

Geological Report

American Warrior, Inc.

Katherine #2-19

1802' FNL & 640' FWL

Sec. 19, T24s, R30w

Finney County, Kansas



American Warrior, Inc.

General Data

Well Data: American Warrior, Inc.
Katherine #2-19
1802' FNL & 640' FWL
Sec. 19, T24s, R30w
Gray County, Kansas
API # 15-069-20478-00-00

Drilling Contractor: Duke Drilling Co. Rig #5

Geologist: Kevin Timson

Spud Date: August 3, 2014

Completion Date: August 13, 2014

Elevation 2880' G.L.
2891' K.B.

Directions: From Garden City, Go SE on Hwy 50 to Pole Line Rd. Go East 5 miles to Mennonite Rd. Go South $\frac{3}{4}$ mile and East into.

Casing: 1702' 8 5/8" #24 Surface Casing
5128' 5 1/2" #15.5 Production Casing

Samples: 4600' to RTD 10' Wet & Dry

Drilling Time: 4000' to RTD

Electric Logs: Pioneer Energy Services "J. Henrickson"
Full Sweep

Drillstem Tests: Two-Trilobite Testing "Matt Smith"

Problems: None

Formation Tops

Katherine #2-19

Sec. 19, T24s, R30w

1802' FNL & 640' FWL

Anhydrite	1967' +924
Base	2040' +851
Heebner	4056' -1165
Lansing	4111' -1220
Stark	4458' -1567
Bkc	4588' -1697
Marmaton	4611' -1720
Pawnee	4690' -1799
Fort Scott	4714' -1823
Cherokee	4726' -1835
Morrow	4878' -1987
Miss	4905' -2014
RTD	5150' -2259
LTD	5152' -2261

Sample Zone Descriptions

St. Louis (4905', -2014): Covered in DST #2

Ls. Tan. Sub crystalline. Fair oomoldic and oolycastic porosity. Poor stain. No saturation. No odor. No show of free oil. 50 unit hotwire.

Morrow (4878', -1987): Covered in DST #1

Sandstone. Grey/slightly glauconitic. Fair to coarse grained. Coarse grain were pyrite cemented. Well rounded. Poor stain. Poor saturation. Poor odor. No show of free oil. 110 unit hotwire.

Drill Stem Tests

Trilobite Testing

“Matt Smith”

DST #1

Morrow

Interval (4870' – 4930') Anchor Length 60'

IHP - 2510 #

IFP - 30" – WSB built to 1 ½" 35-67 #

ISI - 30" – No return 1013 #

FFP - 45" – WSB built to 8" 73-98 #

FSIP - 45" – No return 1137 #

FHP - 2478 #

BHT - 121° F

Recovery: 20' OCM (5% Oil)

60' GOWCM (30% Oil, 5% Water)

60' GOWCM (35% Oil, 5% Water)

DST #2

St. Louis

Interval (4990' – 5010') Anchor Length 20'

IHP - 2506 #

IFP - 30" – WSB 15-23 #

ISI - 30" – No return 1318 #

FFP - 10" – No blow 24-29 #

FSIP - Pull Tool NA

FHP - 2481 #

BHT - 121° F

Recovery: 20' Mud with trace of oil

Structural Comparison

	American Warrior, Inc. Katherine #2-19 Sec. 19, T24s, R30w 1802' FNL & 640' FWL		Sharon Resources Gates #19-1 Sec. 19, T24s, R30w 2100' FNL & 330' FWL		American Warrior, Inc. Irsik-Finney #4-23 Sec 23, T24s, R31w 528' FSL & 2580' FWL
Formation					
Heebner	4056' -1165	+9	4056' -1174	-28	4020' -1137
Lansing	4111' -1220	+8	4110' -1228	-32	4071' -1188
Stark	4458' -1567	+1	4450' -1568	-25	4425' -1542
BKC	4588' -1697	+1	4580' -1698	-24	4556' -1673
Marmaton	4611' -1720	+2	4604' -1722	-27	4576' -1693
Pawnee	4690' -1799	-2	4679' -1797	-30	4652' -1769
Fort Scott	4714' -1823	FL	4704' -1823	-28	4678' -1795
Cherokee	4726' -1835	+2	4719' -1837	-28	4690' -1807
Morrow	4878' -1987	+3	4871' -1990	-24	4846' -1963
Miss	4905' -2014	+4	4900' -2018	-17	4880' -1997

Summary

The location for the Katherine #2-19 well was found via 3-D seismic survey, but moved via geo chem. The new well ran structurally as expected. Two drill stem tests were conducted, one of which recovered commercial quantities of oil from the Morrow Sandstone. After all the gathered data had been examined, the decision was made to run 5 ½" production casing to further evaluate the Katherine #2-19 well.

Perforations

Primary: St. Louis (5003' – 5009')

Secondary: Morrow (4899' – 4907')

Respectfully Submitted,

Kevin Timson
American Warrior, Inc.

