

NORTH DAKOTA GEOLOGICAL SURVEY CIRCULAR NO. 196

Summary of the Powers Lake Petroleum Company
G. A. Vincent W. W. Wild No. 1 and No. 1A
Cavalier County, North Dakota
Well No. 1174 - Permit No. 1186

by Dan E. Hansen
August, 1958

The Powers Lake - G. A. Vincent Wild No. 1 and 1A. Location: SW/4 SW/4 Section 21, T. 159N., R57W. The No. 1A was drilled at a distance of a few feet from the location of the No 1. Elevation: 1560 ground total. Depth: 2190 feet No. 1 and 1200 feet No. 1A.

The Powers Lake - G. A. Vincent W. W. Wild No. 1 was spudded June 27, 1956 and abandoned July 17, 1956. The No. 1A was spudded July 24, 1956 and abandoned February 3, 1958.

LOGS: none

CORES: none

TESTS: none

CASING RECORD:

Set 160 feet of 8 5/8" surface casing with 35 sacks of cement for the No. 1. Set 160 feet of surface pipe (6 5/8") with 24 sacks of cement for the No. 1A.

PLUGGING RECORD:

Left surface casing in both holes. In the No. 1 18 sacks of cement were spotted at 1520 feet 12 sacks cement at 1150 feet, 18 sacks cement at 1010 feet, and top sealed. The No. 1A was plugged with 10 sacks of cement with a base at 189 feet, and a plug of 2 sacks was placed at the top of the casing and sealed with a steel cap.

Formation tops were determined from samples. Colors were taken from the Goddard et. al. 1951 Rock Color Chart distributed by the Geological Society of America, New York, N.Y.

FORMATION TOPS

Cretaceous System	
Niobrara formation	300
Greenhorn formation	720
Basal Cretaceous sandstone	1090
Jurassic System	
Piper formation	1180
Silurian System	
Interlake group	1320
Ordovician System	
Stony Mountain formation	1470 ?
Red River formation	1600
Winnipeg shale	2170 ?

W. W. Wild No. 1A

0-180 No samples.
180-240 Shale medium gray, massive.
240-300 Shale as above, with grayish black, soft lumpy shale, light bluish gray bentonite.
300-340 Shale, medium gray, calcareous, massive "white specks".
340-420 Shale as above, and very light gray fine-grained grainy argillaceous, limestone.
420-660 Shale medium dark gray to dark gray, massive and lumpy, soft, also calcareous shale, as above. Small amounts gray bentonite.
680-720 Shale medium dark gray massive, contains many cemented fragments of calcite prisms and limestone as above. Traces of fragments with "white specks", calcareous.
720-740 Shale medium dark gray calcareous, "white specks".
740-800 Samples missing.
800-840 Shale as above.
840-880 Shale as above, with very soft fine-grained light gray grainy argillaceous limestone.
880-990 Shale medium dark gray, lumpy and massive, traces of calcite prisms. Small amounts of light gray bentonite.
990-1010 Samples missing.
1010-1090 Shale as above.
1090-1120 Shale as above small amounts of pyrite, pale red clay, light gray shale and light gray dense silt and very fine-grained calcareous quartzose, sandstone.
1120-1180 Shale as above, small amounts of light gray and pale red soft shale and fine-grained friable white sandstone. End of samples.

W. W. Wild No. 1

0-860 Samples missing.
860-880 Shale medium dark gray, small amounts of calcite prisms and traces of dark gray shale fragments with "white specks".
880-920 Shale as above many calcite prisms, cemented into a fragmental light-gray limestone.
920-990 Shale as above. Calcite prisms as above. A moderate amount of medium gray shaly calcareous very fine-grained quartzose sandstone. Small amounts of pyrite. Traces of clear, angular to rounded, coarse quartz grains.
990-1040 Shale medium dark gray, small amount calcareous sandstone as above, pyrite and calcite prisms.
1040-1100 Shale as above, small amount pale brown iron carbonate "pellets", traces light gray and light brown shale.
1100-1180 Shale as above. Pale brown slightly calcareous silty very fine grained sandstone; light gray soft to hard calcareous very fine-grained sandstone and traces pale brown, light gray shale.
1180-1190 Dolomite, limey, very light gray, vuggy fine-grained granular pale brown shale as above.
1190-1210 Limestone, dolomitic very light gray to yellowish gray argillaceous fragmental shell fragments and medium grained oolitic. Dolomite as above.
1210-1250 Shale pale red limestone as above, much soft fibrous white gypsum, poor samples.

1250-1320 Limestone yellowish gray to light gray, very fine-grained, argillaceous and chalky with inclusions of white gypsum. Fragments of pale red shale and gypsum as above.

1320-1330 Dolomite pale yellowish brown fine-grained crystalline and much pale yellowish orange chert.

1330-1340 Dolomite very pale orange to white, very fine-grained crystalline pale red shale.

1340-1450 Dolomite limey very light gray to white and yellowish gray, crystalline fine-grained, pale red shale.

1450-1470 Shale pale red slightly calcareous soft dolomite as above.

1470-1500 Dolomite white to yellowish gray cherty fine-grained crystalline dense.

1500-1560 Poor samples gray cretaceous shales, traces of grayish orange pink granular fine-grained dolomitic limestone a shell fragment at 1540-1550. Much red staining of limestone at 1550-1560 and the shell content also increases at this depth.

1560-1600 Limestone, light to medium gray fragmental many brachiopod shell fragments traces bryozoan fragments.

1600-1620 Limestone very light gray to yellowish gray dense chalky, very fine grained.

1620-1670 Dolomite, limey yellowish gray, fine-grained, sucrosic.

1670-1740 Dolomite limey yellowish gray, very fine-grained grainy to sub-lithographic traces oolites from 1710-1730, well recrystallized.

1740-1800 Dolomite very light brownish gray, limey fine grained, granular poor samples, from 1760-1800 much stony mountain cave.

1800-1850 Dolomite limey yellowish gray fine-grained grainy to sub-lithographic much gray shale cave.

1850-1920 Mainly cave. Much red and gray shale, small amounts of gypsum small amounts of yellowish to light brownish gray granular dolomite.

1920-1960 Dolomite as above, but less cave material.

1960-1970 Samples missing.

1970-2010 Dolomite as above, small amounts of very light gray dolomitic limestone fine-grained to sublithographic.

2010-2060 Poor samples much cave as above, small amounts of very light gray slightly dolomitic, very fine-grained limestone. Dolomite as above, small amounts.

2060-2100 Limestone, slightly dolomitic very light gray very fine-grained to sublithographic slightly chalky.

2100-2130 Samples missing.

2130-2190 Poor samples, mostly cave with a small amount of limestone as above, traces calcareous light-green gray shale at 2170-2190.