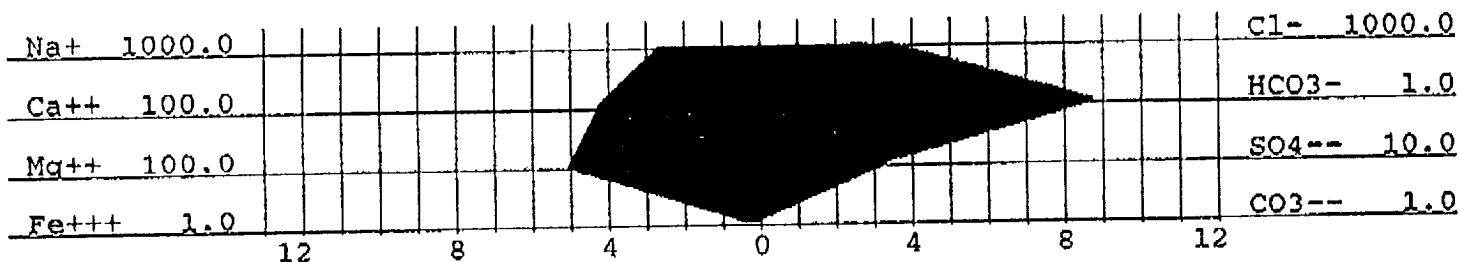


Date of Analysis: MAY 6, 1993
 Company: HEYCO
 State: NEW MEXICO
 Lease: CAVINESS 11 FED. #1
 Oil (bbl/day): N/D
 Type of Water: PRODUCED
 Sample Source: HEATER TREATER
 Representative: STEVE STROUD

Analysis #: 2203
 Company Address: ROSWELL
 Field: N/D
 Well #: # 1
 Water (bbl/day): N/D
 Temp., C: 20
 Date of Sampling: MAY 6, 1993
 Analysis By: SUZANNE WILLIAMS

WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



DISSOLVED SOLIDS

CATIONS	me/l	mg/l
Total Hardness	960.00	
Calcium, (Ca++)	440.00	8821.17
Magnesium, (Mg++)	520.00	6318.73
Iron, (Fe+++)	0.54	10.00
Barium, (Ba++)	N/D	N/D
Sodium, Na+(calc)	2744.77	63129.68
Manganese, (Mn++)	0.00	0.00

ANIONS	me/l	mg/l
Chloride, Cl-	3661.97	129995.38
Sulfate, SO4--	34.34	1650.00
Carbonate, CO3--	0.00	0.00
Bicarbonate, HCO3--	9.00	549.12
Hydroxyl, OH-	0.00	0.00
Sulfide, S--	0.00	0.00
TOTAL SOLIDS (quant.)		210474.00

DISSOLVED GASES

Hydrogen sulfide:	0.00	mg/l
Carbon dioxide :	158.40	mg/l
Oxygen :	N/D	mg/l

PHYSICAL PROPERTIES

pH	: 6.25
Spec Grav.	: 1.115
TDS (calc.)	: 210483.08

SCALE STABILITIES

Temp., C	CaCO3	CaSO4	BaSO4
20.0	.84	2221	0
30.0	N/D	2420	0
40.0	N/D	2832	0
Max entity, (calc.)	2496		0
RESIDUAL HYDROCARBONS:		N/D	

N/D = not determined

@20'C...CALCIUM SULFATE SCALING IS LIKELY.
 @20'C...MODERATE CARBONATE SCALING.

RECEIVED

JUN 16 1993

LIBRARY