

TRETOLITE DMSO

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 WATER ANALYSIS REPORT

Company	: YATES PETROLEUM	Date	: 01/09/95
Address	: ARTESIA, NEW MEXICO	Date Sampled	: 01/09/95
Lease	: ASPDEN	Analysis No.	: 0004
Well	: #1		
Sample Pt.	: WELLHEAD		

ANALYSIS		mg/L		* meq/L
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1. pH	7.2			
2. H2S	300 PPM			
3. Specific Gravity	1.005			
4. Total Dissolved Solids		12820.2		
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	976.0	HCO3	16.0
12. Chloride	Cl	4323.0	Cl	121.9
13. Sulfate	SO4	3125.0	SO4	65.1
14. Calcium	Ca	634.0	Ca	31.6
15. Magnesium	Mg	199.6	Mg	16.4
16. Sodium (calculated)	Na	3562.6	Na	155.0
17. Iron	Fe	NR		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO3)		2405.0		

 PROBABLE MINERAL COMPOSITION

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

32 *Ca <----- *HCO3	16	Ca(HCO3)2	81.0	1297
/----->		CaSO4	68.1	1064
16 *Mg -----> *SO4	65	CaCl2	55.5	
<-----/		Mg(HCO3)2	73.2	
155 *Na -----> *Cl	122	MgSO4	60.2	988
		MgCl2	47.6	
Saturation Values Dist. Water 20 C		NaHCO3	84.0	
CaCO3 13 mg/L		Na2SO4	71.0	2345
CaSO4 * 2H2O 2090 mg/L		NaCl	58.4	7127
BaSO4 2.4 mg/L				

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

Petrolite Oilfield Chemicals Group

 Respectfully submitted,
 STEVE TIGERT