



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: LAMBDA ENERGY RESOURCES, LLC
Name:
ClientProj: 2018100115
GTA ProjNo: 111323-8

Site Addr: RUDY 1-24

Sampled By: BRENDAN RUPPEN/GCES
Date Rec: 11/13/2023
Time Rec: 3:05 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-2	11/13/2023	11:15 AM	WATER
2	MW-18	11/13/2023	11:55 AM	WATER
3	MW-3	11/13/2023	12:20 PM	WATER
4	MW-8	11/13/2023	12:35 PM	WATER
5	MW-11	11/13/2023	12:55 PM	WATER
6	MW-13	11/13/2023	1:10 PM	WATER
7	MW-10	11/13/2023	1:30 PM	WATER
8	MW-9	11/13/2023	1:45 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
Fx: 231-929-0894
SP: 231-590-0291
kirk@gtanalytical.com



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COMPANY: LAMBDA ENERGY RESOURCES, LLC
 PROJECT NO: 2018100115
 LOCATION: RUDY 1-24
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-2

GTA PROJECT NO: 111323-8
 GTA SAMPLE NO: 1
 DATE SAMPLED: 11/13/2023
 TIME SAMPLED: 11:15 AM
 DATE RECEIVED: 11/13/2023
 TIME RECEIVED: 3:05 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		11/14/2023	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: 2018100115
 LOCATION: RUDY 1-24
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-3

GTA PROJECT NO: 111323-8
 GTA SAMPLE NO: 3
 DATE SAMPLED: 11/13/2023
 TIME SAMPLED: 12:20 PM
 DATE RECEIVED: 11/13/2023
 TIME RECEIVED: 3:05 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		11/14/2023	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
 PROJECT NO: 2018100115
 LOCATION: RUDY 1-24
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-8

GTA PROJECT NO: 111323-8
 GTA SAMPLE NO: 4
 DATE SAMPLED: 11/13/2023
 TIME SAMPLED: 12:35 PM
 DATE RECEIVED: 11/13/2023
 TIME RECEIVED: 3:05 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		11/14/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	47	3.0					
1,2,4-Trimethylbenzene	40	1.0					
1,3,5-Trimethylbenzene	7.6	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: LAMBDA ENERGY RESOURCES, LLC
 PROJECT NO: 2018100115
 LOCATION: RUDY 1-24
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-11

GTA PROJECT NO: 111323-8
 GTA SAMPLE NO: 5
 DATE SAMPLED: 11/13/2023
 TIME SAMPLED: 12:55 PM
 DATE RECEIVED: 11/13/2023
 TIME RECEIVED: 3:05 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		11/14/2023	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	2.9	1.0					
Xylene(Total)	66	3.0					
1,2,4-Trimethylbenzene	28	1.0					
1,3,5-Trimethylbenzene	5.9	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: LAMBDA ENERGY RESOURCES, LLC
 PROJECT NO: 2018100115
 LOCATION: RUDY 1-24
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-13

GTA PROJECT NO: 111323-8
 GTA SAMPLE NO: 6
 DATE SAMPLED: 11/13/2023
 TIME SAMPLED: 1:10 PM
 DATE RECEIVED: 11/13/2023
 TIME RECEIVED: 3:05 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			
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:	111323-8
PROJECT NO:	2018100115	GTA SAMPLE NO:	7
LOCATION:	RUDY 1-24	DATE SAMPLED:	11/13/2023
		TIME SAMPLED:	1:30 PM
		DATE RECEIVED:	11/13/2023
	MI	TIME RECEIVED:	3:05 PM
SAMPLE MATRIX:	WATER	SAMPLED BY:	BRENDAN RUPPEN/GCES
SAMPLE ID:	MW-10		

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		11/14/2023	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	GTA PROJECT NO:	111323-8
PROJECT NO:	2018100115	GTA SAMPLE NO:	8
LOCATION:	RUDY 1-24	DATE SAMPLED:	11/13/2023
		TIME SAMPLED:	1:45 PM
		DATE RECEIVED:	11/13/2023
	MI	TIME RECEIVED:	3:05 PM
SAMPLE MATRIX:	WATER	SAMPLED BY:	BRENDAN RUPPEN/GCES
SAMPLE ID:	MW-9		

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		11/14/2023	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: 2018100115
LOCATION: RUDY 1-24

GTA PROJECT NO: 111323-8
GTA SAMPLE NO: 1

DATE SAMPLED: 11/13/2023
TIME SAMPLED: 11:15 AM
DATE RECEIVED: 11/13/2023
TIME RECEIVED: 3:05 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-2	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	11/21/2023	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: 2018100115
 LOCATION: RUDY 1-24

GTA PROJECT NO: 111323-8
 GTA SAMPLE NO: 2

DATE SAMPLED: 11/13/2023
 TIME SAMPLED: 11:55 AM
 DATE RECEIVED: 11/13/2023
 TIME RECEIVED: 3:05 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-18	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	11/21/2023	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: 2018100115
 LOCATION: RUDY 1-24

GTA PROJECT NO: 111323-8
 GTA SAMPLE NO: 4

DATE SAMPLED: 11/13/2023
 TIME SAMPLED: 12:35 PM
 DATE RECEIVED: 11/13/2023
 TIME RECEIVED: 3:05 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-8	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	11/21/2023	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: 2018100115
 LOCATION: RUDY 1-24

GTA PROJECT NO: 111323-8
 GTA SAMPLE NO: 5

DATE SAMPLED: 11/13/2023
 TIME SAMPLED: 12:55 PM
 DATE RECEIVED: 11/13/2023
 TIME RECEIVED: 3:05 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	11/21/2023	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: 2018100115
 LOCATION: RUDY 1-24

GTA PROJECT NO: 111323-8
 GTA SAMPLE NO: 7
 DATE SAMPLED: 11/13/2023
 TIME SAMPLED: 1:30 PM
 DATE RECEIVED: 11/13/2023
 TIME RECEIVED: 3:05 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	11/21/2023	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: 2018100115
 LOCATION: RUDY 1-24

GTA PROJECT NO: 111323-8
 GTA SAMPLE NO: 8

DATE SAMPLED: 11/13/2023
 TIME SAMPLED: 1:45 PM
 DATE RECEIVED: 11/13/2023
 TIME RECEIVED: 3:05 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-9	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	KC/TR	11/21/2023	WATER

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

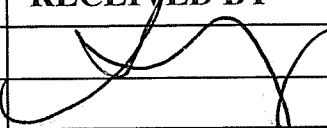
CHAIN OF CUSTODY

PROJECT NUMBER 2018100115	SITE NAME/ADDRESS Rudy 1-24	COMPANY/NAME LER
SAMPLED BY Brendan Reppen	COMPANY GCES	GTA PROJECT # 111323-8

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	MW-2	11/13/23	11:15	GW	[BTEX+4, Chloride]
2	MW-18	↓	11:55	↓	
3	MW-3		12:20		
4	MW-8		12:35		
5	MW-11		12:55		
6	MW-13		1:10		
7	MW-10		1:30		
8	MW-9		1:45		

BILL TO: LER	TempRec: <input type="checkbox"/> 2.1°C	On Ice? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	REPORT TO: J. Simsa
------------------------	--	--	-------------------------------

RELEASED BY Brendan Reppen	DATE/TIME 11/13/23 3:05	RECEIVED BY 	DATE/TIME 11/13/23 3:05
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REQUESTED TAT STANDARD 1 BUSINESS DAY 2 BUSINESS DAYS 3 BUSINESS DAYS