



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: QUARTERLY INJECTION FLUID ANALYSIS -
GTA ProjNo: 062922-11

Site Addr: EPA-UIC ANALYSIS
Sampled By: DAVE SMITH/MECII
Date Rec: 6/29/2022
Time Rec: 10:00 AM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	CONSERVATION ESTATES 5-5 SWD	6/20/2022	10:15 AM	WATER
2	FRED E. BEUTLER 2 SWD	6/20/2022	10:00 AM	WATER
3	HAROLD CUMMINGS 1-33 SWD	6/20/2022	8:30 AM	WATER
4	JOHN CUMMINGS 1-33	6/20/2022	8:15 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

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COMPANY:	MILLER ENERGY COMPANY II, LLC	GTA PROJECT NO:	062922-11
PROJECT NO:	QUARTERLY INJECTION FLUID ANALYSIS -	GTA SAMPLE NO:	1
LOCATION:	EPA-UIC ANALYSIS	DATE RECEIVED:	6/29/2022
		TIME RECEIVED:	10:00 AM
	MI	DATE SAMPLED:	6/20/2022
SAMPLED BY:	DAVE SMITH/MECII	TIME SAMPLED:	10:15 AM
		SAMPLE MATRIX:	WATER
SAMPLE ID:	CONSERVATION ESTATES 5-5 SWD		

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)	55	10	mg/L (PPM)	TR	7/7/2022
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	7/7/2022
CHLORIDE EPA 300.0	270,000	2,0000	mg/L (PPM)	KC/TR	7/21/2022
pH EPA 150.1 - LAB	5.6	0.10	s.u.	TR	7/7/2022
RESISTIVITY SM 2510A	9.3	-	ohms x cm	AS	7/11/2022
SULFATE EPA 300.0	160	50	mg/L (PPM)	KC/TR	7/21/2022
SULFIDE SM 4500S D	ND	1.0	mg/L (PPM)	KC	6/30/2022
TOTAL DISSOLVED SOLIDS EPA 160.1	390,000	5.0	mg/L (PPM)	TR	7/7/2022

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



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COMPANY:	MILLER ENERGY COMPANY II, LLC	GTA PROJECT NO:	062922-11
PROJECT NO:	QUARTERLY INJECTION FLUID ANALYSIS -	GTA SAMPLE NO:	2
LOCATION:	EPA-UIC ANALYSIS	DATE RECEIVED:	6/29/2022
		TIME RECEIVED:	10:00 AM
	MI	DATE SAMPLED:	6/20/2022
SAMPLED BY:	DAVE SMITH/MECII	TIME SAMPLED:	10:00 AM
SAMPLE ID:	FRED E. BEUTLER 2 SWD	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	7/7/2022
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	7/7/2022
CHLORIDE EPA 300.0	240,000	2,0000	mg/L (PPM)	KC/TR	7/21/2022
pH EPA 150.1 - LAB	5.6	0.10	s.u.	TR	7/7/2022
RESISTIVITY SM 2510A	9.5	-	ohms x cm	AS	7/11/2022
SULFATE EPA 300.0	150	50	mg/L (PPM)	KC/TR	7/21/2022
SULFIDE SM 4500S D	ND	1.0	mg/L (PPM)	KC	6/30/2022
TOTAL DISSOLVED SOLIDS EPA 160.1	380,000	5.0	mg/L (PPM)	TR	7/7/2022

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COMPANY:	MILLER ENERGY COMPANY II, LLC	GTA PROJECT NO:	062922-11
PROJECT NO:	QUARTERLY INJECTION FLUID ANALYSIS -	GTA SAMPLE NO:	4
LOCATION:	EPA-UIC ANALYSIS	DATE SAMPLED:	6/20/2022
		TIME SAMPLED:	8:15 AM
		DATE RECEIVED:	6/29/2022
	MI	TIME RECEIVED:	10:00 AM
SAMPLED BY:	DAVE SMITH/MECII	SAMPLE MATRIX:	WATER
SAMPLE ID:	JOHN CUMMINGS 1-33		

METALS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Completed</u>	<u>Digestion Method</u>
BARIUM DISS EPA 6020A	1.7	1.0	mg/L (PPM)	MR	7/21/2022	EPA 3005A
CALCIUM DISS EPA 6020A	14,000	100	mg/L (PPM)	MR	7/21/2022	EPA 3005A
IRON TOTAL EPA 6020A	ND	10	mg/L (PPM)	MR	7/21/2022	EPA 3020A
MAGNESIUM DISS EPA 6020A	3,100	100	mg/L (PPM)	MR	7/21/2022	EPA 3005A
SODIUM DISS EPA 6020A	29,000	100	mg/L (PPM)	MR	7/21/2022	EPA 3005A

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PROJECT NO: QUARTERLY INJECTION FLUID ANALYSIS -
LOCATION: EPA-UIC ANALYSIS
MI
SAMPLED BY: DAVE SMITH/MECII
SAMPLE ID: JOHN CUMMINGS 1-33

GTA PROJECT NO: 062922-11
GTA SAMPLE NO: 4
DATE RECEIVED: 6/29/2022
TIME RECEIVED: 10:00 AM
DATE SAMPLED: 6/20/2022
TIME SAMPLED: 8:15 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)	89	10	mg/L (PPM)	TR	7/7/2022
ALKALINITY SM 4500CO2D (CARBONATE)	ND	10	mg/L (PPM)	TR	7/7/2022
CHLORIDE EPA 300.0	240,000	2,0000	mg/L (PPM)	KC/TR	7/21/2022
pH EPA 150.1 - LAB	6.1	0.10	s.u.	TR	7/7/2022
RESISTIVITY SM 2510A	9.4	-	ohms x cm	AS	7/11/2022
SULFATE EPA 300.0	190	50	mg/L (PPM)	KC/TR	7/21/2022
SULFIDE SM 4500S D	ND	1.0	mg/L (PPM)	KC	6/30/2022
TOTAL DISSOLVED SOLIDS EPA 160.1	380,000	5.0	mg/L (PPM)	TR	7/7/2022

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