

**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: 2018100154.03
GTA ProjNo: 042619-7

Site Addr: BEAR LAKE 3-13

Sampled By: PETER KALLIOINEN/GCES
Date Rec: 4/26/2019
Time Rec: 3:52 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	SB-18 (13')	4/26/2019	11:20 AM	SOIL
2	SB-18 (17')	4/26/2019	11:35 AM	SOIL
3	SB-19 (8')	4/26/2019	11:49 AM	SOIL
4	SB-20 (13')	4/26/2019	1:09 PM	SOIL
5	SB-20 (17')	4/26/2019	1:21 PM	SOIL

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 L 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: 2018100154.03

LOCATION: BEAR LAKE 3-13

MI

SAMPLE MATRIX: SOIL

SAMPLE ID: SB-18 (13')

GTA PROJECT NO: 042619-7

GTA SAMPLE NO: 1

DATE SAMPLED: 4/26/2019

TIME SAMPLED: 11:20 AM

DATE RECEIVED: 4/26/2019

TIME RECEIVED: 3:52 PM

SAMPLED BY: PETER KALLIOINEN/GCES

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

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>Complete</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB) MR		4/26/2019	4/28/2019	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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: 2018100154.03

LOCATION: BEAR LAKE 3-13

MI

SAMPLE MATRIX: SOIL

SAMPLE ID: SB-18 (17')

GTA PROJECT NO: 042619-7

GTA SAMPLE NO: 2

DATE SAMPLED: 4/26/2019

TIME SAMPLED: 11:35 AM

DATE RECEIVED: 4/26/2019

TIME RECEIVED: 3:52 PM

SAMPLED BY: PETER KALLIOINEN/GCES

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Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

PROJECT NO: 2018100154.03

LOCATION: BEAR LAKE 3-13

MI

SAMPLE MATRIX: SOIL

SAMPLE ID: SB-19 (8')

GTA PROJECT NO: 042619-7

GTA SAMPLE NO: 3

DATE SAMPLED: 4/26/2019

TIME SAMPLED: 11:49 AM

DATE RECEIVED: 4/26/2019

TIME RECEIVED: 3:52 PM

SAMPLED BY: PETER KALLIOINEN/GCES

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

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>Complete</u>	<u>Prep Method</u>
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Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 042619-7

PROJECT NO: 2018100154.03

GTA SAMPLE NO: 4

LOCATION: BEAR LAKE 3-13

DATE SAMPLED: 4/26/2019

TIME SAMPLED: 1:09 PM

MI

DATE RECEIVED: 4/26/2019

TIME RECEIVED: 3:52 PM

SAMPLE MATRIX: SOIL

SAMPLE ID: SB-20 (13')

SAMPLED BY: PETER KALLIOINEN/GCES

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

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>Complete</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB) MR		4/26/2019	4/28/2019	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 042619-7

PROJECT NO: 2018100154.03

GTA SAMPLE NO: 5

LOCATION: BEAR LAKE 3-13

DATE SAMPLED: 4/26/2019

TIME SAMPLED: 1:21 PM

MI

DATE RECEIVED: 4/26/2019

TIME RECEIVED: 3:52 PM

SAMPLE MATRIX: SOIL

SAMPLE ID: SB-20 (17')

SAMPLED BY: PETER KALLIOINEN/GCES

**THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

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>Complete</u>	<u>Prep Method</u>
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Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 042619-7

PROJECT NO: 2018100154.03

GTA SAMPLE NO: 1

LOCATION: BEAR LAKE 3-13

DATE SAMPLED: 4/26/2019

TIME SAMPLED: 11:20 AM

DATE RECEIVED: 4/26/2019

TIME RECEIVED: 3:52 PM

MI

SAMPLED BY: PETER KALLIOINEN/GCES

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: SB-18 (13')						
	CHLORIDE EPA 300.0	ND	28	mg/Kg (PPM)	LV	4/30/2019	SOIL

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: 042619-7

PROJECT NO: 2018100154.03

GTA SAMPLE NO: 2

LOCATION: BEAR LAKE 3-13

DATE SAMPLED: 4/26/2019

TIME SAMPLED: 11:35 AM

DATE RECEIVED: 4/26/2019

TIME RECEIVED: 3:52 PM

MI

SAMPLED BY: PETER KALLIOINEN/GCES

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: SB-18 (17')

CHLORIDE EPA 300.0

Concentration

ND

LOD

27

Units

mg/Kg (PPM) LV

Analyst

Date

4/30/2019

Sample

SOIL

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: 2018100154.03
LOCATION: BEAR LAKE 3-13
MI
SAMPLED BY: PETER KALLIOINEN/GCES

GTA PROJECT NO: 042619-7
GTA SAMPLE NO: 3
DATE SAMPLED: 4/26/2019
TIME SAMPLED: 11:49 AM
DATE RECEIVED: 4/26/2019
TIME RECEIVED: 3:52 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: SB-19 (8')						
	CHLORIDE EPA 300.0	ND	25	mg/Kg (PPM)	LV	4/30/2019	SOIL

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: 2018100154.03
LOCATION: BEAR LAKE 3-13
MI
SAMPLED BY: PETER KALLIOINEN/GCES

GTA PROJECT NO: 042619-7
GTA SAMPLE NO: 4
DATE SAMPLED: 4/26/2019
TIME SAMPLED: 1:09 PM
DATE RECEIVED: 4/26/2019
TIME RECEIVED: 3:52 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: SB-20 (13')						
	CHLORIDE EPA 300.0	ND	27	mg/Kg (PPM)	LV	4/30/2019	SOIL

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: 042619-7

PROJECT NO: 2018100154.03

GTA SAMPLE NO: 5

LOCATION: BEAR LAKE 3-13

DATE SAMPLED: 4/26/2019

TIME SAMPLED: 1:21 PM

DATE RECEIVED: 4/26/2019

TIME RECEIVED: 3:52 PM

MI

SAMPLED BY: PETER KALLIOINEN/GCES

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: SB-20 (17')

CHLORIDE EPA 300.0

Concentration

ND

LOD

26

Units

mg/Kg (PPM) LV

Analyst

Date

4/30/2019

Sample

SOIL

ND = NOT DETECTED, RESULT < LOD

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

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GTA PROJECT NO: 042619-7

NAME:

SAMPLED BY: PETER KALLIOINEN/GCES

PROJECT NO: 2018100154.03

DATE SAMPLED: 4/26/2019

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LOCATION: BEAR LAKE 3-13

SAMPLE MATRIX: SOIL

DATE RECEIVED: 4/26/2019

TIME RECEIVED: 3:52 PM

MI

MOISTURE

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Complete</u>
SAMPLE ID: SB-18 (13')	% MOISTURE EPA 3550C	14	0.050	% OF SAMPLE	AS	4/26/2019
SAMPLE ID: SB-18 (17')	% MOISTURE EPA 3550C	9.2	0.050	% OF SAMPLE	AS	4/26/2019
SAMPLE ID: SB-19 (8')	% MOISTURE EPA 3550C	7.2	0.050	% OF SAMPLE	AS	4/26/2019
SAMPLE ID: SB-20 (13')	% MOISTURE EPA 3550C	7.5	0.050	% OF SAMPLE	AS	4/26/2019
SAMPLE ID: SB-20 (17')	% MOISTURE EPA 3550C	5.4	0.050	% OF SAMPLE	AS	4/26/2019

CHAIN OF CUSTODY

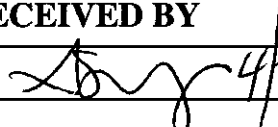
PROJECT NUMBER 2018100154.03	SITE NAME/ADDRESS Bear Lake 3-13	COMPANY/NAME Lambda Energy
SAMPLED BY Peter Kallioinen	COMPANY Gosling Czubak	GTA PROJECT # 042619-7

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	SB-18(13')	4-26-19	11:20	Soil	BTEX+H Chloride
2	SB-18(17')	↓	11:35	↓	↓
3	SB-19(8')	↓	11:49	↓	↓
4	SB-20(13')	↓	11:09	↓	↓
5	SB-20(17')	↓	11:21	↓	↓

BILL TO: **Gosling & Lambda Energy**
ATTN: **Nick Summerland**

REPORT TO: **Same**
cc: **Jeff Simsa at Gosling Czubak**

RELEASED BY 	DATE/TIME 4-26-19 3:52pm	RECEIVED BY 	DATE/TIME 4/26/19 3:52p rec 40°C
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REQUESTED TAT ☐ STANDARD ☐ 1 BUSINESS DAY ☐ 2 BUSINESS DAYS ☒ 3 BUSINESS DAYS