16447

H. M. RINER WELL 1 WELL RECORD NW NW

NW/4 36-30 S-2 W, Sumner County, Kansas. 330' from W line, 330' from N line.
Drilling commenced 3-14-25. Drilled by Sawtelle, Braymer and M. P. C. tools.
Drilling completed 12-31-26.

FORMATION	FROM	TO	REMARKS
soil	0	35	
shale	35	55	
slate	55	80	7 bailers water from 65-70'. Ran 20" csg.
"	80	110	@ 80'.
shale	110	210	
slate	210	250	
red rock	250	270	
lime	270	280	
shale	280	290	
lime and sand	290	310	Hole full water
salt	310	315	
shale	315	325	
lime	325	335	
shale	335	340	
lime	340	400	
shale	400	410	
rock salt	410	440	
shale	440	450	
lime	450	455	
lime	455	460	Ran 410' 15½" csg.
shale	460	480	
lime	480	490	
shale	490	510	
lime	510	515	
shale	515	520	
lime	520	525	
shale	525	535	
lime	535	550	
shale	550	560	
lime	560	570	
shale	570	580	
lime	580	600	
shale	600	605	
lime	605	635	
shale	635	650	
lime	650	655	
shale	655	670	
"	670	700	
lime	700	710	
shale	710	720	
lime	720	735	
shale	735	745	
lime	745	760	
shale	760	795	
red rock	795	805	
lime	805	810	
shale	810	835	
lime	835	850	
shale	850	860	
lime	860	900	
shale	900	910	
sand	910	935	1 bailer water per hour
shale	935	940	
lime	940	950	
shale	950	955	
lime	955	970	
shale	970	985	
lime	985	990	
red rock	990	995	
lime	995	1000	

shale	1000	1010	
lime	1010	1030	
sandy lime	1030	1040	4 bailers water per hr. 1035'
red rock	1040	1050	
lime	1050	1075	
shale	1075	1090	
red rock	1090	1095	
lime	1095	1130	Ran 12½" csg. at 1130'
shale	1130	1135	
lime	1135	1145	
shale	1145	1170	
lime	1170	1185	
shale	1185	1200	
lime	1200	1210	
shale	1210	1240	
lime	1240	1250	
shale	1250	1255	
lime	1255	1260	
shale	1260	1270	
lime	1270	1274	
dark shale	1274	1290	Hole caving
lime	1290	1295	
shale	1295	1310	
lime	1310	1320	
shale	1320	1325	
lime	1325	1335	
sand	1335	1365	Hole full water
shale	1365	1390	12½" csg. underreamed to 1365' -
lime	1390	1400	hole bailed dry
shale	1400	1460	
sandy shale	1460	1490	
shale	1490	1520	
shale	1520	1560	Hole caving; ran 1550' 10" csg.
"	1560	1570	
lime	1570	1575	
shale	1575	1640	
"	1640	1665	
lime	1665	1670	
shale	1670	1735	
"	1735	1770	
lime	1770	1780	
shale	1780	1785	
lime	1785	1790	
shale	1790	1800	
lime	1800	1815	
shale	1815	1830	
lime	1830	1835	
shale	1835	1860	
lime	1860	1865	
shale	1865	1875	
lime	1875	1895	
shale	1895	1920	
lime	1920	1925	
shale	1925	1950	
sand	1950	1960	8 M cu. ft. gas estimated
lime	1960	2000	
blue shale	2000	2010	
lime	2010	2020	
shale	2020	2022	
sandy lime	2022	2040	2 or 3 M cu. ft. gas estimated 2022'
shale	2040	2060	
lime	2060	2070	
shale	2070	2075	10" csg. underreamed to 2069' & gas
lime	2075	2100	mudded off with good heavy mud. Hole
shale	2100	2105	is practically filled ful of mud be-
sandy lime	2105	2125	tween 12½ and 10" csg. to hold gas in.
lime	2125	2170	
shale	2170	2175	
lime	2175	2210	Hole full water at 2190'

lime	2210	2225	
shale	2225	2260	
lime	2260	2285	Wet hole from water at 2190
black shale	2285	2295	
lime	2295	2300	
blue shale	2300	2335	
lime	2335	2345	
shale	2345	2385	
sandy shale	2385	2400	
blue shale	2400	2435	
lime	2435	2450	Running 8¼ casing
shale	2450	2490	
lime	2490	2500	
blue shale	2500	2505	
sandy shale	2505	2525	
lime	2525	2530	
sand	2530	2540	5 bailers water
sandy shale	2540	2680	
shale	2680	2780	
lime	2780	2790	
sandy lime	2790	2865	
water sand	2865	2870	Getting ready to underream 8¼ casing
lime	2870	2880	
sand	2880	2885	8¼ casing underreamed to 2885
shale	2885	2890	
sandy lime	2890	2905	
shale	2905	2920	8¼ casing is now run to depth of 2920 alongside three strings of tools lost in hole
corrected measurement	2914		
black shale	2914	2923	
" lime	2923	2927	
" "	2927	2931	
" "	2931	2939	Run 6 5/8 casing; csg. measures 2921' in hole. Tried to pick 6 5/8 csg. up and pulled it in two at top of hole
corrected measurement	2921		
sandy lime	2921	2938	
sandy "	2938	2940	
blue shale	2940	2945	
lime, black & hard	2945	2958	
" hard	2958	2960	
blue shale, firm	2960	2975	
sand, dark	2975	2979	2000' water in hole @ 2977'
" "	2979	2983	
black lime, hard	2983	3008	
shale, blue	3008	3010	
lime, hard	3010	3015	
shale, blue	3015	3018	
sandy shale, dark	3018	3029	
blue shale	3029	3053	
broken lime	3053	3056	
black shale	3056	3061	
" lime	3061	3062	
broken sand and shale	3062	3073	
lime, black, soft	3073	3089	
blue shale, soft	3089	3093	
sand & shale	3093	3096	Acid test shows formation from 3064-69 to be pure black lime instead of broken
shale, blue	3096	3103	
lime, gray, dark, hard	3103	3108	
" white, "	3108	3124	
" & sand, white,"	3124	3129	
sand, white, hard	3129	3131	
" dark, "	3131	3149	
water sand, white, soft	3149	3154	
white lime, soft	3154	3157	
lime, dark, hard	3157	3172	
" " " , gray, coarse	3172	3174	
lime & sand, light, hard	3174	3177	
white sand, hard	3177	3190	
blue lime, hard	3190	3196	
lime and sand, solid	3196	3200	
white lime, hard	3200	3205	
brown " " dark lime & sand	3210	3226	
Brown lime, hard	3205	3210	
dark lime & sand, hard	3210	3226	

shale, black, soft	3226	3228	
gray lime, firm	3228	3246	
white " hard	3246	3263	
lime, white	3263	3265	
" gray, soft	3265	3276	
" brown, hard	3276	3290	
gray lime, dark, hard	3290	3296	
" " "	3296	3300	
shale & light shell, firm	3300	3308	
gray shale & hard solid shell	3308	3312	
lime shells & breaks, gray, solid	3312	3320	Ran 3305' 5 3/16 csg. Corrected measurement 3310'
sand, dark, hard	3310	3314	
" " "	3314	3317	
lime, gray, hard	3317	3327	
shale, black, soft	3327	3340	
" blue, soft	3340	3356	
lime shell, white	3356	3358	
shale, light	3358	3380	
shale, light, soft	3380	3387	
lime, white, hard	3387	3407	
shale, black, soft	3407	3412	
lime, gray, hard	3412	3423	
shale, blue, soft	3423	3428	
lime, gray, hard	3428	3433	
" " "	3433	3484	
shale, black, soft	3484	3492	
lime, gray, hard	3492	3504	
" white, "	3504	3506	
shale, blue, soft	3506	3532	
lime, white, hard	3532	3536	
shale, soft	3536	3550	
lime shell, very hard	3550	3553	
shale, dark, soft	3553	3565	
lime, brown, hard	3565	3570	
shale, black, soft	3570	3580	
lime, gray, very hard	3580	3585	
shale, black, soft	3585	3609	
" white, "	3609	3637	hole caves some all the time
lime, white, firm	3637	3640	
shale, gray, soft	3640	3648	
lime shell, gray, hard	3648	3651	
red rock, soft	3651	3655	
lime, dark gray, very hard	3655	3658	
shale, gray, soft	3658	3694	hole caving
lime shell	3694	3696	
lime, white, soft	3696	3698	
shale, gray, soft	3698	3705	
" green, soft	3705	3719	hole caving a badly
lime, hard	3719	3722	
shale break, solid	3722	3725	
lime, white, hard	3725	3732	hole caving a badly
shale, soft	3732	3735	
" lime shells, solid	3735	3748	
shale, gray, soft	3748	3752	
lime, white	3752	3753	
sand	3753	3755	show of gas-GIM 3760
lime	3760	3765	3736' 9" 5 3/16" csg. run
sand, soft	3765	3767	Water broke under csg.; csg. lowered
sandy lime, soft	3767	3770	to 3747'
" " hard	3770	3773	
" " light gray	3773	3779	
" " gray, soft	3779	3785	1500' oil in hole; ½ bailer water
sand, gray	3785	3800	per hour in bottom
sandy lime, hard, light	3800	3805	
" " " white	3805	3820	

sandy lime, hard, light	3820	3826
" " gray, hard	3826	3838
" " "	3838	3844
sand, soft	3844	3848
sandy lime, light, hard	3848	3856
lime, gray, hard	3856	3860
" sandy, "	3860	38654
" light "	3864	3868
" gray, "	3868	3870
" dark, "	3870	3872
" sandy, hard, gray	3872	3880
" light, hard	3880	3892
sandy lime, gray, hard	3892	3894
lime, sandy, hard, light	3894	3898
" gray, hard	3898	3916
lime, dark, hard	3916	3928
" gray, "	3928	3946
" white, "	3946	3950
" gray, "	3950	3959
" soft	3959	3973
" gray, soft	3973	3988
" dark, hard	3992	3998
", gray, hard	3998	4008
" sharp, hard	4008	4030
" hard	4030	4044
" light, hard	4044	4050
" " "	4050	4060
" hard	4060	4068
" dark, soft	4068	4070
" dark, hard	4070	4080
" " soft	4080	4110
" " hard	4110	4125
" gray, "	4125	4130
" dark, "	4130	4140
" " gray, very hard	4140	4150
" " hard	4150	4160
water sand, white, soft	4160	4165

HPW Total depth

CASING RECORD

Size	Weight	Run In	Pulled Out	
20"	90	80	Left in 80' cemented;could not	
15½	70	410	405' 1"	got out
12½	50	1365	1371' 7"	overall
10	40	2065	1743	
8¼	32	2920	2559 7"	
6 5/8	26	2921	2696 4"	
5 3/16	17	3747	3787 8"	overall

Note - All casing pulled measured overall

Mid-Continent Petro. Corp.