

Permian Treating Chemicals

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : Coastal Oil & Gas
Lease : Sawyer
Well No. : Marr #3
Salesman :

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

ANALYSIS

1. pH 5.840
2. Specific Gravity 60/60 F. 1.155
3. CaCO₃ Saturation Index @ 80 F. +0.978
@ 140 F. +2.738

Dissolved Gasses

- | | MG/L | EQ. WT. | *MEQ/L |
|---------------------|----------------|---------|--------|
| 4. Hydrogen Sulfide | Present | | |
| 5. Carbon Dioxide | Not Determined | | |
| 6. Dissolved Oxygen | Not Determined | | |

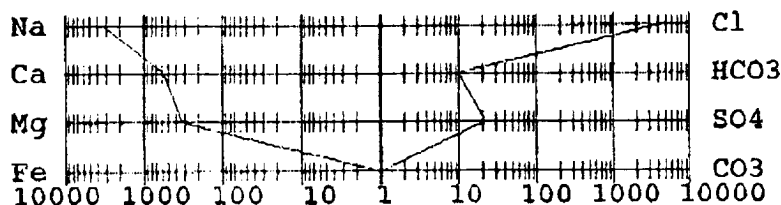
Cations

- | | | | |
|---|----------------|----------|----------|
| 7. Calcium (Ca ⁺⁺) | 11,022 | / 20.1 = | 548.36 |
| 8. Magnesium (Mg ⁺⁺) | 3,890 | / 12.2 = | 318.85 |
| 9. Sodium (Na ⁺) (Calculated) | 71,489 | / 23.0 = | 3,108.22 |
| 10. Barium (Ba ⁺⁺) | Not Determined | | |

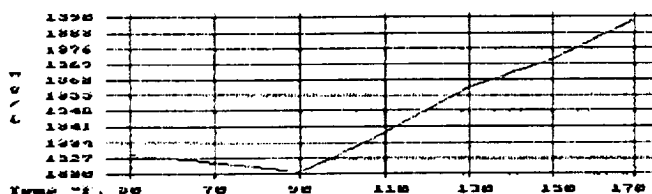
Anions

- | | | | |
|--|------------|----------|----------|
| 11. Hydroxyl (OH ⁻) | 0 | / 17.0 = | 0.00 |
| 12. Carbonate (CO ₃ ²⁻) | 0 | / 30.0 = | 0.00 |
| 13. Bicarbonate (HCO ₃ ⁻) | 596 | / 61.1 = | 9.75 |
| 14. Sulfate (SO ₄ ²⁻) | 1,050 | / 48.8 = | 21.52 |
| 15. Chloride (Cl ⁻) | 139,968 | / 35.5 = | 3,942.76 |
| 16. Total Dissolved Solids | 228,015 | | |
| 17. Total Iron (Fe) | 1 | / 18.2 = | 0.05 |
| 18. Total Hardness As CaCO ₃ | 43,539 | | |
| 19. Resistivity @ 75 F. (Calculated) | 0.001 /cm. | | |

LOGARITHMIC WATER PATTERN *meq/L.



Calcium Sulfate Solubility Profile



PROBABLE MINERAL COMPOSITION COMPOUND EQ. WT. X *meq/L = mg/L.

Cl	Ca(HCO ₃) ₂	81.04	9.75	791
HCO ₃	CaSO ₄	68.07	21.52	1,465
SO ₄	CaCl ₂	55.50	517.09	28,698
CO ₃	Mg(HCO ₃) ₂	73.17	0.00	0
	MgSO ₄	60.19	0.00	0
	MgCl ₂	47.62	318.85	15,184
	NaHCO ₃	84.00	0.00	0
	NaSO ₄	71.03	0.00	0
	NaCl	58.46	3,106.82	181,625

*Milli Equivalents per Liter

This water is somewhat corrosive due to the pH observed on analysis.
The corrosivity is increased by the content of mineral salts, and the presence of H₂S in solution.

EXHIBIT "G"

