

NORTH DAKOTA GEOLOGICAL SURVEY CIRCULAR NO. 171

Summary of the Sohio Petroleum Company - George A. Magnuson No. 2
Renville County, North Dakota
Well No. 960 - Permit No. 972

by James Peterson
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Sohio Petroleum Company, George A. Magnuson No. 2, Renville County, North Dakota. Location: 1980 feet from north line and 660 feet from east line, C SE SE Section 30, Township 163N., R. 84W. Elevation: 1631 Derrick floor, 1642 K.B.

Sohio Petroleum Company, George A. Magnuson No. 2 was spudded September 4, 1955, drilled to a total depth of 4828, found dry and plugged September 18, 1955.

Logging Record:
Electric and Microlog by Schlumberger.

Coring Record:
4169-4188
4225-4261
4286-4343
4346-4403

Casing Record:
311 feet of 9 5/8 inches

Plugging Record:
4771-4761 20 sacks of cement
4350-4340 20 sacks of cement
4155-4145 20 sacks of cement
3949-3939 20 sacks of cement
2795-2785 20 sacks of cement
35- 2 15 sacks of cement

Formation tops were determined from core chips and electric logs. Colors were determined from the Rock-Color chart which is distributed by the National Research Council, Washington, D.C.

FORMATION TOPS

Cretaceous System	
Pierre formation	502
Niobrara formation	1973
Greenhorn formation	2278
Dakota Sand	2776
Jurassic System	3145
Piper formation	2728
Triassic System	
Spearfish formation	2939

Mississippian System

Charles formation	4140
Mission Canyon formation (MC3)	4440
Mission Canyon formation (MC2)	4595
Lodgepole formation	4764

0-4169	Missing.
4169-4170	Limestone, very light gray, fine granular, tight, sub-lithographic.
4170-4173	Limestone, very light gray, subcrystalline, oolitic and fragmental sublithographic, fair to good porosity.
4173-4175	Limestone, very light gray, oolitic with intergranular porosity to oolitic is a subcrystalline, tight matrix.
4175-4183	Limestone, very light gray, subcrystalline, tight, some very thin shale streaks.
4183-4184	Limestone, very light gray, oolitic to crystalline, tight.
4184-4187	Limestone, very light gray to pale red, fine graining, little porosity.
4187-4188	Limestone, very light gray, partly fragmental, poor intergranular porosity.
4188-4225	Missing.
4225-4226	Limy dolomite, light gray, very finely granular with recrystallization, tight.
4226-4230	Limy dolomite, light gray, very finely granular, tight.
4230-4233	Anhydrite, medium gray, subcrystalline, dense.
4233-4237	Anhydrite as above, dolomitic.
4237-4241	Anhydrite, medium light gray to medium dark gray, subcrystalline.
4241-4287	Missing.
4287-4291	Dolomite, light gray, very fine grainy, dense.
4291-4294	Dolomite, light gray, fine grainy.
4294-4295	Limestone, medium light gray, fine grainy, thin shale streaks.
4295-4299	Limestone, yellowish gray, grainy, resinous calcite crystals, secondary anhydrite filling, good intercrystalline porosity.
4299-4305	Limestone, yellowish gray, fine grainy, fair porosity.
4305-4307	Limestone, pale yellowish brown, subcrystalline, calcite filling in cracks and pores, tight.
4307-4308	Limestone, pale yellowish brown, oolitic, as above.
4308-4311	Limestone, pale yellowish brown to dusky yellowish brown, subcrystalline to crystalline.
4311-4315	Dolomite, very light gray, subcrystalline, dense, sublithographic. Secondary crystalline, vitreous, anhydrite filling of fractures.
4315-4340	Anhydrite, medium light gray, subcrystalline, dense.
4340-4341	Anhydrite, light gray, crystalline, dolomitic matrix.
4341-4342	Dolomite, medium light gray, subcrystalline, anhydrite filling of fractures.
4342-4343	Anhydrite, medium gray, subcrystalline to very fine granular.
4343-4346	Missing.
4346-4347	Sandy limestone, very light gray, fine grained, good intergranular porosity.
4347-4348	Limestone, yellowish gray, small to large oolites, very little porosity.
4348-4349	Limestone, light gray, subcrystalline, oolitic, fractures filled with clear, vitreous, crystalline anhydrite.
4349-4355	Missing.

4355-4358 Limestone, yellowish gray, subcrystalline, oolitic, vuggy, filled or partially filled with calute crystals, some colorless anhydrite crystals.

4358-4375 Limestone, light gray, oolitic, pores with crystalline calute crystals, tight.

4375-4377 Limestone, very light gray, very fine grainy texture, a few oolites, fair porosity, some secondary filling.

4377-4378 Limestone, light gray, very oolitic, pores filled with calute, tight.

4378-4386 Missing.

4386-4389 Limestone, light gray to yellowish gray, oolitic, vugs partially filled with crystalline calcite.

4389-4404 Limestone, light gray to yellowish brown, oolitic, some very good vugular porosity.

4404-4640 No samples.

4640-4670 Limestone, very light gray to yellowish gray, sublithographic to lithographic, oolitic.

4670-4700 Limestone, yellowish gray to light brownish gray, lithographic, crystalline, fragmental to oolitic. Vuggy in part, fossiliferous.

4700-4718 Missing.

4718-4760 Limestone, yellowish gray, lithographic, granular to medium crystalline, fragmental to oolitic, fossiliferous.

4760-4780 Limestone, yellowish gray to light gray, lithographic, fragmental to oolitic, very fossiliferous.

4780- Limestone, light gray to medium gray, lithographic, fragmental, fossiliferous.