#### JAMES C. MUSGROVE

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C & B Operating Inc. Helmers 'B' #2-5 130' South & 270' West, NE-NW-SE; Section 2-22s-12w Stafford County, Kansas Page No. 1

**Dry and Abandoned** 

Contractor:

Southwind Drilling Company (Rig #2)

KCC WICHITA

Commenced:

August 4, 2005

Completed:

August 9, 2005

**Elevation:** 

1833' K.B.; 1831' D.F.; 1824' G.L.

Casing Program: Surface; 8 5/8" @ 265'

Production; none.

Samples:

Samples saved and examined 2200' to the Rotary Total Depth.

**Drilling Time:** 

One (1) foot drilling time recorded and kept 2200' to the Rotary

Total Depth.

Measurements:

All depths measured from the Kelly Bushing.

Formation Testing: There were two (2) Drill Stem Tests ran by Trilobite Testing Co.

Electric Log:

By Log Tech; Radiation Guard Log and Sonic.

**Gas Detector:** 

By MBC Well Logging.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	604	+1229
Heebner	3101	-1268
Toronto	3119	-1286
Douglas	3133	-1300
Brown Lime	3230	-1397
Lansing	3253	-1420
Base Kansas City	3490	-1657
Conglomerate	3501	-1668
Viola	3521	-1688
Simpson Shale	3565	-1732
Simpson Sand	3588	-1755
Arbuckle	3615	-1782
Rotary Total Depth	3633	-1800
Log Total Depth	3630	-1797
(All tops and zones are corrected to Electric Log measurements).		

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

# **TOPEKA SECTION**

2806-3105'

There were several zones of well developed porosity encountered in the drilling of the Topeka Section but no shows of oil and/or gas was noted. (See attached Drilling Time and

Sample Log).

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## **TORONTO SECTION**

3119-3130'

Limestone; cream, white, finely crystalline, slightly fossiliferous, chalky, scattered porosity, (barren), plus trace white chalk.

#### **LANSING SECTION**

3253-3260'	Limestone; tan, brown, fine to medium crystalline, slightly fossiliferous, chalky, poor visible porosity, trace brown to golden brown stain, no show of free oil and questionable odor in fresh samples.
3266-3270'	Limestone; tan, finely crystalline, fossiliferous, poorly developed porosity, dark brown to brown stain, no show of free oil and faint odor in fresh samples.
3276-3282'	Limestone; tan, highly fossiliferous, poor porosity, trace brown and golden brown stain, no show of free oil or odor.
3296-3302'	Limestone; tan, buff, oolitic/fossiliferous, poor visible porosity, no shows, trace cream, medium crystalline, limestone, trace spotty stain, trace of free oil and faint odor in fresh samples.
3314-3319'	Limestone; cream, gray, fossiliferous, fair vuggy porosity, brown to golden brown stain, trace of free oil and faint odor in fresh samples.
3339-3350'	Limestone; gray, oolitic/fossiliferous, scattered porosity, brown, black and gray stain, trace of free oil and faint odor in fresh samples.
3360-3380'	Limestone; gray, white, slightly fossiliferous, chalky, poor porosity.
3386-3392'	Limestone; cream, white, fossiliferous/sub oomoldic, poorly developed porosity, trace stain, no show of free oil or odor in fresh samples.
3401-3404'	Limestone; as above, plus white, oolitic, chalky, no shows.
3412-3422'	Limestone; as above, poorly developed porosity, chalky, trace poor stain, no show of free oil or odor in fresh samples.
3444-3448'	Limestone; white, cream and tan, oolitic, chalky, poor visible porosity (barren).
3462-3472'	Limestone; white, cream and tan, oolitic, chalky, poor visible porosity (barren).

#### **CONGLOMERATE SECTION**

3501-3521' Chert; yellow, red, brick red, boney, trace sand, white, calcareous, poorly developed, no shows.

# **VIOLA SECTION**

3521-3540' Chert; white, gray, few weathered, semi-tripolitic, brown to

golden brown stain, trace of free oil and faint odor in fresh

samples.

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**Drill Stem Test #1** 

3432-3542' (log 3429-3540')

Times:

30-30-45-60

Blow:

Weak to fair

Recovery:

100' gas in pipe

20' mud

Pressures: ISIP 67

FSIP 72 IFP 20-18

psi psi

psi

FFP 19-21 psi

HSH 1737-1703

psi

3540-3565'

Chert; as above, few with chalky luster, brown to golden brown

stain, show of free oil.

## SIMPSON SECTION

3588-3592'

Sand; white, gray, highly dolomitic, poor porosity, no shows.

### **ARBUCKLE SECTION**

3615-3620'

Dolomite; tan, pink, finely crystalline, slightly cherty, poor

porosity, brown to black stain, trace of free oil and faint odor in

fresh samples.

3620-3627

Dolomite; as above, fair odor.

3627-3630

Dolomite; tan, gray, medium crystalline, fair intercrystalline to vuggy type porosity, brown to golden brown and black stain,

show of free oil and fair to good odor in fresh samples.

# **Drill Stem Test #2**

3621-3633' (log 3618-3640')

Times:

30-30-30-30

Blow:

Weak

Recovery:

20' mud

Pressures: ISIP 97

psi

FSIP 43

IFP 16-62 psi

FFP 20-31

HSH 1813-1703

psi psi psi

C. MUSG

**Rotary Total Depth** 

3633 (-1800)

Log Total Depth

3630 (-1797)

#### **Recommendations:**

On the basis of the low structural position and there being no other zones worthy of any further testing, it was recommended by all parties involved that the Helmers #2-5 be plugged and abandoned at the Rotary Total Depth 3630' (log measurements).

Respectfully submitted;

James 🖎 Musgrove Petroleum) Geologist