



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: 10-228
GTA ProjNo: 121719-7

Site Addr: TANGELO

Sampled By: STEVEN HEMSTREET/OMPC
Date Rec: 12/17/2019
Time Rec: 3:15 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-1	12/17/2019	1:00 PM	WATER
2	MW-2	12/17/2019	1:00 PM	WATER
3	MW-3	12/17/2019	1:00 PM	WATER
4	MW-4	12/17/2019	1:00 PM	WATER
5	MW-6	12/17/2019	1:00 PM	WATER
6	MW-7	12/17/2019	1:00 PM	WATER
7	MW-7D	12/17/2019	1:00 PM	WATER
8	MW-9	12/17/2019	1:00 PM	WATER
9	MW-10	12/17/2019	1:00 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
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Traverse City, MI 49686
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Fx: 231-929-0894
SP: 231-590-0291
kirk@gtanalytical.com

COMPANY: BREITBURN OPERATING
 PROJECT NO: 10-228
 LOCATION: TANGELO

GTA PROJECT NO: 121719-7
 GTA SAMPLE NO: 1
 DATE SAMPLED: 12/17/2019
 TIME SAMPLED: 1:00 PM
 DATE RECEIVED: 12/17/2019
 TIME RECEIVED: 3:15 PM

MI
 SAMPLED BY: STEVEN HEMSTREET/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	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	12/19/2019	WATER

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

COMPANY: BREITBURN OPERATING
PROJECT NO: 10-228
LOCATION: TANGELO
MI
SAMPLED BY: STEVEN HEMSTREET/OMPC

GTA PROJECT NO: 121719-7
GTA SAMPLE NO: 2
DATE SAMPLED: 12/17/2019
TIME SAMPLED: 1:00 PM
DATE RECEIVED: 12/17/2019
TIME RECEIVED: 3:15 PM

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-2	CHLORIDE EPA 300.0	250	10	mg/L (PPM)	LV	12/19/2019	WATER

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 10-228
 LOCATION: TANGELO

GTA PROJECT NO: 121719-7
 GTA SAMPLE NO: 3
 DATE SAMPLED: 12/17/2019
 TIME SAMPLED: 1:00 PM
 DATE RECEIVED: 12/17/2019
 TIME RECEIVED: 3:15 PM

MI
 SAMPLED BY: STEVEN HEMSTREET/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-3	CHLORIDE EPA 300.0	80	10	mg/L (PPM)	LV	12/19/2019	WATER

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

COMPANY: BREITBURN OPERATING
PROJECT NO: 10-228
LOCATION: TANGELO
MI
SAMPLED BY: STEVEN HEMSTREET/OMPC

GTA PROJECT NO: 121719-7
GTA SAMPLE NO: 4
DATE SAMPLED: 12/17/2019
TIME SAMPLED: 1:00 PM
DATE RECEIVED: 12/17/2019
TIME RECEIVED: 3:15 PM

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-4	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	12/19/2019	WATER

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

COMPANY: BREITBURN OPERATING
PROJECT NO: 10-228
LOCATION: TANGELO
MI
SAMPLED BY: STEVEN HEMSTREET/OMPC

GTA PROJECT NO: 121719-7
GTA SAMPLE NO: 5
DATE SAMPLED: 12/17/2019
TIME SAMPLED: 1:00 PM
DATE RECEIVED: 12/17/2019
TIME RECEIVED: 3:15 PM

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-6	CHLORIDE EPA 300.0	130	10	mg/L (PPM)	LV	12/19/2019	WATER

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COMPANY: BREITBURN OPERATING
 PROJECT NO: 10-228
 LOCATION: TANGELO
 MI
 SAMPLED BY: STEVEN HEMSTREET/OMPC

GTA PROJECT NO: 121719-7
 GTA SAMPLE NO: 6
 DATE SAMPLED: 12/17/2019
 TIME SAMPLED: 1:00 PM
 DATE RECEIVED: 12/17/2019
 TIME RECEIVED: 3:15 PM

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-7	CHLORIDE EPA 300.0	190	10	mg/L (PPM)	LV	12/19/2019	WATER

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 10-228
 LOCATION: TANGELO

GTA PROJECT NO: 121719-7
 GTA SAMPLE NO: 7
 DATE SAMPLED: 12/17/2019
 TIME SAMPLED: 1:00 PM
 DATE RECEIVED: 12/17/2019
 TIME RECEIVED: 3:15 PM

MI
 SAMPLED BY: STEVEN HEMSTREET/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-7D	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	12/19/2019	WATER

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COMPANY: BREITBURN OPERATING
PROJECT NO: 10-228
LOCATION: TANGELO
MI
SAMPLED BY: STEVEN HEMSTREET/OMPC

GTA PROJECT NO: 121719-7
GTA SAMPLE NO: 8
DATE SAMPLED: 12/17/2019
TIME SAMPLED: 1:00 PM
DATE RECEIVED: 12/17/2019
TIME RECEIVED: 3:15 PM

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-9	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	12/19/2019	WATER

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 10-228
 LOCATION: TANGELO

GTA PROJECT NO: 121719-7
 GTA SAMPLE NO: 9
 DATE SAMPLED: 12/17/2019
 TIME SAMPLED: 1:00 PM
 DATE RECEIVED: 12/17/2019
 TIME RECEIVED: 3:15 PM

MI
 SAMPLED BY: STEVEN HEMSTREET/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-10	CHLORIDE EPA 300.0	66	10	mg/L (PPM)	LV	12/19/2019	WATER

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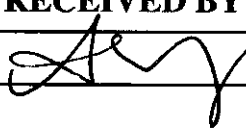
CHAIN OF CUSTODY

PROJECT NUMBER 10-228	SITE NAME/ADDRESS Tangelo	COMPANY/NAME Breitburn
SAMPLED BY Steven Hemstreet	COMPANY Otwell Mawby	GTA PROJECT # 121719-7

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
1	MW-1	12-17-19	13:00	Water	Chlorides
2	MW-2	↓	↓	↓	↓
3	MW-3	↓	↓	↓	↓
4	MW-4	↓	↓	↓	↓
5	MW-6	↓	↓	↓	↓
6	MW-7	↓	↓	↓	↓
7	MW-7D	↓	↓	↓	↓
8	MW-9	↓	↓	↓	↓
9	MW-10	↓	↓	↓	↓

BILL TO: Breitburn	REPORT TO: Otwell Mawby
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RELEASED BY 	DATE/TIME 12-17-19 15:15	RECEIVED BY 	DATE/TIME 12/17/19 15:15
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REQUESTED TAT STANDARD 1 BUSINESS DAY 2 BUSINESS DAYS 3 BUSINESS DAYS