

NORTH DAKOTA GEOLOGICAL SURVEY CIRCULAR NO. 181

Summary of the Wm. H. Hunt - Guy Almy #1
Ward County, North Dakota
Well No. 656 - Permit No. 670

By Clarence Carlson
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Wm. H. Hunt - Guy Almy #1, Ward County, North Dakota. Location: NE NE Section 13, T. 155N., R. 82W. Elevation: K.B. 1632, G.L. 1620.

The Wm. H. Hunt - Guy Almy #1 was spudded July 20, 1954; drilled to a total depth of 7300 feet; found dry and plugged August 17, 1954.

Casing Record:

10 3/4" casing at 1000 feet with 300 sacks of cement
7" casing at 9200 feet with 1000 sacks of cement

Cores: None

Logs: Electric and Gamma Ray-Neutron

Tests:

DST #1 - 5246-5347. Tool open 4 hours shut in 30 minutes. Recovered 4409 feet of salty, sulphur water. IFP 350#, FFP 2400#, HP 2250# B.H. SIP 2550#.

DST #2 - 6523-6605. Tool, open 4 hours, shut in 30 minutes. Immediate fair blow which lasted throughout test. Recovered 1250 feet of salt water no shows of oil or gas. IFP 55#, FFP 570#, HP 3405# B.H. SIP 2660#.

Plugging Record:

Ground level	10 sacks of cement
283- 340	30 sacks of cement
2918-2970	20 sacks of cement
4518-4570	20 sacks of cement

Formation tops were determined from samples and mechanical logs corrected to electric log tops. Color names and indentifying numbers are from the 1948 Rock-Color chart distributed by the National Research Council, Washington, D.C. Not all formation tops are listed.

FORMATION TOPS

Cretaceous System	
Pierre formation	638
Niobrara formation	1930
Greenhorn formation	2365
Dakota group	2773
Dakota group sandstone	2968
Jurassic System	3295
Piper limestone	3857
Triassic System	
Spearfish formation	4058

Mississippian System

Charles formation	4434
Mission Canyon formation	5023
Lodgepole formation	5375
Englewood formation	6025

Devonian System

Lyleton formation	6045
Nisku formation	6178
Duperow formation	6264
Ashern formation	7180

Silurian System

Interlake group	7250
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350-400	Sandstone, very light gray, fine to medium, subangular grains, calcareous; shale, light gray and pale brown, silty, micaceous, bentonitic.
400-450	Shale, as above with a little sandstone as above.
450-466	Sandstone very light gray, fine to medium, subangular grains, calcareous; some shale, as above.
470-500	Shale, light gray and pale brown, micaceous, silty and bentonitic.
500-680	Shale, as above; a little sandstone, light gray, fine to medium, subangular grains, calcareous.
680-800	Shale, as above.
800-980	Shale, medium light gray, slightly bentonitic.
980-1000	Shale, medium light gray, and medium gray, lumpy.
1000-1510	Shale, medium light gray, lumpy compact.
1510-1620	Shale, light gray, lumpy, compact.
1620-1670	Shale, as above with some Bentonite, very light gray.
1670-1700	Shale, medium light gray, soft, lumpy, bentonitic.
1700-1730	Shale, medium gray, lumpy, compact.
1730-1750	Shale, as above; some Bentonite, very light gray.
1750-1940	Shale, medium light gray, lumpy, compact.
1940-1990	Shale, medium gray, laminated, calcareous, white specks.
1990-2310	Shale, medium light gray, lumpy, compact.
2310-2380	Shale, medium dark gray, soft, flaky.
2390-2450	Shale, medium dark gray, flaky, soft, calcareous, white specked.
2450-2500	Shale, medium dark gray, lumpy to flaky, many Inoceramus fragments.
2500-2960	Shale, medium dark gray, soft, flaky.
2960-2970	Shale, as above; some sandstone light gray, very fine grained argillaceous.
2970-2980	Sandstone, colorless to very light gray, fine grained.
2980-2990	Sand, loose, medium to coarse, angular to rounded quartz.
2990-3020	Sand, as above; some shale, medium gray.
3030-3040	Sand, loose, medium to coarse grained, angular to rounded.
3040-3080	Sandstone, colorless to very light gray, medium grained, calcareous; some loose sand, as above.
3080-3120	Shale, medium gray; some shale, very light gray, soft, flaky, waxy luster.
3120-3150	Shale, very light gray to pinkish gray, soft, flaky to lumpy, waxy, with some siderite concretions.
3150-3180	Shale, as above, some sandstone grayish pink, very fine grained, some siderite nodules.

3180-3210 Shale, very light gray to pinkish gray, soft lumpy; some sandstone very light gray, very fine grained, slightly calcareous.

3210-3250 Shale, very light gray, to pinkish gray, soft, lumpy.

3250-3300 Shale, as above; some sandstone very light gray, very fine grained, slightly calcareous.

3300-3310 Shale, very light gray, soft, lumpy, some varicolored, reddish and dusky, yellow.

3310-3360 Shale, as above, and sandstone very light gray, very fine grained, slightly calcareous.

3360-3390 Shale, as above; some anhydrite, colorless to white.

3390-3410 Shale, very light gray and pale red, platy to lumpy.

3410-3440 Shale, light greenish gray, fissile to platy, calcareous with some thin, very fine grained sandstone stringers.

3440-3500 Shale, light, greenish gray as above, some pale red, shale, platy, compact.

3520-3560 Shale, light greenish gray, platy to flaky, calcareous; with some beds of sandstone, very light gray, very fine grained, calcareous.

3560-3620 Shale, light greenish gray, as above.

3620-3680 Shale as above and pale reddish brown, lumpy, slightly calcareous.

3680-3730 Shale, pale reddish brown, lumpy to platy, slightly calcareous; some light greenish gray shale, platy calcareous.

3730-3760 Shale, as above and dark greenish gray 5GY4/1, platy, calcareous.

3760-3800 Shale, as above; a little sandstone very light gray, very fine grained, calcareous.

3800-3830 Shale, as above.

3830-3850 Shale, as above; some limestone very light gray, chalky.

3850-3860 Sandstone, very light gray, very fine to fine grained, calcareous.

3860-3880 Sandstone as above; a little limestone, yellowish gray, finely crystalline.

3880-3900 Limestone, very light gray, finely crystalline,

3900-3960 Limestone, very light gray to yellowish gray, very finely crystalline.

3960-3970 Shale, grayish red 10R4/2, lumpy, slightly calcareous and pale red, lumpy.

3970-3990 Shale, as above, some anhydrite, white to colorless.

3990-4030 Anhydrite, white, fine grained, some shale, pale reddish brown, lumpy slightly calcareous.

4030-4040 Dolomite, yellowish gray, fine grained, slightly argillaceous; some anhydrite and shale, as above.

4040-4080 Anhydrite, white, fine grained and shale, grayish red 10R4/2 to pale reddish brown 10R5/4, lumpy, slightly calcareous.

4080-4100 Shale, pale reddish brown to moderate reddish orange, lumpy, compact, slightly calcareous.

4100-4120 Siltstone, moderate reddish orange, with a few fine, rounded sand grains, slightly calcareous; with small amounts of anhydrite.

4120-4180 Siltstone, as above, becoming more sandy.

4180-4200 Siltstone, moderate reddish orange, slightly calcareous.

4200-4300 Siltstone, as above, with some fine to medium, rounded sand grains; a little anhydrite.

4300-4340 Siltstone, moderate reddish orange, sandy with fine to medium, rounded, frosted quartz grains.

4340-4350 Limestone, white, fine grained, grainy, and siltstone, as above; some shale, pale reddish brown, lumpy.

4350-4370 Shale and siltstone, as above; a little limestone as above.

4370-4420 Siltstone, moderate reddish orange and shale, pale reddish brown, lumpy to platy.

4420-4440 Siltstone, moderate reddish orange, with minor amounts of anhydrite.

4440-4470 Limestone, pinkish gray, fine grained, granular, anhydritic.

4470-4480 Anhydrite, white, dense.

4480-4490 Limestone, pinkish gray, fine grained, granular; some anhydrite pinkish, gray, dense slightly calcitic.

4490-4500 Limestone, yellowish gray, very finely crystalline and anhydrite, white, dense.

4500-4510 Anhydrite, white to pinkish gray, dense.

4520-4540 Anhydrite, as above; a little dolomite, pinkish gray, fine grained, granular.

4540-4570 Limestone, yellowish gray, finely crystalline with a few medium crystals of pale brown anhydrite.

4570-4580 Limestone, as above, with some anhydrite, pale red, calcareous.

4580-4640 Anhydrite, white to pale red.

4640-4650 Limestone, yellowish gray, fine grained, grainy, with, some medium crystals of pale brown anhydrite inclusions, good intergranular porosity.

4650-4670 Limestone, yellowish gray, fine grained, fragmental, with a few shell fragments, good intergranular porosity.

4670-4680 Limestone as above; oolitic in part.

4680-4690 Limestone as above; some anhydrite, white, dense.

4690-4710 Anhydrite, white dense.

4710-4720 Limestone, yellowish gray, fine grained, fragmental.

4720-4730 Limestone as above; some anhydrite, light gray.

4730-4750 Anhydrite, very light gray to white.

4750-4760 Shale, greenish gray 5G6/1, platy, slightly calcareous; some anhydrite as above.

4760-4790 Limestone, yellowish gray, fine grained to finely crystalline.

4790-4800 Limestone, yellowish gray, fine grained, granular.

4800-4810 Limestone, yellowish gray, fine grained, fragmental, some anhydrite, very light gray, dense.

4810-4830 Limestone, yellowish gray, fine grained to finely crystalline, fragmental, with some pale brown, medium crystals of anhydrite; a little anhydrite, very light gray, dense.

4830-4840 Anhydrite, very light gray, dense.

4840-4850 Anhydrite, as above and limestone, yellowish gray, fine grained to finely crystalline.

4850-4860 Limestone, yellowish gray, fine grained, grainy to finely crystalline.

4860-4870 Limestone, yellowish gray, fine grained, fragmental.

4870-4880 Limestone, yellowish gray, fine grained, fragmental to oolitic.

4880-4890 Anhydrite, very light gray, dense; some limestone as above.

4890-4930 Anhydrite, light gray, dense.

4930-4950 Anhydrite, very light gray to white, dense.

4950-4960 Samples poor, mostly cavings, some anhydrite, as above, may be salt from indications of the logs.

4960-4980 Anhydrite, very light gray and pale red 5R6/2, dense.

4980-5030 Anhydrite, very light gray, dense.

5030-5040 Limestone, yellowish gray, fine grained, fragmental.

5040-5050 Limestone, yellowish gray, fragmental in part, oolitic in part.

5050-5100 Limestone, yellowish gray, fine to medium grained, fragmental.

5100-5140 Limestone as above, oolitic in part.

5140-5190 Limestone, yellowish gray, finely crystalline to fine grained, fragmental.

5190-5210 Limestone, very light gray, dense, anhydritic some limestone as above.

5210-5230 Limestone, yellowish gray, fine to medium grained, fragmental and oolitic.

5230-5250 Limestone, yellowish gray, fine to medium grained, granular.

5250-5290 Limestone as above, granular to fragmental.

5290-5310 Limestone, yellowish gray, fine grained, granular.

5310-5330 Limestone, yellowish gray, fine to medium grained, fragmental.

5350-5390 Limestone as above.

5390-5400 Limestone, medium gray, fine grained, grainy argillaceous.

5400-5410 Limestone, light gray, fine grained, fragmental, fossiliferous; some medium gray limestone, as above.

5410-5420 Limestone, medium gray, fine grained, grainy, argillaceous, with a few Brachiopod fragments.

5420-5440 Limestone, very light gray, fine to medium grained, fragmental, fossiliferous.

5440-5450 Limestones, yellowish gray, very fine grained to sublithographic.

5450-5520 Limestone, very light gray, fine to medium grained, fragmental, fossiliferous.

5520-5550 Limestone, very light gray, fine grained, fragmental.

5550-5600 Limestone, very light gray, fine to medium grained, fragmental, fossiliferous.

5600-5710 Limestone, very light gray, fine grained to finely crystalline, fragmental, fossiliferous.

5710-5730 Limestone, very light gray, medium to fine grained, fragmental, fossiliferous.

5730-5780 Limestone, medium light gray, fine grained argillaceous.

5780-5800 Limestone, very light gray, fine grained, fragmental; some medium light gray limestone as above.

5800-5900 Limestone, medium gray to medium light gray, fine grained, slightly argillaceous.

5900-5920 Limestone, medium light gray, finely crystalline.

5920-5950 Chert, light gray, calcareous; some limestone as above.

5950-5990 Limestone, medium light gray, fine grained to finely crystalline; some chert, as above.

5990-6010 Limestone, medium gray, fine grained, argillaceous.

6010-6030 Limestone, very light gray, finely crystalline.

6050-6050 Shale, brownish gray, platy to flaky.

6050-6060 Dolomite, very pale orange 10YR8/2, finely crystalline, to fine grained, grainy.

6060-6100 Shale, pale red 10R6/2, calcareous; and shale, light greenish gray, calcareous.

6100-6150 Shale, grayish orange pink 5YR7/2, lumpy, calcareous.

6150-6170 Shale, pale red and grayish orange pink, calcareous, a little white anhydrite.

6170-6180 Dolomite, very light gray, fine grained, some shale as above.

6180-6210 Limestone, very light gray to very pale orange 10YR8/2, very finely crystalline, with some white anhydrite.

6210-6220 Limestone, grayish orange pink, 5YR7/2, dolomitic, medium crystalline, sucrosic.

6220-6230 Limestone, very light gray, finely crystalline, slightly dolomitic and limestone as above.

6230-6250 Limestone grayish orange pink, fine to medium crystalline, sucrosic, dolomitic.

6250-6260 Limestone as above and shale, light gray, calcareous.

6260-6270 Shale, as above and some anhydrite.

6270-6290 Anhydrite, white to very pale orange, dense.

6290-6300 Limestone, very light gray, finely crystalline, microgranular, dolomitic, slightly argillaceous.

6300-6310 Limestone, as above and anhydrite, white, dense.

6310-6350 Anhydrite, very light gray, dense, very slightly calcareous.

6350-6370 Limestone, grayish orange pink, fine to medium crystalline, granular, slightly dolomitic.

6380-6390 Limestone as above, a few Brachiopod fragments.

6390-6400 Limestone, grayish orange pink, fine grained, earthy.

6400-6420 Limestone, grayish orange pink, fine to medium crystalline, fragmental in part.

6420-6450 Limestone, grayish orange pink, fine to medium crystalline, sucrosic and finely crystalline, earthy.

6450-6520 Limestone, grayish orange pink 5YR7/2, medium crystalline, sucrosic slightly dolomitic.

6540-6550 Limestone as above.

6560-6580 Anhydrite, white and limestone as above.

6580-6620 Limestone grayish orange pink 5YR7/2, fine to medium crystalline, granular.

6620-6650 Limestone, grayish pink, fine grained earthy and anhydrite, white, dense.

6650-6690 Dolomite, light brownish gray, microsucrosic.

6690-6720 Limestone, light gray, microsucrosic, slightly dolomitic.

6720-6750 Limestone, light brownish gray, very finely crystalline, slightly dolomitic.

6750-6780 Limestone as above, some anhydrite, white, dense.

6780-6830 Limestone, light brownish gray, finely crystalline.

6830-6850 Dolomite, light brownish gray, fine grained, granular.

6850-6890 Dolomite, light brownish gray, very fine to medium crystalline, dense.

6890-6950 Dolomite, light brownish gray, fine to medium crystalline, some inter-crystalline porosity.

6950-6970 Limestone, light gray, finely crystalline, dolomitic, earthy.

6970-6980 Dolomite, light brownish gray, fine to medium crystalline, some intergranular porosity; some limestone as above.

6980-7020 Shale, pale red, calcareous, lumpy.

7020-7050 Anhydrite, white, dense.

7050-7070 Dolomite, light brownish gray, microsucrosic; some anhydrite, as above.

7070-7080 Anhydrite, white, dense.

7080-7100 Dolomite, light brownish gray, microsucrosic, limy.

7100-7110 Anhydrite, white to light gray, dense; some dolomite, as above.

7110-7140 Limestone, brownish gray, very finely crystalline, dense, slightly dolomitic, anhydrite.

7140-7200 Limestone, light brownish gray, very finely crystalline, dense anhydritic.

7200-7230 Dolomite, light gray, fine grained, argillaceous.

7230-7240 Anhydrite, very light gray, dense; some dolomite, as above.

7240-7250 Anhydrite, very light gray and grayish orange pink, dense, slightly calcareous.

7250-7300 Limestone, very light gray, very finely crystalline.