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American Warrior Inc.  
White #5-8  
NW-NE-SE-NW  
(1490' FNL & 2259' FWL)  
Section 8-16s-10w  
Ellsworth County, Kansas  
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**5 1/2" Production/Disposal Casing Set**

**Contractor:** Duke Drilling Co. (Rig #8)  
**Commenced:** November 16, 2013  
**Completed:** November 23, 2013  
**Elevation:** 1856' K.B; 1854' D.F; 1848' G.L.  
**Casing program:** Surface; 8 5/8" @ 374'  
Production; none.  
**Sample:** Samples saved and examined 2600' to the Rotary Total Depth.  
**Drilling time:** One (1) foot drilling time recorded and kept 2600 ft. to the Rotary Total Depth.  
**Measurements:** All depths measured from the Kelly Bushing.  
**Drill Stem Tests:** There was one (1) Drill Stem Test ran by Trilobite Testing Co.  
**Electric Log:** By Pioneer Energy Services; Dual Induction, Dual Compensated Porosity Log, Micro and Sonic.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	667	+1189
Base Anhydrite	693	+1163
Heebner	2886	-1030
Toronto	2905	-1049
Douglas	2914	-1058
Brown Lime	2986	-1130
Lansing	3001	-1145
Base Kansas City	3295	-1439
Simpson Sand	3318	-1462
Arbuckle	3325	-1469
Rotary Total Depth	3600	-1744
Log Total Depth	3607	-1751

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

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

**TOPEKA SECTION**

2846-2860' Limestone; gray, cream, finely crystalline, oomoldic, good oomoldic porosity, no shows.

2870-2880' Limestone; gray, cream, chalky, plus trace gray chert.

**TORONTO SECTION**

2905-2914' Limestone; gray, finely crystalline, chalky, few cherty, poorly developed porosity, trace black/gray stain, no show of free oil and no odor.

**LANSING SECTION**

3001-3010' Limestone; white, finely crystalline, fossiliferous, poor porosity, chalky, no shows.

3036-3043' Limestone; white, finely crystalline, oomoldic, sub oomoldic, chalky, poor porosity, trace brown stain, no free oil and no odor.

3052-3066' Limestone; white, oolitic, few oomoldic, chalky, poorly developed porosity, trace brown stain, no show of free oil and no odor.

3083-3094' Limestone; white/gray, finely crystalline, oolitic/fossiliferous, poor porosity, chalky, no shows.

3098-3114' Limestone; white, highly oomoldic, good oomoldic porosity, no shows.

3146-3154' Limestone; gray, slightly cherty, poor porosity, no shows.

3162-3174' Limestone; gray, oolitic, slightly cherty, no shows.

3176-3194' Limestone; cream, oomoldic, fair oomoldic porosity, black stain, no free oil and no odor in fresh samples.

3224-3240' Limestone; gray, finely crystalline, fossiliferous, few oolitic, chalky, no shows.

3262-3270' Limestone; white, cream, slightly fossiliferous, cherty in part, brown stain, no free oil and faint odor in fresh samples.

**SIMPSON SAND SECTION**

3317-3324' Sand; clear, very fine grained, sub rounded, friable, fair stain, show of free oil and good odor in fresh samples.

**ARBUCKLE SECTION**

3325-3333' Dolomite; tan, white, fine and medium crystalline, fair porosity, brown stain, show of free oil and faint odor in fresh samples.

Drill Stem Test #1 3286-3326'

Times: 30-30-45-60

Blow: Weak

Recovery: 15' gassy mud cut oil  
(10% gas, 60% oil, 30% mud)

Pressures: ISIP 802 psi  
FSIP 851 psi  
IFP 24-24 psi  
FFP 21-27 psi  
HSH 1625-1595 psi

- 3333-3347' Dolomite; white, tan, few sucrosic, medium crystalline, brown stain, show of free oil and good odor in fresh samples.
- 3347-3370' Dolomite; as above, oomoldic, good oomoldic porosity, brown stain, show of free oil and good odor in fresh samples.
- 3370-3400' Dolomite; white, brown, finely crystalline, few medium crystalline porosity, trace black stain, no free oil and good odor in fresh samples.
- 3400-3426' Dolomite; white, tan, finely crystalline, sucrosic, few cherty, trace stain, show of free oil (dead) and no odor in fresh samples.
- 3426-3500' Dolomite; white, finely crystalline, slightly cherty, dense in part, no shows.
- 3500-3520' Dolomite; white, cream, finely crystalline, slightly cherty, poor visible porosity, no shows.
- 3520-3550' Dolomite; white/gray, finely crystalline, few medium crystalline, sandy in part, no shows
- 3550-3580' Dolomite; white/gray, fair, finely crystalline, few medium crystalline, fair intercrystalline, few with fair to good vuggy porosity, no shows.
- 3580-3607' Dolomite; as above, few sandy.

Rotary Total Depth 3600  
Log Total Depth 3607

**Recommendations:**

5 1/2" production/disposal casing was set and cemented on the White #5-8.

Respectfully submitted;

*James C. Musgrove & Clint Musgrove*  
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