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Grady Bolding Corporation
Rogers #1
250' north, SE-SW-NE; Section 20-19s-14w
Barton County, Kansas
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5 1/2" Production Casing Set

Contractor: Vonfeldt Drilling Company

Commenced: December 31, 2003

Completed: January 7, 2004

Casing Program: Surface; 8 5/8" @ 808'
Production; 5 1/2" @ 3548'

Samples: Samples saved and examined 1700' to the Rotary Total Depth.

Drilling Time: One (1) foot drilling time recorded and kept 1700' to the Rotary Total Depth.

Measurements: All depths measured from the Kelly Bushing.

Formation Testing: There were four (4) Drill Stem Tests ran by Trilobite Testing Inc.

Electric Log: By Log Tech; Dual Induction, Dual Compensated Porosity and Micro Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	810	-1083
Herington	1740	+153
Winfield	1788	+105
Neva	2242	-349
Red Eagle	2305	-412
Tarkio Lime	2594	-701
Howard	2728	-835
Topeka	2792	-899
Heebner	3120	-1227
Toronto	3138	-1245
Douglas	3153	-1260
Brown Lime	3208	-1315
Lansing	3217	-1324
Base Kansas City	3453	-1560
Conglomerate	3468	-1575
Arbuckle	3540	-1647
Rotary Total Depth	3549	-1654
Log Total Depth	3549	-1656

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(All tops and zones are corrected to Electric Log measurements.)

SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.

HERINGTON SECTION

1740-1750' Dolomite; gray, finely crystalline, sucrosic, scattered porosity, trace gas bubbles, no stain, no fluorescence.

1760-1770' Dolomite; as above, shaley, scattered porosity, trace gas

bubbles, no stain.

WINFIELD SECTION

1788-1800' Dolomite; white and cream, sucrosic, plus trace white chert.
Dolomite and chert; as above.

NEVA SECTION

2242-2252' Limestone; gray to tan, finely crystalline, fossiliferous, fair intercrystalline porosity, trace gas bubbles.

RED EAGLE SECTION

2305-2310' Limestone; gray and cream, sub oocastic, chalky, poorly developed porosity.
2312-2326' Limestone; white and cream, fine to medium crystalline, chalky, no shows.

Drill Stem Test #1 **2240-2332'**

Misrun – packer failure

TOPEKA SECTION

2990-3000' Limestone; gray and cream, finely crystalline, granular, chalky, poor porosity, no shows.
3045-3055' Limestone; gray and tan, granular, sub oocastic, poor visible porosity, trace gray boney and opaque fossiliferous chert.
3068-3090' Limestone and chert, as above.
3096-3006' Limestone; gray and tan, finely crystalline, slightly chalky.
3006-3119' Limestone; as above, trace gray chert.

TORONTO SECTION

3138-3143' Limestone; tan and gray, finely crystalline, few fossiliferous, slightly cherty, trace iron pyrite.
3143-3153' Limestone; as above, increase chalky.

LANSING SECTION

3222-3228' Limestone; gray and white, slightly fossiliferous, chalky, trace brown to dull gray stain, show of free oil and faint odor in fresh samples.

Drill Stem Test #2 **3210-3230'**

Times: 45-45-60-60

Blow: Strong

Recovery: 1830' gas in pipe

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15' heavy oil gas cut mud
(20% oil, 25% gas, 55% mud)
120' mud cut gassy oil
(20% mud, 30% gas, 50% oil)
60' slightly mud and water cut gassy oil
(10% mud, 7% water, 30% gas, 53% oil)
180' water, trace of oil

Pressures: ISIP 387 psi
FSIP 360 psi
IFP 42-113 psi
FFP 116-183 psi
HSH 1573-1537 psi

- 3237-3241' Limestone; white and gray, chalky, trace pinpoint porosity, chalky, spotty brown stain, no show of free oil or odor in fresh samples.
- 3246-3252' Limestone; gray and white, fossiliferous, chalky, dull gray to black stain, no show of free oil and questionable odor in fresh samples.
- 3262-3270' Limestone; tan, gray, fossiliferous/oolitic, fair to good dark brown and gray stain, trace of free oil and faint odor in fresh samples.
- 3275-3278' Limestone; tan and gray, fossiliferous, chalky in part, fair to good brown and golden brown stain, show of free oil and good odor in fresh samples.

Drill Stem Test #3 **3237-3282'**

Times: 30-30-45-60

Blow: Weak, decreasing

Recovery: 10' mud few oil specks

Pressures: ISIP 345 psi
FSIP 382 psi
IFP 18-20 psi
FFP 20-22 psi
HSH 1607-1517 psi

- 3288-3296' Limestone; tan, oocastic, good oocastic porosity, trace spotty stain, trace of free oil and faint odor in fresh samples.
- 3296-3310' Limestone; as above, decreasing stain, no show of free oil and faint odor in fresh samples.
- 3310-3330' Limestone; tan and brown, oocastic, fair to good oocastic porosity, no shows.
- 3356-3366' Limestone; gray and white, fossiliferous, chalky, poorly developed porosity, no shows.
- 3390-3400' Limestone; white and gray, chalky, fossiliferous, trace gray stain, no show of free oil or odor in fresh samples.

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3410-3420'	Limestone; as above.
3426-3436'	Limestone; white, gray, fossiliferous/oolitic, chalky, black to gray stain, no show of free oil and faint odor in fresh samples.
3446-3450'	Limestone; gray, fossiliferous, cherty, trace black stain, no show of free oil or odor in fresh samples.

CONGLOMERATE SECTION

3471-3473'	Sand; white, very fine grained, highly calcareous, poor visible porosity, no shows.
3496-3506'	Sand; medium to coarse grained, quartzitic, feldspar inclusions, sub angular, sub rounded, calcareous, black stain, no show of free oil or odor in fresh samples.
3506-3520'	Varied colored shale; plus chert, white, few semitripolitic, black stain, no show of free oil or odor in fresh samples.
3520-3540'	Shale as above; plus varied colored oolitic opaque chert.

ARBUCKLE SECTION

3540-3544'	Dolomite; white and cream, medium and coarse crystalline, fair intercrystalline and vuggy porosity, fair spotty dark brown and golden brown stain, show of free oil and fair to good odor in fresh samples.
3544-3549'	Dolomite; as above.

Drill Stem Test #4 3538-3547' (log measurements 3540-3549')

Times: 30-30-30-45

Blow: Strong, decreasing

**Recovery: 750' gas in pipe
 200' clean gassy oil
 70' heavy oil cut gassy mud
 (35% oil, 30% gas, 35% mud)**

Pressures:	ISIP	559	psi
	FSIP	357	psi
	IFP	48-66	psi
	FFP	78-118	psi
	HSH	1786-1727	psi

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**Rotary Total Depth 3547 (-1654)
 Log Total Depth 3549 (-1656)**

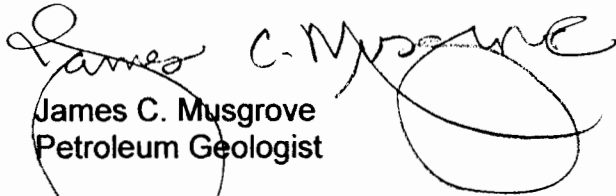
Recommendations:

On the basis of the favorable structural position and the positive results of the Drill Stem Tests it was recommended by all parties involved to set and cement 5 ½" production casing at 3540' (eight foot off bottom) and the following zones be tested in the Rogers #1:

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Rogers #1
250' north, SE-SW-NE; Section 20-19s-14w
Barton County, Kansas
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1. Arbuckle	open hole completion methods
2. Lansing	3222-3226 perforate
3. Herington/Krider	1741-1754 perforate
	1760-1766 perforate

Respectfully submitted;


James C. Musgrove
Petroleum Geologist

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