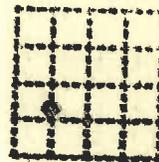


SPENCER & YARNELL
Patzner No. 4-B.

SEC. 31 T. 17 R. 10W
CSL N $\frac{1}{2}$ SW

Total Depth. 3275'
Comm. 11-9-39 Comp. 12-15-39
Shot or Treated:
Contractor. Spencer Drlg.Co.
Issued. 4-13-40

County: Ellsworth



CASING:
12 $\frac{1}{2}$ " 230' UR 570'2"
10 " 1814'
8 $\frac{1}{2}$ " 2115'
7 " 3074'
5 $\frac{1}{2}$ " 3252'

Elevation.

Production. Pot. 33 B.

Figures Indicate Bottom of Formations.

soil & sand	45	lime	2045	shale	3225
mud	60	shale	2060	lime	3231
sand wtr	70	lime	2065	conglomerate	3266
red rock	90	shale	2080	lime	3275
mud HFW	160	lime	2090	Total Depth.	
sand wtr	220	shale	2105		
shale 6BW 280-85	280	shells	2115	1st oil 3268	
sand wtr	285	shale	2120		
shale	320	lime	2130		
red rock	562	shale	2170		
lime anhydrite	565	shale & shells	2195		
lime	580	lime	2200		
red rock	785	shale HFW 2215-25	2210		
shale	860	lime & shale	2225		
red rock	900	shale	2300		
shale	1010	lime	2305		
salt	1275	shale	2330		
shale	1280	shale & shells	2345		
shale & shells	1350	lime	2380		
shale	1355	shale	2390		
lime	1380	lime	2400		
shale	1385	shale	2415		
lime	1395	shale & lime shells	2435		
shale	1410	shale	2480		
shale & lime	1430	lime	2495		
lime	1455	shale	2520		
shale	1460	lime	2550		
lime	1480	shale	2570		
shale	1490	lime	2600		
lime	1525	shale $\frac{1}{2}$ BW 2655-60	2610		
red rock	1530	lime	2675		
lime	1565	shale	2680		
shale	1570	lime	2695		
lime	1585	shale	2700		
shale	1590	lime	2770		
lime $\frac{1}{2}$ BW 1615-20	1595	lime sdy	2810		
3 BW 1665-75		lime	2840		
red rock	1700	shale $\frac{1}{2}$ BW 2850-55	2850		
lime	1720	lime	2860		
red rock	1725	shale	2870		
lime sdy	1755	lime	2880		
lime	1765	shale	2945		
shale	1770	gas & oil 2945			
red rock	1780	lime Kansas City	2960		
lime	1795	shale	2965		
red rock	1800	lime	3016		
lime	1820	shale	3027		
shale	1825	lime	3041		
lime	1830	lime brown, wtr	3050		
red rock	1835	bailing more oil 3062-70			
lime	1840	lime	3100		
red rock	1845	shale	3102		
lime $\frac{2}{3}$ BW 1910-20	1895	lime $\frac{1}{2}$ BWPH	3132		
red rock	1910	shale	3135		
lime	1930	lime	3145		
shale lime shells	1970	shale	3150		
lime	1980	lime	3170		
red rock	1990	shale(sh oil 3205)	3175		
lime	2020	lime	3222		
shale	2030				