

WATER ANALYSIS REPORT

Company : YATES PETROLUEM Date : 10/19/95
 Address : ARTESIA, NM Date Sampled : 10/18/95
 Lease : PADUCA Analysis No. : 009
 Well : BATTERY 23-25s-32e
 Sample Pt. : TANK

ANALYSIS		mg/L	* meq/L
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1.	pH	5.6	
2.	H2S	0	
3.	Specific Gravity	1.170	
4.	Total Dissolved Solids	257038.3	
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 109.0	HCO3 1.8
12.	Chloride	Cl 159750.0	Cl 4506.3
13.	Sulfate	SO4 375.0	SO4 7.8
14.	Calcium	Ca 24480.0	Ca 1221.6
15.	Magnesium	Mg 3829.6	Mg 315.1
16.	Sodium (calculated)	Na 68494.7	Na 2979.3
17.	Iron	Fe NR	
18.	Barium	Ba NR	
19.	Strontium	Sr NR	
20.	Total Hardness (CaCO3)	76900.0	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter			Compound Equiv wt X meq/L = mg/L				
+-----+			+-----+				
1222	*Ca <-----	*HCO3	2	Ca (HCO3) 2	81.0	1.8	145
	/----->			CaSO4	68.1	7.8	531
315	*Mg ----->	*SO4	8	CaCl2	55.5	1212.0	67252
	<-----/			Mg (HCO3) 2	73.2		
2979	*Na ----->	*Cl	4506	MgSO4	60.2		
+-----+			+-----+				
Saturation Values Dist. Water 20 C				MgCl2	47.6	315.1	14998
CaCO3							

REMARKS:

----- ANDY MILLER