

WATER ANALYSIS REPORT

Company : SANTA FE
Address : ARTESIA, NM
Lease : 9-7
Well : BATTERY
Sample Pt. : TANK

Date : 10/19/95
Date Sampled : 10/18/95
Analysis No. : 019

9-235-31e

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	259113.9	
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 73.0	HCO3 1.2
12.	Chloride	Cl 161028.0	Cl 4542.4
13.	Sulfate	SO4 25.0	SO4 0.5
14.	Calcium	Ca 21000.0	Ca 1047.9
15.	Magnesium	Mg 3802.9	Mg 312.9
16.	Sodium (calculated)	Na 73185.0	Na 3183.3
17.	Iron	Fe NR	
18.	Barium	Ba NR	
19.	Strontium	Sr NR	
20.	Total Hardness (CaCO3)	68100.0	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter		Compound	Equiv wt X meq/L =		mg/L
+-----+			+-----+		
1048	*Ca <----- *HCO3	1	Ca(HCO3)2	81.0	97
	/----->		CaSO4	68.1	35
313	*Mg -----> *SO4	1	CaCl2	55.5	58053
	<-----/		Mg(HCO3)2	73.2	
3183	*Na -----> *Cl	4542	MgSO4	60.2	
			MgCl2	47.6	14894
Saturation Values Dist. Water 20 C			NaHCO3	84.0	
CaCO3	13 mg/L		Na2SO4	71.0	
CaSO4 * 2H2O	2090 mg/L		NaCl	58.4	186034
BaSO4	2.4 mg/L				

REMARKS:

----- ANDY MILLER