



**CONESTOGA-ROVERS
& ASSOCIATES**

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November 30, 2010

Ms. Sue Kaelber-Matlock
Michigan Department of Environmental Quality
Environmental Response Division
Saginaw Bay District Office
401 Ketchum Street, Suite B
Bay City, Michigan
U.S.A. 48708

Dear Ms. Kaelber-Matlock:

Re: Thirty-Fifth Semi-Annual Technical Progress Report Submittal
Motors Liquidation Corporation/State of Michigan
Bay City On-Site Consent Judgment
Civil Action No. 92-3740-CE

Enclosed is the Thirty-Fifth Semi-Annual Technical Progress Report (Semi-Annual Report) for the General Motors Corporation (GM)/State of Michigan Bay City On-Site Consent Judgment (Civil Action No. 92-3740-CE) for GM-Powertrain Group Bay City Plant located in Bay City, Michigan. The submission of this report is pursuant to Section XIX "Progress Reports" Paragraph 62.

As part of a 363 sale under Chapter 11 of the United States bankruptcy code, a new company, General Motors Company, was formed by selling a substantial portion of General Motors Corporation assets to General Motors Company. Those assets sold to General Motors Company will include property with an operating manufacturing facility known as Bay City Powertrain (BCPT). The BCPT facility property is adjacent to property formerly owned by REALM, a subsidiary of General Motors Corporation, which changed its name to Motors Liquidation Company (MLC) at the time of the asset sale. The former REALM property is now referred to as MLC property.

This Semi-Annual Report covers the MLC Property (former Machine Storage Area, Crotty Street Channel, and the former Undeveloped Area) for the time period from May 16, 2010 through November 15, 2010, unless otherwise noted in the report. Included as part of this MLC submittal, as applicable, are descriptions of actions related to the implementation of the



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Feasibility Study/Remedial Action Plan (FS/RAP), Interim Response Actions including End-Of Pipe Treatment and Recirculation Implementation, and Operation, Maintenance, and Monitoring activities. The semi-annual report summarizes activities related to these action plans, outlines project status, and details any difficulties encountered during the implementation of the action plans.

1.0 SUMMARY OF ON-GOING ACTIVITIES AND PROJECT STATUS

The following sections summarize the activities performed related to implementation of the RAP and Interim Response Actions and details any difficulties encountered during the implementation of the action plans.

1.1 REMEDIAL ACTION PLAN

MLC is currently implementing RAP operation and maintenance activities for the former Machine Storage Area, Crotty Street Channel, and former Undeveloped Area.

1.1.1 OPERATION AND MAINTENANCE ACTIVITIES

An initial Operation, Maintenance, and Monitoring Plan (O&M Plan) was submitted in November 2000 to the MDEQ. Revised O&M Plan sections were submitted to the MDEQ on June 2001, conditionally approved by the MDEQ on November 27, 2001, and the final O&M Plan was submitted in January 2002 and subsequently approved by the MDEQ. Pursuant to this plan, O&M activities are being conducted.

1.1.2 OPERATION AND MAINTENANCE ACTIVITIES - GROUNDWATER EXTRACTION SYSTEM

Table 1 presents Saginaw River water levels measured during the monthly inspections, as well as the corresponding daily, weekly, and monthly river water level averages at the United States Geological Survey (USGS) station - 04157065 Saginaw River at Weadock Road at Essexville, Michigan. Extraction well details and water elevations are presented in Tables 2 and 3, respectively. Monthly maintenance activity checklists are presented in Attachment A.

Each of the groundwater extraction systems were running continuously, during the 6-month period covered by this report.



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Approximately 2 of the 10 pumps are cleaned on average each month. Pumps are removed from the well, disassembled, soaked in a mixture of residential grade CLR® Calcium Lime Rust Remover and water, reassembled, and stored for re-use. Pumps are replaced with spares to minimize down time.

1.1.3 SAGINAW RIVER LEVELS AT ESSEXVILLE, MICHIGAN

Saginaw River water levels have been recorded downstream from the MLC property at Essexville by the National Oceanic and Atmospheric Administration (NOAA) since 1977. Due to the unavailability of the data from the NOAA website, data was obtained from USGS station (04157065 Saginaw River at Weadock Road at Essexville, MI) and used for water elevation data of the Saginaw River, as of November 1, 2005.

Based on the combined NOAA and USGS data from 1977 to October 31, 2010, the average water level at Essexville is 578.96 feet (ft) above mean sea level (AMSL). Recent water levels continue to be below the average, as the current water level at Essexville measured on October 15, 2010 was 577.25 ft AMSL.

1.1.4 GROUNDWATER MONITORING ACTIVITIES

The tenth annual ground water sampling event (August 2010) was conducted during this reporting period. Figure 1 presents the locations sampled for chemical analysis. Figure 2 presents the location where groundwater and surface water elevations are monitored. Groundwater elevations are presented in Tables 2 and 3 for extraction wells and monitoring wells, respectively. Shallow groundwater contours were developed from water levels collected between August 10 and August 16, 2010 and are presented on Figure 3.

Table 4 presents the August 2010 Analytical Results Summary. A summary of the past 5 years of analytical groundwater data is presented in Attachment B and the laboratory data reports and data validation report for the August 2010 sampling round are presented in Attachment C.

1.2 INTERIM RESPONSE ACTIONS

No interim response actions are proposed at this time.



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2.0 PROPOSED MODIFICATIONS TO MONITORING PROGRAM

Ten rounds of sampling have been completed to date as part of the long-term monitoring program. MLC proposes to remove monitoring wells/parameters from the program based on the following rationale: PCBs analysis can be dropped if there are 4 consecutive rounds of non-detect concentrations and Metals analysis can be dropped if there are 4 consecutive rounds of reporting below the Michigan Residential Drinking Water Criteria as there have been four consecutive rounds of non-detect results. The following monitoring wells/parameters are proposed to be dropped from the program.

- CB-2 (PCBs)
- MW102D3 (PCBs)
- MW301D1 (PCBs)
- MW301D3 (PCBs)
- MW501S (PCBs, Metals)
- MW503D (PCBs)
- MW503S (PCBs, Metals)
- MW504S (Metals)
- MW506S (PCBs, Metals)

Should MLC receive no response from the MDEQ before the next sampling event on the removal of the above monitoring wells, MLC will proceed with removing the monitoring wells from the program. Table 5 presents a summary of the revised monitoring program.

3.0 SCHEDULE

All activities have been completed within the required time frames.



**CONESTOGA-ROVERS
& ASSOCIATES**

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Should you have any questions on the above, please do not hesitate to contact us.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Michael R. Tomka, P.E.

Reference No. 012610

JP/sc/7

Encl.

cc: John Leone, Esq. - Assistant Attorney General
Robert Belleman, City of Bay City
Jennifer Wegener, MDEQ
Doug Wagner, MLC

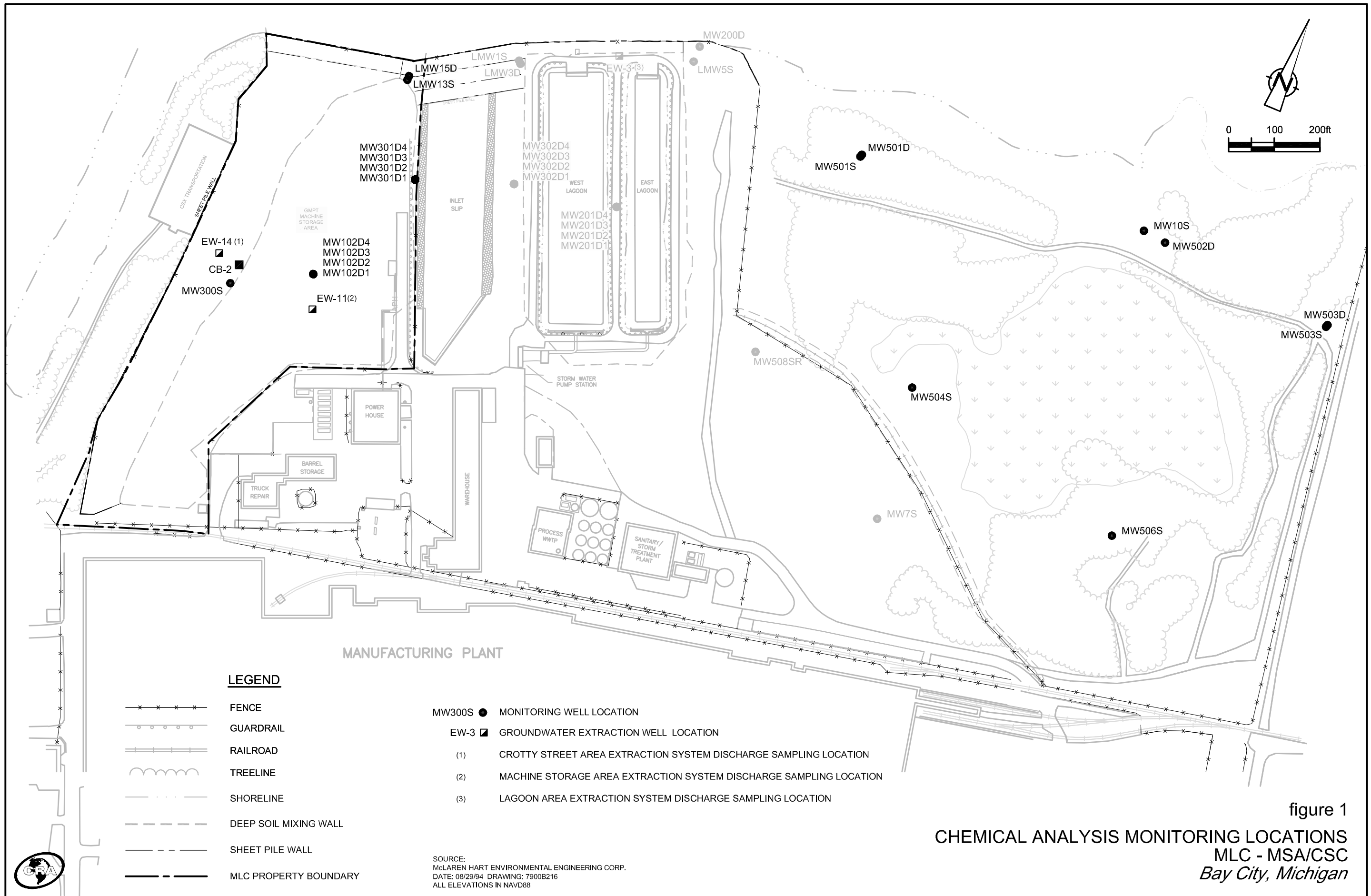


figure 1
CHEMICAL ANALYSIS MONITORING LOCATIONS
 MLC - MSA/CSC
Bay City, Michigan

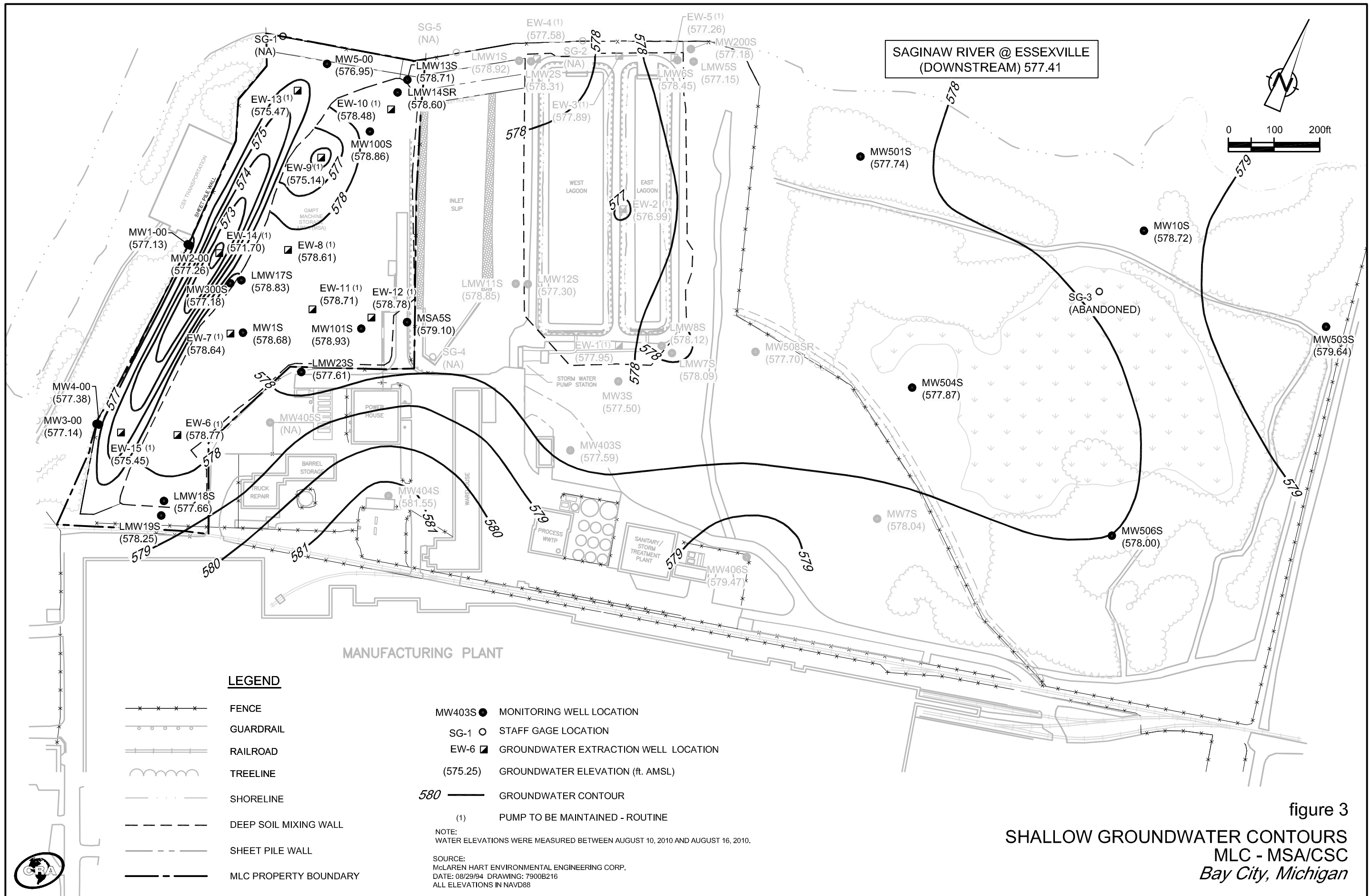


figure 3
SHALLOW GROUNDWATER CONTOURS
MLC - MSA/CSC
Bay City, Michigan

TABLE 1

**RIVER WATER LEVELS
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN**

<i>Location</i>	<i>26-May-10</i>	<i>30-Jun-10</i>	<i>16-Jul-10</i>	<i>24-Aug-10</i>	<i>15-Sep-10</i>	<i>28-Oct-10</i>
<u>Crotty Street Channel Containment Area</u>						
SG-1 - Saginaw River	(1)	(1)	(1)	(1)	(1)	(1)
USGS Station - Essexville, MI						
<i>Daily Average Saginaw River at Essexville, MI</i>	577.29	577.88	577.54	577.59	577.44	576.86
<i>Weekly Average Water Level</i>	577.37	577.77	577.69	577.69	577.35	576.66
<i>Monthly Average Water Level</i>	577.35	577.55	577.74	577.61	577.28	577.07

Note:

(1) Staff Gage Missing. To be replaced.

TABLE 2

**GROUNDWATER EXTRACTION SYSTEM WATER ELEVATIONS
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN**

<i>Extraction Well</i>	<i>Reference Elevation (ft AMSL)</i>	<i>Bottom of Well Elevation (ft AMSL)</i>	<i>Top ICU (ft AMSL)</i>	<i>Water Elevation (ft AMSL) May 26, 2010</i>	<i>Water Elevation (ft AMSL) June 30, 2010</i>	<i>Water Elevation (ft AMSL) July 16, 2010</i>	<i>Water Elevation (ft AMSL) August 10, 2010</i>	<i>Elevation (ft AMSL) September 13, 2010</i>	<i>Water Elevation (ft AMSL) October 28, 2010 (1)</i>
<i>Machine Storage Area</i>									
EW-6	589.74	570.39	572.39	577.96	578.38	578.49	578.77	578.06	NA
EW-7	587.99	571.14	571.64	578.72	578.66	578.64	578.64	578.63	NA
EW-8	588.34	572.29	573.29	578.65	578.62	578.63	578.61	578.56	NA
EW-9	588.04	572.19	573.69	574.21	575.53	575.31	575.14	578.25	NA
EW-10	587.77	570.82	572.32	573.31	577.84	578.22	578.48	578.31	NA
EW-11	591.51	571.91	572.56	576.24	578.76	578.72	578.71	578.68	NA
EW-12	586.42	571.57	573.07	579.24	579.35	578.95	578.78	578.57	NA
<i>Crotty Street Channel Containment Area</i>									
EW-13	584.33	571.86	NA	575.71	575.84	575.45	575.47	575.63	NA
EW-14	582.42	569.92	NA	575.01	570.93	571.33	571.70	572.95	NA
EW-15	583.71	571.61	NA	575.75	575.47	575.46	575.45	575.60	NA

Note:

(1) Key broke in lock for extraction well, not able to access any of the extraction wells to collect measurements

TABLE 3

**MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
GM POWERTRAIN DIVISION, BAY CITY, MICHIGAN**

Well Location	Top of Riser Elevation (ft AMSL)	Modified Top of Riser Elevation (ft AMSL)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)								
								03/08/99	03/19/99	04/20/99	05/20/99	06/22/99	07/20/99	09/07/99	09/27/99	10/25/99
Machine Storage Area (MSA)																
LMW13S	590.02	589.4	19.22	10	SS	PVC	2	582.56	583.17	582.65	581.42	579.23	579.68	580.02	580.55	581.26
LMW17S	589.77	589.31	19.83	10	SS	PVC	2	581.58	581.57	580.25	579.77	579.65	579.43	579.19	578.98	579.69
LMW18S	591.24	592.33	22.52	10	SS	PVC	2	579.44	579.44	579.78	579.39	579.45	579.57	577.89	577.51	577.62
LMW19S	589.22	588.61	19.32	10	SS	PVC	2	580.66	580.90	580.94	580.51	580.52	580.42	580.01	579.53	579.95
MW1S (formerly LW-1)	591.94	591.08	12.95	2	SS	SS	2	584.12	584.35	579.49	579.29	578.64	--	578.58	578.51	579.11
MW100S (formerly EW-2)	590.03	591.97	14.44	10	SS	SS	2	582.71	582.53	579.96	579.30	579.07	579.33	--	578.57	578.77
MW101S (formerly LW-2)	594.17	593.34	19.22	10	SS	SS	2	586.44	586.50	580.44	579.19	578.71	578.83	579.18	579.04	579.81
MW102D1	594.13	594.86	30.99	10	SS	SS	2	582.32	582.38	579.34	579.27	576.82	579.69	578.29	577.64	577.47
MW102D2	594.08	594.93	36.21	10	SS	SS	2	581.93	582.03	579.39	579.34	576.78	579.68	578.15	577.50	577.33
MW102D3	594.14	594.91	46.74	10	SS	SS	2	581.84	581.92	579.35	579.25	576.80	579.66	578.20	577.55	577.35
MW102D4 (replacement)	594.06	594.9	56.85	10	SS	SS	2	581.45	581.54	579.21	579.13	576.70	579.56	578.05	577.40	577.21
MW300S	587.71	587.12	15.06	10	SS	SS	2	579.51	579.37	579.86	579.51	579.95	579.69	579.33	578.90	578.87
LMW14SR (Replaced LMW14S Jan/00)	589.65	589.01	13.00	7	SS	SS	2	582.11	582.10	581.12	580.40	578.55	579.97	578.88	578.30	578.58
Perimeter Banks (PB)																
LMW15D	589.06	588.34	32.8	10	SS	PVC	2	579.71	579.86	579.23	579.21	577.88	579.68	579.81	578.93	578.49
MW301D1	590.15	589.54	27.50	10	SS	SS	2	579.29	579.40	579.32	579.22	575.75	579.73	579.67	578.99	578.63
MW301D2	589.77	589.16	37.24	10	SS	SS	2	579.23	579.35	579.28	579.19	576.11	579.69	579.62	578.93	578.57

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MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
GM POWERTRAIN DIVISION, BAY CITY, MICHIGAN

Well Location	Top of Riser Elevation (ft AMSL)	Modified Top of Riser Elevation (ft AMSL)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)									
								03/08/99	03/19/99	04/20/99	05/20/99	06/22/99	07/20/99	09/07/99	09/27/99	10/25/99	
								MW301D3 (formerly MW-33-A2)	589.83	589.22	44.04	10	SS	SS	2	579.23	579.38
MW301D4	589.92	589.33	55.95	10	SS	SS	2	579.18	579.37	579.26	579.17	576.08	579.62	579.52	578.85	578.47	
Support Facilities Area (SFA)																	
MSA5S	589.28	588.6	18.98			SS	2	580.54	580.33	580.83	579.71	577.24	579.38	581.84	581.74	581.77	
Undeveloped Area (UA)																	
MW10S	589.85	589.17	12.19			PVC	2	583.01	583.05	580.56	580.45	580.00	579.77	579.37	578.97	579.23	
MW501D	584.54	584.05	54.63	10	SS	SS	2	578.51	578.56	578.49	578.47	577.68	578.74	578.52	577.88	577.68	
MW501S	584.39	583.62	14.86	10	SS	SS	2	579.80	579.79	579.91	579.72	579.25	579.25	578.82	578.35	579.06	
MW502D	589.82	589.28	57.98	10	SS	SS	2	579.68	579.57	578.45	578.37	577.88	578.60	578.36	577.75	577.59	
MW503D	588.94	588.54	56.60	10	SS	SS	2	578.60	578.45	578.49	578.39	578.02	578.60	578.38	577.78	577.63	
MW503S	589.09	588.69	18.97	10	SS	SS	2	580.52	580.38	580.67	580.43	579.49	579.15	578.64	578.39	578.85	
MW504S	586.2	585.54	14.33	10	SS	SS	2	581.51	581.65	n/a	579.70	579.39	579.20	578.76	578.47	579.15	
MW506S	589.48	588.85	14.22	10	SS	SS	2	582.47	582.61	580.93	580.28	578.22	579.00	578.48	578.24	578.85	
Gage 3	584.76	579.24	--	--	--	--	--	584.06	584.06	584.21	584.26	584.26	584.26	Dry	Dry	Dry	
Crotty Street Channel																	
MW1-00	588.87	588.26	12.00	7	SS	SS	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
MW2-00	590.09	589.29	18.00	7	SS	SS	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
MW3-00	587.92	588.4	12.50	7	SS	SS	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
MW4-00	590.67	589.65	19.00	7	SS	SS	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
MW5-00	589.73	588.89	13.00	7	SS	SS	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Gage 1	569.43	569.43	--	--	--	--	--	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	
Saginaw River																	
NOAA/NOS Station - Essexville, MI ⁽⁶⁾	--	--	--	--	--	--	--	578.34	578.55	578.32	578.37	578.51	578.87	578.59	578.04	577.35	

Notes:

- (1) Approximate value
 - (2) Lock Needs Replacing
 - (3) Gage needs to be relocated
 - (4) Could not open due to liner attachment
 - (5) Could not read due to accumulation of snow and ice
 - (6) Water Level is taken from mean hourly data over a 24 hour period
- n/a Groundwater elevation not available

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Well Location	Top of Riser Elevation (ft AMSL)	Modified Top of Riser Elevation (ft AMSL)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)									
								11/24/99	1/4/00	2/2/00	2/28/00	3/29/00	4/26/00	5/30/00	6/30/00	7/18/2000	
<u>Machine Storage Area (MSA)</u>																	
LMW13S	590.02	589.4	19.22	10	SS	PVC	2	580.68	580.08	579.27	581.74	581.27	581.81	581.63	580.62	580.11	
LMW17S	589.77	589.31	19.83	10	SS	PVC	2	579.71	579.47	579.08	579.96	579.91	580.19	580.06	579.85	579.09	
LMW18S	591.24	592.33	22.52	10	SS	PVC	2	577.32	577.37	577.09	577.80	577.66	578.09	578.10	577.80	578.52	
LMW19S	589.22	588.61	19.32	10	SS	PVC	2	579.58	580.30	579.70	581.39	580.73	581.25	580.96	580.56	579.45	
MW1S (formerly LW-1)	591.94	591.08	12.95	2	SS	SS	2	579.15	579.07	579.05	579.18	579.28	579.29	579.26	579.31	578.34	
MW100S (formerly EW-2)	590.03	591.97	14.44	10	SS	SS	2	578.09	577.49	577.09	576.69	576.87	577.07	577.79	578.03	579.85	
MW101S (formerly LW-2)	594.17	593.34	19.22	10	SS	SS	2	579.65	579.61	579.61	579.86	579.21	580.14	580.39	580.22	579.02	
MW102D1	594.13	594.86	30.99	10	SS	SS	2	576.38	576.80	576.81	577.23	577.25	577.60	577.70	577.62	578.71	
MW102D2	594.08	594.93	36.21	10	SS	SS	2	576.24	576.67	576.80	577.08	577.12	577.44	577.58	577.48	578.67	
MW102D3	594.14	594.91	46.74	10	SS	SS	2	576.26	576.71	576.88	577.12	577.16	577.47	577.59	577.52	578.63	
MW102D4 (replacement)	594.06	594.9	56.85	10	SS	SS	2	576.12	576.56	575.70	576.98	577.01	577.34	577.45	577.38	578.55	
MW300S	587.71	587.12	15.06	10	SS	SS	2	579.91	579.27	578.55	No Access	579.73	580.18	579.89	n/a (4)	n/a (2)	
LMW14SR (Replaced LMW14S Jan/00)	589.65	589.01	13.00	7	SS	SS	2	Damaged	Damaged	578.58	578.55	578.99	578.91	579.22	579.32	579.19	
<u>Perimeter Banks (PB)</u>																	
LMW15D	589.06	588.34	32.8	10	SS	PVC	2	577.18	577.95	578.23	578.56	578.56	578.74	578.88	n/a (4)	578.43	
MW301D1	590.15	589.54	27.50	10	SS	SS	2	577.42	578.05	578.28	578.56	578.59	578.85	578.80	579.37	578.65	
MW301D2	589.77	589.16	37.24	10	SS	SS	2	577.35	577.99	578.22	578.51	578.54	578.77	578.89	578.80	578.56	

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**MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
GM POWERTRAIN DIVISION, BAY CITY, MICHIGAN**

Well Location	Top of Riser Elevation (ft AMSL)	Modified Top of Riser Elevation (ft AMSL)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)								
								11/24/99	1/4/00	2/2/00	2/28/00	3/29/00	4/26/00	5/30/00	6/30/00	7/18/2000
MW301D3 (formerly MW-33-A2)	589.83	589.22	44.04	10	SS	SS	2	577.32	577.96	578.18	578.48	578.49	578.74	578.85	578.80	578.56
MW301D4	589.92	589.33	55.95	10	SS	SS	2	577.27	577.90	578.14	578.43	578.45	578.69	578.76	578.78	578.48
<u>Support Facilities Area (SFA)</u>																
MSA5S	589.28	588.6	18.98			SS	2	581.70	581.42	580.96	582.13	580.62	582.37	582.22	581.17	581.32
<u>Undeveloped Area (UA)</u>																
MW10S	589.85	589.17	12.19			PVC	2	579.07	579.11	578.80	579.67	579.65	580.59	580.79	580.11	578.75
MW501D	584.54	584.05	54.63	10	SS	SS	2	576.42	577.18	577.26	577.62	577.44	577.87	577.99	577.82	577.88
MW501S	584.39	583.62	14.86	10	SS	SS	2	578.86	578.93	575.69	579.82	579.11	579.66	579.89	579.22	577.90
MW502D	589.82	589.28	57.98	10	SS	SS	2	576.43	577.09	577.14	577.58	577.43	577.87	577.97	577.96	577.49
MW503D	588.94	588.54	56.60	10	SS	SS	2	576.56	577.18	577.17	577.69	577.46	578.06	578.15	578.07	577.70
MW503S	589.09	588.69	18.97	10	SS	SS	2	578.66	579.00	578.77	580.38	579.91	580.76	581.37	580.30	579.00
MW504S	586.2	585.54	14.33	10	SS	SS	2	579.08	579.24	578.87	580.16	579.43	579.94	580.31	579.49	578.07
MW506S	589.48	588.85	14.22	10	SS	SS	2	578.59	578.79	578.59	580.07	579.73	580.55	581.12	580.04	578.58
Gage 3	584.76	579.24	--	--	--	--	--	Dry	Dry	Dry	584.16	584.16	584.06	583.76	583.76	580.24
<u>Crotty Street Channel</u>																
MW1-00	588.87	588.26	12.00	7	SS	SS	2	n/a	n/a	577.89	578.89	578.04	578.42	578.68	579.57	577.71
MW2-00	590.09	589.29	18.00	7	SS	SS	2	n/a	n/a	579.11	578.11	577.26	577.65	Not Accessible	578.67	577.65
MW3-00	587.92	588.4	12.50	7	SS	SS	2	n/a	n/a	578.27	579.25	578.40	578.79	579.05	578.46	578.68
MW4-00	590.67	589.65	19.00	7	SS	SS	2	n/a	n/a	577.03	578.03	577.18	577.60	Not Accessible	578.87	577.62
MW5-00	589.73	588.89	13.00	7	SS	SS	2	n/a	n/a	577.63	578.36	578.66	578.86	579.12	n/a (4)	n/a (4)
Gage 1	569.43	569.43	--	--	--	--	--	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed (3)	Destroyed (3)
<u>Saginaw River</u>																
<u>NOAA/NOS Station - Essexville, MI</u> ⁽⁶⁾	--	--	--	--	--	--	--	576.54	577.15	577.14	577.24	577.37	577.42	577.48	577.81	578.27

Notes:

- (1) Approximate value
 - (2) Lock Needs Replacing
 - (3) Gage needs to be relocated
 - (4) Could not open due to liner attachment
 - (5) Could not read due to accumulation of snow and ice
 - (6) Water Level is taken from mean hourly data over a 24 hour period
- n/a Groundwater elevation not available

TABLE 3

**MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
GM POWERTRAIN DIVISION, BAY CITY, MICHIGAN**

Well Location	Top of Riser Elevation (ft AMSL)	Modified Top of Riser Elevation (ft AMSL)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)								
								8/29/2000	9/11/2000	10/31/2000	11/30/2000	12/15/2000	1/24/2001	2/23/2001	3/19/2001	8/13/2001
<u>Machine Storage Area (MSA)</u>																
LMW13S	590.02	589.4	19.22	10	SS	PVC	2	578.90	578.90	578.63	578.35	578.06	578.19	578.17	577.85	578.68
LMW17S	589.77	589.31	19.83	10	SS	PVC	2	579.20	579.24	578.93	579.17	578.79	579.06	578.83	578.74	578.68
LMW18S	591.24	592.33	22.52	10	SS	PVC	2	579.03	578.67	578.52	578.29	578.18	578.39	578.61	578.22	578.10
LMW19S	589.22	588.61	19.32	10	SS	PVC	2	580.13	579.34	579.38	579.56	(5)	579.59	579.96	579.56	578.79
MW1S (formerly LW-1)	591.94	591.08	12.95	2	SS	SS	2	578.38	578.43	578.57	578.40	578.36	578.44	(5)	578.41	578.51
MW100S (formerly EW-2)	590.03	591.97	14.44	10	SS	SS	2	579.66	579.57	579.33	579.05	578.65	578.87	578.64	578.36	578.93
MW101S (formerly LW-2)	594.17	593.34	19.22	10	SS	SS	2	579.04	578.99	578.91	579.03	578.84	579.18	578.96	578.84	578.76
MW102D1	594.13	594.86	30.99	10	SS	SS	2	578.15	578.16	577.87	577.67	577.62	577.47	577.40	577.61	578.18
MW102D2	594.08	594.93	36.21	10	SS	SS	2	578.13	578.13	577.85	577.65	577.61	577.45	577.39	577.60	578.15
MW102D3	594.14	594.91	46.74	10	SS	SS	2	578.09	578.08	577.80	577.60	577.56	577.40	577.34	577.56	578.11
MW102D4 (replacement)	594.06	594.9	56.85	10	SS	SS	2	578.02	578.00	577.73	577.53	577.47	577.33	577.27	577.49	578.03
MW300S	587.71	587.12	15.06	10	SS	SS	2	578.24	578.16	578.27	578.84	578.07	578.99	578.67	578.84	577.00
LMW14SR (Replaced LMW14S Jan/00)	589.65	589.01	13.00	7	SS	SS	2	578.21	578.16	578.13	578.04	577.54	577.88	577.77	577.38	578.23
<u>Perimeter Banks (PB)</u>																
LMW15D	589.06	588.34	32.8	10	SS	PVC	2	578.03	577.94	577.63	577.48	577.33	577.22	577.12	577.37	578.06
MW301D1	590.15	589.54	27.50	10	SS	SS	2	578.88	(5)	(5)	578.34	578.25	578.09	578.03	578.28	578.89
MW301D2	589.77	589.16	37.24	10	SS	SS	2	578.47	(5)	(5)	577.92	577.81	577.67	577.62	577.86	578.48

TABLE 3

MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
GM POWERTRAIN DIVISION, BAY CITY, MICHIGAN

Well Location	Top of Riser Elevation (ft AMSL)	Modified Top of Riser Elevation (ft AMSL)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)									
								8/29/2000	9/11/2000	10/31/2000	11/30/2000	12/15/2000	1/24/2001	2/23/2001	3/19/2001	8/13/2001	
MW301D3 (formerly MW-33-A2)	589.83	589.22	44.04	10	SS	SS	2	578.32	(5)	(5)	577.78	577.67	577.52	577.59	577.72	578.53	
MW301D4	589.92	589.33	55.95	10	SS	SS	2	578.48	(5)	(5)	577.93	577.82	577.68	577.63	577.86	578.48	
Support Facilities Area (SFA)																	
MSA5S	589.28	588.6	18.98			SS	2	580.41	580.56	580.34	580.65	580.46	580.62	580.42	580.65	579.74	
Undeveloped Area (UA)																	
MW10S	589.85	589.17	12.19			PVC	2	578.46	578.22	578.21	578.24	578.22	578.29	579.64	579.41	577.57	
MW501D	584.54	584.05	54.63	10	SS	SS	2	577.35	577.30	576.91	576.70	576.60	576.48	576.50	576.78	577.25	
MW501S	584.39	583.62	14.86	10	SS	SS	2	577.97	577.62	577.95	578.12	578.15	578.06	578.59	578.81	576.63	
MW502D	589.82	589.28	57.98	10	SS	SS	2	577.24	577.11	576.82	576.58	576.50	576.40	576.49	576.72	577.16	
MW503D	588.94	588.54	56.60	10	SS	SS	2	577.45	577.36	576.96	576.83	576.69	576.60	576.76	576.96	577.36	
MW503S	589.09	588.69	18.97	10	SS	SS	2	578.58	578.29	578.20	578.47	578.35	578.41	580.31	580.42	577.53	
MW504S	586.2	585.54	14.33	10	SS	SS	2	578.25	577.82	578.19	578.43	578.26	578.41	577.97	579.33	576.76	
MW506S	589.48	588.85	14.22	10	SS	SS	2	578.19	577.95	577.95	578.21	578.03	578.25	579.68	580.07	577.18	
Gage 3	584.76	579.24	--	--	--	--	--	Dry	Dry	Dry	Dry	Dry (5)	(5)	(5)	Dry	Dry	
Crotty Street Channel																	
MW1-00	588.87	588.26	12.00	7	SS	SS	2	577.60	577.36	577.45	577.75	577.49	577.81	578.14	578.61	576.72	
MW2-00	590.09	589.29	18.00	7	SS	SS	2	577.59	577.36	577.45	577.77	577.51	577.82	578.26	578.69	576.76	
MW3-00	587.92	588.4	12.50	7	SS	SS	2	577.60	577.37	577.45	577.74	577.48	577.79	578.26	578.62	576.70	
MW4-00	590.67	589.65	19.00	7	SS	SS	2	577.57	577.34	577.47	577.78	577.51	577.84	578.30	578.67	576.79	
MW5-00	589.73	588.89	13.00	7	SS	SS	2	578.01	577.91	577.31	576.90	576.91	576.97	577.86	577.06	577.02	
Gage 1	569.43	569.43	--	--	--	--	--	578.05	577.93	577.43	577.33	(5)	(5)	(5)	(5)	578.12	
Saginaw River																	
<u>NOAA/NOS Station - Essexville, MI</u> ⁽⁶⁾	--	--	--	--	--	--	--	577.76	577.49	577.23	577.02	576.78	576.77	576.74	576.80	577.91	

Notes:

- (1) Approximate value
 - (2) Lock Needs Replacing
 - (3) Gage needs to be relocated
 - (4) Could not open due to liner attachment
 - (5) Could not read due to accumulation of snow and ice
 - (6) Water Level is taken from mean hourly data over a 24 hour period
- n/a Groundwater elevation not available

TABLE 3

**MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
GM POWERTRAIN DIVISION, BAY CITY, MICHIGAN**

Well Location	Top of Riser Elevation (ft AMSL)	Modified Top of Riser Elevation (ft AMSL)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)								
								8/26/2002	7/28/2003	8/24/2004	8/29/2005	8/16/2006	8/20/2007	8/19/2008	8/27/2009	8/16/2010
<u>Machine Storage Area (MSA)</u>																
LMW13S	590.02	589.4	19.22	10	SS	PVC	2	582.05	578.45	579.40	578.14	578.23	577.67	578.21	579.31	578.71
LMW17S	589.77	589.31	19.83	10	SS	PVC	2	578.91	582.73	578.80	578.31	578.63	577.58	578.58	578.81	578.83
LMW18S	591.24	592.33	22.52	10	SS	PVC	2	578.85	578.35	578.45	578.23	578.00	578.13	577.62	577.99	577.66
LMW19S	589.22	588.61	19.32	10	SS	PVC	2	579.93	579.24	579.21	578.85	578.45	579.71	578.45	578.53	578.25
MW1S (formerly LW-1)	591.94	591.08	12.95	2	SS	SS	2	578.48	578.56	578.63	577.58	n/a	578.48	580.93	579.71	578.68
MW100S (formerly EW-2)	590.03	591.97	14.44	10	SS	SS	2	578.91	577.27	579.15	578.57	578.38	578.01	578.40	579.27	578.86
MW101S (formerly LW-2)	594.17	593.34	19.22	10	SS	SS	2	579.12	578.87	578.82	577.95	578.31	578.39	578.49	578.78	578.93
MW102D1	594.13	594.86	30.99	10	SS	SS	2	578.98	578.25	579.02	578.30	578.30	578.04	578.83	579.42	578.39
MW102D2	594.08	594.93	36.21	10	SS	SS	2	578.95	578.24	579.01	578.33	578.25	578.03	578.93	579.40	578.37
MW102D3	594.14	594.91	46.74	10	SS	SS	2	578.93	578.20	578.98	578.31	578.25	577.98	578.89	579.41	579.34
MW102D4 (replacement)	594.06	594.9	56.85	10	SS	SS	2	578.86	578.16	578.94	578.25	578.22	577.98	578.76	579.33	578.29
MW300S	587.71	587.12	15.06	10	SS	SS	2	578.53	577.77	577.05	578.34	576.81	576.30	579.26	578.22	577.18
LMW14SR (Replaced LMW14S Jan/00)	589.65	589.01	13.00	7	SS	SS	2	578.45	578.13	576.94	577.50	577.97	576.98	577.96	579.19	578.60
<u>Perimeter Banks (PB)</u>																
LMW15D	589.06	588.34	32..8	10	SS	PVC	2	578.83	578.04	579.34	578.24	578.22	577.89	578.12	579.45	578.21
MW301D1	590.15	589.54	27.50	10	SS	SS	2	579.66	578.90	580.02	579.05	578.94	578.72	579.03	579.96	578.96
MW301D2	589.77	589.16	37.24	10	SS	SS	2	579.25	578.49	579.59	578.62	578.55	578.33	578.64	579.56	578.60

TABLE 3

MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
GM POWERTRAIN DIVISION, BAY CITY, MICHIGAN

Well Location	Top of Riser Elevation (ft AMSL)	Modified Top of Riser Elevation (ft AMSL)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)									
								8/26/2002	7/28/2003	8/24/2004	8/29/2005	8/16/2006	8/20/2007	8/19/2008	8/27/2009	8/16/2010	
MW301D3 (formerly MW-33-A2)	589.83	589.22	44.04	10	SS	SS	2	579.10	578.36	579.47	578.52	578.44	578.20	578.41	579.44	578.47	
MW301D4	589.92	589.33	55.95	10	SS	SS	2	579.28	578.57	579.71	578.80	578.69	578.48	578.75	579.70	578.74	
<u>Support Facilities Area (SFA)</u>																	
MSA5S	589.28	588.6	18.98			SS	2	580.65	580.55	580.57	579.76	579.28	580.10	578.04	580.10	579.10	
<u>Undeveloped Area (UA)</u>																	
MW10S	589.85	589.17	12.19			PVC	2	579.29	578.98	578.75	578.16	578.13	577.94	578.75	579.25	578.72	
MW501D	584.54	584.05	54.63	10	SS	SS	2	578.08	577.34	578.54	577.56	577.57	577.17	577.34	578.63	577.76	
MW501S	584.39	583.62	14.86	10	SS	SS	2	578.66	575.72	578.32	577.07	577.11	577.16	578.33	578.56	577.74	
MW502D	589.82	589.28	57.98	10	SS	SS	2	577.96	577.13	578.33	577.40	577.42	577.05	577.97	578.15	577.67	
MW503D	588.94	588.54	56.60	10	SS	SS	2	578.74	577.98	579.07	578.12	578.16	577.93	578.81	579.88	578.87	
MW503S	589.09	588.69	18.97	10	SS	SS	2	579.89	579.62	579.63	579.11	579.17	578.98	579.97	580.11	579.64	
MW504S	586.2	585.54	14.33	10	SS	SS	2	578.91	579.00	577.95	577.26	577.31	577.34	578.46	578.73	577.87	
MW506S	589.48	588.85	14.22	10	SS	SS	2	578.53	578.07	578.14	577.62	577.66	577.50	578.27	578.74	578.00	
Gage 3	584.76	579.24	--	--	--	--	--	Dry	Dry	Dry	Dry	abandoned	abandoned	abandoned	abandoned	abandoned	
<u>Crotty Street Channel</u>																	
MW1-00	588.87	588.26	12.00	7	SS	SS	2	578.44	577.78	578.37	577.09	576.92	577.11	578.74	578.95	577.13	
MW2-00	590.09	589.29	18.00	7	SS	SS	2	578.03	577.60	577.50	577.23	576.97	577.09	578.83	578.40	577.26	
MW3-00	587.92	588.4	12.50	7	SS	SS	2	578.38	577.77	578.51	577.13	576.94	577.19	578.74	579.01	577.14	
MW4-00	590.67	589.65	19.00	7	SS	SS	2	578.07	577.68	577.59	577.34	577.07	577.21	578.95	578.55	577.38	
MW5-00	589.73	588.89	13.00	7	SS	SS	2	576.72	576.28	576.91	577.85	576.72	576.55	578.82	578.04	576.95	
Gage 1	569.43	569.43	--	--	--	--	--	578.73	577.93	579.63	578.43	578.33	577.83	578.55	n/a	n/a	
<u>Saginaw River</u>																	
<u>NOAA/NOS Station - Essexville, MI ⁽⁶⁾</u>	--	--	--	--	--	--	--	578.50	576.83	578.52	578.32	577.41	577.09	577.97	578.34	577.41	

Notes:

- (1) Approximate value
- (2) Lock Needs Replacing
- (3) Gage needs to be relocated
- (4) Could not open due to liner attachment
- (5) Could not read due to accumulation of snow and ice
- (6) Water Level is taken from mean hourly data over a 24 hour period
- n/a Groundwater elevation not available

TABLE 4

ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER SAMPLING
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:		<i>Crotty Street Channel</i>	<i>Crotty Street Channel</i>	<i>Crotty Street Channel</i>	<i>Crotty Street Channel</i>	<i>Machine Storage Area</i>
Sample Location:		CB-2	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge
Sample ID:		W-12610-032410-SSH-CB10-1	W-12610-043010-SSH-CSC-4	GW-12610-081910-SSH-026	GW-12610-081910-SSH-027	W-12610-032410-SSH-MSA10-2
Sample Date:		3/24/2010	4/30/2010	8/19/2010	8/19/2010 (Duplicate)	3/24/2010
Parameters:	Units					
<i>Metals</i>						
Antimony	mg/L	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-
Barium	mg/L	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-
Copper	mg/L	-	-	-	-	-
Lead	mg/L	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-
Silver	mg/L	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-
Tin	mg/L	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-
<i>Polychlorinated Biphenyls</i>						
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.59 J	0.62	0.63	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U

Notes:

J - Estimated concentration.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- - Not analyzed.

TABLE 4
ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER SAMPLING
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Machine Storage Area		Machine Storage Area		Machine Storage Area		Machine Storage Area	
Sample Location:	MSA GW Ext. Sys. Discharge		MW102D1		MW102D2		MW102D3	
Sample ID:	GW-12610-081910-SSH-028		GW-12610-081710-JY-001		GW-12610-081710-JY-002		GW-12610-081710-JY-003	
Sample Date:	8/19/2010		8/17/2010		8/17/2010		8/17/2010	
Parameters:	Units							
Metals								
Antimony	mg/L	-	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-
Polychlorinated Biphenyls								
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.31	0.13 J	0.20 U	0.084 J	0.14 J	
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	
Aroclor-1260 (PCB-1260)	µg/L	0.17 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	

Notes:

J - Estimated concentration.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- - Not analyzed.

TABLE 4
ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER SAMPLING
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:		Machine Storage Area	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks
Sample Location:		MW300S	LMW13S	LMW15D	MW301D1	MW301D2	MW301D3
Sample ID:		GW-12610-081810-JY-012	GW-12610-081710-JY-009	GW-12610-081710-JY-010	GW-12610-081710-JY-005	GW-12610-081710-JY-006	GW-12610-081710-JY-007
Sample Date:		8/18/2010 (Duplicate)	8/17/2010	8/17/2010	8/17/2010	8/17/2010	8/17/2010
Parameters:	Units						
<i>Metals</i>							
Antimony	mg/L	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-
<i>Polychlorinated Biphenyls</i>							
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.16 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	1.1	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

J - Estimated concentration.

U - Not present at or above
the associated value.UJ - Estimated reporting
limit.

- - Not analyzed.

TABLE 4
ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER SAMPLING
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Perimeter Banks	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	
Sample Location:	MW301D4	MW10S	MW501D	MW501S	MW502D	MW503D	
Sample ID:	GW-12610-081710-JY-008	GW-12610-083010-SSH-038	GW-12610-083110-SSH-043	GW-12610-083110-SSH-042	GW-12610-083010-SSH-039	GW-12610-083010-SSH-037	
Sample Date:	8/17/2010	8/30/2010	8/31/2010	8/31/2010	8/30/2010	8/30/2010	
Parameters:	Units						
Metals							
Antimony	mg/L	-	0.00014 J	0.002 U	0.002 U	0.002 U	0.002 U
Arsenic	mg/L	-	0.0011 J	0.0049	0.00081 J	0.009	0.0545
Barium	mg/L	-	0.358	4.31	0.164	3.83	2.46
Beryllium	mg/L	-	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U
Cadmium	mg/L	-	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chromium	mg/L	-	0.0021	0.002 U	0.0034	0.002 U	0.002 U
Cobalt	mg/L	-	0.00038 J	0.00027 J	0.00024 J	0.00024 J	0.00092 J
Copper	mg/L	-	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Lead	mg/L	-	0.002	0.001 U	0.001 U	0.001 U	0.001 U
Mercury	mg/L	-	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	-	0.0016 J	0.002	0.0015 J	0.003	0.0088
Selenium	mg/L	-	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Silver	mg/L	-	0.001 U	0.001 U	0.001 U	0.0002 J	0.001 U
Thallium	mg/L	-	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tin	mg/L	-	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Vanadium	mg/L	-	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	mg/L	-	1.3	0.02 U	0.02 U	0.02 U	0.02 U
Polychlorinated Biphenyls							
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	3.7	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

J - Estimated concentration.
U - Not present at or above
the associated value.

UJ - Estimated reporting
limit.

-- Not analyzed.

TABLE 4

ANALYTICAL RESULTS SUMMARY
ANNUAL GROUNDWATER SAMPLING
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

<i>AOI:</i>		<i>Undevel. Area</i>	<i>Undevel. Area</i>	<i>Undevel. Area</i>
<i>Sample Location:</i>		<i>MW503S</i>	<i>MW504S</i>	<i>MW506S</i>
<i>Sample ID:</i>		<i>GW-12610-083010-SSH-036</i>	<i>GW-12610-083110-SSH-041</i>	<i>GW-12610-083010-SSH-040</i>
<i>Sample Date:</i>		<i>8/30/2010</i>	<i>8/31/2010</i>	<i>8/30/2010</i>
<i>Parameters:</i>	<i>Units</i>			
<i>Metals</i>				
Antimony	mg/L	0.002 U	0.002 U	0.00018 J
Arsenic	mg/L	0.0088	0.001 J	0.0015 J
Barium	mg/L	0.125	0.697	0.0196
Beryllium	mg/L	0.001 U	0.001 U	0.001 U
Cadmium	mg/L	0.001 U	0.001 U	0.001 U
Chromium	mg/L	0.002 U	0.0053	0.0009 J
Cobalt	mg/L	0.0017	0.0004 J	0.00013 J
Copper	mg/L	0.002 U	0.002 U	0.002 U
Lead	mg/L	0.001 U	0.001 U	0.001 U
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	0.0014 J	0.0027	0.002 U
Selenium	mg/L	0.002 U	0.002 U	0.002 U
Silver	mg/L	0.001 U	0.001 U	0.001 U
Thallium	mg/L	0.001 U	0.001 U	0.001 U
Tin	mg/L	0.01 U	0.01 U	0.01 U
Vanadium	mg/L	0.01 U	0.01 U	0.01 U
Zinc	mg/L	0.02 U	0.0208 U	0.02 U
<i>Polychlorinated Biphenyls</i>				
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U

Notes:

J - Estimated concentration.

U - Not present at or above
the associated value.UJ - Estimated reporting
limit.

- - Not analyzed.

TABLE 5

SUMMARY OF LONG-TERM GROUNDWATER AND STORMWATER MONITORING ACTIVITIES
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

Plant Area	Location	Original Program 2001 - 2008			Location	Revision 2009-2010			Location	Proposed Revision 2011		
		Groundwater		Static Water		Groundwater		Static Water		Groundwater		Static Water
		Quality Monitoring	Frequency	Level Monitoring (1)		Quality Monitoring	Frequency	Level Monitoring (1)		Quality Monitoring	Frequency	Level Monitoring (1)
	Parameters	Frequency	Frequency		Parameters	Frequency	Frequency		Parameters	Frequency	Frequency	
<u>Inlet Slip (IS)</u>												
IS	Gage 4 (2)	--	--	annually	Gage 4 (2)	--	--	annually	Gage 4 (2)	--	--	annually
IS	Gage 5 (2)	--	--	annually	Gage 5 (2)	--	--	annually	Gage 5 (2)	--	--	annually
<u>Lagoon Area (LA)</u>												
LA	LMW1S	PCBs, VOCs	annually	annually	LMW1S	PCBs, VOCs	(6)	annually	LMW1S	PCBs, VOCs	(6)	annually
LA	LMW2S (3)	--	--	annually	LMW2S (3)	--	--	annually	LMW2S (3)	--	--	annually
LA	LMW6S (3)	--	--	annually	LMW6S (3)	--	--	annually	LMW6S (3)	--	--	annually
LA	LMW8S (3)	--	--	annually	LMW8S (3)	--	--	annually	LMW8S (3)	--	--	annually
LA	LMW12S (3)	--	--	annually	LMW12S (3)	--	--	annually	LMW12S (3)	--	--	annually
LA	MW201D1	PCBs, VOCs	annually	annually	MW201D1	PCBs, VOCs	(6)	annually	MW201D1	PCBs, VOCs	(6)	annually
LA	MW201D2	PCBs, VOCs	annually	annually	MW201D2	PCBs, VOCs	(6)	annually	MW201D2	PCBs, VOCs	(6)	annually
LA	MW201D3	PCBs, VOCs	annually	annually	MW201D3	PCBs, VOCs	(6)	annually	MW201D3	PCBs, VOCs	(6)	annually
LA	MW201D4	PCBs, VOCs	annually	annually	MW201D4	PCBs, VOCs	(6)	annually	MW201D4	PCBs, VOCs	(6)	annually
<u>Machine Storage Area (MSA)</u>												
MSA	LMW17S	--	--	annually	LMW17S	--	--	annually	LMW17S	--	--	annually
MSA	LMW18S (3)	--	--	annually	LMW18S (3)	--	--	annually	LMW18S (3)	--	--	annually
MSA	LMW19S	--	--	annually	LMW19S	--	--	annually	LMW19S	--	--	annually
MSA	MW1S (3)	--	--	annually	MW1S (3)	--	--	annually	MW1S (3)	--	--	annually
MSA	MW100S (3)	--	--	annually	MW100S (3)	--	--	annually	MW100S (3)	--	--	annually
MSA	MW101S (3)	--	--	annually	MW101S (3)	--	--	annually	MW101S (3)	--	--	annually
MSA	MW102D1	PCBs	annually	annually	MW102D1	PCBs	annually	annually	MW102D1	PCBs	annually	annually
MSA	MW102D2	PCBs	annually	annually	MW102D2	PCBs	annually	annually	MW102D2	PCBs	annually	annually
MSA	MW102D3	PCBs	annually	annually	MW102D3	PCBs	annually	annually	MW102D3	(6)	annually	annually
MSA	MW102D4	PCBs	annually	annually	MW102D4	PCBs	annually	annually	MW102D4	PCBs	annually	annually
MSA	MW300S	PCBs	annually	annually	MW300S	PCBs	annually	annually	MW300S	PCBs	annually	annually
MSA	LMW14S	--	--	annually	LMW14S	--	--	annually	LMW14S	--	--	annually
<u>Perimeter Banks (PB)</u>												
PB	LMW3D	PCBs	annually	annually	LMW3D	PCBs	(6)	annually	LMW3D	PCBs	(6)	annually
PB	LMW5S	PCBs	annually	annually	LMW5S	PCBs	(6)	annually	LMW5S	PCBs	(6)	annually
PB	LMW13S	PCBs	annually	annually	LMW13S	PCBs	annually	annually	LMW13S	PCBs	annually	annually
PB	LMW15D	PCBs	annually	annually	LMW15D	PCBs	annually	annually	LMW15D	PCBs	annually	annually
PB	MW200D	PCBs	annually	annually	MW200D	PCBs	(6)	annually	MW200D	PCBs	(6)	annually
PB	MW200S	--	--	annually	MW200S	--	--	annually	MW200S	--	--	annually
PB	MW301D1	PCBs	annually	annually	MW301D1	PCBs	annually	annually	MW301D1	(6)	annually	annually
PB	MW301D2	PCBs	annually	annually	MW301D2	PCBs	annually	annually	MW301D2	PCBs	annually	annually
PB	MW301D3	PCBs	annually	annually	MW301D3	PCBs	annually	annually	MW301D3	(6)	annually	annually
PB	MW301D4	PCBs	annually	annually	MW301D4	PCBs	annually	annually	MW301D4	PCBs	annually	annually
PB	MW302D1	PCBs	annually	annually	MW302D1	PCBs	(6)	annually	MW302D1	PCBs	(6)	annually
PB	MW302D2	PCBs	annually	annually	MW302D2	PCBs	(6)	annually	MW302D2	PCBs	(6)	annually
PB	MW302D3	PCBs	annually	annually	MW302D3	PCBs	(6)	annually	MW302D3	PCBs	(6)	annually
PB	MW302D4	PCBs	annually	annually	MW302D4	PCBs	(6)	annually	MW302D4	PCBs	(6)	annually
PB	Gage 2	--	--	annually	Gage 2	--	--	annually	Gage 2	--	--	annually
<u>Support Facilities Area (SFA)</u>												
SFA	LMW7S	--	--	annually	LMW7S	--	--	annually	LMW7S	--	--	annually
SFA	LMW11S	--	--	annually	LMW11S	--	--	annually	LMW11S	--	--	annually
SFA	LMW23S	--	--	annually	LMW23S	--	--	annually	LMW23S	--	--	annually
SFA	MSA5S	--	--	annually	MSA5S	--	--	annually	MSA5S	--	--	annually
SFA	MW3S	--	--	annually	MW3S	--	--	annually	MW3S	--	--	annually
SFA	MW403S	--	--	annually	MW403S	--	--	annually	MW403S	--	--	annually
SFA	MW404S	--	--	annually	MW404S	--	--	annually	MW404S	--	--	annually
SFA	MW405S	--	--	annually	MW405S	--	--	annually	MW405S	--	--	annually
SFA	MW406S	--	--	annually	MW406S	--	--	annually	MW406S	--	--	annually

TABLE 5
SUMMARY OF LONG-TERM GROUNDWATER AND STORMWATER MONITORING ACTIVITIES
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

Plant Area	Location	Original Program 2001 - 2008			Location	Revision 2009-2010			Location	Proposed Revision 2011		
		Groundwater		Static Water		Groundwater		Static Water		Groundwater		Static Water
		Quality Monitoring		Level Monitoring (1)		Quality Monitoring		Level Monitoring (1)		Quality Monitoring		Level Monitoring (1)
		Parameters	Frequency	Frequency		Parameters	Frequency	Frequency		Parameters	Frequency	Frequency
Undeveloped Area (UA)												
UA	MW7S	PCBs, metals	annually	annually	MW7S	PCBs, metals	(6)	annually	MW7S	PCBs, metals	(6)	annually
UA	MW10S	PCBs, metals	annually	annually	MW10S	PCBs, metals	annually	annually	MW10S	PCBs, metals	annually	annually
UA	MW501D	PCBs, metals	annually	annually	MW501D	PCBs, metals	annually	annually	MW501D	PCBs, metals	annually	annually
UA	MW501S	PCBs, metals	annually	annually	MW501S	PCBs, metals	annually	annually	MW501S		annually	annually
UA	MW502D	PCBs, metals	annually	annually	MW502D	PCBs, metals	annually	annually	MW502D	PCBs, metals	annually	annually
UA	MW503D	PCBs, metals	annually	annually	MW503D	PCBs, metals	annually	annually	MW503D	metals	annually	annually
UA	MW503S	PCBs, metals	annually	annually	MW503S	PCBs, metals	annually	annually	MW503S		annually	annually
UA	MW504S	PCBs, metals	annually	annually	MW504S	PCBs, metals	annually	annually	MW504S	PCBs	annually	annually
UA	MW506S	PCBs, metals	annually	annually	MW506S	PCBs, metals	annually	annually	MW506S		annually	annually
UA	MW508SR	PCBs, metals	annually	annually	MW508SR	PCBs, metals	(6)	annually	MW508SR	PCBs, metals	(6)	annually
UA	Gage 3 (2)	--	--	annually	Gage 3 (2)	--	--	annually	Gage 3 (2)	--	--	annually
Crotty Street Channel (CSC)												
CSC	MW1	--	--	annually	MW1	--	--	annually	MW1	--	--	annually
CSC	MW2	--	--	annually	MW2	--	--	annually	MW2	--	--	annually
CSC	MW3	--	--	annually	MW3	--	--	annually	MW3	--	--	annually
CSC	MW4	--	--	annually	MW4	--	--	annually	MW4	--	--	annually
CSC	MW5	--	--	annually	MW5	--	--	annually	MW5	--	--	annually
CSC	Gage 1 (2)	--	--	annually	Gage 1 (2)	--	--	annually	Gage 1 (2)	--	--	annually
Stormwater System(3)												
MSA(5)	Extraction System	PCBs	Semi-annually	--	Extraction System	PCBs	Semi-annually	--	Extraction System	PCBs	Semi-annually	--
LA(5)	Extraction System	PCBs	Semi-annually	--	Extraction System	PCBs	(6)	--	Extraction System	PCBs	(6)	--
CSC(5)	Extraction System	PCBs	Semi-annually	--	Extraction System	PCBs	Semi-annually	--	Extraction System	PCBs	Semi-annually	--
SWTP(4)	Influent from Lagoons	PCBs	Semi-annually	--	Influent from Lagoons	PCBs	(6)	--	Influent from Lagoons	PCBs	(6)	--
CSC(5)	CB2	PCBs	Semi-annually	--	CB2	PCBs	Semi-annually	--	CB2		Semi-annually	--

Notes:

- (1) Static water level monitoring refers to independent monitoring program to evaluate containment. Static water level measurements will also be collected at all groundwater quality monitoring wells to evaluate groundwater flow directions.
- (2) Staff gauge.
- (3) Extraction system monitoring.
- (4) To be sampled by plant personnel.
- (5) To be sampled by company who maintains the extraction system.
- (6) Monitoring conducted by GM LLC
- (6) Changes made to monitoring program

ATTACHMENT A

MONTHLY MAINTENANCE CHECKLISTS

O&M LOG
CSC/MSA
BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
O&M Log	Monthly	SSH	5/26	field book	
Site Log Book	Monthly	SSH	5/26	field book	
Extraction Well Water Levels	Monthly	SSH	5/26	collected	
Inspection	Monthly	SSH	5/26	not all working properly	
Maintenance	Monthly - As Required	SSH	5/26	clean + replace as necessary	
Level Transmitter Inspection	Monthly	SSH	5/26	complete	
Maintenance	Monthly - As Required			—	
Calibration	Semi-Annually			—	
Control Panel Inspection	Monthly	SSH	5/26	OK	
Maintenance	Monthly - As Required			none required	
Air Supply Manifold Inspection	Monthly			by GM	
Air Compressor Maintenance	Monthly - As Required			—	
Heater Check	Monthly (Winter Season)	SSH	5/26	"off" for summer	
Maintenance	Monthly - As Required			none	

O&M LOG
CSC/MSA
BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
Monitoring Well Sampling	As Required	SSH	5/26	annually	
Water Levels	As required				
General Maintenance	As required	SSH	5/26	order tubing, purchase cleaning supplies	
Force Main Cleaning	As required	SSH	5/26	schedule for summer	
Flowmeter Cleaning	As required	SSH	5/26	unhooked from line	
Spare Parts Inventory	As used	SSH	5/26	determine which brains are good or not	
Staff Gauges Water Levels	As Required	SSH	5/26	collected	
Exposure Barriers	Monthly	SSH	5/26	signs of animal activity	
Multi-Layer Cap	Monthly	SSH	5/26	signs of animal activity	
Containment System	Monthly	SSH	5/26	minor cracks at welds	
Stormwater Collection System	Monthly	SSH	5/26	OK - proper flow	
Crotty Street Channel Abandoned 60" Sewer	Monthly	SSH	5/26	OK	

* Note: All of the suggested frequencies are minimums and additional maintenance may be required
(1) - Attach additional documentation.

EW#	MACHINE STORAGE AREA	NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
		SSH	5/26					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 12.74		11.78					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.00		9.27					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.34		9.69					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.04		13.83					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 10.77		14.46					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 14.51		12.32 / 15.27					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 9.42		7.18					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)		NA					
	TOTAL (gal.)							
LT-01			NA					
CP-01			OK					
AIR SUPPLY MANIFOLD								
HEATER			10.44"					
DATE OF LAST SWABBING								

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

		NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
EW#	CROTTY STREET CHANNEL	SSA	5/26					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 7.33		8.62					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 5.42		7.41					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 6.71		7.96					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)							
	TOTAL (gal.)		NA					
HEATER			"off"					
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)		0.52					
	INLET RIVER - WATER LEVEL (ft)		8.70					
	CROTTY STREET - WATER LEVEL (ft)		damaged					

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
eM Log	Monthly	SSH	6/30	field book	
e Log Book	Monthly			field book	
traction Well Water Levels	Monthly			collected	
Inspection	Monthly			not all working	properly
Maintenance	Monthly - As Required			clean + replace	as necessary
vel Transmitter Inspection	Monthly			complete	
Maintenance	Monthly - As Required			-	
Calibration	Semi-Annually				
ontrol Panel Inspection	Monthly			OK	
Maintenance	Monthly - As Required			none required	
r Supply Manifold Inspection	Monthly			by GM	
r Compressor Maintenance	Monthly - As Required			-	
ater Check	Monthly (Winter Season)			"off" for summer	
Maintenance	Monthly - As Required			none	

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
Monitoring Well Sampling	As Required	SSH	6/30	field book ^{SSH}	annually
Water Levels	As required			field book ^{SSH}	annually
General Maintenance	As required			cleanup buildings	
Force Main Cleaning	As required			schedule for fall	
Flowmeter Cleaning	As required			—	
Spare Parts Inventory	As used			bought new turbing	
Staff Gauges Water Levels	As Required			collected	
Exposure Barriers	Monthly			Critter Control onsite to capture animals	
Multi-Layer Cap	Monthly			Critter Control onsite to capture animals	
Containment System	Monthly			12 cracks at welds	
Stormwater Collection System	Monthly			proper flow -	OK
Crotty Street Channel Abandoned 60" Sewer	Monthly			OK	

* Note: All of the suggested frequencies are minimums and additional maintenance may be required
 (1) - Attach additional documentation.

O&M LOG
CSC/MSA
BAY CITY, MICHIGAN

		NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
EW#	MACHINE STORAGE AREA	SSH	6/30					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 12.74		11.36					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.00		9.33					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.34		9.72					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.04		12.51					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 10.77		9.93					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 14.51		10.57 12.75					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 9.42		7.07					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)		NA					
	TOTAL (gal.)							
LT-01			OK					
CP-01			OK					
AIR SUPPLY MANIFOLD								
HEATER			OFF					
DATE OF LAST SWABBING								

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

EW#	CROTTY STREET CHANNEL	NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
		SSH	6/30					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 7.33		8.89					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 5.42		11.49					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 6.71		8.24					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)							
	TOTAL (gal.)							
HEATER								
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)		0.62					
	INLET RIVER - WATER LEVEL (ft)		9.48					
	CROTTY STREET - WATER LEVEL (ft)		NA					

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
O&M Log	Monthly	<u>7/16/00</u>	<u>SSH</u>	<u>field book</u>	
Site Log Book	Monthly			<u>field book</u>	
Extraction Well Water Levels	Monthly			<u>collected</u>	
Inspection	Monthly			<u>continue pumps</u>	<u>not working properly</u>
Maintenance	Monthly - As Required				
Level Transmitter Inspection	Monthly			<u>not in use</u>	
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			<u>OK</u>	
Maintenance	Monthly - As Required			<u>none required</u>	
Air Supply Manifold Inspection	Monthly			<u>by GM</u>	<u>air supply OK</u>
Air Compressor Maintenance	Monthly - As Required			<u>—</u>	
Heater Check	Monthly (Winter Season)			<u>4 ft²</u>	<u>for summer</u>
Maintenance	Monthly - As Required			<u>—</u>	

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
Monitoring Well Sampling	As Required	SSH	7/16/10	annually in August	
Water Levels	As required			" "	
General Maintenance	As required			check sump pumps, electrical systems, etc	
Force Main Cleaning	As required			complete this year	
Flowmeter Cleaning	As required			-	
Spare Parts Inventory	As used			continue to sort thru old pumps	
Staff Gauges Water Levels	As Required			collected	
Exposure Barriers	Monthly			good condition	
Multi-Layer Cap	Monthly			some animal disturbances - critter control helped	
Containment System	Monthly			minor cracks at weld's	
Stormwater Collection System	Monthly			proper flow	
Crotty Street Channel Abandoned 60" Sewer	Monthly			bulkhead - OK	

* Note: All of the suggested frequencies are minimums and additional maintenance may be required
 (1) - Attach additional documentation.

O&M LOG
CSC/MSA
BAY CITY, MICHIGAN

		NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
EW#	MACHINE STORAGE AREA	SSH	7/16					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 12.74		11.25					
	PUMP CHANGED (Y/N)							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.00		9.35					
	PUMP CHANGED (Y/N)							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.34		9.71					
	PUMP CHANGED (Y/N)							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.04		12.73					
	PUMP CHANGED (Y/N)							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 10.77		9.55					
	PUMP CHANGED (Y/N)							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 14.51		12.79					
	PUMP CHANGED (Y/N)							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 9.42		7.47					
	PUMP CHANGED (Y/N)							
FQIT-01	FLOW (gpm)							
	TOTAL (gal.)							
LI-01								
CP-01								
AIR SUPPLY MANIFOLD								
HEATER								
DATE OF LAST SWABBING								

U&M LOG
CSC/MSA
BAY CITY, MICHIGAN

		NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
CROTTY STREET CHANNEL		SSH	7/16					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT! 7.33	8.80						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT! 5.42	11.09						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT! 6.71	8.25						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)	-						
	TOTAL (gal.)							
HEATER		off						
DATE OF LAST SWABBING		09'						
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)							} require maintenance
	INLET RIVER - WATER LEVEL (ft)							
	CROTTY STREET - WATER LEVEL (ft)	gone						

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
O&M Log	Monthly	SSH	8/24/10	field book	
Site Log Book	Monthly			field book	
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			not all working properly	
Maintenance	Monthly - As Required			clean & replace as necessary	
Level Transmitter Inspection	Monthly			not in use	
Maintenance	Monthly - As Required			—	
Calibration	Semi-Annually			—	
Control Panel Inspection	Monthly			OK	
Maintenance	Monthly - As Required			none required	
Air Supply Manifold Inspection	Monthly			by GM	
Air Compressor Maintenance	Monthly - As Required			—	
Heater Check	Monthly (Winter Season)			"off" for summer	
Maintenance	Monthly - As Required			check operation in fall	

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
Monitoring Well Sampling	As Required	SSH	8/24/10	completed in August	
Water Levels	As required			completed in August	
General Maintenance	As required			house keeping, Crater Control, cut trees	
Force Main Cleaning	As required			scheduled for fall	
Flowmeter Cleaning	As required			—	
Spare Parts Inventory	As used			require new pumps, purchased tubing	
Staff Gauges Water Levels	As Required			collected - algae	requires cleaning
Exposure Barriers	Monthly			good condition	
Multi-Layer Cap	Monthly			no major erosion	
Containment System	Monthly			minor cracks at wells	
Stormwater Collection System	Monthly			proper flow	
Crotty Street Channel Abandoned 60" Sewer	Monthly			bulkhead OK	

* Note: All of the suggested frequencies are minimums and additional maintenance may be required
(1) - Attach additional documentation.

O&M LOG
CSC/MSA
BAY CITY, MICHIGAN

EW#	MACHINE STORAGE AREA	NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)	SSH	8/24					discharge lines require swabbing
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 12.74		10.97					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							↑
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.00		9.35					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							↑
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.34		9.73					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							↑
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.04		12.99					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							↑
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 10.77		9.29					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							↑
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 14.51		12.80					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							↑
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 9.42		7.64					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)							
	TOTAL (gal.)							
LT-01				OK				
CP-01				OK				
AIR SUPPLY MANIFOLD				OK				
HEATER				OK				
DATE OF LAST SWABBING								

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

EW#	CROTTY STREET CHANNEL	NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
		SSH	8/24					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 7.33		8.86					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 5.42		10.72					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 6.71		8.26					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)							
	TOTAL (gal.)							
HEATER			10.16					
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)		algae					cannot read - requires cleaning cannot read - requires cleaning
	INLET RIVER - WATER LEVEL (ft)		algae					
	CROTTY STREET - WATER LEVEL (ft)		gone					

O&M LOG
CSC/MSA
BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
O&M Log	Monthly	SSH	9/15	field book notes	
Site Log Book	Monthly			field book	
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			not all pumps working properly	
Maintenance	Monthly - As Required			ongoing cleaning + replacement	
Level Transmitter Inspection	Monthly			not in use	
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			OK	
Maintenance	Monthly - As Required			none required	
Air Supply Manifold Inspection	Monthly			by GM	adequate air supply
Air Compressor Maintenance	Monthly - As Required			-	
Heater Check	Monthly (Winter Season)			off	
Maintenance	Monthly - As Required			-	

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
Monitoring Well Sampling	As Required	SSH	9/15	Annually	
Water Levels	As required			11	
General Maintenance	As required			obtain water from plant	
Force Main Cleaning	As required			required	
Flowmeter Cleaning	As required			—	
Spare Parts Inventory	As used			use old pumps	
Staff Gauges Water Levels	As Required			collected	
Exposure Barriers	Monthly			good condition	
Multi-Layer Cap	Monthly			very minor erosion	
Containment System	Monthly			minor cracks at welds	
Stormwater Collection System	Monthly			normal operation	
Crotty Street Channel Abandoned 60" Sewer	Monthly			bulkhead - OK	

* Note: All of the suggested frequencies are minimums and additional maintenance may be required
 (1) - Attach additional documentation.

O&M LOG
CSC/MSA
BAY CITY, MICHIGAN

		NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
EW#	MACHINE STORAGE AREA	SSH	9/15					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT	12.74	11.68					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT	11.00	9.36					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT	11.34	9.78					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT	11.04	9.79					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT	10.77	9.46					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT	14.51	12.83					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT	9.42	7.85					
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)							
	TOTAL (gal.)							
LI-01								
CP-01								
AIR SUPPLY MANIFOLD								
HEATER								
DATE OF LAST SWABBING								

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

		NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
EW#	CROTTY STREET CHANNEL	SSH	9/15					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 7.33	8.70						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 5.42	9.47						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT 6.71	8.11						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)							
	TOTAL (gal.)							
HEATER		off						
DATE OF LAST SWABBING		09						
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)	0.42						
	INLET RIVER - WATER LEVEL (ft)	8.05						
	CROTTY STREET - WATER LEVEL (ft)	missing						

O&M LOG
 CSC/MSA
 BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
O&M Log	Monthly	10/28/10	SSH	field book	
Site Log Book	Monthly			field book	
Extraction Well Water Levels	Monthly			broke key	
Inspection	Monthly				
Maintenance	Monthly - As Required				
Level Transmitter Inspection	Monthly			not in use	
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			broke key	
Maintenance	Monthly - As Required				
Air Supply Manifold Inspection	Monthly			by GM	
Air Compressor Maintenance	Monthly - As Required			—	
Heater Check	Monthly (Winter Season)			"off"	turn on in Nov.
Maintenance	Monthly - As Required			—	

O&M LOG
CSC/MSA
BAY CITY, MICHIGAN

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
Monitoring Well Sampling	As Required	SSH	10/28/10	annually	
Water Levels	As required			"	
General Maintenance	As required			prep. for winter	
Force Main Cleaning	As required			-	
Flowmeter Cleaning	As required			complete this year	
Spare Parts Inventory	As used			used old pumps	
Staff Gauges Water Levels	As Required			-	
Exposure Barriers	Monthly			good condition	
Multi-Layer Cap	Monthly			very minor erosion - good vegetation	
Containment System	Monthly			minor cracks at welds	
Stormwater Collection System	Monthly			normal	
Crotty Street Channel Abandoned 60" Sewer	Monthly			OK	

* Note: All of the suggested frequencies are minimums and additional maintenance may be required
(1) - Attach additional documentation.

O&M LOG
CSC/MSA
BAY CITY, MICHIGAN

EW#	MACHINE STORAGE AREA	NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
		SSR	10/28					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							broke key - unable to open EW vaults
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 12.74							
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.00							
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.34							
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 11.04							
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 10.77							
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 14.51							
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPT: 9.42							
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)							
	TOTAL (gal.)							
LT-01								
CP-01								
AIR SUPPLY MANIFOLD								
HEATER								
DATE OF LAST SWABBING								

U&M LOG
CSC/MSA
BAY CITY, MICHIGAN

EW#		CROTTY STREET CHANNEL		NAME	DATE	NAME	DATE	NAME	DATE	NOTES, DESCRIPTION OF MAINT., SPARE PARTS USED
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)			SSH	10/28					↑
	AIR PRESSURE (psi)									
	DEPTH TO WATER/LNAPL (ft.)	TARGET DEPTI	7.33							
	PUMP CHANGED (Y/N)									
	CHLORINE ADDED									
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)									
	AIR PRESSURE (psi)									
	DEPTH TO WATER/LNAPL (ft.)	TARGET DEPTI	5.42							
	PUMP CHANGED (Y/N)									
	CHLORINE ADDED									
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)									
	AIR PRESSURE (psi)									
	DEPTH TO WATER/LNAPL (ft.)	TARGET DEPTI	6.71							
	PUMP CHANGED (Y/N)									
	CHLORINE ADDED									
FQIT-03	FLOW (gpm)									
	TOTAL (gal.)									
HEATER										
DATE OF LAST SWABBING										
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)									
	INLET RIVER - WATER LEVEL (ft)									
	CROTTY STREET - WATER LEVEL (ft)									

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Crotty Street Channel CB-2	Crotty Street Channel CB-2	Crotty Street Channel CB-2	Crotty Street Channel CB-2	Crotty Street Channel CB-2	Crotty Street Channel CB-2	Crotty Street Channel CB-2
Sample Location:	W-040506-SSH-CB04	W-031307-SSH-CB07-4	CB2_8/27/07	CB2-(06/11/08)	CB2_(08/19/08)	CB-2_(03/12/09)	W-12610-032410-SSH-CB10-1
Sample ID:							
Sample Date:	4/5/2006	3/13/2007	8/27/2007	6/11/2008	8/19/2008	3/12/2009	3/24/2010

Michigan Residential
Drinking water
criteria

Parameters:	Units								
Metals									
Antimony	mg/L	0.006	-	-	-	-	-	-	-
Arsenic	mg/L	0.01	-	-	-	-	-	-	-
Barium	mg/L	2	-	-	-	-	-	-	-
Beryllium	mg/L	0.004	-	-	-	-	-	-	-
Cadmium	mg/L	0.005	-	-	-	-	-	-	-
Chromium	mg/L	0.1	-	-	-	-	-	-	-
Cobalt	mg/L	0.04	-	-	-	-	-	-	-
Copper	mg/L	1	-	-	-	-	-	-	-
Lead	mg/L	0.004	-	-	-	-	-	-	-
Mercury	mg/L	0.002	-	-	-	-	-	-	-
Nickel	mg/L	0.1	-	-	-	-	-	-	-
Selenium	mg/L	0.05	-	-	-	-	-	-	-
Silver	mg/L	0.034	-	-	-	-	-	-	-
Thallium	mg/L	0.002	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.0045	-	-	-	-	-	-	-
Zinc	mg/L	2.4	-	-	-	-	-	-	-
Polychlorinated Biphenyls									
Aroclor-1016 (PCB-1016)	µg/L	0.5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel
Sample Location:	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge
Sample ID:	W-040506-SSH-C03	GW-081606-SSH-0601	W-031307-SSH-C07-3	CSC	CSC-(06/11/08)	DUP-(06/11/08)
Sample Date:	4/5/2006	8/16/2006	3/13/2007	8/23/2007	6/11/2008	6/11/2008 (Duplicate)

Parameters:	Units						
Metals							
Antimony	mg/L	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-
Polychlorinated Biphenyls							
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.36	0.47	0.23 J	0.51	0.074 J	0.077 J
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U

Notes:

J - Estimated concentration.
U - Not present at or above
the associated value.
UJ - Estimated reporting
limit.
- - Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel	Crotty Street Channel
Sample Location:	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge
Sample ID:	CSC_08/19/08)	CSC_03/12/09)	CSC	W-12610-043010-SSH-CSC-4	GW-12610-081910-SSH-026	GW-12610-081910-SSH-027
Sample Date:	8/19/2008	3/12/2009	8/27/2009	4/30/2010	8/19/2010	8/19/2010 (Duplicate)

Parameters: Units

Metals

Antimony	mg/L	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-
Barium	mg/L	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-
Copper	mg/L	-	-	-	-	-
Lead	mg/L	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-
Silver	mg/L	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-
Tin	mg/L	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.38	0.14 J	0.75	0.59 J	0.62	0.63
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge
Sample ID:	W-040506-SSH-M02	GW-081606-SSH-0602	W-031307-SSH-M07-2	MSA	MSA-(06/11/08)	MSA_(08/19/08)
Sample Date:	4/5/2006	8/16/2006	3/13/2007	8/23/2007	6/11/2008	8/19/2008

Parameters: Units

Metals

Antimony	mg/L	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.62	1.0 U	0.20 U	0.20 U	0.25
Aroclor-1248 (PCB-1248)	µg/L	0.20	0.20 U	1.0 U	0.30	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.18 J	0.24	1.0 U	0.26	0.20 U	0.28

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge	MW102D1	MW102D1
Sample ID:	DUP_(03/12/09)	MSA_(03/12/09)	MSA	W-12610-032410-SSH-MSA10-2	GW-12610-081910-SSH-028	GW-081606-SSH-0604		
Sample Date:	3/12/2009 (Duplicate)	3/12/2009	8/27/2009	3/24/2010	8/19/2010	8/16/2006		8/21/2007

Parameters: Units

Metals

Antimony	mg/L	-	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	2.1	1.3	0.20 U	0.20 U	0.19 J	0.44
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20	0.20 U	0.20 U	0.17 J	0.20 U	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:	MW102D1	MW102D1	MW102D1	MW102D2	MW102D2	MW102D2	MW102D2	MW102D2	MW102D2
Sample ID:	MW102D1_(08/19/08)	MW102D1	GW-12610-081710-JY-001	GW-081606-SSH-0606	MW102D2	MW102D2_(08/19/08)	MW102D2	MW102D2	GW-12610-081710-JY-002
Sample Date:	8/19/2008	8/26/2009	8/17/2010	8/16/2006	8/21/2007	8/19/2008	8/26/2009	8/26/2009	8/17/2010

Parameters: Units

Metals

Antimony	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-	-

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.40 J	0.31	0.20 U	0.20 U	0.20 U	0.073 J	0.13 J
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- - Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:	MW102D3	MW102D3	MW102D3	MW102D3	MW102D3	MW102D3	MW102D4	MW102D4	MW102D4	MW102D4
Sample ID:	GW-081606-SSH-0607	MW102D3	MW102D3_(08/19/08)	MW102D3	MW102D3	GW-12610-081710-JY-003	GW-081606-SSH-0605	MW102D4	MW102D4_(08/19/08)	MW102D4
Sample Date:	8/16/2006	8/21/2007	8/19/2008	8/26/2009	8/17/2010		8/16/2006	8/21/2007	8/19/2008	8/26/2009

Parameters: Units

Metals

Antimony	mg/L	-	-	-	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-	-	-

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- - Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:	MW102D4	MW300S	MW300S	MW300S	MW300S	MW300S	MW300S	MW300S	MW300S
Sample ID:	GW-12610-081710-JY-004	GW-081706-SSH-0608	GW-081706-SSH-0609	MW300S	MW300S_(08/19/08)	DUP 4	MW300S	GW-12610-081810-JY-011	
Sample Date:	8/17/2010	8/17/2006	8/17/2006 (Duplicate)	8/21/2007	8/19/2008	8/26/2009 (Duplicate)	8/26/2009	8/18/2010	

Parameters: Units

Metals

Antimony	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-	-

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 UJ	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 UJ	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 UJ	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.084 J	0.11 J	0.095 J	0.24	0.21	0.40 J	0.39 J	0.14 J
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 UJ	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 UJ	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 UJ	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Machine Storage Area	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks
Sample Location:	MW300S	LMW13S	LMW13S	LMW13S	LMW13S	LMW15D	LMW15D	LMW15D	LMW15D	LMW15D
Sample ID:	GW-12610-081810-JY-012	GW-081706-SSH-0610	LMW13S	LMW13S_08/18/08)	GW-12610-081710-JY-009	GW-081706-SSH-0611	LMW15D	LMW15D	LMW15D_(08/18/08)	MW15D
Sample Date:	8/18/2010 (Duplicate)	8/17/2006	8/21/2007	8/18/2008	8/17/2010	8/17/2006	8/21/2007	8/18/2008	8/26/2009	

Parameters: Units

Metals

Antimony	mg/L	-	-	-	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-	-	-

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1242 (PCB-1242)	µg/L	0.16 J	0.20 U	1.0	0.20 U	0.20 U	0.20 U	0.20 U	0.19 J	0.073 J
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	1.2	0.20 U	1.6	1.1	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- - Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks
Sample Location:	LMW15D	MW301D1	MW301D1	MW301D1	MW301D1	MW301D1	MW301D1	MW301D2	MW301D2
Sample ID:	GW-12610-081710-JY-010	GW-081706-SSH-0612	MW301D1	MW301D1_(08/19/08)	MW301D1	GW-12610-081710-JY-005	GW-081706-SSH-0615	MW301D2	MW301D2_(08/19/08)
Sample Date:	8/17/2010	8/17/2006	8/21/2007	8/19/2008	8/26/2009	8/17/2010	8/17/2006	8/21/2007	8/19/2008

Parameters: Units

Metals

Antimony	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-	-

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks	Perimeter Banks
Sample Location:	MW301D2	MW301D2	MW301D3	MW301D3	MW301D3	MW301D3	MW301D3	MW301D3	MW301D4	MW301D4	MW301D4
Sample ID:	MW301D2	GW-12610-081710-JY-006	GW-081706-SSH-0614	MW301D3	MW301D3	MW301D3_08/19/08	MW301D3	MW301D3	GW-12610-081710-JY-007	GW-081706-SSH-0613	MW301D4
Sample Date:	8/26/2009	8/17/2010	8/17/2006	8/21/2007	8/19/2008	8/26/2009	8/17/2010	8/17/2006	8/21/2007	8/19/2008	DUP3_08/19/08 (Duplicate)

Parameters: Units

Metals

Antimony	mg/L	-	-	-	-	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	-	-	-	-	-	-
Chromium	mg/L	-	-	-	-	-	-	-	-	-	-
Cobalt	mg/L	-	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-	-	-	-

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.085 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.12 J	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Perimeter Banks	Perimeter Banks	Perimeter Banks	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area
Sample Location:	MW301D4	MW301D4	MW301D4	MW10S	MW10S	MW10S	MW10S	MW10S	MW10S	MW501D	MW501D
Sample ID:	MW301D4_(08/19/08)	MW301D4	GW-12610-081710-JY-008	GW-082106-SSH-0640	MW10S	MW10S	MW10S_(08/20/08)	MW10S	GW-12610-083010-SSH-038	GW-082106-SSH-0641	MW501D
Sample Date:	8/19/2008	8/26/2009	8/17/2010	8/21/2006	8/23/2007	8/20/2008	8/25/2009	8/30/2010	8/21/2006	8/22/2007	
Parameters: Units											
Metals											
Antimony	mg/L	-	-	0.00042 J	0.00047 J	0.0022	0.002 U	0.00014 J		0.00034 J	0.00027 J
Arsenic	mg/L	-	-	0.0013 J	0.0048	0.0094	0.001 J	0.0011 J		0.0987	0.0723
Barium	mg/L	-	-	0.45	0.361	0.837	0.368	0.358		4.7	4.49
Beryllium	mg/L	-	-	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U
Cadmium	mg/L	-	-	0.00019 J	0.00027 J	0.0064	0.001 U	0.001 U		0.00024 J	0.00013 J
Chromium	mg/L	-	-	0.0035	0.0016 J	0.0679	0.0024	0.0021		0.0013 J	0.002 U
Cobalt	mg/L	-	-	0.0013	0.0009 J	0.0013	0.00046 J	0.00038 J		0.0075	0.0042
Copper	mg/L	-	-	0.0029 U	0.0023	0.206	0.002 U	0.002 U		0.009	0.0059
Lead	mg/L	-	-	0.0091	0.009	0.525	0.0049	0.002		0.001 U	0.00042 J
Mercury	mg/L	-	-	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U	0.0002 U
Nickel	mg/L	-	-	0.0108	0.0176	0.038	0.002	0.0016 J		0.0537	0.0411
Selenium	mg/L	-	-	0.0034 J	0.0029 U	0.002 U	0.002 U	0.002 U		0.352 J	0.312
Silver	mg/L	-	-	0.001 UJ	0.001 U	0.00034 J	0.001 U	0.001 U		0.00046 J	0.0003 J
Thallium	mg/L	-	-	0.001 U	0.001 U	0.00023 J	0.001 U	0.001 U		0.001 U	0.001 U
Tin	mg/L	-	-	0.00047 J	0.01 U	0.009 J	0.01 U	0.01 U		0.00065 J	0.01 U
Vanadium	mg/L	-	-	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U
Zinc	mg/L	-	-	1.59	5.82	40.8	0.822	1.3		0.0076 J	0.0445
Polychlorinated Biphenyls											
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	1.0 U	1.0 U		0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	1.0 U	1.0 U		0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	1.0 U	1.0 U		0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U	0.20 U	3.1	1.4	1.3 J	3.3	3.7	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	1.0 U	1.0 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	1.0 U	1.0 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40 U	1.0 U	1.0 U	0.20 U	0.20 U

Notes:
 J - Estimated concentration.
 U - Not present at or above the associated value.
 UJ - Estimated reporting limit.
 -- Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area
Sample Location:	MW501D	MW501D	MW501D	MW501S	MW501S	MW501S	MW501S	MW501S	MW502D
Sample ID:	MW501D_(08/20/08)	MW501D	GW-12610-083110-SSH-043	GW-082106-SSH-0637	MW501S	MW501S_(08/20/08)	MW501S	GW-12610-083110-SSH-042	GW-082106-SSH-0638
Sample Date:	8/20/2008	8/25/2009	8/31/2010	8/21/2006	8/22/2007	8/20/2008	8/25/2009	8/31/2010	8/21/2006

Parameters: Units

Metals

Antimony	mg/L	0.00014 J	0.00015 J	0.002 U	0.001 J	0.00013 J	0.002 U	0.002 U	0.00094 J
Arsenic	mg/L	0.0208	0.0406	0.0049	0.0011 J	0.0034	0.00053 J	0.0011 J	0.00081 J
Barium	mg/L	6.11	6.15	4.31	0.14	0.131	0.15	0.111	0.164
Beryllium	mg/L	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00032 J
Chromium	mg/L	0.0022	0.0021	0.002 U	0.0016 J	0.0027 U	0.0022	0.0026	0.0034
Cobalt	mg/L	0.00036 J	0.00046 J	0.00027 J	0.00064 J	0.00044 J	0.00019 J	0.00019 J	0.00024 J
Copper	mg/L	0.0019 J	0.0036 U	0.002 U	0.002 U	0.00068 J	0.002 U	0.002 U	0.002 U
Lead	mg/L	0.00044 J	0.00037 J	0.001 U	0.001 U	0.00013 J	0.00018 J	0.001 U	0.001 U
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	0.002 U	0.0018 J	0.002	0.0051	0.0054 U	0.002 U	0.0012 J	0.0015 J
Selenium	mg/L	0.002 U	0.002 U	0.002 U	0.0026 J	0.0082	0.002 U	0.002 U	0.002 U
Silver	mg/L	0.00031 J	0.00034 J	0.001 U	0.000072 J	0.001 U	0.001 U	0.001 U	0.00038 J
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tin	mg/L	0.01 U	0.01 U	0.01 U	0.0013 J	0.01 U	0.01 U	0.01 U	0.01 U
Vanadium	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	mg/L	0.0111 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0155 J

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.15 J	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	1.0 U	0.20 U	0.20 UJ	0.20 U	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- - Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area
Sample Location:	MW502D	MW502D	MW502D	MW502D	MW502D	MW503D	MW503D	MW503D	MW503D	MW503D
Sample ID:	GW-082106-SSH-0639	MW502D	MW502D_(08/19/08)	MW502D	GW-12610-083010-SSH-039	GW-081806-SSH-0629	DUP3	MW503D	MW503D_(08/19/08)	MW503D
Sample Date:	8/21/2006 (Duplicate)	8/22/2007	8/19/2008	8/25/2009	8/30/2010	8/18/2006	8/21/2007 (Duplicate)	8/21/2007	8/19/2008	8/26/2009

Parameters: Units

Metals

Antimony	mg/L	0.00052 J	0.00035 J	0.002 U	0.002 U	0.002 U	0.00032 J	0.00021 J	0.00058 J	0.002 U	0.002 U
Arsenic	mg/L	0.101	0.0848	0.0169	0.0266	0.009	0.153	0.108	0.122	0.0543	0.0893
Barium	mg/L	4.1	3.82	4.32	4.69	3.83	2.52	2.51	2.63	2.7	2.98
Beryllium	mg/L	0.001 U	0.001 U	0.005 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U
Cadmium	mg/L	0.00033 J	0.00016 J	0.001 U	0.001 U	0.001 U	0.00011 J	0.00013 J	0.00015 J	0.001 U	0.001 U
Chromium	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0043 J	0.014 J	0.002 U	0.0037
Cobalt	mg/L	0.0083	0.0048	0.00021 J	0.00034 J	0.00024 J	0.004	0.0043	0.0045	0.00064 J	0.0023
Copper	mg/L	0.0098	0.0059	0.00062 J	0.002 U	0.002 U	0.006	0.0051	0.0057	0.00047 J	0.0067
Lead	mg/L	0.001 U	0.00033 J	0.001 U	0.0002 J	0.001 U	0.001 U	0.00032 J	0.00057 J	0.00022 J	0.00079 J
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	0.0548	0.0481	0.002 U	0.002	0.003	0.0447	0.0377	0.0403	0.002 U	0.0505
Selenium	mg/L	0.303 J	0.363	0.002 U	0.002 U	0.002 U	0.285	0.278	0.338	0.002 U	0.002 U
Silver	mg/L	0.00032 J	0.00021 J	0.000085 J	0.00042 J	0.0002 J	0.00012 J	0.00034 J	0.00038 J	0.001 U	0.00039 J
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tin	mg/L	0.00084 J	0.01 U	0.01 U	0.01 U	0.01 U	0.00043 J	0.01 U	0.00037 J	0.01 U	0.01 U
Vanadium	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	mg/L	0.0151 J	0.02 U	0.0075 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0119 J

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U	0.084 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area
Sample Location:	MW503D	MW503S	MW503S	MW503S	MW503S	MW503S	MW503S	MW504S	MW504S	MW504S
Sample ID:	GW-12610-083010-SSH-037	GW-081806-SSH-0628	MW503S	MW503S_(08/19/08)	MW503S	GW-12610-083010-SSH-036	GW-082106-SSH-0642	MW504S	MW504S_(08/20/08)	MW504S
Sample Date:	8/30/2010	8/18/2006	8/21/2007	8/19/2008	8/26/2009	8/30/2010	8/21/2006	8/22/2007	8/20/2008	8/25/2009

Parameters: Units

Metals

Antimony	mg/L	0.002 U	0.00011 J	0.000085 J	0.002 U	0.002 U	0.002 U	0.00011 J	0.0001 J	0.002 U	0.002 U
Arsenic	mg/L	0.0545	0.0023	0.005	0.0058	0.0075	0.0088	0.0084	0.005	0.00049 J	0.0015 J
Barium	mg/L	2.46	0.282	0.229	0.29	0.149	0.125	0.586	0.47	0.319	0.361
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0002 J	0.00036 J	0.001 U
Chromium	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0061	0.007 U	0.011	0.0096
Cobalt	mg/L	0.00092 J	0.0015	0.0016	0.0024	0.0029	0.0017	0.0012	0.00069 J	0.00029 J	0.00033 J
Copper	mg/L	0.002 U	0.002 U	0.0012 J	0.002 U	0.002 U	0.002 U	0.002 U	0.0015 J	0.0026	0.002 U
Lead	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00025 J	0.00026 J	0.00035 J
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	0.0088	0.0104	0.0066	0.0017 J	0.0018 J	0.0014 J	0.01	0.0096	0.0043	0.0042
Selenium	mg/L	0.002 U	0.0032	0.0046	0.002 U	0.002 U	0.002 U	0.0294 J	0.019	0.002 U	0.002 U
Silver	mg/L	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tin	mg/L	0.01 U	0.00031 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.00044 J	0.01 U	0.01 U
Vanadium	mg/L	0.01 U	0.00052 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Zinc	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.005 J	0.02 U	0.0092 J	0.0229 U	0.0119 J	0.02 U

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.087 J	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.065 J	0.15 J
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

J - Estimated concentration.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

-- Not analyzed.

ATTACHMENT B

ANALYTICAL RESULTS SUMMARY
MLC - MSA/CSC, BAY CITY PLANT
BAY CITY, MICHIGAN

AOI:	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area	Undevel. Area
Sample Location:	MW504S	MW506S	MW506S	MW506S	MW506S	MW506S	MW506S
Sample ID:	GW-12610-083110-SSH-041	GW-081806-SSH-0627	DUP4	MW506S	MW506S_(08/20/08)	MW506S	GW-12610-083010-SSH-040
Sample Date:	8/31/2010	8/18/2006	8/22/2007 (Duplicate)	8/22/2007	8/20/2008	8/27/2009	8/30/2010

Parameters: Units

Metals

Antimony	mg/L	0.002 U	0.00031 J	0.00016 J	0.00014 J	0.00024 J	0.00013 J	0.00018 J
Arsenic	mg/L	0.001 J	0.00089 J	0.003	0.0023 U	0.00053 J	0.00075 J	0.0015 J
Barium	mg/L	0.697	0.0188	0.0202	0.0207	0.0191	0.0224	0.0196
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chromium	mg/L	0.0053	0.002 U	0.002 U	0.002 U	0.0009 J	0.00094 J	0.0009 J
Cobalt	mg/L	0.0004 J	0.00069 J	0.0006 J	0.00054 J	0.00016 J	0.00012 J	0.00013 J
Copper	mg/L	0.002 U	0.002 U	0.0014 J	0.0015 J	0.002 U	0.002 U	0.002 U
Lead	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	0.0027	0.0102	0.0077	0.0069	0.002 U	0.00082 J	0.002 U
Selenium	mg/L	0.002 U	0.0023	0.0068	0.0051	0.002 U	0.002 U	0.002 U
Silver	mg/L	0.001 U	0.000053 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.00054 J	0.001 U	0.001 U
Tin	mg/L	0.01 U	0.00056 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Vanadium	mg/L	0.01 U	0.0023 J	0.0019 J	0.002 J	0.0028 J	0.0025 J	0.01 U
Zinc	mg/L	0.0208 U	0.02 U	0.02 U	0.02 U	0.0058 J	0.02 U	0.02 U

Polychlorinated Biphenyls

Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

Notes:

- J - Estimated concentration.
- U - Not present at or above the associated value.
- UJ - Estimated reporting limit.
- Not analyzed.

ATTACHMENT C

DATA VALIDATION MEMORANDUM



**CONESTOGA-ROVERS
& ASSOCIATES**

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MEMORANDUM

TO: Mike Tomka REF. NO.: 12610

FROM: Rawa Fleisher^{RF}/14/rr/Det DATE: October 28, 2010

RE: Data Quality Assessment and Reduced Validation
Annual and Semi-annual Groundwater Sampling – August 2010
MLC Bay City – Bay City, Michigan

The following details a quality assessment and validation of the analytical data resulting from the August 17 to 31, 2010 collection of 22 groundwater samples and two (2) quality control samples from the MLC Bay City Site in Bay City, Michigan. The sample summary detailing sample identification, sample location, quality control samples, and analytical parameters is presented in Table 1. Sample analysis was completed at TestAmerica in North Canton, Ohio (TA) in accordance with the methodologies presented in Table 2.

The quality control criteria used to assess the data were established by the methods and the quality assurance project plan (QAPP). Application of quality assurance criteria was consistent with following guidance document:

- i. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", EPA-540/R-99/008, October 1999 and
- ii. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Review", EPA-540/R-94/013, February 1994.

These guidelines are collectively referred to as "NFGs" in this Memorandum.

Sample Quantitation

The laboratory reported detected concentrations of polychlorinated biphenyls (PCB) and metals below the laboratory's report limit (RL) but above the laboratory's method detection limit (MDL). The laboratory flagged these sample concentrations with a "J" or a "B" for organics and inorganics, respectively. These concentrations should be qualified as estimated (J) values unless qualified otherwise in this memorandum. The laboratory "B" flags may be disregarded.

Sample Preservation and Holding Times

Sample holding time periods and preservation requirements are presented in Table 2. The samples were prepared and/or analyzed within the specified holding time periods. The samples were shipped and maintained in accordance with the sample preservation requirements.

Method Blank Samples

Method blank samples are prepared from a purified sample matrix and are processed concurrently with investigative samples to assess the presence and the magnitude of sample contamination introduced during sample analysis. Method blank samples are analyzed at a minimum frequency of one per analytical batch and target analytes should be non-detect.

The samples presented in Table 3 should be qualified due to laboratory contamination. The laboratory flagged the inorganics with a "J" which may be disregarded. The remaining method blank samples did not contain target compounds with concentrations that impacted the investigative samples.

Surrogate Compounds – Organic Analyses

Individual sample performance for organic analyses was monitored by assessing the results of surrogate compound percent recoveries. Surrogate percent recoveries are reviewed against the laboratory developed control limits provided in the analytical report.

The surrogate recovery acceptance criteria were met for all samples.

Matrix Spike/Matrix Spike Duplicate Analyses

To assess the long term accuracy and precision of the analytical methods on various matrices, matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and the relative percent difference (RPD) of the concentrations were determined. The organic MS/MSD percent recovery and RPD control limits are established by the laboratory.

In one sample batch, a non-Site-specific sample was utilized as the MS/MSD. Qualification of samples associated with this MS/MSD was not performed. If MS/MSD analyses could not be completed in an analytical batch due to insufficient sample volume; precision and accuracy were verified by the analysis of the laboratory control sample/laboratory control duplicate (LCS/LCD). The MS/MSD percent recoveries and associated RPD met the acceptance criteria.

Laboratory Control Sample/Laboratory Control Duplicate Analyses

The LCS/LCD analyses serve as a monitor of the overall performance in all steps of the sample analysis and are analyzed with each sample batch. The LCS/LCD percent recoveries were evaluated against method and laboratory established control limits.

The LCS/LCD percent recoveries were within the laboratory control limits or did not warrant qualification, indicating that an acceptable level of overall performance was achieved with the exception of the qualified samples presented in Table 5.

Laboratory Control Sample/Laboratory Control Duplicate Analyses (continued)

Laboratory precision was verified by the RPD of the LCS/LCD when a matrix spike/matrix spike duplicate was not analyzed.

The RPDs were within the laboratory control limits, indicating that an acceptable level of overall laboratory precision was achieved.

Field Quality Assurance/Quality Control

The field quality assurance/quality control consisted of two (2) field duplicate sample sets.

Field Duplicate Samples

Overall precision for the sampling event and laboratory procedures was monitored using the results of the field duplicate sample sets. The RPDs associated with these duplicate samples must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the RL, the evaluation criteria is one times the RL value for water samples.

The data indicate that an adequate level of precision was achieved for the sampling event.

Overall Assessment

The data were found to exhibit acceptable levels of accuracy and precision, based on the provided information, and may be used with the qualifications noted.

TABLE 1

**SAMPLE COLLECTION AND ANALYSIS SUMMARY
SEMI-ANNUAL GROUNDWATER SAMPLING - AUGUST 2010
MLC BAY CITY
BAY CITY, MICHIGAN**

<i>Sample Identification</i>	<i>Location</i>	<i>Matrix</i>	<i>QC Samples</i>	<i>Collection Date (mm/dd/yyyy)</i>	<i>Collection Time (hr:min)</i>	<i>Analysis/Parameters</i>
CRA SDG No. 04-01	TA-NC Lot No. A0H180489		TA-NC SDG No. 0H18489			
GW-12610-081710-JY-001	MW102D1	water		8/17/2010	9:56:00 AM	PCB
GW-12610-081710-JY-002	MW102D2	water		8/17/2010	0:06:00 AM	PCB
GW-12610-081710-JY-003	MW102D3	water		8/17/2010	0:51:00 AM	PCB
GW-12610-081710-JY-004	MW102D4	water		8/17/2010	1:06:00 AM	PCB
GW-12610-081710-JY-005	MW301D1	water		8/17/2010	2:21:00 PM	PCB
GW-12610-081710-JY-006	MW301D2	water		8/17/2010	2:24:00 PM	PCB
GW-12610-081710-JY-007	MW301D3	water		8/17/2010	1:31:00 PM	PCB
GW-12610-081710-JY-008	MW301D4	water		8/17/2010	1:43:00 PM	PCB
GW-12610-081710-JY-009	LMW13S	water		8/17/2010	2:36:00 PM	PCB
GW-12610-081710-JY-010	LMW15D	water		8/17/2010	2:48:00 PM	PCB
CRA SDG No. 04-02	TA-NC Lot No. A0H190456		TA-NC SDG No. 0H18489			
GW-12610-081810-JY-011	MW300S	water		8/18/2010	9:26:00 AM	PCB
GW-12610-081810-JY-012	MW300S	water	DUP (-011)	8/18/2010	9:36:00 AM	PCB
CRA SDG No. 04-03	TA-NC Lot No. A0H200455		TA-NC SDG No. 0H18489			
W-12610-081910-SSH-025	catchbasin	water		8/19/2010	1:25:00 PM	PCB
GW-12610-081910-SSH-026	CSA GW Ext. Sys. Discharge	water		8/19/2010	1:35:00 PM	PCB
GW-12610-081910-SSH-027	CSA GW Ext. Sys. Discharge	water	DUP (-026)	8/19/2010	1:40:00 PM	PCB
GW-12610-081910-SSH-028	MSA GW Ext. Sys. Discharge	water		8/19/2010	1:45:00 PM	PCB
CRA SDG No. 04-04	TA-NC Lot No. A0H310455		TA-NC SDG No. 0H31455			
GW-12610-083010-SSH-036	MW503S	water	MS/MSD	8/30/2010	1:02:00 AM	PCB, Metals
GW-12610-083010-SSH-037	MW503D	water		8/30/2010	1:37:00 AM	PCB, Metals
GW-12610-083010-SSH-038	MW10S	water		8/30/2010	1:12:00 PM	PCB, Metals
GW-12610-083010-SSH-039	MW502D	water		8/30/2010	1:37:00 PM	PCB, Metals
GW-12610-083010-SSH-040	MW506S	water		8/30/2010	2:42:00 PM	PCB, Metals

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
SEMI-ANNUAL GROUNDWATER SAMPLING - AUGUST 2010
MLC BAY CITY
BAY CITY, MICHIGAN

Sample Identification	Location	Matrix	QC Samples	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters
CRA SDG No. 04-05	TA-NC Lot No. A01010428		TA-NC SDG No. 0H31455			
GW-12610-083110-SSH-041	MW504S	water		8/31/2010	1:42:00 AM	PCB, Metals
GW-12610-083110-SSH-042	MW501S	water		8/31/2010	2:57:00 PM	PCB, Metals
GW-12610-083110-SSH-043	MW501D	water		8/31/2010	1:32:00 PM	PCB, Metals

Notes:

- DUP - Field Duplicate Sample of sample in parenthesis
- MS/MSD - Matrix Spike/Matrix Spike Duplicate
- PCB - Polychlorinated biphenyls
- QC - Quality Control

TABLE 2

SUMMARY OF ANALYTICAL METHODS, HOLDING TIME PERIODS, AND PRESERVATIVES
 SEMI-ANNUAL GROUNDWATER SAMPLING - AUGUST 2010
 MLC BAY CITY
 BAY CITY, MICHIGAN

<i>Parameter</i>	<i>Method</i>	<i>Matrix</i>	<i>Holding Time</i>	<i>Preservation</i>
PCB	SW-846 8082	Water	- 7 days from sample collection to extraction - 40 days from extraction to completion of analysis	Iced, 4 ± 2° C
Metals		Water	- 180 days from sample collection to completion of analysis	water- pH < 2 and Iced, 4 ± 2° C
Antimony	SW-846 6020B			
Arsenic	SW-846 6020B			
Barium	SW-846 6020B			
Beryllium	SW-846 6020B			
Cadmium	SW-846 6020B			
Chromium	SW-846 6020B			
Cobalt	SW-846 6020B			
Copper	SW-846 6020B			
Lead	SW-846 6020B			
Nickel	SW-846 6020B			
Selenium	SW-846 6020B			
Silver	SW-846 6020B			
Thallium	SW-846 6020B			
Tin	SW-846 6020B			
Vanadium	SW-846 6020B			
Zinc	SW-846 6010B			
Mercury	SW-846 7470A	Water	- 28 days from sample collection to completion of analysis	pH < 2 and Iced, 4 ± 2° C

Notes:

¹ SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, 3rd Edition, and Promulgated updates, November 1986

PCB - Polychlorinated biphenyls

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
 SEMI-ANNUAL GROUNDWATER SAMPLING - AUGUST 2010
 MLC BAY CITY
 BAY CITY, MICHIGAN

<i>Parameter</i>	<i>Analyte</i>	<i>Analysis Date</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Qualified Result</i>	<i>Units</i>
Metals	Copper	09/08/10	1.4	GW-12610-083010-SSH-036	2.0 U	µg/L
				GW-12610-083010-SSH-037	2.0 U	µg/L
				GW-12610-083010-SSH-038	2.0 U	µg/L
				GW-12610-083010-SSH-039	2.0 U	µg/L
				GW-12610-083010-SSH-040	2.0 U	µg/L
				GW-12610-083110-SSH-041	2.0 U	µg/L
				GW-12610-083110-SSH-042	2.0 U	µg/L
GW-12610-083110-SSH-043	2.0 U	µg/L				
Metals	Nickel	09/08/10	0.21	GW-12610-083010-SSH-040	2.0 U	µg/L
Metals	Zinc	09/08/10	10.9	GW-12610-083010-SSH-036	20.0 U	µg/L
				GW-12610-083010-SSH-039	20.0 U	µg/L
				GW-12610-083010-SSH-040	20.0 U	µg/L
				GW-12610-083110-SSH-041	20.8 U	µg/L

Notes:

U - Qualified as Not Detected at the report limit