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GEOLOGICAL REPORT

O'BRIEN ENERGY RESOURCES

No. 1 Danford

2040' FNL, 1980' FWL, Sec. 9 - T2N - R58W

Morgan County, Colorado

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RESUME

OPERATOR: O'Brien Energy Resources Corp.

WELL: No. 1 Danford

LOCATION: 2040' FNL, 1980' FWL, Section 9 - T2N - R58W

COUNTY: Morgan

STATE: Colorado

FIELD: Sawbuck

ELEVATION: 4571 G.. L., 4579 K. B.

CASING: Ran 4 joints of 8-5/8" casing set at 161/169' KB
cemented with 100 sacks neat plus 3% CC.

HOLE SIZE: 7-7/8"

TOTAL DEPTH: 6025' Driller, 5985 Phoenix Surveys

T.D.FORMATION: Cretaceous "J" Sand

MUD: Chemical Gel

COMMENCED: May 29, 1996

COMPLETED: June 4, 1996

CORES: None

DRILL STEM TESTS: DST No. 1 5852-5872 ("D" Sand) Corrected depth 5844-5864.

LOGS: Phoenix Surveys Dual Induction Log with Gamma Ray and SP
plus Compensated Density and Neutron with Gamma Ray and
Caliper.

CONTRACTOR: Ashby Drilling Company

GEOLOGIST: Floyd H. Miller

PRODUCTION: None

PLUG DATA: Pumped 40 sx @ 5863'. Pumped 50 sacks at 225'. Cut
casing to 4' below ground, weld cap.

DAILY DRILLING CHRONOLOGY
8:00 A. M. - 8:00 A. M.

<u>DATE</u>	<u>DEPTH</u>	<u>STATUS</u>	<u>ACTIVITY</u>	<u>FEET MADE</u>	<u>HOURS DRILLED</u>
5/29/96	-	Rigging	Rigging up Ashby Rig No. 1, Preparing to start drilling.	-	-
5/30/96	985	Drilling	Drilled surface hole. Ran 4 jts 8-5/8 casing set at 161/169KB with 100 sacks cement. Neat. 3% CC. Drilled ahead at 2:00 A.M.	985	5.5
5/31/96	3815	Drilling		2830	23
6/1/96	5482	Drilling		1667	22
6/2/96	5872	Testing		390	12
6/3/96	5872	Repairing	Took DST No. 1 5852-5872. Engine broke down while lifting pipe and DST tools out-of-hole. Engine is being replaced.	0	-
6/4/96	6025	Total Depth	Concluded test with replaced engine & drilled ahead with Bit No. 2. Tripped for Bit No. 3 @ 5939. Now coming out of hole to run electrical surveys.	153	15
6/5/96	6025	Total Depth	Ran Phoenix Electrical Surveys and then plugged the well.	-	-

FORMATION TOPS

<u>FORMATION</u>	<u>LOG DEPTH</u>	<u>DATUM</u>
Niobrara	5115	- 536
Carlile	5434	- 855
Greenhorn	5496	- 917
Bentonite	5742	-1163
"D" Sand	5840	-1261
"J" Sand	5912	-1333
Total Depth	6025	-1446

BIT RECORD 7-7/8"

<u>NO.</u>	<u>MAKE</u>	<u>TYPE</u>	<u>DEPTH OUT</u>	<u>FOOTAGE</u>	<u>HOURS</u>	<u>FT/HR.</u>
1	RTC	HPH	5872	5697	55.5	102.6
2	Sec.	584F	5939	67	7.5	9
3	Sec.	584CF	6025	86	5.75	15

DEVIATION SURVEYS

<u>DEPTH</u>	<u>DEVIATION^o</u>
519	1/4
1017	1/2
1577	3/4
2075	3/4
2419	3/4
3009	1
3506	1
4005	1-1/4
4473	1-1/2
5033	1-3/4

DRILL STEM TESTS

DST NO. 1 ("D" Sand) 5852-5872 (corrected depth 5844-5864). Open 15 minutes. Shut-in 30 minutes. Open 60 minutes. Shut-in 60 minutes. Tool opened with 1/2" blow increasing to good off bottom in 6 minutes and held steady. Second open flow opened with 1" and increased to good off bottom in 1 minute. Gas to surface in 17 minutes and held steady. Estimated 20 MCFPD.

Recovered: Gas in pipe. Total: 227' fluid.
134' slightly gas cut mud.
93' mud cut H₂O.

Sample Chamber Recovery:

Top Sample R. W.	2.4 @ 70 ^o	- 2400 PPM
Middle Sample R. W.	.95 @ 70 ^o	- 6800 PPM
Bottom Sample R. W.	.70 @ 68 ^o	- 8800 PPM

Pressures: Continued next page -

DRILL STEM TESTS - Continued

Pressures:	IH	2765
	FH	2740
	IF-1	121
	FF-1	108
	IF-2	121
	FF-2	108
	SIP-1	859
	SIP-2	809

SAMPLE DESCRIPTION

5800-5835 Shale, gray-black. Few pieces of white bentonite. Trace pyrite. Trace recirculated cuttings.

5835- Circulated one hour. Samples as above.

5835-5860 Shale, gray-black. Few pieces of greenish white to white bentonite.

5860-5865 Shale, gray-black. Few pieces of sandstone, clear-white, fine grained, poor porosity, fair oil stain, weak fluorescence and cut.

5865-5870 Increase in sandstone, clear-white, fine to medium grained, poor to fair porosity, good oil stain and fluorescence. Trace sandstone with good porosity and oil stain.

5872- Circulated one hour - Abundant sandstone, clear-white, fine to medium grained, poor to fair porosity, few pieces good porosity, good oil stain and fluorescence with streaming cut.

5872-5880 Took DST No. 1 5852-5872 - after test drilled ahead. Shale, gray-black, abundant recirculated cuttings including bentonite, pyrite, siltstone, etc. Few pieces of sandstone as in sample above.

5880-5900 Shale, gray-black. Small amount recirculated cuttings.

5900-5920 Shale, gray-black. Abundant recirculated cuttings.

5920-5940 As above - plus small amount sandstone, clear-white, fine to medium grained, fair porosity, no stain or fluorescence.

5940-5980 Shale, gray-black. Sandstone, clear-white, fine to medium grained, fair to good porosity, no stain or fluorescence.

5980-6025 Shale, gray to black. Abundant sandstone, clear-white to tan, fine to medium grained, good porosity, some clayfilling, trace glauconite, no stain or fluorescence.

COMMENTS

This well, the O'Brien Energy No. 1 Danford, penetrated the Cretaceous "D" and "J" Sands at an ideal structural position which is high to every other well in the area. The "D" Sand samples had good hydrocarbon stain and fluorescence. Therefore we believed that the favorable high structural position, plus the hydrocarbon stained "D" Sand samples indicated that we had a potential producing well. However, the drill stem test recovery was not good - 227' of mud and formation water with only 20 MCF of gas. The electrical surveys defined the negative reservoir capability - the potential pay zones are very shaly with poor porosity and permeability. Therefore, the well was plugged and abandoned.

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