

DRILL IN November 2, 1963

Drilled shoe at 4411' at 9:50 A.M., drilled and cleaned out to 4412' at 10:35 A.M.
16 gallons of muddy oil at 10:45 A.M. (10 minutes)
1 gallon of oil and 6 gallons muddy oil at 10:52 A.M. (7 minutes)
5 gallons of oil at 11:00 A.M. (8 minutes)
Filled up 130' fluid at 1:00 P.M. (2 hours)
32 gallons of oil with a little muddy oil at 1:20 P.M.
Drilled and cleaned out cement at 1:25 P.M. T.T.D. 4413'.
15 gallons of oil and 1 gallon of muddy oil at 1:40 P.M.
16 gallons of oil at 1:55 P.M.

11/3/63 to 11/4/63 Fill up 1117' fluid in 14 hours.
Ran tubing and swabbed 28.4 barrels of oil, no water in 5 hours, last hour
.8 barrels of oil.

11/5/63 Swabbed 15.5 barrels of oil, no water in 4 hours, put on pump, pumped 10
barrels of oil in 12 hours.

11/6/63 Pumped 24 barrels of oil, no water in 24 hours. Affidavit Potential filed
effective 11/3/63 for 28.4 barrels of oil.

11/7/63 Pumped 23.5 barrels of oil in 24 hours.

11/8/63 Pumped 24 barrels of oil in 24 hours.

11/9/63 Pumped 24 barrels of oil in 24 hours.

11/9/63 Pulled rods and tubing.

11/10/63 Fill up 1676' fluid in 20 hours.
Drilled deeper 4413-4414' from 1:09 to 1:32 P.M.
4413-4414' Chert, white, opaque, bony and slightly tripolitic with a
little limestone, finely crystalline and sucrosic, 20% poor
with trace of fair porosity, light spotted stain to fair
saturation.
16 gallons of oil at 2:10 P.M.
16 gallons of oil at 2:30 P.M.
16 gallons of oil at 2:48 P.M.
Bailed 48 gallons of oil or 70' in 38 minutes.
1676' fluid at 3:32 P.M.
70' fill up from 2:48 to 3:32 P.M. (44 minutes)
32 gallons of oil from 3:32 to 4:12 P.M.
Drilled deeper 4414-4415' from 4:37 to 4:56 P.M.
4414-4415' Chert, white, opaque, bony and slightly tripolitic, 10% poor
porosity with light spotted stain to light spotted saturation.
Fill up 124' fluid in 16 minutes.
16 gallons oil, no water at 5:35 P.M.
16 gallons oil, no water at 6:31 P.M.

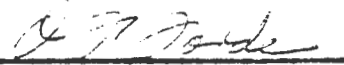
11/12/63 2400' of oil in hole, ran tubing and rods.
Pumped 42 barrels of oil, no water in 16 hours.

11/13/63 Pumped 27 barrels of oil, no water in 24 hours.

11/14/63 Pumped 26 barrels of oil, no water in 24 hours.

11/15/63 Pumped 26 barrels of oil, no water in 24 hours.

11/20/63 State Physical Potential pumped 28 barrels of oil, no water in 24 hours,
gravity 39° at 60°, Schaben Field Allowable 28 barrels of oil per day.
Completed 11/20/63. Total depth 4415', penetrate Mississippian 5'.


O. F. Forde
Geologist

Cities Service Oil any #1 Rein "A"
C. NW SW, Section 29-19S-21W
Ness County, Kansas

This well was completed November 20, 1963, for 28 oil, no water, in 24 hours. Production declined to 19 oil, 1 water, 24 hours.

A re-check of the elevation of this well resulted in an elevation correction. Original K.B. elevation 2285 = 2295 new elevation. Corrected derrick floor 2293. Corrected ground 2287. This 10 foot correction revised all formation plus or minus data as follows:

Anhydrite	1520 (+775)	
Heelner	3776 (-1481)	
Toronto	3792 (-1507)	
Lansing	3822 (-1527)	
Base Kansas City	4142 (-1847)	
Fort Scott	4223 (-2028)	
Cherokee shale	4340 (-2045)	
Conglomerate	4386 (-2091)	
Mississippian (Osage)	4410 (-2115)	T.D. 4415

The upward correction of minus datum on the Mississippian along with a decline in production initiated a recompletion of the Mississippian by acidizing before deepening.

- 3/7/64 Total depth 4415. Mississippi open hole 4411-4415. Acidized with 250 gallons 15%. Pressure 550# on vacuum in 8 minutes, down annulus rate 1 gallon per minute. 71 barrels of load and acid water.
- 3/9/64 Pumped 20 oil, 9 water, 24 hours. (Short 7 barrels water.)
- 3/10/64 Pumped 20 oil, 1 water, 24 hours. (Short 6 barrels water.)
- 3/11/64 Pumped 19 oil, 1 water, 24 hours. (Short 5 barrels water.)

Deepening Mississippian March 13, 1964

Top Mississippian 4410 (-2115); O.T.D. 4415 (-2120). 1860' fluid in hole at 7:30 A.M. Commenced deepening at 9:05 A.M.

4315-4317 70% Chert, buff to light grayish tan, bony, dense, 5% poor spotted porosity with light to fair spotted stain. 30% dolomite, tan, finely crystalline, poor porosity with light stain to fair saturation.

No increase in fluid at 9:50 A.M.

4317-4321 85% Chert, white to cream, bony, trace slightly tripolitic, trace poor porosity with light to fair stain. 15% dolomite, cream to tan, finely crystalline, dense, poor porosity with trace fair porosity with light spotted stain to fair saturation.

20 gallons oil, slightly muddy, no water, at 12:30 P.M.

20 gallons oil, slightly muddy at 12:45 P.M. No increase in fluid in 2 hours and 25 minutes at 12:45 P.M.

1935' oil at 1:45 P.M. (fill up 75' in 1 hour)

1985' oil at 2:45 P.M. (fill up 50' in 1 hour)

2035' oil at 3:45 P.M. (fill up 50' in 1 hour)

2080' oil at 4:45 P.M. (fill up 40' in 1 hour)

2320' oil at 7:30 A.M. 3/14/64 (fill up 240' in 14 hours and 45 minutes)

3/15/64 Pumped 19 oil, 1 water, 24 hours.

3/16/64 Pumped 19 oil, 1 water, 24 hours.

- 3/18/64 Frac. with 3500 gallons 3% jelled acid and 3000# sand, 2100 gallons salt water flush. Breakdown at 2150#. Maximum pressure 2575#, average pressure 2200#, pressure drop to zero in 10 minutes. A.I.R. 5 B.P.M. Total load 135 B.W.
- 3/20/64 Swab 60.91 B.O., 21.14 B.W., in 10 hours. (Short 30.86 B.W.)
- 3/21/64 Swab 29.61 B.O., 15.93 B.W., in 5 hours.
- 3/23/64 Pump 35 oil, 19 water, 18 hours. (Short 3 B.W.)
- 3/24/64 Pump 65.62 B.O., 32.48 B.W., in 23 hours. (29.48 barrels new water)
- 3/31/64 State Potential. Pumped 44 oil, 35 water, 24 hours. Complete.
Total Depth 4321.
Penetration Mississippi 11 feet.



V. J. Quick
Geologist

VJQ/ng
4-10-64

LEASE# WELL NO.: KEN A

Local. un: 1980 FSL-260' FWL Sec-4-19-2 County: Ness Co.

Elevation -- G.L.: 2287' R.K.B.: 2295'

Date Completed: 11-10-63

Initial Potential: 2860 + 0 bw-24

Producing Formation: Mississippi Top: 4410' (-2115')

Current Production: 260 + 91 bw-24

Accumulated Production: 48,000 bo + 936,000 bw

Casing: 8 5/8" @ 538' w/ 300 sk 4 1/2" @ 4411' w/ 375 sk

Total Depth: 4415' PBD: _____ DV Tool: _____

8 5/8" @
538'
w/ 300 sk

WORKOVER RECORD:

4-1-64 Acidized well with 250 Gals 15%
 Drilled Deeper 4415-21 Fraced w/ 3000 Gal
 Gelled- water + 3000 # 20/40 sand
 BWO: 2660 + 0 bw-24 AWO: 4460 + 35 bw-24

Well could be opened in Fr. Scott + Lansing.
 Watch more B' 1.

4 1/2" @
4411'
w/ 375 sk

TD 4421'