

ROTARY DRILLERS' LOG

OPERATOR: Graves Drilling Co., Inc. DRILLING COMMENCED: March 4, 1977  
910 Union Center  
Wichita, Kansas 67202

CONTRACTOR: Graves Drilling Co., Inc. DRILLING COMPLETED: March 13, 1977  
910 Union Center  
Wichita, Kansas 67202

CASING RECORD: 5 Jts. 207' of used 8 5/8" LOCATION: McDaniel No. 1  
cemented with 215 sacks C SE SW  
Section 4-32S-12W  
128 Jts. 4255' new 4 1/2" Barber County, Kansas  
cemented with 75 sacks

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0 - 207	Sand & red bed
207 - 1500	Red Bed & shale
1500 - 1599	Shale & lime
1599 - 2290	Lime & shale
2290 - 2440	Shale & lime
2440 - 2625	Shale
2625 - 3407	Shale & lime
3407 - 3573	Shale, lime & sand
3573 - 3712	Sand, shale & lime
3712 - 4142	Lime & shale
4142 - 4235	Lime
4235 - 4257	Lime
4257	Rotary Total Depth

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

GRAVES DRILLING CO., INC.