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December 30, 2013 Reference No. 012610

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

Dear Ms. Kaelber-Matlock:

Re: 2013 Annual Technical Progress Report Submittal
RACER Trust Bay City Powertrain Industrial Lands

Enclosed is the 2013 Annual Technical Progress Report (Annual Report) for the Revitalizing Auto Communities Environmental Response Trust (RACER) Bay City Powertrain Industrial Lands (Site) located in Bay City, Michigan.

This Annual Report covers the RACER Site for the time period from November 16, 2012 through November 15, 2013, unless otherwise noted in the report. Included as part of this submittal, as applicable, are descriptions of actions related to the implementation of the Feasibility Study/Remedial Action Plan (FS/RAP), interim response actions including, end-of-pipe treatment and recirculation implementation, and operation, maintenance, and monitoring activities. This 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

RAP operation and maintenance activities are being implemented for the Site.

A groundwater treatment system has been designed to provide operational independence from the treatment system at the neighboring General Motors LLC facility which previously treated groundwater and storm water from the RACER Site. The construction of the facility was initiated in November 2012 and is expected to be completed in December 2013. New groundwater extraction pumps and associated well upgrades were completed as part of the new groundwater treatment system construction.

1.1.1 Operation and Maintenance Activities

An initial Operation, Maintenance, and Monitoring Plan (O&M Plan) was submitted in November 2000 to MDEQ. Revised O&M Plan sections were submitted to MDEQ in June 2001, conditionally approved by MDEQ on November 27, 2001, and the final O&M Plan was submitted in January 2002 and subsequently approved by 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 from 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. Groundwater Monitoring well details and water elevations are presented in Table 3. Monthly maintenance activity checklists are presented in Attachment A.

Frequent interruptions to the MSA groundwater extraction system and the storm water management system were due to construction of the groundwater treatment system and associated extraction system modifications during the 12-month period covered by this report, as documented in the monthly maintenance activity checklists. Extraction well EW-14 in the Crotty Street Channel (CSC), which dewaters the entire CSC, continued to operate throughout the construction activities, while the water in the Machine Storage Area (MSA) extraction wells were manually extracted each month until October 30, 2013 when the extraction well pumps in EW-6, EW-8, and EW-12 were turned on and discharged to EW-15 as a temporary measure until the groundwater treatment system is commissioned. Due to the porous nature of the soils in the CSC, the water discharged to EW-15 will be collected through the operation of EW-14, which continues to discharge to the GM LLC stormwater treatment system.

The EW-14 pump was inspected twice a month and cleaned as required.

1.1.3 Saginaw River Levels at Essexville, Michigan

Saginaw River water levels have been recorded downstream from the RACER 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 November 15, 2013, the average Saginaw River water level at Essexville is 578.86 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 November 15, 2013 was 576.61 ft AMSL.

1.1.4 Groundwater Monitoring Activities

Table 4 presents the sample results for the MSA and CSC extraction system discharge samples. The thirteenth annual ground water sampling event (August 2013) was also conducted during this reporting period. Table 5 presents the August, 2013 Analytical Results Summary. 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. Groundwater elevations collected on August 6, 2013 are presented on Figure 3.

A summary of the last 7 years of analytical groundwater data is presented in Attachment B and the laboratory data reports and data validation report for the April and August 2013 sampling rounds are presented in Attachment C.

1.2 Interim Response Actions

No Interim response actions are proposed at this time.

2.0 Proposed Modifications to Monitoring Program

There are no proposed modifications to the monitoring program.

Table 6 presents a summary of the monitoring program.

3.0 Schedule

All activities have been completed within the required time frames.

As part of the 2014 monitoring program, RACER will continue to perform monthly extraction system inspections and regular pump maintenance, as necessary. RACER will also continue to collect semi-annual CSA and MSA extraction system samples (to be completed in February and August, 2014). The 2014 annual groundwater monitoring event will be completed in August 2014. Monitoring activities will be evaluated to identify ways to streamline and more efficiently complete necessary activity. Modifications will be proposed to MDEQ as appropriate.

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

Yours truly,

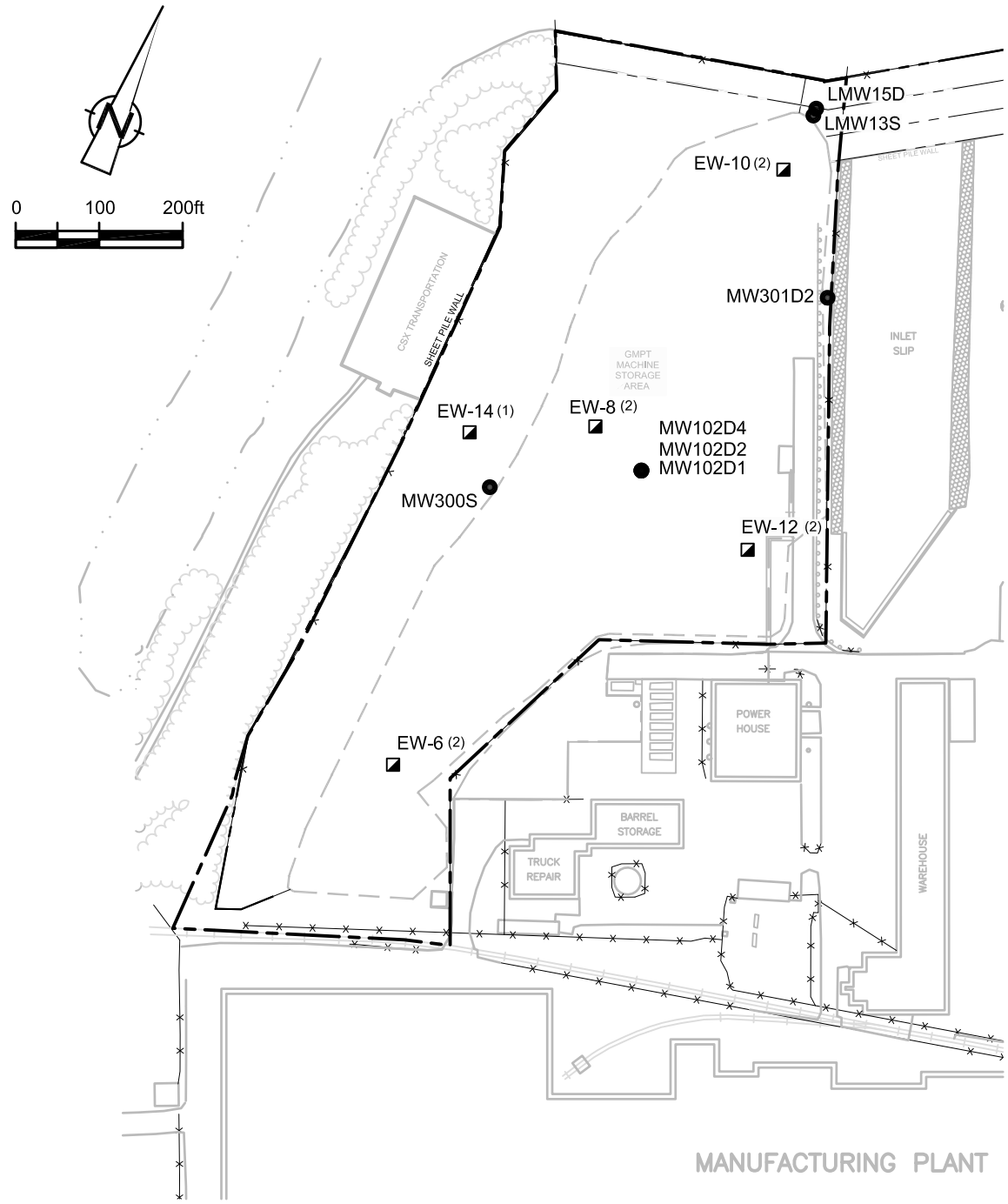
CONESTOGA-ROVERS & ASSOCIATES

Michael R. Tomka, P.E.

JP/kf/10
Encl.

Figure 1	Chemical Analysis Monitoring Locations
Figure 2	Water Elevation Monitoring Locations
Figure 3	Shallow Groundwater Elevations – August 6, 2013
Table 1	Saginaw River Water Levels
Table 2	Groundwater Extraction System Water Elevations
Table 3	Monitoring Well Completion Details and Groundwater Elevations
Table 4	Analytical Results Summary – Extraction System Sampling
Table 5	Analtyical Results Summary – Annual Sampling
Table 6	Summary of Long-Term Groundwater and Stormwater Monitoring Activities
Attachment A	Maintenance Activity Checklists
Attachment B	Analytical Results Summary (2006 to 2013)
Attachment C	Analytical Results and Reduced Validation – 2013 Annual and Semi-annual Groundwater Sampling

cc: John Leone, Esq. - Assistant Attorney General
Robert Belleman, City of Bay City
Thomas McDowell, MDEQ
Grant Trigger, RACER Trust
Dave Favero, RACER Trust



LEGEND

- FENCE
- GUARDRAIL
- RAILROAD
- TREELINE
- SHORELINE
- DEEP SOIL MIXING WALL
- SHEET PILE WALL
- APPROXIMATE RACER PROPERTY BOUNDARY

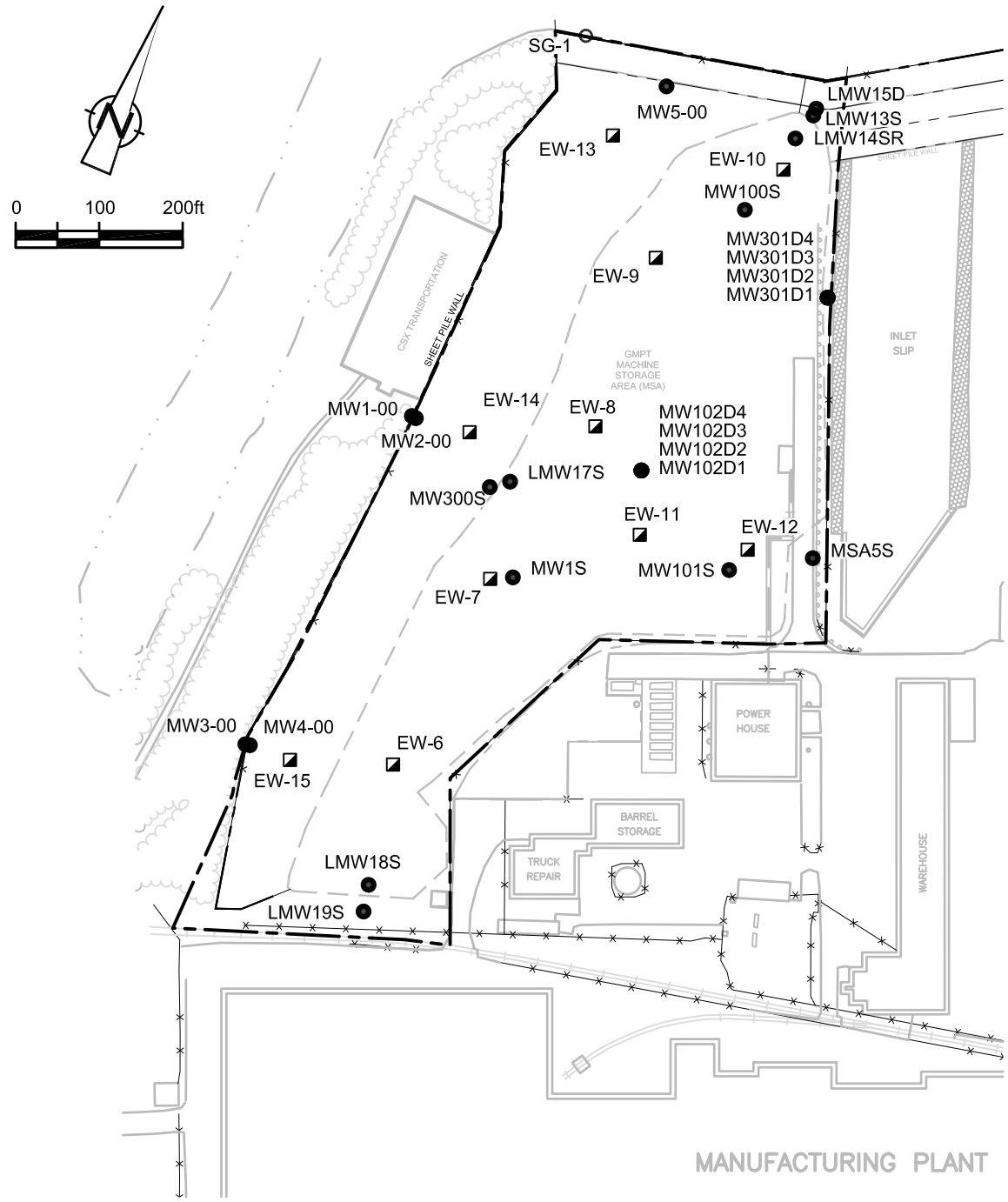
MW403S ● MONITORING WELL LOCATION
EW-6 ◪ GROUNDWATER EXTRACTION WELL LOCATION
(1) CSC SEMI-ANNUAL SAMPLING POINT
(2) MSA SEMI-ANNUAL SAMPLING POINT)

figure 1

CHEMICAL ANALYSIS MONITORING LOCATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
Bay City, Michigan

SOURCE:
McLAREN HART ENVIRONMENTAL ENGINEERING CORP.
DATE: 08/29/94 DRAWING: 7900B216
ALL ELEVATIONS IN NAVD88

12610-T04(KAEL010)GN-WA001 DEC 20/2013



LEGEND

- FENCE
- GUARDRAIL
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- TREELINE
- SHORELINE
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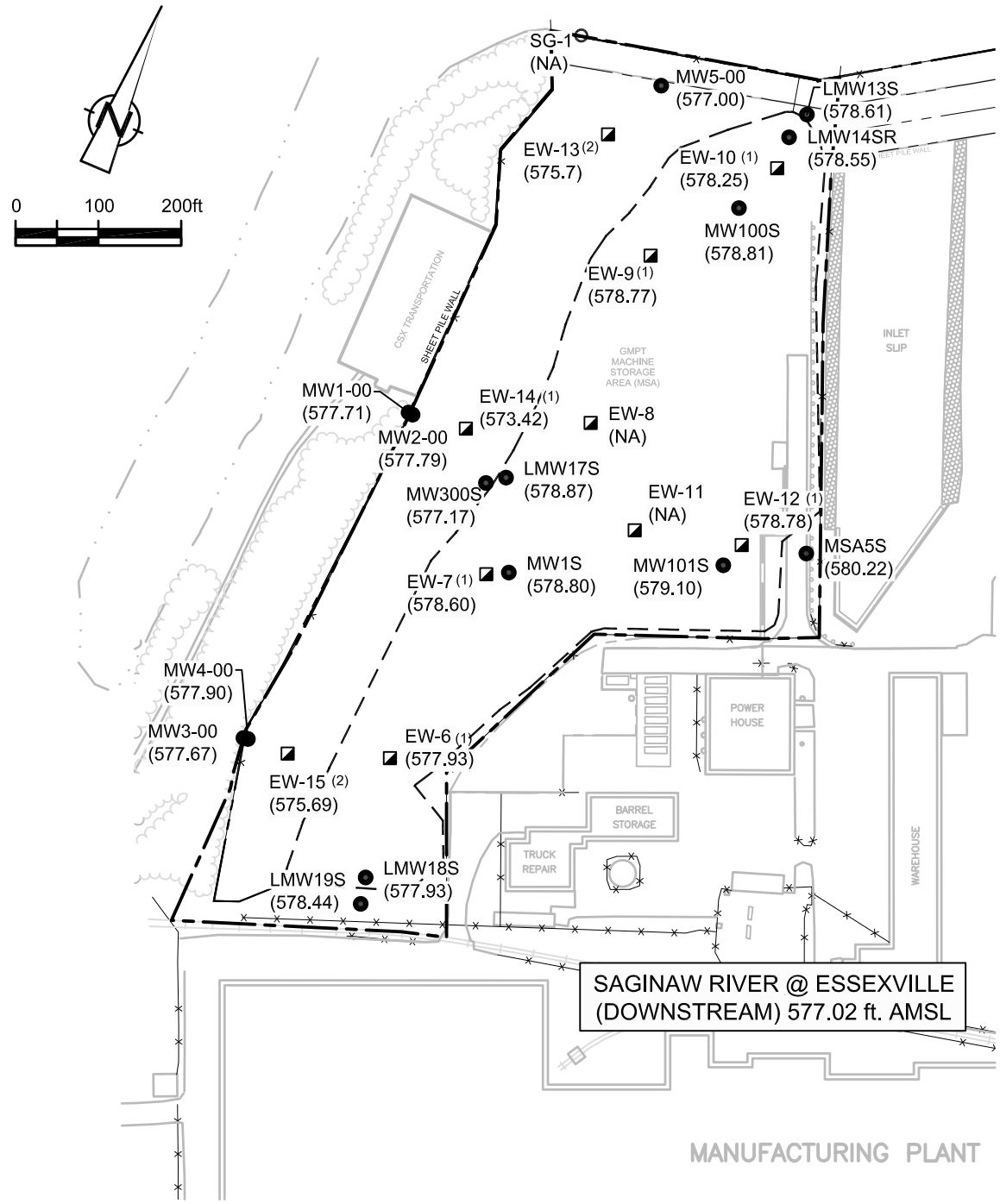
MW403S ●	MONITORING WELL LOCATION
SG-1 ○	STAFF GAGE LOCATION
EW-6 ◪	GROUNDWATER EXTRACTION WELL LOCATION
(1)	PUMP TO BE MAINTAINED - ROUTINE
(2)	WELL USED FOR WATER LEVEL MONITORING PURPOSES ONLY

figure 2

WATER ELEVATION MONITORING LOCATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
Bay City, Michigan

SOURCE:
McLAREN HART ENVIRONMENTAL ENGINEERING CORP.
DATE: 08/29/94 DRAWING: 7900B216
ALL ELEVATIONS IN NAVD88



LEGEND

- FENCE
- GUARDRAIL
- RAILROAD
- TREELINE
- SHORELINE
- DEEP SOIL MIXING WALL
- SHEET PILE WALL
- APPROXIMATE RACER PROPERTY BOUNDARY

MW403S ●	MONITORING WELL LOCATION
SG-1 ○	STAFF GAGE LOCATION
EW-6 ◪	GROUNDWATER EXTRACTION WELL LOCATION
(578.44)	GROUNDWATER ELEVATION (ft. AMSL)
(1)	- PUMP TO BE MAINTAINED - ROUTINE - EW WATER LEVEL RECORDED ON AUGUST 16, 2013
(2)	WELL USED FOR WATER LEVEL MONITORING PURPOSES ONLY

figure 3

NOTE:
- WATER ELEVATIONS WERE MEASURED ON AUGUST 7, 2012.
- EW WATER LEVELS MEASUED ON AUGUST 17, 2012.

SHALLOW GROUNDWATER ELEVATIONS AUGUST 6, 2013

RACER TRUST - BAY CITY INDUSTRIAL LAND

Bay City, Michigan

SOURCE:
McLAREN HART ENVIRONMENTAL ENGINEERING CORP.
DATE: 08/29/94 DRAWING: 7900B216
ALL ELEVATIONS IN NAVD88

12610-T04(KAEL010)GN-WA003 NOV 28/2013

TABLE 1

SAGINAW RIVER WATER LEVELS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Location	*13-Dec-12*	*9-Jan-13*	*25-Feb-13*	*27-Mar-13*	*17-Apr-13*	*2-May-13*	*24-Jun-13*	*16-Jul-13*	*16-Aug-13*	*17-Sep-13*	*30-Oct-13*	*4-Nov-13*
Crotty Street Channel Containment Area												
SG-1 - Saginaw River	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
USGS Station - Essexville, MI												
Daily Average Saginaw River at Essexville, MI	575.10	574.92	575.68	575.82	576.79	576.60	576.98	577.22	577.24	577.12	576.74	576.40
Weekly Average Water Level	575.51	575.23	575.82	575.88	576.47	576.49	577.21	577.22	577.28	577.13	576.80	576.63
Monthly Average Water Level	575.65	575.36	575.62	575.77	576.30	576.79	577.19	577.30	577.20	577.20	576.83	576.65

Notes:

Provisional USGS Data, Subject to Revision

(1) Water level below the bottom of the staff gauge

TABLE 2

GROUNDWATER EXTRACTION SYSTEM WATER ELEVATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Extraction Well	*Reference Elevation (ft AMSL)*	*Bottom of Well Elevation (ft AMSL)*	*Top ICU (ft AMSL)*	*Water Elevation (ft AMSL) Dec. 13, 2012*	*Water Elevation (ft AMSL) Jan. 9, 2013*	*Water Elevation (ft AMSL) Feb. 25, 2013*	*Water Elevation (ft AMSL) Mar. 27, 2013*	*Water Elevation (ft AMSL) Apr. 17, 2013*	*Water Elevation (ft AMSL) May 2, 2013*
Machine Storage Area									
EW-6	589.74	570.39	572.39	577.76	577.76	576.68	577.55	577.53	(1)
EW-7	587.99	571.14	571.64	577.71	577.73	573.88	577.92	578.59	(1)
EW-8	588.34	572.29	573.29	578.23	578.34	575.48	573.78	578.41	(1)
EW-9	588.04	572.19	573.69	576.61	576.72	575.85	576.42	578.65	(1)
EW-10	587.77	570.82	572.32	577.00	576.03	572.84	576.24	577.32	(1)
EW-11	591.51	571.91	572.56	576.65	576.71	576.65	577.18	577.00	(1)
EW-12	586.42	571.57	573.07	578.66	578.83	573.73	578.39	579.65	(1)
Crotty Street Channel Containment Area									
EW-13	584.33	571.86	NA	575.58	575.63	575.60	575.98	576.64	(1)
EW-14	582.42	569.92	NA	574.43	575.35	573.37	573.13	575.41	(1)
EW-15	583.71	571.61	NA	575.70	(1)	575.53	579.27	577.45	(1)

Notes:

(1) Groundwater treatment building is under construction; no access to well
(2) Faulty dual phase probe
(3) Product at 578.33 ft AMSL; no water level

TABLE 2

GROUNDWATER EXTRACTION SYSTEM WATER ELEVATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Extraction Well	*Reference Elevation (ft AMSL)*	*Bottom of Well Elevation (ft AMSL)*	*Top ICU (ft AMSL)*	*Water Elevation (ft AMSL) Jun. 24, 2013*	*Water Elevation (ft AMSL) Aug. 16, 2013*	*Water Elevation (ft AMSL) Sept. 17, 2013*	*Water Elevation (ft AMSL) Oct. 30, 2013*	*Water Elevation (ft AMSL) Nov. 4, 2013*
Machine Storage Area								
EW-6	589.74	570.39	572.39	577.83	577.93	577.99	578.00	577.19
EW-7	587.99	571.14	571.64	578.50	578.60	578.58	578.66	578.50
EW-8	588.34	572.29	573.29	578.53	(2)	578.42	(3)	575.61
EW-9	588.04	572.19	573.69	578.71	578.77	578.81	578.73	578.75
EW-10	587.77	570.82	572.32	578.02	578.25	578.19	578.15	577.94
EW-11	591.51	571.91	572.56	576.77	(2)	576.40	576.21	576.25
EW-12	586.42	571.57	573.07	579.01	578.78	578.82	577.79	578.23
Crotty Street Channel Containment Area								
EW-13	584.33	571.86	NA	577.24	575.7	575.66	575.65	575.63
EW-14	582.42	569.92	NA	576.55	573.42	573.39	571.35	571.13
EW-15	583.71	571.61	NA	577.16	575.69	575.63	574.82	578.1

Notes:

(1) Groundwater treatment building is under construction
(2) Faulty dual phase probe
(3) Product at 578.33 ft AMSL; no water level

TABLE 3

MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Well Location	*Top of Riser Elevation (ft AMSL)*	*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)*				
								8/6/2013	*8/7/2012*	*8/22/2011*	*8/16/2010*	*8/27/2009*
Machine Storage Area (MSA)												
LMW13S	590.02	589.40	19.22	10	SS	PVC	2	578.61	578.19	578.03	578.71	579.31
LMW17S	589.77	589.31	19.83	10	SS	PVC	2	578.87	578.85	578.80	578.83	578.81
LMW18S	591.24	592.33	22.52	10	SS	PVC	2	577.93	577.82	577.61	577.66	577.99
LMW19S	589.22	588.61	19.32	10	SS	PVC	2	578.44	578.58	578.34	578.25	578.53
MW1S	591.94	591.08	12.95	2	SS	SS	2	578.80	578.65	578.65	578.68	579.71
MW100S	590.03	591.97	14.44	10	SS	SS	2	578.81	578.49	578.18	578.86	579.27
MW101S	594.17	593.34	19.22	10	SS	SS	2	579.10	578.94	578.80	578.93	578.78
MW102D1	594.13	594.86	30.99	10	SS	SS	2	578.34	577.90	578.71	578.39	579.42
MW102D2	594.08	594.93	36.21	10	SS	SS	2	578.31	577.89	578.69	578.37	579.40
MW102D3	594.14	594.91	46.74	10	SS	SS	2	578.27	577.84	578.67	579.34	579.41
MW102D4 (replacement)	594.06	594.90	56.85	10	SS	SS	2	578.24	577.79	578.63	578.29	579.33
MW300S	587.71	587.12	15.06	10	SS	SS	2	577.17	577.69	577.03	577.18	578.22
LMW14SR (Replaced LMW14S Jan/00)	589.65	589.01	13.00	7	SS	SS	2	578.55	578.14	577.47	578.60	579.19
Perimeter Banks (PB)												
LMW15D	589.06	588.34	32..8	10	SS	PVC	2	578.02	577.56	578.65	578.21	579.45
MW301D1	590.15	589.54	27.50	10	SS	SS	2	576.56	578.38	579.39	578.96	579.96
MW301D2	589.77	589.16	37.24	10	SS	SS	2	576.62	577.99	579.00	578.60	579.56
MW301D3	589.83	589.22	44.04	10	SS	SS	2	576.46	577.87	578.87	578.47	579.44
MW301D4	589.92	589.33	55.95	10	SS	SS	2	576.54	578.15	579.16	578.74	579.70
Support Facilities Area (SFA)												
MSA5S	589.28	588.60	18.98			SS	2	580.22	578.58	578.67	579.10	580.10
Undeveloped Area (UA)												
MW10S	589.85	589.17	12.19			PVC	2	(8)	(8)	578.35	578.72	579.25
MW501D	584.54	584.05	54.63	10	SS	SS	2	(8)	(8)	578.03	577.76	578.63
MW501S	584.39	583.62	14.86	10	SS	SS	2	(8)	(8)	577.61	577.74	578.56
MW502D	589.82	589.28	57.98	10	SS	SS	2	(8)	(8)	577.89	577.67	578.15
MW503D	588.94	588.54	56.60	10	SS	SS	2	(8)	(8)	579.04	578.87	579.88
MW503S	589.09	588.69	18.97	10	SS	SS	2	(8)	(8)	579.50	579.64	580.11
MW504S	586.20	585.54	14.33	10	SS	SS	2	(8)	(8)	577.66	577.87	578.73
MW506S	589.48	588.85	14.22	10	SS	SS	2	(8)	(8)	577.88	578.00	578.74
Gage 3	584.76	579.24	- -	- -	- -	- -	- -	abandoned	abandoned	abandoned	abandoned	abandoned

TABLE 3

MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Well Location	*Top of Riser Elevation (ft AMSL)*	*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)*				
								8/6/2013	*8/7/2012*	*8/22/2011*	*8/16/2010*	*8/27/2009*
Crotty Street Channel												
MW1-00	588.87	588.26	12.00	7	SS	SS	2	577.71	576.44	577.17	577.13	578.95
MW2-00	590.09	589.29	18.00	7	SS	SS	2	577.79	576.62	577.29	577.26	578.40
MW3-00	587.92	588.40	12.50	7	SS	SS	2	577.67	576.47	577.25	577.14	579.01
MW4-00	590.67	589.65	19.00	7	SS	SS	2	577.90	576.76	577.41	577.38	578.55
MW5-00	589.73	588.89	13.00	7	SS	SS	2	577.00	576.73	576.77	576.95	578.04
Gage 1	569.43	569.43	- -	- -	- -	- -	- -	n/a	n/a	n/a	n/a	n/a
Saginaw River												
NOAA/NOS Station - Essexville, MI (6)	--	--	--	--	--	--	--	577.02	576.71	577.53	577.41	578.34

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
(7) Could not read due to well being covered with equipment
(8) Monitoring wells removed from the monitoring program
n/a Groundwater elevation not available

TABLE 3

MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Well Location	*Groundwater Elevation (feet AMSL)*											
	8/19/2008	*8/20/2007*	*8/16/2006*	*8/29/2005*	*8/24/2004*	*7/28/2003*	*8/26/2002*	*8/13/2001*	*3/19/2001*	*2/23/2001*	*1/24/2001*	*12/15/2000*
Machine Storage Area (MSA)												
LMW13S	578.21	577.67	578.23	578.14	579.40	578.45	582.05	578.68	577.85	578.17	578.19	578.06
LMW17S	578.58	577.58	578.63	578.31	578.80	582.73	578.91	578.68	578.74	578.83	579.06	578.79
LMW18S	577.62	578.13	578.00	578.23	578.45	578.35	578.85	578.10	578.22	578.61	578.39	578.18
LMW19S	578.45	579.71	578.45	578.85	579.21	579.24	579.93	578.79	579.56	579.96	579.59	(5)
MW1S	580.93	578.48	n/a	577.58	578.63	578.56	578.48	578.51	578.41	(5)	578.44	578.36
MW100S	578.40	578.01	578.38	578.57	579.15	577.27	578.91	578.93	578.36	578.64	578.87	578.65
MW101S	578.49	578.39	578.31	577.95	578.82	578.87	579.12	578.76	578.84	578.96	579.18	578.84
MW102D1	578.83	578.04	578.30	578.30	579.02	578.25	578.98	578.18	577.61	577.40	577.47	577.62
MW102D2	578.93	578.03	578.25	578.33	579.01	578.24	578.95	578.15	577.60	577.39	577.45	577.61
MW102D3	578.89	577.98	578.25	578.31	578.98	578.20	578.93	578.11	577.56	577.34	577.40	577.56
MW102D4 (replacement)	578.76	577.98	578.22	578.25	578.94	578.16	578.86	578.03	577.49	577.27	577.33	577.47
MW300S	579.26	576.30	576.81	578.34	577.05	577.77	578.53	577.00	578.84	578.67	578.99	578.07
LMW14SR (Replaced LMW14S Jan/00)	577.96	576.98	577.97	577.50	576.94	578.13	578.45	578.23	577.38	577.77	577.88	577.54
Perimeter Banks (PB)												
LMW15D	578.12	577.89	578.22	578.24	579.34	578.04	578.83	578.06	577.37	577.12	577.22	577.33
MW301D1	579.03	578.72	578.94	579.05	580.02	578.90	579.66	578.89	578.28	578.03	578.09	578.25
MW301D2	578.64	578.33	578.55	578.62	579.59	578.49	579.25	578.48	577.86	577.62	577.67	577.81
MW301D3	578.41	578.20	578.44	578.52	579.47	578.36	579.10	578.53	577.72	577.59	577.52	577.67
MW301D4	578.75	578.48	578.69	578.80	579.71	578.57	579.28	578.48	577.86	577.63	577.68	577.82
Support Facilities Area (SFA)												
MSA5S	578.04	580.10	579.28	579.76	580.57	580.55	580.65	579.74	580.65	580.42	580.62	580.46
Undeveloped Area (UA)												
MW10S	578.75	577.94	578.13	578.16	578.75	578.98	579.29	577.57	579.41	579.64	578.29	578.22
MW501D	577.34	577.17	577.57	577.56	578.54	577.34	578.08	577.25	576.78	576.50	576.48	576.60
MW501S	578.33	577.16	577.11	577.07	578.32	575.72	578.66	576.63	578.81	578.59	578.06	578.15
MW502D	577.97	577.05	577.42	577.40	578.33	577.13	577.96	577.16	576.72	576.49	576.40	576.50
MW503D	578.81	577.93	578.16	578.12	579.07	577.98	578.74	577.36	576.96	576.76	576.60	576.69
MW503S	579.97	578.98	579.17	579.11	579.63	579.62	579.89	577.53	580.42	580.31	578.41	578.35
MW504S	578.46	577.34	577.31	577.26	577.95	579.00	578.91	576.76	579.33	577.97	578.41	578.26
MW506S	578.27	577.50	577.66	577.62	578.14	578.07	578.53	577.18	580.07	579.68	578.25	578.03
Gage 3	abandoned	abandoned	abandoned	Dry	Dry	Dry	Dry	Dry	Dry	(5)	(5)	Dry (5)

TABLE 3

MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Well Location	*Groundwater Elevation (feet AMSL)*											
	8/19/2008	*8/20/2007*	*8/16/2006*	*8/29/2005*	*8/24/2004*	*7/28/2003*	*8/26/2002*	*8/13/2001*	*3/19/2001*	*2/23/2001*	*1/24/2001*	*12/15/2000*
Crotty Street Channel												
MW1-00	578.74	577.11	576.92	577.09	578.37	577.78	578.44	576.72	578.61	578.14	577.81	577.49
MW2-00	578.83	577.09	576.97	577.23	577.50	577.60	578.03	576.76	578.69	578.26	577.82	577.51
MW3-00	578.74	577.19	576.94	577.13	578.51	577.77	578.38	576.70	578.62	578.26	577.79	577.48
MW4-00	578.95	577.21	577.07	577.34	577.59	577.68	578.07	576.79	578.67	578.30	577.84	577.51
MW5-00	578.82	576.55	576.72	577.85	576.91	576.28	576.72	577.02	577.06	577.86	576.97	576.91
Gage 1	578.55	577.83	578.33	578.43	579.63	577.93	578.73	578.12	(5)	(5)	(5)	(5)
Saginaw River												
NOAA/NOS Station - Essexville, MI [6]	577.97	577.09	577.41	578.32	578.52	576.83	578.50	577.91	576.80	576.74	576.77	576.78

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
(6) Water Level is taken from mean hourly data
(7) Could not read due to well being covered wit
(8) Monitoring wells removed from the monitori
n/a Groundwater elevation not available

TABLE 3

MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Well Location	*Groundwater Elevation (feet AMSL)*											
	11/30/2000	*10/31/2000*	*9/11/2000*	*8/29/2000*	*7/18/2000*	*6/30/2000*	*5/30/2000*	*4/26/2000*	*3/29/2000*	*2/28/2000*	*2/2/2000*	*1/4/2000*
Machine Storage Area (MSA)												
LMW13S	578.35	578.63	578.90	578.90	580.11	580.62	581.63	581.81	581.27	581.74	579.27	580.08
LMW17S	579.17	578.93	579.24	579.20	579.09	579.85	580.06	580.19	579.91	579.96	579.08	579.47
LMW18S	578.29	578.52	578.67	579.03	578.52	577.80	578.10	578.09	577.66	577.80	577.09	577.37
LMW19S	579.56	579.38	579.34	580.13	579.45	580.56	580.96	581.25	580.73	581.39	579.70	580.30
MW1S	578.40	578.57	578.43	578.38	578.34	579.31	579.26	579.29	579.28	579.18	579.05	579.07
MW100S	579.05	579.33	579.57	579.66	579.85	578.03	577.79	577.07	576.87	576.69	577.09	577.49
MW101S	579.03	578.91	578.99	579.04	579.02	580.22	580.39	580.14	579.21	579.86	579.61	579.61
MW102D1	577.67	577.87	578.16	578.15	578.71	577.62	577.70	577.60	577.25	577.23	576.81	576.80
MW102D2	577.65	577.85	578.13	578.13	578.67	577.48	577.58	577.44	577.12	577.08	576.80	576.67
MW102D3	577.60	577.80	578.08	578.09	578.63	577.52	577.59	577.47	577.16	577.12	576.88	576.71
MW102D4 (replacement)	577.53	577.73	578.00	578.02	578.55	577.38	577.45	577.34	577.01	576.98	575.70	576.56
MW300S	578.84	578.27	578.16	578.24	n/a (2)	n/a (4)	579.89	580.18	579.73	No Access	578.55	579.27
LMW14SR (Replaced LMW14S Jan/00)	578.04	578.13	578.16	578.21	579.19	579.32	579.22	578.91	578.99	578.55	578.58	Damaged
Perimeter Banks (PB)												
LMW15D	577.48	577.63	577.94	578.03	578.43	n/a (4)	578.88	578.74	578.56	578.56	578.23	577.95
MW301D1	578.34	(5)	(5)	578.88	578.65	579.37	578.80	578.85	578.59	578.56	578.28	578.05
MW301D2	577.92	(5)	(5)	578.47	578.56	578.80	578.89	578.77	578.54	578.51	578.22	577.99
MW301D3	577.78	(5)	(5)	578.32	578.56	578.80	578.85	578.74	578.49	578.48	578.18	577.96
MW301D4	577.93	(5)	(5)	578.48	578.48	578.78	578.76	578.69	578.45	578.43	578.14	577.90
Support Facilities Area (SFA)												
MSA5S	580.65	580.34	580.56	580.41	581.32	581.17	582.22	582.37	580.62	582.13	580.96	581.42
Undeveloped Area (UA)												
MW10S	578.24	578.21	578.22	578.46	578.75	580.11	580.79	580.59	579.65	579.67	578.80	579.11
MW501D	576.70	576.91	577.30	577.35	577.88	577.82	577.99	577.87	577.44	577.62	577.26	577.18
MW501S	578.12	577.95	577.62	577.97	577.90	579.22	579.89	579.66	579.11	579.82	575.69	578.93
MW502D	576.58	576.82	577.11	577.24	577.49	577.96	577.97	577.87	577.43	577.58	577.14	577.09
MW503D	576.83	576.96	577.36	577.45	577.70	578.07	578.15	578.06	577.46	577.69	577.17	577.18
MW503S	578.47	578.20	578.29	578.58	579.00	580.30	581.37	580.76	579.91	580.38	578.77	579.00
MW504S	578.43	578.19	577.82	578.25	578.07	579.49	580.31	579.94	579.43	580.16	578.87	579.24
MW506S	578.21	577.95	577.95	578.19	578.58	580.04	581.12	580.55	579.73	580.07	578.59	578.79
Gage 3	Dry	Dry	Dry	Dry	580.24	583.76	583.76	584.06	584.16	584.16	Dry	Dry

TABLE 3

MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Well Location	*Groundwater Elevation (feet AMSL)*											
	11/30/2000	*10/31/2000*	*9/11/2000*	*8/29/2000*	*7/18/2000*	*6/30/2000*	*5/30/2000*	*4/26/2000*	*3/29/2000*	*2/28/2000*	*2/2/2000*	*1/4/2000*
Crotty Street Channel												
MW1-00	577.75	577.45	577.36	577.60	577.71	579.57	578.68	578.42	578.04	578.89	577.89	n/a
MW2-00	577.77	577.45	577.36	577.59	577.65	578.67	Not Accessible	577.65	577.26	578.11	579.11	n/a
MW3-00	577.74	577.45	577.37	577.60	578.68	578.46	579.05	578.79	578.40	579.25	578.27	n/a
MW4-00	577.78	577.47	577.34	577.57	577.62	578.87	Not Accessible	577.60	577.18	578.03	577.03	n/a
MW5-00	576.90	577.31	577.91	578.01	n/a (4)	n/a (4)	579.12	578.86	578.66	578.36	577.63	n/a
Gage 1	577.33	577.43	577.93	578.05	Destroyed (3)	Destroyed (3)	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed
Saginaw River												
NOAA/NOS Station - Essexville, MI [6]	577.02	577.23	577.49	577.76	578.27	577.81	577.48	577.42	577.37	577.24	577.14	577.15

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
(6) Water Level is taken from mean hourly data
(7) Could not read due to well being covered wit
(8) Monitoring wells removed from the monitori
n/a Groundwater elevation not available

TABLE 3

MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Well Location	*Groundwater Elevation (feet AMSL)*									
	11/24/1999	*10/25/1999*	*9/27/1999*	*9/7/1999*	*7/20/1999*	*6/22/1999*	*5/20/1999*	*4/20/1999*	*3/19/1999*	*3/8/1999*
Machine Storage Area (MSA)										
LMW13S	580.68	581.26	580.55	580.02	579.68	579.23	581.42	582.65	583.17	582.56
LMW17S	579.71	579.69	578.98	579.19	579.43	579.65	579.77	580.25	581.57	581.58
LMW18S	577.32	577.62	577.51	577.89	579.57	579.45	579.39	579.78	579.44	579.44
LMW19S	579.58	579.95	579.53	580.01	580.42	580.52	580.51	580.94	580.90	580.66
MW1S	579.15	579.11	578.51	578.58	--	578.64	579.29	579.49	584.35	584.12
MW100S	578.09	578.77	578.57	--	579.33	579.07	579.30	579.96	582.53	582.71
MW101S	579.65	579.81	579.04	579.18	578.83	578.71	579.19	580.44	586.50	586.44
MW102D1	576.38	577.47	577.64	578.29	579.69	576.82	579.27	579.34	582.38	582.32
MW102D2	576.24	577.33	577.50	578.15	579.68	576.78	579.34	579.39	582.03	581.93
MW102D3	576.26	577.35	577.55	578.20	579.66	576.80	579.25	579.35	581.92	581.84
MW102D4 (replacement)	576.12	577.21	577.40	578.05	579.56	576.70	579.13	579.21	581.54	581.45
MW300S	579.91	578.87	578.90	579.33	579.69	579.95	579.51	579.86	579.37	579.51
LMW14SR (Replaced LMW14S Jan/00)	Damaged	578.58	578.30	578.88	579.97	578.55	580.40	581.12	582.10	582.11
Perimeter Banks (PB)										
LMW15D	577.18	578.49	578.93	579.81	579.68	577.88	579.21	579.23	579.86	579.71
MW301D1	577.42	578.63	578.99	579.67	579.73	575.75	579.22	579.32	579.40	579.29
MW301D2	577.35	578.57	578.93	579.62	579.69	576.11	579.19	579.28	579.35	579.23
MW301D3	577.32	578.54	578.90	579.59	579.65	576.13	579.18	579.25	579.38	579.23
MW301D4	577.27	578.47	578.85	579.52	579.62	576.08	579.17	579.26	579.37	579.18
Support Facilities Area (SFA)										
MSA5S	581.70	581.77	581.74	581.84	579.38	577.24	579.71	580.83	580.33	580.54
Undeveloped Area (UA)										
MW10S	579.07	579.23	578.97	579.37	579.77	580.00	580.45	580.56	583.05	583.01
MW501D	576.42	577.68	577.88	578.52	578.74	577.68	578.47	578.49	578.56	578.51
MW501S	578.86	579.06	578.35	578.82	579.25	579.25	579.72	579.91	579.79	579.80
MW502D	576.43	577.59	577.75	578.36	578.60	577.88	578.37	578.45	579.57	579.68
MW503D	576.56	577.63	577.78	578.38	578.60	578.02	578.39	578.49	578.45	578.60
MW503S	578.66	578.85	578.39	578.64	579.15	579.49	580.43	580.67	580.38	580.52
MW504S	579.08	579.15	578.47	578.76	579.20	579.39	579.70	n/a	581.65	581.51
MW506S	578.59	578.85	578.24	578.48	579.00	578.22	580.28	580.93	582.61	582.47
Gage 3	Dry	Dry	Dry	Dry	584.26	584.26	584.26	584.21	584.06	584.06

TABLE 3

MONITORING WELL COMPLETION DETAILS AND GROUNDWATER ELEVATIONS
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

Well Location	*Groundwater Elevation (feet AMSL)*									
	11/24/1999	*10/25/1999*	*9/27/1999*	*9/7/1999*	*7/20/1999*	*6/22/1999*	*5/20/1999*	*4/20/1999*	*3/19/1999*	*3/8/1999*
Crotty Street Channel										
MW1-00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW2-00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW3-00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW4-00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW5-00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Gage 1	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed
Saginaw River										
NOAA/NOS Station - Essexville, MI [6]	576.54	577.35	578.04	578.59	578.87	578.51	578.37	578.32	578.55	578.34

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
(6) Water Level is taken from mean hourly data
(7) Could not read due to well being covered wit
(8) Monitoring wells removed from the monitori
n/a Groundwater elevation not available

TABLE 4

ANALYTICAL RESULTS SUMMARY
EXTRACTION SYSTEM SAMPLING
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:			*Crotty Street Channel*	*Crotty Street Channel*	*Crotty Street Channel*	*Machine Storage Area*	*Machine Storage Area*
Sample Location:			*CSA GW Ext. Sys. Discharge*	*CSA GW Ext. Sys. Discharge*	*CSA GW Ext. Sys. Discharge*	*MSA GW Ext. Sys. Discharge*	*MSA GW Ext. Sys. Discharge*
Sample ID:			*W-12610-040913-SSH-CS1013*	*W-12610-040913-SSH-CS1113*	*GW-12610-080713-JY-003*	*W-12610-040913-SSH-MSA1313*	*W-12610-120913-SSH-010*
Sample Date:			*4/9/2013*	*4/9/2013 (Duplicate)*	*8/7/2013*	*4/9/2013*	*12/09/13*
Parameters:	*Units*	*Michigan Residential Drinking water criteria*					
Polychlorinated Biphenyls							
Aroclor-1016 (PCB-1016)	µg/L	0.5	0.19 U	0.19 U	0.19 U	1.9 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.5	0.19 U	0.19 U	0.19 U	1.9 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.5	0.19 U	0.19 U	0.19 U	1.9 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.5	0.19 U	0.19 U	**0.55**	1.9 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.5	0.19 U	0.059 J	0.19 U	1.9 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.5	0.19 U	0.19 U	0.19 U	1.9 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.5	0.19 U	0.19 U	0.19 U	**8.6**	0.20 U

Notes:

J	Estimated concentration
U	Not present at or above the associated value
0.85	Exceedance of criteria

TABLE 5

ANALYTICAL RESULTS SUMMARY
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:			*Machine Storage Area*	*Machine Storage Area*	*Machine Storage Area*	*Machine Storage Area*	*Machine Storage Area*
Sample Location:			*MW102D1*	*MW102D2*	*MW102D4*	*MW300S*	*MW300S*
Sample ID:			*GW-12610-080713-JY-004*	*GW-12610-080713-JY-005*	*GW-12610-080713-JY-006*	*GW-12610-080713-JY-001*	*GW-12610-080713-JY-002*
Sample Date:			*8/7/2013*	*8/7/2013*	*8/7/2013*	*8/7/2013*	*8/7/2013 (Duplicate)*
Parameters:	***Units***	***Michigan Residential Drinking water criteria***					
Polychlorinated Biphenyls							
Aroclor-1016 (PCB-1016)	µg/L	0.5	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.5	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.5	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.5	0.19 U	0.19 U	0.19	0.19 J	0.19 J
Aroclor-1248 (PCB-1248)	µg/L	0.5	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.5	R	0.19 U	0.19 U	R	R
Aroclor-1260 (PCB-1260)	µg/L	0.5	R	0.19 U	0.19 U	R	R

Notes:

J	Estimated concentration.
U	Not present at or above the associated value.
UJ	Estimated reporting limit.
R	Rejected.
- -	Not analyzed.
1.0	Exceedance of criteria

TABLE 5

ANALYTICAL RESULTS SUMMARY
RACER TRUST - BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:			***Perimeter Banks***	***Perimeter Banks***	***Perimeter Banks***
Sample Location:			***LMW13S***	***LMW15D***	***MW301D2***
Sample ID:			***GW-12610-080813-JY-008***	***GW-12610-080813-JY-009***	***GW-12610-080713-JY-007***
Sample Date:			***8/8/2013***	***8/8/2013***	***8/7/2013***
Parameters:	***Units***	***Michigan Residential Drinking water criteria***			
Polychlorinated Biphenyls					
Aroclor-1016 (PCB-1016)	µg/L	0.5	0.19 UJ	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.5	0.19 UJ	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.5	0.19 UJ	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.5	0.19 UJ	0.14 J	0.19 U
Aroclor-1248 (PCB-1248)	µg/L	0.5	**1.0 J**	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.5	0.19 U	0.19 UJ	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	0.5	0.19 U	0.19 UJ	0.19 U

Notes:

J	Estimated concentration.
U	Not present at or above the associated value.
UJ	Estimated reporting limit.
R	Rejected.
- -	Not analyzed.
1.0	Exceedance of criteria

TABLE 6

SUMMARY OF LONG-TERM GROUNDWATER AND STORMWATER MONITORING ACTIVITIES
RACER TRUST - BAY CITY SITE
BAY CITY, MICHIGAN

		Original Program 2001 - 2008			*Revision 2009-2010*			*Proposed Revision 2011*			*2012*			*2013/2014*		
		Groundwater Quality Monitoring		*Static Water Level Monitoring (1)*	*Groundwater Quality Monitoring*		*Static Water Level Monitoring (1)*	*Groundwater Quality Monitoring*		*Static Water Level Monitoring (1)*	*Groundwater Quality Monitoring*		*Static Water Level Monitoring (1)*	*Groundwater Quality Monitoring*		*Static Water Level Monitoring (1)*
Plant Area	*Location*	*Parameters*	*Frequency*	*Frequency*	*Parameters*	*Frequency*	*Frequency*	*Parameters*	*Frequency*	*Frequency*	*Parameters*	*Frequency*	*Frequency*	*Parameters*	*Frequency*	*Frequency*
Machine Storage Area (MSA)																
MSA	LMW17S	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	LMW18S (3)	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	LMW19S	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	MW1S (3)	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	MW100S (3)	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	MW101S (3)	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	MW102D1	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	MW102D2	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	MW102D3	PCBs	annually	annually	PCBs	annually	annually		- -	annually	- -	- -	annually	- -	- -	annually
MSA	MW102D4	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	MW300S	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	LMW14S	--	--	annually	--	--	annually	--	--	annually	--	--	annually	--	--	annually
Perimeter Banks (PB)																
PB	LMW13S	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
PB	LMW15D	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
PB	MW301D1	PCBs	annually	annually	PCBs	annually	annually		- -	annually	- -	- -	annually	- -	- -	annually
PB	MW301D2	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
PB	MW301D3	PCBs	annually	annually	PCBs	annually	annually		- -	annually	- -	- -	annually	- -	- -	annually
PB	MW301D4	PCBs	annually	annually	PCBs	annually	annually		- -	annually	- -	- -	annually	- -	- -	annually
Support Facilities Area (SFA)																
SFA	MSA5S	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
Crotty Street Channel (CSC)																
CSC	MW1	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
CSC	MW2	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
CSC	MW3	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
CSC	MW4	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
CSC	MW5	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
CSC	Gage 1 (2)	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually	- -	- -	annually
Stormwater System(3)																
MSA(5)	Extraction System	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -
CSC(5)	Extraction System	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -
CSC(5)	CB2	PCBs	Semi-annually	- -	PCBs	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
[ ] Changes made to monitoring program

Attachment A

Monthly Maintenance Activity 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	S. Hovemeyer	12/13/12	field book used when on site	
Site Log Book	Monthly			"	"
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			ongoing construction	
Maintenance	Monthly - As Required			clean pulled pumps	
Level Transmitter Inspection	Monthly				
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			OK	
Maintenance	Monthly - As Required			under construction	
Air Supply Manifold Inspection	Monthly			by GM	
Air Compressor Maintenance	Monthly - As Required				
Heater Check	Monthly (Winter Season)			"on"	
Maintenance	Monthly - As Required			none but under construction	

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	12/13/12	annual in	August
Water Levels	As required			"	"
General Maintenance	As required			GW Treatment system being constructed	
Force Main Cleaning	As required			schedule for spring	
Flowmeter Cleaning	As required			/	
Spare Parts Inventory	As used			all new pumps will be installed in FWs	
Staff Gauges Water Levels	As Required				
Exposure Barriers	Monthly			collected	
Multi-Layer Cap	Monthly			cap liner breached for construction	
Containment System	Monthly			excavations during construction	
Stormwater Collection System	Monthly			minor cracks at welds	
Crotty Street Channel Abondoned 60" Sewer	Monthly			continues to flow normal	
				normal to a little higher H2O level	

* 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
		SSH	12/13					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							no oil
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 12.74	11.98						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							no oil
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.00	10.28						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							drops of oil on probe
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.34	10.11						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							no oil
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.04	11.93						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							no oil
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 10.77	10.77						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							oil/H_2O
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 14.51	13.75/14.86						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							7.76
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 9.42	7.76						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm) / TOTAL (gal.)	— / —						
LT-01		OK						
CP-01		by GM						
AIR SUPPLY MANIFOLD		11 am						
HEATER								
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	12/13					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 7.33	8.75						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 5.42	7.99						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 6.71	8.01						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)	/						
	TOTAL (gal.)							
HEATER		on						
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)	2.46'						
	INLET RIVER - WATER LEVEL (ft)	dry						
	CROTTY STREET - WATER LEVEL (ft)	dry						

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	S. Housemeyer	1/9/13	field book used when onsite	
Site Log Book	Monthly			" "	" "
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			no power or air	
Maintenance	Monthly - As Required			pulled to clean	
Level Transmitter Inspection	Monthly				
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			OK	
Maintenance	Monthly - As Required			under construction	
Air Supply Manifold Inspection	Monthly			turned off by GM	
Air Compressor Maintenance	Monthly - As Required				
Heater Check	Monthly (Winter Season)			no power	
Maintenance	Monthly - As Required			NA	

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	1/9/13	annual in	August
Water Levels	As required			"	"
General Maintenance	As required			working with construction crew	
Force Main Cleaning	As required			scheduled for	spring
Flowmeter Cleaning	As required			/	
Spare Parts Inventory	As used			construction installing new pumps	
Staff Gauges Water Levels	As Required			collected	
Exposure Barriers	Monthly			cap liner breached for construction - will repair	
Multi-Layer Cap	Monthly			excavations for construction	
Containment System	Monthly			minor cracks at welds	
Stormwater Collection System	Monthly			continue to flow out - to GM	
Crotty Street Channel Abondoned 60" Sewer	Monthly			higher water level than normal	

* 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
		SSH	1/9/13					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							no power or air drops of oil
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 12.74	11.98						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.00	10.26						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.34	10.00						oil in EW
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.04	11.32						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 10.77	11.74						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 14.51	13.79 / 14.80						oil in EW
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 9.42	7.59						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)	/						
	TOTAL (gal.)							
LT-01		/						
CP-01		OK						road construction
AIR SUPPLY MANIFOLD		off						turned off by GM
HEATER		off						no power
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	1/9/13					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 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 DEPTH 5.42	7.07						Sump pump
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 6.71							under construction for GW Treatment bldg
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)							
	TOTAL (gal.)	/						
HEATER		off						no power - under construction
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)	dry						
	INLET RIVER - WATER LEVEL (ft)	dry						
	CROTTY STREET - WATER LEVEL (ft)	1.24'						

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	S. Howemeyer	2/25/13	use of site log book when onsite	
Site Log Book	Monthly			" "	"
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			no power	pumping manually
Maintenance	Monthly - As Required				
Level Transmitter Inspection	Monthly			NA	
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			OK	down for GW treatment
Maintenance	Monthly - As Required			no power	bldg. construction
Air Supply Manifold Inspection	Monthly			turned off by GM	
Air Compressor Maintenance	Monthly - As Required			NA	
Heater Check	Monthly (Winter Season)			all off - no power	
Maintenance	Monthly - As Required			some may require replacement	

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	2/25/13	sampled annually in August	
Water Levels	As required			"	"
General Maintenance	As required			GW Treatment system under construction	
Force Main Cleaning	As required			spring	
Flowmeter Cleaning	As required			✓	
Spare Parts Inventory	As used			new pumps being installed in EWs	
Staff Gauges Water Levels	As Required				
Exposure Barriers	Monthly			collected	
Multi-Layer Cap	Monthly			liner has been repaired from construction	
Containment System	Monthly			requires grading/sealing this spring	
Stormwater Collection System	Monthly			minor cracks on welds on cap	
Crotty Street Channel				working properly - flow directed to GM	
Abondoned 60" Sewer	Monthly			fairly full of H_2O	

* 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
		SSH	2/25					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							peristaltic pump
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 12.74	13.06						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							whaler pump
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.00	14.11						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							peristaltic pump - small amount of oil in bucket ≈ 1/8"
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.34	12.86						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							whaler pump
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.04	12.19						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							whaler pump
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 10.77	14.93						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							13.74 LNAPL no pumping 14.86 H_2O bailed ≈ 1/3 gal LNAPL
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 14.51							
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							whaler pump
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 9.42	12.69						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)	—						
	TOTAL (gal.)	—						
LT-01		OK						
CP-01								no power
AIR SUPPLY MANIFOLD								air is shutdown
HEATER								no power
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	2/25					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 7.33	8.73						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 5.42	9.05						sump pump
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 6.71	8.18						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)	—						
	TOTAL (gal.)							
HEATER		no Power						
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)	0.02'						
	INLET RIVER - WATER LEVEL (ft)	out of H2O						snow covered shoreline
	CROTTY STREET - WATER LEVEL (ft)	out of H2O						

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	S. Howemeyer	3/27/13	use of field book when on site	
Site Log Book	Monthly			"	"
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			no air or power to EWs	
Maintenance	Monthly - As Required			complete GW Treatment Construction	
Level Transmitter Inspection	Monthly				
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			OK - no power	
Maintenance	Monthly - As Required			construction	
Air Supply Manifold Inspection	Monthly			shutdown by GM	
Air Compressor Maintenance	Monthly - As Required				
Heater Check	Monthly (Winter Season)			no power	
Maintenance	Monthly - As Required			check before next heating season	

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	3/27/13	annual in Aug	
Water Levels	As required			" "	
General Maintenance	As required			manual pumping of EWS	
Force Main Cleaning	As required			early summer to complete	
Flowmeter Cleaning	As required				
Spare Parts Inventory	As used			installation of new pumps with GW Treatment system	
Staff Gauges Water Levels	As Required			collected	
Exposure Barriers	Monthly			liner repaired but still open excavations	
Multi-Layer Cap	Monthly			excavations open from GW Treatment system	
Containment System	Monthly			minor cracks on welds on cap	
Stormwater Collection System	Monthly			flowing good - normal	
Crotty Street Channel Abondoned 60" Sewer	Monthly			full of water	

* 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
		SSH	4/4					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 12.74	12.19						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.00	10.07						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.34	14.56						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.04	11.62						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 10.77	11.53						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 14.51	14.33						LNAPL at 13.79'
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 9.42	8.03						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)	—						
	TOTAL (gal.)							
LT-01		—						
CP-01		OFF						no power
AIR SUPPLY MANIFOLD		shut down by GM						
HEATER		no power						
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	4/4					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 7.33	8.35						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 5.42	9.29						power to sump pump
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 6.71	4.44						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)	/						
	TOTAL (gal.)							
HEATER		no power						
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)	1.40+						
	INLET RIVER - WATER LEVEL (ft)	dry						
	CROTTY STREET - WATER LEVEL (ft)							

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	S. Hovermeyer	4/17/13	site logbook used	
Site Log Book	Monthly			" "	
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			non-operational - no power - complete GW Treatment	
Maintenance	Monthly - As Required			manually remove H_2O with pumps	
Level Transmitter Inspection	Monthly				
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			OK	
Maintenance	Monthly - As Required			no power	
Air Supply Manifold Inspection	Monthly			shutdown by GM	
Air Compressor Maintenance	Monthly - As Required				
Heater Check	Monthly (Winter Season)			no power	
Maintenance	Monthly - As Required			check all for proper operation upon power	

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	4/19/13	annual in Aug.	
Water Levels	As required			" "	
General Maintenance	As required			manual pumping - over 4" rain	
Force Main Cleaning	As required			upon completion of GW Treatment system	
Flowmeter Cleaning	As required				
Spare Parts Inventory	As used			installation of new pumps	
Staff Gauges Water Levels	As Required			collected	
Exposure Barriers	Monthly			line scheduled backfill in May	
Multi-Layer Cap	Monthly			restoration - grading / seeding in May	
Containment System	Monthly			minor cracks on wells on cap	
Stormwater Collection System	Monthly			flowing heavy - lots of rain - sampled on 4/9/13	
Crotty Street Channel Abondoned 60" Sewer	Monthly			full - rain	

* 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
		SSH	4/17					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 12.74	12.21						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.00	9.40						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.34	9.93						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.04	9.39						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 10.77	10.45						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 14.51	14.51						13.49' to LNAPL
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 9.42	6.77						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)	/						
	TOTAL (gal.)	/						
LT-01								
CP-01		OK-no power						
AIR SUPPLY MANIFOLD		/						
HEATER		no power						
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	4/17					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 7.33	7.69						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 5.42	7.01						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 6.71	6.26						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)	/						
	TOTAL (gal.)							
HEATER		no power						
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)	1.98'						
	INLET RIVER - WATER LEVEL (ft)	dry						
	CROTTY STREET - WATER LEVEL (ft)							

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	S. Housenger	5/2/17	use of field book	when onsite
Site Log Book	Monthly			" "	"
Extraction Well Water Levels	Monthly			not collected	
Inspection	Monthly			no power	
Maintenance	Monthly - As Required			manual pumping	
Level Transmitter Inspection	Monthly				
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			OK – rewriting for new GW system	
Maintenance	Monthly - As Required				
Air Supply Manifold Inspection	Monthly			shut off by GM	
Air Compressor Maintenance	Monthly - As Required				
Heater Check	Monthly (Winter Season)			off	
Maintenance	Monthly - As Required			not at this time	

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	5/2/13	annual in Aug.	
Water Levels	As required			" "	
General Maintenance	As required			GW Treatment system construction	
Force Main Cleaning	As required			schedule after construction	
Flowmeter Cleaning	As required			/	
Spare Parts Inventory	As used			all new pumps + equipment	
Staff Gauges Water Levels	As Required				
Exposure Barriers	Monthly			not collected	
Multi-Layer Cap	Monthly			open excavations for construction	
Containment System	Monthly			open trenches	
Stormwater Collection System	Monthly			sheetpile wall ok except minor cracks at welds	
Crotty Street Channel Abondoned 60" Sewer	Monthly			OK — normal operation	
				standing H_2O at ~1.7ft above normal level	

* 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

Description	Frequency	Inspected By (Print)	Date	Inspection Results (1)	Nature of Maintenance/Repairs (1)
O&M Log	Monthly	S. Hovermeyer	6/24/13	use of field book onsite	
Site Log Book	Monthly			"	"
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			no power	
Maintenance	Monthly - As Required				
Level Transmitter Inspection	Monthly				
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			OK	
Maintenance	Monthly - As Required			no power	
Air Supply Manifold Inspection	Monthly			non operational	
Air Compressor Maintenance	Monthly - As Required				
Heater Check	Monthly (Winter Season)			"off" for season	
Maintenance	Monthly - As Required			not at this time	

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	6/24/13	annual in Aug.	
Water Levels	As required			" "	
General Maintenance	As required				
Force Main Cleaning	As required			not at this time	
Flowmeter Cleaning	As required				
Spare Parts Inventory	As used			adequate	
Staff Gauges Water Levels	As Required				
Exposure Barriers	Monthly			collect	
Multi-Layer Cap	Monthly			no excavations open	
Containment System	Monthly			disturbed areas - seed growing but need rain	
Stormwater Collection System	Monthly			minor cracks at cap welds	
Crotty Street Channel	Monthly			no flow	
Abondoned 60" Sewer				normal level	

* 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
		SSH	6/25					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 12.74	11.91						drops of product on probe
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.00	9.49						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							9.77 / 9.81
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.34							
	PUMP CHANGED (Y/N)							LNAPL / H_2O
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.04	9.33						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 10.77	9.75						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							13.75 / 14.74
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 14.51							
	PUMP CHANGED (Y/N)							LNAPL / H_2O
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 9.42	7.41						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)	—						
	TOTAL (gal.)							
LT-01		—						
CP-01		ON						no power
AIR SUPPLY MANIFOLD		—						
HEATER								
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	6/25					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 7.33	7.09						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 5.42	5.87						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 6.71	6.55						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)	/						
	TOTAL (gal.)							
HEATER		"off"						
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)							
	INLET RIVER - WATER LEVEL (ft)	out of H_2O						
	CROTTY STREET - WATER LEVEL (ft)	Out of H_2O						

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	S. Howemeyer	8/29 + 8/30	use of field book	
Site Log Book	Monthly			"	"
Extraction Well Water Levels	Monthly				
Inspection	Monthly			OK - no power	
Maintenance	Monthly - As Required				
Level Transmitter Inspection	Monthly				
Maintenance	Monthly - As Required			no power to GW Treatment System	
Calibration	Semi-Annually				
Control Panel Inspection	Monthly				
Maintenance	Monthly - As Required			OK an inspection - all key parts upon power	
Air Supply Manifold Inspection	Monthly			no air pressure	
Air Compressor Maintenance	Monthly - As Required			/	
Heater Check	Monthly (Winter Season)			"off" for season - no power	
Maintenance	Monthly - As Required			not at this time	

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	8/29 + 8/30	completed early August.	
Water Levels	As required			"	"
General Maintenance	As required			complete forcemain for GW Treatment System	
Force Main Cleaning	As required			none required at this time	
Flowmeter Cleaning	As required			—	
Spare Parts Inventory	As used			new system	
Staff Gauges Water Levels	As Required				
Exposure Barriers	Monthly			collected	
Multi-Layer Cap	Monthly			excavation on outside of sheetpile wall	
Containment System	Monthly			vegetation good - some disturbed areas	
Stormwater Collection System	Monthly			minor cracks at welds on cap	
Crotty Street Channel	Monthly			CBs - OK - no flow	
Abondoned 60" Sewer				fairly full of water - a little over normal	

* 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
		SSH	8/16/13					S. York- completed DTWs
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 12.74	11.81						drops of product on probe
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.00	9.39						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.34							no interface probe
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.04	9.27						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 10.77	9.52						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 14.51							no interface probe
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 9.42	7.64						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)	—						
	TOTAL (gal.)	—						
LT-01		ON						
CP-01		"off"						no power
AIR SUPPLY MANIFOLD								
HEATER								
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	8/16					S. Yonk completed DTWs
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 7.33	8.63						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 5.42	9.00						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 6.71	8.02						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)	/						
	TOTAL (gal.)	"off"						
HEATER								
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)							
	INLET RIVER - WATER LEVEL (ft)	out of H2O						
	CROTTY STREET - WATER LEVEL (ft)	out of H2O						

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	S. Hoesemeyer	9/17/13	use of field book	while onsite
Site Log Book	Monthly			"	" "
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			not operational -	setting up comissioning
Maintenance	Monthly - As Required				of GW Treatment System
Level Transmitter Inspection	Monthly			nonoperational -	site requires power
Maintenance	Monthly - As Required			/	
Calibration	Semi-Annually			/	
Control Panel Inspection	Monthly			OK	
Maintenance	Monthly - As Required			turn "on" power to system in Sept. or Oct.	
Air Supply Manifold Inspection	Monthly			no air pressure	from GM
Air Compressor Maintenance	Monthly - As Required			/	
Heater Check	Monthly (Winter Season)			"off" for season in EWs	
Maintenance	Monthly - As Required			not at this time - no power	

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	9/17/13	annual in Aug.	
Water Levels	As required			" "	
General Maintenance	As required			commissioning of GW treatment	
Force Main Cleaning	As required			not at this time	
Flowmeter Cleaning	As required			✓	
Spare Parts Inventory	As used			determine after new GW system operates	
Staff Gauges Water Levels	As Required				
Exposure Barriers	Monthly			collected	
Multi-Layer Cap	Monthly			no excavations	
Containment System	Monthly			seeded areas look OK - vegetation requires cutting	
Stormwater Collection System	Monthly			minor cracks at wells on cap	
Crotty Street Channel Abondoned 60" Sewer	Monthly			no flow - dry	
				normal Hg0 level	

* 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
		SSH	9/18					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 12.74							11.71/11.75
	PUMP CHANGED (Y/N)							(product/H_2O)
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.00	9.41						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.34							9.81/9.92
	PUMP CHANGED (Y/N)							(product/H_2O)
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.04	9.23						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 10.77	9.58						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 14.51							13.66/15.11
	PUMP CHANGED (Y/N)							(product/H_2O)
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 9.42	7.60						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)	—						
	TOTAL (gal.)							
LT-01		OK						
CP-01								no power
AIR SUPPLY MANIFOLD								no air pressure
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	9/18/13					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 7.39	8.67						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 5.42	9.03						sump pump w/ float
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 6.71	8.08						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)	/						
	TOTAL (gal.)							
HEATER		off						
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)							
	INLET RIVER - WATER LEVEL (ft)	out of H2o		it appears - on GM property				
	CROTTY STREET - WATER LEVEL (ft)	out of H_2O						

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	S Hoesmeyer	10/30/13	use of field book onsite	
Site Log Book	Monthly			"	"
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			turned on new pumps in EW-6, 8, 12	
Maintenance	Monthly - As Required				
Level Transmitter Inspection	Monthly				
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			OK	
Maintenance	Monthly - As Required			will require power switch from GM to Racc	
Air Supply Manifold Inspection	Monthly			shut down by GM	
Air Compressor Maintenance	Monthly - As Required			/	
Heater Check	Monthly (Winter Season)			off	turn "on" in Nov.
Maintenance	Monthly - As Required				verify operation

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	10/30/13	annual in Aug.	
Water Levels	As required			" "	
General Maintenance	As required			commissioning GW Treatment system	
Force Main Cleaning	As required			as necessary for iron bacteria buildup	
Flowmeter Cleaning	As required			/	
Spare Parts Inventory	As used			use new pumps	
Staff Gauges Water Levels	As Required				
Exposure Barriers	Monthly			collected	
Multi-Layer Cap	Monthly			site restore after GW Treatment construction	
Containment System	Monthly			no open excavations	vegetation good
Stormwater Collection System	Monthly			sheetpile - all but minor cracks on cap welds	
Crotty Street Channel Abondoned 60" Sewer	Monthly			normal flow	
				Always standing H_2O in pipe	

* 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
		10/30	SSH					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 12.74	11.73/11.79						• product
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							• turn new pump on at 60%
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.00	9.33						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							• turn new pump on at 60%
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.34							• product at 10.01' - thick - no H_2O level
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.04	9.31						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 10.77	9.62						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							• product
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 14.51	13.69/15.30						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							• turn new pump on at 60%
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 9.42	8.63						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)	—						
	TOTAL (gal.)							
LT-01		—						
CP-01		on						
AIR SUPPLY MANIFOLD		—						

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	10/30					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 7.39	8.68						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-14	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 5.42	11.07						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 6.71	8.89						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)	/						
	TOTAL (gal.)							
HEATER		off						Turn on in November
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)	1.90'						
	INLET RIVER - WATER LEVEL (ft)	out of H_2S						
	CROTTY STREET - WATER LEVEL (ft)	out of H_2S						

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	S. Hoevemeyer	11/4/13	use of field log book while onsite	
Site Log Book	Monthly			"	"
Extraction Well Water Levels	Monthly			collected	
Inspection	Monthly			only EW 6, 8 + 12 operational	
Maintenance	Monthly - As Required			none required at this time	
Level Transmitter Inspection	Monthly				
Maintenance	Monthly - As Required				
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			OK	
Maintenance	Monthly - As Required			when GW Treatment system fully operational disconnect power supply from GM	
Air Supply Manifold Inspection	Monthly			GM has turned off air supply	
Air Compressor Maintenance	Monthly - As Required				
Heater Check	Monthly (Winter Season)			turned on in EW 6, 8, 12 + 15	
Maintenance	Monthly - As Required			none required at this time	

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	11/4/13	annual in Aug.	
Water Levels	As required			" "	
General Maintenance	As required			prep bldgs for winter	
Force Main Cleaning	As required			schedule as necessary	
Flowmeter Cleaning	As required				
Spare Parts Inventory	As used			adequate for new treatment system	
Staff Gauges Water Levels	As Required				
Exposure Barriers	Monthly			collected	
Multi-Layer Cap	Monthly			disturbed areas vegetation OK	
Containment System	Monthly			no excavations	
Stormwater Collection System	Monthly			sheetpile wall has minor cracks at weld's on cap - watch tie rods during season change	
Crotty Street Channel Abondoned 60" Sewer	Monthly			normal flow	
				holding H2O - a little higher than normal from recent rains	

* 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
		SSH	11/4/13					
EW-6	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							• couple drops of LNAPL on probe
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 12.74	12.55						• turn on heat
	PUMP CHANGED (Y/N)							• new pump
	CHLORINE ADDED							
EW-7	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.00	9.99						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-8	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							• drops of LNAPL on probe
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.34	12.73						• turn on heat
	PUMP CHANGED (Y/N)							• new pump
	CHLORINE ADDED							
EW-9	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 11.04	9.29						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-10	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 10.77	9.83						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							13.80 LNAPL / 15.26 H_2O
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 14.51							bailed 1/2 gal LNAPL
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-12	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							• turn on heat
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 9.42	8.19						• new pump
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm)	/						
	TOTAL (gal.)							
LT-01		/						
CP-01		OK						
AIR SUPPLY MANIFOLD		NA						
HEATER		turned on						

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	11/4/13					
EW-13	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 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 DEPTH 5.42	11.29						Sump pump
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-15	PUMP CYCLING BEFORE/AFTER MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO WATER/LNAPL (ft.) TARGET DEPTH 6.71	5.61						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-03	FLOW (gpm)	/						
	TOTAL (gal.)							
HEATER		"on"						
DATE OF LAST SWABBING								
STAFF GAUGES	INLET SLIP - WATER LEVEL (ft)	1.32						
	INLET RIVER - WATER LEVEL (ft)	out of H2O						
	CROTTY STREET - WATER LEVEL (ft)	out of H2O						

Attachment B

Analytical Results Summary

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:			*Crotty Street Channel*	*Crotty Street Channel*	*Crotty Street Channel*	*Crotty Street Channel*	*Crotty Street Channel*	*Crotty Street Channel*	*Crotty Street Channel*
Sample Location:			*CB-2*	*CB-2*	*CB-2*	*CB-2*	*CB-2*	*CB-2*	*CB-2*
Sample ID:			*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 Date:			*4/5/2006*	*3/13/2007*	*8/27/2007*	*6/11/2008*	*8/19/2008*	*3/12/2009*	*3/24/2010*
Parameters:	*Units*	*Michigan Residential Drinking water criteria*							
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
Volatile Organic Compounds									
cis-1,2-Dichloroethene	µg/L	70	-	-	-	-	-	-	-
Ethylbenzene	µg/L	74	-	-	-	-	-	-	-
Toluene	µg/L	790	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	100	-	-	-	-	-	-	-
Vinyl chloride	µg/L	2	-	-	-	-	-	-	-
Xylenes (total)	µg/L	280	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:		*Crotty Street Channel*	*Crotty Street Channel*	*Crotty Street Channel*	*Crotty Street Channel*	*Crotty Street Channel*	*Crotty Street Channel*
Sample Location:		*CB-2*	*CB-2*	*CB-2*	*CB-2*	*CB-2*	*CB-2*
Sample ID:		*W-12610-040611-SSH-11103*	*W-12610-040611-SSH-11104*	*W-12610-102511-SSH-027*	*W-12610-041712-SSH-SA1202*	*GW-12610-080712-SSH-001*	*W-12610-040913-SSH-CB1213*
Sample Date:		*4/6/2011*	*4/6/2011 (Duplicate)*	*10/25/2011*	*4/17/2012*	*8/7/2012*	*4/9/2013*
Parameters:	***Units***						
Metals							
Antimony	mg/L	-	-	0.0002 J	-	-	-
Arsenic	mg/L	-	-	0.005 U	-	-	-
Barium	mg/L	-	-	0.022 JB	-	-	-
Beryllium	mg/L	-	-	0.001 U	-	-	-
Cadmium	mg/L	-	-	0.001 U	-	-	-
Chromium	mg/L	-	-	0.01 U	-	-	-
Cobalt	mg/L	-	-	0.00012 J	-	-	-
Copper	mg/L	-	-	0.0025 JB	-	-	-
Lead	mg/L	-	-	0.003 U	-	-	-
Mercury	mg/L	-	-	0.0002 U D 0.00000084	-	-	-
Nickel	mg/L	-	-	0.00043 JB	-	-	-
Selenium	mg/L	-	-	0.0025 J	-	-	-
Silver	mg/L	-	-	0.0002 U	-	-	-
Thallium	mg/L	-	-	0.00024 J	-	-	-
Tin	mg/L	-	-	-	-	-	-
Vanadium	mg/L	-	-	0.00046 J	-	-	-
Zinc	mg/L	-	-	0.0025 JB	-	-	-
Polychlorinated Biphenyls							
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.19 U	0.095 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.19 U	0.095 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.19 U	0.095 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U	0.19 U	0.095 U	0.19 U	0.19 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.19 U	0.095 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.19 U	0.095 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.19 U	0.095 U	0.19 U	0.19 U
Volatile Organic Compounds							
cis-1,2-Dichloroethene	µg/L	-	-	1.0 U	-	-	-
Ethylbenzene	µg/L	-	-	1.0 U	-	-	-
Toluene	µg/L	-	-	1.0 U	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	1.0 U	-	-	-
Vinyl chloride	µg/L	-	-	1.0 U	-	-	-
Xylenes (total)	µg/L	-	-	2.0 U	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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
Volatile Organic Compounds							
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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
Volatile Organic Compounds							
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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-12610-040611-SSH-11102*	*GW-12610-082211-JY-002*	*W-12610-041712-SSH-SA1201*	*GW-12610-080712-SSH-002*	*W-12610-040913-SSH-CS1013*	*W-12610-040913-SSH-CS1113*
Sample Date:		*4/6/2011*	*8/22/2011*	*4/17/2012*	*8/7/2012*	*4/9/2013*	*4/9/2013 (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	0.19 U	0.097 U	0.20 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.19 U	0.097 U	0.20 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.19 U	0.097 U	0.20 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	**0.96**	**0.62**	**0.86**	0.19 U	0.19 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.19 U	0.097 U	0.20 U	0.19 U	0.059 J
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.19 U	0.097 U	0.20 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.044 J	0.097 U	0.20 U	0.19 U	0.19 U
Volatile Organic Compounds							
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:		*Crotty Street Channel*	*Crotty Street Channel*	*Machine Storage Area*	*Machine Storage Area*	*Machine Storage Area*	*Machine Storage Area*
Sample Location:		*CSA GW Ext. Sys. Discharge*	*EW14*	*EW6*	*EW7*	*EW8*	*EW9*
Sample ID:		*GW-12610-080713-JY-003*	*GW-12610-071811-SH-004*	*GW-12610-072011-SH-016*	*GW-12610-071811-SH-001(C)*	*GW-12610-071911-SH-009C*	*GW-12610-071811-SH-002(C)*
Sample Date:		*8/7/2013*	*7/18/2011*	*7/20/2011*	*7/18/2011*	*7/19/2011*	*7/18/2011*
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	-	0.00000036 J	-	-	-	-
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	0.19 U	0.19 U	-	-	-	-
Aroclor-1221 (PCB-1221)	µg/L	0.19 U	0.19 U	-	-	-	-
Aroclor-1232 (PCB-1232)	µg/L	0.19 U	0.19 U	-	-	-	-
Aroclor-1242 (PCB-1242)	µg/L	**0.55**	**0.54**	-	-	-	-
Aroclor-1248 (PCB-1248)	µg/L	0.19 U	0.19 U	-	-	-	-
Aroclor-1254 (PCB-1254)	µg/L	0.19 U	0.19 U	-	-	-	-
Aroclor-1260 (PCB-1260)	µg/L	0.19 U	0.19 U	-	-	-	-
Volatile Organic Compounds							
cis-1,2-Dichloroethene	µg/L	-	1.0 U	1.0 U	1.0 U	**200**	1.0 U
Ethylbenzene	µg/L	-	1.0 U	0.33 J	1.0 U	3.0 J	0.54 J
Toluene	µg/L	-	1.0 U	1.0 U	1.0 U	18	1.7
trans-1,2-Dichloroethene	µg/L	-	1.0 U	1.0 U	1.0 U	2.9 J	1.0 U
Vinyl chloride	µg/L	-	1.0 U	1.0 U	1.0 U	**140**	1.0 U
Xylenes (total)	µg/L	-	2.0 U	2.0 U	0.99 J	16	3.4

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:		*Machine Storage Area*	*Machine Storage Area*	*Machine Storage Area*	*Machine Storage Area*	*Machine Storage Area*	*Machine Storage Area*
Sample Location:		*EW9*	*EW10*	*EW11*	*EW12*	*MSA GW Ext. Sys. Discharge*	*MSA GW Ext. Sys. Discharge*
Sample ID:		*GW-12610-071811-SH-003*	*GW-12610-072011-SH-017*	*GW-12610-071911-SH-008C*	*GW-12610-072011-SH-015*	*W-040506-SSH-M02*	*GW-081606-SSH-0602*
Sample Date:		*7/18/2011 (Duplicate)*	*7/20/2011*	*7/19/2011*	*7/20/2011*	*4/5/2006*	*8/16/2006*
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
Aroclor-1221 (PCB-1221)	µg/L	-	-	-	-	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	-	-	-	-	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	-	-	-	-	0.20 U	**0.62**
Aroclor-1248 (PCB-1248)	µg/L	-	-	-	-	0.20	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	-	-	-	-	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	-	-	-	-	0.18 J	0.24
Volatile Organic Compounds							
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	**630**	49	-	-
Ethylbenzene	µg/L	0.54 J	1.0 U	29 U	1.4 J	-	-
Toluene	µg/L	1.8	1.0 U	33	3.5	-	-
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	29 U	1.1 J	-	-
Vinyl chloride	µg/L	1.0 U	1.0 U	**98**	**86**	-	-
Xylenes (total)	µg/L	3.4	2.0 U	57 U	14	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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-031307-SSH-M07-2*	*MSA*	*MSA-(06/11/08)*	*MSA_(08/19/08)*	*DUP_(03/12/09)*	*MSA_(03/12/09)*
Sample Date:		*3/13/2007*	*8/23/2007*	*6/11/2008*	*8/19/2008*	*3/12/2009 (Duplicate)*	*3/12/2009*
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	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	1.0 U	0.20 U	0.20 U	0.25	0.20 U	**2.1**
Aroclor-1248 (PCB-1248)	µg/L	1.0 U	0.30	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	1.0 U	0.26	0.20 U	0.28	0.20 U	0.20
Volatile Organic Compounds							
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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:		*MSA*	*W-12610-032410-SSH-MSA10-2*	*GW-12610-081910-SSH-028*	*W-12610-040611-SSH-11101*	*GW-12610-082211-JY-001*	*W-12610-041712-SSH-SA1203*
Sample Date:		*8/27/2009*	*3/24/2010*	*8/19/2010*	*4/6/2011*	*8/22/2011*	*4/17/2012*
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	0.19 U	0.096 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.096 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.096 U
Aroclor-1242 (PCB-1242)	µg/L	**1.3**	0.20 U	0.20 U	0.13 J	0.19 U	0.096 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.40
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.096 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.17 J	0.20 U	0.19 U	0.18
Volatile Organic Compounds							
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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*
Sample Location:		*MSA GW Ext. Sys. Discharge*	*MSA GW Ext. Sys. Discharge*	*MSA GW Ext. Sys. Discharge*	*MW102D1*	*MW102D1*	*MW102D1*	*MW102D1*
Sample ID:		*GW-12610-080712-SSH-003*	*W-12610-040913-SSH-MSA1313*	*W-12610-120913-SSH-010*	*GW-081606-SSH-0604*	*MW102D1*	*MW102D1_(08/19/08)*	*MW102D1*
Sample Date:		*8/7/2012*	*4/9/2013*	*12/09/13*	*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	0.19 U	1.9 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1221 (PCB-1221)	µg/L	0.19 U	1.9 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1232 (PCB-1232)	µg/L	0.19 U	1.9 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1242 (PCB-1242)	µg/L	0.19 U	1.9 U	0.20 U	0.19 J	0.44	0.20 U	0.40 J
Aroclor-1248 (PCB-1248)	µg/L	0.19 U	1.9 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1254 (PCB-1254)	µg/L	0.19 U	1.9 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1260 (PCB-1260)	µg/L	0.19 U	**8.6**	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Volatile Organic Compounds								
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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*
Sample Location:		*MW102D1*	*MW102D1*	*MW102D1*	*MW102D1*	*MW102D2*	*MW102D2*	*MW102D2*
Sample ID:		*GW-12610-081710-JY-001*	*GW-12610-082311-JY-010*	*GW-12610-080912-SSH-012*	*GW-12610-080713-JY-004*	*GW-081606-SSH-0606*	*MW102D2*	*MW102D2_(08/19/08)*
Sample Date:		*8/17/2010*	*8/23/2011*	*8/9/2012*	*8/7/2013*	*8/16/2006*	*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	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.31	0.28	0.43	0.19 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.19 U	0.19 U	R	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.046 J	0.19 U	R	0.20 U	0.20 U	0.20 U
Volatile Organic Compounds								
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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*
Sample Location:		*MW102D2*	*MW102D2*	*MW102D2*	*MW102D2*	*MW102D2*	*MW102D3*	*MW102D3*
Sample ID:		*MW102D2*	*GW-12610-081710-JY-002*	*GW-12610-082311-JY-011*	*GW-12610-080912-SSH-011*	*GW-12610-080713-JY-005*	*GW-081606-SSH-0607*	*MW102D3*
Sample Date:		*8/26/2009*	*8/17/2010*	*8/23/2011*	*8/9/2012*	*8/7/2013*	*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	0.19 U	0.19 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.073 J	0.13 J	0.20 U	0.19 U	0.19 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.13 J	0.19 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.20 U	0.20 U
Volatile Organic Compounds								
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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:		*MW102D3*	*MW102D3*	*MW102D3*	*MW102D4*	*MW102D4*	*MW102D4*	*MW102D4*	*MW102D4*
Sample ID:		*MW102D3_(08/19/08)*	*MW102D3*	*GW-12610-081710-JY-003*	*GW-081606-SSH-0605*	*MW102D4*	*MW102D4_(08/19/08)*	*MW102D4*	*GW-12610-081710-JY-004*
Sample Date:		*8/19/2008*	*8/26/2009*	*8/17/2010*	*8/16/2006*	*8/21/2007*	*8/19/2008*	*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 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	0.084 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
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
Volatile Organic Compounds									
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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*
Sample Location:		*MW102D4*	*MW102D4*	*MW102D4*	*MW300S*	*MW300S*	*MW300S*	*MW300S*
Sample ID:		*GW-12610-082311-JY-012*	*GW-12610-080912-SSH-010*	*GW-12610-080713-JY-006*	*GW-081706-SSH-0608*	*GW-081706-SSH-0609*	*MW300S*	*MW300S_(08/19/08)*
Sample Date:		*8/23/2011*	*8/9/2012*	*8/7/2013*	*8/17/2006*	*8/17/2006 (Duplicate)*	*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	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.082 J	0.19 U	0.19	0.11 J	0.095 J	0.24	0.21
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Volatile Organic Compounds								
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
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*
Sample Location:		*MW300S*	*MW300S*	*MW300S*	*MW300S*	*MW300S*	*MW300S*	*MW300S*
Sample ID:		*DUP 4*	*MW300S*	*GW-12610-081810-JY-011*	*GW-12610-081810-JY-012*	*GW-12610-082311-JY-004*	*GW-12610-082311-JY-005*	*GW-12610-080912-SSH-007*
Sample Date:		*8/26/2009 (Duplicate)*	*8/26/2009*	*8/18/2010*	*8/18/2010 (Duplicate)*	*8/23/2011*	*8/23/2011 (Duplicate)*	*8/9/2012*
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 UJ	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 UJ	0.20 UJ	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 UJ	0.20 UJ	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.40 J	0.39 J	0.14 J	0.16 J	0.23	0.24	0.19 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 UJ	0.20 UJ	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 UJ	0.20 UJ	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 UJ	0.20 UJ	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U
Volatile Organic Compounds								
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:		*Machine Storage Area*	*Machine Storage Area*	*Machine Storage Area*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*
Sample Location:		*MW300S*	*MW300S*	*MW300S*	*LMW13S*	*LMW13S*	*LMW13S*	*LMW13S*
Sample ID:		*GW-12610-080912-SSH-008*	*GW-12610-080713-JY-001*	*GW-12610-080713-JY-002*	*GW-081706-SSH-0610*	*LMW13S*	*LMW13S_(08/18/08)*	*GW-12610-081710-JY-009*
Sample Date:		*8/9/2012*	*8/7/2013*	*8/7/2013*	*8/17/2006*	*8/21/2007*	*8/18/2008*	*8/17/2010*
		(Duplicate)		*(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	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.083 J	0.19 J	0.19 J	0.20 U	**1.0**	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.19 U	0.19 U	0.19 U	**1.2**	0.20 U	**1.6**	**1.1**
Aroclor-1254 (PCB-1254)	µg/L	0.19 U	R	R	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.19 U	R	R	0.20 U	0.20 U	0.20 U	0.20 U
Volatile Organic Compounds								
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:		*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*12610*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*
Sample Location:		*LMW13S*	*LMW13S*	*LMW13S*	*LMW13S*	*LMW15D*	*LMW15D*	*LMW15D*	*LMW15D*
Sample ID:		*GW-12610-082311-JY-006*	*GW-12610-080812-SSH-004*	*GW-12610-080812-SSH-005*	*GW-12610-080813-JY-008*	*GW-081706-SSH-0611*	*LMW15D*	*LMW15D_(08/18/08)*	*MW15D*
Sample Date:		*8/23/2011*	*8/8/2012*	*8/8/2012 (Duplicate)*	*8/8/2013*	*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	0.19 U	0.19 U	0.19 U	0.19 UJ	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1221 (PCB-1221)	µg/L	0.19 U	0.19 U	0.19 U	0.19 UJ	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1232 (PCB-1232)	µg/L	0.19 U	0.19 U	0.19 U	0.19 UJ	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1242 (PCB-1242)	µg/L	**0.72**	**0.79**	**0.85**	0.19 UJ	0.20 U	0.20 U	0.19 J	0.073 J
Aroclor-1248 (PCB-1248)	µg/L	0.19 U	0.19 U	0.19 U	**1.0 J**	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1254 (PCB-1254)	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Aroclor-1260 (PCB-1260)	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 UJ
Volatile Organic Compounds									
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:		*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*
Sample Location:		*LMW15D*	*LMW15D*	*LMW15D*	*LMW15D*	*MW301D1*	*MW301D1*	*MW301D1*	*MW301D1*
Sample ID:		*GW-12610-081710-JY-010*	*GW-12610-082311-JY-007*	*GW-12610-080812-SSH-006*	*GW-12610-080813-JY-009*	*GW-081706-SSH-0612*	*MW301D1*	*MW301D1_(08/19/08)*	*MW301D1*
Sample Date:		*8/17/2010*	*8/23/2011*	*8/8/2012*	*8/8/2013*	*8/17/2006*	*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	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.060 J	0.13 J	0.14 J	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.19 U	0.19 U	0.19 UJ	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.19 U	0.19 U	0.19 UJ	0.20 U	0.20 U	0.20 U	0.20 U
Volatile Organic Compounds									
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:		*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*
Sample Location:		*MW301D1*	*MW301D2*	*MW301D2*	*MW301D2*	*MW301D2*	*MW301D2*	*MW301D2*	*MW301D2*
Sample ID:		*GW-12610-081710-JY-005*	*GW-081706-SSH-0615*	*MW301D2*	*MW301D2_(08/19/08)*	*MW301D2*	*GW-12610-081710-JY-006*	*GW-12610-082311-JY-008*	*GW-12610-080912-SSH-009*
Sample Date:		*8/17/2010*	*8/17/2006*	*8/21/2007*	*8/19/2008*	*8/26/2009*	*8/17/2010*	*8/23/2011*	*8/9/2012*
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 UJ	0.20 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.085 J	0.20 U	0.19 U	0.19 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U	0.19 U
Volatile Organic Compounds									
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:		*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*
Sample Location:		*MW301D2*	*MW301D3*	*MW301D3*	*MW301D3*	*MW301D3*	*MW301D3*	*MW301D4*	*MW301D4*	*MW301D4*
Sample ID:		*GW-12610-080713-JY-007*	*GW-081706-SSH-0614*	*MW301D3*	*MW301D3_(08/19/08)*	*MW301D3*	*GW-12610-081710-JY-007*	*GW-081706-SSH-0613*	*MW301D4*	*DUP3_(08/19/08)*
Sample Date:		*8/7/2013*	*8/17/2006*	*8/21/2007*	*8/19/2008*	*8/26/2009*	*8/17/2010*	*8/17/2006*	*8/21/2007*	*8/19/2008 (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	0.19 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	0.19 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	0.19 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	0.19 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	0.19 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	0.19 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	0.19 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
Volatile Organic Compounds										
cis-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-	-	-	-	-	-
Toluene	µg/L	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-	-	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-	-	-	-	-	-

Notes:

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

ANALYTICAL RESULTS SUMMARY
RACER TRUST- BAY CITY INDUSTRIAL LAND
BAY CITY, MICHIGAN

AOI:		*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*	*Perimeter Banks*
Sample Location:		*MW301D4*	*MW301D4*	*MW301D4*	*MW301D4*
Sample ID:		*MW301D4_(08/19/08)*	*MW301D4*	*GW-12610-081710-JY-008*	*GW-12610-082311-JY-009*
Sample Date:		*8/19/2008*	*8/26/2009*	*8/17/2010*	*8/23/2011*
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
Aroclor-1221 (PCB-1221)	µg/L	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
Aroclor-1242 (PCB-1242)	µg/L	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
Aroclor-1254 (PCB-1254)	µg/L	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
Volatile Organic Compounds					
cis-1,2-Dichloroethene	µg/L	-	-	-	-
Ethylbenzene	µg/L	-	-	-	-
Toluene	µg/L	-	-	-	-
trans-1,2-Dichloroethene	µg/L	-	-	-	-
Vinyl chloride	µg/L	-	-	-	-
Xylenes (total)	µg/L	-	-	-	-

Notes:

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

Attachment C

Data Validation Memorandum - April & August 2013

CONESTOGA-ROVERS
& ASSOCIATES

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MEMORANDUM

TO: Mike. Tomka

REF. NO.: 012610-T04

FROM: Andrew Klos/tl/21/Det

DATE: October 22, 2013

E-Mail and Hard Copy if Requested

RE: Analytical Results and Reduced Validation
2013 Annual & Semi-annual Groundwater Sampling
Bay City Site
Bay City, Michigan
April and August 2013

1.0 Introduction

The following document details a reduced validation of analytical results for water samples collected in support of the Annual & Semi-annual Groundwater sampling at the Bay City Site during April and August 2013. Samples were submitted to TestAmerica, located in North Canton, Ohio. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard CRA report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, duplicate data, recovery data from surrogate spikes, laboratory control samples (LCS), and matrix spikes; and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 2 and the document entitled:

i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999

Items i) will subsequently be referred to as the "Guidelines" in this Memorandum.

2.0 Sample Holding Time And Preservation

The sample holding time criteria and sample preservation requirements for the analyses are summarized in Table 2. Sample chain of custody documents and analytical reports were used to determine sample holding times. The samples summarized in Table 4 were qualified due to sample holding time period exceedances. The remaining samples were prepared and/or analyzed within the specified holding time periods.

All samples were properly preserved and delivered on ice, and stored by the laboratory at the required temperature (4±2°C).

3.0 Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4.0 Surrogate Spike Recoveries

In accordance with the methods employed, all samples, blanks and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for polychlorinated biphenyl (PCB) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and analysis.

Surrogate recoveries were assessed against laboratory control limits. Some extremely low (<10%) decachlorobiphenyl surrogate recoveries were reported. All associated detected results were qualified as estimated. Associated non-detect results were rejected based on the poor analytical efficiency as listed in Table 5. Surrogate recoveries below laboratory limits (but >10%) for tetrachloro-m-xylene were reported. Associated detected and non-detected results were qualified as estimated, also as listed in Table 5.

5.0 Laboratory Control Sample (LCS) Analyses

The LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

The LCS contained the compounds specified in the method. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

6.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the extraction or digestion process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed.

MS/MSD analyses were performed as specified in Table 1.

The MS/MSD samples were spiked with the compounds specified in the method. The MS/MSD recoveries associated with sample W-12610-040913-SSH-MSA1313 could not be assessed due to the high level of target analyte present in the sample. MS/MSD recoveries and RPDs associated with other samples were within laboratory control limits, demonstrating acceptable analytical accuracy and precision.

7.0 Field QA/QC Samples

The field QA/QC consisted of two field duplicate samples.

Field Duplicate Sample Analysis
To assess the analytical and sampling protocol precision, one field duplicate sample was collected for each month's sampling event and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one times the RL.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

8.0 Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were qualified as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

9.0 Conclusion

Based on the assessment of the information provided, the data produced by TestAmerica were found to exhibit acceptable levels of accuracy and precision and may be used with the qualification noted.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
2013 ANNUAL SEMI-ANNUAL GROUNDWATER SAMPLING
BAY CITY SITE
BAY CITY, MICHIGAN
APRIL AND AUGUST 2013

Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*Analysis/Parameters*	*Comments*
TestAmerica Job No.: 240-22994-1						
W-12610-040913-SSH-CS1013	Crotty St	water	04/09/2013	10:10	TCL PCBs	
W-12610-040913-SSH-CS1113	Crotty St	water	04/09/2013	10:15	TCL PCBs	Field Duplicate of Crotty St
W-12610-040913-SSH-CB1213	CB-2	water	04/09/2013	10:20	TCL PCBs	
W-12610-040913-SSH-MSA1313	MS GW	water	04/09/2013	11:45	TCL PCBs	MS/MSD
TestAmerica Job No.: 240-27691-1						
GW-12610-080713-JY-001	MW300S	water	08/07/2013	9:40	TCL PCBs	
GW-12610-080713-JY-002	MW300S	water	08/07/2013	9:50	TCL PCBs	Field Duplicate of MW3005
GW-12610-080713-JY-003	CSUMP	water	08/07/2013	9:20	TCL PCBs	
GW-12610-080713-JY-004	MW102D1	water	08/07/2013	11:00	TCL PCBs	MS/MSD
GW-12610-080713-JY-005	MW102D2	water	08/07/2013	11:45	TCL PCBs	
GW-12610-080713-JY-006	MW102D4	water	08/07/2013	13:25	TCL PCBs	
GW-12610-080713-JY-007	MW301D2	water	08/07/2013	14:30	TCL PCBs	
TestAmerica Job No.: 240-27794-1						
GW-12610-080713-JY-008	LMW13S	water	08/08/2013	10:05	TCL PCBs	
GW-12610-080713-JY-009	LMW15D	water	08/08/2013	11:05	TCL PCBs	

Notes:

MS/MSD - Matrix Soike/Matrix Spike Duplicate
PCB - Polychlorinated Biphenyls
TCL - Target Compound List

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
BAY CITY SITE
BAY CITY, MICHIGAN
APRIL AND AUGUST 2013

Sample Location:			***CB-2***	***Crotty St. Channel***	***Crotty St. Channel***
Sample ID:			***W-12610-040913-SSH-CB1213***	***W-12610-040913-SSH-CS1013***	***W-12610-040913-SSH-CS1113***
Sample Date:			***4/9/2013***	***4/9/2013***	***4/9/2013***
Sample Type:			***N***	***N***	***FD***
Sample Depth:			-	-	-
PCBs	Aroclor-1016 (PCB-1016)	ug/L	0.19 U	0.19 U	0.19 U
	Aroclor-1221 (PCB-1221)	ug/L	0.19 U	0.19 U	0.19 U
	Aroclor-1232 (PCB-1232)	ug/L	0.19 U	0.19 U	0.19 U
	Aroclor-1242 (PCB-1242)	ug/L	0.19 U	0.19 U	0.19 U
	Aroclor-1248 (PCB-1248)	ug/L	0.19 U	0.19 U	0.059 J
	Aroclor-1254 (PCB-1254)	ug/L	0.19 U	0.19 U	0.19 U
	Aroclor-1260 (PCB-1260)	ug/L	0.19 U	0.19 U	0.19 U

Notes

PCB - Polychlorinated Biphenyls
TCL - Target Compound List

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
BAY CITY SITE
BAY CITY, MICHIGAN
APRIL AND AUGUST 2013

			MSA GW Ext. Sys. Discharge	*CSUMP*	*LMW13S*
Sample Location:			*MSA GW Ext. Sys. Discharge*	*CSUMP*	*LMW13S*
Sample ID:			*W-12610-040913-SSH-MSA1313*	*GW-12610-080713-JY-003*	*GW-12610-080813-JY-008*
Sample Date:			*4/9/2013*	*8/7/2013*	*8/8/2013*
Sample Type:			*N*	*N*	*N*
Sample Depth:			*MSA GW Ext. Sys. Discharge^W-12610-040913-SSH-MSA1313^4/9/2013 ^*	-	-
PCBs	Aroclor-1016 (PCB-1016)	ug/L	1.9 U	0.19 U	0.19 UJ
	Aroclor-1221 (PCB-1221)	ug/L	1.9 U	0.19 U	0.19 UJ
	Aroclor-1232 (PCB-1232)	ug/L	1.9 U	0.19 U	0.19 UJ
	Aroclor-1242 (PCB-1242)	ug/L	1.9 U	0.55	0.19 UJ
	Aroclor-1248 (PCB-1248)	ug/L	1.9 U	0.19 U	1.0 J
	Aroclor-1254 (PCB-1254)	ug/L	1.9 U	0.19 U	0.19 UJ
	Aroclor-1260 (PCB-1260)	ug/L	8.6 J	0.19 U	0.19 UJ

Notes

PCB - Polychlorinated Biphenyls
TCL - Target Compound List

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
BAY CITY SITE
BAY CITY, MICHIGAN
APRIL AND AUGUST 2013

Sample Location:			***LMW15D***	***MW102D1***	***MW102D2***	***MW102D4***	***MW300S***
Sample ID:			***GW-12610-080813-JY-009***	***GW-12610-080713-JY-004***	***GW-12610-080713-JY-005***	***GW-12610-080713-JY-006***	***GW-12610-080713-JY-001***
Sample Date:			***8/8/2013***	***8/7/2013***	***8/7/2013***	***8/7/2013***	***8/7/2013***
Sample Type:			***N***	***N***	***N***	***N***	***N***
Sample Depth:			-	-	-	-	-
PCBs	Aroclor-1016 (PCB-1016)	ug/L	0.19 UJ	ND(0.19) R	0.19 U	0.19 U	ND(0.19) R
	Aroclor-1221 (PCB-1221)	ug/L	0.19 UJ	ND(0.19) R	0.19 U	0.19 U	ND(0.19) R
	Aroclor-1232 (PCB-1232)	ug/L	0.19 UJ	ND(0.19) R	0.19 U	0.19 U	ND(0.19) R
	Aroclor-1242 (PCB-1242)	ug/L	0.19 UJ	ND(0.19) R	0.19 U	0.19	0.19 UJ
	Aroclor-1248 (PCB-1248)	ug/L	0.19 UJ	ND(0.19) R	0.19 U	0.19 U	ND(0.19) R
	Aroclor-1254 (PCB-1254)	ug/L	0.19 UJ	ND(0.19) R	0.19 U	0.19 U	ND(0.19) R
	Aroclor-1260 (PCB-1260)	ug/L	0.19 UJ	ND(0.19) R	0.19 U	0.19 U	ND(0.19) R

Notes

PCB - Polychlorinated Biphenyls
TCL - Target Compound List

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
BAY CITY SITE
BAY CITY, MICHIGAN
APRIL AND AUGUST 2013

Sample Location:			***MW300S***	***MW301D2***
Sample ID:			***GW-12610-080713-JY-002***	***GW-12610-080713-JY-007***
Sample Date:			***8/7/2013***	***8/7/2013***
Sample Type:			***FD***	***N***
Sample Depth:			***-***	***-***
PCBs	Aroclor-1016 (PCB-1016)	ug/L	ND(0.19) R	0.19 U
	Aroclor-1221 (PCB-1221)	ug/L	ND(0.19) R	0.19 U
	Aroclor-1232 (PCB-1232)	ug/L	ND(0.19) R	0.19 U
	Aroclor-1242 (PCB-1242)	ug/L	0.19 UJ	0.19 U
	Aroclor-1248 (PCB-1248)	ug/L	ND(0.19) R	0.19 U
	Aroclor-1254 (PCB-1254)	ug/L	ND(0.19) R	0.19 U
	Aroclor-1260 (PCB-1260)	ug/L	ND(0.19) R	0.19 U

Notes

PCB - Polychlorinated Biphenyls
TCL - Target Compound List

TABLE 3

ANALYTICAL METHODS AND HOLDING TIME CRITERIA
2013 ANNUAL SEMI-ANNUAL GROUNDWATER SAMPLING
BAY CITY SITE
BAY CITY, MICHIGAN
APRIL AND AUGUST 2013

				Holding Time	
Parameter	*Method* [1]	*Matrix*	*Preservation*	*Collection to Extraction (Days)*	*Collection or Extraction to Analysis (Days)*
TCL PCBs	SW-846 8082	Water	Iced, 4±2 °C	7	40

Notes

SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions.

PCB - Polychlorinated Biphenyls
TCL - Target Compound List

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO HOLDING TIME EXCEEDANCE
2013 ANNUAL SEMI-ANNUAL GROUNDWATER SAMPLING
BAY CITY SITE
BAY CITY, MICHIGAN
APRIL AND AUGUST 2013

Parameter	*Sample ID*	*Holding Time (days)*	*Holding Time Criteria (days)*	*Analyte*	*Qualified Sample Results*	*Units*
TCL PCBs	GW-12610-080713-JY-009	11	7	Aroclor 1254	UJ	µg/L
				Aroclor 1260	UJ	µg/L

Notes:

UJ - Not detected; associated reporting limit is estimated.

PCB - Polychlorinated Biphenyls
TCL - Target Compound List

TABLE 5

QUALIFIED SAMPLE DATA DUE TO OUTLYING SURROGATE RECOVERIES
2013 ANNUAL SEMI-ANNUAL GROUNDWATER SAMPLING
BAY CITY SITE
BAY CITY, MICHIGAN
APRIL AND AUGUST 2013

Porameter	*Sample ID*	*Surrogote*	*Surrogate Recovery (percent)*	*Control Limits (percent)*	*Analyte*	*Qualified Result*	*Units*
TCL PCBs	GW-12610-080713-JY-001	Decachlorobiphenyl	4	10-130	Aroclor 1254	R	µg/L
					Aroclor 1260	R	µg/L
TCL PCBs	GW-12610-080713-JY-002	Decachlorobiphenyl	3	10-130	Aroclor 1254	R	µg/L
					Aroclor 1260	R	µg/L
TCL PCBs	GW-12610-080713-JY-004	Decachlorobiphenyl	6	10-130	Aroclor 1254	R	µg/L
					Aroclor 1260	R	µg/L
TCL PCBs	GW-12610-080713-JY-008	Tetrachloro-m-xylene	19	23-136	Aroclor 1016	0.19 UJ	µg/L
					Aroclor 1221	0.19 UJ	µg/L
					Aroclor 1232	0.19 UJ	µg/L
					Aroclor 1242	0.19 UJ	µg/L
					Aroclor 1248	1.0 J	µg/L

Notes:

J - Estimated concentration
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated Biphenyls
TCL - Target Compound List