

Artnell #3 Sittner  
 SW NE NE  
 33-21S-12W  
 Stafford County, Kansas  
 Elevation 1857' (Laughlin & Simmons)

Note: samples start at 3175'. All measurements are from the top of the rotary bushing which is approximately 1' above the derrick floor.

<u>Depth</u>	<u>Formation Description</u>
3175-78	Gray and maroon shale.
3178-81	Tan dense to crystalline limestone.
3181-3210	Gray and maroon shale.
3210-40	Gray fine sandy shale.
3240-54	Gray and maroon shale.
3254-61	Brown mottled crystalline limestone.
<u>3254</u>	<u>Top Brown Lansing</u>
3261-71	Gray and maroon shale.
<u>3271</u>	<u>Top Lansing</u>
3271-80	Tan to light brown crystalline to sub-crystalline limestone.
3280-95	Limestone as above, some chert, yellow, brown, and gray, opaque to translucent.
3295-3300	Limestone as above, slightly oolitic, fair porosity, fair stain, no odor.
3300-10	Tan finely crystalline limestone, no porosity.
3310-14	Limestone as above, some porosity and stain, no odor.
3314-30	Gray to tan sub-crystalline limestone, tight.
3330-32	Gray shale.
3332-53	Limestone, black and tan mottled, crystalline.
3353-59	Limestone, tan sub-crystalline, oolitic, good porosity, fair stain, trace dead black-oil.
3359-75	Limestone tan, sub-crystalline, tight.
3375-97	Limestone as above, with some gray opaque chert.
3397-3402	Limestone tan oolitic, very porous, good stain, strong odor.
3402-18	Limestone, tan to brown, dense.
3418-22	Limestone tan to brown oolitic, tight, trace stain, possible trace porosity.
3422-37	Limestone as above oolitic tight, no porosity or stain.
3437-40	Limestone light cream oolitic, good porosity, trace spotted stain.

<u>Depth</u>	<u>Formation Description</u>
3440-51	Limestone as above, no porosity or stain.
3451-59	Limestone tan oolitic and oolitic, very porous, good stain and good odor.
3459-74	Limestone cream crystalline to dense, tight.
3474-80	Limestone brown dense.
3480-82	Gray shale.
3482-88	Limestone cream dense.
3488-96	Limestone tan, many small oolites, trace porosity and trace stain.
<u>3496 Base Kansas City and Top Conglomerate</u>	
3496-3505	Gray and maroon shale and trace weathered red and gray limestone.
3505-10	Gray and maroon shale, some fine brown sand, chert, gray, brown, white, and red, opaque to translucent.
<u>3510 Top Viola</u>	
3510-44	Chert white opaque, some brown chert and white translucent chert at top.
3544-50	Chert as above with some very hard silicified limestone or dolomite.
<u>3550 Top Simpson</u>	
3550-52	Some gray and yellow weathered limestone.
3552-80	Weathered Simpson material, green, yellow and maroon shale and sandy shale.
3580-99	Green unweathered Simpson shale and sandy shale.
3599-3600	Brown medium sub-rounded Simpson sand, fair stain. Probably not a whole foot of sand.
<u>3600 Top of Arkos</u>	
3600-02	Dolomite white and red finely crystalline, hard, tight. Spotted oil stain.
3602-05	Dolomite, brown, good porosity, good saturation, good odor. Trace oolitic white chert.
<u>3605 Total Depth</u>	

Ran a Schlumberger electrical survey. Survey agreed very well with time log and sample log except it showed all formations, breaks and total depth as 2 feet shallower. At the time of perforation, however, Lane-Wells measurements appeared to check more closely

TIME LOG

WENDEL

Artnell #3 Sittner  
SW NE NE  
33-218-12W  
Stafford County, Kansas  
Elevation 1857'

All depths are from the top of the rotary bushing which is one foot above the derrick floor.

The time log starts at 3175'. A new O.W.S. bit was put in at 3065'.

One foot time log - 7-7/8" hole - 4-1/2" drill pipe.

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
3175-80	7-10-9-9-6	
3180-90	7-6-6-6-6-7-6-5-6-6	
3190-3200	6-6-6-5-5-6-5-6-5-5	
3200-10	5-4-5-5-5-4-4-4-4-4	
3210-20	6-6-5-5-6-6-6-6-5-5	
3220-30	6-6-6-6-6-6-6-6-6-6	
3230-40	6-6-6-6-6-5-6-6-6-6	
3240-50	6-6-7-7-7-8-8-8-8-8	
3250-60	5-7-8-8-7-8-9-10-10-10	Rough at 3255.
3260-70	12-8-9-9-10-8-8-8-8-8	Circulated at 3260 1 hr.
3270-80	8-10-12-11-11-11-10-12-9-11	Top Lansing 3271. Circulated at 3275 61 min.
		Little rough 3277-79
3280-90	15-13-12-14-21-21-10-8-6-10	
3290-3300	12-15-20-15-13-9-9-10-7-5	Trip at 3298 O.W.S.
3300-10	10-11-12-8-10-11-7-8-8-9	Mixed 4 sex Impernex.
3310-20	4-5-6-8-8-10-10-10-9-10	Odor in samples at 3315'.
3320-30	8-9-10-12-11-8-6-7-8-11	
3330-40	11-5-12-9-10-8-7-11-6-9	
3340-50	6-4-6-6-6-10-9-10-10-8	
3350-60	7-9-8-5-1-2-3-5-6-10	Circulated 78 min at 3357.
3360-70	11-9-9-9-11-12-10-12-11-12	
3370-80	7-10-10-6-8-10-10-14-10-10	
3380-90	12-15-15-11-10-10-12-12-10-11	
3390-3400	10-18-10-8-8-7-9-2-3-3	Little rough 3393-95, very rough 3395-3401.
3400-10	3-3-10-7-4-9-10-12-12-10	Circulated 1-1/2 hrs at 3402', strong odor.
3410-20	11-12-10-12-11-12-11-10-9-8	
3420-30	8-11-11-12-13-13-11-11-12-15	
3430-40	11-10-10-10-6-10-13-4-6-7	
3440-50	9-13-10-11-10-10-10-11-12-10	
3450-60	12-6-6-4-5-5-4-4-5-9	Circulated 1-1/2 hrs at 3458, strong odor.
3460-70	10-10-11-13-13-11-14-12-13-11	

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
3470-80	12-13-11-14-16-17-16-15-17-17	
3480-90	13-8-10-10-10-11-8-8-8-9	
3490-3500	11-11-7-8-10-13-14-18-12-14	<u>Base Kansas City 3496'.</u> Little rough at 3495-96 Trip at 3500 WTR Broke drilling line while making trip. Rough at 3504'. <u>Top Viola 3510'.</u>
3500-10	14-13-10-10-8-8-11-10-7-7	
3510-20	10-8-7-8-5-5-6-6-6-7	
3520-30	5-7-7-9-7-7-6-8-8-7	
3530-40	8-8-6-7-5-6-7-5-7-7	
3540-50	8-7-9-6-9-14-17-14-13-15	Trip at 3550'. OWS <u>Top Simpson 3550'.</u>
3550-60	9-7-8-6-11-6-7-8-10-8	
3560-70	9-11-11-10-12-10-9-11-12-11	Rough at 3565.
3570-80	12-12-13-12-10-9-11-13-11-11	Rough at 3573-75.
3580-90	11-9-9-10-10-10-10-9-9-8	
3590-3600	8-9-10-12-13-12-13-9-9-6	Circulated at 3597 1-1/2 hrs.
3600-05	8-8-7-5-5	Circulated at 3602 1 hr. Rough at 3604 Circulated at 3605 1-1/2 hrs. <u>Top Arbuckle 3600'.</u>
Total Depth	3685'	

Time Log compiled by

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