



**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

[www.gtanalytical.com](http://www.gtanalytical.com)

Company: BREITBURN OPERATING  
Name:  
ClientProj: 13.079  
GTA ProjNo: 043020-2

Site Addr: SOUTH CAPLE

Sampled By: KWB/HURON  
Date Rec: 4/30/2020  
Time Rec: 11:45 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	OW 1	4/28/2020		WATER
2	OW 4	4/28/2020		WATER
3	MW 5	4/28/2020		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: 13.079  
LOCATION: SOUTH CAPLE

GTA PROJECT NO: 043020-2  
GTA SAMPLE NO: 1  
DATE SAMPLED: 4/28/2020  
TIME SAMPLED:  
DATE RECEIVED: 4/30/2020  
TIME RECEIVED: 11:45 AM

MI  
SAMPLED BY: KWB/HURON

**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: OW 1						
	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	5/1/2020	WATER
	CONDUCTIVITY SM2510-B	230	1.0	uS/cm@25C	LV	5/1/2020	WATER

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



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COMPANY: BREITBURN OPERATING  
PROJECT NO: 13.079  
LOCATION: SOUTH CAPLE

GTA PROJECT NO: 043020-2  
GTA SAMPLE NO: 2  
DATE SAMPLED: 4/28/2020  
TIME SAMPLED:  
DATE RECEIVED: 4/30/2020  
TIME RECEIVED: 11:45 AM

MI  
SAMPLED BY: KWB/HURON

**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: OW 4						
	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	5/1/2020	WATER
	CONDUCTIVITY SM2510-B	470	1.0	uS/cm@25C	LV	5/1/2020	WATER

ND = NOT DETECTED, RESULT < LOD  
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COMPANY: BREITBURN OPERATING  
PROJECT NO: 13.079  
LOCATION: SOUTH CAPLE

GTA PROJECT NO: 043020-2  
GTA SAMPLE NO: 3  
DATE SAMPLED: 4/28/2020  
TIME SAMPLED:  
DATE RECEIVED: 4/30/2020  
TIME RECEIVED: 11:45 AM

SAMPLED BY: MI  
KWB/HURON

**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	5/1/2020	WATER
	CONDUCTIVITY SM2510-B	430	1.0	uS/cm@25C	LV	5/1/2020	WATER

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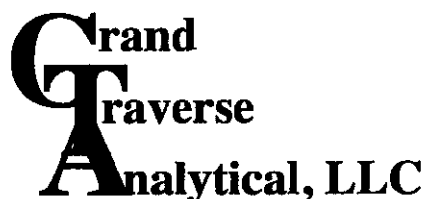
COMPANY: BREITBURN OPERATING  
 NAME:  
 PROJECT NO: 13.079  
 LOCATION: SOUTH CAPLE  
 MI  
 SAMPLED BY: KWB/HURON

GTA PROJECT NO: 043020-2  
 GTA SAMPLE NO: 3  
 DATE SAMPLED: 4/28/2020  
 TIME SAMPLED:  
 DATE RECEIVED: 4/30/2020  
 TIME RECEIVED: 11:45 AM

**ORGANICS**

<u>No:</u>	<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>
SAMPLE ID:	MW 5							
SAMPLE MATRIX:	WATER							
TRIETHYLENE GLYCOL EPA 8015M		ND	4.0	mg/L (PPM)	KC/TR	5/1/2020	5/7/2020	EPA 3511

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.  
 ND = NOT DETECTED, RESULT < LOD  
 LOD = LIMIT OF DETECTION



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**CHAIN OF CUSTODY**

PROJECT NUMBER 13.079	SITE NAME/ADDRESS South Caple	COMPANY/NAME BreitBurn Operating
SAMPLED BY KWB	COMPANY Huron Engineering & Surveying	GTA PROJECT # <i>043020-2</i>

**SAMPLE INFORMATION**

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
	OW 1	<i>4/28/20</i>		GW	Chloride and Specific Conductance
	OW 4	<i>4/28/20</i>		GW	Chloride and Specific Conductance
	MW 5	<i>4/28/20</i>		GW	Chloride, Specific Conductance & TEG
					Chloride & TEG mg/l
					SC µmhos/cm

**BILL TO:** Huron Engineering & Surveying

**Report To:** Kim Wallis-Burke, Huron Engineering & Surveying kim.wallis-burke@huronesi.com

<b>RELEASED BY</b>	<b>DATE/TIME</b>	<b>RECEIVED BY</b>	<b>DATE/TIME</b>
<i>Kimberly Wallis-Burke</i>		<i>UPS</i>	<i>4/29/20</i>
		<i>K. Wallis</i>	<i>4/30/20 11:45</i>
		<i>R. Wallis</i>	<i>4/30/20 on ice</i>

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