

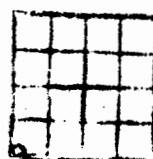
EMPIRE OIL & REFG. CO.
Vaughn No. 1.

SEC. 17 T. 14 R. 14 W
SWc SW
330' N 330' E of SW Cor.

Total Depth. 3247'
Comm. 1-16-37 Comp. 4-7-37
Shot or Treated. 2000 Gals. 3-28-37
Contractor. R.W.Rine Drlg.Co.
Issued. 12-7-46

DEEPENING RECORD

County. Russell



CASING:

20 " 36' Pulled 8 5/8" 3023
15 1/2 " 348' Pulled
12 1/2 " 852'
10 " 2497' Pulled

Elevation. 1861

Production. Pot. 1482 B.
5% wtr 22 hrs. (Down 2 hrs.)

Figures Indicate Bottom of Formations.

clay yellow	30	shale	2290
shale blue	140	lime hole caving	2310
shale lgt	155	shale	2340
shale	215	shale & shells	2370
wtr sand	250	red rock	2375
shale reddish	255	lime breaks	2390
shale grey	280	shale	2405
shale reddish	325	slate & shells	2425
shale	335	slate & shells	2440
shale lgt blue	340	gas 2410-20 Est.	1/2 M.
red rock	348	lime	2475
shale blue	355	slate	2485
sand	370	shale	2510
shale blue	385	lime	2525
slate blue	415	shale	2535
sand	425	lime	2545
slate blue	435	shale	2550
sand	480	lime	2565
red rock	540	shale	2575
lime	545	lime	2580
red rock(hole caving)	830	shale	2615
red rock	835	lime	2625
lime	852	shale	2657
anhydrite	880	lime	2700
red rock	1040	slate	2712
lime brkn	1075	lime	2715
red rock	1130	shale	2720
shale grey	1170	lime	2725
red rock	1175	S.S.O. 2720-25	
salt	1190	lime(hole caving	2865
shale & shells brkn	1220	lime 2725-30)	2960
salt	1527	S.O. 2890-2900	
lime brkn	1560	shale blue	2970
lime hrd	1590	shale	2975
lime	1635	lime	2990
red rock	1640	red rock	2995
lime	1725	shale grey green	3013
lime & red rock	1760	lime	3027
lime	1775	shale green	3030
red rock	1780	lime	3040
lime breaks	1800	SLM Corr. 3040-3031	
shale sdy	1815	lime	3034
lime	1890	oil 3028-31	
shale blue	1895	Total Depth.	
lime	1930		
shale	1935	Top Oswald 3004 SLM	
lime	1960	Pen. 30'	
shale cave	1985	2500' oil in hole in 3 hrs.	
lime(S.G 1990)	2050	before cementing casing	
shale brown	2075		
lime brkn	2115	WATER RECORD	
lime	2125	4 BWPH 215-50	
shale grey	2130	HFW 355-70	
lime	2165	1 BPH 2920-30	
red rock	2185		
brkn lime	2210		
shale blue(hole caving)	2220		
brkn lime	2225		
lime	2255		
shale blue	2275		

DEEPENING RECORD

Cities Service Oil Co.
Comm. 3-26-38
Comp. 3-28-38
Pot. 1482 B. 5% wtr, 22 H.
(Down 2 Hrs.)

Old T.D. 3034
lime 3043
shale green 3044
lime sft 3046
lime 3051
lime w/ shale strks 3052
Total Depth.

Pay 3044-46 (oil)
3050-52 (oil)
Increase in gas
Acidized w/ 8000 Gals.
3-31-38

D.D. to a lower pay in
the Lansing- Kansas City
lime.

DEEPENING RECORD

Comm. 10-18-41
Comp. 11-5-41
L. P. - Pot. 5639 B.
Depth.

lime 3093
Total Depth.

DEEPENING RECORD

Comm. 3-1-46
Comp. 3-13-46
Keyes Drlg.Co-Contr.
Prod. 106 oil, trace wtr
24 hrs
5 1/2" @ 3224' Cem., Pulled
2814' of 5 1/2" csg, leaving
410' cem. liner

lime 3093-3110
shale 3118
lime 3125
shale 3133
lime 3168
shale 3187
lime 3212
lime sdy 3228
sand 3232
3232-3224 SLM
sand 3250
sand hd 3234
(OVER)

Cities Service #1 Vaughn
DEEPENING RECORD (Cont'd)

SW of Section 17-14-14 W

sand sft 3234-35 $\frac{1}{2}$
sand 3247
Total Depth.

Top Quartzite 3224
Penetration 23

Fillup:

400' oil in 2 hrs, 25 min.
600' oil in 5 $\frac{1}{4}$ hrs
700' oil in 9 hrs
800' oil in 12 hrs

Pmpd 59 oil, 1 wtr, 24 hrs
Shot 30 Qts. 3227-42
No acid