

**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: 20-116

GTA ProjNo: 122222-10

Site Addr: FREDERIC 2

Sampled By: WPM/OMPC

Date Rec: 12/22/2022

Time Rec: 4:50 PM

| Sample No. | Sample ID | Date Sampled | Time Sampled | Sample Matrix |
|------------|-----------|--------------|--------------|---------------|
| 1          | MW-1SR    | 12/22/2022   | 10:40 AM     | WATER         |
| 2          | MW-2      | 12/22/2022   | 11:10 AM     | WATER         |
| 3          | MW-3      | 12/22/2022   | 11:25 AM     | WATER         |
| 4          | MW-4      | 12/22/2022   | 10:50 AM     | WATER         |
| 5          | MW-4M     | 12/22/2022   | 12:15 PM     | WATER         |
| 6          | MW-5      | 12/22/2022   | 12:35 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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FAX: 231-929-0894

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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: 122222-10  
GTA SAMPLE NO: 1  
DATE SAMPLED: 12/22/2022  
TIME SAMPLED: 10:40 AM  
DATE RECEIVED: 12/22/2022  
TIME RECEIVED: 4:50 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<br/>Extracted</u> | <u>Date<br/>Complete</u> | <u>Prep Method</u> |
|------------------------|----------------------|------------|--------------|----------------|---------------------------|--------------------------|--------------------|
| Benzene                | ND                   | 1.0        | ug/L (PPB)   | MR             |                           | 12/24/2022               | 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 &lt; 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: 122222-10  
GTA SAMPLE NO: 2  
DATE SAMPLED: 12/22/2022  
TIME SAMPLED: 11:10 AM  
DATE RECEIVED: 12/22/2022  
TIME RECEIVED: 4:50 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</u><br><u>Extracted</u> | <u>Date</u><br><u>Complete</u> | <u>Prep Method</u> |
|------------------------|----------------------|------------|--------------|----------------|---------------------------------|--------------------------------|--------------------|
| Benzene                | ND                   | 1.0        | ug/L (PPB)   | MR             |                                 | 12/24/2022                     | 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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LOD = LIMIT OF DETECTION

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|                |                              |                 |            |
|----------------|------------------------------|-----------------|------------|
| COMPANY:       | LAMBDA ENERGY RESOURCES, LLC | GTA PROJECT NO: | 122222-10  |
| PROJECT NO:    | 20-116                       | GTA SAMPLE NO:  | 3          |
| LOCATION:      | FREDERIC 2                   | DATE SAMPLED:   | 12/22/2022 |
|                |                              | TIME SAMPLED:   | 11:25 AM   |
|                |                              | DATE RECEIVED:  | 12/22/2022 |
|                | MI                           | TIME RECEIVED:  | 4:50 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</u><br><u>Extracted</u> | <u>Date</u><br><u>Complete</u> | <u>Prep Method</u> |
|------------------------|----------------------|------------|--------------|----------------|---------------------------------|--------------------------------|--------------------|
| Benzene                | ND                   | 1.0        | ug/L (PPB)   | MR             |                                 | 12/24/2022                     | 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 &lt; LOD

LOD = LIMIT OF DETECTION

|                |                              |                 |            |
|----------------|------------------------------|-----------------|------------|
| COMPANY:       | LAMBDA ENERGY RESOURCES, LLC | GTA PROJECT NO: | 122222-10  |
| PROJECT NO:    | 20-116                       | GTA SAMPLE NO:  | 4          |
| LOCATION:      | FREDERIC 2                   | DATE SAMPLED:   | 12/22/2022 |
|                |                              | TIME SAMPLED:   | 10:50 AM   |
|                |                              | DATE RECEIVED:  | 12/22/2022 |
|                | MI                           | TIME RECEIVED:  | 4:50 PM    |
| SAMPLE MATRIX: | WATER                        |                 |            |
| SAMPLE ID:     | MW-4                         | 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<br/>Extracted</u> | <u>Date<br/>Complete</u> | <u>Prep Method</u> |
|------------------------|----------------------|------------|--------------|----------------|---------------------------|--------------------------|--------------------|
| Benzene                | ND                   | 1.0        | ug/L (PPB)   | MR             |                           | 12/24/2022               | 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: | 122222-10  |
| PROJECT NO:    | 20-116                       | GTA SAMPLE NO:  | 5          |
| LOCATION:      | FREDERIC 2                   | DATE SAMPLED:   | 12/22/2022 |
|                |                              | TIME SAMPLED:   | 12:15 PM   |
|                |                              | DATE RECEIVED:  | 12/22/2022 |
|                | MI                           | TIME RECEIVED:  | 4:50 PM    |
| SAMPLE MATRIX: | WATER                        |                 |            |
| SAMPLE ID:     | MW-4M                        | 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<br/>Extracted</u> | <u>Date<br/>Complete</u> | <u>Prep Method</u> |
|------------------------|----------------------|------------|--------------|----------------|---------------------------|--------------------------|--------------------|
| Benzene                | ND                   | 1.0        | ug/L (PPB)   | MR             |                           | 12/24/2022               | 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: | 122222-10  |
| PROJECT NO:    | 20-116                       | GTA SAMPLE NO:  | 6          |
| LOCATION:      | FREDERIC 2                   | DATE SAMPLED:   | 12/22/2022 |
|                |                              | TIME SAMPLED:   | 12:35 PM   |
|                |                              | DATE RECEIVED:  | 12/22/2022 |
|                | MI                           | TIME RECEIVED:  | 4:50 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<br/>Extracted</u> | <u>Date<br/>Complete</u> | <u>Prep Method</u> |
|------------------------|----------------------|------------|--------------|----------------|---------------------------|--------------------------|--------------------|
| Benzene                | ND                   | 1.0        | ug/L (PPB)   | MR             |                           | 12/24/2022               | 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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LOD = LIMIT OF DETECTION



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COMPANY: LAMBDA ENERGY RESOURCES, LLC  
PROJECT NO: 20-116  
LOCATION: FREDERIC 2  
MI  
SAMPLED BY: WPM/OMPC

GTA PROJECT NO: 122222-10  
GTA SAMPLE NO: 1  
DATE SAMPLED: 12/22/2022  
TIME SAMPLED: 10:40 AM  
DATE RECEIVED: 12/22/2022  
TIME RECEIVED: 4:50 PM

### SAMPLE ANALYSIS

| <u>No:</u>         | <u>Analysis</u> | <u>Concentration</u> | <u>LOD</u> | <u>Units</u> | <u>Analyst</u> | <u>Date</u> | <u>Sample</u> |
|--------------------|-----------------|----------------------|------------|--------------|----------------|-------------|---------------|
| SAMPLE ID:         | MW-1SR          | 17                   | 10         | mg/L (PPM)   | KC/TR          | 12/29/2022  | WATER         |
| CHLORIDE EPA 300.0 |                 |                      |            |              |                |             |               |

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: 122222-10

PROJECT NO: 20-116

GTA SAMPLE NO: 2

LOCATION: FREDERIC 2

DATE SAMPLED: 12/22/2022

TIME SAMPLED: 11:10 AM

DATE RECEIVED: 12/22/2022

TIME RECEIVED: 4:50 PM

MI

SAMPLED BY: WPM/OMPC

**SAMPLE ANALYSIS**

**No: Analysis**

SAMPLE ID: MW-2

CHLORIDE EPA 300.0

**Concentration**

**LOD**

**Units**

**Analyst**

**Date**

**Sample**

ND

10

mg/L (PPM)

KC/TR

12/29/2022

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: 122222-10

PROJECT NO: 20-116

GTA SAMPLE NO: 3

LOCATION: FREDERIC 2

DATE SAMPLED: 12/22/2022

TIME SAMPLED: 11:25 AM

DATE RECEIVED: 12/22/2022

TIME RECEIVED: 4:50 PM

MI

SAMPLED BY: WPM/OMPC

### SAMPLE ANALYSIS

#### No: Analysis

SAMPLE ID: MW-3

CHLORIDE EPA 300.0

#### Concentration

17

#### LOD

10

#### Units

mg/L (PPM)

#### Analyst

KC/TR

#### Date

12/29/2022

#### 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: 122222-10

PROJECT NO: 20-116

GTA SAMPLE NO: 4

LOCATION: FREDERIC 2

DATE SAMPLED: 12/22/2022

TIME SAMPLED: 10:50 AM

DATE RECEIVED: 12/22/2022

TIME RECEIVED: 4:50 PM

MI

SAMPLED BY: WPM/OMPC

**SAMPLE ANALYSIS****No: Analysis**

SAMPLE ID: MW-4

CHLORIDE EPA 300.0

**Concentration**

160

**LOD**

10

**Units**

mg/L (PPM)

**Analyst**

KC/TR

**Date**

12/29/2022

**Sample**

WATER

ND = NOT DETECTED, RESULT &lt; LOD

LOD = LIMIT OF DETECTION

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 122222-10

PROJECT NO: 20-116

GTA SAMPLE NO: 5

LOCATION: FREDERIC 2

DATE SAMPLED: 12/22/2022

TIME SAMPLED: 12:15 PM

DATE RECEIVED: 12/22/2022

TIME RECEIVED: 4:50 PM

MI

SAMPLED BY: WPM/OMPC

**SAMPLE ANALYSIS**

**No: Analysis**

SAMPLE ID: MW-4M

CHLORIDE EPA 300.0

**Concentration**

**LOD**

**Units**

**Analyst**

**Date**

**Sample**

ND

10

mg/L (PPM)

KC/TR

12/29/2022

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: 122222-10

PROJECT NO: 20-116

GTA SAMPLE NO: 6

LOCATION: FREDERIC 2

DATE SAMPLED: 12/22/2022

TIME SAMPLED: 12:35 PM

DATE RECEIVED: 12/22/2022

TIME RECEIVED: 4:50 PM

MI

SAMPLED BY: WPM/OMPC

**SAMPLE ANALYSIS**

**No: Analysis**

SAMPLE ID: MW-5

CHLORIDE EPA 300.0

**Concentration**

**LOD**

**Units**

**Analyst**

**Date**

**Sample**

ND

10

mg/L (PPM)

KC/TR

12/29/2022

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

**CHAIN OF CUSTODY**

|                                 |                                        |                                   |
|---------------------------------|----------------------------------------|-----------------------------------|
| PROJECT NUMBER<br><b>20-116</b> | SITE NAME/ADDRESS<br><b>Frederic 2</b> | COMPANY/NAME<br><b>Lambda</b>     |
| SAMPLED BY<br><b>WPM</b>        | COMPANY<br><b>OMPC</b>                 | GTA PROJECT #<br><b>122222-10</b> |

**SAMPLE INFORMATION**

| # | SAMPLE ID | DATE SAMPLED | TIME | MATRIX | ANALYSIS         |
|---|-----------|--------------|------|--------|------------------|
| 1 | MW-1sr    | 12-22-22     | 1040 | H2O    | HIPs + Chlorides |
| 2 | MW-2      | ↓            | 1110 | ↓      | ↓                |
| 3 | MW-3      |              | 1125 |        |                  |
| 4 | MW-4      |              | 1050 |        |                  |
| 5 | MW-4m     |              | 1215 |        |                  |
| 6 | MW-5      |              | 1235 |        |                  |
|   |           |              |      |        |                  |
|   |           |              |      |        |                  |
|   |           |              |      |        |                  |
|   |           |              |      |        |                  |
|   |           |              |      |        |                  |
|   |           |              |      |        |                  |
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|   |           |              |      |        |                  |
|   |           |              |      |        |                  |

|                                                                                                                                                                                      |                                                |                                                                          |                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------|
| BILL TO:                                                                                                                                                                             | TempRec: <input type="checkbox"/> <b>3.0°C</b> | On Ice? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | REPORT TO:<br><b>Dan Barton</b>   |
| RELEASED BY<br><b>[Signature]</b>                                                                                                                                                    | DATE/TIME<br><b>12-22-22 1650</b>              | RECEIVED BY<br><b>[Signature]</b>                                        | DATE/TIME<br><b>12/22/22 1650</b> |
| REQUESTED TAT <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 1 BUSINESS DAY <input type="checkbox"/> 2 BUSINESS DAYS <input type="checkbox"/> 3 BUSINESS DAYS |                                                |                                                                          |                                   |