

Artnell #4 Sittner
SE NW 1/4 33-218-12W.,
Stafford County, Kansas
Elevation: 1855' Derrick Floor

Spudded: 8/31/46

All measurements are from the top of the rotary bushing, which is 1' above the derrick floor.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
0- 100	Sand and clay	Log from 0-3000 is drillers log.
100- 325	Shale	10" Cag. at 320 w/200 sacks
325- 640	Red beds	
640- 665	Anhydrite	Stone corral 640-65
665- 900	Shale and shells	" " 635-60 (sc41)
900-1500	Salt and shale	
1500-1560	Limestone and shale	
1560-1655	Broken limestone	
1655-1740	Limestone	
1740-1800	Shale and shells	
1800-2325	Shale and limestone	
2325-2360	Limestone	
2360-2590	Shale	
2590-2700	Shale and shells	
2700-2860	Shale and limestone	Top Topeka 2825
2860-2965	Limestone	
2965-3000	Shale	
3000-3018	Limestone light tan, sub crystalline Granular, some gray opaque chert	Sample log from 3000 to total depth
3018-20	Black very shale, some gray shale	Heebner shale 3018-20
3020-63	Limestone, as above, harder at bottom, trace porosity, no stain	
3063-66	Gray and maroon shale	
3066-86	Limestone as above	
3086-90	Gray and maroon shale	
3090-96	Limestone as above	
3096-3100	Gray and maroon shale	
3100-06	Limestone as above	
3106-40	Gray and maroon shale with limestone streaks	
3140-72	Limestone white, crystalline	Dodge Limestone 3140-72
3168-77	Gray and maroon shale	Base oreod 3172
3172-3222	Maroon, green and gray shale	Douglas 3172-3222 3264
3222-53	Shale as above with some fine gray shaley sand	
3253-57	Limestone brown to light brown finely crystalline	Brown Lansing 3253
3257-64	Gray shale	
3264-75	Limestone tan sub-crystalline hard tight oolitic	Lansing 3264
3275-91	Limestone tan sub-crystalline, some gray opaque chert	
3291-96	Limestone gray and tan, trace porosity, no odor, possible trace stain	
3296-3303	Hard gray-tan limestone	
3303-08	Limestone gray tan sub-crystalline trace of porosity	Trace dead oil stain

WENDELL C. JOHNS

Formation Log

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
3308-10	Non-porous limestone	
3310-11	Limestone as above porous	
3311-30	Limestone finely crystalline to dense hard gray-brown	First odor in 3320 sample Drill stem test 3290-3327 Open 6 min est., 5 mil gas in 3 min. Rec 75 mud
3330-48	Limestone gray to brown, finely crystalline	
3348-53	Limestone as above, some pin point porosity - some oolitic limestone good porosity	Fair stain - trace of odor
3353-73	Limestone gray to brown finely crystalline, slightly oolitic	Drill stem test 3344-56 open 15 min. Rec 70' slightly gas cut mud and a trace salt water
3373-91	Limestone, tan to light gray sub-crystalline to dense - some gray and tan opaque chert	
3391-3401	Limestone tan porous oolitic with streaks of hard dense limestone	
3401-15	Limestone tan dense	Good odor fair spotted stain Drill stem test 3388-3402-Open 15 min. Rec 125' oil and gas cut mud
3415-26	Limestone, white crystalline very oolitic	
3426-35	Limestone as above- fair porosity between oolites	
3435-47	Limestone as above - no porosity	Some dark spotted stain, little or no odor
3447-49	Limestone as above - trace oolitic porosity	Trace dark spotted stain, no odor
3449-54	Limestone as above, no porosity	
3454-58	Gray and maroon shale	
3458-62	Limestone tan to white finely crystalline, hard	
3462-86	Limestone brown, dense	
3486-3500	Limestone white crystalline fossiliferous, oolitic large oolites, trace porosity near bottom	Trace dark oil stain near bottom Base Kansas City 3500
3500-89	Shale - gray, green and maroon, some gray brown translucent chert	Base Kansas and top Conglomerate 3500
3509-51	Chert, brown to white, vitreous, translucent to opaque, some white opaque partially devitrified chert at bottom	Viola 3509
3551-3601	Shale gray, maroon and green, streaks sandy shale	Simpson 3551

Formation Log

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
3601-05	Shale as above, increase in sand	
3605-07	Brown to white dolomite, finely crystalline, some porosity, fair odor and stain. Trace white oolitic shale	Arbuckle 3605

Rotary Total Depth 3607'

5 1/2" Casing 3606'

Total Depth 3627'

Samples run and log compiled by

TIME LOG

WENDELL S. 50

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Stafford County, Kansas
Elevation: 1855' Derrick Floor

All depths are measured from the top of the rotary bushing, which is 1' above the derrick floor.

Time Log starts at 3000'

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
3000-10	5-9-14-13-11-11-11-15-11-6	New Hughes OVS bit in at 2850
20	7-3-3-3-5-6-6-12-11-6	
30	12-13-12-9-5-4-4-3-3-3	
40	2-3-3-2-3-6-5-6-5-5	
50	4-5-3-3-2-2-2-2-3-5	
60	7-5-5-4-11-13-12-10-8-12	
70	14-14-12-5-5-5-9-13-12-10	
80	8-10-11-10-10-13-12-8-9-9	
90	9-8-9-10-10-10-9-7-8-8	
3100	9-9-9-12-10-13-7-7-6-7	
3100-10	8-8-9-8-7-8-7-7-7-7	
20	7-8-8-9-10-9-9-12-12-8	
30	8-7-9-11-11-18-17-15-13-12	
40	8-10-10-10-10-4-5-5-4-5	Trip 3135 - Hughes OVS
50	6-5-2-2-4-4-3-4-3-6	Dodge 3140
60	6-5-6-5-5-5-5-6-6-5	
70	5-6-5-6-6-7-6-3-4-5	
80	6-8-6-5-5-4-4-4-5-5	
90	5-5-5-4-4-4-4-4-4-5	Base Gread 3172
3200	4-4-4-3-4-4-4-4-4-5	
3200-10	4-4-4-4-3-4-5-4-5-4	
20	4-4-4-3-4-4-3-4-4-3	
30	3-3-4-4-4-4-4-3-4-4	
40	4-4-3-4-4-4-4-4-4-4	
50	4-3-4-4-4-4-3-4-4-4	
60	4-4-3-6-6-6-5-4-4-5	
70	5-7-5-6-7-6-5-6-10-7	Brown Lensing 3253
80	6-7-6-6-5-7-8-5-5-6	Lensing 3264
90	8-8-6-5-5-5-6-6-7-8	
3300	7-5-5-5-5-4-6-8-6-5	Circ. 1 hour @ 3297
10	6-8-8-7-5-7-5-6-8-9	Slightly rough 3304-05
20	5-13-7-8-9-7-8-6-8-8	
30	8-7-5-6-6-10-10-4-4-4	Drill stem test 3290-3327
40	4-5-5-5-6-5-5-4-4-4	New H OVC bit 3327
50	4-6-7-5-7-6-5-5-5-4	
60	2-3-4-5-6-8-5-5-5-6	
70	6-6-7-7-8-8-8-8-10-10	
80	9-8-9-11-14-12-15-13-11-10	
90	11-15-10-12-11-11-10-10-14-9	
3400	11-4-5-9-6-3-4-11-11-5	Slightly rough 3394-95

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
3400-10	5-13-12-14-13-10-9-10-7-7	Circ @ 3402 - 1 1/2 hours Drill stem test 3388-3402
20	8-8-10-10-10-8-9-10-16-18	
30	13-9-11-9-11-11-5-12-6-7	
40	6-6-7-7-8-11-10-10-9-8	
50	10-10-10-10-10-10-11-2-6-7	Circ 1 hour @ 3440
60	7-7-8-9-7-7-8-8-9-10	Circ 1 hour @ 3456
70	9-8-10-14-14-10-13-12-11-12	
80	12-12-14-15-15-15-15-15-16-15-13	
90	11-11-13-13-11-12-11-9-11-8	
3500	9-10-9-9-10-10-13-13-12-10	Base Kansas City 3500 Conglomerate 3500 Rough 3506-07 Viola 3509
3500-10	10-10-10-10-10-10-8-10-10-9	
20	10-9-10-9-8-7-8-8-9-8	
30	6-6-8-8-8-10-9-10-10-9	
40	11-10-12-12-11-9-7-9-9-11	
50	10-8-4-4-4-8-9-6-18-7-6 26	Simpson 3551
60	16-6-7-7-7-7-7-8-8-6	Trip 3551 - Hughes OVS rerun
70	8-8-6-6-7-8-8-7-7-7	
80	7-8-8-9-9-9-8-7-9-7	
90	9-7-8-8-8-8-6-6-8-7	
3600	8-6-7-7-8-7-9-7-7-7	Circ 1 1/2 hours @ 3598
3600-06	9-5-5-5-5-5	Circ 1 1/2 hours @ 3602 Circ 1 1/2 hours @ 3605 Circ 1 1/2 hours @ 3606 Arbuckle 3605 Corrected. Rough 3604-06

Rotary Total Depth 3606' = 3607 Corrected

5 1/2" Casing 3605' = 3606 "

Time Log Compiled by