

Permian Treat.

WATER ANALYSIS REPORT

SAMPLE

Oil Co. :
 Lease : CW Trainer
 Well No. : Morse #1 SW/4W Sec 27-T10S-R37E
 Salesman :

Sample Loc. :
 Date Analyzed: 04-January-1996
 Date Sampled :

ANALYSIS

Lea Co, New Mexico

1. pH 7.280
 2. Specific Gravity 60/60 F. 1.028
 3. CaCO₃ Saturation Index 80 F. +0.094
 140 F. +1.064

Dissolved Gases

4. Hydrogen Sulfide Not Present
 5. Carbon Dioxide Not Determined
 6. Dissolved Oxygen Not Determined

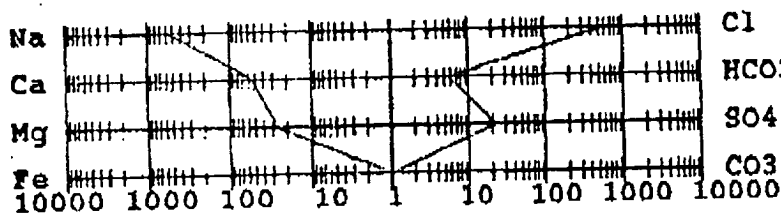
Cations

7. Calcium	{Ca ⁺⁺ }	1,002	/ 20.1 =	49.85
8. Magnesium	{Mg ⁺⁺ }	304	/ 12.2 =	24.92
9. Sodium	{Na ⁺ }	11,869	/ 23.0 =	516.04
10. Barium	{Ba ⁺⁺ }	Not Determined		

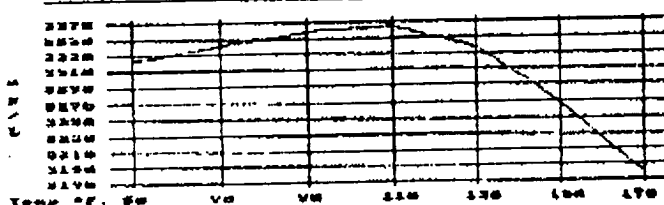
Anions

11. Hydroxyl	{OH ⁻ }	0	/ 17.0 =	0.00
12. Carbonate	{CO ₃ ²⁻ }	0	/ 30.0 =	0.00
13. Bicarbonate	{HCO ₃ ⁻ }	332	/ 61.1 =	5.43
14. Sulfate	{SO ₄ ²⁻ }	1,050	/ 48.8 =	21.52
15. Chloride	{Cl ⁻ }	19,995	/ 35.5 =	563.24
16. Total Dissolved Solids		34,552	/ 18.2 =	0.19
17. Total Iron (Fe)		4		
18. Total Hardness As CaCO ₃		3,753		
19. Resistivity @ 75 F. (Calculated)		0.235 /cm.		

LOGARITHMIC WATER PATTERN



Calcium Sulfate Solubility Profile



COMPOUND	EQ. WT. X	*meq/L =	mg/L.
Ca(HCO ₃) ₂	81.04	5.43	440
CaSO ₄	68.07	21.52	1,465
CaCl ₂	55.50	22.90	1,271
Mg(HCO ₃) ₂	73.17	0.00	0
MgSO ₄	60.19	0.00	0
MgCl ₂	47.62	24.92	1,187
NaHCO ₃	84.00	0.00	0
NaSO ₄	71.03	0.00	0
NaCl	58.46	515.42	30,131

*Milli Equivalents per Liter

This water is mildly corrosive due to the pH observed on analysis.
 The corrosivity is increased by the content of mineral salts in solution.