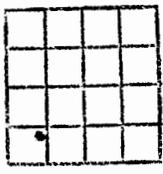


31-31-5E

WELL LOG BUREAU—KANSAS GEOLOGICAL SOCIETY  
508 East Murdock, Wichita, Kansas

Cities Service Oil Co.  
Company- WHITE & ELLIS DRILLING COMPANY  
Farm- Holt "C" No. 2

SEC. 31 T. 31 R. 5E  
NE SW SW  
830' N. & 990' E. of  
SW Corner.  
County Cowley  
KANSAS



Total Depth. 3065'  
Comm. 8-1-57 Comp. 8-14-57

Shot or Treated.  
Contractor. White & Ellis Drilling Company  
Issued. 2-22-58

CASING:  
8 5/8" 210' cem w/100 sx  
5 1/2" 3064' cem w/250 sx

Elevation. 1245' R.T.B.

Production. 84 B.O. - 3 B.W. -  
24 hrs. (after az)

ALL MEASUREMENTS FROM R.T.B. Figures indicate Bottom of Formations.

soil	5	Stalnaker Sand	1885	D.S.T. #4, 2370-2380'
lime	75	Base	1990 N.S.O.	Op 45 Min. Cl. 1 hr.
shale	80	Layton Sand	2302	Op. w/vy. faint bl.
red rock	85	Base	2328 N.S.O.	Dead in 15 sec.
shale & shells	125	Lower Layton Sand	2375	Rec. 2' Drilling Mud.
red rock	130	Base (Poss. Wtr.)	2395 N.S.O.	I.F. 12#; F.F. 12#;
shale & shells	145	Kansas City Lime	2422	B.H.P. 585#; H.H.
lime & flint	170	Base	2566 N.S.O.	1185#.
red rock	185	Pawnee Lime	2654	D.S.T. #5, 2894-2915'
lime	213	Base	2670 N.S.O.	Op 1 hr. Cl 1 hr.
lime & shale	330	Fort Scott Lime	2721	Op w/fair bl incre-
red rock & lime	400	Base	2781 N.S.O.	asing to a stng. bl.
shale & shells	930	Cherokee Group	2781	which con't. throug-
shale w/lime strks.	1100	Cattleman Sand	2894	the test. Rec. 1260'
shale & shells	1130	Base	2909 F.S.F.O.	rich gas in drill
shale & lime strks.	1194	Bartlesville Zone	2960	pipe, 58' hvy oil &
lime & shale	1300	Th.	13 N.S.O.	gas cut drilling mud
lime	1375	Bartlesville (gd.)		no wtr. I.F. 12#; F.F.
shale	1480	Sand.	2973	35#; B.H.P. 1085#; H.H.
lime	1574	Th.	6 N.S.O.	1505#.
shale & lime strks.	1800	Base	2979	D.S.T. #6, 3055-3065'
shale	1893	Mississippi Chert		Op 1 hr. Cl. 1 hr. Op.
sand	1982	(in place)	3027	w/good bl increased
shale & shells	2105	Th.	11 N.S.O.	to a stng. bl after 10
sand & shale	2135	Mississippi Lime	3038	min. which continued
shale	2306	Pen.	27	throug test. Rec.
sand	2330			1140' gas in drill
sandy shale	2380	D.S.T. #1, 2303-2310'		pipe, 5' gd. clean
sand	2395	Closed 45 min. Opened w/good blow		oil (br. grn), 50' heavy
shale	2422	which continued throughout test.		oil & gas cut mud, &
lime	2563	Rec. 300' gas in drill pipe & 30'		230' salt wtr. I.F.
shale & lime strks.	2655	vy. sl. oil & gas cut mud. I.F. 12#;		42#; F.F. 155#; B.H.P.
lime	2705	F.F. 20#; B.H.P. 765#; H.H. 1225#.		1115#; H.H. 1590#.
shale & lime strks.	2730	D.S.T. #2, 2308-2318'		
lime & shale strks.	2790	Closed 1 hr. Opened w/strong blow		Perf. w/18 holes
shale	2880	which continued throughout test.		3057 1/2-3060'.
Core #1	2915	Rec. 360' gas in drill pipe & 75'		Acidized w/1000 gals.
shale	2955	vy heavy oil & gas cut mud, no wtr.		Perf. w/16 holes at
Core #2	2986	I.F. 20#; F.F. 60#; B.H.P. 740#; H.H.		2909'.
shale	3039	1190#.		Acidized at 2909'
lime	3065	D.S.T. #3, 2318-2330'		through perf. w/500
Total Depth		Closed 1 hr. Opened w/vy. weak blow.		gals.
		Dead in 14 min. Rec. 10' drilling		C.C. frac. sand 2911'
		mud, no wtr. I.F. 12#; F.F. 20#; B.H.P.		to bottom 2929'.

STEEL LINE MEASUREMENT:

5184' = 518'	518'	O.K.
1057' = 1057'	1057'	C.K.
1537' = 1537'	1537'	O.K.
1982' = 1982'	1982'	O.K.
2337' = 2341' (4' corr.)	2337'	O.K.
2546' = 2546'	2546'	C.K.
2758' = 2758'	2758'	O.K.
2845' = 2845'	2845'	O.K.

3059-60' One foot of porosity w/show of oil.

Schlumberger electric log & microlog were run.