STERLING DRILLING CO.

BOX 129

STERLING, KANSAS 67579

_ _ _ _ JOHNSON #3-5 WELL LOG - - - -Located: C NW SE, Section 5-24S-17W, Edwards County, Kansas

OWNER: F. G. Holl

ROTARY DRILLING CONTRACTOR; Sterling Drilling Company

COMMENCED: November 29, 1984 COMPLETED: December 5, 1984

TOTAL DEPTH: 4474'

LOG

80 Surface Soil and Sand 0 -

80 - 250 Red Bed, Clay, Shale

250 - 354, Shale

354 - 1170 Shale, Sand, Red Bed

1170 - 1190 Anhydrite

1190 - 1903 Shale, Lime Stringers

1903 - 4373 Lime and Shale

4373 - 4383 Kinderhook Shale

4383 - 4474 Lime and Shale

CASING RECORD

Ran 8 joints new 8 5/8", 23# casing. 339.34 pipe set at 251 K.B. Cemented with 235 sacks 60/40 Pozmix plug 3% cc. Plug down at 6:00 PM, 11-29-84, by Howco.

Ran 109 joints 4 1/2", 10.5# casing. 11 joints were used. 4445.58' pipe set at 4455' K.B. Cemented with 100 sacks Lite, 125 sacks 50/50 Pozmix, plus our regular flush ahead and additives. Plugged rathole and water well. Plug down at 10:40 PM, 12-5-84, by Howco.

Deviation Surveys: 3/4° at 2154' 1° at 4338'