

WATER ANALYSIS REPORT

COMPANY Gulf Oil Exploration & Prod. ADDRESS Hobbs, NM DATE: 10/30/81
Windmill Waterwell in
 SOURCE Sec. 31-T18S-R35E DATE SAMPLED 10/29/81 ANALYSIS NO. _____
 Analysis Mg/L *Meq/L

1. pH	<u>7.8</u>			
2. H ₂ S (Qualitative)	<u>Neg.</u>			
3. Specific Gravity	<u>1.000</u>			
4. Dissolved Solids	<u>1072</u>			
5. Suspended Solids	<u>-0-</u>			
6. Phenolphthalein Alkalinity (CaCO ₃)	<u>-0-</u>			
7. Methyl Orange Alkalinity (CaCO ₃)	<u>150</u>			
8. Bicarbonate (HCO ₃)	HCO ₃ <u>183</u>	÷ 61	<u>3</u>	HCO ₃
9. Chlorides (Cl)	Cl <u>543</u>	÷ 35.5	<u>15</u>	Cl
10. Sulfates (SO ₄)	SO ₄ <u>50</u>	÷ 48	<u>1</u>	SO ₄
11. Calcium (Ca)	Ca <u>200</u>	÷ 20	<u>10</u>	Ca
12. Magnesium (Mg)	Mg <u>121</u>	÷ 12.2		Mg
13. Total Hardness (CaCO ₃)	<u>1000</u>			
14. Total Iron (Fe)				
15. Barium (Qualitative)				
16. Strontium				

*Milli equivalents per liter

PROBABLE MINERAL COMPOSITION

10	Ca	←	HCO ₃	3	Compound	Equiv. Wt.	X	Meq/L	=	Mg/L
9	Mg	←	SO ₄	1	Ca (HCO ₃) ₂	81.04		3		243
0	Na	←	Cl	15	Ca SO ₄	68.07		1		68
					Ca Cl ₂	55.50		6		333
					Mg (HCO ₃) ₂	73.17		-0-		-0-
					Mg SO ₄	60.19		-0-		-0-
					Mg Cl ₂	47.62		9		428
					Na HCO ₃	84.00		-0-		-0-
					Na ₂ SO ₄	71.03		0-		-0-
					Na Cl	58.46		-0-		-0-

Saturation Values Distilled Water 20°C
 Ca CO₃ 13 Mg/L
 Ca SO₄ • 2H₂O 2,090 Mg/L
 Mg CO₃ 103 Mg/L

REMARKS cc: Mr. R. Worley

M Hill, G. Knorr

Respectfully submitted
TRETOLITE COMPANY

Ron Matthews