

July 2, 1951

Mr. Harry Gore
400 Brown Building
Wichita, Kansas

Dear Sir:

Below is a report based on the examination of the cuttings from the Frank Law No. 1. I have examined all of the cuttings from a depth of 2900 to 4268 and was present at the well during the drilling and drill-stem testing from 3650 to 4268.

Harry Gore
Frank Law No. 1.
2-108-23W
Graham County, Kansas

Location: NW-SW
Elevation: 2437 Big Floor.

3013-28 - Light, finely oolitic limestone with fair to good porosity and no oil stain.

3477 (-1040) - Top of Topeka Lime.

3639-50 - Light limestone with fair vugular porosity and no oil stain. There was considerable chert with the limestone.

3689 (-1252) - Top of Heebner Black Shale.

3711 (-1274) - Top of "Dodge Lime".

3721 (-1284) - Top of Lansing-Kansas City Lime.

3723-27) - Light limestone with poor, minute porosity and a trace of "dead" oil stain.

3735-37) - Light limestone with fair, minute porosity and a slight stain of "live" oil.

3761-62 - Light limestone with a few crevices slightly oil stained.

3773-75 - Light limestone with a little minute porosity and a

3802-03) - little free oil and oil stain.

A drill-stem test was taken at 3813 with the packer set at 3787. Open 1 hour it had a medium "blow" and recovered 540 feet of slightly "gassy", muddy salt water and a scum of oil. The bottom hole pressure was 1150 pounds in 15 minutes and the flow pressure was 150 pounds.

- 3820-26 - Light limestone with poor to fair porosity and a slight stain of "dead" oil.
3828-30 - Light limestone with some microscopic porosity and a stain of oil.
3904-05) - Light limestone with a little vugular porosity and a
3906-07) stain of brown, "live" oil.
3916-20) - Light limestone with a little vugular porosity and a few
3923-24) fine crevices with a little free oil and oil stain.

A drill-stem test was taken at 3926 with the packer set at 3900. Open 1 hour it had a very light blow and recovered 10 feet of oil cut mud with no bottom hole pressure.

3953 (-1516) - Base of Kansas City Lime.

4046 (-1609) - Top of "Marmaton Conglomerate".

4124 (-1667) - Top of "Marmaton Sand".

4124-38 - Medium fine angular cemented sand with large, rounded frosted sand grains included. The sand has poor to good porosity and free oil in the pores and a faint oil odor.

A drill-stem test was taken at 4139 with the packer set at 4125. Open 1 hour it had a light, steady "blow" and recovered 240 feet of slightly mud-cut oil with no water. The bottom hole pressure in 15 minutes was 1000 pounds.

4149 (-1712) - Top of Cherty Conglomerate.

There was a little asphaltic residue but no fluid oil in the conglomerate.

4253 (-1816) - Top of Arbuckle Dolomite.

4253-68 - Light and a little red and yellow medium to medium coarsely crystalline dolomite with some good vugular porosity and no oil stain or odor.

4268 - Total depth. Rig floor.

4270 - Total depth. Top of rotary bushing.

It was recommended that casing be set through the sand below 4138 and that testing be done by perforating. It is further recommended that the following zones be tested before the well is abandoned.

3904-05: 3906-07: 3916-20 and 3923-24. This zone should be tested with the possibility that the use of acid might open better permeability.

3828-30 - This zone should be tested 2nd.

3773-75 - " " " " " 3rd.

3761-62 - " " " " " 4th.

All depths have been corrected to conform to the drilling time record and were taken from the rig floor which was 2 feet below the rotary bushing and 3 feet above ground level.

Respectfully submitted,

Jas. I. Daniels
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