



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: 20-157
GTA ProjNo: 062520-8

Site Addr: JOSEPH #1

Sampled By: JOSE MEMBRILLO/OMPC
Date Rec: 6/25/2020
Time Rec: 4:04 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-1D	6/25/2020	10:30 AM	WATER
2	MW-2	6/25/2020	11:00 AM	WATER
3	MW-3D	6/25/2020	11:30 AM	WATER
4	MW-4	6/25/2020	12:00 PM	WATER
5	MW-8	6/25/2020	1:00 PM	WATER
6	MW-9	6/25/2020	2:00 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
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COMPANY: BREITBURN OPERATING
PROJECT NO: 20-157
LOCATION: JOSEPH #1
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-1D

GTA PROJECT NO: 062520-8
GTA SAMPLE NO: 1
DATE SAMPLED: 6/25/2020
TIME SAMPLED: 10:30 AM
DATE RECEIVED: 6/25/2020
TIME RECEIVED: 4:04 PM

SAMPLED BY: JOSE MEMBRILLO/OMPC

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	620	1.0	ug/L (PPB)	MR		6/26/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	200	1.0					
Xylene(Total)	320	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: BREITBURN OPERATING
 PROJECT NO: 20-157
 LOCATION: JOSEPH #1
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-2

GTA PROJECT NO: 062520-8
 GTA SAMPLE NO: 2
 DATE SAMPLED: 6/25/2020
 TIME SAMPLED: 11:00 AM
 DATE RECEIVED: 6/25/2020
 TIME RECEIVED: 4:04 PM

SAMPLED BY: JOSE MEMBRILLO/OMPC

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		6/26/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					

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COMPANY: BREITBURN OPERATING
 PROJECT NO: 20-157
 LOCATION: JOSEPH #1
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-3D

GTA PROJECT NO: 062520-8
 GTA SAMPLE NO: 3
 DATE SAMPLED: 6/25/2020
 TIME SAMPLED: 11:30 AM
 DATE RECEIVED: 6/25/2020
 TIME RECEIVED: 4:04 PM

SAMPLED BY: JOSE MEMBRILLO/OMPC

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		6/26/2020	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: BREITBURN OPERATING
 PROJECT NO: 20-157
 LOCATION: JOSEPH #1
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-4

GTA PROJECT NO: 062520-8
 GTA SAMPLE NO: 4
 DATE SAMPLED: 6/25/2020
 TIME SAMPLED: 12:00 PM
 DATE RECEIVED: 6/25/2020
 TIME RECEIVED: 4:04 PM

SAMPLED BY: JOSE MEMBRILLO/OMPC

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		6/26/2020	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: BREITBURN OPERATING
 PROJECT NO: 20-157
 LOCATION: JOSEPH #1
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-8

GTA PROJECT NO: 062520-8
 GTA SAMPLE NO: 5
 DATE SAMPLED: 6/25/2020
 TIME SAMPLED: 1:00 PM
 DATE RECEIVED: 6/25/2020
 TIME RECEIVED: 4:04 PM

SAMPLED BY: JOSE MEMBRILLO/OMPC

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		6/26/2020	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: BREITBURN OPERATING
PROJECT NO: 20-157
LOCATION: JOSEPH #1

GTA PROJECT NO: 062520-8
GTA SAMPLE NO: 1
DATE SAMPLED: 6/25/2020
TIME SAMPLED: 10:30 AM
DATE RECEIVED: 6/25/2020
TIME RECEIVED: 4:04 PM

MI
SAMPLED BY: JOSE MEMBRILLO/OMPC

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-1D						
	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	6/26/2020	WATER
	CONDUCTIVITY SM2510-B	610	1.0	uS/cm@25C	LV	6/26/2020	WATER

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 20-157
 LOCATION: JOSEPH #1

GTA PROJECT NO: 062520-8
 GTA SAMPLE NO: 2
 DATE SAMPLED: 6/25/2020
 TIME SAMPLED: 11:00 AM
 DATE RECEIVED: 6/25/2020
 TIME RECEIVED: 4:04 PM

MI
 SAMPLED BY: JOSE MEMBRILLO/OMPC

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	6/26/2020	WATER
	CONDUCTIVITY SM2510-B	920	1.0	uS/cm@25C	LV	6/26/2020	WATER

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COMPANY: BREITBURN OPERATING
 PROJECT NO: 20-157
 LOCATION: JOSEPH #1

GTA PROJECT NO: 062520-8
 GTA SAMPLE NO: 3
 DATE SAMPLED: 6/25/2020
 TIME SAMPLED: 11:30 AM
 DATE RECEIVED: 6/25/2020
 TIME RECEIVED: 4:04 PM

MI
 SAMPLED BY: JOSE MEMBRILLO/OMPC

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-3D						
	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	6/26/2020	WATER
	CONDUCTIVITY SM2510-B	240	1.0	uS/cm@25C	LV	6/26/2020	WATER

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COMPANY: BREITBURN OPERATING
PROJECT NO: 20-157
LOCATION: JOSEPH #1

GTA PROJECT NO: 062520-8
GTA SAMPLE NO: 4
DATE SAMPLED: 6/25/2020
TIME SAMPLED: 12:00 PM
DATE RECEIVED: 6/25/2020
TIME RECEIVED: 4:04 PM

MI
SAMPLED BY: JOSE MEMBRILLO/OMPC

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-4						
	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	6/26/2020	WATER
	CONDUCTIVITY SM2510-B	840	1.0	uS/cm@25C	LV	6/26/2020	WATER

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COMPANY: BREITBURN OPERATING
PROJECT NO: 20-157
LOCATION: JOSEPH #1

GTA PROJECT NO: 062520-8
GTA SAMPLE NO: 5
DATE SAMPLED: 6/25/2020
TIME SAMPLED: 1:00 PM
DATE RECEIVED: 6/25/2020
TIME RECEIVED: 4:04 PM

MI
SAMPLED BY: JOSE MEMBRILLO/OMPC

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-8						
	CHLORIDE EPA 300.0	15	10	mg/L (PPM)	LV	6/26/2020	WATER
	CONDUCTIVITY SM2510-B	860	1.0	uS/cm@25C	LV	6/26/2020	WATER

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COMPANY: BREITBURN OPERATING
PROJECT NO: 20-157
LOCATION: JOSEPH #1

GTA PROJECT NO: 062520-8
GTA SAMPLE NO: 6
DATE SAMPLED: 6/25/2020
TIME SAMPLED: 2:00 PM
DATE RECEIVED: 6/25/2020
TIME RECEIVED: 4:04 PM

MI
SAMPLED BY: JOSE MEMBRILLO/OMPC

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	16	10	mg/L (PPM)	LV	6/26/2020	WATER
	CONDUCTIVITY SM2510-B	660	1.0	uS/cm@25C	LV	6/26/2020	WATER

ND = NOT DETECTED, RESULT < LOD
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DISS = DISSOLVED

CHAIN OF CUSTODY

PROJECT NUMBER 20-157	SITE NAME/ADDRESS Jough #1	COMPANY/NAME Brietburn
SAMPLED BY Josi Membrillo	COMPANY Otwell Mawby	GTA PROJECT # 062520-8

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS	
1	MW-1D	6/25/20	10:30	Water	Chloride, Conductivity, BTEX	
2	MW-2	↓	10:00	↓	↓ ↓ ↓	
3	MW-3D		11:30			
4	MW-4		12:00			
5	MW-8		1:00			
6	MW-9		2:00			Chloride, Conductivity

BILL TO:
Brietburn

REPORT TO:
Otwell Mawby

RELEASED BY	DATE/TIME	RECEIVED BY	DATE/TIME
Josi Membrillo	6/25/20 4:04	[Signature]	6/25/20 4:09 rec 4:00 once

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