

Sup.
29-26-2E

SAMPLE LOG

C. L. Carlock:

Toben No. 1

CH $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 29, T.26 S., R.1 E., Sedgwick County, Kansas.

Elevation: 1404' (Derrick Floor) Total Depth 3314' (Derrick floor)

Comm. Drig. Nov. 2, 1947 Comp. Drig. Nov. 14, 1947

Casing: 10 $\frac{1}{2}$ " 133' Cemented with 100 sacks.

Contractor: Shawver-Graham, Inc.: Rig No. 1

Drilling Superintendent: Dwight M. Shawver

Drillers:	A.M.	J. W. Claspitt (to 1905')
		Ralph Schuyler (1905' to T.D.)
	Day	Joe Jacobs
	P.M.	Fred Swettman

Note: The formation tops and other zones mentioned in the following log are corrected to the derrick floor which makes them three feet higher than the driller's measurements and corresponding points of the drilling time record; (due to the fact that the driller's measurements were made from the top of the Kelly drive-bushing which was three feet above the derrick floor).

Formation Tops

Kansas City limestone	2497'	(-1093')
Base Kansas City limestone	2665'	(-1261')
Mississippi ("Chat") limestone	2944'	(-1540')
Chattanooga shale (Base Mississippi "lime")	3220'	(-1826')
Wisner "sand"	3301'	(-1897')
Viola (dolomite)	3308'	(-1899')
Total Depth	3314'	(-1910')

Abbreviations

lime	=	limestone	circ.	=	circulated
gran.	=	granular	dolo.	=	dolomite
tex	=	textured	med.	=	medium
cryst.	=	crystalline	est.	=	estimated
sand	=	sandstone	cem.	=	cemented

Depth

Description

2325-35	Gray and some pale-greenish-gray shale with little gray, fine, crystalline lime
2335-45	Tan, fine, crystalline lime with trace of chert

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- 2345-68 Gray and very dark, partly mottled, fine crys., slightly cherty lime
- 2365-2400 Gray-dark and some pale-green shale with some gray-dark lime; --some pyrite at base
- 2400-2415 Light-gray with little buff, fine crys. lime
- 2415-40 Gray-dark and some greenish-gray shale
- 2440-42 Light-gray, finely crys., partly cherty, oolitic lime
- 244E-97 Dark and gray shale with little pyrite and thin stringers of lime

2497 (-1093) Top of Kansas City limestone.

- 2497-2505 Light-gray, gray and tan, partly mottled, fine crys., slightly cherty lime
- 2505-12 Tan and gray, fine crys. lime
- 251E-16 White and light-gray, fine tex., chalky, soft lime (Circ. $\frac{1}{2}$ hr. at 2517'; no oil)
- 251E-25 Light-gray with little tan, fine crys., slightly porous lime with trace oil stain
- 252E-30 Black and very dark shale
- 2530-35 Light-gray, fine crys. lime with little solid, oolitic lime
- 253E-41 Light-gray and white, fine tex., partly chalky, slightly porous lime with very slight spotted oil stains (Circ. $\frac{1}{2}$ hr. at 2540')
- 2541-60 Light-gray, fine crys. and fine tex. lime
- 2560-65 Black and very dark shale
- 256E-69 Light-gray and buff, fine crys., partly porous, oolitic lime with few light spotted oil stains
- 2569-75 Light-gray and buff, fine crys. lime
- 257E-82 Black and very dark shale
- 258E-84 Light-gray, fine crys. and partly porous, oolitic lime with little spotted oil stain
- 2584-95 Light-gray, fine crys. and fine tex. lime
- 259E-2605 Gray-dark with some pale-green shale
- 260E-10 Light-gray, fine crys. and fine tex. lime
- 2610-20 Gray-dark with some pale-green shale
- 2620-30 Light-gray, fine crys. lime
- 2630-40 Dark and little black shale with some pyrite
- 2640-47 Light-gray, fine crys. and little fine tex. lime
- 2647-52 Light-gray, fine crys. and slightly porous, oolitic lime with very little slight spotted oil stain
- 265E-65 Buff and light-gray, fine granular with little oolitic lime

2665 (-1261) Base Kansas City limestone.

- 266E-85 Black and dark-gray shale
- 268E-272E Dark, gray, some pale-green and little red shale
- 272E-35 Tan and light-gray, fine crystalline lime with some oolites in lower part
- 273E-75 Gray-dark shale with thin beds of lime
- 277E-95 Dark, gray and some black shale with disseminated pyrite

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C. L. Carlock:

Reben No. 1

- 2795-2805 Light-gray and gray, fine crys. lime
- 2805-15 Dark and gray shale
- 2815-35 Black and very dark shale with disseminated pyrite
- 2825-45 Dark-gray and gray, fine crys. lime
- 2845-65 Gray and dark shale
- 2865-75 Dark-gray, gray and tan, fine crys. lime
- 2875-85 Dark-gray shale
- 2885-95 Dark-gray and gray, fine crys. lime
- 2895-2915 Dark and gray shale with some dark-gray and gray lime
- 2915-25 Tan and gray very fine crys. to dense lime
- 2925-30 Dark and gray shale with some tan and gray very fine crys. lime
- 2930-44 Dark and gray with some black and little vari-colored purple, red, yellow and green shale with little gray, dark-gray--amy and pink chert.

2944 (-1540) Top of Mississippi ("Chat") limestone.

- 2944-46 White and light-gray, opaque, fresh chert and little weathered, tripolitic chert and little dolomitic lime; some fragments of porous chert with black "dead" solid oil residue and little brown live oil stain.
- 2946-49 (Circ. 1 hr. for samples at 2949') Mostly white, weathered, partly porous, tripolitic chert with some light-gray, white, fresh, opaque chert and little dolomitic lime;--some fragments of porous trip. chert with little "live" brown oil stain. Fresh wet circulated sample had light crude oil odor.
- 2949-52 Mostly white, tripolitic, partly porous chert with little non-porous, white, opaque chert;-- few porous fragments with dark spotted stain; (less stain and darker oil than above)

At 2952' (Derrick floor) made drill-stem test from 2946-52' (Derrick floor); valve open 20 minutes (10:45-11:05 P.M., Monday, November 10, 1947); recovered 180' of fluid;-- uppermost 20' light brown oil; 80' fresh water and drilling mud and lower 80' somewhat salty water and drilling mud.

Checked Depth: 2952 drill-pipe = 2952' S.L.M.

- 2952-57 Mostly white, tripolitic, partly porous, soft chert;--few fragments with dark "dead" oil stain
- 2957-62 White tripolitic chert and little white, solid, opaque chert;--harder and less porous than above.
- 2962-67 (Circ. 1 hr. at 2967) White, dense, opaque chert with little semi-tripolitic chert;(drilled rapidly but had no observable oil staining and fresh wet samples had no oil odor).

DELMER L. POWERS, WICHITA, KANSAS

G. L. Carlock:

Toban No. 1

- 2967-80 White, finely porous, tripolitic chert and some white, dense, opaque chert
- 2980-92 White, dense, opaque chert with some partly porous, tripolitic chert with little light-gray, fine crys.--fine gran. dolo.
- 2992-3035 White and light-gray, dense, opaque to semi-transparent chert and some tripolitic chert with 25-35% of light-gray, fine gran. dolo.
- 3035-65 White, dense, opaque chert and some tripolitic chert with 40% of light gray, fine to med. crys., gran. dolo. 40 plus or minus per cent.
- 3065-3125 White, dense and little bluish-gray, translucent, dense chert with some white, tripolitic chert with estimated 30% of light-gray, fine, gran. dolo. and some little fine crys. lime
- 3125-55 White, fine crys. dolo. and dolomitic lime 40-65% and chert as above estimated, 30-35%.
- 3155-75 White, fine-medium crys. lime and little fine gran. dolo., partly cherty with some gray-dark shale
- 3175-95 Light-gray and gray, fine to medium crys. lime, slightly cherty lime with some gray-dark shale
- 3195-3210 Light-gray and gray, fine crys. lime.--lower part cherty
- 3210-30 Light-gray and gray, fine crys. lime

3230 (-1826) Top of Chattanooga shale (Base Miss. lime).

- 3230-70 Very dark to black, hard shale with little carbonaceous shale and little pyrite
- 3270-3301 Very dark--black, hard shale with little pale-green shale with disseminated pyrite and few thin stringers of dark, fine crys. lime

3301 (-1897) Top of Wisner "sand".

- 3301-03 Gray, medium grained sand with some tightly cemented "quartzitic" sand; very few fragments with slight trace oil stain

3303 (-1899) Top of Viola (dolomite) limestone.

- 3303-07 Gray, mottled, fine--medium, fairly porous (many small vugs noted) dolo.;--very few fragments with trace of brown oil stain;--no oil odor could be detected in fresh wet samples; (this trace of oil was considered far too small to have any commercial value).
- 3307-14 Gray, mottled, fine to medium crys., hard dolo.

3314 (-1910) (Berrick floor) Total Depth

Drilling completed P.M., Friday,
November 14, 1947

Made Schlumberger electric survey of hole late P.M., Friday,
November 14, 1947.

Delmer L. Powers
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Petroleum Geologist