January 14, 2016 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
U.S.A. 48708

Dear Ms. Kaelber-Matlock:

Re: 2015 Annual Technical Progress Report Submittal
RACER Trust Bay City Powertrain Industrial Lands

Enclosed is the 2015 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, 2014 through November 15, 2015, 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), supplemental response actions 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. Summary of On-Going Activities and Project Status

The following sections summarize the activities performed related to implementation of the RAP, supplemental response actions, and operation, maintenance, and monitoring, 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

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and storm water from the RACER Site. The need for this system resulted from the outcome of the General Motors Corporation June 2009 bankruptcy (i.e., RACER received ownership of the Site and GM LLC obtained ownership of the adjacent operating facility). The construction of the system was initiated in November 2012 and was fully commissioned in April 2015. 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. Specific O&M activities for the new groundwater treatment system were added to the existing O&M Plan after the commissioning of the treatment system in April 2015.

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 – 04157060 Saginaw River at Midland Road in Bay City, Michigan (approximately 1 mile upstream of the Site). Extraction well details and water elevations are presented in Table 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 Machine Storage Area (MSA) groundwater extraction system and the storm water management system were due to construction and commissioning 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. The groundwater treatment system operated sporadically during the 12-month period covered by this report. When the RACER groundwater treatment system was operational, the entire Crotty Street Channel (CSC) was dewatered through the operation of a pump in CSC extraction well EW-15, since the entire CSC is hydraulically well connected due to the porous nature of the soils (backfill was pea gravel and sand) in the CSC. In addition, the MSA was dewatered through the operation of pumps in MSA extraction wells EW-6, EW-8, and EW12, which discharge to EW-15. The pump in EW-15 directed water to the RACER groundwater treatment system where the extracted water is treated before being discharged to the City of Bay City sanitary sewer system. When the groundwater treatment system was not operating (pump in EW-15 not operating) the water level in the CSC was kept in a dewatered state by operation of a sump pump in CSC extraction well EW-14 which discharged extracted water to a nearby catchbasin which drains to the GM LLC stormwater treatment system, where it is treated. The MSA continued to be dewatered even though the treatment system was down, since the pumps in the

MSA extraction wells EW-6, EW-8, and EW-12 continued to operate and discharge to EW-15. The water that accumulated in EW-15 was pumped out through the operation of the sump pump in EW-14 (CSC is hydraulically well connected).

1.1.3 Operation and Maintenance Activities – Groundwater Treatment System

From April 2015, when the groundwater treatment system was fully commissioned, through November 15, 2015 approximately 258,727 gallons of groundwater were treated and discharged to the City of Bay City under Industrial User Discharge Permit (120807). Semi-annual effluent samples were collected on March 16, 2015 and December 10, 2015 and no exceedances of permit discharge standards were observed, as presented in Table 4.

1.1.4 Operation and Maintenance Activities – Cap and fence

Wooded plants with deep roots that have the potential to compromise the cap were removed, as well as, fragmitis growing on the cap. In addition, there were some trees and branches that fell on the fence around the Site that were removed.

1.1.5 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) from 1977 until 2005. 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. On December 4, 2013 USGS station 04157065 was removed from service so data was obtained from USGS station (04157060 Saginaw River at Midland Road at Bay City, MI) and used for water elevation data of the Saginaw River, as of November 16, 2013. USGS station 04157060 is approximately 1 mile upstream of the Site.

Based on the combined NOAA and USGS data from 1977 to November 15, 2015, the average Saginaw River water level is 578.86 feet (ft) above mean sea level (AMSL). Recent water levels were above the average, as the current water level at Midland Road measured on November 15, 2015 was 579.35 ft AMSL.

1.1.6 Groundwater Monitoring Activities

Table 5 presents the sample results for the MSA and CSC semi-annual extraction system discharge samples. The fifteenth annual ground water sampling event (August 2015) was also conducted during this reporting period. Table 6 presents the fifteenth annual groundwater sampling event analytical results summary. Table 4 presents the analytical results for the semi-annual samples collected from the groundwater treatment system effluent. 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 24, 2015 are presented on Figure 3.

A summary of the last 9 years of analytical groundwater data is presented in Attachment B. The laboratory data reports for all chemical analysis conducted in 2015 and data validation for the 2015 annual sampling event are presented in Attachment C.

1.2 Supplemental Response Actions

A Declaration of Restrictive Covenant for the Site was recorded with the Bay County Register of Deeds on November 17, 2015. Permanent markers were reviewed and approved by the MDEQ on November 4, 2015. The permanent markers will be installed following the completion of some additional stormwater work, which is expected to be completed in 2016.

2. Proposed Modifications to the Monitoring Program

There are no proposed modifications to the monitoring program.

Table 7 presents a summary of the monitoring program.

3. Schedule

All activities have been completed within the required time frames.

As part of the 2016 monitoring program, RACER will continue to perform monthly extraction and treatment system inspections and regular pump maintenance, as necessary. RACER will also collect semi-annual CSC and MSA extraction system samples (to be completed in April and August, 2016) and semi-annual effluent samples. The 2016 annual groundwater monitoring event will be completed in August 2016. Monitoring activities will be evaluated to identify ways to streamline and more efficiently complete necessary activity. Modifications will be proposed to MDEQ as appropriate.

RACER will work with the MDEQ to prepare a closure report for the Site in 2016. Permanent markers will be installed following the completion of the proposed stormwater work.

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

Sincerely,

GHD

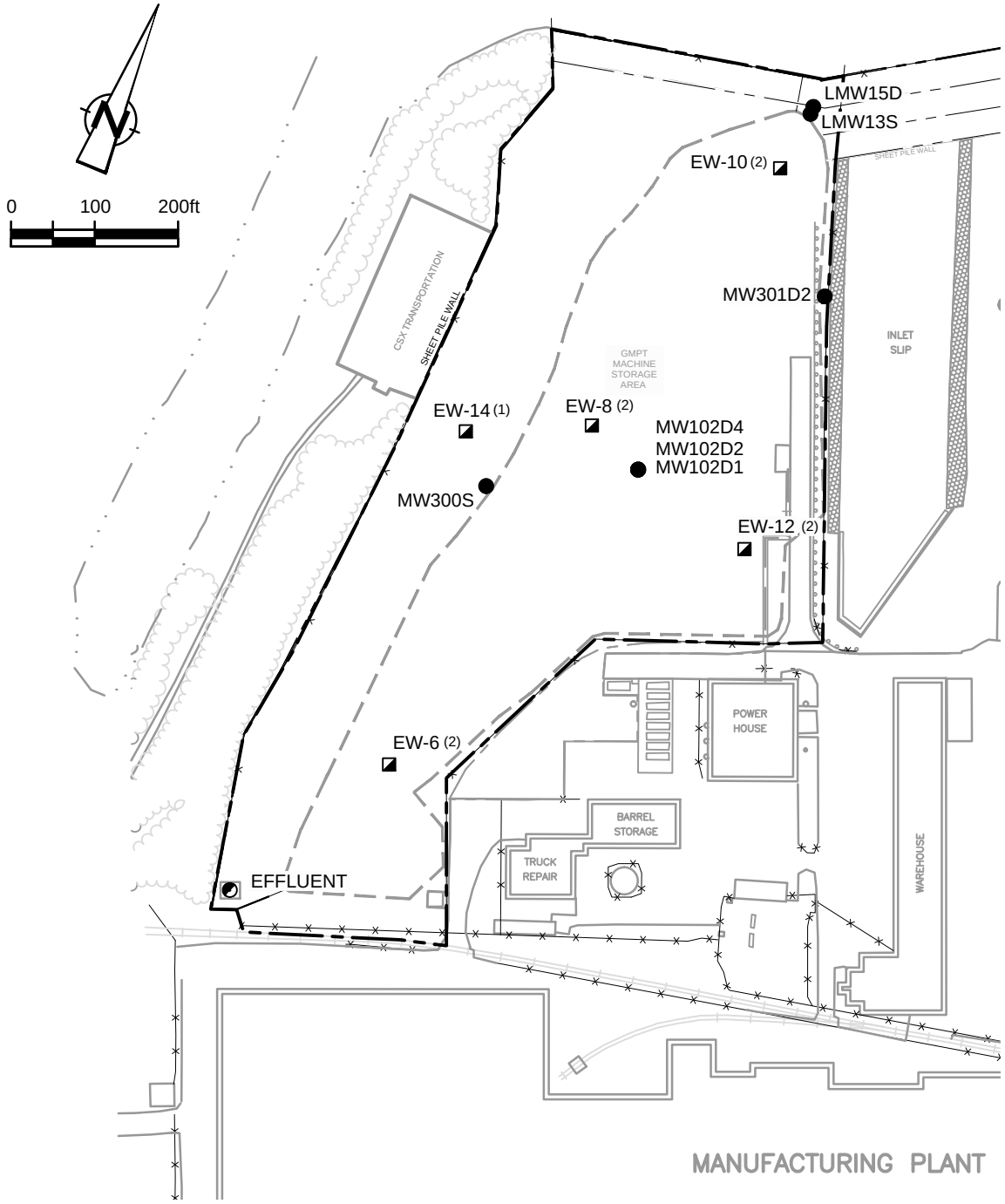
Michael R. Tomka, P.E.

RC/kf/12

Encl.

Figure 1	Chemical Analysis Monitoring Locations
Figure 2	Water Elevation Monitoring Locations
Figure 3	Shallow Groundwater Elevations–August 24, 2015
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–Groundwater Treatment System Effluent Sampling
Table 5	Analytical Results Summary–Extraction System Sampling
Table 6	Analytical Results Summary–Annual Sampling
Table 7	Summary of Long-Term Groundwater and Stormwater Monitoring Activities
Attachment A	Maintenance Activity Checklists
Attachment B	Analytical Results Summary (2006 to 2015)
Attachment C	Analytical Results and Reduced Validation–2015 Annual Sampling Event

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



LEGEND

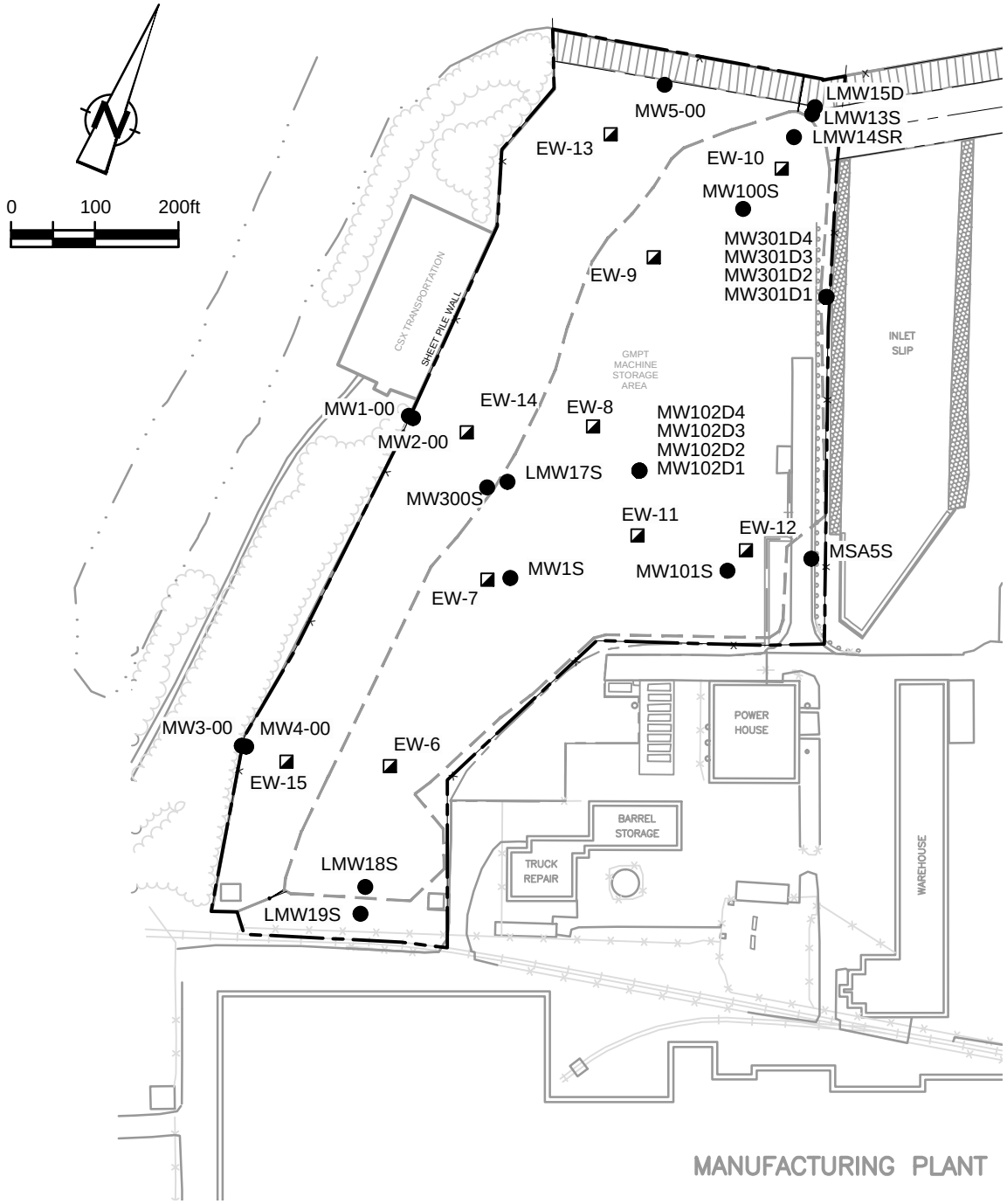
- FENCE
- GUARDRAIL
- RAILROAD
- TREELINE
- SHORELINE
- DEEP SOIL MIXING WALL
- SHEET PILE WALL
- APPROXIMATE RACER PROPERTY BOUNDARY

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

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



LEGEND

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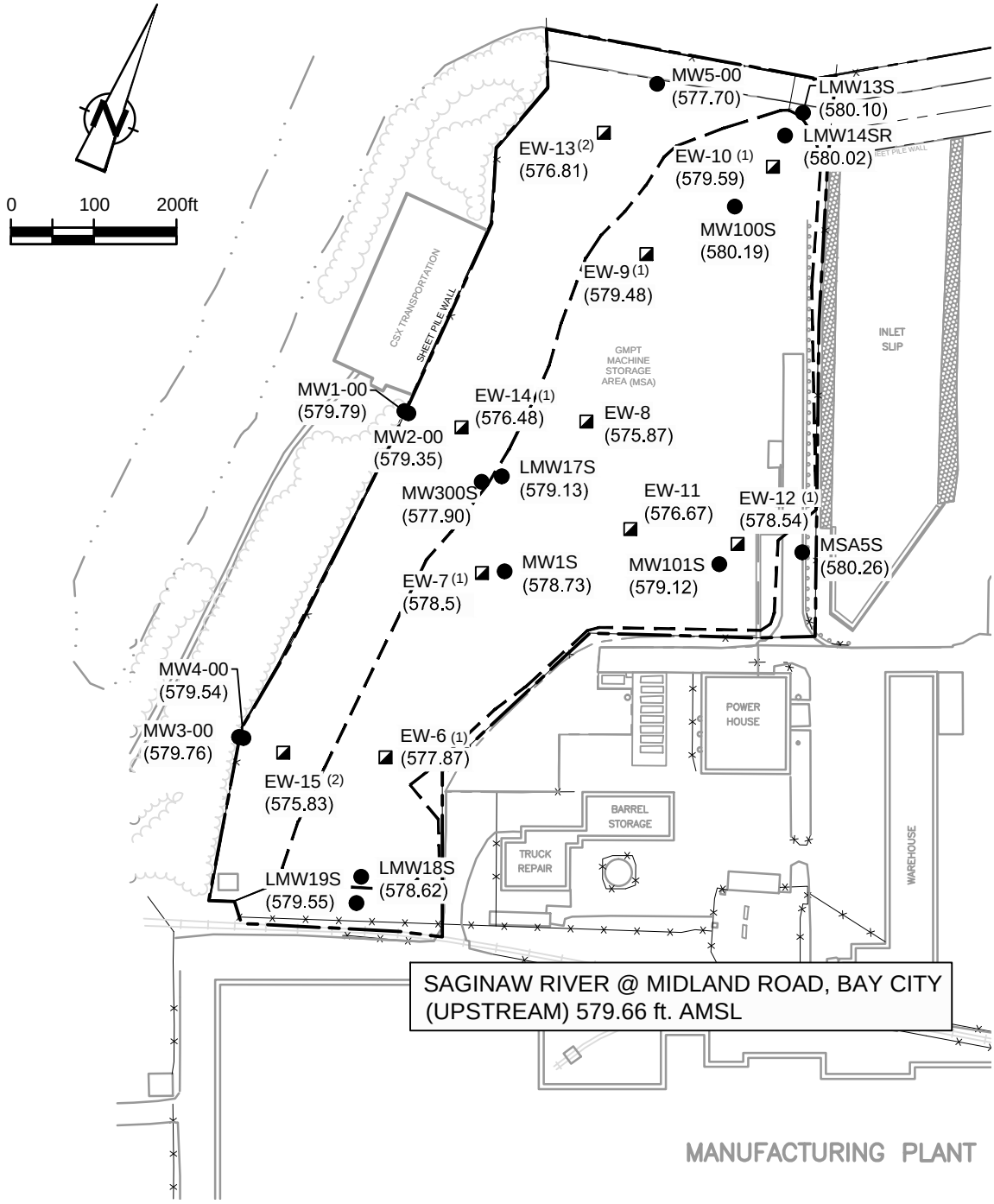
MW403S ●	MONITORING WELL LOCATION
SG-1 ○	STAFF GAGE LOCATION
EW-6 ◪	GROUNDWATER EXTRACTION WELL LOCATION
(1)	PUMP TO BE MAINTAINED - ROUTINE
(2)	WELL USED FOR WATER LEVEL MONITORING PURPOSES ONLY

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
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MW403S ●	MONITORING WELL 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 28, 2015
(2)	WELL USED FOR WATER LEVEL MONITORING PURPOSES ONLY

figure 3

SHALLOW GROUNDWATER ELEVATIONS AUGUST 24, 2015 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

Table 1

Saginaw River Water Levels
Racer Trust - Bay City Industrial Land
Bay City, Michigan

Location	29-Dec-14	27-Jan-15	27-Feb-15	20-Mar-15	27-Apr-15	28-May-15	25-Jun-15	29-Jul-15	28-Aug-15	29-Sep-15	30-Oct-15	23-Nov-15
USGS Station - Midland Road at Saginaw River in Bay City, MI [(1)]												
Daily Average Water Level	579.81	576.32	576.88	577.13	577.61	578.60	579.08	579.72	579.32	579.71	579.55	579.75
Weekly Average Water Level	579.44	579.34	579.15	579.19	579.75	579.71	580.21	579.82	579.93	580.31	579.74	579.11
Monthly Average Water Level	579.46	579.37	579.28	579.26	579.41	579.60	580.04	580.04	579.99	580.06	579.65	579.34

Notes:

(1) Source of Saginaw River Elevation is USGS Station (04157060) Midland Road at Saginaw River, Bay City, MI. (Provisional USGS Data, Subject to Revision)
NM Not Measured

Table 2

Groundwater Extraction System Water Elevations
Racer Trust - Bay City Industrial Land
Bay City, Michigan

Extraction	Reference Elevation	Bottom of Well Elevation (ft AMSL)	Top ICU Top ICU (ft AMSL)	Water Elevation (ft AMSL) Dec. 29, 2014	Water Elevation (ft AMSL) Jan. 27, 2015	Water Elevation (ft AMSL) Feb. 27, 2015	Water Elevation (ft AMSL) Mar. 20, 2015	Water Elevation (ft AMSL) Apr. 27, 2015	Water Elevation (ft AMSL) May 28, 2015
Machine Storage Area									
EW-6	589.74	570.39	572.39	577.76 (1)	577.65	577.57	577.63	574.09	577.66
EW-7	587.99	571.14	571.64	578.55	578.5	578.24	578.54	578.55	578.52
EW-8	588.34	572.29	573.29	578.74	574.35 (1)	578.48	574.46	574.86	576.31
EW-9	588.04	572.19	573.69	579.11	579.15	578.93	579.51	579.25	579.33
EW-10	587.77	570.82	572.32	579.00	578.99	578.88	579.19	579.24	579.28
EW-11	591.51	571.91	572.56	-- (1)	576.9 (1)	--	576.85 (1)	576.82 (1)	576.66
EW-12	586.42	571.57	573.07	577.09 (1)	577.97 (1)	578.51 (1)	578.24 (1)	578.27 (1)	577.98
Crotty Street Channel Containment Area									
EW-13	584.33	571.86	NA	576.42	575.65	575.82	576.7	578.27	578.8
EW-14	582.42	569.92	NA	576.16	573.73	575.59	576.51	578.05	578.47
EW-15	583.71	571.61	NA	576.54	579.96	575.79	575.88	577.56	578.18

Notes:

-- No Level recorded
(1) Product identified in well

Table 2

Groundwater Extraction System Water Elevations
Racer Trust - Bay City Industrial Land
Bay City, Michigan

Extraction	Reference Elevation	Bottom of Well Elevation (ft AMSL)	Top ICU Top ICU (ft AMSL)	Water Elevation (ft AMSL) Jun. 25, 2015	Water Elevation (ft AMSL) Jul. 29, 2015	Water Elevation (ft AMSL) Aug. 28, 2015	Water Elevation (ft AMSL) Sept. 29, 2015	Water Elevation (ft AMSL) Oct. 30, 2015	Water Elevation (ft AMSL) Nov. 23, 2015
Machine Storage Area									
EW-6	589.74	570.39	572.39	575.71 (1)	578 (1)	577.87	578.03 (1)	577.62 (1)	577.94
EW-7	587.99	571.14	571.64	578.63	578.6	578.5	578.6	578.58	578.60
EW-8	588.34	572.29	573.29 (1)	575.46 (1)	578.89	575.87	578.99 (1)	575.68 (1)	576.03 (1)
EW-9	588.04	572.19	573.69	579.45	579.56	579.48	579.74	579.53	579.45
EW-10	587.77	570.82	572.32	579.6	579.74	579.59	579.68	579.34	579.35
EW-11	591.51	571.91	572.56 (1)	576.9 (1)	576.76 (1)	576.67 (1)	576.55 (1)	576.41 (1)	576.51 (1)
EW-12	586.42	571.57	573.07 (1)	578.57 (1)	579.01 (1)	578.54	579.1 (1)	577.29 (1)	577.8 (1)
Crotty Street Channel Containment Area									
EW-13	584.33	571.86	NA	575.71	575.71	576.81	578.24	575.64	576.3
EW-14	582.42	569.92	NA	575.05	574.16	576.48	577.38	573.8	576.03
EW-15	583.71	571.61	NA	575.13	575.79	575.83	578.68	577.03	580.02

Notes:

-- No Level recorded
(1) Product identified in well

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)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)					
							8/24/2015	8/6/2014	8/6/2013	8/7/2012	8/22/2011	8/16/2010
Machine Storage Area (MSA)												
LMW13S	589.40	19.22	10	SS	PVC	2	580.10	579.43	578.61	578.19	578.03	578.71
LMW17S	589.31	19.83	10	SS	PVC	2	579.13	578.96	578.87	578.85	578.80	578.83
LMW18S	592.33	22.52	10	SS	PVC	2	578.62	578.27	577.93	577.82	577.61	577.66
LMW19S	588.61	19.32	10	SS	PVC	2	579.55	579.32	578.44	578.58	578.34	578.25
MW1S	591.08	12.95	2	SS	SS	2	578.73	578.71	578.80	578.65	578.65	578.68
MW100S	591.97	14.44	10	SS	SS	2	580.19	579.32	578.81	578.49	578.18	578.86
MW101S	593.34	19.22	10	SS	SS	2	579.12	579.01	579.10	578.94	578.80	578.93
MW102D1	594.86	30.99	10	SS	SS	2	579.88	579.39	578.34	577.90	578.71	578.39
MW102D2	594.93	36.21	10	SS	SS	2	579.86	579.38	578.31	577.89	578.69	578.37
MW102D3	594.91	46.74	10	SS	SS	2	579.83	579.35	578.27	577.84	578.67	579.34
MW102D4 (replacement)	594.90	56.85	10	SS	SS	2	579.77	579.30	578.24	577.79	578.63	578.29
MW300S	587.12	15.06	10	SS	SS	2	577.90	577.03	577.17	577.69	577.03	577.18
LMW14SR (Replaced LMW14S Jan/00)	589.01	13.00	7	SS	SS	2	580.02	579.22	578.55	578.14	577.47	578.60
Perimeter Banks (PB)												
LMW15D	588.34	32..8	10	SS	PVC	2	579.68	579.37	578.02	577.56	578.65	578.21
MW301D1	589.54	27.50	10	SS	SS	2	578.15	577.70	576.56	578.38	579.39	578.96
MW301D2	589.16	37.24	10	SS	SS	2	578.22	577.78	576.62	577.99	579.00	578.60
MW301D3	589.22	44.04	10	SS	SS	2	578.06	577.64	576.46	577.87	578.87	578.47
MW301D4	589.33	55.95	10	SS	SS	2	578.14	577.96	576.54	578.15	579.16	578.74
Support Facilities Area (SFA)												
MSA5S	588.60	18.98			SS	2	580.26	579.67	580.22	578.58	578.67	579.10
Crotty Street Channel												
MW1-00	588.26	12.00	7	SS	SS	2	579.79	579.35	577.71	576.44	577.17	577.13
MW2-00	589.29	18.00	7	SS	SS	2	579.35	578.75	577.79	576.62	577.29	577.26
MW3-00	588.40	12.50	7	SS	SS	2	579.76	579.38	577.67	576.47	577.25	577.14
MW4-00	589.65	19.00	7	SS	SS	2	579.54	578.91	577.90	576.76	577.41	577.38
MW5-00	588.89	13.00	7	SS	SS	2	577.70	576.99	577.00	576.73	576.77	576.95
SG-1	580.00	- -	- -	- -	- -	- -	n/a	581.06	n/a	n/a	n/a	n/a
Saginaw River Elevation [6]							579.66	579.32	577.02	576.71	577.53	577.41

Notes:

(1) Approximate value
(2) Lock Needs Replacing
(3) Gage needs to be relocated
(4) Could not open due to liner attachment
(5) Could not read due to accumulation of snow and ice
(6) Source of Saginaw River Elevation is: NOAA (Essexville, MI) for prior to November 1, 2005, USGS Station (04157065) for November 1, 2005 to December 4, 2013 and USGS Station (04157060) for December 4, 2013 to the present.
(7) Could not read due to well being covered with equipment
n/a Water elevation not available

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)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)											
							8/27/2009	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
Machine Storage Area (MSA)																		
LMW13S	589.40	19.22	10	SS	PVC	2	579.31	578.21	577.67	578.23	578.14	579.40	578.45	582.05	578.68	577.85	578.17	578.19
LMW17S	589.31	19.83	10	SS	PVC	2	578.81	578.58	577.58	578.63	578.31	578.80	582.73	578.91	578.68	578.74	578.83	579.06
LMW18S	592.33	22.52	10	SS	PVC	2	577.99	577.62	578.13	578.00	578.23	578.45	578.35	578.85	578.10	578.22	578.61	578.39
LMW19S	588.61	19.32	10	SS	PVC	2	578.53	578.45	579.71	578.45	578.85	579.21	579.24	579.93	578.79	579.56	579.96	579.59
MW1S	591.08	12.95	2	SS	SS	2	579.71	580.93	578.48	n/a	577.58	578.63	578.56	578.48	578.51	578.41	(5)	578.44
MW100S	591.97	14.44	10	SS	SS	2	579.27	578.40	578.01	578.38	578.57	579.15	577.27	578.91	578.93	578.36	578.64	578.87
MW101S	593.34	19.22	10	SS	SS	2	578.78	578.49	578.39	578.31	577.95	578.82	578.87	579.12	578.76	578.84	578.96	579.18
MW102D1	594.86	30.99	10	SS	SS	2	579.42	578.83	578.04	578.30	578.30	579.02	578.25	578.98	578.18	577.61	577.40	577.47
MW102D2	594.93	36.21	10	SS	SS	2	579.40	578.93	578.03	578.25	578.33	579.01	578.24	578.95	578.15	577.60	577.39	577.45
MW102D3	594.91	46.74	10	SS	SS	2	579.41	578.89	577.98	578.25	578.31	578.98	578.20	578.93	578.11	577.56	577.34	577.40
MW102D4 (replacement)	594.90	56.85	10	SS	SS	2	579.33	578.76	577.98	578.22	578.25	578.94	578.16	578.86	578.03	577.49	577.27	577.33
MW300S	587.12	15.06	10	SS	SS	2	578.22	579.26	576.30	576.81	578.34	577.05	577.77	578.53	577.00	578.84	578.67	578.99
LMW14SR (Replaced LMW14S Jan/00)	589.01	13.00	7	SS	SS	2	579.19	577.96	576.98	577.97	577.50	576.94	578.13	578.45	578.23	577.38	577.77	577.88
Perimeter Banks (PB)																		
LMW15D	588.34	32..8	10	SS	PVC	2	579.45	578.12	577.89	578.22	578.24	579.34	578.04	578.83	578.06	577.37	577.12	577.22
MW301D1	589.54	27.50	10	SS	SS	2	579.96	579.03	578.72	578.94	579.05	580.02	578.90	579.66	578.89	578.28	578.03	578.09
MW301D2	589.16	37.24	10	SS	SS	2	579.56	578.64	578.33	578.55	578.62	579.59	578.49	579.25	578.48	577.86	577.62	577.67
MW301D3	589.22	44.04	10	SS	SS	2	579.44	578.41	578.20	578.44	578.52	579.47	578.36	579.10	578.53	577.72	577.59	577.52
MW301D4	589.33	55.95	10	SS	SS	2	579.70	578.75	578.48	578.69	578.80	579.71	578.57	579.28	578.48	577.86	577.63	577.68
Support Facilities Area (SFA)																		
MSA5S	588.60	18.98			SS	2	580.10	578.04	580.10	579.28	579.76	580.57	580.55	580.65	579.74	580.65	580.42	580.62
Crotty Street Channel																		
MW1-00	588.26	12.00	7	SS	SS	2	578.95	578.74	577.11	576.92	577.09	578.37	577.78	578.44	576.72	578.61	578.14	577.81
MW2-00	589.29	18.00	7	SS	SS	2	578.40	578.83	577.09	576.97	577.23	577.50	577.60	578.03	576.76	578.69	578.26	577.82
MW3-00	588.40	12.50	7	SS	SS	2	579.01	578.74	577.19	576.94	577.13	578.51	577.77	578.38	576.70	578.62	578.26	577.79
MW4-00	589.65	19.00	7	SS	SS	2	578.55	578.95	577.21	577.07	577.34	577.59	577.68	578.07	576.79	578.67	578.30	577.84
MW5-00	588.89	13.00	7	SS	SS	2	578.04	578.82	576.55	576.72	577.85	576.91	576.28	576.72	577.02	577.06	577.86	576.97
SG-1	580.00	- -	- -	- -	- -	- -	n/a	578.55	577.83	578.33	578.43	579.63	577.93	578.73	578.12	(5)	(5)	(5)
Saginaw River Elevation [6]							578.34	577.97	577.09	577.41	578.32	578.52	576.83	578.50	577.91	576.80	576.74	576.77

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) Source of Saginaw River Elevation is: NOAA (Essexville, MI) for prior to November 1, 2005, USGS Station (04157065) for November 1, 2005 to December 4, 2013 and USGS Station (04157060) for December 4, 2013 to the present.
(7) Could not read due to well being covered with equipment
n/a Water elevation not available

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)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)											
							12/15/2000	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
Machine Storage Area (MSA)																		
LMW13S	589.40	19.22	10	SS	PVC	2	578.06	578.35	578.63	578.90	578.90	580.11	580.62	581.63	581.81	581.27	581.74	579.27
LMW17S	589.31	19.83	10	SS	PVC	2	578.79	579.17	578.93	579.24	579.20	579.09	579.85	580.06	580.19	579.91	579.96	579.08
LMW18S	592.33	22.52	10	SS	PVC	2	578.18	578.29	578.52	578.67	579.03	578.52	577.80	578.10	578.09	577.66	577.80	577.09
LMW19S	588.61	19.32	10	SS	PVC	2	(5)	579.56	579.38	579.34	580.13	579.45	580.56	580.96	581.25	580.73	581.39	579.70
MW1S	591.08	12.95	2	SS	SS	2	578.36	578.40	578.57	578.43	578.38	578.34	579.31	579.26	579.29	579.28	579.18	579.05
MW100S	591.97	14.44	10	SS	SS	2	578.65	579.05	579.33	579.57	579.66	579.85	578.03	577.79	577.07	576.87	576.69	577.09
MW101S	593.34	19.22	10	SS	SS	2	578.84	579.03	578.91	578.99	579.04	579.02	580.22	580.39	580.14	579.21	579.86	579.61
MW102D1	594.86	30.99	10	SS	SS	2	577.62	577.67	577.87	578.16	578.15	578.71	577.62	577.70	577.60	577.25	577.23	576.81
MW102D2	594.93	36.21	10	SS	SS	2	577.61	577.65	577.85	578.13	578.13	578.67	577.48	577.58	577.44	577.12	577.08	576.80
MW102D3	594.91	46.74	10	SS	SS	2	577.56	577.60	577.80	578.08	578.09	578.63	577.52	577.59	577.47	577.16	577.12	576.88
MW102D4 (replacement)	594.90	56.85	10	SS	SS	2	577.47	577.53	577.73	578.00	578.02	578.55	577.38	577.45	577.34	577.01	576.98	575.70
MW300S	587.12	15.06	10	SS	SS	2	578.07	578.84	578.27	578.16	578.24	n/a (2)	n/a (4)	579.89	580.18	579.73	No Access	578.55
LMW14SR (Replaced LMW14S Jan/00)	589.01	13.00	7	SS	SS	2	577.54	578.04	578.13	578.16	578.21	579.19	579.32	579.22	578.91	578.99	578.55	578.58
Perimeter Banks (PB)																		
LMW15D	588.34	32..8	10	SS	PVC	2	577.33	577.48	577.63	577.94	578.03	578.43	n/a (4)	578.88	578.74	578.56	578.56	578.23
MW301D1	589.54	27.50	10	SS	SS	2	578.25	578.34	(5)	(5)	578.88	578.65	579.37	578.80	578.85	578.59	578.56	578.28
MW301D2	589.16	37.24	10	SS	SS	2	577.81	577.92	(5)	(5)	578.47	578.56	578.80	578.89	578.77	578.54	578.51	578.22
MW301D3	589.22	44.04	10	SS	SS	2	577.67	577.78	(5)	(5)	578.32	578.56	578.80	578.85	578.74	578.49	578.48	578.18
MW301D4	589.33	55.95	10	SS	SS	2	577.82	577.93	(5)	(5)	578.48	578.48	578.78	578.76	578.69	578.45	578.43	578.14
Support Facilities Area (SFA)																		
MSA5S	588.60	18.98			SS	2	580.46	580.65	580.34	580.56	580.41	581.32	581.17	582.22	582.37	580.62	582.13	580.96
Crotty Street Channel																		
MW1-00	588.26	12.00	7	SS	SS	2	577.49	577.75	577.45	577.36	577.60	577.71	579.57	578.68	578.42	578.04	578.89	577.89
MW2-00	589.29	18.00	7	SS	SS	2	577.51	577.77	577.45	577.36	577.59	577.65	578.67	Not Accessible	577.65	577.26	578.11	579.11
MW3-00	588.40	12.50	7	SS	SS	2	577.48	577.74	577.45	577.37	577.60	578.68	578.46	579.05	578.79	578.40	579.25	578.27
MW4-00	589.65	19.00	7	SS	SS	2	577.51	577.78	577.47	577.34	577.57	577.62	578.87	Not Accessible	577.60	577.18	578.03	577.03
MW5-00	588.89	13.00	7	SS	SS	2	576.91	576.90	577.31	577.91	578.01	n/a (4)	n/a (4)	579.12	578.86	578.66	578.36	577.63
SG-1	580.00	- -	- -	- -	- -	- -	(5)	577.33	577.43	577.93	578.05	Destroyed (3)	Destroyed (3)	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed
Saginaw River Elevation [6]							576.78	577.02	577.23	577.49	577.76	578.27	577.81	577.48	577.42	577.37	577.24	577.14

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) Source of Saginaw River Elevation is: NOAA (Essexville, MI) for prior to November 1, 2005, USGS Station (04157065) for November 1, 2005 to December 4, 2013 and USGS Station (04157060) for December 4, 2013 to the present.
(7) Could not read due to well being covered with equipment
n/a Water elevation not available

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)	Depth of Well (feet)	Screen Length (feet)	Screen Type	Riser Type	Diameter of Screen (inches)	Groundwater Elevation (feet AMSL)										
							1/4/2000	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	589.40	19.22	10	SS	PVC	2	580.08	580.68	581.26	580.55	580.02	579.68	579.23	581.42	582.65	583.17	582.56
LMW17S	589.31	19.83	10	SS	PVC	2	579.47	579.71	579.69	578.98	579.19	579.43	579.65	579.77	580.25	581.57	581.58
LMW18S	592.33	22.52	10	SS	PVC	2	577.37	577.32	577.62	577.51	577.89	579.57	579.45	579.39	579.78	579.44	579.44
LMW19S	588.61	19.32	10	SS	PVC	2	580.30	579.58	579.95	579.53	580.01	580.42	580.52	580.51	580.94	580.90	580.66
MW1S	591.08	12.95	2	SS	SS	2	579.07	579.15	579.11	578.51	578.58	--	578.64	579.29	579.49	584.35	584.12
MW100S	591.97	14.44	10	SS	SS	2	577.49	578.09	578.77	578.57	--	579.33	579.07	579.30	579.96	582.53	582.71
MW101S	593.34	19.22	10	SS	SS	2	579.61	579.65	579.81	579.04	579.18	578.83	578.71	579.19	580.44	586.50	586.44
MW102D1	594.86	30.99	10	SS	SS	2	576.80	576.38	577.47	577.64	578.29	579.69	576.82	579.27	579.34	582.38	582.32
MW102D2	594.93	36.21	10	SS	SS	2	576.67	576.24	577.33	577.50	578.15	579.68	576.78	579.34	579.39	582.03	581.93
MW102D3	594.91	46.74	10	SS	SS	2	576.71	576.26	577.35	577.55	578.20	579.66	576.80	579.25	579.35	581.92	581.84
MW102D4 (replacement)	594.90	56.85	10	SS	SS	2	576.56	576.12	577.21	577.40	578.05	579.56	576.70	579.13	579.21	581.54	581.45
MW300S	587.12	15.06	10	SS	SS	2	579.27	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)	589.01	13.00	7	SS	SS	2	Damaged	Damaged	578.58	578.30	578.88	579.97	578.55	580.40	581.12	582.10	582.11
Perimeter Banks (PB)																	
LMW15D	588.34	32..8	10	SS	PVC	2	577.95	577.18	578.49	578.93	579.81	579.68	577.88	579.21	579.23	579.86	579.71
MW301D1	589.54	27.50	10	SS	SS	2	578.05	577.42	578.63	578.99	579.67	579.73	575.75	579.22	579.32	579.40	579.29
MW301D2	589.16	37.24	10	SS	SS	2	577.99	577.35	578.57	578.93	579.62	579.69	576.11	579.19	579.28	579.35	579.23
MW301D3	589.22	44.04	10	SS	SS	2	577.96	577.32	578.54	578.90	579.59	579.65	576.13	579.18	579.25	579.38	579.23
MW301D4	589.33	55.95	10	SS	SS	2	577.90	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	588.60	18.98			SS	2	581.42	581.70	581.77	581.74	581.84	579.38	577.24	579.71	580.83	580.33	580.54
Crotty Street Channel																	
MW1-00	588.26	12.00	7	SS	SS	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW2-00	589.29	18.00	7	SS	SS	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW3-00	588.40	12.50	7	SS	SS	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW4-00	589.65	19.00	7	SS	SS	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW5-00	588.89	13.00	7	SS	SS	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SG-1	580.00	- -	- -	- -	- -	- -	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed	Destroyed
Saginaw River Elevation [6]							577.15	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 and ice
(6) Source of Saginaw River Elevation is: NOAA (Essexville, MI) for prior to November 1, 2005, USGS Station (04157065) for November 1, 2005 to December 4, 2013 and USGS Station (04157060) for December 4, 2013 to the present.
(7) Could not read due to well being covered with equipment
n/a Water elevation not available

Table 4

Analytical Results Summary
Groundwater Treatment System Effluent Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

Sample Location:			Effluent	Effluent
Sample ID:			W-12610-031615-1501	W-12610-121015-SSH-1115
Sample Date:			3/16/2015	12/10/15
Parameters:	**Units**	**Industrial User Discharge Permit Limits (Daily Maximum)**		
Metals				
Cadmium	ug/L	57	2.0 U	2.0 U
Chromium	ug/L	6812	5.0 U	5.0 U
Copper	ug/L	1476	20 U	20 U
Iron	ug/L	--	100 U	100 U
Lead	ug/L	632	3.0 U	3.0 U
Mercury	ug/L	non-detect	0.20 U	0.20 U
Nickel	ug/L	2548	20 U	20 U
Silver	ug/L	200	5.0 U	5.0 U
Polychlorinated Biphenyls				
Aroclor-1016 (PCB-1016)	µg/L	non-detect	0.095 U	0.10 U
Aroclor-1221 (PCB-1221)	µg/L	non-detect	0.095 U	0.10 U
Aroclor-1232 (PCB-1232)	µg/L	non-detect	0.095 U	0.10 U
Aroclor-1242 (PCB-1242)	µg/L	non-detect	0.095 U	0.10 U
Aroclor-1248 (PCB-1248)	µg/L	non-detect	0.095 U	0.10 U
Aroclor-1254 (PCB-1254)	µg/L	non-detect	0.095 U	0.10 U
Aroclor-1260 (PCB-1260)	µg/L	non-detect	0.095 U	0.10 U
Volatile Organic Compounds				
Vinyl chloride	ug/L	2	1.0 U	1.0 U
General Chemistry				
Oil and grease	mg/L	100	4.7 U	4.8 U
Ammonia (as N)	mg/L	30	6.8	3.4
COD	mg/L	1670	10 U	10 U
pH		--	7.69	7.75
BOD	mg/L	835	2.3	9.3
TSS	mg/L	1336	4.0 U	4.0 U
Total Phosphorus	mg/L	13.8	0.10 U	0.10 U

Notes:

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

Table 5

Analytical Results Summary
Extraction System Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:			Crotty Street Channel	Crotty Street Channel	Machine Storage Area
Sample Location:			CSA GW Ext. Sys. Discharge	CSA GW Ext. Sys. Discharge	MSA GW Ext. Sys. Discharge
Sample ID:			W-12610-040915-SSH-1502	GW-12610-082515-SSH-0115	GW-12610-082515-SSH-0215
Sample Date:			4/09/15	8/25/15	8/25/15
Parameters:	**Units**	**Michigan Residential Drinking water criteria**			
Polychlorinated Biphenyls					
Aroclor-1016 (PCB-1016)	µg/L	0.5	0.19 U	0.19 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	0.5	0.19 U	0.19 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	0.5	0.19 U	0.19 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	0.5	0.19 U	**0.56**	0.38 U
Aroclor-1248 (PCB-1248)	µg/L	0.5	0.19 U	0.19 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.5	0.19 U	0.19 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.5	0.19 U	0.19 U	0.19 J

Notes:

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

Table 6

Analytical Results Summary
Annual Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:			Machine Storage Area	Machine Storage Area
Sample Location:			MW102D1	MW102D1
Sample ID:			GW-12610-082615-SSH-0715	GW-12610-082615-SSH-0815
Sample Date:			8/26/2015	8/26/2015 (Duplicate)
Parameters:	Units	Michigan Residential Drinking water criteria		
Polychlorinated Biphenyls				
Aroclor-1016 (PCB-1016)	µg/L	0.5	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.5	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.5	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.5	0.34	0.34
Aroclor-1248 (PCB-1248)	µg/L	0.5	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.5	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	0.5	0.19 U	0.19 U

Notes:

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

Table 6

Analytical Results Summary
Annual Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:			Machine Storage Area	Machine Storage Area	Machine Storage Area
Sample Location:			MW102D2	MW102D4	MW300S
Sample ID:			GW-12610-082615-SSH-0915	GW-12610-082615-SSH-1015	GW-12610-082615-SSH-0615
Sample Date:			8/26/2015	8/26/2015	8/26/2015
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
Aroclor-1221 (PCB-1221)	µg/L	0.5	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
Aroclor-1242 (PCB-1242)	µg/L	0.5	0.19 U	0.19 U	0.095 J
Aroclor-1248 (PCB-1248)	µg/L	0.5	0.19 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.5	0.19 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	0.5	0.19 U	0.19 U	0.19 U

Notes:

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

Table 6

Analytical Results Summary
Annual Sampling
Racer Trust - Bay City Industrial Land
Bay City, Michigan

AOI:			**Perimeter Banks**	**Perimeter Banks**	**Perimeter Banks**
Sample Location:			**LMW13S**	**LMW15D**	**MW301D2**
Sample ID:			**GW-12610-082615-SSH-0315**	**GW-12610-082615-SSH-0415**	**GW-12610-082615-SSH-0515**
Sample Date:			**8/26/2015**	**8/26/2015**	**8/26/2015**
Parameters:	**Units**	**Michigan Residential Drinking water criteria**			
Polychlorinated Biphenyls					
Aroclor-1016 (PCB-1016)	µg/L	0.5	0.19 U	0.19 U	0.38 U
Aroclor-1221 (PCB-1221)	µg/L	0.5	0.19 U	0.19 U	0.38 U
Aroclor-1232 (PCB-1232)	µg/L	0.5	0.19 U	0.19 U	0.38 U
Aroclor-1242 (PCB-1242)	µg/L	0.5	0.19 U	0.19 U	0.38 U
Aroclor-1248 (PCB-1248)	µg/L	0.5	**0.98**	0.19 U	0.38 U
Aroclor-1254 (PCB-1254)	µg/L	0.5	0.19 U	0.19 U	0.38 U
Aroclor-1260 (PCB-1260)	µg/L	0.5	0.19 U	0.19 U	0.38 U

Notes:

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

TABLE 7

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

		Original Program (1) 2001 - 2010			Revised 2011 - 2014			Revised 2015-2016		
		Groundwater Quality Monitoring		Static Water Level Monitoring (2)	Groundwater Quality Monitoring		Static Water Level Monitoring (2)	Groundwater Quality Monitoring		Static Water Level Monitoring (2)
Plant Area	**Location**	**Parameters**	**Frequency**	**Frequency**	**Parameters**	**Frequency**	**Frequency**	**Parameters**	**Frequency**	**Frequency**
Machine Storage Area (MSA)										
MSA	LMW17S	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	LMW18S (4)	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	LMW19S	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	MW1S (4)	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	MW100S (4)	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	MW101S (4)	- -	- -	annually	- -	- -	annually	- -	- -	annually
MSA	MW102D1	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	MW102D2	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	MW102D3	PCBs	annually	annually	- -	- -	annually	- -	- -	annually
MSA	MW102D4	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	MW300S	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
MSA	LMW14S	--	--	annually	--	--	annually	--	--	annually
Perimeter Banks (PB)										
PB	LMW13S	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
PB	LMW15D	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
PB	MW301D1	PCBs	annually	annually	- -	- -	annually	- -	- -	annually
PB	MW301D2	PCBs	annually	annually	PCBs	annually	annually	PCBs	annually	annually
PB	MW301D3	PCBs	annually	annually	- -	- -	annually	- -	- -	annually
PB	MW301D4	PCBs	annually	annually	- -	- -	annually	- -	- -	annually
Crotty Street Channel (CSC)										
CSC	MW1	- -	- -	annually	- -	- -	annually	- -	- -	annually
CSC	MW2	- -	- -	annually	- -	- -	annually	- -	- -	annually
CSC	MW3	- -	- -	annually	- -	- -	annually	- -	- -	annually
CSC	MW4	- -	- -	annually	- -	- -	annually	- -	- -	annually
CSC	MW5	- -	- -	annually	- -	- -	annually	- -	- -	annually
CSC	SG-1 (3)	- -	- -	annually	- -	- -	annually	- -	- -	--
Stormwater System(3)										
MSA(5)	Extraction System	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -
CSC(5)	Extraction System	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -	PCBs	Semi-annually	- -
CSC(5)	CB2	PCBs	Semi-annually	- -	- -	- -	- -	- -	- -	- -
CSC(5)	Effluent							(6)	Semi-annually	- -

Notes:

(1) The program presented is a subset of the original program. Locations no longer included in this long-term groundwater and stormwater monitoring program are not presented.
(2) 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.
(3) Staff gauge.
(4) Extraction system monitoring.
(5) To be sampled by company who maintains the extraction system.
(6) Sampling in accordance with the Industrial User Discharge Permit with the City of Bay City (120807). Parameters include: TSS, pH, grease/oil, phosphorous, COD, BOD, cadmium, chromium, copper, mercury, lead, nickel, silver, ammonia-nitrogen, PCBs, and vinyl chloride

Attachments

Attachment A
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. Hoevemeyer	12/29/14	Field Book	
Site Log Book	Monthly			Field Book	
Extraction Well Water Levels	Monthly			Collected (EW 14, CB, EW 6/8/12)	
Inspection	Monthly			GW Treatment system Off	
Maintenance	Monthly - As Required				
Level Transmitter Inspection	Monthly			local controls only	
Maintenance	Monthly - As Required			none.	
Calibration	Semi-Annually				
Control Panel Inspection	Monthly			Okay	
Maintenance	Monthly - As Required			None	
Air Supply Manifold Inspection	Monthly				
Air Compressor Maintenance	Monthly - As Required				
Heater Check	Monthly (Winter Season)			heaters "on"	
Maintenance	Monthly - As Required			none 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	12/29/14	annual in August	
Water Levels	As required			"	
General Maintenance	As required			deck tie rods	after winter freeze/thaw
Force Main Cleaning	As required			schedule as necessary	
Flowmeter Cleaning	As required			as necessary - sight gauge.	
Spare Parts Inventory	As used			extra tubing, fittings stored in building	
Staff Gauges Water Levels	As Required			Collected	
Exposure Barriers	Monthly			vegetation Okay - bett brown.	
Multi-Layer Cap	Monthly			no excavations - minor erosion	
Containment System	Monthly			minor cracks at wells on sheetpile cap	
Stormwater Collection System	Monthly			collect sample - little flow	
Crotty Street Channel Abondoned 60" Sewer	Monthly			normal lever	

* 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	12/29/19					
EW-6	PUMP CYCLING **BEFORE/AFTER** MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO **WATER/LNAPL** (ft.) **TARGET DEPTH 12.74**	11.98						Drops of LNAPL
	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**	9.44						
	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**	9.60						
	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**	8.93						
	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**	8.77						
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
EW-11	PUMP CYCLING **BEFORE/AFTER** MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO **WATER/LNAPL** (ft.) **TARGET 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**	9.33						drops of LNAPL on probe.
	PUMP CHANGED (Y/N)							
	CHLORINE ADDED							
FQIT-01	FLOW (gpm) TOTAL (gal.)	—						
LT-01		—						
CP-01		OK						
AIR SUPPLY MANIFOLD		—						
HEATER		ON						
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	12/29/14					
EW-13	PUMP CYCLING **BEFORE/AFTER** MAINTENANCE (count/min)							
	AIR PRESSURE (psi)							
	DEPTH TO **WATER/LNAPL** (ft.) **TARGET DEPTH 7.33**	7.91						
	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**	6.26						hose frozen for 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**	7.17						
	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)	—						
	INLET RIVER - WATER LEVEL (ft)	—						
	CROTTY STREET - WATER LEVEL (ft)	—						Broken from Driftwood

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION

Project: 12610

On-Site Personnel: Steve Hoevemeyer

Completed Date: 1/27/15

Completed By: SH

1. DETAILS OF INSPECTION

- [X] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [ ] Other task:

Weather: sun, wind ~10 mph

Temperature: high teens.

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
N	Exposure Barrier (signs of trespassing, impairment of pavement)	
Y	Multi-layer Cap (evidence of settlement, erosion, disturbance)	minor erosion near sheet pile wall & old animal signs
Y	Containment System (signs of deterioration of sheet pile, leaking)	minor cracks on welds on cap

3. GROUNDWATER EXTRACTION SYSTEM

- [ ] Forcemain tubing requires replacement?

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	12.09	N	Y	Turned ON
EW-8	11.34	13.99	Y	Y	Drops of LNAPL
EW-12	9.42	8.42/8.45	Y	Y	LNAPL
EW-15	6.71	3.75	Y	Y	

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	14.51	7.33	5.42
DTW	9.49	8.89	8.78	13.79/14.51(LNAPL)	8.68	8.69

4. GROUNDWATER TREATMENT SYSTEM

	Comments
[ ] Check piping for leaks	System Down
[ ] Check Bag filters	
[ ] check GACs for leaks	
[ ] Check PLC	
[ ] check aerator	
[ ] check sludge pump	
[ ] check inspection drum	
[ ] check aeration tank	
[ ] check settling chamber	
[ ] check clear well	
[ ] check floats in clearwell	✓

	Comments
[X] check feed pump	
Flow Reading	off (gpm)
Totalized Flow Reading	(gal)
[X] heater on?	
[X] check sludge tank	
sludge thickness	(in)

Collect Samples

	Date	Initials	Sample Numbe	Time
[ ] Sample Groundwater Treatment System Influent			W-12610-	
[ ] Sample Groundwater Treatment System effluent			W-12610-	

Notes

replaced frozen hose @ EW-14

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION

Project: 12610

On-Site Personnel: Steve Hoevemeyer

Completed Date: 2/27/15

Completed By: SH

1. DETAILS OF INSPECTION

- [X] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [ ] Other task:

Weather: Sun, wind ≈ 5mph

Temperature: below 0°F

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
N	Exposure Barrier (signs of trespassing, impairment of pavement)	
N	Multi-layer Cap (evidence of settlement, erosion, disturbance)	site is snow covered
N	Containment System (signs of deterioration of sheet pile, leaking)	minor cracks at welds on cap

3. GROUNDWATER EXTRACTION SYSTEM

- [ ] Forcemain tubing requires replacement?

EW15 2" line to bldg is froze - treatment system down

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	12.17	N	Y	
EW-8	11.34	9.86	N	Y	
EW-12	9.42	7.91	N	Y	product on probe
EW-15	6.71	7.92	N	Y	

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	14.51	7.33	5.42
DTW	9.75	9.11	8.89	—	8.51	6.83

4. GROUNDWATER TREATMENT SYSTEM

	Comments
[X] Check piping for leaks	system down
[X] Check Bag filters	
[X] check GACs for leaks	
[X] Check PLC	
[X] check aerator	
[X] check sludge pump	
[X] check inspection drum	
[X] check aeration tank	
[X] check settling chamber	
[X] check clear well	
[X] check floats in clearwell	

		Comments
[X] check feed pump		had to thaw line
Flow Reading	off	(gpm)
Totalized Flow Reading	46,303	(gal)
[X] heater on?		extra heater in bldg
[X] check sludge tank		
sludge thickness		(in)

Collect Samples

	Date	Initials	Sample Numbe	Time
[ ] Sample Groundwater Treatment System Influent			W-12610-	
[ ] Sample Groundwater Treatment System effluent			W-12610-	

Notes

Phoenix on-site to assist in thawing out frozen lines
- thawed feed pump line from clearwell.
- EW15 still froze

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION

Project: 12610

On-Site Personnel: Steve Hoevemeyer

Completed Date: 3/20/15

Completed By: SH

1. DETAILS OF INSPECTION

- [X] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [ ] Other task:

Weather: mostly sun, 5-10 mph wind

Temperature: 40's

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
N	Exposure Barrier (signs of trespassing, impairment of pavement)	
Y	Multi-layer Cap (evidence of settlement, erosion, disturbance)	minor erosion by sheetpile wall
Y	Containment System (signs of deterioration of sheet pile, leaking)	minor cracks at welds on cap

3. GROUNDWATER EXTRACTION SYSTEM

- [X] Forcemain tubing requires replacement? EW15 tubing replaced on 3/18

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	12.11	Y	Y	
EW-8	11.34	13.88	Y	Y	
EW-12	9.42	8.18	Y	Y	product on probe
EW-15	6.71	7.83		Y	

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	14.51	7.33	5.42
DTW	9.45	8.53	8.58	13.70/14.66	7.63	5.91

4. GROUNDWATER TREATMENT SYSTEM

	Comments
[X] Check piping for leaks	
[X] Check Bag filters	1.0 psi
[X] check GACs for leaks	#1 GAC 0.5 psi
[X] Check PLC	
[X] check aerator	
[X] check sludge pump	
[X] check inspection drum	
[X] check aeration tank	
[X] check settling chamber	
[X] check clear well	
[X] check floats in clearwell	

	Comments
[X] check feed pump	1.77
Flow Reading	1.77 (gpm)
Totalized Flow Reading	71,229 (gal)
[X] heater on?	extra heater in bldg
[X] check sludge tank	
sludge thickness	>1 (in)

Collect Samples

	Date Initials Sample Numbe	Time
[ ] Sample Groundwater Treatment System Influent	W-12610-	
[X] Sample Groundwater Treatment System effluent	W-12610-031615-SSH-1501	0800

Notes

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION

Project: 12610

On-Site Personnel: Steve Hoevemeyer

Completed Date: 4/27/15

Completed By: SH

1. DETAILS OF INSPECTION

- [X] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [ ] Other task:

Weather: part sun, wind 5-10mph

Temperature: high 40's

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
N	Exposure Barrier (signs of trespassing, impairment of pavement)	
X	Multi-layer Cap (evidence of settlement, erosion, disturbance)	animal activity, minor erosion along sheetpile
N	Containment System (signs of deterioration of sheet pile, leaking)	continue to monitoring cracks on cap

3. GROUNDWATER EXTRACTION SYSTEM

[N] Forcemain tubing requires replacement?

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	15.65		N	
EW-8	11.34	13.48		N	new tubing
EW-12	9.42	8.15'		N	LNAPL at 8.13'
EW-15	6.71	6.15	55%	N	

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	LNAPL/14.51	7.33	5.42
DTW	9.44	8.79	8.53	13.73/14.69	6.06	4.37

4. GROUNDWATER TREATMENT SYSTEM

	Comments		Comments
[X] Check piping for leaks	OK	[X] check feed pump	65%
[X] Check Bag filters	OK - 2.25 psi	Flow Reading	~~164~~ 1.70 (gpm)
[X] check GACs for leaks	minor leak in 1st stage - 1.5 psi	Totalized Flow Reading	164,448 (gal)
[X] Check PLC	OK	[X] heater on?	yes, only bldg. heater
[X] check aerator	working - 5 psi	[X] check sludge tank	OK
[X] check sludge pump	working	sludge thickness	1/4 - 1/2" (in)
[X] check inspection drum	brownish/red to H_2S		
[X] check aeration tank	aerators look good		
[X] check settling chamber	working properly		
[X] check clear well	water is clear		
[X] check floats in clearwell	working properly		

Collect Samples

	Date	Initials	Sample Numbe	Time
[ ] Sample Groundwater Treatment System Influent			W-12610-	
[ ] Sample Groundwater Treatment System effluent			W-12610-	

Notes

4/9/15 - City of Bay City collecting 24 comp. sample

4/9/15 - collect SA - sample for PCBs from EW-5 - # - 1502

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION

Project: 12610

On-Site Personnel: Steve Hoevemeyer

Completed Date: 5/28/15

Completed By: SH

1. DETAILS OF INSPECTION

- [X] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [X] Other task: O+M

Weather: mostly sun, high 70s

Temperature: wind ~5-10mph

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
N	Exposure Barrier (signs of trespassing, impairment of pavement)	vegetation on cap good
Y	Multi-layer Cap (evidence of settlement, erosion, disturbance)	minor around sheetpile; woodchuck signs
Y	Containment System (signs of deterioration of sheet pile, leaking)	minor cracks at wells on cap

3. GROUNDWATER EXTRACTION SYSTEM

- [Y] Forcemain tubing requires replacement? replaced EW15 + fuel pump

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	12.08		N	
EW-8	11.34	12.03		N	LNAPL on probe
EW-12	9.42	8.44		N	LNAPL on probe
EW-15	6.71	5.53	55%	N	change tubing

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	14.51	7.33	5.42
DTW	9.47	8.71	8.49	13.81/14.85	5.53	3.95

4. GROUNDWATER TREATMENT SYSTEM

	Comments
[X] Check piping for leaks	none
[X] Check Bag filters	replaced
[X] check GACs for leaks	high pressure
[X] Check PLC	OK
[X] check aerator	clean tubes
[X] check sludge pump	cannot get pumping
[X] check inspection drum	iron bacteria
[X] check aeration tank	clean tubes
[X] check settling chamber	OK
[X] check clear well	OK
[X] check floats in clearwell	OK

	Comments	
[X] check feed pump		
Flow Reading	1.72	(gpm)
Totalized Flow Reading	213769	(gal)
[X] heater on?	no	
[X] check sludge tank		
sludge thickness	—	(in)

Collect Samples

	Date	Initials	Sample Numbe	Time
[ ] Sample Groundwater Treatment System Influent			W-12610-	
[ ] Sample Groundwater Treatment System effluent			W-12610-	

Notes

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION

Project: 12610

On-Site Personnel: Steve Hoevemeyer

Completed Date: 6/25/15

Completed By: SH

1. DETAILS OF INSPECTION

- [X] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [ ] Other task:

Weather: mostly clouds, wind ~5mph

Temperature: 70's

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
Y	Exposure Barrier (signs of trespassing, impairment of pavement)	no excavations
Y	Multi-layer Cap (evidence of settlement, erosion, disturbance)	vegetation good; minor erosion
Y	Containment System (signs of deterioration of sheet pile, leaking)	minor cracks on sheetpile cap

3. GROUNDWATER EXTRACTION SYSTEM

- [X] Forcemain tubing requires replacement? — replaced in EW15; new tubing for feed pump

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	14.03	Y-75%	N	sheen on probe
EW-8	11.34	12.88	Y-75%	N	drops of LNAPL on probe
EW-12	9.42	7.95	Y-85%	N	LNAPL - too thick - 7.79'
EW-15	6.71	8.58	Y-60%	N	

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	14.51	7.33	5.42
DTW	9.36	8.59	8.17	13.57/14.61	8.62	7.37

4. GROUNDWATER TREATMENT SYSTEM

	Comments
[X] Check piping for leaks	none
[X] Check Bag filters	pressure - OK
[X] check GACs for leaks	none
[X] Check PLC	OK
[X] check aerator	not working
[X] check sludge pump	
[X] check inspection drum	scum on top
[X] check aeration tank	couple inches sludge
[X] check settling chamber	OK
[X] check clear well	OK
[X] check floats in clearwell	OK

	Comments
[X] check feed pump	OK - new tubing
Flow Reading	1.92 (gpm)
Totalized Flow Reading	232,315 (gal)
[X] heater on?	No
[X] check sludge tank	
sludge thickness	1-2 (in)

Collect Samples

	Date	Initials	Sample Numbe	Time
[ ] Sample Groundwater Treatment System Influent			W-12610-	
[ ] Sample Groundwater Treatment System effluent			W-12610-	

Notes

aerators sent in for repair

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION

Project: 12610

On-Site Personnel: Steve Hoevemeyer

Completed Date: 7/29/15

Completed By: SH

1. DETAILS OF INSPECTION

- [X] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [ ] Other task:

Weather: part sun, light breeze

Temperature: 70's

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
Y	Exposure Barrier (signs of trespassing, impairment of pavement)	vegetation good
Y	Multi-layer Cap (evidence of settlement, erosion, disturbance)	minor erosion;
Y	Containment System (signs of deterioration of sheet pile, leaking)	cracks at welds on cap

3. GROUNDWATER EXTRACTION SYSTEM

- [X] Forcemain tubing requires replacement? on cap as needed basis

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	11.74			drops on probe
EW-8	11.34	9.45			
EW-12	9.42	7.41			LNAPL at 7.39
EW-15	6.71	7.92			not currently "on"

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	14.51	7.33	5.42
DTW	9.39	8.48	8.03	13.64/14.75	8.62	8.26

4. GROUNDWATER TREATMENT SYSTEM

	Comments
[X] Check piping for leaks	
[X] Check Bag filters	
[X] check GACs for leaks	
[X] Check PLC	
[X] check aerator	out for repair
[X] check sludge pump	
[X] check inspection drum	
[X] check aeration tank	
[X] check settling chamber	
[X] check clear well	
[X] check floats in clearwell	

	Comments
[X] check feed pump	
Flow Reading	(gpm)
Totalized Flow Reading	232,315 (gal)
[X] heater on?	off
[X] check sludge tank	
sludge thickness	1-2 (in)

Collect Samples

	Date	Initials	Sample Numbe	Time
☐ Sample Groundwater Treatment System Influent			W-12610-	
☐ Sample Groundwater Treatment System effluent			W-12610-	

Notes

- GW treatment system down

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION

Project: 12610

On-Site Personnel: Steve Hoevemeyer

Completed Date: 8/28/15

Completed By: SH

1. DETAILS OF INSPECTION

- [X] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [ ] Other task:

Weather: mostly clouds wind 5-10mph

Temperature: high 70s

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
Y	Exposure Barrier (signs of trespassing, impairment of pavement)	OK no excavations
Y	Multi-layer Cap (evidence of settlement, erosion, disturbance)	good vegetation, minor erosion
Y	Containment System (signs of deterioration of sheet pile, leaking)	welds on cap of sheetpile wall cracked

3. GROUNDWATER EXTRACTION SYSTEM

- [X] Forcemain tubing requires replacement? replaced on EW-15

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	11.87	Y-75%		
EW-8	11.34	12.47	Y-75%		
EW-12	9.42	7.88			replace tubing
EW-15	6.71	7.88	Y-60%		

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	14.51	7.33	5.42
DTW	9.49	8.56	8.18	13.73/14.84	7.52	5.94

4. GROUNDWATER TREATMENT SYSTEM

	Comments
[X] Check piping for leaks	none
[ ] Check Bag filters	changed on 8/17
[X] check GACs for leaks	none
[X] Check PLC	OK
[X] check aerator	installed repaired
[X] check sludge pump	OK
[X] check inspection drum	scum on top
[X] check aeration tank	clean diffusers
[X] check settling chamber	
[X] check clear well	
[X] check floats in clearwell	

	Comments
[X] check feed pump	OK - 75%
Flow Reading	1-82 (gpm)
Totalized Flow Reading	241,397 (gal)
[X] heater on?	NO
[X] check sludge tank	
sludge thickness	1-2 (in)

Collect Samples

	Date	Initials	Sample Numbe	Time
[ ] Sample Groundwater Treatment System Influent			W-12610-	
[ ] Sample Groundwater Treatment System effluent			W-12610-	

Notes

- only 1 of 2 repaired aerators working
- pump aeration tank into sludge tank

SH

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION

Project: 12610

On-Site Personnel: Steve Hoevemeyer

Completed Date: 9/29/15

Completed By: SH

1. DETAILS OF INSPECTION

- [X] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [ ] Other task:

Weather: overcast, rain, wind 10-15 mph

Temperature: 60's

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
N	Exposure Barrier (signs of trespassing, impairment of pavement)	
Y	Multi-layer Cap (evidence of settlement, erosion, disturbance)	minor erosion by shutpile
Y	Containment System (signs of deterioration of sheet pile, leaking)	minor cracks at welds on cap

3. GROUNDWATER EXTRACTION SYSTEM

- [N] Forcemain tubing requires replacement?

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	11.71	N	N	drops of LNAPL
EW-8	11.34	9.35	N	N	drops of LNAPL
EW-12	9.42	7.32	N	N	LNAPL at 7.29'
EW-15	6.71	5.03	N	N	electrical trouble

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	14.51	7.33	5.42
DTW	9.39	8.30	8.09	13.63/14.96	6.09	5.04

4. GROUNDWATER TREATMENT SYSTEM

	Comments
[X] Check piping for leaks	system not
[X] Check Bag filters	operating
[X] check GACs for leaks	
[X] Check PLC	
[X] check aerator	
[X] check sludge pump	
[X] check inspection drum	
[X] check aeration tank	
[X] check settling chamber	
[X] check clear well	
[X] check floats in clearwell	

	Comments
[X] check feed pump	
Flow Reading	(gpm)
Totalized Flow Reading	252,638 (gal)
[X] heater on?	no
[X] check sludge tank	
sludge thickness	2 (in)

Collect Samples

	Date	Initials	Sample Numbe	Time
[ ] Sample Groundwater Treatment System Influent			W-12610-	
[ ] Sample Groundwater Treatment System effluent			W-12610-	

Notes

woody vegetation growing on cap has been cut

EW14 sump running

SH

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION

Project: 12610

On-Site Personnel: Steve Hoevemeyer

Completed Date: 10/30/15

Completed By: SH

1. DETAILS OF INSPECTION

- [x] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [ ] Other task:

Weather: mix sun/clouds; wind S

Temperature: 40s

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
N	Exposure Barrier (signs of trespassing, impairment of pavement)	
Y	Multi-layer Cap (evidence of settlement, erosion, disturbance)	minor erosion by sheetpile; some bare areas
Y	Containment System (signs of deterioration of sheet pile, leaking)	minor cracks at welds on cap

3. GROUNDWATER EXTRACTION SYSTEM

- [N] Forcemain tubing requires replacement?

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	12.12	Y - 70%	N	couple drops of LNAPL on probe
EW-8	11.34	12.66	Y - 75%	N	LNAPL drops on probe
EW-12	9.42	9.13	Y - 80%	N	LNAPL on probe
EW-15	6.71	6.68	Y - 60%	N	

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	14.51	7.33	5.42
DTW	9.41	8.51	8.43	13.77/15.10	8.69	8.62

4. GROUNDWATER TREATMENT SYSTEM

	Comments
[x] Check piping for leaks	none
[x] Check Bag filters	OK
[x] check GACs for leaks	none
[x] Check PLC	OK
[x] check aerator	4.5 psi
[x] check sludge pump	OK
[x] check inspection drum	water is orange brown
[x] check aeration tank	OK
[x] check settling chamber	OK
[x] check clear well	filling
[x] check floats in clearwell	OK

	Comments
[x] check feed pump	not running
Flow Reading	(gpm)
Totalized Flow Reading	260,771 (gal)
[x] heater on?	yes
[x] check sludge tank	
sludge thickness	2 (in)

clearwell filling at time of inspection

Collect Samples

	Date Initials Sample Numbe	Time
☐ Sample Groundwater Treatment System Influent	W-12610-	
☐ Sample Groundwater Treatment System effluent	W-12610-	

Notes

AH

BAY CITY INDUSTRIAL LAND - MONTHLY SITE INSPECTION **Project: 12610**

On-Site Personnel: Steve Hoevemeyer

Completed Date: 11/23/15

Completed By: SH

1. DETAILS OF INSPECTION

- [X] Routine Monthly Inspection
- [ ] Response to Alarm (list type and/or PLC outputs)
- [ ] Other task:

Weather: cloudy, wind ≈10mph

Temperature: 20's

2. SITE INSPECTION

(Y/N)		If yes indicate nature of maintenance/repairs required
N	Exposure Barrier (signs of trespassing, impairment of pavement)	first snow on ground
Y	Multi-layer Cap (evidence of settlement, erosion, disturbance)	no excavations; minor erosion by sheetpile
Y	Containment System (signs of deterioration of sheet pile, leaking)	minor cracks at welds on cap

3. GROUNDWATER EXTRACTION SYSTEM

[N] Forcemain tubing requires replacement?

EW (pump)	Target Depth (feet)	DTW (feet)	Pump Operating? (Y/N) What speed?	Heater On? (Y/N)	Comments (product evident, tubing replaced, iron bacteria)
EW-6	12.74	11.80	Y-70%	Y	
EW-8	11.34	12.31	Y-75%	Y	LNAPL on probe
EW-12	9.42	8.62	Y-75%	Y	LNAPL on probe
EW-15	6.71	3.69	Y-50%	Y	new tubing

EW (no pump)	EW-7	EW-9	EW-10	EW-11	EW-13	EW-14
Target Depth	11.00	11.04	10.77	14.51	7.33	5.42
DTW	9.39	8.59	8.42	13.64/15.00	8.03	6.39

4. GROUNDWATER TREATMENT SYSTEM

	Comments
[X] Check piping for leaks	none
[X] Check Bag filters	OK
[X] check GACs for leaks	none
[X] Check PLC	OK
[X] check aerator	4.5 psi
[X] check sludge pump	on
[X] check inspection drum	iron bacteria
[X] check aeration tank	on
[X] check settling chamber	on
[X] check clear well	filling at time of inspection
[X] check floats in clearwell	

	Comments
[X] check feed pump	not running
Flow Reading	(gpm)
Totalized Flow Reading	289,731 (gal)
[X] heater on?	added additional
[X] check sludge tank	
sludge thickness	≈2 (in)

Collect Samples

	Date Initials Sample Numbe	Time
[ ] Sample Groundwater Treatment System Influent	W-12610-	
[ ] Sample Groundwater Treatment System effluent	W-12610-	

Notes

SH

Attachment B
Analytical Results Summary (2006 to 2015)

Attachment B

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	Crotty Street Channel	Crotty Street Channel
		Sample Location:	CB-2	CB-2	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	W-12610-040611-SSH-11103	W-12610-040611-SSH-11104
		Sample Date:	4/5/2006	3/13/2007	8/27/2007	6/11/2008	8/19/2008	3/12/2009	3/24/2010	4/6/2011	4/6/2011
Parameters:	**Units**	**Michigan Residential Drinking water criteria**									**(Duplicate)**
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	-	-	-	-	-	-	-	-	-
Iron	mg/L	300000	-	-	-	-	-	-	-	-	-
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	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	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	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	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	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	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	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	-	-	-	-	-	-	-	-	-
General Chemistry											
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	10000000	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-	-
pH	mg/L	6.5 to 8.5	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/L	63000000	-	-	-	-	-	-	-	-	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Crotty Street Channel CB-2 W-12610-102511-SSH-027 10/25/2011	Crotty Street Channel CB-2 W-12610-041712-SSH-SA1202 4/17/2012	Crotty Street Channel CB-2 GW-12610-080712-SSH-001 8/7/2012	Crotty Street Channel CB-2 W-12610-040913-SSH-CB1213 4/9/2013	Crotty Street Channel CSA GW Ext. Sys. Discharge W-040506-SSH-C03 4/5/2006	Crotty Street Channel CSA GW Ext. Sys. Discharge GW-081606-SSH-0601 8/16/2006	Crotty Street Channel CSA GW Ext. Sys. Discharge W-031307-SSH-C07-3 3/13/2007	Crotty Street Channel CSA GW Ext. Sys. Discharge CSC 8/23/2007
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	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-
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	0.19 U	0.095 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 UJ	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.19 U	0.095 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 UJ	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.19 U	0.095 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 UJ	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.19 U	0.095 U	0.19 U	0.19 U	0.36	0.47	0.23 J	**0.51**
Aroclor-1248 (PCB-1248)	µg/L	0.19 U	0.095 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 UJ	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.19 U	0.095 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 UJ	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.19 U	0.095 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 UJ	0.20 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	-	-	-	-	-	-	-
General Chemistry									
Oil and grease	mg/L	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-
Total Phosphorus	mg/L	-	-	-	-	-	-	-	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Crotty Street Channel CSA GW Ext. Sys. Discharge CSC-(06/11/08) 6/11/2008	Crotty Street Channel CSA GW Ext. Sys. Discharge DUP-(06/11/08) 6/11/2008 (Duplicate)	Crotty Street Channel CSA GW Ext. Sys. Discharge CSC_(08/19/08) 8/19/2008	Crotty Street Channel CSA GW Ext. Sys. Discharge CSC_(03/12/09) 3/12/2009	Crotty Street Channel CSA GW Ext. Sys. Discharge CSC 8/27/2009	Crotty Street Channel CSA GW Ext. Sys. Discharge W-12610-043010-SSH-CSC-4 4/30/2010	Crotty Street Channel CSA GW Ext. Sys. Discharge GW-12610-081910-SSH-026 8/19/2010	Crotty Street Channel CSA GW Ext. Sys. Discharge GW-12610-081910-SSH-027 8/19/2010 (Duplicate)
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	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls									
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 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 UJ	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.074 J	0.077 J	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 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	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	-	-	-	-	-	-	-	-
General Chemistry									
Oil and grease	mg/L	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-
Total Phosphorus	mg/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

Parameters:	Units	Crotty Street Channel CSA GW Ext. Sys. Discharge W-12610-040611-SSH-11102 4/6/2011	Crotty Street Channel CSA GW Ext. Sys. Discharge GW-12610-082211-JY-002 8/22/2011	Crotty Street Channel CSA GW Ext. Sys. Discharge W-12610-041712-SSH-SA1201 4/17/2012	Crotty Street Channel CSA GW Ext. Sys. Discharge GW-12610-080712-SSH-002 8/7/2012	Crotty Street Channel CSA GW Ext. Sys. Discharge W-12610-040913-SSH-CS1013 4/9/2013	Crotty Street Channel CSA GW Ext. Sys. Discharge W-12610-040913-SSH-CS1113 4/9/2013 (Duplicate)	Crotty Street Channel CSA GW Ext. Sys. Discharge GW-12610-080713-JY-003 8/7/2013	Crotty Street Channel CSA GW Ext. Sys. Discharge GW-12610-080514-SSH-1402 8/5/2014
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	-	-	-	-	-	-	-	-
Iron	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	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	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	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	**0.55**	**0.68J**
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.19 U	0.097 U	0.20 U	0.19 U	0.059 J	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.19 U	0.097 U	0.20 U	0.19 U	0.19 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	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	-	-	-	-	-	-	-	-
General Chemistry									
Oil and grease	mg/L	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-
Total Phosphorus	mg/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

Parameters:	Units	Crotty Street Channel CSA GW Ext. Sys. Discharge W-12610-122914-SSH-1420 12/29/2014	Crotty Street Channel CSA GW Ext. Sys. Discharge W-12610-040915-SSH-1502 4/09/15	Crotty Street Channel CSA GW Ext. Sys. Discharge GW-12610-082515-SSH-0115 8/25/15	Crotty Street Channel EW14 GW-12610-071811-SH-004 7/18/2011	Machine Storage Area Effluent W-12610-022614-1403 2/26/2014	Machine Storage Area Effluent W-12610-090514-SSH-1411 9/5/2014	Machine Storage Area Effluent W-12610-031615-1501 3/16/2015	Machine Storage Area Effluent W-12610-121015-SSH-1115 12/10/15	Machine Storage Area EW6 GW-12610-072011-SH-016 7/20/2011
Metals										
Antimony	mg/L	-	-	-	-	-	-	-	-	-
Arsenic	mg/L	-	-	-	-	-	-	-	-	-
Barium	mg/L	-	-	-	-	-	-	-	-	-
Beryllium	mg/L	-	-	-	-	-	-	-	-	-
Cadmium	mg/L	-	-	-	-	0.002 U	0.002 U	0.002 U	0.002 U	-
Chromium	mg/L	-	-	-	-	0.005 U	0.005 U	0.005 U	0.005 U	-
Cobalt	mg/L	-	-	-	-	-	-	-	-	-
Copper	mg/L	-	-	-	-	0.02 U	0.021	0.02 U	0.02 U	-
Iron	mg/L	-	-	-	-	0.18	0.54	0.10 U	0.10 U	-
Lead	mg/L	-	-	-	-	0.003 U	0.003 U	0.003 U	0.003 U	-
Mercury	mg/L	-	-	-	0.00000036 J	0.00002 U	0.00002 U	0.00002 U	0.00002 U	-
Nickel	mg/L	-	-	-	-	0.0078 J	0.02 U	0.02 U	0.02 U	-
Selenium	mg/L	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	0.005 U	0.005 U	0.005 U	0.005 U	-
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	0.098 U	0.095 U	0.095 U	0.10 U	-
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.098 U	0.095 U	0.095 U	0.10 U	-
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.098 U	0.095 U	0.095 U	0.10 U	-
Aroclor-1242 (PCB-1242)	µg/L	0.22	0.19 U	**0.56**	**0.54**	0.098 U	0.095 U	0.095 U	0.10 U	-
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.098 U	0.095 U	0.095 U	0.10 U	-
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.098 U	0.095 U	0.095 U	0.10 U	-
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.098 U	0.095 U	0.095 U	0.10 U	-
Volatile Organic Compounds										
cis-1,2-Dichloroethene	µg/L	-	-	-	1.0 U	-	-	-	-	1.0 U
Ethylbenzene	µg/L	-	-	-	1.0 U	-	-	-	-	0.33 J
Toluene	µg/L	-	-	-	1.0 U	-	-	-	-	1.0 U
trans-1,2-Dichloroethene	µg/L	-	-	-	1.0 U	-	-	-	-	1.0 U
Vinyl chloride	µg/L	-	-	-	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	-	-	-	2.0 U	-	-	-	-	2.0 U
General Chemistry										
Oil and grease	mg/L	-	-	-	-	1.7 J	4.9 U	4.7 U	4.8 U	-
Ammonia (as N)	mg/L	-	-	-	-	6.7	2.0 U	6.8	3.4	-
COD	mg/L	-	-	-	-	10 U	10 U	10 U	10 U	-
pH	mg/L	-	-	-	-	8.09	7.38	7.69	7.75	-
BOD	mg/L	-	-	-	-	2.3	2.0 U	2.3	9.3	-
TSS	mg/L	-	-	-	-	4.0	4.0 U	4.0 U	4.0 U	-
Total Phosphorus	mg/L	-	-	-	-	0.20	0.10 U	0.10 U	0.10 U	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Machine Storage Area EW7 GW-12610-071811-SH-001(C) 7/18/2011	Machine Storage Area EW8 GW-12610-071911-SH-009C 7/19/2011	Machine Storage Area EW9 GW-12610-071811-SH-002(C) 7/18/2011	Machine Storage Area EW9 GW-12610-071811-SH-003 7/18/2011 (Duplicate)	Machine Storage Area EW10 GW-12610-072011-SH-017 7/20/2011	Machine Storage Area EW11 GW-12610-071911-SH-008C 7/19/2011	Machine Storage Area EW12 GW-12610-072011-SH-015 7/20/2011	Machine Storage Area MSA GW Ext. Sys. Discharge W-040506-SSH-M02 4/5/2006
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	-	-	-	-	-	-	-	-
Iron	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
Aroclor-1221 (PCB-1221)	µg/L	-	-	-	-	-	-	-	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	-	-	-	-	-	-	-	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	-	-	-	-	-	-	-	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	-	-	-	-	-	-	-	0.20
Aroclor-1254 (PCB-1254)	µg/L	-	-	-	-	-	-	-	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	-	-	-	-	-	-	-	0.18 J
Volatile Organic Compounds									
cis-1,2-Dichloroethene	µg/L	1.0 U	**200**	1.0 U	1.0 U	1.0 U	**630**	49	-
Ethylbenzene	µg/L	1.0 U	3.0 J	0.54 J	0.54 J	1.0 U	29 U	1.4 J	-
Toluene	µg/L	1.0 U	18	1.7	1.8	1.0 U	33	3.5	-
trans-1,2-Dichloroethene	µg/L	1.0 U	2.9 J	1.0 U	1.0 U	1.0 U	29 U	1.1 J	-
Vinyl chloride	µg/L	1.0 U	**140**	1.0 U	1.0 U	1.0 U	**98**	**86**	-
Xylenes (total)	µg/L	0.99 J	16	3.4	3.4	2.0 U	57 U	14	-
General Chemistry									
Oil and grease	mg/L	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-
Total Phosphorus	mg/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

Parameters:	Units	Machine Storage Area MSA GW Ext. Sys. Discharge GW-081606-SSH-0602 8/16/2006	Machine Storage Area MSA GW Ext. Sys. Discharge W-031307-SSH-M07-2 3/13/2007	Machine Storage Area MSA GW Ext. Sys. Discharge MSA 8/23/2007	Machine Storage Area MSA GW Ext. Sys. Discharge MSA-(06/11/08) 6/11/2008	Machine Storage Area MSA GW Ext. Sys. Discharge MSA_(08/19/08) 8/19/2008	Machine Storage Area MSA GW Ext. Sys. Discharge DUP_(03/12/09) 3/12/2009 (Duplicate)	Machine Storage Area MSA GW Ext. Sys. Discharge MSA_(03/12/09) 3/12/2009	Machine Storage Area MSA GW Ext. Sys. Discharge MSA 8/27/2009
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	-	-	-	-	-	-	-	-
Iron	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	1.0 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	1.0 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	1.0 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	**0.62**	1.0 U	0.20 U	0.20 U	0.25	0.20 U	**2.1**	**1.3**
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	1.0 U	0.30	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	1.0 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.24	1.0 U	0.26	0.20 U	0.28	0.20 U	0.20	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	-	-	-	-	-	-	-	-
General Chemistry									
Oil and grease	mg/L	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-
Total Phosphorus	mg/L	-	-	-	-	-	-	-	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Machine Storage Area MSA GW Ext. Sys. Discharge W-12610-032410-SSH-MSA10-2 3/24/2010	Machine Storage Area MSA GW Ext. Sys. Discharge GW-12610-081910-SSH-028 8/19/2010	Machine Storage Area MSA GW Ext. Sys. Discharge W-12610-040611-SSH-11101 4/6/2011	Machine Storage Area MSA GW Ext. Sys. Discharge GW-12610-082211-JY-001 8/22/2011	Machine Storage Area MSA GW Ext. Sys. Discharge W-12610-041712-SSH-SA1203 4/17/2012	Machine Storage Area MSA GW Ext. Sys. Discharge GW-12610-080712-SSH-003 8/7/2012	Machine Storage Area MSA GW Ext. Sys. Discharge W-12610-040913-SSH-MSA1313 4/9/2013	Machine Storage Area MSA GW Ext. Sys. Discharge W-12610-120913-SSH-010 12/09/13
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	-	-	-	-	-	-	-	-
Iron	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	0.096 U	0.19 U	1.9 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.096 U	0.19 U	1.9 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.096 U	0.19 U	1.9 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.20 U	0.13 J	0.19 U	0.096 U	0.19 U	1.9 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.40	0.19 U	1.9 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.096 U	0.19 U	1.9 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.17 J	0.20 U	0.19 U	0.18	0.19 U	**8.6**	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	-	-	-	-	-	-	-	-
General Chemistry									
Oil and grease	mg/L	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-
Total Phosphorus	mg/L	-	-	-	-	-	-	-	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Machine Storage Area MSA GW Ext. Sys. Discharge GW-12610-080514-SSH-1401 8/5/2014	Machine Storage Area MSA GW Ext. Sys. Discharge W-12610-122914-SSH-1422 12/29/2014	Machine Storage Area MSA GW Ext. Sys. Discharge GW-12610-082515-SSH-0215 8/25/15	Machine Storage Area MW102D1 GW-081606-SSH-0604 8/16/2006	Machine Storage Area MW102D1 MW102D1 8/21/2007	Machine Storage Area MW102D1 MW102D1_(08/19/08) 8/19/2008	Machine Storage Area MW102D1 MW102D1 8/26/2009	Machine Storage Area MW102D1 GW-12610-081710-JY-001 8/17/2010	Machine Storage Area MW102D1 GW-12610-082311-JY-010 8/23/2011
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	-	-	-	-	-	-	-	-	-
Iron	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	0.38 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.19 U	0.19 U	0.38 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.19 U	0.19 U	0.38 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.19 U	0.19 U	0.38 U	0.19 J	0.44	0.20 U	0.40 J	0.31	0.28
Aroclor-1248 (PCB-1248)	µg/L	0.19 U	0.19 U	0.38 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	R	0.19 U	0.38 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	R	0.19 U	0.19 J	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.046 J
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	-	-	-	-	-	-	-	-	-
General Chemistry										
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/L	-	-	-	-	-	-	-	-	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Machine Storage Area MW102D1 GW-12610-080912-SSH-012 8/9/2012	Machine Storage Area MW102D1 GW-12610-080713-JY-004 8/7/2013	Machine Storage Area MW102D1 GW-12610-080614-SSH-1403 8/6/2014	Machine Storage Area MW102D1 GW-12610-082615-SSH-0715 8/26/2015	Machine Storage Area MW102D1 GW-12610-082615-SSH-0815 8/26/2015 (Duplicate)	Machine Storage Area MW102D2 GW-081606-SSH-0606 8/16/2006	Machine Storage Area MW102D2 MW102D2 8/21/2007	Machine Storage Area MW102D2 MW102D2_(08/19/08) 8/19/2008	Machine Storage Area MW102D2 MW102D2 8/26/2009
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	-	-	-	-	-	-	-	-	-
Iron	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 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	0.19 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	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.43	0.19 U	0.41 J	0.34	0.34	0.20 U	0.20 U	0.20 U	0.073 J
Aroclor-1248 (PCB-1248)	µg/L	0.19 U	0.19 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	0.19 U	R	0.19 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	0.19 U	R	0.19 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	-	-	-	-	-	-	-	-	-
General Chemistry										
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/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

Parameters:	Units	Machine Storage Area MW102D2 GW-12610-081710-JY-002 8/17/2010	Machine Storage Area MW102D2 GW-12610-082311-JY-011 8/23/2011	Machine Storage Area MW102D2 GW-12610-080912-SSH-011 8/9/2012	Machine Storage Area MW102D2 GW-12610-080713-JY-005 8/7/2013	Machine Storage Area MW102D2 GW-12610-080614-SSH-1404 8/6/2014	Machine Storage Area MW102D2 GW-12610-082615-SSH-0915 8/26/2015	Machine Storage Area MW102D3 GW-081606-SSH-0607 8/16/2006	Machine Storage Area MW102D3 MW102D3 8/21/2007	Machine Storage Area MW102D3 MW102D3_(08/19/08) 8/19/2008
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	-	-	-	-	-	-	-	-	-
Iron	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	0.19 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	0.20 U	0.19 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	0.20 U	0.19 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	0.13 J	0.20 U	0.19 U	0.19 U	0.13 J	0.19 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.13 J	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	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.19 U	0.19 U	0.19 U	0.19 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	-	-	-	-	-	-	-	-	-
General Chemistry										
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/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

Parameters:	Units	Machine Storage Area MW102D3 MW102D3 8/26/2009	Machine Storage Area MW102D3 GW-12610-081710-JY-003 8/17/2010	Machine Storage Area MW102D4 GW-081606-SSH-0605 8/16/2006	Machine Storage Area MW102D4 MW102D4 8/21/2007	Machine Storage Area MW102D4 MW102D4_(08/19/08) 8/19/2008	Machine Storage Area MW102D4 MW102D4 8/26/2009	Machine Storage Area MW102D4 GW-12610-081710-JY-004 8/17/2010	Machine Storage Area MW102D4 GW-12610-082311-JY-012 8/23/2011	Machine Storage Area MW102D4 GW-12610-080912-SSH-010 8/9/2012	Machine Storage Area MW102D4 GW-12610-080713-JY-006 8/7/2013
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	-	-	-	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls											
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	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 U	0.20 U	0.20 U	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	0.20 U	0.20 U	0.084 J	0.082 J	0.19 U	0.19
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	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 U	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	-	-	-	-	-	-	-	-	-	-
General Chemistry											
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Machine Storage Area MW102D4 GW-12610-080614-SSH-1405 8/6/2014	Machine Storage Area MW102D4 GW-12610-080614-SSH-1406 8/6/2014 (Duplicate)	Machine Storage Area MW102D4 GW-12610-082615-SSH-1015 8/26/2015	Machine Storage Area MW300S GW-081706-SSH-0608 8/17/2006	Machine Storage Area MW300S GW-081706-SSH-0609 8/17/2006 (Duplicate)	Machine Storage Area MW300S MW300S 8/21/2007	Machine Storage Area MW300S MW300S_(08/19/08) 8/19/2008	Machine Storage Area MW300S DUP 4 8/26/2009 (Duplicate)	Machine Storage Area MW300S MW300S 8/26/2009
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	-	-	-	-	-	-	-	-	-
Iron	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	0.20 UJ	0.20 UJ
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	0.20 UJ	0.20 UJ
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	0.20 UJ	0.20 UJ
Aroclor-1242 (PCB-1242)	µg/L	0.19 U	0.19 U	0.19 U	0.11 J	0.095 J	0.24	0.21	0.40 J	0.39 J
Aroclor-1248 (PCB-1248)	µg/L	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 UJ
Aroclor-1254 (PCB-1254)	µg/L	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 UJ
Aroclor-1260 (PCB-1260)	µg/L	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 UJ	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	-	-	-	-	-	-	-	-	-
General Chemistry										
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/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

Parameters:	Units	Machine Storage Area MW300S GW-12610-081810-JY-011 8/18/2010	Machine Storage Area MW300S GW-12610-081810-JY-012 8/18/2010 (Duplicate)	Machine Storage Area MW300S GW-12610-082311-JY-004 8/23/2011	Machine Storage Area MW300S GW-12610-082311-JY-005 8/23/2011 (Duplicate)	Machine Storage Area MW300S GW-12610-080912-SSH-007 8/9/2012	Machine Storage Area MW300S GW-12610-080912-SSH-008 8/9/2012 (Duplicate)	Machine Storage Area MW300S GW-12610-080713-JY-001 8/7/2013	Machine Storage Area MW300S GW-12610-080713-JY-002 8/7/2013 (Duplicate)	Machine Storage Area MW300S GW-12610-080614-SSH-1407 8/6/2014
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	-	-	-	-	-	-	-	-	-
Iron	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	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.14 J	0.16 J	0.23	0.24	0.19 U	0.083 J	0.19 J	0.19 J	0.1 J
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.19 U	R	R	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.19 U	R	R	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	-	-	-	-	-	-	-	-	-
General Chemistry										
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/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

Parameters:	Units	Machine Storage Area MW300S GW-12610-082615-SSH-0615 8/26/2015	Perimeter Banks LMW13S GW-081706-SSH-0610 8/17/2006	Perimeter Banks LMW13S LMW13S 8/21/2007	Perimeter Banks LMW13S LMW13S_(08/18/08) 8/18/2008	Perimeter Banks LMW13S GW-12610-081710-JY-009 8/17/2010	Perimeter Banks LMW13S GW-12610-082311-JY-006 8/23/2011	Perimeter Banks LMW13S GW-12610-080812-SSH-004 8/8/2012	Perimeter Banks LMW13S GW-12610-080812-SSH-005 8/8/2012 (Duplicate)	Perimeter Banks LMW13S GW-12610-080813-JY-008 8/8/2013	Perimeter Banks LMW13S GW-12610-080614-SSH-1408 8/6/2014
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	-	-	-	-	-	-	-	-	-	-
Iron	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	0.19 U	0.19 U	0.19 U	0.19 UJ	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.19 U	0.19 UJ	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.19 U	0.19 UJ	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.095 J	0.20 U	**1.0**	0.20 U	0.20 U	**0.72**	**0.79**	**0.85**	0.19 UJ	0.19 U
Aroclor-1248 (PCB-1248)	µg/L	0.19 U	**1.2**	0.20 U	**1.6**	**1.1**	0.19 U	0.19 U	0.19 U	**1.0 J**	**1.0**
Aroclor-1254 (PCB-1254)	µg/L	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.19 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	-	-	-	-	-	-	-	-	-	-
General Chemistry											
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Perimeter Banks LMW13S GW-12610-082615-SSH-0315 8/26/2015	Perimeter Banks LMW15D GW-081706-SSH-0611 8/17/2006	Perimeter Banks LMW15D LMW15D 8/21/2007	Perimeter Banks LMW15D LMW15D_(08/18/08) 8/18/2008	Perimeter Banks LMW15D MW15D 8/26/2009	Perimeter Banks LMW15D GW-12610-081710-JY-010 8/17/2010	Perimeter Banks LMW15D GW-12610-082311-JY-007 8/23/2011	Perimeter Banks LMW15D GW-12610-080812-SSH-006 8/8/2012	Perimeter Banks LMW15D GW-12610-080813-JY-009 8/8/2013	Perimeter Banks LMW15D GW-12610-080614-SSH-1409 8/6/2014
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	-	-	-	-	-	-	-	-	-	-
Iron	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 UJ	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	µg/L	0.19 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	µg/L	0.19 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	µg/L	0.19 U	0.20 U	0.20 U	0.19 J	0.073 J	0.20 U	0.060 J	0.13 J	0.14 J	0.065 J
Aroclor-1248 (PCB-1248)	µg/L	**0.98**	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	µg/L	0.19 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U	0.19 U	0.19 UJ	0.19 U
Aroclor-1260 (PCB-1260)	µg/L	0.19 U	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.19 U	0.19 U	0.19 UJ	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	-	-	-	-	-	-	-	-	-	-
General Chemistry											
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Perimeter Banks LMW15D GW-12610-082615-SSH-0415 8/26/2015	Perimeter Banks MW301D1 GW-081706-SSH-0612 8/17/2006	Perimeter Banks MW301D1 MW301D1 8/21/2007	Perimeter Banks MW301D1 MW301D1_(08/19/08) 8/19/2008	Perimeter Banks MW301D1 MW301D1 8/26/2009	Perimeter Banks MW301D1 GW-12610-081710-JY-005 8/17/2010	Perimeter Banks MW301D2 GW-081706-SSH-0615 8/17/2006	Perimeter Banks MW301D2 MW301D2 8/21/2007	Perimeter Banks MW301D2 MW301D2_(08/19/08) 8/19/2008	Perimeter Banks MW301D2 MW301D2 8/26/2009	Perimeter Banks MW301D2 GW-12610-081710-JY-006 8/17/2010
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	-	-	-	-	-	-	-	-	-	-	-
Iron	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	0.20 UJ	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	0.20 UJ	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	0.20 UJ	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	0.20 U	0.20 U	0.085 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	0.20 UJ	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	0.20 UJ	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	0.20 UJ	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	-	-	-	-	-	-	-	-	-	-	-
General Chemistry												
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Perimeter Banks MW301D2 GW-12610-082311-JY-008 8/23/2011	Perimeter Banks MW301D2 GW-12610-080912-SSH-009 8/9/2012	Perimeter Banks MW301D2 GW-12610-080713-JY-007 8/7/2013	Perimeter Banks MW301D2 GW-12610-080614-SSH-1410 8/6/2014	Perimeter Banks MW301D2 GW-12610-082615-SSH-0515 8/26/2015	Perimeter Banks MW301D3 GW-081706-SSH-0614 8/17/2006	Perimeter Banks MW301D3 MW301D3 8/21/2007	Perimeter Banks MW301D3 MW301D3_(08/19/08) 8/19/2008	Perimeter Banks MW301D3 MW301D3 8/26/2009	Perimeter Banks MW301D3 GW-12610-081710-JY-007 8/17/2010
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	-	-	-	-	-	-	-	-	-	-
Iron	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 U	0.38 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	0.19 U	0.19 U	0.19 U	0.38 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	0.19 U	0.19 U	0.19 U	0.38 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	0.19 U	0.19 U	0.19 U	0.38 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.38 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	0.19 U	0.19 U	0.19 U	0.38 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	0.19 U	0.19 U	0.19 U	0.38 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	-	-	-	-	-	-	-	-	-	-
General Chemistry											
Oil and grease	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-	-	-	-
Total Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-

Notes:

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

Attachment B

Analytical Results Summary
Racer Trust- Bay City Industrial Land
Bay City, Michigan

Parameters:	Units	Perimeter Banks MW301D4 GW-081706-SSH-0613 8/17/2006	Perimeter Banks MW301D4 MW301D4 8/21/2007	Perimeter Banks MW301D4 DUP3_(08/19/08) 8/19/2008 (Duplicate)	Perimeter Banks MW301D4 MW301D4_(08/19/08) 8/19/2008	Perimeter Banks MW301D4 MW301D4 8/26/2009	Perimeter Banks MW301D4 GW-12610-081710-JY-008 8/17/2010	Perimeter Banks MW301D4 GW-12610-082311-JY-009 8/23/2011
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	-	-	-	-	-	-	-
Iron	mg/L	-	-	-	-	-	-	-
Lead	mg/L	-	-	-	-	-	-	-
Mercury	mg/L	-	-	-	-	-	-	-
Nickel	mg/L	-	-	-	-	-	-	-
Selenium	mg/L	-	-	-	-	-	-	-
Silver	mg/L	-	-	-	-	-	-	-
Thallium	mg/L	-	-	-	-	-	-	-
Tin	mg/L	-	-	-	-	-	-	-
Vanadium	mg/L	-	-	-	-	-	-	-
Zinc	mg/L	-	-	-	-	-	-	-
Polychlorinated Biphenyls								
Aroclor-1016 (PCB-1016)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1221 (PCB-1221)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1232 (PCB-1232)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1242 (PCB-1242)	µg/L	0.20 U	0.12 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1248 (PCB-1248)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1254 (PCB-1254)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260 (PCB-1260)	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
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	-	-	-	-	-	-	-
General Chemistry								
Oil and grease	mg/L	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	-	-	-	-	-	-	-
COD	mg/L	-	-	-	-	-	-	-
pH	mg/L	-	-	-	-	-	-	-
BOD	mg/L	-	-	-	-	-	-	-
TSS	mg/L	-	-	-	-	-	-	-
Total Phosphorus	mg/L	-	-	-	-	-	-	-

Notes:

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

Attachment C
Analytical Results and Reduced Validation–2015 Annual Sampling Event

Attachment C-1
Semi-Annual Effluent Sampling
March 2015

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-48267-1
Client Project/Site: 12610-T03, RACER Bay City

For:
Conestoga-Rovers & Associates, Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
3/30/2015 8:59:45 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

Table of Contents

Job ID: 240-48267-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 12610-T03, RACER Bay City

Report Number: 240-48267-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 03/17/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.7 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA Method 624. The samples were analyzed on 03/19/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 608. The samples were prepared on 03/18/2015 and analyzed on 03/19/2015.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 240-48267-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

TOTAL RECOVERABLE METALS (ICP)

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for total recoverable metals (ICP) in accordance with EPA Method 200.7. The samples were prepared on 03/18/2015 and analyzed on 03/19/2015.

Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: W-12610-031615-SSH-1501 (240-48267-1). The continuing calibration blanks and method blanks may not support the lower PQL.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MERCURY

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared on 03/18/2015 and analyzed on 03/19/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

N-HEXANE EXTRACTABLE MATERIAL

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for n-hexane extractable material in accordance with EPA Method 1664A. The samples were prepared and analyzed on 03/27/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SUSPENDED SOLIDS

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 03/19/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for ammonia in accordance with EPA Method 350.2. The samples were prepared and analyzed on 03/25/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 03/23/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL PHOSPHORUS

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for total phosphorus in accordance with SM 4500 P E. The samples were prepared and analyzed on 03/19/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

BIOCHEMICAL OXYGEN DEMAND

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The samples were analyzed on 03/18/2015.

The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PH

Sample W-12610-031615-SSH-1501 (240-48267-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed

Job ID: 240-48267-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

past the method recommended 24 hour holding time on 03/17/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
b	Result Detected in the Unseeded Control blank (USB).
U	Indicates the analyte was analyzed for but not detected.
s	Seeded Control Blank (SCB) Recovery High

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-48267-1	W-12610-031615-SSH-1501	Water	03/16/15 08:00	03/17/15 09:20

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Client Sample ID: W-12610-031615-SSH-1501

Lab Sample ID: 240-48267-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Ammonia (as N)	6.8		2.0		mg/L	1		350.2	Total/NA
pH	7.69	HF	0.100		SU	1		4500 H+ B-2000	Total/NA
Biochemical Oxygen Demand	2.3	b	2.0		mg/L	1		5210B-2001	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CAN
608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL CAN
200.7 Rev 4.4	Metals (ICP)	EPA	TAL CAN
245.1	Mercury (CVAA)	EPA	TAL CAN
1664A	HEM and SGT-HEM	1664A	TAL CAN
350.2	Nitrogen, Ammonia, Distillation	MCAWW	TAL CAN
410.4	COD	MCAWW	TAL CAN
4500 H+ B-2000	pH	SM	TAL CAN
5210B-2001	BOD, 5-Day	SM	TAL CAN
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CAN
SM4500 P E-1999	Phosphorus	SM	TAL CAN

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-12610-031615-SSH-1501
Date Collected: 03/16/15 08:00
Date Received: 03/17/15 09:20

Lab Sample ID: 240-48267-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0		ug/L			03/19/15 04:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*80 - 120*		*03/19/15 04:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*80 - 125*		*03/19/15 04:42*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*03/19/15 04:42*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: W-12610-031615-SSH-1501
Date Collected: 03/16/15 08:00
Date Received: 03/17/15 09:20

Lab Sample ID: 240-48267-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095		ug/L		03/18/15 06:31	03/19/15 22:01	1
Aroclor-1221	0.095	U	0.095		ug/L		03/18/15 06:31	03/19/15 22:01	1
Aroclor-1232	0.095	U	0.095		ug/L		03/18/15 06:31	03/19/15 22:01	1
Aroclor-1242	0.095	U	0.095		ug/L		03/18/15 06:31	03/19/15 22:01	1
Aroclor-1248	0.095	U	0.095		ug/L		03/18/15 06:31	03/19/15 22:01	1
Aroclor-1254	0.095	U	0.095		ug/L		03/18/15 06:31	03/19/15 22:01	1
Aroclor-1260	0.095	U	0.095		ug/L		03/18/15 06:31	03/19/15 22:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*49*		*10 - 114*	*03/18/15 06:31*	*03/19/15 22:01*	*1*
Tetrachloro-m-xylene	*62*		*15 - 131*	*03/18/15 06:31*	*03/19/15 22:01*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Client Sample ID: W-12610-031615-SSH-1501
Date Collected: 03/16/15 08:00
Date Received: 03/17/15 09:20

Lab Sample ID: 240-48267-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0		ug/L		03/18/15 08:40	03/19/15 11:17	1
Cadmium	2.0	U	2.0		ug/L		03/18/15 08:40	03/19/15 11:17	1
Chromium	5.0	U	5.0		ug/L		03/18/15 08:40	03/19/15 11:17	1
Copper	20	U	20		ug/L		03/18/15 08:40	03/19/15 11:17	1
Iron	100	U	100		ug/L		03/18/15 08:40	03/19/15 13:02	1
Nickel	20	U	20		ug/L		03/18/15 08:40	03/19/15 11:17	1
Lead	3.0	U	3.0		ug/L		03/18/15 08:40	03/19/15 11:17	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Method: 245.1 - Mercury (CVAA)

Client Sample ID: W-12610-031615-SSH-1501
Date Collected: 03/16/15 08:00
Date Received: 03/17/15 09:20

Lab Sample ID: 240-48267-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20		ug/L		03/18/15 12:00	03/19/15 09:36	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

General Chemistry

Client Sample ID: W-12610-031615-SSH-1501
Date Collected: 03/16/15 08:00
Date Received: 03/17/15 09:20

Lab Sample ID: 240-48267-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
HEM	4.7	U	4.7		mg/L		03/27/15 08:19	03/27/15 08:19	1
Ammonia (as N)	**6.8**		2.0		mg/L		03/25/15 07:00	03/25/15 14:22	1
Chemical Oxygen Demand	10	U	10		mg/L			03/23/15 11:39	1
pH	**7.69**	**HF**	0.100		SU			03/17/15 14:22	1
Biochemical Oxygen Demand	**2.3**	**b**	2.0		mg/L			03/18/15 07:36	1
Total Suspended Solids	4.0	U	4.0		mg/L			03/19/15 11:00	1
Total Phosphorus as P	0.10	U	0.10		mg/L		03/19/15 06:30	03/19/15 14:18	1

GC/MS VOA

Analysis Batch: 172671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	624	
LCS 240-172671/6	Lab Control Sample	Total/NA	Water	624	
MB 240-172671/5	Method Blank	Total/NA	Water	624	

GC Semi VOA

Prep Batch: 172529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	3520C	
LCS 240-172529/4-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-172529/3-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 172856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	608	172529
LCS 240-172529/4-A	Lab Control Sample	Total/NA	Water	608	172529
MB 240-172529/3-A	Method Blank	Total/NA	Water	608	172529

Metals

Prep Batch: 172556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total Recoverable	Water	200.7	
LCS 240-172556/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 240-172556/1-A	Method Blank	Total Recoverable	Water	200.7	

Prep Batch: 172557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	245.1	
LCS 240-172557/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 240-172557/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 172740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total Recoverable	Water	200.7 Rev 4.4	172556
240-48267-1	W-12610-031615-SSH-1501	Total Recoverable	Water	200.7 Rev 4.4	172556
LCS 240-172556/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	172556
MB 240-172556/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	172556

Analysis Batch: 172783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	245.1	172557
LCS 240-172557/2-A	Lab Control Sample	Total/NA	Water	245.1	172557
MB 240-172557/1-A	Method Blank	Total/NA	Water	245.1	172557

General Chemistry

Analysis Batch: 172472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	4500 H+ B-2000	

General Chemistry (Continued)

Analysis Batch: 172472 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1 DU	W-12610-031615-SSH-1501	Total/NA	Water	4500 H+ B-2000	
LCS 240-172472/2	Lab Control Sample	Total/NA	Water	4500 H+ B-2000	

Analysis Batch: 172625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	5210B-2001	
LCS 240-172625/3	Lab Control Sample	Total/NA	Water	5210B-2001	
SCB 240-172625/2	Method Blank	Total/NA	Water	5210B-2001	
USB 240-172625/1	Method Blank	Total/NA	Water	5210B-2001	

Prep Batch: 172716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	365.2/365.3/365	
LCS 240-172716/11-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
MB 240-172716/10-A	Method Blank	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 172795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	SM 2540D	
LCS 240-172795/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 240-172795/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 172864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	SM4500 P E-1999	172716
LCS 240-172716/11-A	Lab Control Sample	Total/NA	Water	SM4500 P E-1999	172716
MB 240-172716/10-A	Method Blank	Total/NA	Water	SM4500 P E-1999	172716

Analysis Batch: 173169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	410.4	
LCS 240-173169/10	Lab Control Sample	Total/NA	Water	410.4	
LCS 240-173169/38	Lab Control Sample	Total/NA	Water	410.4	
MB 240-173169/37	Method Blank	Total/NA	Water	410.4	
MB 240-173169/9	Method Blank	Total/NA	Water	410.4	

Prep Batch: 173625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	Distill/Ammonia	
LCS 240-173625/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
MB 240-173625/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 173664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	350.2	173625
LCS 240-173625/2-A	Lab Control Sample	Total/NA	Water	350.2	173625
MB 240-173625/1-A	Method Blank	Total/NA	Water	350.2	173625

General Chemistry (Continued)

Prep Batch: 174002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	1664A	
LCS 240-174002/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 240-174002/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 174025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-48267-1	W-12610-031615-SSH-1501	Total/NA	Water	1664A	174002
LCS 240-174002/2-A	Lab Control Sample	Total/NA	Water	1664A	174002
MB 240-174002/1-A	Method Blank	Total/NA	Water	1664A	174002

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-172671/5
Matrix: Water
Analysis Batch: 172671

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0		ug/L			03/18/15 18:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*80 - 120*		*03/18/15 18:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*80 - 125*		*03/18/15 18:24*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*03/18/15 18:24*	*1*

Lab Sample ID: LCS 240-172671/6
Matrix: Water
Analysis Batch: 172671

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			20.0	21.1		ug/L		105	10 - 251		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 125*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 240-172529/3-A
Matrix: Water
Analysis Batch: 172856

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172529

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10		ug/L		03/18/15 06:31	03/19/15 22:15	1
Aroclor-1221	0.10	U	0.10		ug/L		03/18/15 06:31	03/19/15 22:15	1
Aroclor-1232	0.10	U	0.10		ug/L		03/18/15 06:31	03/19/15 22:15	1
Aroclor-1242	0.10	U	0.10		ug/L		03/18/15 06:31	03/19/15 22:15	1
Aroclor-1248	0.10	U	0.10		ug/L		03/18/15 06:31	03/19/15 22:15	1
Aroclor-1254	0.10	U	0.10		ug/L		03/18/15 06:31	03/19/15 22:15	1
Aroclor-1260	0.10	U	0.10		ug/L		03/18/15 06:31	03/19/15 22:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*10 - 114*	*03/18/15 06:31*	*03/19/15 22:15*	*1*
Tetrachloro-m-xylene	*74*		*15 - 131*	*03/18/15 06:31*	*03/19/15 22:15*	*1*

Lab Sample ID: LCS 240-172529/4-A
Matrix: Water
Analysis Batch: 172856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172529

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			2.50	2.07		ug/L		83	50 - 114		
Aroclor-1260			2.50	2.17		ug/L		87	8 - 127		

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCS 240-172529/4-A
Matrix: Water
Analysis Batch: 172856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172529

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	99		10 - 114
Tetrachloro-m-xylene	75		15 - 131

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 240-172556/1-A
Matrix: Water
Analysis Batch: 172740

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 172556

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0		ug/L		03/18/15 08:40	03/19/15 12:31	1
Cadmium	2.0	U	2.0		ug/L		03/18/15 08:40	03/19/15 12:31	1
Chromium	5.0	U	5.0		ug/L		03/18/15 08:40	03/19/15 12:31	1
Copper	20	U	20		ug/L		03/18/15 08:40	03/19/15 12:31	1
Iron	100	U	100		ug/L		03/18/15 08:40	03/19/15 12:31	1
Nickel	20	U	20		ug/L		03/18/15 08:40	03/19/15 12:31	1
Lead	3.0	U	3.0		ug/L		03/18/15 08:40	03/19/15 12:31	1

Lab Sample ID: LCS 240-172556/2-A
Matrix: Water
Analysis Batch: 172740

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 172556

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver			50.0	47.5		ug/L		95	85 - 115		
Cadmium			50.0	47.2		ug/L		94	85 - 115		
Chromium			200	185		ug/L		92	85 - 115		
Copper			250	234		ug/L		93	85 - 115		
Iron			1000	951		ug/L		95	85 - 115		
Nickel			500	462		ug/L		92	85 - 115		
Lead			500	450		ug/L		90	85 - 115		

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 240-172557/1-A
Matrix: Water
Analysis Batch: 172783

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172557

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20		ug/L		03/18/15 12:00	03/19/15 09:26	1

Lab Sample ID: LCS 240-172557/2-A
Matrix: Water
Analysis Batch: 172783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172557

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			5.00	5.02		ug/L		100	85 - 115		

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 240-174002/1-A
Matrix: Water
Analysis Batch: 174025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 174002

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
HEM	5.0	U	5.0		mg/L		03/27/15 08:19	03/27/15 08:19	1

Lab Sample ID: LCS 240-174002/2-A
Matrix: Water
Analysis Batch: 174025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 174002

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
HEM			40.0	37.3		mg/L		93	78 - 114		

Method: 350.2 - Nitrogen, Ammonia, Distillation

Lab Sample ID: MB 240-173625/1-A
Matrix: Water
Analysis Batch: 173664

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 173625

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	2.0	U	2.0		mg/L		03/25/15 07:00	03/25/15 14:19	1

Lab Sample ID: LCS 240-173625/2-A
Matrix: Water
Analysis Batch: 173664

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 173625

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia (as N)			2.32	2.53		mg/L		109	85 - 114		

Method: 410.4 - COD

Lab Sample ID: MB 240-173169/37
Matrix: Water
Analysis Batch: 173169

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	10	U	10		mg/L			03/23/15 11:47	1

Lab Sample ID: MB 240-173169/9
Matrix: Water
Analysis Batch: 173169

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	10	U	10		mg/L			03/23/15 11:33	1

Lab Sample ID: LCS 240-173169/10
Matrix: Water
Analysis Batch: 173169

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand			68.0	71.9		mg/L		106	90 - 110		

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 240-173169/38
Matrix: Water
Analysis Batch: 173169

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand			68.0	63.9		mg/L		94	90 - 110		

Method: 4500 H+ B-2000 - pH

Lab Sample ID: LCS 240-172472/2
Matrix: Water
Analysis Batch: 172472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			6.15	6.210		SU		101	97 - 103		

Lab Sample ID: 240-48267-1 DU
Matrix: Water
Analysis Batch: 172472

Client Sample ID: W-12610-031615-SSH-1501
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.69	HF		7.630		SU				0.8	20

Method: 5210B-2001 - BOD, 5-Day

Lab Sample ID: SCB 240-172625/2
Matrix: Water
Analysis Batch: 172625

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	SCB Result	SCB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U s	2.0		mg/L			03/18/15 07:25	1

Lab Sample ID: USB 240-172625/1
Matrix: Water
Analysis Batch: 172625

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0		mg/L			03/18/15 07:23	1

Lab Sample ID: LCS 240-172625/3
Matrix: Water
Analysis Batch: 172625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	195		mg/L		99	85 - 115		

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-172795/1
Matrix: Water
Analysis Batch: 172795

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4.0	U	4.0		mg/L			03/19/15 11:00	1

Lab Sample ID: LCS 240-172795/2
Matrix: Water
Analysis Batch: 172795

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			75.9	73.0		mg/L		96	73 - 113		

Method: SM4500 P E-1999 - Phosphorus

Lab Sample ID: MB 240-172716/10-A
Matrix: Water
Analysis Batch: 172864

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 172716

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10		mg/L		03/19/15 06:01	03/19/15 14:12	1

Lab Sample ID: LCS 240-172716/11-A
Matrix: Water
Analysis Batch: 172864

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 172716

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Phosphorus as P			1.69	1.44		mg/L		85	53 - 134		

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-125)	(80-120)
240-48267-1	W-12610-031615-SSH-1501	83	94	95
LCS 240-172671/6	Lab Control Sample	91	93	97
MB 240-172671/5	Method Blank	85	91	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB2	TCX2
Lab Sample ID	Client Sample ID	(10-114)	(15-131)
240-48267-1	W-12610-031615-SSH-1501	49	62
LCS 240-172529/4-A	Lab Control Sample	99	75
MB 240-172529/3-A	Method Blank	94	74

Surrogate Legend

DCB = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Client Sample ID: W-12610-031615-SSH-1501
Date Collected: 03/16/15 08:00
Date Received: 03/17/15 09:20

Lab Sample ID: 240-48267-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	172671	03/19/15 04:42	TJL1	TAL CAN
Total/NA	Prep	3520C			172529	03/18/15 06:31	SDE	TAL CAN
Total/NA	Analysis	608		1	172856	03/19/15 22:01	HMB	TAL CAN
Total Recoverable	Prep	200.7			172556	03/18/15 08:40	WAL	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1	172740	03/19/15 11:17	KLC	TAL CAN
Total Recoverable	Prep	200.7			172556	03/18/15 08:40	WAL	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1	172740	03/19/15 13:02	KLC	TAL CAN
Total/NA	Prep	245.1			172557	03/18/15 12:00	WAL	TAL CAN
Total/NA	Analysis	245.1		1	172783	03/19/15 09:36	BW	TAL CAN
Total/NA	Analysis	1664A		1	174025	03/27/15 08:19	BLW	TAL CAN
Total/NA	Prep	1664A			174002	03/27/15 08:19	BLW	TAL CAN
Total/NA	Prep	Distill/Ammonia			173625	03/25/15 07:00	JAK	TAL CAN
Total/NA	Analysis	350.2		1	173664	03/25/15 14:22	JAK	TAL CAN
Total/NA	Analysis	410.4		1	173169	03/23/15 11:39	TPH	TAL CAN
Total/NA	Analysis	4500 H+ B-2000		1	172472	03/17/15 14:22	NJE	TAL CAN
Total/NA	Analysis	5210B-2001		1	172625	03/18/15 07:36	TPH	TAL CAN
Total/NA	Analysis	SM 2540D		1	172795	03/19/15 11:00	LCN	TAL CAN
Total/NA	Prep	365.2/365.3/365			172716	03/19/15 06:30	TPH	TAL CAN
Total/NA	Analysis	SM4500 P E-1999		1	172864	03/19/15 14:18	TPH	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-48267-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-15 *
Connecticut	State Program	1	PH-0590	12-31-15
Florida	NELAP	4	E87225	06-30-15 *
Georgia	State Program	4	N/A	06-30-15 *
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	03-31-15 *
Kentucky (UST)	State Program	4	58	06-30-15 *
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15 *
New York	NELAP	2	10975	03-31-15 *
Ohio VAP	State Program	5	CL0024	10-31-15
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-15

* Certification renewal pending - certification considered valid.

TestAmerica
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TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS

240-48267 Chain of Custody

CHAIN OF CUSTODY RECORD

CONESTOGA-ROVERS & ASSOCIATES

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170 52|C5.7
Phone: (734) 453-5123 Fax: (734) 453-5201

COC NO.: PL-13186
PAGE 1 OF 1
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 12610-T04-001415	Laboratory Name: TestAmerica	Lab Location: North Canton, OH	SSOW ID: 12610-T03-011
Project Name: Racer Trust Bay City	Lab Contact: D. Heckler	Lab Quote No: 24006288	Cooler No:
Project Location: Bay City, MI			Carrier: FedEx
Chemistry Contact: R. Fleischer			Airbill No: 805943848339
Sampler(s): S. Hoevemeyer			Date Shipped: 3/16/15

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	PCBs	pH	HEM	Vinyl chloride	COD	TSS	metals	NH_3-N	BOD	T. Phosphorus	MS/MSD Request	Comments/ Special Instructions:
1	W-12610-031615-SSH-1501	3/16/15	0800	WT	G	X	X	X	X					11	X	X	X	X	X	X	X	XX	X	X		
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										
13																										
14																										
15																										

Page 27 of 28

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 11
All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	CRA	3/16/15	1500	1.	TDL	3/17/15	900
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

3/30/2015

TestAmerica Canton Sample Receipt Form/Narrative Login # : 18267
Canton Facility

Client CRA Site Name Pace Trust
Cooler Received on 3/17/15 Opened on 3/17/15
Cooler unpacked by: Heather Powell
FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other
Packing material used: Bubble Wrap Foam Plastic Bag None Other
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   ~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~
   IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. 5-2 °C Corrected Cooler Temp. 5.7 °C ☐ See Multiple Cooler Form
   ~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~
   IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the sampler(s) clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC425511**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # Yes No

Contacted PM Date by via Verbal Voice Mail Other
Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

Ref: SOP NC-SC-0005, Sample Receiving
X:\Document Control\SOPs\Work Instructions\Word Version Work Instructions\WI-NC-099P-020915 Cooler Receipt Form.doc djl

Attachment C-2
Semi-Annual Extraction System Sampling
April 2015

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-49223-1
Client Project/Site: 12610-T04-10, RACER Bay City

For:
Conestoga-Rovers & Associates, Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
4/21/2015 8:07:59 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

Table of Contents

Job ID: 240-49223-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 12610-T04-10, RACER Bay City

Report Number: 240-49223-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 04/10/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.5 C.

POLYCHLORINATED BIPHENYLS (PCBS)

Sample W-12610-040915-SSH-1502 (240-49223-1) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 04/13/2015 and analyzed on 04/15/2015.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with 176082.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T04-10, RACER Bay City

TestAmerica Job ID: 240-49223-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T04-10, RACER Bay City

TestAmerica Job ID: 240-49223-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-49223-1	W-12610-040915-SSH-1502	Water	04/09/15 13:25	04/10/15 10:15

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T04-10, RACER Bay City

TestAmerica Job ID: 240-49223-1

Client Sample ID: W-12610-040915-SSH-1502 **Lab Sample ID: 240-49223-1**

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T04-10, RACER Bay City

TestAmerica Job ID: 240-49223-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T04-10, RACER Bay City

TestAmerica Job ID: 240-49223-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: W-12610-040915-SSH-1502
Date Collected: 04/09/15 13:25
Date Received: 04/10/15 10:15

Lab Sample ID: 240-49223-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.19	U	0.19	0.042	ug/L		04/13/15 06:09	04/15/15 20:55	1
Aroclor-1221	0.19	U	0.19	0.043	ug/L		04/13/15 06:09	04/15/15 20:55	1
Aroclor-1232	0.19	U	0.19	0.070	ug/L		04/13/15 06:09	04/15/15 20:55	1
Aroclor-1242	0.19	U	0.19	0.057	ug/L		04/13/15 06:09	04/15/15 20:55	1
Aroclor-1248	0.19	U	0.19	0.058	ug/L		04/13/15 06:09	04/15/15 20:55	1
Aroclor-1254	0.19	U	0.19	0.030	ug/L		04/13/15 06:09	04/15/15 20:55	1
Aroclor-1260	0.19	U	0.19	0.036	ug/L		04/13/15 06:09	04/15/15 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*23 - 136*	*04/13/15 06:09*	*04/15/15 20:55*	*1*
DCB Decachlorobiphenyl	*34*		*10 - 130*	*04/13/15 06:09*	*04/15/15 20:55*	*1*

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T04-10, RACER Bay City

TestAmerica Job ID: 240-49223-1

GC Semi VOA

Prep Batch: 176082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49223-1	W-12610-040915-SSH-1502	Total/NA	Water	3520C	
LCS 240-176082/6-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-176082/5-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 176614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-49223-1	W-12610-040915-SSH-1502	Total/NA	Water	8082	176082
LCS 240-176082/6-A	Lab Control Sample	Total/NA	Water	8082	176082
MB 240-176082/5-A	Method Blank	Total/NA	Water	8082	176082

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-176082/5-A
Matrix: Water
Analysis Batch: 176614

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.20	U	0.20	0.044	ug/L		04/13/15 06:09	04/15/15 22:46	1
Aroclor-1221	0.20	U	0.20	0.045	ug/L		04/13/15 06:09	04/15/15 22:46	1
Aroclor-1232	0.20	U	0.20	0.073	ug/L		04/13/15 06:09	04/15/15 22:46	1
Aroclor-1242	0.20	U	0.20	0.060	ug/L		04/13/15 06:09	04/15/15 22:46	1
Aroclor-1248	0.20	U	0.20	0.061	ug/L		04/13/15 06:09	04/15/15 22:46	1
Aroclor-1254	0.20	U	0.20	0.032	ug/L		04/13/15 06:09	04/15/15 22:46	1
Aroclor-1260	0.20	U	0.20	0.038	ug/L		04/13/15 06:09	04/15/15 22:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*89*		*23 - 136*	*04/13/15 06:09*	*04/15/15 22:46*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 130*	*04/13/15 06:09*	*04/15/15 22:46*	*1*

Lab Sample ID: LCS 240-176082/6-A
Matrix: Water
Analysis Batch: 176614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176082

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			2.50	2.25		ug/L		90	66 - 120		
Aroclor-1260			2.50	2.17		ug/L		87	55 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*23 - 136*
DCB Decachlorobiphenyl	*97*		*10 - 130*

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T04-10, RACER Bay City

TestAmerica Job ID: 240-49223-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX2	DCB2								
Lab Sample ID	Client Sample ID	(23-136)	(10-130)								
240-49223-1	W-12610-040915-SSH-1502	74	34								
LCS 240-176082/6-A	Lab Control Sample	89	97								
MB 240-176082/5-A	Method Blank	89	85								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T04-10, RACER Bay City

TestAmerica Job ID: 240-49223-1

Client Sample ID: W-12610-040915-SSH-1502
Date Collected: 04/09/15 13:25
Date Received: 04/10/15 10:15

Lab Sample ID: 240-49223-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			176082	04/13/15 06:09	CSC	TAL CAN
Total/NA	Analysis	8082		1	176614	04/15/15 20:55	HMB	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12610-T04-10, RACER Bay City

TestAmerica Job ID: 240-49223-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-15 *
Connecticut	State Program	1	PH-0590	12-31-15
Florida	NELAP	4	E87225	06-30-15 *
Georgia	State Program	4	N/A	06-30-15 *
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	04-30-15 *
Kentucky (UST)	State Program	4	58	06-30-15 *
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15 *
New York	NELAP	2	10975	03-31-15 *
Ohio VAP	State Program	5	CL0024	10-31-15
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-15

* Certification renewal pending - certification considered valid.

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240-49223 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

4.0/C45

CONESTOGA-ROVERS & ASSOCIATES

CHAIN OF CUSTODY RECORD

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

COC NO.: PL-14847
PAGE 1 OF 1
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 12610-T04-001415	**Laboratory Name:** Test America	**Lab Location:** North Canton, OH	**SSOW ID:** 12610-T04-010
Project Name: RaceTrust Bay City	**Lab Contact:** D. Heckler	**Lab Quote No:**	**Cooler No:**
Project Location: Bay City, MI			**Carrier:** FedEx
Chemistry Contact: R. Fleisher			**Airbill No:** 8065 0982 8430
Sampler(s): S. Hovemeyer			**Date Shipped:** 4/9/15

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd//yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	PCBs									MS/MSD Request	Comments/ Special Instructions:
1	W-12610-040915-SSA-1502	4/9/15	1325	WG	G	X								2	X										
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									

Page 15 of 16

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 2
All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. [signature]	CRA	4/9/15	1530	1. [signature]	TA	4.10.15	1015
2.				2.			
3.				3.			

4/21/2015

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

14 13 12 11 10 9 8 7 6 5 4 3 2 1

TestAmerica Canton Sample Receipt Form/Narrative Login # : 49223
Canton Facility

Client CRA Site Name

Cooler Received on 4-10-15 Opened on 4-10-15

Cooler unpacked by:

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. 4.0 °C Corrected Cooler Temp. 4.5 °C ☐ See Multiple Cooler Form

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2.	Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
	-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
	-Were custody seals on the bottle(s)?	Yes	No
3.	Shippers' packing slip attached to the cooler(s)?	Yes	No
4.	Did custody papers accompany the sample(s)?	Yes	No
5.	Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6.	Was/were the sampler(s) clearly identified on the COC?	Yes	No
7.	Did all bottles arrive in good condition (Unbroken)?	Yes	No
8.	Could all bottle labels be reconciled with the COC?	Yes	No
9.	Were correct bottle(s) used for the test(s) indicated?	Yes	No
10.	Sufficient quantity received to perform indicated analyses?	Yes	No
11.	Were sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC425511
12.	Were VOAs on the COC?	Yes	No
13.	Were air bubbles >6 mm in any VOA vials?	Yes	No NA
14.	Was a trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No

Contacted PM Date by via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

Attachment C-3
Reduced Validation Report for 2015 Annual Sampling Results

Memorandum

To:	Mike Tomka	Ref. No.:	012610-T04
From:	Nancy Bergstrom/tl/23/Det	Date:	October 1, 2015
cc:	Rawa Fleisher		

Re: Analytical Results and Reduced Validation
2015 Semi-Annual Groundwater Sampling
RACER Bay City Site
Bay City, Michigan
August 2015

1. Introduction

This document details a reduced validation of analytical results for groundwater samples collected in support of the 2015 Semi-Annual Groundwater Sampling at the RACER Bay City Site during August 2015. Samples were submitted to TestAmerica Laboratories, Inc., 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 GHD 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 form, finished report forms, method blank data, recovery data from surrogate spikes, laboratory control samples (LCS), matrix spikes (MS) and field QA/QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the documents entitled:

i) "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review", USEPA 540-R-08-01, June 2008.

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

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

GHD Limited.
14496 Sheldon Road, Ste. #200 Plymouth Michigan 48170
T 734-453-5123 F 734-453-5201 W www.ghd.com

3. 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 1 per 20 investigative samples and/or 1 per analytical batch.

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

4. Surrogate Spike Recoveries - Organic Analyses

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 biphenyls (PCB) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the above criteria.

5. Laboratory Control Sample Analyses

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 1 per 20 investigative samples and/or 1 per analytical batch.

5.1 Organic Analyses

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

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with known concentrations of the analytes of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision.

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

6.1 Organic Analyses

The MS/MSD samples were spiked with the compounds specified in the method. All percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

7. Field QA/QC Samples

The field QA/QC consisted of one field duplicate sample set.

7.1 Field Duplicate Sample Analysis

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

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

8. 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. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Table 1

Sample Collection and Analysis Summary
2015 Semi-Annual Groundwater Sampling
RACER Bay City Site
Bay City, Michigan
August 2015

					Analysis/Parameters	
Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	PCB	Comments
TA-NC SDG No.: 240-54781-1						
GW-12610-082515-SSH-0115	CSA GW Ext. Sys. Discharge	Water	08/25/2015	08:45	X	
GW-12610-082515-SSH-0215	MSA GW Ext. Sys. Discharge	Water	08/25/2015	09:00	X	
GW-12610-082615-SSH-0315	LMW13S	Water	08/26/2015	10:16	X	
GW-12610-082615-SSH-0415	LMW15D	Water	08/26/2015	11:06	X	
GW-12610-082615-SSH-0515	MW301D2	Water	08/26/2015	11:56	X	
GW-12610-082615-SSH-0615	MW300S	Water	08/26/2015	13:21	X	
GW-12610-082615-SSH-0715	MW102D1	Water	08/26/2015	14:16	X	
GW-12610-082615-SSH-0815	MW102D1	Water	08/26/2015	14:21	X	FD (MW102D1)
GW-12610-082615-SSH-0915	MW102D2	Water	08/26/2015	15:16	X	MS/MSD
GW-12610-082615-SSH-1015	MW102D4	Water	08/26/2015	16:21	X	

Notes:

FD - Field Duplicate sample of sample in parenthesis
MS/MSD - Matrix Spike/Matrix Spike Duplicate
PCB - Polychlorinated biphenyls
TA-NC - TestAmerica Laboratories, Inc. - North Canton, Ohio
SDG - Sample Delivery Group

Table 2

Validated Analytical Summary Results
2015 Semi-Annual Groundwater Sampling
RACER Bay City Site
Bay City, Michigan
August 2015

Sample Location:		CSA GW Ext. Sys. Discharge	LMW13S	LMW15D	MSA GW Ext. Sys. Discharge
Sample ID:		GW-12610-082515-SSH-0115	GW-12610-082615-SSH-0315	GW-12610-082615-SSH-0415	GW-12610-082515-SSH-0215
Sample Date:		8/25/2015	8/26/2015	8/26/2015	8/25/2015
Parameters	**Units**				
PCBs					
Aroclor-1016 (PCB-1016)	ug/L	0.19 U	0.19 U	0.19 U	0.38 U
Aroclor-1221 (PCB-1221)	ug/L	0.19 U	0.19 U	0.19 U	0.38 U
Aroclor-1232 (PCB-1232)	ug/L	0.19 U	0.19 U	0.19 U	0.38 U
Aroclor-1242 (PCB-1242)	ug/L	0.56	0.19 U	0.19 U	0.38 U
Aroclor-1248 (PCB-1248)	ug/L	0.19 U	0.98	0.19 U	0.38 U
Aroclor-1254 (PCB-1254)	ug/L	0.19 U	0.19 U	0.19 U	0.38 U
Aroclor-1260 (PCB-1260)	ug/L	0.19 U	0.19 U	0.19 U	0.19 J

Table 2

Validated Analytical Summary Results
2015 Semi-Annual Groundwater Sampling
RACER Bay City Site
Bay City, Michigan
August 2015

Sample Location:		MW102D1	MW102D1	MW102D2	MW102D4
Sample ID:		GW-12610-082615-SSH-0715	GW-12610-082615-SSH-0815	GW-12610-082615-SSH-0915	GW-12610-082615-SSH-1015
Sample Date:		8/26/2015	8/26/2015 (Duplicate)	8/26/2015	8/26/2015
Parameters	**Units**				
PCBs					
Aroclor-1016 (PCB-1016)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1221 (PCB-1221)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1232 (PCB-1232)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1242 (PCB-1242)	ug/L	0.34	0.34	0.19 U	0.19 U
Aroclor-1248 (PCB-1248)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1254 (PCB-1254)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor-1260 (PCB-1260)	ug/L	0.19 U	0.19 U	0.19 U	0.19 U

Table 2

Validated Analytical Summary Results
2015 Semi-Annual Groundwater Sampling
RACER Bay City Site
Bay City, Michigan
August 2015

Sample Location:		MW300S	MW301D2
Sample ID:		GW-12610-082615-SSH-0615	GW-12610-082615-SSH-0515
Sample Date:		8/26/2015	8/26/2015
Parameters	**Units**		
PCBs			
Aroclor-1016 (PCB-1016)	ug/L	0.19 U	0.38 U
Aroclor-1221 (PCB-1221)	ug/L	0.19 U	0.38 U
Aroclor-1232 (PCB-1232)	ug/L	0.19 U	0.38 U
Aroclor-1242 (PCB-1242)	ug/L	0.095 J	0.38 U
Aroclor-1248 (PCB-1248)	ug/L	0.19 U	0.38 U
Aroclor-1254 (PCB-1254)	ug/L	0.19 U	0.38 U
Aroclor-1260 (PCB-1260)	ug/L	0.19 U	0.38 U

Notes:

U - Not detected at the associtated reporting

J - Estimated concentration

Table 3

Analytical Methods
2015 Semi-Annual Groundwater Sampling
RACER Bay City Site
Bay City, Michigan
August 2015

Parameter	Method	Matrix	Holding Time: Collection to Extraction (Days)	Holding Time: Collection or Extraction to Analysis (Days)
PCB	SW-846 8082	Water	7	40

Notes:

Method References:
SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions
PCB - Polychlorinated biphenyls

Attachment C-4
Annual Sampling Results
August 2015

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-54781-1
Client Project/Site: 12610-T04, RACER Bay City

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
9/9/2015 4:17:12 PM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

Table of Contents

Job ID: 240-54781-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: GHD Services Inc.

Project: 12610-T04, RACER Bay City

Report Number: 240-54781-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/27/2015; the samples arrived in good condition, properly preserved and on ice.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples GW-12610-082515-SSH-0115 (240-54781-1), GW-12610-082515-SSH-0215 (240-54781-2), GW-12610-082615-SSH-0315 (240-54781-3), GW-12610-082615-SSH-0415 (240-54781-4), GW-12610-082615-SSH-0515 (240-54781-5), GW-12610-082615-SSH-0615 (240-54781-6), GW-12610-082615-SSH-0715 (240-54781-7), GW-12610-082615-SSH-0815 (240-54781-8), GW-12610-082615-SSH-0915 (240-54781-9) and GW-12610-082615-SSH-1015 (240-54781-10) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 08/28/2015 and analyzed on 09/01/2015, 09/02/2015 and 09/09/2015.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

The following samples appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: GW-12610-082515-SSH-0115 (240-54781-1), GW-12610-082615-SSH-0715 (240-54781-7) and GW-12610-082615-SSH-0815 (240-54781-8). Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

Job ID: 240-54781-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: GW-12610-082515-SSH-0215 (240-54781-2). Reagents: 2154308, 1848564, 2138445.

The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: GW-12610-082615-SSH-0515 (240-54781-5). Reagent: 2154308, 1848564, 2138443.

Samples GW-12610-082515-SSH-0215 (240-54781-2)[2X] and GW-12610-082615-SSH-0515 (240-54781-5)[2X] required dilution prior to analysis due to the nature of the sample matrix. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-54781-1	GW-12610-082515-SSH-0115	Water	08/25/15 08:45	08/27/15 09:10
240-54781-2	GW-12610-082515-SSH-0215	Water	08/25/15 09:00	08/27/15 09:10
240-54781-3	GW-12610-082615-SSH-0315	Water	08/26/15 10:16	08/27/15 09:10
240-54781-4	GW-12610-082615-SSH-0415	Water	08/26/15 11:06	08/27/15 09:10
240-54781-5	GW-12610-082615-SSH-0515	Water	08/26/15 11:56	08/27/15 09:10
240-54781-6	GW-12610-082615-SSH-0615	Water	08/26/15 13:21	08/27/15 09:10
240-54781-7	GW-12610-082615-SSH-0715	Water	08/26/15 14:16	08/27/15 09:10
240-54781-8	GW-12610-082615-SSH-0815	Water	08/26/15 14:21	08/27/15 09:10
240-54781-9	GW-12610-082615-SSH-0915	Water	08/26/15 15:16	08/27/15 09:10
240-54781-10	GW-12610-082615-SSH-1015	Water	08/26/15 16:21	08/27/15 09:10

Detection Summary

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Client Sample ID: GW-12610-082515-SSH-0115 — Lab Sample ID: 240-54781-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1242	0.56		0.19	0.058	ug/L	1		8082	Total/NA

Client Sample ID: GW-12610-082515-SSH-0215 — Lab Sample ID: 240-54781-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1260	0.19	J	0.38	0.073	ug/L	2		8082	Total/NA

Client Sample ID: GW-12610-082615-SSH-0315 — Lab Sample ID: 240-54781-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1248	0.98		0.19	0.059	ug/L	1		8082	Total/NA

Client Sample ID: GW-12610-082615-SSH-0415 — Lab Sample ID: 240-54781-4

No Detections.

Client Sample ID: GW-12610-082615-SSH-0515 — Lab Sample ID: 240-54781-5

No Detections.

Client Sample ID: GW-12610-082615-SSH-0615 — Lab Sample ID: 240-54781-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1242	0.095	J	0.19	0.058	ug/L	1		8082	Total/NA

Client Sample ID: GW-12610-082615-SSH-0715 — Lab Sample ID: 240-54781-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1242	0.34		0.19	0.058	ug/L	1		8082	Total/NA

Client Sample ID: GW-12610-082615-SSH-0815 — Lab Sample ID: 240-54781-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1242	0.34		0.19	0.058	ug/L	1		8082	Total/NA

Client Sample ID: GW-12610-082615-SSH-0915 — Lab Sample ID: 240-54781-9

No Detections.

Client Sample ID: GW-12610-082615-SSH-1015 — Lab Sample ID: 240-54781-10

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-12610-082515-SSH-0115
Date Collected: 08/25/15 08:45
Date Received: 08/27/15 09:10

Lab Sample ID: 240-54781-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.19	U	0.19	0.042	ug/L		08/28/15 04:45	09/01/15 18:29	1
Aroclor-1221	0.19	U	0.19	0.043	ug/L		08/28/15 04:45	09/01/15 18:29	1
Aroclor-1232	0.19	U	0.19	0.070	ug/L		08/28/15 04:45	09/01/15 18:29	1
Aroclor-1242	**0.56**		0.19	0.058	ug/L		08/28/15 04:45	09/01/15 18:29	1
Aroclor-1248	0.19	U	0.19	0.059	ug/L		08/28/15 04:45	09/01/15 18:29	1
Aroclor-1254	0.19	U	0.19	0.031	ug/L		08/28/15 04:45	09/01/15 18:29	1
Aroclor-1260	0.19	U	0.19	0.037	ug/L		08/28/15 04:45	09/01/15 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*60*		*21 - 124*	*08/28/15 04:45*	*09/01/15 18:29*	*1*
DCB Decachlorobiphenyl	*11*		*10 - 131*	*08/28/15 04:45*	*09/01/15 18:29*	*1*

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-12610-082515-SSH-0215
Date Collected: 08/25/15 09:00
Date Received: 08/27/15 09:10

Lab Sample ID: 240-54781-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.38	U	0.38	0.085	ug/L		08/28/15 04:45	09/02/15 15:30	2
Aroclor-1221	0.38	U	0.38	0.087	ug/L		08/28/15 04:45	09/02/15 15:30	2
Aroclor-1232	0.38	U	0.38	0.14	ug/L		08/28/15 04:45	09/02/15 15:30	2
Aroclor-1242	0.38	U	0.38	0.12	ug/L		08/28/15 04:45	09/02/15 15:30	2
Aroclor-1248	0.38	U	0.38	0.12	ug/L		08/28/15 04:45	09/02/15 15:30	2
Aroclor-1254	0.38	U	0.38	0.062	ug/L		08/28/15 04:45	09/02/15 15:30	2
Aroclor-1260	**0.19**	**J**	0.38	0.073	ug/L		08/28/15 04:45	09/02/15 15:30	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*41*		*21 - 124*	*08/28/15 04:45*	*09/02/15 15:30*	*2*
DCB Decachlorobiphenyl	*42*		*10 - 131*	*08/28/15 04:45*	*09/02/15 15:30*	*2*

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-12610-082615-SSH-0315
Date Collected: 08/26/15 10:16
Date Received: 08/27/15 09:10

Lab Sample ID: 240-54781-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.19	U	0.19	0.042	ug/L		08/28/15 04:45	09/01/15 19:02	1
Aroclor-1221	0.19	U	0.19	0.043	ug/L		08/28/15 04:45	09/01/15 19:02	1
Aroclor-1232	0.19	U	0.19	0.070	ug/L		08/28/15 04:45	09/01/15 19:02	1
Aroclor-1242	0.19	U	0.19	0.058	ug/L		08/28/15 04:45	09/01/15 19:02	1
Aroclor-1248	**0.98**		0.19	0.059	ug/L		08/28/15 04:45	09/01/15 19:02	1
Aroclor-1254	0.19	U	0.19	0.031	ug/L		08/28/15 04:45	09/01/15 19:02	1
Aroclor-1260	0.19	U	0.19	0.037	ug/L		08/28/15 04:45	09/01/15 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*21 - 124*	*08/28/15 04:45*	*09/01/15 19:02*	*1*
DCB Decachlorobiphenyl	*31*		*10 - 131*	*08/28/15 04:45*	*09/01/15 19:02*	*1*

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-12610-082615-SSH-0415
Date Collected: 08/26/15 11:06
Date Received: 08/27/15 09:10

Lab Sample ID: 240-54781-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.19	U	0.19	0.042	ug/L		08/28/15 04:45	09/01/15 19:18	1
Aroclor-1221	0.19	U	0.19	0.043	ug/L		08/28/15 04:45	09/01/15 19:18	1
Aroclor-1232	0.19	U	0.19	0.070	ug/L		08/28/15 04:45	09/01/15 19:18	1
Aroclor-1242	0.19	U	0.19	0.058	ug/L		08/28/15 04:45	09/01/15 19:18	1
Aroclor-1248	0.19	U	0.19	0.059	ug/L		08/28/15 04:45	09/01/15 19:18	1
Aroclor-1254	0.19	U	0.19	0.031	ug/L		08/28/15 04:45	09/01/15 19:18	1
Aroclor-1260	0.19	U	0.19	0.037	ug/L		08/28/15 04:45	09/01/15 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*21 - 124*	*08/28/15 04:45*	*09/01/15 19:18*	*1*
DCB Decachlorobiphenyl	*46*		*10 - 131*	*08/28/15 04:45*	*09/01/15 19:18*	*1*

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-12610-082615-SSH-0515
Date Collected: 08/26/15 11:56
Date Received: 08/27/15 09:10

Lab Sample ID: 240-54781-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.38	U	0.38	0.085	ug/L		08/28/15 04:45	09/09/15 10:36	2
Aroclor-1221	0.38	U	0.38	0.087	ug/L		08/28/15 04:45	09/09/15 10:36	2
Aroclor-1232	0.38	U	0.38	0.14	ug/L		08/28/15 04:45	09/09/15 10:36	2
Aroclor-1242	0.38	U	0.38	0.12	ug/L		08/28/15 04:45	09/09/15 10:36	2
Aroclor-1248	0.38	U	0.38	0.12	ug/L		08/28/15 04:45	09/09/15 10:36	2
Aroclor-1254	0.38	U	0.38	0.062	ug/L		08/28/15 04:45	09/09/15 10:36	2
Aroclor-1260	0.38	U	0.38	0.073	ug/L		08/28/15 04:45	09/09/15 10:36	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*126*	*X*	*21 - 124*	*08/28/15 04:45*	*09/09/15 10:36*	*2*
DCB Decachlorobiphenyl	*33*		*10 - 131*	*08/28/15 04:45*	*09/09/15 10:36*	*2*

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-12610-082615-SSH-0615
Date Collected: 08/26/15 13:21
Date Received: 08/27/15 09:10

Lab Sample ID: 240-54781-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.19	U	0.19	0.042	ug/L		08/28/15 04:45	09/01/15 19:51	1
Aroclor-1221	0.19	U	0.19	0.043	ug/L		08/28/15 04:45	09/01/15 19:51	1
Aroclor-1232	0.19	U	0.19	0.070	ug/L		08/28/15 04:45	09/01/15 19:51	1
Aroclor-1242	**0.095**	**J**	0.19	0.058	ug/L		08/28/15 04:45	09/01/15 19:51	1
Aroclor-1248	0.19	U	0.19	0.059	ug/L		08/28/15 04:45	09/01/15 19:51	1
Aroclor-1254	0.19	U	0.19	0.031	ug/L		08/28/15 04:45	09/01/15 19:51	1
Aroclor-1260	0.19	U	0.19	0.037	ug/L		08/28/15 04:45	09/01/15 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*21 - 124*	*08/28/15 04:45*	*09/01/15 19:51*	*1*
DCB Decachlorobiphenyl	*28*		*10 - 131*	*08/28/15 04:45*	*09/01/15 19:51*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-12610-082615-SSH-0715
Date Collected: 08/26/15 14:16
Date Received: 08/27/15 09:10

Lab Sample ID: 240-54781-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.19	U	0.19	0.042	ug/L		08/28/15 04:45	09/01/15 20:08	1
Aroclor-1221	0.19	U	0.19	0.043	ug/L		08/28/15 04:45	09/01/15 20:08	1
Aroclor-1232	0.19	U	0.19	0.070	ug/L		08/28/15 04:45	09/01/15 20:08	1
Aroclor-1242	**0.34**		0.19	0.058	ug/L		08/28/15 04:45	09/01/15 20:08	1
Aroclor-1248	0.19	U	0.19	0.059	ug/L		08/28/15 04:45	09/01/15 20:08	1
Aroclor-1254	0.19	U	0.19	0.031	ug/L		08/28/15 04:45	09/01/15 20:08	1
Aroclor-1260	0.19	U	0.19	0.037	ug/L		08/28/15 04:45	09/01/15 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*21 - 124*	*08/28/15 04:45*	*09/01/15 20:08*	*1*
DCB Decachlorobiphenyl	*27*		*10 - 131*	*08/28/15 04:45*	*09/01/15 20:08*	*1*

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-12610-082615-SSH-0815
Date Collected: 08/26/15 14:21
Date Received: 08/27/15 09:10

Lab Sample ID: 240-54781-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.19	U	0.19	0.042	ug/L		08/28/15 04:45	09/01/15 20:24	1
Aroclor-1221	0.19	U	0.19	0.043	ug/L		08/28/15 04:45	09/01/15 20:24	1
Aroclor-1232	0.19	U	0.19	0.070	ug/L		08/28/15 04:45	09/01/15 20:24	1
Aroclor-1242	**0.34**		0.19	0.058	ug/L		08/28/15 04:45	09/01/15 20:24	1
Aroclor-1248	0.19	U	0.19	0.059	ug/L		08/28/15 04:45	09/01/15 20:24	1
Aroclor-1254	0.19	U	0.19	0.031	ug/L		08/28/15 04:45	09/01/15 20:24	1
Aroclor-1260	0.19	U	0.19	0.037	ug/L		08/28/15 04:45	09/01/15 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*21 - 124*	*08/28/15 04:45*	*09/01/15 20:24*	*1*
DCB Decachlorobiphenyl	*33*		*10 - 131*	*08/28/15 04:45*	*09/01/15 20:24*	*1*

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-12610-082615-SSH-0915
Date Collected: 08/26/15 15:16
Date Received: 08/27/15 09:10

Lab Sample ID: 240-54781-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.19	U	0.19	0.042	ug/L		08/28/15 04:45	09/01/15 20:40	1
Aroclor-1221	0.19	U	0.19	0.043	ug/L		08/28/15 04:45	09/01/15 20:40	1
Aroclor-1232	0.19	U	0.19	0.070	ug/L		08/28/15 04:45	09/01/15 20:40	1
Aroclor-1242	0.19	U	0.19	0.058	ug/L		08/28/15 04:45	09/01/15 20:40	1
Aroclor-1248	0.19	U	0.19	0.059	ug/L		08/28/15 04:45	09/01/15 20:40	1
Aroclor-1254	0.19	U	0.19	0.031	ug/L		08/28/15 04:45	09/01/15 20:40	1
Aroclor-1260	0.19	U	0.19	0.037	ug/L		08/28/15 04:45	09/01/15 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*21 - 124*	*08/28/15 04:45*	*09/01/15 20:40*	*1*
DCB Decachlorobiphenyl	*42*		*10 - 131*	*08/28/15 04:45*	*09/01/15 20:40*	*1*

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-12610-082615-SSH-1015
Date Collected: 08/26/15 16:21
Date Received: 08/27/15 09:10

Lab Sample ID: 240-54781-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.19	U	0.19	0.042	ug/L		08/28/15 04:45	09/01/15 21:29	1
Aroclor-1221	0.19	U	0.19	0.043	ug/L		08/28/15 04:45	09/01/15 21:29	1
Aroclor-1232	0.19	U	0.19	0.070	ug/L		08/28/15 04:45	09/01/15 21:29	1
Aroclor-1242	0.19	U	0.19	0.058	ug/L		08/28/15 04:45	09/01/15 21:29	1
Aroclor-1248	0.19	U	0.19	0.059	ug/L		08/28/15 04:45	09/01/15 21:29	1
Aroclor-1254	0.19	U	0.19	0.031	ug/L		08/28/15 04:45	09/01/15 21:29	1
Aroclor-1260	0.19	U	0.19	0.037	ug/L		08/28/15 04:45	09/01/15 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*21 - 124*	*08/28/15 04:45*	*09/01/15 21:29*	*1*
DCB Decachlorobiphenyl	*39*		*10 - 131*	*08/28/15 04:45*	*09/01/15 21:29*	*1*

GC Semi VOA

Prep Batch: 195225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-54781-1	GW-12610-082515-SSH-0115	Total/NA	Water	3520C	
240-54781-2	GW-12610-082515-SSH-0215	Total/NA	Water	3520C	
240-54781-3	GW-12610-082615-SSH-0315	Total/NA	Water	3520C	
240-54781-4	GW-12610-082615-SSH-0415	Total/NA	Water	3520C	
240-54781-5	GW-12610-082615-SSH-0515	Total/NA	Water	3520C	
240-54781-6	GW-12610-082615-SSH-0615	Total/NA	Water	3520C	
240-54781-7	GW-12610-082615-SSH-0715	Total/NA	Water	3520C	
240-54781-8	GW-12610-082615-SSH-0815	Total/NA	Water	3520C	
240-54781-9	GW-12610-082615-SSH-0915	Total/NA	Water	3520C	
240-54781-9 MS	GW-12610-082615-SSH-0915	Total/NA	Water	3520C	
240-54781-9 MSD	GW-12610-082615-SSH-0915	Total/NA	Water	3520C	
240-54781-10	GW-12610-082615-SSH-1015	Total/NA	Water	3520C	
LCS 240-195225/19-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-195225/18-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 195804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-54781-1	GW-12610-082515-SSH-0115	Total/NA	Water	8082	195225
240-54781-3	GW-12610-082615-SSH-0315	Total/NA	Water	8082	195225
240-54781-4	GW-12610-082615-SSH-0415	Total/NA	Water	8082	195225
240-54781-6	GW-12610-082615-SSH-0615	Total/NA	Water	8082	195225
240-54781-7	GW-12610-082615-SSH-0715	Total/NA	Water	8082	195225
240-54781-8	GW-12610-082615-SSH-0815	Total/NA	Water	8082	195225
240-54781-9	GW-12610-082615-SSH-0915	Total/NA	Water	8082	195225
240-54781-9 MS	GW-12610-082615-SSH-0915	Total/NA	Water	8082	195225
240-54781-9 MSD	GW-12610-082615-SSH-0915	Total/NA	Water	8082	195225
240-54781-10	GW-12610-082615-SSH-1015	Total/NA	Water	8082	195225
LCS 240-195225/19-A	Lab Control Sample	Total/NA	Water	8082	195225
MB 240-195225/18-A	Method Blank	Total/NA	Water	8082	195225

Analysis Batch: 195946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-54781-2	GW-12610-082515-SSH-0215	Total/NA	Water	8082	195225

Analysis Batch: 196701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-54781-5	GW-12610-082615-SSH-0515	Total/NA	Water	8082	195225

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-195225/18-A
Matrix: Water
Analysis Batch: 195804

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 195225

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.20	U	0.20	0.044	ug/L		08/28/15 04:45	09/01/15 22:51	1
Aroclor-1221	0.20	U	0.20	0.045	ug/L		08/28/15 04:45	09/01/15 22:51	1
Aroclor-1232	0.20	U	0.20	0.073	ug/L		08/28/15 04:45	09/01/15 22:51	1
Aroclor-1242	0.20	U	0.20	0.060	ug/L		08/28/15 04:45	09/01/15 22:51	1
Aroclor-1248	0.20	U	0.20	0.061	ug/L		08/28/15 04:45	09/01/15 22:51	1
Aroclor-1254	0.20	U	0.20	0.032	ug/L		08/28/15 04:45	09/01/15 22:51	1
Aroclor-1260	0.20	U	0.20	0.038	ug/L		08/28/15 04:45	09/01/15 22:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*21 - 124*	*08/28/15 04:45*	*09/01/15 22:51*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 131*	*08/28/15 04:45*	*09/01/15 22:51*	*1*

Lab Sample ID: LCS 240-195225/19-A
Matrix: Water
Analysis Batch: 195804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 195225

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			2.50	2.24		ug/L		90	48 - 126		
Aroclor-1260			2.50	2.38		ug/L		95	43 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*80*		*21 - 124*
DCB Decachlorobiphenyl	*83*		*10 - 131*

Lab Sample ID: 240-54781-9 MS
Matrix: Water
Analysis Batch: 195804

Client Sample ID: GW-12610-082615-SSH-0915
Prep Type: Total/NA
Prep Batch: 195225

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	0.19	U	2.40	1.97		ug/L		82	40 - 129		
Aroclor-1260	0.19	U	2.40	1.83		ug/L		76	10 - 126		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*74*		*21 - 124*
DCB Decachlorobiphenyl	*28*		*10 - 131*

Lab Sample ID: 240-54781-9 MSD
Matrix: Water
Analysis Batch: 195804

Client Sample ID: GW-12610-082615-SSH-0915
Prep Type: Total/NA
Prep Batch: 195225

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	0.19	U	2.40	2.28		ug/L		95	40 - 129	14	40
Aroclor-1260	0.19	U	2.40	2.26		ug/L		94	10 - 126	21	52

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*84*		*21 - 124*
DCB Decachlorobiphenyl	*43*		*10 - 131*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	TCX2 (21-124)	DCB2 (10-131)										
240-54781-1	GW-12610-082515-SSH-0115	60	11										
240-54781-2	GW-12610-082515-SSH-0215	41	42										
240-54781-3	GW-12610-082615-SSH-0315	80	31										
240-54781-4	GW-12610-082615-SSH-0415	84	46										
240-54781-5	GW-12610-082615-SSH-0515	126 X	33										
240-54781-6	GW-12610-082615-SSH-0615	78	28										
240-54781-7	GW-12610-082615-SSH-0715	81	27										
240-54781-8	GW-12610-082615-SSH-0815	74	33										
240-54781-9	GW-12610-082615-SSH-0915	71	42										
240-54781-9 MS	GW-12610-082615-SSH-0915	74	28										
240-54781-9 MSD	GW-12610-082615-SSH-0915	84	43										
240-54781-10	GW-12610-082615-SSH-1015	80	39										
LCS 240-195225/19-A	Lab Control Sample	80	83										
MB 240-195225/18-A	Method Blank	77	85										

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Client Sample ID: GW-12610-082515-SSH-0115
Lab Sample ID: 240-54781-1
Date Collected: 08/25/15 08:45
Matrix: Water
Date Received: 08/27/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			195225	08/28/15 04:45	CSC	TAL CAN
Total/NA	Analysis	8082		1	195804	09/01/15 18:29	HMB	TAL CAN

Client Sample ID: GW-12610-082515-SSH-0215
Lab Sample ID: 240-54781-2
Date Collected: 08/25/15 09:00
Matrix: Water
Date Received: 08/27/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			195225	08/28/15 04:45	CSC	TAL CAN
Total/NA	Analysis	8082		2	195946	09/02/15 15:30	LSH	TAL CAN

Client Sample ID: GW-12610-082615-SSH-0315
Lab Sample ID: 240-54781-3
Date Collected: 08/26/15 10:16
Matrix: Water
Date Received: 08/27/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			195225	08/28/15 04:45	CSC	TAL CAN
Total/NA	Analysis	8082		1	195804	09/01/15 19:02	HMB	TAL CAN

Client Sample ID: GW-12610-082615-SSH-0415
Lab Sample ID: 240-54781-4
Date Collected: 08/26/15 11:06
Matrix: Water
Date Received: 08/27/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			195225	08/28/15 04:45	CSC	TAL CAN
Total/NA	Analysis	8082		1	195804	09/01/15 19:18	HMB	TAL CAN

Client Sample ID: GW-12610-082615-SSH-0515
Lab Sample ID: 240-54781-5
Date Collected: 08/26/15 11:56
Matrix: Water
Date Received: 08/27/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			195225	08/28/15 04:45	CSC	TAL CAN
Total/NA	Analysis	8082		2	196701	09/09/15 10:36	HMB	TAL CAN

Client Sample ID: GW-12610-082615-SSH-0615
Lab Sample ID: 240-54781-6
Date Collected: 08/26/15 13:21
Matrix: Water
Date Received: 08/27/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			195225	08/28/15 04:45	CSC	TAL CAN
Total/NA	Analysis	8082		1	195804	09/01/15 19:51	HMB	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Client Sample ID: GW-12610-082615-SSH-0715 — Lab Sample ID: 240-54781-7

Date Collected: 08/26/15 14:16 — **Matrix: Water**
Date Received: 08/27/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			195225	08/28/15 04:45	CSC	TAL CAN
Total/NA	Analysis	8082		1	195804	09/01/15 20:08	HMB	TAL CAN

Client Sample ID: GW-12610-082615-SSH-0815 — Lab Sample ID: 240-54781-8

Date Collected: 08/26/15 14:21 — **Matrix: Water**
Date Received: 08/27/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			195225	08/28/15 04:45	CSC	TAL CAN
Total/NA	Analysis	8082		1	195804	09/01/15 20:24	HMB	TAL CAN

Client Sample ID: GW-12610-082615-SSH-0915 — Lab Sample ID: 240-54781-9

Date Collected: 08/26/15 15:16 — **Matrix: Water**
Date Received: 08/27/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			195225	08/28/15 04:45	CSC	TAL CAN
Total/NA	Analysis	8082		1	195804	09/01/15 20:40	HMB	TAL CAN

Client Sample ID: GW-12610-082615-SSH-1015 — Lab Sample ID: 240-54781-10

Date Collected: 08/26/15 16:21 — **Matrix: Water**
Date Received: 08/27/15 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			195225	08/28/15 04:45	CSC	TAL CAN
Total/NA	Analysis	8082		1	195804	09/01/15 21:29	HMB	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: GHD Services Inc.
Project/Site: 12610-T04, RACER Bay City

TestAmerica Job ID: 240-54781-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	09-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15 *
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15 *
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-15 *

* Certification renewal pending - certification considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS


240-54781 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

24/C3,4
22/C3,2

Chain of Custody Record

1,8/C28

104778

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: JT Pardys	Site Contact: S. Howeyer	Date: 8/26/15	COC No: 104778
Company Name: GHD Services Inc.	Tel/Fax: 519 884 0510	Lab Contact: D. Hunt	Carrier: FedEx	____ of ____ COCs
Address: 14496 N. Sheldon Rd Ste 200	Analysis Turnaround Time			Sampler: S Howeyer
City/State/Zip: Plymouth MI 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 734 453 5123	TAT if different from Below ____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: Race Trust Bay City	☐ 1 week			
Site: 12610-T04-010	☐ 2 days			Job / SDG No.:
P O # 2400628B	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PCBs	Sample Specific Notes:
GW-12610-082515-SSH-0115	8/25/15	0845	G	GW	2	N	N	X	
GW-12610-082515-SSH-0215	8/25/15	0900	G	GW	2	N	N	X	
GW-12610-082615-SSH-0315	8/26/15	1016	G	GW	2	N	N	X	
-0415		1106	G	GW	2	N	N	X	
-0515		1156	G	GW	2	N	N	X	
-0615		1321	G	GW	2	N	N	X	
-0715		1416	G	GW	2	N	N	X	
-0815		1421	G	GW	2	N	N	X	
-0915		1516	G	GW	4	N	Y	X	MS/MSD
GW-12610-082615-SSH-1015	8/26/15	1621	G	GW	2	N	N	X	

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

542781

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.: 555145 / 555146	Cooler Temp. (°C): Obs'd:_____ Corr'd:_____	Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
S. Howeyer	GHD	8/26/15 1830	Jerry Burns	TA Can	8/27/15 0910
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client GHD Services Site Name Racer Trust

Cooler Received on 8/27/15 Opened on 8/27/15

Cooler unpacked by: Denny Burns

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other Multiple

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   IR GUN# A (CF +1.0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   ~~IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C~~
   ~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C~~
   IR GUN# 8 (CF -1.5 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   ☑ See Multiple Cooler Form
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 each Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC432654**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s):_____

TestAmerica Multiple Cooler Receipt Form/Narrative
Canton Facility

Login # :

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
MICH	A	2.4	3.4	ICE
"	"	2.2	3.2	"
"	"	1.8	2.8	"

Attachment C-5
Semi-Annual Effluent Sampling Results
December 2015

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-59001-1
Client Project/Site: 12610-T03, RACER Bay City

For:
GHD Services Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Rawa Fleisher

Denise D Heckler

Authorized for release by:
12/29/2015 10:14:52 AM

Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

Table of Contents

Job ID: 240-59001-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: GHD Services Inc.

Project: 12610-T03, RACER Bay City

Report Number: 240-59001-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 12/11/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.4 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples W-12610-121015-SSH-1115 (240-59001-1) and TB-12610-121015-SSH-1215 (240-59001-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA Method 624. The samples were analyzed on 12/15/2015 and 12/16/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Sample W-12610-121015-SSH-1115 (240-59001-1) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA Method 608. The samples were prepared on 12/12/2015 and analyzed on 12/15/2015.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

Job ID: 240-59001-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 240-210536.

The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: W-12610-121015-SSH-1115 (240-59001-1). Reagents: 2316599, 1848564, 2333858.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICP)
Sample W-12610-121015-SSH-1115 (240-59001-1) was analyzed for total recoverable metals (ICP) in accordance with EPA Method 200.7. The samples were prepared on 12/14/2015 and analyzed on 12/15/2015.

Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: W-12610-121015-SSH-1115 (240-59001-1). The continuing calibration blanks and method blanks may not support the lower PQL.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MERCURY
Sample W-12610-121015-SSH-1115 (240-59001-1) was analyzed for mercury in accordance with EPA Method 245.1. The samples were prepared on 12/14/2015 and analyzed on 12/15/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HEM AND SGT-HEM
Sample W-12610-121015-SSH-1115 (240-59001-1) was analyzed for HEM and SGT-HEM in accordance with EPA Method 1664A. The samples were analyzed on 12/22/2015.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SUSPENDED SOLIDS
Sample W-12610-121015-SSH-1115 (240-59001-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 12/15/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA
Sample W-12610-121015-SSH-1115 (240-59001-1) was analyzed for ammonia in accordance with EPA Method 350.2. The samples were prepared and analyzed on 12/22/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND
Sample W-12610-121015-SSH-1115 (240-59001-1) was analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 12/14/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL PHOSPHORUS
Sample W-12610-121015-SSH-1115 (240-59001-1) was analyzed for total phosphorus in accordance with SM 4500 P E. The samples were prepared on 12/28/2015 and analyzed on 12/29/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

BIOCHEMICAL OXYGEN DEMAND
Sample W-12610-121015-SSH-1115 (240-59001-1) was analyzed for Biochemical oxygen demand in accordance with SM 5210B. The

Job ID: 240-59001-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

samples were analyzed on 12/11/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PH

Sample W-12610-121015-SSH-1115 (240-59001-1) was analyzed for pH in accordance with SM 4500 H+ B. The samples were analyzed past the method recommended 15 minute holding time on 12/11/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-59001-1	W-12610-121015-SSH-1115	Water	12/10/15 08:30	12/11/15 09:30
240-59001-2	TB-12610-121015-SSH-1215	Water	12/10/15 08:45	12/11/15 09:30

Detection Summary

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

Client Sample ID: W-12610-121015-SSH-1115 — Lab Sample ID: 240-59001-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Ammonia (as N)	3.4		2.0		mg/L	1		350.2	Total/NA
pH	7.75	HF	0.100		SU	1		4500 H+ B-2000	Total/NA
Biochemical Oxygen Demand	9.3		2.0		mg/L	1		5210B-2001	Total/NA

Client Sample ID: TB-12610-121015-SSH-1215 — Lab Sample ID: 240-59001-2

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL CAN
608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL CAN
200.7 Rev 4.4	Metals (ICP)	EPA	TAL CAN
245.1	Mercury (CVAA)	EPA	TAL CAN
1664A	HEM and SGT-HEM	1664A	TAL CAN
350.2	Nitrogen, Ammonia, Distillation	MCAWW	TAL CAN
410.4	COD	MCAWW	TAL CAN
4500 H+ B-2000	pH	SM	TAL CAN
5210B-2001	BOD, 5-Day	SM	TAL CAN
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL CAN
SM4500 P E-1999	Phosphorus	SM	TAL CAN

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: W-12610-121015-SSH-1115
Date Collected: 12/10/15 08:30
Date Received: 12/11/15 09:30

Lab Sample ID: 240-59001-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0		ug/L			12/15/15 08:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*61 - 120*		*12/15/15 08:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*78 - 125*		*12/15/15 08:02*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/15/15 08:02*	*1*

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-12610-121015-SSH-1215
Date Collected: 12/10/15 08:45
Date Received: 12/11/15 09:30

Lab Sample ID: 240-59001-2
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0		ug/L			12/16/15 04:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*61 - 120*		*12/16/15 04:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*78 - 125*		*12/16/15 04:14*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/16/15 04:14*	*1*

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Client Sample ID: W-12610-121015-SSH-1115
Date Collected: 12/10/15 08:30
Date Received: 12/11/15 09:30

Lab Sample ID: 240-59001-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:27	1
Aroclor-1221	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:27	1
Aroclor-1232	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:27	1
Aroclor-1242	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:27	1
Aroclor-1248	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:27	1
Aroclor-1254	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:27	1
Aroclor-1260	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*10 - 114*	*12/12/15 08:14*	*12/15/15 15:27*	*1*
Tetrachloro-m-xylene	*32*		*15 - 131*	*12/12/15 08:14*	*12/15/15 15:27*	*1*

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Client Sample ID: W-12610-121015-SSH-1115
Date Collected: 12/10/15 08:30
Date Received: 12/11/15 09:30

Lab Sample ID: 240-59001-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0		ug/L		12/14/15 09:30	12/15/15 19:32	1
Cadmium	2.0	U	2.0		ug/L		12/14/15 09:30	12/15/15 19:32	1
Chromium	5.0	U	5.0		ug/L		12/14/15 09:30	12/15/15 19:32	1
Copper	20	U	20		ug/L		12/14/15 09:30	12/15/15 19:32	1
Iron	100	U	100		ug/L		12/14/15 09:30	12/15/15 19:32	1
Nickel	20	U	20		ug/L		12/14/15 09:30	12/15/15 19:32	1
Lead	3.0	U	3.0		ug/L		12/14/15 09:30	12/15/15 19:32	1

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

Method: 245.1 - Mercury (CVAA)

Client Sample ID: W-12610-121015-SSH-1115
Date Collected: 12/10/15 08:30
Date Received: 12/11/15 09:30

Lab Sample ID: 240-59001-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20		ug/L		12/14/15 14:00	12/15/15 12:34	1

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

General Chemistry

Client Sample ID: W-12610-121015-SSH-1115
Date Collected: 12/10/15 08:30
Date Received: 12/11/15 09:30

Lab Sample ID: 240-59001-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
HEM	4.8	U	4.8		mg/L			12/22/15 08:10	1
Ammonia (as N)	**3.4**		2.0		mg/L		12/22/15 06:45	12/22/15 10:43	1
Chemical Oxygen Demand	10	U	10		mg/L			12/14/15 12:12	1
pH	**7.75**	**HF**	0.100		SU			12/11/15 16:43	1
Biochemical Oxygen Demand	**9.3**		2.0		mg/L			12/11/15 15:44	1
Total Suspended Solids	4.0	U	4.0		mg/L			12/15/15 10:39	1
Total Phosphorus as P	0.10	U	0.10		mg/L		12/28/15 05:19	12/29/15 04:48	1

QC Association Summary

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

GC/MS VOA

Analysis Batch: 210776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	624	
LCS 240-210776/6	Lab Control Sample	Total/NA	Water	624	
MB 240-210776/7	Method Blank	Total/NA	Water	624	

Analysis Batch: 210952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-2	TB-12610-121015-SSH-1215	Total/NA	Water	624	
LCS 240-210952/6	Lab Control Sample	Total/NA	Water	624	
MB 240-210952/7	Method Blank	Total/NA	Water	624	

GC Semi VOA

Prep Batch: 210536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	3520C	
LCS 240-210536/14-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-210536/13-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 210803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	608	210536
LCS 240-210536/14-A	Lab Control Sample	Total/NA	Water	608	210536
MB 240-210536/13-A	Method Blank	Total/NA	Water	608	210536

Metals

Prep Batch: 210685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total Recoverable	Water	200.7	
240-59001-1 MS	W-12610-121015-SSH-1115	Total Recoverable	Water	200.7	
240-59001-1 MSD	W-12610-121015-SSH-1115	Total Recoverable	Water	200.7	
LCS 240-210685/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
MB 240-210685/1-A	Method Blank	Total Recoverable	Water	200.7	

Prep Batch: 210689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	245.1	
240-59001-1 MS	W-12610-121015-SSH-1115	Total/NA	Water	245.1	
240-59001-1 MSD	W-12610-121015-SSH-1115	Total/NA	Water	245.1	
LCS 240-210689/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 240-210689/1-A	Method Blank	Total/NA	Water	245.1	

Analysis Batch: 211008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total Recoverable	Water	200.7 Rev 4.4	210685
240-59001-1 MS	W-12610-121015-SSH-1115	Total Recoverable	Water	200.7 Rev 4.4	210685
240-59001-1 MSD	W-12610-121015-SSH-1115	Total Recoverable	Water	200.7 Rev 4.4	210685
LCS 240-210685/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	210685
MB 240-210685/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	210685

Metals (Continued)

Analysis Batch: 211084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	245.1	210689
240-59001-1 MS	W-12610-121015-SSH-1115	Total/NA	Water	245.1	210689
240-59001-1 MSD	W-12610-121015-SSH-1115	Total/NA	Water	245.1	210689
LCS 240-210689/2-A	Lab Control Sample	Total/NA	Water	245.1	210689
MB 240-210689/1-A	Method Blank	Total/NA	Water	245.1	210689

General Chemistry

Analysis Batch: 210450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	5210B-2001	
LCS 240-210450/3	Lab Control Sample	Total/NA	Water	5210B-2001	
SCB 240-210450/2	Method Blank	Total/NA	Water	5210B-2001	
USB 240-210450/1	Method Blank	Total/NA	Water	5210B-2001	

Analysis Batch: 210511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	4500 H+ B-2000	
LCS 240-210511/2	Lab Control Sample	Total/NA	Water	4500 H+ B-2000	

Analysis Batch: 210663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	410.4	
240-59001-1 MS	W-12610-121015-SSH-1115	Total/NA	Water	410.4	
LCS 240-210663/38	Lab Control Sample	Total/NA	Water	410.4	
MB 240-210663/37	Method Blank	Total/NA	Water	410.4	

Analysis Batch: 210870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	SM 2540D	
LCS 240-210870/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 240-210870/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 211886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	1664A	
LCS 240-211886/2	Lab Control Sample	Total/NA	Water	1664A	
MB 240-211886/1	Method Blank	Total/NA	Water	1664A	

Prep Batch: 211941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	Distill/Ammonia	
LCS 240-211941/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
MB 240-211941/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 211946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	350.2	211941
LCS 240-211941/2-A	Lab Control Sample	Total/NA	Water	350.2	211941
MB 240-211941/1-A	Method Blank	Total/NA	Water	350.2	211941

General Chemistry (Continued)

Prep Batch: 212355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	365.2/365.3/365	
240-59001-1 MS	W-12610-121015-SSH-1115	Total/NA	Water	365.2/365.3/365	
240-59001-1 MSD	W-12610-121015-SSH-1115	Total/NA	Water	365.2/365.3/365	
LCS 240-212355/11-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
MB 240-212355/10-A	Method Blank	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 212395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-59001-1	W-12610-121015-SSH-1115	Total/NA	Water	SM4500 P E-1999	212355
240-59001-1 MS	W-12610-121015-SSH-1115	Total/NA	Water	SM4500 P E-1999	212355
240-59001-1 MSD	W-12610-121015-SSH-1115	Total/NA	Water	SM4500 P E-1999	212355
LCS 240-212355/11-A	Lab Control Sample	Total/NA	Water	SM4500 P E-1999	212355
MB 240-212355/10-A	Method Blank	Total/NA	Water	SM4500 P E-1999	212355

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-210776/7
Matrix: Water
Analysis Batch: 210776

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0		ug/L			12/14/15 18:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*61 - 120*		*12/14/15 18:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*78 - 125*		*12/14/15 18:05*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/14/15 18:05*	*1*

Lab Sample ID: LCS 240-210776/6
Matrix: Water
Analysis Batch: 210776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			20.0	16.2		ug/L		81	10 - 251		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*61 - 120*
1,2-Dichloroethane-d4 (Surr)	*90*		*78 - 125*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 240-210952/7
Matrix: Water
Analysis Batch: 210952

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.0	U	1.0		ug/L			12/15/15 19:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*61 - 120*		*12/15/15 19:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*78 - 125*		*12/15/15 19:40*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*12/15/15 19:40*	*1*

Lab Sample ID: LCS 240-210952/6
Matrix: Water
Analysis Batch: 210952

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			20.0	15.2		ug/L		76	10 - 251		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*61 - 120*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*
Toluene-d8 (Surr)	*92*		*80 - 120*

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 240-210536/13-A
Matrix: Water
Analysis Batch: 210803

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210536

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:45	1
Aroclor-1221	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:45	1
Aroclor-1232	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:45	1
Aroclor-1242	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:45	1
Aroclor-1248	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:45	1
Aroclor-1254	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:45	1
Aroclor-1260	0.10	U	0.10		ug/L		12/12/15 08:14	12/15/15 15:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*10 - 114*	*12/12/15 08:14*	*12/15/15 15:45*	*1*
Tetrachloro-m-xylene	*67*		*15 - 131*	*12/12/15 08:14*	*12/15/15 15:45*	*1*

Lab Sample ID: LCS 240-210536/14-A
Matrix: Water
Analysis Batch: 210803

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210536

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			2.50	1.71		ug/L		68	50 - 114		
Aroclor-1260			2.50	1.83		ug/L		73	8 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*50*		*10 - 114*
Tetrachloro-m-xylene	*64*		*15 - 131*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 240-210685/1-A
Matrix: Water
Analysis Batch: 211008

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 210685

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0		ug/L		12/14/15 09:30	12/15/15 12:22	1
Cadmium	2.0	U	2.0		ug/L		12/14/15 09:30	12/15/15 12:22	1
Chromium	5.0	U	5.0		ug/L		12/14/15 09:30	12/15/15 12:22	1
Copper	20	U	20		ug/L		12/14/15 09:30	12/15/15 12:22	1
Iron	100	U	100		ug/L		12/14/15 09:30	12/15/15 12:22	1
Nickel	20	U	20		ug/L		12/14/15 09:30	12/15/15 12:22	1
Lead	3.0	U	3.0		ug/L		12/14/15 09:30	12/15/15 12:22	1

Lab Sample ID: LCS 240-210685/2-A
Matrix: Water
Analysis Batch: 211008

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 210685

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silver			50.0	51.2		ug/L		102	85 - 115		
Cadmium			50.0	50.8		ug/L		102	85 - 115		
Chromium			200	188		ug/L		94	85 - 115		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 240-210685/2-A
Matrix: Water
Analysis Batch: 211008

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 210685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	250	237		ug/L		95	85 - 115
Iron	1000	971		ug/L		97	85 - 115
Nickel	500	487		ug/L		97	85 - 115
Lead	500	471		ug/L		94	85 - 115

Lab Sample ID: 240-59001-1 MS
Matrix: Water
Analysis Batch: 211008

Client Sample ID: W-12610-121015-SSH-1115
Prep Type: Total Recoverable
Prep Batch: 210685

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.0	U	50.0	52.9		ug/L		106	75 - 125
Cadmium	2.0	U	50.0	55.7		ug/L		111	75 - 125
Chromium	5.0	U	200	186		ug/L		93	75 - 125
Copper	20	U	250	265		ug/L		103	75 - 125
Iron	100	U	1000	1020		ug/L		93	75 - 125
Nickel	20	U	500	502		ug/L		100	75 - 125
Lead	3.0	U	500	473		ug/L		95	75 - 125

Lab Sample ID: 240-59001-1 MSD
Matrix: Water
Analysis Batch: 211008

Client Sample ID: W-12610-121015-SSH-1115
Prep Type: Total Recoverable
Prep Batch: 210685

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	5.0	U	50.0	52.7		ug/L		105	75 - 125	0	20
Cadmium	2.0	U	50.0	55.0		ug/L		110	75 - 125	1	20
Chromium	5.0	U	200	187		ug/L		93	75 - 125	0	20
Copper	20	U	250	261		ug/L		102	75 - 125	2	20
Iron	100	U	1000	1030		ug/L		95	75 - 125	1	20
Nickel	20	U	500	498		ug/L		99	75 - 125	1	20
Lead	3.0	U	500	468		ug/L		94	75 - 125	1	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 240-210689/1-A
Matrix: Water
Analysis Batch: 211084

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210689

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	ug/L		12/14/15 14:00	12/15/15 12:31	1

Lab Sample ID: LCS 240-210689/2-A
Matrix: Water
Analysis Batch: 211084

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210689

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.70		ug/L		94	85 - 115

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 240-59001-1 MS
Matrix: Water
Analysis Batch: 211084

Client Sample ID: W-12610-121015-SSH-1115
Prep Type: Total/NA
Prep Batch: 210689

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.20	U	1.00	0.990		ug/L		99	70 - 130		

Lab Sample ID: 240-59001-1 MSD
Matrix: Water
Analysis Batch: 211084

Client Sample ID: W-12610-121015-SSH-1115
Prep Type: Total/NA
Prep Batch: 210689

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	0.971		ug/L		97	70 - 130	2	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 240-211886/1
Matrix: Water
Analysis Batch: 211886

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
HEM	5.0	U	5.0		mg/L			12/22/15 08:10	1

Lab Sample ID: LCS 240-211886/2
Matrix: Water
Analysis Batch: 211886

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
HEM			40.0	36.0		mg/L		90	78 - 114		

Method: 350.2 - Nitrogen, Ammonia, Distillation

Lab Sample ID: MB 240-211941/1-A
Matrix: Water
Analysis Batch: 211946

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211941

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	2.0	U	2.0		mg/L		12/22/15 06:45	12/22/15 10:37	1

Lab Sample ID: LCS 240-211941/2-A
Matrix: Water
Analysis Batch: 211946

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211941

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia (as N)			11.1	11.2		mg/L		101	85 - 114		

Method: 410.4 - COD

Lab Sample ID: MB 240-210663/37
Matrix: Water
Analysis Batch: 210663

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	10	U	10		mg/L			12/14/15 12:00	1

Lab Sample ID: LCS 240-210663/38
Matrix: Water
Analysis Batch: 210663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand			68.0	61.9		mg/L		91	90 - 110		

Lab Sample ID: 240-59001-1 MS
Matrix: Water
Analysis Batch: 210663

Client Sample ID: W-12610-121015-SSH-1115
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chemical Oxygen Demand	10	U	50.0	57.5		mg/L		107	90 - 110		

Method: 4500 H+ B-2000 - pH

Lab Sample ID: LCS 240-210511/2
Matrix: Water
Analysis Batch: 210511

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			6.15	6.180		SU		100	97 - 103		

Method: 5210B-2001 - BOD, 5-Day

Lab Sample ID: SCB 240-210450/2
Matrix: Water
Analysis Batch: 210450

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	SCB Result	SCB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0		mg/L			12/11/15 12:44	1

Lab Sample ID: USB 240-210450/1
Matrix: Water
Analysis Batch: 210450

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0		mg/L			12/11/15 12:42	1

Lab Sample ID: LCS 240-210450/3
Matrix: Water
Analysis Batch: 210450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Biochemical Oxygen Demand			198	206		mg/L		104	85 - 115		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-210870/1
Matrix: Water
Analysis Batch: 210870

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	4.0	U	4.0		mg/L			12/15/15 10:39	1

Lab Sample ID: LCS 240-210870/2
Matrix: Water
Analysis Batch: 210870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			74.4	65.0		mg/L		87	73 - 113		

Method: SM4500 P E-1999 - Phosphorus

Lab Sample ID: MB 240-212355/10-A
Matrix: Water
Analysis Batch: 212395

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 212355

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10		mg/L		12/28/15 05:17	12/29/15 04:48	1

Lab Sample ID: LCS 240-212355/11-A
Matrix: Water
Analysis Batch: 212395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 212355

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Phosphorus as P			6.79	6.63		mg/L		98	53 - 134		

Lab Sample ID: 240-59001-1 MS
Matrix: Water
Analysis Batch: 212395

Client Sample ID: W-12610-121015-SSH-1115
Prep Type: Total/NA
Prep Batch: 212355

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Phosphorus as P	0.10	U	0.500	0.521		mg/L		104	10 - 199		

Lab Sample ID: 240-59001-1 MSD
Matrix: Water
Analysis Batch: 212395

Client Sample ID: W-12610-121015-SSH-1115
Prep Type: Total/NA
Prep Batch: 212355

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Phosphorus as P	0.10	U	0.500	0.514		mg/L		103	10 - 199	1	20

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(61-120)	(78-125)	(80-120)
240-59001-1	W-12610-121015-SSH-1115	83	91	94
240-59001-2	TB-12610-121015-SSH-1215	84	91	93
LCS 240-210776/6	Lab Control Sample	86	90	97
LCS 240-210952/6	Lab Control Sample	78	93	92
MB 240-210776/7	Method Blank	88	90	94
MB 240-210952/7	Method Blank	73	86	89

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB2	TCX2
Lab Sample ID	Client Sample ID	(10-114)	(15-131)
240-59001-1	W-12610-121015-SSH-1115	60	32
LCS 240-210536/14-A	Lab Control Sample	50	64
MB 240-210536/13-A	Method Blank	68	67

Surrogate Legend

DCB = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

Client Sample ID: W-12610-121015-SSH-1115

Lab Sample ID: 240-59001-1

Date Collected: 12/10/15 08:30

Matrix: Water

Date Received: 12/11/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	210776	12/15/15 08:02	TJL1	TAL CAN
Total/NA	Prep	3520C			210536	12/12/15 08:14	JDR	TAL CAN
Total/NA	Analysis	608		1	210803	12/15/15 15:27	LSH	TAL CAN
Total Recoverable	Prep	200.7			210685	12/14/15 09:30	WKD	TAL CAN
Total Recoverable	Analysis	200.7 Rev 4.4		1	211008	12/15/15 19:32	KLC	TAL CAN
Total/NA	Prep	245.1			210689	12/14/15 14:00	WKD	TAL CAN
Total/NA	Analysis	245.1		1	211084	12/15/15 12:34	WAL	TAL CAN
Total/NA	Analysis	1664A		1	211886	12/22/15 08:10	BLW	TAL CAN
Total/NA	Prep	Distill/Ammonia			211941	12/22/15 06:45	JAS	TAL CAN
Total/NA	Analysis	350.2		1	211946	12/22/15 10:43	JAS	TAL CAN
Total/NA	Analysis	410.4		1	210663	12/14/15 12:12	TPH	TAL CAN
Total/NA	Analysis	4500 H+ B-2000		1	210511	12/11/15 16:43	GNR	TAL CAN
Total/NA	Analysis	5210B-2001		1	210450	12/11/15 15:44	DTN	TAL CAN
Total/NA	Analysis	SM 2540D		1	210870	12/15/15 10:39	GNR	TAL CAN
Total/NA	Prep	365.2/365.3/365			212355	12/28/15 05:19	TPH	TAL CAN
Total/NA	Analysis	SM4500 P E-1999		1	212395	12/29/15 04:48	TPH	TAL CAN

Client Sample ID: TB-12610-121015-SSH-1215

Lab Sample ID: 240-59001-2

Date Collected: 12/10/15 08:45

Matrix: Water

Date Received: 12/11/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	210952	12/16/15 04:14	TJL1	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: GHD Services Inc.
Project/Site: 12610-T03, RACER Bay City

TestAmerica Job ID: 240-59001-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	06-30-16
New York	NELAP	2	10975	03-31-16
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS

4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

TestAmerica Michigan
10448 Citation Drive
Suite 200
Brighton, MI 48116
Phone: 810.229.2763 Fax:

1.7 | C1.4

Chain of Custody Record

122378

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: M. Tomlinson	Site Contact: S. Havermeyer	Date: 12/10/15	COC No: 122378
Company Name: GHD Services	Tel/Fax: 517 884 0510	Lab Contact: D. Hulme	Carrier: FedEx	1 of 1 COCs
Address: 14496 N. Sheldon Rd Ste 200	Analysis Turnaround Time			Sampler: S. Havermeyer
City/State/Zip: Plymouth MI 48170	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 734-453-1523	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: RacTrust Bay City	☐ 1 week			
Site: SSW 12610-011-T23	☐ 2 days			Job / SDG No.:
PO # 2400628B	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	PCBs	HEM	pH	Vinyl chloride	TSS	T. phosphorus	COD	BOD	Metals	Ammonia nitrogen	Sample Specific Notes:
W-12610-121015-SSH-1115	12/10/15	0830	C, G	WT	11	N	N	X	X	X	X	X	X	X	X	X	X	
TB-12610-121015-SSH-1215	12/10/15	0845	G	TB	1	N	N				X							

SSH

Page 29 of 31

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1, 3, 4

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: 795627 | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

	Company	Date/Time		Company	Date/Time
Relinquished by:	GHD	12/10/15 1500	Received by:		
Relinquished by:			Received by:		
Relinquished by:			Received in Laboratory by:	TA	12/11/15 930

12/29/2015

14 13 12 11 10 9 8 7 6 5 4 3 2 1

TestAmerica Canton Sample Receipt Form/Narrative Login # : 54661
Canton Facility

Client GHD Site Name ______ Cooler unpacked by: [signature]

Cooler Received on 12/11/15 Opened on 12/11/15

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other ______

Receipt After-hours: Drop-off Date/Time ______ Storage Location ______

TestAmerica Cooler # ______ Foam Box Client Cooler Box Other ______

Packing material used: Bubble Wrap Foam Plastic Bag None Other ______

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   - IR GUN# 53 (CF +0.1 °C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C
   - IR GUN# 48 (CF -0.3 °C) Observed Cooler Temp. 1.7 °C Corrected Cooler Temp. 1.4 °C ☐ See Multiple Cooler Form
   - ~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C~~
   - IR GUN# 8 (CF -0.5 °C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 — Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? — Yes No NA
   - -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? — Yes No
3. Shippers' packing slip attached to the cooler(s)? — Yes No
4. Did custody papers accompany the sample(s)? — Yes No
5. Were the custody papers relinquished & signed in the appropriate place? — Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? — Yes No
7. Did all bottles arrive in good condition (Unbroken)? — Yes No
8. Could all bottle labels be reconciled with the COC? — Yes No
9. Were correct bottle(s) used for the test(s) indicated? — Yes No
10. Sufficient quantity received to perform indicated analyses? — Yes No
11. Were sample(s) at the correct pH upon receipt? — Yes No NA pH Strip Lot# HC559158
12. Were VOAs on the COC? — Yes No
13. Were air bubbles >6 mm in any VOA vials? — Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B5234KNB — Yes No
15. Was a LL Hg or Me Hg trip blank present? ______ — Yes No

Contacted PM ______ Date ______ by ______ via Verbal Voice Mail Other

Concerning ______

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) ______ were received after the recommended holding time had expired.

Sample(s) ______ were received in a broken container.

Sample(s) ______ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ______ were further preserved in the laboratory.

Time preserved: ______ Preservative(s) added/Lot number(s): ______

Ref: SOP NC-SC-0005, Sample Receiving
X:\X-Drive Document Control\SOPs\Work Instructions\Word Version Work Instructions\WI-NC-099W-112315 Cooler Receipt Form.doc djl

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
W-12610-121015-SSH-1115	240-59001-E-1	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
W-12610-121015-SSH-1115	240-59001-F-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
W-12610-121015-SSH-1115	240-59001-J-1	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____
W-12610-121015-SSH-1115	240-59001-K-1	Amber Glass 1 liter - Sulfuric Acid	_____	_____	_____