



Motors Liquidation Company
500 Renaissance Center
Suite 1400
Detroit, MI 48243

October 11, 2010

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 Permit Semi-Annual Monitoring at
Outfalls CFD-01 and CFD-02 for September 2010
GMPT Saginaw Malleable Iron (SMI), Saginaw, Michigan

This letter is submitted on behalf of Motors Liquidation Company (MLC). 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 MLC to submit 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 fourth quarter of 2010 and are representative of normal daily discharges. 24-hour time proportional composite samples were collected on the 14th, 15th, and 16th of September, 2010. 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 undergoing demolition. There have been no changes not previously reported. Materials, if any, which could cause slug loading or detrimental affect 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 (µg/L)</i> <i>(Sample Tag 01)</i>	<i>CFD-02 (µg/L)</i> <i>(Sample Tag 02)</i>	<i>Flow (gpd)</i>
September 14	10:15, 10:00	<0.1	<0.1	***
September 15	10:15, 10:00	0.1	<0.1	***
September 16	10:15, 10:00	<0.1	0.3	***

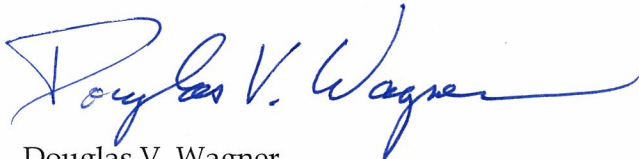
Flow at CFD-02 was too low to obtain an accurate reading, therefore, average and maximum daily flows are not available, however, the only discharge is incidental groundwater and stormwater infiltration.

All samples at CFD-02 are in compliance or deemed to be in compliance. The detection at CFD-02 on September 16th is likely the result of pass thru from CDF-01 on September 15th.

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 419-656-0701.

Yours truly,



Douglas V. Wagner
Genoa Environmental, Inc. on behalf of MLC

Encl.

cc: Jeanette Best - City of Saginaw
Tom Darnell - City of Saginaw, City Manager
Michael Tomka - CRA

ATTACHMENT A

ANALYTICAL LABORATORY REPORTS



Analytical Laboratory Report

Report ID: S45725.01(03)

Generated on 09/27/2010

Replaces report S45725.01(02) generated on 09/20/2010

Report to

Attention: Steve Hoevemeyer

GM SMI

77 W. Center

MC: 486-577-008

Saginaw, Michigan 48605

Phone: 989-757-0920 FAX: 989-757-0707

Email: shoevemeyer@craworld.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): S45725.01-S45725.02

Project: SA & Qtly Outfall's 01-02SSOW# 7878-002

Collected Date: 09/14/2010

Submitted Date/Time: 09/14/2010 15:10

Sampled by: Terry Gooslin

P.O. #: 4017090

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
S45725.01	02	Liquid	09/14/2010 10:00
S45725.02	01	Liquid	09/14/2010 10:15



Analytical Laboratory Report

Lab Sample ID: S45725.01

Sample Tag: 02

Collected Date/Time: 09/14/2010 10:00

Matrix: Liquid

COC Reference: 56918

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	1L Amber	None	Yes	4.6	IR
1	1L Plastic	None	Yes	4.6	IR
1	250ml Plastic	H2SO4	Yes	4.6	IR
1	125ml Amber	H2SO4	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR
1	125ml Plastic	NaOH	Yes	4.6	IR
1	32oz Glass	HCL	Yes	4.6	IR
2	40ml Glass	HCL	Yes	4.6	IR

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

BNA Extraction	Completed			3510C	09/14/10 15:02	DLR		
Extraction, PCB	Completed			3510C	09/17/10 12:08	ADB		
Mercury Digestion	Completed			7471A	09/15/10 09:00	JRT		
Metal Digestion	Completed			3015A	09/16/10 12:00	SLS		

Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-G	09/20/10 11:38	JDP	57-12-5AM	
Ammonia-N	1.95	mg/L	0.04	4500-NH3 D	09/16/10 17:00	MJC	7664-41-7	
COD	60	mg/L	5	410.4	09/16/10 13:00	MJC		
Field pH	8.12	STD Units	0.01	4500-H+ B	09/14/10 10:00	TG		
Field Temperature	68	oF	1	2550 B	09/14/10 10:00	TG		
Flow, Field	0	gpd			09/14/10 10:00	TG		
Oil & Grease	11	mg/L	1	413.1	09/23/10 14:44	DJS		
Phenols	0.012	mg/L	0.02	420.1	09/21/10 13:35	JKB		
TBOD5 - Set	Completed	mg/L		10360	09/16/10 09:30	DJS		
TBOD5	6	mg/L	1	10360	09/21/10 10:00	DJS		
Total Dissolved Solids	960	mg/L	1	2540C	09/15/10 17:30	DJS		
Total Phosphorus	0.41	mg/L	0.01	4500-PE	09/17/10 14:39	MJC	7723-14-0	
Total Suspended Solids	10	mg/L	1	2540 D	09/14/10 18:00	DJS		

Metals

Arsenic	0.002	mg/L	0.002	200.8	09/16/10 17:58	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	200.8	09/16/10 17:58	SLS	7440-43-9	
Chromium	0.001	mg/L	0.005	200.8	09/16/10 17:58	SLS	7440-47-3	b
Copper	0.002	mg/L	0.004	200.8	09/16/10 17:58	SLS	7440-50-8	b
Lead	0.002	mg/L	0.003	200.8	09/16/10 17:58	SLS	7439-92-1	b
Mercury	Not detected	mg/L	0.0002	245.1	09/15/10 13:41	JRT	7439-97-6	
Molybdenum	0.003	mg/L	0.005	200.8	09/16/10 17:58	SLS	7439-98-7	b
Nickel	0.004	mg/L	0.005	200.8	09/16/10 17:58	SLS	7440-02-0	b
Selenium	Not detected	mg/L	0.005	200.8	09/16/10 17:58	SLS	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	09/16/10 17:58	SLS	7440-22-4	
Zinc	0.028	mg/L	0.005	200.8	09/16/10 17:58	SLS	7440-66-6	

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



Analytical Laboratory Report

Lab Sample ID: S45725.01 (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	09/20/10 09:48	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	09/20/10 09:48	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	09/20/10 09:48	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	09/20/10 09:48	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	09/20/10 09:48	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	09/20/10 09:48	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	09/20/10 09:48	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	09/20/10 09:48	JANB	1336-36-3	
Organics - Semi-Volatiles								
Semi-Volatile Organics GM-SMI 02 TTO								
Acenaphthene	Not detected	ug/L	10	625	09/17/10 16:06	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	10	625	09/17/10 16:06	PL	208-96-8	
Anthracene	Not detected	ug/L	10	625	09/17/10 16:06	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	10	625	09/17/10 16:06	PL	56-55-3	
bis(2-Ethylhexyl)phthalate	2	ug/L	10	625	09/17/10 16:06	PL	117-81-7	J
Butyl benzyl phthalate	Not detected	ug/L	10	625	09/17/10 16:06	PL	85-68-7	
Chrysene	Not detected	ug/L	10	625	09/17/10 16:06	PL	218-01-9	
di-n-Butyl phthalate	2	ug/L	10	625	09/17/10 16:06	PL	84-74-2	BJ
2,4-Dichlorophenol	Not detected	ug/L	10	625	09/17/10 16:06	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	10	625	09/17/10 16:06	PL	84-66-2	
Dimethyl phthalate	Not detected	ug/L	10	625	09/17/10 16:06	PL	131-11-3	
2,4-Dimethylphenol	Not detected	ug/L	10	625	09/17/10 16:06	PL	105-67-9	
Fluoranthene	Not detected	ug/L	10	625	09/17/10 16:06	PL	206-44-0	
Fluorene	Not detected	ug/L	10	625	09/17/10 16:06	PL	86-73-7	
Naphthalene	Not detected	ug/L	10	625	09/17/10 16:06	PL	91-20-3	
Pentachlorophenol	Not detected	ug/L	10	625	09/17/10 16:06	PL	87-86-5	
Phenol	Not detected	ug/L	10	625	09/17/10 16:06	PL	108-95-2	
Pyrene	Not detected	ug/L	10	625	09/17/10 16:06	PL	129-00-0	
Phenanthrene	Not detected	ug/L	10	625	09/17/10 16:06	PL	85-01-8	
Organics - Volatiles								
Total BTEX	Not detected	ug/L	5	624	09/24/10 16:12	JGH		
Volatile Organics-GM-SMI 02 VOC TTO List								
Methylene chloride	Not detected	ug/L	5	624	09/24/10 16:12	JGH	75-09-2	
Chloroform	Not detected	ug/L	1	624	09/24/10 16:12	JGH	67-66-3	
Benzene	Not detected	ug/L	1	624	09/24/10 16:12	JGH	71-43-2	
Toluene	Not detected	ug/L	1	624	09/24/10 16:12	JGH	108-88-3	
Ethylbenzene	Not detected	ug/L	1	624	09/24/10 16:12	JGH	100-41-4	
o-Xylene	Not detected	ug/L	1	624	09/24/10 16:12	JGH	95-47-6	
p,m-Xylene	Not detected	ug/L	1	624	09/24/10 16:12	JGH		

J-Estimated value less than reporting limit, but greater than MDL

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S45725.02

Sample Tag: 01

Collected Date/Time: 09/14/2010 10:15

Matrix: Liquid

COC Reference: 56918

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR

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

Extraction, PCB	Completed			3510C	09/17/10 12:08	ADB		
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Organics - PCBs/Pesticides

PCB

PCB-1016	Not detected	ug/L	0.1	608	09/17/10 16:27	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	09/17/10 16:27	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	09/17/10 16:27	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	09/17/10 16:27	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	09/17/10 16:27	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	09/17/10 16:27	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	09/17/10 16:27	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	09/17/10 16:27	JANB	1336-36-3	



C.O.C. PAGE # _____ OF _____

INVOICE TO

CHAIN OF CUSTODY RECORD

CONTACT NAME		() SAME	
COMPANY			
ADDRESS			
CITY		STATE	ZIP CODE
PHONE NO.	FAX NO.	PO. NO.	

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

O_2 -Flow = ϕ
 $PA = 8.12$
 Top 68

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 9-25-10		TIME 1510	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 9-14-10		TIME 1510	
SEAL NO.	SEAL INTACT YES ☐ NO ☒	INITIALS	NOTES: TEMP. ON ARRIVAL 4.6		
SEAL NO.	SEAL INTACT YES () NO ()	INITIALS			

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



Analytical Laboratory Report

Report ID: S45745.01(02)

Generated on 09/27/2010

Replaces report S45745.01(01) generated on 09/20/2010

Report to

Attention: Steve Hoevemeyer

GM SMI

77 W. Center

MC: 486-577-008

Saginaw, Michigan 48605

Phone: 989-757-0920 FAX: 989-757-0707

Email: shoevemeyer@craworld.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): S45745.01-S45745.02

Project: SA & Qtly Outfall's 01-02 SSOW# 7878-002

Collected Date: 09/15/2010

Submitted Date/Time: 09/15/2010 15:00

Sampled by: Terry Gooslin

P.O. #: 4017090

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
S45745.01	02	Liquid	09/15/2010 10:00
S45745.02	01	Liquid	09/15/2010 10:15



Analytical Laboratory Report

Lab Sample ID: S45745.01

Sample Tag: 02

Collected Date/Time: 09/15/2010 10:00

Matrix: Liquid

COC Reference: 56903

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
1	1L Plastic	None	Yes	4.7	IR
1	250ml Plastic	H2SO4	Yes	4.7	IR
1	125ml Amber	H2SO4	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR
1	125ml Plastic	NaOH	Yes	4.7	IR
1	32oz Glass	HCL	Yes	4.7	IR
2	40ml Glass	HCL	Yes	4.7	IR

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

BNA Extraction	Completed			3510C	09/20/10 21:39	EMR		
Extraction, PCB	Completed			3510C	09/17/10 12:08	ADB		
Mercury Digestion	Completed			7471A	09/16/10 10:30	JRT		
Metal Digestion	Completed			3015A	09/16/10 12:00	SLS		

Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-G	09/20/10 11:42	JDP	57-12-5AM	
Ammonia-N	2.0	mg/L	0.1	4500-NH3 D	09/16/10 17:00	MJC	7664-41-7	
COD	45	mg/L	5	410.4	09/16/10 13:00	MJC		
Field pH	7.95	STD Units	0.01	4500-H+ B	09/15/10 10:00	TG		
Field Temperature	69	oF	1	2550 B	09/15/10 10:00	TG		
Flow, Field	0	gpd			09/15/10 10:00	TG		
Oil & Grease	5	mg/L	1	413.1	09/23/10 14:44	DJS		
Phenols	Not detected	mg/L	0.02	420.1	09/21/10 13:55	JKB		
TBOD5 - Set	Completed	mg/L		10360	09/16/10 09:30	DJS		
TBOD5	6	mg/L	1	10360	09/21/10 10:00	DJS		
Total Dissolved Solids	1,082	mg/L	1	2540C	09/15/10 17:30	DJS		
Total Phosphorus	0.25	mg/L	0.01	4500-PE	09/17/10 14:48	MJC	7723-14-0	
Total Suspended Solids	3	mg/L	1	2540 D	09/15/10 16:30	DJS		

Metals

Arsenic	0.003	mg/L	0.002	200.8	09/16/10 18:13	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	200.8	09/16/10 18:13	SLS	7440-43-9	
Chromium	0.001	mg/L	0.005	200.8	09/16/10 18:13	SLS	7440-47-3	b
Copper	0.001	mg/L	0.004	200.8	09/16/10 18:13	SLS	7440-50-8	b
Lead	0.001	mg/L	0.003	200.8	09/16/10 18:13	SLS	7439-92-1	b
Mercury	Not detected	mg/L	0.0002	245.1	09/16/10 15:19	JRT	7439-97-6	
Molybdenum	0.002	mg/L	0.005	200.8	09/16/10 18:13	SLS	7439-98-7	b
Nickel	0.004	mg/L	0.005	200.8	09/16/10 18:13	SLS	7440-02-0	b
Selenium	Not detected	mg/L	0.005	200.8	09/16/10 18:13	SLS	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	09/16/10 18:13	SLS	7440-22-4	
Zinc	0.023	mg/L	0.005	200.8	09/16/10 18:13	SLS	7440-66-6	

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



Analytical Laboratory Report

Lab Sample ID: S45745.01 (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	09/20/10 09:59	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	09/20/10 09:59	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	09/20/10 09:59	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	09/20/10 09:59	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	09/20/10 09:59	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	09/20/10 09:59	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	09/20/10 09:59	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	09/20/10 09:59	JANB	1336-36-3	
Organics - Semi-Volatiles								
Semi-Volatile Organics GM-SMI 02 TTO								
Acenaphthene	Not detected	ug/L	10	625	09/21/10 17:53	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	10	625	09/21/10 17:53	PL	208-96-8	
Anthracene	Not detected	ug/L	10	625	09/21/10 17:53	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	10	625	09/21/10 17:53	PL	56-55-3	
bis(2-Ethylhexyl)phthalate	1	ug/L	10	625	09/21/10 17:53	PL	117-81-7	J
Butyl benzyl phthalate	Not detected	ug/L	10	625	09/21/10 17:53	PL	85-68-7	
Chrysene	Not detected	ug/L	10	625	09/21/10 17:53	PL	218-01-9	
di-n-Butyl phthalate	1	ug/L	10	625	09/21/10 17:53	PL	84-74-2	BJ
2,4-Dichlorophenol	Not detected	ug/L	10	625	09/21/10 17:53	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	10	625	09/21/10 17:53	PL	84-66-2	
Dimethyl phthalate	Not detected	ug/L	10	625	09/21/10 17:53	PL	131-11-3	
2,4-Dimethylphenol	Not detected	ug/L	10	625	09/21/10 17:53	PL	105-67-9	
Fluoranthene	Not detected	ug/L	10	625	09/21/10 17:53	PL	206-44-0	
Fluorene	Not detected	ug/L	10	625	09/21/10 17:53	PL	86-73-7	
Naphthalene	Not detected	ug/L	10	625	09/21/10 17:53	PL	91-20-3	
Pentachlorophenol	Not detected	ug/L	10	625	09/21/10 17:53	PL	87-86-5	
Phenol	Not detected	ug/L	10	625	09/21/10 17:53	PL	108-95-2	
Pyrene	Not detected	ug/L	10	625	09/21/10 17:53	PL	129-00-0	
Phenanthrene	Not detected	ug/L	10	625	09/21/10 17:53	PL	85-01-8	
Organics - Volatiles								
Total BTEX	Not detected	ug/L	5	624	09/24/10 16:30	JGH		
Volatile Organics-GM-SMI 02 VOC TTO List								
Methylene chloride	Not detected	ug/L	5	624	09/24/10 16:30	JGH	75-09-2	
Chloroform	Not detected	ug/L	1	624	09/24/10 16:30	JGH	67-66-3	
Benzene	Not detected	ug/L	1	624	09/24/10 16:30	JGH	71-43-2	
Toluene	Not detected	ug/L	1	624	09/24/10 16:30	JGH	108-88-3	
Ethylbenzene	Not detected	ug/L	1	624	09/24/10 16:30	JGH	100-41-4	
o-Xylene	Not detected	ug/L	1	624	09/24/10 16:30	JGH	95-47-6	
p,m-Xylene	Not detected	ug/L	1	624	09/24/10 16:30	JGH		

J-Estimated value less than reporting limit, but greater than MDL

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S45745.02

Sample Tag: 01

Collected Date/Time: 09/15/2010 10:15

Matrix: Liquid

COC Reference: 56903

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR

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

Extraction, PCB	Completed			3510C	09/17/10 12:08	ADB		
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Organics - PCBs/Pesticides

PCB

PCB-1016	Not detected	ug/L	0.1	608	09/20/10 10:09	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	09/20/10 10:09	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	09/20/10 10:09	JANB	11141-16-5	
PCB-1242	0.1	ug/L	0.1	608	09/20/10 10:09	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	09/20/10 10:09	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	09/20/10 10:09	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	09/20/10 10:09	JANB	11096-82-5	
PCB, Total	0.1	ug/L	0.1	608	09/20/10 10:09	JANB	1336-36-3	



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C.O.C. PAGE # _____ OF _____

56903

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME <u>Steve Hoesemeyer (CRA)</u>				CONTACT NAME				☐ SAME							
COMPANY <u>GM-SMT</u>				COMPANY											
ADDRESS <u>220 W. Center</u>				ADDRESS											
CITY <u>Saginaw</u>			STATE <u>MI</u>	ZIP CODE	CITY			STATE		ZIP CODE					
PHONE NO.		FAX NO.		P.O. NO.		PHONE NO.		FAX NO.		P.O. NO.					
E-MAIL ADDRESS				QUOTE NO.				ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)							

[illegible]

RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE 9-15-10	TIME 1500	RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE 9-15-10	TIME 1500
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 9-15-10	TIME 1400	RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 9-15-10	TIME 1500
RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME	SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE	TIME	SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
			NOTES: TEMP. ON ARRIVAL 47		

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



Analytical Laboratory Report

Report ID: S45758.01(02)

Generated on 09/27/2010

Replaces report S45758.01(01) generated on 09/20/2010

Report to

Attention: Steve Hoevemeyer

GM SMI

77 W. Center

MC: 486-577-008

Saginaw, Michigan 48605

Phone: 989-757-0920 FAX: 989-757-0707

Email: shoevermeyer@craworld.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): S45758.01-S45758.02

Project: SA & Qtly Outfall's 01-02 SSOW# 7878-002

Collected Date: 09/16/2010

Submitted Date/Time: 09/16/2010 15:15

Sampled by: Terry Gooslin

P.O. #: 4017090

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
S45758.01	02	Liquid	09/16/2010 10:00
S45758.02	01	Liquid	09/16/2010 10:15



Analytical Laboratory Report

Lab Sample ID: S45758.01

Sample Tag: 02

Collected Date/Time: 09/16/2010 10:00

Matrix: Liquid

COC Reference: 56906

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
1	1L Plastic	None	Yes	4.7	IR
1	250ml Plastic	H2SO4	Yes	4.7	IR
1	125ml Amber	H2SO4	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR
1	125ml Plastic	NaOH	Yes	4.7	IR
1	32oz Glass	HCL	Yes	4.7	IR
2	40ml Glass	HCL	Yes	4.7	IR

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

BNA Extraction	Completed			3510C	09/20/10 21:39	EMR		
Extraction, PCB	Completed			3510C	09/17/10 13:10	ADB		
Mercury Digestion	Completed			7471A	09/17/10 10:00	JRT		
Metal Digestion	Completed			3015A	09/16/10 12:00	SLS		

Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-G	09/20/10 11:52	JDP	57-12-5AM	
Ammonia-N	1.79	mg/L	0.04	4500-NH3 D	09/16/10 17:00	MJC	7664-41-7	
COD	99	mg/L	5	410.4	09/16/10 20:00	MJC		
Field pH	8.08	STD Units	0.01	4500-H+ B	09/16/10 10:00	TG		
Field Temperature	68	oF	1	2550 B	09/16/10 10:00	TG		
Flow, Field	0	gpd			09/16/10 10:00	TG		
Oil & Grease	3	mg/L	1	413.1	09/23/10 14:44	DJS		
Phenols	Not detected	mg/L	0.02	420.1	09/21/10 14:00	JKB		
TBOD5 - Set	Completed	mg/L		10360	09/17/10 12:00	DJS		
TBOD5	7	mg/L	1	10360	09/22/10 12:30	DJS		
Total Dissolved Solids	1,028	mg/L	1	2540C	09/21/10 15:00	DJS		
Total Phosphorus	0.44	mg/L	0.01	4500-PE	09/17/10 14:56	MJC	7723-14-0	
Total Suspended Solids	132	mg/L	1	2540 D	09/16/10 16:30	DJS		

Metals

Arsenic	0.002	mg/L	0.002	200.8	09/16/10 18:36	SLS	7440-38-2	
Cadmium	0.0003	mg/L	0.0005	200.8	09/16/10 18:36	SLS	7440-43-9	b
Chromium	0.003	mg/L	0.005	200.8	09/16/10 18:36	SLS	7440-47-3	b
Copper	0.006	mg/L	0.004	200.8	09/16/10 18:36	SLS	7440-50-8	
Lead	0.010	mg/L	0.003	200.8	09/16/10 18:36	SLS	7439-92-1	
Mercury	Not detected	mg/L	0.0002	245.1	09/17/10 13:59	JRT	7439-97-6	
Molybdenum	0.005	mg/L	0.005	200.8	09/16/10 18:36	SLS	7439-98-7	b
Nickel	0.004	mg/L	0.005	200.8	09/16/10 18:36	SLS	7440-02-0	b
Selenium	Not detected	mg/L	0.005	200.8	09/16/10 18:36	SLS	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	09/16/10 18:36	SLS	7440-22-4	
Zinc	0.119	mg/L	0.005	200.8	09/16/10 18:36	SLS	7440-66-6	

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



Analytical Laboratory Report

Lab Sample ID: S45758.01 (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	09/20/10 10:20	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	09/20/10 10:20	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	09/20/10 10:20	JANB	11141-16-5	
PCB-1242	0.3	ug/L	0.1	608	09/20/10 10:20	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	09/20/10 10:20	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	09/20/10 10:20	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	09/20/10 10:20	JANB	11096-82-5	
PCB, Total	0.3	ug/L	0.1	608	09/20/10 10:20	JANB	1336-36-3	
Organics - Semi-Volatiles								
Semi-Volatile Organics GM-SMI 02 TTO								
Acenaphthene	Not detected	ug/L	10	625	09/21/10 18:52	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	10	625	09/21/10 18:52	PL	208-96-8	
Anthracene	Not detected	ug/L	10	625	09/21/10 18:52	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	10	625	09/21/10 18:52	PL	56-55-3	
bis(2-Ethylhexyl)phthalate	3	ug/L	10	625	09/21/10 18:52	PL	117-81-7	J
Butyl benzyl phthalate	Not detected	ug/L	10	625	09/21/10 18:52	PL	85-68-7	
Chrysene	Not detected	ug/L	10	625	09/21/10 18:52	PL	218-01-9	
di-n-Butyl phthalate	2	ug/L	10	625	09/21/10 18:52	PL	84-74-2	BJ
2,4-Dichlorophenol	Not detected	ug/L	10	625	09/21/10 18:52	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	10	625	09/21/10 18:52	PL	84-66-2	
Dimethyl phthalate	Not detected	ug/L	10	625	09/21/10 18:52	PL	131-11-3	
2,4-Dimethylphenol	Not detected	ug/L	10	625	09/21/10 18:52	PL	105-67-9	
Fluoranthene	Not detected	ug/L	10	625	09/21/10 18:52	PL	206-44-0	
Fluorene	Not detected	ug/L	10	625	09/21/10 18:52	PL	86-73-7	
Naphthalene	Not detected	ug/L	10	625	09/21/10 18:52	PL	91-20-3	
Pentachlorophenol	Not detected	ug/L	10	625	09/21/10 18:52	PL	87-86-5	
Phenol	2	ug/L	10	625	09/21/10 18:52	PL	108-95-2	J
Pyrene	Not detected	ug/L	10	625	09/21/10 18:52	PL	129-00-0	
Phenanthrene	Not detected	ug/L	10	625	09/21/10 18:52	PL	85-01-8	
Organics - Volatiles								
Total BTEX	Not detected	ug/L	5	624	09/24/10 16:49	JGH		
Volatile Organics-GM-SMI 02 VOC TTO List								
Methylene chloride	Not detected	ug/L	5	624	09/24/10 16:49	JGH	75-09-2	
Chloroform	Not detected	ug/L	1	624	09/24/10 16:49	JGH	67-66-3	
Benzene	Not detected	ug/L	1	624	09/24/10 16:49	JGH	71-43-2	
Toluene	Not detected	ug/L	1	624	09/24/10 16:49	JGH	108-88-3	
Ethylbenzene	Not detected	ug/L	1	624	09/24/10 16:49	JGH	100-41-4	
o-Xylene	Not detected	ug/L	1	624	09/24/10 16:49	JGH	95-47-6	
p,m-Xylene	Not detected	ug/L	1	624	09/24/10 16:49	JGH		

J-Estimated value less than reporting limit, but greater than MDL

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S45758.02

Sample Tag: 01

Collected Date/Time: 09/16/2010 10:15

Matrix: Liquid

COC Reference: 56906

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR

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

Extraction, PCB	Completed			3510C	09/17/10 13:10	ADB		
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Organics - PCBs/Pesticides

PCB

PCB-1016	Not detected	ug/L	0.1	608	09/17/10 17:40	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	09/17/10 17:40	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	09/17/10 17:40	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	09/17/10 17:40	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	09/17/10 17:40	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	09/17/10 17:40	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	09/17/10 17:40	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	09/17/10 17:40	JANB	1336-36-3	

Merit

Laboratories, Inc.

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

C.O.C. PAGE # _____ OF _____

56906

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME <i>Steve Hoevenberg - CRA</i>		CONTACT NAME ☐ SAME	
COMPANY <i>GM - SMI</i>		COMPANY	
ADDRESS <i>77 W. Center</i>		ADDRESS	
CITY <i>Saginaw</i>	STATE <i>MI</i>	ZIP CODE	
PHONE NO.	FAX NO.	P.O. NO.	
E-MAIL ADDRESS		QUOTE NO.	

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

PROJECT NO./NAME <i>SA-02-01</i>		SAMPLER(S) PLEASE PRINT/SIGN NAME <i>J. Gosselin</i>		DAY 3 of 3		SPECIAL INSTRUCTIONS/NOTES <i>Delays in m. hole should have reported it to Tom W.</i>					
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	# Containers & Preservatives					
MERIT LAB NO.	YEAR DATE TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NOV	HCL	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER
45758.01	9-16-10 10 ⁰⁰	02	L	10	X	X	X	X	X	X	X
02	11 10 ¹⁵	01	L	2	X						X

TOTAL 02 Flow = ϕ
 RH = 8.08
 Temp = 68°
 Run Early in AM - Had some flow
 But not enough
 to register
 1.3 IN 100 FT/5
 Est. flow = 10,000 gnl

RELINQUISHED BY: SIGNATURE/ORGANIZATION <i>[Signature]</i>	DATE 9-16-10	TIME 1400	RELINQUISHED BY: SIGNATURE/ORGANIZATION <i>[Signature]</i>	DATE 9-16-10	TIME 1515
RECEIVED BY: SIGNATURE/ORGANIZATION <i>[Signature]</i>	DATE 9-16-10	TIME 1400	RECEIVED BY: SIGNATURE/ORGANIZATION <i>[Signature]</i>	DATE 9-16-10	TIME 1515
RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME	SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
RECEIVED BY: SIGNATURE/ORGANIZATION	DATE	TIME	SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS

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