



**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: 06-133  
GTA ProjNo: 110321-9

Site Addr: LOGAN C1-22

Sampled By: WPM/OMPC  
Date Rec: 11/3/2021  
Time Rec: 11:05 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-15	10/29/2021	11:40 AM	WATER
2	MW-1DD	10/29/2021	11:35 AM	WATER
3	MW-2	10/29/2021	11:50 AM	WATER
4	MW-3	10/29/2021	12:45 PM	WATER
5	GP-11	10/29/2021	12:00 PM	WATER
6	GP-12	10/29/2021	12:25 PM	WATER
7	GP-13	10/29/2021	12:40 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  
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COMPANY: BREITBURN OPERATING  
PROJECT NO: 06-133  
LOCATION: LOGAN C1-22

GTA PROJECT NO: 110321-9  
GTA SAMPLE NO: 1

DATE SAMPLED: 10/29/2021  
TIME SAMPLED: 11:40 AM  
DATE RECEIVED: 11/3/2021  
TIME RECEIVED: 11:05 AM

SAMPLED BY: MI  
WPM/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</u>
SAMPLE ID: MW-15							
CHLORIDE EPA 300.0		570	50	mg/L (PPM)	TR	11/9/2021	WATER

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



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COMPANY: BREITBURN OPERATING  
PROJECT NO: 06-133  
LOCATION: LOGAN C1-22

GTA PROJECT NO: 110321-9  
GTA SAMPLE NO: 2

DATE SAMPLED: 10/29/2021  
TIME SAMPLED: 11:35 AM  
DATE RECEIVED: 11/3/2021  
TIME RECEIVED: 11:05 AM

SAMPLED BY: MI  
WPM/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</u>
	SAMPLE ID: MW-1DD CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	TR	11/9/2021	WATER

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

COMPANY: BREITBURN OPERATING  
 PROJECT NO: 06-133  
 LOCATION: LOGAN C1-22

GTA PROJECT NO: 110321-9  
 GTA SAMPLE NO: 3

DATE SAMPLED: 10/29/2021  
 TIME SAMPLED: 11:50 AM  
 DATE RECEIVED: 11/3/2021  
 TIME RECEIVED: 11:05 AM

SAMPLED BY: MI  
 WPM/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</u>
SAMPLE ID: MW-2	CHLORIDE EPA 300.0	350	20	mg/L (PPM)	TR	11/9/2021	WATER

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

COMPANY: BREITBURN OPERATING  
 PROJECT NO: 06-133  
 LOCATION: LOGAN C1-22

GTA PROJECT NO: 110321-9  
 GTA SAMPLE NO: 4

DATE SAMPLED: 10/29/2021  
 TIME SAMPLED: 12:45 PM  
 DATE RECEIVED: 11/3/2021  
 TIME RECEIVED: 11:05 AM

SAMPLED BY: MI  
 WPM/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</u>
SAMPLE ID: MW-3	CHLORIDE EPA 300.0	18	10	mg/L (PPM)	TR	11/9/2021	WATER

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

COMPANY: BREITBURN OPERATING  
 PROJECT NO: 06-133  
 LOCATION: LOGAN C1-22

GTA PROJECT NO: 110321-9  
 GTA SAMPLE NO: 5

DATE SAMPLED: 10/29/2021  
 TIME SAMPLED: 12:00 PM  
 DATE RECEIVED: 11/3/2021  
 TIME RECEIVED: 11:05 AM

SAMPLED BY: MI  
 WPM/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</u>
SAMPLE ID: GP-11	CHLORIDE EPA 300.0	110	10	mg/L (PPM)	TR	11/9/2021	WATER

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

COMPANY: BREITBURN OPERATING  
 PROJECT NO: 06-133  
 LOCATION: LOGAN C1-22

GTA PROJECT NO: 110321-9  
 GTA SAMPLE NO: 6

DATE SAMPLED: 10/29/2021  
 TIME SAMPLED: 12:25 PM  
 DATE RECEIVED: 11/3/2021  
 TIME RECEIVED: 11:05 AM

SAMPLED BY: MI  
 WPM/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</u>
SAMPLE ID: GP-12	CHLORIDE EPA 300.0	140	10	mg/L (PPM)	TR	11/9/2021	WATER

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

COMPANY: BREITBURN OPERATING  
 PROJECT NO: 06-133  
 LOCATION: LOGAN C1-22

GTA PROJECT NO: 110321-9  
 GTA SAMPLE NO: 7

DATE SAMPLED: 10/29/2021  
 TIME SAMPLED: 12:40 PM  
 DATE RECEIVED: 11/3/2021  
 TIME RECEIVED: 11:05 AM

SAMPLED BY: MI  
 WPM/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</u>
SAMPLE ID: GP-13	CHLORIDE EPA 300.0	100	10	mg/L (PPM)	TR	11/9/2021	WATER

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

**CHAIN OF CUSTODY**

PROJECT NUMBER <b>06-133</b>	SITE NAME/ADDRESS <b>Logan C1-22</b>	COMPANY/NAME <b>BB</b>
SAMPLED BY <b>WPM</b>	COMPANY <b>OMPC</b>	GTA PROJECT # <b>110321-9</b>

**SAMPLE INFORMATION**

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	<del>AW-1</del> MW-15	10/29/21	1140	H <sub>2</sub> O	Chlorides + Conductivity
2	MW-1DD	↓	1135	↓	↓
3	MW-2		1150		
4	MW-3		1245		
5	GP-11		1200		
6	GP-12		1225		
7	GP-13		1240		

BILL TO:	TempRec: <input type="checkbox"/>	On Ice? <input type="checkbox"/> <input type="checkbox"/>	REPORT TO:
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RELEASED BY <i>[Signature]</i>	DATE/TIME 11/3/21 11:05	RECEIVED BY <i>[Signature]</i>	DATE/TIME 11/3/21 11:05
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REQUESTED TAT  STANDARD  1 BUSINESS DAY  2 BUSINESS DAYS  3 BUSINESS DAYS