



Infrastructure, environment, facilities

Mr. Allan Brouillet  
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Michigan Department of Environmental Quality  
Saginaw Bay District  
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Subject:

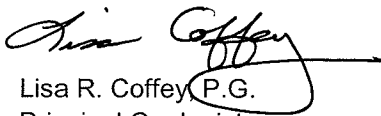
Monthly Report #169 – December 2008  
GM SMI Plant Property, REALM Inc. Green Point Landfill and  
Drum Remediation Area RI/FS/RAP, and Green Point Landfill Closure

Dear Mr. Brouillet:

On behalf of the General Motors Corporation (GM) and Waste Management, Inc. (WMI), the December 2008 monthly report for the GM SMI Plant Property and the Remediation and Liability Management Company Inc. (REALM) Green Point Landfill Property is attached. Please contact me if you have any questions regarding the enclosed information.

Sincerely,

ARCADIS



Lisa R. Coffey, P.G.  
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  
Anthony Thrubis, Esq., GM Legal  
Mr. Kent Bainbridge, Waste Management, Inc.  
Mr. Jim Forney, Waste Management, Inc.  
Ms. Jo Ann Robertson, ARCADIS

Date:  
January 9, 2009

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Our ref:  
B0027608 #2.08

Imagine the result

**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 December 15, 2008. 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 building is down).
- The Quench Pit Area was not accessible during the month of December 2008. As allowed by plant decommissioning activities, the wells in this area will be manually bailed until power is restored to the automated recovery system.
- The analytical results of the *Former Underground Storage Tank (UST) 7* groundwater monitoring program completed during 2008 are attached (Table 2). The data show stable conditions, with benzene, toluene, ethylbenzene, and xylene detections within the range of previously detected concentrations.

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

None during December.

**Key Correspondence and Communications**

- The November 2008 monthly report, dated December 12, 2008, was submitted to the MDEQ.
- Revised sections of the Remedial Action Plan, prepared in response to preliminary comments provided by the MDEQ, were submitted to the MDEQ on December 31, 2008.

**Anticipated Activities for January 2009**

- Continuation of LNAPL recovery activities using manual means, until a power supply to the automated recovery systems can be established given planned decommissioning and demolition activities.
- Submittal of a monthly report.

Table 1. Groundwater and LNAPL Measurement Summary, March 2004 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)
March 8, 2004	NA	NA	NA	NA	--	--	--	--	8.41	0.01	8.42	NA
April 29, 2004	6.36	1.64	8.00	585.58	--	--	--	--	NA	NA	NA	NA
June 1, 2004	5.20	1.25	6.45	586.77	--	--	--	--	NA	NA	NA	NA
June 30, 2004	6.05	1.26	7.31	585.92	--	--	--	--	7.90	0.01	7.91	583.88
July 28, 2004	NA	NA	NA	NA	--	--	--	--	8.21	0.01	8.22	583.57
August 17, 2004	6.76	1.34	8.10	585.20	--	--	--	--	NP	0.00	8.39	583.39
September 27, 2004	6.91	1.61	8.52	585.03	--	--	--	--	8.41	0.01	8.42	583.37
October 29, 2004	7.04	1.78	8.82	584.89	--	--	--	--	8.56	0.01	8.57	583.22
November 30, 2004	6.35	1.72	8.07	585.58	--	--	--	--	8.35	0.01	8.36	583.43
December 27, 2004	NA	NA	NA	NA	--	--	--	--	NA	NA	NA	NA
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	585.34	--	--	--	--	8.07	0.02	8.09	583.71
March 17, 2005	6.55	2.04	8.59	585.36	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 28, 2005	6.49	1.59	8.08	585.45	7.37	0.04	7.41	584.35	NP	0.00	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	7.20	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	1.64	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	583.85
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	0.06	7.54	584.25	NP	0.00	8.31	583.47
November 27, 2007	6.47	1.58	8.05	585.47	7.06	0.08	7.12	584.66	NP	0.00	7.64	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	585.75
November 20, 2008	5.85	0.30	6.15	586.20	5.66	0.28	5.94	586.04	NP	0.00	6.64	585.14
December 15, 2008	5.55	0.29	5.84	586.50	5.92	0.13	6.05	585.79	NP	0.00	6.37	585.41

Table 1. Groundwater and LNAPL Measurement Summary, March 2004 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	MW-160WT reference elevation = 591.83				MW-168WT reference elevation = 592.11				MW-169WT reference elevation = 591.82			
	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)
March 8, 2004	8.33	0.31	8.64	583.18	8.32	0.23	8.55	583.77	NA	NA	NA	NA
April 29, 2004	8.41	0.19	8.60	583.10	NA	NA	NA	NA	NA	NA	NA	NA
June 1, 2004	7.83	0.11	7.94	583.69	NA	NA	NA	NA	7.62	0.01	7.63	584.20
June 30, 2004	8.25	0.09	8.34	583.27	NA	NA	NA	NA	7.94	0.01	7.95	583.88
July 28, 2004	8.43	0.11	8.54	583.09	NA	NA	NA	NA	NP	0.00	8.17	583.65
August 17, 2004	8.46	0.11	8.57	583.06	NA	NA	NA	NA	NP	0.00	8.23	583.59
September 27, 2004	8.54	0.17	8.71	582.98	NA	NA	NA	NA	8.35	0.01	8.36	583.47
October 29, 2004	8.58	0.09	8.67	582.94	NA	NA	NA	NA	8.44	0.01	8.45	583.38
November 30, 2004	8.47	0.07	8.54	583.05	NA	NA	NA	NA	NP	0.00	8.23	583.59
December 27, 2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
January 26, 2005	8.21	0.35	8.56	583.29	NA	NA	NA	NA	NP	0.00	8.17	583.65
February 7, 2005	8.10	0.11	8.21	583.42	NA	NA	NA	NA	NA	NA	NA	NA
March 17, 2005	8.43	0.13	8.56	583.09	NA	NA	NA	NA	NA	NA	NA	NA
April 13, 2005	8.39	0.13	8.52	583.13	NA	NA	NA	NA	NP	0.00	8.20	583.62
May 31, 2005	8.39	0.15	8.54	583.13	NA	NA	NA	NA	NP	0.00	7.92	583.90
June 28, 2005	8.14	0.09	8.23	583.38	NA	NA	NA	NA	NP	0.00	7.92	583.90
July 29, 2005	8.13	0.04	8.17	583.40	NA	NA	NA	NA	NP	0.00	7.92	583.90
August 18, 2005	8.30	0.04	8.34	583.23	NA	NA	NA	NA	NA	NA	NA	NA
September 28, 2005	8.46	0.02	8.48	583.07	NA	NA	NA	NA	NA	NA	NA	NA
October 18, 2005	8.66	0.06	8.72	582.87	NA	NA	NA	NA	NA	NA	NA	NA
November 30, 2005	8.52	0.01	8.53	583.01	NA	NA	NA	NA	NA	NA	NA	NA
December 26, 2005	8.44	0.01	8.45	583.09	NA	NA	NA	NA	NA	NA	NA	NA
January 31, 2006	NP	0.00	8.21	583.32	NA	NA	NA	NA	NA	NA	NA	NA
February 24, 2006	NP	0.00	8.38	583.15	NA	NA	NA	NA	NA	NA	NA	NA
March 22, 2006	8.24	0.01	8.25	583.29	NA	NA	NA	NA	NA	NA	NA	NA
April 27, 2006	NP	0.00	8.43	583.10	NA	NA	NA	NA	NA	NA	NA	NA
May 25, 2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
June 27, 2006	NP	0.00	8.44	583.09	NA	NA	NA	NA	NA	NA	NA	NA
July 11, 2006	NP	0.00	8.40	583.13	NA	NA	NA	NA	NA	NA	NA	NA
August 23, 2006	NP	0.00	8.41	583.12	NA	NA	NA	NA	NA	NA	NA	NA
September 26, 2006	NP	0.00	8.32	583.21	NA	NA	NA	NA	NA	NA	NA	NA
October 30, 2006	NP	0.00	8.13	583.40	NA	NA	NA	NA	NA	NA	NA	NA
November 27, 2006	NP	0.00	8.40	583.13	NA	NA	NA	NA	NA	NA	NA	NA
December 27, 2006	NP	0.00	8.34	583.19	NA	NA	NA	NA	NA	NA	NA	NA
January 25, 2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
March 6, 2007	NP	0.00	8.59	582.94	NA	NA	NA	NA	NA	NA	NA	NA
March 23, 2007	NP	0.00	8.53	583.00	NA	NA	NA	NA	NA	NA	NA	NA
April 30, 2007	NP	0.00	8.46	583.07	NA	NA	NA	NA	NA	NA	NA	NA
May 17, 2007	NP	0.00	8.44	583.09	NA	NA	NA	NA	NA	NA	NA	NA
June 12, 2007	NP	0.00	8.50	583.03	NA	NA	NA	NA	NA	NA	NA	NA
July 18, 2007	NP	0.00	8.54	582.99	NA	NA	NA	NA	NP	0.00	8.31	583.51
August 28, 2007	NP	0.00	8.46	583.07	NA	NA	NA	NA	NA	NA	NA	NA
September 19, 2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
October 25, 2007	NP	0.00	7.61	583.92	NA	NA	NA	NA	NA	NA	NA	NA
November 27, 2007	NP	0.00	6.31	586.22	NA	NA	NA	NA	NA	NA	NA	NA
January 7, 2008	NP	0.00	6.31	586.22	NA	NA	NA	NA	NA	NA	NA	NA
February 22, 2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
March 17, 2008	5.82	0.03	5.85	585.71	NA	NA	NA	NA	NA	NA	NA	NA
April 7, 2008	5.96	0.06	6.02	585.57	NA	NA	NA	NA	NA	NA	NA	NA
May 5, 2008	6.89	0.03	7.13	584.43	NA	NA	NA	NA	NA	NA	NA	NA
June 2, 2008	6.80	0.23	7.03	584.71	NA	NA	NA	NA	NP	0.00	7.10	584.72
July 7, 2007	6.08	0.21	6.29	585.43	NA	NA	NA	NA	NP	0.00	6.56	585.26
August 13, 2008	6.31	0.21	6.52	585.20	NA	NA	NA	NA	NP	0.00	6.78	585.04
September 8, 2008	6.54	0.12	6.66	584.98	NA	NA	NA	NA	NP	0.00	7.03	584.79
October 9, 2008	6.11	0.09	6.20	585.41	NA	NA	NA	NA	NP	0.00	6.72	585.10
November 20, 2008	6.66	0.23	6.89	584.85	NA	NA	NA	NA	NP	0.00	7.13	584.69
December 15, 2008	NP	0.00	6.30	585.23	NA	NA	NA	NA	NP	0.00	7.09	584.73

Table 1. Groundwater and LNAPL Measurement Summary, March 2004 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	MW-172WT reference elevation = 531.51				MW-175WT reference elevation not available				MW-178WT reference elevation = 590.35			
	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)
March 8, 2004	8.18	0.44	8.62	583.29	NA	NA	NA	NA	NA	NA	NA	NA
April 29, 2004	7.98	0.56	8.54	583.49	NA	NA	NA	NA	NP	0.00	7.21	583.14
June 1, 2004	NA	NA	NA	NA	NA	NA	NA	NA	7.37	1.24	8.61	582.88
June 30, 2004	8.55	0.06	8.61	582.96	6.71	0.01	6.72	NA	NA	NA	NA	NA
July 28, 2004	8.32	0.36	8.68	583.16	6.89	0.01	7.02	NA	7.45	1.25	8.70	582.80
August 17, 2004	8.33	0.49	8.82	583.14	7.01	0.01	7.12	NA	7.46	1.33	8.79	582.78
September 27, 2004	8.42	0.48	8.90	583.05	7.18	0.01	7.19	NA	7.51	1.02	8.53	582.76
October 29, 2004	NA	NA	NA	NA	7.24	0.01	7.25	NA	NA	NA	NA	NA
November 30, 2004	8.39	0.72	9.11	583.06	NP	0.00	7.11	NA	NA	NA	NA	NA
December 27, 2004	NA	NA	NA	NA	NP	0.00	7.11	NA	7.53	0.59	8.12	582.77
January 26, 2005	NA	NA	NA	NA	NP	0.00	7.01	NA	8.20	0.65	8.20	582.75
February 7, 2005	8.00	0.19	8.19	583.49	7.11	0.01	7.12	NA	7.17	0.39	7.56	583.15
March 17, 2005	8.34	0.28	8.62	583.15	NP	0.00	7.22	NA	7.63	0.65	8.28	582.67
April 13, 2005	8.33	0.35	8.68	583.15	NP	0.00	7.12	NA	7.46	0.69	8.15	582.83
May 31, 2005	8.29	0.38	8.67	583.19	NP	0.00	6.98	NA	7.56	0.83	8.39	582.72
June 28, 2005	8.06	0.04	8.10	583.45	6.67	0.01	6.73	NA	7.39	0.56	7.95	582.92
July 29, 2005	8.06	0.02	8.08	583.45	NP	0.00	6.73	NA	7.44	0.82	8.26	582.84
August 18, 2005	8.24	0.17	8.41	583.26	NP	0.00	6.93	NA	7.51	1.26	8.77	582.74
September 28, 2005	8.36	0.21	8.57	583.13	NP	0.00	7.04	NA	7.49	0.32	7.81	582.83
October 18, 2005	8.51	0.42	8.93	582.97	NP	0.00	7.26	NA	7.57	0.32	7.89	582.75
November 30, 2005	8.41	0.32	8.73	583.07	NP	0.00	7.16	NA	7.54	0.51	8.05	582.77
December 26, 2005	8.32	0.35	8.67	583.16	NP	0.00	7.19	NA	7.54	1.24	8.78	582.71
January 31, 2006	8.08	0.27	8.35	583.41	NP	0.00	6.79	NA	7.45	0.16	7.61	582.89
February 24, 2006	8.32	0.33	8.65	583.16	NP	0.00	6.99	NA	7.56	0.60	8.16	582.74
March 22, 2006	8.17	0.08	8.25	583.33	NP	0.00	6.75	NA	7.42	0.14	7.56	582.92
April 27, 2006	8.33	0.11	8.44	583.17	NP	0.00	6.84	NA	7.43	0.26	7.69	582.90
May 25, 2006	8.20	0.18	8.38	583.30	NP	0.00	6.92	NA	7.39	0.36	7.75	582.93
June 27, 2006	8.39	0.31	8.70	583.10	NP	0.00	6.79	NA	7.43	0.37	7.80	582.89
July 11, 2006	8.27	0.36	8.63	583.21	NP	0.00	6.91	NA	7.46	0.34	7.80	582.86
August 23, 2006	8.36	0.19	8.55	583.13	NP	0.00	6.81	NA	7.39	0.47	7.86	582.92
September 26, 2006	8.21	0.23	8.44	583.28	NP	0.00	6.70	NA	7.41	0.29	7.70	582.92
October 30, 2006	8.07	0.15	8.22	583.43	NP	0.00	6.86	NA	7.35	0.38	7.73	582.97
November 27, 2006	8.29	0.16	8.45	583.21	NP	0.00	6.78	NA	7.37	0.34	7.71	582.95
December 27, 2006	NA	NA	NA	NA	NP	0.00	6.83	NA	7.36	0.33	7.69	582.96
January 25, 2007	NA	NA	NA	NA	NP	0.00	6.96	NA	7.41	0.38	7.79	582.91
March 6, 2007	8.44	0.29	8.73	583.05	NP	0.00	7.13	NA	7.51	0.51	8.02	582.80
March 23, 2007	8.41	0.33	8.74	583.07	NP	0.00	7.13	NA	7.51	0.46	7.97	582.80
April 30, 2007	8.34	0.36	8.70	583.14	NP	0.00	6.89	NA	7.48	0.25	7.73	582.85
May 17, 2007	8.32	0.19	8.51	583.17	NP	0.00	6.86	NA	7.13	0.33	7.46	583.19
June 12, 2007	8.33	0.38	8.71	583.15	NP	0.00	6.91	NA	7.47	0.28	7.75	582.86
July 18, 2007	NA	NA	NA	NA	NP	0.00	7.02	NA	7.46	0.32	7.78	582.86
August 28, 2007	NA	NA	NA	NA	NP	0.00	6.96	NA	7.46	0.29	7.75	582.87
September 19, 2007	NA	NA	NA	NA	NP	0.00	6.66	NA	6.87	0.11	6.98	583.47
October 25, 2007	NP	0.00	8.42	583.09	NP	0.00	7.08	NA	7.59	0.25	7.84	582.74
November 27, 2007	7.50	0.02	7.52	584.01	NP	0.00	6.53	NA	6.52	0.14	6.66	583.82
January 7, 2008	NP	0.00	6.16	585.35	NP	0.00	6.53	NA	5.44	0.05	5.49	584.91
February 22, 2008	NA	NA	NA	NA	NP	0.00	6.14	NA	NA	NA	NA	NA
March 17, 2008	NP	0.00	5.73	585.78	NP	0.00	6.31	NA	NA	NA	NA	NA
April 7, 2008	NP	0.00	5.88	585.63	NP	0.00	5.84	NA	5.30	0.02	5.32	585.05
May 5, 2008	NP	0.00	6.85	584.66	NP	0.00	6.31	NA	6.25	0.02	6.27	584.10
June 2, 2008	NP	0.00	6.75	584.76	NP	0.00	6.39	NA	5.94	0.01	5.94	584.42
July 7, 2008	NP	0.00	5.99	585.52	NP	0.00	5.96	NA	5.32	0.02	5.34	585.03
August 13, 2008	NP	0.00	NA	NA	NP	0.00	6.14	NA	NP	0.00	5.81	584.54
September 8, 2008	NA	NA	NA	NA	NP	0.00	6.36	NA	5.86	0.01	5.87	584.49
October 9, 2008	6.00	0.02	6.02	585.51	NP	0.00	6.13	NA	NP	0.00	5.68	584.67
November 20, 2008	6.57	0.15	6.72	584.93	NP	0.00	6.58	NA	NP	0.00	6.18	584.17
December 15, 2008	NA	NA	NA	NA	NP	0.00	6.44	NA	NP	0.00	5.66	584.79

See Notes on Page 6.

Table 1. Groundwater and LNAPL Measurement Summary, March 2004 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	reference elevation not available				MW-180WT reference elevation = 590.67				RW-1 reference elevation = 592.18			
	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)
March 8, 2004	--	--	--	--	--	--	--	--	8.10	0.18	8.28	584.07
April 29, 2004	--	--	--	--	--	--	--	--	8.63	0.17	8.80	583.54
June 1, 2004	--	--	--	--	--	--	--	--	7.71	0.27	7.98	584.45
June 30, 2004	--	--	--	--	--	--	--	--	8.30	0.13	8.43	583.87
July 28, 2004	--	--	--	--	--	--	--	--	8.76	0.39	9.15	583.39
August 17, 2004	--	--	--	--	--	--	--	--	8.89	0.46	9.35	583.25
September 27, 2004	--	--	--	--	--	--	--	--	8.87	0.38	9.25	583.28
October 29, 2004	--	--	--	--	--	--	--	--	NA	NA	NA	NA
November 30, 2004	--	--	--	--	--	--	--	--	8.79	0.95	9.74	583.31
December 27, 2004	--	--	--	--	--	--	--	--	8.76	0.55	9.31	583.38
January 26, 2005	--	--	--	--	--	--	--	--	8.43	1.29	9.72	583.65
February 7, 2005	--	--	--	--	--	--	--	--	8.59	0.70	9.29	583.53
March 17, 2005	NP	0.00	7.13	NA	7.15	0.02	7.17	583.52	NA	NA	NA	NA
April 13, 2005	NP	0.00	6.91	NA	NP	0.00	6.87	583.80	8.60	0.28	8.88	583.56
May 31, 2005	NP	0.00	6.96	NA	NP	0.00	7.01	583.66	8.58	0.21	8.79	583.58
June 28, 2005	NP	0.00	6.82	NA	6.84	0.01	6.85	583.83	8.13	0.21	8.34	584.03
July 29, 2005	NP	0.00	6.73	NA	NP	0.00	6.73	583.94	8.05	0.17	8.22	584.12
August 18, 2005	NP	0.00	6.78	NA	NP	0.00	6.78	583.89	8.18	0.79	8.97	583.94
September 28, 2005	NP	0.00	6.95	NA	6.93	0.01	7.00	583.68	8.61	0.59	9.40	583.32
October 18, 2005	NP	0.00	7.14	NA	7.20	0.01	7.21	583.47	8.83	0.91	9.74	583.28
November 30, 2005	7.03	0.01	7.04	NA	NP	0.00	7.11	583.56	8.54	0.68	9.22	583.59
December 26, 2005	NP	0.00	7.14	NA	NP	0.00	7.20	583.47	NA	NA	NA	NA
January 31, 2006	NP	0.00	7.63	NA	NP	0.00	6.81	583.86	NA	NA	NA	NA
February 24, 2006	NP	0.00	7.82	NA	NP	0.00	6.81	583.86	8.49	0.33	8.82	583.66
March 22, 2006	NP	0.00	6.88	NA	NP	0.00	6.69	583.98	8.35	0.52	8.87	583.79
April 27, 2006	6.79	0.01	6.80	NA	NP	0.00	6.82	583.85	8.72	0.67	9.39	583.41
May 25, 2006	NP	0.00	6.74	NA	NP	0.00	6.76	583.91	8.45	0.56	9.01	583.69
June 27, 2006	NP	0.00	6.84	NA	NP	0.00	6.85	583.82	8.71	0.71	9.42	583.41
July 11, 2006	NP	0.00	6.83	NA	NP	0.00	6.90	583.77	8.49	0.86	9.35	583.62
August 23, 2006	NP	0.00	6.61	NA	NP	0.00	6.65	584.02	8.51	0.97	9.48	583.59
September 26, 2006	NA	NA	NA	NA	NP	0.00	6.76	583.91	8.31	0.48	8.79	583.83
October 30, 2006	NA	NA	NA	NA	NP	0.00	6.49	584.18	NA	NA	NA	NA
November 27, 2006	NA	NA	NA	NA	NP	0.00	6.59	584.08	8.43	0.61	9.04	583.70
December 27, 2006	NA	NA	NA	NA	NP	0.00	6.64	584.03	NA	NA	NA	NA
January 25, 2007	NA	NA	NA	NA	NP	0.00	6.76	583.91	NA	NA	NA	NA
March 6, 2007	NP	0.00	7.13	NA	NP	0.00	7.16	583.51	8.53	0.27	8.80	583.63
March 23, 2007	NP	0.00	6.90	NA	NP	0.00	6.93	583.74	8.31	0.27	8.58	583.85
April 30, 2007	NP	0.00	6.56	NA	NP	0.00	6.58	584.09	8.52	0.09	8.61	583.65
May 17, 2007	NA	NA	NA	NA	NP	0.00	6.52	584.15	8.38	0.14	8.52	583.79
June 12, 2007	NP	0.00	6.57	NA	NP	0.00	6.58	584.09	8.39	0.07	8.46	583.78
July 18, 2007	NP	0.00	6.75	NA	NP	0.00	6.78	583.89	8.46	0.63	9.09	583.67
August 28, 2007	NP	0.00	6.82	NA	NP	0.00	6.85	583.82	8.23	0.11	8.34	583.94
September 19, 2007	NP	0.00	6.65	NA	NP	0.00	6.69	583.98	7.93	0.11	8.04	584.24
October 25, 2007	NP	0.00	6.98	NA	NP	0.00	7.02	583.65	8.80	0.45	9.25	583.34
November 27, 2007	NA	NA	NA	NA	NP	0.00	7.07	583.60	8.03	0.15	8.18	584.14
January 7, 2008	NA	NA	NA	NA	NP	0.00	7.01	583.66	6.76	0.04	6.80	585.42
February 22, 2008	NA	NA	NA	NA	NP	0.00	NA	NA	6.06	0.03	6.09	586.12
March 17, 2008	NA	NA	NA	NA	NP	0.00	NA	NA	5.95	0.02	5.97	586.23
April 7, 2008	NP	0.00	6.46	NA	NP	0.00	6.45	584.22	6.24	0.06	6.30	585.94
May 5, 2008	NA	NA	NA	NA	NP	0.00	6.52	584.15	7.17	0.02	7.19	585.01
June 2, 2008	NP	0.00	6.55	NA	NP	0.00	6.56	584.11	7.16	0.03	7.19	585.02
July 7, 2007	NA	NA	NA	NA	NP	0.00	6.14	584.53	6.24	0.01	6.25	585.94
August 13, 2008	NA	NA	NA	NA	NP	0.00	6.25	584.42	NP	0.00	6.49	585.69
September 8, 2008	NA	NA	NA	NA	NP	0.00	6.45	584.22	NP	0.00	6.60	585.58
October 9, 2008	NA	NA	NA	NA	NP	0.00	6.31	584.36	NP	0.00	6.34	585.84
November 20, 2008	NA	NA	NA	NA	NP	0.00	6.56	584.11	NP	0.00	6.99	585.19
December 15, 2008	NA	NA	NA	NA	NP	0.00	6.64	584.03	NA	NA	NA	NA

Table 1. Groundwater and LNAPL Measurement Summary, March 2004 Through the Present, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

Date	RW-2 reference elevation = 592.07				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)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
	March 8, 2004	NA	NA	NA	NA	8.27	0.01	8.28	584.05	NA	NA	NA
April 29, 2004	NA	NA	NA	NA	7.78	0.01	7.79	584.54	8.65	0.75	9.40	NA
June 1, 2004	NA	NA	NA	NA	NP	0.00	5.61	586.71	7.64	0.23	7.87	NA
June 30, 2004	8.66	0.01	8.67	583.41	NP	0.00	7.44	584.88	NA	NA	NA	NA
July 28, 2004	8.83	0.01	8.84	583.24	NP	0.00	8.14	584.18	NA	NA	NA	NA
August 17, 2004	8.94	0.01	8.95	583.13	NP	0.00	8.51	583.81	NA	NA	NA	NA
September 27, 2004	9.09	0.01	9.10	582.98	NP	0.00	8.50	583.82	8.75	0.71	9.46	NA
October 29, 2004	8.71	0.02	8.73	583.36	NP	0.00	7.72	584.60	NA	NA	NA	NA
November 30, 2004	9.02	0.01	9.03	583.05	NP	0.00	8.07	584.25	8.67	1.00	9.67	NA
December 27, 2004	NP	0.00	9.03	583.04	NP	0.00	7.84	584.48	NA	NA	NA	NA
January 26, 2005	NP	0.00	8.69	583.38	NP	0.00	6.92	585.40	8.33	1.09	9.42	NA
February 7, 2005	NP	0.00	8.73	583.34	NP	0.00	7.57	584.75	8.44	1.05	9.49	NA
March 17, 2005	NP	0.00	8.92	583.15	NP	0.00	7.82	584.50	8.61	1.30	9.91	NA
April 13, 2005	NP	0.00	8.94	583.13	NP	0.00	7.83	584.49	8.49	1.13	9.62	NA
May 31, 2005	NP	0.00	8.93	583.14	NP	0.00	7.88	584.44	8.54	0.33	8.87	NA
June 28, 2005	NP	0.00	8.71	583.36	NP	0.00	7.04	585.28	8.01	0.48	8.49	NA
July 29, 2005	NP	0.00	8.69	583.38	NP	0.00	6.77	585.55	7.97	0.25	8.22	NA
August 18, 2005	NP	0.00	8.67	583.40	NP	0.00	7.72	584.60	8.28	0.75	9.03	NA
September 28, 2005	NP	0.00	9.01	583.06	NP	0.00	8.41	583.91	8.69	0.82	9.51	NA
October 18, 2005	NP	0.00	8.99	583.08	NP	0.00	8.41	583.91	--	--	--	NA
November 30, 2005	NP	0.00	8.93	583.14	NP	0.00	8.02	584.30	--	--	--	NA
December 26, 2005	NP	0.00	8.99	583.08	NP	0.00	7.98	584.34	8.43	0.87	9.30	NA
January 31, 2006	NP	0.00	8.72	583.35	NP	0.00	5.50	586.82	7.82	0.72	8.54	NA
February 24, 2006	NP	0.00	8.87	583.20	NP	0.00	6.78	585.54	8.36	1.04	9.40	NA
March 22, 2006	NA	NA	NA	NA	NP	0.00	6.29	586.03	8.22	0.81	9.03	NA
April 27, 2006	NA	NA	NA	NA	NP	0.00	7.66	584.66	8.57	0.99	9.56	NA
May 25, 2006	NA	NA	NA	NA	NP	0.00	7.25	585.07	8.31	0.96	9.27	NA
June 27, 2006	NA	NA	NA	NA	NP	0.00	7.91	584.41	NA	NA	NA	NA
July 11, 2006	NA	NA	NA	NA	NP	0.00	7.34	584.98	8.03	1.70	9.73	NA
August 23, 2006	NA	NA	NA	NA	NP	0.00	7.89	584.43	NA	NA	NA	NA
September 26, 2006	NP	0.00	8.90	583.17	NP	0.00	7.08	585.24	NA	NA	NA	NA
October 30, 2006	NP	0.00	8.75	583.32	NP	0.00	7.05	585.27	NA	NA	NA	NA
November 27, 2006	NP	0.00	8.94	583.13	NP	0.00	7.50	584.82	NA	NA	NA	NA
December 27, 2006	NP	0.00	8.76	583.31	NP	0.00	7.33	584.99	NA	NA	NA	NA
January 25, 2007	NA	NA	NA	NA	NP	0.00	7.90	584.42	NA	NA	NA	NA
March 6, 2007	NP	0.00	9.14	582.93	NP	0.00	8.18	584.14	8.54	0.92	9.46	NA
April 30, 2007	NP	0.00	8.98	583.09	NP	0.00	8.03	584.29	8.37	0.79	9.16	NA
May 17, 2007	NP	0.00	8.99	583.08	NP	0.00	7.98	584.34	8.34	0.77	9.11	NA
June 12, 2007	NP	0.00	9.03	583.04	NP	0.00	8.21	584.11	8.29	0.76	9.05	NA
July 18, 2007	NP	0.00	9.07	583.00	NP	0.00	8.27	584.05	8.44	0.01	8.45	NA
August 28, 2007	NP	0.00	9.00	583.07	NP	0.00	7.57	584.75	8.12	0.45	8.57	NA
September 19, 2007	NP	0.00	8.44	583.63	NP	0.00	7.03	585.29	7.82	0.11	7.93	NA
October 25, 2007	NP	0.00	8.93	583.14	NP	0.00	8.32	584.00	8.69	0.39	9.08	NA
November 27, 2007	NP	0.00	8.04	584.03	NP	0.00	8.22	584.10	7.95	0.22	8.17	NA
January 7, 2008	NA	NA	NA	NA	NP	0.00	7.30	585.02	6.66	0.04	6.70	NA
February 22, 2008	NP	0.00	6.56	585.51	NP	0.00	5.19	587.13	NA	NA	NA	NA
March 17, 2008	NP	0.00	6.36	585.71	NP	0.00	4.45	587.87	5.79	0.02	5.81	NA
April 7, 2008	NP	0.00	6.51	585.56	NP	0.00	5.03	587.29	6.15	0.02	6.17	NA
May 5, 2008	NP	0.00	6.18	585.89	NP	0.00	6.79	585.53	7.18	0.01	7.19	NA
June 2, 2008	NP	0.00	7.33	584.74	NP	0.00	7.51	584.81	7.09	0.02	7.11	NA
July 7, 2007	NA	NA	NA	NA	NP	0.00	6.78	585.54	6.13	0.03	6.16	NA
August 13, 2008	NA	NA	NA	NA	NP	0.00	6.95	585.37	6.38	0.04	6.42	NA
September 8, 2008	NA	NA	NA	NA	NP	0.00	7.31	585.01	6.60	0.02	6.62	NA
October 9, 2008	NP	0.00	6.69	585.38	NP	0.00	6.83	585.49	6.89	0.00	6.25	NA
November 20, 2008	NP	0.00	7.19	584.88	NP	0.00	7.56	584.76	6.99	0.02	6.91	NA
December 15, 2008	NA	NA	NA	NA	NP	0.00	7.39	584.93	6.37	0.01	6.38	NA

Table 1. Groundwater and LNAPL Measurement Summary, March 2004 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.

Table 2. Current and Historic Groundwater Quality Data, Former UST 7 Area, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

		Benzene	Ethylbenzene	Toluene	Total Xylenes	Lead	Sulfate (mg/L)	
Industrial & Commercial II, III & IV Drinking Water Criteria*		5 (A,I)	74 (E,I)	790 (E,I)	280 (E,I)	4 (L)	250 (E)	
Groundwater Contact Criteria*		11000 (I)	170,000 (I,S)	530,000 (I,S)	190,000 (I,S)	ID	ID	
Residential Groundwater Volatilization to Air Inhalation Criteria*		5600 (I)	110,000 (I)	530,000 (I,S)	190,000 (I,S)	NLV	NLV	
Industrial Groundwater Volatilization to Air Inhalation Criteria*		35000 (I)	170,000 (I,S)	530,000 (I,S)	190,000 (I,S)	NLV	NLV	
Monitoring Well	Date							
BBL-MW1	6/96	16	130	25 U	210	3 U	5 U	
	7/98	13	13	1 U	10	100 U	5 U	
	10/98	10	30	2	45	3 U	2	
	1/99	26	32	3	54	1 U	2	
	4/99	20	30	20 U	50	1 U	3	
	7/99	27	17	5	20	3 U	2	
	10/99	6	3	1 U	2	3 U	1 U	
	1/00	4 (5)	5 (5)	1 U (1 U)	5 (5)	3 U (3 U)	1 U (1 U)	
	5/00	8.1	10	0.77 J	15	10	25.1	
	8/00	3 (1 U)	2 (1 U)	1 U (1 U)	2 (1 U)	3 U (3 U)	6 (6)	
	10/00	17	22	2	36	3 U	1 U	
	3/01	14 (15)	12 (13)	1 (1)	15 (17)	3 U (3 U)	1 U (1 U)	
	5/01	14	9	1 U	9	1 U	5 U	
	8/01	18(18)	13(13)	1 U	15(15)	3(3)	2(2)	
	2/02	53	25	3	28	3 U	21	
	8/02	5 (7)	2 (2)	1 U (1 U)	2 (2)	1 U (1 U)	5 (4)	
	3/03	23	4	2	3	1 U	16	
	8/03	23 (21)	4 (4)	2 (2)	4 (4)	0.001 U (0.001 U)	5 U (5 U)	
	2/04	29 (29)	13 (13)	1.5 J (1.5 J)	7.4 (7.3)	0.83 B (0.81 B)	8 (8)	
	8/04	33 (32)	19 (20)	1.6 (1.7)	6.8 (7.5)	0.93 B (1.4 B,G)	5 U (5 U)	
	2/05	36	27	2.5 U	11	1.1	5 U	
	8/05	37	25	3.3 U	6.7 U	1.3	5 U	
	2/06	36	29	2.5 U	10	1.2	5 U	
	8/06	44.0	52	4 U	17	1.1	5 U	
	2/07	34.0	33	2.5	8.6	1 U	5 U	
	3/08	22.0	32	1.6	3.3	5 U	12	
	11/08	31 (30)	35 (36)	2.3 (2.3)	8.5 (8.4)	1 B J (1 B J)	2 B (6 U)	
	BBL-MW4	6/96	12	1 U	1 U	3 U	3 U	5 U
		7/98	5 U	1 U	1 U	3 U	100 U	NA
		10/98	1 U	1 U	1 U	1 U	3 U	NA
		1/99	2	1 U	1 U	1 U	2	NA
		4/99	1	1 U	1 U	2 U	1 U	NA
		7/99	1 U	1 U	3	2 U	3 U	NA
10/99		1 U	1 U	1 U	2 U	3 U	NA	
1/00		1 U	1 U	1 U	2 U	3 U	NA	
5/00		1.6	1 U	0.12 J	1 U	5.1	9.6 BG	
8/00		1 U	1 U	1 U	1 U	3 U	NA	
10/00		1	1 U	1 U	1 U	3 U	NA	
3/01		2	1 U	1 U	1 U	3 U	NA	
5/01		1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	NA	
8/01		1 U	1 U	1 U	1 U	1 U	NA	
2/02		1 U	1 U	1 U	1 U	3 U	NA	
8/02		1 U	1 U	1 U	1 U	1 U	NA	
3/03		1 U	1 U	1 U	1 U	1 U	NA	
8/03		1 U	1 U	1 U	1 U	0.001 U	NA	
2/04		0.33 J	1 U	1 U	2 U	1 U	4 B	
8/04		0.25 J	1 U	1 U	1 U	1 U	3 B	
2/05		1 U	1 U	1 U	3 U	1 U	5 U	
8/05		1 U	1 U	1 U	2 U	1 U	5 U	
2/06		1 U	1 U	1 U	3 U	1 U	5 U	
8/06	1 U	1 U	1 U	3 U	1 U	5 U		
2/07	NA	NA	NA	NA	1 U	NA		
MW-135 WT	7/98	5 U	1 U	1 U	3 U	100 U	NA	
	10/98	1	1 U	1 U	2 U	3 U	NA	
	1/99	1 U	1 U	1 U	1 U	1 U	NA	
	4/99	1 U	1 U	1 U	1 U	1 U	NA	
	7/99	2	1 U	3	2 U	3 U	NA	
	10/99	2	1 U	1 U	2 U	3 U	NA	
	1/00	1 U	1 U	1 U	2 U	3 U	NA	
	5/00	0.3 J	1 U	0.12 J	1 U	3 U	146	
	8/00	1 U	1 U	1 U	1 U	3 U	NA	
	10/00	1 U	1 U	1 U	1 U	3 U	NA	
	3/01	1 U	1 U	1 U	1 U	3 U	NA	
	5/01	1 U	1 U	1 U	1 U	1 U	NA	
	8/01	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	NA (NA)	
	2/02	1 U	1 U	1 U	1 U	3 U	NA	
	8/02	1 U	1 U	1 U	1 U	1 U	NA	
	3/03	1 U	1 U	1 U	1 U	1 U	NA	
	8/03	1 U	1 U	2 B	1 U	0.001 U	NA	
	2/04	1 U	1 U	1 U	1 U	1 U	5 U	
	8/04	1 U	1 U	1 U	2 U	1 U	5 U	
	2/05	1 U	1 U	1 U	3 U	1 U	5 U	
	8/05	1 U	1 U	1 U	2 U	1 U	5 U	
	2/06	1 U (1 U)	1 U (1 U)	1 U (1 U)	3 U (3 U)	1 U (1 U)	5 U (5 U)	
	8/06	1 U (1 U)	1 U (1 U)	1 U (1 U)	3 U (3 U)	1 U (1 U)	5 U (5 U)	
2/07	NA	NA	NA	NA	1 U	NA		

See notes, Page 4.

Table 2. Current and Historic Groundwater Quality Data, Former UST 7 Area, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

		Benzene	Ethylbenzene	Toluene	Total Xylenes	Lead	Sulfate (mg/L)	
Industrial & Commercial II, III & IV Drinking Water Criteria*		5 {A,I}	74 {E,I}	790 {E,I}	280 {E,I}	4 {L}	250 {E}	
Groundwater Contact Criteria*		11000 {I}	170,000 {I,S}	530,000 {I,S}	190,000 {I,S}	ID	ID	
Residential Groundwater Volatilization to Air Inhalation Criteria*		5600 {I}	110,000 {I}	530,000 {I,S}	190,000 {I,S}	NLV	NLV	
Industrial Groundwater Volatilization to Air Inhalation Criteria*		35000 {I}	170,000 {I,S}	530,000 {I,S}	190,000 {I,S}	NLV	NLV	
Monitoring Well	Date							
MW-139 WT	6/96	5 U	1 U	1 U	3 U	3 U	132	
	7/98	5 U	1 U	1 U	3 U	100 U	160	
	10/98	1 U	1 U	1 U	2 U	3 U	168	
	1/99	1 U	1 U	1 U	1 U	1 U	153	
	4/99	1 U	1 U	1 U	2 U	1 U	158	
	7/99	1 U	1 U	1 U	2 U	3 U	156	
	10/99	1 U (1)	1 U (1 U)	1 U (1 U)	2 U (2 U)	3 U (3 U)	152 (155)	
	1/00	1 U	1	1 U	7	3 U	162	
	5/00	1 U	1 U	0.29 J	1 U	3 U	168	
	8/00	1 U	1 U	1 U	1 U	3 U	170	
	10/00	1 (1)	1 U (1 U)	1 U (1 U)	1 (1)	3 U (3 U)	159 (156)	
	3/01	1 U	1 U	1 U	1 U	3 U	168	
	5/01	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	166 (167)	
	8/01	1 U	1 U	1 U	1 U	1 U	170	
	2/02	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	3 U (3 U)	163 (163)	
	8/02	1 U	1 U	1 U	1 U	1 U	166	
	3/03	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	164 (165)	
	8/03	1 U	1 U	2 B	1 B	0.001 U	170	
	2/04	1 U	1 U	1 U	1 U	1 U	160	
	8/04	1 U	1 U	0.19 J	2 U	1	150	
	2/05	1 U	1 U	1 U	3 U	1 U	150	
	8/05	1 U	1 U	1 U	2 U	1 U	160	
	2/06	1 U	1 U	1 U	3 U	1 U	91	
	8/06	1 U	1 U	1 U	3 U	1 U	140	
	2/07	NA	NA	NA	NA	NA	NA	
	UST 7-2	6/94	2,100	100 U	3,100	9,800	1	NA
		6/96	950	1,700	120 U	3,600	114	5 U
7/98		6	17	1 U	6	100 U	NA	
10/98		1 U	2	1 U	2 U	3 U	NA	
1/99		5	23	1 U	7	1 U	NA	
4/99		10 U	40	10 U	20	1 U	NA	
7/99		10 U	20	20	10	3 U	NA	
10/99		10 (10 U)	20 (20)	10 U (10 U)	10 (10)	3 U (3 U)	NA (NA)	
1/00		2	1 U	1 U	1	3 U	NA	
5/00		1,500	1,200	25 J	1,200	35	2 U G	
8/00		4	1	1 U	1 U	3 U	NA	
10/00		50	3	1	3	3 U	NA	
3/01		96 (112)	9 (9)	1 (5 U)	7 (8)	3 U (3 U)	NA (NA)	
5/01		7	1 U	1 U	1 U	1 U	NA	
8/01		170	50 U	50 U	50 U	1 U	NA	
2/02		47	1	1 U	3	3 U	NA	
8/02		1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	NA	
3/03		67	1 U	1	2	1 U	NA	
8/03		123 (126)	1 U (1)	2 (2)	2 (3)	0.001 U (0.001 U)	NA (NA)	
2/04		850	120	12 J	97	12.5	5 U	
8/04		2,100	980	39 J	400	4.6	5 U	
2/05		1600	420	59	170	5.8	5 U	
8/05		2400	610	62 U	210	6.6	5 U	
2/06		1900	450	56 U	170 U	5.6	5 U	
8/06		2300	610	100 U	300 U	4.6	5 U	
2/07		1900	310	50 U	150 U	4.5	5 U	
3/08		2100	240	27 J	36 J	3.7	3 B	
UST 7-3R	7/98	14	1 U	1 U	3 U	100 U	NA	
	10/98	12	1 U	1 U	2 U	3 U	NA	
	1/99	5	1 U	1 U	1 U	1 U	NA	
	4/99	18	1 U	1 U	2 U	1 U	NA	
	7/99	24	1 U	2	2 U	3 U	NA	
	10/99	50	1 U	1 U	2 U	3 U	NA	
	1/00	30 (32)	1 U	1 U	2 U	4 (3 U)	NA	
	5/00	13	1 U	0.12 J	1 U	3 U	27.6	
	8/00	28	1 U	1 U	1 U	3 U	NA	
	10/00	26	1 U	1 U	1 U	3 U	NA	
	3/01	15	1 U	1 U	1 U	3 U	NA	
	5/01	12	1 U	1 U	1 U	1 U	NA	
	8/01	35	1 U	1 U	1 U	1 U	NA	
	2/02	30	1 U	1 U	1 U	3 U	NA	
	8/02	6	1 U	1 U	1 U	1 U	NA	
	3/03	30	1 U	1 U	1 U	1 U	NA	
	8/03	9	1 U	1 U	1 U	0.001 U	NA	
	2/04	9	1 U	1 U	1 U	1 U	5 U	
	8/04	16	1 U	1 U	2 U	1 U	3 B	
	2/05	11 (11)	1 U (1 U)	1 U (1 U)	3 U (3 U)	1 U (1 U)	5 U (5 U)	
	8/05	12	1 U	1 U	2 U	1 U	5 U	
	2/06	3.3	1 U	1 U	3 U	1 U	6	
	8/06	8.9	1 U	1 U	3 U	1 U	5 U	
	2/07	1.4	1 U	1 U	3 U	1 U	5 U	
	3/08	0.86 J	1 U	1 U	2 U	1 U	15	
	11/08	1 U	1 U	1 U	2 U	1 U	10	

See Notes, Page 4.

Table 2. Current and Historic Groundwater Quality Data, Former UST 7 Area, GM Saginaw Malleable Iron Plant, Saginaw, Michigan

		Benzene	Ethylbenzene	Toluene	Total Xylenes	Lead	Sulfate (mg/L)	
Industrial & Commercial II, III & IV Drinking Water Criteria*		5 (A, I)	74 (E, I)	790 (E, I)	280 (E, I)	4 (L)	250 (E)	
Groundwater Contact Criteria*		11000 (I)	170,000 (I, S)	530,000 (I, S)	190,000 (I, S)	ID	ID	
Residential Groundwater Volatilization to Air Inhalation Criteria*		5600 (I)	110,000 (I)	530,000 (I, S)	190,000 (I, S)	NLV	NLV	
Industrial Groundwater Volatilization to Air Inhalation Criteria*		35000 (I)	170,000 (I, S)	530,000 (I, S)	190,000 (I, S)	NLV	NLV	
Monitoring Well	Date							
UST 7-4	6/94	110	2.0 U	8	1.0 U	1.0 U	NA	
	6/96	44	1.7 U	1.7 U	5.1 U	3 U	6	
	7/98	14	1 U	1 U	3 U	100 U	NA	
	10/98	10	1 U	1 U	2 U	3 U	NA	
	1/99	17	1 U	1 U	2 U	1 U	NA	
	4/99	7	1 U	1 U	2 U	1 U	NA	
	7/99	4	1 U	4	2 U	3 U	NA	
	10/99	4	1 U	1 U	1	3 U	NA	
	1/00	3	1 U	1	1	17	NA	
	5/00	6	0.18 J	0.22 J	0.67 J	9.4	30.5	
	8/00	3 (3)	1 U (1 U)	1 U (1 U)	1 U (1 U)	3 U (3 U)	NA	
	10/00	23	1 U	1 U	1 U	3 U	NA	
	3/01	2	1 U	1 U	1	3 U	NA	
	5/01	2	1 U	1 U	1 U	1 U	NA	
	8/01	2	1 U	1 U	1 U	1 U	NA	
	2/02	16 (16)	2 (3)	1 U (1 U)	1 (1)	3 U (3 U)	NA	
	8/02	1	1 U	1 U	1 U	1 U	NA	
	3/03	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	1 U (1 U)	NA	
	8/03	2	1 U	1 U	1 U	0.001 U	NA	
	2/04	4	1 U	0.25 J	0.84 J	1 U	23	
	8/04	0.71 J	1 U	1 U	1 U	1 U	5 U	
	2/05	1 U	1 U	1 U	3 U	1 U	5 U	
	8/05	1 U	1 U	1 U	2 U	1 U	5 U	
	2/06	1 U	1 U	1 U	3 U	1 U	6	
	8/06	1 U	1 U	1 U	3 U	1 U	5 U	
	2/07	1.1	1 U	1 U	3 U	1 U	5 U	
	3/08	1 U	1 U	1 U	2 U	1.2	11	
	11/08	1.4	1 U	1 U	2 U	1 U	11	
	UST 7-5	6/94	3,700	13,000	3,600	19,000	1	NA
		6/96	1,600	1,800	1,400	6,900	46	8
		7/98	1,900	200 U	930	7,900	100 U	NA
		10/98	1,390	1,330	990	5,120	3 U	NA
		1/99	190	680	450	4,440	10	NA
4/99		400	890	400	6,540	5	NA	
7/99		300	240	240	3,470	4	NA	
10/99		20	110	20	860	5	NA	
1/00		23	71	9	354	3 U	NA	
5/00		42 (56)	71 (83)	13 (13)	330 (360)	20.3 (12.9)	52.6 (54.2)	
8/00		160	100	40	530	3 U	NA	
10/00		56 (59)	27 (29)	30 (50 U)	860 (870)	3 U (3 U)	NA	
3/01		200	100	100 U	1,300	5	NA	
5/01		10 U	10	10 U	170	1	NA	
8/01		160	130	50 U	690	2	NA	
2/02		1	1	1 U	7	14	NA	
8/02		7	7	3	85	3	NA	
3/03		330	380	80	1,400	2	NA	
8/03		470	340	100	1,690	0.001	NA	
2/04		42	62	27	360	2.1	210	
8/04		120	96	29	460	1.8	5 U	
2/05		140	78	34	450	1.8	99	
8/05		340	230	86	1060	1 U	5 U	
2/06	390	450	42	1500	1 U	39		
8/06	430	440	63	2000	1 U	5 U		
2/07	340	330	20U	960	1 U	8		
3/08	42 (45)	18 (20)	7.7 (8.1)	100 (110)	5 U (5 U)	120 (120)		
11/08	150	110	36	630	1 U	5 U		

**Table 2. Current and Historic Groundwater Quality Data, Former UST 7 Area, GM Saginaw Malleable Iron Plant, Saginaw, Michigan**

**Notes:**

All units are micrograms per liter (ug/L) except sulfate concentrations which are reported in units of milligrams per liter (mg/L).

ID = Insufficient Data.

Bolded and underlined values indicate exceedance of referenced criteria.

NA = Not Analyzed.

B = The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

G = Elevated reporting limit. The reporting limit is elevated due to matrix interference.

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.

U = Not detected above method detection limit.

\* Michigan Department of Environmental Quality - Generic Industrial Cleanup Criteria and Screening Levels, December 2002.

{A} Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of the Safe Drinking Water Act, Act. No. 399 of the Public Acts

{E} Criterion is the aesthetic drinking water value, as required by Sec. 20120(1)(5).

{I} Hazardous substance may exhibit the characteristic of ignitability as defined in 40 CFR 261.21.

{L} Reserved.

{S} Criterion defaults to the chemical-specific water solubility limit.

NLV = Chemical is not likely to volatilize under most conditions.

The number in parentheses is the sample duplicate.