# **Geological Report**

American Warrior, Inc.
Wiedeman-Dianne Unit #1
2600' FSL & 1650' FEL
Sec. 20 T19s R21w
Ness County, Kansas



American Warrior, Inc.

## **General Data**

Well Data:	American Warrior, Inc. Wiedeman-Dianne Unit #1 2600' FSL & 1650' FEL Sec. 20 T19s R21w Ness County, Kansas API # 15-135-25641-0000
Drilling Contractor:	Petromark Drilling, LLC. Rig #1
Geologist:	Jason T Alm
Spud Date:	July 26, 2013
Completion Date:	August 3, 2013
Elevation:	2277' Ground Level 2283' Kelly Bushing
Directions:	Bazine KS, from the intersection of Hwy 96 and Austin St. South 3 mi. to 100 Rd. East 1 mi. to EE Rd. 1 mi. South to 90 Rd. East 34 mi. South into location.
Casing:	223' 8 5/8" surface casing 4412' 5 1/2" production casing
Samples:	10' wet and dry, 4000' to RTD
Drilling Time:	3700' to RTD
Electric Logs:	None
Drillstem Tests:	One, Trilobite Testing, Inc. "Ray Schwager"
Problems:	None

None

Remarks:

### **Formation Tops**

	American Warrior, Inc.		
	Wiedeman-Dianne Unit #1		
	Sec. 20 T19s R21w		
<b>Formation</b>	2600' FSL & 1650' FEL		
Anhydrite	1503', +780		
Base	1537', +746		
Heebner	3759', -1476		
Lansing	3802', -1519		
BKc	4136', -1853		
Pawnee	4224', -1941		
Fort Scott	4298', -2015		
Cherokee	4316', -2033		
Mississippian	4391', -2108		
RTD	4313', -2130		

## **Sample Zone Descriptions**

#### Mississippian Osage (4391', -2108): Covered in DST #1

Dolo –  $\Delta$  – Fine sucrosic crystalline with poor to fair intercrystalline and vuggy porosity, very heavy triptolic chert, weathered with fair vuggy porosity, light to good oil stain in porosity, fair show of free oil, good odor, bright yellow fluorescents, 54-62 units hotwire.

#### **Drill Stem Tests**

Trilobite Testing, Inc. "Ray Schwager"

#### DST #1 <u>Mississippian Osage</u>

Interval (4391' – 4408') Anchor Length 15'

IHP -2110 #
IFP -45" - B.O.B. 42 min.
ISI -45" - Dead
FFP -45" - B.O.B. 35 min.
FSI -45" - W.S.B.

FHP - 2048 # BHT - 118°F

Recovery: 400' GIP

235' GCO Gravity: 40° API

30' MGO 60% Oil

21-73 #

1117#

1043 #

78-108 #

## **Structural Comparison**

	American Warrior, Inc.	American Warrior, Inc.		Chief Drilling & B&B Drilling	
	Wiedeman-Dianne Unit #1	Dianne #2-20		Hinnergardt #1	
	Sec. 20 T19s R21w	Sec. 20 T19s R21w		Sec. 20 T19s R21w	
Formation	2600' FSL & 1650' FEL	2310' FNL & 1600' FEL		E2 SW NE	
Anhydrite	1503', +780	1494', +790	<b>(-10)</b>	1493', +787	(-7)
Base	1537', +746	1528', +756	<b>(-10)</b>	1527', +753	<b>(-7)</b>
Heebner	3759', -1476	3756', -1472	(-4)	3757', -1477	<b>(-1)</b>
Lansing	3802', -1519	3799', -1515	(-4)	3801', -1521	<b>(-2)</b>
BKc	4136', -1853	4130', -1846	(-7)	4133', -1853	FL
Pawnee	4224', -1941	4216', -1932	<b>(-9</b> )	4220', -1940	<b>(-1)</b>
Fort Scott	4298', -2015	4294', -2010	(-5)	4293', -2013	<b>(-2)</b>
Cherokee	4316', -2033	4311', -2027	(-6)	4312', -2032	<b>(-1)</b>
Mississippian	4391', -2108	4378', -2094	<b>(-14)</b>	4388', -2108	FL

## **Summary**

The location for the Wiedeman-Dianne Unit #1 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 1/2 inch production casing to further evaluate the Wiedeman-Dianne Unit #1 well.

#### **Recommended Perforations**

Mississippian Osage: (4391' – 4411') DST #1

Respectfully Submitted,

Jason T Alm Hard Rock Consulting, Inc.