

*IND*

ROTARY DRILLERS' LOG

OPERATOR: Aylward Drilling Co.  
909 First National Bank Building  
Wichita, Kansas 67202

DRILLING COMMENCED: August 27, 1981

CONTRACTOR: Graves Drilling Co., Inc.  
910 Union Center  
Wichita, Kansas 67202

DRILLING COMPLETED: September 2, 1981

CASING RECORD: 9 Jts. 391' of used 8-5/8"  
cemented with 275 sacks  
  
109 Jts. 4308' of new 4 1/2"  
cemented with 100 sacks

LOCATION: Smith "B" No. 5  
C N/2 NW SE  
Section 11-32S-12W  
Barber County, Kansas

-----

0 - 150 Red bed & sand  
150 - 391 Red bed  
391 - 833 Red bed & shale  
833 - 1583 Lime & shale  
  
1583 - 4265 Shale & lime  
4265 - 4310 Lime  
  
4310 Rotary Total Depth

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

Copy sent to:  
State Corporation Commission  
Kansas Geological Society  
Kansas Geological Survey

GRAVES DRILLING CO., INC.

By *Petty*  
Secretary-Treasurer

STATE OF KANSAS )  
                          ) ss.  
SEDGWICK COUNTY )

Subscribed and sworn to before me, a Notary Public, this 14th day of September, 1981

*Rebecca L. Matthews*  
Rebecca L. Matthews Notary Public

My commission expires: May 17, 1983.