



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: 20-099
GTA ProjNo: 092520-11

Site Addr: BREITBURN B-16

Sampled By: COOPER/OMPC
Date Rec: 9/25/2020
Time Rec: 3:25 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-iD 30-40'	9/23/2020		WATER
2	MW-iD 40-50'	9/23/2020		WATER
3	MW-iD 50-60'	9/23/2020		WATER
4	MW-iD 28-30'	9/23/2020		SOIL
5	MW-iD 26'	9/23/2020		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 Chase

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COMPANY: BREITBURN OPERATING
 PROJECT NO: 20-099
 LOCATION: BREITBURN B-16
 MI
 SAMPLE MATRIX: WATER
 SAMPLE ID: MW-1D 30-40'

GTA PROJECT NO: 092520-11
 GTA SAMPLE NO: 1
 DATE SAMPLED: 9/23/2020
 TIME SAMPLED:
 DATE RECEIVED: 9/25/2020
 TIME RECEIVED: 3:25 PM
 SAMPLED BY: COOPER/OMPC

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	100	1.0	ug/L (PPB)	MR		9/26/2020	EPA 5030B
Toluene	190	1.0					
Ethylbenzene	25	1.0					
Xylene(Total)	85	3.0					
1,2,4-Trimethylbenzene	10	1.0					
1,3,5-Trimethylbenzene	5.0	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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



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COMPANY: BREITBURN OPERATING
PROJECT NO: 20-099
LOCATION: BREITBURN B-16
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-1D 40-50'

GTA PROJECT NO: 092520-11
GTA SAMPLE NO: 2
DATE SAMPLED: 9/23/2020
TIME SAMPLED:
DATE RECEIVED: 9/25/2020
TIME RECEIVED: 3:25 PM
SAMPLED BY: COOPER/OMPC

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	2.3	1.0	ug/L (PPB)	MR		9/27/2020	EPA 5030B
Toluene	4.6	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	3.0	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: BREITBURN OPERATING
PROJECT NO: 20-099
LOCATION: BREITBURN B-16
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-1D 50-60'

GTA PROJECT NO: 092520-11
GTA SAMPLE NO: 3
DATE SAMPLED: 9/23/2020
TIME SAMPLED:
DATE RECEIVED: 9/25/2020
TIME RECEIVED: 3:25 PM
SAMPLED BY: COOPER/OMPC

EPA 8260B VOLATILE ORGANICS

<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>
Benzene	1.5	1.0	ug/L (PPB)	MR		9/27/2020	EPA 5030B
Toluene	2.4	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: BREITBURN OPERATING
 PROJECT NO: 20-099
 LOCATION: BREITBURN B-16
 MI
 SAMPLE MATRIX: SOIL
 SAMPLE ID: MW-1D 28-30'

GTA PROJECT NO: 092520-11
 GTA SAMPLE NO: 4
 DATE SAMPLED: 9/23/2020
 TIME SAMPLED:
 DATE RECEIVED: 9/25/2020
 TIME RECEIVED: 3:25 PM

SAMPLED BY: COOPER/OMPC
 **THIS SAMPLE WAS RECEIVED MEOH PRESERVED.

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	9/23/2020	9/27/2020	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	160	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY: BREITBURN OPERATING
 PROJECT NO: 20-099
 LOCATION: BREITBURN B-16
 MI
 SAMPLE MATRIX: SOIL
 SAMPLE ID: MW-1D 26'

GTA PROJECT NO: 092520-11
 GTA SAMPLE NO: 5
 DATE SAMPLED: 9/23/2020
 TIME SAMPLED:
 DATE RECEIVED: 9/25/2020
 TIME RECEIVED: 3:25 PM

SAMPLED BY: COOPER/OMPC
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EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Complete</u>	<u>Prep Method</u>
Benzene	ND	50	ug/Kg (PPB)	MR	9/23/2020	9/26/2020	EPA 5035A
Toluene	ND	50					
Ethylbenzene	ND	50					
Xylene(Total)	ND	150					
1,2,4-Trimethylbenzene	ND	50					
1,3,5-Trimethylbenzene	ND	50					
Naphthalene	ND	250					
2-Methylnaphthalene	ND	250					

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COMPANY: BREITBURN OPERATING
PROJECT NO: 20-099
LOCATION: BREITBURN B-16
MI
SAMPLED BY: COOPER/OMPC

GTA PROJECT NO: 092520-11
GTA SAMPLE NO: 1
DATE SAMPLED: 9/23/2020
TIME SAMPLED:
DATE RECEIVED: 9/25/2020
TIME RECEIVED: 3:25 PM

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-1D 30-40' CHLORIDE EPA 300.0	1,600	50	mg/L (PPM)	LV	9/30/2020	WATER

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

COMPANY: BREITBURN OPERATING
PROJECT NO: 20-099
LOCATION: BREITBURN B-16
MI
SAMPLED BY: COOPER/OMPC

GTA PROJECT NO: 092520-11
GTA SAMPLE NO: 2
DATE SAMPLED: 9/23/2020
TIME SAMPLED:
DATE RECEIVED: 9/25/2020
TIME RECEIVED: 3:25 PM

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-1D 40-50' CHLORIDE EPA 300.0	240	10	mg/L (PPM)	LV	9/30/2020	WATER

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 20-099
 LOCATION: BREITBURN B-16

GTA PROJECT NO: 092520-11
 GTA SAMPLE NO: 3
 DATE SAMPLED: 9/23/2020
 TIME SAMPLED:
 DATE RECEIVED: 9/25/2020
 TIME RECEIVED: 3:25 PM

SAMPLED BY: MI
 COOPER/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-1D 50-60' CHLORIDE EPA 300.0	350	10	mg/L (PPM)	LV	9/30/2020	WATER

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

COMPANY: BREITBURN OPERATING
 PROJECT NO: 20-099
 LOCATION: BREITBURN B-16
 MI
 SAMPLED BY: COOPER/OMPC

GTA PROJECT NO: 092520-11
 GTA SAMPLE NO: 4
 DATE SAMPLED: 9/23/2020
 TIME SAMPLED:
 DATE RECEIVED: 9/25/2020
 TIME RECEIVED: 3:25 PM

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-1D 28-30' CHLORIDE EPA 300.0	2,600	100	mg/Kg (PPM)	LV	10/1/2020	SOIL

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COMPANY: BREITBURN OPERATING
 PROJECT NO: 20-099
 LOCATION: BREITBURN B-16

GTA PROJECT NO: 092520-11
 GTA SAMPLE NO: 5
 DATE SAMPLED: 9/23/2020
 TIME SAMPLED:
 DATE RECEIVED: 9/25/2020
 TIME RECEIVED: 3:25 PM

MI
 SAMPLED BY: COOPER/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-1D 26' CHLORIDE EPA 300.0	2,500	120	mg/Kg (PPM)	LV	10/1/2020	SOIL

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NAME:
PROJECT NO: 20-099

LOCATION: BREITBURN B-16

MI

GTA PROJECT NO: 092520-
SAMPLED BY: COOPER/OMPC

DATE SAMPLED: 9/23/2020
TIME SAMPLED:

SAMPLE MATRIX: SOIL

DATE RECEIVED: 9/25/2020
TIME RECEIVED: 3:25 PM

MOISTURE

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
	SAMPLE ID: MW-1D 28-30' % MOISTURE EPA 3550C	3.1	0.050	% OF SAMPLE	AS	9/25/2020
	SAMPLE ID: MW-1D 26' % MOISTURE EPA 3550C	18	0.050	% OF SAMPLE	AS	9/25/2020

