

TRETOLITE DIVISION
369 Marshall Avenue / Saint Louis, Missouri 63119
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WATER ANALYSIS REPORT

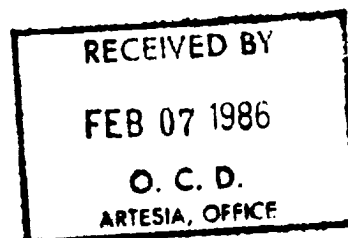
COMPANY Siete Oil and Gas ADDRESS P.O. 2523 Roswell DATE 2/5/86

SOURCE Falcon Federal No. 1 DATE SAMPLED 2/5/86 ANALYSIS NO.
Analysis Mg/L *Meq/L

1. pH 6.75
2. H₂S (Qualitative) 50 ppm
3. Specific Gravity 1.135
4. Dissolved Solids 211,629
5. Suspended Solids --
6. Phenolphthalein Alkalinity (CaCO₃) --
7. Methyl Orange Alkalinity (CaCO₃) 340
8. Bicarbonate (HCO₃) 415
9. Chlorides (Cl) 125,614
10. Sulfates (SO₄) 3750
11. Calcium (Ca) 3200
12. Magnesium (Mg) 972
13. Total Hardness (CaCO₃) 12,000
14. Total Iron (Fe) --
15. Barium (Qualitative)
16. Strontium

*Milli equivalents per liter

HCO ₃	<u>415</u>	÷ 61	<u>7</u>	HCO ₃
Cl	<u>125,614</u>	÷ 35.5	<u>3538</u>	Cl
SO ₄	<u>3750</u>	÷ 48	<u>78</u>	SO ₄
Ca	<u>3200</u>	÷ 20	<u>160</u>	Ca
Mg	<u>972</u>	÷ 12.2	<u>80</u>	Mg



PROBABLE MINERAL COMPOSITION

<u>160</u>	Ca	←	HCO ₃	<u>7</u>
<u>80</u>	Mg	→	SO ₄	<u>78</u>
<u>3383</u>	Na	→	Cl	<u>3538</u>

Saturation Values	Distilled Water 20°C
Ca CO ₃	13 Mg/L
Ca SO ₄ · 2H ₂ O	2,090 Mg/L
Mg CO ₃	103 Mg/L

Compound	Equiv. Wt.	X	Meq/L	=	Mg/L
Ca (HCO ₃) ₂	81.04		<u>7</u>		<u>567</u>
Ca SO ₄	68.07		<u>78</u>		<u>5309</u>
Ca Cl ₂	55.50		<u>75</u>		<u>4163</u>
Mg (HCO ₃) ₂	73.17		<u>0</u>		<u>0</u>
Mg SO ₄	60.19		<u>0</u>		<u>0</u>
Mg Cl ₂	47.62		<u>80</u>		<u>3810</u>
Na HCO ₃	84.00		<u>0</u>		<u>0</u>
Na ₂ SO ₄	71.03		<u>0</u>		<u>0</u>
Na Cl	58.46		<u>3383</u>		<u>197770</u>

REMARKS

Respectfully submitted
TRETOLITE COMPANY

Steve Hollings