NORTH DAKOTA GEOLOGICAL SURVEY CIRCULAR NO. 62

Summary of the Wilson Germany & Cardinal Drilling Company Gerhart Bahnmiller #1

Wells County, North Dakota Well #385, Permit #401

By Carole Smith April, 1954

The Wilson Germany and Cardinal Drilling Company - Gerhart Bahnmiller #1, Wells County, North Dakota. Located: Section 26, T. 145N., R. 72W. (660 feet from east line, 740 feet from south line, section 26) Elevation: 1906' G.L., 1914 1/2 R.B.

The Germany and Cardinal Drilling Company - Bahnmiller #1 was spudded September 14, 1953 and 316' of 10 3/4" surface casing was set with 195 sacks of cement. 15 sack plugs were set at 2412', 3083', 3245', and 3430'. A 15 sack plug was set at 316'. The well was abandoned as dry on November 1, 1953 at a total depth of 3700'.

No cores.

No tests.

FORMATION TOPS

Cretaceous System				
Niobrara	1313			
Greenhorn	1875			
Muddy ?	2120			
Dakota	2415			
Jurassic System				
Morrison	2655			
Sundance	2752			
Piper Lime	2910			
Triassic System				
Spearfish	2980			
Mississippian System				
Amsden	3082			
Big Snowy	3100			
Charles	3182			
Mission Canyon	3236			
Lodgepole	3432			

From	<u>To</u>	<u>Formation</u>
0	30	Gravel, grey and brown silty shale, some sand.
30	90	Gravel, much light brown to dark grey, silty, sandy shale.
90	120	Silty sandy shale, light brown to dark grey; some sand and gravel.
120	180	Sand, medium to coarse, rounded, fairly well sorted.

From	<u>To</u>	<u>Formation</u>
180	270	Silty, sandy shale, brownish, calcareous, some sand and gravel, much sand as above (210-270).
270	325	Silty, sandy shale, medium grey, slightly brown, some sand and gravel.
325	340	Missing Samples.
340	460	Shale, medium light grey, silty, very slightly calcareous; somewhat glauconitic and more silty (400-430).
460	640	Shale, light grey, rather silty, firm, partly glauconitic, becoming partly medium dark grey at 610.
640	770	Shale, medium grey to dark grey, partly lumpy and bentonitic.
770	1290	Shale, medium grey, very slightly greenish, firm; partly lumpy and bentonitic (1230-1290); missing samples (830-870).
1290	1320	Shale, light to dark grey, partly brownish and lumpy.
1320	1350	Shale, firm, medium grey to dark grey, lumpy; traces of bentonite.
1350	1410	Shale, dark grey to grey black, lumpy and flaky, partly calcareous.
1410	1470	Calcareous shale, medium grey to medium dark grey, lumpy to flaky, pyrite.
1470	1530	Calcareous shale, medium grey with white specks, firm to lumpy, pyritic, traces of iridescent shell fragments.
1530	1620	Shale, medium grey, firm to lumpy, pyritic, slightly calcareous.
1620	1920	Shale, medium grey to dark grey, firm to lumpy, pyritic, somewhat calcareous in scattered places, traces of Inoceramus fragments beginning at 1860.
1920	1950	Calcareous shale, medium grey with white specks, small amounts of Inoceramus fragments.
1950	2100	Shale, medium grey, partly calcareous, some Inoceramus fragments and dense fragmental limestone increasing greatly at 1980 and decreasing at 2040.
2100	2130	Calcareous shale, dark grey to medium brownish grey, firm to lumpy, traces of Inoceramus fragments.
2130	2280	Shale, medium grey to dark grey, very slightly calcareous, traces of Inoceramus fragments.
2280	2400	Shale, medium grey, lumpy, partly calcareous.
2400	2500	Shale, medium dark grey, flaky, very slightly calcareous, traces of grey siltstone and fine grained sandstone beginning at 2480.
2500	2560	Shale, as above, small amounts of light brown, pitted concretionary, coarse quartz, increasing in quantity, traces of hematite pellets.
2560	2630	Shale, medium grey to dark grey, firm, much very coarse, subangular to subround quartz sand beginning at 2600 and increasing even more in quantity at 2620.
2630	2660	Shale, dark grey, flaky, some very limey, fine to medium grained white sandstone, decreasing at 2640, some coarse to very coarse quartz sand beginning at 2640.
2660	2670	Shale, medium grey to dark grey, firm to flaky, traces of sand and sandstone.
2670	2690	Shale, as above, much coarse, subround quartz sand; traces of hematite and lemonite(?), green shale.

From	<u>To</u>	<u>Formation</u>
2690	2740	Shale, dark grey, flaky, traces of reddish shale and siltstone, yellowish shale, and sand, hematite(?).
2740	2770	Shale, medium dark grey, flaky, traces of sand, fine glauconite sandstone, lemonite and hematite(?) and reddish shale; some coarse to very coarse subround quartz sand (2760-70).
2770	2780	Shale, medium dark grey to dark grey, somewhat silty; traces of, pyrite, shells, and fragmental Inoceramus limestone.
2780	2850	Shale, medium gray to dark grey, firm, some very coarse, subangular to subround quartz sand, increasing in quantity; traces of chalky white limestone beginning at 2810; the sand decreasing in quantity at 2830 and the shale becomes rather greenish gray.
2850	2860	Shale, grey, reddish, greenish, light brown, small amounts of sand, traces of pyrite and tiny hematite(?) pellets.
2860	2910	Shale, reddish brown, silty, some grey shale, traces of greenish shale, sand, pyrite.
2910	2920	Limestone, almost white, sublithographic, much reddish, grey, and greenish shale, traces of sand.
2920	2950	Shale, grey, green, reddish brown, moderate red, much almost white, sublithographic limestone, increasing in quantity.
2950	2980	Limestone, almost white, sublithographic, becoming partly very pale yellow brown, some reddish and grey shales, much medium grey shale (2970-2980).
2980	2990	Limestone, white, very pale yellow brown, micro-sugary to sublithographic, some grey shale, small amounts of red and green shales.
2990	3030	Limestone, very pale yellow grey to white, sublithographic to lithographic, partly fine oolitic, much medium grey shale, increasing in quantity, some reddish brown shale beginning at 3010.
3030	3050	Shale, dark grey to medium grey, small amounts of reddish brown shale, limestone as above, traces of green shale, sand, and anhydrite.
3050	3070	Shale, reddish brown, some grey, traces of yellow and red and green, small amounts of limestone and anhydrite.
3070	3100	Shale, dark grey, splintery, some shale as above, traces of anhydrite.
3100	3120	Shale reddish brown and grey, traces of green, much pale, micro-sugary dolomitic limestone.
3120	3160	Shale, as above, much pale, micro-sugary limestone, traces of anhydrite.
3160	3190	Shale, dark grey and reddish brown, small amounts of anhydrite limestone, traces of green shale.
3190	3210	Shale, grey and red, small amounts of greenish; some white
3210	3240	anhydrite; small amount of pale sublithographic limestone. Shale, medium grey to dark grey, small amounts are red; increasing amounts of white anhydrite and dense, pinkish dolomite, much very pale yellow brown, pseudo-oolitic limestone (3230-3240).

From	<u>To</u>	<u>Formation</u>
3240	3250	Dolomite, pale red, dense, some very pale, micro-sugary limestone, some grey and reddish shale, traces of anhydrite.
3250	3270	Shale as above, some pale yellow brown, dense limestone some white anhydrite.
3270	3280	Missing samples.
3280	3310	Shale, medium grey to dark grey, some reddish shale, some white anhydrite, small amounts of dense, pale limestone increasing greatly in quantity at 3300.
3310	3350	Dolomitic limestone, greyish orange pink to pale pink, micro-sugary, somewhat argillaceous, some shale as above, traces of anhydrite and pyrite.
3350	3370	Limestone, very pale yellow brown, pseudo-oolitic, becoming more oolitic at 3360, some chalky white limestone and some fine sugary pink limestone, some shale.
3370	3380	Limestone, white, pink, pale yellow brown, micro-sugary to chalky, much grey and reddish shale.
3380	3390	Oolitic limestone, very pale yellow brown, some pale, micro-sugary and chalky limestone, some shale as above.
3390	3420	Dolomite, pinkish, micro-sugary to fine sugary; small amounts of limestone and shale as above.
3420	3440	Oolitic limestone, very pale yellow brown; small amounts of chalky and fine sugary limestone, pink dolomite as above, and shale.
3440	3550	Limestone, white, very pale yellow brown, pink, oolitic, chalky micro-sugary; a trace of grey siltstone and brachiopod fragments at 3450; much grey shale beginning at 3460; a small amount of limey dolomite at 3480; reddish and greenish shales in small amounts beginning at 3500; traces of anhydrite beginning at 3540.
3550	3590	Limestone, very pale yellow brown and grey, somewhat pink tinged, crystalline and/or chalky; much reddish, grey, and greenish shales, traces of anhydrite and pyrite.
3590	3600	Limestone, white to pale red, crystalline and/or chalky; much grey, reddish, and greenish shales; traces of anhydrite and pyrite.
3600	3630	Limestone, very pale yellow brown, very pale orange, crystalline chalky, micro-sugary; increasing amounts of shale as above; small amounts of anhydrite.
3630	3650	Limestone, very pale yellow brown and pink, fine sugary and/or chalky; some white anhydrite, decreasing in quantity; some shale.
3650	3680	Limestone, pale red to greyish orange pink, fine sugary, partly chalky, increasing amounts of grey and reddish shales.
3680	3690	Limestone, very pale yellow brown and grey, slightly pink, micro-sugary and/or chalky; much grey shale.
3690	3700	Limestone; very pale yellow brown, micro-sugary and chalky; small amounts of shale.
3700		Total depth.