

TRETOLITE®

Chemicals and Services

16010 Barker's Point Lane • Houston, Texas 77079
713 558-5200 • Telex: 4620346 • FAX: 713 589-4737

Reply to: P.O. Box FF
Artesia, New Mexico 88210
(505) 746-3588 Phone
(505) 746-3580 Fax

WATER ANALYSIS REPORT

Company : YATES PETROLEUM
Address : ARTESIA
Lease : CONOCO
Well : 15
Sample Pt. : WELLHEAD

Date : 6/23/93
Date Sampled : 6/22/93
Analysis No. : 217

ANALYSIS		mg/L		* meq/L
1. pH	7.5			
2. H2S	200			
3. Specific Gravity	1.010			
4. Total Dissolved Solids		12331.1		
5. Suspended Solids		NR		
6. Dissolved Oxygen		NR		
7. Dissolved CO2		NR		
8. Oil In Water		NR		
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)				
11. Bicarbonate	HCO3	756.0	HCO3	12.4
12. Chloride	Cl	5325.0	Cl	150.2
13. Sulfate	SO4	2250.0	SO4	46.9
14. Calcium	Ca	2880.0	Ca	143.7
15. Magnesium	Mg	439.1	Mg	36.1
16. Sodium (calculated)	Na	681.0	Na	29.6
17. Iron	Fe	NR		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO3)		9000.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter		Compound	Equiv wt	X meq/L	= mg/L
144	*Ca <----- *HCO3	Ca (HCO3) 2	81.0	12.4	1004
36	*Mg <----- *SO4	CaSO4	68.1	46.9	3189
30	*Na <----- *Cl	CaCl2	55.5	84.5	4687
		Mg (HCO3) 2	73.2		
		MgSO4	60.2		
		MgCl2	47.6	36.1	1720
		NaHCO3	84.0		
		Na2SO4	71.0		
		NaCl	58.4	29.6	1731

Saturation Values Dist. Water 20 C

CaCO3	13 mg/L
CaSO4 * 2H2O	2090 mg/L
BaSO4	2.4 mg/L

REMARKS:

----- A.MILLER/FILE

Petrolite Oilfield Chemicals Group

Respectfully submitted,
S.TIGERT