MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT
ENVIRONMENTAL LABORATORY
P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Division:	RD		
Report to:	SYBIL KOLON	**Lab Work Order # :**	10100033
	MDNRE-RRD-JACKSON	**Work Site ID :**	81000018
	JACKSON DISTRICT OFFICE	**Site Name :**	GELMAN / PLS
	301 EAST LOUIS GLICK HWY, JACKSON, MI 49201-155	**Received:**	01/10/2011
		Reported:	01/27/2011
Total:	$1,040.00	**Collected By:**	JIM COGER

Samples Received :

No:	Sample ID	Sample Description	Matrix:	Collection Date
01	AB69496	MW-56s	WATER	01/05/2011
02	AB69497	MW-125	WATER	01/05/2011
03	AB69498	MW-127d	WATER	01/05/2011
04	AB69499	MW-127s	WATER	01/05/2011
05	AB69500	MW-126d	WATER	01/05/2011
06	AB69501	MW-126s	WATER	01/05/2011
07	AB69502	MW-39s	WATER	01/05/2011
08	AB69503	MW-39d	WATER	01/05/2011

I certify that the analysis performed by the MDEQ Environmental Laboratory are accurate and that the laboratory tests were conducted by methods approved by the U.S. Environmental Protection Agency and other appropriate regulatory agencies.

George L. Krisztian,
Acting Laboratory Director

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Sample Number: AB69496 MW-56s

1,4-dioxane

Analytical Method: 8260SIM **Date Tested:** 01/14/2011 **Analyst:** PCR

CAS #	Compound	Result ug/L	RL	Qualifier	Dilution Factor
123-91-1	1,4-dioxane	90	1.0		1.0

Sample Number: AB69497 MW-125

1,4-dioxane

Analytical Method: 8260SIM **Date Tested:** 01/15/2011 **Analyst:** PCR

CAS #	Compound	Result ug/L	RL	Qualifier	Dilution Factor
123-91-1	1,4-dioxane	350	10		10

Sample Number: AB69498 MW-127d

1,4-dioxane

Analytical Method: 8260SIM **Date Tested:** 01/14/2011 **Analyst:** PCR

CAS #	Compound	Result ug/L	RL	Qualifier	Dilution Factor
123-91-1	1,4-dioxane	3.0	1.0		1.0

This analysis is performed using selected ion monitoring (SIM). Due to the nature of 1,4-dioxane, results reported below 5 ug/L should be considered estimated.

CAS# : Chemical Abstract Service Registry Number
RL : Reporting Limit
ND : Not Detected

ug / L : microgram / liter (ppb)
mg / L : milligram / liter (ppm)
ug / Kg : microgram / kilogram (ppb)
mg / Kg : milligram / kilogram (ppm)

Laboratory Contacts
Inorganic Unit Mgr: Sandy Gregg
Organic Unit Mgr: Carol Smith
Systems Mgmt Unit: George Krisztian

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Sample Number: AB69499 MW-127s

1,4-dioxane

Analytical Method: 8260SIM **Date Tested:** 01/14/2011 **Analyst:** PCR

CAS #	Compound	Result ug/L	RL	Qualifier	Dilution Factor
123-91-1	1,4-dioxane	Not Detected	1.5	K	1.0

This analysis is performed using selected ion monitoring (SIM). Due to the nature of 1,4-dioxane, results reported below 5 ug/L should be considered estimated.

Sample Number: AB69500 MW-126d

1,4-dioxane

Analytical Method: 8260SIM **Date Tested:** 01/14/2011 **Analyst:** PCR

CAS #	Compound	Result ug/L	RL	Qualifier	Dilution Factor
123-91-1	1,4-dioxane	Not Detected	1.0		1.0

This analysis is performed using selected ion monitoring (SIM). Due to the nature of 1,4-dioxane, results reported below 5 ug/L should be considered estimated.

Sample Number: AB69501 MW-126s

1,4-dioxane

Analytical Method: 8260SIM **Date Tested:** 01/14/2011 **Analyst:** PCR

CAS #	Compound	Result ug/L	RL	Qualifier	Dilution Factor
123-91-1	1,4-dioxane	Not Detected	1.0		1.0

This analysis is performed using selected ion monitoring (SIM). Due to the nature of 1,4-dioxane, results reported below 5 ug/L should be considered estimated.

CAS# : Chemical Abstract Service Registry Number
RL : Reporting Limit
ND : Not Detected

ug / L : microgram / liter (ppb)
mg / L : milligram / liter (ppm)
ug / Kg : microgram / kilogram (ppb)
mg / Kg : milligram / kilogram (ppm)

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Sample Number: AB69502 MW-39s

1,4-dioxane

Analytical Method: 8260SIM **Date Tested:** 01/14/2011 **Analyst:** PCR

CAS #	Compound	Result ug/L	RL	Qualifier	Dilution Factor
123-91-1	1,4-dioxane	26	1.0		1.0

Sample Number: AB69503 MW-39d

1,4-dioxane

Analytical Method: 8260SIM **Date Tested:** 01/14/2011 **Analyst:** PCR

CAS #	Compound	Result ug/L	RL	Qualifier	Dilution Factor
123-91-1	1,4-dioxane	180	1.0		1.0

CAS# : Chemical Abstract Service Registry Number
RL : Reporting Limit
ND : Not Detected

ug / L : microgram / liter (ppb)
mg / L : milligram / liter (ppm)
ug / Kg : microgram / kilogram (ppb)
mg / Kg : milligram / kilogram (ppm)

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Qualifier Code	Qualifier Description
1	Result(s) and RL(s) are estimated due to low surrogate recovery.
2	Result is estimated due to high surrogate recovery.
3	Result(s) and RL(s) are estimated due to low matrix spike recovery.
4	Result is estimated due to high matrix spike recovery.
5	Result and RL are estimated due to low continuing calibration standard criteria failure.
6	Result is estimated due to high continuing calibration standard criteria failure.
7	Result(s) and RL(s) are estimated due to poor precision.
8	Result(s) and RL(s) are estimated due to low recovery of batch QC.
9	Result outside QC acceptance criteria.
A	Value reported is the mean of two or more determinations.
C	Value calculated from other independent parameters.
D	Analyte value quantified from a dilution(s); reporting limit (RL) raised.
E	Result is estimated due to high recovery of batch QC.
F	Amenable cyanide was not analyzed due to low level of total cyanide.
G	Result and RL are estimated due to initial calibration standard criteria failure.
H	Recommended laboratory holding time was exceeded.
I	Dilution required due to matrix interference; reporting limit (RL) raised.
J	Analyte was positively identified. Value is an estimate.
JA	Result is estimated due to multiple Aroclors present.
JC	Result is estimated since confirmation analysis did not meet acceptance criteria
JD	Due to severe degradation, specific Aroclor identification is difficult and quantitation is estimated.
K	RL(s) raised due to matrix interferences.
KR	RL(s) raised due to low sample volume submitted.
KS	RL(s) raised due to low total solids.
KW	RL(s) raised due to light sample weight.
LB	Reported library search compounds are tentative identifications with estimated concentrations.
M	The level of the method preparation blank (MPB) is reported in the qualifier column.
N	Non-homogeneous sample made analysis of sample questionable.
O	Result and RL estimated due to analysis from an open vial.
P	Recommended sample collection/preservation technique not used; reported result(s) is an estimate.
Q	Quantity of sample insufficient to perform analyses requested.
R	Result confirmed by re-extraction and analysis.
S	Supernatant analyzed.
T	Reported value is less than the reporting limit (RL). Result is estimated.
V	Value not available due to dilution.
W	Reported value is less than the method detection limit (MDL).
X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200°C. 2-Methylnaphthalene & naphthalene have boiling points above 200°C and are better suited to analysis by methods 8270 or 625 as semivolatile organics.
PI	Possible interference may have affected the accuracy of the laboratory result
Z	Result reported below the RL to meet the TDL in RRD Op Memo 2 (10/22/04) multiplied by applicable dilution factor.

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