

GEOLOGICAL REPORT

R. P. NIXON

GEOLOGIST

WELL #1 LOCATION NW NW NW Sec. 35-14S-21W Trego Co., Kansas

LEASE Holtsinger

December 17, 1952

OPERATOR: Jones, Shelburne & Farmer, Inc.
Russell, Kansas

CONTRACTOR: D. & M. Drilling Company
Great Bend, Kansas

CREW: Tool pusher: W. M. Barnett
Drillers: 1. Munk Chapman
2. Paul Brewer
3. C. Chaney

ELEVATION: Laughlin-Simmons Company
Derrick floor: 2096'
Rotary bushing: 2099

All measurements shown in this report are from the top of the rotary bushing.

SAMPLES: Five foot intervals from 3300 to 3862-rotary total depth
All samples were examined and described.

TIME LOG: One foot intervals from 3300 to 3862-rotary total depth
A copy of the time log is included with this report.

PIPE ZERO POINT: 6' 8" above bradenhead.

#1

NW NW NW Sec. 35-14S-21W Trego Co., Kansas

Holtsinger

SAMPLE DESCRIPTION

HEEBNER SHALE: 3385 (-1286)

TORONTO LIME: 3407 (-1308)

No shows of oil or gas were observed in the Toronto Lime.

LANSING-KANSAS CITY: 3424 (-1325)

A small drilling break occurred from 3424-3429 which contained medium crystalline, white lime with spotty stain and slight vugular porosity. The wet samples had free oil but no odor.

Drill stem test #1 was taken from 3412-40. Tool open one hour with weak blow for six minutes. Received five feet of slightly oil cut mud. The bottom hole pressure was 550# in 15 minutes. Test this break before abandoning the well.

Another drilling break was had from 3506-3511 which held medium crystalline white lime with spotty staining and slight vugular porosity. The wet samples held free oil but no odor.

Drill stem test #2 was taken from 3504-13. Tool open 30 minutes with weak blow for 10 minutes. Received 9 feet of mud. The bottom hole pressure was 1090# in 15 minutes. Test this show before abandonment of the well.

RAKE OF KANSAS CITY: 3675 (-1576)

MARMATON LIME: 3759 (-1660)

A good drilling break occurred from 3764-67 which consisted of fine to medium crystalline, cherty, white lime with spotty to fair staining and fair pin-point porosity.

Drill stem test #3 was taken from 3762-77. Tool open for one hour with fair blow throughout test. Received 75 feet of muddy oil with bottom hole pressure 920# in 15 minutes. Test this break before abandoning the well.

#1

NW NW NW Sec. 35-14S-21W Trego Co., Kansas

Holtsinger

CONTINUED:

CONGLOMERATE SAND:

3823 (-1724)

A core was taken from 3815 to 52 which contained the following shows of oil:

- 3823-24: Shaly, fine grain sand (bleeding oil)
- 3824 $\frac{1}{2}$ -26: Shaley, fine grain sand (bleeding oil)
- 3828-31 $\frac{1}{2}$: Shaly, fine grain sand (bleeding oil)
- 3833-35 $\frac{1}{2}$: Coarse grain sand (excellent saturation and heavy bleeding)

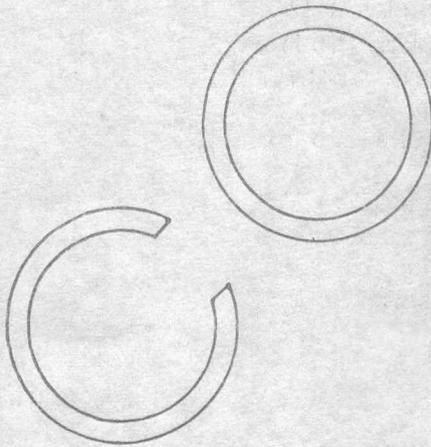
ARBUCKLE DOLOMITE:

3845-52 (-1746)

Fine to medium crystalline light grey and pink, sandy dolomite with poor to fair porosity. (bleeding oil)

ROTARY TOTAL DEPTH:

3862 (-1763)



#1

NW NW NW Sec. 35-14S-21W Trego County, Kansas

Holtsinger

REMARKS AND RECOMMENDATIONS:

On top of the Lansing-Kansas City the #1 Holtsinger was five feet lower than the #1 Groff located one location due north. This interval was maintained until Marmaton Lime was cut where the Holtsinger gained 3 feet making it only 2 feet low. The Conglomerate sand was also 2 feet low in the Holtsinger but Arbuckle Dolomite was encountered at a minus 1746 which is 13 feet higher than the #1 Groff.

The Arbuckle had a good show of oil and should be perforated and acidized first. If water is encountered it should be squeezed off and the sand shows perforated and tested from the bottom upwards.

Because of its high structural position and excellent oil shows pipe was advised to be run to 3862 and cemented sufficiently to protect the up-hole shows.

Respectfully submitted,

By

R. P. Nixon
Geologist

RPN:bb

#1

NW NW NW Sec. 35-14S-21W Trego Co., Kansas

Holtsinger

TIME LOG:

3300-3350 14-13-10-10-10 12-17-10-5-13 16-16-16-14-13 11-10-9-10-7
4-4-4-4-6 5-8-10-11-11 8-6-7-8-7 7-7-8-11-11
11-8-6-5-6 9-8-11-12-5

3350-3400 5-4-2-3-3 3-4-6-5-9 8-9-7-8-8 11-10-13-9-9
8-9-9-8-10 11-8-10-10-9 8-6-8-10-9 5-4-7-15-16
19-18-9-10-10 8-9-12-11-11

3400-3450 11-10-10-13-8 8-8-14-17-15 16-13-14-15-13 19-19-16-12-8
14-13-16-14-6 6-5-8-9-15 11-11-10-10-10 10-10-10-13-12
6-7-7-7-8 10-7-8-7-9

3450-3500 9-11-10-9-10 9-7-6¹/₂-6 7-8-7-7-6 7-7-6-6-7 8-9-9-11-10 13-9-7-7-9
7-10-9-10-11 10-10-8-9-10 11-13-10-9-9 10-8-10-10-10

3500-3550 10-8-9-9-11 10-6-4-5-10 8-14-13-13-15 18-10-7-3-3
6-12-11-9-11 10-11-13-10-9 10-8-8-7-7 11-16-14-14-17
15-15-10-13-8 5-8-10-6-20

3550 3600 14-15-13-7-12 15-15-20-13-8 7-10-10-15-18 15-13-13-13-15
17-13-21-15-24 17-20-16-15-15 18-19-13-10-10 10-11-12-6-7
5-9-6-7-9 9-14-16-18-16

3600-3650 19-18-14-11-11 10-9-10-10-5 8-11-14-14-20 17-16-15-16-16
18-18-19-17-16 12-10-10-10-11 11-8-14-12-15 16-16-15-14-14
15-13-14-14-15 15-12-14-15-15

3650-3700 14-11-10-14-14 14-14-17-17-13 18-15-18-18-15 14-15-13-8-6
7-12-12-13-11 9-7-9-9-7 9-10-11-10-12 13-14-10-10-10
10-10-8-8-9 8-10-14-11-13

3700-3750 10-8-8-10-10 12-11-13-10-12 10-10-10-9-12 12-12-15-10-10
13-12-11-10-12 12-12-8-10-12 10-12-7-8-6 8-10-9-9-10
10-8-7-7-10 9-9-9-9-9

3750-3800 10-9-9-9-9 8-12-8-9-11 12-13-13 11-6 5-4-7-8-15 10-12-11-12-10
10-10-9-9-10 14-21-19-14-24 23-15-15-17-17
19-15-20-25-25 25-35-35-25-26

3800-3850 26-23-23-20-25 17-25-23-18-18 17-15-18-14-16 43-15-36-49-42
42-19-13-27-40 37-27-29-43-76 52-11-14-23-10 13-22-25-26-24 24-23-23-21-27
20-26-22-25-22

3850-3862 21-27-5-7 8-8-5-8-9 10-11