

Dickey**Analytical Laboratory**

1308 S. Midkiff, Ste. 107
Midland, Texas 79703
915-687-2253

NEUBOURNE OIL COMPANY
FEDERAL E-12
LEA COUNTY, NEW MEXICO
DL-2151

JULY 25, 1986
BONE SPRINGS FORMATION
GUARACHO FIELD
SUBMITTED BY: CECHEM CHEMICALS

DISSOLVED SOLIDS

CATIONS	MG/L	ME/L
SODIUM, Na (calc.)	62268	2707
CALCIUM, Ca	2607	130
MAGNESIUM, Mg	1215	100

ANIONS

CHLORIDE, Cl	102240	2883
SULFATE, SO ₄	2160	45
CARBONATE, CO ₃	0	0
BICARBONATE, HCO ₃	561	9

TOTAL DISSOLVED SOLIDS (calc.)
171051

IRON, Fe (total) 21
SULFIDE, as H₂S NONE DETECTED

OTHER PROPERTIES

pH 7.8
SPECIFIC GRAVITY, 60/60 F. 1.116
RESISTIVITY (ohm-meters) 80 F. .06
HARDNESS, mg/L CaCO₃ 11512

REMARKS:

The Stiff-Davis equation indicates that the water has a Stability Index of 1.6 at 80 F. A positive index indicates a tendency toward calcium carbonate deposition.

The calculated solubility of calcium sulfate in this water is 77 me/L at 80 F. Analysis indicates the water contains 45 me/L, therefore calcium sulfate deposition is not indicated.

R.S. DICKEY