

# **Geological Report**

American Warrior, Inc.  
**Ben Hinnergardt #3**  
1750' FNL & 1275' FEL  
Sec. 12 T20s R21w  
Ness County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
Ben Hinnergardt #3  
1750' FNL & 1275' FEL  
Sec. 12 T20s R21w  
Ness County, Kansas  
API # 15-135-25725-0000

Drilling Contractor: Petromark Drilling, LLC. Rig #1

Geologist: Jason T Alm

Spud Date: January 27, 2014

Completion Date: February 8, 2014

Elevation: 2230' Ground Level  
2236' Kelly Bushing

Directions: Bazine KS, 4 mi East on Hwy 96 to the HH Rd. 8 mi. South to 50 Rd. East 2 mi. to County Line Rd. ½ mi. South, West into location.

Casing: 225' 8 5/8" surface casing

Samples: 10' wet and dry, 4000' to RTD

Drilling Time: 3700' to RTD

Electric Logs: None

Drillstem Tests: Five, Trilobite Testing, Inc. "Brett Dickinson"

Problems: DST #3,4,5 were all mis-runs due to tool issues.

Remarks: None

## Formation Tops

	<b>American Warrior, Inc.</b> <b>Ben Hinnergardt #3</b> <b>Sec. 12 T20s R21w</b> <b>1750' FNL &amp; 1275' FEL</b>
<b>Formation</b>	
Anhydrite	<b>1436', +800</b>
Base	<b>1462', +774</b>
Heebner	<b>3748', -1512</b>
Lansing	<b>3796', -1560</b>
BKc	<b>4133', -1897</b>
Pawnee	<b>4260', -2024</b>
Fort Scott	<b>4285', -2049</b>
Cherokee	<b>4304', -2068</b>
Mississippian	<b>4385', -2149</b>
RTD	<b>4402', -2166</b>

## Sample Zone Descriptions

**Mississippian Osage (4385', -2149):**      **Covered in DST #1**

Δ – Dolo – Fine sucrosic crystalline with poor scattered pinpoint vuggy porosity, very heavy mostly fresh, angular chert with poor to fair scattered vuggy porosity, light spotted oil stain in porosity, very slight show of free oil, very light odor, dull yellow fluorescents.



## Structural Comparison

<b>Formation</b>	<b>American Warrior, Inc. Ben Hinnergardt #3 Sec. 12 T20s R21w 1750' FNL &amp; 1275' FEL</b>	<b>National Oil Co. Ben Hinnergardt #1 Sec. 12 T20s R21w C SE NE</b>	<b>National Oil Co. Ben Hinnergardt #1-A Sec. 12 T20s R21w 810' FNL &amp; 1830' FEL</b>
Anhydrite	<b>1436', +800</b>	NA	1450', +796 <b>(+4)</b>
Base	<b>1462', +774</b>	NA	NA <b>NA</b>
Heebner	<b>3748', -1512</b>	3748', -1520	3764', -1518 <b>(+6)</b>
Lansing	<b>3796', -1560</b>	3794', -1566	3815', -1569 <b>(+9)</b>
BKc	<b>4133', -1897</b>	NA	4150', -1904 <b>(+7)</b>
Pawnee	<b>4260', -2024</b>	NA	NA <b>NA</b>
Fort Scott	<b>4285', -2049</b>	4285', -2057	4305', -2059 <b>(+10)</b>
Cherokee	<b>4304', -2068</b>	NA	NA <b>NA</b>
Mississippian	<b>4385', -2149</b>	4362', -2134	4378', -2132 <b>(-17)</b>

## Summary

The location for the Ben Hinnergardt #3 was found via 3-D seismic survey. The new well ran structurally as expected via the survey on all datums except for the Mississippian. Five Drill Stem Tests were conducted all of which were negative or invalid. After all gathered data had been examined the decision was made to plug and abandon the Ben Hinnergardt #3 well.

Respectfully Submitted,

Jason T Alm  
Hard Rock Consulting, Inc.