

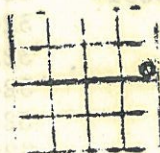
WELL LOG BUREAU - KANSAS GEOLOGICAL SOCIETY.
Union National Bank Bldg, Wichita, Kansas.

EMPIRE OIL AND REFG CO.
Johnson No. 1.

SEC. 2 T. 14 R. 15W.
Sec NE 330' N. 330' W. E. cor.

County. Russell.

Total Depth. 3081'
Comm. 3-28-35 Comp. 5-21-35
Shot or Treated. 1000 gal acid.
Contractor. Twin Drilling Co.
Issued. 9-24-38



Elevation.

CASING.

20" 20' 10" 2415' UR 2546'
15 1/2" 425' 8" 2810 UR 3060'
12 3/8" 925' 65/8" 31' liner set at 3074

Production. 679 B. 22 1/2 hrs
after acid.

Figures Indicate Bottom of Formations.

yellow clay	45	lime	1815	broken lime	2590
shale dark	100	shale	1820	shale and shells	2615
shale blue	150	lime	1825	lime	2645
shale blue	195	broken lime	1850	broken lime	2650
shale light	250	red rock	1860	lime hard	2660
sand	260	lime hard	1870	lime broken	2675
shale light	270	lime	1895	shale	2680
red rock	280	shale blue	1920	shale light	2730
shale blue	285	lime	1965	shale	2735
red rock	340	lime light	1980	lime	2775
shale blue	350	shale light	1985	shale	2785
mud blue	400	red rock	2000	shale blue	2795
shale	420	lime	2005	lime	2875
sand and iron	425	shale blue	2035	shale	2880
shale	430	lime	2055	lime	2910
sand	440	shale	2060	lime white	2945
shale blue	470	lime	2065	lime	3018
lime	475	lime grey	2090	shale	3022
shale blue	555	shale	2095	lime	3026
red rock	560	lime	2105	shale	3030
lime	565	shale	2115	lime	3040
shale blue	585	red rock	2120	shale green	3048
red rock	640	lime	2130	shale brown	3055
shale	665	lime grey	2145	shale green	3069
red rock	923	red rock	2160	lime	3076
lime	925	lime	2220	Corr. T.D. 3076 equals 3081	
red rock	935	lime white	2235	Total Depth.	
lime	975	shale blue	2250		
red rock	1130	lime	2260	Top of Oswald	3074
shale blue	1160	red rock	2280		
slate blue	1220	shale blue caving	2305	10WPHR 250-60	
red rock	1235	lime white	2315	9 BW 425-30	
slate blue	1270	shale	2320	HFV 2515	
shale blue	1320	lime	2385		OVER
salt	1395	shale blue	2395		
shale	1410	lime	2410		
salt	1590	shale	2415		
lime brown	1605	broken lime	2425		
shale brown	1625	Corr. 2425 equals	2415		
sdv lime	1630	lime	2440		
shale light	1645	broken lime	2460		
shale blue	1655	shale	2465		
lime grey	1660	lime	2475		
shale light	1680	red rock	2485		
lime	1690	broken lime	2495		
shale light	1700	lime	2500		
lime	1705	sand	2515		
shale	1740	show oil 2500-10			
lime	1750	sdv shale	2530		
lime light	1770	shale	2545		
red rock	1795	lime	2560		