



INDEPENDENT TESTING LAB

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: MILLER ENERGY COMPANY II, LLC
Name:
ClientProj: ANNUAL INJECTION FLUID ANALYSIS-
GTA ProjNo: 110922-11

Site Addr: EPA-UIC ANNUAL SAMPLES
Sampled By: DAVE SMITH/MECII
Date Rec: 11/9/2022
Time Rec: 8:20 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	VANDERSYS 1-29	11/8/2022	10:45 AM	WATER
2	ROY J EMBREY B-4	11/8/2022	9:15 AM	WATER
3	FRED E. BEUTLER 2 (Q4)	11/8/2022	10:00 AM	WATER
4	JOHN CUMMINGS 1-33 (Q4)	11/8/2022	11:30 AM	WATER
5	HAROLD CUMMINGS 1-33 (Q4)	11/8/2022	11:40 AM	WATER
6	CONSERVATION ESTATES 5-5 (Q4)	11/8/2022	9:30 AM	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: MILLER ENERGY COMPANY II, LLC
PROJECT NO: ANNUAL INJECTION FLUID ANALYSIS-
LOCATION: EPA-UIC ANNUAL SAMPLES
MI
SAMPLED BY: DAVE SMITH/MECII
SAMPLE ID: VANDERSYS 1-29

GTA PROJECT NO: 110922-11
GTA SAMPLE NO: 1
DATE RECEIVED: 11/9/2022
TIME RECEIVED: 8:20 AM
DATE SAMPLED: 11/8/2022
TIME SAMPLED: 10:45 AM
SAMPLE MATRIX: WATER

SAMPLE ANALYSIS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
ALKALINITY SM 4500CO2D (BICARBONATE)	22	10	mg/L (PPM)	TR	12/4/2022
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	12/4/2022
CHLORIDE EPA 300.0	350,000	2,000	mg/L (PPM)	KC/TR	11/27/2022
pH EPA 150.1 - LAB	5.4	0.10	s.u.	TR	12/4/2022
RESISTIVITY SM 2510A	8.3	-	ohms x cm	AS	12/1/2022
SPECIFIC GRAVITY SM 2710F	1.212	-	-	TR	12/4/2022
SULFATE EPA 300.0	210	50	mg/L (PPM)	KC/TR	11/27/2022
SULFIDE SM 4500S D	ND	1.0	mg/L (PPM)	KC	11/15/2022
TOTAL DISSOLVED SOLIDS EPA 160.1	370,000	5.0	mg/L (PPM)	TR	12/3/2022

ND = NOT DETECTED, RESULT < LOD
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DISS = DISSOLVED



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COMPANY:	MILLER ENERGY COMPANY II, LLC	GTA PROJECT NO:	110922-11
PROJECT NO:	ANNUAL INJECTION FLUID ANALYSIS-	GTA SAMPLE NO:	2
LOCATION:	EPA-UIC ANNUAL SAMPLES	DATE RECEIVED:	11/9/2022
	MI	TIME RECEIVED:	8:20 AM
SAMPLED BY:	DAVE SMITH/MECII	DATE SAMPLED:	11/8/2022
		TIME SAMPLED:	9:15 AM
SAMPLE ID:	ROY J EMBREY B-4	SAMPLE MATRIX:	WATER

SAMPLE ANALYSIS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
ALKALINITY SM 4500CO2D (BICARBONATE)	78	10	mg/L (PPM)	TR	12/4/2022
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	12/4/2022
CHLORIDE EPA 300.0	340,000	2,000	mg/L (PPM)	KC/TR	11/27/2022
pH EPA 150.1 - LAB	5.8	0.10	s.u.	TR	12/4/2022
RESISTIVITY SM 2510A	8.6	-	ohms x cm	AS	12/1/2022
SPECIFIC GRAVITY SM 2710F	1.188	-	-	TR	12/4/2022
SULFATE EPA 300.0	220	50	mg/L (PPM)	KC/TR	11/27/2022
SULFIDE SM 4500S D	ND	1.0	mg/L (PPM)	KC	11/15/2022
TOTAL DISSOLVED SOLIDS EPA 160.1	360,000	5.0	mg/L (PPM)	TR	12/3/2022

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COMPANY: MILLER ENERGY COMPANY II, LLC
 PROJECT NO: ANNUAL INJECTION FLUID ANALYSIS-
 LOCATION: EPA-UIC ANNUAL SAMPLES
 MI
 SAMPLED BY: DAVE SMITH/MECII
 SAMPLE ID: FRED E. BEUTLER 2 (Q4)

GTA PROJECT NO: 110922-11
 GTA SAMPLE NO: 3
 DATE RECEIVED: 11/9/2022
 TIME RECEIVED: 8:20 AM
 DATE SAMPLED: 11/8/2022
 TIME SAMPLED: 10:00 AM
 SAMPLE MATRIX: WATER

SAMPLE ANALYSIS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
ALKALINITY SM 4500CO2D (BICARBONATE)	44	10	mg/L (PPM)	TR	12/4/2022
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	12/4/2022
CHLORIDE EPA 300.0	340,000	2,000	mg/L (PPM)	KC/TR	11/27/2022
pH EPA 150.1 - LAB	5.6	0.10	s.u.	TR	12/4/2022
RESISTIVITY SM 2510A	9.9	-	ohms x cm	AS	12/1/2022
SULFATE EPA 300.0	220	50	mg/L (PPM)	KC/TR	11/27/2022
SULFIDE SM 4500S D	ND	1.0	mg/L (PPM)	KC	11/15/2022
TOTAL DISSOLVED SOLIDS EPA 160.1	400,000	5.0	mg/L (PPM)	TR	12/3/2022

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COMPANY:	MILLER ENERGY COMPANY II, LLC	GTA PROJECT NO:	110922-11
PROJECT NO:	ANNUAL INJECTION FLUID ANALYSIS-	GTA SAMPLE NO:	4
LOCATION:	EPA-UIC ANNUAL SAMPLES	DATE RECEIVED:	11/9/2022
	MI	TIME RECEIVED:	8:20 AM
SAMPLED BY:	DAVE SMITH/MECII	DATE SAMPLED:	11/8/2022
		TIME SAMPLED:	11:30 AM
SAMPLE ID:	JOHN CUMMINGS 1-33 (Q4)	SAMPLE MATRIX:	WATER

SAMPLE ANALYSIS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
ALKALINITY SM 4500CO2D (BICARBONATE)	140	10	mg/L (PPM)	TR	12/4/2022
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	12/4/2022
CHLORIDE EPA 300.0	320,000	2,000	mg/L (PPM)	KC/TR	11/27/2022
pH EPA 150.1 - LAB	6.8	0.10	s.u.	TR	12/4/2022
RESISTIVITY SM 2510A	8.8	-	ohms x cm	AS	12/1/2022
SULFATE EPA 300.0	270	50	mg/L (PPM)	KC/TR	11/27/2022
SULFIDE SM 4500S D	ND	1.0	mg/L (PPM)	KC	11/15/2022
TOTAL DISSOLVED SOLIDS EPA 160.1	360,000	5.0	mg/L (PPM)	TR	12/3/2022

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COMPANY: MILLER ENERGY COMPANY II, LLC
PROJECT NO: ANNUAL INJECTION FLUID ANALYSIS-
LOCATION: EPA-UIC ANNUAL SAMPLES
MI
SAMPLED BY: DAVE SMITH/MECII
SAMPLE ID: HAROLD CUMMINGS 1-33 (Q4)

GTA PROJECT NO: 110922-11
GTA SAMPLE NO: 5
DATE RECEIVED: 11/9/2022
TIME RECEIVED: 8:20 AM
DATE SAMPLED: 11/8/2022
TIME SAMPLED: 11:40 AM
SAMPLE MATRIX: WATER

SAMPLE ANALYSIS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
ALKALINITY SM 4500CO2D (BICARBONATE)	44	10	mg/L (PPM)	TR	12/4/2022
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	12/4/2022
CHLORIDE EPA 300.0	340,000	2,000	mg/L (PPM)	KC/TR	11/27/2022
pH EPA 150.1 - LAB	6.0	0.10	s.u.	TR	12/4/2022
RESISTIVITY SM 2510A	7.9	-	ohms x cm	AS	12/1/2022
SULFATE EPA 300.0	250	50	mg/L (PPM)	KC/TR	11/27/2022
SULFIDE SM 4500S D	ND	1.0	mg/L (PPM)	KC	11/15/2022
TOTAL DISSOLVED SOLIDS EPA 160.1	380,000	5.0	mg/L (PPM)	TR	12/3/2022

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COMPANY: MILLER ENERGY COMPANY II, LLC
 PROJECT NO: ANNUAL INJECTION FLUID ANALYSIS-
 LOCATION: EPA-UIC ANNUAL SAMPLES
 MI
 SAMPLED BY: DAVE SMITH/MECII
 SAMPLE ID: CONSERVATION ESTATES 5-5 (Q4)

GTA PROJECT NO: 110922-11
 GTA SAMPLE NO: 6
 DATE RECEIVED: 11/9/2022
 TIME RECEIVED: 8:20 AM
 DATE SAMPLED: 11/8/2022
 TIME SAMPLED: 9:30 AM
 SAMPLE MATRIX: WATER

SAMPLE ANALYSIS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>
ALKALINITY SM 4500CO2D (BICARBONATE)	33	10	mg/L (PPM)	TR	12/4/2022
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	12/4/2022
CHLORIDE EPA 300.0	340,000	2,000	mg/L (PPM)	KC/TR	11/27/2022
pH EPA 150.1 - LAB	5.6	0.10	s.u.	TR	12/4/2022
RESISTIVITY SM 2510A	8.6	-	ohms x cm	AS	12/1/2022
SULFATE EPA 300.0	230	50	mg/L (PPM)	KC/TR	11/27/2022
SULFIDE SM 4500S D	ND	1.0	mg/L (PPM)	KC	11/15/2022
TOTAL DISSOLVED SOLIDS EPA 160.1	380,000	5.0	mg/L (PPM)	TR	12/3/2022

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