

# NORTH DAKOTA GEOLOGICAL SURVEY CIRCULAR NO. 128

Summary of the Stanolind Oil and Gas Co. - Hans Creek Unit #1  
Dunn County, North Dakota  
Well #826 - Permit #839

By Clarence Carlson

Stanolind Oil and Gas Co.- Hans Creek Unit #1, Dunn County, North Dakota. C NW SW of Section 11, T. 146N., R. 91W. Elevation K.B. 2291 Total Depth 9562 feet.

The Stanolind - Hans Creek #1 was spudded February 22, 1955 and 10 3/4" casing was set at 1,001 feet with 800 sacks of cement. The well was completed as a dry hole April 22, 1955.

Cores: none

Logs: Electric, Gamma Ray-Neutron, Laterolog, Micro Laterolog, Section Gauge.

## Tests:

DST #1 - 8568-8610, open 3 hours, shut in 30 minutes. Fair blow throughout test. Recovered 1080' of fluid, 270' being drilling mud and 810' of black, very salty, sulphur water. Salt content of sulphur water 351,500 PPM.  
BHP 160-560#, SIP 3260#", HP 4670#.

## Plugging Record

9179-9076' with 50 sacks	6057-5954' with 50 sacks
8582-8479' with 50 sacks	3758-3655' with 50 sacks
7929-7826' with 50 sacks	1031- 928' with 50 sacks
	top of surface casing - 10 sacks

Formation tops were determined from samples and logs, corrected to electric log tops. Not all formation tops called in the following list.

## FORMATION TOPS

Cretaceous System	
Pierre Formation	1900
Niobrara Formation	3745
Greenhorn Formation	4302
Muddy Sand	4780
Dakota Silt	5005
Dakota Sand	5052
Jurassic System	
Morrison Formation	5365
Sundance Formation	5443
Piper Lime	6032
Triassic System	
Spearfish Formation	6240
Permian System	
Minnekahta Formation	6465

Opeche Formation	6510
Pennsylvanian System	
Minnelusa Formation	6990
Mississippian System	
Big Snowy Group (radioactivity log)	7513
Kibbey Sand	7800
Kibbey Lime	7890
Charles Formation	8026
Mission Canyon Formation	
(base of last anhydrite)	8735
Lodgepole Formation	9144

0-90	Sand, fine to medium grained, loose, angular to subrounded, mainly quartz. Some lignite.
90-210	Sand, fine to medium, loose grains, angular to subrounded.
240-450	Lignite.
450-480	Lignite and shale, light brownish gray, lumpy.
480-570	Shale, medium light gray, lumpy, compact, bentonitic. Sandstone, very light gray, fine grained, argillaceous bentonitic. A little lignite.
570-630	Shale, medium light gray to light brownish gray, lumpy, bentonitic.
630-690	Shale, as above. Some sandstone, very light gray, fine grained bentonitic, argillaceous, calcareous.
690-840	Lignite. Some shale, medium gray, lumpy, compact.
840-900	Shale, light brownish gray and medium light gray, lumpy, compact. Some lignite.
1300-1420	Shale, light brownish and medium light gray, bentonitic, lumpy, compact.
1420-1510	Shale, light brown, bentonitic, lumpy, compact, silty in part.
1510-1600	Shale, medium gray, bentonitic, lumpy, silty in part.
1600-1630	Shale, light brown and medium gray, bentonitic, lumpy, compact.
1660-1720	Shale, medium gray, lumpy, bentonitic.
2100-2260	Shale, medium light gray, bentonitic, lumpy, compact, platy in part.
2260-2380	Shale, medium gray, bentonitic, platy, compact.
2380-2830	Shale, medium gray, platy, compact.
2830-2920	Shale, medium gray and pale yellowish brown bentonitic, lumpy, spongy to compact.
2920-3200	Shale, medium gray, bentonitic, platy to lumpy compact.
3200-3310	Shale, medium gray and pale yellowish brown, bentonitic, lumpy, platy to compact.
3310-3650	Shale, medium gray, bentonitic, lumpy, compact.
3650-3740	Shale, as above and bentonite, light gray, micaceous.
3740-3800	Shale, medium gray, bentonitic, flaky, spongy, some lumpy, compact.
3800-3950	Shale, medium dark gray, calcareous, white specks, lumpy, compact. Some shale, as above.
3950-4040	Shale, medium gray, lumpy, spongy to compact.
4170-4320	Shale, medium gray, lumpy, compact and lumpy, spongy, silty, micaceous.
4320-4380	Shale, medium dark gray, calcareous, white specks, lumpy, compact. Many Inoceramus fragments.

4380-4770 Shale, medium dark gray, splintery, compact.

4770-4800 Shale, medium dark gray, splintery, compact. Some sandstone, colorless fine grained.

4800-5030 Shale, medium dark gray, splintery, compact.

5030-5060 Shale, as above. Sandstone, very light gray, to grayish orange, fine grained.

5220-5310 Shale, medium dark gray and medium gray, platy, compact. Some sand, colorless, fine to medium grained.

5310-5430 Sand, colorless, medium grained to granule size, angular to subrounded quartz. Some shale, medium dark gray, splintery, compact.

5430-5440 Shale, medium dark gray and medium gray, platy to splintery, compact. Sandstone, very light gray, fine grained, calcareous.

5440-5540 Sandstone, very light gray, fine grained, calcareous, slightly micaceous. Some shale, medium gray, light brownish gray, lumpy to platy, compact.

5540-5550 Sandstone, as above. Shale, light brownish gray, lumpy, compact, waxy luster, some reddish mottling.

5550-5590 Sandstone, as above. Shale, medium light gray, lumpy, compact, waxy luster. Shale, medium dark gray, platy compact.

5590-5610 Sandstone, very light gray, fine grained, calcareous. Shale, light greenish gray, foliated, compact, calcareous. Some shale, medium to medium dark gray, probably cave.

5610-5630 Shale, greenish gray, platy, compact, calcareous. Some sandstone, as above.

5630-5640 Sandstone, very light gray, fine to medium grained, calcareous, micaceous.

5640-5660 Shale, greenish gray, platy, compact, calcareous. Some sandstone, as above.

5660-5680 Sandstone, very light gray, fine to medium grained, calcareous. Some shale, as above. A few pieces of white fragmental limestone.

5680-5700 Shale, greenish gray, platy, compact, slightly calcareous. Some sandstone as above.

5700-5760 Shale, greenish gray and medium dark gray, platy, compact, slightly calcareous.

5760-5800 Shale, greenish gray, platy, compact, calcareous.

5800-5850 Shale, greenish gray 5GY6/1, moderate brown 5YR4/4. A few pieces of limestone.

5850-5880 Shale, greenish gray, platy, compact, calcareous.

5880-5920 Shale, grayish red 10R4/2, greenish gray, lumpy to platy, compact, calcareous.

5920-5950 Shale, as above, some sandstone white, fine grained, calcareous. A few pieces of white, fine grained, limestone with carbonaceous streaks.

5950-6000 Shale, greenish gray, splintery, compact, calcareous. Some grayish red shale, lumpy, compact.

6000-6010 Shale, as above. Some limestone, light brownish gray, fine grained, argillaceous.

6010-6030 Shale, as above. A little limestone, very light gray, finely crystalline.

6030-6040 Limestone, yellowish gray, very finely crystalline. Shale, as above.

6040-6080 Limestone very light gray, very finely crystalline to fine grained earthy, a few pieces of chert.

6080-6090 Limestone, a very light gray to yellowish gray, finely crystalline.

6090-6100 Limestone as above, and pole red, fine grained, argillaceous.

6100-6160 Limestone, yellowish gray, finely crystalline, slightly argillaceous.

6160-6190 Shale, greenish gray, light olive gray, platy, compact, calcareous.

6190-6240 Shale, grayish red 10R4/2, lumpy, compact, calcareous. Some white, sugary anhydrite, also shale, as above.

6240-6330 Salt.

6330-6350 Shale, moderate reddish orange, lumpy, compact, slightly calcareous. A little white anhydrite.

6350-6380 Siltstone, moderate reddish orange, calcareous. Shale, moderate reddish orange to pale reddish brown, lumpy, compact, calcareous. A little white anhydrite.

6380-6420 Siltstone, moderate reddish orange, slightly calcareous. Some white anhydrite.

6420-6510 Siltstone, moderate reddish orange, slightly calcareous, arenaceous. A little white gypsum.

6510-6540 Siltstone, as above. A little limestone, very light gray to pinkish gray, finely crystalline.

6540-6550 Siltstone, moderate reddish orange, calcareous.

6550-6610 Shale, grayish red 10R4/2, lumpy, compact. Some siltstone, as above. A little white anhydrite.

6610-6630 Shale and siltstone, as above. Much white to colorless anhydrite.

6630-6680 Salt, colorless.

6680-6720 Shale, moderate reddish orange, lumpy, compact. Some salt.

6720-6770 Shale, pale reddish brown, lumpy, compact, very slightly calcareous.

6770-6890 Shale, pale reddish brown, moderate reddish orange, lumpy, compact, slightly calcareous.

6890-6920 Salt, colorless.

6920-6950 Siltstone, moderate reddish orange, calcareous. Some shale, pale reddish brown, lumpy, compact.

6950-6970 Dolomite, pinkish gray to very light gray, fine grained. Some chert, white and pink.

6970-6980 Sandstone, very light gray to pinkish gray, very fine to medium grained, rounded quartz.

6980-7000 Sandstone, pinkish gray to pale red, fine to medium grained rounded quartz.

7000-7030 Dolomite, very light gray, finely crystalline, limey.

7030-7050 Sandstone, very light gray to pinkish gray, very fine to fine grained, slightly calcareous.

7050-7080 Dolomite, very light gray to pinkish gray, fine grained to finely crystalline.

7080-7110 Dolomite, as above. Some sandstone, very light gray to pinkish gray, fine to medium grained, slightly calcareous.

7110-7130 Dolomite, pinkish gray, fine grained.

7130-7150 Sandstone, very light gray to pinkish gray, fine to medium grained, slightly calcareous.

7150-7170 Dolomite, pinkish gray, fine grained, slightly arenaceous. A little white chert.

7170-7180 Sandstone, white to pinkish gray, fine to medium grained, slightly calcareous.

7180-7190 Sandstone, as above. Some Dolomite, pinkish gray, fine grained.  
 7190-7240 Dolomite, pinkish gray to pale red, fine grained. Some sandstone as above.  
 7240-7260 Sandstone, very light gray to pinkish gray, fine grained. Some dolomite, as above. A little white anhydrite.  
 7260-7280 Salt. Shale, medium dark gray, platy, compact. Some sandstone, as above.  
 7280-7290 Shale, medium dark gray, platy, compact. A little white gypsum. Some dolomite, pinkish gray, fine grained.  
 7290-7300 Shale, pale reddish brown, medium dark gray, platy, compact. A little white gypsum.  
 7300-7340 Shale, moderate red 5R5/4, grayish red 5R4/2, splintery, brittle.  
 7340-7380 Dolomite, very light gray, finely crystalline to fine grained. Some shale, as above.  
 7380-7390 Limestone, very light gray, fine grained. Some shale, as above.  
 7390-7430 Limestone, very light gray, finely crystalline, dense.  
 7430-7440 Limestone, pale red and very light gray, fine grained. Some shale, moderate red to grayish red, platy, compact.  
 7440-7470 Shale, moderate red 5R5/4, grayish orange 10YR7/4. Some limestone, very light gray, finely crystalline.  
 7470-7510 Shale, moderate red, 5R5/4, dusky yellow, splintery, brittle. Some limestone, white to light gray, fine grained.  
 7510-7650 Shale, variegated, splintery, compact, colors as above and dark gray grayish red 5R4/2.  
 7650-7690 Shale, as above. Some limestone, light gray to greenish gray, fine grained, argillaceous.  
 7690-7740 Limestone, greenish gray to light gray, fine grained, argillaceous.  
 7740-7790 Sandstone, pale red 10R6/2, fine grained, oolitic.  
 7806-7810 Sandstone, as above.  
 7810-7850 Sandstone, pinkish gray, fine to medium grained, slightly calcareous. Some sandstone, pale red, fine grained, slightly calcareous.  
 7850-7900 Sandstone, pale red, fine grained, slightly calcareous.  
 7900-7910 Limestone, very light gray, very finely crystalline.  
 7910-7940 Limestone, light gray and light brownish gray, finely crystalline, and fine grained, fragmental.  
 7940-7960 Sandstone, light gray, very fine to fine grained, calcareous.  
 7960-8010 Sandstone, pale reddish brown and light gray, very fine to fine grained, calcareous.  
 8010-8030 Shale, pale reddish brown, silty, calcareous.  
 8030-8050 Shale, as above. Some white, sugary to dense, anhydrite.  
 8050-8080 Anhydrite, white, dense to sugary. A little shale, very light gray, foliated.  
 8080-8100 Shale, light gray, very calcareous, compact. Some anhydrite.  
 8100-8130 Anhydrite, white to colorless, dense.  
 8130-8170 Salt.  
 8170-8180 Anhydrite, white. Limestone, brownish gray, finely crystalline, dense.  
 8180-8210 Limestone, yellowish gray to light brownish gray, finely crystalline to fine grained, fragmental.  
 8210-8220 Limestone, as above. Dolomite, light gray, fine grained.  
 8220-8270 Anhydrite, white to light gray, dense. Limestone, light gray, fine grained, argillaceous, dolomitic.

8270-8330 Limestone, yellowish gray to light brownish gray, fine grained.  
 8330-8360 Limestone, as above and light gray, finely crystalline, dense.  
 8360-8380 Anhydrite, white, dense. Some limestone, yellowish gray, fine grained.  
 8380-8440 Salt, colorless.  
 8460-8500 Anhydrite, light gray, dense.  
 8500-8520 Limestone, yellowish gray, very fine grained, fragmental in part, grainy in part.  
 8520-8570 Limestone, as above. Some anhydrite, light gray.  
 8570-8600 Limestone, yellowish gray, fine grained, fragmental in part.  
 8600-8660 Limestone, yellowish gray, finely crystalline, to fine grained, fragmental.  
 8670-8680 Limestone as above.  
 8680-8740 Anhydrite, light gray, dense.  
 8740-8770 Limestone, yellowish gray, fine grained, granular.  
 8770-8830 Limestone as above and light brownish gray, finely crystalline.  
 8830-8900 Limestone, yellowish gray, fine grained, fragmental to fine grained, granular.  
 8900-8930 Limestone, yellowish gray, fine to medium grained, fragmental.  
 8930-8940 Limestone, yellowish gray, fine to medium grained, fragmental in part to granular. Some oil stain, fluorescence and cut with C cl<sub>4</sub>.  
 8940-8980 Limestone, yellowish gray, fine to medium grained, fragmental to finely granular. A few pieces with staining and fluorescence from (8950-70).  
 8980-9020 Limestone, light gray, finely crystalline, dense. Some limestone as above.  
 9020-9090 Limestone, yellowish gray, fine to medium grained, fragmental to finely granular. A few pieces with some staining. (9020-30)  
 9090-9150 Limestone, light gray to yellowish gray, fine to medium grained, granular, fragmental in part.  
 9150-9230 Limestone, light gray, fine grained, slightly argillaceous, fragmental in part, with a few shell fragments.  
 9230-9280 Limestone, very light gray to yellowish gray, fine grained, fragmental, fossiliferous.  
 9280-9430 Limestone, very light gray to light gray, fine gained, fragmental, fossiliferous, slightly argillaceous.  
 9440-9540 Limestone, light gray, finely crystalline to fine grained, fragmental, fossiliferous.  
 9540-9562 Limestone, light gray, finely crystalline, dense, some shell fragments.