

TRETOLITE DIVISION

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 Reply to:
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WATER ANALYSIS REPORT

 Company : POGO PRODUCING
 Address : MIDLAND, TX
 Lease : COVINGTON "A"
 Well : #1
 Sample Pt. : WELLHEAD

 Date : 3/17/94
 Date Sampled : 3/16/94
 Analysis No. : 625

ANALYSIS	mg/L	* meq/L
1. pH	5.6	
2. H2S	NEG	
3. Specific Gravity	1.160	
4. Total Dissolved Solids	206290.6	
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 183.0	HCO3 3.0
12. Chloride	Cl 124605.0	Cl 3515.0
13. Sulfate	SO4 500.0	SO4 10.4
14. Calcium	Ca 1800.0	Ca 89.8
15. Magnesium	Mg -168.8	Mg -13.9
16. Sodium (calculated)	Na 79371.4	Na 3452.4
17. Iron	Fe NR	
18. Barium	Ba NR	
19. Strontium	Sr NR	
20. Total Hardness (CaCO3)	3800.0	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
90 *Ca <----- *HCO3	Ca (HCO3) 2	81.0	3.0 243
----- /----->	CaSO4	68.1	2090
----- /----->	Mg (HCO3) 2	73.2	4240
3452 *Na <----- *Cl	MgSO4	60.2	
----- /----->	MgCl2	47.6	
Saturation Values Dist. Water 20 C	NaHCO3	84.0	
CaCO3 13 mg/L	Na2SO4	71.0	
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	3438.5 200948
BaSO4 2.4 mg/L			

REMARKS:

Petrolite Oilfield Chemicals Group

 Respectfully submitted,
 A. MILLER