

32-9-19W

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Ind
State Geological Survey
WICHITA BRANCH

GEOLOGICAL REPORT

FRONTIER OIL COMPANY

NO. 1 ALLPHIN

NW SE NE Sec. 32-9S-19W

ROOKS COUNTY, KANSAS

RECEIVED
STATE CORPORATION COMMISSION

SEP 28 1983

CONSERVATION DIVISION
Wichita, Kansas

Commenced: July 16, 1983

Completed: July 24, 1983

RELEASED

Date: SEP 1 1984
FROM CONFIDENTIAL

Joel A. Alberts

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

RE: Frontier Oil Company's
No. 1 Allphin
NW SE NE 32-9S-19W
Rooks County, Kansas

Dear Sir:

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

Drilling was supervised from 3000' to 3762', rotary total depth. Samples were examined from 3000' 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)	2226 GL	--	2231 KB
Anhydrite	1634		(+ 597)
Topeka	3210		(- 979)
Heebner	3413		(-1182)
Toronto	3433		(-1202)
Lansing-Kansas City	3452		(-1221)
Base of Kansas City	3656		(-1425)
Cherty Conglomerate	3693		(-1462)
Simpson Dolomite	3742		(-1511)
Arbuckle	3757		(-1526)
RTD	3762		(-1531)
5-1/2" Pipe at	3758		(-1527)

Structurally, on top of the Lansing-Kansas City, the No. 1 Allphin ran 7' high to I. O. Miller's No. 1 Allphin, an abandoned Arbuckle producer 660' North. On top of the Arbuckle, the No. 1 Allphin ran 3' high to I. O. Miller's No. 1 Allphin.

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ZONES OF INTEREST

Alphin #1
32-9-19W

TOPEKA (Top 3210 (-979))

3236 to 3243

Tan to grey fine crystalline to chalky limestone. No odor. Trace of pin point porosity. Very slight show of free oil. Scattered light brown spotted staining.

3364 to 3370

White chalky to dense limestone. No odor. Slight show of free oil. Scattered spotted staining.

TORONTO (Top 3433 (-1202))

3437 to 3442

White fine crystalline limestone. No odor. No show.

LANSING-KANSAS CITY (Top 3452 (-1221))

3456 to 3460

White fine crystalline, oolitic limestone. Tight. No odor. No show.

3492 to 3495

White to light grey fine crystalline slightly fossiliferous limestone. No odor. No show free oil. Trace of light stain.

3511 to 3514

Light grey fine crystalline limestone. Trace of pin point porosity. Faint odor. Slight show of free oil. Scattered light brown stain.

3537 to 3541

White fine crystalline dense limestone. Slight fossiliferous. Trace of pin point porosity, scattered vugs. Very faint odor. Fair show of free oil. Dark brown spotted staining.

DRILL STEM TEST NO. 1 (Western)

3503 to 3543

*Alphin #1
32-9-19W*

60-30-60-30 First opening very weak blow throughout. Second opening no blow - flushed tool weak blow. Recovered 190' muddy water. Initial flow of 45 to 68#. Final flow of 79 to 125#. Initial shut in pressure 924#. Final shut in pressure 912#.

3553 to 3560

White fine crystalline limestone. Abundant grey chert. No odor. No show of oil.

3583 to 3586

White fine crystalline cherty limestone. Trace of pin point porosity. Fair odor. Slight show of free oil. Scattered brown stain.

DRILL STEM TEST NO. 2 (Western)

3566 to 3600

60-45-30-45 First opening weak blow for 5 minutes. Flushed tool - no help. Second opening no blow. Recovered 10' mud. Initial flow of 56 to 56#. Final flow of 56 to 56#. Initial shut in pressure 391#. Final shut in pressure 306#.

3604 to 3608

White fine crystalline limestone. Scattered pin point porosity. Fair to good odor. Slight show of free oil. Brown stain.

3622 to 3625

White poorly developed oolitic limestone. Good odor. Dark brown stain. Fair show of free oil.

3644 to 3646

White to tan fine crystalline to chalky fossiliferous limestone. No odor. No show of free oil. Trace of light stain.

DRILL STEM TEST NO. 3 (Western)

3600 to 3655

Alphie #1
32-9-19W

60-30-30-30 First open weak blow 17 minutes, flushed tool - weak blow 10 minutes. Second open no blow. Recovered 65' mud. Initial flow of 45 to 68#. Final flow of 68 to 68#. Initial shut in pressure 812#. Final shut in pressure 734#.

CHERTY CONGLOMERATE (Top 3693 (-1462))

3695 to 3706

Fresh yellow and red cherts. White weathered chert with some pin point porosity. Vuggy in part. No odor. Fair to good show free oil in tray. Scattered dark stain.

DRILL STEM TEST NO. 4 (Western)

3692 to 3730

30-30-30-30 First opening weak blow 10 minutes. Second opening no blow. Recovered 5' mud. Initial flow of 45 to 45#. Final flow of 45 to 45#. Initial and final shut in pressure 45#.

SIMPSON DOLOMITE (Top 3742 (-1511))

3742 to 3752

Yellow fine crystalline dolomite, sandy in part. No odor. No show of oil. No stain.

ARBUCKLE (Top 3757 (-1526))

3757 to 3762

Tan fine crystalline dolomite, cherty in part. Fair to good odor. Fair show of free oil. Abundant dark brown staining.

DRILL STEM TEST NO. 5 (Western)

3690 to 3762

Alphin #1
32-9-19W

30-45-30-45 First open weak
blow 10 minutes. Second open
no blow. Recovered 190' mud
with oil spots above tool.
Tool slid 3', partial packer failure
and plugged tool. Pressures
not readable.

Due to the favorable structural position and show of oil in the Arbuckle,
it was decided to run 5-1/2" casing at 3758', 4' off bottom and 1' in the
Arbuckle, with 175 sx common cement 10% salt.

A D.V. Tool was set at 1650' with 450 sx 50-50 pozmix 5% gel.

The shoe joint is 43.62' long and zero point is 5' AGL.

Sincerely,

Joel A. Alberts
Joel A. Alberts

/ss

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DRILLING INFORMATION ON THE NO. 1 ALLPHIN 32-9-19W

Contractor: Red Tiger Drilling Co. (Rig 7)

Drillers: Tim Derauf

Bill Ayres

Tool Pusher: Bill Ayres

Wayne Sander

Spud Date: July 16, 1983

RTD Date: July 24, 1983

Surface Casing: 8-5/8" @ 329' w/200 sx

Production Casing: 5-1/2" @ 3758' w/
175 sx common cement 10% salt

DV @ 1650' w/450 sx 50-50 poz 5% gel

TOTAL FOOTAGE DRILLED PER DAY

Under Surface at 9:30 P.M. on July 16, 1983

1303	Feet	At	7:00 A.M.	On	July 17, 1983
2403	"	"	" "	"	July 18, 1983
2946	"	"	" "	"	July 19, 1983
3295	"	"	" "	"	July 20, 1983
3507	"	"	" "	"	July 21, 1983
3547	"	"	" "	"	July 22, 1983
3644	"	"	" "	"	July 23, 1983
3730	"	"	" "	"	July 24, 1983
3762	"	"	8:07 P.M.	"	July 24, 1983

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BIT RECORD

Allypin #1
32-9-19W

BITSTYPEFOOTAGE

No. 1	Walker McDonald 03	332' to 1741'
No. 2	Reed HS-51	1741' to 3600'
No. 3	Security S-84	3600' to 3762'

MUD RECORD

Surface:	30 sx gel, 5 sx lime, 9 sx hulls
2946'	50 sx saltgel, 40 sx starch, 8 sx hulls, 3 sx preservative
3000'	30 sx saltgel, 7 sx starch, 2 sx hulls
3295'	15 sx saltgel, 4 sx hulls
3380'	10 sx saltgel, 2 sx hulls
3450'	10 sx saltgel
3543'	10 sx saltgel
3549'	20 sx saltgel, 10 sx starch
3600'	15 sx saltgel, 3 sx hulls
3655'	15 sx saltgel, 10 sx starch, 4 sx hulls
3688'	2 sx hulls

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