

Artnell #5 Habiger
NE NE NW
27-18S-10W
Rice County, Kansas
Elevation: 1751 Derrick Floor

Commenced 10-29-47
Completed
10-3/4" 240'

Note: All measurements are from the top of the rotary bushing which is 2 feet above the derrick floor.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
0- 85	No log.	Drillers log 0 - 1300.
85- 240	Shale and shells.	
240- 95	Red beds	
295- 340	Shale and shells	
340- 420	Shale and red beds	
420- 580	Shale and sand	
580-1180	Shale and shells	
1180-1300	Shale, shells and limestone	Sample log 1300 to total depth.
1300-1310	Dolomite, gray, silty, brown, finely crystalline Trace porosity.	
1310-1320	Dark brown, gray dense dolomite	
1320-1330	Gray, finely sucrose dolomite, some porosity.	
1330-1345	Shale, green, gray and brown, gray shaly dolomite	
1345-1355	Dolomite, gray, fine silty; chert, tan, gray opaque	
1355-1370	Limestone, light tan, finely crystalline	
1370-1380	Limestone, gray, finely crystalline to crystalline, trace of porosity.	
1380-1395	Shale, green and red	
1395-1410	Dolomite, gray, dense, to brown finely sucrose	1395 Top Ft. Riley
1410-1420	Limestone, tan oolitic and oolitic, very porous, fossils - crinoids.	
1420-1455	Shale, gray soft, streaks, dense, brown dolomite	
1455- 90	Limestone, tan porous, fossil casts and oolitic	
1490-1505	Gray shale	
1505- 45	Limestone, tan porous very oolitic, some gray opaque fossiliferous chert, some fossil casts	
1545- 60	Gray shale	
1560- 70	Limestone, brown crystalline fossiliferous	
1570- 80	Limestone, light tan finely crystalline, finely oolitic, fossiliferous	
1580- 90	Shale, gray	
1590- 95	Limestone, gray, finely crystalline, mottled with dark gray fossils.	
1595-1600	Gray, shale	
1600- 20	Limestone, gray to brown, finely crystalline, gray opaque chert.	
1620- 50	Gray shale with limestone streaks	
1650- 60	Limestone, tan finely crystalline, finely oolitic fossiliferous	
1660- 75	Gray shale and limestone streaks	
1675- 85	Limestone, gray, sub-crystalline	
1685-1725	Gray shale with limestone streaks	
1725- 30	Limestone, brown, very oolitic	
1730- 65	Limestone, brown to gray, dense to finely crystalline, trace chert.	

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
1765- 80	Limestone, gray - brown, sub-crystalline soft, possibly some porosity, many fusulinids.	Trace dead oil stain.
1780-1825	Limestone, light tan to light gray, finely crystalline	
1825- 35	Shale, gray and red	
1835- 40	Limestone, tan dense	
1840- 55	Shale, gray and red	
1855- 65	Limestone as above	
1865-1905	Shale red and gray	
1905- 90	Broken gray limestone	
1990-2000	Shale, gray and red	
2000- 35	Limestone, gray, finely crystalline with gray shale streaks.	
2035- 50	Limestone, tan, oolitic, some porosity	
2050- 80	Broken limestone	
2080- 85	Limestone, tan, very finely oolitic, porous	
2085-2100	Broken limestone	
2100- 05	Limestone, light gray, sub-crystalline	
2105- 35	Shale, gray and brown	
2135- 40	Limestone, tan, finely crystalline	
2140- 45	Shale, gray and brown	
2145- 65	Limestone as above	
2165- 80	Shale as above	
2180- 85	Limestone, brown, crystalline	
2185-2202	Gray and brown shale and fine gray sand	
2202- 05	Limestone as above	
2205- 20	Shale, gray, trace brown	
2220- 25	Limestone, white, finely crystalline	
2225- 30	Shale as above	
2230- 35	Limestone as above	
2235- 45	Shale, gray	
2245- 70	Limestone, tan, finely crystalline	
2270- 75	Shale, gray	
2275- 90	Limestone as above	
2290-2310	Shale, gray	
2310- 20	Limestone, tan to gray, finely crystalline	
2320- 55	Shale, gray	
2355- 90	Limestone, gray to brown, finely crystalline	
2390-2405	Shale, gray	
2405- 22	Shale as above with thin streaks, dark gray to brown finely crystalline limestone	
2422- 35	Sand, dark gray, dirty sub-medium, micaceous	
2435- 70	Limestone, dark gray sub-crystalline to dense	Top Topeka 2435
2470- 80	Limestone, dark gray dense	
2480- 82	Sand, medium, gray micaceous	
2482-2564	Limestone, light tan to white, crystalline, brown opaque chert.	
2564- 78	Limestone as above with gray shale streaks	
2578-2610	Limestone, tan finely crystalline, some gray opaque chert.	
2610- 24	Limestone, light brown to tan, sub-crystalline to dense.	
2624- 34	Shale, dark gray to black, much black opaque vitreous chert.	

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
2634- 47	Limestone, light gray, finely crystalline with streaks gray shale.	
2647- 52	Limestone, light brown, oolitic and oolitic, porous	Good odor and saturation
2652- 57	Limestone as above, very porous	Pay zone 2647-57
2657- 70	Limestone, light gray to white, sub-crystalline	
2670- 99	Limestone, brown to gray, dense	
2699-2700	Shale, black soft	Top Heebner 2699.
Total Depth	2700	

Drill stem test 1404-30 (in Fort Riley); open 15 minutes; recovered 180' salt water, no oil or gas.

Tried to run oil string. Lost 300 feet in hole; could not fish it out. Abandoned hole and skidded rig 90 feet west.

Sample information from log by
Wendell S. Johns

TIME LOG

WENDELL S. JOHNS

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 Rice County, Kansas
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5' time log 1300' - 2500'

<u>DEPTH</u>	<u>TIME</u>	<u>REMARKS</u>
1300- 50	22-20-20-15-10-8-12-14-16-23	
1400	20-12-15-20-15-18-13-12-15-25	Top Pt. Riley 1395
1400- 50	18-12-8-8-14-18-20-19-21-28	DST 1404-30
1500	19-5-3-12-8-9-12-13-14-14	
1500- 50	16-10-6-8-3-3-13-14-31-15	
1600	18-17-15-22-28-35-28-17-24-18	
1600- 50	20-29-11-22-42-35-34-31-30-27	
1700	45-30-29-31-39-55-37-45-48-45	
1700- 50	41-33-26-22-22-8-17-17-17-17	Trip 1705
1800	18-16-16-11-9-10-16-21-20-23	
1800- 50	15-17-15-15-19-15-16-20-12-16	
1900	17-15-15-11-15-18-27-15-13-14	
1900- 50	16-25-11-12-12-18-18-15-15-17	
2000	15-15-12-15-13-13-13-29-17-15	
2000- 50	22-13-16-20-24-17-14-10-10-18	
2100	15-20-19-22-18-14-12-16-12-11	
2100- 50	12-13-12-12-15-13-15-15-15-25	
2200	32-18-20-13-12-13-15-14-16-15	
2200- 50	28-24-26-25-16-32-18-32-35-21	
2300	18-17-20-20-23-27-28-21-26-25	
2300- 50	19-23-13-11-16-17-19-20-23-30	
2400	26-22-30-27-19-29-33-29-30-34	
2400- 50	26-27-17-17-16-7-7-19-40-30	Top Topeka 2435; Trip 2445
2500	35-30-30-25-25-20-15-25-25-29	

1' time log 2500' - 2700'

2500- 10	6-5-5-5-8-6-8-8-8-8	
20	8-8-8-7-10-10-10-8-8-7	
30	7-8-5-7-5-5-4-6-10-10	
40	10-10-5-7-10-13-13-6-7-5	
50	5-6-6-5-5-5-4-7-9-9	
60	6-8-6-7-6-7-7-7-7-7	
70	6-5-8-4-4-5-4-7-6-5	
80	6-6-5-7-6-6-5-7-8-10	
90	8-6-7-6-7-7-8-6-9-6	
2600	7-10-5-11-9-12-10-11-7-11	
2600- 10	9-8-11-10-7-9-8-9-8-8	
20	7-5-5-5-6-8-8-7-10-7	
30	8-6-8-7-7-7-7-7-7-6	
40	6-9-7-7-10-10-9-7-10-10	
50	10-11-10-5-6-12-9-5-6-6	
60	5-5-3-2-1-3-3-5-6-9	Circulated 2659 1-1/2 hours
70	9-10-12-12-12-10-10-11-13-13	
80	13-14-15-11-11-11-10-11-11-12	
90	14-15-11-9-10-10-10-8-7-6	
2700	7-7-8-9-13-12-13-15-10	Top Heebner 2699; Total Depth 2700