

WATER ANALYSIS REPORT

Company : YATES PETROLUEM Date : 10/19/95
 Address : ARTESIA, NM Date Sampled : 10/18/95
 Lease : MEDANO B Analysis No. : 002
 Well : BATTERY 16-235-31e
 Sample Pt. : TANK

ANALYSIS		mg/L		* meq/L
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1. pH	5.5			
2. H2S	0 PPM			
3. Specific Gravity	1.205			
4. Total Dissolved Solids		293207.3		
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	12.0	HCO3	0.2
12. Chloride	Cl	182754.0	Cl	5155.3
13. Sulfate	SO4	25.0	SO4	0.5
14. Calcium	Ca	25640.0	Ca	1279.4
15. Magnesium	Mg	4874.7	Mg	401.0
16. Sodium (calculated)	Na	79901.5	Na	3475.5
17. Iron	Fe	NR		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO3)		84100.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter		Compound	Equiv wt	X meq/L	=	mg/L
+	+					
1279	*Ca <----- *HCO3	Ca(HCO3)2	81.0	0.2		16
	/----->	CaSO4	68.1	0.5		35
401	*Mg -----> *SO4	CaCl2	55.5	1278.7		70956
	<-----/	Mg(HCO3)2	73.2			
3475	*Na -----> *Cl	MgSO4	60.2			
		MgCl2	47.6	401.0		19092
		NaHCO3	84.0			
		Na2SO4	71.0			
		NaCl	58.4	3475.5		203108
Saturation Values Dist. Water 20 C						
	CaCO3 13 mg/L					
	CaSO4 * 2H2O 2090 mg/L					
	BaSO4 2.4 mg/L					

REMARKS:

----- ANDY MILLER