

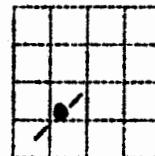
WELL LOG BUREAU—KANSAS GEOLOGICAL SOCIETY
412 Union National Bk. Bldg., Wichita, Kansas

Company - CITIES SERVICE OIL CO.
Farm - Hartshorn No. 1.

SEC. 27 T. 5 R. 20 W
SW NE SW
990'S 990'W Center

Total Depth. 3630' PB 3476'
Comm. 10-9-43 Comp. 10-17-43
Shot or Treated.
Contractor. R.W. Rine Drlg. Co.
Issued. 2-26-44

County. Phillips
KANSAS



CASING:
8 5/8" 158' Cem.
5 1/2" 3630' Cem. (P 2626')

Elevation. _____

Production. Dry

Figures Indicate Bottom of Formations:

clay	0-20	3000 Gals. Acid 3321-23
sand	50	& 3347-58
shale	540	2000 Gals. Acid 3321-23
shale & sand	1185	
sand & shale	1570	
shale	1665	
anhydrite	1700	
shale	2045	
shale & lime	2180	
shale & shells	2365	
shale & lime	2505	
shale & shells	2610	
shale	2760	
shale & lime	2860	
shale & shells	3115	
shale & lime	3215	
lime	3630	
Total Depth.	PB 3476	

Tops: Lansing 3321
Gorham 3597
Arbuckle 3617
Penetration 13

Drld cement to 3614 SIM
Perf. 60 shots 3596-3608
4 gals. fluid per hr
Perf. 12 shots 3608-10
125' wtr 10 min
200' wtr 40 min
850' wtr in 4 3/4 hrs
Set Lane-Wells bridge
plug at 3569 SIM
Perf. 60 shots 3347-58
1/2 blr muddy wtr 1/2 hr
Perf. 12 shots 3321-23
1/3 blr fluid (sm sh
oil) in 1/2 hr, 15 gals.
wtr & 2 gals. oil in
1 hr
Perf. 24 shots 3503-07
no increase
Perf. 24 shots 3302-08
no increase

Plugged back to 3476 SIM
w/ crushed rock & 2sx
cement. Set packer at
3313 & acidized w/3000
Gals. Pmpd 2 1/4 Bbls.
fluid (25% wtr) per hr
Set packers at 3310
& 3343, & acidized 3321-
3323 w/2000 Gals. Pmpd
3 1/2 bbls fluid (80% wtr)
per hr