## NORTH DAKOTA GEOLOGICAL SURVEY CIRCULAR NO. 94

Summary of the Pollard and Davis - A. H. Gregory #1
Barnes County, North Dakota
Well No. 401 - Permit No. 417

By Morton Strassberg November, 1954

Pollard and Davis - Gregory #1, Barnes County, North Dakota, C SE SW Sec. 23, T. 143N., R. 61W. (660 feet from S. line and 1980 feet from W. line). Elevation 1473 D.F.

The Pollard and Davis - Gregory #1 was spudded September 16, 1953 and 8 5/8 inch casing was set at 307 feet with 200 sacks of cement. The well was completed as a dry hole October 8, 1953 and was abandoned. Total Depth 1690 feet.

Formation tops were determined from samples and electric logs and were corrected to electric log tops. Not all lithologic tops were called in the following list. Colors were determined from the rock color chart.

## Formation tops

Pierre 150 Niobrara 420 Greenhorn 875 "Muddy Zone" ? 1209 Dakota 1377 Silurian System Interlake Group ? 1618  0-40 Sand, medium to very coarse grained. 40-80 Sand, fine to very coarse grained. 80-150 Shale, medium light gray. 150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic. 230-270 Shale, light to medium light gray, slightly calcareous.
Greenhorn 875  "Muddy Zone" ? 1209 Dakota 1377  Silurian System Interlake Group ? 1618  0-40 Sand, medium to very coarse grained. 40-80 Sand, fine to very coarse grained. 80-150 Shale, medium light gray. 150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic.
"Muddy Zone" ? 1209 Dakota 1377  Silurian System Interlake Group ? 1618  0-40 Sand, medium to very coarse grained. 40-80 Sand, fine to very coarse grained. 80-150 Shale, medium light gray. 150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic.
Dakota 1377  Silurian System Interlake Group ? 1618  0-40 Sand, medium to very coarse grained. 40-80 Sand, fine to very coarse grained. 80-150 Shale, medium light gray. 150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic.
Silurian System Interlake Group? 1618  0-40 Sand, medium to very coarse grained. 40-80 Sand, fine to very coarse grained. 80-150 Shale, medium light gray. 150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic.
Interlake Group? 1618  0-40 Sand, medium to very coarse grained. 40-80 Sand, fine to very coarse grained. 80-150 Shale, medium light gray. 150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic.
0-40 Sand, medium to very coarse grained. 40-80 Sand, fine to very coarse grained. 80-150 Shale, medium light gray. 150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic.
40-80 Sand, fine to very coarse grained. 80-150 Shale, medium light gray. 150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic.
40-80 Sand, fine to very coarse grained. 80-150 Shale, medium light gray. 150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic.
80-150 Shale, medium light gray. 150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic.
150-170 Shale, light gray, slightly calcareous. 170-200 Shale, medium light gray, calcareous. 200-230 Shale, medium light gray, bentonitic.
200-230 Shale, medium light gray, bentonitic.
· · · · · · · · · · · · · · · · · · ·
230-270 Shale, light to medium light gray, slightly calcareous.
270-300 Shale, medium light to medium gray.
300-310 Shale, medium light to medium gray, calcareous.
310-320 Shale, light gray, highly calcareous.
320-340 Shale, medium dark to dark gray, slightly calcareous.
340-360 Shale, medium gray, calcareous.
360-390 Shale, medium to medium dark gray, calcareous.
390-400 Shale, light to medium gray, calcareous.
400-410 Siltstone, pale brown, argillaceous.
410-420 Shale, light to medium gray, calcareous.
Shale, medium light to medium dark gray, white specks, calcareous.
Shale, medium dark gray, calcareous.
450-510 Shale, medium light gray, white specks, calcareous.
510-540 Shale, medium light to medium gray, white specks, calcareous.
540-570 Shale, medium light to medium gray, calcareous.

- 570-590 Shale, medium to medium dark gray, slightly calcareous.
- 590-620 Shale, medium light to medium gray, calcareous.
- 620-680 Shale, medium light to medium gray, white specks, calcareous.
- 680-720 Shale, medium light to medium gray, calcareous.
- 720-750 Shale, medium gray, calcareous.
- 750-780 Shale, medium light to medium gray, calcareous.
- 780-820 Shale, medium gray, calcareous.
- 820-870 Shale, medium to medium dark gray, calcareous.
- 870-880 Sandstone, coarse to very coarse grained, rounded, frosted.
- Shale, medium to medium dark gray, calcareous. Medium to very coarse grained sandstone
- 900-930 Shale, medium dark gray, white specks, calcareous. Calcite prisms.
- 930-970 Shale, medium to medium dark gray, white specks, calcareous. Calcite prisms.
- 970-990 Shale, medium dark gray, white specks, calcareous.
- 990-1030 Shale, medium to medium dark gray, white specks, calcareous.
- 1030-1050 Shale, dark gray, calcareous.
- 1050-1090 Shale, medium dark to dark gray, calcareous. Calcite prisms.
- 1090-1150 Shale, medium dark gray, bentonitic, calcareous. Calcite prisms.
- 1150-1210 Shale, medium to medium dark gray, calcareous. Fine grained calcareous sandstone.
- 1210-1220 Sandstone, white fine grained calcareous and pale yellowish brown, silty.
- 1220-1250 Sandstone, light olive gray, very fine grained, silty.
- 1250-1260 Sandstone, medium to very coarse grained, rounded, frosted and very fine grained silty.
- 1260-1270 Shale, medium to medium dark gray. Medium to very coarse grained sandstone.
- 1270-1280 Siltstone, medium light gray, argillaceous. Medium to medium dark gray shale.
- 1280-1300 Shale, medium dark gray, fragmental calcite prisms.
- 1300-1360 Shale, medium to medium dark gray. Light gray argillaceous siltstone.
- 1360-1380 Shale, medium to medium dark gray, calcareous.
- 1380-1390 Sandstone, fine grained calcareous and very coarse grained, pyritic.
- 1390-1420 Sandstone, medium to very coarse grained, subrounded, frosted, pyritic.
- 1420-1440 Sandstone, coarse to very coarse grained, subrounded to subangular, frosted, pyritic. Iron stained concretions.
- 1440-1460 Shale, medium light to medium dark gray. Iron stained concretions and free coarse grained quartz.
- 1460-1470 Sandstone, coarse to very coarse grained, subangular, frosted, Iron stained concretions.
- 1470-1500 Sandstone, medium to very coarse grained, subangular frosted. Iron stained concretions.
- 1500-1520 Shale, medium light to medium gray. Medium to very coarse grained subangular frosted sandstone. Iron stained concretions.
- 1520-1590 Sandstone, medium to very coarse grained, subangular frosted. Iron stained concretions.
- 1590-1610 Sandstone, medium grained to pebbly, subrounded to subangular, frosted, pyritic. Iron stained concretions.
- 1610-1620 Sandstone, same as above. Pale yellowish brown, fine grained dolomite.

1620-1630	Dolomite, pale yellowish brown, fine grained to sucrosic, some intergranular porosity.
1630-1650	Dolomite, white to pale yellowish brown, microsucrosic to fine grained.
1650-1660	Dolomite, white to pale yellowish brown, microsucrosic to fine grained. Fine to very coarse grained, subrounded to subangular frosted sandstone.
1660-1690	Dolomite, white to pale yellowish brown, fine grained to sucrosic, some intergranular porosity. Medium to very coarse grained free quartz.