



**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

[www.gtanalytical.com](http://www.gtanalytical.com)

Company: LAMBDA ENERGY RESOURCES, LLC  
Name:  
ClientProj: 2018100104  
GTA ProjNo: 092723-11

Site Addr: BEAR LAKE 13  
Sampled By: BRENDAN RUPPEN/GCES  
Date Rec: 9/27/2023  
Time Rec: 3:20 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-47	9/27/2023	10:15 AM	WATER
2	MW-43	9/27/2023	11:15 AM	WATER
3	MW-22S	9/27/2023	11:40 AM	WATER
4	SUMP	9/27/2023	12:30 PM	WATER
5	MW-6	9/27/2023	1:00 PM	WATER
6	TW-9	9/27/2023	1:10 PM	WATER
7	MW-37	9/27/2023	1:30 PM	WATER
8	MW-33	9/27/2023	1:50 PM	WATER
9	MW-46	9/27/2023	2:05 PM	WATER
10	MW-1	9/27/2023	2:20 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  
Grand Traverse Analytical  
830 Robinwood Court  
Traverse City, MI 49686  
Ph: 231-929-0905  
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SP: 231-590-0291  
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COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100104  
 LOCATION: BEAR LAKE 13  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-47

GTA PROJECT NO: 092723-11  
 GTA SAMPLE NO: 1  
 DATE SAMPLED: 9/27/2023  
 TIME SAMPLED: 10:15 AM  
 DATE RECEIVED: 9/27/2023  
 TIME RECEIVED: 3:20 PM

SAMPLED BY: BRENDAN RUPPEN/GCES

**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	1.0	ug/L (PPB)	MR		9/29/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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



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COMPANY: LAMBDA ENERGY RESOURCES, LLC

PROJECT NO: 2018100104  
 LOCATION: BEAR LAKE 13

MI

SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-43

GTA PROJECT NO: 092723-11  
 GTA SAMPLE NO: 2

DATE SAMPLED: 9/27/2023  
 TIME SAMPLED: 11:15 AM  
 DATE RECEIVED: 9/27/2023  
 TIME RECEIVED: 3:20 PM

SAMPLED BY: BRENDAN RUPPEN/GCES

**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	1.0	ug/L (PPB)	MR		9/29/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY:	LAMBDA ENERGY RESOURCES, LLC	GTA PROJECT NO:	092723-11
PROJECT NO:	2018100104	GTA SAMPLE NO:	3
LOCATION:	BEAR LAKE 13	DATE SAMPLED:	9/27/2023
		TIME SAMPLED:	11:40 AM
		DATE RECEIVED:	9/27/2023
	MI	TIME RECEIVED:	3:20 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-22S	SAMPLED BY:	BRENDAN RUPPEN/GCES

**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	1.0	ug/L (PPB)	MR		9/29/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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



COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100104  
 LOCATION: BEAR LAKE 13  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-6

GTA PROJECT NO: 092723-11  
 GTA SAMPLE NO: 5  
 DATE SAMPLED: 9/27/2023  
 TIME SAMPLED: 1:00 PM  
 DATE RECEIVED: 9/27/2023  
 TIME RECEIVED: 3:20 PM

SAMPLED BY: BRENDAN RUPPEN/GCES

**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	1.0	ug/L (PPB)	MR		9/29/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100104  
 LOCATION: BEAR LAKE 13  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: TW-9

GTA PROJECT NO: 092723-11  
 GTA SAMPLE NO: 6  
 DATE SAMPLED: 9/27/2023  
 TIME SAMPLED: 1:10 PM  
 DATE RECEIVED: 9/27/2023  
 TIME RECEIVED: 3:20 PM

SAMPLED BY: BRENDAN RUPPEN/GCES

**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	1.0	ug/L (PPB)	MR		9/29/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	3.2	1.0					
Xylene(Total)	27	3.0					
1,2,4-Trimethylbenzene	160	1.0					
1,3,5-Trimethylbenzene	41	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	35	5.0					

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COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100104  
 LOCATION: BEAR LAKE 13  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-37

GTA PROJECT NO: 092723-11  
 GTA SAMPLE NO: 7  
 DATE SAMPLED: 9/27/2023  
 TIME SAMPLED: 1:30 PM  
 DATE RECEIVED: 9/27/2023  
 TIME RECEIVED: 3:20 PM

SAMPLED BY: BRENDAN RUPPEN/GCES

**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	1.0	ug/L (PPB)	MR		9/29/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	5.4	3.0					
1,2,4-Trimethylbenzene	9.1	1.0					
1,3,5-Trimethylbenzene	2.1	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
 ND = NOT DETECTED, RESULT < LOD  
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COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100104  
 LOCATION: BEAR LAKE 13  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-33

GTA PROJECT NO: 092723-11  
 GTA SAMPLE NO: 8  
 DATE SAMPLED: 9/27/2023  
 TIME SAMPLED: 1:50 PM  
 DATE RECEIVED: 9/27/2023  
 TIME RECEIVED: 3:20 PM

SAMPLED BY: BRENDAN RUPPEN/GCES

**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 Completed</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		9/29/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	3.2	3.0					
1,2,4-Trimethylbenzene	8.5	1.0					
1,3,5-Trimethylbenzene	2.4	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100104  
 LOCATION: BEAR LAKE 13  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-46

GTA PROJECT NO: 092723-11  
 GTA SAMPLE NO: 9  
 DATE SAMPLED: 9/27/2023  
 TIME SAMPLED: 2:05 PM  
 DATE RECEIVED: 9/27/2023  
 TIME RECEIVED: 3:20 PM

SAMPLED BY: BRENDAN RUPPEN/GCES

**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	1.0	ug/L (PPB)	MR		9/29/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	1.6	1.0					
Xylene(Total)	66	3.0					
1,2,4-Trimethylbenzene	21	1.0					
1,3,5-Trimethylbenzene	8.7	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100104  
 LOCATION: BEAR LAKE 13  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-1

GTA PROJECT NO: 092723-11  
 GTA SAMPLE NO: 10  
 DATE SAMPLED: 9/27/2023  
 TIME SAMPLED: 2:20 PM  
 DATE RECEIVED: 9/27/2023  
 TIME RECEIVED: 3:20 PM

SAMPLED BY: BRENDAN RUPPEN/GCES

**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	1.0	ug/L (PPB)	MR		9/29/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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 LOD = LIMIT OF DETECTION



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COMPANY: LAMBDA ENERGY RESOURCES, LLC

PROJECT NO: 2018100104

LOCATION: BEAR LAKE 13

SAMPLED BY: MI  
BRENDAN RUPPEN/GCES

GTA PROJECT NO: 092723-11

GTA SAMPLE NO: 4

DATE SAMPLED: 9/27/2023

TIME SAMPLED: 12:30 PM

DATE RECEIVED: 9/27/2023

TIME RECEIVED: 3:20 PM

**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:	SUMP						
	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	10/5/2023	WATER

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



**CHAIN OF CUSTODY**

PROJECT NUMBER <b>2018100104</b>	SITE NAME/ADDRESS <b>Bear Lake 13</b>	COMPANY/NAME <b>LER</b>
SAMPLED BY <b>Brendan Ruppen</b>	COMPANY <b>G CES</b>	GTA PROJECT # <b>092723-11</b>

**SAMPLE INFORMATION**

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS	
1	MW-47	9/27/23	10:15	GW	BTEX+4	
2	MW-43	↓	11:15	↓	↓	
3	MW-22s		11:40			
4	Sump		12:30			[BTEX+4, Chloride]
5	MW-6		1:00			↓
6	TW-9		1:10			
7	MW-37		1:30			↓
8	MW-33		1:50			
9	MW-46		2:05			
10	MW-1		2:20			↓

BILL TO: <b>LER</b>	TempRec: <input type="checkbox"/> <b>5.6°C</b>	On Ice? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	REPORT TO: <b>J. Simsa</b>
------------------------	---------------------------------------------------	--------------------------------------------------------------------------	-------------------------------

RELEASED BY <b>B. Ruppen</b>	DATE/TIME <b>9/27/23 3:20</b>	RECEIVED BY <b>[Signature]</b>	DATE/TIME <b>9/27/23 3:20p</b>
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REQUESTED TAT  STANDARD  1 BUSINESS DAY  2 BUSINESS DAYS  3 BUSINESS DAYS