

**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: 20-116

GTA ProjNo: 122321-9

Site Addr: FREDERIC 2

Sampled By: WPM/OMPC

Date Rec: 12/23/2021

Time Rec: 4:45 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-1SR	12/23/2021	12:35 PM	WATER
2	MW-2	12/23/2021	1:15 PM	WATER
3	MW-3	12/23/2021	2:35 PM	WATER
4	MW-4	12/23/2021	12:20 PM	WATER
5	MW-4M	12/23/2021	1:20 PM	WATER
6	MW-5	12/23/2021	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
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COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 20-116
LOCATION: FREDERIC 2
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-1SR

GTA PROJECT NO: 122321-9
GTA SAMPLE NO: 1
DATE SAMPLED: 12/23/2021
TIME SAMPLED: 12:35 PM
DATE RECEIVED: 12/23/2021
TIME RECEIVED: 4:45 PM
SAMPLED BY: WPM/OMPC

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		12/28/2021	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: 20-116
LOCATION: FREDERIC 2
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-2

GTA PROJECT NO: 122321-9
GTA SAMPLE NO: 2
DATE SAMPLED: 12/23/2021
TIME SAMPLED: 1:15 PM
DATE RECEIVED: 12/23/2021
TIME RECEIVED: 4:45 PM
SAMPLED BY: WPM/OMPC

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		12/28/2021	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

COMPANY:	LAMBDA ENERGY RESOURCES, LLC	GTA PROJECT NO:	122321-9
PROJECT NO:	20-116	GTA SAMPLE NO:	3
LOCATION:	FREDERIC 2	DATE SAMPLED:	12/23/2021
		TIME SAMPLED:	2:35 PM
	MI	DATE RECEIVED:	12/23/2021
		TIME RECEIVED:	4:45 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-3	SAMPLED BY:	WPM/OMPC

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		12/28/2021	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: 20-116
LOCATION: FREDERIC 2
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-4

GTA PROJECT NO: 122321-9
GTA SAMPLE NO: 4
DATE SAMPLED: 12/23/2021
TIME SAMPLED: 12:20 PM
DATE RECEIVED: 12/23/2021
TIME RECEIVED: 4:45 PM
SAMPLED BY: WPM/OMPC

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	19	1.0	ug/L (PPB)	MR		12/28/2021	EPA 5030B
Toluene	25	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	12	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: 20-116
LOCATION: FREDERIC 2
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-4M
GTA PROJECT NO: 122321-9
GTA SAMPLE NO: 5
DATE SAMPLED: 12/23/2021
TIME SAMPLED: 1:20 PM
DATE RECEIVED: 12/23/2021
TIME RECEIVED: 4:45 PM
SAMPLED BY: WPM/OMPC

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		12/28/2021	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	GTA PROJECT NO:	122321-9
PROJECT NO:	20-116	GTA SAMPLE NO:	6
LOCATION:	FREDERIC 2	DATE SAMPLED:	12/23/2021
		TIME SAMPLED:	2:20 PM
	MI	DATE RECEIVED:	12/23/2021
		TIME RECEIVED:	4:45 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-5	SAMPLED BY:	WPM/OMPC

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		12/28/2021	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

GTA PROJECT NO: 122321-9

PROJECT NO: 20-116

GTA SAMPLE NO: 1

LOCATION: FREDERIC 2

DATE SAMPLED: 12/23/2021

TIME SAMPLED: 12:35 PM

DATE RECEIVED: 12/23/2021

TIME RECEIVED: 4:45 PM

MI

SAMPLED BY: WPM/OMPC

SAMPLE ANALYSIS**No: Analysis**

SAMPLE ID: MW-1SR

CHLORIDE EPA 300.0

Concentration**LOD****Units****Analyst****Date Completed****Sample**

49

10

mg/L (PPM)

TR

12/31/2021

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

GTA PROJECT NO: 122321-9

PROJECT NO: 20-116

GTA SAMPLE NO: 2

LOCATION: FREDERIC 2

DATE SAMPLED: 12/23/2021

TIME SAMPLED: 1:15 PM

DATE RECEIVED: 12/23/2021

TIME RECEIVED: 4:45 PM

MI

SAMPLED BY: WPM/OMPC

SAMPLE ANALYSIS**No: Analysis**

SAMPLE ID: MW-2

CHLORIDE EPA 300.0

Concentration

220

LOD

10

Units

mg/L (PPM)

Analyst

TR

Date Completed

12/31/2021

Sample

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

GTA PROJECT NO: 122321-9

PROJECT NO: 20-116

GTA SAMPLE NO: 3

LOCATION: FREDERIC 2

DATE SAMPLED: 12/23/2021

TIME SAMPLED: 2:35 PM

DATE RECEIVED: 12/23/2021

TIME RECEIVED: 4:45 PM

MI

SAMPLED BY: WPM/OMPC

SAMPLE ANALYSIS**No: Analysis**

SAMPLE ID: MW-3

CHLORIDE EPA 300.0

Concentration

ND

LOD

10

Units

mg/L (PPM)

Analyst

TR

Date Completed

12/31/2021

Sample

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

GTA PROJECT NO: 122321-9

PROJECT NO: 20-116

GTA SAMPLE NO: 4

LOCATION: FREDERIC 2

DATE SAMPLED: 12/23/2021

TIME SAMPLED: 12:20 PM

DATE RECEIVED: 12/23/2021

TIME RECEIVED: 4:45 PM

MI

SAMPLED BY: WPM/OMPC

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: MW-4

CHLORIDE EPA 300.0

Concentration

150

LOD

10

Units

mg/L (PPM)

Analyst

TR

Date Completed

12/31/2021

Sample

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

GTA PROJECT NO: 122321-9

PROJECT NO: 20-116

GTA SAMPLE NO: 5

LOCATION: FREDERIC 2

DATE SAMPLED: 12/23/2021

TIME SAMPLED: 1:20 PM

DATE RECEIVED: 12/23/2021

TIME RECEIVED: 4:45 PM

MI

SAMPLED BY: WPM/OMPC

SAMPLE ANALYSIS**No: Analysis**

SAMPLE ID: MW-4M

CHLORIDE EPA 300.0

Concentration**LOD****Units****Analyst****Date Completed****Sample**

140

10

mg/L (PPM)

TR

12/31/2021

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 122321-9

PROJECT NO: 20-116

GTA SAMPLE NO: 6

LOCATION: FREDERIC 2

DATE SAMPLED: 12/23/2021

TIME SAMPLED: 2:20 PM

DATE RECEIVED: 12/23/2021

TIME RECEIVED: 4:45 PM

MI

SAMPLED BY: WPM/OMPC

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: MW-5

CHLORIDE EPA 300.0

Concentration

20

LOD

10

Units

mg/L (PPM)

Analyst

TR

Date Completed

12/31/2021

Sample

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

s.u. = STANDARD pH UNITS REPORTED AT 25 C

CHAIN OF CUSTODY

PROJECT NUMBER 20-116	SITE NAME/ADDRESS Frederic 2	COMPANY/NAME Lambda
SAMPLED BY WPM	COMPANY OMPC	GTA PROJECT # 122321-9

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
	MW-1SR	12-23-21	1235	H ₂ O	HIPs + Chlorides
	MW-2	↓	1315	↓	↓
	MW-3	↓	1435	↓	↓
	MW-4	↓	1220	↓	↓
	MW-4A	↓	1320	↓	↓
	MW-5	↓	1420	↓	↓

BILL TO: LER	TempRec: ☐ 10°C	On Ice? ☒ Y ☐ N	REPORT TO:
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RELEASED BY D. M. L.	DATE/TIME 12-23-21 1645	RECEIVED BY [Signature]	DATE/TIME 12/23/21 1645

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