



Infrastructure, environment, facilities

Mr. Allan Brouillet  
Environmental Response Division  
Michigan Department of Environmental Quality  
Saginaw Bay District  
503 North Euclid Street  
Bay City, MI 48706

ARCADIS  
6723 Towpath Road  
P.O. Box 66  
Syracuse  
New York 13214-0066  
Tel 315.446.9120  
Fax 315.446.8053  
www.arcadis-us.com

Subject:


Monthly Report #172 – March 2009  
GM SMI Plant Property, REALM Inc. Green Point Landfill and  
Drum Remediation Area RI/FS/RAP, and Green Point Landfill Closure

Dear Mr. Brouillet:

On behalf of the General Motors Corporation (GM), the Remediation and Liability Management Company Inc. (REALM), and Waste Management, Inc. (WMI), the March 2009 monthly report for the GM SMI Plant Property and the REALM Green Point Landfill Property is attached. Please contact me if you have any questions regarding the enclosed information.

Sincerely,

ARCADIS

  
Lisa R. Coffey  
Principal Geologist

LRC/plf  
Attachments

Copies:

Ms. Susan Kaelber-Matlock, MDEQ, ERD  
John Fordell Leone, Esq., Department of Attorney General  
Ms. Cheryl Hiatt/Mr. Edward Peterson, GM WFG  
James Walle, Esq., GM Legal  
Mr. Kent Bainbridge, Waste Management, Inc.  
Mr. Jim Forney, Waste Management, Inc.  
Ms. Jo Ann Robertson, ARCADIS

Date:

April 15, 2009

Contact:

Lisa R. Coffey, P.G.

Phone:

315.671.9164

Email:

[lisa.coffey@arcadis-us.com](mailto:lisa.coffey@arcadis-us.com)

Our ref:

B0027608 #2.08

Imagine the result

**General Motors Corporation Saginaw Malleable Iron Plant Property and  
REALM Inc. Green Point Landfill and Drum Remediation Area  
March 2009**

**Key Correspondence and Communications**

- The February 2009 monthly report, dated March 10, 2009, was submitted to the MDEQ.
- In a letter dated March 27, 2009, the Green Point Landfill Responding Group (GPLFRG) for the Saginaw Malleable Iron/Green Point Landfill Site acknowledged receipt of the Michigan Department of Environmental Quality (MDEQ) February 27, 2009, conditional Remedial Action Plan (RAP) approval letter, and requested an extension of two months to file the restrictive covenants and to submit the financial assurance mechanism (FAM).
- In a letter dated March 31, 2009, the MDEQ approved the extension request made by the GPLFRG. The revised schedule dates are: submittal of the FAM for DEQ review and approval by August 7, 2009; filling restrictive covenants by August 28, 2009; and abandonment of monitoring wells not used in the RAP groundwater monitoring programs during the summer of 2010.

**Significant RI/FS/RAP and Interim Measure Activities and Events**

- The light non-aqueous phase liquid (LNAPL) recovery system, located south of the main plant building, is not currently operating due to plant decommissioning activities. The recovery wells and the monitoring wells were gauged on March 5, 2009. Small accumulations of LNAPL were recorded (Table 1). The wells in this area will continue to be monitored and bailed, when possible, until power can be restored to the recovery system (once the plant buildings are down).
- The automated skimmer pump installed at monitoring well QPTW-3 in the Quench Pit Area did not operate during March 2009, due to shut down of plant operations. Approximately one half gallon of LNAPL was bailed from the monitoring wells located in the Quench Pit Area on March 18, 2009. As allowed by demolition activities, the wells in this area will be manually bailed until power is restored to the system.

**Significant Green Point Landfill Closure Activities and Events**

- None during March 2009.

**Anticipated Activities for April 2009**

- Continuation of LNAPL recovery activities using manual means.
- Submittal of a monthly report.
- Continuation of work on the remaining items to complete the Remedial Action Plan (e.g. survey, affidavits of unremediated release).

Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	MW-147WT reference elevation = 592.07				MW-157WT reference elevation = 591.72				MW-158WT reference elevation = 591.76			
	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 26, 2005	6.28	2.03	8.31	585.63	--	--	--	--	NP	0.00	7.98	583.80
February 7, 2005	6.57	1.96	8.53	585.94	--	--	--	--	8.07	0.02	8.09	583.71
March 17, 2005	6.55	2.04	8.59	585.38	7.27	0.66	7.93	584.40	NP	0.00	8.24	583.54
April 13, 2005	6.44	1.74	8.18	585.49	7.18	0.18	7.36	584.53	NP	0.00	8.23	583.55
May 31, 2005	6.53	1.76	8.29	585.40	7.23	0.25	7.48	584.47	NP	0.00	8.14	583.64
June 28, 2005	5.83	1.73	7.56	586.10	6.23	0.21	6.44	585.47	NP	0.00	7.72	584.06
July 29, 2005	5.59	1.58	7.17	586.35	6.21	0.70	6.91	585.45	NP	0.00	7.69	584.09
August 18, 2005	6.19	1.75	7.94	585.74	6.96	0.23	7.19	584.74	NP	0.00	7.98	583.80
September 23, 2005	6.49	1.59	8.08	585.45	7.37	0.04	7.41	584.35	8.33	0.01	8.34	583.45
October 18, 2005	6.85	1.93	8.78	585.07	7.68	0.38	8.06	584.01	NP	0.00	8.56	583.22
November 30, 2005	6.33	1.76	8.09	585.60	7.09	0.03	7.12	584.63	NP	0.00	8.31	583.47
December 26, 2005	6.15	1.96	8.11	585.76	6.89	0.19	7.08	584.81	NP	0.00	8.14	583.64
January 31, 2006	5.21	1.91	7.12	586.71	5.74	0.51	6.25	585.94	NP	0.00	7.53	584.25
February 24, 2006	6.38	1.86	8.24	585.54	6.87	0.27	7.14	584.83	NP	0.00	7.98	583.80
March 22, 2006	5.70	1.63	7.33	586.24	5.68	0.13	5.81	586.03	NP	0.00	7.71	584.07
April 27, 2006	6.23	1.69	7.92	585.70	7.17	0.03	7.20	584.55	8.14	0.01	8.15	583.64
May 25, 2006	NA	NA	NA	NA	6.37	0.14	6.51	585.34	NP	0.00	7.95	583.83
June 27, 2006	6.32	1.70	8.02	585.61	7.20	0.04	7.24	584.52	NP	0.00	8.17	583.61
July 11, 2006	5.99	1.67	7.66	585.95	6.96	0.11	7.07	584.75	NP	0.00	8.03	583.75
August 23, 2006	6.24	1.65	7.89	585.70	7.20	0.01	7.21	584.52	NP	0.00	8.08	583.70
September 26, 2006	5.67	1.84	7.31	586.27	6.69	0.11	6.80	585.02	NP	0.00	7.90	583.88
October 30, 2006	5.36	1.65	7.01	586.58	5.71	0.22	5.93	585.99	7.49	0.02	7.51	584.29
November 27, 2006	6.00	1.66	7.66	585.94	6.89	0.12	7.01	584.82	7.92	0.01	7.93	583.86
December 27, 2006	6.12	1.65	7.77	585.82	7.00	0.02	7.02	584.72	NP	0.00	7.94	583.84
January 25, 2007	NA	NA	NA	NA	7.42	0.04	7.46	584.30	NA	NA	NA	NA
March 6, 2007	7.08	1.60	8.68	584.86	NP	0.00	7.72	584.00	NA	NA	NA	NA
March 23, 2007	6.18	1.64	7.82	585.76	7.23	0.02	7.25	584.49	NP	0.00	8.09	583.69
April 30, 2007	6.13	1.47	7.60	585.82	7.10	0.05	7.15	584.62	8.05	0.01	8.06	583.73
May 17, 2007	6.19	1.57	7.76	585.75	7.16	0.04	7.20	584.56	NA	NA	NA	NA
June 12, 2007	6.30	1.58	7.88	585.64	7.20	0.02	7.22	584.52	NP	0.00	8.11	583.67
July 18, 2007	6.42	1.62	8.04	585.52	7.19	0.02	7.21	584.53	NP	0.00	8.16	583.62
August 28, 2007	5.93	1.51	7.44	586.02	6.71	0.02	6.73	585.01	NP	0.00	7.97	583.81
September 19, 2007	5.59	1.53	7.12	586.36	6.03	0.12	6.15	585.68	NP	0.00	7.51	584.27
October 25, 2007	6.53	1.72	8.25	585.40	7.46	0.08	7.54	584.25	NP	0.00	8.31	583.47
November 27, 2007	6.47	1.58	8.05	585.47	7.06	0.06	7.12	584.66	NP	0.00	7.84	584.14
January 7, 2008	5.46	1.18	6.64	586.52	6.01	0.26	6.27	585.69	NP	0.00	6.49	585.29
February 22, 2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
March 17, 2008	4.09	1.23	5.32	587.88	NA	NA	NA	NA	NP	0.00	5.42	586.36
April 7, 2008	4.68	0.97	5.65	587.31	4.96	0.31	5.27	586.74	NP	0.00	5.66	586.12
May 5, 2008	5.91	0.74	6.65	586.10	5.72	0.29	6.01	585.98	NP	0.00	6.68	585.10
June 2, 2008	5.98	0.66	6.64	586.04	6.26	0.25	6.51	585.44	NP	0.00	6.81	584.97
July 7, 2007	4.96	0.64	5.60	587.06	5.21	0.18	5.39	586.50	NP	0.00	6.00	585.78
August 13, 2008	5.19	0.63	5.82	586.83	5.32	0.18	5.50	586.39	NP	0.00	6.21	585.57
September 8, 2008	5.45	0.51	5.96	586.58	5.61	0.18	5.79	586.10	NP	0.00	6.35	585.43
October 9, 2008	5.16	0.42	5.58	586.88	5.36	0.16	5.52	586.35	NP	0.00	6.03	585.74
November 20, 2008	5.85	0.30	6.15	586.20	5.66	0.28	5.94	586.04	NP	0.00	6.64	585.15
December 15, 2008	5.55	0.29	5.84	587.50	5.92	0.13	6.05	585.79	NP	0.00	6.37	585.41
January 6, 2009	4.60	0.28	4.88	587.45	NA	NA	NA	NA	NP	0.00	NA	NA
February 10, 2009	5.09	0.19	5.28	586.96	5.31	0.15	5.46	586.40	NP	0.00	5.92	585.86
March 5, 2009	4.91	0.29	5.20	587.14	5.05	0.13	5.18	586.66	NP	0.00	5.82	585.96

Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	MW-160WT reference elevation = 591.53			MW-169WT reference elevation = 591.82			MW-172WT reference elevation = 591.51				
	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to Water (feet)	LNAPL Thickness (feet)	Groundwater Elevation (corrected)
January 26, 2005	8.21	0.35	8.56	583.29	NA	NA	NA	NA	NA	NA	NA
February 7, 2005	8.10	0.11	8.21	583.42	NP	0.00	8.17	583.65	8.00	0.19	583.49
March 17, 2005	8.43	0.13	8.56	583.09	NA	NA	NA	NA	8.34	0.28	583.15
April 13, 2005	8.39	0.13	8.52	583.13	NA	NA	NA	NA	8.33	0.35	583.15
May 31, 2005	8.39	0.15	8.54	583.13	NP	0.00	8.20	583.62	8.29	0.38	583.19
June 28, 2005	8.14	0.09	8.23	583.38	NP	0.00	7.92	583.90	8.06	0.04	583.45
July 29, 2005	8.13	0.04	8.17	583.40	NP	0.00	7.92	583.90	8.06	0.02	583.45
August 18, 2005	8.30	0.04	8.34	583.23	NA	NA	NA	NA	8.24	0.17	583.26
September 28, 2005	8.46	0.02	8.48	583.07	NA	NA	NA	NA	8.36	0.21	583.13
October 18, 2005	8.66	0.06	8.72	582.87	NA	NA	NA	NA	8.51	0.42	582.97
November 30, 2005	8.52	0.01	8.53	583.01	NA	NA	NA	NA	8.41	0.32	583.07
December 26, 2005	8.44	0.01	8.45	583.09	NA	NA	NA	NA	8.32	0.35	583.16
January 31, 2006	NP	0.00	8.21	583.32	NA	NA	NA	NA	8.08	0.27	583.41
February 24, 2006	NP	0.00	8.38	583.15	NA	NA	NA	NA	8.32	0.33	583.16
March 22, 2006	8.24	0.01	8.25	583.29	NA	NA	NA	NA	8.17	0.08	583.33
April 27, 2006	NP	0.00	8.43	583.10	NA	NA	NA	NA	8.33	0.11	583.17
May 25, 2006	NP	NA	NA	NA	NA	NA	NA	NA	8.20	0.18	583.30
June 27, 2006	NP	0.00	8.44	583.09	NA	NA	NA	NA	8.39	0.31	583.10
July 11, 2006	NP	0.00	8.40	583.13	NA	NA	NA	NA	8.27	0.36	583.21
August 23, 2006	NP	0.00	8.41	583.12	NA	NA	NA	NA	8.36	0.19	583.13
September 26, 2006	NP	0.00	8.32	583.21	NA	NA	NA	NA	8.21	0.23	583.28
October 30, 2006	NP	0.00	8.13	583.40	NA	NA	NA	NA	8.07	0.15	583.43
November 27, 2006	NP	0.00	8.40	583.13	NA	NA	NA	NA	8.29	0.16	583.21
December 27, 2006	NP	0.00	8.34	583.19	NA	NA	NA	NA	8.45	0.16	583.21
January 25, 2007	NP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
March 6, 2007	NP	0.00	8.59	582.94	NA	NA	NA	NA	8.44	0.29	583.05
March 23, 2007	NP	0.00	8.53	583.00	NA	NA	NA	NA	8.41	0.33	583.07
April 30, 2007	NP	0.00	8.46	583.07	NA	NA	NA	NA	8.34	0.36	583.14
May 17, 2007	NP	0.00	8.44	583.09	NA	NA	NA	NA	8.32	0.19	583.17
June 12, 2007	NP	0.00	8.50	583.03	NA	NA	NA	NA	8.33	0.38	583.15
July 18, 2007	NP	0.00	8.54	582.99	NP	0.00	8.31	583.51	NA	NA	NA
August 28, 2007	NP	0.00	8.46	583.07	NA	NA	NA	NA	NA	NA	NA
September 19, 2007	NP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
October 25, 2007	NP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
November 27, 2007	NP	0.00	7.81	583.92	NA	NA	NA	NA	NP	0.00	583.09
January 7, 2008	NP	0.00	6.31	585.22	NA	NA	NA	NA	7.50	0.02	584.01
February 22, 2008	NP	NA	NA	NA	NA	NA	NA	NA	NP	0.00	585.35
March 17, 2008	5.82	0.03	5.85	585.71	NA	NA	NA	NA	NA	NA	NA
April 7, 2008	5.96	0.06	6.02	585.57	NA	NA	NA	NA	NP	0.00	585.78
May 5, 2008	6.89	0.03	7.13	584.43	NA	NA	NA	NA	NP	0.00	585.63
June 2, 2008	6.80	0.23	7.03	584.71	NP	0.00	7.10	584.72	NP	0.00	584.66
July 7, 2008	6.08	0.21	6.29	585.43	NP	0.00	6.56	585.26	NP	0.00	585.52
August 13, 2008	6.31	0.21	6.52	585.20	NP	0.00	6.78	585.04	NP	0.00	585.26
September 8, 2008	6.54	0.12	6.66	584.98	NP	0.00	7.03	584.79	NA	NA	NA
October 9, 2008	6.11	0.09	6.20	585.41	NP	0.00	6.72	585.10	6.00	0.02	585.51
November 20, 2008	6.66	0.23	6.89	584.85	NP	0.00	7.13	584.69	6.57	0.15	584.93
December 15, 2008	NP	0.00	6.30	585.23	NP	0.00	7.09	584.73	NA	NA	NA
January 6, 2009	NP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
February 10, 2009	6.08	0.07	6.15	585.44	NP	0.00	6.64	585.18	NA	NA	NA
March 5, 2009	5.94	0.07	6.01	585.58	NA	NA	NA	NA	NP	0.00	585.43

Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	MW-175WT reference elevation not available				MW-178WT reference elevation = 590.35				MW-179WT reference elevation not available			
	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 26, 2005	NP	0.00	7.01	NA	7.55	0.65	8.20	582.75	---	---	---	---
February 7, 2005	7.11	0.01	7.12	NA	7.17	0.39	7.56	583.15	---	---	---	---
March 17, 2005	NP	0.00	7.22	NA	7.63	0.65	8.28	582.67	NP	0.00	7.13	NA
April 13, 2005	NP	0.00	7.12	NA	7.46	0.69	8.15	582.83	NP	0.00	6.91	NA
May 31, 2005	NP	0.00	6.98	NA	7.56	0.83	8.39	582.72	NP	0.00	6.96	NA
June 28, 2005	6.67	0.01	6.68	NA	7.39	0.56	7.95	582.92	NP	0.00	6.82	NA
July 29, 2005	NP	0.00	6.73	NA	7.44	0.82	8.26	582.84	NP	0.00	6.73	NA
August 16, 2005	NP	0.00	6.83	NA	7.51	1.26	8.77	582.74	NP	0.00	6.78	NA
September 28, 2005	NP	0.00	7.04	NA	7.49	0.32	7.81	582.83	NP	0.00	6.95	NA
October 18, 2005	NP	0.00	7.26	NA	7.57	0.32	7.89	582.75	NP	0.00	7.14	NA
November 30, 2005	NP	0.00	7.16	NA	7.54	0.51	8.05	582.77	7.03	0.01	7.04	NA
December 26, 2005	NP	0.00	7.19	NA	7.64	1.24	8.78	582.71	NP	0.00	7.14	NA
January 31, 2006	NP	0.00	6.79	NA	7.45	0.16	7.61	582.89	NP	0.00	7.63	NA
February 24, 2006	NP	0.00	6.99	NA	7.56	0.60	8.16	582.74	NP	0.00	7.82	NA
March 22, 2006	NP	0.00	6.75	NA	7.42	0.14	7.56	582.92	NP	0.00	6.68	NA
April 27, 2006	NP	0.00	6.84	NA	7.43	0.26	7.69	582.90	6.79	0.01	6.80	NA
May 25, 2006	NP	0.00	6.82	NA	7.39	0.36	7.75	582.93	NP	0.00	6.74	NA
June 27, 2006	NP	0.00	6.79	NA	7.43	0.37	7.80	582.89	NP	0.00	6.84	NA
July 11, 2006	NP	0.00	6.79	NA	7.46	0.34	7.80	582.86	NP	0.00	6.83	NA
August 23, 2006	NP	0.00	6.81	NA	7.39	0.47	7.86	582.92	NP	0.00	6.61	NA
September 26, 2006	NP	0.00	6.70	NA	7.41	0.29	7.70	582.92	NA	NA	NA	NA
October 30, 2006	NP	0.00	6.56	NA	7.35	0.38	7.73	582.97	NA	NA	NA	NA
November 27, 2006	NP	0.00	6.79	NA	7.37	0.34	7.71	582.95	NA	NA	NA	NA
December 27, 2006	NP	0.00	6.83	NA	7.36	0.33	7.69	582.96	NA	NA	NA	NA
January 25, 2007	NA	NA	NA	NA	7.41	0.38	7.79	582.91	NA	NA	NA	NA
March 6, 2007	NP	0.00	7.13	NA	7.51	0.51	8.02	582.80	NP	0.00	7.13	NA
March 23, 2007	NP	0.00	6.89	NA	7.51	0.46	7.97	582.80	NP	0.00	6.90	NA
April 30, 2007	NP	0.00	6.89	NA	7.48	0.25	7.73	582.85	NP	0.00	6.56	NA
May 17, 2007	NP	0.00	6.86	NA	7.13	0.33	7.46	583.19	NA	NA	NA	NA
June 12, 2007	NP	0.00	6.91	NA	7.47	0.28	7.75	582.86	NP	0.00	6.57	NA
July 18, 2007	NP	0.00	7.02	NA	7.46	0.32	7.78	582.86	NP	0.00	6.75	NA
August 28, 2007	NP	0.00	6.96	NA	7.46	0.29	7.75	582.87	NP	0.00	6.82	NA
September 19, 2007	NP	0.00	6.66	NA	6.87	0.11	6.98	583.47	NP	0.00	6.65	NA
October 25, 2007	NP	0.00	7.08	NA	7.59	0.25	7.84	582.74	NP	0.00	6.98	NA
November 27, 2007	NA	NA	NA	NA	6.52	0.14	6.66	583.82	NA	NA	NA	NA
January 7, 2008	NP	0.00	6.53	NA	5.44	0.05	5.49	584.91	NA	NA	NA	NA
February 22, 2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
March 17, 2008	NP	0.00	5.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
April 7, 2008	NP	0.00	5.84	NA	5.30	0.02	5.32	585.05	NP	0.00	6.46	NA
May 5, 2008	NP	0.00	6.31	NA	6.25	0.02	6.27	584.10	NA	NA	NA	NA
June 2, 2008	NP	0.00	6.39	NA	5.93	0.01	5.94	584.42	NP	0.00	6.55	NA
July 7, 2007	NP	0.00	5.96	NA	5.32	0.02	5.34	585.03	NA	NA	NA	NA
August 13, 2008	NP	0.00	6.14	NA	NP	0.00	5.81	584.54	NA	NA	NA	NA
September 8, 2008	NP	0.00	6.36	NA	5.86	0.01	5.87	584.49	NA	NA	NA	NA
October 9, 2008	NP	0.00	6.13	NA	NP	0.00	5.68	584.67	NA	NA	NA	NA
November 20, 2008	NP	0.00	6.58	NA	NP	0.00	6.18	584.17	NA	NA	NA	NA
December 16, 2008	NP	0.00	6.44	NA	NP	0.00	5.56	584.79	NA	NA	NA	NA
January 6, 2009	NP	0.00	6.15	NA	NP	0.00	5.42	584.93	NA	NA	NA	NA
February 10, 2009	NP	0.00	6.15	NA	NP	0.00	5.57	584.78	NA	NA	NA	NA
March 5, 2009	NA	NA	NA	NA	NP	0.00	5.55	584.80	NP	0.00	6.41	NA

Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	MW-180WT reference elevation = 590.87				RW-1 reference elevation = 592.18				RW-2 reference elevation = 592.07			
	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 26, 2005	--	--	8.43	583.65	1.29	9.72	583.65	NP	0.00	8.69	583.38	
February 7, 2005	--	--	8.59	583.53	0.70	9.29	583.53	NP	0.00	8.73	583.34	
March 17, 2005	7.15	0.02	7.17	583.52	NA	NA	NA	NP	0.00	8.92	583.15	
April 13, 2005	NP	0.00	6.87	583.80	0.28	8.88	583.56	NP	0.00	8.94	583.13	
May 31, 2005	NP	0.00	7.01	583.66	0.21	8.79	583.58	NP	0.00	8.93	583.14	
June 28, 2005	6.84	0.01	6.85	583.83	0.21	8.34	584.03	NP	0.00	8.71	583.36	
July 29, 2005	NP	0.00	6.73	583.94	0.05	8.22	584.12	NP	0.00	8.69	583.38	
August 18, 2005	NP	0.00	6.78	583.89	0.18	8.97	583.94	NP	0.00	8.67	583.40	
September 28, 2005	6.99	0.01	7.00	583.68	0.59	9.40	583.32	NP	0.00	9.01	583.06	
October 18, 2005	7.20	0.01	7.21	583.47	0.91	9.74	583.28	NP	0.00	8.99	583.08	
November 30, 2005	NP	0.00	7.11	583.56	0.68	9.22	583.59	NP	0.00	8.93	583.14	
December 26, 2005	NP	0.00	7.20	583.47	NA	NA	NA	NP	0.00	8.99	583.08	
January 31, 2006	NP	0.00	6.81	583.86	NA	NA	NA	NP	0.00	8.72	583.35	
February 24, 2006	NP	0.00	6.81	583.86	0.33	8.82	583.66	NP	0.00	8.87	583.20	
March 22, 2006	NP	0.00	6.69	583.98	0.35	8.87	583.79	NP	0.00	8.87	583.20	
April 27, 2006	NP	0.00	6.82	583.85	8.72	9.39	583.41	NP	0.00	8.87	583.20	
May 25, 2006	NP	0.00	6.76	583.91	8.45	9.01	583.69	NP	0.00	8.87	583.20	
June 27, 2006	NP	0.00	6.85	583.82	8.71	9.42	583.41	NP	0.00	8.87	583.20	
July 11, 2006	NP	0.00	6.90	583.77	0.86	9.35	583.62	NP	0.00	8.87	583.20	
August 23, 2006	NP	0.00	6.65	584.02	0.97	9.48	583.59	NP	0.00	8.87	583.20	
September 26, 2006	NP	0.00	6.76	583.91	8.31	8.79	583.83	NP	0.00	8.90	583.17	
October 30, 2006	NP	0.00	6.49	584.18	NA	NA	NA	NP	0.00	8.75	583.32	
November 27, 2006	NP	0.00	6.59	584.08	8.43	9.04	583.70	NP	0.00	8.94	583.13	
December 27, 2006	NP	0.00	6.64	584.03	NA	NA	NA	NP	0.00	8.76	583.31	
January 25, 2007	NP	0.00	6.76	583.91	NA	NA	NA	NP	0.00	8.76	583.31	
February 5, 2007	NP	0.00	7.16	583.51	8.53	8.80	583.63	NP	0.00	9.14	582.93	
March 23, 2007	NP	0.00	6.93	583.74	8.31	8.58	583.85	NP	0.00	8.64	583.43	
April 30, 2007	NP	0.00	6.58	584.09	8.52	8.61	583.65	NP	0.00	8.98	583.09	
May 17, 2007	NP	0.00	6.52	584.15	8.38	8.52	583.79	NP	0.00	8.99	583.08	
June 12, 2007	NP	0.00	6.58	584.09	8.39	8.45	583.78	NP	0.00	9.03	583.04	
July 18, 2007	NP	0.00	6.78	583.89	8.46	9.09	583.67	NP	0.00	9.07	583.00	
August 28, 2007	NP	0.00	6.85	583.82	8.23	8.34	583.94	NP	0.00	9.00	583.07	
September 19, 2007	NP	0.00	6.69	583.98	7.93	8.04	584.24	NP	0.00	8.44	583.63	
October 25, 2007	NP	0.00	7.02	583.65	8.80	9.25	583.34	NP	0.00	8.93	583.14	
November 27, 2007	NP	0.00	7.07	583.60	8.03	8.18	584.14	NP	0.00	8.04	584.03	
January 7, 2008	NP	0.00	7.01	583.66	6.76	6.80	585.42	NP	0.00	8.04	584.03	
February 22, 2008	NP	0.00	6.45	584.22	6.06	6.09	586.12	NP	0.00	6.56	585.51	
March 17, 2008	NP	0.00	6.45	584.22	5.95	5.97	586.23	NP	0.00	6.36	585.71	
April 7, 2008	NP	0.00	6.52	584.15	6.24	6.30	585.94	NP	0.00	6.51	585.56	
May 5, 2008	NP	0.00	6.56	584.11	7.17	7.19	585.01	NP	0.00	6.18	585.89	
June 2, 2008	NP	0.00	6.56	584.11	7.16	7.19	585.02	NP	0.00	7.33	584.74	
July 7, 2007	NP	0.00	6.14	584.53	6.24	6.25	585.94	NP	0.00	7.33	584.74	
August 13, 2008	NP	0.00	6.25	584.42	NP	6.49	585.69	NP	0.00	7.19	584.88	
September 8, 2008	NP	0.00	6.45	584.36	NP	6.34	585.84	NP	0.00	6.69	585.38	
October 9, 2008	NP	0.00	6.31	584.22	NP	6.34	585.84	NP	0.00	6.69	585.38	
November 20, 2008	NP	0.00	6.56	584.11	NP	6.99	585.19	NP	0.00	7.19	584.88	
December 15, 2008	NP	0.00	6.64	584.03	NP	6.06	586.12	NP	0.00	6.63	585.54	
January 6, 2009	NP	0.00	6.25	584.42	NP	6.06	586.12	NP	0.00	6.63	585.54	
February 10, 2009	NP	0.00	6.58	584.09	NP	6.21	585.97	NP	0.00	6.63	585.44	
March 5, 2009	NP	0.00	6.40	584.27	NP	6.21	585.97	NP	0.00	6.63	585.44	

Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	RW-3 reference elevation = 592.32				TP-2			
	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 26, 2005	NP	0.00	6.92	585.40	8.33	1.09	9.42	NA
February 7, 2005	NP	0.00	7.57	584.75	8.44	1.05	9.49	NA
March 17, 2005	NP	0.00	7.82	584.50	8.61	1.30	9.91	NA
April 13, 2005	NP	0.00	7.83	584.49	8.49	1.13	9.62	NA
May 31, 2005	NP	0.00	7.88	584.44	8.54	0.33	8.87	NA
June 28, 2005	NP	0.00	7.04	585.28	8.01	0.48	8.49	NA
July 29, 2005	NP	0.00	6.77	585.55	7.97	0.25	8.22	NA
August 18, 2005	NP	0.00	7.72	584.60	8.28	0.75	9.03	NA
September 28, 2005	NP	0.00	8.41	583.91	8.69	0.82	9.51	NA
October 18, 2005	NP	0.00	8.41	583.91	--	--	--	NA
November 30, 2005	NP	0.00	8.02	584.30	--	--	--	NA
December 26, 2005	NP	0.00	7.98	584.34	8.43	0.87	9.30	NA
January 31, 2006	NP	0.00	5.50	586.82	7.82	0.72	8.54	NA
February 24, 2006	NP	0.00	6.78	585.54	8.36	1.04	9.40	NA
March 22, 2006	NP	0.00	6.29	586.03	8.22	0.81	9.03	NA
April 27, 2006	NP	0.00	7.66	584.66	8.57	0.99	9.56	NA
May 25, 2006	NP	0.00	7.25	585.07	8.31	0.96	9.27	NA
June 27, 2006	NP	0.00	7.91	584.41	NA	NA	NA	NA
July 11, 2006	NP	0.00	7.34	584.98	8.03	1.70	9.73	NA
August 23, 2006	NP	0.00	7.89	584.43	NA	NA	NA	NA
September 26, 2006	NP	0.00	7.08	585.24	NA	NA	NA	NA
October 30, 2006	NP	0.00	7.05	585.27	NA	NA	NA	NA
November 27, 2006	NP	0.00	7.50	584.82	NA	NA	NA	NA
December 27, 2006	NP	0.00	7.33	584.99	NA	NA	NA	NA
January 25, 2007	NP	0.00	7.90	584.42	NA	NA	NA	NA
March 6, 2007	NP	0.00	8.18	584.14	8.54	0.92	9.46	NA
March 23, 2007	NP	0.00	NA	NA	8.28	0.89	9.17	NA
April 30, 2007	NP	0.00	8.03	584.29	8.37	0.79	9.16	NA
May 17, 2007	NP	0.00	7.98	584.34	8.34	0.77	9.11	NA
June 12, 2007	NP	0.00	8.21	584.11	8.29	0.76	9.05	NA
July 18, 2007	NP	0.00	8.27	584.05	8.44	0.01	8.45	NA
August 28, 2007	NP	0.00	7.57	584.75	8.12	0.45	8.57	NA
September 19, 2007	NP	0.00	7.03	585.29	7.82	0.11	7.93	NA
October 25, 2007	NP	0.00	8.32	584.00	8.69	0.39	9.08	NA
November 27, 2007	NP	0.00	8.22	584.10	7.95	0.22	8.17	NA
January 7, 2008	NP	0.00	7.30	585.02	6.66	0.04	6.70	NA
February 22, 2008	NP	0.00	5.19	587.13	NA	NA	NA	NA
March 17, 2008	NP	0.00	4.45	587.87	5.79	0.02	5.81	NA
April 7, 2008	NP	0.00	5.03	587.29	6.15	0.02	6.17	NA
May 5, 2008	NP	0.00	6.79	585.53	7.18	0.01	7.19	NA
June 2, 2008	NP	0.00	7.51	584.81	7.09	0.02	7.11	NA
July 7, 2008	NP	0.00	6.78	585.54	6.13	0.03	6.16	NA
August 13, 2008	NP	0.00	6.95	585.37	6.38	0.04	6.42	NA
September 8, 2008	NP	0.00	7.31	585.01	6.60	0.02	6.62	NA
October 9, 2008	NP	0.00	6.83	585.49	NP	0.00	6.25	NA
November 20, 2008	NP	0.00	7.56	584.76	6.89	0.02	6.91	NA
December 15, 2008	NP	0.00	7.39	584.93	6.37	0.01	6.38	NA
January 6, 2009	NP	0.00	NA	NA	NP	0.00	5.68	NA
February 10, 2009	NP	0.00	5.83	586.49	NP	0.00	5.99	NA
March 5, 2009	NP	0.00	5.74	586.58	NP	0.00	6.10	NA

See Notes on Page 6.

4/15/2009

C:\DIV1\1Doc\0927608\_011911577\_March 2009 Monthly Rpt\_Table 1.xls

**Table 1. Groundwater and LNAPL Measurement Summary, January 26, 2005 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan**

**Notes:**

The reference elevation for each of the recovery wells (RW-1, RW-2, RW-3, and RW-4) is the ground surface elevation; approximately equal to the elevation of the edge of the vault.

NA = not available; monitoring well inaccessible (e.g., covered by pallet, gravel, roll-off, vehicle, or snowpile).

-- = Not measured.

NP = LNAPL was not present in well.

An LNAPL density of 0.92 was used to correct the water level elevations for the presence of LNAPL.  
LNAPL is periodically removed by bailing from monitoring well MW-178WT.