

SIDE TWO

Operator Name Kirby Krier Oil Inc. Lease Name Greensides Well # 1Sec. 9 Twp. 18 Rge. 11 ☐ East ☒ West County Barton

WELL LOG

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken: ☒ Yes ☐ No
Samples Sent to Geological Survey ☐ Yes ☒ No
Cores Taken ☐ Yes ☒ No

Formation Description
☐ Log ☒ Sample

Name Top Bottom

DST 1 3279-3327 45-15-15-15
20 OCM ISIP 523 FSIP 580 IFP 58-58
FFP 58-58

TOPEKA	2650
HEEBNER	29087
TORTONTO	2926
DOUGLAS	2940
BRN LM.	3019
L-KC	3037
CONG	3294
ARBUCLE	3325
T.D.	3329

DST 2 3266-3329 30-45-60-45
510' Mud CUT OIL
120' MUD&WATER CUT OIL
160' WATER CUT OIL
710' Saltwater
ISIP 1069
Fsp 1069
Ifp 203-378
FFP 436-609

CASING RECORD ☐ New ☒ Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs/Ft.	Setting Depth	Type of Cement	#Sacks Used	Type and Percent Additives
surface casing	127/8"	85/8"	24#	335	common	175	
Production	77/8"	8 1/2"	15	3326	class A	140	
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)		Depth	
TUBING RECORD				Liner Run ☐ Yes ☒ No			
Size 2 7/8		Set At 3310		Packer at			
Date of First Production July 1, 1988		Producing Method ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (explain).....					
Estimated Production Per 24 Hours	Oil	Gas	Water	Gas-Oil Ratio		Gravity	
	21 Bbls	0 MCF	75 Bbls			38 CFPB	

METHOD OF COMPLETION

Production Interval

Disposition of gas: ☐ Vented
☐ Sold
☒ Used on Lease

☒ Open Hole ☐ Perforation
☐ Other (Specify)

☐ Dually Completed
☐ Commingled

ROBERT C. LEWELLYN

petroleum geologist



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P. O. Box 2608
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GEOLOGICAL REPORT

RECEIVED
STATE CORPORATION COMMISSION

Kirby Krier Oil, Inc.
No. 1 greensides
1280' FSL & 1190' FEL Sec. 9-18S-11W
Barton County, Kansas

SEP 13 1988

CONTRACTOR:

CONSERVATION DIVISION
Abercrombie Drilling & Service, Inc.

SPUDED:

May 18, 1988

DRILLING COMPLETED:

May 23, 1988

SURFACE CASING:

8 5/8" @ 335 KBM/175 sx.

ELECTRIC LOGS:

No Open Hole Logs

ELEVATIONS:

1782 KB 1779 DF 1777 GL

FORMATION TOPS: (Sample)

Topeka	2650 (- 868)
Heebner	2908 (-1126)
Toronto	2926 (-1144)
Douglas	2940 (-1158)
Brown Limestone	3019 (-1237)
Lansing-Kansas City	3037 (-1255)
Base Kansas City	3283 (-1501)
Conglomerate	3294 (-1512)
Arbuckle Dolomite	3325 (-1543)
ROTARY TOTAL DEPTH	3329 (-1547)

Samples were examined microscopically from 2600 to Rotary Total Depth. Following is a description of zones of interest, shows of oil, drill stem tests, and other pertinent information:

TOPEKA ZONES:

2690-2698	Limestone, cream to buff, finely crystalline and oolitic, poor to fair ooliticastic porosity, no show of oil.
2731-2740	Limestone, buff, finely crystalline and oolitic, scattered poor ooliticastic porosity, no show of oil.
2856-2864	Limestone, buff, some tan, finely crystalline and oolitic, good ooliticastic porosity, some fair interooli-

tic porosity, some intercrystalline porosity, no show of oil.

TORONTO ZONES:

2926-2940 Limestone, cream to buff, finely crystalline and chalky, mostly tight, no show of oil.

LANSING-KANSAS CITY ZONES:

3037-3043 Limestone, buff, dense to finely crystalline, some
3049-3052 sucrosic, fair pinpoint porosity, some fair intercrystalline porosity, poor to fair spotted stain, slight show of free oil, faint odor.
A zone

3061-3067 Limestone, buff, finely crystalline and oolitic, fair
B zone to good interoolitic and ooliticastic porosity, fair spotted stain, slight to fair show of free oil, fair odor.

3077-3093 Limestone, tan to brown, some mottled, dense to finely crystalline, some scattered poor intercrystalline and vugular porosity, poor spotted stain, very slight show of free oil, faint odor.
C-D zone

3096-3098 Limestone, cream to buff, some tan, dense to finely crystalline, mostly tight, trace of very poor spotted stain, no free oil, no odor.
E zone

3100-3109 Limestone, cream to buff, finely crystalline and partly oolitic, poor to fair interoolitic and ooliticastic porosity with slight to fair show of free oil, fair spotted stain, fair odor.
F zone

3116-3120 Limestone, buff to tan, finely crystalline and oolitic,
3124-3146 fair to good ooliticastic porosity; upper section has scattered fair spotted stain with slight show of free oil and faint odor and considerable barren porosity. Lower section has good ooliticastic porosity with no show of oil.
G zone

3166-3170 Limestone, cream to buff, dense to finely crystalline,
3176-3186 oolitic, scattered poor interoolitic porosity with much tight limestone, some poor spotted stain with very slight show of free oil, no odor; lower portion contains some dead stain and gilsonite, with poor spotted live stain in coarsely oolitic lime with fair ooliticastic porosity, no free oil, no odor.
H zone

3190-3200 Limestone, buff to tan, finely crystalline and oolitic, poor ooliticastic porosity, no show of oil.
I zone

3201-3206 Limestone, buff, finely crystalline and oolitic, fair to good ooliticastic porosity, 20% with fair spotted
Jl zone

stain, 80% barren porosity, slight show of free oil, faint odor.

3212-3219 Limestone, buff, finely crystalline and oolitic, fair
J2 zone to good ooliticastic porosity with trace of poor spotted stain, mostly barren, no free oil, no odor.

3242-3269 Limestone, buff to tan, dense to finely crystalline,
K zone much chalk in section, trace of poor intercrystalline porosity, rare trace of very poor spotted stain, no free oil, no odor.

3265-3283 Limestone, cream to buff, some tan, dense to finely
L zone crystalline with much chalk, mostly tight, no show of oil.

CONGLOMERATE ZONES:

3294-3314 Various and varicolored shales and cherts with trace of scattered tripolitic chert, zone appears mostly tight, with insufficient chert percentage to have reservoir quality, no show of oil.

3314-3325 Sand, fine grained, some medium grained, subround, partly glassy, fairly well cemented and partly quartzitic, partly tight, some friable sand with fair intergranular porosity. All sand clusters except tight sand have good spotted to saturated stain, good show of free oil, good odor. This section was open in DST No. 1.

ARBUCKLE ZONES:

3325-3327 Dolomite, dense to finely crystalline, some sucrosic, considerable tight dolomite, some with scattered poor to fair intercrystalline porosity, fair spotted stain, fair show of free oil, faint to fair odor.

DST No. 1 45-15-15-15; weak blow, died in 45 minutes; flushed tool
3279-3327 on second flow period, no help; recovered 20 feet of oil cut mud (5% oil - 95% mud).
ISIP 523# FSIP 580# IFP 58-58# FFP 58-58#

3327-3329 Dolomite, buff, fine to medium crystalline, fair to good intercrystalline porosity, some vugular porosity, fair spotted stain, fair to good show of free oil, fair to good odor, some gray opaque chert.

DST No. 2 30-45-60-45; strong blow, bottom of bucket in 2 minutes;
3266-3329 recovered 510 feet of mud cut oil (35% oil - 15% wtr - 50% mud), 120 feet of mud and water cut oil (50% oil - 30% wtr - 20% mud), 160 feet of water cut oil (50% oil - 40% wtr - 10% mud), & 710 feet of saltwater.
ISIP 1069# FSIP 1069# IFP 203-378# FFP 436-609#

3329

ROTARY TOTAL DEPTH

RECOMMENDATIONS:

The Arbuckle Dolomite should be completed open hole, with no additional penetration into the section. Stimulation with acid should be used only if necessary, and as necessary, to facilitate production. It is strongly recommended that the Arbuckle be produced at a moderate rate if possible, to minimize water production, and to avoid "coning", which would result in excessive water production and loss of oil production.

After depletion of the Arbuckle, the following Lansing-Kansas City zones should be perforated, and treated with acid as necessary to facilitate production:

J zone	3201-3203
F zone	3100-3103
B zone	3062-3066
A zone	3039-3042 & 3048-3052

A cased-hole electric log should be run, and measurements on the Lansing-Kansas City zones should be correlated to the log. Porosity should be verified by the log before perforating the zones.

Respectfully submitted,



Robert C. Lewellyn
Petroleum Geologist

RCL:me

Kirby Krier Oil, Inc. - No. 1 Greensides
1280 FSL & 1190 FEL Sec. 9-18S-11W

DRILLING TIME

2600-20	2-2-2-2-3	3-2-2-2-1	2-2-2-3-3	3-2-3-2-2
40	2-2-2-2-3	2-2-2-2-3	2-3-1-1-1	1-1-1-1-1
60	2-1-1-1-1	1-1-1-1-1	2-2-2-3-2	2-3-2-3-3
80	3-3-3-3-3	3-3-2-2-2	3-2-1-2-2	2-3-3-3-3
00	3-3-2-3-2	2-3-3-2-1	2-1-1-1-1	1-1-1-2-2
2700-20	2-2-1-2-1	3-2-2-2-2	2-3-2-2-3	2-3-2-2-2
40	3-3-2-3-2	3-2-2-2-3	1-1-2-2-1	2-1-2-2-2
60	3-2-3-2-2	2-2-2-4-3	3-2-3-1-2	1-1-1-3-2
80	2-2-2-1-1	2-1-1-1-1	1-2-1- $\frac{1}{2}$ - $\frac{1}{2}$	2-2-2-2-1
00	2-2-1-2-2	2-2-2-2-2	2-2-2-2-2	2-2-3-1-2
2800-20	2-2-3-2-3	2-1-2-1-2	1-2-2-3-3	3-2-3-2-2
40	3-2-1-1-2	2-2-2-2-1	2-2-1-1-2	2-2-2-2-2
60	2-2-2-2-3	1-2-2-2-3	2-3-2-1-3	3-2-1-1-2
80	1-1-1-1-2	2-3-2-3-2	3-3-3-2-3	3-3-2-3-2
00	2-3-3-2-3	2-2-2-3-2	2-1-1-3-2	2-3-2-2-2
2900-20	2-3-3-2-3	3-2-3-2-1	1-1-3-3-1	3-3-1-2-1
40	1-2-1-1-1	1-2-1-1-2	4-4-3-3-3	3-2-2-2-1
60	1-1-1-1-2	1-1-1-1-1	1-1-1-1-1	1-1-1-1-1
80	$\frac{1}{2}$ - $\frac{1}{2}$ -1-1-1	1-1-1-1-1	1-1-1-1-1	2-1-1-2-1
00	1-1-1-1- $\frac{1}{2}$	$\frac{1}{2}$ -1-1-1- $\frac{1}{2}$	$\frac{1}{2}$ -1-1-1- $\frac{1}{2}$	1- $\frac{1}{2}$ -1-1-1
3000-20	1- $\frac{1}{2}$ - $\frac{1}{2}$ -1-1	1- $\frac{1}{2}$ -1- $\frac{1}{2}$ -1	1-1-1-1-3	3-2-1-1-2
40	3-3-3-2-3	2-2-2-2-3	3-2-2-2-2	2-2-3-2-2
60	2-3-2-3-3	3-3-3-4-3	3-3-4-4-3	3-3-3-3-3
80	2-3-2-1-1	1-3-5-4-5	4-4-3-3-3	3-3-2-4-4
00	4-3-3-2-4	5-4-4-4-4	3-4-4-3-3	2-3-5-4-3
3100-20	2-2-2-3-2	2-2-2-4-4	5-4-5-4-3	4-3-2-2-4
40	4-4-4-4-2	2-1-1-2-2	1-1-1-1-2	2-2-2-2-2
60	2-2-1-1-1	2-4-4-3-4	3-4-3-4-4	4-3-4-4-4
80	3-3-3-3-2	3-3-3-3-1	2-2-3-3-3	3-5-4-3-3
00	3-4-3-3-4	4-2-3-3-4	3-3-3-3-4	4-4-4-4-4
3200-20	2-2-2-2-1	2-3-3-3-2	3-3-2-1-1	1- $\frac{1}{2}$ - $\frac{1}{2}$ -3-4
40	4-4-3-4-3	3-4-4-4-3	4-3-3-3-4	2-2-2-2-3
60	3-3-4-4-4	5-5-5-6-4	4-4-4-3-4	5-7-4-4-3
80	4-3-2-4-4	4-3-4-4-3	4-3-3-3-3	5-4-4-5-4
00	3-4-4-3-3	3-3-2-2-4	3-3-2-1-2	2-3-2-2-3
3300-20	4-4-3-3-4	2-3-3-3-3	2-2-2-3-2	1-3-3-2-2
40	1-2-2-1-2	1-4-3-3		

3329 RTD