



Petrolite Corporation
422 West Main Street
Artesia, NM 88210-2041

TRETOLITE DIVISION

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WATER ANALYSIS REPORT

Reply to:
P.O. Box 1140
Artesia, NM
88211-7531

Company : YATES PETROLEUM
Address : ARTESIA, NM
Lease : DIAMOND "AKI"
Well : #1
Sample Pt. : WELLHEAD
Date : 03/19/96
Date Sampled : 03/18/96
Analysis No. : 0246

ANALYSIS	mg/L	* meq/L
1. pH	6.9	
2. H2S	210 PPM	
3. Specific Gravity	1.015	
4. Total Dissolved Solids	25377.3	
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 1000.0	HCO3 16.4
12. Chloride	Cl 12780.0	Cl 360.5
13. Sulfate	SO4 2250.0	SO4 46.9
14. Calcium	Ca 1060.0	Ca 52.9
15. Magnesium	Mg 268.1	Mg 22.1
16. Sodium (calculated)	Na 8018.9	Na 348.8
17. Iron	Fe 0.3	
18. Barium	Ba NR	
19. Strontium	Sr NR	
20. Total Hardness (CaCO3)	3751.0	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
53 *Ca <----- *HCO3	Ca(HCO3)2	81.0	1328
/----->	CaSO4	68.1	2484
22 *Mg -----> *SO4	CaCl2	55.5	
<-----/	Mg(HCO3)2	73.2	
349 *Na -----> *Cl	MgSO4	60.2	623
	MgCl2	47.6	557
Saturation Values Dist. Water 20 C	NaHCO3	84.0	
CaCO3 13 mg/L	Na2SO4	71.0	
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	20384
BaSO4 2.4 mg/L			

REMARKS: KCl: 0.0%
----- A. MILLER

Petrolite Oilfield Chemicals Group

Respectfully submitted,
TATE LAIR