

State Geological Survey
WICHITA BRANCH

ROTARY DRILLERS' LOG

15-007-20442

4-32-12W

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

DRILLING COMMENCED: 10 Sept. 1976

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

DRILLING COMPLETED: 17 Sept. 1976

CASING RECORD: 5 Jts. 214' of used 8-5/8"
cemented with 225 sacks;
136 Jts. 4259' of new 4-1/2"
cemented with 75 sacks

LOCATION: Lorena No. 1
C SW SE
Section 4-32S-12W
Barber County, Kansas

0 - 70	Sand
70 - 214	Red bed
214 - 2040	Shale
2040 - 2185	Shale & shells
2185 - 2910	Shale
2910 - 3205	Shale & shells
3205 - 3340	Shale
3340 - 3530	Shale & lime
3530 - 3890	Lime & shale
3890 - 3989	Shale & lime
3989 - 4130	Lime
4130 - 4188	Lime & shale
4188 - 4258	Lime
4258	Rotary Total Depth

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

GRAVES DRILLING CO., INC.