



**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: 2018100159.01  
GTA ProjNo: 101818-1

Site Addr: CASE 33  
Sampled By: BR/GCES  
Date Rec: 10/18/2018  
Time Rec: 12:20 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-2D	10/16/2018	12:40 PM	WATER
2	MW-5	10/16/2018	1:20 PM	WATER
3	MW-7	10/16/2018	1:45 PM	WATER
4	MW-2S	10/16/2018	2:20 PM	WATER
5	MW-3S	10/16/2018	2:50 PM	WATER
6	MW-8	10/16/2018	3:20 PM	WATER
7	MW-1	10/16/2018	3:40 AM	WATER
8	MW-6	10/16/2018	4:00 PM	WATER
9	MW-4	10/16/2018	4:20 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  
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COMPANY:	LAMBDA ENERGY RESOURCES, LLC	GTA PROJECT NO:	101818-1
PROJECT NO:	2018100159.01	GTA SAMPLE NO:	6
LOCATION:	CASE 33	DATE SAMPLED:	10/16/2018
		TIME SAMPLED:	3:20 PM
		DATE RECEIVED:	10/18/2018
	MI	TIME RECEIVED:	12:20 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-8	SAMPLED BY:	BR/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 Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		10/22/2018	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: 2018100159.01  
 LOCATION: CASE 33  
 MI  
 SAMPLE MATRIX: WATER  
 SAMPLE ID: MW-1

GTA PROJECT NO: 101818-1  
 GTA SAMPLE NO: 7  
 DATE SAMPLED: 10/16/2018  
 TIME SAMPLED: 3:40 AM  
 DATE RECEIVED: 10/18/2018  
 TIME RECEIVED: 12:20 PM

SAMPLED BY: BR/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 Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		10/22/2018	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: 2018100159.01  
LOCATION: CASE 33

GTA PROJECT NO: 101818-1  
GTA SAMPLE NO: 1

DATE SAMPLED: 10/16/2018  
TIME SAMPLED: 12:40 PM  
DATE RECEIVED: 10/18/2018  
TIME RECEIVED: 12:20 PM

SAMPLED BY: MI  
BR/GCES

**INORGANICS**

<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-2D CHLORIDE EPA 300.0	ND	2.5	mg/L (PPM)	LV	10/29/2018	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: 2018100159.01  
 LOCATION: CASE 33

GTA PROJECT NO: 101818-1  
 GTA SAMPLE NO: 2  
 DATE SAMPLED: 10/16/2018  
 TIME SAMPLED: 1:20 PM  
 DATE RECEIVED: 10/18/2018  
 TIME RECEIVED: 12:20 PM

SAMPLED BY: MI  
 BR/GCES

**INORGANICS**

<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-5 CHLORIDE EPA 300.0	8.3	2.5	mg/L (PPM)	LV	10/29/2018	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: 2018100159.01  
 LOCATION: CASE 33

GTA PROJECT NO: 101818-1  
 GTA SAMPLE NO: 3  
 DATE SAMPLED: 10/16/2018  
 TIME SAMPLED: 1:45 PM  
 DATE RECEIVED: 10/18/2018  
 TIME RECEIVED: 12:20 PM

SAMPLED BY: MI  
 BR/GCES

**INORGANICS**

<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-7 CHLORIDE EPA 300.0	15.4	2.5	mg/L (PPM)	LV	10/29/2018	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: 2018100159.01  
 LOCATION: CASE 33

GTA PROJECT NO: 101818-1  
 GTA SAMPLE NO: 4  
 DATE SAMPLED: 10/16/2018  
 TIME SAMPLED: 2:20 PM  
 DATE RECEIVED: 10/18/2018  
 TIME RECEIVED: 12:20 PM

SAMPLED BY: MI  
 BR/GCES

**INORGANICS**

<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-2S CHLORIDE EPA 300.0	15.4	2.5	mg/L (PPM)	LV	10/29/2018	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: 2018100159.01  
 LOCATION: CASE 33

GTA PROJECT NO: 101818-1  
 GTA SAMPLE NO: 6  
 DATE SAMPLED: 10/16/2018  
 TIME SAMPLED: 3:20 PM  
 DATE RECEIVED: 10/18/2018  
 TIME RECEIVED: 12:20 PM

SAMPLED BY: MI  
 BR/GCES

**INORGANICS**

<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-8 CHLORIDE EPA 300.0	136	2.5	mg/L (PPM)	LV	10/29/2018	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: 2018100159.01  
 LOCATION: CASE 33

GTA PROJECT NO: 101818-1  
 GTA SAMPLE NO: 7  
 DATE SAMPLED: 10/16/2018  
 TIME SAMPLED: 3:40 AM  
 DATE RECEIVED: 10/18/2018  
 TIME RECEIVED: 12:20 PM

SAMPLED BY: MI  
 BR/GCES

**INORGANICS**

<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-1 CHLORIDE EPA 300.0	758	50	mg/L (PPM)	LV	10/29/2018	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: 2018100159.01  
 LOCATION: CASE 33

GTA PROJECT NO: 101818-1  
 GTA SAMPLE NO: 8  
 DATE SAMPLED: 10/16/2018  
 TIME SAMPLED: 4:00 PM  
 DATE RECEIVED: 10/18/2018  
 TIME RECEIVED: 12:20 PM

SAMPLED BY: MI  
 BR/GCES

**INORGANICS**

<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-6 CHLORIDE EPA 300.0	1,500	50	mg/L (PPM)	LV	10/29/2018	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: 2018100159.01  
 LOCATION: CASE 33

GTA PROJECT NO: 101818-1  
 GTA SAMPLE NO: 9  
 DATE SAMPLED: 10/16/2018  
 TIME SAMPLED: 4:20 PM  
 DATE RECEIVED: 10/18/2018  
 TIME RECEIVED: 12:20 PM

SAMPLED BY: MI  
 BR/GCES

**INORGANICS**

<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-4 CHLORIDE EPA 300.0	300	2.5	mg/L (PPM)	LV	10/29/2018	WATER

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

**CHAIN OF CUSTODY**

PROJECT NUMBER 2018100159.01	SITE NAME/ADDRESS Case 33	COMPANY/NAME LER
SAMPLED BY BR	COMPANY GCES	GTA PROJECT # 101818-1

**SAMPLE INFORMATION**

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	MW 2D	10/16/18	12:40	GW	Chloride
2	MW 5		1:20		↓
3	MW 7		1:45		
4	MW 2s		2:20		
5	MW 3s		2:50		
6	MW 8		3:20		
7	MW 1		3:40		Chloride, BTEX + 4
8	MW 6		4:00		Chloride
9	MW 4		4:20		Chloride

**BILL TO:**

GCES

**REPORT TO:**

J. Simso

fee - 1.0% on inc

**RELEASED BY**

**DATE/TIME**

**RECEIVED BY**

**DATE/TIME**

B. [Signature]

10/16/18 6:00 pm

K. [Signature]

10/18/18 12:20 p

[Signature]

10/15/18 12:20 pm

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