

**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: BREITBURN OPERATING
Name:
ClientProj: 228907.073
GTA ProjNo: 102819-12

Site Addr: ST. BEAVER CREEK M#3

Sampled By: HOLLIS THOMAS/DARCY
Date Rec: 10/28/2019
Time Rec: 10:15 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-2	10/23/2019	4:15 PM	WATER
2	MW-4D	10/23/2019	4:30 PM	WATER
3	MW-5	10/23/2019	5:15 PM	WATER
4	MW-9	10/23/2019	4:55 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 L Chase

Kirk L. Chase/Chemist
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COMPANY: BREITBURN OPERATING

PROJECT NO: 228907.073

LOCATION: ST. BEAVER CREEK M#3

MI

SAMPLE MATRIX: WATER

SAMPLE ID: MW-2

GTA PROJECT NO: 102819-12

GTA SAMPLE NO: 1

DATE SAMPLED: 10/23/2019

TIME SAMPLED: 4:15 PM

DATE RECEIVED: 10/28/2019

TIME RECEIVED: 10:15 AM

SAMPLED BY: HOLLIS THOMAS/DARCY

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	1.6	1.0	ug/L (PPB)	MR		10/29/2019	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	21	1.0					
Xylene(Total)	64	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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PROJECT NO: 228907.073

LOCATION: ST. BEAVER CREEK M#3

MI

SAMPLE MATRIX: WATER

SAMPLE ID: MW-4D

GTA PROJECT NO: 102819-12

GTA SAMPLE NO: 2

DATE SAMPLED: 10/23/2019

TIME SAMPLED: 4:30 PM

DATE RECEIVED: 10/28/2019

TIME RECEIVED: 10:15 AM

SAMPLED BY: HOLLIS THOMAS/DARCY

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	ND	1.0	ug/L (PPB)	MR		10/29/2019	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					

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PROJECT NO: 228907.073

LOCATION: ST. BEAVER CREEK M#3

MI

SAMPLE MATRIX: WATER

SAMPLE ID: MW-5

GTA PROJECT NO: 102819-12

GTA SAMPLE NO: 3

DATE SAMPLED: 10/23/2019

TIME SAMPLED: 5:15 PM

DATE RECEIVED: 10/28/2019

TIME RECEIVED: 10:15 AM

SAMPLED BY: HOLLIS THOMAS/DARCY

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	ND	1.0	ug/L (PPB)	MR		10/29/2019	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					

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PROJECT NO: 228907.073

LOCATION: ST. BEAVER CREEK M#3

MI

SAMPLE MATRIX: WATER

SAMPLE ID: MW-9

GTA PROJECT NO: 102819-12

GTA SAMPLE NO: 4

DATE SAMPLED: 10/23/2019

TIME SAMPLED: 4:55 PM

DATE RECEIVED: 10/28/2019

TIME RECEIVED: 10:15 AM

SAMPLED BY: HOLLIS THOMAS/DARCY

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	ND	1.0	ug/L (PPB)	MR		10/29/2019	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	77	1.0					
Xylene(Total)	3.5	3.0					

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PROJECT NO: 228907.073

LOCATION: ST. BEAVER CREEK M#3

GTA PROJECT NO: 102819-12

GTA SAMPLE NO: 1

DATE SAMPLED: 10/23/2019

TIME SAMPLED: 4:15 PM

DATE RECEIVED: 10/28/2019

TIME RECEIVED: 10:15 AM

MI

SAMPLED BY: HOLLIS THOMAS/DARCY

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: MW-2						
	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	11/6/2019	WATER
	CONDUCTIVITY SM2510-B	850	1.0	uS/cm@25C	LV	11/6/2019	WATER

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

DISS = DISSOLVED

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COMPANY: BREITBURN OPERATING
PROJECT NO: 228907.073
LOCATION: ST. BEAVER CREEK M#3

GTA PROJECT NO: 102819-12
GTA SAMPLE NO: 2

DATE SAMPLED: 10/23/2019
TIME SAMPLED: 4:30 PM

DATE RECEIVED: 10/28/2019
TIME RECEIVED: 10:15 AM

MI
SAMPLED BY: HOLLIS THOMAS/DARCY

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: MW-4D						
	CHLORIDE EPA 300.0	310	10	mg/L (PPM)	LV	11/6/2019	WATER
	CONDUCTIVITY SM2510-B	1,200	1.0	uS/cm@25C	LV	11/6/2019	WATER

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PROJECT NO: 228907.073

LOCATION: ST. BEAVER CREEK M#3

GTA PROJECT NO: 102819-12

GTA SAMPLE NO: 3

DATE SAMPLED: 10/23/2019

TIME SAMPLED: 5:15 PM

DATE RECEIVED: 10/28/2019

TIME RECEIVED: 10:15 AM

MI

SAMPLED BY: HOLLIS THOMAS/DARCY

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: MW-5						
	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	11/6/2019	WATER
	CONDUCTIVITY SM2510-B	520	1.0	uS/cm@25C	LV	11/6/2019	WATER

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GTA PROJECT NO: 102819-12

GTA SAMPLE NO: 4

DATE SAMPLED: 10/23/2019

TIME SAMPLED: 4:55 PM

DATE RECEIVED: 10/28/2019

TIME RECEIVED: 10:15 AM

MI

SAMPLED BY: HOLLIS THOMAS/DARCY

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: MW-9						
	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	11/8/2019	WATER
	CONDUCTIVITY SM2510-B	530	1.0	uS/cm@25C	LV	11/8/2019	WATER

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DISS = DISSOLVED

CHAIN OF CUSTODY

PROJECT NUMBER 228907.073	SITE NAME/ADDRESS STATE BEAVER CREEK M#3	COMPANY/NAME Breithorn on LP
SAMPLED BY J. Gault	COMPANY Dary	GTA PROJECT # 102819-12

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	MW-2	10/23/19	4:15 pm	GW	CI, SC & BTEX
2	MW-4d	↓	4:30 pm	↓	↓ ↓ ↓
3	MW-5	↓	5:15 pm	↓	↓ ↓ ↓
4	MW-9	↓	4:55 pm	↓	↓ ↓ ↓

BILL TO: BB		REPORT TO: Dary	
RELEASED BY J. Gault	DATE/TIME 10/28/19 1045am	RECEIVED BY L. V. [Signature]	DATE/TIME 10/28/19 0013
REQUESTED TAT ☒ STANDARD		☐ 1 BUSINESS DAY ☐ 2 BUSINESS DAYS ☐ 3 BUSINESS DAYS	