

TRETOLITE DIVISION

 (505) 746-3588
 Fax (505) 746-3580

 Reply to:
 P.O. Box FF
 Artesia, NM
 88211-7531

WATER ANALYSIS REPORT

Company : YATES PETROLEUM
 Address : ARTESIA, NM
 Lease : ANEMONE "ANE" FED.
 Well : #1
 Sample Pt. : WATER TANK

Date : 3/17/95
 Date Sampled : 3/17/95
 Analysis No. : 0066

ANALYSIS		mg/L		* meq/L
-----		----		-----
1. pH	6.0			
2. H ₂ S	0			
3. Specific Gravity	1.040			
4. Total Dissolved Solids		27547.6		
5. Suspended Solids		NR		
6. Dissolved Oxygen		NR		
7. Dissolved CO ₂		NR		
8. Oil In Water		NR		
9. Phenolphthalein Alkalinity (CaCO ₃)				
10. Methyl Orange Alkalinity (CaCO ₃)				
11. Bicarbonate	HCO ₃	122.0	HCO ₃	2.0
12. Chloride	Cl	28116.0	Cl	793.1
13. Sulfate	SO ₄	125.0	SO ₄	2.6
14. Calcium	Ca	840.0	Ca	41.9
15. Magnesium	Mg	21349.8	Mg	1756.5
16. Sodium (calculated)	Na	-23005.2	Na	-1000.7
17. Iron	Fe	NR		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO ₃)		90000.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter		Compound	Equiv wt X meq/L	= mg/L

42 *Ca <----- *HCO ₃	2	Ca(HCO ₃) ₂	81.0	162
/----->		CaSO ₄	68.1	177
1756 *Mg -----> *SO ₄	3	CaCl ₂	55.5	2071
<-----/		Mg(HCO ₃) ₂	73.2	
-1001 *Na -----> *Cl	793	MgSO ₄	60.2	
-----		MgCl ₂	47.6	755.8
Saturation Values Dist. Water 20 C		NaHCO ₃	84.0	35980
CaCO ₃ 13 mg/L		Na ₂ SO ₄	71.0	
CaSO ₄ * 2H ₂ O 2090 mg/L		NaCl	58.4	
BaSO ₄ 2.4 mg/L				

 REMARKS: KCL = 0.25%

Petrolite Oilfield Chemicals Group

 Respectfully submitted,
 A. MILLER