1.0	7.6	27	DMT ⁴	double diaphragm pump
12/4/2015	DNAPL pumping not required to be completed							
1/6/2016	35.0	5.0	0.2	0.2	12.6	58	DMT ⁴	double diaphragm pump
2/8/2016	36.3	3.7	0.1	0.1	9.4	33	DMT ⁴	double diaphragm pump
3/8/2016	37.0	3.0	0.1	0.1	7.6	29	DMT ⁴	double diaphragm pump
4/4/2016	37.7	2.3	0.1	0.1	5.9	27	DMT ⁴	double diaphragm pump
5/2/2016	37.6	2.4	0.1	0.1	6.1	28	DMT ⁴	double diaphragm pump
6/14/2016	36.3	3.7	0.2	0.2	9.1	43	DMT ⁴	double diaphragm pump
7/12/2016	37.7	2.3	0.2	0.2	5.7	28	DMT ⁴	double diaphragm pump
8/1/2016	38.1	1.9	-	-	-	20	DMT ⁴	double diaphragm pump
9/13/2016	35.0	5.0	-	-	12.8	43	DMT ⁴	double diaphragm pump
10/25/2016	36.7	3.3	0.3	0.3	7.8	42	DMT ⁴	double diaphragm pump
11/10/2016	DNAPL pumping not required to be completed							
12/10/2016	DNAPL pumping not required to be completed							
1/18/2017	36.0	4.0	0.7	0.7	8.7	85	DMT ⁴	double diaphragm pump
2/20/2017	DNAPL gauging or pumping not completed due to adverse weather conditions							

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

Date	Depth to Product (ft)	Product Apparent Height -		Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) ³	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
		Pre-pumping (ft)	Post-pumping (ft)					
3/6/2017	36.3	3.7	0.2	9.1	47	DMT ⁴		double diaphragm pump
TOTAL VOLUME RECOVERED TO DATE FROM HARW-2 (GALLONS)								
				728.2				
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		double diaphragm pump
4/5/2012	-	-	0.3	4.7	-	DMT ⁴		-
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		-
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							
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							
11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers							
12/9/2013	37.2	1.8	-	-	90	DMT ⁴		-
1/9/2014	36.6	2.4	0.6	4.8	31	DMT ⁴		-

	Product Apparent				Product Apparent				Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
	Date	Depth to Product (ft)	Height - Pre-pumping (ft)	Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) ¹	Height - Pre-pumping (ft)	Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) ¹			
HARW-3 Continued	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	-
HARW-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	-
	9/12/2016	37.4	1.6	-	-	-	-	-	63	DMT ⁴	-
	10/24/2016	37.4	1.6	-	-	-	-	-	42	DMT ⁴	-
	11/10/2016	DNAPL pumping not required to be completed								DMT ⁴	-
	12/10/2016	DNAPL pumping not required to be completed								DMT ⁴	-
	1/16/2017	37.4	1.6	-	-	-	-	-	84	DMT ⁴	-
	2/20/2017	DNAPL gauging or pumping not completed due to adverse weather conditions								DMT ⁴	-
	3/6/2017	37.9	1.1	-	-	-	-	-	49	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

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)	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
HARW-4 Continued	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
	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	38.6	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	double diaphragm pump
	6/5/2012	-	-	0.2	6.5	-	DMT ⁴	-
	7/9/2012	40.2	0.8	-	-	34	DMT ⁴	double diaphragm pump
	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	38.7	1.3	0.0	-	28	DMT ⁴	double diaphragm pump
	11/5/2012	-	-	-	-	-	-	-
	12/3/2012	36.9	4.1	0.4	10.7	56	DMT ⁴	-
	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	-	-	-	-	-	-	-
	11/4/2013	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-
	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	-
	11/1/2014	39.6	1.4	-	-	35	DMT ⁴	-
	12/1/2014	-	-	-	-	-	-	-
DNAPL pumping not required to be completed								

Date	Depth to Product (ft)	Product Apparent Height -		Product Apparent Post-pumping (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
		Pre-pumping (ft)	Post-pumping (ft)						
HARW-4 Continued	1/6/2015								
	2/2/2015								
	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								
	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	-
	9/13/2016	39.0	2.0		0.1	5.4	43	DMT ⁴	-
	10/24/2016	40.2	0.8		-	-	41	DMT ⁴	-
	11/10/2016								
	12/10/2016								
	1/16/2017	39.3	1.7		-	-	84	DMT ⁴	-
	2/20/2017								
	3/6/2017	39.5	1.5		-	-	49	DMT ⁴	-
TOTAL VOLUME RECOVERED TO DATE FROM HARW-4 (GALLONS)							202.3		
HARW-5	7/18/2011	38.9	1.5		-	-	0	DMT ⁴	-
	8/22/2011	36.7	3.6		-	-	35	DMT ⁴	-
	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

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

HARW-5 Continued	Date	Depth to Product (ft)	Product Apparent		Product Apparent Height - Pre-pumping (ft)	Product Apparent Height - Post-pumping (ft)	Approximate Volume of Product Recovered (gallons) ^a	Days Elapsed Between Measurement Readings		Measurement Tool Used	Recovery Procedure Used
	11/5/2012		recovery data not compiled due to extreme weather events		0.8		13.9			DMT ⁴	double diaphragm pump
	12/3/2012	34.6	5.7				15.2		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		recovery data not compiled due to significant site activities which may pose a health and safety risk to workers							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		recovery data not compiled due to significant site activities which may pose a health and safety risk to workers							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		0.2		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		recovery data not compiled due to significant site activities which may pose a health and safety risk to workers							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
	9/12/2016	35.1	5.2		0.6		12.8		41	DMT ⁴	double diaphragm pump
	10/24/2016	35.2	5.1		0.5		13.3		42	DMT ⁴	double diaphragm pump
	11/10/2016		recovery data not compiled due to significant site activities which may pose a health and safety risk to workers							DMT ⁴	-
	12/10/2016		recovery data not compiled due to significant site activities which may pose a health and safety risk to workers							DMT ⁴	-
	1/17/2017	35.2	5.1		0.2		14.1		85	DMT ⁴	double diaphragm pump

Date	Depth to Product (ft)	Product Apparent Height -		Product Apparent Post-pumping (ft)	Product Apparent Height - Post-pumping (ft)	Product Apparent Post-pumping not completed due to adverse weather conditions	Approximate Volume of Product Recovered (gallons) *	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
		Pre-pumping (ft)	Pre-pumping (ft)							
2/20/2017	37.2	3.1	0.1	0.1	8.7	48			DMT ⁴	-
3/6/2017									DMT ⁴	double diaphragm pump
TOTAL VOLUME RECOVERED TO DATE FROM HARW-5 (GALLONS)										
							823.0			
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	-
	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	-
	8/6/2012	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	-
	11/1/2014	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	-

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

	Product Apparent				Product Apparent		Approximate Volume of		Days Elapsed Between		Measurement Tool	
	Depth to Product	Height -	Height -	Post-pumping	Product Recovered	Product Recovered	Product Recovered	Product Recovered	Product Recovered	Product Recovered	Product Recovered	Product Recovered
	(ft)	Pre-pumping	Post-pumping	(ft)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)
	Date											
HARW-6 Continued	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										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	-
	9/12/2016	39.6	1.2	-	-	-	-	-	-	42	DMT ⁴	-
	10/24/2016	39.6	1.2	-	-	-	-	-	-	42	DMT ⁴	-
	11/10/2016										DMT ⁴	-
	12/10/2016										DMT ⁴	-
	1/16/2017	40.0	0.8	-	-	-	-	-	-	84	DMT ⁴	-
	2/20/2017										DMT ⁴	-
	3/6/2017	40.0	0.8	-	-	-	-	-	-	49	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	-
	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										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	-	

HARW-7 Continued	Product Apparent			Product Apparent			Approximate Volume of Product Recovered (gallons) ³	Days Elapsed Between Measurement Readings	Measurement Tool Used	Recovery Procedure Used
	Depth to Product (ft)	Pre-pumping (ft)	Height - Post-pumping (ft)	Height - Post-pumping (ft)						
	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	28	13.5	28	DMT ⁴	double diaphragm pump	
	7/8/2013	36.6	5.4	0.3	34	13.5	34	DMT ⁴	double diaphragm pump	
	8/6/2013	38.0	4.0	0.3	29	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								
	11/4/2013	recovery data not compiled due to significant site activities which may pose a health and safety risk to workers								
	12/12/2013	35.8	6.2	0.2	93	15.7	93	DMT ⁴	double diaphragm pump	
	1/10/2014	37.4	4.6	0.2	29	11.5	29	DMT ⁴	double diaphragm pump	
	2/7/2014	38.2	3.8	0.2	28	9.6	28	DMT ⁴	double diaphragm pump	
	3/5/2014	40.4	1.6	-	26	-	26	DMT ⁴	double diaphragm pump	
	4/8/2014	36.0	6.0	0.2	34	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								
	7/22/2014	36.0	6.0	0.2	77	15.2	77	DMT ⁴	double diaphragm pump	
	8/12/2014	41.0	1.0	-	21	-	21	DMT ⁴	double diaphragm pump	
	9/8/2014	36.4	5.6	0.8	27	12.6	27	DMT ⁴	double diaphragm pump	
	10/6/2014	40.7	1.3	-	28	-	28	DMT ⁴	double diaphragm pump	
	11/11/2014	35.8	6.2	0.1	36	15.9	36	DMT ⁴	double diaphragm pump	
	12/11/2014	DNAPL pumping not required to be completed								
	1/6/2015	DNAPL not pumped due to adverse weather conditions								
	2/2/2015	DNAPL gauging or pumping not completed due to adverse weather conditions								
	3/23/2015	35.8	6.3	0.3	132	15.4	132	DMT ⁴	double diaphragm pump	
	4/21/2015	41.5	0.5	-	29	-	29	DMT ⁴	double diaphragm pump	
	5/11/2015	39.9	2.1	0.1	20	5.2	20	DMT ⁴	double diaphragm pump	
	6/8/2015	40.0	2.0	0.1	28	5.0	28	DMT ⁴	double diaphragm pump	
	7/8/2015	39.9	2.1	0.1	30	5.2	30	DMT ⁴	double diaphragm pump	
	8/4/2015	40.2	1.8	-	27	-	27	DMT ⁴	double diaphragm pump	
	9/8/2015	37.0	5.0	0.1	35	12.8	35	DMT ⁴	double diaphragm pump	
	10/12/2015	39.1	2.9	0.1	34	7.4	34	DMT ⁴	double diaphragm pump	
	11/9/2015	40.2	1.8	-	28	-	28	DMT ⁴	double diaphragm pump	
	12/4/2015	DNAPL pumping not required to be completed								
	1/4/2016	36.8	5.2	0.3	56	12.8	56	DMT ⁴	double diaphragm pump	
	2/8/2016	39.3	2.7	0.2	35	6.5	35	DMT ⁴	double diaphragm pump	
	3/8/2016	41.7	0.3	-	29	-	29	DMT ⁴	double diaphragm pump	
	4/4/2016	41.7	0.3	-	27	-	27	DMT ⁴	double diaphragm pump	
	5/2/2016	37.0	5.0	0.1	28	12.8	28	DMT ⁴	double diaphragm pump	
	6/13/2016	40.2	1.8	-	42	-	42	DMT ⁴	double diaphragm pump	
	7/11/2016	38.5	3.5	0.3	28	8.3	28	DMT ⁴	double diaphragm pump	
	8/1/2016	39.5	2.5	-	21	6.5	21	DMT ⁴	double diaphragm pump	
	9/12/2016	40.3	1.7	-	42	-	42	DMT ⁴	double diaphragm pump	
	10/24/2016	37.2	4.8	0.3	42	11.5	42	DMT ⁴	double diaphragm pump	
	11/10/2016	DNAPL pumping not required to be completed								
	12/10/2016	DNAPL pumping not required to be completed								
	1/17/2017	37.3	4.8	0.1	85	12.2	85	DMT ⁴	double diaphragm pump	
	2/20/2017	DNAPL gauging or pumping not completed due to adverse weather conditions								
	3/6/2017	41.0	1.0	-	48	-	48	DMT ⁴	double diaphragm pump	
TOTAL VOLUME RECOVERED TO DATE FROM HARW-7 (GALLONS)										494.3

	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
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	-
	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	-
	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	-

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
HARW-8										
Continued	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	-
	9/12/2016	41.6	1.4		-		-	42	DMT ⁴	-
	10/24/2016	41.7	1.3		-		-	42	DMT ⁴	-
	11/10/2016					DNAPL pumping not required to be completed			DMT ⁴	-
	12/10/2016					DNAPL pumping not required to be completed			DMT ⁴	-
	1/18/2017	40.8	2.2		0.2		5.2	86	DMT ⁴	-
	2/20/2017					DNAPL gauging or pumping not completed due to adverse weather conditions			DMT ⁴	-
	3/6/2017	41.7	1.3		-		-	47	DMT ⁴	-
TOTAL VOLUME RECOVERED TO DATE FROM HARW-8 (GALLONS)							23.2			

TOTAL VOLUME RECOVERED TO DATE FROM ALL WELLS (GALLONS)

2352.1

Notes:

DNAPL pumping was not conducted in any of the wells due to equipment availability and shortages caused by 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:

MIW-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 piston 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.

MARY K STEGEMANN

Member Since 2015 Account number ending in: 3132

Billing Period: 03/03/17-04/04/17

How to reach us

www.citicards.com

1-888-766-CITI(2484) (TTY: 1-800-325-2865)

BOX 6500 SIOUX FALLS, SD 57117

Minimum payment due: **\$56.55**New balance: **\$1,926.39**Payment due date: **04/28/17**Make a payment now! www.payonline.citicards.com

Late Payment Warning: If we do not receive your minimum payment by the date listed above, you may have to pay a late fee of up to \$35 and your APRs may be increased up to the variable Penalty APR of 29.99%.

Minimum Payment Warning: If you make only the minimum payment each period, you will pay more in interest and it will take you longer to pay off your balance. For example:

If you make no additional charges using this card and each month you pay...	You will pay off the balance shown on the statement in about...	And you will end up paying an estimated total of...
Only the minimum payment	12 year(s)	\$4,469
\$73	3 year(s)	\$2,628 (Savings = \$1,841)

For information about credit counseling services, call 1-877-337-8187.

Account Summary

Previous balance	\$1,988.84
Payments	-\$100.00
Credits	-\$0.00
Purchases	+\$0.00
Cash advances	+\$0.00
Fees	+\$0.00
Interest	+\$37.55

New balance **\$1,926.39**

Credit Limit

Revolving Credit limit **\$2,000**

Includes \$500 cash advance limit

Available Revolving credit **\$73**

Includes \$73 available for cash advances

P.O. Box 6004
Sioux Falls, SD 57117-6004

Your Statement Is Inside

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to American Airlines:**0**» See page 2 for more information
about your rewardsMinimum payment due **\$56.55**New balance **\$1,926.39**Payment due date **04/28/17**

Amount enclosed: \$

Account number ending in 3132

MARY K STEGEMANN
3432 CLARENCE AVE
BERWYN IL 60402-3754CITI CARDS
PO BOX 78045
Phoenix, AZ 85062-8045

Account Summary

Trans. date	Post date	Description	Amount
----------------	--------------	-------------	--------

Payments, Credits and Adjustments

	03/08	ONLINE PAYMENT, THANK YOU	-\$100.00
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Fees charged

Total fees charged in this billing period	\$0.00
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Interest charged

Date	Description	Amount
04/04	INTEREST CHARGED TO STANDARD ADV	\$7.46
04/04	INTEREST CHARGED TO STANDARD PURCH	\$30.09

Total interest charged in this billing period	\$37.55
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2017 totals year-to-date

Total fees charged in 2017	\$95.00
Total interest charged in 2017	\$138.79

Interest charge calculation

Days in billing cycle: 33

Your Annual Percentage Rate (APR) is the annual interest rate on your account.

Balance type	Annual percentage rate (APR)	Balance subject to interest rate	Interest charge
PURCHASES			
Standard Purch	20.74% (V)	\$1,604.70 (D)	\$30.09
ADVANCES			
Standard Adv	25.99% (V)	\$317.58 (D)	\$7.46

Your Annual Percentage Rate (APR) is the annual interest rate on your account. APRs followed by (V) may vary. Balances followed by (D) are determined by the daily balance method (including current transactions).

Account messages

Remember, any charges above your revolving credit limit MUST BE PAID IN FULL by your statement's payment due date.

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About Interest Charges

How We Calculate Interest. We calculate it separately for each balance shown in the Interest Charge Calculation table. We use the **daily balance method (including current transactions)** if the Balance Subject to Interest Rate is followed by (D). We figure the interest charge by multiplying the daily balance by its daily periodic rate each day in the billing period. To get a daily balance, we take the balance at the end of the previous day, add the interest on the previous day's balance and new charges, subtract new credits or payments, and make adjustments. The Balance Subject to Interest Rate is the average of the daily balances. We use the **average daily balance method (including current transactions)** if the Balance Subject to Interest Rate is followed by (A). To get an average daily balance, we take the balance at the end of the previous day, add new charges, subtract new credits or payments, and make adjustments. We add all the daily balances and divide by the number of days in the billing period. We figure the interest charge by multiplying the average daily balance by the monthly periodic rate, or by the daily periodic rate and by the number of days in the billing period, as applicable.

Minimum Interest Charge. If we charge interest, it will be at least \$0.50.

How to Avoid Paying Interest on Purchases. Your due date is at least 23 days after the close of each billing period. We will not charge you any interest on purchases if you pay your New Balance by the due date each month. This is called a grace period on purchases. If you do not pay the New Balance in full by the due date, you will not get a grace period on purchases until you pay the New Balance in full for two billing periods in a row. We will begin charging interest on cash advances and balance transfers on the transaction date.

Your Rights

What To Do If You Find A Mistake On Your Statement. If you think there is an error on your statement, visit us online or write to the Customer Service address shown on the front.

In your letter, give us the following information:

- Account information: Your name and account number.
- Dollar amount: The dollar amount of the suspected error.
- Description of problem: If you think there is an error on your bill, describe what you believe is wrong and why you believe it is a mistake.

You must contact us within 60 days after the error appeared on your statement. You must notify us of any potential errors in writing. You may call us, but if you do we are not required to investigate any potential errors and you may have to pay the amount in question.

While we investigate whether or not there has been an error, the following are true:

- We cannot try to collect the amount in question, or report you as delinquent on that amount.
- The charge in question may remain on your statement, and we may continue to charge you interest on that amount. But, if we determine that we made a mistake, you will not have to pay the amount in question or any interest or other fees related to that amount.
- While you do not have to pay the amount in question, you are responsible for the remainder of your balance.
- We can apply any unpaid amount against your credit limit.

Your Rights if You Are Dissatisfied With Your Credit Card Purchases.

If you are dissatisfied with the goods or services that you have purchased with your credit card, and you have tried in good faith to correct the problem with the merchant, you may have the right not to pay the remaining amount due on the purchase.

To use this right, all of the following must be true:

1. The purchase must have been made in your home state or within 100 miles of your current mailing address, and the purchase price must have been more than \$50. (Note: Neither of these is necessary if your purchase was based on an advertisement we mailed to you, or if we own the company that sold you the goods or services.)
2. You must have used your credit card for the purchase. Purchases made with cash advances from an ATM or with a check that accesses your credit card account do not qualify.
3. You must not yet have fully paid for the purchase.

If all of the criteria above are met and you are still dissatisfied with the purchase, contact us online or in writing at the Customer Service address shown on front of statement.

While we investigate, the same rules apply to the disputed amount as discussed above. After we finish our investigation, we will tell you our decision. At that point, if we think you owe an amount and you do not pay, we may report you as delinquent.

Notification of Disputed Item

You can file a billing dispute or check the status of an existing dispute online. You can also check the status of an existing billing dispute by contacting the customer service number on the top of this page.

Other Account and Payment Information

When Your Payment Will Be Credited. If we receive your payment in proper form at our processing facility by 5 p.m. local time there, it will be credited as of that day. A payment received there in proper form after that time will be credited as of the next day. Allow 5 to 7 days for payments by regular mail to reach us. There may be a delay of up to 5 days in crediting a payment we receive that is not in proper form or not sent to the correct address. The correct address for regular mail is the address on the front of the payment coupon. The correct address for courier or express mail is the Express Payments Address shown below.

Proper Form. For a payment sent by mail or courier to be in proper form, you must:

- Enclose a valid check or money order. No cash or foreign currency please.
- Include your name and the last four digits of your account number.

How to Report a Lost or Stolen Card. Call the Customer Service number at the top of the page.

Membership Fee. Some accounts are charged a membership fee. To avoid paying this fee, notify us that you are closing your account within 30 days of the mailing or delivery date of the statement on which the fee is billed.

Credit Reporting Disputes. We may report information about your account to credit bureaus. If you think we've reported inaccurate information, please write to us at the Customer Service address on your statement.

Payment Amount

You may pay all or part of your account balance at any time. However, you must pay, by the payment due date, at least the minimum payment due.

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Payments other than by mail

Online. Visit payonline.citicards.com to enroll in Online Bill Pay and make a payment. When you enroll in Online Bill Pay you can schedule your payments up to ninety days in advance using the "Other" payment option. For security reasons, you may not be able to pay your entire new balance the first time you make a payment online.

Phone. Call 800-777-9999 to make a payment. There is no fee for this service.

AutoPay. Visit autopay.citicards.com to enroll in AutoPay and have your payment amount automatically deducted each month on your payment date from the payment account you choose.

Express mail. Send payment by express mail to:

Citi Cards
Attention: Bankcard Payments Department
6716 Grade Lane
Building 9, Suite 910
Louisville, KY 40213

Crediting Payments other than by Mail. The payment cutoff time for Online Bill Payments, Phone Payments, and Express mail payments is midnight Eastern time. This means that we will credit your account as of the calendar day, based on Eastern time, that we receive your payment request.

If you send an eligible check with this payment coupon, you authorize us to complete your payment by electronic debit. If we do, the checking account will be debited in the amount on the check. We may do this as soon as the day we receive the check. Also, the check will be destroyed.