

15-185-23373

NW SE NE 1895 FNL 1025 FEL

3-22-08

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TNT Engineering Inc.  
Siefkes 'A' #1  
NW-SE-NE; Section 3-22s-12w  
Stafford County, Kansas  
Page No. 1

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

**Contractor:** Landmark Drilling Company (Rig #1)

**Commenced:** September 15, 2006

**Completed:** September 28, 2006

**Elevation:** 1846' K.B.; 1844' D.F.; 1841' G.L.

**Casing Program:** Surface; 8 5/8" @ 652'  
Production; 5 1/2" @ 3699'

**Samples:** Samples saved and examined 2800' to the Rotary Total Depth.

**Drilling Time:** One (1) foot drilling time recorded and kept 2800' to the Rotary Total Depth.

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

**Formation Testing:** There was one (1) Drill Stem Test ran by Trilobite Testing Company.

**Electric Log:** By Eli Wireline; Dual Induction, Compensated Neutron Density.

**Gas Detector:** None.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	620	+1226
Topeka	2817	-971
Heebner	3108	-1262
Toronto	3126	-1280
Douglas	3139	-1293
Brown Lime	3241	-1395
Lansing	3259	-1413
Base Kansas City	3478	-1632
Viola	3496	-1650
Simpson Shale	3540	-1694
Lower Simpson Sand	3593	-1747
Arbuckle	3597	-1751
Rotary Total Depth	3700	-1854
Log Total Depth	3701	-1855

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

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

**TOPEKA SECTION**

2944-3011' Limestone; tan, white, gray, finely crystalline, fossiliferous, slightly granular, abundant, white, chalk.

3011-3030' Limestone; tan, white, fossiliferous, granular in part, plus white and gray chert, no stain, no fluorescence, no free oil and

questionable odor in fresh samples.

- 3030-3044' Limestone; tan, fossiliferous, sub oomoldic, chalky, trace white chert.
- 3050-3060' Limestone; tan, granular in part, chalky, no shows.
- 3080-3100' Limestone; gray, tan, slightly granular, chalky in part, trace brown and tan cherty dense limestone.

#### TORONTO SECTION

- 3126-3136' Limestone; gray, white, fossiliferous, chalky, trace questionable brown stain, no show of free oil, no fluorescence, no odor, trace gas bubbles in fresh samples.

#### LANSING SECTION

- 3259-3270' Limestone; white, gray, fossiliferous, chalky, trace dull gray and black stain, no show of free oil or odor in fresh samples.
- 3282-3290' Limestone; gray, white, slightly fossiliferous, cherty in part, poor visible porosity, trace spotty gray stain, no show of free oil or odor in fresh samples.
- 3301-3310' Poor samples.  
**Remarks:** Mud pump repair at 3311, down two (2) days.
- 3321-3325' Poor samples.
- 3334-3341' Limestone; tan, gray, fossiliferous, slightly chalky, poor visible porosity, no shows.
- 3350-3356' Limestone; gray, highly oolitic, plus trace white chert, no shows.
- 3370-3386' Limestone; gray, tan, oolitic in part, chalky increasingly cherty, dense, no shows.
- 3406-3414' Limestone; gray, medium crystalline, oolitic, fair inter-oolitic to vuggy type porosity, trace brown and dark brown stain, trace of free oil and no odor in fresh samples.
- 3424-3436' Limestone; white, tan, fine to medium oolitic, black and brown stain, no show of free oil and faint odor in fresh samples, poor visible porosity.
- 3446-3450' Limestone; cream, tan, finely crystalline, few fossiliferous, chalky, golden brown spotty stain, no show of free oil and no odor in fresh samples.
- 3466-3472' Limestone; as above.

#### VIOLA SECTION

- 3496-3510' Chert; cream, white, yellow boney, trace black stain, no show of free oil or odor in fresh samples.
- 3510-3540' Chert; as above, few tripolitic, weathered in part, trace black stain, trace of free oil and questionable odor in fresh samples.

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**SIMPSON SECTION**

3594-3597' Sand; white, clear, medium grained, loose unconsolidated, trace brown stain, trace of free oil, good odor.

**ARBUCKLE SECTION**

3597-3602' Dolomite; cream, sucrosic, finely crystalline, good intercrystalline porosity, golden brown stain, show of free oil and good to strong odor in fresh samples.

**Drill Stem Test #1** 3720-3786' 3593'-3602'

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

**Blow:** Strong; gas to surface in 18 minutes into final flow, TSTM.

**Recovery:** 70' heavy oil and gas cut mud  
 (10% gas, 30% oil, 60% mud)  
 480' slightly mud cut gassy watery oil  
 (25% gas, 60% oil, 10% water, 5% mud)  
 120' very heavy oil and gas cut muddy water  
 (10% gas, 30% oil, 50% water, 10% mud)  
 720' water

**Pressures:** ISIP 963 psi  
 FSIP 964 psi  
 IFP 222-458 psi  
 FFP 459-629 psi  
 HSH 1674-1673 psi

3602-3620' Dolomite; tan, beige, finely crystalline, few sucrosic, brown and golden brown stain, show of free oil and strong odor in fresh samples.

3620-3640' Dolomite; as above, few dense, poor visible porosity.

3640-3660' Dolomite; cream, gray, finely crystalline, few medium crystalline, sucrosic in part, scattered porosity, trace brown stain, show of free oil and fair odor in fresh samples.

3660-3680' Dolomite; tan, cream, finely crystalline, sucrosic in part, fair intercrystalline porosity, brown stain, show of free oil and fair odor in fresh samples.

3680-3700' Dolomite; as above, decreasing stain, trace of free oil, faint odor.

**Rotary Total Depth** 3700 (-1854)  
**Log Total Depth** 3701 (-1855)

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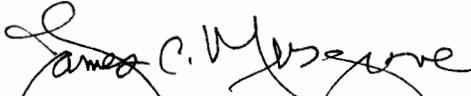
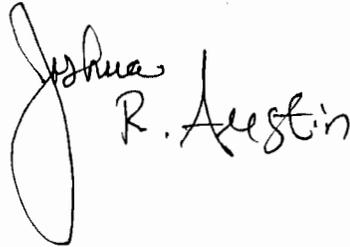
**Recommendations:**

5 1/2" production casing was set and cemented at 3699' (one foot off bottom) and the following zones should be tested in the Siekes 'A' #1:

1. Arbuckle 3603-3604
2. Simpson Sand/Arbuckle 3594-3597

All zones with sample shows and porosity should be perforated before abandonment.

Respectfully submitted;

 s'   
James C. Musgrove and  
Joshua R Austin  
Petroleum Geologists

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