

Computer inventoried

F O R M A T I O N L O G

WENLELL S. JOHNS

R. W. Rine #2 Hoener "B"
 SW/NW/NW; 35-268-13W
 Pratt County, Kansas
 Elevation: 1951 derrick floor

8 5/8" surface casing 1201'
 5 1/2" casing 4393'
 Comd: 3/15/54
 Comp:

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

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
0 - 170	Surface sand	Drillers log 0 - 3500'
170 - 230	Gravel	
230 - 475	Red bed	
475 - 755	Red bed and sand	
755 - 776	Anhydrite	Stone Corral - drillers top
776 - 2010	Shale and shells	
2010 - 2165	Sandy limestone	
2165 - 2873	Limestone and shale	
2873 - 3500	Limestone	
3500 - 3515	Limestone, white, chalky to buff, finely crystalline; spotted vugular porosity.	<u>Sample log 3500 to T.D.</u> No show.
3515 - 3517	Shale, gray	
3517 - 3557	Limestone, gray to buff, sub-crystalline to finely crystalline, some dolomitic; spotted vugular and pinpoint porosity	No show
3557 - 3562	Shale, gray to gray-black	
3562 - 3574	Limestone, brown to gray, sub-crystalline to dense; some spotted pinpoint porosity	No show
3574 - 3579	Shale, brown-black, soft, fissile	Heebner
3579 - 3584	Limestone, brown, dense, fossiliferous.	Leavenworth
3584 - 3593	Shale, gray to gray-green	Snyderville
3593 - 3617	Limestone, cream to buff to gray, finely crystalline; shale streak 3597 - 3603.	Toronto
3617 - 3636	Shale, gray to gray-green, micaceous; some gray-green, sub-crystalline sandy limestone.	
3636 - 3669	Sand, fine to medium, gray, sub-angular, micaceous, calcareous, porous.	No show; DST
3669 - 3736	Shale, gray, very soft, micaceous to gray-green, micaceous; streaks gray siltstone and fine white sand.	
3736 - 3741	Limestone, brown to chocolate brown, dense.	Top Brown Lime 3736
3741 - 3763	Shale, gray; streaks limestone, as above.	
3763 - 3786	Limestone, light gray to white, sub-crystalline, some oolitic; streaks gray and brown shale.	Top Lansing 3763

(2) Formation log; Rine #2 Hoener "B"

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
3786 - 3794	Limestone, gray, sub-crystalline, crypto-oolitic; fair vugular porosity.	Fair show free oil, good odor; DST
3794 - 3810	Limestone, gray to brown, sub-crystalline to dense, streak gray-brown shale at bottom.	
3810 - 3826	Limestone, gray, sub-crystalline, oolitic; spotted vugular porosity; streak brown shale 3813-15.	Slight stain
3826 - 3853	Limestone, gray, sub-crystalline to brown, dense; some gray and brown shale streaks.	
3853 - 3856	Limestone, tan, finely sucrose, fossiliferous; good pinp int porosity	Slight trace stain
3856 - 3866	Limestone and brown shale streaks	
3866 - 3876	Limestone, gray-brown, sub-crystalline; poor spotted pinpoint porosity.	Slight stain
3876 - 3879	Mostly gray-brown shale, some lime streaks	
3879 - 3882	Limestone, buff to white, finely sucrose to chalky, fossiliferous; poor spotted vugular porosity.	Spotted stain
3882 - 3885	Shale, gray-brown	
3885 - 3890	Limestone, buff to white, finely sucrose to chalky, fossiliferous; poor spotted vugular porosity	Spotted stain
3890 - 3895	Limestone, as above, no porosity	
3895 - 3901	Limestone, porous, as above	No show
3901 - 3928	Limestone, tan to gray, sub-crystalline to dense; chert, light gray to gray, vitreous to sub-vitreous; streak shale 3905-12	
3928 - 3931	Limestone, gray to tan, sub-crystalline with large oolites; some vugular porosity	Slight stain
3931 - 3960	Limestone, brown to dark gray-black, dense; some gray, opaque chert; streaks gray-green and black shale	
3960 - 3969	Limestone, tan to brown, finely crystalline, very oolitic; good vugular and oolitic porosity	Good stain
3969 - 3981	Limestone, light tan to brown, dense, lithographic; trace gray, opaque, figured chert.	
3981 - 3984	Limestone, gray to brown, sub-crystalline, good vugular porosity	Good odor; good show free oil; DST
3984 - 3993	Limestone and gray-black shale	
3993 - 3998	Limestone, tan, very finely sucrose, oolitic; good oolitic porosity	Fair show free oil, good odor; DST
3998 - 4040	Limestone, gray to brown, dense, some lithographic; some gray-black shale streaks	

(3) Formation log; Rine #2 Hoener "B"

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
4040 - 4049	Limestone, gray to tan, sub-crystalline, oolitic	Fair spotted stain
4049 - 4084	Limestone, gray, sub-crystalline to tan dense; streaks gray-black shale	Base Kansas City 4084
4084 - 4108	Shale, gray-black and green	Top Wernaton 4084
4108 - 4112	Limestone, tan, sucrose to salmon, sub-crystalline; chert, gray, smoky to tan, semi-translucent	
4112 - 4117	Shale, gray-green and brown	
4117 - 4126	Limestone, tan to brown, dense, resinous; chert, as above	
4126 - 4131	Shale, as above	
4131 - 4153	Limestone and chert, as above; spotted vugular porosity 4145-53	
4153 - 4159	Shale, black, fissile	
4159 - 4189	Chert, white, opaque, vitreous, cream, vitreous, translucent; chert, gray, opaque; chert, salmon to milky, semi-translucent, vitreous; much limestone, tan, brown and gray, sub-crystalline to dense	Top Mississippi 4159 No shows
4189 - 4192	Shale, gray-green to gray-black	Top Kinderhook 4189
4192 - 4197	Limestone, gray-brown, sub-crystalline	
4197 - 4199	Shale, as above	
4199 - 4212	Chert, salmon, white, cream and milky, translucent, vitreous; some vuggy with slight show free oil; chert, brown, semi-translucent	Slight show free oil; Trace odor; DST
4212 - 4224	Mostly shale, gray-green to gray-black; some brown, sub-crystalline limestone	
4224 - 4271	Chert, white, opaque, vitreous, spicular; chert, tan to salmon, opaque; chert, white, opaque, devitrified; some light tan to pink coarsely crystalline limestone	Top Viola 4224; brown stain, no odor or free oil
4271 - 4273	Limestone, gray-blue to gray-brown, finely sucrose, large rounded, included sand grains	
4273 - 4280	Shale, gray-green to bright green, sandy	Top Simpson 4273
4280 - 4286	Sand, brown, medium, sub-rounded to sub-angular, well sorted	
4286 - 4288	Sand, as above, porous	Slight show free oil, slight odor; DST
4288 - 4296	Dolomite, brown to tan, some dirty finely sucrose, sandy	
4296 - 4299	Shale, gray-black	

(4) Formation log; Rine #2 Hoener "B"

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
4299 - 4311	Sand, coarse, poorly sorted, sub-angular	Very slight show free oil, trace odor; DST
4311 - 4376	Mostly shale, gray-green to gray-black, some sandy; streaks amber to brown, medium, poorly sorted, sub-angular, dolomitic sand; streaks brown, finely sucrose, sandy dolomite with spotted gilsonitic stain	
4376 - 4392	Dolomite, tan to light brown to buff, finely crystalline to sub-crystalline, rhombohedral	Top Arbuckle 4376
4392 - 4400	Dolomite, cream to gray, coarsely crystalline, rhombohedral; fair vugular porosity; chert, buff, opaque, oolitic	Slight show free oil, slight odor; DST
<u>4400</u>	<u>Rotary Total Depth</u>	

Drill Stem Test Data:

Douglas: #1-3607 - 75; open 1 hour - fair blow throughout test
recovered 450' salt water
bottom hole pressure 1270# (20 min)

Lansing-Kansas City:

#2-3778 - 3800; open 1 hour - strong blow throughout test
gas to surface in 7 min
recovered 60' gas out mud
bottom hole pressure 1375# (20 min)

#3-3981 - 4010; open 1 hour - weak blow throughout test
recovered 75' muddy salt water
bottom hole pressure 1189# (20 min)

Kinderhook: #4-4193 - 4215; open 45 min. - weak blow throughout test
recovered 25' mud
bottom hole pressure 70# (15 min)

Viola: #5-4220 - 67; open 1 hour - strong blow throughout test; gas
to surface in 30 min
recovered 30' very slightly oil and gas out mud
90' slightly oil and gas out mud
90' muddy oil
bottom hole pressure 1075# (20 min)
Initial flow pressure 45#
Final flow pressure 80#

Simpson: #6-4276 - 4313; packer failed. Cleaned up hole and changed
packer seat.
4274 - 4313; open 45 min - weak blow throughout test
recovered 40' mud
bottom hole pressure 0# (20 min)

(5) Formation log; Line #2 Hooper "B"

Arbuckle: #7-4381 - 4400; open 1 hour - fair blow which decreased to
small blow at end of test
Recovered 790' salt water
Bottom hole pressure 1480# (20 min)

(Samples examined and log compiled by Willie Jack Magathan)

T I M E L O G

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

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
3500 - 10	3-3-3-3-3-3-3-3-3-3	1' time log starts @ 3500'
20	3-3-3-3-3-2-3-2-3-3	
30	2-1-2-2-2-2-3-2-3-3	
40	3-2-2-2-2-2-1-2-1-2	
50	2-2-2-3-3-2-2-1-2-1	
60	2-1-2-2-3-4-3-4-5-5	
70	6-5-5-4-4-3-3-4-5-5	
80	5-5-5-4-4-3-3-2-2-3	Top Heebner 3574
90	5-7-7-7-8-8-8-6-6-5	
90 - 3600	5-5-8-6-6-6-7-6-7	Trip @ 3584
3600 - 10	6-6-5-5-5-6-6-5-5-5	
20	4-4-3-2-2-4-3-3-4-5	Top Douglas 3647
30	5-4-3-4-5-5-4-4-4-4	
40	3-4-5-5-4-5-5-4-4-5	
50	4-3-3-3-2-2-1-1-2-1	
60	2-2-2-2-2-2-1-2-2-2	
70	2-4-3-2-2-2-2-2-3-3	
80	3-3-4-3-3-5-6-5-5-5	Circ. 1 1/2 hr. @ 3675
90	4-4-4-5-4-5-5-3-5-4	
90 - 3700	5-4-4-5-4-4-5-4-4-5	
3700 - 10	4-5-4-4-6-4-4-4-4-4	
20	4-4-4-4-4-5-4-4-4-5	
30	5-4-4-4-5-4-4-4-4-4	
40	5-3-5-5-4-4-8-9-8-6	Top Brown Line 3736
50	7-5-6-5-5-6-6-5-5-6	
60	6-7-6-5-5-5-5-6-4-5	
70	5-6-7-6-7-5-5-6-5-6	
80	6-7-6-8-7-7-8-9-7-6	Top Lansing 3763
90	5-5-9-9-10-6-4-3-3-3	
90 - 3800	4-3-3-3-3-3-3-4-3-4	Circ. 1 1/2 hr @ 3800; ROT; new bit @ 3800
3800 - 10	4-7-8-11-9-9-11-9-9-7	
20	5-4-4-4-3-2-6-3-4-4	
30	3-3-4-4-4-6-4-4-4-10	
40	5-6-8-8-7-7-10-7-9-6	
50	8-7-11-12-10-13-8-10-9-13	
60	8-8-11-7-13-9-5-5-5-6	
70	6-5-8-7-9-6-4-5-5-6	
80	4-5-4-6-4-5-6-8-11-8	
90	9-5-6-8-6-6-5-8-6-6	
90 - 3900	8-12-15-15-10-8-10-15-17-17	Trip @ 3900

(2) Time log; Rine #2 Hoener "B"

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
3900 - 10	14-12-12-13-10-9-6-6-6-6	
20	5-4-5-8-8-7-5-7-7-7	
30	8-10-9-9-7-7-6-7-6-6	
40	7-8-10-10-10-10-11-11-10-7	
50	12-13-7-5-8-11-10-8-4-3	
60	3-4-3-3-6-10-10-10-10-2	
70	1-1-1-2-2-3-3-2-3-4	
80	9-10-11-9-9-9-11-12-12-9	
90	5-5-3-3-4-9-10-9-5-11	
90 - 4000	6-5-4-6-7-4-6-5-4-12	
4000 - 10	11-10-8-9-9-6-11-11-8-9	Circ. 1½ hr @ 4010; DST; new bit @ 4010
20	14-10-11-10-11-12-12-12-12-11	
30	9-10-12-12-13-11-11-11-12-10	
40	12-4-12-8-8-13-16-13-12-10	
50	6-5-5-6-5-5-5-6-6-10	
60	12-10-11-10-10-12-10-7-11-11	
70	11-10-10-10-10-10-10-10-10-10	
80	8-10-5-6-6-7-7-8-8-8	
90	8-9-9-9-7-6-7-8-9-9	Base Kansas City 4084; Top Marmaton 4084
90 - 4100	7-6-5-6-7-7-6-6-6-7	
4100 - 10	6-11-7-7-8-6-6-6-8-8	
20	8-8-8-8-9-9-9-9-8-7	
30	7-7-7-6-7-7-8-7-8-9	
40	9-6-5-8-7-7-6-6-6-9	
50	11-10-11-12-10-9-10-8-6-5	
60	5-7-8-8-8-9-9-6-5-5	Top Mississippi 4159
70	5-4-2-3-3-3-3-4-3-4	
80	3-4-3-4-3-4-3-3-3-3	
90	4-3-4-4-4-4-4-7-8-14	Top Kinderhook 4189; Circ. 1½ hr @ 4190
90 - 4200	14-13-14-12-11-11-8-9-5-4	
4200 - 10	3-3-4-5-4-4-4-5-5-5	
20	6-7-7-10-14-13-9-8-12-11	Circ. 1½ hr @ 4215; DST; new bit @ 4215
30	7-7-6-7-5-4-4-3-4-4	Top Viola 4224
40	5-3-3-5-4-4-4-5-4-5	
50	4-5-5-4-4-5-4-5-4-5	
60	6-6-5-6-5-5-6-6-6-6	
70	4-5-6-4-6-4-7-6-6-6	Circ. 1½ hr @ 4267; DST; new bit @ 4267
80	7-9-9-9-9-9-8-9-9-8	Top Simpson 4273
90	5-5-6-7-6-4-5-5-6-7	Circ. 1½ hr @ 4285
90 - 4300	9-9-10-10-10-10-7-8-8-5	
4300 - 10	4-3-4-5-5-4-8-5-6-6	
20	3-6-8-8-19-9-7-7-6-8	Circ. 1½ hr @ 4313; DST; new bit @ 4313
30	24-15-14-8-11-10-9-8-8-12	
40	8-9-14-10-10-15-12-10-10-10	Circ. 1½ hr @ 4337
50	11-10-9-11-11-11-11-11-11-9	

(3) Time log; Rins #2 Hoener "B"

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
4350 - 60	11-10-11-9-12-10-13-10-12-12	
70	12-13-13-15-15-14-14-13-13-17	
80	14-13-12-12-13-9-10-11-11-23	Top Arbuakle 4376
90	19-15-13-13-12-10-9-13-14-14	Circ. 1½ hr @ 4385
90 - 4400	14-13-12-12-12-11-13-14-10-10	Circ. 1½ hr @ 4400; DST; <u>R.T.D. 4400</u>

(Time log condensed by Johns & Magathan)