

PI

27-14-4E

224

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State Geological Survey
Wichita

JUL 5 1984

RELEASED
Date: JUL 1 1984
FROM CONFIDENTIAL

GEOLOGICAL REPORT

FRONTIER OIL COMPANY

NO. 1 DEINES

120' E of NE NW NW Sec. 27-14S-4E

Dickinson County, Kansas

Commenced: June 11, 1983

Completed: June 17, 1983

Joel A. Alberts

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RECEIVED
STATE CORPORATION COMMISSION

JUL 06 1983

CONSERVATION DIVISION
Wichita, Kansas

RT

27-14-4E

Frontier Oil Company
1720 Kansas State Bank Building
Wichita, Kansas 67202

RE: Frontier Oil Company's
No. 1 Deines
120' E of NE NW NW
Sec. 27-14S-4E
Dickinson County, Kansas

Dear Sir:

The following is a Geological Report with a Time Log attached on the above captioned well. Drilling was supervised from 1000' to 2950', rotary total depth. Samples were examined from 1000' to rotary total depth.

All formation tops, zones of porosity, and staining are based on rotary bushing measurements.

Any corrections in measurement made during the drilling of this well have been incorporated into this report.

Elevation (L&S)	1295 GL	--- 1300 KB
Heebner	1439	(- 139)
Lansing	1614	(- 314)
Base of Kansas City	1990	(- 690)
Mississippian	2157	(- 857)
Kinderhook	2235	(- 935)
Hunton	2400	(-1100)
Maquoketa	2605	(-1305)
Viola	2705	(-1405)
Simpson	2792	(-1492)
Simpson Sand	2814	(-1514)
Arbuckle	2890	(-1590)
RTD	2950	(-1650)

Structurally, on top of the Mississippian the No. 1 Deines ran 25' low to the Skaer-Crum No. 1 Starett, a dry hole located in the NW SW SE of Section 35-14S-4E. On top of the Viola, the No. 1 Deines ran 18' low to the No. 1 Starett. On top of the Arbuckle the No. 1 Deines ran 37' low to the No. 1 Starett.

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PT

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1 Deanes

ZONES OF INTEREST

LANSING-KANSAS CITY (Top 1614 (-314))

1664 to 1670

White fine crystalline, poorly developed oolitic porosity. No odor. No show.

1787 to 1794

White chalky to sucrosic limestone. Fossiliferous. No odor. No show.

MISSISSIPPIAN (Top 2157 (-857))

2157 to 2186

White, pink, yellow, red, green pitted, weathered cherts. Trace of pin point porosity. No odor. No show of oil.

DRILL STEM TEST NO. 1 (Halliburton)

2124 to 2210

60-45-60-45 Weak blow throughout both openings. Recovered 330' mud. Initial flow of 53 to 139#. Final flow of 159 to 230#. Initial shut in pressure of 689#. Final shut in pressure of 671#.

HUNTON (Top 2400 (-1100))

2400 to 2412

White sucrosic, cherty dolomitic limestone. Brown dense limestone. No odor. No show.

2430 to 2508

White medium to coarse crystalline dolomite. Vuggy. No odor. No show.

VIOLA (Top 2705 (-1405))

2705 to 2725

Tan to grey, translucent, medium to coarse crystalline dolomite. No odor. No show.

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1 Deines

SIMPSON SAND (Top 2814 (-1514))

2814 to 2861

Scattered medium, round, clear loose quartz sand grains. White fine grained sand clusters. No odor. No show.

ARBUCKLE (Top 2890 (-1590))

2890 to 2910

Tan fine crystalline, dense dolomite with chert fragments, pyrite, and scattered sand grains grading into tan to grey fine to medium crystalline dolomite. No odor. No show.

DRILL STEM TEST NO. 2 (Halliburton Straddle)

2800 to 2825

60-30-60-30 First opening blow off bottom immediately. Second opening blow off bottom immediately. Recovered 2200' salt water. Initial flow of 59 to 803#. Final flow of 812 to 988#. Initial shut in pressure of 1066#. Final shut in pressure of 1066#.

Due to the low structural position, lack of shows and negative drill stem test results, the No. 1 Deines was plugged a dry hole.

Sincerely,

Joel A. Alberts
Joel A. Alberts

/ss

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DRILLING INFORMATION ON THE NO. 1 DEINES

Contractor: Red Tiger Drilling (Rig #3)

Drillers: John Ball
Ross Crawford
Richard Cox

Tool Pusher: Ross Crawford

Spud Date: June 11, 1983

RTD Date: June 16, 1983

Surface Casing: 8-5/8" @ 277' w/175 sx

Production Casing: None

TOTAL FOOTAGE DRILLED PER DAY

Under Surface at 3:15 A.M. on June 12, 1983

1460	Feet	At	7:00 A.M.	On	June 13, 1983
2085	"	"	" "	"	June 14, 1983
2245	"	"	" "	"	June 15, 1983
2625	"	"	" "	"	June 16, 1983
2950	"	"	11:20 P.M.	"	June 16, 1983

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1 Deines

BIT RECORD

<u>BITS</u>	<u>TYPE</u>	<u>FOOTAGE</u>
No. 1	Security S86F (RR)	281' to 2210'
No. 2	Security M84F	2210' to 2950'

MUD RECORD

Surface	35 sx gel, 3 sx lime, 3 sx hulls, 2 sx mud seal
1000'	30 sx gel
1500'	30 sx gel, 4 sx caustic soda, 3 sx soda ash, 3 sx tannathin
1770'	28 sx gel, 1 sx caustic soda, 4 sx hulls, 1 sx tannathin
1935'	20 sx gel, 1 sx tannathin
2085'	49 sx gel, 1 sx caustic soda, 1 sx soda ash, 1 sx tannathin
2210'	16 sx gel, 1 sx caustic soda, 4 sx hulls, 1 sx tannathin
2245'	1 sx soda ash, 1 sx caustic soda, 1 sx tannathin
2406'	40 sx hulls, 1 sx caustic soda, 8 sx mud seal, 1 sx tannathin
2535'	1 sx soda ash, 1 sx caustic soda, 1 sx tannathin
2770'	17 sx gel, 3 sx caustic soda, 1 sx soda ash, 2 sx tannathin
2945'	10 sx gel