



General Motors LLC
Tonawanda Engine Plant
2995 River Road
Buffalo, NY 14207-1099

April 24, 2014

J.R. Smythe
Division of Water
NYS Dept. of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

RECEIVED
NYSDEC - REGION 9

APR 28 2014

FOIL
REL UNREL

Re: GM Powertrain Tonawanda Engine Plant
SPDES Permit NY0000574
1st Quarter 2014 Monitoring Well Results

Dear Mr. Smythe:

Per our current permit, PCBs are sampled quarterly in the monitoring wells and the regular parameters sampled semi-annually. Please find the analytical results for PCB samples collected during the first quarter of 2014. The full semi-annual report will be submitted in the second quarter.

Please call Miguel A. Antonetti, PhD at 716-879-5423, if you have any questions.

"I certify under the 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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed 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 the possibility of fines and imprisonment for knowing violations."

Sincerely,

Lori L. Shufflett for:

Steven C. Finch
Plant Manager

Attachment

CC:

Andrea Skalski- NYSDEC, Buffalo ✓
Brian Baker- NYSDEC, Albany



April 04, 2014

GM - Tonawanda Engine Plant
Attn: Mr. Casey Essary
2995 River Road
Buffalo, NY 14207-1099

RECEIVED
NYSDEC - REGION 9

APR 28 2014

FOIL
REL UNREL

Project: Program 2 - Quarterly SPDES Wells

Dear Mr. Casey Essary,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	Received	Description
1403283	03/22/2014	Laboratory Services

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ACCLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/13-049-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#200026/003329); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#103068); Michigan DPH (#0034); Minnesota DPH (#491715); New York ELAP (#11776/48855); North Carolina DNRE (#659); Texas CEQ (#T104704495-14-4); Virginia DCLS (#460153/2592); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-12-00236).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Jennifer L. Rice
Project Chemist



PROJECT TECHNICAL NARRATIVE(s)

Polychlorinated Biphenyls (PCBs) by EPA Method 608

Narrative: Due to sample volumes, batch matrix quality control (QC) was not performed for this analysis. A Method Blank and Laboratory Control Sample comprise the batch QC.

Analysis: USEPA-608

Sample/Analyte: 1403283-01 Monitoring Well 1
1403283-02 Monitoring Well 2
1403283-03 Monitoring Well 3
1403283-04 Monitoring Well 4



STATEMENT OF DATA QUALIFICATIONS

All analyses have been validated and comply with our Quality Control Program.
No Qualification is required.



ANALYTICAL REPORT

Client: **GM - Tonawanda Engine Plant**
Project: Program 2 - Quarterly SPDES Wells
Client Sample ID: **Monitoring Well 1**
Lab Sample ID: **1403283-01**
Matrix: Ground Water
Unit: ug/L
Dilution Factor: 1
QC Batch: 1402753

Work Order: **1403283**
Description: Laboratory Services
Sampled: 3/21/14 12:30
Sampled By: P. Hagerty
Received: 3/22/14 8:45
Prepared: 3/25/14 7:32 By: JTS
Analyzed: 4/1/14 0:15 By: MSZ
Analytical Batch: 4D01055

Polychlorinated Biphenyls (PCBs) by EPA Method 608

CAS Number	Analyte	Analytical Result	RL	MDL
12674-11-2	PCB-1016	0.10U	0.10	0.054
11104-28-2	PCB-1221	0.10U	0.10	0.045
11141-16-5	PCB-1232	0.10U	0.10	0.041
53469-21-9	PCB-1242	0.10U	0.10	0.062
12672-29-6	PCB-1248	0.10U	0.10	0.054
11097-69-1	PCB-1254	0.10U	0.10	0.053
11096-82-5	PCB-1260	0.10U	0.10	0.029

Surrogates:

Decachlorobiphenyl
Tetrachloro-m-xylene

% Recovery

99
71

Control Limits

30-138
29-117



ANALYTICAL REPORT

Client: **GM - Tonawanda Engine Plant**
Project: Program 2 - Quarterly SPDES Wells
Client Sample ID: **Monitoring Well 2**
Lab Sample ID: **1403283-02**
Matrix: Ground Water
Unit: ug/L
Dilution Factor: 1
QC Batch: 1402753

Work Order: **1403283**
Description: Laboratory Services
Sampled: 3/21/14 12:20
Sampled By: P. Hagerty
Received: 3/22/14 8:45
Prepared: 3/25/14 7:32 By: JTS
Analyzed: 4/4/14 3:15 By: MSZ
Analytical Batch: 4D04028

Polychlorinated Biphenyls (PCBs) by EPA Method 608

CAS Number	Analyte	Analytical Result	RL	MDL
12674-11-2	PCB-1016	0.10U	0.10	0.054
11104-28-2	PCB-1221	0.10U	0.10	0.045
11141-16-5	PCB-1232	0.10U	0.10	0.041
53469-21-9	PCB-1242	0.10U	0.10	0.062
12672-29-6	PCB-1248	0.10U	0.10	0.054
11097-69-1	PCB-1254	0.10U	0.10	0.053
11096-82-5	PCB-1260	0.10U	0.10	0.029

Surrogates:

Decachlorobiphenyl
Tetrachloro-m-xylene

% Recovery

89
60

Control Limits

30-138
29-117



ANALYTICAL REPORT

Client:	GM - Tonawanda Engine Plant	Work Order:	1403283	
Project:	Program 2 - Quarterly SPDES Wells	Description:	Laboratory Services	
Client Sample ID:	Monitoring Well 3	Sampled:	3/21/14 12:05	
Lab Sample ID:	1403283-03	Sampled By:	P. Hagerty	
Matrix:	Ground Water	Received:	3/22/14 8:45	
Unit:	ug/L	Prepared:	3/25/14 7:32	By: JTS
Dilution Factor:	1	Analyzed:	4/1/14 1:15	By: MSZ
QC Batch:	1402753	Analytical Batch:	4D01055	

Polychlorinated Biphenyls (PCBs) by EPA Method 608

CAS Number	Analyte	Analytical Result	RL	MDL
12674-11-2	PCB-1016	0.10U	0.10	0.054
11104-28-2	PCB-1221	0.10U	0.10	0.045
11141-16-5	PCB-1232	0.10U	0.10	0.041
53469-21-9	PCB-1242	0.10U	0.10	0.062
12672-29-6	PCB-1248	0.10U	0.10	0.054
11097-69-1	PCB-1254	0.10U	0.10	0.053
11096-82-5	PCB-1260	0.10U	0.10	0.029
Surrogates:		% Recovery	Control Limits	
<i>Decachlorobiphenyl</i>		99	30-138	
<i>Tetrachloro-m-xylene</i>		71	29-117	



ANALYTICAL REPORT

Client:	GM - Tonawanda Engine Plant	Work Order:	1403283	
Project:	Program 2 - Quarterly SPDES Wells	Description:	Laboratory Services	
Client Sample ID:	Monitoring Well 4	Sampled:	3/21/14 11:45	
Lab Sample ID:	1403283-04	Sampled By:	P. Hagerty	
Matrix:	Ground Water	Received:	3/22/14 8:45	
Unit:	ug/L	Prepared:	3/25/14 7:32	By: JTS
Dilution Factor:	1	Analyzed:	4/1/14 3:16	By: MSZ
QC Batch:	1402753	Analytical Batch:	4D01055	

Polychlorinated Biphenyls (PCBs) by EPA Method 608

CAS Number	Analyte	Analytical Result	RL	MDL
12674-11-2	PCB-1016	0.10U	0.10	0.054
11104-28-2	PCB-1221	0.10U	0.10	0.045
11141-16-5	PCB-1232	0.10U	0.10	0.041
53469-21-9	PCB-1242	0.10U	0.10	0.062
12672-29-6	PCB-1248	0.10U	0.10	0.054
11097-69-1	PCB-1254	0.10U	0.10	0.053
11096-82-5	PCB-1260	0.10U	0.10	0.029

Surrogates:

Decachlorobiphenyl
Tetrachloro-m-xylene

% Recovery

100
73

Control Limits

30-138
29-117



QUALITY CONTROL REPORT

Polychlorinated Biphenyls (PCBs) by EPA Method 608

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
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QC Batch: 1402753 608 Liquid/Liquid Extraction/USEPA-608

Method Blank

Unit: ug/L

Analyzed:

03/31/2014

By: MSZ

Analytical Batch:

4D01055

PCB-1016			0.10 U			--		0.10	0.054
PCB-1221			0.10 U					0.10	0.045
PCB-1232			0.10 U					0.10	0.041
PCB-1242			0.10 U					0.10	0.062
PCB-1248			0.10 U					0.10	0.054
PCB-1254			0.10 U					0.10	0.053
PCB-1260			0.10 U			--		0.10	0.029

Surrogates:

Decachlorobiphenyl

89

30-138

Tetrachloro-m-xylene

89

29-117

Laboratory Control Sample

Unit: ug/L

Analyzed:

03/31/2014

By: MSZ

Analytical Batch:

4D01055

PCB-1016	0.600	0.537	89	71-104	--		0.10	0.054
PCB-1260	0.600	0.603	101	65-125	--		0.10	0.029

Surrogates:

Decachlorobiphenyl

95

30-138

Tetrachloro-m-xylene

77

29-117



TRIMATRIX
LABORATORIES

Chain of Custody Record

COC No. 121022700

For Lab Use Only

Cart

VOA Rack/Tray

Receipt Log No.

Project Chemist
Jennifer Rice

Work Order No.

1403283

5560 Corporate Exchange Court SE, Grand Rapids, MI 49512
Phone (616) 975-4500 Fax (616) 942-7463 www.trimatrixlabs.com

Client Name
GM - Tonawanda Engine Plant

Address
2995 River Road

City, State Zip
Buffalo, NY 14207-1099

Phone: 716-879-5638 Fax: 716-879-5425

Email: casey.essary@gm.com

Project Name
Program 2 - Qlly SPDES Wells
Client Project No. / P.O. No.

Invoice To ☒ Client
☐ Other (comments)

Contact/Report To

Casey Essary

Analyses Requested

Pg. 1 of 1

A

PCBs - 608

Field pH

Field Temp

Container Type (corresponds to Container Packing List)

- ← PRESERVATIVES
- A NONE pH~7
 - B HNO₃ pH<2
 - C H₂SO₄ pH<2
 - D 1+1 HCl pH<2
 - E NaOH pH>12
 - F 20%NaOH pH>9
 - G MeOH
 - H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	COMPAR	Matrix	2	Field pH	Field Temp	Sample Comments
		01	1 Monitoring Well 1	3344	03/21/14	1230	X	W	2	7.21	10.9	2 Field pH/Temp
		02	2 Monitoring Well 2			1220	X	W	2	6.82	10.8	2 Field pH/Temp
		03	3 Monitoring Well 3			1205	X	W	2	7.22	12.6	2 Field pH/Temp
		04	4 Monitoring Well 4			1145	X	W	2	7.35	12.1	2 Field pH/Temp

Sampled By (print)

Patrick J. Heger

Company

File Chem

How Shipped?
Tracking No.

Hand Carrier

Comments

Relinquished By

Patrick J. Heger

Received By

Date

Time

150

2. Relinquished By

Date

Time

3. Relinquished By

Date

Time

4. Relinquished By

Date

Time

5. Received for Lab By

Date

Time

22/14 0845

ORIGINAL - LABORATORY

COPY - SAMPLER

SAMPLE RECEIVING / LOG-IN CHECKLIST

 TRIMATRIX LABORATORIES		Client: <u>MTT-Tomawanda EP</u> Receipt Record Page Line #: <u>17-3</u>		Work Order #: <u>1403283</u> New / Add To: Project Chemist: Sample #:	
Recorded by (Initials/Date): <u>La 3/22/14</u>		☒ Cooler ☐ Box ☐ Other:		Qty Received: <u>1</u> ☒ IR Gun (#202) Thermometer Used: ☐ Digital Thermometer (#54) ☐ Other (#):	
See Additional Cooler Information on Form					

Cooler #	Time	Cooler #	Time	Cooler #	Time	Cooler #	Time
3344	0948						
Custody Seals: ☒ None ☐ Present / Intact ☐ Present / Not Intact		Custody Seals: ☐ None ☐ Present / Intact ☐ Present / Not Intact		Custody Seals: ☐ None ☐ Present / Intact ☐ Present / Not Intact		Custody Seals: ☐ None ☐ Present / Intact ☐ Present / Not Intact	
Coolant Location: ☒ Dispersed / Top / Middle / Bottom		Coolant Location: ☐ Dispersed / Top / Middle / Bottom		Coolant Location: ☐ Dispersed / Top / Middle / Bottom		Coolant Location: ☐ Dispersed / Top / Middle / Bottom	
Coolant/Temperature Taken Via: ☒ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ☐ None / Avg 2-3 containers		Coolant/Temperature Taken Via: ☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ☐ None / Avg 2-3 containers		Coolant/Temperature Taken Via: ☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ☐ None / Avg 2-3 containers		Coolant/Temperature Taken Via: ☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ☐ None / Avg 2-3 containers	
Alternate Temperature Taken Via: ☐ Temperature Blank (TB) ☐ 1 Container		Alternate Temperature Taken Via: ☐ Temperature Blank (TB) ☐ 1 Container		Alternate Temperature Taken Via: ☐ Temperature Blank (TB) ☐ 1 Container		Alternate Temperature Taken Via: ☐ Temperature Blank (TB) ☐ 1 Container	
Recorded °C	Correction Factor °C	Actual °C	Recorded °C	Correction Factor °C	Actual °C	Recorded °C	Correction Factor °C
Temp Blank			Temp Blank			Temp Blank	
TB location: Representative / Not Representative			TB location: Representative / Not Representative			TB location: Representative / Not Representative	
1	3.7	3.7	1			1	
2	5.0	5.0	2			2	
3	4.6	4.6	3			3	
Average °C			Average °C			Average °C	
☐ Cooler ID on COC? ☐ VOC Trip Blank received?			☐ Cooler ID on COC? ☐ VOC Trip Blank received?			☐ Cooler ID on COC? ☐ VOC Trip Blank received?	

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received Yes No ☒ Chain of Custody record(s)? If No, Initialed By _____ ☒ Received for Lab Signed/Date/Time? ☐ Shipping document? ☐ Other _____ COC Information ☒ TriMatrix COC ☐ Other _____ COC ID Numbers:	Check Sample Preservation N/A Yes No ☒ Average sample temperature ≤ 5° C? ☐ Was thermal preservation required? If "No", Project Chemist Approval Initials: _____ If "Yes", Completed Non-Con Cooler - Cont Inventory Form? ☒ Completed Sample Preservation Verification Form? ☐ Samples chemically preserved correctly? If "No", added orange tag? ☒ Received pre-preserved VOC soils? ☐ MeOH ☐ Na ₂ SO ₄
Check COC for Accuracy Yes No ☐ Analysis Requested? ☒ Sample ID matches COC? ☒ Sample Date and Time matches COC? ☒ Container type completed on COC? ☒ All container types indicated are received?	Check for Short Hold-Time Prep/Analyses ☐ Bacteriological ☐ Air Bags ☐ EnCores / Methanol Pre-Preserved ☐ Formaldehyde/Alddehyde ☐ Green-tagged containers ☐ Yellow/White-tagged 1L ambers (SV Prep-Lab)

Sample Condition Summary N/A Yes No ☐ Broken containers/seals? ☐ Missing or incomplete labels? ☐ Illegible information on labels? ☐ Low volume received? ☐ Inappropriate or non-TriMatrix containers received? ☐ VOC vials / TOX containers have headspace? ☒ Extra sample locations / containers not listed on COC?	Notes ☐ Trip Blank received ☐ Trip Blank not listed on COC Cooler Received (Date/Time) <u>3/22/14 0845</u> Paperwork Delivered (Date/Time) <u>3/22/14 0957</u> ≤ 1 Hour Goal Met? Yes (No)
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