

DRILLER'S LOG

FARM NAME: BATES # 2 LOCATION: E/2 NW/4 SW/4 Sec 31-30-1W
 Contractor: SHAWVER ARMOUR, INC. Sumner County, Kansas
 OWNER SHAWVER ARMOUR, INC. & ELEVATION: 1298 KB
 BEARDMORE DRILLING CO.
 COMMENCED: March 11, 1966 COMPLETED: March 24, 1966
 CASING RECORD: 433' 8 5/8ths w/300 sacks HAS
 Set 5 1/2" @ 3797' w/100 sacks cement

FORMATION:

Soil & Clay	10
Shale & Lime	433
Anhydrite	400
Anhydrite & Lime	760
Lime & Shale	1115
Shale & Lime	2185
Lime & Shale	2600
Shale & Lime	2795
Stalnaker Sand	2860
Lime & Shale	2986
Shale & Lime	3074
Lime	3316
Lime & Shale	3376
Shale & Lime	3446
Lime & Shale	3715
Shale & Lime	3718
Mississippi Cher	3723
Core #1	3746
Core # 2	3788
Rotary Total Depth	3798

TOPS:

T: Stalnaker	2795
T. Kansas City	3063
Mississippi Chert	3717
Mississippi Dolomite	3722 (-2424)

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
 28th day of March, 1966.

My commission expires Dec 10, 1967

Claire Jones
 Claire Jones, Notary Public

1ST TESTS THRO SEP SHOW OIL-GAS RATIO
 APP 500 TO 1
 4-5-66
 DATE