

10-9-19W

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WICHITA, KANSAS

September 19, 1962

Continental Oil Company
D. Barry "C" No. 5 NW NW NE
Section 10- T 9S- R 19W
Rooks County, KansasElevation: 2,073 feet, Kelly bushing (depth datum)
2,071 feet, Derrick floor
2,066 feet, GroundCommenced: September 5, 1962.
Completed: September 12, 1962 (Rotary).
Contractor: Murfin Drilling Company - Rig No. 4.10 3/4 inch surface casing cemented at 207 feet with 200 sacks.
7 inch oil string cemented on bottom.G E O L O G I C A L R E P O R T

The following are the important geological markers, zones of porosity, shows of oil and other pertinent data as determined by the appearance of the drill cuttings, changes in the drilling rate, the appearance and calculations of the Welex Radiation - Guard Log and the results of the one Halliburton drill stem test.

Electric log formation tops and corresponding subsea datum are as follows:

<u>Formation</u>	<u>Depth</u>	<u>Datum</u>
Topeka	2996	- 923
Heebner	3192	-1119
Toronto	3215	-1142
Lansing	3234	-1161
Arbuckle	3479	-1406
Total Depth	3524	-1449

*Indicates shows of oil.

Lithology with oil shows and porosity is as follows:

Top Topeka

2996, (-923)
3016-3022 Cream - buff, medium crystalline, fossiliferous limestone with fair porosity. No oil shows, odor or fluorescence.

3042-3046 Light gray, medium crystalline - chalky limestone with fair chalky porosity. No oil shows, odor or fluorescence.

*** 3140-3155 Tan, medium crystalline limestone with good oil staining, free oil, odor and fluorescence.
Calculations were as follows:

3140-3144	17% porosity	45% water saturation
3144-3147	13% porosity	82% water saturation
3150-3155	10% porosity	66% water saturation

These zones covered by drill stem test No. 1.

** 3164-3168 Cream - buff, medium crystalline limestone with fair oil staining, some saturation, some free oil odor and fluorescence. Porosity is 12% and water saturation is 69%. This zone covered by drill stem test No. 1.

Drill Stem Test No. 1 3140-3180 (Halliburton)

Open one hour. Good blow throughout test.

Recovered: 580 feet of gassy oil

50 feet of muddy oil

60 feet of oil cut saltwater.

Initial bottom hole pressure in 30 mins. - - - 1087 psi

Initial flow pressure - - - - - 28 psi

Final flow pressure - - - - - 270 psi

Final bottom hole pressure in 30 mins. - - - 1055 psi

Initial hydrostatic pressure - - - - - 1745 psi

Top Heebner Black Shale 3192 (-1119)Top Toronto

3215 (-1142)

** 3215-3224 Tan - buff, medium crystalline limestone with fair oil staining, some free oil and odor. Interval 3215-3217 has 16% porosity and 43% water saturation. Interval 3217-3220 has 10% porosity and 47% water saturation.

Top Lansing

3234 (-1161)

* 3234-3250 Cream, medium crystalline limestone with cream, translucent chert. Some light oil staining. Interval 3235-3240 calculates 12% porosity and 52 - 60% water saturation. Interval 3242-3249 calculates 12% porosity and 62% water saturation.

- ** 3254-3260 Cream, medium crystalline limestone with much chert as above. Fair oil staining. Porosity is 7% and water saturation 68 - 48%.
- ** 3272-3275 Cream, medium crystalline limestone with pinhole porosity. Fair oil staining, some saturation, free oil and odor. Porosity calculates 11% and water saturation 63%.
- 3282-3289 Cream, fine crystalline limestone with 10 - 19% porosity and 48 - 39% water saturation. No visible oil shows.
- ** 3314-3318 Light gray, fine - medium crystalline limestone with gray smoky chert. Fair oil staining. This interval calculates 11% porosity and 36 - 39% water saturation.
- 3376-3380 Cream - gray, fine - medium crystalline limestone with cream opaque chert. This interval calculates 8% porosity and 41 - 89% water saturation. No visible oil shows.
- 3392-3396 Buff, medium crystalline limestone with tan translucent chert. This interval calculates 12% porosity and 65% water saturation. No visible oil shows.
- * 3418-3421 Tan, medium crystalline limestone with some spotted oil staining. Interval calculates 8% porosity and 27% water saturation.
- 3444-3447 Gray, fine - very fine crystalline limestone with 7% porosity and 41% water saturation. No visible oil shows.
- 3454-3457 Cream - buff, fine - medium crystalline limestone with fair oil staining. Interval calculates 7% porosity and 47% water saturation.

Top Arbuckle

- *** 3479-3524 3479 (-1406)
Light gray, fine, medium, coarse and rhombic dolomite with some cream, sub-translucent chert. Fair - good oil staining becoming darker with depth. Good odor and fluorescence. Calculations of the zone are as follows:

<u>Interval</u>	<u>Porosity%</u>	<u>Water Saturation%</u>
3480-3482	13	61
3482-3484	16	35
3484-3486	16	48
3486-3490	16	33

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<u>Interval</u>	<u>Porosity%</u>	<u>Water Saturation%</u>
3490-3493	17	34
3493-3495	17	23
3500-3502	18	30
3502-3505	15	41
3507-3510	15	42
3510-3516	14	46

Total Depth 3524 (-1449)

Remarks:

Drill cuttings were examined and described on location from 2500 feet to 3524 feet, total depth. The geological phase of drilling operations was supervised from 2710 feet to total depth.

The subject well was 5 feet lower on the top of the Arbuckle than the south offset, 4 feet lower than the west offset and 14 feet higher than the north offset. Commercial oil shows have been previously described in the Topeka, Lansing and Arbuckle.

It was recommended that 7 inch casing be cemented one foot off bottom.

Respectfully submitted,

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Petroleum Geologist.

RWF/mlb
encl.