NORTH DAKOTA GEOLOGICAL SURVEY CIRCULAR N0. 200

Summary of the North Plains Petroleum, Inc. - C.O. Haugen No. 1
Grand Forks County, North Dakota
Well No. 1415 - Permit No. 1427

by Dan E. Hansen
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The North Plains Petroleum Inc. - C.O. Haugen No.1, Grand Forks County. Location: 660 feet from the south line and 660 feet from the east line of section 22, T. 152N., R. 54W. Elevation: 1015 G.L.

The North Plains Petroleum, Inc. - C.O. Haugen was, spudded April 3, 1957; drilled to a total depth of 1150 feet; and completed as a dry hole April 15, 1957. One core was cut from 992-1002 with no recovery. No mechanical logs were run.

PLUGGING RECORD:

150 feet 8" casing left in hole, 2 sacks cement top of casing, 15 sacks cement bottom of casing; 15 sacks cement at 625 (top of Red River); and 15 sacks cement at 992 (top of Winnipeg sandstone). Mud plugs were used.

Formation tops were determined from cuttings. Colors were determined from the 1948 Rock-Color Chart which was distributed by the National Research Council, Washington D.C.

FORMATION TOPS

Cretaceous System	310
Dakota sandstone	390
Ordovician System	
Red River Formation	625
Winnipeg Formation	970

0-40	Sands, very coarse-grained, much quartz from 0-20; feldspar and light yellowish gray dolomite grains increase below, all angular. Medium light gray Cretaceous shale pebbles.
40-50	Sand, as above, with much dark gray, earthy, silty material, the carbon content being high (soil?).
50-80	Sandy, as above, small pebbles, high sand content (fine quartz) at 70-80.
80-120	Sand, chiefly gray shale pebbles, (small) coarse quartz and yellowish gray dolomite.
120-130	Gravel, small pebbles of yellowish gray dolomite, some feldspar, and chiefly gray shale.
130-140	Clay, medium gray, pebbly, slightly calcareous, silty.
140-220	Gravel, shale, traces calcareous, dolomite, as above, coarse pebbles. Increase in content of quartz and igneous rock fragments. Generally the fragments are angular.
220-310	Gravel and sand, quartz predominate. Basic igneous rock fragments appear. Much pyrite at 290.
310-370	Sandstone, medium gray indurated, silty calcareous, very-fine-grained, very pyritic, shaly.

370-390	Sample as above and cave.
390-500	Sandstone, fine-coarse-grained, rounded to angular, pyritic, quartzose. Chiefly fine-medium grained.
500-540	Sandstone, as above, but chiefly coarse-grained.
540-560	Sandstone, as above, stained orange with traces light-orange red clay.
560-570	Sandstone, fine-medium-grained, calcareous cement, very friable, very light orange color, quartzose.
570-625	Sandstone, and clay, moderate reddish brown. Sandstone, as above, chiefly medium-grained, rounded. Traces white, angular chert at 595-605. Pyrite.
625-635	Chert, white to very light gray.
635-680	Limestone, moderately dolomitic, moderate reddish orange (light yellowish gray to white, stained). Chert as above. The limestone is soft, granular, crystalline, very-fine-grained. Quartz grains, as above.
680-740	Limestone, very pale orange, fine-coarse-grained, granular, crystalline, dolomitic. Traces chert and limestone as above.
740-760	Limestone, vary pale orange to whitish yellow, fine-grained, granular, moderately dolomitic. Finer grained and less dolomitic than limestone above.
760-795	Limestone, grayish orange pink to very pale orange, fine-grained, granular occasionally coarse-grained, slightly to moderately dolomitic.
795-805	Limestone, very pale orange, fine-grained, granular to chalky with intermixture of coarse-grained, slabby, slightly to moderately dolomitic.
805-820	Limestone, moderate orange pink, fine-coarse-grained, granular to crystalline, slabby, chalky, moderately to slightly dolomitic. Pale red shale.
820-840	Limestone, very pale orange, otherwise as above.
840-940	Limestone, grayish orange pink to very pale orange fine-grained, granular and chalky to crystalline, slabby, moderately dolomitic, slightly shaly. Poorly washed samples, much red staining.
940-950	Limestone, as above, poorly washed samples. Much fine-medium-grained, loose quartz grains.
950-960	Limestone, as above. Traces white chert.
960-970	Limestone, light brownish gray to light gray, fine-grained, granular, argillaceous to crystalline, slabby.
970-990	Limestone, as above, slightly fossiliferous (bryozoan fragments) and greenish gray shale.
990-995	Shale, as above, and sandstone, grayish orange, calcareous cement, friable, fine-medium-grained, angular to rounded, quartzose.
995-997	Sandstone, as above.
997-1005	Limestone and chert, as above. Traces of shale and sandstone, as above.
1005-1010	Sandstone, pale red, loose grains of fine-coarse-grained quartz, iron-stained, angular to rounded.
1010-1055	Sandstone, pale yellowish orange, medium-grained, loose, rounded to angular quartz grains.
1055-1060	Sandstone, grayish red, medium-grained, friable, calcareous cement, quartzose, rounded.
1060-1080	Sandstone, pale yellowish orange, as above. Limestone, very dolomitic, fine-grained, dense, crystalline.

1080-1095	Limestone, as above, with small amounts of dark greenish gray, slightly calcareous shale.
1095-1130	Shale, dark greenish gray, splintery, waxy. Much limestone from above. Poor samples, much cave.
1130-1145	Sandstone, light gray, quartzose, loose grains of fine- to coarse-grained, clear and white, rounded to angular quartz grains. Small amounts of pyrite.
1145-1150	Sandstone, as above, with many fragments of pink feldspar, traces of white feldspar, angular quartz, and mafics. End of Samples.
1150	Total Depth.