

**RL BAYLESS**

County: San Juan	Field: 0
State: NM	Location: OXNARD #11
Sampled at: BRADEN HEAD	Formation: N/A
Date: MAY 14, 2024	Depth: 0

## Envision Products Water Analysis

Sum +	mg/L	meq/L		Sum -	mg/L	meq/L
Potassium	0.0	0.00		Sulfate	70.0	1.46
Sodium	285.3	12.41		Chloride	500.0	14.10
Calcium	60.0	2.99		Carbonate	0.0	0.00
Magnesium	28.6	2.35		Bicarbonate	420.0	6.88
Iron	6.4	0.34		Hydroxide	0.0	0.00
Barium	0.0	0.00	<b>Analysis Balanced</b>	-	0.0	0.00
Strontium	0.0	0.00		-	0.0	0.00
<b>CATIONS</b>	<b>380.3</b>	<b>18.09</b>		<b>ANIONS</b>	<b>990.0</b>	<b>22.44</b>

### System Parameters

Total Dissolved Solids @180C	1,370 mg/L
Sample Temperature, °F	70 F
Sample pH, standard units	9.91 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	1.0011
Resistivity, measured	0 ohm/m³
Ionic strength	0.024
Sulfate Reducing Bacteria	na
Aerobic Bacteria	na
Manganese Level	0 mg/L
Chemical	N/A ppm
Amine	N/A ppm

### Scaling Tendency

CACO3			CASO4				
Temp F	Stiff Davis Index	A index	Temp F	SOLUBILITY Actual	SOLUBILITY Calculated	S Index	A Index
32	2.21	52					
50	2.42	52	50	1.46	23.73	-22.28	-531
68	2.63	52	68	1.46	24.54	-23.08	-550
77	2.73	52	86	1.46	25.31	-23.86	-569
86	2.83	52	104	1.46	25.67	-24.21	-577
104	3.03	52	122	1.46	25.62	-24.16	-576
122	3.22	52	140	1.46	24.61	-23.15	-552
140	3.41	52	158	1.46	23.56	-22.10	-527
158	3.59	53	176	1.46	22.46	-21.01	-501
176	3.77	53					

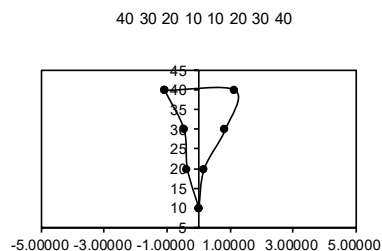
**BASO4 SCALE POSSIBLE** **NO**

### 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.



Approved: Desirae  
05/14/24

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

CONDITIONS

Action 347726

**CONDITIONS**

Operator: ROBERT L BAYLESS PRODUCER LLC 621 17th Street, Suite 2300 Denver, CO 80293	OGRID: 150182
	Action Number: 347726
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

**CONDITIONS**

Created By	Condition	Condition Date
mkuehling	None	7/5/2024