



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

June 30, 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 April 2010  
GMPT Saginaw Malleable Iron (SMI), Saginaw, Michigan

This letter is submitted on behalf of Motors Liquidation Company, formerly General Motors Corporation. 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 Motors Liquidation Company (MLC) to submit a quarterly/semi-annual 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 2010 and are representative of normal daily discharges. 24-hour time proportional composite samples were collected on the 20th, 21st, and 22nd of April, 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 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):

June 30, 2010

<i>Date</i>	<i>Sample Time</i>	<i>CFD-01 (<math>\mu\text{g/L}</math>) (Sample Tag 01)</i>	<i>CFD-02 (<math>\mu\text{g/L}</math>) (Sample Tag 02)</i>	<i>Flow (gpd)</i>
April 20	10:30, 10:00	0.2	<0.1	***
April 21	10:30, 10:00	0.1	<0.1	***
April 22	10:30, 10:00	0.1	<0.1	***

Note:

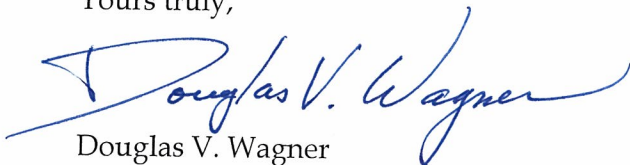
\*\*\* Flow at CFD-02 was too low to obtain an accurate reading, therefore, average and maximum daily flows are not available, however, the only discharge is incidental groundwater and stormwater infiltration.

All samples at CFD-02 are in compliance or are 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 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

LABORATORY REPORTS



# Analytical Laboratory Report

Report ID: S44005.01(01)  
Generated on 05/03/2010

Report to

Attention: Steve Hoevemeyer/Cheryl Hyatt  
GM 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): S44005.01-S44005.02  
Project: SA & Qtly Outfall's 01-02 SSOW# 7878-002  
Collected Date: 04/20/2010  
Submitted Date/Time: 04/20/2010 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.

Violetta F. Murshak  
Laboratory Director



# Analytical Laboratory Report

## Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S44005.01	02	Liquid	04/20/2010 10:00
S44005.02	01	Liquid	04/20/2010 10:30



# Analytical Laboratory Report

Lab Sample ID: S44005.01  
 Sample Tag: 02  
 Collected Date/Time: 04/20/2010 10:00  
 Matrix: Liquid  
 COC Reference: 52858

## 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
----------	---------	-------	----	--------	---------------	---------	-------	-------

### Extraction / Prep.

BNA Extraction	Completed			3510C	04/22/10 22:04	EMR		
Extraction, PCB	Completed			3510C	04/20/10 18:05	ADB		
Mercury Digestion	Completed			7471A	04/27/10 09:30	JRT		
Metal Digestion	Completed			3015A	04/23/10 12:00	SLS		

### Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-G	04/26/10 10:46	JDP	57-12-5AM	
Ammonia-N	1.60	mg/L	0.04	4500-NH3 D	04/21/10 13:00	MJC	7664-41-7	
COD	44	mg/L	1	410.4	04/22/10 14:00	MJC		
Field pH	7.98	STD Units	0.01	4500-H+ B	04/20/10 10:00	TG		
Field Temperature	65	oF	1	2550 B	04/20/10 10:00	TG		
Flow, Field	No Flow	gpd			04/20/10 10:00	TG		
Oil & Grease	9	mg/L	1	413.1	04/22/10 12:39	DJS		
Phenols	Not detected	mg/L	0.01	420.1	04/27/10 15:15	JKB		
TBOD5 - Set	Completed	mg/L		10360	04/21/10 14:30	DJS		
TBOD5	12	mg/L	1	10360	04/26/10 15:00	DJS		
Total Dissolved Solids	794	mg/L	1	2540C	04/26/10 16:00	DJS		
Total Phosphorus	0.28	mg/L	0.01	4500-PE	04/21/10 22:00	MJC	7723-14-0	
Total Suspended Solids	12	mg/L	1	2540 D	04/22/10 15:00	DJS		

### Metals

Arsenic	0.002	mg/L	0.002	200.8	04/23/10 15:49	SLS	7440-38-2	b
Cadmium	0.0001	mg/L	0.0005	200.8	04/23/10 15:49	SLS	7440-43-9	b
Chromium	0.001	mg/L	0.005	200.8	04/23/10 15:49	SLS	7440-47-3	b
Copper	Not detected	mg/L	0.004	200.8	04/23/10 15:49	SLS	7440-50-8	
Lead	0.001	mg/L	0.003	200.8	04/23/10 15:49	SLS	7439-92-1	b
Mercury	Not detected	mg/L	0.0002	245.1	04/27/10 14:51	JRT	7439-97-6	
Molybdenum	0.026	mg/L	0.005	200.8	04/23/10 15:49	SLS	7439-98-7	
Nickel	0.002	mg/L	0.005	200.8	04/23/10 15:49	SLS	7440-02-0	b
Selenium	Not detected	mg/L	0.005	200.8	04/23/10 15:49	SLS	7782-49-2	
Silver	Not detected	mg/L	0.0005	200.8	04/23/10 15:49	SLS	7440-22-4	
Zinc	0.035	mg/L	0.005	200.8	04/23/10 15:49	SLS	7440-66-6	

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



# Analytical Laboratory Report

Lab Sample ID: S44005.01 (continued)

Sample Tag: 02

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
<b>Organics - PCBs/Pesticides</b>								
<b>PCB</b>								
PCB-1016	Not detected	ug/L	0.1	608	04/22/10 17:28	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/22/10 17:28	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/22/10 17:28	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/22/10 17:28	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/22/10 17:28	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/22/10 17:28	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	04/22/10 17:28	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	04/22/10 17:28	JANB	1336-36-3	
<b>Organics - Semi-Volatiles</b>								
<b>Semi-Volatile Organics GM-SMI 02 TTO</b>								
Acenaphthene	Not detected	ug/L	10	625	04/30/10 18:52	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	10	625	04/30/10 18:52	PL	208-96-8	
Anthracene	Not detected	ug/L	10	625	04/30/10 18:52	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	10	625	04/30/10 18:52	PL	56-55-3	
bis(2-Ethylhexyl)phthalate	2	ug/L	10	625	04/30/10 18:52	PL	117-81-7	J
Butyl benzyl phthalate	Not detected	ug/L	10	625	04/30/10 18:52	PL	85-68-7	
Chrysene	Not detected	ug/L	10	625	04/30/10 18:52	PL	218-01-9	
di-n-Butyl phthalate	Not detected	ug/L	10	625	04/30/10 18:52	PL	84-74-2	
2,4-Dichlorophenol	Not detected	ug/L	10	625	04/30/10 18:52	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	10	625	04/30/10 18:52	PL	84-66-2	
Dimethyl phthalate	Not detected	ug/L	10	625	04/30/10 18:52	PL	131-11-3	
2,4-Dimethylphenol	Not detected	ug/L	10	625	04/30/10 18:52	PL	105-67-9	
Fluoranthene	Not detected	ug/L	10	625	04/30/10 18:52	PL	206-44-0	
Fluorene	Not detected	ug/L	10	625	04/30/10 18:52	PL	86-73-7	
Naphthalene	Not detected	ug/L	10	625	04/30/10 18:52	PL	91-20-3	
Pentachlorophenol	Not detected	ug/L	10	625	04/30/10 18:52	PL	87-86-5	
Phenol	Not detected	ug/L	10	625	04/30/10 18:52	PL	108-95-2	
Pyrene	Not detected	ug/L	10	625	04/30/10 18:52	PL	129-00-0	
Phenanthrene	Not detected	ug/L	10	625	04/30/10 18:52	PL	85-01-8	
<b>Organics - Volatiles</b>								
Total BTEX	0.4	ug/L	5	624	04/23/10 16:58	JGH		J
<b>Volatile Organics-GM-SMI 02 VOC TTO List</b>								
Methylene chloride	Not detected	ug/L	5	624	04/23/10 16:58	JGH	75-09-2	
Chloroform	Not detected	ug/L	1	624	04/23/10 16:58	JGH	67-66-3	
Benzene	Not detected	ug/L	1	624	04/23/10 16:58	JGH	71-43-2	
Toluene	0.3	ug/L	1	624	04/23/10 16:58	JGH	108-88-3	J
Ethylbenzene	0.1	ug/L	1	624	04/23/10 16:58	JGH	100-41-4	J
o-Xylene	Not detected	ug/L	1	624	04/23/10 16:58	JGH	95-47-6	
p,m-Xylene	Not detected	ug/L	1	624	04/23/10 16:58	JGH		

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



# Analytical Laboratory Report

Lab Sample ID: S44005.02  
Sample Tag: 01  
Collected Date/Time: 04/20/2010 10:30  
Matrix: Liquid  
COC Reference: 52858

## 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
----------	---------	-------	----	--------	---------------	---------	-------	-------

### **Extraction / Prep.**

Extraction, PCB	Completed			3510C	04/20/10 18:05	ADB		
-----------------	-----------	--	--	-------	----------------	-----	--	--

### **Organics - PCBs/Pesticides**

#### **PCB**

PCB-1016	Not detected	ug/L	0.1	608	04/21/10 15:51	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/21/10 15:51	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/21/10 15:51	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/21/10 15:51	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/21/10 15:51	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/21/10 15:51	JANB	11097-69-1	
PCB-1260	0.2	ug/L	0.1	608	04/21/10 15:51	JANB	11096-82-5	
PCB, Total	0.2	ug/L	0.1	608	04/21/10 15:51	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 \_\_\_\_\_

52858

**REPORT TO**

**CHAIN OF CUSTODY RECORD**

**INVOICE TO**

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

**ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)**

PROJECT NO. NAME: *SA: Kelly Outfalls 01-02* ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

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 Q-QOL	S-SOIL A-AIR	L-LIQUID M-WASTE	SD-SOLID M-MISC	CONTAINERS & PRESERVATIVES	DATE	TIME	IDENTIFICATION-DESCRIPTION	YEAR	DATE	TIME	MATRIX CODE	CONTAINERS & PRESERVATIVES	DATE	TIME	IDENTIFICATION-DESCRIPTION	YEAR
44005-01						11	10/10	00	02		10/10	00	44005-01	11	10/10	00	02	
02						10	10/30	01	01		10/30	01	02	10	10/30	01	01	

SPECIAL INSTRUCTIONS/NOTES: *Day 1 of 3*

RELINQUISHED BY: SIGNATURE/ORGANIZATION <i>[Signature]</i>	DATE <i>4-20-10</i>	TIME <i>1:00</i>	RECEIVED BY: SIGNATURE/ORGANIZATION <i>[Signature]</i>	DATE <i>4/20/10</i>	TIME <i>15:00</i>
RELINQUISHED BY: SIGNATURE/ORGANIZATION <i>[Signature]</i>	DATE <i>4-20-10</i>	TIME <i>1:00</i>	RECEIVED BY: SIGNATURE/ORGANIZATION <i>[Signature]</i>	DATE <i>4/20/10</i>	TIME <i>15:00</i>
SEAL NO.	SEAL NO.	SEAL NO.	SEAL NO.	SEAL NO.	SEAL NO.
INITIALS	INITIALS	INITIALS	INITIALS	INITIALS	INITIALS
YES <input type="checkbox"/>	NO <input type="checkbox"/>	YES <input type="checkbox"/>	NO <input type="checkbox"/>	YES <input type="checkbox"/>	NO <input type="checkbox"/>
NOTES:	NOTES:	NOTES:	NOTES:	NOTES:	NOTES:
TEMP. ON ARRIVAL: <i>46</i>	TEMP. ON ARRIVAL: <i>46</i>	TEMP. ON ARRIVAL: <i>46</i>	TEMP. ON ARRIVAL: <i>46</i>	TEMP. ON ARRIVAL: <i>46</i>	TEMP. ON ARRIVAL: <i>46</i>

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



# Analytical Laboratory Report

Report ID: S44013.01(01)  
Generated on 05/03/2010

Report to

Attention: Steve Hoevemeyer/Cheryl Hyatt  
GM 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): S44013.01-S44013.02  
Project: SA & Qtly Outfall's 01-02 SSOW# 7878-002  
Collected Date: 04/21/2010  
Submitted Date/Time: 04/21/2010 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.

Violetta F. Murshak  
Laboratory Director



# Analytical Laboratory Report

## Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S44013.01	02	Liquid	04/21/2010 10:00
S44013.02	01	Liquid	04/21/2010 10:30



# Analytical Laboratory Report

Lab Sample ID: S44013.01  
 Sample Tag: 02  
 Collected Date/Time: 04/21/2010 10:00  
 Matrix: Liquid  
 COC Reference: 52859

## Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	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
----------	---------	-------	----	--------	---------------	---------	-------	-------

### Extraction / Prep.

BNA Extraction	Completed			3510C	04/22/10 22:04	EMR		
Extraction, PCB	Completed			3510C	04/23/10 12:02	JANB		
Mercury Digestion	Completed			7471A	04/28/10 12:30	JRT		
Metal Digestion	Completed			3015A	04/23/10 12:00	SLS		

### Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-G	04/26/10 10:48	JDP	57-12-5AM	
Ammonia-N	1.61	mg/L	0.04	4500-NH3 D	04/21/10 21:00	MJC	7664-41-7	
COD	51	mg/L	1	410.4	04/22/10 14:00	MJC		
Field pH	8.26	STD Units	0.01	4500-H+ B	04/21/10 10:00	TG		
Field Temperature	59	oF	1	2550 B	04/21/10 10:00	TG		
Flow, Field	No Flow	gpd			04/21/10 10:00	TG		
Oil & Grease	5	mg/L	1	413.1	04/22/10 12:39	DJS		
Phenols	Not detected	mg/L	0.01	420.1	04/27/10 15:20	JKB		
TBOD5 - Set	Completed	mg/L		10360	04/23/10 08:00	DJS		
TBOD5	10	mg/L	1	10360	04/28/10 09:00	DJS		
Total Dissolved Solids	1,040	mg/L	1	2540C	04/26/10 16:00	DJS		
Total Phosphorus	0.30	mg/L	0.01	4500-PE	04/21/10 22:00	MJC	7723-14-0	
Total Suspended Solids	11	mg/L	1	2540 D	04/22/10 15:00	DJS		

### Metals

Arsenic	0.002	mg/L	0.002	200.8	04/23/10 15:53	SLS	7440-38-2	b
Cadmium	0.0002	mg/L	0.0005	200.8	04/23/10 15:53	SLS	7440-43-9	b
Chromium	0.001	mg/L	0.005	200.8	04/23/10 15:53	SLS	7440-47-3	b
Copper	0.001	mg/L	0.004	200.8	04/23/10 15:53	SLS	7440-50-8	b
Lead	0.001	mg/L	0.003	200.8	04/23/10 15:53	SLS	7439-92-1	b
Mercury	Not detected	mg/L	0.0002	245.1	04/28/10 15:27	JRT	7439-97-6	
Molybdenum	0.010	mg/L	0.005	200.8	04/23/10 15:53	SLS	7439-98-7	
Nickel	0.002	mg/L	0.005	200.8	04/23/10 15:53	SLS	7440-02-0	b
Selenium	0.001	mg/L	0.005	200.8	04/23/10 15:53	SLS	7782-49-2	b
Silver	Not detected	mg/L	0.0005	200.8	04/23/10 15:53	SLS	7440-22-4	
Zinc	0.063	mg/L	0.005	200.8	04/23/10 15:53	SLS	7440-66-6	

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



# Analytical Laboratory Report

Lab Sample ID: S44013.01 (continued)

Sample Tag: 02

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
<b>Organics - PCBs/Pesticides</b>								
<b>PCB</b>								
PCB-1016	Not detected	ug/L	0.1	608	04/23/10 13:06	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/23/10 13:06	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/23/10 13:06	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/23/10 13:06	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/23/10 13:06	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/23/10 13:06	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	04/23/10 13:06	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	04/23/10 13:06	JANB	1336-36-3	
<b>Organics - Semi-Volatiles</b>								
<b>Semi-Volatile Organics GM-SMI 02 TTO</b>								
Acenaphthene	Not detected	ug/L	10	625	04/30/10 19:26	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	10	625	04/30/10 19:26	PL	208-96-8	
Anthracene	Not detected	ug/L	10	625	04/30/10 19:26	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	10	625	04/30/10 19:26	PL	56-55-3	
bis(2-Ethylhexyl)phthalate	2	ug/L	10	625	04/30/10 19:26	PL	117-81-7	J
Butyl benzyl phthalate	Not detected	ug/L	10	625	04/30/10 19:26	PL	85-68-7	
Chrysene	Not detected	ug/L	10	625	04/30/10 19:26	PL	218-01-9	
di-n-Butyl phthalate	Not detected	ug/L	10	625	04/30/10 19:26	PL	84-74-2	
2,4-Dichlorophenol	Not detected	ug/L	10	625	04/30/10 19:26	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	10	625	04/30/10 19:26	PL	84-66-2	
Dimethyl phthalate	Not detected	ug/L	10	625	04/30/10 19:26	PL	131-11-3	
2,4-Dimethylphenol	Not detected	ug/L	10	625	04/30/10 19:26	PL	105-67-9	
Fluoranthene	Not detected	ug/L	10	625	04/30/10 19:26	PL	206-44-0	
Fluorene	Not detected	ug/L	10	625	04/30/10 19:26	PL	86-73-7	
Naphthalene	Not detected	ug/L	10	625	04/30/10 19:26	PL	91-20-3	
Pentachlorophenol	Not detected	ug/L	10	625	04/30/10 19:26	PL	87-86-5	
Phenol	Not detected	ug/L	10	625	04/30/10 19:26	PL	108-95-2	
Pyrene	Not detected	ug/L	10	625	04/30/10 19:26	PL	129-00-0	
Phenanthrene	Not detected	ug/L	10	625	04/30/10 19:26	PL	85-01-8	
<b>Organics - Volatiles</b>								
Total BTEX	0.1	ug/L	5	624	04/23/10 18:47	JGH		J
<b>Volatile Organics-GM-SMI 02 VOC TTO List</b>								
Methylene chloride	Not detected	ug/L	5	624	04/23/10 18:47	JGH	75-09-2	
Chloroform	Not detected	ug/L	1	624	04/23/10 18:47	JGH	67-66-3	
Benzene	Not detected	ug/L	1	624	04/23/10 18:47	JGH	71-43-2	
Toluene	Not detected	ug/L	1	624	04/23/10 18:47	JGH	108-88-3	
Ethylbenzene	0.1	ug/L	1	624	04/23/10 18:47	JGH	100-41-4	J
o-Xylene	Not detected	ug/L	1	624	04/23/10 18:47	JGH	95-47-6	
p,m-Xylene	Not detected	ug/L	1	624	04/23/10 18:47	JGH		

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



# Analytical Laboratory Report

Lab Sample ID: S44013.02  
Sample Tag: 01  
Collected Date/Time: 04/21/2010 10:30  
Matrix: Liquid  
COC Reference: 52859

## 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
----------	---------	-------	----	--------	---------------	---------	-------	-------

### **Extraction / Prep.**

Extraction, PCB	Completed			3510C	04/23/10 12:02	JANB		
-----------------	-----------	--	--	-------	----------------	------	--	--

### **Organics - PCBs/Pesticides**

#### **PCB**

PCB-1016	Not detected	ug/L	0.1	608	04/23/10 13:17	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/23/10 13:17	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/23/10 13:17	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/23/10 13:17	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/23/10 13:17	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/23/10 13:17	JANB	11097-69-1	
PCB-1260	0.1	ug/L	0.1	608	04/23/10 13:17	JANB	11096-82-5	
PCB, Total	0.1	ug/L	0.1	608	04/23/10 13:17	JANB	1336-36-3	





# Analytical Laboratory Report

Report ID: S44035.01(01)  
Generated on 05/03/2010

Report to

Attention: Steve Hoevemeyer/Cheryl Hyatt  
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): S44035.01-S44035.02  
Project: SA & Qtly Outfall's 01-02 SSOW# 7878-002  
Collected Date: 04/22/2010  
Submitted Date/Time: 04/22/2010 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.

Violetta F. Murshak  
Laboratory Director



# Analytical Laboratory Report

## Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S44035.01	02	Liquid	04/22/2010 10:00
S44035.02	01	Liquid	04/22/2010 10:30



# Analytical Laboratory Report

Lab Sample ID: S44035.01  
 Sample Tag: 02  
 Collected Date/Time: 04/22/2010 10:00  
 Matrix: Liquid  
 COC Reference: 52860

## Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.4	IR
1	1L Plastic	None	Yes	4.4	IR
1	250ml Plastic	H2SO4	Yes	4.4	IR
1	125ml Amber	H2SO4	Yes	4.4	IR
1	125ml Plastic	HNO3	Yes	4.4	IR
1	125ml Plastic	NaOH	Yes	4.4	IR
1	32oz Glass	HCL	Yes	4.4	IR
2	40ml Glass	HCL	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
----------	---------	-------	----	--------	---------------	---------	-------	-------

### Extraction / Prep.

BNA Extraction	Completed			3510C	04/22/10 22:04	EMR		
Extraction, PCB	Completed			3510C	04/23/10 18:05	ADB		
Mercury Digestion	Completed			7471A	04/28/10 12:30	JRT		
Metal Digestion	Completed			3015A	04/23/10 12:00	SLS		

### Inorganics

Amenable Cyanide	Not detected	mg/L	0.005	335.4/4500-CN-G	04/26/10 10:52	JDP	57-12-5AM	
Ammonia-N	1.54	mg/L	0.02	4500-NH3 D	04/29/10 15:00	MJC	7664-41-7	
COD	53	mg/L	1	410.4	04/22/10 21:00	MJC		
Field pH	7.73	STD Units	0.01	4500-H+ B	04/22/10 10:00	TG		
Field Temperature	60	oF	1	2550 B	04/22/10 10:00	TG		
Flow, Field	No Flow	gpd			04/22/10 10:00	TG		
Oil & Grease	5	mg/L	1	413.1	04/29/10 13:13	DJS		
Phenols	Not detected	mg/L	0.01	420.1	04/27/10 15:30	JKB		
TBOD5 - Set	Completed	mg/L		10360	04/23/10 08:00	DJS		
TBOD5	11	mg/L	1	10360	04/28/10 09:00	DJS		
Total Dissolved Solids	938	mg/L	1	2540C	04/26/10 16:00	DJS		
Total Phosphorus	0.25	mg/L	0.01	4500-PE	04/29/10 13:00	MJC	7723-14-0	
Total Suspended Solids	13	mg/L	1	2540 D	04/27/10 13:30	WAR		

### Metals

Arsenic	0.002	mg/L	0.002	200.8	04/23/10 16:00	SLS	7440-38-2	b
Cadmium	0.0001	mg/L	0.0005	200.8	04/23/10 16:00	SLS	7440-43-9	b
Chromium	0.001	mg/L	0.005	200.8	04/23/10 16:00	SLS	7440-47-3	b
Copper	Not detected	mg/L	0.004	200.8	04/23/10 16:00	SLS	7440-50-8	
Lead	0.001	mg/L	0.003	200.8	04/23/10 16:00	SLS	7439-92-1	b
Mercury	Not detected	mg/L	0.0002	245.1	04/28/10 15:45	JRT	7439-97-6	
Molybdenum	0.028	mg/L	0.005	200.8	04/23/10 16:00	SLS	7439-98-7	
Nickel	0.002	mg/L	0.005	200.8	04/23/10 16:00	SLS	7440-02-0	b
Selenium	0.001	mg/L	0.005	200.8	04/23/10 16:00	SLS	7782-49-2	b
Silver	Not detected	mg/L	0.0005	200.8	04/23/10 16:00	SLS	7440-22-4	
Zinc	0.043	mg/L	0.005	200.8	04/23/10 16:00	SLS	7440-66-6	

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



# Analytical Laboratory Report

Lab Sample ID: S44035.01 (continued)

Sample Tag: 02

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
<b>Organics - PCBs/Pesticides</b>								
<b>PCB</b>								
PCB-1016	Not detected	ug/L	0.1	608	04/27/10 14:00	JANB	12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/27/10 14:00	JANB	11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/27/10 14:00	JANB	11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/27/10 14:00	JANB	53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/27/10 14:00	JANB	12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/27/10 14:00	JANB	11097-69-1	
PCB-1260	Not detected	ug/L	0.1	608	04/27/10 14:00	JANB	11096-82-5	
PCB, Total	Not detected	ug/L	0.1	608	04/27/10 14:00	JANB	1336-36-3	
<b>Organics - Semi-Volatiles</b>								
<b>Semi-Volatile Organics GM-SMI 02 TTO</b>								
Acenaphthene	Not detected	ug/L	10	625	04/30/10 20:00	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	10	625	04/30/10 20:00	PL	208-96-8	
Anthracene	Not detected	ug/L	10	625	04/30/10 20:00	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	10	625	04/30/10 20:00	PL	56-55-3	
bis(2-Ethylhexyl)phthalate	3	ug/L	10	625	04/30/10 20:00	PL	117-81-7	J
Butyl benzyl phthalate	Not detected	ug/L	10	625	04/30/10 20:00	PL	85-68-7	
Chrysene	Not detected	ug/L	10	625	04/30/10 20:00	PL	218-01-9	
di-n-Butyl phthalate	Not detected	ug/L	10	625	04/30/10 20:00	PL	84-74-2	
2,4-Dichlorophenol	Not detected	ug/L	10	625	04/30/10 20:00	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	10	625	04/30/10 20:00	PL	84-66-2	
Dimethyl phthalate	Not detected	ug/L	10	625	04/30/10 20:00	PL	131-11-3	
2,4-Dimethylphenol	Not detected	ug/L	10	625	04/30/10 20:00	PL	105-67-9	
Fluoranthene	Not detected	ug/L	10	625	04/30/10 20:00	PL	206-44-0	
Fluorene	Not detected	ug/L	10	625	04/30/10 20:00	PL	86-73-7	
Naphthalene	Not detected	ug/L	10	625	04/30/10 20:00	PL	91-20-3	
Pentachlorophenol	Not detected	ug/L	10	625	04/30/10 20:00	PL	87-86-5	
Phenol	Not detected	ug/L	10	625	04/30/10 20:00	PL	108-95-2	
Pyrene	Not detected	ug/L	10	625	04/30/10 20:00	PL	129-00-0	
Phenanthrene	Not detected	ug/L	10	625	04/30/10 20:00	PL	85-01-8	
<b>Organics - Volatiles</b>								
Total BTEX	Not detected	ug/L	5	624	04/28/10 16:23	JGH		
<b>Volatile Organics-GM-SMI 02 VOC TTO List</b>								
Methylene chloride	0.7	ug/L	5	624	04/28/10 16:23	JGH	75-09-2	J
Chloroform	Not detected	ug/L	1	624	04/28/10 16:23	JGH	67-66-3	
Benzene	Not detected	ug/L	1	624	04/28/10 16:23	JGH	71-43-2	
Toluene	Not detected	ug/L	1	624	04/28/10 16:23	JGH	108-88-3	
Ethylbenzene	Not detected	ug/L	1	624	04/28/10 16:23	JGH	100-41-4	
o-Xylene	Not detected	ug/L	1	624	04/28/10 16:23	JGH	95-47-6	
p,m-Xylene	Not detected	ug/L	1	624	04/28/10 16:23	JGH		

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



# Analytical Laboratory Report

Lab Sample ID: S44035.02  
 Sample Tag: 01  
 Collected Date/Time: 04/22/2010 10:30  
 Matrix: Liquid  
 COC Reference: 52860

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
----------	---------	-------	----	--------	---------------	---------------	-------

**Extraction / Prep.**

Extraction, PCB	Completed			3510C	04/23/10 18:05	ADB	
-----------------	-----------	--	--	-------	----------------	-----	--

**Organics - PCBs/Pesticides**

**PCB**

PCB-1016	Not detected	ug/L	0.1	608	04/26/10 14:12	JANB 12674-11-2	
PCB-1221	Not detected	ug/L	0.1	608	04/26/10 14:12	JANB 11104-28-2	
PCB-1232	Not detected	ug/L	0.1	608	04/26/10 14:12	JANB 11141-16-5	
PCB-1242	Not detected	ug/L	0.1	608	04/26/10 14:12	JANB 53469-21-9	
PCB-1248	Not detected	ug/L	0.1	608	04/26/10 14:12	JANB 12672-29-6	
PCB-1254	Not detected	ug/L	0.1	608	04/26/10 14:12	JANB 11097-69-1	
PCB-1260	0.1	ug/L	0.1	608	04/26/10 14:12	JANB 11096-82-5	
PCB, Total	0.1	ug/L	0.1	608	04/26/10 14:12	JANB 1336-36-3	

**REPORT TO**

**CHAIN OF CUSTODY RECORD**

**INVOICE TO**

CONTACT NAME: Steve Hooseney (CRA) COMPANY: \_\_\_\_\_  
 ADDRESS: 614-SMI CITY: \_\_\_\_\_ STATE: MI ZIP CODE: \_\_\_\_\_  
 PHONE NO.: 77 W. Center P.O. NO.: \_\_\_\_\_ FAX NO.: \_\_\_\_\_  
 E-MAIL ADDRESS: Saginaw QUOTE NO.: \_\_\_\_\_

PROJECT NAME: SA - oily 343 ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED): DAY 343  
 SPECIAL INSTRUCTIONS/NOTES: \_\_\_\_\_

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

DELIVERABLES REQUIRED:  STANDARD  LEVEL II  LEVEL III  OTHER

MATRIX CODE: 16005/10 SAMPLE(S) - PLEASE PRINT OR TYPE: \_\_\_\_\_

MATRIX LAB NO.	YEAR	DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NON	HO	HO	HO	HO	HO	HO	HO	HO	HO	HO	HO	HO
44635.01	2010	4-22-10	10:00	02	L	10	X	X	X	X	X	X	X	X	X	X	X	X	X
2010	2010	4-22-10	10:30	01	L	2	X	X	X	X	X	X	X	X	X	X	X	X	X

RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME	RELINQUISHED BY: SIGNATURE/ORGANIZATION	DATE	TIME
<i>[Signature]</i>	4-22-10	11:30	<i>[Signature]</i>	4-22-10	13:00
<i>[Signature]</i>	4-22-10	11:30	<i>[Signature]</i>	4-22-10	13:00

RECEIVED BY: SIGNATURE/ORGANIZATION: \_\_\_\_\_ DATE: 4-22-10 TIME: 11:30  
 SEAL NO.: \_\_\_\_\_ SEAL INTACT: YES  NO   
 INITIALS: \_\_\_\_\_ INITIALS: \_\_\_\_\_  
 NOTES: \_\_\_\_\_ TEMP. ON ARRIVAL: 7.4