

# **Geological Report**

American Warrior, Inc.  
**Baumgarten Unit #1-24**  
2550' FSL & 335' FEL  
Sec. 24 T18s R22w  
Ness County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
Baumgarten Unit #1-24  
2550' FSL & 335' FEL  
Sec. 24 T18s R22w  
Ness County, Kansas  
API # 15-135-25676-0000

Drilling Contractor: Petromark Drilling, LLc. Rig #1

Geologist: Jason T Alm

Spud Date: November 22, 2013

Completion Date: December 1, 2013

Elevation: 2149' Ground Level  
2155' Kelly Bushing

Directions: Bazine KS, at the intersection of Hwy 96 and  
Austin St. North 1 ½ mi. West into location.

Casing: 227' 8 5/8" surface casing  
4245' 5 1/2" production casing

Samples: 10' wet and dry, 3900' to RTD

Drilling Time: 3500' to RTD

Electric Logs: None

Drillstem Tests: One, Trilobite Testing, Inc. "Cornelio Landa III"

Problems: None

Remarks: None

## Formation Tops

	<b>American Warrior, Inc.</b> <b>Baumgarten Unit #1-24</b> Sec. 24 T18s R22w 2550' FSL & 335' FEL
<b>Formation</b>	
Anhydrite	<b>1419', +736</b>
Base	<b>1452', +703</b>
Heebner	<b>3618', -1463</b>
Lansing	<b>3662', -1507</b>
BKc	<b>3976', -1821</b>
Pawnee	<b>4058', -1903</b>
Fort Scott	<b>4134', -1979</b>
Cherokee	<b>4155', -2000</b>
Mississippian	<b>4228', -2073</b>
RTD	<b>4246', -2091</b>

## Sample Zone Descriptions

**Mississippian Osage (4228', -2073):**      **Covered in DST #1**  
 Dolo – Δ – Fine sucrosic crystalline with poor inter-crystalline and vuggy porosity, heavy triptolic chert, weathered with fair to good vuggy porosity, light to good oil stain and saturation, fair show of free oil, good odor, good yellow fluorescents, 30-40 units hotwire.

## Drill Stem Tests

Trilobite Testing, Inc.  
 "Cornelio Landa III"

### DST #1

#### Mississippian Osage

Interval (4232' – 4242') Anchor Length 10'

IHP	– 2194 #	
IFP	– 45" – B.O.B. 27 min.	32-86 #
ISI	– 45" – W.S.B.	960 #
FFP	– 45" – B.O.B. 37 min.	90-113 #
FSI	– 45" – W.S.B.	829 #
FHP	– 2141 #	
BHT	– 115°F	

Recovery:	190' GIP	
	212' GCO	Gravity 43° API
	63' GMCO	60% Oil

## Structural Comparison

	American Warrior, Inc. Baumgarten Unit #1-24 Sec. 24 T18s R22w 2550' FSL & 335' FEL	Galloway Drilling Co. Roth #1 Sec. 24 T18s R22w 1980' FSL & 660' FEL		Mack Oil Co. Roth #1 Sec. 19 T18s R21w 2310' FNL & 500' FWL	
<b>Formation</b>					
Anhydrite	<b>1419', +736</b>	1417', +740	<b>(-4)</b>	1416', +734	<b>(+2)</b>
Base	<b>1452', +703</b>	NA	<b>NA</b>	NA	<b>NA</b>
Heebner	<b>3618', -1463</b>	3620', -1463	<b>FL</b>	NA	<b>NA</b>
Lansing	<b>3662', -1507</b>	3666', -1509	<b>(+2)</b>	3664', -1505	<b>(-2)</b>
BKc	<b>3976', -1821</b>	NA	<b>NA</b>	NA	<b>NA</b>
Pawnee	<b>4058', -1903</b>	NA	<b>NA</b>	4068', -1909	<b>(+6)</b>
Fort Scott	<b>4134', -1979</b>	4142', -1985	<b>(+6)</b>	4142', -1983	<b>(+4)</b>
Cherokee	<b>4155', -2000</b>	4165', -2008	<b>(+8)</b>	NA	<b>NA</b>
Mississippian	<b>4228', -2073</b>	4235', -2078	<b>(+5)</b>	4239', -2080	<b>(+7)</b>

## Summary

The location for the Baumgarten Unit #1-24 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 Osage Formation. After all gathered data had been examined the decision was made to run 5 ½ inch production casing to further evaluate the Baumgarten Unit #1-24 well.

## Recommended Perforations

**Mississippian Osage**

**(4228' – 4244')**

**DST #1**

Respectfully Submitted,

Jason T Alm  
Hard Rock Consulting, Inc.