



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: MACKINAC ENVIRONMENTAL
Name:
ClientProj: M19-3117
GTA ProjNo: 101819-5

Site Addr: BAY MILLS INDIAN COMMUNITY (BMIC)

Sampled By: SLF/MJR - MET
Date Rec: 10/18/2019
Time Rec: 12:20 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-1	10/16/2019	3:20 PM	WATER
2	MW-2	10/16/2019	3:40 PM	WATER
3	MW-3	10/16/2019	3:30 PM	WATER
4	MW-4	10/16/2019	3:15 PM	WATER
5	MW-5	10/16/2019	3:50 PM	WATER

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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830 Robinwood Court
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INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M19-3117
 LOCATION: BAY MILLS INDIAN COMMUNITY (BMIC)

GTA PROJECT NO: 101819-5
 GTA SAMPLE NO: 1
 DATE SAMPLED: 10/16/2019
 TIME SAMPLED: 3:20 PM
 DATE RECEIVED: 10/18/2019
 TIME RECEIVED: 12:20 PM

SAMPLED BY: SLF/MJR - MET

SAMPLE MATRIX: WATER

SAMPLE ID: MW-1

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 10/21/2019

Prep

EPA 5030B

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	25	cis-1,3-DICHLOROPROPENE	ND	1.0
ALLYL CHLORIDE	ND	10	trans-1,3-DICHLOROPROPENE	ND	1.0
BENZENE	ND	1.0	DIETHYL ETHER	ND	10
BROMOBENZENE	ND	1.0	ETHYLBENZENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0	ETHYL METHACRYLATE	ND	10
BROMODICHLOROMETHANE	ND	1.0	HEXACHLOROBUTADIENE	ND	1.0
BROMOFORM	ND	1.0	HEXACHLOROETHANE	ND	10
BROMOMETHANE	ND	1.0	2-HEXANONE	ND	10
n-BUTYLBENZENE	ND	1.0	IDOMETHANE	ND	10
s-BUTYLBENZENE	ND	1.0	ISOPROPYLBENZENE	ND	1.0
t-BUTYLBENZENE	ND	1.0	ISOPROPYLTOLUENE	ND	1.0
CARBON DISULFIDE	ND	5.0	METHYL ACRYLATE	ND	10
CARBON TETRACHLORIDE	ND	1.0	METHYL ETHYL KETONE	ND	10
CHLOROENZENE	ND	1.0	METHYL-t-BUTYL ETHER	ND	5.0
1-CHLOROBUTANE	ND	1.0	METHYLENE CHLORIDE	ND	1.0
CHLOROFORM	ND	1.0	METHYL METHACRYLATE	ND	10
CHLOROETHANE	ND	1.0	MIBK	ND	10
CHLOROMETHANE	ND	1.0	2-METHYLNAPHTHALENE	ND	5.0
2-CHLOROTOLUENE	ND	1.0	NAPHTHALENE	ND	5.0
4-CHLOROTOLUENE	ND	1.0	PENTACHLOROETHANE	ND	10
DIBROMOCHLOROMETHANE	ND	1.0	n-PROPYLBENZENE	ND	1.0
DIBROMOMETHANE	ND	1.0	STYRENE	ND	1.0
1,2-DIBROMOETHANE	ND	1.0	1,1,1,2-TETRACHLOROETHANE	ND	1.0
1,2-DICHLOROENZENE	ND	1.0	1,1,2,2-TETRACHLOROETHANE	ND	1.0
1,3-DICHLOROENZENE	ND	1.0	TETRACHLOROETHENE	ND	1.0
1,4-DICHLOROENZENE	ND	1.0	TOLUENE	ND	1.0
t-1,4-DICHLORO-2-BUTENE	ND	10	1,2,3-TRICHLOROENZENE	ND	1.0
DICHLORODIFLUOROMETHANE	ND	1.0	1,2,4-TRICHLOROENZENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	1,1,1-TRICHLOROETHANE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	1,1,2-TRICHLOROETHANE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0	TRICHLOROETHENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0	TRICHLORFLUOROMETHANE	ND	1.0
trans-1,2-DICHLOROETHENE	ND	1.0	1,2,3-TRICHLOROPROPANE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0	1,2,4-TRIMETHYLBENZENE	1.3	1.0
1,3-DICHLOROPROPANE	ND	1.0	1,3,5-TRIMETHYLBENZENE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0	VINYL CHLORIDE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0	XYLENE (TOTAL)	ND	3.0

ND = NOT DETECTED, RESULT IS <LOD.
 LOD = LIMIT OF DETECTION.



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COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M19-3117
 LOCATION: BAY MILLS INDIAN COMMUNITY (BMIC)

GTA PROJECT NO: 101819-5
 GTA SAMPLE NO: 2
 DATE SAMPLED: 10/16/2019
 TIME SAMPLED: 3:40 PM
 DATE RECEIVED: 10/18/2019
 TIME RECEIVED: 12:20 PM

SAMPLED BY: SLF/MJR - MET

SAMPLE MATRIX: WATER

SAMPLE ID: MW-2

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 10/21/2019

Prep

EPA 5030B

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	25	cis-1,3-DICHLOROPROPENE	ND	1.0
ALLYL CHLORIDE	ND	10	trans-1,3-DICHLOROPROPENE	ND	1.0
BENZENE	ND	1.0	DIETHYL ETHER	ND	10
BROMOBENZENE	ND	1.0	ETHYLBENZENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0	ETHYL METHACRYLATE	ND	10
BROMODICHLOROMETHANE	ND	1.0	HEXACHLOROBUTADIENE	ND	1.0
BROMOFORM	ND	1.0	HEXACHLOROETHANE	ND	10
BROMOMETHANE	ND	1.0	2-HEXANONE	ND	10
n-BUTYLBENZENE	ND	1.0	IDOMETHANE	ND	10
s-BUTYLBENZENE	ND	1.0	ISOPROPYLBENZENE	ND	1.0
t-BUTYLBENZENE	ND	1.0	ISOPROPYLTOLUENE	ND	1.0
CARBON DISULFIDE	ND	5.0	METHYL ACRYLATE	ND	10
CARBON TETRACHLORIDE	ND	1.0	METHYL ETHYL KETONE	ND	10
CHLOROENZENE	ND	1.0	METHYL-t-BUTYL ETHER	ND	5.0
1-CHLOROBUTANE	ND	1.0	METHYLENE CHLORIDE	ND	1.0
CHLOROFORM	ND	1.0	METHYL METHACRYLATE	ND	10
CHLOROETHANE	ND	1.0	MIBK	ND	10
CHLOROMETHANE	ND	1.0	2-METHYLNAPHTHALENE	ND	5.0
2-CHLOROTOLUENE	ND	1.0	NAPHTHALENE	ND	5.0
4-CHLOROTOLUENE	ND	1.0	PENTACHLOROETHANE	ND	10
DIBROMOCHLOROMETHANE	ND	1.0	n-PROPYLBENZENE	ND	1.0
DIBROMOMETHANE	ND	1.0	STYRENE	ND	1.0
1,2-DIBROMOETHANE	ND	1.0	1,1,1,2-TETRACHLOROETHANE	ND	1.0
1,2-DICHLOROENZENE	ND	1.0	1,1,2,2-TETRACHLOROETHANE	ND	1.0
1,3-DICHLOROENZENE	ND	1.0	TETRACHLOROETHENE	ND	1.0
1,4-DICHLOROENZENE	ND	1.0	TOLUENE	ND	1.0
t-1,4-DICHLORO-2-BUTENE	ND	10	1,2,3-TRICHLOROENZENE	ND	1.0
DICHLORODIFLUOROMETHANE	ND	1.0	1,2,4-TRICHLOROENZENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	1,1,1-TRICHLOROETHANE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	1,1,2-TRICHLOROETHANE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0	TRICHLOROETHENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0	TRICHLORFLUOROMETHANE	ND	1.0
trans-1,2-DICHLOROETHENE	ND	1.0	1,2,3-TRICHLOROPROPANE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0	1,2,4-TRIMETHYLBENZENE	ND	1.0
1,3-DICHLOROPROPANE	ND	1.0	1,3,5-TRIMETHYLBENZENE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0	VINYL CHLORIDE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0	XYLENE (TOTAL)	ND	3.0

ND = NOT DETECTED, RESULT IS <LOD.

LOD = LIMIT OF DETECTION.



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COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M19-3117
 LOCATION: BAY MILLS INDIAN COMMUNITY (BMIC)

GTA PROJECT NO: 101819-5
 GTA SAMPLE NO: 3
 DATE SAMPLED: 10/16/2019
 TIME SAMPLED: 3:30 PM
 DATE RECEIVED: 10/18/2019
 TIME RECEIVED: 12:20 PM

SAMPLED BY: SLF/MJR - MET

SAMPLE MATRIX: WATER

SAMPLE ID: MW-3

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 10/21/2019

Prep

EPA 5030B

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	25	cis-1,3-DICHLOROPROPENE	ND	1.0
ALLYL CHLORIDE	ND	10	trans-1,3-DICHLOROPROPENE	ND	1.0
BENZENE	2.2	1.0	DIETHYL ETHER	ND	10
BROMOBENZENE	ND	1.0	ETHYLBENZENE	4.1	1.0
BROMOCHLOROMETHANE	ND	1.0	ETHYL METHACRYLATE	ND	10
BROMODICHLOROMETHANE	ND	1.0	HEXACHLOROBUTADIENE	ND	1.0
BROMOFORM	ND	1.0	HEXACHLOROETHANE	ND	10
BROMOMETHANE	ND	1.0	2-HEXANONE	ND	10
n-BUTYLBENZENE	ND	1.0	IDOMETHANE	ND	10
s-BUTYLBENZENE	ND	1.0	ISOPROPYLBENZENE	1.2	1.0
t-BUTYLBENZENE	ND	1.0	ISOPROPYLTOLUENE	ND	1.0
CARBON DISULFIDE	ND	5.0	METHYL ACRYLATE	ND	10
CARBON TETRACHLORIDE	ND	1.0	METHYL ETHYL KETONE	ND	10
CHLOROENZENE	ND	1.0	METHYL-t-BUTYL ETHER	ND	5.0
1-CHLOROBUTANE	ND	1.0	METHYLENE CHLORIDE	ND	1.0
CHLOROFORM	ND	1.0	METHYL METHACRYLATE	ND	10
CHLOROETHANE	ND	1.0	MIBK	ND	10
CHLOROMETHANE	ND	1.0	2-METHYLNAPHTHALENE	ND	5.0
2-CHLOROTOLUENE	ND	1.0	NAPHTHALENE	ND	5.0
4-CHLOROTOLUENE	ND	1.0	PENTACHLOROETHANE	ND	10
DIBROMOCHLOROMETHANE	ND	1.0	n-PROPYLBENZENE	1.5	1.0
DIBROMOMETHANE	ND	1.0	STYRENE	ND	1.0
1,2-DIBROMOETHANE	ND	1.0	1,1,1,2-TETRACHLOROETHANE	ND	1.0
1,2-DICHLOROENZENE	ND	1.0	1,1,2,2-TETRACHLOROETHANE	ND	1.0
1,3-DICHLOROENZENE	ND	1.0	TETRACHLOROETHENE	ND	1.0
1,4-DICHLOROENZENE	ND	1.0	TOLUENE	ND	1.0
t-1,4-DICHLORO-2-BUTENE	ND	10	1,2,3-TRICHLOROENZENE	ND	1.0
DICHLORODIFLUOROMETHANE	ND	1.0	1,2,4-TRICHLOROENZENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	1,1,1-TRICHLOROETHANE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	1,1,2-TRICHLOROETHANE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0	TRICHLOROETHENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0	TRICHLORFLUOROMETHANE	ND	1.0
trans-1,2-DICHLOROETHENE	ND	1.0	1,2,3-TRICHLOROPROPANE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0	1,2,4-TRIMETHYLBENZENE	7.7	1.0
1,3-DICHLOROPROPANE	ND	1.0	1,3,5-TRIMETHYLBENZENE	2.3	1.0
2,2-DICHLOROPROPANE	ND	1.0	VINYL CHLORIDE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0	XYLENE (TOTAL)	17	3.0

ND = NOT DETECTED, RESULT IS <LOD.

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COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M19-3117
 LOCATION: BAY MILLS INDIAN COMMUNITY (BMIC)

GTA PROJECT NO: 101819-5
 GTA SAMPLE NO: 4
 DATE SAMPLED: 10/16/2019
 TIME SAMPLED: 3:15 PM
 DATE RECEIVED: 10/18/2019
 TIME RECEIVED: 12:20 PM

SAMPLED BY: SLF/MJR - MET

SAMPLE MATRIX: WATER

SAMPLE ID: MW-4

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 10/21/2019

Prep

EPA 5030B

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	25	cis-1,3-DICHLOROPROPENE	ND	1.0
ALLYL CHLORIDE	ND	10	trans-1,3-DICHLOROPROPENE	ND	1.0
BENZENE	ND	1.0	DIETHYL ETHER	ND	10
BROMOBENZENE	ND	1.0	ETHYLBENZENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0	ETHYL METHACRYLATE	ND	10
BROMODICHLOROMETHANE	ND	1.0	HEXACHLOROBUTADIENE	ND	1.0
BROMOFORM	ND	1.0	HEXACHLOROETHANE	ND	10
BROMOMETHANE	ND	1.0	2-HEXANONE	ND	10
n-BUTYLBENZENE	ND	1.0	IDOMETHANE	ND	10
s-BUTYLBENZENE	ND	1.0	ISOPROPYLBENZENE	ND	1.0
t-BUTYLBENZENE	ND	1.0	ISOPROPYLTOLUENE	ND	1.0
CARBON DISULFIDE	ND	5.0	METHYL ACRYLATE	ND	10
CARBON TETRACHLORIDE	ND	1.0	METHYL ETHYL KETONE	ND	10
CHLOROENZENE	ND	1.0	METHYL-t-BUTYL ETHER	ND	5.0
1-CHLOROBUTANE	ND	1.0	METHYLENE CHLORIDE	ND	1.0
CHLOROFORM	ND	1.0	METHYL METHACRYLATE	ND	10
CHLOROETHANE	ND	1.0	MIBK	ND	10
CHLOROMETHANE	ND	1.0	2-METHYLNAPHTHALENE	ND	5.0
2-CHLOROTOLUENE	ND	1.0	NAPHTHALENE	ND	5.0
4-CHLOROTOLUENE	ND	1.0	PENTACHLOROETHANE	ND	10
DIBROMOCHLOROMETHANE	ND	1.0	n-PROPYLBENZENE	ND	1.0
DIBROMOMETHANE	ND	1.0	STYRENE	ND	1.0
1,2-DIBROMOETHANE	ND	1.0	1,1,1,2-TETRACHLOROETHANE	ND	1.0
1,2-DICHLOROENZENE	ND	1.0	1,1,2,2-TETRACHLOROETHANE	ND	1.0
1,3-DICHLOROENZENE	ND	1.0	TETRACHLOROETHENE	ND	1.0
1,4-DICHLOROENZENE	ND	1.0	TOLUENE	ND	1.0
t-1,4-DICHLORO-2-BUTENE	ND	10	1,2,3-TRICHLOROENZENE	ND	1.0
DICHLORODIFLUOROMETHANE	ND	1.0	1,2,4-TRICHLOROENZENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	1,1,1-TRICHLOROETHANE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	1,1,2-TRICHLOROETHANE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0	TRICHLOROETHENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0	TRICHLORFLUOROMETHANE	ND	1.0
trans-1,2-DICHLOROETHENE	ND	1.0	1,2,3-TRICHLOROPROPANE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0	1,2,4-TRIMETHYLBENZENE	ND	1.0
1,3-DICHLOROPROPANE	ND	1.0	1,3,5-TRIMETHYLBENZENE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0	VINYL CHLORIDE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0	XYLENE (TOTAL)	ND	3.0

ND = NOT DETECTED, RESULT IS <LOD.

LOD = LIMIT OF DETECTION.



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COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M19-3117
 LOCATION: BAY MILLS INDIAN COMMUNITY (BMIC)

GTA PROJECT NO: 101819-5
 GTA SAMPLE NO: 5
 DATE SAMPLED: 10/16/2019
 TIME SAMPLED: 3:50 PM
 DATE RECEIVED: 10/18/2019
 TIME RECEIVED: 12:20 PM

SAMPLED BY: SLF/MJR - MET

SAMPLE MATRIX: WATER

SAMPLE ID: MW-5

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 10/21/2019

Prep

EPA 5030B

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	25	cis-1,3-DICHLOROPROPENE	ND	1.0
ALLYL CHLORIDE	ND	10	trans-1,3-DICHLOROPROPENE	ND	1.0
BENZENE	ND	1.0	DIETHYL ETHER	ND	10
BROMOBENZENE	ND	1.0	ETHYLBENZENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0	ETHYL METHACRYLATE	ND	10
BROMODICHLOROMETHANE	ND	1.0	HEXACHLOROBUTADIENE	ND	1.0
BROMOFORM	ND	1.0	HEXACHLOROETHANE	ND	10
BROMOMETHANE	ND	1.0	2-HEXANONE	ND	10
n-BUTYLBENZENE	ND	1.0	IDOMETHANE	ND	10
s-BUTYLBENZENE	ND	1.0	ISOPROPYLBENZENE	ND	1.0
t-BUTYLBENZENE	ND	1.0	ISOPROPYLTOLUENE	ND	1.0
CARBON DISULFIDE	ND	5.0	METHYL ACRYLATE	ND	10
CARBON TETRACHLORIDE	ND	1.0	METHYL ETHYL KETONE	ND	10
CHLOROENZENE	ND	1.0	METHYL-t-BUTYL ETHER	ND	5.0
1-CHLOROBUTANE	ND	1.0	METHYLENE CHLORIDE	ND	1.0
CHLOROFORM	ND	1.0	METHYL METHACRYLATE	ND	10
CHLOROETHANE	ND	1.0	MIBK	ND	10
CHLOROMETHANE	ND	1.0	2-METHYLNAPHTHALENE	ND	5.0
2-CHLOROTOLUENE	ND	1.0	NAPHTHALENE	ND	5.0
4-CHLOROTOLUENE	ND	1.0	PENTACHLOROETHANE	ND	10
DIBROMOCHLOROMETHANE	ND	1.0	n-PROPYLBENZENE	ND	1.0
DIBROMOMETHANE	ND	1.0	STYRENE	ND	1.0
1,2-DIBROMOETHANE	ND	1.0	1,1,1,2-TETRACHLOROETHANE	ND	1.0
1,2-DICHLOROENZENE	ND	1.0	1,1,2,2-TETRACHLOROETHANE	ND	1.0
1,3-DICHLOROENZENE	ND	1.0	TETRACHLOROETHENE	ND	1.0
1,4-DICHLOROENZENE	ND	1.0	TOLUENE	ND	1.0
t-1,4-DICHLORO-2-BUTENE	ND	10	1,2,3-TRICHLOROENZENE	ND	1.0
DICHLORODIFLUOROMETHANE	ND	1.0	1,2,4-TRICHLOROENZENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	1,1,1-TRICHLOROETHANE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	1,1,2-TRICHLOROETHANE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0	TRICHLOROETHENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0	TRICHLORFLUOROMETHANE	ND	1.0
trans-1,2-DICHLOROETHENE	ND	1.0	1,2,3-TRICHLOROPROPANE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0	1,2,4-TRIMETHYLBENZENE	ND	1.0
1,3-DICHLOROPROPANE	ND	1.0	1,3,5-TRIMETHYLBENZENE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0	VINYL CHLORIDE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0	XYLENE (TOTAL)	ND	3.0

ND = NOT DETECTED, RESULT IS <LOD.

LOD = LIMIT OF DETECTION.



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

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COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M19-3117
 LOCATION: BAY MILLS INDIAN COMMUNITY (BMIC)
 MI
 SAMPLED BY: SLF/MJR - MET
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-2

GTA PROJECT NO: 101819-5
 GTA SAMPLE NO: 2
 DATE SAMPLED: 10/16/2019
 TIME SAMPLED: 3:40 PM
 DATE RECEIVED: 10/18/2019
 TIME RECEIVED: 12:20 PM

PNA EPA 8270D (SIM)

<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>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	10/21/2019	10/22/2019	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					

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



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M19-3117
 LOCATION: BAY MILLS INDIAN COMMUNITY (BMIC)
 MI
 SAMPLED BY: SLF/MJR - MET
 WATER
 SAMPLE ID: MW-3

GTA PROJECT NO: 101819-5
 GTA SAMPLE NO: 3
 DATE SAMPLED: 10/16/2019
 TIME SAMPLED: 3:30 PM
 DATE RECEIVED: 10/18/2019
 TIME RECEIVED: 12:20 PM

PNA EPA 8270D (SIM)

<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>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	10/21/2019	10/22/2019	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					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.
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COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M19-3117
 LOCATION: BAY MILLS INDIAN COMMUNITY (BMIC)
 MI
 SAMPLED BY: SLF/MJR - MET
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-5

GTA PROJECT NO: 101819-5
 GTA SAMPLE NO: 5
 DATE SAMPLED: 10/16/2019
 TIME SAMPLED: 3:50 PM
 DATE RECEIVED: 10/18/2019
 TIME RECEIVED: 12:20 PM

PNA EPA 8270D (SIM)

<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>
Acenaphthene	ND	5.0	ug/L (PPB)	KC/TR	10/21/2019	10/22/2019	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					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.
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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	101819-5
PROJECT NO:	M19-3117	GTA SAMPLE NO:	1
LOCATION:	BAY MILLS INDIAN COMMUNITY (BMIC)	DATE SAMPLED:	10/16/2019
		TIME SAMPLED:	3:20 PM
		DATE RECEIVED:	10/18/2019
	MI	TIME RECEIVED:	12:20 PM
SAMPLED BY:	SLF/MJR - MET	SAMPLE MATRIX:	WATER
SAMPLE ID:	MW-1		

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC TOTAL EPA 6020A	0.0011	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
BARIUM TOTAL EPA 6020A	0.026	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
CHROMIUM TOTAL EPA 6020A	0.017	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
COPPER TOTAL EPA 6020A	0.0020	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
LEAD TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
MERCURY TOTAL EPA 7470A	ND	0.00020	mg/L (PPM)	MR	10/25/2019	EPA 7470
ZINC TOTAL EPA 6020A	0.014	0.010	mg/L (PPM)	MR	10/22/2019	EPA 3005A

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 DISS = DISSOLVED



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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	101819-5
PROJECT NO:	M19-3117	GTA SAMPLE NO:	2
LOCATION:	BAY MILLS INDIAN COMMUNITY (BMIC)	DATE SAMPLED:	10/16/2019
		TIME SAMPLED:	3:40 PM
		DATE RECEIVED:	10/18/2019
	MI	TIME RECEIVED:	12:20 PM
SAMPLED BY:	SLF/MJR - MET	SAMPLE MATRIX:	WATER
SAMPLE ID:	MW-2		

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
BARIUM TOTAL EPA 6020A	0.024	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
CHROMIUM TOTAL EPA 6020A	0.0090	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
COPPER TOTAL EPA 6020A	0.0027	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
LEAD TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
MERCURY TOTAL EPA 7470A	ND	0.00020	mg/L (PPM)	MR	10/25/2019	EPA 7470
ZINC TOTAL EPA 6020A	ND	0.010	mg/L (PPM)	MR	10/22/2019	EPA 3005A

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	101819-5
PROJECT NO:	M19-3117	GTA SAMPLE NO:	3
LOCATION:	BAY MILLS INDIAN COMMUNITY (BMIC)	DATE SAMPLED:	10/16/2019
		TIME SAMPLED:	3:30 PM
		DATE RECEIVED:	10/18/2019
	MI	TIME RECEIVED:	12:20 PM
SAMPLED BY:	SLF/MJR - MET	SAMPLE MATRIX:	WATER
SAMPLE ID:	MW-3		

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC TOTAL EPA 6020A	0.0014	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
BARIUM TOTAL EPA 6020A	0.037	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
CHROMIUM TOTAL EPA 6020A	0.019	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
COPPER TOTAL EPA 6020A	0.0017	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
LEAD TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
MERCURY TOTAL EPA 7470A	ND	0.00020	mg/L (PPM)	MR	10/25/2019	EPA 7470
ZINC TOTAL EPA 6020A	ND	0.010	mg/L (PPM)	MR	10/22/2019	EPA 3005A

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	101819-5
PROJECT NO:	M19-3117	GTA SAMPLE NO:	4
LOCATION:	BAY MILLS INDIAN COMMUNITY (BMIC)	DATE SAMPLED:	10/16/2019
		TIME SAMPLED:	3:15 PM
		DATE RECEIVED:	10/18/2019
	MI	TIME RECEIVED:	12:20 PM
SAMPLED BY:	SLF/MJR - MET	SAMPLE MATRIX:	WATER
SAMPLE ID:	MW-4		

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC TOTAL EPA 6020A	0.0023	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
BARIUM TOTAL EPA 6020A	0.014	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
CHROMIUM TOTAL EPA 6020A	0.029	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
COPPER TOTAL EPA 6020A	0.0041	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
LEAD TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
MERCURY TOTAL EPA 7470A	ND	0.00020	mg/L (PPM)	MR	10/25/2019	EPA 7470
ZINC TOTAL EPA 6020A	0.036	0.010	mg/L (PPM)	MR	10/22/2019	EPA 3005A

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	101819-5
PROJECT NO:	M19-3117	GTA SAMPLE NO:	5
LOCATION:	BAY MILLS INDIAN COMMUNITY (BMIC)	DATE SAMPLED:	10/16/2019
		TIME SAMPLED:	3:50 PM
		DATE RECEIVED:	10/18/2019
	MI	TIME RECEIVED:	12:20 PM
SAMPLED BY:	SLF/MJR - MET	SAMPLE MATRIX:	WATER
SAMPLE ID:	MW-5		

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
BARIUM TOTAL EPA 6020A	0.0033	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
CHROMIUM TOTAL EPA 6020A	0.0031	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
COPPER TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
LEAD TOTAL EPA 6020A	ND	0.0010	mg/L (PPM)	MR	10/22/2019	EPA 3005A
MERCURY TOTAL EPA 7470A	ND	0.00020	mg/L (PPM)	MR	10/25/2019	EPA 7470
ZINC TOTAL EPA 6020A	ND	0.010	mg/L (PPM)	MR	10/22/2019	EPA 3005A

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CHAIN OF CUSTODY

PROJECT NUMBER M19-3117	SITE NAME/ADDRESS Bay Mills Indian Community (BMIC)	COMPANY/NAME
SAMPLED BY SLF/MJR	COMPANY MET	GTA PROJECT # 101819-5

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
	MW-1	10/16/19	1520	GW	VOCs, PVA, arsenic, barium, Chromium, copper, lead, Zinc, mercury
	MW-2	↓	1540	↓	
	MW-3	↓	1530	↓	
	MW-4	↓	1515	↓	
	MW-5	↓	1550	↓	
					Shipped on ice

BILL TO:

REPORT TO:

RELEASED BY

DATE/TIME

RECEIVED BY

DATE/TIME

Senna Lambert

10/17/19 1500

[Signature]

10/18/19 12:20

rec 7:00

REQUESTED TAT STANDARD 1 BUSINESS DAY 2 BUSINESS DAYS 3 BUSINESS DAYS