

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : ANADARKO

Date : 10-10-1991

Location: Exxon Federal #1 - Wellhead (on 8/12/91)

	Sample 1
Specific Gravity:	1.157
Total Dissolved Solids:	219389
pH:	6.30
Resistivity:	0.047 ohms @ 76°F
IONIC STRENGTH:	4.952

CATIONS:		me/liter	mg/liter
Calcium	(Ca ⁺²)	1150	23000
Magnesium	(Mg ⁺²)	832	10100
Sodium	(Na ⁺¹)	1980	45600
Iron (total)	(Fe ⁺²)	0.752	21.0
Barium	(Ba ⁺²)	0.051	3.50
Manganese	(Mn ⁺²)	0.190	5.23

ANIONS:			
Bicarbonate	(HCO ₃ ⁻¹)	4.20	256
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	9.89	475
Chloride	(Cl ⁻¹)	3950	140000

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
104°F	40°C	2.5	1.00
122°F	50°C	2.7	1.00
140°F	60°C	3.1	1.00
168°F	76°C	3.6	1.0
176°F	80°C	3.8	1.0

RECEIVED

OCT 25 1991

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