

# **Geological Report**

American Warrior, Inc.

**Carl-Betty #2-19**

1475' FSL & 2000' FEL

Sec. 19 T17s R21w

Ness County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
Carl-Betty #2-19  
1475' FSL & 2000' FEL  
Sec. 19 T17s R21w  
Ness County, Kansas  
API # 15-135-25716-0000

Drilling Contractor: Discovery Drilling Co. Inc. Rig #3

Geologist: Jason T Alm

Spud Date: January 11, 2014

Completion Date: January 16, 2014

Elevation: 2226' Ground Level  
2234' Kelly Bushing

Directions: Bazine KS, East ½ mi. to EE Rd. North 7 mi. to 200 Rd. West and North into location.

Casing: 223' 8 5/8" surface casing

Samples: 10' wet and dry, 3950' to RTD

Drilling Time: 3600' to RTD

Electric Logs: None

Drillstem Tests: None

Problems: None

Remarks: No Drill Stem Tests were run due to lack of oil shows.

## Formation Tops

<b>Formation</b>	<b>American Warrior, Inc. Carl-Betty #2-19 Sec. 19 T17s R21w 1475' FSL &amp; 2000' FEL</b>
Anhydrite	<b>1533', +701</b>
Base	<b>1566', +668</b>
Heebner	<b>3696', -1462</b>
Lansing	<b>3740', -1506</b>
BKc	<b>4022', -1788</b>
Pawnee	<b>4126', -1892</b>
Fort Scott	<b>4204', -1970</b>
Cherokee	<b>4220', -1986</b>
Mississippian	<b>4314', -2080</b>
Osage	<b>4321', -2087</b>
RTD	<b>4329', -2095</b>

## Sample Zone Descriptions

**Mississippian Osage (4321', -2087):            Not Tested**

Dolo – Δ – Fine sucrosic crystalline with scattered fair inter-crystalline and vuggy porosity, very heavy slightly triptolic chert, weathered with fair to good vuggy porosity, scattered tarry oil stain, no show of free oil, mostly barren, no odor, no fluorescents.

## Structural Comparison

	American Warrior, Inc. Carl-Betty #2-19 Sec. 19 T17s R21w 1475' FSL & 2000' FEL	D N B Drilling Stieben #1 Sec. 19 T17s R21w C SW SE		American Warrior, Inc. Elmer's #1-19 Sec. 19 T17s R21w 550' FNL & 1920' FEL	
<b>Formation</b>					
Anhydrite	<b>1533', +701</b>	1526', +699	<b>(+2)</b>	1572', +701	<b>FL</b>
Base	<b>1566', +668</b>	NA	<b>NA</b>	1607', +666	<b>(+2)</b>
Heebner	<b>3696', -1462</b>	3691', -1466	<b>(+4)</b>	3735', -1462	<b>FL</b>
Lansing	<b>3740', -1506</b>	3739', -1514	<b>(+8)</b>	3779', -1506	<b>FL</b>
BKc	<b>4022', -1788</b>	NA	<b>NA</b>	4051', -1778	<b>(-10)</b>
Pawnee	<b>4126', -1892</b>	NA	<b>NA</b>	4155', -1882	<b>(-10)</b>
Fort Scott	<b>4204', -1970</b>	4199', -1974	<b>(+4)</b>	4233', -1960	<b>(-10)</b>
Cherokee	<b>4220', -1986</b>	4217', -1992	<b>(+6)</b>	4247', -1974	<b>(-14)</b>
Mississippian	<b>4314', -2080</b>	4308', -2083	<b>(+3)</b>	4322', -2049	<b>(-31)</b>
Osage	<b>4321', -2087</b>	4315', -2090	<b>(+3)</b>	4338', -2065	<b>(-22)</b>

## Summary

The location for the Carl-Betty #2-19 was found via 3-D seismic survey. The new well ran structurally as expected on all datums except for the Mississippian. No Drill Stem Tests were conducted due to lack of oil shows throughout the well. After all gathered data had been examined the decision was made to plug and abandon the Carl-Betty #2-19 well.

Respectfully Submitted,

Jason T Alm  
Hard Rock Consulting, Inc.