



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: 2018100141.01
GTA ProjNo: 071719-5

Site Addr: MULDAVIN
Sampled By: BPR/GCES
Date Rec: 7/17/2019
Time Rec: 3:00 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-9	7/17/2019	11:30 AM	WATER
2	MW-20	7/17/2019	12:30 PM	WATER
3	MW-21	7/17/2019	1:15 PM	WATER
4	MW-22	7/17/2019	2:00 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 L Chase

Kirk L. Chase/Chemist
Grand Traverse Analytical
830 Robinwood Court
Traverse City, MI 49686
Ph: 231-929-0905
Fx: 231-929-0894
SP: 231-590-0291
kirk@gtanalytical.com



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
 PROJECT NO: 2018100141.01
 LOCATION: MULDAVIN
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-9

GTA PROJECT NO: 071719-5
 GTA SAMPLE NO: 1
 DATE SAMPLED: 7/17/2019
 TIME SAMPLED: 11:30 AM
 DATE RECEIVED: 7/17/2019
 TIME RECEIVED: 3:00 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		7/18/2019	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



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
 PROJECT NO: 2018100141.01
 LOCATION: MULDAVIN
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-20

GTA PROJECT NO: 071719-5
 GTA SAMPLE NO: 2
 DATE SAMPLED: 7/17/2019
 TIME SAMPLED: 12:30 PM
 DATE RECEIVED: 7/17/2019
 TIME RECEIVED: 3:00 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		7/18/2019	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



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
 PROJECT NO: 2018100141.01
 LOCATION: MULDAVIN
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-21

GTA PROJECT NO: 071719-5
 GTA SAMPLE NO: 3
 DATE SAMPLED: 7/17/2019
 TIME SAMPLED: 1:15 PM
 DATE RECEIVED: 7/17/2019
 TIME RECEIVED: 3:00 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		7/18/2019	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
 PROJECT NO: 2018100141.01
 LOCATION: MULDAVIN

GTA PROJECT NO: 071719-5
 GTA SAMPLE NO: 1

DATE SAMPLED: 7/17/2019
 TIME SAMPLED: 11:30 AM
 DATE RECEIVED: 7/17/2019
 TIME RECEIVED: 3:00 PM

SAMPLED BY: MI
 BPR/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: MW-9	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	7/19/2019	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: 2018100141.01

LOCATION: MULDAVIN

SAMPLED BY: MI
 BPR/GCES

GTA PROJECT NO: 071719-5

GTA SAMPLE NO: 2

DATE SAMPLED: 7/17/2019

TIME SAMPLED: 12:30 PM

DATE RECEIVED: 7/17/2019

TIME RECEIVED: 3:00 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-20 CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	7/19/2019	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: 2018100141.01
 LOCATION: MULDAVIN

GTA PROJECT NO: 071719-5
 GTA SAMPLE NO: 3

DATE SAMPLED: 7/17/2019
 TIME SAMPLED: 1:15 PM
 DATE RECEIVED: 7/17/2019
 TIME RECEIVED: 3:00 PM

SAMPLED BY: MI
 BPR/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: MW-21 CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	7/19/2019	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: 2018100141.01

LOCATION: MULDAVIN

SAMPLED BY: MI
 BPR/GCES

GTA PROJECT NO: 071719-5

GTA SAMPLE NO: 4

DATE SAMPLED: 7/17/2019

TIME SAMPLED: 2:00 PM

DATE RECEIVED: 7/17/2019

TIME RECEIVED: 3:00 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-22	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	7/19/2019	WATER

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

CHAIN OF CUSTODY

PROJECT NUMBER 2018100141	SITE NAME/ADDRESS Muldavin	COMPANY/NAME LER
SAMPLED BY BPR	COMPANY GCES	GTA PROJECT # 071719-5

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
	MW 9	7/17/19	11:30	GW	BTEX+4, Chloride
	MW 20	↓	12:30	↓	↓ ↓
	MW 21	↓	1:45	↓	↓ ↓
	MW 22	↓	2:00	↓	↓ ↓

BILL TO: LER	REPORT TO: J. Simsa
-------------------------------	--------------------------------------

RELEASED BY B. R...	DATE/TIME 7/17/19 3:00pm	RECEIVED BY [Signature]	DATE/TIME 7/17/19 3:00
			REC 13.1°C

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