

NORTH DAKOTA GEOLOGICAL SURVEY CIRCULAR NO. 150

Summary of the Caroline Hunt Trust Estate - Obed Larson No. 1
Well No. 642 - Permit No. 656

by Dan E. Hansen

Caroline Hunt Trust Estate - Obed Larson No. 1, Wells County, North Dakota. Location: Center NW NE Sec. 32 - Twp. 150N. - Rge. 70W. Elevation: 1588 Grd., 1589 K.B. Total Depth - 5034.

The Caroline Hunt Trust Estate - Obed Larson No. 1 was spudded June 28, 1954, drilled to a total depth of 5034 feet, found dry and plugged August 9, 1954. No drill stem tests or cores were taken. Electrical, Micro, and Gamma Ray-Neutron logs were run by Schlumberger August 9, 1954.

Casing Record

Set 10 3/4" surface casing at 190 feet with 125 sacks of cement.

Plugging Record

Plug 1 --	Ground level to 20'	-- 10 sacks cement
Plug 2 --	150 to 190'	-- 20 sacks cement
Plug 3 --	1880 to 1980'	-- 30 sacks cement
Plug 4 --	2670 to 2770'	-- 30 sacks cement
Plug 5 --	4195 to 4295'	-- 30 sacks cement

Formation tops were determined from samples and electric logs. Doubtful or obscure formation tops were not picked. Color names and identifying numbers are from the 1948 Rock-Color Chart (second printing) distributed by the Geological Society of America, New York, N.Y.

FORMATION TOPS

Cretaceous system	
Pierre formation	345
Niobrara formation	930
Greenhorn formation	1515
Dakota group sandstones	1975
Jurassic system	
Piper limestone	2451
Mississippian system	
Mission Canyon formation	2620
Lodgepole formation	2787
Englewood formation	3201
Devonian system	
Lyleton formation	3227
"Nisku" formation	3297
Duperow formation	3358
Ashern formation	3784
Silurian system	
Interlake group	3826
Ordovician system	

Stony Mountain formation	
upper member	4037
lower member	4103
Red River formation	4200
Winnipeg formation	
shale member	4780
sandstone member	4976
Total Depth	5034

0-180	Missing samples.
180-250	Sand, gravel, pebbles and grains, angular to well rounded of medium gray shale, pale yellow brown dolomite, clear and white quartz, pink feldspar, dark igneous rock, biotite flakes, pyrite and fragments of coal. Fragments of green gray, splintery, compact, waxy shale.
250-310	Samples missing.
310-350	Sand, fine to coarse grained, predominately angular to rounded, frosted and pitted quartz grains with lessor amounts of pink feldspar, biotite, yellow gray dolomite, and dark igneous rock fragments.
350-370	Sand, as above, with dark gray, velvety, massive, compact shale, carbonaceous.
370-660	Shale, medium gray, compact, massive, silky.
660-940	Shale as above, becoming slightly spongy and traces of light gray bentonite.
940-1000	Shale as above, with medium dark gray flaky and spongy shale.
1000-1040	Poor samples, same as interval from 310 to 370.
1040-1140	Shale, medium gray, massive, calcareous, "white specks". Samples are generally Pierre shale cave.
1140-1860	Shale, medium dark gray to dark gray, soft, spongy, massive to flaky, disaggregated. Traces of light blue gray and light gray, biotitic bentonite. Much surface cave, extremely poor samples.
1860-2280	Samples missing.
2280-2470	Samples not representative, junk.
2470-2490	Limestone, yellowish gray, very fine grained to sublithographic with few fragments of sandy limestone.
2490-2610	Shale, medium gray, calcareous with waxy, green-gray, flaky shale, and traces of limestone as above.
2610-2680	Anhydrite, white to pink, fine medium grained, granular with much red-brown, slightly calcareous, silty, massive shale and traces of waxy, soft, greenish gray and above limestone with anhydrite inclusions.
2680-2710	Limestone, dolomitic, moderate pink, fine grained crystalline.
2710-2830	Limestone, yellowish gray, medium grained, fragmental and oolitic, irregular.
2830-2890	Limestone, pinkish gray, very fine grained, crystalline to fragmental, oolitic. Medium grained.
2890-2950	Limestone, pinkish gray, medium to coarse grained, fragmental. Fragments of brachiopod shells.
2950-3050	Limestone, light gray as above, slightly shaly, well cemented.
3050-3210	Limestone, grayish pink, fine medium coarse, grained, fragmental and granular, well cemented. Much white, pink chert.
3210-3230	Shale, red brown, silty, massive, slightly calcareous.

3230-3300 Shale, red brown, splintery to massive, and gray green, waxy, splintery, slightly calcareous. Much dark gray slightly calcareous, splintery.

3300-3400 Dolomite, light brown gray, gray orange pink, fine medium grained, granular and crystalline. Some intergranular and vuggy porosity.

3400-3520 Dolomite, grayish orange pink, light brown gray, fine medium grained, crystalline and granular. Anhydrite filling, limey.

3520-3530 Limestone, light gray, fine grained crystalline to sub-lithographic.

3530-3580 Limestone, grayish pink, fine grained crystalline and granular with fragments of medium grained, fragmental. Some vuggy porosity.

3580-3610 Dolomite, light brown gray, fine medium grained, granular.

3610-3660 Limestone, pinkish gray, very fine grained, sublithographic.

3660-3700 Limestone, light gray, very fine grained, sublithographic with some medium grained, granular.

3700-3720 Shale, medium gray, calcareous, compact, platy.

3720-3790 Limestone, dolomitic, light brown gray, very fine grained, crystalline, to medium grained, fragmental, granular.

3790-3820 Dolomite, pale red, fine medium grained, granular. Traces dolomitic, soft, silty, pale red brown shale.

3820-3940 Dolomite, moderate orange pink, very fine grained, sub-lithographic, some vuggy porosity, some fragments microsucrosic. Pink, grayish orange pink chert.

3940-4110 Dolomite, pinkish gray, fine grained, dense crystalline, microsucrosic, some medium grained fragmental. From 3960-4110 loose, medium grained, rounded, frosted quartz grains.

4110-4170 Limestone, light gray, fine grained, granular to coarse, fragmental, very fossiliferous. Trace pyrite.

4170-4200 Limestone as above with pale orange, soft, massive shale, calcareous.

4200-4380 Limestone, fine grained, microsucrosic to very fine grained crystalline, light gray to pinkish gray.

4380-4580 Limestone, light brownish gray, fine medium grained, granular, dolomitic, and crystalline, dense, fine grained.

4580-4660 Limestone, dolomitic, light gray, fine grained, microsucrosic to crystalline.

4660-4780 Limestone, light gray, fine grained, crystalline to medium coarse grained, fragmental.

4780-4820 Limestone, as above, with green gray and dark gray shale.

4820-4980 Shale, greenish gray, waxy, splintery, compact.

4980-5000 Sandstone, loose fine medium grained, frosted, generally rounded, clear quartz grains.

5000-5030 Sandstone, fine grained, calcareous cemented, quartzose, sandstone fragments, white with green mineral. Loose quartz grains as above.

5034 Total Depth.