

**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: 2018100125.01

GTA ProjNo: 120418-9

Site Addr: PARADISE 19

Sampled By: BPR/GCES

Date Rec: 12/4/2018

Time Rec: 4:30 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-5	12/4/2018	10:00 AM	WATER
2	MW-7	12/4/2018	10:20 AM	WATER
3	MW-14	12/4/2018	10:50 AM	WATER
4	MW-12	12/4/2018	11:20 AM	WATER
5	MW-3	12/4/2018	11:40 AM	WATER
6	MW-4	12/4/2018	12:10 PM	WATER
7	MW-12D	12/4/2018	12:30 PM	WATER
8	MW-6D	12/4/2018	1:10 PM	WATER
9	MW-14D	12/4/2018	1:45 PM	WATER
10	MW-13	12/4/2018	2:25 PM	WATER
11	MW-3D	12/4/2018	2:50 PM	WATER
12	MW-5D	12/4/2018	3:30 PM	WATER
13	MW-4D	12/4/2018	4:00 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
PROJECT NO: 2018100125.01
LOCATION: PARADISE 19
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-14

GTA PROJECT NO: 120418-9
GTA SAMPLE NO: 3
DATE SAMPLED: 12/4/2018
TIME SAMPLED: 10:50 AM
DATE RECEIVED: 12/4/2018
TIME RECEIVED: 4:30 PM
SAMPLED BY: BPR/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		12/5/2018	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					

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: 2018100125.01
LOCATION: PARADISE 19
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-3

GTA PROJECT NO: 120418-9
GTA SAMPLE NO: 5
DATE SAMPLED: 12/4/2018
TIME SAMPLED: 11:40 AM
DATE RECEIVED: 12/4/2018
TIME RECEIVED: 4:30 PM
SAMPLED BY: BPR/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		12/5/2018	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.
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COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 2018100125.01
LOCATION: PARADISE 19
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-14D
GTA PROJECT NO: 120418-9
GTA SAMPLE NO: 9
DATE SAMPLED: 12/4/2018
TIME SAMPLED: 1:45 PM
DATE RECEIVED: 12/4/2018
TIME RECEIVED: 4:30 PM
SAMPLED BY: BPR/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		12/5/2018	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.
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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 1

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 10:00 AM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES

INORGANICS

No: Analysis

SAMPLE ID: MW-5

CHLORIDE EPA 300.0

Concentration

LOD

Units

Analyst

Date

Sample

ND

2.5

mg/L (PPM)

LV

12/11/2018

WATER

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 2

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 10:20 AM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES**INORGANICS****No: Analysis**

SAMPLE ID: MW-7

CHLORIDE EPA 300.0

Concentration

ND

LOD

2.5

Units

mg/L (PPM)

Analyst

LV

Date

12/11/2018

Sample

WATER

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 3

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 10:50 AM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES

INORGANICS

No: Analysis

SAMPLE ID: MW-14

CHLORIDE EPA 300.0

Concentration

LOD

Units

Analyst

Date

Sample

ND

2.5

mg/L (PPM)

LV

12/11/2018

WATER

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 4

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 11:20 AM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES

INORGANICS

No: Analysis

SAMPLE ID: MW-12

CHLORIDE EPA 300.0

<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
9.4	2.5	mg/L (PPM)	LV	12/11/2018	WATER

ND = NOT DETECTED, RESULT < LOD

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 5

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 11:40 AM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES

INORGANICS

No: Analysis

SAMPLE ID: MW-3

CHLORIDE EPA 300.0

Concentration

LOD

Units

Analyst

Date

Sample

37.4

2.5

mg/L (PPM)

LV

12/11/2018

WATER

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 6

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 12:10 PM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES

INORGANICS

No: Analysis

SAMPLE ID: MW-4

CHLORIDE EPA 300.0

Concentration

LOD

Units

Analyst

Date

Sample

ND

2.5

mg/L (PPM)

LV

12/11/2018

WATER

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 7

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 12:30 PM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES**INORGANICS****No: Analysis**

SAMPLE ID: MW-12D

CHLORIDE EPA 300.0

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

12.0

2.5

mg/L (PPM)

LV

12/11/2018

WATER

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LOD = LIMIT OF DETECTION

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 8

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 1:10 PM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES

INORGANICS

No: Analysis

SAMPLE ID: MW-6D

CHLORIDE EPA 300.0

Concentration

LOD

Units

Analyst

Date

Sample

14.3

2.5

mg/L (PPM)

LV

12/11/2018

WATER

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 9

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 1:45 PM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES

INORGANICS

No: Analysis

SAMPLE ID: MW-14D

CHLORIDE EPA 300.0

Concentration

LOD

Units

Analyst

Date

Sample

12.2

2.5

mg/L (PPM)

LV

12/11/2018

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 10

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 2:25 PM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES

INORGANICS

No: Analysis

SAMPLE ID: MW-13

CHLORIDE EPA 300.0

Concentration

LOD

Units

Analyst

Date

Sample

41.3

2.5

mg/L (PPM)

LV

12/11/2018

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY:	LAMBDA ENERGY RESOURCES, LLC	GTA PROJECT NO:	120418-9
PROJECT NO:	2018100125.01	GTA SAMPLE NO:	11
LOCATION:	PARADISE 19	DATE SAMPLED:	12/4/2018
		TIME SAMPLED:	2:50 PM
		DATE RECEIVED:	12/4/2018
		TIME RECEIVED:	4:30 PM
	MI		
SAMPLED BY:	BPR/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-3D						
	CHLORIDE EPA 300.0	15.0	2.5	mg/L (PPM)	LV	12/12/2018	WATER

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 LOD = LIMIT OF DETECTION
 s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 12

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 3:30 PM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES

INORGANICS

No: Analysis

SAMPLE ID: MW-5D

CHLORIDE EPA 300.0

Concentration

LOD

Units

Analyst

Date

Sample

73.5

2.5

mg/L (PPM)

LV

12/12/2018

WATER

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 120418-9

PROJECT NO: 2018100125.01

GTA SAMPLE NO: 13

LOCATION: PARADISE 19

DATE SAMPLED: 12/4/2018

TIME SAMPLED: 4:00 PM

DATE RECEIVED: 12/4/2018

TIME RECEIVED: 4:30 PM

SAMPLED BY: MI
BPR/GCES

INORGANICS

No: Analysis

SAMPLE ID: MW-4D

CHLORIDE EPA 300.0

Concentration

LOD

Units

Analyst

Date

Sample

13.8

2.5

mg/L (PPM)

LV

12/12/2018

WATER

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

CHAIN OF CUSTODY

PROJECT NUMBER 2018100125	SITE NAME/ADDRESS Paradise 19	COMPANY/NAME LER
SAMPLED BY BPR	COMPANY GCEs	GTA PROJECT # 120418-9

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	MW 5	12/4/18	10:00	GW	Chloride
2	MW 7		10:20		Chloride
3	MW 14		10:50		Chloride, BTEX
4	MW 12		11:20		Chloride
5	MW 3		11:40		Chloride, BTEX
6	MW 4		12:10		Chloride
7	MW 12 D		12:30		Chloride
8	MW 6 D		1:10		Chloride
9	MW 14 D		1:45		Chloride, BTEX
10	MW 13		2:25		Chloride
11	MW 3 D		2:50		Chloride
12	MW 5 D		3:30		Chloride
13	MW 4 D		4:00		Chloride

BILL TO:

GCEs

REPORT TO:

E. Vincke

RELEASED BY B. [Signature]	DATE/TIME 4:30 12/4/18	RECEIVED BY [Signature]	DATE/TIME 12/4/18 7:30p

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