

**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:

Site Addr: CATTLE ANTRIM

GTA ProjNo: 081619-13

Sampled By: J. BEEHLER/BBOP
Date Rec: 8/16/2019
Time Rec: 3:35 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	N GS C	8/16/2019	10:15 AM	SOIL
2	NW WSC	8/16/2019	10:30 AM	SOIL
3	W WSC	8/16/2019	10:45 AM	SOIL
4	S WSC	8/16/2019	11:00 AM	SOIL
5	E WSC	8/16/2019	11:30 AM	SOIL
6	E GSC	8/16/2019	11:40 AM	SOIL
7	E GSC	8/16/2019	11:55 AM	SOIL

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
Grand Traverse Analytical
830 Robinwood Court
Traverse City, MI 49686
Ph: 231-929-0905
Fx: 231-929-0894
SP: 231-590-0291
kirk@gtanalytical.com

COMPANY: BREITBURN OPERATING

GTA PROJECT NO: 081619-13

PROJECT NO:

GTA SAMPLE NO: 1

LOCATION: CATTLE ANTRIM

DATE SAMPLED: 8/16/2019

TIME SAMPLED: 10:15 AM

DATE RECEIVED: 8/16/2019

TIME RECEIVED: 3:35 PM

MI

SAMPLED BY: J. BEEHLER/BBOP

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: N GS C

CHLORIDE EPA 300.0

Concentration

150

LOD

54

Units

mg/Kg (PPM) LV

Analyst

Date

8/27/2019

Sample

SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: BREITBURN OPERATING

GTA PROJECT NO: 081619-13

PROJECT NO:

GTA SAMPLE NO: 2

LOCATION: CATTLE ANTRIM

DATE SAMPLED: 8/16/2019

TIME SAMPLED: 10:30 AM

DATE RECEIVED: 8/16/2019

TIME RECEIVED: 3:35 PM

MI

SAMPLED BY: J. BEEHLER/BBOP

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: NW WSC

CHLORIDE EPA 300.0

Concentration

350

LOD

54

Units

mg/Kg (PPM) LV

Analyst

Date

8/27/2019

Sample

SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: BREITBURN OPERATING

GTA PROJECT NO: 081619-13

PROJECT NO:

GTA SAMPLE NO: 3

LOCATION: CATTLE ANTRIM

DATE SAMPLED: 8/16/2019

TIME SAMPLED: 10:45 AM

DATE RECEIVED: 8/16/2019

TIME RECEIVED: 3:35 PM

MI

SAMPLED BY: J. BEEHLER/BBOP

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: W WSC

CHLORIDE EPA 300.0

Concentration

LOD

Units

Analyst

Date

Sample

ND

55

mg/Kg (PPM) LV

8/27/2019

SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: BREITBURN OPERATING

GTA PROJECT NO: 081619-13

PROJECT NO:

GTA SAMPLE NO: 4

LOCATION: CATTLE ANTRIM

DATE SAMPLED: 8/16/2019

TIME SAMPLED: 11:00 AM

DATE RECEIVED: 8/16/2019

TIME RECEIVED: 3:35 PM

MI

SAMPLED BY: J. BEEHLER/BBOP

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: S WSC

CHLORIDE EPA 300.0

Concentration

ND

LOD

53

Units

mg/Kg (PPM) LV

Analyst

Date

8/27/2019

Sample

SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: BREITBURN OPERATING

GTA PROJECT NO: 081619-13

PROJECT NO:

GTA SAMPLE NO: 5

LOCATION: CATTLE ANTRIM

DATE SAMPLED: 8/16/2019

TIME SAMPLED: 11:30 AM

DATE RECEIVED: 8/16/2019

TIME RECEIVED: 3:35 PM

MI

SAMPLED BY: J. BEEHLER/BBOP

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: E WSC

CHLORIDE EPA 300.0

Concentration

250

LOD

57

Units

mg/Kg (PPM) LV

Analyst

Date

8/27/2019

Sample

SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: BREITBURN OPERATING

GTA PROJECT NO: 081619-13

PROJECT NO:

GTA SAMPLE NO: 6

LOCATION: CATTLE ANTRIM

DATE SAMPLED: 8/16/2019

TIME SAMPLED: 11:40 AM

DATE RECEIVED: 8/16/2019

TIME RECEIVED: 3:35 PM

MI

SAMPLED BY: J. BEEHLER/BBOP

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: E GSC

CHLORIDE EPA 300.0

Concentration

190

LOD

51

Units

mg/Kg (PPM) LV

Analyst

Date

8/27/2019

Sample

SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

COMPANY: BREITBURN OPERATING

GTA PROJECT NO: 081619-13

PROJECT NO:

GTA SAMPLE NO: 7

LOCATION: CATTLE ANTRIM

DATE SAMPLED: 8/16/2019

TIME SAMPLED: 11:55 AM

DATE RECEIVED: 8/16/2019

TIME RECEIVED: 3:35 PM

MI

SAMPLED BY: J. BEEHLER/BBOP

SAMPLE ANALYSIS

No: Analysis

SAMPLE ID: E GSC

CHLORIDE EPA 300.0

Concentration

ND

LOD

53

Units

mg/Kg (PPM) LV

Analyst

Date

8/27/2019

Sample

SOIL

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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

**INDEPENDENT TESTING LAB**

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FAX: 231-929-0894

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COMPANY: BREITBURN OPERATING

GTA PROJECT NO: 081619-

NAME:

SAMPLED BY: J. BEEHLER/BBOP

PROJECT NO:

DATE SAMPLED: 8/16/2019

TIME SAMPLED: 10:15 AM

LOCATION: CATTLE ANTRIM

SAMPLE MATRIX: SOIL

DATE RECEIVED: 8/16/2019

TIME RECEIVED: 3:35 PM

MI

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: N GS C	% MOISTURE EPA 3550C	10	0.050	% OF	AS	8/16/2019
SAMPLE ID: NW WSC	% MOISTURE EPA 3550C	11	0.050	% OF	AS	8/16/2019
SAMPLE ID: W WSC	% MOISTURE EPA 3550C	10	0.050	% OF	AS	8/16/2019
SAMPLE ID: S WSC	% MOISTURE EPA 3550C	6.0	0.050	% OF	AS	8/16/2019
SAMPLE ID: E WSC	% MOISTURE EPA 3550C	15	0.050	% OF	AS	8/16/2019
SAMPLE ID: E GSC	% MOISTURE EPA 3550C	5.1	0.050	% OF	AS	8/16/2019
SAMPLE ID: E GSC	% MOISTURE EPA 3550C	7.0	0.050	% OF	AS	8/16/2019

CHAIN OF CUSTODY

PROJECT NUMBER CATTLE Anttrim	SITE NAME/ADDRESS	COMPANY/NAME BREITBURG - MAUERICH
SAMPLED BY J. BEEHLER	COMPANY BREITBURG - MAUERICH	GTA PROJECT # 081619-13

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	① N GSC	8-16-19	10:15	Soil	CHLORIDES
2	② NW WSC	8-16-19	10:30	Soil	CHLORIDES
3	③ W WSC	8-16-19	10:45	Soil	CHLORIDES
4	④ S WSC	8-16-19	11:00	Soil	CHLORIDES
5	⑤ E WSC	8-16-19	11:30	Soil	CHLORIDES
6	⑥ E GSC	8-16-19	11:40	Soil	CHLORIDES
7	⑦ E GSC	8-16-19	11:55	Soil	CHLORIDES

BILL TO: **BREITBURG**

REPORT TO:

J. BEEHLER

RELEASED BY

DATE/TIME

RECEIVED BY

DATE/TIME

J. Beehler

8-16-19 3:35P

L. U

8/16/19 3:35P

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