

15-065-00307-0000
RECEIVED
STATE CORPORATION COMMISSION
APR 5 1971
CONSERVATION DIVISION
Wichita, Kansas

GEOLOGICAL REPORT

Company: Imperial Drilling Company, Inc. NW NE SE 33-10S-23W
Farm: Diebolt #1 Graham County, Kansas
Contractor: Imperial Drilling Company, Inc. Elevation 2353 R.B.
Pool: North Wakeeney Rotary Total Depth: 3779'

Geological Data:

Samples were examined, by writer, from 3500 to total depth.

Formation Tops

Top Heebner Shale	3543	{ -1190 }
Top Toronto Limestone	3564	{ -1211 }
Top Lansing-K.C.	3581	{ -1228 }
Rotary Total Depth	3779	{ -1426 }

Top Toronto 3564-1211 Porosity and shows of oil.

~~3564-62~~ Tan cherty oolitic and semi-fossiliferous lime. Trace of free oil in fossiliferous and light vugular porosity. No. odor.

Top Lansing K.C. 3581 -1228 Porosity and shows of oil.

3583-86 Dull bit, no sample, no odor. D.S.T.

4 / D S T. 3573-88 Open 1 hour, gas to surface in 50 minutes. Recovered 652' oil, no water. IFP 60#, FFP 260#, BHP 1160# in 15 minutes.

3591-3602 White to tan dense vugular lime, show free oil, no odor. D.S.T.

4 / D.S.T. 3591-3604 Open 30 minutes, weak blow 4 minutes. Received 5' mud. BHP "0" in 15 minutes.

3614-19 Vari-colored chert, trace fossiliferous lime, good porosity. No odor. D.S.T.

2 / D.S.T. 3606-21 Open 1 hour, strong steady blow. Recovered 1360' slightly oil and gas cut salt water, 25% oil. 860' gas above fluid. IFP 100#, FFP 600#, BHP 1170# in 15 minutes.

NOTE This is the main producing zone in the wells in Section 4-11S-23W, 1 mile south.

APR 5 1971

CONSERVATION DIVISION
Wichita, Kansas

15-005-00307-0000

Page 2

Geological Report

Diebolt #1

3630-34 & 3640-44 Good fossiliferous and vugular lime, good porosity and show of oil. Fair odor, D.S.T.

D.S.T. 3625-43 Open 1 hour, good blow. Recovered 1860' salt water. IFP 120#, FFP 900#, BHP 1200#.

NOTE This zone may be commonly known as the 50' zone and is believed to carry oil in the wells to the south, in Section 4.

3669-74 White oolitic lime, oolitic to light vugular porosity, light spotted stains, trace free oil, no odor.

3683-90 Tan dense vugular lime, good porosity. Show free oil, no odor. D.S.T.

D.S.T. 3683-91 Open 1 hour, strong blow. Recovered 80' muddy gas cut oil and trace of water; 60' muddy gas cut oil and 10% water; 60' salt water, trace of oil. FFP 100#, BHP 1300# in 15 minutes.

3722-30 Fine crystalline oolitic to fossiliferous limestone. Pinpoint to light vugular porosity, light show free oil, trace dense vugular porosity, residual oil. No odor.

3744-47 & 49-52 Tan fossiliferous limestone, show free oil. No odor, fair to tight porosity. D.S.T.

D.S.T. 3739-54 Open 1 hour, weak blow throughout. Recovered 325' gas, 45' oil cut mud. BHP 240# building up fast in 20 minutes. (Last 5 minutes built up over 150#)

NOTE This zone would probably attain a BHP of 1250# if it was shut in for 30 minutes or more, therefore this zone should be tested by perforations and acid before abandoning the well.

3758-67 White tan dense to fossiliferous lime, good vugular porosity and show of free oil. No odor. D.S.T.

D.S.T. 3758-72 Open 1 hour, weak blow 1 minutes. Recovered 10' mud. BHP "0" #.

Rotary Total Depth 3779. 5" casing was cemented on bottom at rotary total depth. This is in the top of the next to the last lime member in the Kansas City formation.

Standard tools drilled out 6' below the shoe and encountered a show of oil 5' below the shoe. The oil filled up 1400' in 45 minutes. Well was given 5000 gallons of J type acid at total depth (3785). Well swabbed 21 BOPH 1000' off bottom, no water.

IMPERIAL DRILLING COMPANY, INC.

By: Orlin R. Phelps
Orlin R. Phelps, Geologist

ORP/dm

RECEIVED
STATE CORPORATION COMMISSION
APR 5 1971
CONSERVATION DIVISION
Wichita, Kansas