



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: M11-1853
GTA ProjNo: 080520-2

Site Addr: FREEDOM VALUE #28
Sampled By: MJR/SLR - MET
Date Rec: 8/5/2020
Time Rec: 12:45 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-6	8/3/2020	11:24 AM	WATER
2	VW-1	8/3/2020	11:40 AM	WATER
3	MW-8	8/3/2020	11:56 AM	WATER
4	MW-4	8/3/2020	12:15 PM	WATER
5	MW-3	8/3/2020	12:36 PM	WATER
6	MW-1	8/3/2020	1:02 PM	WATER
7	MW-2	8/3/2020	1:20 PM	WATER
8	MW-5	8/3/2020	1:35 PM	WATER
9	MW-7	8/3/2020	1:53 PM	WATER
10	VW-2	8/3/2020	2:06 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 Chase

Kirk L. Chase/Chemist
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COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M11-1853
 LOCATION: FREEDOM VALUE #28
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-6

GTA PROJECT NO: 080520-2
 GTA SAMPLE NO: 1
 DATE SAMPLED: 8/3/2020
 TIME SAMPLED: 11:24 AM
 DATE RECEIVED: 8/5/2020
 TIME RECEIVED: 12:45 PM

SAMPLED BY: MJR/SLR - MET

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	370	50	ug/L (PPB)	MR		8/6/2020	EPA 5030B
Toluene	96	5.0					
Ethylbenzene	390	50					
Xylene(Total)	1,600	110					
1,2,4-Trimethylbenzene	2,300	50					
1,3,5-Trimethylbenzene	570	50					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	260	12					
2-Methylnaphthalene	400	12					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.
 ND = NOT DETECTED, RESULT < LOD
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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M11-1853

LOCATION: FREEDOM VALUE #28

MI

SAMPLE MATRIX: WATER

SAMPLE ID: VW-1

GTA PROJECT NO: 080520-2

GTA SAMPLE NO: 2

DATE SAMPLED: 8/3/2020

TIME SAMPLED: 11:40 AM

DATE RECEIVED: 8/5/2020

TIME RECEIVED: 12:45 PM

SAMPLED BY: MJR/SLR - MET

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	ND	1.0	ug/L (PPB)	MR		8/6/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	8.0	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	080520-2
PROJECT NO:	M11-1853	GTA SAMPLE NO:	3
LOCATION:	FREEDOM VALUE #28	DATE SAMPLED:	8/3/2020
		TIME SAMPLED:	11:56 AM
		DATE RECEIVED:	8/5/2020
	MI	TIME RECEIVED:	12:45 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-8	SAMPLED BY:	MJR/SLR - MET

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	ND	1.0	ug/L (PPB)	MR		8/6/2020	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					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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LOD = LIMIT OF DETECTION

COMPANY: MACKINAC ENVIRONMENTAL
PROJECT NO: M11-1853
LOCATION: FREEDOM VALUE #28
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-4

GTA PROJECT NO: 080520-2
GTA SAMPLE NO: 4
DATE SAMPLED: 8/3/2020
TIME SAMPLED: 12:15 PM
DATE RECEIVED: 8/5/2020
TIME RECEIVED: 12:45 PM

SAMPLED BY: MJR/SLR - MET

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	3,800	100	ug/L (PPB)	MR		8/6/2020	EPA 5030B
Toluene	22,000	100					
Ethylbenzene	3,600	100					
Xylene(Total)	21,000	300					
1,2,4-Trimethylbenzene	3,900	100					
1,3,5-Trimethylbenzene	950	100					
Methyl-t-Butyl Ether	ND	10					
Naphthalene	1,300	250					
2-Methylnaphthalene	440	25					

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COMPANY: MACKINAC ENVIRONMENTAL

PROJECT NO: M11-1853

LOCATION: FREEDOM VALUE #28

MI

SAMPLE MATRIX: WATER

SAMPLE ID: MW-3

GTA PROJECT NO: 080520-2

GTA SAMPLE NO: 5

DATE SAMPLED: 8/3/2020

TIME SAMPLED: 12:36 PM

DATE RECEIVED: 8/5/2020

TIME RECEIVED: 12:45 PM

SAMPLED BY: MJR/SLR - MET

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	62	1.0	ug/L (PPB)	MR		8/6/2020	EPA 5030B
Toluene	26	1.0					
Ethylbenzene	96	1.0					
Xylene(Total)	970	75					
1,2,4-Trimethylbenzene	330	25					
1,3,5-Trimethylbenzene	110	25					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	82	5.0					
2-Methylnaphthalene	28	5.0					

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 PROJECT NO: M11-1853
 LOCATION: FREEDOM VALUE #28
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-1

GTA PROJECT NO: 080520-2
 GTA SAMPLE NO: 6
 DATE SAMPLED: 8/3/2020
 TIME SAMPLED: 1:02 PM
 DATE RECEIVED: 8/5/2020
 TIME RECEIVED: 12:45 PM

SAMPLED BY: MJR/SLR - MET

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	ND	1.0	ug/L (PPB)	MR		8/6/2020	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					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY:	MACKINAC ENVIRONMENTAL	GTA PROJECT NO:	080520-2
PROJECT NO:	M11-1853	GTA SAMPLE NO:	7
LOCATION:	FREEDOM VALUE #28	DATE SAMPLED:	8/3/2020
		TIME SAMPLED:	1:20 PM
		DATE RECEIVED:	8/5/2020
	MI	TIME RECEIVED:	12:45 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-2	SAMPLED BY:	MJR/SLR - MET

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	1.3	1.0	ug/L (PPB)	MR		8/6/2020	EPA 5030B
Toluene	21	1.0					
Ethylbenzene	310	10					
Xylene(Total)	1,500	30					
1,2,4-Trimethylbenzene	260	10					
1,3,5-Trimethylbenzene	37	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	93	5.0					
2-Methylnaphthalene	12	5.0					

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COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M11-1853
 LOCATION: FREEDOM VALUE #28
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-5

GTA PROJECT NO: 080520-2
 GTA SAMPLE NO: 8
 DATE SAMPLED: 8/3/2020
 TIME SAMPLED: 1:35 PM
 DATE RECEIVED: 8/5/2020
 TIME RECEIVED: 12:45 PM

SAMPLED BY: MJR/SLR - MET

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	ND	1.0	ug/L (PPB)	MR		8/6/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	1.9	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M11-1853
 LOCATION: FREEDOM VALUE #28
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-7

GTA PROJECT NO: 080520-2
 GTA SAMPLE NO: 9
 DATE SAMPLED: 8/3/2020
 TIME SAMPLED: 1:53 PM
 DATE RECEIVED: 8/5/2020
 TIME RECEIVED: 12:45 PM

SAMPLED BY: MJR/SLR - MET

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	ND	1.0	ug/L (PPB)	MR		8/6/2020	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					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: MACKINAC ENVIRONMENTAL
 PROJECT NO: M11-1853
 LOCATION: FREEDOM VALUE #28
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: VW-2

GTA PROJECT NO: 080520-2
 GTA SAMPLE NO: 10
 DATE SAMPLED: 8/3/2020
 TIME SAMPLED: 2:06 PM
 DATE RECEIVED: 8/5/2020
 TIME RECEIVED: 12:45 PM

SAMPLED BY: MJR/SLR - MET

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	ND	1.0	ug/L (PPB)	MR		8/6/2020	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					
Methyl-t-Butyl Ether	ND	5.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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CHAIN OF CUSTODY

PROJECT NUMBER M11-1853	SITE NAME/ADDRESS Freedom Valu #28	COMPANY/NAME
SAMPLED BY MJR/SLR	COMPANY MET	GTA PROJECT # 080520-2

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	MW-6	8/3/2020	1124	GW	ULG
2	VW-1		1140		
3	MW-8		1156		
4	MW-4		1215		
5	MW-3		1236		
6	MW-1		1302		
7	MW-2		1320		
8	MW-5		1335		
9	MW-7		1353		
10	VW-2	↓	1406	↓	↓
					Shipped on ice

BILL TO:

REPORT TO:

RELEASED BY **DATE/TIME**

RECEIVED BY **DATE/TIME**

Diana Reynolds 8/4/2020 1500

[Signature] 8/5/20/12:45

rec 4°C
on ice

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