

KANSAS GEOLOGICAL SOCIETY  
508 East Murdock  
Wichita, Kansas

APR 17 1971

33-8-21W  
W/2 SE NW  
15-065-20396  
P 5 BOPD, NW  
Arbuck

DRILLER'S LOG

COMPANY: Landes Exploration Co., 416 Union Center Bldg., Wichita, Ks. 67202  
CONTRACTOR: Hellar Drilling Company, Inc., Wichita, Kansas 67202  
LEASE: #1 Fountain  
LOCATION: W/2 SE NW 33-8S-21W, Graham County, Kansas  
COMMENCED: November 18, 1970  
COMPLETED: December 11, 1970  
CASING: Set 8 5/8" Surface Casing @ 214'/110 sacks cement  
Set 4 1/2" Casing @ 3729'/600 sacks cement

Elev. 2185' RB

0-3	Top Soil
3-42	Clay
42-178	Shale
178-194	Sand Rock
194-1075	Shale
1075-1220	Shale & Sand
1220-1430	Sand
1430-1585	Shale & Shells
1585-1697	Shale & Red Bed
1697-1736	Anhydrite
1736-2000	Shale & Red Bed
2000-2255	Shale & Shells & Lime
2255-2440	Shale & Lime
2440-3395	Lime & Shale
3395-3700	Lime
3700-3727	Arbuckle
3727-3734	Lime
3734	Rotary Total Depth

Log Taps

* Anhydrite	1698
* B. "	1736
Heebner	3345
Jaranta	3369
LKC	3388
BKC	3596
Arbuckle	3724
* Sample Taps	

STATE OF KANSAS )  
                          ) SS  
COUNTY OF SEDGWICK )

I, D. L. Hellar, do hereby certify that the above and foregoing is a true and correct copy of the log of the #1 Fountain, located in W/2 SE NW 33-8S-21W, Graham County, Kansas, as reflected by the files of the Hellar Drilling Company, Inc.

HELLAR DRILLING COMPANY, INC.

By D. L. Hellar  
President - D. L. Hellar