



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: LAYLINE ENERGY
Name:
ClientProj: 2021505005.01
GTA ProjNo: 072121-4

Site Addr: BENCHLEY 3-29 SPILL

Sampled By: PETER KALLIOINEN/GCES
Date Rec: 7/21/2021
Time Rec: 4:00 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	GS-1 (8')	7/21/2021	11:04 AM	SOIL
2	GS-2 (8')	7/21/2021	11:20 AM	SOIL
3	GS-3 (4')	7/21/2021	11:30 AM	SOIL
4	GS-4 (4')	7/21/2021	11:41 AM	SOIL
5	GS-5 (8')	7/21/2021	2:09 PM	SOIL
6	GS-6 (8')	7/21/2021	1:04 PM	SOIL
7	GS-7 (6')	7/21/2021	1:42 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 Chase

Kirk L. Chase/Chemist
Grand Traverse Analytical
830 Robinwood Court
Traverse City, MI 49686
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COMPANY: LAYLINE ENERGY
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLEY 3-29 SPILL

GTA PROJECT NO: 072121-4
 GTA SAMPLE NO: 1

DATE SAMPLED: 7/21/2021
 TIME SAMPLED: 11:04 AM
 DATE RECEIVED: 7/21/2021
 TIME RECEIVED: 4:00 PM

MI

SAMPLE MATRIX: SOIL
 SAMPLE ID: GS-1 (8')

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	7/21/2021	7/21/2021	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: LAYLINE ENERGY
PROJECT NO: 2021505005.01
LOCATION: BENCHLEY 3-29 SPILL
MI
SAMPLE MATRIX: SOIL
SAMPLE ID: GS-2 (8')

GTA PROJECT NO: 072121-4
GTA SAMPLE NO: 2
DATE SAMPLED: 7/21/2021
TIME SAMPLED: 11:20 AM
DATE RECEIVED: 7/21/2021
TIME RECEIVED: 4:00 PM

SAMPLED BY: PETER KALLIOINEN/GCES
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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	3,200	50	ug/Kg (PPB)	MR	7/21/2021	7/22/2021	EPA 5035A
Toluene	3,000	50					
Ethylbenzene	370	50					
Xylene(Total)	2,100	150					
1,2,4-Trimethylbenzene	480	50					
1,3,5-Trimethylbenzene	250	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY: LAYLINE ENERGY
PROJECT NO: 2021505005.01
LOCATION: BENCHLEY 3-29 SPILL

MI
SAMPLE MATRIX: SOIL
SAMPLE ID: GS-3 (4')

GTA PROJECT NO: 072121-4
GTA SAMPLE NO: 3
DATE SAMPLED: 7/21/2021
TIME SAMPLED: 11:30 AM
DATE RECEIVED: 7/21/2021
TIME RECEIVED: 4:00 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	230	50	ug/Kg (PPB)	MR	7/21/2021	7/22/2021	EPA 5035A
Toluene	210	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 ENERGY
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLEY 3-29 SPILL

GTA PROJECT NO: 072121-4
 GTA SAMPLE NO: 4

DATE SAMPLED: 7/21/2021
 TIME SAMPLED: 11:41 AM
 DATE RECEIVED: 7/21/2021
 TIME RECEIVED: 4:00 PM

MI

SAMPLE MATRIX: SOIL
 SAMPLE ID: GS-4 (4')

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	7/21/2021	7/21/2021	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: LAYLINE ENERGY
PROJECT NO: 2021505005.01
LOCATION: BENCHLEY 3-29 SPILL
MI
SAMPLE MATRIX: SOIL
SAMPLE ID: GS-5 (8')

GTA PROJECT NO: 072121-4
GTA SAMPLE NO: 5
DATE SAMPLED: 7/21/2021
TIME SAMPLED: 2:09 PM
DATE RECEIVED: 7/21/2021
TIME RECEIVED: 4:00 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	7/21/2021	7/21/2021	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: LAYLINE ENERGY
PROJECT NO: 2021505005.01
LOCATION: BENCHLEY 3-29 SPILL
MI
SAMPLE MATRIX: SOIL
SAMPLE ID: GS-6 (8')

GTA PROJECT NO: 072121-4
GTA SAMPLE NO: 6
DATE SAMPLED: 7/21/2021
TIME SAMPLED: 1:04 PM
DATE RECEIVED: 7/21/2021
TIME RECEIVED: 4:00 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	2,900	50	ug/Kg (PPB)	MR	7/21/2021	7/22/2021	EPA 5035A
Toluene	1,300	50					
Ethylbenzene	ND	50					
Xylene(Total)	310	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: LAYLINE ENERGY
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLEY 3-29 SPILL

GTA PROJECT NO: 072121-4
 GTA SAMPLE NO: 7

DATE SAMPLED: 7/21/2021
 TIME SAMPLED: 1:42 PM
 DATE RECEIVED: 7/21/2021
 TIME RECEIVED: 4:00 PM

MI

SAMPLE MATRIX: SOIL
 SAMPLE ID: GS-7 (6')

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	3,900	50	ug/Kg (PPB)	MR	7/21/2021	7/22/2021	EPA 5035A
Toluene	3,400	50					
Ethylbenzene	200	50					
Xylene(Total)	1,200	150					
1,2,4-Trimethylbenzene	93	50					
1,3,5-Trimethylbenzene	56	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: LAYLINE ENERGY
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLEY 3-29 SPILL

GTA PROJECT NO: 072121-4
 GTA SAMPLE NO: 1
 DATE SAMPLED: 7/21/2021
 TIME SAMPLED: 11:04 AM
 DATE RECEIVED: 7/21/2021
 TIME RECEIVED: 4:00 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 Completed</u>	<u>Sample</u>
	SAMPLE ID: GS-1 (8') CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	KC/AS	7/22/2021	SOIL

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

COMPANY: LAYLINE ENERGY
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLEY 3-29 SPILL

GTA PROJECT NO: 072121-4
 GTA SAMPLE NO: 2

DATE SAMPLED: 7/21/2021
 TIME SAMPLED: 11:20 AM
 DATE RECEIVED: 7/21/2021
 TIME RECEIVED: 4:00 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 Completed</u>	<u>Sample</u>
	SAMPLE ID: GS-2 (8')						
	CHLORIDE EPA 300.0	260	110	mg/Kg (PPM)	KC/AS	7/22/2021	SOIL

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

COMPANY: LAYLINE ENERGY
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLEY 3-29 SPILL

GTA PROJECT NO: 072121-4
 GTA SAMPLE NO: 3

DATE SAMPLED: 7/21/2021
 TIME SAMPLED: 11:30 AM
 DATE RECEIVED: 7/21/2021
 TIME RECEIVED: 4:00 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 Completed</u>	<u>Sample</u>
SAMPLE ID: GS-3 (4*)	CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	KC/AS	7/22/2021	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 ENERGY
PROJECT NO: 2021505005.01
LOCATION: BENCHLEY 3-29 SPILL
MI
SAMPLED BY: PETER KALLIOINEN/GCES

GTA PROJECT NO: 072121-4
GTA SAMPLE NO: 4
DATE SAMPLED: 7/21/2021
TIME SAMPLED: 11:41 AM
DATE RECEIVED: 7/21/2021
TIME RECEIVED: 4:00 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</u>
	SAMPLE ID: GS-4 (4*) CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	KC/AS	7/22/2021	SOIL

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

COMPANY: LAYLINE ENERGY
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLEY 3-29 SPILL

GTA PROJECT NO: 072121-4
 GTA SAMPLE NO: 5

DATE SAMPLED: 7/21/2021
 TIME SAMPLED: 2:09 PM
 DATE RECEIVED: 7/21/2021
 TIME RECEIVED: 4:00 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 Completed</u>	<u>Sample</u>
	SAMPLE ID: GS-5 (8')						
	CHLORIDE EPA 300.0	ND	110	mg/Kg (PPM)	KC/AS	7/22/2021	SOIL

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

COMPANY: LAYLINE ENERGY
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLEY 3-29 SPILL

GTA PROJECT NO: 072121-4
 GTA SAMPLE NO: 6
 DATE SAMPLED: 7/21/2021
 TIME SAMPLED: 1:04 PM
 DATE RECEIVED: 7/21/2021
 TIME RECEIVED: 4:00 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 Completed</u>	<u>Sample</u>
SAMPLE ID: GS-6 (8')	CHLORIDE EPA 300.0	210	100	mg/Kg (PPM)	KC/AS	7/22/2021	SOIL

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

COMPANY: LAYLINE ENERGY
 PROJECT NO: 2021505005.01
 LOCATION: BENCHLEY 3-29 SPILL

GTA PROJECT NO: 072121-4
 GTA SAMPLE NO: 7

DATE SAMPLED: 7/21/2021
 TIME SAMPLED: 1:42 PM
 DATE RECEIVED: 7/21/2021
 TIME RECEIVED: 4:00 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 Completed</u>	<u>Sample</u>
	SAMPLE ID: GS-7 (6*) CHLORIDE EPA 300.0	ND	110	mg/Kg (PPM)	KC/AS	7/22/2021	SOIL

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 LOD = LIMIT OF DETECTION
 s.u. = STANDARD pH UNITS REPORTED AT 25 C



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COMPANY: LAYLINE ENERGY

NAME:
PROJECT NO: 2021505005.01

LOCATION: BENCHLEY 3-29 SPILL

MI

GTA PROJECT NO: 072121-
SAMPLED BY: PETER KALLIOINEN/GCES

DATE SAMPLED: 7/21/2021
TIME SAMPLED: 11:04 AM

SAMPLE MATRIX: SOIL

DATE RECEIVED: 7/21/2021
TIME RECEIVED: 4:00 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-1 (8") % MOISTURE EPA 3550C	13	0.050	% OF SAMPLE	AS	7/21/2021
SAMPLE ID: GS-2 (8") % MOISTURE EPA 3550C	20	0.050	% OF SAMPLE	AS	7/21/2021
SAMPLE ID: GS-3 (4") % MOISTURE EPA 3550C	15	0.050	% OF SAMPLE	AS	7/21/2021
SAMPLE ID: GS-4 (4") % MOISTURE EPA 3550C	16	0.050	% OF SAMPLE	AS	7/21/2021
SAMPLE ID: GS-5 (8") % MOISTURE EPA 3550C	13	0.050	% OF SAMPLE	AS	7/21/2021
SAMPLE ID: GS-6 (8") % MOISTURE EPA 3550C	17	0.050	% OF SAMPLE	AS	7/21/2021
SAMPLE ID: GS-7 (6") % MOISTURE EPA 3550C	15	0.050	% OF SAMPLE	AS	7/21/2021

CHAIN OF CUSTODY

PROJECT NUMBER 2021505005.01	SITE NAME/ADDRESS Benchley 3-29 Spill	COMPANY/NAME Layline
SAMPLED BY Peter Kallioinen	COMPANY Gosling Czubak	GTA PROJECT # 072121-4

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	GS-1 (8')	7-21-21	11:04	Soil	BTEX +4 Chloride
2	GS-2 (8')	↓	11:20	↓	↓
3	GS-3 (4')		11:30		
4	GS-4 (4')		11:41		
5	GS-5 (8')		2:09		
6	GS-6 (8')		1:04		
7	GS-7 (6')		1:42		

BILL TO: Gosling Czubak Attn: Eric Vincke	TempRec: <input type="checkbox"/> 2.0°C	On Ice? <input checked="" type="checkbox"/> <input type="checkbox"/>	REPORT TO: Same
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RELEASED BY <i>[Signature]</i>	DATE/TIME 7-21-21 4:00	RECEIVED BY <i>[Signature]</i>	DATE/TIME 7/21/21 4:00
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REQUESTED TAT STANDARD 1 BUSINESS DAY 2 BUSINESS DAYS 3 BUSINESS DAYS