

API #~~009-2477-00-00~~

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Globe Operating Inc.  
Conner #3  
W/2-SW-NW; Section 21-19s-14w  
Barton County, Kansas  
Page No. 1

FEB 23 2004

KCC WICHITA

**5 1/2" Production Casing Set**

**Contractor:** Discovery Drilling Company (Rig #2)

**Commenced:** November 17, 2003

**Completed:** November 25, 2003

**Elevations:** 1895' KB, 1893' DF, 1887' GL

**Casing Program:** Surface; 8 5/8" @ 819'  
Production; 5 1/2" @ 3619'

**Samples:** Samples saved and examined 1600' to the Rotary Total Depth.

**Drilling Time:** One (1) foot drilling time recorded and kept 1600' to the Rotary Total Depth.

**Measurements:** All depths measured from the Kelly Bushing.

**Formation Testing:** There were five (5) Drill Stem Tests ran by Diamond Testing.

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

**Gas Detector:** By MBC Well Logging.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	800	+1095
Herington	1731	+164
Winfield	1781	+114
Neva	2233	-338
Red Eagle	2288	-393
Howard	2721	-826
Topeka	2784	-889
Queen Hill	3021	-1126
Heebner	3114	-1219
Toronto	3131	-1236
Dougias	3146	-1251
Brown Lime	3201	-1306
Lansing	3211	-1316
Base Kansas City	3447	-1552
Conglomerate	3461	-1566
Conglomerate Sand	3494	-1599
Arbuckle	3551	-1656
Quartzite	3614	-1719
Log and Rotary Total Depth	3620	-1725

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

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

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**HERINGTON SECTION**

- 1731-1750' Dolomite; gray and dark gray, sucrosic, shaley in part, fair intercrystalline porosity, trace gas bubbles.
- 1752-1766' Dolomite; gray, light gray, sucrosic, scattered pinpoint to intercrystalline porosity, trace gas bubbles (10 unit gas kick).

**WINFIELD SECTION**

- 1781-1800' Dolomite; tan and beige, finely crystalline, few granular, scattered porosity, trace gray and tan chert. (10 unit gas kick).

**NEVA SECTION**

- 2233-2240' Limestone; white and cream, chalky, poor visible porosity, trace poor fluorescence, no gas kicks.

**RED EAGLE SECTION**

- 2288-2320' Limestone; white and gray, fine to medium crystalline, chalky, few fossiliferous, fair porosity, dull fluorescence, no stain, no gas kicks.

**TOPEKA SECTION**

- 3038-3050' Limestone; gray and white to tan, fossiliferous, granular, fair interfossiliferous to pinpoint type porosity, fair dark brown to brown stain, show of free oil and faint odor in fresh samples.
- 3058-3062' Limestone; tan, sub oocastic, chalky in part, spotty brown to golden brown stain, show of free oil and fair odor in fresh samples.
- 3080-3096' Limestone; gray to tan, chalky in part, fair granular, questionable stain, no show of free oil and faint odor in fresh samples.

**TORONTO SECTION**

- 3131-3140' Limestone; white and gray; chalky, trace black stain, no show of free oil or odor in fresh samples.

**LANSING SECTION**

- 3218-3226' Limestone; tan and white, finely crystalline, granular, poor to fair pinpoint to intercrystalline porosity, chalky in part, fair to good brown stain and saturation, show of free oil and fair odor in fresh samples.

**Drill Stem Test #1 3203-3226'**

**Times: 45-30-60-45**

**Blow: Strong**

**Recovery: 750' gas in pipe  
35' oil and gas cut mud  
(10% oil, 5% gas, 85% mud)**

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Pressures: ISIP 216 psi  
FSIP 381 psi  
IFP 13-14 psi  
FFP 14-19 psi  
HSH 1497-1479 psi

- 3242-3249' Limestone; white and gray, fossiliferous, spotty black to brown stain.
- 3253-3261' Limestone; white, gray, fossiliferous, black/brown stain, trace of free oil and no odor in fresh samples.
- 3271-3278' Limestone; cream, white, fossiliferous/oolitic, scattered interfossiliferous porosity, light brown to dark brown stain, trace of free oil and good odor in fresh samples.

**Drill Stem Test #2** **3237-3278'**

Times: 30-30-30-45

Blow: Strong, decreasing

Recovery: 60' mud  
180' water

Pressures: ISIP 1010 psi  
FSIP 1011 psi  
IFP 15-75 psi  
FFP 79-129 psi  
HSH 1522-1508 psi

- 3280-3300' Limestone; white and tan, oocastic, fair oocastic porosity, trace brown spotty brown stain, show of free oil and faint odor in fresh samples.
- 3300-3320' Limestone; as above, faint odor.
- 3348-3354' Limestone; white and gray, oolitic, oocastic, fair porosity, trace golden brown and black stain, show of free oil (gassy) and faint odor in fresh samples.
- 3364-3370' Limestone; tan, finely crystalline, fossiliferous, fair to good golden brown stain, weak show of free oil, trace gas bubbles.
- 3383-3388' Limestone; white, cream, sub oocastic, scattered sub oocastic porosity, brown stain, trace free oil.

**Drill Stem Test #3** **3342-3420'**

Times: 30-30-45-45

Blow: Strong

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**Recovery:** 450' gas in pipe  
100' oil and gas cut watery mud  
(3% water, 10% gas, 25% oil, 62% mud)  
60' oil specked muddy water  
(1% oil, 10% gas, 25% water, 64% mud)

**Pressures:** ISIP 785 psi  
FSIP 706 psi  
IFP 22-50 psi  
FFP 57-93 psi  
HSH 1597-1589 psi

3405-3410' Limestone; cream to white, fossiliferous, chalky, poorly developed porosity, no shows.

**CONGLOMERATE SECTION**

3478-3486' Sand; fine to coarse grained, sub rounded, friable, fair to good intergranular porosity, light brown stain, show of free oil and no odor.

3494-3498' Sand; as above, show of free

**Drill Stem Test #4 3436-3506'**

**Times:** 30-45-45-60

**Blow:** Strong, as to surface 5 minutes, gas gauged as follows:

**Initial Flow**  
10 minutes 77,800 cfgpd  
20 minutes 82,800 cfgpd  
30 minutes 85,800 cfgpd  
**Final Flow**  
10 minutes 108,000 cfgpd  
20 minutes 107,000 cfgpd  
30 minutes 101,000 cfgpd  
40 minutes 101,000 cfgpd  
45 minutes 101,000 cfgpd

**Recovery:** 60' mud  
120' oil and gas cut mud  
(10% gas, 10% oil, 75% mud)  
120' oil and gas cut muddy water  
(20% gas, 20% oil, 35% water, 35% mud)  
70' oil and gas cut muddy water  
(20% gas, 15% oil, 30% mud, 35% water)

**Pressures:** ISIP 1010 psi  
FSIP 1003 psi  
IFP 58-108 psi  
FFP 108-174 psi  
HSH 1634-1617 psi

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**ARBUCKLE SECTION**

- 3551-3553' Dolomite; white to tan, finely crystalline, dense, poor visible porosity, fair odor.
- 3553-3564' Dolomite; white and tan, sandy in part, finely crystalline, spotty stain, show free gassy oil, good odor in fresh samples.

**Drill Stem Test #5 3555-3564'**

**Times: 30-45-45-60**

**Blow: Strong**

**Recovery: 1500' gas in pipe  
15' gas cut mud**

**Pressures: ISIP 897 psi  
FSIP 1034 psi  
IFP 7-9 psi  
FFP 5-8 psi  
HSH 1675-1657 psi**

- 3567-3571' Dolomite; tan and brown, fine to medium crystalline, scattered porosity, sandy, trace brown stain, show of free oil and fair odor in fresh samples.
- 3576-3580' Dolomite; as above, sandy, medium to coarse crystalline, fair to good intercrystalline porosity, fair stain, show of free oil and good odor in fresh samples.
- 3580-3600' Dolomite; as above, decreasing stain.
- 3600-3616' Dolomite; as above, highly sandy at base.

**PRE-CAMBRIA SECTION**

- 3616-3620' Quartz; clear, angular, sub angular, scattered biolite and red orange feldspar, no shows.

**Rotary Total Depth 3620 (-1725)  
Log Total Depth 3620 (-1725)**

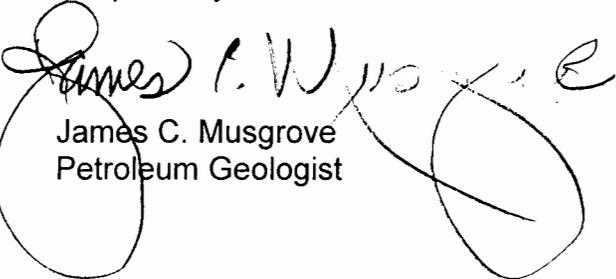
**Recommendations:**

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 1/2" production casing at 3619' (one foot off bottom) and the following zones be tested in the Conner #3:

1. Arbuckle 3567-3571 perforate
2. Conglomerate Sand 3494-3498 perforate
3. Lansing 3383-3388 perforate

- |                     |           |           |
|---------------------|-----------|-----------|
| 4. Lansing          | 3365-3369 | perforate |
| 5. Lansing          | 3218-3224 | perforate |
| 6. Herington/Krider | 1754-1760 | perforate |
|                     | 1732-1742 | perforate |

Respectfully submitted;



James C. Musgrove  
Petroleum Geologist

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