

**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: WHITE ROCK OIL & GAS

Name:

ClientProj: 2020688003

GTA ProjNo: 010622-1

Site Addr: ST. ALLIS 2-24

Sampled By: PETER KALLIOINEN/GCES

Date Rec: 1/6/2022

Time Rec: 11:00 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	GS-1 (1')	1/5/2022	12:51 PM	SOIL
2	GS-2 (1')	1/5/2022	1:02 PM	SOIL
3	GS-3 (3')	1/5/2022	1:23 PM	SOIL
4	GS-4 (2')	1/5/2022	1:34 PM	SOIL
5	GS-5 (0.5')	1/5/2022	1:48 PM	SOIL
6	GS-6 (0.5')	1/5/2022	2:02 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: WHITE ROCK OIL & GAS

PROJECT NO: 2020688003

LOCATION: ST. ALLIS 2-24

MI

SAMPLE MATRIX: SOIL

SAMPLE ID: GS-1 (1')

GTA PROJECT NO: 010622-1

GTA SAMPLE NO: 1

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 12:51 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

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		1/5/2022	1/7/2022	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: WHITE ROCK OIL & GAS

PROJECT NO: 2020688003

LOCATION: ST. ALLIS 2-24

MI

SAMPLE MATRIX: SOIL

SAMPLE ID: GS-2 (1')

GTA PROJECT NO: 010622-1

GTA SAMPLE NO: 2

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 1:02 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

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	ND	50	ug/Kg (PPB) MR		1/5/2022	1/7/2022	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					

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LOD = LIMIT OF DETECTION

COMPANY: WHITE ROCK OIL & GAS

PROJECT NO: 2020688003

LOCATION: ST. ALLIS 2-24

MI

SAMPLE MATRIX: SOIL

SAMPLE ID: GS-3 (3')

GTA PROJECT NO: 010622-1

GTA SAMPLE NO: 3

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 1:23 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

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		1/5/2022	1/7/2022	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					

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LOD = LIMIT OF DETECTION

COMPANY: WHITE ROCK OIL & GAS

PROJECT NO: 2020688003

LOCATION: ST. ALLIS 2-24

MI

SAMPLE MATRIX: SOIL

SAMPLE ID: GS-4 (2')

GTA PROJECT NO: 010622-1

GTA SAMPLE NO: 4

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 1:34 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

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		1/5/2022	1/7/2022	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: WHITE ROCK OIL & GAS

GTA PROJECT NO: 010622-1

PROJECT NO: 2020688003

GTA SAMPLE NO: 5

LOCATION: ST. ALLIS 2-24

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 1:48 PM

MI

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

SAMPLE MATRIX: SOIL

SAMPLE ID: GS-5 (0.5')

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		1/5/2022	1/7/2022	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: WHITE ROCK OIL & GAS

PROJECT NO: 2020688003

LOCATION: ST. ALLIS 2-24

MI

SAMPLE MATRIX: SOIL

SAMPLE ID: GS-6 (0.5')

GTA PROJECT NO: 010622-1

GTA SAMPLE NO: 6

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 2:02 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

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		1/5/2022	1/7/2022	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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COMPANY: WHITE ROCK OIL & GAS

PROJECT NO: 2020688003

LOCATION: ST. ALLIS 2-24

GTA PROJECT NO: 010622-1

GTA SAMPLE NO: 1

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 12:51 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

SAMPLED BY: MI
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 (1')						
	CHLORIDE EPA 300.0	ND	110	mg/Kg (PPM)	TR	1/10/2022	SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: WHITE ROCK OIL & GAS

GTA PROJECT NO: 010622-1

PROJECT NO: 2020688003

GTA SAMPLE NO: 2

LOCATION: ST. ALLIS 2-24

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 1:02 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

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 (1')						
	CHLORIDE EPA 300.0	ND	110	mg/Kg (PPM)	TR	1/10/2022	SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: WHITE ROCK OIL & GAS

GTA PROJECT NO: 010622-1

PROJECT NO: 2020688003

GTA SAMPLE NO: 3

LOCATION: ST. ALLIS 2-24

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 1:23 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

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 (3')						
	CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	TR	1/10/2022	SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: WHITE ROCK OIL & GAS

GTA PROJECT NO: 010622-1

PROJECT NO: 2020688003

GTA SAMPLE NO: 4

LOCATION: ST. ALLIS 2-24

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 1:34 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

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-4 (2')						
	CHLORIDE EPA 300.0	ND	100	mg/Kg (PPM)	TR	1/10/2022	SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: WHITE ROCK OIL & GAS

GTA PROJECT NO: 010622-1

PROJECT NO: 2020688003

GTA SAMPLE NO: 5

LOCATION: ST. ALLIS 2-24

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 1:48 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

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 (0.5')						
	CHLORIDE EPA 300.0	ND	110	mg/Kg (PPM)	TR	1/10/2022	SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: WHITE ROCK OIL & GAS

GTA PROJECT NO: 010622-1

PROJECT NO: 2020688003

GTA SAMPLE NO: 6

LOCATION: ST. ALLIS 2-24

DATE SAMPLED: 1/5/2022

TIME SAMPLED: 2:02 PM

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

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 (0.5')						
	CHLORIDE EPA 300.0	ND	110	mg/Kg (PPM)	TR	1/10/2022	SOIL

ND = NOT DETECTED, RESULT < LOD

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

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NAME:

PROJECT NO: 2020688003

GTA PROJECT NO: 010622-

SAMPLED BY: PETER KALLIOINEN/GCES

DATE SAMPLED: 1/5/2022

LOCATION: ST. ALLIS 2-24

SAMPLE MATRIX: SOIL

DATE RECEIVED: 1/6/2022

TIME RECEIVED: 11:00 AM

MI

MOISTURE

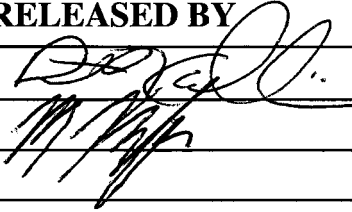
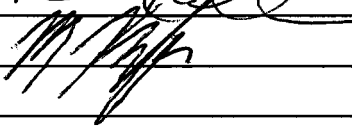
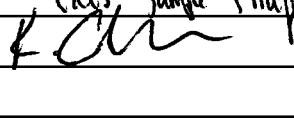
No:	Analysis	Concentration	LOD	Units	Analyst	Date Completed
SAMPLE ID: GS-1 (1')	% MOISTURE EPA 3550C	15	0.050	% OF SAMPLE	AS	1/10/2022
SAMPLE ID: GS-2 (1')	% MOISTURE EPA 3550C	8.9	0.050	% OF SAMPLE	AS	1/10/2022
SAMPLE ID: GS-3 (3')	% MOISTURE EPA 3550C	4.9	0.050	% OF SAMPLE	AS	1/10/2022
SAMPLE ID: GS-4 (2')	% MOISTURE EPA 3550C	5.0	0.050	% OF SAMPLE	AS	1/10/2022
SAMPLE ID: GS-5 (0.5')	% MOISTURE EPA 3550C	9.7	0.050	% OF SAMPLE	AS	1/10/2022
SAMPLE ID: GS-6 (0.5')	% MOISTURE EPA 3550C	8.1	0.050	% OF SAMPLE	AS	1/10/2022

CHAIN OF CUSTODY

PROJECT NUMBER 2020688003	SITE NAME/ADDRESS St. Allis 2-24	COMPANY/NAME White Rock O&G
SAMPLED BY Peter Kallioinen	COMPANY Gosling Czubak Eng.	GTA PROJECT # 010622-1

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	GS-1 (1')	1-5-22	12:51	Soil	BTEX+4, chloride
2	GS-2 (1')	↓	13:02	↓	↓
3	GS-3 (3')	↓	13:23	↓	↓
4	GS-4 (2')	↓	13:34	↓	↓
5	GS-5 (0.5')	↓	13:48	↓	↓
6	GS-6 (0.5')	↓	14:02	↓	↓

BILL TO: Gosling Czubak ATTN: Eric Vincke	TempRec: ☐ -1.7°C	On Ice? ☒ ☐	REPORT TO: Same
RELEASED BY 	DATE/TIME 1-5-22 17:30	RECEIVED BY Eric Sample Fridge	DATE/TIME 1-5-22 17:30
	1-6-22 11:00 a		1/6/21 11a
REQUESTED TAT ☒ STANDARD ☐ 1 BUSINESS DAY ☐ 2 BUSINESS DAYS ☐ 3 BUSINESS DAYS			