



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: REEF WORKS
Name:
ClientProj: 2200356-0300
GTA ProjNo: 110723-14

Site Addr: MUELLER 11-11

Sampled By: JSL/BJB - ECT
Date Rec: 11/7/2023
Time Rec: 4:55 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	F-1	11/7/2023	1:30 PM	SOIL
2	F-2	11/7/2023	1:35 PM	SOIL
3	F-3	11/7/2023	1:35 PM	SOIL
4	F-4	11/7/2023	3:04 PM	SOIL
5	F-5	11/7/2023	3:23 PM	SOIL
6	F-6	11/7/2023	3:30 PM	SOIL
7	SW-1	11/7/2023	11:50 AM	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 Chase

Kirk L. Chase/Chemist
Grand Traverse Analytical
830 Robinwood Court
Traverse City, MI 49686
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SP: 231-590-0291
kirk@gtanalytical.com

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 1

DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 1:30 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

MI

SAMPLE MATRIX: SOIL
 SAMPLE ID: F-1

SAMPLED BY: JSL/BJB - ECT

**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>Completed</u>	<u>Prep Method</u>
Benzene	61	50	ug/Kg (PPB)	MR	11/7/2023	11/8/2023	EPA 5035A
Toluene	140	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					

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

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11
 MI
 SAMPLE MATRIX: SOIL
 SAMPLE ID: F-2

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 2
 DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 1:35 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

SAMPLED BY: JSL/BJB - ECT

**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>Completed</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	11/7/2023	11/8/2023	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					

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

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LOD = LIMIT OF DETECTION

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 3

DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 1:35 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

MI

SAMPLE MATRIX: SOIL
 SAMPLE ID: F-3

SAMPLED BY: JSL/BJB - ECT

**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>Completed</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	11/7/2023	11/8/2023	EPA 5035A
Toluene	170	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					

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

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LOD = LIMIT OF DETECTION

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 4

DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 3:04 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

MI

SAMPLE MATRIX: SOIL
 SAMPLE ID: F-4

SAMPLED BY: JSL/BJB - ECT

**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>Completed</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	11/7/2023	11/8/2023	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					

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

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LOD = LIMIT OF DETECTION

COMPANY: REEF WORKS
PROJECT NO: 2200356-0300
LOCATION: MUELLER 11-11

MI
SAMPLE MATRIX: SOIL
SAMPLE ID: F-5

GTA PROJECT NO: 110723-14
GTA SAMPLE NO: 5
DATE SAMPLED: 11/7/2023
TIME SAMPLED: 3:23 PM
DATE RECEIVED: 11/7/2023
TIME RECEIVED: 4:55 PM

SAMPLED BY: JSL/BJB - ECT

**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>Completed</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	11/7/2023	11/8/2023	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					

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

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11
 MI
 SAMPLE MATRIX: SOIL
 SAMPLE ID: F-6

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 6
 DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 3:30 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

SAMPLED BY: JSL/BJB - ECT

**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>Completed</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	11/7/2023	11/8/2023	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					

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

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

COMPANY: REEF WORKS
PROJECT NO: 2200356-0300
LOCATION: MUELLER 11-11

MI
SAMPLE MATRIX: SOIL
SAMPLE ID: SW-1

GTA PROJECT NO: 110723-14
GTA SAMPLE NO: 7
DATE SAMPLED: 11/7/2023
TIME SAMPLED: 11:50 AM
DATE RECEIVED: 11/7/2023
TIME RECEIVED: 4:55 PM

SAMPLED BY: JSL/BJB - ECT

**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>Completed</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	11/7/2023	11/8/2023	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					

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

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 1

DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 1:30 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

MI
 SAMPLED BY: JSL/BJB - ECT

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: F-1	CHLORIDE EPA 300.0	1,100	98	mg/Kg (PPM)	KC/TR	11/8/2023	SOIL

ND = NOT DETECTED, RESULT < LOD
 LOD = LIMIT OF DETECTION
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 2
 DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 1:35 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

MI
 SAMPLED BY: JSL/BJB - ECT

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: F-2	CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	KC/TR	11/8/2023	SOIL

ND = NOT DETECTED, RESULT < LOD
 LOD = LIMIT OF DETECTION
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 3

DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 1:35 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

MI
 SAMPLED BY: JSL/BJB - ECT

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: F-3	CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	KC/TR	11/8/2023	SOIL

ND = NOT DETECTED, RESULT < LOD
 LOD = LIMIT OF DETECTION
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 4

DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 3:04 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

MI
 SAMPLED BY: JSL/BJB - ECT

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: F-4	CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	KC/TR	11/8/2023	SOIL

ND = NOT DETECTED, RESULT < LOD
 LOD = LIMIT OF DETECTION
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 5

DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 3:23 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

MI
 SAMPLED BY: JSL/BJB - ECT

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: F-5	CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	KC/TR	11/8/2023	SOIL

ND = NOT DETECTED, RESULT < LOD
 LOD = LIMIT OF DETECTION
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 6

DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 3:30 PM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

MI
 SAMPLED BY: JSL/BJB - ECT

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: F-6	CHLORIDE EPA 300.0	ND	110	mg/Kg (PPM)	KC/TR	11/8/2023	SOIL

ND = NOT DETECTED, RESULT < LOD
 LOD = LIMIT OF DETECTION
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: REEF WORKS
 PROJECT NO: 2200356-0300
 LOCATION: MUELLER 11-11

GTA PROJECT NO: 110723-14
 GTA SAMPLE NO: 7

DATE SAMPLED: 11/7/2023
 TIME SAMPLED: 11:50 AM
 DATE RECEIVED: 11/7/2023
 TIME RECEIVED: 4:55 PM

MI
 SAMPLED BY: JSL/BJB - ECT

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
SAMPLE ID: SW-1	CHLORIDE EPA 300.0	ND	99	mg/Kg (PPM)	KC/TR	11/8/2023	SOIL

ND = NOT DETECTED, RESULT < LOD
 LOD = LIMIT OF DETECTION
 s.u. = STANDARD pH UNITS REPORTED AT 25 C



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

COMPANY: REEF WORKS

NAME:
PROJECT NO: 2200356-0300

LOCATION: MUELLER 11-11

MI

GTA PROJECT NO: 110723-14
SAMPLED BY: JSL/BJB - ECT

DATE SAMPLED: 11/7/2023

SAMPLE SOIL

DATE RECEIVED: 11/7/2023
TIME RECEIVED: 4:55 PM

MOISTURE

<u>No:</u> <u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
SAMPLE ID: F-1 % MOISTURE EPA 3550C	3.4	0.10	% OF SAMPLE	AS	11/7/2023
SAMPLE ID: F-2 % MOISTURE EPA 3550C	6.8	0.10	% OF SAMPLE	AS	11/7/2023
SAMPLE ID: F-3 % MOISTURE EPA 3550C	3.5	0.10	% OF SAMPLE	AS	11/7/2023
SAMPLE ID: F-4 % MOISTURE EPA 3550C	4.4	0.10	% OF SAMPLE	AS	11/7/2023
SAMPLE ID: F-5 % MOISTURE EPA 3550C	5.3	0.10	% OF SAMPLE	AS	11/7/2023
SAMPLE ID: F-6 % MOISTURE EPA 3550C	5.9	0.10	% OF SAMPLE	AS	11/7/2023
SAMPLE ID: SW-1 % MOISTURE EPA 3550C	4.5	0.10	% OF SAMPLE	AS	11/7/2023

CHAIN OF CUSTODY

PROJECT NUMBER <i>220356-0300</i>	SITE NAME/ADDRESS <i>Mueller 11-11</i>	COMPANY/NAME <i>Reef Works</i>
SAMPLED BY <i>JSL/BBB</i>	COMPANY <i>ECT</i>	GTA PROJECT # <i>110723-14</i>

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
	<i>F-1</i>	<i>11/7/23</i>	<i>13:30</i>	<i>Soil</i>	<i>BTEXT + Chloride</i>
	<i>F-2</i>	↓	<i>12:35</i>	↓	
	<i>F-3</i>		<i>13:35</i>		
	<i>F-4</i>		<i>15:04</i>		
	<i>F-5</i>		<i>15:23</i>		
	<i>F-6</i>		<i>15:30</i>		
	<i>SW-1</i>		<i>11:50</i>		

BILL TO:	TempRec: <input type="checkbox"/>	On Ice? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	REPORT TO: <i>Brad Bunting</i> <i>Jeremy Penland</i>
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RELEASED BY <i>[Signature]</i>	DATE/TIME <i>11/7/23 4:55p</i>	RECEIVED BY <i>[Signature]</i>	DATE/TIME <i>11/7/23 4:55</i>
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REQUESTED TAT STANDARD 1 BUSINESS DAY 2 BUSINESS DAYS 3 BUSINESS DAYS