# **Geological Report**

American Warrior, Inc.

Jenetta #2-14

1448' FSL & 2224' FEL

Sec. 14 T19s R25w

Ness County, Kansas



American Warrior, Inc.

# **General Data**

Well Data:	American Warrior, Inc. Jenetta #2-14 1448' FSL & 2224' FEL Sec. 14 T19s R25w Ness County, Kansas API # 15-135-25692-0000
Drilling Contractor:	Duke Drilling, Inc. Rig #5
Geologist:	Jason T Alm
Spud Date:	November 4, 2013
Completion Date:	November 17, 2013
Elevation:	2383' Ground Level 2394' Kelly Bushing
Directions:	Ness City, West on Hwy 96 to L Rd. South 3 $\frac{1}{2}$ mi. to 95 Rd. West 1 $\frac{1}{2}$ mi. South into location.
Casing:	228' 8 5/8" surface casing 4517' 5 1/2" production casing
Samples:	10' wet and dry, 3750' to RTD
Drilling Time:	3600' to RTD
Electric Logs:	Pioneer Energy Services "Jared Long" CNL/CDL, DIL, MEL
Drillstem Tests:	Two, Trilobite Testing, Inc. "Bradley Walter"
Problems:	Rig got stuck in hole prior to displacement

Remarks:

Rig had to wash over 900+ ft. of drill pipe and collars.

# **Formation Tops**

	American Warrior, Inc.			
	Jenetta #2-14			
	Sec. 14 T19s R25w			
Formation	1448' FSL & 2224' FEL			
Anhydrite	1655', +739			
Base	<b>1694'</b> , + <b>700</b>			
Heebner	3760', -1366			
Lansing	3802', -1408			
BKc	4148', -1754			
Marmaton	4166', -1772			
Pawnee	4238', -1844			
Fort Scott	4312', -1918			
Cherokee	4338', -1944			
Mississippian	4414', -2020			
RTD	4515', -2121			
LTD	4518', -2124			

# **Sample Zone Descriptions**

Fort Scott (4312', -1918): Covered in DST #1

Ls – Fine crystalline with poor inter-crystalline porosity, light spotted oil stain in porosity, slight show of free oil, very light odor, fair cut fluorescents, 40 units hotwire.

Miss Warsaw (4414', -2020): Covered in DST #2

Dolo – Fine to medium crystalline with fair to good vuggy and scattered good inter-crystalline porosity, light to good oil stain and scattered good saturation, good show of free oil, fair odor, bright yellow fluorescents, 55-85 units hotwire.

#### **Drill Stem Tests**

Trilobite Testing, Inc. "Bradley Walter"

#### DST #1 Fort Scott

Interval (4290' – 4355') Anchor Length 65'

IHP - 2164 #

IFP - 30" - W.S.B. 23-24 #
ISI - 30" - Dead 394 #
FFP - 15" - Dead, Flushed 24-78 #

FHP - 2135 # BHT - 116°F

Recovery: 90' Oil Spotted Mud

#### DST #2 Mississippian Warsaw

Interval (4425' – 4435') Anchor Length 10'

IHP - 2267 #

IFP - 30" - B.O.B. 8 min. 35-153 #
ISI - 45" - Surface Blow 1196 #
FFP - 45" - B.O.B. 13 min. 161-245 #
FSI - 60" - Surface Blow 1141 #

FHP - 2203 # BHT - 131°F

Recovery: 180' GIP

570' GSMCO 78% Oil 60' GMCO 50% Oil

# **Structural Comparison**

	American Warrior, Inc.	Palomino Petroleum		F&M Oil Co.	
	Jenetta #2-14	Rebel #1		Betz A #1	
	Sec. 14 T19s R25w	Sec. 14 T19s R25w		Sec. 23 T19s R25w	
Formation	1448' FSL & 2224' FEL	1270' FSL & 960' FWL		330' FNL & 1320' FEL	
Anhydrite	1655', +739	1656', +742	(-3)	1638', +743	(-4)
Base	<b>1694',</b> + <b>700</b>	1696', +702	(-2)	1677', +704	<b>(-4)</b>
Heebner	3760', -1366	3752', -1354	<b>(-12)</b>	3759', -1378	(+12)
Lansing	3802', -1408	3794', -1396	<b>(-12)</b>	3800', -1419	(+11)
BKc	4148', -1754	4141', -1743	<b>(-11)</b>	NA	NA
Marmaton	4166', -1772	NA	NA	NA	NA
Pawnee	4238', -1844	4233', -1835	<b>(-9</b> )	4243', -1763	(+19)
Fort Scott	4312', -1918	4305', -1907	<b>(-11)</b>	4320', -1939	(+21)
Cherokee	4338', -1944	4330', -1932	<b>(-12)</b>	4346', -1965	(+21)
Mississippian	4414', -2020	4433', -2035	(+15)	4452', -2071	(+51)

# **Summary**

The location for the Jenetta #2-14 was found via 3-D seismic survey. The new well ran structurally as expected via the survey. Two drill stem tests were conducted one of which recovered commercial amounts of oil from the Mississippian Warsaw Formation. After all gathered data had been examined the decision was made to run  $5\frac{1}{2}$  inch production casing to further evaluate the Jenetta #2-14 well.

#### **Recommended Perforations**

Mississippian Warsaw: (4423' – 4429') DST #1

Respectfully Submitted,

Jason T Alm Hard Rock Consulting, Inc.