

# **Geological Report**

American Warrior, Inc.

**DBD #3-28**

2265' FSL & 1837' FWL

Sec. 28, T18s, R25w

Ness County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
DBD #3-28  
2265' FSL & 1837' FWL  
Sec. 28, T18s, R25w  
Ness County, Kansas  
API # 15-135-25690-00-00

Drilling Contractor: Duke Drilling Co. Rig #5

Geologist: Kevin Timson

Spud Date: October 25, 2013

Completion Date: November 2, 2013

Elevation 2427' G.L.  
2438' K.B.

Directions: From Laird Elevator, Go West on Hwy 96 2 miles to H Rd. Go North ½ mile and East into location.

Casing: 226' 8 5/8" #23 Surface Casing  
4500' 5 ½" #15.5 Production Casing  
Port Collar @ 1696'

Samples: 3700' to RTD 10' Wet & Dry

Drilling Time: 3700' to RTD

Electric Logs: Pioneer Energy Services "J. Long"  
Stacked-Micro

Drillstem Tests: Two, Trilobite Testing, Inc. "Will MacLean"

Problems: None

## Formation Tops

DBD #3-28

Sec. 28, T18s, R25w

2265' FSL & 1837' FWL

<b>Anhydrite</b>	<b>1710' +728</b>
<b>Base</b>	<b>1749' +689</b>
<b>Heebner</b>	<b>3765' -1327</b>
<b>Lansing</b>	<b>3805' -1367</b>
<b>Stark</b>	<b>4051' -1613</b>
<b>Bkc</b>	<b>4148' -1710</b>
<b>Marmaton</b>	<b>4157' -1719</b>
<b>Pawnee</b>	<b>4241' -1803</b>
<b>Fort Scott</b>	<b>4309' -1871</b>
<b>Cherokee</b>	<b>4336' -1898</b>
<b>Mississippi</b>	<b>4407' -1969</b>
<b>RTD</b>	<b>4500' -2062</b>
<b>LTD</b>	<b>4504' -2066</b>

## Sample Zone Descriptions

### Fort Scott

**(4309', -1871): Covered in DST #1**

Ls – Sub-crystalline with fair vuggy and fair oomoldic/oolycastic porosity. Slight to fair stain. Fair saturation. Show of free oil when broken. Slight odor. 35 Units Hotwire.

### Warsaw

**(4407', -1969): Covered in DST #2**

Dolo grey. Sucrosic. Fair intercrystalline porosity and good vuggy porosity. Good stain. Good saturation in porosity. Fair show of free oil. Strong odor. 25 Units Hotwire.

**Drill Stem Tests**  
Trilobite Testing Inc.  
"Will MacLean"

**DST #1**

**Fort Scott**

Interval (4280' – 4340') Anchor Length 60'

IHP - 2117 #

IFP - 30" – BOB in 10 min

32-145 #

ISI - 45" – WSB in 5 min

1111 #

FFP - 45" – BOB in 11 min

154-225 #

FSIP - 60" – WSB built to 2"

1090 #

FHP - 2064 #

BHT - 122 ° F

Recovery: 109' WGMCO (50% Oil)

62' OWGCM (18% Oil)

62' OGMCW (4% Oil)

124' GMCW

124' GMCW

1069' GIP

**DST #2**

**Warsaw**

Interval (4346' – 4420') Anchor Length 74'

IHP - 2163 #

IFP - 30" – WSB built to 3 ¼"

23-59 #

ISI - 30" – No Return

944 #

FFP - 30" – WSB built to ¾"

65-93 #

FSIP - 30" – No Return

847 #

FHP - 2014 #

BHT - 118 ° F

Recovery: 64' OCM (7% Oil)

62' WOCM (4% Oil)

## Structural Comparison

	American Warrior, Inc. DBD #3-28 Sec. 28, T18s, R25w 2265' FSL & 1837' FWL		Palomino Petroleum, Inc Betty-Marilyn #1 Sec. 28, T18s, R25w 2113' FNL & 2200' FWL		American Warrior, Inc DBD #1-28 Sec 28, T18s, R25w 1010' FSL & 1320' FEL
<b>Formation</b>					
Heebner	3765' -1327	-6	3795' -1321	<b>FL</b>	3761' -1327
Lansing	3805' -1367	-4	3837' -1363	-2	3799' -1365
Stark	4051' -1613	NA	NA	-2	4045' -1611
BKC	4148' -1710	NA	NA	-4	4140' -1706
Marmaton	4157' -1719	-9	4184' -1710	-2	4151' -1717
Pawnee	4241' -1803	NA	NA	-3	4234' -1800
Fort Scott	4309' -1871	-4	4340' -1866	-4	4301' -1867
Cherokee	4336' -1898	-7	4365' -1891	-5	4327' -1893
Miss	4407' -1969	+5	4448' -1974	-11	4392' -1958

## Summary

The location for the DBD #3-28 well was found via 3-D seismic survey. The new well ran structurally as expected. Two drill stem tests were conducted, one of which recovered commercial quantities of oil from the Fort Scott Limestone formation. After all the gathered data had been examined, the decision was made to run 5 ½" production casing to further evaluate the DBD #3-28 well.

## Perforations

**Primary:** Warsaw 4415'-4422'

**Secondary:** Fort Scott 4330'-4334'

**Perf & Squeeze:** Warsaw 4426'-4428'

Respectfully Submitted,

Kevin Timson  
American Warrior, Inc.

