

R O T A R Y D R I L L E R S' L O G

CONTRACTOR Graves Drilling Co., Inc. DRILLING COMMENCED: April 24, 1978
910 Union Center
Wichita, Kansas 67202

OPERATOR Graves Drilling Co., Inc. DRILLING COMPLETED: May 1, 1978
910 Union Center
Wichita, Kansas 67202

CASING RECORD 5 Jts. 216' 8-5/8" used LOCATION: Warwick No. 3
cemented with 200 sacks S/2 NW NE
138 Jts. 4475' 10 1/2" new Section 29-32S-12W
cemented with 75 sacks Barber County, Kansas

0 - 216 Red Bed & Gyp
216 - 548 Red Bed & Shale
548 - 1405 Shale & Lime
1405 - 2823 Lime & Shale
2823 - 3088 Shale
3088 - 3992 Shale & Lime
3992 - 4270 Lime & Shale
4270 - 4369 Shale & Lime
4369 - 4462 Lime
4462 - 4477 Lime & Chert
4477 Rotary Total Depth

I hereby certify the foregoing statements to be true and correct to the best of my knowledge.

GRAVES DRILLING CO., INC.

By Court Graves
Vice - President