



**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: 20-117  
GTA ProjNo: 071423-13

Site Addr: FREDERIC 1-10

Sampled By: JAKE PALINSKY/OMPC  
Date Rec: 7/14/2023  
Time Rec: 3:20 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	VSR-12 @ 5'	7/12/2023		SOIL
2	VSR-12 @ 7'	7/12/2023		SOIL
3	VSR-13 @ 2.5'	7/12/2023		SOIL
4	VSR-14 @ 2.5'	7/12/2023		SOIL
5	VSR-15 @ 2.5'	7/12/2023		SOIL
6	VSR-16 @ 7'	7/12/2023		SOIL
7	VSR-17 @ 2.5'	7/12/2023		SOIL
8	VSR-18 @ 2.5'	7/13/2023		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 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:	071423-13
PROJECT NO:	20-117	GTA SAMPLE NO:	1
LOCATION:	FREDERIC 1-10	DATE SAMPLED:	7/12/2023
		TIME SAMPLED:	
	MI	DATE RECEIVED:	7/14/2023
		TIME RECEIVED:	3:20 PM
SAMPLE MATRIX:	SOIL	SAMPLED BY:	JAKE PALINSKY/OMPC
SAMPLE ID:	VSR-12 @ 5'	**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	7/12/2023	7/17/2023	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	GTA PROJECT NO:	071423-13
PROJECT NO:	20-117	GTA SAMPLE NO:	3
LOCATION:	FREDERIC 1-10	DATE SAMPLED:	7/12/2023
		TIME SAMPLED:	
	MI	DATE RECEIVED:	7/14/2023
		TIME RECEIVED:	3:20 PM
SAMPLE MATRIX:	SOIL	SAMPLED BY:	JAKE PALINSKY/OMPC
SAMPLE ID:	VSR-13 @ 2.5'	**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	7/12/2023	7/17/2023	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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 LOD = LIMIT OF DETECTION

COMPANY: LAMBDA ENERGY RESOURCES, LLC  
PROJECT NO: 20-117  
LOCATION: FREDERIC 1-10  
MI  
SAMPLE MATRIX: SOIL  
SAMPLE ID: VSR-14 @ 2.5'

GTA PROJECT NO: 071423-13  
GTA SAMPLE NO: 4  
DATE SAMPLED: 7/12/2023  
TIME SAMPLED:  
DATE RECEIVED: 7/14/2023  
TIME RECEIVED: 3:20 PM

SAMPLED BY: JAKE PALINSKY/OMPC  
\*\*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	7/12/2023	7/17/2023	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

COMPANY: LAMBDA ENERGY RESOURCES, LLC  
PROJECT NO: 20-117  
LOCATION: FREDERIC 1-10  
MI  
SAMPLE MATRIX: SOIL  
SAMPLE ID: VSR-15 @ 2.5'

GTA PROJECT NO: 071423-13  
GTA SAMPLE NO: 5  
DATE SAMPLED: 7/12/2023  
TIME SAMPLED:  
DATE RECEIVED: 7/14/2023  
TIME RECEIVED: 3:20 PM

SAMPLED BY: JAKE PALINSKY/OMPC  
\*\*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	7/12/2023	7/17/2023	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

COMPANY: LAMBDA ENERGY RESOURCES, LLC  
 PROJECT NO: 20-117  
 LOCATION: FREDERIC 1-10  
 MI  
 SAMPLE MATRIX: SOIL  
 SAMPLE ID: VSR-17 @ 2.5'

GTA PROJECT NO: 071423-13  
 GTA SAMPLE NO: 7  
 DATE SAMPLED: 7/12/2023  
 TIME SAMPLED:  
 DATE RECEIVED: 7/14/2023  
 TIME RECEIVED: 3:20 PM

SAMPLED BY: JAKE PALINSKY/OMPC  
 \*\*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	7/12/2023	7/17/2023	EPA 5035A
Toluene	95	50					
Ethylbenzene	110	50					
Xylene(Total)	1,200	150					
1,2,4-Trimethylbenzene	390	50					
1,3,5-Trimethylbenzene	120	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY:	LAMBDA ENERGY RESOURCES, LLC	GTA PROJECT NO:	071423-13
NAME:		GTA SAMPLE NO:	1
PROJECT NO:	20-117	DATE SAMPLED:	7/12/2023
LOCATION:	FREDERIC 1-10	TIME SAMPLED:	
		DATE RECEIVED:	7/14/2023
		TIME RECEIVED:	3:20 PM
SAMPLED BY:	MI JAKE PALINSKY/OMPC		

**ORGANICS**

<u>No:</u>	<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>
SAMPLE ID:	VSR-12 @ 5'							
SAMPLE MATRIX:	SOIL							
ETHYLENE GLYCOL EPA 8270D (SIM)		210	10	mg/Kg (PPM)	KC/TR	7/18/2023	7/19/2023	EPA 3550M

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
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COMPANY:	LAMBDA ENERGY RESOURCES, LLC	GTA PROJECT NO:	071423-13
NAME:		GTA SAMPLE NO:	5
PROJECT NO:	20-117	DATE SAMPLED:	7/12/2023
LOCATION:	FREDERIC 1-10	TIME SAMPLED:	
		DATE RECEIVED:	7/14/2023
		TIME RECEIVED:	3:20 PM
SAMPLED BY:	MI JAKE PALINSKY/OMPC		

**ORGANICS**

<u>No:</u>	<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>
	SAMPLE ID: VSR-15 @ 2.5'							
	SAMPLE MATRIX: SOIL							
	ETHYLENE GLYCOL EPA 8270D (SIM)	ND	10	mg/Kg (PPM)	KC/TR	7/18/2023	7/19/2023	EPA 3550M

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: 20-117  
 LOCATION: FREDERIC 1-10

GTA PROJECT NO: 071423-13  
 GTA SAMPLE NO: 2  
 DATE SAMPLED: 7/12/2023  
 TIME SAMPLED:  
 DATE RECEIVED: 7/14/2023  
 TIME RECEIVED: 3:20 PM

MI  
 SAMPLED BY: JAKE PALINSKY/OMPC

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: VSR-12 @ 7' CHLORIDE EPA 300.0	120	90	mg/Kg (PPM)	KC/AS	7/20/2023	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: 20-117  
 LOCATION: FREDERIC 1-10

GTA PROJECT NO: 071423-13  
 GTA SAMPLE NO: 3  
 DATE SAMPLED: 7/12/2023  
 TIME SAMPLED:  
 DATE RECEIVED: 7/14/2023  
 TIME RECEIVED: 3:20 PM

MI  
 SAMPLED BY: JAKE PALINSKY/OMPC

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: VSR-13 @ 2.5' CHLORIDE EPA 300.0	ND	94	mg/Kg (PPM)	KC/AS	7/20/2023	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: 20-117  
LOCATION: FREDERIC 1-10  
MI  
SAMPLED BY: JAKE PALINSKY/OMPC

GTA PROJECT NO: 071423-13  
GTA SAMPLE NO: 6  
DATE SAMPLED: 7/12/2023  
TIME SAMPLED:  
DATE RECEIVED: 7/14/2023  
TIME RECEIVED: 3:20 PM

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: VSR-16 @ 7' CHLORIDE EPA 300.0	ND	98	mg/Kg (PPM)	KC/AS	7/20/2023	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: 20-117  
 LOCATION: FREDERIC 1-10  
 MI  
 SAMPLED BY: JAKE PALINSKY/OMPC

GTA PROJECT NO: 071423-13  
 GTA SAMPLE NO: 7  
 DATE SAMPLED: 7/12/2023  
 TIME SAMPLED:  
 DATE RECEIVED: 7/14/2023  
 TIME RECEIVED: 3:20 PM

**SAMPLE ANALYSIS**

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Sample Matrix</u>
	SAMPLE ID: VSR-17 @ 2.5' CHLORIDE EPA 300.0	ND	87	mg/Kg (PPM)	KC/AS	7/20/2023	SOIL

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





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NAME:  
PROJECT NO: 20-117

LOCATION: FREDERIC 1-10  
  
MI

GTA PROJECT NO: 071423-  
SAMPLED BY: JAKE PALINSKY/OMPC

DATE SAMPLED: 7/12/2023

SAMPLE MATRIX: SOIL

DATE RECEIVED: 7/14/2023  
TIME RECEIVED: 3:20 PM

**MOISTURE**

<u>No:</u> <u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
SAMPLE ID: VSR-12 @ 5' % MOISTURE EPA 3550C	3.9	0.10	% OF SAMPLE	AS	7/14/2023
SAMPLE ID: VSR-12 @ 7' % MOISTURE EPA 3550C	3.9	0.10	% OF SAMPLE	AS	7/14/2023
SAMPLE ID: VSR-13 @ 2.5' % MOISTURE EPA 3550C	6.5	0.10	% OF SAMPLE	AS	7/14/2023
SAMPLE ID: VSR-14 @ 2.5' % MOISTURE EPA 3550C	2.9	0.10	% OF SAMPLE	AS	7/14/2023
SAMPLE ID: VSR-15 @ 2.5' % MOISTURE EPA 3550C	5.4	0.10	% OF SAMPLE	AS	7/14/2023
SAMPLE ID: VSR-16 @ 7' % MOISTURE EPA 3550C	5.4	0.10	% OF SAMPLE	AS	7/14/2023
SAMPLE ID: VSR-17 @ 2.5' % MOISTURE EPA 3550C	3.4	0.10	% OF SAMPLE	AS	7/14/2023
SAMPLE ID: VSR-18 @ 2.5' % MOISTURE EPA 3550C	8.6	0.10	% OF SAMPLE	AS	7/14/2023

**CHAIN OF CUSTODY**

PROJECT NUMBER <b>20-117</b>	SITE NAME/ADDRESS <b>Frederic 1-10</b>	COMPANY/NAME <b>Lambda</b>
SAMPLED BY <b>Jacke Palinsky</b>	COMPANY <b>OMPL</b>	GTA PROJECT # <b>071423-13</b>

SAMPLE INFORMATION					
#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	VSR-12 @ 5'	7/12/23		Soil	HIPs, Chlorides, Ethylene Glycol
2	VSR-12 @ 7'				HOLD HIPs, Ethylene Glycol
3	VSR-13 @ 2.5'				
4	VSR-14 @ 2.5'				
5	VSR-15 @ 2.5'				
6	VSR-16 @ 7'				HOLD HIPs, Ethylene Glycol
7	VSR-17 @ 2.5'				
8	VSR-18 @ 2.5'	7/13/23			HOLD HIPs

BILL TO: <b>Lambda</b>	TempRec: <input type="checkbox"/> <b>3.0°C</b>	On Ice? <input checked="" type="checkbox"/> <b>Y</b> <input type="checkbox"/> <b>N</b>	REPORT TO: <b>Don Buntar</b>
---------------------------	--	--	---------------------------------

RELEASED BY <b>[Signature]</b>	DATE/TIME <b>9/14/23 1520</b>	RECEIVED BY <b>[Signature]</b>	DATE/TIME <b>7/14/23 1520</b>
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REQUESTED TAT  STANDARD  1 BUSINESS DAY  2 BUSINESS DAYS  3 BUSINESS DAYS