

DRILLER'S LOG

FARM NAME: BATES # 1
 CONTRACTOR: SHAWVER ARMOUR, INC.
 OWNER: SHAWVER ARMOUR, INC &
 BEARDMORE DRILLING CO.

LOCATION: SW NE SW Sec 31-30-1W
 Sumner County, Kansas

ELEVATION: 1295 KB

COMMENCED: January 5, 1966

COMPLETED: January 17, 1966

CASING RECORD: 424' 8 5/8" w/300 sacks cement - 1" w/200 sx HA5
 Set 5 1/2" @ 3737' w/75 sacks cement

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FORMATION:

TOPS:

Top soil & Shale	250
Shale	400
Anhydrite	440
Shale & Lime	830
Lime & Shale	1055
Shale & Lime	2200
Lime	2230
Lime & Shale	2760
Sand	2865
Lime & Shale	2989
Shale & Lime	3070
Kansas City	3082
Lime	3327
Shale	3380
Lime & Shale	3620
Shale & Lime	3727
Miss. Chert	3730
Core #1	3740
Core #2	3743
Rotary Total Depth	3743

T Stalnaker	2760'
Kansas City	3070'
Mississippian	3727'
Mississippian Dolomite	3736' (-2441)

STATE OF KANSAS }
 SEDGWICK COUNTY } ss

I, James M. Armour, do hereby certify that the above log is a true and correct copy of the above captioned well as shown on the daily drilling reports.

SHAWVER ARMOUR, INC.

BY James M. Armour
 James M. Armour

Subscribed and sworn to before me this
 14th day of February, 1966.
 My commission expires Dec 10, 1967
 SEDGWICK CO., KANSAS

Claire Jones
 Claire Jones, Notary Public

OIL-GAS RATIO EARLY TESTS IN FEB 66
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