Formation Log

Ashton #1 Kires
SW SW NE; 2-30S-14W
Barber County, Kansas
Elevation: 1934 Kelly bushing
1931 Derrick floor

8 5/8" casing 322'
5 1/2" casing 4554'
Comm: 4-30-55
Comp:

Note: All measurements are from the top of the kelly bushing. Measurements on this log (drilling measurements) are 4 feet deeper than the electric log measurements from 3500 to 4039, and 2 feet deeper than electric log measurements from 4039 to total depth.

Depth	Formation Description	Remarks
0 - 322	Surface hole, no log	Drillers log 0-3600
322 - 915	Red beds	
915 - 1165	Shale	
1165 - 1512	Shale and anhydrite	
1512 - 1603	Shale	
1603 - 1960	Shale and limestone	
1960 - 2245	Limestone	
2245 - 2365	Limestone and shale	
2365 - 2525	Limestone	
2525 - 2814	Limestone and shale	
2814 - 3130	Shale and limestone	
3130 - 3340	Limestone and shale	
3340 - 3600	Shale and limestone	
3600 - 70	Limestone white to light gray, chalky to finely crystalline; fossiliferous, some porosity	Sample log 3600 - T.D. No show 3600-70
3670 - 84	Streaks limestone as above and green-gray and brown shale	
3684 - 96	Limestone, dirty gray-brown subcrystalline	
3696 - 97	Shale, gray	
3697 - 3730	Limestone, light tan to brown, chalky to subcrystalline fossiliferous	
3730 - 42	Limestone, tan to brown, finely crystalline, chert white opaque to gray speckled, devitrified. Possible trace porosity 3734-37	No show. Looks good on electric log.
3742 - 49	Shale, gray green and brown	
3749 - 51	Limestone as above	
3751 - 57	Shale, as above	
3757 - 63	Limestone, as above	
3763 - 66	Shale, soft fissile, brown-black	

Formation Log
Ashton #1 Kiras

Depth	Formation Description	Remarks
3766 - 70	Limestone, dark dirty gray, finely crystalline	
3770 - 76	Shale, soft, fissile, black	Haebner
3776 - 80	Limestone, tan to gray, subcrystalline to finely crystalline	Leavenworth
3780 - 89	Shale, gray to green-gray	Snyderville
3789 - 3812	Limestone, white, finely crystalline to crystalline, clean	Toronto
3812 - 32	Shale, gray muddy; streaks fine gray gray silty sand.	Douglas
3832 - 44	Sand, medium to submedium, angular, light gray to green gray.	Trace light stain
3844 - 64	Shale, gray to gray-green, some dark gray shale, streaks sand as above, some fine white sand	
3864 - 3900	Shale as above	
3900 - 14	Some sand, fine shaly, micaceous	
3914 - 46	Shale, as above	
3946 - 52	Limestone, gray-brown, dense to subcrystalline, fossiliferous possibly oolitic	Brown Lansing
3952 - 56	Shale gray	
3956 - 63	Limestone, brown to gray, subcrystalline to dense, large gray oolites	Lansing
3963 - 80	Limestone, brown, dense to finely crystalline, fossiliferous	
3980 - 82	Shale, gray	
3982 - 89	Limestone, tan to light brown, dense, fossiliferous, oolitic . Some porosity 3983-86, trace chert, brown, translucent.	No show Looks good on electric log
3989 - 94	Shale, gray and green	
3994 - 4018	Limestone, gray to brown, dense, trace chert.	
4018 - 26	Limestone as above, with streaks gray shale.	
4026 - 49	Limestone as above, increase in chert, dark brown to dark gray, vitreous, translucent. Possible porosity 4034 - 37.	No show
4049 - 55	Limestone tan chalky, possible trace porosity, trace brown chert	No show

Formation Log
Ashton #1 Kirss

Depth	Formation Description	Remarks
4055 - 68	Limestone, brown dense	
4068 - 70	Shale, black	
4070 - 81	Limestone, brown sucrose, trace pinpoint porosity 4074-77	Slight odor Very slight trace free oil. Water on electric log.
4081 - 83	Shale, gray	
4083 - 4101	Limestone, gray-brown, finely crystalline to dense, some porosity 4087-93	No show
4101 - 03	Shale, gray	
4103 - 10	Limestone, light tan, chalky to subcrystalline, possible pinpoint porosity, trace odor and stain, trace free oil	D.S.T. #1 4098-4110 Water
4110 - 23	Dolomite, brown sucrose, to brown sucrose dolomitic limestone. Fair vugular porosity.	Slight show free oil
4123 - 25	Shale, gray	
4125 - 30	Limestone, tan to gray dense, fossiliferous, chert blue-gray, opaque	
4130 - 36	Shale, gray	
4136 - 43	Limestone, dolomitic sucrose	
4143 - 56	Limestone, tan to gray, dense	
4156 - 63	Limestone brown, dolomitic, sucrose to dense, fair porosity	Trace odor and free oil. Water on electric log
4163 - 71	Limestone, dense, brown, trace gray opaque chert	
4171 - 76	Limestone as above some porosity	No show
4176 - 98	Limestone, light tan chalky to finely crystalline	
4198 - 4210	Limestone, light tan, chalky some porosity.	Trace oil show. Water on electric log
4210 - 24	Limestone tan to gray dense to subcrystalline, trace chert gray opaque	
4224 - 27	Shale, green and brown	
4227 - 39	Limestone, light tan; finely crystalline to sucrose. Some pinpoint porosity 4230 - 39	Trace free oil Water on electric log
4239 - 63	Limestone, light tan, to gray, to brown, dense to chalky, trace chert gray opaque	

Depth	Formation Description	Remarks
4263 - 68	Shale, gray and black	
4268 - 89	Limestone, tan to light brown dense, some oolites, trace gray chert. Some porosity 4270-76	No show
4289 - 91	Shale gray	
4291 - 4300	Limestone, tan to gray-brown chalky to dense, to finely crystalline	Base Kansas City 4300
4300 - 02	Shale, gray, green and brown	Top Marmaton no show
4302 - 18	Limestone, gray to tan, dense to subcrystalline to chalky. Possibly some porosity 4311-15 Shale streak 4305-07	
4318 - 20	Shaly gray green and brown	
4320 - 24	Limestone as above	
4324 - 32	Shale as above	
4332 - 38	Limestone as above	
4338 - 50	Shale as above	
4350 - 60	Limestone, brown dense	
4360 - 68	Shale as above	
4368 - 78	Limestone white to light gray dense to chalky, some gray and brown chert	
4378 - 80	Shale, black	
4380 - 90	Limestone, gray to tan, dense to white, chalky, some gray-brown fossils, probably 30% chert, tan to gray translucent and gray opaque. Considerable gray silicified limestone or devitrified chert. A very few pieces of limestone, with slight vuggular porosity 4383-88	A few pieces with very slight spotted stain No odor or free oil D.S.T. #4 4370-91
4390 - 92	Shale, green-gray to dark gray.	
4392 - 4412	Limestone, as above, possibly less chert	
4412 - 20	Shale; dark gray to black, some light gray green silty shale and brown variegated shale, trace black limestone and white translucent chert	
4420 - 26	Chert gray, red, black, brown opaque to translucent. Trace oolitic chert, some sand grains fine to coarse	Conglomerate
4426 - 34	Limestone chalky to finely crystalline white, no porosity in samples. Electric log looks porous 4426-30	Viola? Samples bad No show in samples

Formation Log
Ashton #1 Kiras

Depth	Formation Description	Remarks
4434 - 36	Shale, probably green-gray	
4436 - 43	Limestone as above. No porosity in samples, electric log shows porous 4435-39	No show in samples
4443 - 63	Shale, green to dark gray. Possible sand streak with dark stain 4445-47?	Top Simpson 4443
4463 - 66	Brown shaly dolomite to sandy dolomitic green shale	Slight odor and slight stain
4466 - 4528	Shale, green, with a few streaks of gray to dark gray shale. A few streaks of shaly sand, white to brown, quartzitic	
4528 - 36	Sand white to brown, quartzitic Some dolomitic.	Possible show of oil DST #2 4530-40
4536 - 50	Dolomite tan to brown, sucrose to finely crystalline, rhombohedral Fair vugular porosity	Top Arbuckle 4536 Fair odor and good stain D.S.T. #3 4540-55 Water
4550 - 55	Dolomite as above, some large sand grains	Little if any oil show
4555	Total depth	

Ran Schlumberger Microlaterolog
Set 5½" at 4554 5-24-55

Drill Stem Tests

#1 4098 - 4110 Open 1 hour
Rec. 200' watery gas cut mud
960' water
B.H.P. 1430# (20 min.)

#2 4530- 40 Open 1 hour
Rec. 30' mud - no oil, gas or wtr.
B.H.P. 1550# (20 min.)

#3 4540 - 55 Open 1½hours.
Recovered 475' sulphur water
B.H.P. 1560# (20 min.)

#4 4370 - 91 Straddle packer test-TD 4555
Open 1 hour
Gauged 1,250,000 C.F. gas in 40 min.
Recovered 110' clean oil, 920' oily mud and muddy oil
BHP 1375# (20 min.)
Bottom packer leaked on this test

Formation Log
Ashton #1 Kiras

Core Record

Core #1 4461-71; Recovered 10'
4461 - 63 Bright green sandy shale
4463 - 66½ Shale as above with streaks of finely sucrose brown dolomite - Slight odor and few spots oil stain.
4466½ - 67½ Bright green shale
4467½ - 71 Shale, dark greenish black

Core #2 4471 - 89; Recovery questionable because core all ran out on floor when core barrel was opened. Probably full recovery. All dark green very fissile shale.

Samples examined and log compiled

by

Wendell S. Johns

Prospective Horizons: continued

Marmaton
The only zone which appears prospective is Zone #2 (4380-88) which was covered by the straddle drill stem test. This zone carries no more than a trace of stain in the samples. However, the electric log looks very prospective. It is interesting to note that the check run of the electric log does not look at all prospective, in spite of the fact that the check run agrees very well with the final run at all other points.

The true value of this zone is further obscured by the fact that the bottom packer was leaking during the drill stem test. I am inclined to believe that the final run of the electric log is correct and that probably both the oil and gas on this test came from this zone. However, the possibility that the gas may have come from this section and the oil from the Viola section below should not be overlooked. There is even the remote possibility that both oil and gas could have come from the Viola.

Viola
Both Zones #1 (4424-28) and #2 (4435-40) appear mildly prospective on the electric log. No trace of oil show can be found in the samples through this section. However, the samples are so bad at this point that only a few pieces of probable Viola limestone can be found. I believe these zones should be checked before this test is abandoned.

congl wss. Simp 3d or cgl wss.

There are no other prospective sections in this well.

Notes On Stratigraphy

There are no problems of a stratigraphic nature in this well except for the identification of the Heebner, Conglomerate and Viola sections.

Two black shale sections occur in this well at 3759-62 and 3766-71. I had first believed that both were Heebner with a limestone member developed between them. However, I now believe that the upper one is likely a black shale development in the overlying Plattsmouth limestone and the lower one is actually Heebner.

I at first called the section from 4418 to 4441 all conglomerate. However, after further study I believe the section from 4424-41 is Viola limestone in place.

Very truly yours,
Johns and Magathan

by [signature]
Wendell S. Johns

Note Correlation with a later Well 1/2 mile So. Indicates that the section from 4420-36 is prob congl. The section from 4436-43 may be congl. or a remnant of Simpson sd in place. Almost certainly No Viola in this Well. [initials]
(over)

WSJ:lb

Late May or Early June 1955

After running the straddle drill stem test Ashton set pipe on this well (I recommended 5½" ~~wall~~ at 4554 - 125 sax) but I never could find out exactly what was actually done. They then perf the Mammalian section from 4380-88 (Exact depth of perf unknown to me)

They completed this well under about 1500' of salt water. After considerable fooling around they reported about 3 million CFG per day.

The well then ~~went~~ through a long period of litigation and messing around and I lost track of it

4-4-62 Jack Barker reported as follows Stelbar Oil Co Perf 4426-36 (in lower Cgl & trace of Simpson? sd) about Aug 1961. Well had made 21 BOPd + 70 BWPd for last 8 month

6-22-62
Woodsides of Sunray reports that well had made a total of about 11,000 BO to June 1

Time Log

Ashton #1 Kiras
SW SW NE 2-30S-14W
Barber County, Kansas
Elevation 1934 **Kelly Bushing**
1931 **Derrick Floor**

Note: All measurements are from the top of the Kelly Bushing

Depth	Time	Remarks
3600 - 10	4-4-5-4-4-4-4-5-7-5	
20	5-3-4-3-5-4-4-3-4-5	
30	5-3-5-3-4-4-4-4-3-5	
40	4-4-4-6-5-3-5-4-5-5	
50	6-3-4-5-5-5-5-4-4-3	
60	5-4-4-3-3-5-5-4-3-3	
70	2-1-4-4-5-4-5-6-6-5	
80	4-6-4-4-6-4-4-8-6-5	
90	3-5-4-3-9-6-7-8-5-7	
90 - 3700	6-7-6-5-7-6-5-7-8-6	
3700 - 10	8-6-5-4-6-5-6-6-6-7	
20	7-9-6-5-7-6-6-6-3-6	
30	4-5-5-4-4-5-5-4-5-5	
40	6-5-6-8-7-6-6-8-7-9	
50	9-6-3-3-4-4-3-4-3-6	
60	9-5-3-3-3-7-7-10-12-7	
70	2-4-4-2-3-3-6-5-5-8	Trip 3760 OWV
80	4-2-4-3-2-2-3-7-5-5	Heebner 3770-76
90	4-4-4-5-6-8-5-6-6-7	
90 - 3800	8-4-4-3-4-7-7-3-4-3	
3800 - 10	4-4-4-4-3-2-3-4-4-4	
20	5-4-2-2-2-3-2-1-2-2	Douglas 3812-3946
30	2-3-3-2-2-2-1-2-1-1	
40	1-2-1-1-1-1-2-1-1-2	
50	1-2-2-1-2-2-3-2-3-2	
60	3-2-3-2-3-2-2-2-2-2	
70	2-2-2-2-3-2-3-2-3-2	
80	3-3-2-3-3-2-3-2-3-2	
90	3-3-3-4-3-3-4-2-5-3	
90 - 3900	3-2-4-3-3-3-4-3-3-3	
3900 - 10	3-3-4-3-3-3-3-3-3-4	
20	3-3-4-2-4-3-3-3-3-3	
30	3-3-4-3-3-3-4-4-3-3	
40	3-4-3-3-3-4-3-3-3-5	
50	2-3-3-4-3-3-8-7-6-7	Top Brown Lansing 3946

Time Log
Ashton #1 Kirns

Depth	Time	Remarks
3950 - 60	7-5-3-4-3-4-4-3-3-7	Top Lansing 3956
70	4-5-5-4-3-8-8-6-7-7	
80	7-7-9-7-8-8-7-7-8-9	
90	5-8-9-7-8-7-8-9-9-5	
90 - 4000	4-4-5-5-8-8-10-12-10-11	Circ. 3997 1 hr.
4000 - 10	11-9-10-9-10-9-10-7-9-11	
20	9-10-8-8-10-10-11-13-9-14	
30	12-12-16-12-11-9-9-11-10-10	
40	12-10-9-13-7-8-10-10-11-6	Trip 4039 OWW
50	6-6-7-6-6-6-5-5-8-4	
60	5-10-10-7-13-11-13-11-13-11	
70	11-11-16-15-11-13-13-8-5-8	
80	8-9-9-8-6-4-6-8-12-9	
90	11-8-5-11-11-10-10-7-4-10	Circ. 4083 ½ hr.
90 - 4100	8-6-7-9-9-9-10-11-13-11	
4100 - 10	12-8-5-6-10-7-5-5-4-4	Circ. 4110 1½ hrs. D.S.T 4098-4110 Rec. 1160 mud & Wtr. New OWW at 4110
20	3-2-2-3-3-3-3-5-2-5	
30	4-5-4-5-5-4-6-6-9-9	
40	6-5-5-4-5-5-4-3-3-3	
50	4-3-2-6-6-6-9-7-10-6	
60	5-8-8-3-4-7-5-3-3-4	
70	3-4-3-6-8-6-5-9-7-8	Circ. 4166 1 hr.
80	7-4-4-3-2-3-6-8-7-6	Circ. 4178 1 hr.
90	6-5-6-7-6-5-7-6-7-7	
90 - 4200	7-7-7-6-7-7-7-5-5-3	
4200 - 10	4-5-5-5-5-5-4-5-6-6	
20	7-9-10-10-11-10-9-12-11-10	
30	14-13-10-10-8-5-5-9-12-8	
40	3-4-5-5-9-9-8-9-9-16	Rough 4234-35
50	12-13-12-16-5-7-5-6-7-6	Circ. 4240 ½ hr Trip 4244 OWW
60	4-6-4-8-7-4-6-11-7-8	
70	7-10-12-5-7-5-4-3-6-8	
80	5-3-4-4-4-3-6-5-6-5	Circ. 4275 1 hr.
90	5-7-6-5-5-5-5-6-5-6	
90 - 4300	5-6-8-5-7-6-5-5-7-7	Base Kansas City 4300
4300 - 10	3-2-5-6-6-4-2-4-5-7	
20	7-5-4-5-5-6-6-6-4-5	
30	7-7-7-6-5-4-3-4-3-4	
40	4-3-6-8-7-8-7-6-5-3	
50	3-5-3-3-4-5-4-3-6-4	

Time Log
Ashton #1 Kiras

Depth	Time	Remarks
4350 - 60	6-5-5-6-4-4-4-5-4-4	
70	5-4-4-4-5-4-4-4-9-8	
80	9-14-13-14-15-12-12-11-9-7	Circ. 4370 1½ hrs.
90	13-11-13-9-7-8-10-10-12-7	Rough 4383-84 & 4386-88
90 - 4400	5-6-9-11-12-13-9-11-13-11	
4400 - 10	11-9-7-8-5-5-3-4-4-4	Lost Circ. 4401 Very rough 4401-02 Trip 4402 W-7
4420	6-4-4-6-6-4-3-5-6-4	Circ. 4420 1 hr.
4430	6-5-4-2-3-2-1-2-8-3	Top Conglomerate 4420 Top Viola 4426
4440	2-2-3-3-6-11-8-6-4-5-	Circ. 4438 1 hr. Simp. 4443
4450	5-4-6-6-5-2-4-7-7-7	Circ. 4450 1 hr.
60	6-9-7-6-7-6-8-8-6-7	SR 4450-52 Circ. 4461 1 hr.
70	7-27-26-22-20-21-32-40-38-37	Cored 4461-71- Full recovery All shale and shaly dolomite
80	35-22-34-34-29-30-30-36-40-35	Cored 4471-89 Probably full recovery? All shale.
90	26-33-29-34-35-26-23-20-22-6	
90 - 4500	5-6-7-6-6-7-7-6-5-6	
4500 - 10	6-4-5-6-7-5-5-6-6-6	
20	4-7-5-5-6-5-6-8-7-5	
30	4-4-6-6-5-6-6-6-10-11	
40	17-12-11-11-14-20-17-19-25-22	Top Arbuckle 4536 DST 4530-40 Recovered 30' mud
50	3-6-7-5-5-5-6-6-5-5	Circ. 4540 1 hr. New W7 4540
60	7-6-6-4-6	Circ. 4555 1 hr. T.D. 4555 D.S.T. 4540 -55 Recovered 475' Wtr. Ran electric log Took straddle packer D.S.T. 4370-91 Recovered 1030' mud & oil 5½" @ 4554