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American Warrior Inc.  
Eulert #21-35  
SE-SW-NW-SE (1330' FSL & 2240' FEL)  
Section 35-11s-15w  
Russell County, Kansas

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

**Contractor:** Duke Drilling Co. (rig #8)

**Commenced:** July 18, 2014

**Completed:** July 25, 2014

**Elevation:** 1849' K.B., 1847' D.F., 1841' G.L.

**Casing program:** Surface; 8 5/8" @ 902'  
Production, 5 1/2" @ 3409'

**Sample:** Samples saved and examined 2500' to the Rotary Total Depth.

**Drilling time:** One (1) foot drilling time recorded and kept 2500 ft. to the Rotary Total Depth.

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

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

**Electric Log:** By Pioneer Energy Services; Dual Induction, Dual Compensated Porosity Log and Micro-Resistivity Log.

| <u>Formation</u>   | <u>Log Depth</u> | <u>Sub-Sea Datum</u> |
|--------------------|------------------|----------------------|
| Anhydrite          | 902              | +947                 |
| Base Anhydrite     | 938              | +911                 |
| Topeka             | 2688             | -839                 |
| Heebner            | 2939             | -1090                |
| Toronto            | 2959             | -1110                |
| Lansing            | 2993             | -1144                |
| Base Kansas City   | 3269             | -1420                |
| Erosional Arbuckle | 3303             | -1454                |
|                    | 3300             | -1460                |

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

**TOPEKA SECITON**

- 2722-2730' Limestone, gray, white, finely crystalline, fossiliferous, chalky, trace poor stain, no free oil and no odor in fresh samples.
- 2860-2870' Limestone, tan, brown, finely crystalline, few granular, fossiliferous, chalky, poor brown stain, no free oil and no odor in fresh samples.
- 2900-2930' Limestone, tan, gray, medium crystalline; fossiliferous in part, few sub-oomoldic, fair porosity, dark brown and brown stain, show of free oil and faint odor in fresh samples.

**TORONTO SECTION**

- 2960-2970' Limestone, gray, white, finely crystalline, few oolitic/fossiliferous, chalky, poor visible porosity, brown stain, trace of free oil and questionable odor in fresh samples.

**LANSING SECTION**

- 2993-3000' Limestone, white, gray, tan, fossiliferous, chalky, poor visible porosity, brown stain, trace of free oil and questionable odor in fresh samples.
- 3018-3026' Limestone, tan, oolitic, sub-oomoldic; fair oomoldic porosity, brown and black stain, show of free oil and faint odor in fresh samples.
- 3032-3040' Limestone, tan, oolitic; few sub-oomoldic, fair porosity, dark brown stain; show of free oil and faint odor.
- 3046-3054' Limestone, as above, decreasing stain and show.
- 3060-3070' Limestone, tan, fossiliferous, chalky, poor visible porosity, brown spotty stain, no show of free oil and questionable odor.
- 3080-3085' Limestone, tan, oolitic, oomoldic, fair porosity, brown stain, trace of free oil and questionable odor.

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- 3210-3220' Limestone, shite/cream, finely crystalline, fossiliferous, few medium crystalline, questionable edge staining, no free oil and no odor.
- 3260-3268' Limestone, as above, no shows.

**ARBUCKLE SECTION**

- 3303-3309' Dolomite, tan, cream, finely crystalline, weathered; cherty; poor visible porosity, plus tan dolomitic chert, fractured; brown stain, trace free oil and odor (poor samples). (Erosional Arbuckle)

**Drill Stem Test #1** **3241-3309**

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

**Blow:** Weak to good

**Recovery:** 100' mud; with oil specks

**Pressures:** ISIP 279 psi  
FSIP 996 psi  
IFP 46-62 psi  
FFP 59-75 psi  
HSH 1716-1548 psi

- 3309-3317' Dolomite, cream, white, finely crystalline, sucrosic, few medium and course crystalline, fair inter-crystalline to vuggy type porosity; brown stain and saturation, show of free oil and fair odor in fresh samples. (Solid Arbuckle).

**Drill Stem Test #2** **3242-3317**

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

**Blow:** Strong

**Recovery:** 282' oil speckled mud  
315' muddy water

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|            |   |
|------------|---|
| 3350-3380' | Dolomite, as above, fair to good porosity, trace stain, weak show of free oil and questionable odor in fresh samples. |
| 3380-3390' | Dolomite, white, cream, fine and medium crystalline, good inter-crystalline/vuggy type porosity, no show.             |
| 3390-3409' | Dolomite, as above, sandy in part, no shows.  |

**Rotary Total Depth: 3410**  
**Log Total Depth: 3409**

**Recommendations:**

5 ½ production casing was set and cemented on the American Warrior Inc., Eulert #21-35.

Respectfully Submitted,

James C. Musgrove and Adam Folk  
Petroleum Geologist