

Geological Report

American Warrior, Inc.

Melvin #1-16

1910' FSL & 940' FWL

Sec. 16 T18s R21w

Ness County, Kansas



American Warrior, Inc.

General Data

Well Data: American Warrior, Inc.
Melvin #1-16
1910' FSL & 940' FWL
Sec. 16 T18s R21w
Ness County, Kansas
API # 15-135-25656-0000

Drilling Contractor: Petromark Drilling, LLC. Rig #1

Geologist: Jason T Alm

Spud Date: September 17, 2013

Completion Date: September 26, 2013

Elevation: 2175' Ground Level
2181' Kelly Bushing

Directions: Bazine KS, 1 1/2 mi. East on Hwy 96, North 2 mi.
on FF rd. to 150 rd. East 1/8 mi. North into
location.

Casing: 224' 8 5/8" surface casing
4280' 5 1/2" production casing

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

Drilling Time: 3600' to RTD

Electric Logs: None

Drillstem Tests: Two, Trilobite Testing, Inc. "Brett Dickinson"

Problems: None

Remarks: None

Formation Tops

Formation	American Warrior, Inc.
	Melvin #1-16
	Sec. 16 T18s R21w
	1910' FSL & 940' FWL
Anhydrite	1432', +749
Base	1463', +718
Heebner	3648', -1467
Lansing	3692', -1511
BKc	4017', -1836
Pawnee	4084', -1903
Fort Scott	4162', -1981
Cherokee	4181', -2000
Mississippian	4264', -2083
RTD	4281', -2100

Sample Zone Descriptions

Mississippian Osage (4264', -2083): Covered in DST #1, 2

Dolo – Δ – Fine sucrosic crystalline with poor inter-crystalline and vuggy porosity, very heavy slightly triptolic chert, weathered with fair vuggy porosity, light to fair spotted oil stain, some pieces with heavy tarry stain, no show of free oil, very light odor, dull yellow fluorescents, 7 units hotwire.

Drill Stem Tests
Trilobite Testing, Inc.
"Brett Dickinson"

DST #1

Mississippian Osage

Interval (4266' – 4272') Anchor Length 6'

IHP	– 2132 #	
IFP	– 45" – Built to 3.5 in.	22-55 #
ISI	– 45" – Dead	1227 #
FFP	– 45" – Built to 3.5 in.	52-72 #
FSI	– 45" – Dead	1220 #
FHP	– 2065 #	
BHT	– 118°F	

Recovery: 15' VSGO
 100' SMWCO 80% Oil, 15% Water
 20' SOMCW 10% Oil, 50% Water

DST #2

Mississippian Osage

Interval (4272' – 4278') Anchor Length 6'

IHP	– 2123 #	
IFP	– 30" – B.O.B. 12 min.	27-108 #
ISI	– 30" – Built to 1 in.	1112 #
FFP	– 30" – B.O.B. 12 min.	116-167 #
FSI	– 30" – Built to ¼ in.	1077 #
FHP	– 2056 #	
BHT	– 116°F	

Recovery: 230' SGO
 145' SMOCW 10% Oil, 85% Water

Structural Comparison

	American Warrior, Inc. Melvin #1-16 Sec. 16 T18s R21w 1910' FSL & 940' FWL	Pickrell Drilling Co. Gaede C #1 Sec. 17 T18s R21w C SE SE		American Warrior, Inc. Triple M #1 Sec. 15 T18s R21w 2304' FSL & 125' FWL	
Formation					
Anhydrite	1432', +749	1416', +745	(+4)	1418', +753	(-4)
Base	1463', +718	NA	NA	1450', +721	(-3)
Heebner	3648', -1467	3625', -1464	(-3)	3644', -1473	(-6)
Lansing	3692', -1511	3670', -1509	(-2)	3680', -1509	(-2)
BKc	4017', -1836	NA	NA	NA	NA
Pawnee	4084', -1903	NA	NA	4061', -1890	(-13)
Fort Scott	4162', -1981	4150', -1989	(+8)	4139', -1968	(-12)
Cherokee	4181', -2000	4169', -2008	(+8)	4158', -1987	(-13)
Mississippian	4264', -2083	4250', -2089	(+6)	4232', -2061	(-22)

Summary

The location for the Melvin #1-16 was found via 3-D seismic survey. The new well ran structurally as expected via the survey. Two drill stem tests were 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 Melvin #1-16 well.

Recommended Perforations

Mississippian Osage

(4264' – 4277')

DST #1, 2

Respectfully Submitted,

Jason T Alm
Hard Rock Consulting, Inc.