

GEOLOGICAL REPORT

on

NO. 1 - YEAGER

in the

SE C SE $\frac{1}{4}$ SECTION 12 - T. 33 S. - R. 2 E.,

SUMNER COUNTY, KANSAS,

for

L. B. JACKSON COMPANY

BELLS WELLS OIL COMPANY

C. G. AND C. COMPANY

CHARLES A. NEAL & COMPANY

OWLI

by
Lucian Walker,
Geologist.

LUCIAN WALKER

2533 E. 18TH ST.

TULSA 4, OKLAHOMA

GEOLOGICAL REPORT

on

L. B. JACKSON COMPANY ET AL - NO. 1 YEAGER - SE C SE $\frac{1}{4}$ SECTION 12 - T. 33 S. -
R. 2 E., SUMNER COUNTY, KANSAS.

This well, with a derrick floor elevation of 1172 feet, had 120 feet of 8 $\frac{5}{8}$ " surface casing set, on September 25, 1952. The casing was cemented with 110 sacks and the cement was circulated. Drilling under the surface casing was commenced on September 26 and was completed on October 7, 1952. The total depth was 3330 feet. Rotary tools were used, L. B. Jackson Company being the contractor.

The Stalnaker sand was found from 2255 to 2345 feet, the Layton sand from 2670 to 2750 feet, the Kansas City Lime from 2816 to 2950 feet, The Big Lime - Oswego from 3000 to 3134 feet, the Cherokee section from 3134 to 3281 feet, and the Mississippi Lime from 3281 to 3330 feet, the total depth. In the Cherokee section were two sands, one from 3210 to 3220 feet (the upper Bartlesville) and the Bartlesville from 3271 to 3277 feet.

There was a slight show of oil in the Bartlesville sand, though it was mostly light colored, and another slight show of oil in the upper part of the Mississippi Lime. Neither was large enough to make a commercial well. There were no other showings.

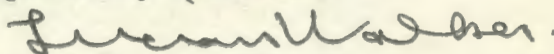
Three porous zones were tested by circulating up the samples. One was at 2675 feet in the Layton sand, another at 3213 feet in the upper Bartlesville sand, and the third at 3275 feet in the Bartlesville sand. One core was taken, from 3275 to 3381 feet. This recovered the lower two feet of the Bartlesville sand and four feet of dark shale and the top of the Mississippi lime.

There were no other shows except those mentioned above.

The well was drilled 49 feet into the Mississippi Lime as there was a show of oil 44 feet in it in a well drilled by the El Dorado Refining Company in the NW NE NW of Section 13 - T. 33 S. - R. 2 E., three-quarters of a mile west and one location south of the Yeager. This showing was tested by setting casing and drilling in with cable tools. The showing was shot with 40 quarts of nitro glycerin, but did not make a well. This showing was not present in the Yeager test, though the Yeager is only three feet lower structurally, as contoured on top of the Mississippi Lime.

The original principal objective was the Simpson sand and the Arbuckle Lime, expected at about 3600 feet, but the well ran lower structurally than mapped, and it appeared useless to drill the extra footage.

Respectfully submitted,



Lucian Walker,
Geologist.

October 9, 1952.

TWLL

SAMPLE LOG - L. B. JACKSON COMPANY ET AL - NO. 1 YEAGER - SE C SE¹/₄ SEC. 12 -
T. 33 S. - R. 2 E., SUMNER COUNTY, KANSAS.

2000 -
2005 - Shale, gray
2020 - Lime, white, dense, some granular, oolitic
2190 - Shale, gray
2215 - Lime, light to brown, some partly crystalline, some sandy
2230 - Sand, gray, fine grained
2255 - Lime, sandy, gray
2345 - Sand, dark gray at top, getting whiter downward, fine grained to medium
2500 - Shale, gray
2505 - Lime, brown
2600 - Shale, gray
2670 - Shale, gray, very finely sandy
2700 - Sand, medium grained, slightly micaceous, gray
2730 - Sand, medium grained, slightly micaceous, gray, some lime, gray, compact
2750 - Sand, gray, medium grained.
2816 - Shale, dark, some lime shells
2830 - Lime, gray, compact
2930 - Lime, gray, granular, some compact
2940 - Shale, dark
2950 - Lime, light to gray, compact
2986 - Shale, dark
3016 - Shale, gray-green, sandy
3090 - Lime, gray, compact
3134 - Lime, grayish-yellow, compact
3180 - Shale, dark
3192 - Lime, gray, compact
3210 - Shale, dark
3220 - Sand, gray, medium grained, considerable carbonaceous material in sand
3271 - Shale, gray, very finely sandy
3277 - Sand, gray to light, medium grained, very few pieces showed stain under light
3281 - Shale, dark
3300 - Lime, light to light tan & chert, white - very few pieces showed stain
3330 - Lime, tan, granular, no oil show. - TOTAL DEPTH.

CIRCULATED - 2675 - 45 min. - no odor and no stain in samples
" - 3213 - 60 " - no odor and no stain in samples
" - 3275 - 90 " - no odor and very few pieces showed oil under light

CORED 3275 - 3281 - 6' - Recovered 5' 6" -

3275 - 3277 - Sand, gray-greenish, micaceous to light gray - very few stained spots under light.

3277 - 3280' 11" - Shale, dark

One inch of gray-green compact, shaly lime - Top of Mississippi.

GEOLOGICAL TOPS: 2255 - 2345 STALNAKER SAND
2670 - 2750 LAYTON SAND
2816 - 2950 KANSAS CITY LIME
3000 - 3134 BIG LIME - OSWEGO (MARMATON)
3134 - 3281 CHEROKEE

Sand - 3210 - 3220

3271 - 3277 BARTLESVILLE SAND - very slight show

3281 - 3300 MISSISSIPPI LIME - chert and lime - very slight show

3300 - 3330 MISSISSIPPI LIME - lime, tan, granular - no show.

Lucian Walker,
Geologist.

Tulsa - October 9, 1952.

DWLL

KANSAS - SUMNER COUNTY.

L. B. JACKSON COMPANY ET AL - NO. 1 YEAGER - SE C SE $\frac{1}{2}$ SEC. 12 - T. 33 S. - R. 2 E.

DRILLING TIME LOG.

2000 -	2255 - 19	2505 - 24	2666 - 3	2796 - 7
5 - 11	60 - 15	10 - 22	67 - 3	97 - 6
10 - 33	65 - 13	15 - 19	68 - 3	98 - 8
15 - 27	70 - 13	20 - 20	69 - 3	99 - 6
20 - 27	75 - 12	25 - 20	70 - 3	2800 - 5
25 - 17	80 - 10	30 - 20	71 - 2	1 - 6
30 - 20	85 - 9	35 - 18	72 - 2	2 - 5
35 - 18	90 - 12	40 - 13	73 - $1\frac{1}{2}$	3 - 6
40 - 20	95 - 9	45 - 12	74 - 1	4 - 7
45 - 20	2300 - 8	50 - 12	75 - 1	5 - 5
50 - 15	5 - 12	55 - 12	80 - 6	6 - 6
55 - 19	10 - 12	60 - 10	85 - 8	7 - 6
60 - 19	15 - 14	65 - 10	90 - 9	8 - 5
65 - 20	20 - 11	70 - 8	95 - 10	9 - 6
70 - 25	25 - 6	75 - 10	2700 - 14	10 - 5
75 - 24	30 - 6	80 - 11	5 - 22	11 - 5
80 - 23	35 - 6	85 - 11	10 - 21	12 - 6
85 - 17	40 - 6	90 - 11	15 - 17	13 - 6
90 - 14	45 - 6	95 - 12	20 - 18	14 - 5
95 - 16	50 - 13	2600 - 12	25 - 17	15 - 5
2100 - 20	55 - 25	5 - 13	30 - 17	16 - 5
5 - 18	60 - 25	10 - 11	35 - 8	17 - 7
10 - 19	65 - 24	15 - 12	40 - 8	18 - 5
15 - 20	70 - 25	20 - 11	45 - 9	19 - 7
20 - 21	75 - 24	25 - 11	50 - 12	20 - 6
25 - 20	80 - 22	30 - 9	55 - 24	21 - 7
30 - 20	85 - 25	35 - 10	60 - 31	22 - 7
35 - 21	90 - 24	40 - 11	65 - 31	23 - 5
40 - 21	95 - 24	41 - 2	70 - 29	24 - 5
45 - 22	2400 - 25	42 - 2	75 - 29	25 - 5
50 - 24	5 - 25	43 - $2\frac{1}{2}$	76 - 5	26 - 5
55 - 25	10 - 25	44 - $2\frac{1}{2}$	77 - 6	27 - 5
60 - 22	15 - 25	45 - 2	78 - 5	28 - 5
65 - 23	20 - 25	46 - 2	79 - 6	29 - 5
70 - 25	25 - 23	47 - $2\frac{1}{2}$	80 - 6	30 - 5
75 - 26	30 - 23	48 - 3	81 - 7	31 - 5
80 - 25	35 - 24	49 - $2\frac{1}{2}$	82 - 7	32 - 5
85 - 27	40 - 25	50 - $2\frac{1}{2}$	83 - 5	33 - 4
90 - 27	45 - 27	51 - $2\frac{1}{2}$	84 - 5	34 - 4
95 - 36	50 - 24	52 - $2\frac{1}{2}$	85 - 5	35 - 4
2200 - 38	55 - 27	53 - $2\frac{1}{2}$	86 - 6	36 - 4
5 - 38	60 - 25	54 - $2\frac{1}{2}$	87 - 5	37 - 4
10 - 34	65 - 27	55 - 2	88 - 4	38 - 4
15 - 33	70 - 33	56 - 3	89 - 5	39 - 4
20 - 27	75 - 23	57 - $2\frac{1}{2}$	90 - 7	40 - 4
25 - 30	80 - 20	58 - 2	91 - 6	41 - 4
30 - 31	85 - 19	59 - 3	92 - 5	42 - 4
35 - 44	90 - 17	60 - 5	93 - 6	43 - 3
40 - 46	95 - 18	61 - 3	94 - 6	44 - 3
45 - 37	2500 - 17	62 - 3	95 - 5	45 - 4
50 - 20		63 - 3		
		64 - 3		
		65 - 3		

7W1.1

DRILLING TIME LOG - L. B. JACKSON COMPANY ET AL - NO. 1 YEAGER -
SE C SE₁ SEC. 12 - T. 33 S. - R. 2 E. - KAN.

2846 - 4	3055 - 32	3146 - 6	3201 - 5
47 - 5	60 - 36	47 - 6	2 - 7
48 - 4	65 - 35	48 - 7	3 - 6
49 - 5	70 - 43	49 - 6	4 - 8
50 - 5	75 - 34	50 - 6	5 - 6
51 - 5	80 - 32	51 - 6	6 - 8
52 - 5	85 - 35	52 - 6	7 - 8
53 - 5	90 - 33	53 - 6	8 - 10
54 - 6	95 - 38	54 - 6	9 - 12
55 - 5	3100 - 37	55 - 6	10 - 6
56 - 6	1 - 8	56 - 6	11 - 2 ¹ / ₂
57 - 5	2 - 9	57 - 6	12 - 4 ¹ / ₂
58 - 5	3 - 6	58 - 7	13 - 3
59 - 4	4 - 6	59 - 6	14 - 3
60 - 4	5 - 6	60 - 6	15 - 6
65 - 15	6 - 6	61 - 6	16 - 5
70 - 14	7 - 7	62 - 6	17 - 4
75 - 13	8 - 7	63 - 4	18 - 3
80 - 13	9 - 8	64 - 4	19 - 2
85 - 9	10 - 9	65 - 5	20 - 3
90 - 10	11 - 9	66 - 6	21 - 6
95 - 11	12 - 8	67 - 5	22 - 8
2900 - 14	13 - 8	68 - 6	23 - 4
5 - 14	14 - 10	69 - 7	24 - 6
10 - 18	15 - 8	70 - 6	25 - 7
15 - 17	16 - 8	71 - 6	26 - 6
20 - 20	17 - 13	72 - 6	27 - 8
25 - 30	18 - 13	73 - 7	28 - 6
30 - 37	19 - 12	74 - 7	29 - 6
35 - 30	20 - 10	75 - 6	30 - 6
40 - 26	21 - 5	76 - 6	31 - 5
45 - 30	22 - 5	77 - 6	32 - 6
50 - 33	23 - 4	78 - 8	33 - 10
55 - 28	24 - 10	79 - 6	34 - 7
60 - 31	25 - 10	80 - 6	35 - 7
65 - 26	26 - 13	81 - 6	36 - 8
70 - 27	27 - 11	82 - 5	37 - 9
75 - 26	28 - 6	83 - 6	38 - 8
80 - 31	29 - 11	84 - 7	39 - 9
85 - 34	30 - 11	85 - 6	40 - 10
90 - 33	31 - 13	86 - 6	41 - 10
95 - 20	32 - 10	87 - 8	42 - 9
3000 - 12	33 - 10	88 - 7	43 - 5
5 - 22	34 - 9	89 - 7	44 - 13
10 - 31	35 - 5	90 - 7	45 - 9
15 - 34	36 - 4	91 - 5	46 - 6
20 - 43	37 - 4	92 - 7	47 - 8
25 - 82	38 - 5	93 - 6	48 - 8
30 - 55	39 - 4	94 - 5	49 - 7
35 - 38	40 - 5	95 - 9	50 - 29
40 - 34	41 - 6	96 - 5	51 - 18
45 - 38	42 - 5	97 - 6	52 - 6
50 - 41	43 - 5	98 - 5	53 - 8
	44 - 5	99 - 6	54 - 10
	45 - 6	3200 - 6	55 - 7

DRILLING TIME LOG - L. B. JACKSON COMPANY ET AL - NO. 1 YEAGER -
SE C SE₄ SEC. 12 - T. 33 S. - R. 2 E. - KANSAS.

3256 - 6
57 - 5
58 - 7
59 - 8
60 - 10
61 - 7
62 - 9
63 - 8
64 - 6
65 - 6
66 - 7
67 - 7
68 - 6
69 - 7
70 - 6
71 - 7
72 - 5
73 - 4
74 - 4
75 - 3

76 - 5 CORING

77 - 9 "
78 - 19 "
79 - 21 "
80 - 33 "
81 - 45 "

82 - 3
83 - 5
84 - 9
85 - 14
86 - 12
87 - 14
88 - 14
89 - 18
90 - 12
91 - 10
92 - 10
93 - 7
94 - 9
95 - 10
96 - 10
97 - 11
98 - 10
99 - 9

3300 - 9
1 - 8
2 - 10
3 - 9
4 - 12
5 - 9
6 - 13
7 - 16
8 - 14
9 - 15
10 - 16

3311 - 14
12 - 14
13 - 17
14 - 16
15 - 17
16 - 17
17 - 17
18 - 16
19 - 16
20 - 18
21 - 18
22 - 18
23 - 15
24 - 18
25 - 20
26 - 17
27 - 21
28 - 19
29 - 19
30 - 20

3330 - TOTAL DEPTH.

COMM: 9-26-52
COMP: 10- 7-52

ELEV: 1168. 4 Ground
1172.4 DF
1174. 0 DB.

BITS: FROM TO FOOTAGE

1.	155 -	790	635
2.	790 -	1309	519
3.	1309 -	1660	351
4.	1660 -	1990	330
5.	1990 -	2247	257
6.	2247 -	2472	225
7.	2473 -	2765	293
8.	2765 -	3030	265
9.	3030 -	3251	221
10.	3251 -	3275	24
	3275 -	3281	
10.	3281 -	3330	49

CORED

GEOLOGICAL TOPS:

2255 - 2345 - STALNAKER SAND

2670 - 2750 - LAYTON SAND

2816 - 2950 - KANSAS CITY LIME

3000 - 3134 - MARMATON FORMATION

3134 - 3281 - CHEROKEE

3271- 3277 - BARTLESVILLE SAND.

3281 - 3330 * MISSISSIPPI LIME

7W11