

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

EMPIRE OIL & REFG. CO.  
 Benton No. 1,

SEC 23 T. 24 R. 13W  
 NE of SW  
 331 1/2' S - 331 1/2' W of Cen.

DEEPENING RECORD

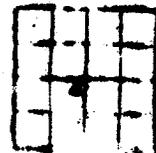
County, Stafford

Total Depth, 4106'  
 Comm. 1-15-36 Comp. 2-13-36  
 Shot or Treated, Acidized 1000 Gals.  
 Contractor, Corbett & Barbour  
 Issued, 10-8-38

CASING.

15 1/2" 291'  
 8 1/2" 3558'

OCT 8 1938



Elevation

Production, 546 Oil  
 No wtr.

Figures Indicate Bottom of Formations.

collar	15	broken lime	2520	Top Kansas City 3535
surface sand	21	shale & shells	2610	Some saturation 3557-3560
clay	60	lime	2628	cored from 3560-3566
sandy clay	80	broken lime	2645	2-17-36
sand	105	shale	2653	cemented back 3632-3620
shale	180	broken lime	2661	cemented with 5 sxs to 3618
sand & red rock	187	lime	2715	
red rock	414	shale & shells	2767	Acidized w/ 1000 gals.
red rock & shells	548	sand soft	2772	2-27-36
red rock	650	shale	2797	600' oil in hole
shale & shells	700	shale & shells	2850	
red rock	725	broken lime	2880	3-3-36 Pumped net 50 oil
lime	755	shale	2907	& 80 wtr 24 hrs.
shale & shells	836	lime	2925	3-4-36 Pumped 42 Bbls.
shale & shells red	860	shale	2950	fluid 30% wtr 24 hrs.
broken lime	895	lime	2970	2-5-36 Pumped 93 Bbls.
shale & shells	1040	broken lime	3014	fluid 8 hrs. 13 Bbls. wtr
lime	1055	lime	3040	3-6-36 Pumped 70 oil 23
red bed&lime shells	1123	shale & shells	3075	wtr in 8 hrs.
shale	1238	sandy lime	3105	
salt	1285	Topeka lime broken	3175	3-9-36 Acidized 2000 Gals.
shale & shells	1305	Topeka lime	3185	
salt & lime shells	1441	broken lime	3240	
lime & salt	1620	lime hard	3250	
lime	1628	lime broken	3318	
salt	1660	sandy lime	3330	
lime & salt	1675	lime	3445	(OVER)
lime	1695	broken lime	3457	
shale & shells	1735	S.L.M. Correction 3457=3445		
broken lime	1800	slate hard	3458	
lime	1860	slate hard, red rock	3470	
shale & shells	1880	shale	3540	
lime	1945	K.C.lime(S.O. 3557-60)	3560	
shale	1957	K.C.lime core	3566	
lime	1970	lime	3576	
shale	1985	S.L.M. Correction 3576=3580		
lime	2025	S.O. 3580		
broken lime	2075	lime	3628	
lime	2120	sand	3632	
broken lime	2181	Total Depth		
shale & shells	2240			
lime	2315	Water filled up 800' 3 hrs.		
shale & broken lime	2368	Pumped 546 oil no free water about 1% B.S.		
	2415			
	2425	Acidized 3-17-36 w/ 5000 gals.		

DEEPENING RECORD

SEC. 23 T. 24 R. 13W

Empire O & R. Co.  
 Benton No. 1.  
 Comm. 11-12-36 Comp. 1-15-37  
 Pot. 960 B.  
 Old T. D. 3632'

NEC SW

SECOND DEEPENING RECORD

Comm. 5-26-37 Comp. 6-9-37  
 Prod. Pot. 1542 B., 60 BW  
 2000 Gals. Acid.

cement	3632
lime	3653
S.O. & G. at 3735	
lime	3764
hole caving at 3764	
lime	3787
shale	3842
lime	3845
hole caving at 3853	
shale	3885
lime	3891
conglomerate	3894
shale	3897
lime	3900
S.O. & G. 3897-3900	
lime	3902
Inc. in oil & gas	
lime	3945
2500' oil in hole 3907	
SLM Corr. 3945-3951	
lime	4038
lime sdy	4045
shale	4078
hole caving 4076	
lime	4081
SLM Corr 4081-4079	
S.O. at 4079	
600' oil in hole in 2 1/2 hrs.	
lime Hole full oil	4093
Total Depth.	

Siliceous lime 4093-4106

Total Depth.

Acidized 1-25-37 with 2000 Gals.

Top Siliceous 4076'  
 Pen. 17'  
 T. D. 4093'

7" csg. 3858' lowered to 3889' set at 4079' SLM  
 Prod. 1-19-37 835 Oil  
 Prod. 1-28-37 Pot. 960 Oil