

September 24, 1963

D & D Drilling Company, Inc.
307 Schweiter Building
Wichita, Kansas

Re: Lowry No. 1
Rooks County, Kansas

Gentlemen:

Herewith is a geological report on the referenced well. I was present during drilling operations and drill stem testing from a depth of 3123 to 3521 feet, the total depth of the well. All of the samples were examined from a depth of 2700 feet to the total depth. This report is based on conclusions reached in examining the samples used in conjunction with the drilling time log and results of drill stem testing. The only oil shows deemed worthy of testing.

Dorset Company and	Elevation:	2004 R.B.
D & D Drilling Company, Inc.		2001 D.F.
Lowry No. 1		1999 G.L.
SE SW SE Section 19-8S-19W	Commenced:	9-12-63
Rooks County, Kansas	Completed:	9-20-63
	Surface Pipe:	8 5/8" at 210' w/165 sacks.

All depths were measured from the Kelly Bushing which was three feet above the derrick floor and five feet above the ground level.

1460 (+544) Top of the Anhydrite Formation.

2971 (-967) Top of the Topeka Formation.

Mostly light to white, dense to fine crystalline and some fossiliferous limestone. A very few pieces of limestone in the interval 3145 to 3151 contained poorly developed vugular porosity with a slight trace of dark, asphaltic staining, majority of porosity barren. The Topeka Formation was, for the most part, extremely tight, non-porous, and was, except as afore mentioned, completely devoid of oil shows.

3177 (-1173) Top of the Heebner Shale.

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3202 (-1198) Top of the Toronto Formation.

3202-09: Light, dense to fine crystalline limestone a few pieces with poorly developed, pin point porosity with a very slight oil stain in a few pieces. Not considered worthy of testing due to poor porosity development, lack of shows of free oil and no oil odor.

3216 (-1212) Top of the Lansing-Kansas City Formation.

3273-77: Light to buff, fine crystalline, cherty limestone, a very few pieces with a trace of poorly developed pin point porosity with a very slight oil stain.

3298-3303: Mostly chalky and some fine crystalline limestone, a very few pieces with very poorly developed oolitic porosity with a slight trace of black asphaltic material in a few pieces, most porosity barren. Zone probably water bearing.

3335-37: Light, fine crystalline limestone with poorly developed pin point porosity in several pieces. Porous pieces carried a trace of oil staining.

3348-53: Light to light grey dense to fine crystalline limestone some pieces with fair fossiliferous to oolitic porosity. A fair oil staining was noted in the porous pieces.

3370-71: Light, fine crystalline limestone some evidence of pin point porosity with fair oil stain.

3382-86: Dense to fine crystalline, light to light grey limestone, a very few pieces with poorly developed vugular porosity which contained a poor to fair oil stain.

3391-93: Limestone as above, better development of oolitic to fossiliferous porosity. Several pieces with fair to good oil staining, some free oil noted in wet samples as well as a fair oil odor.

3410-11: Light, fine crystalline to sucrosic limestone with poor pin point porosity development. Evidence of some oil staining was noted in the wet and dry samples.

The zones 3335-37; 3348-53; 3370-71; 3382-86; 3391-93; and 3410-11 were covered in the interval tested by drill stem test No. 1.

3433 (-11429) Base of the Lansing-Kansas City Formation.

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Drill Stem Test No. 1:

Interval: 3330-3451 (121 feet)
Open: 1 hour
Blow: Weak 6 minutes, died; flush tool twice, no further blow.
Recovered: 60 feet of drilling mud, no evidence of oil or water.
ISIP: 90 pounds in 15 minutes
FSIP: 0 pounds in 15 minutes
FP: 0 - 0 pounds
Hydrostatic
Pressure: 1805-1810 pounds.

3471 (-1467) Top of the Arbuckle Formation:

3473-81: Oolitic to fine crystalline, tan to light brown dolomite with considerable oolitic chert. A few pieces with fair to poor vugular porosity. A small portion of the porous pieces contained a show of dark, very heavy, black oil. No oil odor was noted in the wet cutting and since only a small percentage of the porous pieces contained oil staining the formation was probably water bearing. The porosity appeared to be poorly connected and the zone probably lacked permeability.

3481-3521: Oolitic to fine crystalline tight dolomite with thin streaks of coarse crystalline dolomite. Some evidence of sandy dolomite toward bottom of interval. Considerable vitreous to oolitic chert. Porosity was well developed in coarse crystalline dolomite, however; only flecks of suttly material and a trace of black, tarry oil was noted in the porosity. Porous zones in this interval undoubtedly carried water.

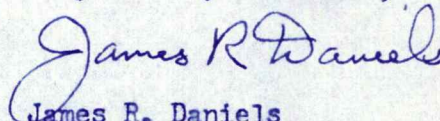
3521 (-1517) Total Depth of the Rotary Hole.

The Lowry No. 1 was 24 feet structurally lower on the top of the Lansing-Kansas City formation than the Kaiser-Francis - Bray No. 1 located one-half mile to the east and 22 feet lower than this same well on the Arbuckle formation. As compared to producing wells in the Hayden Pool located approximately one and one-half miles to the south and east the Lowry was 5 to 20 feet low on the Lansing-Kansas City and 14 to 31 feet low on the Arbuckle. Both formations yield commercial quantities of oil in this pool. The only shows of oil considered worthy of testing were drill stem tested with negative results.

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Based on the low structural datum at which the prospective producing horizons were encountered, the very poor porosity development and poor oil showings encountered therein, and the negative results obtained in the one drill stem test covering the zones with the best oil shows; it was recommended the Lowry No. 1 be plugged and abandoned after penetrating the Arbuckle formation 50 feet.

Respectfully submitted,



James R. Daniels
Geological Engineer

Incl. - Time Log