STERLING DRILLING CO.

BOX 129

STERLING, KANSAS 67579

Located: NW SW NE, Section 13-24S-17W, Edwards County, Kansas

OWNER: F. G. Holl

ROTARY DRILLING CONTRACTOR: Sterling Drilling Company

COMMENCED: April 6, 1982 COMPLETED: April 12, 1982

TOTAL DEPTH: 4425'

LOG

0 - 110 Surface Soil, Sand

110 - 267 Shale

267 - 1015 Shale, Sand, Red Bed

1015 - 1100 Shale

1100 - 1114 Anhydrite

1114 - 1780 Shale

1780 - 2065 Shale and Lime Str.

2065 - 4425 Lime and Shale

CASING RECORD

Ran 6 joints 8 5/8", 24# new casing. 251.95' pipe set at 264' K.B. Cemented with 210 sacks 60/40 Pozmix with 3% cc. Plug down at 4:30 PM, 4-6-82, by Howco.

Ran 7 joints 4 1/2", 10.5# used casing and 101 joints 4 1/2", 10.5# new OD casing. 4409.25' pipe set at 4418' K.B. 7' off bottom. Cemented with 100 sacks Lite, followed with 125 sacks 50/50 Pozmix, plus regular additives. Plug down at 3:55 PM, 4-12-82, by Howco.

Deviation Surveys: 1 1/4° at 2065° 1° at 4330°