

**TRETOLITE** DIVISION

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

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

**WATER ANALYSIS REPORT**  
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Company	: YATES PETROLEUM	Date	: 03/20/96
Address	: ARTESIA, NM	Date Sampled	: 03/18/96
Lease	: MIMOSA "AHS"	Analysis No.	: 0250
Well	: #5		
Sample Pt.	: WELLHEAD		

ANALYSIS		mg/L		* meq/L
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1. pH		5.7		
2. H2S		3 PPM		
3. Specific Gravity		1.075		
4. Total Dissolved Solids		107001.7		
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	97.0	HCO3	1.6
12. Chloride	Cl	65604.0	Cl	1850.6
13. Sulfate	SO4	250.0	SO4	5.2
14. Calcium	Ca	3300.0	Ca	164.7
15. Magnesium	Mg	2092.4	Mg	172.1
16. Sodium (calculated)	Na	34958.3	Na	1520.6
17. Iron	Fe	700.0		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO3)		16856.0		

**PROBABLE MINERAL COMPOSITION**  
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*milli equivalents per Liter		Compound	Equiv wt	X meq/L	= mg/L
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165	*Ca <----- *HCO3	Ca(HCO3)2	81.0	1.6	129
	/----->	CaSO4	68.1	5.2	354
172	*Mg -----> *SO4	CaCl2	55.5	157.9	8760
	<-----/	Mg(HCO3)2	73.2		
1521	*Na -----> *Cl	MgSO4	60.2		
		MgCl2	47.6	172.1	8195
Saturation Values Dist. Water 20 C		NaHCO3	84.0		
	CaCO3 13 mg/L	Na2SO4	71.0		
	CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	1520.6	88863
	BaSO4 2.4 mg/L				

REMARKS:  
----- ANDY MILLER