

**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: 2018100136.02

GTA ProjNo: 011524-2

Site Addr: HAYES 22 CPF

Sampled By: BRENDAN HOLBROOK/GCES

Date Rec: 1/15/2024

Time Rec: 2:50 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	RW-101 BLD	1/15/2024	1:45 PM	WATER
2	RW-102 BLD	1/15/2024	1:45 PM	WATER
3	RW-103 BLD	1/15/2024	1:45 PM	WATER
4	RW-105 BLD	1/15/2024	1:45 PM	WATER
5	TOWER EFF	1/15/2024	1:45 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
Ph: 231-929-0905
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kirk@gtanalytical.com

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COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 2018100136.02
LOCATION: HAYES 22 CPF
MI
SAMPLE MATRIX: WATER
SAMPLE ID: RW-101 BLD

GTA PROJECT NO: 011524-2
GTA SAMPLE NO: 1
DATE SAMPLED: 1/15/2024
TIME SAMPLED: 1:45 PM
DATE RECEIVED: 1/15/2024
TIME RECEIVED: 2:50 PM
SAMPLED BY: BRENDAN HOLBROOK/GCES

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>Completed</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		1/16/2024	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: 2018100136.02
LOCATION: HAYES 22 CPF
MI
SAMPLE MATRIX: WATER
SAMPLE ID: RW-102 BLD

GTA PROJECT NO: 011524-2
GTA SAMPLE NO: 2
DATE SAMPLED: 1/15/2024
TIME SAMPLED: 1:45 PM
DATE RECEIVED: 1/15/2024
TIME RECEIVED: 2:50 PM
SAMPLED BY: BRENDAN HOLBROOK/GCES

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>Completed</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		1/16/2024	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: 2018100136.02
LOCATION: HAYES 22 CPF
MI
SAMPLE MATRIX: WATER
SAMPLE ID: RW-103 BLD

GTA PROJECT NO: 011524-2
GTA SAMPLE NO: 3
DATE SAMPLED: 1/15/2024
TIME SAMPLED: 1:45 PM
DATE RECEIVED: 1/15/2024
TIME RECEIVED: 2:50 PM
SAMPLED BY: BRENDAN HOLBROOK/GCES

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>Completed</u>	<u>Prep Method</u>
Benzene	22	1.0	ug/L (PPB)	MR		1/17/2024	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	20	1.0					
Xylene(Total)	26	3.0					

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COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 2018100136.02
LOCATION: HAYES 22 CPF
MI
SAMPLE MATRIX: WATER
SAMPLE ID: RW-105 BLD

GTA PROJECT NO: 011524-2
GTA SAMPLE NO: 4
DATE SAMPLED: 1/15/2024
TIME SAMPLED: 1:45 PM
DATE RECEIVED: 1/15/2024
TIME RECEIVED: 2:50 PM
SAMPLED BY: BRENDAN HOLBROOK/GCES

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>Completed</u>	<u>Prep Method</u>
Benzene	13	1.0	ug/L (PPB)	MR		1/16/2024	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	34	1.0					
Xylene(Total)	50	3.0					

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PROJECT NO: 2018100136.02
LOCATION: HAYES 22 CPF
MI
SAMPLE MATRIX: WATER
SAMPLE ID: TOWER EFF
GTA PROJECT NO: 011524-2
GTA SAMPLE NO: 5
DATE SAMPLED: 1/15/2024
TIME SAMPLED: 1:45 PM
DATE RECEIVED: 1/15/2024
TIME RECEIVED: 2:50 PM
SAMPLED BY: BRENDAN HOLBROOK/GCES

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>Completed</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		1/16/2024	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: 2018100136.02
LOCATION: HAYES 22 CPF
MI
SAMPLED BY: BRENDAN HOLBROOK/GCES
SAMPLE ID: RW-101 BLD

GTA PROJECT NO: 011524-2
GTA SAMPLE NO: 1
DATE SAMPLED: 1/15/2024
TIME SAMPLED: 1:45 PM
DATE RECEIVED: 1/15/2024
TIME RECEIVED: 2:50 PM
SAMPLE MATRIX: WATER

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC DISS EPA 200.8	ND	0.0010	mg/L (PPM)	MR	1/17/2024	EPA 3005A
IRON DISS EPA 200.8	ND	0.050	mg/L (PPM)	MR	1/17/2024	EPA 3005A
MANGANESE DISS EPA 200.8	0.025	0.0010	mg/L (PPM)	MR	1/17/2024	EPA 3005A

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DISS = DISSOLVED

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COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 2018100136.02
LOCATION: HAYES 22 CPF
MI
SAMPLED BY: BRENDAN HOLBROOK/GCES
SAMPLE ID: RW-102 BLD

GTA PROJECT NO: 011524-2
GTA SAMPLE NO: 2
DATE SAMPLED: 1/15/2024
TIME SAMPLED: 1:45 PM
DATE RECEIVED: 1/15/2024
TIME RECEIVED: 2:50 PM
SAMPLE MATRIX: WATER

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC DISS EPA 200.8	0.0044	0.0010	mg/L (PPM)	MR	1/17/2024	EPA 3005A
IRON DISS EPA 200.8	2.6	0.050	mg/L (PPM)	MR	1/17/2024	EPA 3005A
MANGANESE DISS EPA 200.8	0.018	0.0010	mg/L (PPM)	MR	1/17/2024	EPA 3005A

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PROJECT NO: 2018100136.02
LOCATION: HAYES 22 CPF
MI
SAMPLED BY: BRENDAN HOLBROOK/GCES
SAMPLE ID: RW-103 BLD

GTA PROJECT NO: 011524-2
GTA SAMPLE NO: 3
DATE SAMPLED: 1/15/2024
TIME SAMPLED: 1:45 PM
DATE RECEIVED: 1/15/2024
TIME RECEIVED: 2:50 PM
SAMPLE MATRIX: WATER

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC DISS EPA 200.8	0.0031	0.0010	mg/L (PPM)	MR	1/17/2024	EPA 3005A
IRON DISS EPA 200.8	2.6	0.050	mg/L (PPM)	MR	1/17/2024	EPA 3005A
MANGANESE DISS EPA 200.8	0.017	0.0010	mg/L (PPM)	MR	1/17/2024	EPA 3005A

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PROJECT NO: 2018100136.02
LOCATION: HAYES 22 CPFMI
SAMPLED BY: BRENDAN HOLBROOK/GCES

SAMPLE ID: RW-105 BLD

GTA PROJECT NO: 011524-2

GTA SAMPLE NO: 4

DATE SAMPLED: 1/15/2024
TIME SAMPLED: 1:45 PM
DATE RECEIVED: 1/15/2024
TIME RECEIVED: 2:50 PM
SAMPLE MATRIX: WATER**METALS**

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC DISS EPA 200.8	0.0029	0.0010	mg/L (PPM)	MR	1/17/2024	EPA 3005A
IRON DISS EPA 200.8	3.0	0.050	mg/L (PPM)	MR	1/17/2024	EPA 3005A
MANGANESE DISS EPA 200.8	0.024	0.0010	mg/L (PPM)	MR	1/17/2024	EPA 3005A

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 011524-2

PROJECT NO: 2018100136.02
LOCATION: HAYES 22 CPF

GTA SAMPLE NO: 5

DATE SAMPLED: 1/15/2024

TIME SAMPLED: 1:45 PM

DATE RECEIVED: 1/15/2024

TIME RECEIVED: 2:50 PM

SAMPLED BY: MI
BRENDAN HOLBROOK/GCES

SAMPLE MATRIX: WATER

SAMPLE ID: TOWER EFF

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
ARSENIC DISS EPA 200.8	ND	0.0010	mg/L (PPM)	MR	1/17/2024	EPA 3005A
IRON DISS EPA 200.8	ND	0.050	mg/L (PPM)	MR	1/17/2024	EPA 3005A
MANGANESE DISS EPA 200.8	ND	0.0010	mg/L (PPM)	MR	1/17/2024	EPA 3005A

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LOD = LIMIT OF DETECTION

DISS = DISSOLVED



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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 011524-2

PROJECT NO: 2018100136.02

GTA SAMPLE NO: 1

LOCATION: HAYES 22 CPF

DATE SAMPLED: 1/15/2024

TIME SAMPLED: 1:45 PM

DATE RECEIVED: 1/15/2024

TIME RECEIVED: 2:50 PM

MI

SAMPLED BY: BRENDAN HOLBROOK/GCES

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: RW-101 BLD

CHLORIDE EPA 300.0

Concentration

ND

LOD

10

Units

mg/L (PPM)

Analyst

KC/TR

Date Completed

1/19/2024

Sample Matrix

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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



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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 011524-2

PROJECT NO: 2018100136.02

GTA SAMPLE NO: 2

LOCATION: HAYES 22 CPF

DATE SAMPLED: 1/15/2024

TIME SAMPLED: 1:45 PM

DATE RECEIVED: 1/15/2024

TIME RECEIVED: 2:50 PM

MI

SAMPLED BY: BRENDAN HOLBROOK/GCES

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: RW-102 BLD

CHLORIDE EPA 300.0

Concentration

20

LOD

10

Units

mg/L (PPM)

Analyst

KC/TR

Date Completed

1/19/2024

Sample Matrix

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 011524-2

PROJECT NO: 2018100136.02

GTA SAMPLE NO: 3

LOCATION: HAYES 22 CPF

DATE SAMPLED: 1/15/2024

TIME SAMPLED: 1:45 PM

DATE RECEIVED: 1/15/2024

TIME RECEIVED: 2:50 PM

MI

SAMPLED BY: BRENDAN HOLBROOK/GCES

SAMPLE ANALYSIS**No: Analysis**

SAMPLE ID: RW-103 BLD

CHLORIDE EPA 300.0

Concentration

17

LOD

10

Units

mg/L (PPM)

Analyst

KC/TR

Date Completed

1/19/2024

Sample Matrix

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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



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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 011524-2

PROJECT NO: 2018100136.02

GTA SAMPLE NO: 4

LOCATION: HAYES 22 CPF

DATE SAMPLED: 1/15/2024

TIME SAMPLED: 1:45 PM

DATE RECEIVED: 1/15/2024

TIME RECEIVED: 2:50 PM

MI

SAMPLED BY: BRENDAN HOLBROOK/GCES

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: RW-105 BLD

CHLORIDE EPA 300.0

Concentration

ND

LOD

10

Units

mg/L (PPM)

Analyst

KC/TR

Date Completed

1/19/2024

Sample Matrix

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 011524-2

PROJECT NO: 2018100136.02

GTA SAMPLE NO: 5

LOCATION: HAYES 22 CPF

DATE SAMPLED: 1/15/2024

TIME SAMPLED: 1:45 PM

DATE RECEIVED: 1/15/2024

TIME RECEIVED: 2:50 PM

MI

SAMPLED BY: BRENDAN HOLBROOK/GCES

SAMPLE ANALYSIS**No: Analysis**

SAMPLE ID: TOWER EFF

CHLORIDE EPA 300.0

Concentration

25

LOD

10

Units

mg/L (PPM)

Analyst

KC/TR

Date Completed

1/19/2024

Sample Matrix

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

CHAIN OF CUSTODY

PROJECT NUMBER 2018 100136.02	SITE NAME/ADDRESS Hayes 22	COMPANY/NAME Lambda
SAMPLED BY Brendan Holbrook	COMPANY GCES	GTA PROJECT # 011524-2

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	RW101 - Bld	1/15/24	1:45 PM	GW	BTEX, chloride, Dissolved, Iron, Manganese, Arsenic
2	RW102 - Bld				
3	RW103 - Bld				
4	RW105 - Bld				
5	Tower Eff				

BILL TO: Lambda	TempRec: ☐ 1.80C	On Ice? ☒ Y ☐ N	REPORT TO: Mark Horley
---------------------------	---	--	----------------------------------

RELEASED BY Brendan Holbrook	DATE/TIME 1/15/24 2:50p	RECEIVED BY K. [Signature]	DATE/TIME 1/15/24 2:50p

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