Summary of the Wm. Herbert Hunt Company - Ervin Horne #1
Mountrail County, North Dakota
Well No. 592 - Permit No. 606

By Clarence G. Carlson
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The Wm. Herbert Hunt Company - Ervin Horne #1, Mountrail County, North Dakota, C SE NW Section 14, T. 156N., R. 92W. Elevation 2322 K.B., 2311 G.L.

The Wm. Herbert Hunt - Ervin Horne was spudded May 21, 1954 and 10 3/4" casing was set at 600 feet with 150 sacks of cement. 7 inch casing was set at 8400 feet with 800 sacks of cement. The well was completed as a dry hole June 24, 1954 and abandoned. Total depth was 8699 feet.

Tests

DST #1 - 8258-8310 Tool open 15 minutes. Recovered 1320 feet of extremely salty salt water, no shows, FP 380-1075#, HP 4800#, 15 minutes SIP 3575#.

DST #2 - 8460-8573 Tool open 4 hours. Weak blow for 1 hour, then died. Recovered 1000 feet of muddy water cushion and 664 feet of black sulphur water. FP 650-875#, HP 5200-5100# 30 minute SIP 3200#.

DST #3 - 7870-7896 Failed to set tool.

DST #4 - 7854-7900 Tool open 2 hours. Recovered 30 feet of drilling mud. FP 0#, HP 4725-4625 30 minute SIP 0#.

Cement plugs were set at following depths:

- surface - 10 sacks
- 290 - 350 - 30 sacks
- 4947 - 5000 - 20 sacks
- 8147 - 8200 - 20 sacks

Formation tops were picked from samples, electric and radioactivity logs, adjusted to electric log tops. Not all tops were called in following list. Colors determined from the rock color chart.

FORMATION TOPS

Cretaceous System
- Pierre Formation 1960
- Niobrara Formation 3885
- Greenhorn Formation 4340
- Dakota 5052

Jurassic System
- Morrison Formation 5410
- Sundance Formation 5605
- Piper Formation 6140
Triassic System
  Spearfish Formation  6420

Mississippian System
  Amsden Formation  6890
  Big Snowy Group  7010
  Kibbey Lime  7500
  Charles Formation  7680
  Mission Canyon Formation  8118
  Lodgepole Formation  8510

360-440  Shale, yellowish gray, 5Y8/1, silty, calcareous.
440-500  Shale, yellowish gray, medium gray, silty, calcareous.
500-550  Shale, light gray, sandstone light gray, fine grained, silty, calcareous.
550-570  Shale, light gray, yellowish gray, silty, calcareous.
570-580  Shale, as above, sandstone light gray, fine grained, silty, calcareous.
580-610  Shale, as above.
610-630  Shale, light gray, lignite, sandstone light gray, fine grained, silty, calcareous.
630-710  Shale, light gray, sandstone as above.
710-740  Shale, light gray, silty, calcareous.
740-830  Shale, as above, siltstone, light gray, calcareous.
830-840  Siltstone, pale brown, with medium to coarse, subangular quartz grains.
840-900  Siltstone, light gray, calcareous, shale, light gray.
910-930  Siltstone, light gray, calcareous.
930-940  Siltstone, as above, shale, pale yellowish brown, calcareous.
940-1070  Siltstone, light gray, calcareous, sandy, shale, light gray.
1070-1110  Shale, light gray, bentonitic, slightly calcareous, siltstone as above.
1110-1160  Siltstone, light gray, sandy, calcareous.
1160-1230  Siltstone, as above, shale, light gray, bentonitic, calcareous.
1230-1290  Siltstone, as above, lignite, shale, as above.
1290-1350  Siltstone, light gray, sandy, calcareous, shale light gray, bentonitic, calcareous.
1350-1410  Siltstone, light gray, sandy, calcareous.
1410-1470  Siltstone, as above, shale, light gray, bentonitic.
1470-1490  Shale, light gray, pale brown, bentonitic, lignite.
1490-1510  Shale, light gray, bentonitic, siltstone, light gray, sandy, calcareous.
1510-1520  Lignite, shale, siltstone, as above.
1520-1550  Siltstone, as above, shale, light gray, pale brown, bentonitic.
1550-1570  Shale, light gray, pale yellowish brown, bentonitic.
1570-1580  Shale, as above, some siltstone, light gray, calcareous with medium to coarse, subangular quartz grains.
1580-1700  Shale, as above, siltstone, light gray, sandy, calcareous.
1700-1720  Shale, light gray, bentonitic, lignite.
1720-1760  Shale, light gray, bentonitic.
1760-1780  Siltstone, light gray, sandy, calcareous, shale, light gray.
1780-1820  Siltstone, as above, some lignite, shale, light gray.
1820-1920  Siltstone, sandy, calcareous.
1920-1960  Siltstone, as above, shale, light gray, bentonitic, calcareous.
1960-2020 Shale, light gray, bentonitic, calcareous, siltstone, as above.
2030-2070 Shale, light gray, bentonitic, calcareous, siltstone, light gray, sandy, calcareous.
2070-2090 Shale, light gray, bentonitic, some siltstone, as above.
2090-2110 Shale, medium light gray, bentonitic, yellowish gray, bentonitic, silty.
2110-2150 Shale, medium light gray, brownish gray, bentonitic, silty, resinous, massive compact.
2150-2160 Shale, shale yellowish brown, earthy, massive, compact.
2160-2170 Shale, medium light gray, bentonitic, resinous, massive, compact.
2170-2210 Shale, pale yellowish brown, silty, earthy, massive, compact.
2210-2220 Shale, medium light gray, bentonitic, earthy, massive, compact.
2220-2270 Shale, light brown, silty, slightly bentonitic, earthy, massive compact, some medium light gray, as above.
2270-2380 Shale, medium light gray, bentonitic, earthy, massive, compact slightly silty.
2380-2530 Shale, medium light gray, earthy, massive, compact.
2540-2560 Shale, as above, some white bentonite.
2560-2610 Shale, medium light gray, earthy, massive, compact.
2610-2640 Shale, as above, some white bentonite.
2640-2720 Shale, medium light gray, earthy, massive, compact.
2720-2890 Shale, medium gray, earthy to resinous, massive compact.
2890-2900 Shale, medium dark gray, earthy, massive, compact.
2900-3000 Shale, medium gray, earthy to resinous, massive, compact.
3000-3020 Shale, medium gray, as above, some white bentonite.
3020-3030 Shale, medium gray, as above, some sandstone light yellowish gray, fine grained friable.
3030-3060 Shale, medium gray, earthy to resinous, massive, compact, some white bentonite.
3060-3370 Shale, medium gray, earthy, massive, compact.
3370-3390 Shale, as above, little sandstone light yellowish gray, fine grained, friable.
3390-3570 Shale, medium gray, earthy, massive, compact.
3570-3580 Shale, as above, some white bentonite.
3580-3610 Shale, medium gray, earthy, massive, compact.
3610-3620 Shale, medium gray, light brownish gray, earthy, massive, compact.
3620-3640 Shale, medium gray, earthy to resinous, massive, compact.
3640-3890 Shale, medium to medium dark gray, earthy to resinous, massive compact.
3890-3900 Shale, medium dark gray, resinous, massive, compact, some white bentonite.
3900-3940 Shale, medium to medium dark gray, resinous, massive, compact.
3940-3960 Shale, medium dark gray, calcareous, white specks, resinous foliated, compact.
3960-4050 Shale, medium to medium dark gray, resinous, massive, compact calcareous.
4050-4150 Shale, dark gray, calcareous, resinous, foliated, compact.
4150-4180 Shale, dark gray to grayish black, slightly calcareous, resinous, to silky foliated, compact.
4190-4220 Shale, dark gray, as above, medium gray, brownish stained resinous, massive compact.
4220-4320 Shale, dark gray, calcareous, resinous, foliated, compact.
4320-4400 Shale, dark gray, as above, medium gray, brownish stained resinous, massive compact.
4400-4420  Shale, medium to dark gray, calcareous, resinous, foliated, compact, some limestone white, fine to medium grained, fragmental.
4420-4450  Shale, dark gray, calcareous, white specks, resinous foliated, compact, some limestone as above.
4450-4500  Shale, as above.
4500-4530  Shale, dark gray, resinous, foliated, compact.
4530-4640  Shale, dark gray, calcareous, white specks.
4650-4700  Shale, dark gray, calcareous, earthy to resinous, foliated compact, some white specks.
4700-4850  Shale, dark gray, resinous, foliated, compact.
4850-4980  Shale, dark gray to grayish black, resinous, foliated, compact.
4980-4990  Shale, as above, sandstone light gray, fine grained, calcareous.
4990-5030  Shale, dark gray, resinous, foliated, compact.
5030-5090  Shale, dark gray, medium light gray, resinous, foliated, compact.
5090-5120  Sandstone, light gray, fine grained, calcareous.
5120-5150  Shale, dark gray, medium light gray, resinous, foliated, compact.
5150-5170  Sandstone, light gray, fine grained, shale, as above.
5170-5190  Shale, light gray, waxy, massive, compact, shale, as above.
5190-5210  Shale, dark gray, medium gray, resinous, massive, compact.
5210-5240  Shale, light gray, medium gray, waxy, massive, compact, sandstone light gray, fine to medium grained.
5240-5290  Shale, as above.
5290-5380  Sandstone, light gray, fine to medium grained.
5380-5420  Shale, light brownish gray, medium gray, waxy, massive, compact, sandstone, as above, with some coarse, subangular quartz grains.
5420-5450  Shale, dark gray, resinous, foliated, compact, medium gray, light brownish gray, waxy, massive, compact.
5450-5500  Shale, light to medium gray, waxy, massive, compact, sandstone light gray, very fine grained, calcareous.
5500-5510  Shale, light to medium gray, light brownish gray, waxy to resinous, compact.
5510-5560  Shale, as above, sandstone light gray, very fine grained, calcareous.
5560-5610  Shale, light gray, dark gray, light brownish gray, greenish gray 56Y6/1 slightly calcareous, waxy to resinous, foliated, compact.
5610-5650  Shale, as above, sandstone light gray, fine grained, calcareous.
5650-5670  Shale, light gray, dark gray, light brownish gray, slightly calcareous resinous, foliated, compact.
5670-5690  Shale, as above, sandstone light gray, fine grained, calcareous.
5690-5710  Shale, light greenish gray, medium to dark gray, resinous, foliated, compact.
5710-5770  Shale, as above, sandstone light gray, fine to medium grained, calcareous.
5780-5850  Shale, light greenish gray, medium gray, resinous, foliated, compact.
5850-5920  Shale, light greenish gray 56Y6/1, olive gray, slightly calcareous resinous, foliated, compact, sandstone light greenish gray, fine grain, slightly calcareous, some glauconitic.
5930-6000  Shale, as above, sandstone light gray to light greenish gray, fine grained, slightly calcareous.
6000-6040  Sandstone, light greenish gray, fine grained, slightly calcareous, shale, light greenish gray, resinous, platy, compact, calcareous.
6040-6080  Shale, greenish gray 5G6/1, slightly calcareous, resinous, platy, compact, some sandstone as above.
Shale, greenish gray, pale brown 5YR5/2, slightly calcareous, resinous, platy, compact, some sandstone as above.

Sandstone, light greenish gray, fine grained, calcareous, some shale as above.

Limestone, white to very light gray, fine grained and fragmental.

Limestone, white to very light gray, very fine grained, dense.

Limestone, as above, shale, moderate brown, 5YR4/4, greenish gray, 564/1 slightly calcareous, resinous, platy, compact.

Shale, as above.

Shale, as above, some limestone white, very fine grained.

Shale, moderate, brown, pale brown, greenish gray, slightly calcareous, resinous to subwaxy, platy, compact.

Limestone, light gray, fine grained to fragmental, some shale as above.

Shale, moderate brown, grayish red 10R4/2 greenish gray, calcareous, subwaxy to resinous, platy, compact.

Shale, as above and dark gray shale.

Shale, as above, some white gypsum.

Siltstone, moderate reddish orange, sandy, calcareous, white gypsum.

Siltstone, as above, with some loose, rounded, medium grains white gypsum.

Siltstone, as above, white gypsum, shale, grayish red.

Siltstone, moderate reddish orange, sandy, calcareous, some white gypsum.

Shale, grayish red 10R4/2 calcareous, some siltstone, as above.

Sandstone, moderate reddish orange, very fine grained, calcareous, some white gypsum.

Sandstone, moderate reddish orange, very fine to medium grained, calcareous.

Sandstone, as above, white gypsum.

Sandstone, as above, white gypsum, shale, grayish red, resinous to subwaxy foliated, compact.

Sandstone, moderate reddish orange, fine to medium grained, calcareous, some medium to coarse, rounded, frosted quartz grains.

Dolomite, pale red to very light gray, fine grained.

Dolomite, pale red, fine grained, limey, argillaceous.

Limestone, grayish pink to light gray, fine grained, argillaceous.

Limestone as above, sandstone white to light gray, fine to medium grained, calcareous some limestone, dusky yellow, fine grained, argillaceous.

Shale, moderate red, 5R5/4 to moderate reddish brown, very calcareous, resinous, lumpy, spongy.

Shale, moderate red. 5R5/4 pale reddish brown, subwaxy, platy, brittle.

Shale, variegated, moderate red, pale reddish brown, grayish green 5G5/2 dusky yellow, grayish red, purple.

Shale, medium dark gray, subwaxy, platy, brittle.

Shale as above.

Shale, dark gray, pale reddish brown, grayish red 5R4/2 subwaxy, platy, brittle.

Shale, variegated as above, dolomite, light gray, fine grained, limey.

Limestone, light gray, finely crystalline, dense.
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7290-7310 Limestone, as above, some variegated shale.
7310-7330 Dolomite, light gray, fine grained, dense, some variegated shale.
7330-7350 Shale, pale red, moderate reddish orange, calcareous.
7350-7370 Shale, moderate reddish orange, calcareous, sandstone pale red
fine grained, calcareous.
7370-7380 Sandstone, pale red, fine grained, calcareous.
7390-7410 Sandstone as above.
7410-7510 Sandstone, pale red to very light gray, fine to medium grained,
calcareous.
7510-7520 Anhydrite, white.
7520-7540 Limestone, light to medium gray, finely crystalline.
7550-7580 Sandstone, light gray, very fine grained, very calcareous.
7590-7610 Sandstone, pale red, fine grained, very calcareous.
7610-7620 Sandstone, light gray, fine to medium grained, calcareous.
7620-7690 Sandstone, pale red, light gray, fine to medium grained,
calcareous.
7690-7730 Anhydrite, white, dense.
7730-7750 Limestone, light gray, fine grained, argillaceous, anhydrite.
7750-7800 Anhydrite, white, some limestone as above.
7800-7830 Limestone, light gray, fine grained, argillaceous, anhydrite.
7870-7880 Limestone, light gray to light brownish gray, mostly very finely
crystalline some oolitic.
7900-7940 Anhydrite, white, some dense crystalline, some granular with
yellowish brown, fine grained limestone.
7940-7960 Limestone, light gray, oolitic, some anhydrite.
7960-7970 Limestone, light gray to light brownish gray, fine gained and
oolitic.
7970-7990 Limestone, brownish gray, very finely crystalline.
7990-8010 Limestone, light gray, fine grained.
8010-8040 Anhydrite, white, dense.
8040-8070 Limestone, light gray, fine grained, some anhydrite.
8070-8100 Anhydrite, white, dense, some limestone as above.
8100-8110 Limestone, light gray, fine grained, dolomitic, anhydrite.
8110-8140 Dolomite, light brownish gray, fine grained, microsucrosic
limestone as above.
8150-8190 Anhydrite, bluish gray, dense.
8190-8200 Limestone, brownish gray, fine grained.
8200-8210 Limestone, light brownish gray, fine to medium grained.
8210-8225 Anhydrite, bluish gray and white.
8225-8245 Limestone, light brownish gray, fine to medium grained.
8245-8260 Anhydrite, bluish gray.
8260-8275 Limestone, light brownish gray, fine grained.
8275-8305 Limestone, light brownish gray, microsucrosic.
8305-8310 Limestone, light brownish gray, fine to medium grained.
8310 Circulation limestone, as above.
8310-8340 Limestone, light brownish gray, fine to medium grained.
8340-8375 Limestone, yellowish gray, microsucrosic to fine grained.
8375-8395 Limestone, light brownish gray, fine to medium crystalline, dense.
8395-3430 Limestone, yellowish gray, fine to medium grained, fragmental.
8430-8450 Limestone, light gray, fine grained, and limestone, as above.
8450-8485 Limestone, light yellowish gray, microsucrosic.
8485-8510 Limestone, light yellowish gray, fine to medium grained,
fragmental.
8510-8550  Limestone, light yellowish gray to light brownish gray, fine to medium grained, fragmental.
8550-8560  Limestone, light brownish gray, medium grained.
8560-8605  Limestone, light yellowish gray to light brownish gray, fine to medium grained, fragmental.
8609-8670  Limestone, as above, few shell fragments.
8670-8690  Limestone, light gray to light yellowish gray, fine grained.