

FORMATION LOG.

Ambassador Oil Corporation
 #1 Lloyd Chadd
 SE SE SE; 25-26S-18W
 Edwards County, Kansas
 Elevation: 2148 Ground
 2151 Derrick Floor
 2153 Kelly Bushing

8 5/8" Casing 307'
 Comm: 4-20-56
 Comp: 5-16-56

Note: All measurements are from the top of the rotary bushing.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
0 - 205	Sand	Drillers log 0-3200
205 - 15	Shale	
215 - 307	Shale and shells	
307 - 640	Shale	
640 - 850	Red beds	
850 - 1100	Shale and shells	
1100 - 60	Shale	
1160 - 78	Anhydrite	Stone Corral Electric log
1178 - 1292	Sand and anhydrite with shale streaks	Electric log
1292 - 1603	Shale	
1603 - 1850	Shale and shells	Wellington 1603-2395
1850 - 2160	Anhydrite and salt with shale streaks	Electric log
2160 - 2245	Limestone and shale	
2245 - 2325	Limestone and shale streaks	
2325 - 75	Limestone	
2375 - 95	Limestone with shale streaks	
2395 - 2505	Shale and limestone	Top Chase Group 2395 Electric log
2505 - 40	Limestone and shale streaks	Ft. Riley-Florence 2512-2650 Electric log
2540 - 2755	Limestone	
2755 - 2875	Limestone and shale	
2875 - 3110	Limestone	
3110 - 3200	Limestone and shale	
3200 - 03	Shale	Sample log 3200-T.D.
3203 - 13	Limestone, dark gray, sub-crystalline	
3213 - 28	Shale, gray and brown	
3228 - 31	Limestone, gray dense	

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
3231 - 3239	Shale, gray	
3239 - 48	Limestone, gray to tan and brown, dense to finely crystalline, fossiliferous	
3248 - 54	Shale, gray	
3254 - 71	Limestone, gray to dirty brown-gray, mottled, subcrystalline to finely crystalline. Some fossils and glauconite	
3271 - 3304	Shale, gray	
3304 - 34	Sand, fine gray to green, shaly micaceous, with shale streaks	
3334 - 43	Limestone, gray-tan dense, shaly	
3343 - 64	Limestone gray to black, dense, with gray shale streaks	
3364 - 77	Shale, gray	
3377 - 3416	Limestone as above to lighter gray with shale streaks	
3416 - 38	Limestone, gray-tan, dense to lithographic, with gray shale streaks	
3438 - 44	Shale, gray	
3444 - 49	Limestone, brown, dense	
3449 - 52	Shale, gray	
3452 - 70	Limestone, gray to dark gray, chalky to dense, fossiliferous. Some porosity 3454-62	No show
3470 - 75	Shale, gray	
3475 - 3508	Limestone, tan dense, some gray shale streaks. Some streaks of broken porosity	No show
3508 - 34	Shale, gray, some streaks sandy shale	
3534 - 38	Limestone, gray, finely crystalline, oolitic, fossiliferous	
3538 - 42	Shale, gray	
3542 - 59	Limestone, dark gray, shaly some porosity 3549-56	No show
3559 - 62	Shale, gray	
3562 - 3600	Limestone, gray to tan, subcrystalline to finely crystalline	
3600 - 04	Shale, gray, calcareous, some gray calcareous sand	
3604 - 10	Limestone, gray-tan, subcrystalline, some fossils	Possible Top Topeka
3610 - 16	Shale, dark gray	

-3- Formation Log: Ambassador #1 Lloyd Chadd.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
3616 - 3640	Limestone, light tan to light brown, subcrystalline to dense	
3640 - 41	Shale, gray	
3641 - 61	Limestone, white to light gray, chalky; some light brown finely crystalline, fossiliferous, and oolitic. Trace chert, white devitrified. Some vugular porosity 3645-61	No show
3641 - 83	Limestone, gray to tan, dense to subcrystalline. Trace chert gray opaque	
3683 - 95	Limestone, buff, finely crystalline. Trace porosity	No show
3695 - 3707	Limestone, gray-tan, subcrystalline	
3707 - 12	Shale, dark gray	
3712 - 20	Limestone, light tan, subcrystalline to finely crystalline. Trace porosity	No show
3720 - 29	Limestone, gray, dense, some chert, gray opaque	
3729 - 36	Shale, dark gray	
3736 - 48	Limestone, light gray, dense, some fossils	
3748 - 50	Shale, gray	
3750 - 58	Limestone, light gray, chalky; trace porosity	No show
3758 - 61	Shale, gray	
3761 - 71	Limestone, gray dense	
3771 - 78	Shale, gray, with thin limestone streaks	
3778 - 92	Limestone, gray, dense; some chert gray opaque	
3792 - 96	Shale, gray, and brown	
3796 - 3823	Limestone, gray to tan, dense to finely crystalline, some dark gray to dark brown limestone. Some fossils and chert, gray, opaque vitreous in top part. Broken porosity throughout	No show
3823 - 26	Shale, black	
3826 - 40	Limestone, tan to brown, dense, to finely crystalline. Porosity 3831-37	No show

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
3840 - 3849	Limestone, as above, no porosity, some thin streaks gray shale	
3849 - 3930	Limestone, gray to tan, sucrose to chalky to finely crystalline. Some vugular and pinpoint porosity throughout	No show
3930 - 32	Shale, dark gray	
3932 - 40	Limestone, gray to black; some, gray-brown dense, limestone	
3940 - 53	Limestone, gray to tan, dense to finely crystalline, some fossils and some chert, gray opaque, subvitreous	
3953 - 59	Shale, black, soft	Heebner
3959 - 63	Limestone, dark-gray, dense	Leavenworth
3963 - 72	Shale, gray-green, silty, micaceous	Snyderville
3972 - 92	Limestone, tan to white crystalline to chalky. Streaks of vugular porosity	Toronto No show
3992 - 4000	Shale, gray-green, silty	Douglas 3992-4090
4000 - 04	Limestone, light tan to buff, crystalline to granular. Fossils and oolites. Some oolitic porosity	Amazonia 4000-18 No show
4004 - 06	Shale, gray	
4006 - 18	Limestone, as above	
4018 - 34	Shale, gray-green, silty, some green and brown variegated shale. Some fine shaly sand. Some pyrite	
4034 - 80	Shale as above, some, purple-maroon	
4080 - 82	Limestone, dark brown, dense	
4082 - 90	Shale, as above	
4090 - 95	Limestone, dark brown to dark gray, dense to finely crystalline. Very fossiliferous	Brown Lansing
4095 - 4102	Shale, gray	
4102 - 18	Limestone, tan, finely crystalline, sucrose. Trace oolitic porosity	Lansing Some dark stain, no odor, no free oil
4118 - 22	Shale, gray	
4122 - 43	Limestone, light gray, chalky to sucrose. Some oolitic porosity	No show

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
4143 - 4145	Shale, gray	
4145 - 50	Limestone, light tan, dense; trace of fossils; trace white devitrified chert	
4150 - 51	Shale, gray	
4151 - 62	Limestone tan to dark gray-brown, dense to subcrystalline. Some chert, brown, opaque to translucent	
4162 - 82	Limestone, as above, with streaks gray shale	
4182 - 91	Limestone, gray to dark brown, finely crystalline to sucrose, some fossils. Much brown, translucent chert. Some porosity	No show
4191 - 92	Shale gray	
4192 - 99	Limestone as above, no porosity	
4199 - 4201	Shale gray	
4201 - 08	Dolomite and dolomitic limestone, light tan, sucrose; some porosity	No show
4208 - 14	Limestone, gray to dark brown, dense, some brown chert	
4214 - 35	Limestone, gray subcrystalline, fossiliferous, some chert, gray opaque. Streaks fair vugular porosity	No show
4235 - 39	Limestone, gray dense	
4239 - 41	Shale gray	
4241 - 46	Limestone as above	
4246 - 49	Shale, gray	
4249 - 61	Limestone, light brown, oolitic and oolitic, good porosity	No show
4261 - 72	Limestone, tan to gray, dense	
4272 - 76	Shale, gray and brown	
4276 - 85	Limestone as above, some oolitic porosity	No show
4285 - 99	Limestone, as above, with streaks gray and brown shale	
4299 - 4305	Limestone, white, chalky	
4305 - 11	Limestone, tan to buff, crystalline, some oolitic porosity	No show
4311 - 21	Limestone, light tan, crystalline, to finely crystalline, some fossils or oolites.	

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
4321 - 4336	Limestone, gray to tan to pink, dense, some chert, brown, translucent	
4336 - 39	Shale, gray and brown	
4339 - 44	Limestone, and chert as above. Streaks of slight porosity	No show
4344 - 58	Limestone as above, some streaks green shale	
4358 - 73	Limestone, as above	
4373 - 78	Streaks dark gray shale and limestone	
4378 - 4408	Limestone, gray to brown, sub-crystalline. A few thin streaks of poor porosity	No show
4408 - 20	Limestone, pinkish, brown, dense	
4420 - 26	Shale, dark gray and black	
4426 - 29	Limestone, gray, chalky	
4429 - 30	Shale, dark gray	
4430 - 42	Limestone, dark brown, dense	
4442 - 44	Shale, gray and green	
4444 - 60	Limestone, light gray, sub-crystalline to chalky, some brown dense	
4460 - 62	Shale, gray and brown	
4462 - 65	Limestone, as above	
4465 - 66	Shale, as above	
4466 - 70	Limestone as above	Base Kansas City
4470 - 77	Shale, dark gray to black, some green-gray, some silty	Marmaton
4477 - 80	Limestone, light tan to brown, dense, oolitic or fossiliferous	
4480 - 82	Shale, gray, green-gray, dark gray, maroon; some silty to sandy shale	
4482 - 97	Limestone, gray to brown, sub-crystalline	
4497 - 99	Shale, dark gray to black	
4499 - 4516	Limestone, tan to gray-brown, to pinkish-gray. Subcrystalline to dense. Oolitic	
4516 - 24	Shale, as above	
4524 - 33	Limestone, as above	
4533 - 39	Shale as above, calcareous	
4539 - 49	Limestone, as above	
4549 - 52	Shale, black, soft	
4552 - 68	Limestone, as above, possibly some thin shale streaks	

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
4568 - 4573	Shale as above, some thin limestone streaks	
4573 - 76	Shale, black, soft	Probable Top Cherokee
4576 - 85	Shale, gray, green and maroon, possible thin limestone streaks	
4585 - 92	Limestone, green, shaly, sandy. Some limestone, brown, dense	
4592 - 97	Shale, dark gray	
4597 - 4601	Limestone, gray to brown, sub-crystalline to sucrose	
4601 - 04	Shale, gray, green and brown	No Cherokee Sand
4604 - 10	Limestone, as above	
4610 - 16	Shale, gray, maroon and variegated	
4616 - 77	Chert, gray, opaque; gray, amber, and brown translucent; white devitrified	Mississippi, No show D.S.T.
4677 - 4703	Shale, gray-green and maroon. Trace chert, gray, translucent	Kinderhook 4677-4770
4703 - 07	Chert, white, gray, brown, vitreous, translucent	
4707 - 11	Shale as above	
4711 - 33	Sand, white to red, fine to sub-medium, angular, glassy, tight	No show, no odor, no fluorescence
4733 - 50	Sand, white to red, glassy, quartzitic, very tight	No show
4750 - 62	Sand as above, more quartzitic, cherty	No show
4762 - 66	Sand, quartzitic, very cherty, with streaks shale, green and brown. Some sandy chert	No show
4766 - 70	Shale, green and brown	
4770 - 90	Dolomite, red to gray to nearly white, sucrose to finely crystalline, possibly some chert. Some porosity 4770-79	Viola 4770-4936 No show
4790 - 96	Dolomite, gray, sucrose to finely crystalline. Some streaks red and white chalky limestone	
4796 - 97	Shale, green	
4797 - 4812	Dolomite as above, much chert, gray to red, translucent, vitreous; chert, white opaque vitreous	
4812 - 38	Chert, white, opaque, vitreous to devitrified. Some dolomite as above. Some porosity	No show

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
4838 - 4849	Chert as above, increase in dolomite. Trace white chalky limestone	
4849 - 50	Shale green	
4850 - 79	Dolomite white to tan to cream, finely crystalline to sucrose. Much chert as above. Trace white crystalline limestone at bottom	
4879 - 85	Sand, white, submedium, angular, well sorted, dolomitic and calcareous. Possible porosity	No show
4885 - 4918	Dolomite as above. Some lime- stone as above. Some chert	
4918 - 27	Limestone, cream, finely crystal- line. Some dolomite, brown to dark brown, finely crystalline	
4927 - 36	Limestone white to pink, crystal- line. Some gray subcrystalline sandy limestone	
4936 - 37	Shale, green	Simpson 4936-5025
4937 - 56	Dolomite, light tan, crystal- line	
4956 - 73	Dolomite, tan to white, coarsely crystalline. Some red crystal- line sandy dolomite. Some chert, white, translucent. Some porosity	No show
4973 - 86	Shale, green, dark green. Some light green sandy shale	
4986 - 92	Sand, white, medium to coarse, quartzitic dolomitic. No porosity	
4992 - 96	Shale, green as above	
4996 - 99	Sand as above	
4999 - 5004	Shale as above	
5004 - 12	Sand with shale streaks	
5012 - 25	Shale, as above, a few coarse sand grains in shale	
5025 - 28	Dolomite, light tan to brown, finely crystalline to crystalline. Some finely sucrose sandy dolomite. Some brown oolitic dolomite. Chert, tan, gray and brown, oolitic and fossiliferous, opaque to translucent, vitreous to devitrified. Some porosity	Arbuckle No show
5028 - 29	Shale, green	
5029 - 37	Dolomite as above	
5037 - 38	Shale, green	

-9- Formation Log: Ambassador #1 Lloyd Chadd.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
5038 - 5043	Dolomite, brown, oolitic, very porous	No show
5043 - 49	Dolomite as at top. Some chert. No porosity	
5049	Total depth	
	Ran electric log 5-16-56	
	Dry and abandoned 5-16-56	
	Took no cores.	

Drill Stem Tests:

One drill stem test was taken as follows:

4607-40 - Open 1 hour - Mississippi gas to surface in 5 minutes. Not enough to measure.

Recovered 25' gas cut mud.

120' gas cut muddy water.

180' salt water.

Initial Bottom Hole Pressure: 1535 p.s.i. (20 min.).

Initial Flowing Pressure: 65 p.s.i.

Final Flowing Pressure: 130 p.s.i.

Final Bottom Hole Pressure: 1230 p.s.i. (20 min.).

Samples examined and log compiled by

WENDELL S. JOHNS.