

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY: RICE ENGINEERING
LEASE: ARCO STATE Y 3, Sec. 25, T25S, R37E, Lea County, New Mexico
SAMPLE POINT: MONTOYA FORMATION
SAMPLE DATE: 5-27-88
SAMPLE TEMP.:

pH: 6.6
H₂S: +
SPECIFIC GRAVITY: 1.05

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO ₃	1098.00	18.00
Cl	42600.00	1200.00
SO ₄	2500.00	52.08
Ca	6800.00	340.00
Mg	243.00	19.92
Na	20933.80	910.17

IONIC STRENGTH = 1.48
TOTAL HARDNESS = 18000.0 mg/ltr.
TOTAL DISSOLVED SOLIDS = 74141.2 mg/ltr.
TOTAL IRON (Fe) = 1.0 ppm

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO ₃) ₂	18.00	1458.72
CaSO ₄	52.08	3545.31
CaCl ₂	269.92	14980.37
Mg(HCO ₃) ₂	0.00	0.00
MgSO ₄	0.00	0.00
MgCl ₂	19.92	948.50
NaHCO ₃	0.00	0.00
Na ₂ SO ₄	0.00	0.00
NaCl	910.17	53208.27

CALCULATED SCALING TENDENCIES

SCALING INDEX

CaCO₃ @ 80 DEG F. = 0.6
CaCO₃ @ 120 DEG F. = 1.2

SATURATION POINT

CaSO₄ @ 70 DEG F. = 3499.8 MG/LTR.
CaSO₄ @ 110 DEG F. = 2010.5 MG/LTR.

(THIS SAMPLE CONTAINED 3545.3 MG/LTR. CaSO₄)

EXHIBIT "H"