

15-195-21366

16-15-23W

GEOLOGICAL REPORT

FRONTIER OIL COMPANY

NO. 1 SCHNEIDER "D"

SE SE NE

Section 16-15S-23W

Trego County, Kansas

P.

FEB 9 1984

State Geological Survey
WICHITA BRANCH

Rotary Commenced: October 24, 1983

Rotary Completed: November 1, 1983

RECEIVED
STATE CORPORATION COMMISSION

FEB 08 1984

CONSERVATION DIVISION
Wichita, Kansas

Joel A. Alberts

P.

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

RE: Frontier Oil Company's
No. 1 Schneider "D"
SE SE NE Sec. 16-15S-23W
Trego County, Kansas

Dear Sir:

The following is a Geological Report with a Time Log attached on the above captioned well.

Drilling was supervised from 3350' to 4285', rotary total depth. Samples were examined from 3350' 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)	2298 GR --- 2303 KB	
Anhydrite	1693	(+ 610)
Howard	3361	(- 1058)
Topeka	3406	(- 1103)
Heebner	3668	(- 1365)
Toronto	3685	(- 1382)
Lansing-Kansas City	3708	(- 1405)
Base of Kansas City	3984	(- 1681)
Marmaton	3990	(- 1687)
Fort Scott	4175	(- 1872)
Cherokee Shale	4200	(- 1897)
Mississippian Chert	4271	(- 1968)
Mississippian Dolomite	4280	(- 1977)
RTD	4285	(- 1982)

Structurally, on top of the Lansing-Kansas City the No. 1 Schneider "D" ran 9' low to the Angle Exploration Company's No. 1 Kraft, a Mississippian oil producer located approximately 1 mile to the Southwest. On top of the Mississippian Dolomite, the No. 1 Schneider "D" ran 18' low to the No. 1 Kraft.

Pi
Schneider 1-D
14-155-234

ZONES OF INTEREST

TOPEKA (Top 3406 (-1103))

3434 to 3440

White to light grey fine crystalline to chalky limestone. No odor. No show.

3454 to 3461

Tan oolitic limestone, barren. No odor. No show.

3568 to 3576

Tan chalky limestone. Trace of pin point porosity. No odor. No show.

3631 to 3636

Tan fine crystalline, fossiliferous dense limestone. No show.

TORONTO (Top 3685 (-1382))

3685 to 3692

White chalky limestone. Fair pin point porosity. Trace of light stain. No odor. No show of oil.

LANSING-KANSAS CITY (Top 3708 (-1405))

3711 to 3714

White fine crystalline, cherty limestone. Few oolites. No odor. No show of oil.

3718 to 3724

White fine crystalline, cherty limestone. Few oolites. No odor. No show of oil.

3762 to 3766

Grey fine crystalline to cherty limestone. No odor. No show of oil.

3782 to 3785

White fine crystalline limestone. Trace of black stain. No odor. No show of oil.

3814 to 3820

White fine to medium crystalline limestone and barren oolitic limestone. No odor. No show.

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3831 to 3836

White oolitic, barren limestone.
No odor. No show of oil.

3909 to 3914

Tan oolitic limestone, barren.
No odor. No show of oil.

3930 to 3932

Tan oolitic limestone, barren.
No odor. No show of oil.

3939 to 3948

White to tan oolitic limestone,
barren. No odor. No show of oil.

3967 to 3974

White to light grey poorly developed
oolitic limestone. No odor.
No show of oil.

FORT SCOTT (Top 4175 (-1872))

4186 to 4190

White to tan fine crystalline limestone.
Trace of pin point porosity. Very
light staining. Few pieces with a
fair show of free light yellow oil.
No odor. Good florescence.

DRILL STEM TEST NO. 1 (FOC Test)

4147 to 4200

60-30-30-30 First opening very
weak blow 35 minutes. Second
opening very weak blow 4 minutes.
Recovered 120' gassy oil cut mud
with show of free oil in tool.
Initial flow of 40 to 70#.
Final flow of 70 to 91#.
Initial shut in pressure 202#.
Final shut in pressure 202#.
(Shut in pressures still climbing.)

4255 to 4271

Scattered orange and yellow fresh
cherts grading into white fresh
vitreous chert, scattered clear to
translucent chert. Increasing
amount of medium to large subround
to round, clear to frosted quartz.
Trace of black staining on quartz
and few pieces of white weathered
chert at 4271. No odor. No show oil.

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MISSISSIPPIAN CHERT (Top 4271 (-1968))

4271 to 4274

White fresh translucent chert,
white fresh and weathered chert
with fair vugular porosity.
Good odor, slight show of free oil,
and dark black staining on
several pieces.

4274 to 4280

Chert as above, with less weathering.
No odor, no show of free oil.
Dull yellow florescence.

DRILL STEM TEST NO. 2 (FOC Test)

4230 to 4274

60-45-60-45 First opening weak
blow for 39 minutes. Second
opening no blow.
Recovered 30' mud.
Initial flow of 40 to 60#.
Final flow of 60 to 70#.
Initial shut in pressure 485#.
Final shut in pressure 425#.

MISSISSIPPIAN DOLOMITE (Top 4280 (-1977))

4280 to 4285

Tan fine crystalline dolomite.
Fair to good vugular porosity.
Scattered chert as above.
Faint odor. Slight show of free
oil. No florescence.

DRILL STEM TEST NO. 3 (FOC Test)

4228 to 4285

60-30-30-30 First opening blow
off bottom in 12 minutes.
Second opening blow off bottom
throughout.
Recovered 1364' muddy saltwater.
Initial flow of 30 to 537#.
Final flow of 557 to 659#.
Initial shut in pressure 1317#.
Final shut in pressure 1306#.

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Schneider D-1
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Due to the low structural position and negative drill stem test results the No. 1 Schneider "D" was plugged and abandoned a dry hole.

Sincerely,

Joel A. Alberts
Joel A. Alberts *ss*

JA:ss

16-15-23w

DRILLING INFORMATION ON THE NO. 1 SCHNEIDER "D"

Contractor: Red Tiger Drilling (Rig #10)

Drillers: Ted Shrout Jr.
Bruce Fickel
Dennis Bailey

Tool Pusher: Bruce Fickel

Spud Date: October 24, 1983

RTD Date: November 1, 1983

Surface Casing: 8-5/8" @ 283' w/180 sx

Production Casing: None

TOTAL FOOTAGE DRILLED PER DAY

Under Surface At 8:55 A.M. On October 25, 1983

2065	Feet	At	7:00 A.M.	On	October 26, 1983
2760	"	"	" "	"	October 27, 1983
3390	"	"	" "	"	October 28, 1983
3800	"	"	" "	"	October 29, 1983
4080	"	"	" "	"	October 30, 1983
4200	"	"	" "	"	October 31, 1983
4274	"	"	" "	"	November 1, 1983
4285	"	"	12:09 P.M.	"	November 1, 1983

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BIT RECORD

BITS

TYPE

FOOTAGE

No. 1
No. 2

Walker McDonald 03-J
Walker McDonald 53-J

289' to 1739'
1739' to 4285'

MUD RECORD

Surface	20 sx gel, 10 sx hulls, 2 sx lime
3250'	65 sx saltgel, 20 sx hulls
3400'	35 sx starch, 6 sx hulls
3800'	55 sx saltgel, 10 sx starch, 6 sx hulls, 2 sx preservative, 5 sx betonite
3895'	30 sx saltgel, 6 sx hulls
4080'	20 sx saltgel, 15 sx starch, 6 sx hulls
4240'	20 sx saltgel