



# Geologic Report

Drilling Time and Sample Log

Operator <b>American Warrior, Inc.</b>		KB Elevation DF 2264' GL 2256'
Lease <b>Williams</b> No. <b>11</b>		Casing Record Surface 8 5/8" @ 220' Production 5 1/2" @ 4386'
API # <b>15-135-25903-0000</b>		
Field <b>Schaben</b>		
Location <b>1200' FNL &amp; 560' FWL</b>		
Sec. <b>36</b>	Twp. <b>19s</b>	Rge. <b>22w</b>
County <b>Ness</b> State <b>Kansas</b>		
Electrical Surveys None		
<b>Formation</b>	<b>Log Tops</b>	<b>Sample Tops</b>
Anhydrite		1486' +778
Base		1519' +746
Heebner		3727' -1463
Lansing		3774' -1510
BKC		4087' -1823
Pawnee		4192' -1928
Fort Scott		4273' -2009
Cherokee		4296' -2032
Mississippian		4377' -2113
<b>Total Depth</b>		<b>4387' -2123</b>
Reference Well For Structural Comparison American Warrior, Inc. Williams #8 800' FNL & 400' FWL Sec. 36 T19s R22w Ness Co. Kansas		

Drilling Contractor	Discovery Drilling Co. Inc.	Rig #3
Commenced	3-2-2015	Completed 3-9-2015
Samples Saved From	4000'	To RTD
Drilling Time Kept From	3700'	To RTD
Samples Examined From	4000'	To RTD
Geological Supervision From	4000'	To RTD

Displacement **3600'** Mud Type **Chemical**

### Summary and Recommendations

The location for the Williams #11 was found via 3-D seismic survey. The new well ran structurally as expected via the survey on all datums except for the Mississippian. Two Drill Stem Tests were conducted one of 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 Williams #11 well.

Respectfully Submitted,

Jason T Alm  
Hard Rock Consulting, Inc.

