NORTH DAKOTA GEOLOGICAL SURVEY CIRCULAR NO. 143

Summary of the Oil Exploration Co.- Joe W. Lamb #1
Nelson County, North Dakota
Well #587 - Permit #601

By Dan E. Hansen March 1956

Oil Exploration Co. - Lamb #1, Nelson County, North Dakota. Location: 500 feet from south line and 3140 feet from the west line of Section 33, T. 153N., R. 58W. Elevation 1520 grd. T.D. 1650.

The Oil Exploration Co. - Lamb #1 was spudded May 21, 1954. Circulation was lost at 1540' and hole was temporarily abandoned until September 4, 1954 when the well was plugged.

CORES: None

LOGS RUN: Gamma Ray - from 306 to surface. Unable to get sonde below 306' as hole bridged. No prints made of log.

DRILL STEM TESTS: None. No oil shows observed in samples.

CASING RECORD: 197 feet of 8 3/4" casing cemented to surface.

PLUGGING RECORD: Hole plugged with rocks and cement from 306' to surface.

Formation tops are picked from samples and are tentative only. Colors are from the rock color chart.

FORMATION TOPS

Cretaceous System		
Pierre Formation		
Niobrara Formation		510
Greenhorn Formation		820
Dakota Group sand		1100
Jurassic System		
Piper Lime ?		1370
"Red Beds"		1400
Silurian System		
Interlake		1430
Ordovician System		
Stoney Mountain		1600
0-80		Samples missing.
80-90	Shale, medium gray,	massive with light gray micaceous silt.
90-500	Samples missing.	
500-510	Shale, medium gray,	lumpy to massive.
510-550	Shale, medium gray,	lumpy, spongy, calcareous, "white specks".
	Traces light gray be	entonite.
550-630	Shale, medium gray t	to medium dark gray, lumpy, spongy, massive,
	slightly calcareous.	With above shale. Light blue gray bentonite.

- 630-670 Shale, medium dark gray, massive, lumpy, spongy. Trace pyrite.
- 670-710 Shale, medium gray, massive, compact.
- 710-750 Shale, medium dark gray, soft, lumpy, spongy, flaky.
- 750-790 Shale as above, with calcite prisms.
- 790-800 Shale, medium dark gray, soft, massive, flaky.
- Shale, medium dark gray, massive, lumpy to flaky. Calcite prisms.
- Shale, medium dark gray, calcareous, "white specks". Much calcite prisms, partially indurated into a light brown gray fragmental limestone.
- Shale, medium dark gray, medium gray, lumpy, calcareous, compact to disaggregated. Calcite prisms and traces of "white specks".
- 940-1030 Shale, medium dark gray, lumpy, spongy, to disaggregated, flaky, calcareous. Light blue gray bentonite at 960-970.
- 1030-1090 Shale, medium dark gray, lumpy, slightly calcareous, flaky, spongy, traces light blue gray bentonite.
- 1090-1100 Shale as above, much Greenhorn cave.
- 1100-1200 Shale, medium gray, lumpy, spongy, compact. With fine medium, angular rounded quartz grains. Coarse grained, loose quartz grains at 1180-1190.
- 1200-1220 Shale as above, with moderate orange, calcareous silt and light gray shale.
- 1220-1300 Shale, medium gray, with traces of above light gray shale, silt, and fine grained, loose quartz. Light gray bentonite.
- 1300-1320 Shale, medium gray, lumpy, calcareous. With fine grained, calcareous, quartzose sandstone, pyrite, traces red brown, calcareous silt, and pyrite. Small amounts of coarse grained, angular rounded, loose quartz grains.
- 1330-1340 Shale, medium gray, lumpy, spongy, calcareous. Traces brownish gray, calcareous silt.
- 1340-1360 Shale, medium gray, spongy, lumpy, calcareous. With red brown gray silt and fine grained, loose, quartz sand.
- 1360-1370 Sandstone, light gray, fine grained, calcareous cement and pale reddish brown, fine grained, calcareous. Much cave of medium gray shale, calcite prisms, and pyrite.
- 1370-1390 Limestone, dolomitic, light yellowish gray, fragmental, oolitic, medium grained to dense, crystalline, very vuggy.
- 1390-1400 Limestone as above, and pale reddish brown shale.
- 1400-1430 Shale, pale red, calcareous, lumpy.
- 1430-1530 Dolomite, pinkish gray, very fine grained, microsucrosic to sublithographic, dense.
- 1530-1550 Dolomite as above, with pale red, calcareous shale.
- 1550-1580 Dolomite, pale red, limey, pinkish gray as above, and pale red shale, silty.
- 1580-1600 Dolomite, pale red as above with fragmental and crystalline limestone, pale red. Pale red shale.
- 1600-1630 Shale, pale red, calcareous. Fragments of brachiopods. Trace of bryozoan fragments. Medium gray shale. Pale red, fragmental limestone.
- 1630-1650 Limestone, dolomitic, fine grained, dense, crystalline to sublithographic.
- 1650 Total depth of samples.