



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: LAYLINE OIL AND GAS LLC
Name:
ClientProj: 2021505005.01
GTA ProjNo: 072221-5

Site Addr: BENCHLY 3-29
Sampled By: ERIC VINCKE/GCES
Date Rec: 7/22/2021
Time Rec: 2:00 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	GS-8 (6')	7/22/2021	8:37 AM	SOIL
2	GS-9 (8.5')	7/22/2021	9:18 AM	SOIL
3	GS-13 (5')	7/22/2021	10:28 AM	SOIL
4	GS-14 (5.5')	7/22/2021	10:34 AM	SOIL
5	GS-15 (8')	7/22/2021	10:46 AM	SOIL
6	GS-16 (6.5')	7/22/2021	12:21 PM	SOIL
7	GS-17 (7')	7/22/2021	11:21 AM	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
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COMPANY: LAYLINE OIL AND GAS LLC
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLY 3-29
 MI
 SAMPLE MATRIX: SOIL
 SAMPLE ID: GS-8 (6)

GTA PROJECT NO: 072221-5
 GTA SAMPLE NO: 1
 DATE SAMPLED: 7/22/2021
 TIME SAMPLED: 8:37 AM
 DATE RECEIVED: 7/22/2021
 TIME RECEIVED: 2:00 PM

SAMPLED BY: ERIC VINCKE/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	160	50	ug/Kg (PPB)	MR	7/22/2021	7/22/2021	EPA 5035A
Toluene	240	50					
Ethylbenzene	ND	50					
Xylene(Total)	230	150					
1,2,4-Trimethylbenzene	76	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: LAYLINE OIL AND GAS LLC
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLY 3-29
 MI
 SAMPLE MATRIX: SOIL
 SAMPLE ID: GS-9 (8.5')
 GTA PROJECT NO: 072221-5
 GTA SAMPLE NO: 2
 DATE SAMPLED: 7/22/2021
 TIME SAMPLED: 9:18 AM
 DATE RECEIVED: 7/22/2021
 TIME RECEIVED: 2:00 PM
 SAMPLED BY: ERIC VINCKE/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>Complete</u>	<u>Prep Method</u>
Benzene	1,200	50	ug/Kg (PPB)	MR	7/22/2021	7/22/2021	EPA 5035A
Toluene	590	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: LAYLINE OIL AND GAS LLC
PROJECT NO: 2021505005.01
LOCATION: BENCHLY 3-29
MI
SAMPLE MATRIX: SOIL
SAMPLE ID: GS-13 (5')

GTA PROJECT NO: 072221-5
GTA SAMPLE NO: 3
DATE SAMPLED: 7/22/2021
TIME SAMPLED: 10:28 AM
DATE RECEIVED: 7/22/2021
TIME RECEIVED: 2:00 PM

SAMPLED BY: ERIC VINCKE/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>Complete</u>	<u>Prep Method</u>
Benzene	1,800	50	ug/Kg (PPB)	MR	7/22/2021	7/22/2021	EPA 5035A
Toluene	1,100	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: LAYLINE OIL AND GAS LLC
PROJECT NO: 2021505005.01
LOCATION: BENCHLY 3-29
MI
SAMPLE MATRIX: SOIL
SAMPLE ID: GS-14 (5.5')

GTA PROJECT NO: 072221-5
GTA SAMPLE NO: 4
DATE SAMPLED: 7/22/2021
TIME SAMPLED: 10:34 AM
DATE RECEIVED: 7/22/2021
TIME RECEIVED: 2:00 PM

SAMPLED BY: ERIC VINCKE/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>Complete</u>	<u>Prep Method</u>
Benzene	1,400	60	ug/Kg (PPB)	MR	7/22/2021	7/22/2021	EPA 5035A
Toluene	3,200	60					
Ethylbenzene	300	60					
Xylene(Total)	1,800	180					
1,2,4-Trimethylbenzene	310	60					
1,3,5-Trimethylbenzene	160	60					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY: LAYLINE OIL AND GAS LLC
PROJECT NO: 2021505005.01
LOCATION: BENCHLY 3-29
MI
SAMPLE MATRIX: SOIL
SAMPLE ID: GS-15 (8')

GTA PROJECT NO: 072221-5
GTA SAMPLE NO: 5
DATE SAMPLED: 7/22/2021
TIME SAMPLED: 10:46 AM
DATE RECEIVED: 7/22/2021
TIME RECEIVED: 2:00 PM

SAMPLED BY: ERIC VINCKE/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>Complete</u>	<u>Prep Method</u>
Benzene	1,800	50	ug/Kg (PPB)	MR	7/22/2021	7/22/2021	EPA 5035A
Toluene	850	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: LAYLINE OIL AND GAS LLC
PROJECT NO: 2021505005.01
LOCATION: BENCHLY 3-29
MI
SAMPLE MATRIX: SOIL
SAMPLE ID: GS-16 (6.5')

GTA PROJECT NO: 072221-5
GTA SAMPLE NO: 6
DATE SAMPLED: 7/22/2021
TIME SAMPLED: 12:21 PM
DATE RECEIVED: 7/22/2021
TIME RECEIVED: 2:00 PM

SAMPLED BY: ERIC VINCKE/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>Complete</u>	<u>Prep Method</u>
Benzene	3,100	50	ug/Kg (PPB)	MR	7/22/2021	7/22/2021	EPA 5035A
Toluene	1,700	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: LAYLINE OIL AND GAS LLC
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLY 3-29
 MI
 SAMPLE MATRIX: SOIL
 SAMPLE ID: GS-17 (7')

GTA PROJECT NO: 072221-5
 GTA SAMPLE NO: 7
 DATE SAMPLED: 7/22/2021
 TIME SAMPLED: 11:21 AM
 DATE RECEIVED: 7/22/2021
 TIME RECEIVED: 2:00 PM

SAMPLED BY: ERIC VINCKE/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>Complete</u>	<u>Prep Method</u>
Benzene	390	50	ug/Kg (PPB)	MR	7/22/2021	7/22/2021	EPA 5035A
Toluene	170	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: LAYLINE OIL AND GAS LLC
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLY 3-29

GTA PROJECT NO: 072221-5
 GTA SAMPLE NO: 1

DATE SAMPLED: 7/22/2021
 TIME SAMPLED: 8:37 AM
 DATE RECEIVED: 7/22/2021
 TIME RECEIVED: 2:00 PM

MI
 SAMPLED BY: ERIC VINCKE/GCES

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</u>
SAMPLE ID: GS-8 (6)	CHLORIDE EPA 300.0	ND	120	mg/Kg (PPM)	KC/AS	7/23/2021	SOIL

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

COMPANY: LAYLINE OIL AND GAS LLC
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLY 3-29

GTA PROJECT NO: 072221-5
 GTA SAMPLE NO: 2

DATE SAMPLED: 7/22/2021
 TIME SAMPLED: 9:18 AM
 DATE RECEIVED: 7/22/2021
 TIME RECEIVED: 2:00 PM

MI
 SAMPLED BY: ERIC VINCKE/GCES

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</u>
	SAMPLE ID: GS-9 (8.5') CHLORIDE EPA 300.0	ND	110	mg/Kg (PPM)	KC/AS	7/23/2021	SOIL

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

COMPANY: LAYLINE OIL AND GAS LLC
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLY 3-29

GTA PROJECT NO: 072221-5
 GTA SAMPLE NO: 3

DATE SAMPLED: 7/22/2021
 TIME SAMPLED: 10:28 AM
 DATE RECEIVED: 7/22/2021
 TIME RECEIVED: 2:00 PM

MI
 SAMPLED BY: ERIC VINCKE/GCES

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</u>
	SAMPLE ID: GS-13 (5')						
	CHLORIDE EPA 300.0	ND	110	mg/Kg (PPM)	KC/AS	7/23/2021	SOIL

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

COMPANY: LAYLINE OIL AND GAS LLC
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLY 3-29

GTA PROJECT NO: 072221-5
 GTA SAMPLE NO: 4

DATE SAMPLED: 7/22/2021
 TIME SAMPLED: 10:34 AM
 DATE RECEIVED: 7/22/2021
 TIME RECEIVED: 2:00 PM

MI
 SAMPLED BY: ERIC VINCKE/GCES

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</u>
	SAMPLE ID: GS-14 (5.5') CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	KC/AS	7/23/2021	SOIL

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

COMPANY: LAYLINE OIL AND GAS LLC
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLY 3-29

GTA PROJECT NO: 072221-5
 GTA SAMPLE NO: 5

DATE SAMPLED: 7/22/2021
 TIME SAMPLED: 10:46 AM
 DATE RECEIVED: 7/22/2021
 TIME RECEIVED: 2:00 PM

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 SAMPLED BY: ERIC VINCKE/GCES

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</u>
	SAMPLE ID: GS-15 (8')						
	CHLORIDE EPA 300.0	190	110	mg/Kg (PPM)	KC/AS	7/23/2021	SOIL

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

COMPANY: LAYLINE OIL AND GAS LLC
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLY 3-29

GTA PROJECT NO: 072221-5
 GTA SAMPLE NO: 6

DATE SAMPLED: 7/22/2021
 TIME SAMPLED: 12:21 PM
 DATE RECEIVED: 7/22/2021
 TIME RECEIVED: 2:00 PM

MI
 SAMPLED BY: ERIC VINCKE/GCES

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</u>
	SAMPLE ID: GS-16 (6.5') CHLORIDE EPA 300.0	ND	110	mg/Kg (PPM)	KC/AS	7/23/2021	SOIL

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

COMPANY: LAYLINE OIL AND GAS LLC
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLY 3-29

GTA PROJECT NO: 072221-5
 GTA SAMPLE NO: 7

DATE SAMPLED: 7/22/2021
 TIME SAMPLED: 11:21 AM
 DATE RECEIVED: 7/22/2021
 TIME RECEIVED: 2:00 PM

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 SAMPLED BY: ERIC VINCKE/GCES

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</u>
	SAMPLE ID: GS-17 (7') CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	KC/AS	7/23/2021	SOIL

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



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COMPANY: LAYLINE OIL AND GAS LLC

NAME:
PROJECT NO: 2021505005.01

LOCATION: BENCHLY 3-29

MI

GTA PROJECT NO: 072221-
SAMPLED BY: ERIC VINCKE/GCES

DATE SAMPLED: 7/22/2021
TIME SAMPLED: 8:37 AM

SAMPLE MATRIX: SOIL

DATE RECEIVED: 7/22/2021
TIME RECEIVED: 2:00 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: GS-8 (6') % MOISTURE EPA 3550C	19	0.050	% OF SAMPLE	AS	7/22/2021
SAMPLE ID: GS-9 (8.5') % MOISTURE EPA 3550C	14	0.050	% OF SAMPLE	AS	7/22/2021
SAMPLE ID: GS-13 (5') % MOISTURE EPA 3550C	12	0.050	% OF SAMPLE	AS	7/22/2021
SAMPLE ID: GS-14 (5.5') % MOISTURE EPA 3550C	13	0.050	% OF SAMPLE	AS	7/22/2021
SAMPLE ID: GS-15 (8') % MOISTURE EPA 3550C	17	0.050	% OF SAMPLE	AS	7/22/2021
SAMPLE ID: GS-16 (6.5') % MOISTURE EPA 3550C	13	0.050	% OF SAMPLE	AS	7/22/2021
SAMPLE ID: GS-17 (7') % MOISTURE EPA 3550C	15	0.050	% OF SAMPLE	AS	7/22/2021

