



BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

Transmitted Via FedEx

October 14, 2004

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

Re: Annual Progress Report – October 2003 through September 2004
General Motors Corporation Saginaw Malleable Iron Plant Property and
REALM, Inc. Green Point Landfill and Drum Remediation Area
Saginaw, Michigan
BBL Project #: 0276 276.08 #2.04

Dear Mr. Brouillet:

This progress report presents a summary of the work activities conducted during the period of October 2003 through September 2004 for the above-referenced site, and a summary of the work activities anticipated for the following 12 months. This report was prepared in accordance with the requirements specified in the Consent Judgment executed between the Michigan Department of Environmental Quality (MDEQ), the Michigan Attorney General's Office, General Motors Corporation (GM), and Waste Management Inc. (WMI) that were entered by the State of Michigan Circuit Court on March 16, 1998. An October 15 submittal date for the annual reports was established by the MDEQ in a letter dated October 22, 1999 (Brouillet, A., October 1999).

Significant RI/FS Activities and Correspondence

The following is a summary of the significant Remedial Investigation/Feasibility Study (RI/FS) activities and correspondence completed during the period from October 1, 2003 through September 30, 2004.

Deliverables Submitted

Schedule Table 10-1 of the *RI/FS Work Plan* (BBL, October 1997; revised January 1998) has been updated to reflect actual submittal dates, and is included as Attachment A. All deliverables have been submitted to the MDEQ on or before the deliverable due dates specified in the MDEQ-approved October 1997 *RI/FS Work Plan* (schedule tables revised January 1998).

- The annual report for October 2002 through September 2003 was submitted to the MDEQ on October 13, 2003 (BBL, October 2003).
- Monthly reports have been transmitted to the MDEQ on or before the 15th of each month, as specified in the *RI/FS Work Plan* (see references).

- Semi-annual monitoring reports for the underground storage tank (UST) #7 area, dated May 21, 2004 and October 20, 2003, were submitted to the MDEQ.
- The *Environmental Monitoring Program Annual Report* for the Green Point Landfill, dated October 30, 2003, was submitted to the MDEQ.
- The draft Remedial Action Plan (RAP) was transmitted to the MDEQ on June 17, 2004.

Key Correspondence and Communications

- A letter dated October 28, 2003, was sent from Cheryl Hiatt (GM) to Sue Kaelber-Matlock (MDEQ), to provide notification of the proposed use of manganese impacted soil from the Saginaw River berm to fill the base of the east-west drainage channel located at the northern end of the property. This letter was submitted pursuant to Rule 299.5542 under Part 201 of Act 451.
- A letter dated November 18, 2003, was sent from Brenda Brouillet (MDEQ) to Cheryl Hiatt (GM), providing approval of the Final Feasibility Study Report prepared for the site.
- GM received confirmation from MDEQ in an April 26, 2004 email from Ms. Susan Kaelber-Matlock, that soil excavated from the Saginaw River berm and soil that was previously excavated to create a mitigation wetland could be used to fill the east-west drainage channel, provided that the fill is covered with two feet of clean material.
- Allan Brouillet (MDEQ) sent a letter dated June 24, 2004, to Cheryl Hiatt (GM) indicating that the RAP was received on June 18, 2004 in accordance with the Consent Judgment, and requesting an extension of the Consent Judgment specified MDEQ review period from 60 days to six months.
- MDEQ issued an addendum to a previously issued permit to allow use of manganese impacted soil from the Saginaw River berm as fill (to be covered by two feet of clean fill) within the east-west oriented channel at the north end of the property.

Supplemental RI/FS Sampling Activities

Former Underground Storage Tank (UST) #7 Area

- Groundwater samples were collected from eight monitoring wells in the former UST #7 area in February 2004, and again in August 2004. The samples were collected as part of an ongoing monitored natural attenuation program, and were shipped to STL Laboratories in North Canton, Ohio, to be analyzed for benzene, toluene, ethylbenzene, xylene, sulfate, and dissolved lead. Table 1 presents an updated summary of the analytical data collected in the UST #7 area.

Saginaw River Berm Area

- Groundwater samples were collected from six monitoring wells (B-7R, MW-110WTR, MW-114WT, MW-185WT, MW-112WT, and MW-111WT) located along the Saginaw River for PCB analysis on June 1-3, 2004. Groundwater samples were also collected during this sampling event at five monitoring wells located along the Saginaw River for analysis of select inorganic constituents. Specifically, the following samples were collected for inorganic analyses: X-4AR (thallium), MW-108WT (thallium), MW-149WT (arsenic, manganese, and thallium), MW-112WT (thallium), and

MW-111WT (manganese). The analytical data are provided in Table 2.

- The drainage channel oriented east-west that is located at the north end of the SMI property was partially filled. Manganese-impacted soil excavated from the Saginaw River berm, east of the Secondary Settling Pond and soils from the Crotty Street mitigation wetland construction were placed within the channel, and additional fill was added.

Quench Pit LNAPL Recovery Program

- The automated skimmer pump that was installed in the Quench Pit Area (monitoring well QPTW-3) operated during the majority of the October 2003 through September 2004 time period, recovering approximately 370 gallons of LNAPL during the year. Since the system was installed on February 8, 2002, a total of approximately 1,410 gallons of LNAPL have been recovered by the system through the end of September 2004. The system did not operate from January 22 to February 9, 2004 due to a power outage to the system.

LNAPL Recovery System

- The LNAPL recovery system operated during the majority of the October 2003 through September 2004 time period, recovering a total of approximately 240 gallons of LNAPL.

The cumulative oil recovery and groundwater treatment statistics are as follows:

Operation	Approximate Volume of Oil Recovered (Gallons) ¹	Approximate Volume of Groundwater Treated (Gallons)
LNAPL System Total through September 30, 2004	3,449	2,329,350
Total Hand Bailed – July 2002 through February 2003	21	0
Water/LNAPL Pumped from Reverse Siphon of 42-inch Sewer Line – Total through May 6, 2002	30+	450
Total hand bailed in 1996 and 1997	710	0
Repair of 42-inch Storm Sewer Line (recovery from abandoned 30-inch line)	5,000+	Specific amount unknown
Repair (slip lining) of 42-inch storm sewer line	approximately 3,000+	Specific amount unknown
Totals:	12,210+	2,329,800

Note: ¹ This total includes some water that is drawn into the LNAPL recovery lines when the water table fluctuates rapidly, and water that was included in an LNAPL/water mixture recovered during repair of the 42-inch storm sewer line.

- Groundwater and LNAPL elevation measurements are made on a monthly basis in the vicinity of the LNAPL recovery system to monitor LNAPL distribution during system operation. Table 3 includes the LNAPL and groundwater measurement data.

Green Point Landfill

- Post-closure inspections of the Green Point Landfill cap were completed on March 15, June 3, and September 29, 2004. The Post-Closure Cap Inspection Forms were submitted with the corresponding monthly reports.
- The Annual Environmental Monitoring Report for the Green Point Landfill, which presents the results of the annual groundwater monitoring event, was submitted to the MDEQ in October 2003.
- The annual Green Point Landfill groundwater-sampling event was completed the week of May 24, 2004, and the data are included in Tables 4 and 5.

Monitoring Well Installation Related to Adjacent Peninsula Area Property

- Two monitoring wells (MW04-124WT and MW04-124S1) were installed on the Green Point Landfill Property, northwest of the landfill and just west and downgradient of the REALM Peninsula Area Property. Three additional monitoring wells (MW04-119WT, MW04-121WT, and MW04-121S1) were installed at the western edge of the GM SMI property, along the eastern boundary of the REALM Peninsula Area Property. These wells were installed as part of ongoing investigation of the REALM Peninsula Area Property. The well locations are shown on Figure 1.

Anticipated Site Activities

The following activities are anticipated to be completed during the period from October 2004 through September 2005:

- Re-development and collection of groundwater samples from select monitoring wells located adjacent to the Saginaw River using ultra low-flow sampling procedures. The collected samples will be analyzed for PCBs and/or select inorganic constituents that were previously detected.
- Receipt of comments from the MDEQ on the draft RAP submitted for the Site and submittal of the final RAP, based on the comments received.
- Continued operation of the LNAPL Recovery/Groundwater Treatment System located south of the plant building.
- Continued use of the automated skimmer pump to remove LNAPL in the Quench Pit Area.
- Semi-annual groundwater sampling activities at the Former UST #7 Area.
- Preparation of the Environmental Monitoring Program Annual Report for the Green Point Landfill.
- Submittal of a memo describing oil fingerprinting analysis done on samples from various areas of the SMI LNAPL area south of the plant building and the adjacent Delphi property.
- Placement of topsoil within the east-west channel at the north end of the SMI property to complete the channel filling activities.
- Inspections of the Green Point Landfill cap (tentatively scheduled for December 2004, March 2005, June 2005, and September 2005).

- Completion of the Spring 2004 Green Point Landfill Environmental Monitoring Program groundwater sampling event (tentatively scheduled for June 2005).
- Capping of the pipe discharging VOC-impacted water from an off-site source and implementation of a phytoremediation remedy in the area north of the former Drum Remediation Area Hillock Area.
- Implementation of an ambient air monitoring program in the former railyard to document that site-related manganese-impacted soil does not pose an unacceptable inhalation risk to the surrounding community.

Please contact me if you have any questions regarding the enclosed.

Sincerely,

BLASLAND, BOUCK & LEE, INC.


Lisa R. Coffey, P.G.
Associate, Sr. Geologist

JAR/plf
Attachments

cc: Ms. Susan Kaelber-Matlock, MDEQ
John Fordell Leone, Esq., Assistant Attorney General
Ms. Cheryl Hiatt/Mr. Edward Peterson, GM WFG
Anthony Thrubis, Esq., GM Legal Staff
David Tripp, Esq., Dykema Gossett
Mr. Kent Bainbridge, Waste Management, Inc.
Mr. James Forney, Waste Management, Inc.
Ms. Rachael Schneider, Attorney at Law, Quarles & Brady
Ms. Jennifer Tegen/Mr. Joseph Toth, GM SMI
Mr. Michael Gefell, P.G., Blasland, Bouck & Lee, Inc.
Mr. Mike Tomka, CRA
Mr. Ian Richardson, CRA

REFERENCES ANNUAL PROGRESS REPORT

GENERAL MOTORS CORPORATION SAGINAW MALLEABLE IRON PLANT PROPERTY, AND REALM, INC. GREEN POINT LANDFILL AND DRUM REMEDIATION AREA SAGINAW, MICHIGAN

- Blasland, Bouck & Lee, Inc. (BBL), October 1997. General Motors Corporation Saginaw Malleable Iron Plant, Green Point Landfill and Drum Remediation Area, Saginaw, Michigan, *Remedial Investigation/Feasibility Study Work Plan*, October 1997; schedule tables revised January 1998.
- Blasland, Bouck & Lee, Inc. (BBL), October 2002a. *Annual Progress Report – October 2001 to September 2002, General Motors Corporation Saginaw Malleable Iron Plant Property and REALM, Inc. Green Point Landfill and Drum Remediation Area, Saginaw, Michigan*. October 10, 2002.
- Blasland, Bouck & Lee, Inc. (BBL), October 2002b. *Environmental Monitoring Program Annual Report Green Point Landfill, Saginaw, Michigan*. October 23, 2002.
- Blasland, Bouck & Lee, Inc. (BBL), November 2002. *General Motors Corporation Saginaw Malleable Iron Plant Property, and REALM Green Point Landfill and Drum Remediation Area, Feasibility Study*. November 26, 2002.
- Blasland, Bouck & Lee, Inc. (BBL), January 2003. *General Motors Corporation Saginaw Malleable Iron Plant Property, and REALM Green Point Landfill and Drum Remediation Area, Saginaw, Michigan, Final Feasibility Study*. January 29, 2003.
- Blasland, Bouck & Lee, Inc. (BBL), October 2003a. Report to MDEQ. General Motors Corporation Saginaw Malleable Iron Plant, Green Point Landfill and Drum Remediation Area, Saginaw, Michigan, *Environmental Monitoring Program Report*, October 30, 2003.
- Blasland, Bouck & Lee, Inc. (BBL), October 2003b. *October 2003 Semi-Annual Groundwater Monitoring Report, Interim Response Action, Former UST #7 Area, General Motors Corporation Saginaw Malleable Iron Plant, Saginaw, Michigan*. October 30, 2003.
- Blasland, Bouck & Lee, Inc. (BBL), October 2003c. *Annual Progress Report*, October 13, 2003.
- Blasland, Bouck & Lee, Inc. (BBL), November 2003. *Monthly Report #107 (October 2003)*, November 13, 2003.
- Blasland, Bouck & Lee, Inc. (BBL), December 2003. *Monthly Report #108 (November 2003)*, December 10, 2003.
- Blasland, Bouck & Lee, Inc. (BBL), January 2004. *Monthly Report #109 (December 2003)*, January 14, 2004.
- Blasland, Bouck & Lee, Inc. (BBL), February 2004. *Monthly Report #110 (January 2004)*, February 14, 2004.

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- Blasland, Bouck & Lee, Inc. (BBL), March 2004. *Monthly Report #111 (February 2003)*, March 15, 2004.
- Blasland, Bouck & Lee, Inc. (BBL), April 2004. *Monthly Report #112 (March 2004)*, April 14, 2004.
- Blasland, Bouck & Lee, Inc. (BBL), May 2004. *Monthly Report #113 (April 2004)*, May 12, 2004.
- Blasland, Bouck & Lee, Inc. (BBL), June 2004. *Monthly Report #114 (May 2004)*, June 14, 2004.
- Blasland, Bouck & Lee, Inc. (BBL), July 2004a. *Monthly Report #115 (June 2004)*, July 8, 2004.
- Blasland, Bouck & Lee, Inc. (BBL), July 2003b. Report to MDEQ. General Motors Corporation Saginaw Malleable Iron Plant, Green Point Landfill and Drum Remediation Area, Saginaw, Michigan, *Final Feasibility Study Report*, July 29, 2003.
- Blasland, Bouck & Lee, Inc. (BBL), July 2003c. Report to MDEQ. Subject: *Final Human Health Evaluation Report*, submitted as Appendix A of Final Feasibility Study Report, July 29, 2003.
- Blasland, Bouck & Lee, Inc. (BBL), June 2004. Report to MDEQ. General Motors Corporation Saginaw Malleable Iron Plant, Green Point Landfill and Drum Remediation Area, Saginaw, Michigan, *Draft Remedial Action Plan*, June 17, 2004.
- Blasland, Bouck & Lee, Inc. (BBL), August 2004. *Monthly Report #116 (July 2004)*, August 12, 2004.
- Blasland, Bouck & Lee, Inc. (BBL), September 2004. *Monthly Report #117 (August 2004)*, September 15, 2003.
- Blasland, Bouck & Lee, Inc. (BBL), October 2003. *Monthly Report #118 (September 2004)*, October 14, 2004.
- Brouillet, Allan C. (MDEQ), October 1999. Letter to GM, Subject: *Annual Progress Report, General Motors Corporation Saginaw Malleable Iron Plant, Consent Judgment #98-22686-CE-2*, October 22, 1999.
- Brouillet, Allan C. (MDEQ), January 2003. Letter to GM, Subject: *Acknowledgement of Receipt - Final Feasibility Study Report; Request for Extension of Evaluation Period*, January 30, 2003.
- Brouillet, Allan C. (MDEQ), November 2002. Letter to GM, Subject: *Annual Progress Report, General Motors Corporation Saginaw Malleable Iron Plant, Consent Judgment #98-22686-CE-2*, November 21, 2002.

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- Brouillet, Allan C. (MDEQ), June 2004. Letter to GM, Subject: *Receipt of Draft Remedial Action Plan, Saginaw Malleable Iron Plant, Consent Judgment #98-22686-CE-2*, June 24, 2004.
- Brouillet, Brenda J. (MDEQ), November 2001. Letter to GM, Subject: *General Motors Malleable Iron Plant, Thirteenth Quarterly Groundwater Monitoring Report, Former UST #7 Area, Consent Judgment No. 98-22686-CE-2*, November 13, 2001.
- Brouillet, Brenda J. (MDEQ), June 2002. Letter to GM, Subject: *Draft Feasibility Study, Green Point Landfill/General Motors Saginaw Malleable Iron Facility, Consent Decree No. 98-22686-CE-2*, June 19, 2002.
- Brouillet, Brenda J. (MDEQ), November 2003. Letter to GM, Subject: *Approval of Final Feasibility Study Report*, November 18, 2003.
- Flaga, Christine (MDEQ), March 2003. Email to BBL, Subject: *Saginaw Malleable* (documentation of conversation and request for written response on MDEQ comments on HHE), March 26, 2003.
- Hiatt, Cheryl (GM), September 2003. Letter to MDEQ, Subject: *Form 4482; Notice of Migration of Contamination; General Motors Corporation Saginaw Malleable Iron Plant Property, Saginaw, Michigan*. September 18, 2003.
- Hiatt, Cheryl (REALM), September 2003. Letter to MDEQ, Subject: *Form 4482; Notice of Migration of Contamination; REALM Green Point Landfill and Drum Remediation Area, Saginaw, Michigan*. September 18, 2003.
- Hiatt, Cheryl (REALM), September 2003. Letter to Consumers Energy, Subject: *Notice of Migration; REALM Green Point Landfill Property, Saginaw, Michigan*. September 18, 2003.
- Hiatt, Cheryl (REALM), September 2003. Letter to Michigan Department of Natural Resources, Subject: *Notice of Migration; REALM Green Point Landfill Property, Saginaw, Michigan*. September 18, 2003.
- Hiatt, Cheryl (GM), September 2003. Letter to Delphi Automotive Systems LLC, Subject: *Notice of Migration; General Motors Corporation Saginaw Malleable Iron Plant Property, Saginaw, Michigan*. September 18, 2003.
- Hiatt, Cheryl (GM), September 2003. Letter to City of Saginaw, Subject: *Notice of Migration; General Motors Corporation Saginaw Malleable Iron Plant Property, Saginaw, Michigan*. September 18, 2003.

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GENERAL MOTORS CORPORATION SAGINAW MALLEABLE IRON PLANT PROPERTY, AND REALM, INC. GREEN POINT LANDFILL AND DRUM REMEDIATION AREA SAGINAW, MICHIGAN

Hiatt, Cheryl (GM), October 2003. Letter to Kaelber-Matlock, Susan (MDEQ), Subject: *Notification of Proposed Use of Manganese Impacted Soil from Saginaw River Berm to Fill the Base of East-West Drainage Channel Located at the North End of the Property*, October 28, 2003.

Jones, Holli (BBL), July 2003. Memo to MDEQ, Subject: *Modifications to Human Health Evaluation Report for the GM SMI Plant*, July 21, 2003.

Kaelber-Matlock, Susan (MDEQ), March 2003. Email to GM, Subject: *SMI Human Health Evaluation Report*, March 20, 2003.

Kaelber-Matlock, Susan (MDEQ), April 2004. Email to GM, Subject: *Soil Excavated from Saginaw River Berm.*, April 26, 2004.

Schell, John (BBL), March 2003. Email to MDEQ, Subject: *Modifications to Human Health Evaluation Report for the GM SMI Plant*, March 27, 2003.

TABLE 1

**FORMER UST #7 AREA
CURRENT AND HISTORIC GROUNDWATER QUALITY DATA**

**GENERAL MOTORS CORPORATION
SAGINAW MALLEABLE IRON PLANT
SAGINAW, MICHIGAN**

		Benzene	Ethylbenzene	Toluene	Total Xylenes	Lead	Sulfate (mg/L)
Industrial & Commercial II, III & IV Drinking Water		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	<u>16</u>	<u>130</u>	25 U	210	3 U	5 U
	7/98	<u>13</u>	13	1 U	10	100 U	5 U
	10/98	<u>10</u>	30	2	45	3 U	2
	1/99	<u>26</u>	32	3	54	1 U	2
	4/99	<u>20</u>	30	20 U	50	1 U	3
	7/99	<u>27</u>	17	5	20	3 U	2
	10/99	<u>6</u>	3	1 U	2	3 U	1 U
	1/00	<u>4 (5)</u>	5 (5)	1 U (1 U)	5 (5)	3 U (3 U)	1 U (1 U)
	5/00	<u>8.1</u>	10	0.77 J	15	<u>10</u>	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	<u>17</u>	22	2	36	3 U	1 U
	3/01	<u>14 (15)</u>	12 (13)	1 (1)	15 (17)	3 U (3 U)	1 U (1 U)
	5/01	<u>14</u>	9	1 U	9	1 U	5 U
	8/01	<u>18(18)</u>	13(13)	1 U	15(15)	3(3)	2(2)
	2/02	<u>53</u>	25	3	28	3 U	21
	8/02	<u>6 (7)</u>	2 (2)	1 U (1 U)	2 (2)	1 U (1U)	5 (4)
	3/03	<u>23</u>	4	2	3	1 U	16
	8/03	<u>23 (21)</u>	4 (4)	2 (2)	4 (4)	0.001 U (0.001 U)	5 U (5 U)
	2/04	<u>29 (29)</u>	13 (13)	1.5 J (1.5 J)	7.4 (7.3)	0.83 B (0.81 B)	8 (8)
	8/04	<u>33 (32)</u>	19 (20)	1.6 (1.7)	6.8 (7.5)	0.93 B (1.4 B,G)	5 U (5 U)
BBL-MW4	6/96	<u>12</u>	1 U	1 U	3 U	3 U	5U
	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	<u>5.1</u>	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 (1U)	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

See Notes on Page 5.

TABLE 1

**FORMER UST #7 AREA
CURRENT AND HISTORIC GROUNDWATER QUALITY DATA**

**GENERAL MOTORS CORPORATION
SAGINAW MALLEABLE IRON PLANT
SAGINAW, MICHIGAN**

		Benzene	Ethylbenzene	Toluene	Total Xylenes	Lead	Sulfate (mg/L)
Industrial & Commercial II, III & IV Drinking Water		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-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
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	1.2	150

TABLE 1

**FORMER UST #7 AREA
CURRENT AND HISTORIC GROUNDWATER QUALITY DATA**

**GENERAL MOTORS CORPORATION
SAGINAW MALLEABLE IRON PLANT
SAGINAW, MICHIGAN**

		Benzene	Ethylbenzene	Toluene	Total Xylenes	Lead	Sulfate (mg/L)
Industrial & Commercial II, III & IV Drinking Water		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 7-2	6/94	<u>2,100</u>	100 U	<u>3,100</u>	<u>9,800</u>	1	NA
	6/96	<u>950</u>	<u>1,700</u>	120 U	<u>3,600</u>	<u>114</u>	5 U
	7/98	<u>6</u>	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	<u>10 (10 U)</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	<u>1,500</u>	<u>1,200</u>	25 J	<u>1,200</u>	<u>35</u>	2 U G
	8/00	4	1	1 U	1 U	3 U	NA
	10/00	<u>50</u>	3	1	3	3 U	NA
	3/01	<u>96 (112)</u>	9 (9)	1 (5 U)	7 (8)	3 U (3 U)	NA (NA)
	5/01	<u>7</u>	1 U	1 U	1 U	1 U	NA
	8/01	<u>170</u>	50 U	50 U	50 U	1 U	NA
	2/02	<u>47</u>	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	<u>67</u>	1 U	1	2	1 U	NA
	8/03	<u>123 (126)</u>	1 U (1)	2 (2)	2 (3)	0.001 U (0.001 U)	NA (NA)
	2/04	<u>850</u>	<u>120</u>	12 J	97	<u>12.5</u>	5 U
	8/04	<u>2100</u>	<u>980</u>	39 J	<u>400</u>	<u>4.6</u>	5 U
UST 7-3R	7/98	<u>14</u>	1 U	1 U	3 U	100 U	NA
	10/98	<u>12</u>	1 U	1 U	2 U	3 U	NA
	1/99	5	1 U	1 U	1 U	1 U	NA
	4/99	<u>18</u>	1 U	1 U	2 U	1 U	NA
	7/99	<u>24</u>	1 U	2	2 U	3 U	NA
	10/99	<u>50</u>	1 U	1 U	2 U	3 U	NA
	1/00	<u>30 (32)</u>	1 U	1 U	2 U	4 (3 U)	NA
	5/00	<u>13</u>	1 U	0.12 J	1 U	3 U	27.6
	8/00	<u>28</u>	1 U	1 U	1 U	3 U	NA
	10/00	<u>26</u>	1 U	1 U	1 U	3 U	NA
	3/01	<u>15</u>	1 U	1 U	1 U	3 U	NA
	5/01	<u>12</u>	1 U	1 U	1 U	1 U	NA
	8/01	<u>35</u>	1 U	1 U	1 U	1 U	NA
	2/02	<u>30</u>	1 U	1 U	1 U	3 U	NA
	8/02	<u>6</u>	1 U	1 U	1 U	1 U	NA
	3/03	<u>30</u>	1 U	1 U	1 U	1 U	NA
	8/03	<u>2</u>	1 U	1 U	1 U	0.001 U	NA
	2/04	<u>2</u>	1 U	1 U	1 U	1 U	5 U
	8/04	<u>16</u>	1 U	1 U	2 U	1 U	3 B.

TABLE 1

**FORMER UST #7 AREA
CURRENT AND HISTORIC GROUNDWATER QUALITY DATA**

**GENERAL MOTORS CORPORATION
SAGINAW MALLEABLE IRON PLANT
SAGINAW, MICHIGAN**

		Benzene	Ethylbenzene	Toluene	Total Xylenes	Lead	Sulfate (mg/L)
Industrial & Commercial II, III & IV Drinking Water		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	<u>110</u>	2.0 U	8	1.0 U	1.0 U	NA
	6/96	<u>44</u>	1.7 U	1.7 U	5.1 U	3 U	6
	7/98	<u>14</u>	1 U	1 U	3 U	100 U	NA
	10/98	<u>10</u>	1 U	1 U	2 U	3 U	NA
	1/99	<u>17</u>	1 U	1 U	2 U	1 U	NA
	4/99	<u>7</u>	1 U	1 U	2 U	1 U	NA
	7/99	<u>4</u>	1 U	4	2 U	3 U	NA
	10/99	<u>4</u>	1 U	1 U	1	3 U	NA
	1/00	<u>3</u>	1 U	1	1	<u>17</u>	NA
	5/00	<u>6</u>	0.18 J	0.22 J	0.67 J	<u>9.4</u>	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	<u>23</u>	1 U	1 U	1 U	3 U	NA
	3/01	<u>2</u>	1 U	1 U	1	3 U	NA
	5/01	<u>2</u>	1 U	1 U	1 U	1 U	NA
	8/01	<u>2</u>	1 U	1 U	1 U	1 U	NA
	2/02	<u>16 (16)</u>	2 (3)	1 U (1 U)	1 (1)	3 U (3 U)	NA
	8/02	<u>1</u>	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	<u>2</u>	1 U	1 U	1 U	0.001 U	NA
	2/04	<u>4</u>	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
UST 7-5	6/94	<u>3,700</u>	<u>13,000</u>	<u>3,600</u>	<u>19,000</u>	1	NA
	6/96	<u>1,600</u>	<u>1,800</u>	<u>1,400</u>	<u>6,900</u>	<u>46</u>	8
	7/98	<u>1,900</u>	200 U	<u>930</u>	<u>7,900</u>	100 U	NA
	10/98	<u>1,390</u>	<u>1,330</u>	<u>990</u>	<u>5,120</u>	3 U	NA
	1/99	<u>190</u>	<u>680</u>	450	<u>4,440</u>	10	NA
	4/99	<u>400</u>	<u>890</u>	400	<u>6,540</u>	<u>5</u>	NA
	7/99	<u>300</u>	<u>240</u>	240	<u>3,470</u>	4	NA
	10/99	<u>20</u>	<u>110</u>	20	<u>860</u>	<u>5</u>	NA
	1/00	<u>23</u>	71	9	<u>354</u>	3 U	NA
	5/00	<u>42 (56)</u>	<u>71 (83)</u>	13 (13)	<u>330 (360)</u>	<u>20.3 (12.9)</u>	52.6 (54.2)
	8/00	<u>160</u>	<u>100</u>	40	<u>530</u>	3 U	NA
	10/00	<u>56 (59)</u>	27 (29)	30 (50 U)	<u>860 (870)</u>	3 U (3 U)	NA
	3/01	<u>200</u>	<u>100</u>	100 U	<u>1,300</u>	<u>6</u>	NA
	5/01	10 U	10	10 U	170	1	NA
	8/01	<u>160</u>	<u>130</u>	50 U	<u>690</u>	2	NA
	2/02	<u>1</u>	<u>1</u>	1 U	7	<u>14</u>	NA
	8/02	<u>7</u>	7	3	85	3	NA
	3/03	<u>330</u>	<u>380</u>	80	<u>1,400</u>	2	NA
	8/03	<u>470</u>	<u>340</u>	100	<u>1,690</u>	0.001	NA
	2/04	<u>42</u>	62	27	<u>360</u>	2.1	210
	8/04	<u>120</u>	<u>96</u>	29	<u>460</u>	1.8	5 U

TABLE 1
FORMER UST #7 AREA
CURRENT AND HISTORIC GROUNDWATER QUALITY DATA

GENERAL MOTORS CORPORATION
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 of 1976.

{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.

TABLE 2

**SAGINAW RIVER PERIMETER SAMPLING
GROUNDWATER ANALYTICAL DATA**

**SAGINAW MALLEABLE IRON PLANT PROPERTY
SAGINAW, MICHIGAN**

Location ID	B-7R	MW-108WT	MW-110WTR	MW-111WT	MW-111WT	MW-112WT	MW-114WT	MW-149WT	MW-149WT	MW-185WT	X-4AR
Date Sampled	6/2/2004	6/2/2004	6/2/2004	6/2/2004	6/2/2004	6/3/2004	6/3/2004	6/2/2004	6/2/2004	6/3/2004	6/3/2004
Sample Type	FS	FS	FS	FS	DUP	FS	FS	FS	DUP	FS	FS
Polychlorinated Biphenyls											
PCB-1016	0.20 U	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	--
PCB-1221	0.20 U	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	--
PCB-1232	0.40 U	--	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	--	--	0.40 U	--
PCB-1242	0.20 U	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	--
PCB-1248	0.31	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	--
PCB-1254	0.20 U	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	--
PCB-1260	0.20 U	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	0.20 U	--
Inorganics											
Arsenic	--	--	--	--	--	--	--	223	227	--	--
Manganese	--	--	--	1,090	--	--	--	4,440	4,560	--	--
Thallium	--	1.0 U	--	--	--	1.0 U	--	1.0 U	1.0 U	--	1.0 U

TABLE 2

**SAGINAW RIVER PERIMETER SAMPLING
GROUNDWATER ANALYTICAL DATA**

**SAGINAW MALLEABLE IRON PLANT PROPERTY
SAGINAW, MICHIGAN**

General Notes:

All concentrations in micrograms per liter ($\mu\text{g/L}$); equivalent to parts per billion (ppb), unless otherwise noted.

All detections are shown in bold.

-- = Sample was not analyzed for the listed constituent.

Location ID: MW, X = Permanent monitoring wells.

WT = Water table monitoring wells.

S1 = Well screened at top of sand unit; increasing numbers indicate increased depth within the sand unit (e.g., S2, S3, S4).

Sample Type: FS = Primary field sample, collected by BBL.

DUP = Duplicate field sample, collected by BBL.

Data Qualifiers:

U = The constituent was analyzed for but not detected. The associated value is the constituent quantitation limit.

TABLE 3
GROUNDWATER AND LNAPL MEASUREMENT SUMMARY
2001 THROUGH THE PRESENT

GENERAL MOTORS CORPORATION
SAGINAW MALLEABLE IRON PLANT
SAGINAW, MICHIGAN

Date	MW-147WT reference elevation = 592.07				TP-2 reference elevation not available				RW-1 reference elevation = 592.18				MW-158WT reference elevation = 591.78			
	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)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 2, 2001	NA	NA	NA	NA	9.10	0.37	9.47	NA	9.09	0.38	9.47	583.06	NA	NA	NA	NA
February 5-6, 2001	8.28	1.85	10.13	583.64	10.40	0.47	10.87	NA	10.58	1.18	11.76	581.51	9.09	0.01	9.10	582.69
February 28, 2001	NA	NA	NA	NA	NA	NA	NA	NA	8.80	0.41	9.21	583.35	NA	NA	NA	NA
March 13, 2001	8.12	1.48	9.60	583.83	8.80	0.39	9.19	NA	8.80	0.40	9.20	583.35	NP	0.00	8.65	583.13
May 4, 2001	8.30	1.55	9.85	583.65	8.90	0.50	9.40	NA	8.80	0.41	9.21	583.35	NP	0.00	8.45	583.33
May 24, 2001	8.06	1.54	9.60	583.89	8.84	0.46	9.30	NA	8.75	0.35	9.10	583.40	8.36	0.01	8.37	583.42
June 16, 2001	8.10	1.52	9.62	583.85	8.81	0.45	9.26	NA	8.68	0.02	8.70	583.50	8.42	0.01	8.43	583.36
August 15, 2001	8.31	1.61	9.92	583.63	9.15	0.23	9.38	NA	9.07	0.09	9.16	583.10	NP	0.00	8.67	583.11
September 28, 2001	8.04	1.49	9.53	583.91	8.96	0.38	9.34	NA	8.91	0.16	9.07	583.26	NP	0.00	8.51	583.27
October 31, 2001	7.87	1.54	9.41	584.08	9.04	0.20	9.24	NA	8.84	0.23	9.07	583.32	NP	0.00	9.41	582.37
December 5, 2001	8.15	1.41	9.56	583.81	8.99	0.22	9.21	NA	8.79	0.26	9.05	583.37	8.43	0.01	8.44	583.35
January 10, 2002	8.31	0.33	8.64	583.73	8.91	0.21	9.12	NA	8.85	0.17	9.02	583.32	8.54	0.01	8.55	583.24
February 12, 2002	8.13	1.41	9.54	583.83	8.89	0.16	9.05	NA	8.80	0.24	9.04	583.36	8.39	0.02	8.41	583.39
March 18, 2002	7.90	1.45	9.35	584.05	NA	NA	NA	NA	8.78	0.20	8.98	583.38	NP	0.00	8.25	583.53
May 6, 2002	8.01	0.93	8.94	583.99	8.58	0.52	9.10	NA	8.50	0.21	8.71	583.66	NP	0.00	7.62	584.16
May 22, 2002	8.02	1.56	9.58	583.93	8.87	0.33	9.20	NA	8.81	0.34	9.15	583.34	NP	0.00	7.75	584.03
June 17, 2002	7.98	1.57	9.55	583.96	NA	NA	NA	NA	NA	NA	NA	NA	7.65	0.01	7.66	584.13
September 25, 2002	7.67	2.13	9.80	584.23	8.95	0.30	9.25	NA	NA	NA	NA	NA	NA	NA	NA	NA
October 29, 2002	7.77	2.78	10.55	584.08	9.04	0.30	9.34	NA	8.98	0.22	9.20	583.18	NP	0.00	8.60	583.18
November 26, 2002	7.75	1.75	9.50	584.18	9.11	0.29	9.40	NA	9.03	0.18	9.21	583.14	NA	NA	NA	NA
December 19, 2002	7.78	1.27	9.05	584.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
January 10, 2003	9.25	0.00	9.25	582.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
February 25, 2003	8.18	1.30	9.48	583.79	9.39	0.57	9.96	NA	NA	NA	NA	NA	NA	NA	NA	NA
March 27, 2003	8.06	1.06	9.12	583.93	NA	NA	NA	NA	9.06	0.58	9.64	583.07	NA	NA	NA	NA
April 29, 2003	7.38	0.98	8.36	584.61	9.15	0.01	9.16	NA	8.99	0.79	9.78	583.13	NA	NA	NA	NA
May 29, 2003	6.69	2.15	8.84	585.21	8.68	0.01	8.69	NA	8.49	0.41	8.90	583.66	NA	NA	NA	NA
June 25, 2003	6.79	2.75	9.54	585.06	8.82	0.79	9.61	NA	8.58	0.43	9.01	583.57	NA	NA	NA	NA
July 30, 2003	6.63	2.78	9.41	585.22	8.71	0.78	9.49	NA	8.43	0.46	8.89	583.71	NA	NA	NA	NA
August 4, 2003	6.58	2.78	9.36	585.27	8.65	0.78	9.43	NA	8.40	0.45	8.85	583.74	NA	NA	NA	NA
September 18, 2003	6.80	2.85	9.65	585.04	NA	NA	NA	NA	8.70	0.45	9.15	583.44	NA	NA	NA	NA
November 10, 2003	6.46	2.08	8.54	585.44	8.59	0.61	9.20	NA	8.59	0.33	8.92	583.56	NA	NA	NA	NA
December 29, 2003	6.55	2.16	8.71	585.35	9.35	0.27	9.62	NA	9.19	0.76	9.95	582.93	NA	NA	NA	NA
February 26, 2004	NA	NA	NA	NA	9.03	3.40	12.43	NA	9.00	4.40	13.40	582.83	8.68	0.01	8.69	NA
March 8, 2004	NA	NA	NA	NA	NA	NA	NA	NA	8.10	0.18	8.28	584.07	8.41	0.01	8.42	NA
April 29, 2004	6.36	1.64	8.00	585.58	8.65	0.75	9.40	NA	8.63	0.17	8.80	583.54	NA	NA	NA	NA
June 1, 2004	5.20	1.25	6.45	586.77	7.64	0.23	7.87	NA	7.71	0.27	7.98	584.45	NA	NA	NA	NA
June 30, 2004	6.05	1.26	7.31	585.92	NA	NA	NA	NA	8.30	0.13	8.43	583.87	7.90	0.01	7.91	583.88
July 28, 2004	NA	NA	NA	NA	NA	NA	NA	NA	8.76	0.39	9.15	583.39	8.21	0.01	8.22	583.57
August 17, 2004	6.76	1.34	8.10	585.20	NA	NA	NA	NA	8.89	0.46	9.35	583.25	NP	0.00	8.39	583.39
September 27, 2004	6.91	1.61	8.52	585.03	8.75	0.71	9.46	NA	8.87	0.38	9.25	583.28	8.41	0.01	8.42	583.37

See Notes on Page 4.

TABLE 3
GROUNDWATER AND LNAPL MEASUREMENT SUMMARY
2001 THROUGH THE PRESENT

GENERAL MOTORS CORPORATION
SAGINAW MALLEABLE IRON PLANT
SAGINAW, MICHIGAN

Date	MW-168WT reference elevation = 592.11				RW-3 reference elevation = 592.32				RW-2 reference elevation = 592.07				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)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (corrected)
January 2, 2001	8.46	1.12	9.58	583.56	8.35	0.01	8.36	583.97	8.87	0.01	8.88	583.20	NA	NA	NA	NA
February 5-6, 2001	7.92	1.91	9.83	584.04	NP	0.00	10.52	581.80	NP	0.00	10.61	581.46	8.65	0.01	8.66	583.17
February 28, 2001	NA	NA	NA	NA	9.09	0.01	9.10	583.23	8.95	0.01	8.96	583.12	NA	NA	NA	NA
March 13, 2001	7.95	1.79	9.74	584.02	NP	0.00	9.84	582.48	8.94	0.01	8.95	583.13	NA	NA	NA	NA
May 4, 2001	8.16	1.64	9.80	583.82	10.94	0.01	10.95	581.38	8.90	0.01	8.91	583.17	8.04	0.01	8.05	583.78
May 24, 2001	7.95	1.55	9.50	584.04	9.90	0.01	9.91	582.42	8.88	0.01	8.89	583.19	7.93	0.01	7.94	583.89
June 16, 2001	7.93	1.55	9.48	584.06	9.87	0.01	9.88	582.45	8.92	0.01	8.93	583.15	7.91	0.01	7.92	583.91
August 15, 2001	8.41	1.17	9.58	583.61	8.43	0.01	8.44	583.89	9.05	0.01	9.06	583.02	8.45	0.01	8.46	583.37
September 28, 2001	NA	NA	NA	NA	NP	0.00	6.87	585.45	NP	0.00	8.75	583.32	NP	0.00	8.05	583.77
October 31, 2001	NA	NA	NA	NA	8.21	0.01	8.22	584.11	8.73	0.01	8.74	583.34	NP	0.00	7.85	583.97
December 5, 2001	8.24	0.95	9.19	583.79	8.59	0.01	8.60	583.73	8.69	0.04	8.73	583.38	NP	0.00	7.81	584.01
January 10, 2002	NA	NA	NA	NA	8.69	0.01	8.70	583.63	8.78	0.01	8.79	583.29	NP	0.00	8.62	583.20
February 12, 2002	8.21	0.97	9.18	583.82	8.56	0.01	8.57	583.76	8.68	0.01	8.69	583.39	NP	0.00	7.76	584.06
March 18, 2002	NA	NA	NA	NA	NP	0.00	7.83	584.49	NP	0.00	8.50	583.57	NP	0.00	7.96	583.86
May 6, 2002	7.80	1.27	9.07	584.21	8.08	0.01	8.09	584.24	NP	0.00	8.16	583.91	NP	0.00	7.90	583.92
May 22, 2002	7.41	1.15	8.56	584.61	NP	0.00	7.65	584.67	8.27	0.01	8.28	583.80	NP	0.00	7.96	583.86
June 17, 2002	7.45	1.79	9.24	584.52	7.66	0.01	7.67	584.66	8.28	0.01	8.29	583.79	7.91	0.01	7.92	583.91
September 25, 2002	NA	NA	NA	NA	8.60	0.01	8.61	583.72	8.93	0.01	8.94	583.14	8.17	0.01	8.18	583.65
October 29, 2002	NA	NA	NA	NA	NP	0.00	8.69	583.63	8.99	0.01	9.00	583.08	NP	0.00	8.50	583.32
November 26, 2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
December 19, 2002	NA	NA	NA	NA	NP	0.00	8.82	583.50	NP	0.00	9.08	582.99	NP	0.00	8.61	583.21
January 10, 2003	NA	NA	NA	NA	NP	0.00	8.83	583.49	NP	0.00	9.06	583.01	NP	0.00	8.58	583.24
February 25, 2003	NA	NA	NA	NA	9.00	0.01	9.01	583.32	9.19	0.01	9.20	582.88	NP	0.00	8.67	583.15
March 27, 2003	NA	NA	NA	NA	8.93	0.01	8.94	583.39	9.11	0.01	9.12	582.96	NP	0.00	8.62	583.20
April 29, 2003	NA	NA	NA	NA	8.51	0.01	8.52	583.81	9.01	0.01	9.02	583.06	NP	0.00	8.59	583.23
May 29, 2003	NA	NA	NA	NA	7.35	0.01	7.36	584.97	8.65	0.01	8.66	583.42	NP	0.00	7.95	583.87
June 25, 2003	NA	NA	NA	NA	8.95	0.01	8.96	583.37	9.63	0.01	9.64	582.44	NP	0.00	8.31	583.51
July 30, 2003	NA	NA	NA	NA	8.78	0.01	8.79	583.54	9.47	0.01	9.48	582.60	NP	0.00	8.21	583.61
August 4, 2003	NA	NA	NA	NA	8.73	0.01	8.74	583.59	9.46	0.01	9.47	582.61	NP	0.00	8.18	583.64
September 18, 2003	NA	NA	NA	NA	NP	0.00	8.28	584.04	8.92	0.01	8.93	583.15	NP	0.00	8.51	583.31
November 10, 2003	NA	NA	NA	NA	NP	0.00	8.23	584.09	NP	0.00	8.95	583.12	NP	0.00	8.41	583.41
December 29, 2003	NA	NA	NA	NA	8.28	0.01	8.29	584.04	NP	0.00	9.01	583.06	NP	0.00	7.88	583.94
February 26, 2004	NA	NA	NA	NA	8.50	0.01	8.51	583.82	NA	NA	NA	NA	NA	NA	NA	NA
March 8, 2004	8.32	0.23	8.55	583.77	8.27	0.01	8.28	584.05	NA	NA	NA	NA	NA	NA	NA	NA
April 29, 2004	NA	NA	NA	NA	7.78	0.01	7.79	584.54	NA	NA	NA	NA	NA	NA	NA	NA
June 1, 2004	NA	NA	NA	NA	NP	0.00	5.61	586.71	NA	NA	NA	NA	7.62	0.01	7.63	584.20
June 30, 2004	NA	NA	NA	NA	NP	0.00	7.44	584.88	8.66	0.01	8.67	583.41	7.94	0.01	7.95	583.88
July 28, 2004	NA	NA	NA	NA	NP	0.00	8.14	584.18	8.83	0.01	8.84	583.24	NP	0.00	8.17	583.65
August 17, 2004	NA	NA	NA	NA	NP	0.00	8.51	583.81	8.94	0.01	8.95	583.13	NP	0.00	8.23	583.59
September 27, 2004	NA	NA	NA	NA	NP	0.00	8.50	583.82	9.09	0.01	9.10	582.98	8.35	0.01	8.36	583.47

See Notes on Page 4.

TABLE 3
GROUNDWATER AND LNAPL MEASUREMENT SUMMARY
2001 THROUGH THE PRESENT

GENERAL MOTORS CORPORATION
SAGINAW MALLEABLE IRON PLANT
SAGINAW, MICHIGAN

Date	MW-172WT reference elevation = 591.51				MW-160WT reference elevation = 591.53				RW-4 reference elevation = 592.27			
	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 2, 2001	NA	NA	NA	NA	8.48	0.66	9.14	583.00	NP	0.00	14.18	578.09
February 5-6, 2001	8.42	1.14	9.56	583.00	8.54	0.68	9.22	582.94	12.25	0.01	12.26	580.02
February 28, 2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
March 13, 2001	8.27	0.73	9.00	583.18	8.36	0.45	8.81	583.13	NP	0.00	8.05	584.22
May 4, 2001	8.36	0.91	9.27	583.08	8.45	0.65	9.10	583.03	NP	0.00	8.30	583.97
May 24, 2001	8.33	0.79	9.12	583.12	8.42	0.52	8.94	583.07	7.98	0.01	7.99	584.29
June 16, 2001	8.36	0.78	9.14	583.09	8.48	0.50	8.98	583.01	8.06	0.01	8.07	584.21
August 15, 2001	8.39	0.78	9.17	583.06	8.47	0.64	9.11	583.01	NP	0.00	8.16	584.11
September 28, 2001	8.19	0.35	8.54	583.29	8.31	0.43	8.74	583.19	8.09	0.01	8.10	584.18
October 31, 2001	8.18	0.19	8.37	583.31	8.30	0.38	8.68	583.20	NA	NA	NA	NA
December 5, 2001	8.14	0.21	8.35	583.35	8.29	0.39	8.68	583.21	NA	NA	NA	NA
January 10, 2002	8.23	0.66	8.89	583.23	8.31	0.38	8.69	583.19	NA	NA	NA	NA
February 12, 2002	8.12	0.20	8.32	583.37	8.26	0.38	8.64	583.24	NA	NA	NA	NA
March 18, 2002	7.93	0.25	8.18	583.56	7.99	0.19	8.18	583.52	NA	NA	NA	NA
May 6, 2002	7.64	0.21	7.85	583.85	7.71	0.20	7.91	583.80	NA	NA	NA	NA
May 22, 2002	7.78	0.15	7.93	583.72	7.83	0.29	8.12	583.68	NA	NA	NA	NA
June 17, 2002	7.76	0.23	7.99	583.73	7.83	0.31	8.14	583.68	NA	NA	NA	NA
September 25, 2002	8.47	0.53	9.00	583.00	8.36	0.79	9.15	583.11	NA	NA	NA	NA
October 29, 2002	8.42	0.88	9.30	583.02	8.54	0.56	9.10	582.95	NA	NA	NA	NA
November 26, 2002	8.45	0.82	9.27	582.99	8.60	0.53	9.13	582.89	NA	NA	NA	NA
December 19, 2002	8.43	0.90	9.33	583.01	8.55	0.63	9.18	582.93	NA	NA	NA	NA
January 10, 2003	8.49	0.83	9.32	582.95	8.60	0.56	9.16	582.89	NA	NA	NA	NA
February 25, 2003	8.51	1.01	9.52	582.92	8.72	0.56	9.28	582.77	NA	NA	NA	NA
March 27, 2003	8.46	0.84	9.30	582.98	8.62	0.53	9.15	582.87	NA	NA	NA	NA
April 29, 2003	8.44	0.71	9.15	583.01	8.58	0.37	8.95	582.92	NA	NA	NA	NA
May 29, 2003	7.60	0.50	8.10	583.87	7.77	0.26	8.03	583.74	NA	NA	NA	NA
June 25, 2003	8.35	0.67	9.02	583.11	8.47	0.22	8.69	583.04	NA	NA	NA	NA
July 30, 2003	8.20	0.73	8.93	583.25	8.36	0.22	8.58	583.15	NA	NA	NA	NA
August 4, 2003	8.17	0.73	8.90	583.28	8.32	0.22	8.54	583.19	NA	NA	NA	NA
September 18, 2003	8.35	0.80	9.15	583.10	8.48	0.34	8.82	583.02	NA	NA	NA	NA
November 10, 2003	8.30	0.87	9.17	583.14	8.50	0.20	8.70	583.01	NA	NA	NA	NA
December 29, 2003	8.40	0.91	9.31	583.04	8.68	0.23	8.91	582.83	NA	NA	NA	NA
February 26, 2004	8.45	1.02	9.47	582.98	8.60	0.11	8.71	582.92	NA	NA	NA	NA
March 8, 2004	8.18	0.44	8.62	583.29	8.33	0.31	8.64	583.18	NA	NA	NA	NA
April 29, 2004	7.98	0.56	8.54	583.49	8.41	0.19	8.60	583.10	NA	NA	NA	NA
June 1, 2004	NA	NA	NA	NA	7.83	0.11	7.94	583.69	NA	NA	NA	NA
June 30, 2004	8.55	0.06	8.61	582.96	8.25	0.09	8.34	583.27	NA	NA	NA	NA
July 28, 2004	8.32	0.36	8.68	583.16	8.43	0.11	8.54	583.09	NA	NA	NA	NA
August 17, 2004	8.33	0.49	8.82	583.14	8.46	0.11	8.57	583.06	NA	NA	NA	NA
September 27, 2004	8.42	0.48	8.90	583.05	8.54	0.17	8.71	582.98	NA	NA	NA	NA

See Notes on Page 4.

TABLE 3
GROUNDWATER AND LNAPL MEASUREMENT SUMMARY
2001 THROUGH THE PRESENT

GENERAL MOTORS CORPORATION
SAGINAW MALLEABLE IRON PLANT
SAGINAW, MICHIGAN

Date	MW-148WT reference elevation = 592.02				MW-178WT reference elevation = 590.35				MW-175WT 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 2, 2001	10.56	3.65	14.21	581.17	NA	NA	NA	NA	NP	0.00	7.81	NA
February 5-6, 2001	9.56	3.07	12.63	582.21	7.64	0.96	8.60	582.63	7.65	0.01	7.66	NA
February 28, 2001	8.87	1.54	10.41	583.03	NA	NA	NA	NA	NA	NA	NA	NA
March 13, 2001	7.70	2.70	10.40	584.10	7.63	0.92	8.55	582.65	NP	0.00	7.40	NA
May 4, 2001	8.05	1.80	9.85	583.83	7.62	1.11	8.73	582.64	NP	0.00	7.50	NA
May 24, 2001	7.68	1.77	9.45	584.20	7.64	0.92	8.56	582.64	NP	0.00	7.37	NA
June 16, 2001	7.61	1.77	9.38	584.27	7.68	0.94	8.62	582.59	NP	0.00	7.41	NA
August 15, 2001	7.81	1.71	9.52	584.07	7.63	0.91	8.54	582.65	7.47	0.01	7.48	NA
September 28, 2001	7.53	2.11	9.64	584.32	7.73	0.80	8.53	582.56	NA	NA	NA	NA
October 31, 2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
December 5, 2001	NA	NA	NA	NA	7.61	0.88	8.49	582.67	NA	NA	NA	NA
January 10, 2002	NA	NA	NA	NA	7.66	0.87	8.53	582.62	NA	NA	NA	NA
February 12, 2002	NA	NA	NA	NA	7.58	1.95	9.53	582.61	NA	NA	NA	NA
March 18, 2002	NA	NA	NA	NA	7.55	0.98	8.53	582.72	NP	0.00	6.95	NA
May 6, 2002	NA	NA	NA	NA	NA	NA	NA	NA	NP	0.00	6.86	NA
May 22, 2002	NA	NA	NA	NA	7.48	1.22	8.70	582.77	NP	0.00	6.90	NA
June 17, 2002	NA	NA	NA	NA	7.47	1.28	8.75	582.78	NP	0.00	6.84	NA
September 25, 2002	NA	NA	NA	NA	7.99	1.40	9.39	582.25	NP	0.00	7.67	NA
October 29, 2002	NA	NA	NA	NA	7.56	1.29	8.85	582.69	NP	0.00	7.34	NA
November 26, 2002	NA	NA	NA	NA	7.63	0.96	8.59	582.64	NA	NA	NA	NA
December 19, 2002	NA	NA	NA	NA	7.56	1.24	8.80	582.69	NA	NA	NA	NA
January 10, 2003	NA	NA	NA	NA	7.59	1.19	8.78	582.66	NA	NA	NA	NA
February 25, 2003	NA	NA	NA	NA	7.71	1.37	9.08	582.53	NA	NA	7.58	NA
March 27, 2003	NA	NA	NA	NA	7.60	1.10	8.70	582.66	NP	0.00	7.67	NA
April 29, 2003	NA	NA	NA	NA	7.56	1.21	8.77	582.69	NP	0.00	7.62	NA
May 29, 2003	NA	NA	NA	NA	7.04	1.07	8.11	583.22	NP	0.00	7.17	NA
June 25, 2003	NA	NA	NA	NA	7.41	1.18	8.59	582.85	NP	0.00	7.48	NA
July 30, 2003	NA	NA	NA	NA	7.30	1.13	8.43	582.96	NP	0.00	7.32	NA
August 4, 2003	NA	NA	NA	NA	7.27	1.14	8.41	582.99	NP	0.00	7.30	NA
September 18, 2003	NA	NA	NA	NA	7.50	1.35	8.85	582.74	NP	0.00	7.33	NA
November 10, 2003	NA	NA	NA	NA	7.55	1.20	8.75	582.70	NP	0.00	7.35	NA
December 29, 2003	NA	NA	NA	NA	7.75	1.09	8.84	582.51	NP	0.00	7.41	NA
February 26, 2004	NA	NA	NA	NA	NP	0.00	7.54	582.81	NA	NA	NA	NA
March 8, 2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
April 29, 2004	NA	NA	NA	NA	NP	0.00	7.21	583.14	NA	NA	NA	NA
June 1, 2004	NA	NA	NA	NA	7.37	1.24	8.61	582.88	NA	NA	NA	NA
June 30, 2004	NA	NA	NA	NA	NA	NA	NA	NA	6.71	0.01	6.72	NA
July 28, 2004	NA	NA	NA	NA	7.45	1.25	8.70	582.80	6.88	0.01	6.89	NA
August 17, 2004	NA	NA	NA	NA	7.46	1.33	8.79	582.78	7.01	0.01	7.02	NA
September 27, 2004	NA	NA	NA	NA	7.51	1.02	8.53	582.76	7.18	0.01	7.19	NA

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).

NM = 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.

As of October 2001, recovery well RW-4 was disconnected from the recovery system, and wells located on the upgradient Delphi Plant 2 property were excluded from the gauging program. Due to snow and ice, NAPL and groundwater elevation data were not obtained during January 2004.

TABLE 4

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID Sample Date Sample Type	MW-117WT					MW-117S1						MW-118WT					
	6/20/95 FS	5/19/00 FS	6/18/01 FS	6/26/02 FS	6/19/03 FS	6/20/95 FS	5/19/00 FS	6/19/01 FS	6/26/02 FS	6/19/03 FS	5/27/04 FS	6/20/95 FS	5/17/00 FS	6/19/01 FS	6/19/01 DUP	6/27/02 FS	6/27/02 DUP
Acetone	50 U	10 U	10 U	10 UJ	2.0 U	50 U	10 U	10 U	10 UJ	2.0 U	2.0 UJ	50 U	10 U	40 U	40 U	20 UJ	10 U
Benzene	1.0 U	0.13 J	1.0 U	0.16 J	1.0 U	1.0 U	0.60 J	1.0 U	0.75 J	0.58 J	0.71 J	1.0 U	0.54 J	4.0 U	4.0 U	0.34 J	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
2-Butanone	50 U	10 U	10 U	10 U	2.0 U	50 U	10 U	10 U	10 U	2.0 U	2.0 UJ	50 U	10 U	40 U	40 U	20 UJ	10 UJ
Carbon disulfide	50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Carbon Tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
1,2-Dichloroethene (total)	1.0 U	1.0 U	1.0 U	--	--	1.0 U	1.0 U	1.0 U	--	--	--	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U	2.0 U	2.0 U	1.0 U	0.50 U
trans-1,2-Dichloroethene	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U	2.0 U	2.0 U	1.0 U	0.50 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 J	4.0 U	4.0 U	2.0 U	1.0 U
2-Hexanone	R	10 U	10 U	10 U	2.0 U	R	10 U	10 U	10 U	2.0 U	2.0 U	R	10 U	40 U	40 U	20 UJ	10 U
4-Methyl-2-pentanone	50 U	10 U	5.0 U	10 U	2.0 U	50 U	10 U	5.0 U	10 U	2.0 U	2.0 U	50 U	28	180	180	4.9 J	5.2 J
Methylene Chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Vinyl Chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.14 J	1.0 U	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	1.0 U
Xylenes (total)	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	0.47 J	4.0 U	4.0 U	2.0 U	1.0 U

TABLE 4

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID Sample Date Sample Type	MW-118WT			MW-118S1						MW-128WT						MW-128S1			
	6/19/03	6/19/03	5/27/04	6/20/95	5/17/00	5/17/00	6/19/01	6/27/02	6/19/03	7/26/95	5/19/00	6/20/01	6/26/02	6/18/03	5/25/04	7/26/95	5/19/00	6/20/01	6/26/02
	FS	DUP	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Acetone	2.0 U	2.0 U	3.3 UJ	50 U	10 U	10 U	10 U	10 U	2.0 U	7.3 J	10 U	10 U	10 UJ	2.0 U	8.6 UJ	6.7 J	10 U	10 U	10 UJ
Benzene	1.0 U	1.0 U	1.7 U	1.0 U	0.47 J	0.46 J	1.0 U	0.37 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.28 J	0.27 J	0.33 J
m-dichloromethane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-form	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	2.0 U	2.0 U	3.3 U	50 U	10 U	10 U	10 U	10 UJ	2.0 U	50 U	10 U	10 U	10 U	2.0 U	2.0 UJ	50 U	10 U	10 U	10 U
Carbon disulfide	1.0 U	1.0 U	1.7 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.7 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	--	--	--	1.0 U	1.0 U	1.0 U	1.0 U	--	--	1.0 U	1.0 U	1.0 U	--	--	--	1.0 U	1.0 U	1.0 U	--
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.7 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.7 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	2.0 U	2.0 U	3.3 UJ	R	10 U	10 U	10 U	10 U	2.0 U	R	10 U	10 U	10 U	2.0 U	2.0 UJ	R	10 U	10 U	10 U
ethyl-2-pentanone	0.75 J	0.60 J	3.3 UJ	50 U	10 U	10 U	5.0 U	10 U	2.0 U	50 U	10 U	5.0 U	10 U	2.0 U	2.0 UJ	50 U	10 U	5.0 U	10 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.7 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.7 U	0.90 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	1.0 U	1.0 U	1.7 U	1.0 U	0.33 J	0.33 J	0.27 J	0.27 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	1.0 U	1.0 U	1.7 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID Sample Date Sample Type	MW-128S1		X-1A							X-1B						X-1CR2		
	6/18/03	5/25/04	7/29/95	6/10/96	5/23/00	6/20/01	6/25/02	6/17/03	5/25/04	7/29/95	5/24/00	6/20/01	6/25/02	6/17/03	5/25/04	6/26/02	6/19/03	5/27/04
	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Acetone	2.0 U	5.7 UJ	180 U	210 U	20 U	20 U	10 U	2.0 UJ	2.4 UJ	5.5 J	16 U	11 U	20 U	2.0 UJ	3.2 UJ	10 UJ	2.0 U	2.0 UJ
Benzene	0.50 J	1.0 U	9.5	8.7 J	8.0	9.3	6.2	4.4	5.4	1.9	1.2	2.2	1.7 J	0.53 J	1.1	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U	3.6 U	2.1 U	0.34 J	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	2.0 U	2.0 UJ	180 U	100 U	20 UJ	20 U	10 U	2.0 U	2.0 UJ	50 U	10 UJ	10 U	20 U	2.0 U	2.0 UJ	10 U	2.0 U	2.0 UJ
Carbon disulfide	1.0 U	1.0 U	180 U	100 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	50 U	0.14 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	3.6 U	2.1 U	0.33 J	0.33 J	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	66	65	32	42	15	8.5	8.4	13	11	15	8.4	1.2	3.3	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	1.0 U	1.0 U	3.6 U	2.1 U	2.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.46 J	0.88 J	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 UJ	3.6 U	2.1 U	0.35 J	2.0 U	0.54 J	0.38 J	0.51 J	1.0 U	0.13 J	0.18 J	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 UJ	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	--	--	3.6 U	2.1 U	2.0 U	2.0 U	--	--	--	1.0 U	1.0 U	1.0 U	--	--	--	--	--	--
cis-1,2-Dichloroethene	1.0 U	1.0 U	3.6 U	2.1 U	0.23 J	1.0 U	0.45 J	1.0 U	0.30 J	1.0 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	3.6 U	2.1 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	2.0 U	2.0 UJ	180 U	100 U	20 U	20 U	10 U	2.0 U	2.0 UJ	50 U	10 U	10 U	20 U	2.0 U	2.0 UJ	10 U	2.0 U	2.0 U
1-Methyl-2-pentanone	2.0 U	0.48 J	180 U	100 U	20 U	10 U	10 U	2.0 U	2.0 UJ	50 U	10 U	10 U	20 U	2.0 U	2.0 UJ	10 U	2.0 U	2.0 U
Methylene Chloride	1.0 U	1.0 UJ	3.6 U	5.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 UJ
Styrene	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.44 J	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	1.0 U	1.0 U	3.6 U	2.1 U	2.0 U	2.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Xylenes (total)	1.0 U	1.0 U	11 U	6.2 U	2.5	2.3	0.78 J	0.77 J	0.99 J	3.0 U	1.0 U	0.63 J	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID Sample Date Sample Type	X-2A						X-10A		X-10AR2					X-16A				
	7/15/95 FS	5/19/00 FS	6/18/01 FS	6/26/02 FS	6/17/03 FS	5/25/04 FS	6/13/96 FS	5/24/00 FS	11/27/01 FS	11/27/01 DUP	6/26/02 FS	6/19/03 FS	5/25/04 FS	7/27/95 FS	5/24/00 FS	6/19/01 FS	6/25/02 FS	6/17/03 FS
Acetone	50 UJ	10 U	10 U	10 UJ	2.0 UJ	8.3 UJ	100 U	10 U	10 UJ	10 UJ	10 UJ	2.0 U	2.0 UJ	50 U	10 U	10 U	10 U	2.0 UJ
Benzene	1.0 U	0.36 J	0.57 J	0.71 J	0.60 J	1.7 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50 UJ	10 U	10 U	10 U	2.0 U	3.3 UJ	50 U	10 UJ	10 UJ	10 UJ	10 U	2.0 U	2.0 UJ	50 U	10 UJ	10 U	10 U	2.0 U
Carbon disulfide	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (total)	1.0 U	1.0 U	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	--	--	1.0 U	1.0 U	1.0 U	--	--
cis-1,2-Dichloroethene	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.7 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.28 J	0.50 U	0.50 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.7 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	50 U	10 U	10 U	10 U	2.0 U	3.3 UJ	50 U	10 U	10 UJ	10 UJ	10 U	2.0 U	2.0 UJ	R	10 U	10 U	10 U	2.0 U
Methyl-2-pentanone	50 U	10 U	5.0 U	10 U	2.0 U	3.3 UJ	50 U	10 U	10 U	10 U	10 U	2.0 U	2.0 UJ	50 U	10 U	5.0 U	10 U	2.0 U
Methylene Chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 UJ	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	5.8	4.3	4.4	4.2

TABLE 4

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID Sample Date Sample Type	X-16A		X-16B						
	5/26/04	5/26/04	7/28/95	5/19/00	6/20/01	6/26/02	6/17/03	5/26/04	
	FS	DUP	FS	FS	FS	FS	FS	FS	
Acetone	2.0 UJ	2.0 UJ	50 UJ	10 U	10 U	10 UJ	2.0 UJ	2.0 UJ	
Benzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
2-Butanone	2.0 UJ	2.0 UJ	50 UJ	10 U	10 U	10 U	2.0 U	2.0 UJ	
Carbon disulfide	1.0 U	1.0 U	50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Carbon Tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloroethene (total)	--	--	1.0 U	1.0 U	1.0 U	--	--	--	
cis-1,2-Dichloroethene	0.39 J	0.37 J	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
2-Hexanone	2.0 U	2.0 U	50 U	10 U	10 U	10 U	2.0 U	2.0 U	
4-Methyl-2-pentanone	2.0 U	2.0 U	50 U	10 U	5.0 U	10 U	2.0 U	2.0 U	
Methylene Chloride	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichloroethene	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	
Vinyl Chloride	6.3	6.4	1.0 U	1.0 U	0.34 J	0.48 J	1.0 U	1.0 U	
Xylenes (total)	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	

TABLE 4

GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS

REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN

General Notes:

All concentrations in micrograms per liter ($\mu\text{g/L}$); equivalent to parts per billion (ppb), unless otherwise noted.

All detections are shown in bold.

Data from the 2004 sampling event are shaded.

-- = Sample was not analyzed for the listed constituent.

Locat MW, X = Permanent monitoring wells.

WT = Water table monitoring wells.

S1 = Well screened at top of sand unit; increasing numbers indicate increased depth within the sand unit (e.g., S2, S3, S4).

Samp FS = Primary field sample, collected by BBL.

DUP = Duplicate field sample, collected by BBL.

Data Qualifiers:

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

R = The sample results were rejected.

U = The constituent was analyzed for but not detected. The associated value is the constituent quantitation limit.

TABLE 5

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
TAL INORGANIC CONSTITUENTS AND INDICATOR PARAMETERS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID: Sample Date: Sample Type:	MW-117WT							MW-117S1							
	6/20/95	7/14/95	6/11/96	5/19/00	6/18/01	6/26/02	6/19/03	6/20/95	7/14/95	6/11/96	5/19/00	6/18/01	6/26/02	6/19/03	5/27/04
	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Dissolved Inorganics (ug/L)															
Aluminum	350	--	100 U	100 U	100 U	100 U	100 U	117	--	120	100 U	100 U	100 U	100 U	100 U
Antimony	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0
Arsenic	1.3	--	--	10 U	10 U	2.2 B	10 U	1.2	--	--	10 U	10 U	10 U	10 U	10 U
Barium	2,210	--	2,520	3,580	3,170	2,970	3,250	1,410	--	1,670	1,720	1,740	1,740	1,800	1,780
Beryllium	5.0 U	--	--	4.0 U	4.0 U	4.0 U	4.0 U	5.0 U	--	--	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Cadmium	0.20 U	--	--	1.0 U	1.8	1.0 U	3.8	0.20 U	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	1,340,000 J	--	--	1,200,000	1,090,000	1,110,000	1,160,000	133,000 J	--	--	163,000	157,000	156,000	171,000	167,000 J
Chromium	50 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	50 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	50 U	--	--	40 U	40 U	40 U	40 U	50 U	--	--	40 U	40 U	40 U	40 U	40 U
Copper	25 U	--	--	25 U	25 U	25 U	25 U	25 U	--	--	25 U	25 U	25 U	25 U	25 U
Iron	100,000	--	124,000	149,000	137,000	128,000	139,000	5,780	--	8,260	8,730	9,120	8,650	9,160	10,100
Lead	3.0 UJ	--	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 UJ	--	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	485,000	--	545,000	593,000	550,000	518,000	584,000	42,500	--	50,400	52,100	51,700	49,400	52,900	51,800 J
Manganese	5,130	--	5,190	5,510	4,900	4,850	5,480	347	--	330	341	340	326	354	326 J
Mercury	0.20 UJ	--	--	0.20 U	0.20 UJ	0.20 UJ	0.20 UJ	0.20 UJ	--	--	0.20 U	0.20 UJ	0.20 UJ	0.20 UJ	0.20 U
Nickel	50 U	--	50 U	23.3 B	18.2 B	18 B	20 B	50 U	--	50 U	40 U	40 U	40 U	40 U	40 U
Potassium	6,960	--	--	41,300	39,800 J	40,500 J	47,000	5,000 U	--	--	2,330 B	2,270 BJ	2,490 BJ	2,540 B	2,330 J
Selenium	5.0 UJ	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	0.50 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	0.50 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	463,000	--	499,000	590,000	559,000	539,000	628,000	101,000	--	108,000	120,000	121,000	114,000	118,000	115,000
Thallium	4.0 UJ	--	--	17.9	10 U	8.9 BJ	10 U	2.0 UJ	--	--	5.0 B	10 U	10 UJ	10 U	10 U
Vanadium	20 U	--	--	50 U	50 U	50 U	50 U	20 U	--	--	50 U	50 U	50 U	50 U	50
Zinc	R	--	20 U	20 U	20 U	20 U	20 U	R	--	20 U	20 U	12.3 B	20 U	20 U	20 U
Cyanide, Total	5.0 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Landfill Indicator Parameters															
pH (Standard Units)	--	--	--	6.4	7.1	7.2	7.1	--	--	--	7.0	8.0	8.0	8.1	7.0
Total Dissolved Solids (mg/L)	--	11,000	--	11,000	13,000	11,000 J	13,000	--	990	--	840	920	970	1,000	1,000
Chloride (mg/L)	--	4,600	--	4,930 J	5,380	5,540	4,680	--	230	--	284 J	269	270	264	275
Sulfate (mg/L)	--	--	--	25 UG	0.23 B	0.32 B	0.34 BJG	--	--	--	2.0 UG	0.26 B	0.14 B	1.0 UJ	0.44 B
Nitrate (as N) (mg/L)	--	--	--	12.5 UG	0.50 U	1.0 U	1.0 U	--	--	--	1.0 UG	0.50 U	0.50 U	0.50 U	0.50 U
Nitrite (as N) (mg/L)	--	--	--	12.5 UG	R	25 U	25 U	--	--	--	1.0 UG	R	0.50 U	0.14 BJ	0.16 B
Nitrogen, Ammonia (mg/L)	--	30 J	--	46	63	63	63	--	1 UJ	--	5.1	11	7.1	7.4	7.3

TABLE 5

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
TAL INORGANIC CONSTITUENTS AND INDICATOR PARAMETERS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID: Sample Date: Sample Type:	MW-118WT										
	6/20/95	7/14/95	6/11/96	5/17/00	6/19/01	6/19/01	6/27/02	6/27/02	6/19/03	6/19/03	5/27/04
	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	DUP	FS
<u>Dissolved Inorganics (ug/L)</u>											
Aluminum	563	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Antimony	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	1.0	--	--	10 U	5.1 B	7.4 B	3.9 B	7.9 B	10 U	10 U	3.2
Barium	1,970	--	2,420	7,970	10,700	11,200	8,650	9,200	5,620	5,420	4,350
Beryllium	5.0 U	--	--	4.0 U	5.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Cadmium	0.20 U	--	--	1.5	8.3	8.6	2.5	2.9	6.6	6	0.72
Calcium	1,950,000 J	--	--	4,890,000	5,750,000	6,040,000	4,630,000	4,880,000	2,940,000	2,840,000	2,290,000 J
Chromium	50 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.1
Cobalt	50 U	--	--	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
Copper	25 U	--	--	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	71,500	--	93,100	261,000	330,000	344,000	259,000	277,000	173,000	166,000	135,000
Lead	3.0 UJ	--	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	372,000	--	457,000	1,330,000	1,760,000	1,840,000	1,390,000	1,470,000	916,000	883,000	721,000 J
Manganese	5,460	--	5,390	8,930	7,740	8,070	6,250	6,360	4,110	4,000	3,080 J
Mercury	0.20 UJ	--	--	0.20 U	0.20 UJ	0.20 UJ	0.20 UJ	0.20 UJ	0.20 UJ	0.20 UJ	0.20 U
Nickel	50 U	--	50 U	17.7 B	23.5 B	24.4 B	29 B	31 B	36 B	35 B	39
Potassium	5,000 U	--	--	16,800	30,700 J	32,400 J	40,000 J	43,400 J	37,200	35,200	33,900 J
Selenium	5.0 UJ	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	0.50 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	175,000	--	229,000	647,000	955,000	976,000	925,000	970,000	764,000	735,000	662,000
Thallium	2.0 UJ	--	--	26.8	10 U	6.5 B	19 J	7.8 BJ	10 U	10 U	10 U
Vanadium	20 U	--	--	50 U	50 U	50 U	50 U	50 U	50 U	50 U	1.5
Zinc	R	--	22.3 U	17.8 B	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Cyanide, Total	5.0 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
<u>Landfill Indicator Parameters</u>											
pH (Standard Units)	--	--	--	6.2	6.9	7.0	6.8	6.8	7.7	7	6.4
Total Dissolved Solids (mg/L)	--	1,400	--	37,000	34,000	36,000	42,000	41,000	23,000	24,000	15,000
Chloride (mg/L)	--	3,700	--	16,100	21,800	18,800	16,900	16,500	9,740	9,470	7,580
Sulfate (mg/L)	--	--	5.0 U	100 UG	100 U	0.63 B	0.59 B	0.56 B	0.70 BJG	1.2 BJG	2.0 U
Nitrate (as N) (mg/L)	--	--	0.08 U	50 UG	50 U	0.50 U	2.5 U	2.5 U	2.0 U	2.0 U	1.0 U
Nitrite (as N) (mg/L)	--	--	0.07 U	50 UG	R	R	2.5 U	2.5 U	50 U	50 U	25 U
Nitrogen, Ammonia (mg/L)	--	10 J	--	26	92	76	82	88	66	65	66

TABLE 5

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
TAL INORGANIC CONSTITUENTS AND INDICATOR PARAMETERS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID: Sample Date: Sample Type:	MW-118S1								MW-128WT						
	6/20/95	7/14/95	6/11/96	5/17/00	5/17/00	6/19/01	6/27/02	6/19/03	7/26/95	3/12/97	5/19/00	6/20/01	6/26/02	6/18/03	5/25/04
	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Dissolved Inorganics (ug/L)															
Aluminum	219	--	100 U	100 U	100 U	100 U	100 U	100 U	448	--	100 U	100 U	100 U	100 U	100 U
Antimony	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	1.8	--	--	10 U	10 U	10 U	10 U	10 U	3.7	--	5.1 B	5.9 B	5.8 B	3.7 B	3.8 B
Barium	482	--	532	593	612	645	622	713	628	--	142	219	244	223	188
Beryllium	5.0 U	--	--	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	5.0 U	--	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Cadmium	0.20 U	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 UJ	--	1.0 U	1.0 U	1.0 U	0.35 B	1.0 U
Calcium	120,000 J	--	--	156,000	156,000	151,000	151,000	172,000	360,000	--	217,000	186,000	152,000	169,000	124,000
Chromium	50 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	50 U	--	1.7 B	2.0 B	2.7 B	2.4 B	5.0 U
Cobalt	50 U	--	--	40 U	40 U	40 U	40 U	40 U	50 U	--	1.7 B	7.5 B	9.3 B	7.8 B	8.0 B
Copper	25 U	--	--	25 U	25 U	25 U	25 U	25 U	25 U	--	25 U	25 U	25 U	25 U	25 U
Iron	2,500	--	5,390	6,090	6,150	7,070	6,070	7,570	24,500	--	20,100	19,400	14,900	16,700	10,900
Lead	3.0 UJ	--	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	--	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	38,100	--	47,000	49,300	49,800	49,400	47,900	53,700	115,000	--	54,600	61,500	68,300	80,900	65,800
Manganese	347	--	383	420	415	428	408	476	918	--	2,170	1,520	828	760	388
Mercury	0.20 UJ	--	--	0.20 U	0.20 U	0.20 UJ	0.20 UJ	0.20 UJ	0.20 U	--	0.20 U	0.20 UJ	0.20 UJ	0.20 U	0.20 U
Nickel	50 U	--	50 U	40 U	40 U	40 U	40 U	40 U	50 U	--	14.5 B	25.8 B	32 B	25 B	27 B
Potassium	5,000 U	--	--	2,170 B	2,180 B	2,120 BJ	2,380 BJ	2,510 B	5,420	--	33,900	63,900 J	89,200 J	86,000	93,600
Selenium	5.0 UJ	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	0.50 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.50 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	97,300	--	112,000	121,000	122,000	117,000	112,000	118,000	720,000	--	331,000	509,000	556,000	504,000	479,000
Thallium	2.0 UJ	--	--	8.1 B	5.4 B	10 U	10 UJ	10 U	8.0 UJ*	--	6.9 B	10 U	10 UJ	10 U	10 U
Vanadium	20 U	--	--	50 U	50 U	50 U	50 U	50 U	20 U	--	50 U	50 U	50 U	50 U	50 U
Zinc	R	--	35.8 U	20 U	20 U	20 U	20 U	20 U	31	--	20 U	20 U	20 U	20 U	20 U
Cyanide, Total	5.0 U	--	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	8.3	--	5.0 U	5.0 U	2.1 B	5.0 U	5.0 U
Landfill Indicator Parameters															
pH (Standard Units)	--	--	--	7.0	7.0	8.0	7.1	8.1	--	--	7.2	7.9	8.0	8.1	7.6
Total Dissolved Solids (mg/L)	--	8,000	--	930	940	910	1,200	1,000	--	--	1,800	2,100	2,700	2,100	2,100
Chloride (mg/L)	--	260	--	284	281	272	286	264	--	--	775 J	995	1,280	1,000	905
Sulfate (mg/L)	--	--	5.0 U	4.0 UG	4.0 UG	0.15 B	1.6	1.0 UJ	--	5.0 U	101	105	59.2	174 J	132
Nitrate (as N) (mg/L)	--	--	0.08 U	2.0 UG	2.0 UG	0.50 U	0.50 U	0.50 U	--	0.14	2.5 UG	0.50 U	0.50 U	0.50 U	0.50 U
Nitrite (as N) (mg/L)	--	--	0.07 U	2.0 UG	2.0 UG	R	0.50 U	0.50 U	--	0.07 U	2.5 UG	R	10 U	0.50 U	5.0 U
Nitrogen, Ammonia (mg/L)	--	4.8 J	--	5.9	6.2	8.4	7.3	6.2	--	--	13	66	97	100	110

TABLE 5

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
TAL INORGANIC CONSTITUENTS AND INDICATOR PARAMETERS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID: Sample Date: Sample Type:	MW-128S1							X-1A								
	7/26/95 FS	3/12/97 FS	5/19/00 FS	6/20/01 FS	6/26/02 FS	6/18/03 FS	5/25/04 FS	7/29/95 FS	6/10/96 FS	3/8/97 FS	5/23/00 FS	6/20/01 FS	6/25/02 FS	6/17/03 FS	6/18/03 FS	5/25/04 FS
<u>Dissolved Inorganics (ug/L)</u>																
Aluminum	502	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--	100 U	100 U	100 U	--	100 U	100 U
Antimony	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U
Arsenic	17.3	--	18.1	19	23	2.5 B	6.9 B	3.6	--	--	3.5 B	4.4 B	3.1 B	--	10 U	2.7 U
Barium	936	--	820	791	727	354	405	535	515	--	475	599	304	--	287	173
Beryllium	5.0 U	--	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	5.0 U	--	--	4.0 U	4.0 U	4.0 U	--	4.0 U	4.0 U
Cadmium	0.20 UJ	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 UJ	--	--	1.0 U	1.0 U	1.0 U	--	0.69 B	1.0 U
Calcium	442,000	--	398,000	367,000	365,000	304,000	281,000	175,000	--	--	168,000	172,000	138,000	--	156,000	101,000
Chromium	50 U	--	4.2 B	1.9 B	2.6 B	5.0 U	5.0 U	5.0 U	--	--	3.2 B	5.4	2.4 B	--	5.0 U	5.0 U
Cobalt	50 U	--	4.3 B	4.6 B	5.0 B	40 U	2.4 B	50 U	--	--	40 U	4.9 B	2.6 B	--	40 U	2.9 B
Copper	25 U	--	25 U	25 U	25 U	25 U	25 U	25 U	--	--	25 U	25 U	25 U	--	25 U	25 U
Iron	31,900	--	22,000	20,400	22,900	100 U	3,460	7,120	30,000 J	--	18,500 J	16,000	14,200	--	38,900	19,200
Lead	3.0 U	--	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	--	3.0 U	3.0 U	3.0 U	--	3.0 U	3.0 U
Magnesium	170,000	--	145,000	136,000	138,000	8,300 U	43,200	110,000	102,000	--	111,000	106,000	80,600	--	98,000	56,400
Manganese	437	--	339	377	342	20 U	189	666	1,210 J	--	835	703	646	--	1,090	705
Mercury	0.20 U	--	0.20 U	0.20 UJ	0.20 UJ	0.20 U	0.20 U	0.20 UJ	--	--	0.20 U	0.20 UJ	0.20 UJ	--	0.20 U	0.20 U
Nickel	50 U	--	25.6 B	24 B	19 B	25 B	18 B	50 U	50 U	--	17.2 B	28.1 B	19 B	--	17 B	14 B
Potassium	5,000 U	--	7,750	8,760 J	5,900 J	17,700	10,100	235,000	--	--	163,000	192,000 J	118,000 J	--	98,100	79,800
Selenium	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	--	--	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U
Silver	0.50 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.50 U	--	--	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U
Sodium	582,000	--	515,000	528,000	498,000	373,000	349,000	580,000	389,000	--	339,000	464,000	353,000	--	311,000	275,000
Thallium	8.0 UJ*	--	6.2 B	6.1 B	6.5 BJ	10 U	10 U	8.0 UJ*	--	--	10 U	5.7 B	7.3 BJ	--	10 U	10 U
Vanadium	20 U	--	50 U	3.3 B	3.1 B	50 U	50 U	20 U	--	--	50 U	50 U	50 U	--	50 U	50 U
Zinc	24	--	20 U	20 U	20 U	20 U	20 U	20 U	20 U	--	20 U	20 U	20 U	--	20 U	20 U
Cyanide, Total	8.8	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	--	--	4.5 B	4.8 B	3.5 B	5.0 U	--	5.0 U
<u>Landfill Indicator Parameters</u>																
pH (Standard Units)	--	--	6.7	7.7	7.6	9.8	9.2	--	--	--	7.0	7.8	7.3	--	7.9	7.1
Total Dissolved Solids (mg/L)	--	--	3,000	3,100	3,100	2,700	2,400	--	--	--	2,300	2,100	2,000	--	1,700	1,400
Chloride (mg/L)	--	--	1,320 J	1,230	1,460	1,090	1,220	--	--	--	505	893	714 J	--	593	473
Sulfate (mg/L)	--	5.0 U	3.8 BG	5.0	3.0	22.7 J	27.2	--	5.0 U	5.0 U	528	5.1	0.18 B	--	95.4 J	2.5
Nitrate (as N) (mg/L)	--	0.08 U	5.0 UG	0.50 U	0.50 U	0.50 U	0.040 B	--	0.08 U	0.08 U	2.5 U	0.50 U	0.50 U	--	0.50 U	0.02 B
Nitrite (as N) (mg/L)	--	0.07 U	5.0 UG	R	10 U	0.50 U	0.50 U	--	0.07 U	0.07 U	2.5 U	R	10 U	--	0.50 U	0.50 U
Nitrogen, Ammonia (mg/L)	--	--	3.3	7.4	7.2	6.9	6.4	--	--	--	160	210	94	74	--	73

TABLE 5

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
TAL INORGANIC CONSTITUENTS AND INDICATOR PARAMETERS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID: Sample Date: Sample Type:	X-1B									X-1CR2			X-2A			
	7/29/95 FS	6/10/96 FS	3/9/97 FS	5/24/00 FS	6/20/01 FS	6/25/02 FS	6/17/03 FS	6/18/03 FS	5/25/04 FS	6/26/02 FS	6/19/03 FS	5/27/04 FS	7/15/95 FS	5/19/00 FS	6/18/01 FS	6/26/02 FS
Dissolved Inorganics (ug/L)																
Aluminum	100 U	118 U	--	100 U	100 U	100 U	--	100 U	100 U	100 U	84,400	106 UJ	111	100 U	100 U	100 U
Antimony	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	3.1	--	--	10 U	4.3 B	3.5 B	--	10 U	10 U	3.7 B	27	10 U	1.0 U	3.4 B	10 U	2.2 B
Barium	887	870	--	770	644	706	--	525	350	34 B	534 J	30	365	410	432	358
Beryllium	5.0 U	--	--	4.0 U	4.0 U	4.0 U	--	4.0 U	4.0 U	4.0 U	3.8 B	4.0 U	5.0 U	4.0 U	4.0 U	4.0 U
Cadmium	0.38 J	--	--	1.0 U	1.0 U	1.0 U	--	0.33 B	1.0 U	1.0 U	3.9	0.50	0.20 U	1.0 U	1.0 U	1.0 U
Calcium	371,000	--	--	380,000	352,000	357,000	--	309,000	270,000	68,100	554,000	72,600 J	76,400	98,200	103,000	83,800
Chromium	50 U	--	--	3.8 B	2.2 B	3.1 B	--	1.9 B	5.0 U	5.0 U	180	5.0 U	50 U	5.0 U	5.0 U	5.0 U
Cobalt	50 U	--	--	6.1 B	6.5 B	5.6 B	--	4.0 B	5.7 B	40 U	51	3.4	50 U	40 U	1.3 B	0.83 B
Copper	25 U	--	--	25 U	25 U	25 U	--	25 U	25 U	25 U	112	25 U	25 U	25 U	25 U	25 U
Iron	22,900	21,200 J	--	22,100 J	22,400	20,300	--	19,200	14,000	100 U	98,000	100 U	254 J	429	606	577
Lead	3.0 U	3.0 U	--	3.0 U	3.0 U	3.0 U	--	3.0 U	3.0 U	3.0 U	58	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	124,000	121,000	--	118,000	116,000	113,000	--	105,000	93,300	33,300	211,000 J	34,000 J	23,300	40,400	43,500	34,600
Manganese	1,030	838 J	--	795	935	842	--	1,290	1,330	74	2,000	23 J	517	569	625	518
Mercury	0.20 UJ	--	--	0.20 U	0.20 UJ	0.20 UJ	--	0.20 U	0.20 U	0.20 UJ	0.20 UJ	0.20 UJ	0.20 U	0.20 U	0.20 UJ	0.20 UJ
Nickel	50 U	50 U	--	29.6 B	32.4	30 B	--	17 B	12 B	40 U	131	40 U	50 U	13.4 B	10.8 B	9.4 B
Potassium	53,700	--	--	40,500	37,800 J	34,700 J	--	32,400	23,200	3,310 BJ	28,800	2,710 J	19,900	33,500	35,500 J	33,300 J
Selenium	5.0 U	--	--	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	0.50 U	--	--	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.50 U	5.0 U	5.0 U	5.0 U
Sodium	758,000	831,000	--	858,000	793,000	777,000	--	537,000	355,000	125,000	126,000	130,000	275,000	378,000	429,000	426,000
Thallium	4.0 UJ*	--	--	6.6 B	6.4 B	8.2 BJ	--	10 U	10 U	10 UJ	10 U	10 U	2.0 UJ	5.3 B	5.9 B	10 UJ
Vanadium	20 U	--	--	2.4 B	1.7 B	2.0 B	--	50 U	50 U	50 U	169	50 U	20 U	50 U	50 U	50 U
Zinc	143	42.5 U	--	20 U	32.5	21	--	15 B	20 U	20 U	534	20 U	R	54.6	12.7 B	20 U
Cyanide, Total	9.1	--	--	5.5	5.0	4.7 B	5.0 U	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 B
Landfill Indicator Parameters																
pH (Standard Units)	--	--	--	6.6	7.4	6.9	--	7.8	7.2	8.0	7.9	7.8	--	7.6	7.8	8.0
Total Dissolved Solids (mg/L)	--	--	--	2,600	3,000	3,700	--	2,500	2,200	800	380	750	--	1,800	1,900	2,000
Chloride (mg/L)	--	--	--	1,440	1,280	1,410 J	--	817	571	162	163	170	--	884 J	982	1,060
Sulfate (mg/L)	--	5.0 U	5.0 U	51.2	31.7	30.2	--	217 J	277	251	260 J	260	--	24	1.0 U	0.42 B
Nitrate (as N) (mg/L)	--	0.08 U	0.08 U	10 U	0.50 U	0.50 U	--	0.50 U	0.50 U	0.046 B	0.13 B	0.43 B	--	2.5 UG	0.50 U	0.50 U
Nitrite (as N) (mg/L)	--	0.07 U	0.07 U	10 U	R	0.53 B	--	0.50 U	0.50 U	0.50 U	0.17 BJ	0.50 U	--	2.5 UG	R	0.50 U
Nitrogen, Ammonia (mg/L)	--	--	--	24	59	31	7	--	22	0.6	0.4	0.10 B	--	5.6	6.6	7.8

TABLE 5

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
TAL INORGANIC CONSTITUENTS AND INDICATOR PARAMETERS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID: Sample Date: Sample Type:	X-2A			X-10A		X-10AR2					X-16A				
	6/17/03 FS	6/18/03 FS	5/25/04 FS	6/13/96 FS	5/24/00 FS	11/27/01 FS	11/27/01 DUP	6/26/02 FS	6/19/03 FS	5/25/04 FS	7/27/95 FS	5/24/00 FS	6/19/01 FS	6/25/02 FS	6/17/03 FS
Dissolved Inorganics (ug/L)															
Aluminum	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	1,110	100 U	100 U	100 U	--
Antimony	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	--
Arsenic	--	10 U	2.7 B	5.0 U	10 U	10 U	10 U	2.2 B	10 U	10 U	1.0 U	10 U	10 U	10 U	--
Barium	--	376	336	200 U	44.4 B	62 B	57 B	51 B	100 U	33 B	200 U	216	225	227	--
Beryllium	--	4.0 U	4.0 U	5.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	5.0 U	4.0 U	4.0 U	4.0 U	--
Cadmium	--	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.35 J	1.0 U	1.0 U	1.0 U	--
Calcium	--	92,800	84,900	117,000	209,000	248,000	241,000	202,000	211,000	164,000	362,000	397,000	377,000	373,000	--
Chromium	--	5.0 U	5.0 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	50 U	1.5 B	5.0 U	5.0 U	--
Cobalt	--	40 U	2.7 B	50 U	40 U	10 U	10 U	40 U	40 U	40 U	50 U	40 U	40 U	40 U	--
Copper	--	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	--
Iron	--	100 U	555	100 UJ	100 UJ	4,740 J	1,080 J	15,600	13,500	6,050	4,370	6,850 J	9,020	8,800	--
Lead	--	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	--
Magnesium	--	33,600	27,100	22,400	48,700	74,900 J	73,100 J	55,700	59,000	45,900	126,000	136,000	136,000	133,000	--
Manganese	--	579	480	22.5	152	2,810	2,710	2,630	2,470	2,170	807	966	964	1,050	--
Mercury	--	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 UJ	--
Nickel	--	6.9 B	8.3 B	50 U	40 U	40 U	40 U	40 U	40 U	4.9 B	50 U	9.5 B	40 U	40 U	--
Potassium	--	39,200	35,400	9,450	8,910	14,200	13,700	12,000 J	11,000	8,290	5,000 U	1,920 B	1,530 BJ	1,790 BJ	--
Selenium	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	--
Silver	--	5.0 U	5.0 U	0.50 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.50 U	5.0 U	5.0 U	5.0 U	--
Sodium	--	411,000	366,000	24,000	33,700	67,900	66,100	48,300	44,000	31,500	86,200	124,000	124,000	119,000	--
Thallium	--	10 U	10 U	2.0 UJ	7.1 B	10 U	10 U	5.8 BJ	10 U	10 U	2.0 UJ	7.6 B	6.6 B	5.6 BJ	--
Vanadium	--	50 U	50 U	20 U	50 U	20 U	20 U	50 U	50 U	50 U	20 U	50 U	50 U	50 U	--
Zinc	--	74	20 U	86.8 U	105	17 B	20 U	18 B	28	36	50	20 U	20 U	20 U	--
Cyanide, Total	2.0 B	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.8	5.0 U	5.0 U
Landfill Indicator Parameters															
pH (Standard Units)	--	8	8.2	--	7.0	8.1	--	7.9	8.1	7.1	--	6.7	7.9	7.3	--
Total Dissolved Solids (mg/L)	--	1,800	1,700	--	910	1,300	1,300	1,100	1,100	820	--	1,900	1,900	2,100	--
Chloride (mg/L)	--	913	815	--	58.7	47.1	--	20.9	19.7	5.0	--	420	428	462J	--
Sulfate (mg/L)	--	0.32 BJ	1.0 U	--	430	638	--	492	398 J	279	--	601	602	568	--
Nitrate (as N) (mg/L)	--	0.50 U	0.50 U	--	0.50 U	0.10 UJ	--	0.50 U	0.50 U	0.50 U	--	5.0 U	0.50 U	0.50 U	--
Nitrite (as N) (mg/L)	--	0.50 U	0.50 U	--	0.50 U	0.10 UJ	--	0.50 U	0.50 U	0.50 U	--	5.0 U	R	0.50 U	--
Nitrogen, Ammonia (mg/L)	9.4	--	9.3	--	0.20 U	1.7	--	1.1	1.0	0.4	--	0.40	0.8	0.7	0.7

TABLE 5

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
TAL INORGANIC CONSTITUENTS AND INDICATOR PARAMETERS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

Location ID: Sample Date: Sample Type:	X-16A			X-16B							
	6/18/03	5/26/04	5/26/04	7/28/95	5/19/00	6/20/01	6/26/02	6/27/02	6/17/03	6/18/03	5/26/04
	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS
<u>Dissolved Inorganics (ug/L)</u>											
Aluminum	100 U	100 U	100 U	--	122	100 U	100 U	--	--	100 U	100 U
Antimony	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	--	--	5.0 U	5.0 U
Arsenic	10 U	10 U	10 U	--	10 U	10 U	2.5 B	--	--	10 U	10 U
Barium	234	227	222	--	35.7 B	58.7 B	28 B	--	--	100 U	32 B
Beryllium	4.0 U	4.0 U	4.0 U	--	4.0 U	4.0 U	4.0 U	--	--	4.0 U	4.0 U
Cadmium	0.34 B	1.0 U	1.0 U	--	0.59 B	1.0 U	1.0 U	--	--	1.0 U	0.39
Calcium	378,000	365,000	371,000	--	84,700	136,000	76,100	--	--	74,700	73,300 J
Chromium	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	--	--	5.0 U	5.0 U
Cobalt	40 U	40 U	40 U	--	40 U	40 U	40 U	--	--	40 U	1.4
Copper	25 U	25 U	25 U	--	25 U	25 U	25 U	--	--	25 U	25 U
Iron	12,700	10,200	10,100	--	100 U	100 U	100 U	--	--	100 U	100 U
Lead	3.0 U	3.0 U	3.0 U	--	3.0 U	3.0 U	3.0 U	--	--	3.0 U	3.0 U
Magnesium	140,000	138,000	141,000	--	60,100	61,500	51,200	--	--	51,200	51,700 J
Manganese	1,020	896	935	--	84.5	40.4	135	--	--	13 B	20 U
Mercury	0.20 U	0.20 U	0.20 U	--	0.20 U	0.20 UJ	0.20 UJ	--	--	0.13 B	0.20 U
Nickel	40 U	40 U	2.7 B	--	23.8 B	3.7 B	40 U	--	--	40 U	40 U
Potassium	1,660 B	1,550 B	1,620 B	--	2,620 B	2,450 BJ	2,540 BJ	--	--	2,320 B	2,540 J
Selenium	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	--	--	5.0 U	5.0 U
Silver	5.0 U	5.0 U	5.0 U	--	5.0 U	5.0 U	5.0 U	--	--	5.0 U	5.0 U
Sodium	129,000	128,000	129,000	--	91,000	99,400	80,200	--	--	77,800	80,200
Thallium	10 U	10 U	10 U	--	3.9 B	10 U	10 UJ	--	--	10 U	10 U
Vanadium	50 U	50 U	50 U	--	50 U	50 U	50 U	--	--	50 U	50 U
Zinc	20 U	20 U	20 U	--	14.5 B	24.4	28	--	--	20 U	20 U
Cyanide, Total	--	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	--	5.0 U	--	5.0 U
<u>Landfill Indicator Parameters</u>											
pH (Standard Units)	7.9	7.2	7.1	--	7.9	7.9	--	7.5	--	8.4	7.6
Total Dissolved Solids (mg/L)	2,000	1,900	1,900	--	670	920	--	660	--	640	600
Chloride (mg/L)	530	519	516	--	90.6 J	265	--	56.2	--	61.5	42.3
Sulfate (mg/L)	526 J	528	528	--	229	192	--	216	--	214 J	205
Nitrate (as N) (mg/L)	0.50 U	0.50 U	0.50 U	--	0.16 BG	0.17 B	--	0.50 U	--	0.23 B	0.26 B
Nitrite (as N) (mg/L)	0.50 U	0.50 U	0.50 U	--	1.0 UG	R	--	0.50 U	--	0.50 U	0.50 U
Nitrogen, Ammonia (mg/L)	--	0.5	0.4	--	0.20 U	19	--	0.20 U	0.20 U	--	0.20 U

TABLE 5

**GREEN POINT LANDFILL ENVIRONMENTAL MONITORING PROGRAM
GROUNDWATER ANALYTICAL DATA
TAL INORGANIC CONSTITUENTS AND INDICATOR PARAMETERS**

**REALM, INC. GREEN POINT LANDFILL
SAGINAW, MICHIGAN**

General Notes:

All concentrations in micrograms per liter ($\mu\text{g/L}$); equivalent to parts per billion (ppb), unless otherwise noted.

Dissolved Inorganics ($\mu\text{g/L}$)

Data from the 2004 sampling event are shaded.

-- = Sample was not analyzed for the listed constituent.

Location ID:

MW, X = Permanent monitoring wells.

WT = Water table monitoring wells.

S1 = Well screened at top of sand unit; increasing numbers indicate increased depth within the sand unit (e.g., S2, S3, S4).

Sample Type:

FS = Primary field sample, collected by BBL.

DUP = Duplicate field sample, collected by BBL.

Data Qualifiers:

B (inorganics) = Estimated result. Result is less than the reporting limit.

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

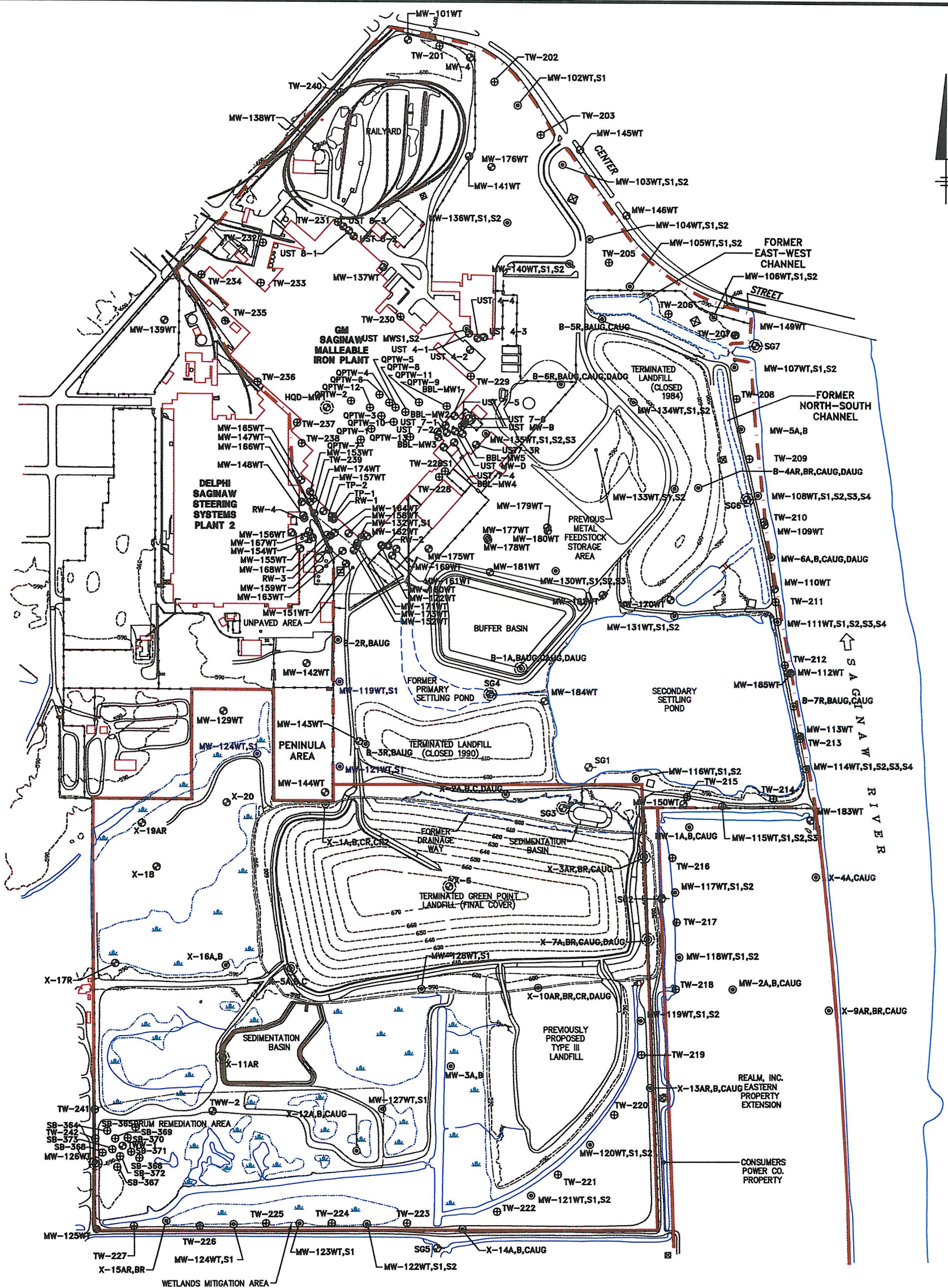
J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.

R = The sample results were rejected.

U = The constituent was analyzed for but not detected. The associated value is the constituent quantitation limit.

UJ = The constituent was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

* = Duplicate analysis not within control limits.



LEGEND

- GM SAGINAW MALLEABLE IRON PLANT PROPERTY LINE (APPROX.)
- REALM, INC. PROPERTY LINE (APPROX.)
- UNPAVED ROAD
- GROUND SURFACE ELEVATION CONTOUR (10 FT INTERVAL)
- FENCE LINE
- SWAMPY AREA
- MW-4 ● MONITORING WELL
- MW-102WT,S1 ● MONITORING WELL CLUSTER
- SG5 ● STAFF GAGE
- TW-203 ● TEMPORARY MONITORING WELL
- TP-2 □ PIEZOMETER
- RW-4 ● RECOVERY WELL
- X-6 ● ABANDONED MONITORING WELL
- SG3 ● ABANDONED STAFF GAGE
- MW-124WT,S1 ● MONITORING WELL CLUSTER (INSTALLED FOR INVESTIGATION OF PENINSULA AREA PROPERTY)

NOTES:

1. THIS PHOTOGRAMMETRIC BASE MAP FOR THE GM SAGINAW MALLEABLE IRON PLANT AND DELPHI SAGINAW STEERING SYSTEMS PLANT 2 PROPERTIES WAS PREPARED BY LOCKWOOD MAPPING, INC. OF ROCHESTER, NEW YORK. AERIAL PHOTOGRAPHY WAS CONDUCTED ON 11/11/94. ORIGINAL LOCKWOOD MAP WAS AT A SCALE OF 1"=100' AND WAS INTERPRETED FOR TWO-FOOT CONTOURS.
2. MOST SAMPLING LOCATIONS SURVEYED BY ATWELL-HICKS, INC. UTICA, MICHIGAN, FILE NO. M1014SU2, FILE DATE 3/22/96, REVISED 8/8/96. TEMPORARY WELLS SMI-SB-01A AND SMI-SB-03, AND WELLS MW04-119WT,S1, MW04-121WT,S1, AND MW04-124WT,S1 WERE NOT SURVEYED; LOCATIONS ARE APPROXIMATE.
3. VERTICAL DATUM REFERENCED TO NGVD OF 1929, HORIZONTAL DATUM REFERENCED TO MICHIGAN SPC-NAD 1983.
4. BASE MAP HAS BEEN MODIFIED TO INCORPORATE BUFFER BASIN, SEDIMENTATION BASINS, WETLANDS MITIGATION AREA, AND GREEN POINT LANDFILL (GPL) FINAL COVER FROM THE FINAL ENGINEERING DESIGN REPORT PREPARED BY BBL FOR THE GPL, DATED JANUARY, 1998.
5. PROPERTY BOUNDARY FOR REALM, INC. DIGITIZED FROM SPICER GROUP DRAWING NO. A-21854-1, DATED 3/27/98.
6. SOIL BORING LOCATIONS FOR SOUTHERN PROPERTY DIGITIZED FROM ECOLOGICAL RISK ASSESSMENT BY EXPONENT, DATED 9/18/00.



SAGINAW MALLEABLE IRON PLANT PROPERTY,
GREEN POINT LANDFILL,
AND DRUM REMEDIATION AREA
SAGINAW, MICHIGAN

ANNUAL REPORT

MONITORING WELL AND TEMPORARY WELL LOCATION MAP

BBL
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

FIGURE
1

TABLE 10-1

**SCHEDULE FOR GREEN POINT LANDFILL CLOSURE
AND SUBMITTAL OF MAJOR DELIVERABLES TO THE MDEQ**

**GENERAL MOTORS CORPORATION
SAGINAW MALLEABLE IRON PLANT PROPERTY, AND
REALM, INC. GREEN POINT LANDFILL AND DRUM REMEDIATION AREA
SAGINAW, MICHIGAN**

Deliverable	Submittal and Completion Schedule ***
1. Monthly Reports	Within 15 days of end of month for which report has been prepared; starting from end of first month following entry of Consent Judgment. [Ongoing]
2. Work Plan to Complete Supplemental Phase II Investigation at Former Tank #7	Work Plan was transmitted on February 9, 1996. [COMPLETED]
3. Draft RI Report	Report was submitted to MDEQ on January 21, 1999. [COMPLETED]
4. Final RI Report	Within 120 days of receiving comments from MDEQ on Draft RI Report: [COMPLETED]
5. Draft FS Report	Report was submitted to MDEQ on January 3, 2002. [COMPLETED]
6. Final FS Report	Report was submitted to MDEQ on July 29, 2003 [COMPLETED]
7. Green Point Landfill Combined Conceptual Engineering and 35% Design Report (including Subgrade Plan)	Report was submitted to MDEQ on February 5, 1996. [COMPLETED]
8. Green Point Landfill 90% Design Report	Report was submitted to MDEQ on October 28, 1997. [COMPLETED]
9. Green Point Landfill Final Design Report	Report was submitted to MDEQ in January 1998. [COMPLETED]
10. Green Point Landfill Subgrade Construction	Subgrade construction was completed in July 1997. [COMPLETED]
11. Green Point Landfill Cap Construction **	Cap construction was completed January 26, 2000. [COMPLETED]
12. Green Point Landfill "As-Built" Drawings	Green Point Landfill "As-Built" drawings were transmitted to the MDEQ on January 26, 2000 as part of the Final Cover System Certification Report [COMPLETED]
13. Draft RAP	Report was submitted to MDEQ on June 17, 2004. [MDEQ reviewing]
14. Final RAP	Within 120 days of receiving comments from MDEQ on Draft RAP.

Notes:

** Landfill cap construction consists of all remedial activities required in the final design for the landfill.

*** Transmittal dates refer to the dates that deliverables were sent out from preparers, and do not indicate the dates that deliverables were received by the MDEQ.