

ATTACHMENT C
WATER ANALYSIS REPORT

Company : YATES PET.
Address : ARTESIA
Lease : MEDANO ~~BA~~ V A
Well : 1
Sample Pt. : WELLHEAD

Date : 10-22-90
Date Sampled : 10-19-90
Analysis No. : 1

ANALYSIS		mg/L		* meq/L	
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1.	pH	7.1			
2.	H2S	POS			
3.	Specific Gravity	1.085			
4.	Total Dissolved Solids	115832.4			
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	207.0	HCO3	3.4
12.	Chloride	Cl	68799.0	Cl	1940.7
13.	Sulfate	SO4	1750.0	SO4	36.4
14.	Calcium	Ca	1480.0	Ca	73.9
15.	Magnesium	Mg	268.2	Mg	22.1
16.	Sodium (calculated)	Na	43328.2	Na	1884.7
17.	Iron	Fe	0.0		
18.	Barium	Ba	0.0		
19.	Strontium	Sr	0.0		
20.	Total Hardness (CaCO3)		4800.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter				Compound	Equiv wt	X meq/L	= mg/L
+-----+				-----			
74	*Ca	<-----	*HCO3	3	Ca (HCO3)2	81.0	275
		/----->			CaSO4	68.1	2480
22	*Mg	----->	*SO4	36	CaCl2	55.5	1888
		<-----/			Mg (HCO3)2	73.2	
1885	*Na	----->	*Cl	1941	MgSO4	60.2	
					MgCl2	47.6	1050
Saturation Values Dist. Water 20 C				NaHCO3	84.0		
	CaCO3		13 mg/L	Na2SO4	71.0		
	CaSO4 * 2H2O		2090 mg/L	NaCl	58.4	1884.7	110139
	BaSO4		2.4 mg/L				

REMARKS:

Petrolite Oilfield Chemicals Group

Respectfully submitted,
L MALLETT