

15-~~009~~-24794

17-19s-14w

JAMES C. MUSGROVE

Petroleum Geologist
P.O. Box 1162
Great Bend, KS 67530

Office (620) 792-7716

Res. Claflin (620) 587-3444

Globe Operating Inc.
Gagleman #1
1950' FSL & 330' FEL, Section 17-19s-14w
Barton County, Kansas
Page No. 1

RECEIVED
AUG 18 2004
KCC WICHITA

5 1/2" Production Casing Set

Contractor: Discovery Drilling Company (Rig #2)

Commenced: July 11, 2004

Completed: July 18, 2004

Elevation: 1904' K.B.; 1902' D.F.; 1896' G. L.

Casing Program: Surface; 8 5/8" @ 835'
Production; 5 1/2" @ 3599'

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) tests ran by Superior Testers.

Electric Log: By Eli; Dual Induction, Compensated Density Neutron Log and Micro Log.

Gas Detector: By None.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	820	+1084
Herington	1743	+161
Winfield	1793	+111
Towanda	1861	+43
Neva	2248	-344
Red Eagle	2311	-407
Tarkio	2605	-701
Topeka	2806	-902
Heebner	3136	-1232
Toronto	3154	-1250
Douglas	3169	-1265
Brown Lime	3224	-1320
Lansing	3239	-1335
Base Kansas City	3460	-1556
Conglomerate	3473	-1569
Arbuckle	3517	-1612
Rotary Total Depth	3600	-1696
Log Total Depth	3598	-1694

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

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

HERINGTON/KRIDER SECTION

- 1743-1758' Dolomite; tan, finely crystalline, sucrosic, scattered intercrystalline to pinpoint type porosity, trace gas bubbles.
- 1761-1776' Dolomite; as above, slightly granular.

WINFIELD THROUGH TOPEKA SECTION

- 1793-3135' There were several zones of well developed porosity encountered in the drilling of the Winfield through the Topeka Section but no show of oil/and or gas was noted. (See attached Sample Log/Geological Report).

TORONTO SECTION

- 3154-3164' Limestone; gray, white, fossiliferous, chalky in part, black, brown edge staining, no show of free oil or odor in fresh samples.

LANSING SECTION

- 3243-3246' Limestone; tan and gray, finely crystalline, slightly sucrosic, fossiliferous, good golden brown stain and saturation, show of free oil and good odor in fresh samples.
- 3266-3271' Limestone; gray and white, oolitic, fossiliferous, chalky, trace brown and golden brown stain, show of free oil and faint odor in fresh samples.

Drill Stem Test #1 3230-3280'

Misrun – hit bridge 690 ft off bottom

Drill Stem Test #2 3230-3280'

Times: 30-30-45-60

Blow: Weak to strong

Recovery: 500' gas in pipe
55' muddy oil and heavy oil cut mud

Pressures: ISIP 265 psi
FSIP 425 psi
IFP 61-65 psi
FFP 58-70 psi
HSH 1566-1562 psi

- 3283-3288' Limestone; gray, tan, fossiliferous, slightly cherty, trace brown stain, no show of free oil or door in fresh samples.
- 3296-3302' Limestone; gray, white, oolitic, fossiliferous, few chalky, sparry calcite cement, fair to good brown stain and saturation, show of free oil and fair odor in fresh samples.

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Drill Stem Test #3 **3279-3304'**

Times: 30-30-30-30

Blow: Weak (died in 8 minutes)

Recovery: 5' mud

Pressures: ISIP 60 psi
FSIP 50 psi
IFP 40-41 psi
FFP 41-44 psi
HSH 1553-1527 psi

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- 3317-3330' Limestone; white and gray, oomoldic, good oomoldic porosity, (barren).
- 3330-3342' Limestone; as above.
- 3364-3374' Limestone; white to gray, sub oomoldic, fossiliferous, scattered vuggy type porosity, trace stain, no show of free oil or odor in fresh samples.
- 3380-3384' Limestone; tan and gray, medium oolitic, chalky, black and gray, stain, trace of free oil and fair odor in fresh samples.
- 3397-3406' Limestone; gray, buff, fossiliferous, oomoldic, scattered oomoldic porosity, poor stain, few trace free oil and no odor in fresh samples.
- 3420-3430' Limestone; tan, fossiliferous, oolitic, dense.
- 3437-3444' Limestone; tan, finely fossiliferous, slightly chalky (dense).

CONGLOMERATE SECTION

- 3473-3484' Varied colored boney, opaque chert in matrix of red, blood red soft shale.
- 3496-3498' Sand; gray, white, very fine grained, calcareous, brown to black stain, no show of free oil or odor in fresh samples.
- 3498-3515' Chert; shale, trace sand as above.

ARBUCKLE SECTION

- 3516-3520' Dolomite; gray and white, cream, medium crystalline, scattered intercrystalline porosity, brown to golden brown stain, trace free oil and faint odor in fresh samples.
- 3520-3528' Dolomite; gray and white, medium to coarse crystalline, good intercrystalline to vuggy type porosity, good brown stain and saturation, good show of free oil and good odor in fresh samples.

Drill Stem Test #4 3519-3528'

Times: 30-30-30-30

Blow: Weak to strong

Recovery: 650' gas in pipe
 150' clean gassy oil
 30' slightly muddy gassy oil
 60' muddy gassy oil

Pressures: ISIP 990 psi
 FSIP 883 psi
 IFP 39-74 psi
 FFP 75-115 psi
 HSH 1697-1701 psi

3528-3539' Dolomite; as above, sandy in part, few large quartz grains, fair to good brown stain to dark brown stain, show of free oil and good odor in fresh samples.

Drill Stem Test #5 3529-3539'

Times: 30-30-30-45

Blow: Weak to strong

Recovery: 900' gas in pipe
 470' clean gassy oil
 30' muddy gassy oil

Pressures: ISIP 893 psi
 FSIP 865 psi
 IFP 49-134 psi
 FFP 143-203 psi
 HSH 1761-1701 psi

3540-3550' Dolomite; as above, medium to coarse crystalline, good intercrystalline to vuggy type porosity, good brown stain, show of free oil and good odor in fresh samples.

3560-3570' Dolomite; white, gray, cream, medium, coarse crystalline, good intercrystalline to vuggy type porosity, good brown stain and saturation, fair show of free oil and good odor in fresh samples.

3574-3581' Dolomite; as above, decreasing stain and show of free oil.

3582-3590' Dolomite; white, gray, cream, cherty, dense.

3590-3600' Dolomite; as above, sandy in part.
 Dolomite; as above, trace white and gray chert, no shows.

Rotary Total Depth 3600 (-1696)
Log Total Depth 3598 (-1694)

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 3599' (one foot off bottom, driller measurements), and all the following zones be tested in the Gagleman #1:

1. Arbuckle 3424-3426'
2. Arbuckle 3430-3432'
3. Lansing 3243-3248'
4. Herington/Krider 1746-1756 and 1761-1774

Respectfully submitted;

James C. Musgrove

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Petroleum Geologist

