

# **Geological Report**

American Warrior Inc.

**Fritzler #3**

335' FSL & 967' FEL

Sec. 3 T23s R24w

Hodgeman County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
Fritzler #3  
335' FSL & 967' FEL  
Sec. 3 T23s R24w  
Hodgeman County, Kansas  
API # 15-083-21906-0000

Drilling Contractor: Duke Drilling Co. Rig #5

Geologist: Jason T Alm

Spud Date: April 11, 2014

Completion Date: April 18, 2014

Elevation: 2298' Ground Level  
2309' Kelly Bushing

Directions: Jetmore KS, West 2 mi. South 1 mi. West 1/8 mi.  
North into location

Casing: 221' 8 5/8" surface casing  
4639' 5 1/2" production casing

Samples: 10' wet and dry, 4200' to RTD

Drilling Time: 3700' to RTD

Electric Logs: Pioneer Energy Services "Chris Desaire"  
CNL/CDL, DIL, MEL

Drillstem Tests: One, Trilobite Testing, Inc. "Brannan Lonsdale"

Problems: None

Remarks: None

## Formation Tops

<b>Formation</b>	<b>American Warrior, Inc. Fritzler #3 Sec. 3 T23s R24w 335' FSL &amp; 967' FEL</b>
Anhydrite	<b>1494', +815</b>
Base	<b>1527', +782</b>
Heebner	<b>3826', -1517</b>
Lansing	<b>3873', -1564</b>
BKc	<b>4287', -1978</b>
Marmaton	<b>4309', -2000</b>
Pawnee	<b>4403', -2094</b>
Fort Scott	<b>4440', -2131</b>
Cherokee	<b>4465', -2156</b>
Miss Rework	<b>4544', -2235</b>
Mississippian	<b>4550', -2241</b>
LTD	<b>4640', -2331</b>
RTD	<b>4640', -2331</b>

## Sample Zone Descriptions

- Miss Rework (4544', -2235): Covered in DST #1**  
 Dolo – Fine to sub-crystalline with poor vuggy porosity, light to fair oil stain and saturation in porosity, slight show of free oil, “Dirty”, reworked, 34 unit hotwire.
- Mississippian (4550', -2241): Covered in DST #1**  
 Dolo – Fine to medium crystalline with fair to good vuggy and scattered inter-crystalline porosity, light to very good oil stain and saturation, fair show of free oil, good odor, bright yellow fluorescents in dry sample, 70 units hotwire.

**Drill Stem Tests**  
Trilobite Testing Inc.  
"Brannan Lonsdale"

**DST #1**

**Mississippian**

Interval (4485' – 4561') Anchor Length 76'

IHP	– 2299 #	
IFP	– 15" – B.O.B. 1 min.	186-272 #
ISI	– 30" – Built to 3 in.	1131 #
FFP	– 15" – B.O.B. 2 min.	311-372 #
FSI	– 30" – Built to 4 in.	1096 #
FHP	– 2259 #	
BHT	– 122°F	

Recovery:      GTS during ISI, TSTM  
                     100' OCM    30% Oil  
                     200' GMCO   60% Oil  
                     700' MWCO   70% Oil, 15% Water

**Structural Comparison**

	American Warrior, Inc. Fritzler #3 Sec. 3 T23s R24w 335' FSL & 967' FEL	American Energies Corp. Sinclair #1 Sec. 3 T23s R24w C SE SE	Pickrell Drilling Co. Sinclair A #1 Sec. 3 T23s R24w C SW SE
<b>Formation</b>			
Anhydrite	<b>1494', +815</b>	NA	<b>NA</b>
Base	<b>1527', +782</b>	NA	<b>NA</b>
Heebner	<b>3826', -1517</b>	3818', -1517	<b>FL</b> 3851', -1528
Lansing	<b>3873', -1564</b>	3867', -1566	<b>(+2)</b> 3898', -1575
BKc	<b>4287', -1978</b>	4280', -1979	<b>(+1)</b> NA
Marmaton	<b>4309', -2000</b>	4302', -2001	<b>(+1)</b> NA
Pawnee	<b>4403', -2094</b>	4401', -2100	<b>(+6)</b> NA
Fort Scott	<b>4440', -2131</b>	4435', -2134	<b>(+3)</b> NA
Cherokee	<b>4465', -2156</b>	4482', -2159	<b>(+3)</b> NA
Miss Rework	<b>4544', -2235</b>	4544', -2243	<b>(+8)</b> NA
Mississippian	<b>4550', -2241</b>	4548', -2247	<b>(+6)</b> 4578', -2255

## Summary

The location for the Fritzler #3 was found via 3-D seismic survey. The new well ran structurally as expected via the survey. One Drill Stem Test was conducted which recovered commercial amounts of oil from the Mississippian Warsaw Formation. After all gathered data had been examined the decision was made to run 5 ½ inch production casing to further evaluate the Fritzler #3 well.

## Recommended Perforations

### Primary

**Mississippian Warsaw (4550' – 4554') DST #1**

### Secondary

**Miss Reworked (4544' – 4547') DST #1**

**Perf and Squeeze (4564' – 4565')**

I have chosen not to shoot the reworked zone directly above the Miss initially due to it looking very dirty in sample. The Micro-log shows good permeability throughout the interval but I am afraid that it may swell. The fluid recovery of the DST came from the true Mississippian section.

Respectfully Submitted,

Jason T Alm  
Hard Rock Consulting, Inc.