

M&G

County: San Juan

Field: 0

State: NM

Location: MARRON 38

Sampled at: 0

Formation: N/A

Date: OCTOBER 8, 2024

Depth: 0

Envision Products**Water Analysis**

	mg/L	meq/L
Sum +		
Potassium	0.0	0.00
Sodium	832.9	36.23
Calcium	6.0	0.30
Magnesium	2.8	0.24
Iron	0.2	0.01
Barium	2.0	0.03
Strontium	0.0	0.00
CATIONS	844.0	36.81

Analysis
Balanced

	mg/L	meq/L
Sum -		
Sulfate	0.0	0.00
Chloride	1,000.0	28.21
Carbonate	0.0	0.00
Bicarbonate	790.0	12.95
Hydroxide	0.0	0.00
	0.0	0.00
	0.0	0.00
ANIONS	1,790.0	41.16

System Parameters

Total Dissolved Solids @180C

2,634 mg/L

Sample Temperature, °F

70 F

Sample pH, standard units

7.23 Units

Dissolved Oxygen

0.0 ppm

Carbon Dioxide

0.0 mg/L

Total Sulfide, (TS)

0.0 mg/L

Sulfide Ion, (S)

0 mg/L

Dissolved Hydrogen Sulfide, (TS-S)

0 mg/L

Specific Gravity

1.0019

Resistivity, measured

0 ohm/m³

Ionic strength

0.039

Sulfate Reducing Bacteria

na

Aerobic Bacteria

na

Manganese Level

1 mg/L

Chemical

N/A ppm

Amine

N/A ppm

Scaling Tendency

CACO ₃			CASO ₄				
Stiff Davis			SOLUBILITY				
Temp F	Index	A index	Temp F	Actual	Calculated	S index	A index
32	-1.27	-79					
50	-1.06	-49	50	0.00	26.78	-26.78	-638
68	-0.85	-30	68	0.00	27.51	-27.51	-656
77	-0.75	-23	86	0.00	28.23	-28.23	-673
86	-0.65	-17	104	0.00	28.57	-28.57	-681
104	-0.44	-9	122	0.00	28.55	-28.55	-680
122	-0.24	-4	140	0.00	27.58	-27.58	-657
140	-0.04	-1	158	0.00	26.57	-26.57	-633
158	0.15	2	176	0.00	25.52	-25.52	-608
176	0.34	3					

BASO₄ SCALE POSSIBLE

NO

Water Analysis Pattern

NOTE: Stiff Davis Index

- indicates undersaturation. Scale formation negative.
- 0 indicates the water is at saturation point. Scale unlikely.
- + indicates supersaturation. A positive scaling condition exists

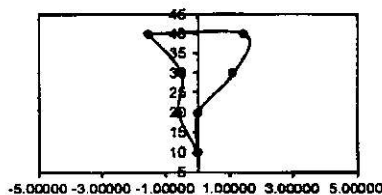
NOTE: Skillman Method Calcium Sulfate 'S Index'

- indicates undersaturation. Scale formation negative.
- 0 indicates the water is at saturation point. Scale unlikely.
- + indicates supersaturation. A positive scaling condition exists

NOTE: A Index; worst possible case. Assumes 100% precipitation.

- Units = pounds of scale produced / 1000 bbls. of water.
- A Index < 0 Scale formation negative.
- A Index > 0 Scale formation positive.

40 30 20 10 10 20 30 40



Approved: Desirae

10/08/24

#

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General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 434332

CONDITIONS

Operator: M & G DRLG CO INC P.O. Box 5940 Farmington, NM 87499	OGRID: 141852
	Action Number: 434332
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	TDS 2634 -	5/1/2025