

ROBERT C. ARMSTRONG

PETROLEUM GEOLOGIST
WICHITA, KANSAS

MURRAY 3-0787

July 14, 1966

564 N. ARMOUR DRIVE

National Associated #1 Meharg "B"
SW SW NE Sec. 32-10S-14W
Osborne County, Kansas

GENERAL

Contractor: Thorobred Drilling Co
Spudded: June 28, 1966
Completed: July 13, 1966
Rotary: Surface to 3615 T. D.

CASING

8 5/8" cemented at 201' with 100 sacks

GEOLOGICAL
DATA

Samples saved, drilling-time recorded from 1900' to the total depth.

Elevation: 1807 derrick floor, 1810 rotary bushing; rotary bushing elevation and measurements used.

Formation tops (Lane Wells)

Topeka	2728	- 918
Heebner	2972	-1162
Toronto	2994	-1184
Lansing K. C.	3024	-1214
Base K. C.	3267	-1457
Conglomerate	3392	-1582
Detrital Viola?	3446	-1636
Viola Lime	3482	-1672
Simpson	3534	-1724
Arbuckle	3861 3581	-2071

DRILL STEM TESTS

DST #1	3030-77	Open 1 hour, recovered 61' mud, spots of oil. 1111 IBHP, 36# IFP, 63# FFP, 1083# BHP/ 30 minutes
DST #2	3183-3230	Open 1 hour, recovered 35' mud, spots of oil, 1047 IBHP, 27# I FP, 45# FFP, 847# BHP/30 minutes.

IMPORTANT ZONES

(Drillers Measurements)

<u>Topeka</u>	2752-60	Buff, fine granular limestone, trace dead oil staining, poor porosity.
	2938-55	Buff to white, soft, chalky, fossiliferous lime. No porosity, no oil staining.
<u>Lansing K. C.</u>	3024-26	White, fine crystalline lime, oolitic, poor porosity, spotted oil staining.
	3054-58	Trace of porous oolitic lime, small show live oil. Included in DST #1.
	3068-74	Porous oolitic lime, show live oil, odor. Included in DST #1.
	3129-35	Porous oolitic lime, no oil shows.
	3198-3201	White, chalky, slightly oolitic lime, trace of oil staining. Included in DST #2
	3210-14	White, chalky, slightly oolitic lime, show free heavy oil, no odor. DST #2
	3220-24	White, soft chalky limestone, no porosity, no oil staining. Included in DST #2.
<u>Conglomerate</u>	3390-3444	Mostly veri-colored soft shale with abundant white to red opaque weathered chert, few free sand grains.
<u>Viola</u>	3444-82	White to light gray mottled, fresh chert, traces of coarse crystalline dolomite. This interval may well be included in the conglomerate section.
	3482-3534	White to light gray fine to coarse crystalline dolomitic limestone with abundant white opaque fresh chert.
<u>Simpson</u>	3534-3581	Green waxy shale with streaks of gray silty fine crystalline dolomite. No sand present.
<u>Arbuckle</u>	3580-3615	Dolomite, fine to coarse crystalline, tan to buff. good porosity, no oil staining.

SUMMARY

Lansing on this well, with a datum of -1214, is approximately 60 feet lower than the Ruggles Pool to the west but 30 to 40 feet higher than nearby dry holes. Two drill stem tests were taken in this formation but recovered mud with very slight oil shows.

The Arbuckle formation was found at a -1770 datum, compared with -1620 average in the Ruggles pool. There were no oil shows below the Kansas City and the well was abandoned at a penetration of 35' in Arbuckle.

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2600-10 4 4 3 3 2 2 5 4 5 3
20 2 2 2 2 3 3 3 3 3 3
30 3 3 3 3 3 3 4 4 4 5
40 5 4 2 2 3 2 2 3 2 2
50 2 3 2 3 3 3 3 4 3 3
60 4 3 3 3 3 3 4 4 3 2
70 3 2 3 3 3 3 3 4 4 3
80 2 2 2 2 2 1 2 3 3 2
90 2 1 1 1 1 2 2 1 1 2
00 2 2 2 2 2 2 3 2 3 2

2700-10 3 2 3 3 3 2 2 2 2 3
20 3 3 3 3 4 4 3 2 3 3
30 3 2 2 3 2 3 2 4 4 4
40 4 4 4 2 2 4 5 5 4 5
50 6-5 5 3 5 6 6 5 5 4
60 4-2 2 3 3 3 4 3 4 3
70 5 5 3 4 6 5 5 4 6 8
80 8 7 7 4 4 4 6 8 8 6
90 5 6 3 8 8 6 6 6 6 6
00 5 4 3 3 3 4 4 6 5 10

2800-10 10 9 11 10 10 10 7 7 5 7
20 8 7 11 7 7 7 8 9 8 6
30 5 7 6 4 4 2 4 3 3 3
40 3 4 3 3 3 4 3 4 4 2
50 5 10 14 3 4 4 4 4 4
60 5 4 3 5 6 9 10 10 11 12
70 8 5 5 6 10 5 11 10 10 11
80 10 7 9 8 7 8 8 9 9 8
90 7 7 8 10 9 10 7 4 4 4
00 3 3 3 5 4 4 4 8 10 14

2900-10 10 9 7 10 10 10 9 8 7 9
20 16 2 2 8 7 6 4 7 9 9
30 8 7 9 9 7 10 7 10 9 7
40 9 10 10 9 7 4 5 5 6 5
50 5 4 5 5 6 5 6 5 5 3
60 4 4 5 6 6 9 8 9 8 7
70 8 7 8 8 5 6 6 8 9 7
80 7 10 5 5 5 2 2 8 15 11
90 10 6 4 4 5 4 7 5 6 6
00 5 7 4 5 10 10 12 13 12 12

3000-10 9 9 10 13 15 8 7 6 4 3
20 3 4 6 4 5 5 4 6 6 5
30 4 4 4 5 10 9 9 9 10 10
40 10 10 10 8 6 3 3 7 9 14
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60 6 5 5 6 11 11 11 12 14 13
70 12 10 8 12 10 10 11 6 5 6
80 7 5 5 6 13 13 14 7 8 6
90 6 5 5 7 6 8 7 8 8 7
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3100-10 4 5 12 11 8 10 5 4 6 8
20 5 3 4 5 4 6 10 15 6 8
30 12 10 13 10 7 10 10 12 10 5
40 2 1 1 2 3 9 10 12 10 10
50 10 10 11 12 11 10 10 15 10 9
60 11 15 17 16 12 14 15 10 10 20
70 5 5 5 5 4 11 7 8 4 4
80 5 4 5 5 2 16 10 6 7 6
90 9 7 10 9 12 4 14 10 5 5
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3200-10 8 11 10 12 10 13 14 5 5 5
20 7 9 5 9 11 11 15 11 12 11
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3300-10 6 6 8 10 15 13 7 7 5 7
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60 10 8 17 24 14 15 12 7 7 5
70 5 4 5 4 6 6 5 5 13 15
80 22 20 15 7 6 5 8 5 4 4
90 3 3 7 12 7 5 5 6 6 6
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3400-10 10 14 10 8 6 5 5 5 5 4
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3500-10 11 12 10 13 13 11 12 11 14 11
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60 16 8 14 15 15 10 8 8 7 10
70 7 7 8 7 6 5 6 7 7 6
80 6 7 6 7 5 7 6 5 7 6
90 9 8 9 6 6 9 9 8 8 8
00 10 8 9 8 8 10 10 10 8 7

3600-10 7 7 6 8 6 6 8 6 7 7
15 7 5 6 6 7
RTD