Computer Inventoried

FORMATION LOG

Schafer & Ross #3 Seidel
NW/SE/NW, 19-27S-12W
Pratt County, Kansas
Elevation: 1871 ground
1873 derrick floor
1876 rotary bushing

8 5/8" casing 347'; 225 sacks
5½" 4355'; 175 sacks
comm: 1/28/54
comp:

Notes: (1) All measurements are from the top of the rotary bushing.
(2) A measurement correction of 5' was made at 3950' (3950 = 3945) It was found that an error had been made in tallying the drill pipe at about 2500'. This log has been corrected throughout.

Depth	Formation Description	Remarks
0 - 150	Sand, shale and shells	Drillers log 0 - 3500
150 - 247	Shale and shells	
247 - 660	Red beds	
660 - 680	Anhydrite	Stone Corral; electric log
680 - 1050	Red beds	
1050 - 1810	Shale and shells	
1810 - 1925	Limestone	
1925 - 2065	Limestone and shale	
2065 - 2220	Shale and limestone	
2220 - 2350	Limestone and shale	
2350 - 2470	Shale and shells	
2470 - 2795	Shale	
2795 - 2890	Shale and shells	
2890 - 3290	Limestone and shale	
3290 - 3390	Shale and shells	
3390 - 3495	Limestone and shale	
3495 - 3526	Limestone, tan to gray, finely crystalline, trace chert	Sample log 3495-total depth
3526 - 3532	Shale, soft black	Heebner
3532 - 3535	Limestone, brown to blue gray, dense.	Leavenworth
3535 - 3544	Shale, green-gray	Snyderville
3544 - 3565	Limestone, light tan, clean, finely crystalline, much chert, white, vitreous, opaque to translucent	Toronto
3565 - 3703	Shale, gray, green, brown, trace fine silty micaceous sand, especially from 3600 -23 and 3653-58.	Douglas
3703 - 3710	Limestone, brown to gray dense, some dark gray-brown, fossiliferous	Brown Lansing
3710 - 3725	Shale, gray, streaks of limestone, as above	
3725 - 3752	Limestone, tan to brown, dense to finely crystalline, trace fossils and oolites.	Lansing
3752 - 3754	Shale, gray	
3754 - 3758	Limestone, as above	
3758 - 3768	Limestone, gray, crystalline to sub-crystalline, some oolites, some vugular porosity.	Fair odor, some stain, no free oil; DST
3768 - 3778	Limestone, brown, dense	

(2) Formation log; Schafer & Ross #3 Seidel

Depth	Formation Description	Remarks
3778 - 3781	Shale, green-gray	
3781 - 3784	Limestone, as above	
3784 - 3787	Shale, as above	
3787 - 3797	Limestone, tan, sub-crystalline possible streaks vugular porosity.	Possibly some stain.
3797 - 3800	Limestone, as above, some vugular porosity	Fair stain
3800 - 3816	Limestone, light tan, sub-crystalline to finely crystalline, fossiliferous	
3816 - 3817	Shale, green-gray	
3817 - 3824	Limestone, as above	
3824 - 3826	Shale, gray	
3826 - 3832	Limestone, tan and brown crystalline, very fossiliferous, streaks of porosity	Trace stain
3832 - 3840	Limestone, as above, no porosity	
3840 - 3853	Limestone, as above, very good vugular porosity	Light stain
3853 - 3857	Limestone, gray sub-crystalline, chert, gray opaque; white devitrified	
3857 - 3861	Limestone, tan to brown, sucrose, finely crystalline, some porosity, some chert, as above.	slight stain
3861 - 3864	Shale, gray	
3864 - 3873	Limestone, as above, some porosity	Slight stain
3873 - 3881	Limestone, gray to brown, dense, chert, dirty gray, opaque, non-vitreous	
3881 - 3886	Shale, green and brown	
3886 - 3892	Limestone, brown, sub-crystalline, possibly oolitic, some vugular porosity.	Slight stain
3892 - 3901	Limestone, gray, dense	
3901 - 3903	Shale, gray and maroon	
3903 - 3909	Limestone, tan, oolitic and oolicastic, good oolicastic and vugular porosity.	Trace dark stain
3909 - 3917	Limestone, tan to brown, dense oolitic, no porosity	
3917 - 3918	Shale, gray	
3918 - 3927	Limestone, as above, possible trace porosity	No show
3927 - 3935	Limestone, tan, dense	
3935 - 3941	Limestone, light tan, dense, to crystalline, oolitic; fractured and vugular porosity	Trace dead black stain
3941 - 3960	Limestone, brown, dense	
3960 - 3970	Shale, gray	
3970 - 3973	Limestone, tan, oolitic and oolicastic, fair oolicastic porosity	Spotted dark stain
3973 - 3978	Limestone, tan, dense	
3978 - 3981	Limestone as from 3970-73	Trace dark stain
3981 - 3996	Limestone, brown, dense	
3996 - 3997	Shale, green and brown	
3997 - 4004	Limestone, tan to brown, dense, some chert, brown, translucent.	

(3) Formation log; Schafer & Ross #3 Seidel.

Depth	Formation Description	Remarks
4004 - 4008	Shale, dark gray	
4008 - 4014	Limestone, as above	
4014 - 4016	Shale, gray	
4016 - 4021	Limestone, gray to brown, sub-crystalline, some fine, vugular porosity	Spotted dark stain
4021 - 4036	Limestone, as above, very little, if any, porosity	
4036 - 4037	Shale, gray and brown	
4037 - 4040	Limestone, as above	
4040 - 4042	Shale, as above	
4042 - 4048	Limestone, as above	
4048 - 4052	Shale, as above	
4052 - 4056	Limestone, as above	
4056 - 4058	Shale, as above	
4058 - 4063	Limestone, as above	Base Kansas City
4063 - 4075	Shale, green-gray, fossiliferous, silty	Marmaton
4075 - 4083	Limestone, gray, sub-crystalline	
4083 - 4085	Shale, green-gray	
4085 - 4099	Limestone, white, chalky	
4099 - 4103	Shale, as above	
4103 - 4109	Limestone, tan, dense	
4109 - 4112	Shale, as above	
4112 - 4116	Limestone, as above	
4116 - 4135	Limestone, tan, sub-crystalline to dense, trace chaetetes, much chert, white to tan vitreous, translucent to transparent, s icular	
4135 - 4149	Some chert, gray opaque; some dirty gray silicified limestone; much shale green and green-gray	
4149 - 4157	Chert, as above, also red, yellow, white; weathered opaque, some weathered limestone	Conglomerate 4149-69
4157 - 4169	Some chert as above, mostly shale, green-gray, brown, purple, variegated	
4169 - 4188	Chert, white, opaque, some light tan, amber, vitreous opaque; some white devitrified chert with dead black stain	Mississippi
4188 - 4217	Shale, gray to green-gray, purple, maroon; some limeston green-gray sub-crystalline	Kinderhook
4217 - 4221	Limestone, dark brown, finely crystalline; some white crystalline	
4221 - 4233	Chert, white opaque to translucent figured; brown to amber translucent	Viola; no show in top
4233 - 4243	Chert as above, with green shale streaks	
4243 - 4257	Chert as above; chert white devitrified, porous	Fair light brown oil stain
4257 - 4263	Limestone, light tan, finely crystalline; trace sandy limestone	
4263 - 4268	Shale, dark green, trace coarse glassy sand grains.	Simpson

(4) Formation log; Schafer & Ross #3 Seidel.

Depth	Formation Description	Remarks
4268 - 4273	Sand, coarse, angular to rounded, slightly shaly	Good stain
4273 - 4277	Shale, green sandy	
4277 - 4281	Sand, white submedium to medium	Trace stain and fair odor
4281 - 4283	Dolomite, brown, hard, finely crystalline, sandy	No show
4283 - 4288	Limestone, hard, dark brown, dense, streaks dolomite, as above	No show
4288 - 4291	Streaks gray brown shaly dolomite, and sandy shale	Fair show oil
4291 - 4294	Shale, green, sandy	
4294 - 4300	Sand, white to green, poorly sorted, cross-bedded, shaly. Some porosity.	Good odor and show oil
4300 - 4302	Sand, green, silty tight	No show
4302 - 4333	Sand, brown, glassy, well sorted, angular to subrounded. Quartzitic to friable.	Very good show oil; probably carries water below 4324
4333 - 4342	Sand, as above, shaly	Slight show oil
4342 - 4355	Shale, green, sandy at top to not sandy at bottom.	
4355	Total depth	Still in Simpson

Ran Gamma ray-Laterolog-Microlaterolog 2/15/54

Drill Stem Tests:

(1) 3751-72 (corrected) open 1 hour
Strong blow by heads which died by end of test
Recovered 600' gas
105' oil and gas cut mud
60' oily water
Initial flowing pressure 30#
Final flowing pressure 60#
Bottom hole pressure 1010# (20 min.)

Core records:

This well was diamond cored from 4275 to total depth.

#1 core - 4275 - 4325; recovered 50'
Top 6" shale, gray-green
18" shale, green, sandy; thin streaks shaly sand
6" shale, bright green, sandy
4' sand, white, submedium to medium, quartzitic; some streaks shale, bright green, calcareous. Fair odor and slight stain in top of sand.
2' dolomite, brown, hard, finely crystalline, with white quartzitic sand inclusions
5' limestone, hard, dark brown, very dense, with interbedded streaks of dolomite as above
6" sand and dolomite as above
6" shale, dark brown, dense, slight odor
6" shale, dark gray, waxy
6" sand, shaly, coarse, poorly sorted, good odor and stain
1' dolomite, gray-brown shaly, porous, good odor and bleeding oil bubbles of gas

(5) Formation log; Schafer & Ross #3 Seidel.

(core record cont'd.)

3' shale, green, fairly sandy (4" at bottom bright green)
6' sand, white to green, poorly sorted, cross-bedded, shaly and silty. Streaks porosity with good stain and odor - bleeding oil
18" sand, green, silty, tight. Trace spotted stain.
Bottom 23' sand, brown, glassy; slightly quartzitic to friable. Well sorted, medium, angular to subrounded. Very well saturated - good odor (a few thin streaks of green shale, none more than ½" thick)

#2 Core - 4325 - 4355 T.D.; recovered 30'
Top 8' sand, quartzitic, hard, well sorted. Fair porosity - good saturation and odor
6' sand, as above, intercalated with concave-convex streaks bright green shale
3' sand, very hard, quartzitic, brown to white. Some shale streaks, fair odor and show oil
13' shale, green to dark green, grades from fairly sandy at top to not sandy at bottom. Much pyrite and phosphate.

(Samples examined and log compiled by Wendell S. Johns.)

T I M E L O G

WENDELL C. ...

Schafer & Ross #3 Seidel
NE/SE/NE, 19-27-12W
Pratt County, Kansas
Elevation: 1873 derrick floor
1876 rotary bushing
Note: (1) All measurements are from the top of the rotary bushing
(2) Measurement correction 3950 = 45. This 5' error was found on the board at approximately 2500'. Therefore all measurements between 2500' and 3950' should be moved up 5'. This log is not corrected.

Depth	Time	Remarks
3500 - 10	4-2-1-1-2-2-2-1-1	
20	2-1-3-2-3-3-4-6-6-3	
30	6-7-6-7-5-4-8-8-7-9	
40	9-4-4-4-3-3-5-8-10-7	Top Heebner 3531
50	6-6-5-5-6-5-6-6-6-6	
60	6-4-4-6-8-9-5-3-3-3	
70	3-3-3-3-2-4-8-6-4-6	
80	6-6-5-6-5-5-4-7-6-7	
90	5-8-5-5-6-5-6-7-5-5	
90 - 3600	4-4-6-6-6-5-6-5-5-5	
3600 - 10	5-4-4-4-6-6-5-5-5-5	
20	4-5-5-7-5-8-12-8-7-5	
30	4-5-5-5-5-4-4-8-12-13	
40	12-12-10-10-9-9-4-3-4-2	Trip 3636, OSQ
50	3-4-4-4-3-3-3-4-3-3	
60	4-4-4-4-4-3-3-3-3-2	Sr. 3655-58
70	2-2-2-4-4-2-4-4-4-5	SR
80	5-5-6-5-5-6-7-6-5-5	
90	5-6-5-4-5-4-4-5-5-4-4	Rough
90 - 3700	4-5-5-4-4-4-3-4-4-4	SR 3694-97
3700 - 10	4-4-6-5-5-4-4-4-5-6	Roug; Brown Lansing 3708
20	7-7-7-7-6-7-6-7-6-7	
30	6-6-7-6-6-5-5-6-5-9	Lansing 3730
40	4-7-6-7-8-6-7-7-7-8	
50	8-6-7-7-7-11-11-8-10-9	V.R.
60	10-10-9-11-10-10-10-6-10-7	
70	6-5-7-5-5-4-4-4-4-4-4-	
80	4-5-4-6-7-7-7-4-8-9	Circ. 3777, 1½ hrs; DST 3756-77 oil and water; new osq 3777
90	8-8-7-6-5-4-4-5-3-4	
90 - 3800	5-5-4-4-4-3-6-4-5-6	
3800 - 10	6-6-5-5-5-6-6-7-6-8	
20	8-8-6-9-7-7-9-10-13-14	
30	12-15-11-14-12-5-10-5-11-7	
40	4-5-3-4-4-5-4-8-10-8	
50	5-6-8-7-8-3-3-3-6-5	
60	3-3-3-3-3-4-5-5-9-13	
70	10-10-7-7-6-6-4-5-6-4	
80	5-5-7-6-5-5-6-6-10-10	
90	7-13-12-15-15-15-11-12-10-10	
90 - 3900	10-12-10-5-6-3-2-9-11-14	

(2) Time log; Schafer and Ross #3 Seidel

Depth	Time	Remarks
3900 - 10	12-12-12-11-12-12-11-10-8-8	
20	5-6-6-5-8-14-16-16-17-17	
30	16-16-9-7-5-5-5-7-10-8	Trip 3922; W-7
40	5-5-8-9-10-9-9-9-8-7	
50	4-5-5-5-5-6-8-9-12-11	
60	11-10-8-9-7-8-11-8-8-10	Measurement correction 3950±45 (3945 to 50 corrected-drilled without keeping time)
70	7-7-7-7-7-5-5-5-3-3	
80	6-3-3-5-7-7-7-8-4-6	
90	5-8-8-8-8-8-9-8-9-8	
90 - 4000	7-10-8-8-9-8-5-9-8-10	
4000 - 10	10-7-9-13-8-17-14-13-6	
20	8-9-9-11-10-10-12-9-9-12	
30	10-16-13-12-7-7-10-12-9	
40	9-9-9-8-7-7-8-11-18-16	
50	14-13-16-15-12-15-14-16-16-18	Trip 4046; W-7
60	17-24-14-16-18-18-13-15-15-21	
70	15-16-16-13-15-17-16-20-20-20	Base Kansas City 4063
80	28-10-12-13-9-10-11-9-16-27	
90	19-17-17-8-8-17-13-14-16-13	
90 - 4100	15-15-11-16-15-12-12-15-10-20	
4100 - 10	19-17-18-20-10-17-18-13-14-16	
20	12-13-17-13-13-14-10-10-10-8	
30	9-7-8-8-7-8-8-7-7-22	
40	7-8-7-7-9-14-11-13-12-11	Trip 4136; W7R
50	9-9-14-15-15-13-14-15-13-8	Top Conglomerate 4149
60	8-10-9-8-9-9-9-9-8-9	
70	14-11-10-14-14-12-10-11-9-2	Mississippi 4169
80	4-4-4-4-4-4-4-4-5-5	
90	4-7-4-5-4-7-5-8-3-8	Kinderhook 4188
90 - 4200	16-14-19-17-20-17-14-15-27-21	
4200 - 10	15-14-19-17-17-16-13-15-16-13	
20	14-14-14-11-12-8-8-6-6-6	
30	11-5-8-4-5-6-5-5-6-5	Viola 4221
40	5-5-6-8-7-9-8-7-7-8	
50	9-10-12-10-6-6-5-7-6-4	
60	8-6-5-4-7-7-10-13-19	Simpson 4263
70	17-22-18-11-11-10-13-14-11-8	Circ. 4265, ½ hr.
80	9-8-10-12-11-12-16-9-9-8	Circ. 4275, 1½ hrs.
90	6-13-14-14-13-16-16-15-10-11	Diamond coring 4275-4355
90 - 4300	6-16-17-14-7-5-4-5-4-3	
4300 - 10	5-7-11-9-11-11-14-15-12-14	
20	22-24-20-19-28-12-12-17-12-10	
30	8-9-12-10-10-7-10-10-9-8	
40	6-6-6-6-5-8-6-9-7-18	
50	15-14-13-17-19-16-14-15-17-13	
60	13-15-17-20-19	Total depth 4355
		Ran electric log
		Set 5½" pipe at 4355

(Time log condensed by Johns & Magathan)