

ROTARY DRILLERS' LOG

OPERATOR: Graves Drilling Co., Inc. DRILLING COMMENCED: Dec. 5, 1976  
910 Union Center  
Wichita, Kansas 67202

CONTRACTOR: Graves Drilling Co., Inc. DRILLING COMPLETED: Dec. 13, 1976  
910 Union Center  
Wichita, Kansas 67202

CASING RECORD: 6 Jts. 212' used 8 5/8" LOCATION: Simpson No. 1  
cemented with 200 sacks E/2 NE SW  
Section 4-32S-9W  
108 Jts. 4327 used 5 1/2" Harper County, Kansas  
cemented with 75 sacks

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0 - 600 Red Bed  
600 - 1766 Shale  
1766 - 1990 Shale & shells  
1990 - 2662 Shale  
2662 - 3081 Shale & lime  
3081 - 3235 Shale  
3235 - 3639 Shale & lime  
3639 - 3818 Lime & shale  
3818 - 3995 Shale & lime  
3995 - 4267 Lime & shale  
4267 - 4340 Lime  
4340 Rotary Total Depth

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

GRAVES DRILLING CO., INC.