

WATER ANALYSIS REPORT

Company : YATES PETROLUEM Date : 10/19/95
 Address : ARTESIA, NM Date Sampled : 10/18/95
 Lease : DAVID ROSS Analysis No. : 007
 Well : SWD
 Sample Pt. : TANK

35-22s-3|e

ANALYSIS		mg/L		* meq/L
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1. pH	5.5			
2. H2S	0 PPM			
3. Specific Gravity	1.185			
4. Total Dissolved Solids		286806.1		
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	85.0	HCO3	1.4
12. Chloride	Cl	178068.0	Cl	5023.1
13. Sulfate	SO4	0.0	SO4	0.0
14. Calcium	Ca	22240.0	Ca	1109.8
15. Magnesium	Mg	4022.4	Mg	330.9
16. Sodium (calculated)	Na	82390.7	Na	3583.8
17. Iron	Fe	NR		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO3)		72100.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter		Compound	Equiv wt	X meq/L	=	mg/L
+	+	+	+	+	+	+
1110	*Ca <----- *HCO3	Ca(HCO3)2	81.0	1.4		113
	/----->	CaSO4	68.1			
331	*Mg -----> *SO4	CaCl2	55.5	1108.4		61504
	<-----/	Mg(HCO3)2	73.2			
3584	*Na -----> *Cl	MgSO4	60.2			
		MgCl2	47.6	330.9		15754
		NaHCO3	84.0			
		Na2SO4	71.0			
		NaCl	58.4	3583.8		209435
Saturation Values Dist. Water 20 C						
	CaCO3					13 mg/L
	CaSO4 * 2H2O					2090 mg/L
	BaSO4					2.4 mg/L

REMARKS:

----- ANDY MILLER

Petrolite Oilfield Chemicals Group

Respectfully submitted,
 SHAWNA MATTHEWS