

# STERLING DRILLING CO.

BOX 129

STERLING, KANSAS 67579

WELL LOG - - - - - J. H. CROSS #2-20  
Located: NW NW NW, Section 20-24S-17W, Edwards County, Kansas

OWNER: F. G. Holl  
ROTARY DRILLING CONTRACTOR: Sterling Drilling Company

COMMENCED: July 19, 1984  
COMPLETED: July 25, 1984

TOTAL DEPTH: 4560'

| <u>LOG</u>                        | <u>CASING RECORD</u>  |
|-----------------------------------|---|
| 0 - 90 Surface Soil and Sand      | Ran 6 joints new 8 5/8", 23# casing.<br>252.57' pipe set at 265' K.B.   |
| 90 - 267 Shale - Clay             | Cemented with 210 sacks 60/40<br>Pozmix with 3% cc. Plug down at<br>12:15 PM, 7-19-84, by Howco.  |
| 267 - 767 Shale, Sand and Red Bed |   |
| 767 - 1170 Shale - Sand           |   |
| 1170 - 1182 Anhydrite             |   |
| 1182 - 4520 Lime and Shale        |   |
| 4520 - 4560 Viola                 | Ran 112 joints 4 1/2", 10.5# casing.<br>11 joints were used. 4543.05' pipe<br>set at 4552' K.B. 8' off bottom.<br>Cemented with 100 sacks Lite and<br>125 sacks 50/50 Pozmix, plus our<br>regular additives. Plugged rathole.<br>Did not plug water well. Plug down<br>at 9:05 AM, 7-25-84, by Howco. |

Deviation Surveys: 3/4° at 2200'  
1/2° at 4428'