



Revitalizing Auto Communities
Environmental Response Trust

May 21, 2011

Mr. Jason Casteel
City of Saginaw Waste Water Treatment Division
Environmental Compliance
2406 Veterans Memorial Parkway
Saginaw, Michigan
U.S.A. 48601

Dear Mr. Casteel:

Re: Consent Order Quarterly and SIU Semi-Annual Monitoring at
Outfalls CFD-01 and CFD-02 for April 2011
GMPT Saginaw Malleable Iron (SMI), Saginaw, Michigan

This letter is submitted on behalf of Revitalizing Auto Communities Environmental Response Trust (RACER). The City of Saginaw/General Motors Consent Order Section 11.a and Section VIII of Significant Industrial User (SIU) Discharge Permit #09-517 (Permit) requires submittal of quarterly reports containing applicable monitoring data.

This letter presents the requested Consent Order and Permit quarterly/semi-annual monitoring analytical results for 24-hour time proportional composite samples collected from Outfalls CFD-01 and CFD-02. The analytical results represent sampling for the second quarter of 2011 and are representative of normal daily discharges. 24-hour time proportional composite samples were collected on the 19th, 20th, and 21st of April, 2011. Samples were analyzed in accordance with the Consent Order and Permit requirements including 40CFR Part 136. Sample results are presented in Attachment A. The laboratory has an active quality control and quality assurance (QC/QA) program in place to ensure reliable and accurate data.

There have been no changes in facility activity, production, or discharge practices. The facility is a closed foundry and has been demolished. There have been no changes not previously reported. Materials, if any, which could cause slug loading or detrimental effect on the sewer system are stored in a manner to minimize any possible discharge to the sewer system.

The following summarizes the PCB analytical results (analyzed in accordance with EPA Method 608):

<i>Date</i>	<i>Sample Time</i>	<i>CFD-01 ($\mu\text{g/L}$) (Sample Tag 01)</i>	<i>CFD-02 ($\mu\text{g/L}$) (Sample Tag 02)</i>	<i>Flow (gpd)</i>
April 19	11:00, 10:30	<0.1	<0.1	***
April 20	11:00, 10:30	<0.1	<0.1	***
April 21	10:15, 10:00	<0.1	<0.1	***

Note:

*** Flow at CFD-02 was too low to obtain an accurate reading, therefore, average and maximum daily flows are not available, however, the only discharge is incidental groundwater and stormwater infiltration.

The sample at CFD-02 is in compliance or deemed to be in compliance.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possibility of fine and imprisonment for knowing violations.

If you have any questions or require clarification on the above information please feel free to contact me at 313-486-2908.

Yours truly,



Grant Trigger
Cleanup Manager - Michigan

Attachment

cc: Jeanette Best - City of Saginaw
Kimberly Mason - City of Saginaw
Dave Favero - RACER
Michael Tomka - CRA

ATTACHMENT A
LABORATORY REPORTS



Analytical Laboratory Report

Report ID: S48448.01(01)
Generated on 04/28/2011

Report to

Attention: Steve Hoevemeyer
MLC SMI
77 W. Center
MC: 486-577-008
Saginaw, Michigan 48605

Phone: 989-757-0920 FAX: 989-757-0707
Email: shoevemeyer@croworld.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S48448.01-S48448.02
Project: 02-01 Qtly - S.A. SSOW# 7878-002
Collected Date: 04/19/2011
Submitted Date/Time: 04/19/2011 14:50
Sampled by: Terry Gooslin
P.O. #: MLI0001

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S48448.01	02	Liquid	04/19/2011 10:30
S48448.02	01	Liquid	04/19/2011 11:00



Analytical Laboratory Report

Lab Sample ID: S48448.01
 Sample Tag: 02
 Collected Date/Time: 04/19/2011 10:30
 Matrix: Liquid
 COC Reference: 60584

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	1L Amber	None	Yes	4.1	IR
2	40ml Glass	HCL	Yes	4.1	IR
1	125ml Plastic	HNO3	Yes	4.1	IR
1	125ml Plastic	NaOH	Yes	4.1	IR
1	250ml Plastic	H2SO4	Yes	4.1	IR
1	125ml Amber	H2SO4	Yes	4.1	IR
1	1L Plastic	None	Yes	4.1	IR
1	32oz Glass	HCL	Yes	4.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	04/25/11 18:10	DLR		
Extraction, PCB	Completed			3510C	04/25/11 15:47	ADB		
Mercury Digestion	Completed			7471A	04/21/11 12:00	JRT		
Metal Digestion	Completed			3015A	04/25/11 01:00	SLR		

Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-G	04/21/11 11:54	JDP	57-12-5AM	
Ammonia-N	1.52	mg/L	0.02	4500-NH3 D	04/20/11 16:52	MJC	7664-41-7	
COD	27	mg/L	5	410.4	04/27/11 15:51	MJC		
Field pH	7.87	STD Units	0.01	4500-H+ B	04/19/11 10:30	TG		
Field Temperature	59	oF	1	2550 B	04/19/11 10:30	TG		
Flow, Field	0	gpd			04/19/11 10:30	TG		
Oil & Grease	2	mg/L	1	413.1	04/20/11 14:57	DJS		
Phenols	Not detected	mg/L	0.01	420.1	04/20/11 15:40	JKB		
TBOD5 - Set	Completed	mg/L		10360	04/20/11 16:30	DJS		
TBOD5	7	mg/L	1	10360	04/25/11 16:45	DJS		
Total Dissolved Solids	770	mg/L	1	2540C	04/26/11 15:00	DJS		
Total Phosphorus	0.25	mg/L	0.01	4500-PE	04/20/11 14:27	MJC	7723-14-0	
Total Suspended Solids	9	mg/L	1	2540 D	04/25/11 15:00	DJS		

Metals

Arsenic	0.001	mg/L	0.002	200.8	04/25/11 16:07	SLS	7440-38-2	b
Cadmium	Not detected	mg/L	0.0005	200.8	04/25/11 16:07	SLS	7440-43-9	
Chromium	0.002	mg/L	0.005	200.8	04/25/11 16:07	SLS	7440-47-3	b
Copper	0.002	mg/L	0.004	200.8	04/25/11 16:07	SLS	7440-50-8	b
Lead	Not detected	mg/L	0.003	200.8	04/25/11 16:07	SLS	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1	04/21/11 15:23	JRT	7439-97-6	
Molybdenum	Not detected	mg/L	0.005	200.8	04/25/11 16:07	SLS	7439-98-7	
Nickel	0.002	mg/L	0.005	200.8	04/25/11 16:07	SLS	7440-02-0	b
Selenium	0.001	mg/L	0.005	200.8	04/25/11 16:07	SLS	7782-49-2	b
Silver	Not detected	mg/L	0.0005	200.8	04/25/11 16:07	SLS	7440-22-4	
Zinc	0.007	mg/L	0.005	200.8	04/25/11 16:07	SLS	7440-66-6	

b-Value detected less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S48448.01 (continued)

Sample Tag: 02

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - PCBs/Pesticides								
PCB								
PCB-1016	Not detected	ug/L	0.1	608	04/26/11 13:55	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/26/11 13:55	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/26/11 13:55	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/26/11 13:55	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/26/11 13:55	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/26/11 13:55	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	04/26/11 13:55	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	04/26/11 13:55	JANB	1336-36-3	
Organics - Semi-Volatiles								
Semi-Volatile Organics GM-SMI 02 TTO								
Acenaphthene	Not detected	ug/L	10	625	04/27/11 13:29	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	10	625	04/27/11 13:29	PL	208-96-8	
Anthracene	Not detected	ug/L	10	625	04/27/11 13:29	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	10	625	04/27/11 13:29	PL	56-55-3	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	10	625	04/27/11 13:29	PL	117-81-7	
Butyl benzyl phthalate	Not detected	ug/L	10	625	04/27/11 13:29	PL	85-68-7	
Chrysene	Not detected	ug/L	10	625	04/27/11 13:29	PL	218-01-9	
di-n-Butyl phthalate	Not detected	ug/L	10	625	04/27/11 13:29	PL	84-74-2	
2,4-Dichlorophenol	Not detected	ug/L	10	625	04/27/11 13:29	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	10	625	04/27/11 13:29	PL	84-66-2	
Dimethyl phthalate	Not detected	ug/L	10	625	04/27/11 13:29	PL	131-11-3	
2,4-Dimethylphenol	Not detected	ug/L	10	625	04/27/11 13:29	PL	105-67-9	
Fluoranthene	Not detected	ug/L	10	625	04/27/11 13:29	PL	206-44-0	
Fluorene	Not detected	ug/L	10	625	04/27/11 13:29	PL	86-73-7	
Naphthalene	Not detected	ug/L	10	625	04/27/11 13:29	PL	91-20-3	
Pentachlorophenol	Not detected	ug/L	10	625	04/27/11 13:29	PL	87-86-5	
Phenol	Not detected	ug/L	10	625	04/27/11 13:29	PL	108-95-2	
Pyrene	Not detected	ug/L	10	625	04/27/11 13:29	PL	129-00-0	
Phenanthrene	Not detected	ug/L	10	625	04/27/11 13:29	PL	85-01-8	
Organics - Volatiles								
Total BTEX	Not detected	ug/L	5	624	04/21/11 18:07	WAT		
Volatile Organics-GM-SMI 02 VOC TTO List								
Methylene chloride	Not detected	ug/L	5	624	04/21/11 18:07	WAT	75-09-2	
Chloroform	Not detected	ug/L	1	624	04/21/11 18:07	WAT	67-66-3	
Benzene	Not detected	ug/L	1	624	04/21/11 18:07	WAT	71-43-2	
Toluene	Not detected	ug/L	1	624	04/21/11 18:07	WAT	108-88-3	
Ethylbenzene	Not detected	ug/L	1	624	04/21/11 18:07	WAT	100-41-4	
o-Xylene	Not detected	ug/L	1	624	04/21/11 18:07	WAT	95-47-6	
p,m-Xylene	Not detected	ug/L	1	624	04/21/11 18:07	WAT		



Analytical Laboratory Report

Lab Sample ID: S48448.02
Sample Tag: 01
Collected Date/Time: 04/19/2011 11:00
Matrix: Liquid
COC Reference: 60584

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

Extraction, PCB	Completed			3510C	04/25/11 15:47	ADB		
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Organics - PCBs/Pesticides

PCB

PCB-1016	Not detected	ug/L	0.1	608	04/26/11 14:57	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/26/11 14:57	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/26/11 14:57	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/26/11 14:57	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/26/11 14:57	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/26/11 14:57	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	04/26/11 14:57	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	04/26/11 14:57	JANB	1336-36-3	

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME: Steve Hervevemeny - CRA
 COMPANY: SMT
 ADDRESS: 77 W. Center
 CITY: SAGINAW STATE: MI ZIP CODE:
 PHONE NO. FAX NO. P.O. NO.
 E-MAIL ADDRESS QUOTE NO.

CONTACT NAME: : SAME
 COMPANY:
 ADDRESS:
 CITY: STATE: ZIP CODE:
 PHONE NO. FAX NO. P.O. NO.

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

PROJECT NO./NAME: 02-01 OHY-SA SAMPLER(S) - PLEASE PRINT SIGN NAME: J. Goslin
 TURNAROUND TIME REQUIRED: 24 HR 48 HR 72 HR STANDARD OTHER
 DELIVERABLES REQUIRED: STANDARD LEVEL II LEVEL III OTHER
 MATRIX CODE: GW-GROUNDWATER SL-SLUDGE WW-WASTEWATER O-OIL S-SOIL A-AIR L-LIQUID W-WASTE SD-SOLID M-MISC

SPECIAL INSTRUCTIONS/NOTES: S.A 1 of 3

MERIT LAB NO.	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCL	HNO3	H2SO4	NHOH	MCOH	OTHER	# Containers & Preservatives
	DATE	TIME											
<u>48446.01</u>	<u>4-19-11</u>	<u>1030</u>	<u>02</u>	<u>L</u>	<u>11</u>	<u>X</u>							
<u>.02</u>	<u>"</u>	<u>1130</u>	<u>01</u>	<u>L</u>	<u>2</u>	<u>X</u>							

PH = 7.87
 TEMP = 59°
 Flow =
 Rain - Snow mix

RELINQUISHED BY: [Signature] DATE: 4-19-11 TIME:
 RECEIVED BY: [Signature] DATE: 4-19-11 TIME: 1230
 RELINQUISHED BY: DATE: TIME:
 RECEIVED BY: DATE: TIME:

RELINQUISHED BY: [Signature] DATE: 4-19-11 TIME: 1430
 RECEIVED BY: [Signature] DATE: 4-19-11 TIME: 1430
 SEAL NO. SEAL INTACT YES NO INITIALS NOTES: TEMP. ON ARRIVAL: 41
 SEAL NO. SEAL INTACT YES NO INITIALS



Analytical Laboratory Report

Report ID: S48482.01(01)
Generated on 05/02/2011

Report to

Attention: Steve Hoevemeyer
MLC SMI
77 W. Center
MC: 486-577-008
Saginaw, Michigan 48605

Phone: 989-757-0920 FAX: 989-757-0707
Email: shoevemeyer@croworld.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S48482.01-S48482.02
Project: 02-01 Qtly - S.A. SSOW# 7878-002
Collected Date: 04/20/2011
Submitted Date/Time: 04/21/2011 15:10
Sampled by: Terry Gooslin
P.O. #: MLI0001

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
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Laboratory Certifications:

Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S48482.01	02	Liquid	04/20/2011 10:30
S48482.02	01	Liquid	04/20/2011 11:00



Analytical Laboratory Report

Lab Sample ID: S48482.01
 Sample Tag: 02
 Collected Date/Time: 04/20/2011 10:30
 Matrix: Liquid
 COC Reference: 61605

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.2	IR
2	40ml Glass	HCL	Yes	4.2	IR
1	125ml Plastic	HNO3	Yes	4.2	IR
1	125ml Plastic	NaOH	Yes	4.2	IR
1	250ml Plastic	H2SO4	Yes	4.2	IR
1	125ml Amber	H2SO4	Yes	4.2	IR
1	1L Plastic	None	Yes	4.2	IR
1	32oz Glass	HCL	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	04/25/11 18:10	DLR		
Extraction, PCB	Completed			3510C	04/25/11 15:47	ADB		
Mercury Digestion	Completed			7471A	04/25/11 11:45	JRT		
Metal Digestion	Completed			3015A	04/25/11 01:00	SLR		

Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-G	04/28/11 14:18	JDP	57-12-5AM	
Ammonia-N	1.07	mg/L	0.02	4500-NH3 D	04/28/11 13:59	MJC	7664-41-7	
COD	43	mg/L	5	410.4	04/27/11 15:53	MJC		
Field pH	7.95	STD Units	0.01	4500-H+ B	04/20/11 10:30	TG		
Field Temperature	60	oF	1	2550 B	04/20/11 10:30	TG		
Flow, Field	0	gpd			04/20/11 10:30	TG		
Oil & Grease	Not detected	mg/L	1	413.1	05/02/11 15:44	DJS		
Phenols	Not detected	mg/L	0.01	420.1	04/28/11 14:20	JKB		
TBOD5 - Set	Completed	mg/L		10360	04/22/11 07:00	DJS		
TBOD5	5	mg/L	1	10360	04/27/11 07:30	DJS		
Total Dissolved Solids	590	mg/L	1	2540C	04/26/11 15:00	DJS		
Total Phosphorus	0.40	mg/L	0.01	4500-PE	04/27/11 15:35	MJC	7723-14-0	
Total Suspended Solids	25	mg/L	1	2540 D	04/26/11 15:30	DJS		

Metals

Arsenic	0.002	mg/L	0.002	200.8	04/25/11 16:56	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	200.8	04/25/11 16:56	SLS	7440-43-9	
Chromium	0.002	mg/L	0.005	200.8	04/25/11 16:56	SLS	7440-47-3	b
Copper	0.004	mg/L	0.004	200.8	04/25/11 16:56	SLS	7440-50-8	b
Lead	0.002	mg/L	0.003	200.8	04/25/11 16:56	SLS	7439-92-1	b
Mercury	Not detected	mg/L	0.0002	245.1	04/25/11 16:00	JRT	7439-97-6	
Molybdenum	0.004	mg/L	0.005	200.8	04/25/11 16:56	SLS	7439-98-7	b
Nickel	0.002	mg/L	0.005	200.8	04/25/11 16:56	SLS	7440-02-0	b
Selenium	0.001	mg/L	0.005	200.8	04/25/11 16:56	SLS	7782-49-2	b
Silver	Not detected	mg/L	0.0005	200.8	04/25/11 16:56	SLS	7440-22-4	
Zinc	0.021	mg/L	0.005	200.8	04/25/11 16:56	SLS	7440-66-6	

b-Value detected less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S48482.01 (continued)

Sample Tag: 02

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - PCBs/Pesticides								
PCB								
PCB-1016	Not detected	ug/L	0.1	608	04/27/11 14:26	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/27/11 14:26	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/27/11 14:26	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/27/11 14:26	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/27/11 14:26	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/27/11 14:26	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	04/27/11 14:26	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	04/27/11 14:26	JANB	1336-36-3	
Organics - Semi-Volatiles								
Semi-Volatile Organics GM-SMI 02 TTO								
Acenaphthene	Not detected	ug/L	10	625	04/27/11 14:05	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	10	625	04/27/11 14:05	PL	208-96-8	
Anthracene	Not detected	ug/L	10	625	04/27/11 14:05	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	10	625	04/27/11 14:05	PL	56-55-3	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	10	625	04/27/11 14:05	PL	117-81-7	
Butyl benzyl phthalate	Not detected	ug/L	10	625	04/27/11 14:05	PL	85-68-7	
Chrysene	Not detected	ug/L	10	625	04/27/11 14:05	PL	218-01-9	
di-n-Butyl phthalate	Not detected	ug/L	10	625	04/27/11 14:05	PL	84-74-2	
2,4-Dichlorophenol	Not detected	ug/L	10	625	04/27/11 14:05	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	10	625	04/27/11 14:05	PL	84-66-2	
Dimethyl phthalate	Not detected	ug/L	10	625	04/27/11 14:05	PL	131-11-3	
2,4-Dimethylphenol	Not detected	ug/L	10	625	04/27/11 14:05	PL	105-67-9	
Fluoranthene	Not detected	ug/L	10	625	04/27/11 14:05	PL	206-44-0	
Fluorene	Not detected	ug/L	10	625	04/27/11 14:05	PL	86-73-7	
Naphthalene	Not detected	ug/L	10	625	04/27/11 14:05	PL	91-20-3	
Pentachlorophenol	Not detected	ug/L	10	625	04/27/11 14:05	PL	87-86-5	
Phenol	Not detected	ug/L	10	625	04/27/11 14:05	PL	108-95-2	
Pyrene	Not detected	ug/L	10	625	04/27/11 14:05	PL	129-00-0	
Phenanthrene	Not detected	ug/L	10	625	04/27/11 14:05	PL	85-01-8	
Organics - Volatiles								
Total BTEX	Not detected	ug/L	5	624	04/22/11 16:01	WAT		
Volatile Organics-GM-SMI 02 VOC TTO List								
Methylene chloride	Not detected	ug/L	5	624	04/22/11 16:01	WAT	75-09-2	
Chloroform	Not detected	ug/L	1	624	04/22/11 16:01	WAT	67-66-3	
Benzene	Not detected	ug/L	1	624	04/22/11 16:01	WAT	71-43-2	
Toluene	Not detected	ug/L	1	624	04/22/11 16:01	WAT	108-88-3	
Ethylbenzene	Not detected	ug/L	1	624	04/22/11 16:01	WAT	100-41-4	
o-Xylene	Not detected	ug/L	1	624	04/22/11 16:01	WAT	95-47-6	
p,m-Xylene	Not detected	ug/L	1	624	04/22/11 16:01	WAT		



Analytical Laboratory Report

Lab Sample ID: S48482.02
Sample Tag: 01
Collected Date/Time: 04/20/2011 11:00
Matrix: Liquid
COC Reference: 61605

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

Extraction, PCB	Completed			3510C	04/25/11 15:47	ADB		
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Organics - PCBs/Pesticides

PCB

PCB-1016	Not detected	ug/L	0.1	608	04/26/11 13:17	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/26/11 13:17	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/26/11 13:17	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/26/11 13:17	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/26/11 13:17	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/26/11 13:17	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	04/26/11 13:17	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	04/26/11 13:17	JANB	1336-36-3	



2680 East Lansing Dr., East Lansing, MI 48823
 Phone (517) 332-0167 Fax (517) 332-6333
 www.meritlabs.com

C.O.C. PAGE # _____ OF _____

61605

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME: *Steve Hoseney CRA*
 COMPANY: *SMI*
 ADDRESS: *77 W. Center*
 CITY: *Saginaw* STATE: *MI* ZIP CODE: _____
 PHONE NO. _____ FAX NO. _____ P.O. NO. _____
 E-MAIL ADDRESS _____ QUOTE NO. _____

CONTACT NAME _____ LI SAME _____
 COMPANY _____
 ADDRESS _____
 CITY _____ STATE _____ ZIP CODE _____
 PHONE NO. _____ FAX NO. _____ P.O. NO. _____

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

PROJECT NO./NAME: *02-01 Otley's A* SAMPLE(S) - PLEASE PRINT/IGN NAME: *T. GOSLIN*
 TURNAROUND TIME REQUIRED: 24 HR 48 HR 72 HR STANDARD OTHER
 DELIVERABLES REQUIRED: STANDARD LEVEL II LEVEL III OTHER

Day 2 of 3
 SPECIAL INSTRUCTIONS/NOTES

MATRIX CODE: GW=GROUNDWATER SL=SLUDGE WW=WASTEWATER O=OIL S=SOIL A=AIR L=LIQUID W=WASTE SD=SOLID ML=MISC
 # Containers & Preservatives

MERIT LAB NO.	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCL	HNO3	H2SO4	NICH	MICH	OTHER
	DATE	TIME										
<i>48482.01</i>	<i>4-20-11</i>	<i>1030</i>	<i>02</i>	<i>L</i>	<i>10</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>
<i>.02</i>	<i>"</i>	<i>1100</i>	<i>01</i>	<i>L</i>	<i>2</i>	<i>Y</i>						

PH = 7.95
Temp = 60°
Flow = 0
Had some flow - but not enough to register.
Rain

RELINQUISHED BY: *[Signature]* DATE: *4-20-11* TIME: _____
 RECEIVED BY: *[Signature]* DATE: *4-21-11* TIME: *1730*
 RELINQUISHED BY: _____ DATE: _____ TIME: _____
 RECEIVED BY: _____ DATE: _____ TIME: _____

RELINQUISHED BY: *[Signature]* DATE: *4-21-11* TIME: *510*
 RECEIVED BY: *[Signature]* DATE: *4-21-11* TIME: *1510*
 SEAL NO. _____ SEAL INTACT YES NO INITIALS _____ NOTES: _____ TEMP. ON ARRIVAL: *42*
 SEAL NO. _____ SEAL INTACT YES NO INITIALS _____

PLEASE NOTE: SIGNING ACKNOWLEDGES ACCEPTANCE OF TERMS & CONDITIONS ON REVERSE SIDE



Analytical Laboratory Report

Report ID: S48483.01(01)
Generated on 05/02/2011

Report to

Attention: Steve Hoevemeyer
MLC SMI
77 W. Center
MC: 486-577-008
Saginaw, Michigan 48605

Phone: 989-757-0920 FAX: 989-757-0707
Email: shoevemeyer@croworld.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S48483.01-S48483.02
Project: 02-01 Qtly - S.A. SSOW# 7878-002
Collected Date: 04/21/2011
Submitted Date/Time: 04/21/2011 15:10
Sampled by: Terry Gooslin
P.O. #: MLI0001

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S48483.01	02	Liquid	04/21/2011 10:30
S48483.02	01	Liquid	04/21/2011 11:00



Analytical Laboratory Report

Lab Sample ID: S48483.01
 Sample Tag: 02
 Collected Date/Time: 04/21/2011 10:30
 Matrix: Liquid
 COC Reference: 61599

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.2	IR
2	40ml Glass	HCL	Yes	4.2	IR
1	125ml Plastic	HNO3	Yes	4.2	IR
1	125ml Plastic	NaOH	Yes	4.2	IR
1	250ml Plastic	H2SO4	Yes	4.2	IR
1	125ml Amber	H2SO4	Yes	4.2	IR
1	1L Plastic	None	Yes	4.2	IR
1	32oz Glass	HCL	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	04/25/11 18:10	DLR		
Extraction, PCB	Completed			3510C	04/26/11 15:41	ADB		
Mercury Digestion	Completed			7471A	04/25/11 11:45	JRT		
Metal Digestion	Completed			3015A	04/25/11 01:00	SLR		

Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-G	04/28/11 14:20	JDP	57-12-5AM	
Ammonia-N	0.88	mg/L	0.02	4500-NH3 D	04/28/11 14:18	MJC	7664-41-7	
COD	34	mg/L	5	410.4	04/27/11 15:53	MJC		
Field pH	7.92	STD Units	0.01	4500-H+ B	04/21/11 10:30	TG		
Field Temperature	59	oF	1	2550 B	04/21/11 10:30	TG		
Flow, Field	0	gpd			04/21/11 10:30	TG		
Oil & Grease	1	mg/L	1	413.1	05/02/11 15:44	DJS		
Phenols	Not detected	mg/L	0.01	420.1	04/28/11 14:30	JKB		
TBOD5 - Set	Completed	mg/L		10360	04/22/11 07:00	DJS		
TBOD5	4	mg/L	1	10360	04/27/11 07:30	DJS		
Total Dissolved Solids	644	mg/L	1	2540C	04/26/11 15:00	DJS		
Total Phosphorus	0.17	mg/L	0.01	4500-PE	04/27/11 16:25	MJC	7723-14-0	
Total Suspended Solids	8	mg/L	1	2540 D	04/26/11 15:30	DJS		

Metals

Arsenic	0.002	mg/L	0.002	200.8	04/25/11 17:00	SLS	7440-38-2	b
Cadmium	0.0001	mg/L	0.0005	200.8	04/25/11 17:00	SLS	7440-43-9	b
Chromium	0.002	mg/L	0.005	200.8	04/25/11 17:00	SLS	7440-47-3	b
Copper	0.002	mg/L	0.004	200.8	04/25/11 17:00	SLS	7440-50-8	b
Lead	0.001	mg/L	0.003	200.8	04/25/11 17:00	SLS	7439-92-1	b
Mercury	Not detected	mg/L	0.0002	245.1	04/25/11 16:02	JRT	7439-97-6	
Molybdenum	0.002	mg/L	0.005	200.8	04/25/11 17:00	SLS	7439-98-7	b
Nickel	0.002	mg/L	0.005	200.8	04/25/11 17:00	SLS	7440-02-0	b
Selenium	0.001	mg/L	0.005	200.8	04/25/11 17:00	SLS	7782-49-2	b
Silver	Not detected	mg/L	0.0005	200.8	04/25/11 17:00	SLS	7440-22-4	
Zinc	0.014	mg/L	0.005	200.8	04/25/11 17:00	SLS	7440-66-6	

b-Value detected less than reporting limit, but greater than MDL



Analytical Laboratory Report

Lab Sample ID: S48483.01 (continued)

Sample Tag: 02

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - PCBs/Pesticides								
PCB								
PCB-1016	Not detected	ug/L	0.1	608	04/27/11 02:13	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/27/11 02:13	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/27/11 02:13	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/27/11 02:13	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/27/11 02:13	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/27/11 02:13	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	04/27/11 02:13	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	04/27/11 02:13	JANB	1336-36-3	
Organics - Semi-Volatiles								
Semi-Volatile Organics GM-SMI 02 TTO								
Acenaphthene	Not detected	ug/L	10	625	04/27/11 14:41	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	10	625	04/27/11 14:41	PL	208-96-8	
Anthracene	Not detected	ug/L	10	625	04/27/11 14:41	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	10	625	04/27/11 14:41	PL	56-55-3	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	10	625	04/27/11 14:41	PL	117-81-7	
Butyl benzyl phthalate	Not detected	ug/L	10	625	04/27/11 14:41	PL	85-68-7	
Chrysene	Not detected	ug/L	10	625	04/27/11 14:41	PL	218-01-9	
di-n-Butyl phthalate	Not detected	ug/L	10	625	04/27/11 14:41	PL	84-74-2	
2,4-Dichlorophenol	Not detected	ug/L	10	625	04/27/11 14:41	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	10	625	04/27/11 14:41	PL	84-66-2	
Dimethyl phthalate	Not detected	ug/L	10	625	04/27/11 14:41	PL	131-11-3	
2,4-Dimethylphenol	Not detected	ug/L	10	625	04/27/11 14:41	PL	105-67-9	
Fluoranthene	Not detected	ug/L	10	625	04/27/11 14:41	PL	206-44-0	
Fluorene	Not detected	ug/L	10	625	04/27/11 14:41	PL	86-73-7	
Naphthalene	Not detected	ug/L	10	625	04/27/11 14:41	PL	91-20-3	
Pentachlorophenol	Not detected	ug/L	10	625	04/27/11 14:41	PL	87-86-5	
Phenol	Not detected	ug/L	10	625	04/27/11 14:41	PL	108-95-2	
Pyrene	Not detected	ug/L	10	625	04/27/11 14:41	PL	129-00-0	
Phenanthrene	Not detected	ug/L	10	625	04/27/11 14:41	PL	85-01-8	
Organics - Volatiles								
Total BTEX	Not detected	ug/L	5	624	04/22/11 16:19	WAT		
Volatile Organics-GM-SMI 02 VOC TTO List								
Methylene chloride	Not detected	ug/L	5	624	04/22/11 16:19	WAT	75-09-2	
Chloroform	Not detected	ug/L	1	624	04/22/11 16:19	WAT	67-66-3	
Benzene	Not detected	ug/L	1	624	04/22/11 16:19	WAT	71-43-2	
Toluene	Not detected	ug/L	1	624	04/22/11 16:19	WAT	108-88-3	
Ethylbenzene	Not detected	ug/L	1	624	04/22/11 16:19	WAT	100-41-4	
o-Xylene	Not detected	ug/L	1	624	04/22/11 16:19	WAT	95-47-6	
p,m-Xylene	Not detected	ug/L	1	624	04/22/11 16:19	WAT		



Analytical Laboratory Report

Lab Sample ID: S48483.02
Sample Tag: 01
Collected Date/Time: 04/21/2011 11:00
Matrix: Liquid
COC Reference: 61599

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.2	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

Extraction, PCB	Completed			3510C	04/26/11 15:41	ADB		
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Organics - PCBs/Pesticides

PCB

PCB-1016	Not detected	ug/L	0.1	608	04/27/11 02:23	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/27/11 02:23	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/27/11 02:23	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/27/11 02:23	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/27/11 02:23	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/27/11 02:23	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	04/27/11 02:23	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	04/27/11 02:23	JANB	1336-36-3	

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME: Steve Hoesemeyer - CRA

COMPANY: GM-SMI

ADDRESS: 77 W. Center Rd

CITY: Saginaw STATE: MI ZIP CODE: _____

PHONE NO.: _____ FAX NO.: _____ P.O. NO.: _____

E-MAIL ADDRESS: _____ QUOTE NO.: _____

CONTACT NAME: _____ IS SAME:

COMPANY: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

PHONE NO.: _____ FAX NO.: _____ P.O. NO.: _____

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

PROJECT NO./NAME: 02-01 Otley + S.A. SAMPLER(S) - PLEASE PRINT SIGNATURE: [Signature]

TURNAROUND TIME REQUIRED: 24 HR 48 HR 72 HR STANDARD OTHER

DELIVERABLES REQUIRED: STANDARD LEVEL II LEVEL III OTHER

DAY 3 of 3

SPECIAL INSTRUCTIONS/NOTES

PH = 7.92
 Temp = 59°
 Flow =

MERIT LAB NO.	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives														
	DATE	TIME				NONE	HCL	HNO3	H2SO4	NaOH	MeOH	OTHER								
48483, 01	4-21-11	10:30	02	L	10	Y	Y	Y	Y											
02	"	" 00	01	L	2	Y														

RELINQUISHED BY: [Signature] DATE: 4-21-11 TIME: _____

RECEIVED BY: [Signature] DATE: 4-21-11 TIME: 1450

RELINQUISHED BY: _____ DATE: _____ TIME: _____

RECEIVED BY: _____ DATE: _____ TIME: _____

RELINQUISHED BY: [Signature] DATE: 4-21-11 TIME: 1570

RECEIVED BY: [Signature] DATE: 4-21-11 TIME: 1570

SEAL NO.: _____ SEAL INTACT YES NO INITIALS: _____

SEAL NO.: _____ SEAL INTACT YES NO INITIALS: _____

NOTES: _____ TEMP. ON ARRIVAL: 42