

DGE

8705 JV-P Gen No. 5

API No. 30-025-31271

CAPROCK
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WATER ANALYSIS REPORT

SAMPLEOil Co.: PRG-KEN FOR BTA
Lease: GEM
Well No.: #5
Job No.: 9110008Sample Loc.:
Date Sampled: SEPTEMBER 25, 1991
Attention: GERALD PHILLIPS
Analysis No.: 10008-4ANALYSIS

MG/L EQ. WT. *MEQ/L

1. pH 7.000
2. Specific Gravity 60/60 F. 1.092
3. CaCO₃ Saturation Index @ 80 F. +0.753
@ 140 F. +1.633

Dissolved Gasses

4. Hydrogen Sulfide 0
5. Carbon Dioxide 300
6. Dissolved Oxygen Not Determined

Cations

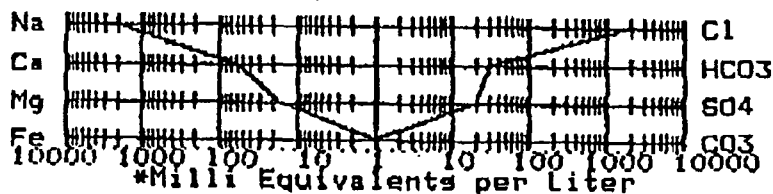
- | | | | |
|----------------------------------|---------------------|----------|----------|
| 7. Calcium (Ca ⁺⁺) | 1,162 | / 20.1 = | 57.81 |
| 8. Magnesium (Mg ⁺⁺) | 219 | / 12.2 = | 17.95 |
| 9. Sodium (Na ⁺) | (Calculated) 51,847 | / 23.0 = | 2,254.22 |
| 10. Barium (Ba ⁺⁺) | Not Determined | | |

Anions

- | | | | |
|--|------------|----------|----------|
| 11. Hydroxyl (OH ⁻) | 0 | / 17.0 = | 0.00 |
| 12. Carbonate (CO ₃ ⁻) | 0 | / 30.0 = | 0.00 |
| 13. Bicarbonate (HCO ₃ ⁻) | 1,892 | / 61.1 = | 30.97 |
| 14. Sulfate (SO ₄ ⁻) | 970 | / 48.8 = | 19.88 |
| 15. Chloride (Cl ⁻) | 80,833 | / 35.5 = | 2,276.99 |
| 16. Total Dissolved Solids | 136,923 | | |
| 17. Total Iron (Fe) | 16 | / 18.2 = | 0.86 |
| 18. Total Hardness As CaCO ₃ | 3,803 | | |
| 19. Resistivity @ 75 F. (Calculated) | 0.052 /cm. | | |

LOGARITHMIC WATER PATTERN

*meq/L.

Calculated Calcium Sulfate solubility in
this brine is 6,292 mg/L. at 90 F.PROBABLE MINERAL COMPOSITION

COMPOUND EQ. WT. X *meq/L = mg/L.

Ca (HCO ₃) ₂	81.04	30.97	2,509
CaSO ₄	68.07	19.88	1,353
CaCl ₂	55.50	6.97	387
Mg (HCO ₃) ₂	73.17	0.00	0
MgSO ₄	60.19	0.00	0
MgCl ₂	47.62	17.95	855
NaHCO ₃	84.00	0.00	0
NaSO ₄	71.03	0.00	0
NaCl	58.46	2,252.07	131,656

Analyst: K. P.

Remarks and Comments:

Oil Conservation Division

Case No. 2-15159Exhibit No. 2