

Unichem International
707 North Leech P.O.Box 1499
Hobbs, New Mexico 88240

Company : ANADARKO
Date : 10-10-1991
Location: TEAS YATES & EXXON FEDERAL - COMPATIBILITY (on 10-10-1991)

Specific Gravity:	Sample 1 1.149
Total Dissolved Solids:	208003
pH:	6.35
IONIC STRENGTH:	4.649

<u>CATIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Calcium	(Ca ⁺²)	1040	20800
Magnesium	(Mg ⁺²)	755	9170
Sodium	(Na ⁺¹)	1950	44800
Iron (total)	(Fe ⁺²)	0.677	18.9
Barium	(Ba ⁺²)	0.049	3.36
Manganese	(Mn ⁺²)	0.172	4.72

<u>ANIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Bicarbonate	(HCO ₃ ⁻¹)	4.54	277
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	18.6	893
Chloride	(Cl ⁻¹)	3720	132000

<u>DISSOLVED GASES</u>		
Carbon Dioxide	(CO ₂)	1.00
Hydrogen Sulfide	(H ₂ S)	11.9
Oxygen	(O ₂)	0

<u>SCALING INDEX (positive value indicates scale)</u>			
<u>Temperature</u>		<u>Calcium</u>	<u>Calcium</u>
		<u>Carbonate</u>	<u>Sulfate</u>
86°F	30°C	1.6	8.6
122°F	50°C	2.5	8.3
140°F	60°C	2.9	8.3
168°F	76°C	3.4	8.0
176°F	80°C	3.6	8.0
200°F	93°C	4.1	8.0

Comments:
COMPATIBILITY = TEAS YATES = 10% & EXXON FEDERAL FEDERAL = 90%