



**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: 2018100101  
GTA ProjNo: 110923-8

Site Addr: SPRINGDALE 28

Sampled By: BRENDAN RUPPEN/GCES  
Date Rec: 11/9/2023  
Time Rec: 3:55 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-22	11/9/2023	10:45 AM	WATER
2	OW-1	11/9/2023	11:15 AM	WATER
3	MW-25	11/9/2023	11:35 AM	WATER
4	MW-11	11/9/2023	12:00 PM	WATER
5	MW-10	11/9/2023	12:15 PM	WATER
6	MW-9	11/9/2023	12:30 PM	WATER
7	MW-12	11/9/2023	1:00 PM	WATER
8	SUMP	11/9/2023	1:15 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  
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Fx: 231-929-0894  
SP: 231-590-0291  
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COMPANY:	LAMBDA ENERGY RESOURCES, LLC	GTA PROJECT NO:	110923-8
PROJECT NO:	2018100101	GTA SAMPLE NO:	1
LOCATION:	SPRINGDALE 28	DATE SAMPLED:	11/9/2023
		TIME SAMPLED:	10:45 AM
		DATE RECEIVED:	11/9/2023
	MI	TIME RECEIVED:	3:55 PM
SAMPLE MATRIX:	WATER	SAMPLED BY:	BRENDAN RUPPEN/GCES
SAMPLE ID:	MW-22		

**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		11/13/2023	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: 2018100101  
 LOCATION: SPRINGDALE 28  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-11

GTA PROJECT NO: 110923-8  
 GTA SAMPLE NO: 4  
 DATE SAMPLED: 11/9/2023  
 TIME SAMPLED: 12:00 PM  
 DATE RECEIVED: 11/9/2023  
 TIME RECEIVED: 3:55 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		11/13/2023	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.  
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COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100101  
 LOCATION: SPRINGDALE 28  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-10

GTA PROJECT NO: 110923-8  
 GTA SAMPLE NO: 5  
 DATE SAMPLED: 11/9/2023  
 TIME SAMPLED: 12:15 PM  
 DATE RECEIVED: 11/9/2023  
 TIME RECEIVED: 3:55 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		11/13/2023	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  
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COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100101  
 LOCATION: SPRINGDALE 28  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-12

GTA PROJECT NO: 110923-8  
 GTA SAMPLE NO: 7  
 DATE SAMPLED: 11/9/2023  
 TIME SAMPLED: 1:00 PM  
 DATE RECEIVED: 11/9/2023  
 TIME RECEIVED: 3:55 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		11/13/2023	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: 2018100101  
 LOCATION: SPRINGDALE 28  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: SUMP

GTA PROJECT NO: 110923-8  
 GTA SAMPLE NO: 8  
 DATE SAMPLED: 11/9/2023  
 TIME SAMPLED: 1:15 PM  
 DATE RECEIVED: 11/9/2023  
 TIME RECEIVED: 3:55 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	2,400	25	ug/L (PPB)	MR		11/13/2023	EPA 5030B
Toluene	5,300	25					
Ethylbenzene	860	25					
Xylene(Total)	1,800	75					
1,2,4-Trimethylbenzene	340	25					
1,3,5-Trimethylbenzene	61	1.0					
Naphthalene	12	5.0					
2-Methylnaphthalene	24	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: 2018100101  
 LOCATION: SPRINGDALE 28

GTA PROJECT NO: 110923-8  
 GTA SAMPLE NO: 1

DATE SAMPLED: 11/9/2023  
 TIME SAMPLED: 10:45 AM  
 DATE RECEIVED: 11/9/2023  
 TIME RECEIVED: 3:55 PM

MI  
 SAMPLED BY: BRENDAN RUPPEN/GCES

**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: MW-22	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	11/20/2023	WATER

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100101  
 LOCATION: SPRINGDALE 28

GTA PROJECT NO: 110923-8  
 GTA SAMPLE NO: 2

DATE SAMPLED: 11/9/2023  
 TIME SAMPLED: 11:15 AM  
 DATE RECEIVED: 11/9/2023  
 TIME RECEIVED: 3:55 PM

MI  
 SAMPLED BY: BRENDAN RUPPEN/GCES

**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: OW-1	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	11/20/2023	WATER

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100101  
 LOCATION: SPRINGDALE 28

GTA PROJECT NO: 110923-8  
 GTA SAMPLE NO: 3

DATE SAMPLED: 11/9/2023  
 TIME SAMPLED: 11:35 AM  
 DATE RECEIVED: 11/9/2023  
 TIME RECEIVED: 3:55 PM

MI  
 SAMPLED BY: BRENDAN RUPPEN/GCES

**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: MW-25	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	11/20/2023	WATER

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100101  
 LOCATION: SPRINGDALE 28

GTA PROJECT NO: 110923-8  
 GTA SAMPLE NO: 4

DATE SAMPLED: 11/9/2023  
 TIME SAMPLED: 12:00 PM  
 DATE RECEIVED: 11/9/2023  
 TIME RECEIVED: 3:55 PM

MI  
 SAMPLED BY: BRENDAN RUPPEN/GCES

**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: MW-11	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	11/20/2023	WATER

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100101  
 LOCATION: SPRINGDALE 28

GTA PROJECT NO: 110923-8  
 GTA SAMPLE NO: 5

DATE SAMPLED: 11/9/2023  
 TIME SAMPLED: 12:15 PM  
 DATE RECEIVED: 11/9/2023  
 TIME RECEIVED: 3:55 PM

MI  
 SAMPLED BY: BRENDAN RUPPEN/GCES

**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: MW-10	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	11/20/2023	WATER

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





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COMPANY: LAMBDA ENERGY RESOURCES, LLC  
PROJECT NO: 2018100101  
LOCATION: SPRINGDALE 28

GTA PROJECT NO: 110923-8  
GTA SAMPLE NO: 7

DATE SAMPLED: 11/9/2023  
TIME SAMPLED: 1:00 PM  
DATE RECEIVED: 11/9/2023  
TIME RECEIVED: 3:55 PM

MI  
SAMPLED BY: BRENDAN RUPPEN/GCES

**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: MW-12	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	11/20/2023	WATER

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 2018100101  
 LOCATION: SPRINGDALE 28

GTA PROJECT NO: 110923-8  
 GTA SAMPLE NO: 8

DATE SAMPLED: 11/9/2023  
 TIME SAMPLED: 1:15 PM  
 DATE RECEIVED: 11/9/2023  
 TIME RECEIVED: 3:55 PM

MI  
 SAMPLED BY: BRENDAN RUPPEN/GCES

**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	14	10	mg/L (PPM)	KC/TR	11/20/2023	WATER

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

**CHAIN OF CUSTODY**

PROJECT NUMBER 2018100101	SITE NAME/ADDRESS Springdale 28	COMPANY/NAME LER
SAMPLED BY Brendan Ruppen	COMPANY GCES	GTA PROJECT # 10923-8

**SAMPLE INFORMATION**

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	MW-22	11/9/23	10:45	GW	[BTEX+4, Chloride]
2	QW-1	↓	11:15	↓	↓
3	MW-25		11:35		
4	MW-11		12:00		
5	MW-10		12:15		
6	MW-9		12:30		
7	MW-12		1:00		
8	Sump		1:15		

BILL TO: LER	TempRec: <input type="checkbox"/> 4.00 C	On Ice? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	REPORT TO: J. Simso
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RELEASED BY B. Ruppen	DATE/TIME 11/9/23 3:53	RECEIVED BY 	DATE/TIME 11/9/23 3:55
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REQUESTED TAT  STANDARD  1 BUSINESS DAY  2 BUSINESS DAYS  3 BUSINESS DAYS