

LOG OF KNUTSON WELL NO. 1 - DRILLED BY THE EUREKA OIL CO.

WELL LOCATED IN NE $\frac{1}{4}$  NW $\frac{1}{4}$  OF SEC. 11 TWP. 27 RGE. 5

BUTLER COUNTY, KANSAS.

<u>Top</u>	<u>Bottom</u>	<u>Formation</u>
0	100	Lime
100	330	Lime and shale water at 316'
330	335	Red rock
335	351	Lime
351	357	Shale
357	369	Lime
369	375	Shale
375	377	Lime and shale
377	397	Shale
397	405	Lime
405	445	Shale
445	447	Lime
447	487	Shale
487	600	Lime and shale
600	605	Red rock
605	630	Shale
630	635	Red rock
635	645	Shale
645	655	Lime
655	661	Red rock
661	680	Shale
680	710	Sand and water
710	730	Shale
730	750	Sand and water
750	760	Shale
760	775	Lime
775	803	Shale
803	830	Shale
830	842	Lime
842	847	Shale
847	870	Lime
870	880	Shale. Showing a little water
880	950	Lime
950	1030	Shale
1030	1060	Lime
1060	1100	Shale
1100	1112	Lime
1112	1165	Shale
1165	1181	Lime
1181	1187	Shale
1187	1225	Lime
1225	1245	Shale
1245	1305	Lime and shale
1305	1325	Lime
1325	1340	Shale
1340	1390	Lime and shale
1390	1450	Lime
1450	1465	Shale
1465	1525	Lime
1525	1535	Shale
1535	1550	Lime
1550	1570	Shale
1570	1580	Dry sand
1580	1610	Shale
1610	1680	Showing water at 1665'
1680	1718	Shale
1718	1733	Lime
1733	1763	Shale
1763	1783	Lime
1783	1833	Shale
1833	2000	Lime. Showing water at 1900'.
2000	2145	Shale
2145	2270	Lime. Showing water at 2200'.

Log of Knutson well - Sheet #2.

<u>Top</u>	<u>Bottom</u>	<u>Formation</u>
2270	2276	Shale
2276	2295	Lime
2295	2298	Shale
2298	2304	Lime
2304	2322	Shale
2322	2327	Lime
2327	2335	Sand. Showing water.
2335	2340	Lime
2340	2435	Shale
2435	2444	Lime
2444	2530	Shale
2530	2533	Lime
2533	2622	Shale
2622	2627	Lime
2627	2634	Shale. Showing some water.
2634	2652	Shale
2652	2654	Lime
2654	2685	Shale
2685	2688	Black shale
2688	2698	Sand (Oil). Well filled up 2600' with oil.
2698	2700	Black shale
2700	2703	Broken sand, showing oil, well filled up and flowed at this depth. Well will likely be drilled deeper.

Casing Record:

<u>Size</u>	<u>Amount</u>
15-1/2"	1 Joint
12-1/2"	760'
10"	1760'
8-1/4"	2200'
6-5/8"	2655'
5-3/16"	Liner - 78'

*See log*