

**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: M20-3253
GTA ProjNo: 062620-3

Site Addr: CHEBOYGAN WWTP

Sampled By: BRAD JEFFERS/MET
Date Rec: 6/26/2020
Time Rec: 1:35 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	TP-4 @ 2-3'	6/24/2020		SOIL
2	TP-6 @ 4-5'	6/24/2020		SOIL
3	TP-7 @ 2-3'	6/24/2020		SOIL
4	TP-9 @ 3-4'	6/24/2020		SOIL
5	BD-1	6/24/2020		SOIL
6	TP-4	6/24/2020		WATER
7	TP-6	6/24/2020		WATER
8	TP-7	6/24/2020		WATER
9	TP-9	6/24/2020		WATER
10	BD-1	6/24/2020		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 Chase

Kirk L. Chase/Chemist
Grand Traverse Analytical
830 Robinwood Court
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COMPANY: MACKINAC ENVIRONMENTAL

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 1

PROJECT NO: M20-3253

LOCATION: CHEBOYGAN WWTP

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLED BY: BRAD JEFFERS/MET

SAMPLE MATRIX: SOIL

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

SAMPLE ID: TP-4 @ 2-3'

EPA 8260B VOLATILE ORGANICS

Units= ug/Kg (PPB)

Analyst= MR

Date 6/24/2020

Date Completed= 6/27/2020

Prep

EPA 5035A

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	1,000	cis-1,3-DICHLOROPROPENE	ND	50
ALLYL CHLORIDE	ND	250	trans-1,3-DICHLOROPROPENE	ND	50
BENZENE	ND	50	DIETHYL ETHER	ND	200
BROMOBENZENE	ND	100	ETHYLBENZENE	ND	50
BROMOCHLOROMETHANE	ND	100	ETHYL METHACRYLATE	ND	250
BROMODICHLOROMETHANE	ND	50	HEXACHLOROBUTADIENE	ND	50
BROMOFORM	ND	100	HEXACHLOROETHANE	ND	250
BROMOMETHANE	ND	200	2-HEXANONE	ND	2,500
n-BUTYLBENZENE	ND	50	IDOMETHANE	ND	250
s-BUTYLBENZENE	ND	50	ISOPROPYLBENZENE	ND	50
t-BUTYLBENZENE	ND	50	ISOPROPYLTOLUENE	ND	50
CARBON DISULFIDE	ND	250	METHYL ACRYLATE	ND	250
CARBON TETRACHLORIDE	ND	50	METHYL ETHYL KETONE	ND	750
CHLOROBENZENE	ND	50	METHYL-t-BUTYL ETHER	ND	250
1-CHLOROBUTANE	ND	100	METHYLENE CHLORIDE	ND	100
CHLOROFORM	ND	50	METHYL METHACRYLATE	ND	250
CHLOROETHANE	ND	250	MIBK	ND	2,500
CHLOROMETHANE	ND	250	2-METHYLNAPHTHALENE	ND	250
2-CHLOROTOLUENE	ND	50	NAPHTHALENE	ND	250
4-CHLOROTOLUENE	ND	50	PENTACHLOROETHANE	ND	250
DIBROMOCHLOROMETHANE	ND	100	n-PROPYLBENZENE	ND	50
DIBROMOMETHANE	ND	250	STYRENE	ND	50
1,2-DIBROMOETHANE	ND	20	1,1,1,2-TETRACHLOROETHANE	ND	100
1,2-DICHLOROETHANE	ND	50	1,1,2,2-TETRACHLOROETHANE	ND	50
1,3-DICHLOROETHANE	ND	50	TETRACHLOROETHENE	ND	50
1,4-DICHLOROETHANE	ND	50	TOLUENE	ND	50
t-1,4-DICHLORO-2-BUTENE	ND	50	1,2,3-TRICHLOROETHANE	ND	50
DICHLORODIFLUOROMETHANE	ND	250	1,2,4-TRICHLOROETHANE	ND	250
1,1-DICHLOROETHANE	ND	50	1,1,1-TRICHLOROETHANE	ND	50
1,2-DICHLOROETHANE	ND	50	1,1,2-TRICHLOROETHANE	ND	50
1,1-DICHLOROETHENE	ND	50	TRICHLOROETHENE	ND	50
cis-1,2-DICHLOROETHENE	ND	50	TRICHLORFLUOROMETHANE	ND	100
trans-1,2-DICHLOROETHENE	ND	50	1,2,3-TRICHLOROPROPANE	ND	100
1,2-DICHLOROPROPANE	ND	50	1,2,4-TRIMETHYLBENZENE	ND	50
1,3-DICHLOROPROPANE	ND	50	1,3,5-TRIMETHYLBENZENE	ND	50
2,2-DICHLOROPROPANE	ND	50	VINYL CHLORIDE	ND	40
1,1-DICHLOROPROPENE	ND	50	XYLENE (TOTAL)	ND	150

ND = NOT DETECTED, RESULT IS <LOD.

LOD = LIMIT OF DETECTION.



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COMPANY: MACKINAC ENVIRONMENTAL

GTA PROJECT NO: 062620-3

PROJECT NO: M20-3253

GTA SAMPLE NO: 2

LOCATION: CHEBOYGAN WWTP

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

SAMPLED BY: BRAD JEFFERS/MET

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

SAMPLE ID: TP-6 @ 4-5'

EPA 8260B VOLATILE ORGANICS

Units= ug/Kg (PPB)

Analyst= MR

Date

6/24/2020

Date Completed= 6/27/2020

Prep

EPA 5035A

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	1,000	cis-1,3-DICHLOROPROPENE	ND	50
ALLYL CHLORIDE	ND	250	trans-1,3-DICHLOROPROPENE	ND	50
BENZENE	ND	50	DIETHYL ETHER	ND	200
BROMOBENZENE	ND	100	ETHYLBENZENE	ND	50
BROMOCHLOROMETHANE	ND	100	ETHYL METHACRYLATE	ND	250
BROMODICHLOROMETHANE	ND	50	HEXACHLOROBUTADIENE	ND	50
BROMOFORM	ND	100	HEXACHLOROETHANE	ND	250
BROMOMETHANE	ND	200	2-HEXANONE	ND	2,500
n-BUTYLBENZENE	ND	50	IDOMETHANE	ND	250
s-BUTYLBENZENE	ND	50	ISOPROPYLBENZENE	ND	50
t-BUTYLBENZENE	ND	50	ISOPROPYLTOLUENE	ND	50
CARBON DISULFIDE	ND	250	METHYL ACRYLATE	ND	250
CARBON TETRACHLORIDE	ND	50	METHYL ETHYL KETONE	ND	750
CHLOROBENZENE	ND	50	METHYL-t-BUTYL ETHER	ND	250
1-CHLOROBUTANE	ND	100	METHYLENE CHLORIDE	ND	100
CHLOROFORM	ND	50	METHYL METHACRYLATE	ND	250
CHLOROETHANE	ND	250	MIBK	ND	2,500
CHLOROMETHANE	ND	250	2-METHYLNAPHTHALENE	ND	250
2-CHLOROTOLUENE	ND	50	NAPHTHALENE	ND	250
4-CHLOROTOLUENE	ND	50	PENTACHLOROETHANE	ND	250
DIBROMOCHLOROMETHANE	ND	100	n-PROPYLBENZENE	ND	50
DIBROMOMETHANE	ND	250	STYRENE	ND	50
1,2-DIBROMOETHANE	ND	20	1,1,1,2-TETRACHLOROETHANE	ND	100
1,2-DICHLOROBENZENE	ND	50	1,1,2,2-TETRACHLOROETHANE	ND	50
1,3-DICHLOROBENZENE	ND	50	TETRACHLOROETHENE	ND	50
1,4-DICHLOROBENZENE	ND	50	TOLUENE	ND	50
t-1,4-DICHLORO-2-BUTENE	ND	50	1,2,3-TRICHLOROBENZENE	ND	50
DICHLORODIFLUOROMETHANE	ND	250	1,2,4-TRICHLOROBENZENE	ND	250
1,1-DICHLOROETHANE	ND	50	1,1,1-TRICHLOROETHANE	ND	50
1,2-DICHLOROETHANE	ND	50	1,1,2-TRICHLOROETHANE	ND	50
1,1-DICHLOROETHENE	ND	50	TRICHLOROETHENE	ND	50
cis-1,2-DICHLOROETHENE	ND	50	TRICHLORFLUOROMETHANE	ND	100
trans-1,2-DICHLOROETHENE	ND	50	1,2,3-TRICHLOROPROPANE	ND	100
1,2-DICHLOROPROPANE	ND	50	1,2,4-TRIMETHYLBENZENE	ND	50
1,3-DICHLOROPROPANE	ND	50	1,3,5-TRIMETHYLBENZENE	ND	50
2,2-DICHLOROPROPANE	ND	50	VINYL CHLORIDE	ND	40
1,1-DICHLOROPROPENE	ND	50	XYLENE (TOTAL)	ND	150

ND = NOT DETECTED, RESULT IS <LOD.

LOD = LIMIT OF DETECTION.



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COMPANY: MACKINAC ENVIRONMENTAL

GTA PROJECT NO: 062620-3

PROJECT NO: M20-3253

GTA SAMPLE NO: 3

LOCATION: CHEBOYGAN WWTP

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

SAMPLED BY: BRAD JEFFERS/MET

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

SAMPLE ID: TP-7 @ 2-3'

EPA 8260B VOLATILE ORGANICS

Units= ug/Kg (PPB)

Analyst= MR

Date

6/24/2020

Date Completed= 6/27/2020

Prep

EPA 5035A

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	1,000	cis-1,3-DICHLOROPROPENE	ND	50
ALLYL CHLORIDE	ND	250	trans-1,3-DICHLOROPROPENE	ND	50
BENZENE	ND	50	DIETHYL ETHER	ND	200
BROMOBENZENE	ND	100	ETHYLBENZENE	ND	50
BROMOCHLOROMETHANE	ND	100	ETHYL METHACRYLATE	ND	250
BROMODICHLOROMETHANE	ND	50	HEXACHLOROBUTADIENE	ND	50
BROMOFORM	ND	100	HEXACHLOROETHANE	ND	250
BROMOMETHANE	ND	200	2-HEXANONE	ND	2,500
n-BUTYLBENZENE	ND	50	IDOMETHANE	ND	250
s-BUTYLBENZENE	ND	50	ISOPROPYLBENZENE	ND	50
t-BUTYLBENZENE	ND	50	ISOPROPYLTOLUENE	ND	50
CARBON DISULFIDE	ND	250	METHYL ACRYLATE	ND	250
CARBON TETRACHLORIDE	ND	50	METHYL ETHYL KETONE	ND	750
CHLOROBENZENE	ND	50	METHYL-t-BUTYL ETHER	ND	250
1-CHLOROBUTANE	ND	100	METHYLENE CHLORIDE	ND	100
CHLOROFORM	ND	50	METHYL METHACRYLATE	ND	250
CHLOROETHANE	ND	250	MIBK	ND	2,500
CHLOROMETHANE	ND	250	2-METHYLNAPHTHALENE	ND	250
2-CHLOROTOLUENE	ND	50	NAPHTHALENE	ND	250
4-CHLOROTOLUENE	ND	50	PENTACHLOROETHANE	ND	250
DIBROMOCHLOROMETHANE	ND	100	n-PROPYLBENZENE	ND	50
DIBROMOMETHANE	ND	250	STYRENE	ND	50
1,2-DIBROMOETHANE	ND	20	1,1,1,2-TETRACHLOROETHANE	ND	100
1,2-DICHLOROBENZENE	ND	50	1,1,2,2-TETRACHLOROETHANE	ND	50
1,3-DICHLOROBENZENE	ND	50	TETRACHLOROETHENE	ND	50
1,4-DICHLOROBENZENE	ND	50	TOLUENE	ND	50
t-1,4-DICHLORO-2-BUTENE	ND	50	1,2,3-TRICHLOROBENZENE	ND	50
DICHLORODIFLUOROMETHANE	ND	250	1,2,4-TRICHLOROBENZENE	ND	250
1,1-DICHLOROETHANE	ND	50	1,1,1-TRICHLOROETHANE	ND	50
1,2-DICHLOROETHANE	ND	50	1,1,2-TRICHLOROETHANE	ND	50
1,1-DICHLOROETHENE	ND	50	TRICHLOROETHENE	ND	50
cis-1,2-DICHLOROETHENE	ND	50	TRICHLORFLUOROMETHANE	ND	100
trans-1,2-DICHLOROETHENE	ND	50	1,2,3-TRICHLOROPROPANE	ND	100
1,2-DICHLOROPROPANE	ND	50	1,2,4-TRIMETHYLBENZENE	ND	50
1,3-DICHLOROPROPANE	ND	50	1,3,5-TRIMETHYLBENZENE	ND	50
2,2-DICHLOROPROPANE	ND	50	VINYL CHLORIDE	ND	40
1,1-DICHLOROPROPENE	ND	50	XYLENE (TOTAL)	ND	150

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COMPANY: MACKINAC ENVIRONMENTAL

GTA PROJECT NO: 062620-3

PROJECT NO: M20-3253

GTA SAMPLE NO: 4

LOCATION: CHEBOYGAN WWTP

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

SAMPLED BY: BRAD JEFFERS/MET

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

SAMPLE ID: TP-9 @ 3-4'

EPA 8260B VOLATILE ORGANICS

Units= ug/Kg (PPB)

Analyst= MR

Date

6/24/2020

Date Completed= 6/27/2020

Prep

EPA 5035A

Analyte	Concentration	LOD	Analyte	Concentration	LOD
ACETONE	ND	1,000	cis-1,3-DICHLOROPROPENE	ND	50
ALLYL CHLORIDE	ND	250	trans-1,3-DICHLOROPROPENE	ND	50
BENZENE	ND	50	DIETHYL ETHER	ND	200
BROMOBENZENE	ND	100	ETHYLBENZENE	ND	50
BROMOCHLOROMETHANE	ND	100	ETHYL METHACRYLATE	ND	250
BROMODICHLOROMETHANE	ND	50	HEXACHLOROBUTADIENE	ND	50
BROMOFORM	ND	100	HEXACHLOROETHANE	ND	250
BROMOMETHANE	ND	200	2-HEXANONE	ND	2,500
n-BUTYLBENZENE	ND	50	IDOMETHANE	ND	250
s-BUTYLBENZENE	ND	50	ISOPROPYLBENZENE	ND	50
t-BUTYLBENZENE	ND	50	ISOPROPYLTOLUENE	ND	50
CARBON DISULFIDE	ND	250	METHYL ACRYLATE	ND	250
CARBON TETRACHLORIDE	ND	50	METHYL ETHYL KETONE	ND	750
CHLOROBENZENE	ND	50	METHYL-t-BUTYL ETHER	ND	250
1-CHLOROBUTANE	ND	100	METHYLENE CHLORIDE	ND	100
CHLOROFORM	ND	50	METHYL METHACRYLATE	ND	250
CHLOROETHANE	ND	250	MIBK	ND	2,500
CHLOROMETHANE	ND	250	2-METHYLNAPHTHALENE	ND	250
2-CHLOROTOLUENE	ND	50	NAPHTHALENE	ND	250
4-CHLOROTOLUENE	ND	50	PENTACHLOROETHANE	ND	250
DIBROMOCHLOROMETHANE	ND	100	n-PROPYLBENZENE	ND	50
DIBROMOMETHANE	ND	250	STYRENE	ND	50
1,2-DIBROMOETHANE	ND	20	1,1,1,2-TETRACHLOROETHANE	ND	100
1,2-DICHLOROBENZENE	ND	50	1,1,2,2-TETRACHLOROETHANE	ND	50
1,3-DICHLOROBENZENE	ND	50	TETRACHLOROETHENE	ND	50
1,4-DICHLOROBENZENE	ND	50	TOLUENE	ND	50
t-1,4-DICHLORO-2-BUTENE	ND	50	1,2,3-TRICHLOROBENZENE	ND	50
DICHLORODIFLUOROMETHANE	ND	250	1,2,4-TRICHLOROBENZENE	ND	250
1,1-DICHLOROETHANE	ND	50	1,1,1-TRICHLOROETHANE	ND	50
1,2-DICHLOROETHANE	ND	50	1,1,2-TRICHLOROETHANE	ND	50
1,1-DICHLOROETHENE	ND	50	TRICHLOROETHENE	ND	50
cis-1,2-DICHLOROETHENE	ND	50	TRICHLORFLUOROMETHANE	ND	100
trans-1,2-DICHLOROETHENE	ND	50	1,2,3-TRICHLOROPROPANE	ND	100
1,2-DICHLOROPROPANE	ND	50	1,2,4-TRIMETHYLBENZENE	ND	50
1,3-DICHLOROPROPANE	ND	50	1,3,5-TRIMETHYLBENZENE	ND	50
2,2-DICHLOROPROPANE	ND	50	VINYL CHLORIDE	ND	40
1,1-DICHLOROPROPENE	ND	50	XYLENE (TOTAL)	ND	150

ND = NOT DETECTED, RESULT IS <LOD.

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M20-3253
LOCATION: CHEBOYGAN WWTP

SAMPLED BY: BRAD JEFFERS/MET

SAMPLE MATRIX: SOIL

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 5

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

SAMPLE ID: BD-1

EPA 8260B VOLATILE ORGANICS

<u>Units=</u> ug/L (PPB)	<u>Analyst=</u> MR	<u>Date</u>
<u>Analyte</u>	<u>Concentration</u>	<u>LOD</u>
ACETONE	ND	25
ALLYL CHLORIDE	ND	10
BENZENE	ND	1
BROMOBENZENE	ND	1
BROMOCHLOROMETHANE	ND	1
BROMODICHLOROMETHANE	ND	1
BROMOFORM	ND	1
BROMOMETHANE	ND	1
n-BUTYLBENZENE	ND	1
s-BUTYLBENZENE	ND	1
t-BUTYLBENZENE	ND	1
CARBON DISULFIDE	ND	5
CARBON TETRACHLORIDE	ND	1
CHLOROBENZENE	ND	1
1-CHLOROBUTANE	ND	1
CHLOROFORM	ND	1
CHLOROETHANE	ND	1
CHLOROMETHANE	ND	1
2-CHLOROTOLUENE	ND	1
4-CHLOROTOLUENE	ND	1
DIBROMOCHLOROMETHANE	ND	1
DIBROMOMETHANE	ND	1
1,2-DIBROMOETHANE	ND	1
1,2-DICHLOROBENZENE	ND	1
1,3-DICHLOROBENZENE	ND	1
1,4-DICHLOROBENZENE	ND	1
t-1,4-DICHLORO-2-BUTENE	ND	10
DICHLORODIFLUOROMETHANE	ND	1
1,1-DICHLOROETHANE	ND	1
1,2-DICHLOROETHANE	ND	1
1,1-DICHLOROETHENE	ND	1
cis-1,2-DICHLOROETHENE	ND	1
trans-1,2-DICHLOROETHENE	ND	1
1,2-DICHLOROPROPANE	ND	1
1,3-DICHLOROPROPANE	ND	1
2,2-DICHLOROPROPANE	ND	1
1,1-DICHLOROPROPENE	ND	1

ND = NOT DETECTED, RESULT IS <LOD.

LOD = LIMIT OF DETECTION.

<u>Date Completed=</u> 6/27/2020	<u>Prep</u>	EPA 5030B
<u>Analyte</u>	<u>Concentration</u>	<u>LOD</u>
cis-1,3-DICHLOROPROPENE	ND	1
trans-1,3-DICHLOROPROPENE	ND	1
DIETHYL ETHER	ND	10
ETHYLBENZENE	ND	1
ETHYL METHACRYLATE	ND	10
HEXACHLOROBUTADIENE	ND	1
HEXACHLOROETHANE	ND	10
2-HEXANONE	ND	10
IDOMETHANE	ND	10
ISOPROPYLBENZENE	ND	1
ISOPROPYLTOLUENE	ND	1
METHYL ACRYLATE	ND	10
METHYL ETHYL KETONE	ND	10
METHYL-t-BUTYL ETHER	ND	5
METHYLENE CHLORIDE	ND	1
METHYL METHACRYLATE	ND	10
MIBK	ND	10
2-METHYLNAPHTHALENE	ND	5
NAPHTHALENE	ND	5
PENTACHLOROETHANE	ND	10
n-PROPYLBENZENE	ND	1
STYRENE	ND	1
1,1,1,2-TETRACHLOROETHANE	ND	1
1,1,2,2-TETRACHLOROETHANE	ND	1
TETRACHLOROETHENE	ND	1
TOLUENE	ND	1
1,2,3-TRICHLOROBENZENE	ND	1
1,2,4-TRICHLOROBENZENE	ND	1
1,1,1-TRICHLOROETHANE	ND	1
1,1,2-TRICHLOROETHANE	ND	1
TRICHLOROETHENE	ND	1
TRICHLORFLUOROMETHANE	ND	1
1,2,3-TRICHLOROPROPANE	ND	1
1,2,4-TRIMETHYLBENZENE	ND	1
1,3,5-TRIMETHYLBENZENE	ND	1
VINYL CHLORIDE	ND	1
XYLENE (TOTAL)	ND	3



INDEPENDENT TESTING LAB

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FAX: 231-929-0894

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COMPANY: MACKINAC ENVIRONMENTAL

GTA PROJECT NO: 062620-3

PROJECT NO: M20-3253

GTA SAMPLE NO: 6

LOCATION: CHEBOYGAN WWTP

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLED BY: BRAD JEFFERS/MET

SAMPLE MATRIX: WATER

SAMPLE ID: TP-4

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 6/27/2020

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
CHLORO BENZENE	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-DICHLOROBENZENE	ND	1.0
1,3-DICHLOROBENZENE	ND	1.0
1,4-DICHLOROBENZENE	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-TRICHLOROBENZENE	ND	1.0
1,2,4-TRICHLOROBENZENE	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.



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

COMPANY: MACKINAC ENVIRONMENTAL

GTA PROJECT NO: 062620-3

PROJECT NO: M20-3253

GTA SAMPLE NO: 7

LOCATION: CHEBOYGAN WWTP

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLED BY: BRAD JEFFERS/MET

SAMPLE MATRIX: WATER

SAMPLE ID: TP-6

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 6/27/2020

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
CHLOROBENZENE	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-DICHLOROBENZENE	ND	1.0
1,3-DICHLOROBENZENE	ND	1.0
1,4-DICHLOROBENZENE	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-TRICHLOROBENZENE	ND	1.0
1,2,4-TRICHLOROBENZENE	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.



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

GTA PROJECT NO: 062620-3

PROJECT NO: M20-3253

GTA SAMPLE NO: 8

LOCATION: CHEBOYGAN WWTP

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLED BY: BRAD JEFFERS/MET

SAMPLE MATRIX: WATER

SAMPLE ID: TP-7

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 6/27/2020

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
CHLOROBENZENE	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-DICHLOROBENZENE	ND	1.0
1,3-DICHLOROBENZENE	ND	1.0
1,4-DICHLOROBENZENE	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-TRICHLOROBENZENE	ND	1.0
1,2,4-TRICHLOROBENZENE	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.



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

COMPANY: MACKINAC ENVIRONMENTAL

GTA PROJECT NO: 062620-3

PROJECT NO: M20-3253

GTA SAMPLE NO: 9

LOCATION: CHEBOYGAN WWTP

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLED BY: BRAD JEFFERS/MET

SAMPLE MATRIX: WATER

SAMPLE ID: TP-9

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 6/27/2020

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
CHLOROBENZENE	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-DICHLOROBENZENE	ND	1.0
1,3-DICHLOROBENZENE	ND	1.0
1,4-DICHLOROBENZENE	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-TRICHLOROBENZENE	ND	1.0
1,2,4-TRICHLOROBENZENE	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.



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

GTA PROJECT NO: 062620-3

PROJECT NO: M20-3253

GTA SAMPLE NO: 10

LOCATION: CHEBOYGAN WWTP

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLED BY: BRAD JEFFERS/MET

SAMPLE MATRIX: WATER

SAMPLE ID: BD-1

EPA 8260B VOLATILE ORGANICS

Units= ug/L (PPB)

Analyst= MR

Date

Date Completed= 6/27/2020

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
CHLOROBEZENE	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-DICHLOROBEZENE	ND	1.0
1,3-DICHLOROBEZENE	ND	1.0
1,4-DICHLOROBEZENE	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-TRICHLOROBEZENE	ND	1.0
1,2,4-TRICHLOROBEZENE	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.

**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: M20-3253
LOCATION: CHEBOYGAN WWTP

GTA PROJECT NO: 062620-3
GTA SAMPLE NO: 1

DATE SAMPLED: 6/24/2020
TIME SAMPLED:

SAMPLED BY: MI
BRAD JEFFERS/MET

DATE RECEIVED: 6/26/2020
TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL
SAMPLE ID: TP-4 @ 2-3'

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	1,800	330	ug/Kg (PPB)	KC/TR	7/1/2020	7/7/2020	EPA 3550B
Acenaphthylene	ND	330					
Anthracene	3,800	330					
Benzo(a)anthracene	4,800	330					
Benzo(b)fluoranthene	5,000	330					
Benzo(k)fluoranthene	2,000	330					
Benzo(a)pyrene	3,800	330					
Benzo(ghi)perylene	ND	330					
2-Chloronaphthalene	ND	330					
Chrysene	4,800	330					
Dibenz(ah)anthracene	ND	330					
Fluoranthene	14,000	330					
Fluorene	2,500	330					
Indeno(123-cd)pyrene	2,200	330					
Phenanthrene	14,000	330					
Pyrene	9,300	330					

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: M20-3253

LOCATION: CHEBOYGAN WWTP

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 2

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

SAMPLED BY: MI
BRAD JEFFERS/MET

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL

SAMPLE ID: TP-6 @ 4-5'

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	330	ug/Kg (PPB)	KC/TR	7/1/2020	7/7/2020	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					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

ND = NOT DETECTED, RESULT IS <LOD.

LOD = LIMIT OF DETECTION.

**INDEPENDENT TESTING LAB**

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M20-3253

LOCATION: CHEBOYGAN WWTP

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 3

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

SAMPLED BY: MI
BRAD JEFFERS/MET

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL
SAMPLE ID: TP-7 @ 2-3'**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	330	ug/Kg (PPB)	KC/TR	7/1/2020	7/7/2020	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					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

ND = NOT DETECTED, RESULT IS <LOD.

LOD = LIMIT OF DETECTION.

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M20-3253
LOCATION: CHEBOYGAN WWTP

GTA PROJECT NO: 062620-3
GTA SAMPLE NO: 4

DATE SAMPLED: 6/24/2020
TIME SAMPLED:

SAMPLED BY: MI
BRAD JEFFERS/MET

DATE RECEIVED: 6/26/2020
TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL
SAMPLE ID: TP-9 @ 3-4'

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	330	ug/Kg (PPB)	KC/TR	7/1/2020	7/7/2020	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					

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

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M20-3253
LOCATION: CHEBOYGAN WWTP

GTA PROJECT NO: 062620-3
GTA SAMPLE NO: 5

DATE SAMPLED: 6/24/2020
TIME SAMPLED:

SAMPLED BY: MI
BRAD JEFFERS/MET

DATE RECEIVED: 6/26/2020
TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL
SAMPLE ID: BD-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	2,300	330	ug/Kg (PPB)	KC/TR	7/1/2020	7/7/2020	EPA 3550B
Acenaphthylene	ND	330					
Anthracene	5,500	330					
Benzo(a)anthracene	6,400	330					
Benzo(b)fluoranthene	6,700	330					
Benzo(k)fluoranthene	2,500	330					
Benzo(a)pyrene	5,000	330					
Benzo(ghi)perylene	ND	330					
2-Chloronaphthalene	ND	330					
Chrysene	6,100	330					
Dibenz(ah)anthracene	ND	330					
Fluoranthene	18,000	330					
Fluorene	3,400	330					
Indeno(123-cd)pyrene	2,500	330					
Phenanthrene	19,000	330					
Pyrene	12,000	330					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.
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LOD = LIMIT OF DETECTION.

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M20-3253

LOCATION: CHEBOYGAN WWTP

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 6

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

SAMPLED BY: MI
BRAD JEFFERS/MET

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: WATER

SAMPLE ID: TP-4

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/MR	6/29/2020	6/29/2020	EPA 3511
Acenaphthylene	ND	5.0					
Anthracene	ND	5.0					
Benzo(a)anthracene	3.2	1.0					
Benzo(b)fluoranthene	4.2	1.0					
Benzo(k)fluoranthene	3.5	1.0					
Benzo(a)pyrene	4.8	1.0					
Benzo(ghi)perylene	ND	2.0					
2-Chloronaphthalene	ND	5.0					
Chrysene	2.8	1.0					
Dibenz(ah)anthracene	ND	2.0					
Fluoranthene	4.2	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	17	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.

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M20-3253
LOCATION: CHEBOYGAN WWTP

GTA PROJECT NO: 062620-3
GTA SAMPLE NO: 7

DATE SAMPLED: 6/24/2020
TIME SAMPLED:

SAMPLED BY: MI
BRAD JEFFERS/MET

DATE RECEIVED: 6/26/2020
TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: WATER
SAMPLE ID: TP-6

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/MR	6/29/2020	6/29/2020	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	8.5	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.

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M20-3253
LOCATION: CHEBOYGAN WWTP

GTA PROJECT NO: 062620-3
GTA SAMPLE NO: 8

DATE SAMPLED: 6/24/2020
TIME SAMPLED:

SAMPLED BY: MI
BRAD JEFFERS/MET

DATE RECEIVED: 6/26/2020
TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: WATER
SAMPLE ID: TP-7

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/MR	6/29/2020	6/29/2020	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	6.2	2.0					
Pyrene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.
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LOD = LIMIT OF DETECTION.

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M20-3253
LOCATION: CHEBOYGAN WWTP

GTA PROJECT NO: 062620-3
GTA SAMPLE NO: 9

DATE SAMPLED: 6/24/2020
TIME SAMPLED:

SAMPLED BY: MI
BRAD JEFFERS/MET

DATE RECEIVED: 6/26/2020
TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: WATER
SAMPLE ID: TP-9

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/MR	6/29/2020	6/29/2020	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	3.5	1.0					
Fluorene	ND	5.0					
Indeno(123-cd)pyrene	ND	2.0					
Phenanthrene	14	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.

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M20-3253
LOCATION: CHEBOYGAN WWTP

GTA PROJECT NO: 062620-3
GTA SAMPLE NO: 10

DATE SAMPLED: 6/24/2020
TIME SAMPLED:

SAMPLED BY: MI
BRAD JEFFERS/MET

DATE RECEIVED: 6/26/2020
TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: WATER
SAMPLE ID: BD-1

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/MR	6/29/2020	6/29/2020	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: M20-3253

LOCATION: CHEBOYGAN WWTP

SAMPLED BY: MI

BRAD JEFFERS/MET

SAMPLE ID: TP-4 @ 2-3'

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 1

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL

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	1.3	0.50	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
BARIUM TOTAL EPA 6020A	33	0.50	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
CADMIUM TOTAL EPA 6020A	0.50	0.50	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
CHROMIUM TOTAL EPA 6020A	13	0.50	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
COPPER TOTAL EPA 6020A	22	0.50	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
LEAD TOTAL EPA 6020A	220	0.50	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
MERCURY TOTAL EPA 7471B	0.13	0.023	mg/Kg (PPM)	MR	7/1/2020	EPA 7471
SELENIUM TOTAL EPA 6020A	ND	0.50	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
SILVER TOTAL EPA 6020A	ND	0.50	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
ZINC TOTAL EPA 6020A	140	5.0	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

DISS = DISSOLVED

**INDEPENDENT TESTING LAB**

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COMPANY: MACKINAC ENVIRONMENTAL

GTA PROJECT NO: 062620-3

PROJECT NO: M20-3253

GTA SAMPLE NO: 2

LOCATION: CHEBOYGAN WWTP

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLED BY: MI

BRAD JEFFERS/MET

SAMPLE MATRIX: SOIL

SAMPLE ID: TP-6 @ 4-5'

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	0.58	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
BARIUM TOTAL EPA 6020A	42	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
CADMIUM TOTAL EPA 6020A	ND	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
CHROMIUM TOTAL EPA 6020A	18	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
COPPER TOTAL EPA 6020A	9.9	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
LEAD TOTAL EPA 6020A	23	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
MERCURY TOTAL EPA 7471B	0.031	0.020	mg/Kg (PPM)	MR	7/1/2020	EPA 7471
SELENIUM TOTAL EPA 6020A	ND	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
SILVER TOTAL EPA 6020A	ND	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
ZINC TOTAL EPA 6020A	31	4.2	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B

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LOD = LIMIT OF DETECTION

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M20-3253

LOCATION: CHEBOYGAN WWTP

SAMPLED BY: MI

BRAD JEFFERS/MET

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 3

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL

SAMPLE ID: TP-7 @ 2-3'

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	0.73	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
BARIUM TOTAL EPA 6020A	48	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
CADMIUM TOTAL EPA 6020A	ND	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
CHROMIUM TOTAL EPA 6020A	14	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
COPPER TOTAL EPA 6020A	13	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
LEAD TOTAL EPA 6020A	37	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
MERCURY TOTAL EPA 7471B	0.050	0.021	mg/Kg (PPM)	MR	7/1/2020	EPA 7471
SELENIUM TOTAL EPA 6020A	ND	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
SILVER TOTAL EPA 6020A	ND	0.42	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
ZINC TOTAL EPA 6020A	76	4.2	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M20-3253

LOCATION: CHEBOYGAN WWTP

SAMPLED BY: MI

BRAD JEFFERS/MET

SAMPLE ID: TP-9 @ 3-4'

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 4

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL

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	2.4	0.52	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
BARIUM TOTAL EPA 6020A	150	0.52	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
CADMIUM TOTAL EPA 6020A	0.81	0.52	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
CHROMIUM TOTAL EPA 6020A	20	0.52	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
COPPER TOTAL EPA 6020A	60	0.52	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
LEAD TOTAL EPA 6020A	210	0.52	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
MERCURY TOTAL EPA 7471B	0.082	0.025	mg/Kg (PPM)	MR	7/1/2020	EPA 7471
SELENIUM TOTAL EPA 6020A	ND	0.52	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
SILVER TOTAL EPA 6020A	ND	0.52	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
ZINC TOTAL EPA 6020A	170	5.2	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M20-3253
LOCATION: CHEBOYGAN WWTPSAMPLED BY: MI
BRAD JEFFERS/MET

SAMPLE ID: BD-1

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 5

DATE SAMPLED: 6/24/2020
TIME SAMPLED:DATE RECEIVED: 6/26/2020
TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: SOIL

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	1.4	0.44	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
BARIUM TOTAL EPA 6020A	35	0.44	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
CADMIUM TOTAL EPA 6020A	0.49	0.44	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
CHROMIUM TOTAL EPA 6020A	14	0.44	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
COPPER TOTAL EPA 6020A	22	0.44	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
LEAD TOTAL EPA 6020A	220	0.44	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
MERCURY TOTAL EPA 7471B	0.23	0.024	mg/Kg (PPM)	MR	7/1/2020	EPA 7471
SELENIUM TOTAL EPA 6020A	ND	0.44	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
SILVER TOTAL EPA 6020A	ND	0.44	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B
ZINC TOTAL EPA 6020A	140	4.4	mg/Kg (PPM)	MR/TR	7/1/2020	EPA 3050B

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

DISS = DISSOLVED

**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: M20-3253

LOCATION: CHEBOYGAN WWTP

SAMPLED BY: MI

BRAD JEFFERS/MET

SAMPLE ID: TP-4

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 6

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: WATER

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 DISS EPA 6020A	0.019	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
BARIUM DISS EPA 6020A	3.6	0.025	mg/L (PPM)	MR	7/1/2020	EPA 3005A
CADMIUM DISS EPA 6020A	ND	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
CHROMIUM DISS EPA 6020A	0.0052	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
COPPER DISS EPA 6020A	0.41	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
LEAD DISS EPA 6020A	0.017	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
MERCURY DISS EPA 7470A	ND	0.00020	mg/L (PPM)	MR	7/1/2020	EPA 7470
SELENIUM DISS EPA 6020A	0.13	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
SILVER DISS EPA 6020A	ND	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
ZINC DISS EPA 6020A	0.14	0.010	mg/L (PPM)	MR	7/1/2020	EPA 3005A

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**INDEPENDENT TESTING LAB**

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M20-3253

LOCATION: CHEBOYGAN WWTP

MI

SAMPLED BY: BRAD JEFFERS/MET

SAMPLE ID: TP-6

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 7

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: WATER

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 DISS EPA 6020A	0.011	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
BARIUM DISS EPA 6020A	0.50	0.025	mg/L (PPM)	MR	7/1/2020	EPA 3005A
CADMIUM DISS EPA 6020A	ND	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
CHROMIUM DISS EPA 6020A	0.0039	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
COPPER DISS EPA 6020A	0.10	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
LEAD DISS EPA 6020A	0.022	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
MERCURY DISS EPA 7470A	ND	0.00020	mg/L (PPM)	MR	7/1/2020	EPA 7470
SELENIUM DISS EPA 6020A	0.013	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
SILVER DISS EPA 6020A	ND	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
ZINC DISS EPA 6020A	0.16	0.010	mg/L (PPM)	MR	7/1/2020	EPA 3005A

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**INDEPENDENT TESTING LAB**

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FAX: 231-929-0894

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M20-3253

LOCATION: CHEBOYGAN WWTP

SAMPLED BY: MI

BRAD JEFFERS/MET

SAMPLE ID: TP-7

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 8

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: WATER

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 DISS EPA 6020A	0.0050	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
BARIUM DISS EPA 6020A	0.26	0.025	mg/L (PPM)	MR	7/1/2020	EPA 3005A
CADMIUM DISS EPA 6020A	0.0011	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
CHROMIUM DISS EPA 6020A	0.0081	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
COPPER DISS EPA 6020A	0.082	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
LEAD DISS EPA 6020A	0.033	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
MERCURY DISS EPA 7470A	ND	0.00020	mg/L (PPM)	MR	7/1/2020	EPA 7470
SELENIUM DISS EPA 6020A	0.0040	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
SILVER DISS EPA 6020A	ND	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
ZINC DISS EPA 6020A	0.46	0.010	mg/L (PPM)	MR	7/1/2020	EPA 3005A

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M20-3253

LOCATION: CHEBOYGAN WWTP

SAMPLED BY: MI

BRAD JEFFERS/MET

SAMPLE ID: TP-9

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 9

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: WATER

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 DISS EPA 6020A	0.013	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
BARIUM DISS EPA 6020A	0.11	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
CADMIUM DISS EPA 6020A	0.0026	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
CHROMIUM DISS EPA 6020A	0.017	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
COPPER DISS EPA 6020A	ND	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
LEAD DISS EPA 6020A	ND	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
MERCURY DISS EPA 7470A	ND	0.00020	mg/L (PPM)	MR	7/1/2020	EPA 7470
SELENIUM DISS EPA 6020A	0.029	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
SILVER DISS EPA 6020A	ND	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
ZINC DISS EPA 6020A	0.020	0.010	mg/L (PPM)	MR	7/1/2020	EPA 3005A

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DISS = DISSOLVED

**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: M20-3253
LOCATION: CHEBOYGAN WWTPSAMPLED BY: MI
BRAD JEFFERS/MET

SAMPLE ID: BD-1

GTA PROJECT NO: 062620-3

GTA SAMPLE NO: 10

DATE SAMPLED: 6/24/2020
TIME SAMPLED:DATE RECEIVED: 6/26/2020
TIME RECEIVED: 1:35 PM

SAMPLE MATRIX: WATER

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 DISS EPA 6020A	0.0093	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
BARIUM DISS EPA 6020A	1.4	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
CADMIUM DISS EPA 6020A	0.0030	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
CHROMIUM DISS EPA 6020A	0.18	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
COPPER DISS EPA 6020A	0.064	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
LEAD DISS EPA 6020A	ND	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
MERCURY DISS EPA 7470A	ND	0.00020	mg/L (PPM)	MR	7/1/2020	EPA 7470
SELENIUM DISS EPA 6020A	0.050	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
SILVER DISS EPA 6020A	ND	0.0010	mg/L (PPM)	MR	7/1/2020	EPA 3005A
ZINC DISS EPA 6020A	0.024	0.010	mg/L (PPM)	MR	7/1/2020	EPA 3005A

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**INDEPENDENT TESTING LAB**

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PH: 231-929-0905

FAX: 231-929-0894

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COMPANY: MACKINAC ENVIRONMENTAL

GTA PROJECT NO: 062620-3

NAME:

SAMPLED BY: BRAD JEFFERS/MET

PROJECT NO: M20-3253

DATE SAMPLED: 6/24/2020

TIME SAMPLED:

LOCATION: CHEBOYGAN WWTP

SAMPLE MATRIX: SOIL

DATE RECEIVED: 6/26/2020

TIME RECEIVED: 1:35 PM

MI

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: TP-4 @ 2-3'	% MOISTURE EPA 3550C	32	0.050	% OF SAMPLE	AS	6/26/2020
SAMPLE ID: TP-6 @ 4-5'	% MOISTURE EPA 3550C	15	0.050	% OF SAMPLE	AS	6/26/2020
SAMPLE ID: TP-7 @ 2-3'	% MOISTURE EPA 3550C	15	0.050	% OF SAMPLE	AS	6/26/2020
SAMPLE ID: TP-9 @ 3-4'	% MOISTURE EPA 3550C	33	0.050	% OF SAMPLE	AS	6/26/2020
SAMPLE ID: BD-1	% MOISTURE EPA 3550C	29	0.050	% OF SAMPLE	AS	6/26/2020

CHAIN OF CUSTODY

PROJECT NUMBER M20-3253	SITE NAME/ADDRESS Cheboygan WWTP	COMPANY/NAME
SAMPLED BY Brad Jeffers	COMPANY MET	GTA PROJECT # 062620-3

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	TP-4 @ 2-3'	6/24/20		Soil	VOCs, PNAAs, 10 MI Metals
2	TP-6 @ 4-5'				
3	TP-7 @ 2-3'				
4	TP-9 @ 3-4'				
5	BD-1			↓	
6	TP-4			GW	
7	TP-6				
8	TP-7				
9	TP-9				
10	BD-1				
					* Samples Packed on ice
					* Metals field filtered
					w/ 0.45 um filter
					* GW = 3 business days

BILL TO:	MET PO Box 485 St. Ignace, MI 49781	REPORT TO:	met@seult.com
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RELEASED BY	DATE/TIME	RECEIVED BY	DATE/TIME
Brad Jeffers	6/24/20 6:30pm	[Signature]	6/26/20 1:35
		rec'd 4:02	
	Soil	on ice	Groundwater
REQUESTED TURNAROUND	☒ STANDARD	☐ 1 BUSINESS DAY	☐ 2 BUSINESS DAYS
		☒ 3 BUSINESS DAYS	