

23-17-9W

LEE H. CORNELL
Petroleum Geologist
PEOPLE AMHERST 1921
706 ORPHEUM BUILDING
WICHITA 2, KANSAS

October 13, 1964

Northeastern Petroleum
2400 N. Main Street
Hutchinson, Kansas

Re: No. 1 Groth.
C N/2 NW SW 23-17S-9W
Ellsworth^{CO}, Kansas

Gentlemen:

Drilling progress at No. 1 Groth was observed from 2865 to 3230', total depth. One foot drilling time was kept from 2640' and five foot samples were saved from 2700' to total depth. Samples were examined at the well and discarded.

MISCELLANEOUS DATA

Surface hole: Oct. 4, 1964
Surface casing: 8 5/8" at 224', cemented with 150 sacks.
Rotary Drilling Completed: Oct. 12, 1964
Oil String: 4 1/2" set at 3228, cemented with 120 sacks.
Elevation: 1771' GR, 1774' DF, 1776' KB.

FORMATION TOPS (by Electra)

Heebner	2725	- 949
Toronto	2744	- 968
Iatan	2843	-1067
Lansing	2861	-1085
Base Kansas City	3147	-1371
Simpson	3180	-1404
Arbuckle	3192	-1416
Total Depth	3230	-1454

Rotary total depth was the same as Electra total depth and all geological tops were the same or within 1 foot of the electric log tops.

LANSING SECTION

3027 - 29: Limestone, fine crystalline, poor porosity, small show of free oil, scattered staining, 27% porosity. 35% water saturation by Electra.

LANSING SECTION (cont'd)

-2-

- 3048 - 51: Limestone, oolitic, fair show of free oil, spotted staining, some barren oolitic porosity, 10% porosity, 80% water saturation by Electra.

Miller DST No. 1, 3010 - 60, Open 40 minutes, weak blow for 8 minutes, recovered 5 feet of mud, ICIP 780#/30 min, FCIP 120#/30 min. IFP 60#, FFP 75#.

The two Lansing zones covered in DST No. 1 are of no commercial value. The electric log and the negative DST indicates no permeability.

There were no other shows of oil noted in the Lansing - Kansas City section.

SIMPSON SECTION

- 3180 - 92: Green shale, sandy in part with rare clusters of medium grained, well rounded, sandstone, some clusters with small show of free oil, some clusters without a show of oil. The electric log indicates no sandstone development. The Simpson section is of no value.

ARBUCKLE SECTION

- 3192 -3204: Dolomite, fine crystalline, fair intercrystalline porosity, fair show of live oil, good odor. 9 to 14% porosity, 33 to 49% water saturation by Electra.

Miller DST No. 2, 4180 - 94, Open 1 hour, strong blow throughout test, recovered 600 feet of gas in pipe, 1680 feet of clean oil (Gr. 45 plus at 60 degrees) and 60 feet of water. ICIP 1070#/30 min, FCIP 1070#/30 min. IFP 70#, FFP 645#.

Note: All but two stands of the fluid was circulated out and the amount of water noted above is estimated. It is quite possible that all or part of the water recovered was filtrate water.

- 3204 - 3240: Total depth, Dolomite, fine, medium and coarse crystalline, good show of free oil and good staining in part. Much good intercrystalline porosity. 8½ to 20% porosity, 55 to 65% water saturation by Electra. The estimated oil-water contact is 3204.

The 4 1/2 inch casing was set at 3228 and it is recommended that the well be completed through one slot, cut at 3194 - 95. It is recommended that the well be completed natural if possible. In the event acid is required, no more than 250 gallons of mud acid should be used.

Yours very truly,

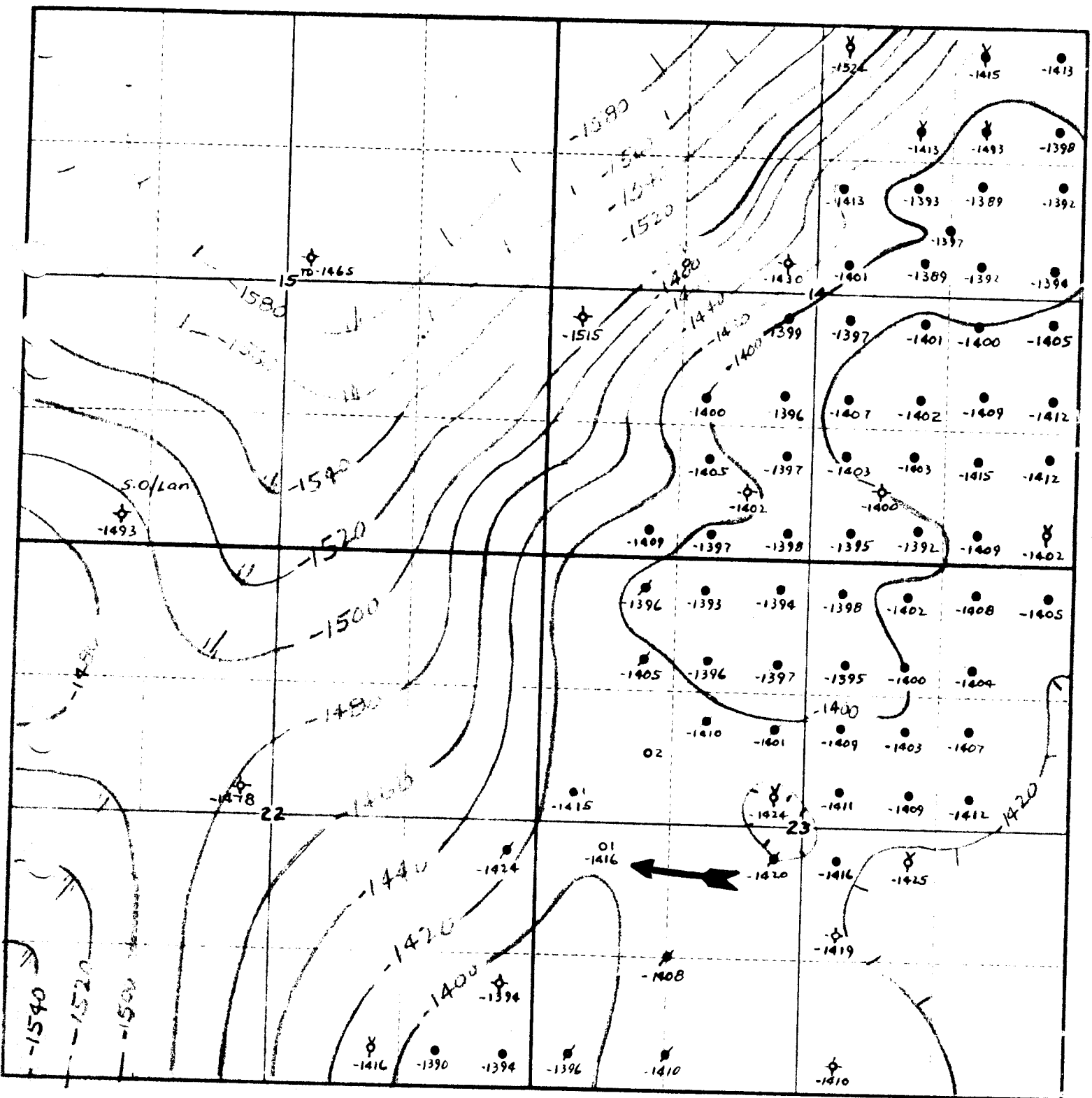


LEE H. CORNELL,
Petroleum Geologist.

LHC/mlb
encl.

23-17s-9w

Township 17s Range 9w County Ellsworth State Kansas



FORM 45

Top of the Arbuckle
Contour Interval - 20ft.
Lee H. Bonnell