

United Petroleum Co.,  
Rice County.

Sec.29; T.21S; R.9W.  
Wellman #1.  
By A. S. Price.

2075 to 2085....Limestone, white. Shale, dark-grey. Trace mica, Shale.  
2085 to 2095....Shale, dark-grey. A little mica Shale. Trace red.  
2095 to 2105....Missing.  
2105 to 2115....Shale, dark-grey and light-grey, mica, gritty. Shale, red 5%.  
2115 to 2125.... " " " " " " " " " " 5-10%.  
2125 to 2135....Shale, grey, trace red.  
2135 to 2145....Shale, red.  
2145 to 2155....Shale, grey, mica, gritty.  
2155 to 2165....Shale, grey, mica, partly gritty, some red.  
2165 to 2185....Shale, grey, fine texture.  
2185 to 2195....Limestone, white, light-brown, light-grey. Shale, grey.  
2195 to 2205....Limestone, white, light-grey. Shale, grey. TOP TARKIO 2190'.  
2205 to 2215....Shale, dark-grey and a little limestone.  
2215 to 2225....Shale, dark-grey and grey mica.  
2225 to 2235....Shale, dark-grey and grey, mica gritty. TOP EMPORIA 2255'.  
2245 to 2253....Shale, grey, fine texture.  
2253 to 2260....Shale, grey. Limestone, grey, dark, brown.  
2260 to 2275....Limestone, white, light-grey. Shale, grey.  
2275 to 2285....Shale, dark-grey. Limestone grey.  
2285 to 2295....Shale, dark-grey. A little limestone, grey.  
2295 to 2305.... " " " " " " " " " "  
2305 to 2315....Limestone, light-grey. Shale, dark-grey.  
2325 to 2335....Shale, dark-grey. Limestone, light-brown, fossiliferous 20%.  
2335 to 2343....Shale, grey.  
2343 to 2345....Shale, mica, gritty.  
2345 to 2354....Shale, grey.  
2354 to 2365....Shale, grey, partly mica.  
2365 to 2375....Shale, grey, mica.  
2375 to 2385....Shale, grey, partly mica.  
2385 to 2405.... " " " " " " " " " "  
2405 to 2415....Missing.  
2415 to 2455....Limestone, light-brownish-grey. TOP HOWARD 2415'.  
2455 to 2465....Limestone, light brownish-grey and Shale, grey.  
2465 to 2475....Limestone, light-grey. Coal and lignite 5%.  
2475 to 2485....Sand, fine, angular, mica. Pyrite nodules. Trace lignite.  
2485 to 2495....Sand, fine, angular, mica. A little lignite and Shale, carbonaceous.  
2495 to 2505....Sand, fine, angular, mica. Pyrite. A little lignite and Shale, carbonaceous.  
2505 to 2510....Sand, fine, angular. Pyrite nodules.  
2510 to 2520....Limestone, light-grey. TOP TOPEKA 2510'.  
2520 to 2530....Limestone, light-grey, mottled with dark material.  
2530 to 2545....Limestone, light-grey.  
2545 to 2553....Limestone, cream-white, slightly cherty.  
2553 to 2562....Limestone, light-grey to white, slightly cherty.  
2562 to 2570....Limestone, light-grey, light-brown.  
2570 to 2578.... " " " " " " " " (Fusulinids)  
2578 to 2590....Limestone, cream-brown.  
2590 to 2600....Limestone, cream-brown.  
2600 to 2606....Limestone, light-grey.  
2606 to 2613....Limestone, light-brownish-grey.  
2613 to 2618....Limestone, light-grey. Shale, carbonaceous 5%.  
2618 to 2629....Limestone, light-brownish-grey.

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2629	to	2640....	Limestone, light-brown and Shale, light-grey.
2640	to	2647....	Limestone, cream.
2647	to	2810....	Limestone, cream, light-brown, light-grey, slightly cherty.
2810	to	2825....	Shale, grey and dark. Limestone, grey, light-grey, brown.
2825	to	2835....	Shale, grey. Limestone, white.
2835	to	2845....	" " " "
2845	to	2860....	Shale, grey and limestone, light-brown.
2860	to	2870....	Shale, light-grey.
2870	to	2880....	Shale, light-grey. Sand, fine, mica.
2880	to	2890....	Shale, light-grey. Sand, fine, mica 15%.
2890	to	2898....	Shale, light-grey.
2898	to	2950....	Shale, grey.
2950	to	2970....	Shale, grey and Sand fine.
2970	to	2980....	Shale, dark-grey and red.
2980	to	3005....	Limestone, light-brown. <u>TOP LANSING 2985'.</u>
3005	to	3025....	Limestone and Shale, dark-grey.
3025	to	3033....	" " " " " 20%.
3033	to	3040....	" " " " " 40%.
3040	to	3070....	" " " " " 35%.
3070	to	3110....	" " " " " 15%.
3110	to	3140....	" " " " " 5%.
3140	to	3150....	Missing.
3150	to	3155....	Shale, grey.
3155	to	3185....	Shale, grey and limestone.
3185	to	3195....	Limestone, white, light-brown.
3195	to	3205....	Limestone, white, cryptocrystalline.
3205	to	3210....	Shale, grey, some red. Limestone, light-grey 50%.
3210	to	3220....	Shale, grey, trace red. Limestone, light-grey, cream 15%.
3220	to	3240....	Missing.
3240	to	3250....	Shale, grey, some red. Limestone, light-grey, cream 50%.
3250	to	3260....	Limestone, light-grey, cream. Shale, grey, trace red 25%.
3260	to	3270....	Limestone, light-grey, cream. Shale, grey, trace red 25%.
3270	to	3285....	Shale, grey and red. Limestone, light-grey 35%.
3285	to	3290....	Shale, grey and reddish. Limestone, light-grey and red mottled.
3290	to	3300....	Shale, grey and red. Limestone light-grey, cream, trace reddish. Slight trace Sand. <u>TOP PENNSYLVANIA BASAL CONGLOMERATE 3295'.</u>
3300	to	3307....	Shale, red, grey. Limestone, white, yellow. Trace sand.
3307	to	3317....	Shale, various-colored. Limestone, white, yellow 10%. Sand, medium, cemented 5%. Slightly trace Chert.
3317	to	3335....	Shale, various-colored. A little limestone and Sand medium round.
3335	to	3346....	Shale, various-colored. Trace limestone and sand.
3346	to	3360....	" " " " " " " "
3360	to	3367....	Shale, various-colored. Trace Chert and limestone.
3367	to	3373....	" " " " " " " "
3373	to	3380....	Shale, various-colored. A little limestone and chert.
3380	to	3397....	Limestone, light-grey, dense and Shale, various-colored.
3397	to	3405....	Limestone, light-grey, argillaceous and limestone, yellow and cream.
3405	to	3410....	" " " " " " " "
3410	to	3415....	Shale, light greenish-grey, various-colored. Limestone, yellow, light-grey.
3415	to	3431....	Limestone, white, crystalline and cavings. <u>TOP VIOLA 3415'.</u>

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3431 to 3435....Limestone, white, crystalline.  
3435 to 3456....Limestone, cream-white, crystalline.  
3456 to 3461....Limestone, cream-brown, crystalline.  
3461 to 3470....Limestone, cream-brown, crystalline.  
3470 to 3480....Limestone, cream-brown, crystalline. Shale, green. Trace Sand.  
3480 to 3482....No sample TOP SIMPSON 3475'.  
3482 to 3492....Sand, fine, to medium, subangular. Shale, green 5%.  
3492 to 3500....Sand, fine, angular and Shale, green. HW at 3485'.  
3500 to 3506....Shale, green. Sand 5%.  
3506 to 3508....Shale, green. Sand, fine 15%. Pyrite nodules.  
3508 to 3511....Shale, green. Sand, fine 5%.  
3511 to 3514....Sand, medium, fine. Shale, green.  
3514 to 3525....Sand, fine, medium, round. Shale, green 15%.  
3525 to 3531....Sand, fine, medium, round. Shale, green 30%.  
3535 to 3538....Shale, green and Sand, fine, angular.  
3538 to 3540....Missing.  
3540 to 3543....Shale, green. Sand, fine, medium 20%.  
3543 to 3547....Shale, green. Limestone, light-brown, trace.  
3547 to 3549....Shale, green. Sand, medium, fine. Limestone, light-brown, partly  
oolitic, trace (looks like Pennsylvanian and contains a few Fusulinids  
fragments).  
3549 to 3553....Shale, green. Sand, fine to medium 25%.  
CORRECTION 3553 equals 3550'.  
3550 to 3552....Shale, green 80%. Sand, fine and medium. Chert, oolitic.  
3552 to 3553½....Shale, green and Sand, fine-medium, angular. A little Chert, oolitic  
and Dolomite, light-brown, crystalline.  
TOP SILICEOUS LIME 3551'.