

TRETOLITE



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C. C. D.

WATER ANALYSIS REPORT

Company	: YATES PETROLEUM	Date	: 10-26-92
Address	: ARTESIA, NEW MEXICO	Date Sampled	: 10-20-92
Lease	: BOB GUSHWA	Analysis No.	: 2583
Well	: #1 J-21-18-26		
Sample Pt.	: SWD TANK		

ANALYSIS		mg/L		* meq/L
-----		----		-----
1. pH	6.5			
2. H2S	20 PPM			
3. Specific Gravity	1.130			
4. Total Dissolved Solids		191794.9		
5. Suspended Solids				
6. Dissolved Oxygen				
7. Dissolved CO2				
8. Oil In Water				
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)		169.0		
11. Bicarbonate	HCO3	206.2	HCO3	3.4
12. Chloride	Cl	114730.4	Cl	3236.4
13. Sulfate	SO4	3125.0	SO4	65.1
14. Calcium	Ca	4008.0	Ca	200.0
15. Magnesium	Mg	1857.3	Mg	152.8
16. Sodium (calculated)	Na	67867.8	Na	2952.1
17. Iron	Fe	0.2		
18. Barium	Ba	0.0		
19. Strontium	Sr	0.0		
20. Total Hardness (CaCO3)		17655.9		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt	X meq/L	= mg/L
+-----+				
200 *Ca <----- *HCO3	Ca(HCO3)2	81.0	3.4	274
----- /----->	CaSO4	68.1	65.1	4429
153 *Mg -----> *SO4	CaCl2	55.5	131.5	7299
----- <----- /	Mg(HCO3)2	73.2		
2952 *Na -----> *Cl	MgSO4	60.2		
+-----+	MgCl2	47.6	152.8	7274
Saturation Values Dist. Water 20 C	NaHCO3	84.0		
CaCO3 13 mg/L	Na2SO4	71.0		
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	2952.1	172518
BaSO4 2.4 mg/L				

REMARKS: MALLETT - BENNETT - FILE