

L O G

Company: M. B. Armer & National Cooperative Refinery Association
 Contractor: M. B. Armer (Ideco)
 Drilling Commenced: 4/5/52
 Drilling Completed: 4/23/52
 Elevation: 1896 R.B.
 1893 D.F.
 1891 Gr.

Farm: Long #1
 Location: NW NW NE $\frac{1}{4}$, Sec. 16-26-12W
 Pratt County, Kansas
 Casing Record: 8-5/8" casing at 400'
 with 300 sacks cement.

(figures below indicate bottoms)

Surface clay & sand	100
Sand	180
Redbed	479
Redbed & shells	1215
Shale & shells	1760
Shale, shells & hard sand	1920
Shale & shells	2065
Shale & lime	2425
Broken lime	2500
Lime & shale	2765
Shale & shells	2915
Lime & shale	3150
Lime	3400
Shale & lime	3670
Lime	4054
Shale & lime	4125
Lime & chert	4145
Lime, shale & chert	4180
Lime & chert	4203
Lime, chert & shale	4244
Shale, sand & lime	4345
Lime	4368
Lime & chert	4400
Lime	4420
R.T.D.	4420 D. & A.

FORMATION TOPS (R. B. Meas.)

Heebner	3470
Broken Lime	3646
Lansing - Kansas City	3670
Mississippi	4084
Viola	4161
Simpson	4240
Arbuckle	4345

I hereby certify that this is a true and correct log of the above described well as shown by the drilling reports.

M. B. ARMER

STATE OF KANSAS)
) ss: *[Signature]*
 COUNTY OF SEDGWICK)
 CORPORATION
 DIVISION
 4-26-52
 RIGHTS DIVISION

STATE OF KANSAS)
) ss:
 COUNTY OF SEDGWICK)

Subscribed and sworn to before me, a notary public, in and for said County and State this 25th day of April, 1952.

[Signature]
 Notary Public

My Commission expires Sept. 17, 1955.

PLUGGING
 FILE SEC 16-26-12W
 BOOK PAGE 46 LINE 21