

NORTH DAKOTA GEOLOGICAL SURVEY CIRCULAR NO. 110

Summary of the William Herbert Hunt-F. C. Neumann #1
Ward County, North Dakota
Permit #602 - Well #588

by John L. Hainer
April 1955

William Herbert Hunt-F. C. Neumann #1, Ward County, North Dakota, Section 33, T. 152N., R. 82W., (600 feet from South and 2040 feet from East section lines of section 33). Elevation: K.B. 2086 feet; G.L. 2075 feet.

The W. H. Hunt-F. C. Neumann #1 was spudded. May 22, 1954 by Penrod Drilling Company of Shreveport, La. A 10 3/4" surface casing was set at 375 feet with 300 sacks of cement. The well was drilled to a total depth of 9653 feet and ended in Winnipeg sand.

No cores or drill stem tests taken.

Plugging Record: 375 feet of 10 3/4" surface casing cemented with 300 sacks was left in the hole.

Plugs were set at:

0- 20 feet	10 sacks inside surface pipe
335-375 feet	20 sacks inside surface pipe
3605-3685 feet	30 sacks top Dakota
6123-6203 feet	30 sacks top Lodgepole
8320-8900 feet	30 sacks top Red River

Logs Run: Electric log 375 feet to 9647 feet.

The W. H. Hunt-F. C. Neumann #1 was plugged and abandoned July 13, 1954.

The following formations were picked from samples and electric log. Colors were determined from Rock Color Chart.

Samples were taken from:

2500 feet to 2700 feet	5310 feet to 5930 feet	8480 feet to 9653 feet
4660 feet to 5300 feet	5985 feet to 8330 feet	

FORMATION TOPS

Cretaceous	
Greenhorn Formation	2980
Dakota	3596
Jurassic	
Morrison Formation	3980
Sundance Formation	3630
Piper Lime	4560
Triassic	
Spearfish Formation	4745

Mississippian	
Kibbey Lime	5060
Charles Formation	5200
Mission Canyon Formation	5800
Lodgepole Formation	6135
Englewood Formation	6790

Devonian	
Lyleton Formation	6815
Nisku Formation	6970
Duperow Formation	7050

Souris River Formation	7380
Dawson Bay Formation	7645
Winnipegosis Formation	8020
Ashern Formation	8060

Silurian	
Interlake Group	8110

Ordovician	
Upper Stony Mountain	8620
Lower Stony Mountain	8733
Red River Formation	8813
Winnipeg Formation	9465
Winnipeg Sand	9608

Total Depth	9653
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2500-2520	Shale, medium gray, little bentonite, white.
2520-2540	Shale, light olive gray 5Y6/1, bentonite, white.
2540-2550	Shale, as above, bentonite, white, light bluish gray 5B7/1.
2550-2580	Shale as above, little bentonite, white.
2580-2620	Shale, light olive gray, medium gray, bentonite, white.
2620-2660	Shale, light olive gray, bentonite, white, little pyrite.
2660-2690	Shale, medium gray, bentonite, white.
2690-2700	Shale, light olive gray 5Y6/1 to medium gray.
2700-4660	Missing.
4660-4670	Limestone, very pale orange 10YR 8/2, sublithographic, pale yellowish brown 10YR6/2, fine grained, crystalline.
4670-4680	Limestone, very pale orange, sublithographic, shale variegated.
4680-4700	Variegated shale.
4700-4730	Limestone, very pale orange, calcareous to dolomitic, fine grained, pale yellowish brown, fine grained, dense.
4730-4740	Limestone, very pale orange to pale yellowish brown, sublithographic, little white anhydrite.
4740-4790	Variegated shale with limestone and anhydrite as above.
4790-4830	Variegated shale with pale reddish brown 10R5/4 predominant, some white anhydrite.
4830-4860	Sandstone, pale reddish brown 10R5/4, fine grained, silty, friable, shale as above.
4860-4890	Sandstone, as above, sandstone, moderate reddish orange 10R6/6 well rounded, medium grained, friable.
4890-5050	Sandstone, moderate reddish orange, well rounded, poorly sorted, friable. Shale medium gray to black.
5050-5060	Variegated shale, sandstone as above.

5060-5100 Limestone, pinkish gray 5YR8/1 to yellowish gray 5Y8/1 sub-lithographic.

5100-5130 Siltstone, pale red 10R6/2. Shale, dark gray, little limestone as above.

5130-5200 Variegated shale, predominately medium to dark gray, grayish red 10R4/2 and dusky yellow green 5GY5/2.

5200-5210 Shale, as above with little anhydrite, white.

5210-5220 Shale as above with more anhydrite.

5220-5240 Shale and anhydrite as above, little limestone, pale yellowish brown 10YR6/2 crystalline.

5240-5250 Shale, pale reddish brown 10R5/4, silty, medium to dark gray. Anhydrite, white.

5250-5290 Anhydrite, white, limestone, oolitic, very light gray with brownish black oolites.

5290-5300 Shale, medium to dark gray.

5300-5310 Missing.

5310-5320 Variegated shale, little anhydrite and limestone as above.

5320-5330 Shale, predominantly grayish red 10R4/2. More anhydrite.

5330-5340 Shale, greenish gray 5GY6/1, grayish red 10R4/2.

5340-5370 Shale, medium to dark gray, grayish red, anhydrite.

5370-5380 Limestone, very pale orange 10YR8/2, sublithographic, anhydrite, white.

5380-5420 Limestone, yellowish gray, silty, little limestone as above.

5420-5430 Limestone as above, little anhydrite, shale, dark reddish brown 10R3/4.

5430-5440 Limestone, very pale orange 10YR8/2 to pale yellowish brown 10YR6/2, partially oolitic. Anhydrite, white.

5440-5470 Limestone as above, shale dark gray to black.

5470-5490 Dolomite, yellowish gray 5Y7/2, shale, dark gray to black, dark reddish brown.

5490-5530 Anhydrite, medium light gray, slightly calcareous.

5530-5555 Limestone, pale yellowish brown, fine grained, vuggy.

5555-5570 Anhydrite, medium gray, slightly calcareous. Limestone as above.

5570-5585 Anhydrite and limestone as above. Shale, dark gray to black.

5585-5595 Limestone, very pale orange 10YR8/2, fragmental, vuggy.

5595-5615 Limestone, pale yellowish brown 10YR6/2, fragmental, vuggy.

5615-5625 Limestone as above, anhydrite, medium gray to white.

5625-5635 Anhydrite, medium gray to white. Little limestone as above.

5635-5660 Limestone, brownish black 5YR2/1, fine grained, dense. Anhydrite as above.

5660-5670 Anhydrite, medium gray to white. Little limestone as above.

5670-5680 Anhydrite as above. Shale, black, carboniferous.

5680-5710 Anhydrite as above. Some limestone, pale yellowish brown 10YR6/2, fragmental, vuggy. Little shale as above.

5710-5725 Anhydrite as above, limestone, dusky yellowish brown 10YR2/2, fine grained, dense.

5725-5735 Anhydrite, yellowish gray 5Y7/2, to white.

5735-5745 Anhydrite, yellowish gray to white. Dolomite, pale red 10R6/2, waxy luster.

5745-5765 Dolomite as above.

5765-5770 Dolomite as above. Anhydrite, white.

5770-5780 Dolomite, light olive gray 5Y6/1. Dolomite and anhydrite as above.

5780-5800 Dolomite, medium grasp, fine grained, dense.

5800-5855 Limestone, pale yellowish brown 10YR6/2 to yellowish gray 5Y8/1, waxy to earthy luster, vuggy.

5855-5945 Limestone, pale yellowish brown, friable, silty.

5945-5955 Limestone as above, shale, medium light gray, calcareous.

5955-5980 Limestone, pale yellowish brown 10YR6/2 to yellowish gray 5Y8/1, medium grain size, scattered dark gray oolites.

5980-5985 Missing.

5985-6005 Limestone, pale yellowish brown 10YR6/2, medium grained. Shale, olive black 5Y2/1.

6005-6055 Limestone, pale yellowish brown, microsucrosic.

6055-6125 Limestone, very light gray, sublithographic, chalky. Some limestone as above.

6125-6135 Limestone as above. Shale medium gray.

6135-6150 Shaly limestone, brownish black 5YR2/1. Shale, medium gray.

6150-6200 Shaly limestone, medium light gray to medium gray.

6200-6220 Limestone, light olive gray 5Y6/1 to pale yellowish brown 10YR6/2, medium grained, crystalline. Shale, medium gray, banded, calcareous.

6220-6240 Limestone and shale as above. Some oolitic limestone with subrounded, brownish black oolites.

6240-6330 Limestone, medium gray, granular, medium grain size to crystalline, slightly argillaceous.

6330-6430 Limestone, olive gray 5Y4/1, with light gray lime coating, granular to fragmental, slightly argillaceous.

6430-6480 Limestone as above. Free quartz pebbles up to 2 mm in diameter.

6480-6510 Limestone as above, shale, medium dark gray.

6510-6530 Shaly limestone, light olive gray 5Y6/1.

6530-6600 Limestone as above, shale, medium light gray, free quartz.

6600-6690 Shaly limestone, light olive gray 5Y6/1.

6690-6740 Limestone as above to medium dark gray, silty, sandy limestone.

6740-6750 Limestone, medium light gray to medium gray, shaly.

6750-6775 Limestone, medium light gray to medium gray, dolomitic.

6775-6785 Limestone as above, some black shale.

6785-6795 Limestone, light gray to medium gray.

6795-6805 Shale, black. Some limestone as above.

6805-6815 Shale, black, richly organic.

6815-6820 Sandstone, medium light gray, fine grained, calcareous, friable. Shale as above.

6820-6825 Sandstone as above. Dolomite, very pale orange, fine grained, friable, silty microsucrosic.

6825-6830 Dolomite, very pale orange 10YR8/2, fine grained, friable, micro-sucrosic.

6830-6835 Dolomite as above. Shale, medium light gray, banded, calcareous.

6835-6850 Dolomite as above. Little shale, grayish yellow green 5GY7/2.

6850-6870 Shale, grayish red 10R4/2, calcareous. Dolomite as above.

6870-6895 Dolomite as above. Little shale, grayish red, calcareous as above.

6895-6900 Marl, pale reddish brown 10R5/4 and white banded. Dolomite, very pale orange 10YR8/2 to grayish red 10R4/2, microsucrosic, silty.

6900-6915 Dolomite as above. Shale, grayish yellow green 5GY7/2.

6915-6960 Shale, pale reddish brown 10R5/4, calcareous.

6960-6970 Shale as above, dolomite, pale reddish brown, silty.

6970-6985 Limestone, very pale orange 10YR8/2, microsucrosic, little white anhydrite.

6985-7000 Limestone, very pale orange, microsugrosic to brownish gray 5YR4/1, crystalline, white anhydrite.

7000-7050 Limestone, pale yellowish brown 10YR6/2, sugrosic, silty.

7050-7060 Limestone as above. Some shale, medium to dark gray.

7060-7070 Anhydrite, pale yellowish brown to white.

7070-7075 Anhydrite as above. Dolomite, pale yellowish brown, saccharoidal, friable.

7075-7090 Limestone, pale yellowish brown 10YR6/2, crystalline.

7090-7115 Limestone as above. Shale, medium gray, calcareous.

7115-7135 Limestone, very pale orange 10YR8/2, finely crystalline.

7135-7145 Limestone, pale yellowish brown 10YR6/2, finely crystalline.

7145-7200 Limestone, pale yellowish brown, fragmental.

7200-7230 Limestone as above, shale dark gray to black.

7230-7240 Dolomite, pale brown 5YR5/2, saccharoidal friable.

7240-7410 Limestone, pale yellowish brown, dolomitic, saccharoidal to fragmental.

7410-7440 Limestone as above, shale, dark gray, little shale, grayish red 5R4/2.

7440-7460 Dolomite, medium gray, argillaceous, silty.

7460-7520 Dolomite as above. Limestone, pale yellowish brown, finely crystalline, friable.

7520-7530 Shale, very light gray, calcareous. Limestone as above.

7530-7570 Limestone, pale yellowish brown, crystalline.

7570-7590 Limestone as above, shale, very light gray, calcareous.

7590-7600 Shale, very light gray, calcareous. Limestone as above.

7600-7620 Calcitic dolomite, white to yellowish gray 5Y8/1, vuggy porosity.

7620-7640 Calcitic dolomite, yellowish gray to pale yellowish brown, vuggy porosity.

7640-7670 Calcitic dolomite, brownish gray 5YR4/1, saccharoidal, vuggy and intergranular porosity, friable.

7670-7720 Limestone, brownish gray, crystalline, little vuggy porosity, slightly dolomitic.

7720-7750 Limestone as above. Limestone, yellowish gray 5Y8/1, fine grained.

7750-7760 Dolomite, medium gray, saccharoidal, silty, friable. Limestone, pale brown 5YR5/2, crystalline, dense.

7760-7790 Dolomite, pale red 10R6/2, silty, very light gray, silty.

7790-7820 Limestone, dark yellowish brown 10YR4/2 to medium gray, crystalline.

7820-7840 Limestone as above, dolomite, light gray, saccharoidal.

7840-7950 Limestone, brownish gray 5YR4/1, crystalline, dense.

7950-7980 Limestone, brownish gray to pale yellowish brown, crystalline.

7980-8030 Limestone, very light gray, chalky, pale yellowish brown, crystalline.

8030-8060 Limestone, very light gray, finely crystalline to chalky.

8060-8070 Dolomite, pale yellowish brown to very light gray, microsugrosic. Little limestone as above.

8070-8080 Dolomite, grayish red, 10R4/2, argillaceous, dolomite, pale yellowish brown to very light gray, microsugrosic.

8080-8110 Limestone, very pale orange, sublithographic to chalky. Dolomite, grayish red as above.

8110-8150 Limestone, white to grayish pink, chalky to finely crystalline.

8150-8180 Limestone, pale to dark yellowish brown, finely crystalline, dense. Limestone as above.

8180-8250 Dolomite, very light gray to very pale orange, medium grained, vitreous. Limestone, white, chalky.

8250-8320 Dolomite, white to pale yellowish brown, finely crystalline. Few free quartz grains, clear to frosted.

8320-8330 Dolomite, very pale orange to pale yellowish brown, microsucrosic to crystalline with dolomite rhombs.

8330-8480 Missing.

8480-8610 Sand, clear to moderate greenish yellow, subangular, free quartz grains 0.5 to 1 mm in diameter. Chert, black, subangular grains. Shale, medium to dark gray, compact, fissile. Dolomite as above.

8610-8620 Sand, chert and shale as above. Dolomite, pale yellowish brown, finely crystalline, dense.

8620-8630 Dolomite as above.

8630-8660 Sand, chert and shale as above. Dolomite, pale to dark yellowish brown, finely crystalline, dense.

8660-8670 Dolomite, olive gray, very pale orange, finely crystalline, argillaceous. Little sand, chert and shale as above.

8670-8710 Sand, chert and shale as above. Some dolomite as above.

8710-8740 Dolomite, very pale orange, microsucrosic. Sand, chert and shale as above.

8740-8760 Dolomite, very pale orange to pale yellowish brown, microsucrosic. Little sand and shale as above. Little anhydrite, white.

8760-8770 Dolomite as above, shale, medium light gray, dolomitic, with some dark banding.

8770-8860 Dolomite as above. Free quartz grains, clear to grayish yellow green, subangular. Black chert grains.

8860-8910 Limestone, very pale orange, microsucrosic, dark yellowish brown, finely crystalline. Free quartz and chert as above.

8910-8960 Limestone, very pale orange, microsucrosic to chalky. Dolomite, pale brown finely crystalline, dense.

8960-8990 Limestone as above.

8990-9090 Limestone as above, dolomite, pale yellowish brown, microsucrosic.

9090-9160 Limestone, very pale orange, microsucrosic to chalky.

9160-9240 Limestone as above, limestone, pale yellowish brown, microsucrosic.

9240-9280 Limestone, very pale orange, finely crystalline to chalky.

9280-9470 Limestone, very pale orange to pale yellowish brown, finely crystalline to microsucrosic.

9470-9500 Limestone as above, little calcareous shale, medium gray.

9500-9550 Limestone, as above, shale, grayish olive to grayish brown, waxy.

9550-9610 Shale, olive gray to grayish brown, waxy. Limestone, very pale orange, finely crystalline to chalky.

9610-9640 Shale, dark reddish brown, greenish black, waxy. Little limestone as above. Sandstone, white, loosely cemented, clear, rounded quartz grains.

9640-9653 Sandstone, medium grained as above.

9653 Total Depth