

Produced Water sample

C RE LABORATORIES, Inc.

2001 COMMERCE DRIVE
POST OFFICE BOX 4337
MIDLAND, TEXAS 79704
(915) 694-7781

MURPHY
MAR 23 1983
Midland, Texas

API WATER ANALYSIS REPORT FORM

Company Petrochem Services for Murphy H. Baxter		Sample No. 83C142		Date Sampled	
Field		Legal Description		County or Parish Lea	
Lease or Unit North E.K. Queens		Well 4-2		Depth	
Type of Water (Produced, Supply, etc.)		Sampling Point		Water, B / D	
				Sampled By	

OTHER PROPERTIES

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	90,500	3935.4
Calcium, Ca	3,880	193.6
Magnesium, Mg	3,970	326.8
Barium, Ba		

ANIONS

	mg/l	me/l
Chloride, Cl	156,200	4404.8
Sulfate, SO ₄	2,340	48.8
Carbonate, CO ₃	0	0.0
Bicarbonate, HCO ₃	136	2.2

Total Dissolved Solids (calc.)

257,000

Iron, Fe (total)

8.8

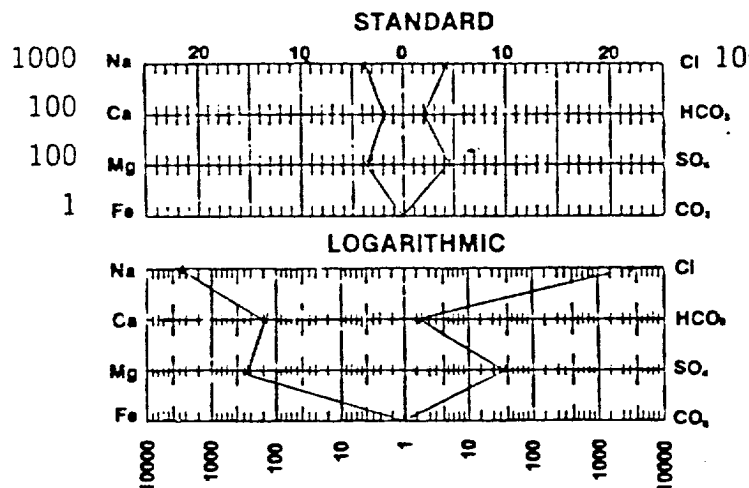
Sulfide, as H₂S

0

REMARKS & RECOMMENDATIONS:

pH	6.25
Specific Gravity, 60/60 F.	1.1473
Resistivity (ohm-meters) 77 °F.	0.044
Total Hardness, CaCO ₃	26,100
Total Alkalinity, CaCO ₃	112
Supersaturation, CaCO ₃	

WATER PATTERNS—me/l



SCALING TENDENCY: (STIFF-DAVIS, CALCULATED)

Calcium Carbonate @ 86 °F = +0.56, indicating scaling

Calcium Sulfate Solubility @ 80 °F = 51.4 me/l, indicating no GYP scale (Marginal)

Copies — D.A. COX

Received 3-10-83
Reported 3-15-83

RECEIVED

MAR 22 1985