

Geological Report

American Warrior, Inc.

HT #1-18

2300' FSL & 2000' FWL

Sec. 18 T20s R20w

Pawnee County, Kansas



American Warrior, Inc.

General Data

Well Data: American Warrior, Inc.
HT #1-18
2300' FSL & 2000' FWL
Sec. 18 T20s R20w
Pawnee County, Kansas
API # 15-145-21754-0000

Drilling Contractor: Petromark Drilling, LLC. Rig #1

Geologist: Jason T Alm

Spud Date: April 5, 2014

Completion Date: April 12, 2014

Elevation: 2226' Ground Level
2220' Kelly Bushing

Directions: Bazine KS, 4 mi East on Hwy 96 to the HH Rd. 10 mi. South to 30 Rd. East 2 ½ mi. North into location.

Casing: 221' 8 5/8" surface casing
4376' 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

Remarks: None

Formation Tops

	American Warrior, Inc. HT #1-18 Sec. 18 T20s R20w 2300' FSL & 2000' FWL
Formation	
Anhydrite	1415', +811
Base	1440', +786
Heebner	3731', -1505
Lansing	3782', -1556
BKc	4124', -1898
Pawnee	4256', -2030
Fort Scott	4280', -2054
Cherokee	4297', -2071
Mississippian	4358', -2132
RTD	4377', -2151

Sample Zone Descriptions

Mississippian Osage (4358', -2132): **Covered in DST #1**

Δ – Dolo – White to clear, mostly fresh, angular with scattered pinpoint vuggy porosity, few large vug cavities, light to fair spotted oil stain in porosity, fair show of free oil on cup, good odor, good yellow fluorescents in dry sample, few pieces of rhombic dolomite with heavy oil show, 100-105 units hotwire.

Drill Stem Tests

Trilobite Testing, Inc.
 “Ray Schwager”

DST #1

Mississippian Osage

Interval (4362' – 4372') Anchor Length 10'

IHP	– 2170 #	
IFP	– 15” – B.O.B. 4 min.	45-117 #
ISI	– 30” – Built to 4 in.	1260 #
FFP	– 15” – B.O.B. 7 min.	133-181 #
FSI	– 30” – Built to 2 in.	1207 #
FHP	– 2150 #	
BHT	– 126°F	

Recovery: 475' GIP
 330' GCO
 124' MGO 55% Oil

Structural Comparison

	American Warrior, Inc. HT #1-18 Sec. 18 T20s R20w 2300' FSL & 2000' FWL	Smitherman LC & Aledo Steffen #1 Sec. 18 T20s R20w 2310' FNL & 2310' FEL		Downing-Nelson Oil Co. Vandenberg-Saxton #1-18 Sec. 18 T20s R20w 2400' FNL & 1660' FEL	
Formation					
Anhydrite	1415', +811	NA	NA	1404', +823	(-12)
Base	1440', +786	NA	NA	1430', +797	(-11)
Heebner	3731', -1505	3732', -1505	FL	3721', -1494	(-11)
Lansing	3782', -1556	3782', -1555	(-1)	3769', -1542	(-14)
BKc	4124', -1898	NA	NA	NA	NA
Pawnee	4256', -2030	NA	NA	NA	NA
Fort Scott	4280', -2054	NA	NA	4264', -2037	(-17)
Cherokee	4297', -2071	4298', -2071	FL	4279', -2052	(-19)
Mississippian	4358', -2132	4368', -2141	(+9)	4334', -2107	(-25)

Summary

The location for the HT #1-18 was found via 3-D seismic 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 HT #1-18 well.

Recommended Perforations

Mississippian Osage (4358' – 4368') DST #1

Respectfully Submitted,

Jason T Alm
Hard Rock Consulting, Inc.