

23-34-2E²¹

GEOLOGICAL REPORT

BUCCANEER PETROLEUM, INC.
No. 3 Reynolds
SE SE NW of Section 23
Township 34 South - Range 2 East
Sumner County, Kansas

CONTRACTOR: E.D. & E. Drilling Co.
SPUD DATE: June 3, 1984
UNDER SURFACE: June 4, 1984
COMPLETION DATE: June 12, 1984
SURFACE CASING: 280 ft. of 8 5/8"
PRODUCTION CASING: 3607 ft. of 5 1/2" cemented with 180 sacks
TOTAL DEPTH: 3610 Driller, 3616 Welex
BIT SIZE: 7 7/8" from under surface to total depth
ELEVATIONS: 1221 Ground, 1230 Kelly Bushing
ELECTRICAL SURVEYS: Welex - Dual Induction Guard Log & Compensated Density Neutron Log

FORMATION TOPS

<u>Formation</u>	<u>Depth</u>	<u>Datum</u>
Neva lm.	810	+ 420
Severy sd.	1580 - 1620	- 350
Topeka lm.	1657	- 427
Upper Hoover sd.	1889 - 1897	- 659
Lower Hoover sd.	1964 - 1977	- 734
Iatan lm.	2350	-1120
Stalnaker sd.	2374 - 2540	-1144
Lignite	2761	-1531
Layton sd.	2804 - 2958	-1574
Kansas City lm.	2995 - 3116	-1765
Cleveland sd.	3148 - 3178	-1918
Marmaton lm.	3197	-1967
Cherokee sh.	3314	-2084
Bartlesville sd.	3468 - 3506	-2238
Mississippi chat	3508	-2278
Mississippi lm.	3595	-2365
Total Depth	3616	-2386

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23-34-2e
3 Reynolds
e'

RECOMMENDATIONS:

Samples were examined from 2200 ft. to total depth. Shows of oil were noted in the Layton sd., Kansas City lm., Cleveland sd., Bartlesville sd. and Mississippi chat. Water saturations from log calculations were relatively high in all zones except the Kansas City lm. and Bartlesville sd. It is suggested that the following zones be tested through perforations before the well is abandoned:

		<u>Porosity</u>	<u>Rt.</u>	<u>Rw.</u>	<u>Sw.</u>
1. Mississippi chat	3521 - 3528	29%	1	.037	66%
2. Bartlesville sand	3474 - 3484	20%	5	.037	43%
3. Cleveland sand	3148 - 3156	14%	2.6	.038	86%
4. Kansas City lm.	3008 - 3012	16%	26	.038	24%
5. Layton sd.	2804 - 2808	16%	3.6	.038	64%

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WICHITA BRANCH

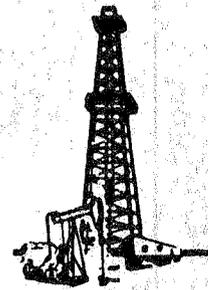
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CONSERVATION DIVISION
Wichita, Kansas



Buccaneer Petroleum, Inc.
P. O. BOX 425
TONKAWA, OKLAHOMA 74653



REYNOLDS #3

- 6-18-84 Rig Shebester up. Swab well down. Dump 80 BBL 2% KCL water in hole. Perforate Mississippi chat from 3500-3504' 17 holes. Run 106 jts. 2 7/8 tubing w/RTTS packer. 1-4' sub. 1-6' sub. 1-8' sub. - 3474' Swab down. No fluid entry. Shut down.
- 6-19-84 Shut in pressure -0-. Run swab. 0' of fluid in hole. No show of gas. Acidize w/500 gal 15% FE Acid w/2 gal. AS 7 NE Agent. Recover 50% of load. Good show of oil. 15% w/treating fluid. Shut down.
- 6-20-84 Shut in pressure 30#. Run swab 800' of fluid in hole. 100' oil on top. Acid water remainder. Swab down in 3 pulls. Oil cut 30%. Continue swabbing every 1/2 hr. Recovering 60' of fluid w/25-40% oil cut. Shut down & frac. Frac w/20,000 gal. of gel & 20,000# of sand. Rate 12 BBL min. 400-500 psi. Well on instant vacuum. Frac job log enclosed.
- 6-21-84 Shut in pressure -0-. Run swab in hole. 850' fluid in hole. Start showing oil after 3rd pull. 30 BBL recovery 5% oil cut. Continue swabbing. Fluid level staying @ 2900' w/ steady swabbing. End of day oil cut 10%. Total fluid recovered. 171 BBL water 20 BBL oil. Total 191 BBLs.
- 6-22-84 Shut in pressure -0-. Open valve. Good blow of gas. Fluid level @ 2700'. 20% oil cut. Continue swabbing. Oil cut increase to 20%. Pulling 700'-800' of fluid every run. Oil cut stabilized @ 12%. Pull tubing & packer. Run 105 jts. 2 7/8" tubing w/3' perf. sub & 30' mud anchor. Perf. nipple set @ 3450'. Shut down & move off to Reynolds #4 to run rods.
- 6-25-84 Move rig in & run rods for pumping unit. Run 2 1/2 x 1 1/2 x 14' Pump w/Lock-No-Valve. 2' sub on top of pump - 135 3/4" rods 10' subs 1 1/4 x 16' polish rod w/8' liner. Tear down & move on Bradley #1.

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