



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: WOLVERINE POWER
Name:
ClientProj: 4220
GTA ProjNo: 042919-1

Site Addr: FAIRVIEW SUBSTATION
Sampled By: JIM ROSSI/COMPLIANCE
Date Rec: 4/29/2019
Time Rec: 9:00 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	HA-1	4/26/2019		WATER
2	HA-5	4/26/2019		WATER
3	HA-1 4'	4/26/2019		SOIL
4	HA-1 8'	4/26/2019		SOIL
5	HA-2 4'	4/26/2019		SOIL
6	HA-3 4'	4/26/2019		SOIL
7	HA-4 4'	4/26/2019		SOIL

ELECTRONIC SIGNATURE REPORT. This is a final report for the following pages of data for the samples specified above. All analysis was performed by the methods stated and all quality control measures required were completed. All quality control information is available upon request.

Kirk L Chase

Kirk L. Chase/Chemist
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COMPANY: WOLVERINE POWER
 PROJECT NO: 4220
 LOCATION: FAIRVIEW SUBSTATION

GTA PROJECT NO: 042919-1
 GTA SAMPLE NO: 1

DATE SAMPLED: 4/26/2019
 TIME SAMPLED:
 DATE RECEIVED: 4/29/2019
 TIME RECEIVED: 9:00 AM

SAMPLED BY: JIM ROSSI/COMPLIANCE

SAMPLE MATRIX: WATER

SAMPLE ID: HA-1

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 4/29/2019

Prep

EPA 5030B

Analyte	Concentration	LOD
ACETONE	ND	25
ALLYL CHLORIDE	ND	10
BENZENE	ND	1.0
BROMOBENZENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0
BROMODICHLOROMETHANE	ND	1.0
BROMOFORM	ND	1.0
BROMOMETHANE	ND	1.0
n-BUTYLBENZENE	ND	1.0
s-BUTYLBENZENE	ND	1.0
t-BUTYLBENZENE	ND	1.0
CARBON DISULFIDE	ND	5.0
CARBON TETRACHLORIDE	ND	1.0
CHLOROENZENE	ND	1.0
1-CHLOROBUTANE	ND	1.0
CHLOROFORM	ND	1.0
CHLOROETHANE	ND	1.0
CHLOROMETHANE	ND	1.0
2-CHLOROTOLUENE	ND	1.0
4-CHLOROTOLUENE	ND	1.0
DIBROMOCHLOROMETHANE	ND	1.0
DIBROMOMETHANE	ND	1.0
1,2-DIBROMOETHANE	ND	1.0
1,2-DICHLOROENZENE	ND	1.0
1,3-DICHLOROENZENE	ND	1.0
1,4-DICHLOROENZENE	ND	1.0
t-1,4-DICHLORO-2-BUTENE	ND	10
DICHLORODIFLUOROMETHANE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0
trans-1,2-DICHLOROETHENE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0
1,3-DICHLOROPROPANE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0

Analyte	Concentration	LOD
cis-1,3-DICHLOROPROPENE	ND	1.0
trans-1,3-DICHLOROPROPENE	ND	1.0
DIETHYL ETHER	ND	10
ETHYLBENZENE	ND	1.0
ETHYL METHACRYLATE	ND	10
HEXACHLOROBUTADIENE	ND	1.0
HEXACHLOROETHANE	ND	10
2-HEXANONE	ND	10
IDOMETHANE	ND	10
ISOPROPYLBENZENE	ND	1.0
ISOPROPYLTOLUENE	ND	1.0
METHYL ACRYLATE	ND	10
METHYL ETHYL KETONE	ND	10
METHYL-t-BUTYL ETHER	ND	5.0
METHYLENE CHLORIDE	ND	1.0
METHYL METHACRYLATE	ND	10
MIBK	ND	10
2-METHYLNAPHTHALENE	ND	5.0
NAPHTHALENE	ND	5.0
PENTACHLOROETHANE	ND	10
n-PROPYLBENZENE	ND	1.0
STYRENE	ND	1.0
1,1,1,2-TETRACHLOROETHANE	ND	1.0
1,1,2,2-TETRACHLOROETHANE	ND	1.0
TETRACHLOROETHENE	ND	1.0
TOLUENE	ND	1.0
1,2,3-TRICHLOROENZENE	ND	1.0
1,2,4-TRICHLOROENZENE	ND	1.0
1,1,1-TRICHLOROETHANE	ND	1.0
1,1,2-TRICHLOROETHANE	ND	1.0
TRICHLOROETHENE	ND	1.0
TRICHLORFLUOROMETHANE	ND	1.0
1,2,3-TRICHLOROPROPANE	ND	1.0
1,2,4-TRIMETHYLBENZENE	ND	1.0
1,3,5-TRIMETHYLBENZENE	ND	1.0
VINYL CHLORIDE	ND	1.0
XYLENE (TOTAL)	ND	3.0

ND = NOT DETECTED, RESULT IS <LOD.

LOD = LIMIT OF DETECTION.



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COMPANY: WOLVERINE POWER
PROJECT NO: 4220
LOCATION: FAIRVIEW SUBSTATION
MI
SAMPLE MATRIX: WATER
SAMPLE ID: HA-5

GTA PROJECT NO: 042919-1
GTA SAMPLE NO: 2
DATE SAMPLED: 4/26/2019
TIME SAMPLED:
DATE RECEIVED: 4/29/2019
TIME RECEIVED: 9:00 AM
SAMPLED BY: JIM ROSSI/COMPLIANCE

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		4/29/2019	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.
ND = NOT DETECTED, RESULT < LOD
LOD = LIMIT OF DETECTION



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COMPANY:	WOLVERINE POWER	GTA PROJECT NO:	042919-1
PROJECT NO:	4220	GTA SAMPLE NO:	3
LOCATION:	FAIRVIEW SUBSTATION	DATE SAMPLED:	4/26/2019
		TIME SAMPLED:	
	MI	DATE RECEIVED:	4/29/2019
		TIME RECEIVED:	9:00 AM
SAMPLE MATRIX:	SOIL	SAMPLED BY:	JIM ROSSI/COMPLIANCE
SAMPLE ID:	HA-1 4'	**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.	

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	4/26/2019	4/29/2019	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY: WOLVERINE POWER
 PROJECT NO: 4220
 LOCATION: FAIRVIEW SUBSTATION
 MI
 SAMPLE MATRIX: SOIL
 SAMPLE ID: HA-1 8'

GTA PROJECT NO: 042919-1
 GTA SAMPLE NO: 4
 DATE SAMPLED: 4/26/2019
 TIME SAMPLED:
 DATE RECEIVED: 4/29/2019
 TIME RECEIVED: 9:00 AM

SAMPLED BY: JIM ROSSI/COMPLIANCE
 **THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	4/26/2019	4/29/2019	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY: WOLVERINE POWER
PROJECT NO: 4220
LOCATION: FAIRVIEW SUBSTATION

MI
SAMPLE MATRIX: SOIL
SAMPLE ID: HA-2 4'

GTA PROJECT NO: 042919-1
GTA SAMPLE NO: 5
DATE SAMPLED: 4/26/2019
TIME SAMPLED:
DATE RECEIVED: 4/29/2019
TIME RECEIVED: 9:00 AM

SAMPLED BY: JIM ROSSI/COMPLIANCE

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	4/26/2019	4/29/2019	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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LOD = LIMIT OF DETECTION

COMPANY: WOLVERINE POWER
 PROJECT NO: 4220
 LOCATION: FAIRVIEW SUBSTATION
 MI
 SAMPLE MATRIX: SOIL
 SAMPLE ID: HA-3 4'

GTA PROJECT NO: 042919-1
 GTA SAMPLE NO: 6
 DATE SAMPLED: 4/26/2019
 TIME SAMPLED:
 DATE RECEIVED: 4/29/2019
 TIME RECEIVED: 9:00 AM

SAMPLED BY: JIM ROSSI/COMPLIANCE

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	4/26/2019	4/29/2019	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY: WOLVERINE POWER
PROJECT NO: 4220
LOCATION: FAIRVIEW SUBSTATION

MI
SAMPLE MATRIX: SOIL
SAMPLE ID: HA-4 4'

GTA PROJECT NO: 042919-1
GTA SAMPLE NO: 7
DATE SAMPLED: 4/26/2019
TIME SAMPLED:
DATE RECEIVED: 4/29/2019
TIME RECEIVED: 9:00 AM

SAMPLED BY: JIM ROSSI/COMPLIANCE

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	4/26/2019	4/29/2019	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY:	WOLVERINE POWER	GTA PROJECT NO:	042919-1
PROJECT NO:	4220	GTA SAMPLE NO:	1
LOCATION:	FAIRVIEW SUBSTATION	DATE SAMPLED:	4/26/2019
		TIME SAMPLED:	
SAMPLED BY:	MI JIM ROSSI/COMPLIANCE	DATE RECEIVED:	4/29/2019
		TIME RECEIVED:	9:00 AM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	HA-1		

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	4/29/2019	4/30/2019	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	ND	1.0					
Benzo(b)fluoranthene	ND	1.0					
Benzo(k)fluoranthene	ND	1.0					
Benzo(a)pyrene	ND	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	ND	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	ND	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	ND	2.0					
Pyrene	ND	5.0					

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COMPANY: WOLVERINE POWER
 PROJECT NO: 4220
 LOCATION: FAIRVIEW SUBSTATION
 MI
 SAMPLED BY: JIM ROSSI/COMPLIANCE
 SAMPLE MATRIX: SOIL
 SAMPLE ID: HA-1 8'

GTA PROJECT NO: 042919-1
 GTA SAMPLE NO: 4
 DATE SAMPLED: 4/26/2019
 TIME SAMPLED:
 DATE RECEIVED: 4/29/2019
 TIME RECEIVED: 9:00 AM

PNA EPA 8270D (SIM)

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Acenaphthene	ND	330	ug/Kg (PPB)	KC/TR	4/29/2019	4/30/2019	EPA 3550B
Acenaphthylene	ND	330					
Anthracene	ND	330					
Benzo(a)anthracene	ND	330					
Benzo(b)fluoranthene	ND	330					
Benzo(k)fluoranthene	ND	330					
Benzo(a)pyrene	ND	330					
Benzo(ghi)perylene	ND	330					
2-Chloronaphthalene	ND	330					
Chrysene	ND	330					
Dibenz(ah)anthracene	ND	330					
Fluoranthene	ND	330					
Fluorene	ND	330					
Indeno(123-cd)pyrene	ND	330					
Phenanthrene	ND	330					
Pyrene	ND	330					

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COMPANY: WOLVERINE POWER

NAME:
PROJECT NO: 4220

LOCATION: FAIRVIEW SUBSTATION

MI

GTA PROJECT NO: 042919-1
SAMPLED BY: JIM ROSSI/COMPLIANCE

DATE SAMPLED: 4/26/2019
TIME SAMPLED:

SAMPLE MATRIX: SOIL

DATE RECEIVED: 4/29/2019
TIME RECEIVED: 9:00 AM

MOISTURE

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Complete</u>
	SAMPLE ID: HA-1 4'					
	% MOISTURE EPA 3550C	20	0.050	% OF SAMPLE	AS	4/30/2019
	SAMPLE ID: HA-1 8'					
	% MOISTURE EPA 3550C	33	0.050	% OF SAMPLE	AS	4/30/2019
	SAMPLE ID: HA-2 4'					
	% MOISTURE EPA 3550C	23	0.050	% OF SAMPLE	AS	4/30/2019
	SAMPLE ID: HA-3 4'					
	% MOISTURE EPA 3550C	23	0.050	% OF SAMPLE	AS	4/30/2019
	SAMPLE ID: HA-4 4'					
	% MOISTURE EPA 3550C	23	0.050	% OF SAMPLE	AS	4/30/2019

