



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

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www.gtanalytical.com

Company: BREITBURN OPERATING
Name:
ClientProj: 19-1489
GTA ProjNo: 102319-7

Site Addr: CONN MELLAND
Sampled By: RO/OMPC
Date Rec: 10/23/2019
Time Rec: 4:25 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-1 23-25'	10/23/2019		SOIL
2	MW-1 28-30'	10/23/2019		SOIL
3	MW-1 33-35'	10/23/2019		SOIL
4	MW-1 38-40'	10/23/2019		SOIL
5	MW-1 43-45'	10/23/2019		SOIL
6	MW-1 48-50'	10/23/2019		SOIL
7	MW-1 50-55'	10/23/2019		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: 19-1489
 LOCATION: CONN MELLAND

GTA PROJECT NO: 102319-7
 GTA SAMPLE NO: 1
 DATE SAMPLED: 10/23/2019
 TIME SAMPLED:
 DATE RECEIVED: 10/23/2019
 TIME RECEIVED: 4:25 PM

SAMPLED BY: MI
 RO/OMPC

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
	SAMPLE ID: MW-1 23-25' CHLORIDE EPA 300.0	ND	51	mg/Kg (PPM)	LV	11/1/2019	SOIL

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 19-1489
 LOCATION: CONN MELLAND

GTA PROJECT NO: 102319-7
 GTA SAMPLE NO: 2
 DATE SAMPLED: 10/23/2019
 TIME SAMPLED:
 DATE RECEIVED: 10/23/2019
 TIME RECEIVED: 4:25 PM

SAMPLED BY: MI
 RO/OMPC

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
	SAMPLE ID: MW-1 28-30' CHLORIDE EPA 300.0	ND	53	mg/Kg (PPM)	LV	11/4/2019	SOIL

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 19-1489
 LOCATION: CONN MELLAND

GTA PROJECT NO: 102319-7
 GTA SAMPLE NO: 3
 DATE SAMPLED: 10/23/2019
 TIME SAMPLED:
 DATE RECEIVED: 10/23/2019
 TIME RECEIVED: 4:25 PM

SAMPLED BY: MI
 RO/OMPC

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
	SAMPLE ID: MW-1 33-35' CHLORIDE EPA 300.0	ND	51	mg/Kg (PPM)	LV	11/4/2019	SOIL

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 19-1489
 LOCATION: CONN MELLAND

GTA PROJECT NO: 102319-7
 GTA SAMPLE NO: 4
 DATE SAMPLED: 10/23/2019
 TIME SAMPLED:
 DATE RECEIVED: 10/23/2019
 TIME RECEIVED: 4:25 PM

SAMPLED BY: MI
 RO/OMPC

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
	SAMPLE ID: MW-1 38-40' CHLORIDE EPA 300.0	310	49	mg/Kg (PPM)	LV	11/4/2019	SOIL

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 19-1489
 LOCATION: CONN MELLAND

GTA PROJECT NO: 102319-7
 GTA SAMPLE NO: 5
 DATE SAMPLED: 10/23/2019
 TIME SAMPLED:
 DATE RECEIVED: 10/23/2019
 TIME RECEIVED: 4:25 PM

SAMPLED BY: MI
 RO/OMPC

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
	SAMPLE ID: MW-1 43-45' CHLORIDE EPA 300.0	ND	51	mg/Kg (PPM)	LV	11/4/2019	SOIL

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 19-1489
 LOCATION: CONN MELLAND

GTA PROJECT NO: 102319-7
 GTA SAMPLE NO: 6
 DATE SAMPLED: 10/23/2019
 TIME SAMPLED:
 DATE RECEIVED: 10/23/2019
 TIME RECEIVED: 4:25 PM

SAMPLED BY: MI
 RO/OMPC

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
	SAMPLE ID: MW-1 48-50' CHLORIDE EPA 300.0	ND	53	mg/Kg (PPM)	LV	11/4/2019	SOIL

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 19-1489
 LOCATION: CONN MELLAND

GTA PROJECT NO: 102319-7
 GTA SAMPLE NO: 7
 DATE SAMPLED: 10/23/2019
 TIME SAMPLED:
 DATE RECEIVED: 10/23/2019
 TIME RECEIVED: 4:25 PM

SAMPLED BY: MI
 RO/OMPC

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
	SAMPLE ID: MW-1 50-55' CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	11/4/2019	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

NAME:
PROJECT NO: 19-1489

LOCATION: CONN MELLAND

MI

GTA PROJECT NO: 102319-7
SAMPLED BY: RO/OMPC

DATE SAMPLED: 10/23/2019
TIME SAMPLED:

SAMPLE MATRIX: SOIL

DATE RECEIVED: 10/23/2019
TIME RECEIVED: 4:25 PM

MOISTURE

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Complete</u>
	SAMPLE ID: MW-1 23-25'					
	% MOISTURE EPA 3550C	3.9	0.050	% OF	AS	10/23/2019
	SAMPLE ID: MW-1 28-30'					
	% MOISTURE EPA 3550C	8.5	0.050	% OF	AS	10/23/2019
	SAMPLE ID: MW-1 33-35'					
	% MOISTURE EPA 3550C	3.4	0.050	% OF	AS	10/23/2019
	SAMPLE ID: MW-1 38-40'					
	% MOISTURE EPA 3550C	2.4	0.050	% OF	AS	10/23/2019
	SAMPLE ID: MW-1 43-45'					
	% MOISTURE EPA 3550C	2.9	0.050	% OF	AS	10/23/2019
	SAMPLE ID: MW-1 48-50'					
	% MOISTURE EPA 3550C	9.4	0.050	% OF	AS	10/23/2019

CHAIN OF CUSTODY

PROJECT NUMBER 19-148	SITE NAME/ADDRESS Conn Melland	COMPANY/NAME OMPC
SAMPLED BY DO	COMPANY OMPC	GTA PROJECT # 102319-7

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS	
1	MW-1 23-25'	10/23		soil	chloride	
2	MW-1 28-30'					
3	MW-1 33-35'					
4	MW-1 38-40'					
5	MW-1 43-45'					
6	MW-1 48-50'					
7	MW-1 50-55'				water	

BILL TO:

REPORT TO:

RELEASED BY	DATE/TIME	RECEIVED BY	DATE/TIME
<i>Matthew C. [Signature]</i>	10-23-19 4:25pm	<i>[Signature]</i>	10/23/19 4:25

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