

Geological Report

American Warrior, Inc.

Kramer #3-31

1982' FSL & 2199' FEL

Sec. 31, T24s, R29w

Gray County, Kansas



American Warrior, Inc.

General Data

Well Data: American Warrior, Inc.
Kramer #3-31
1982' FSL & 2199' FEL
Sec. 31, T24s, R29w
Gray County, Kansas
API # 15-069-20444-00-00

Drilling Contractor: Duke Drilling Co. Rig #5

Geologist: Kevin Timson

Spud Date: September 30, 2013

Completion Date: October 10, 2013

Elevation 2824' G.L.
2835' K.B.

Directions: From Kalvesta, KS. Go 14.5 miles West on Hwy 96 to Haflich Rd. Go 9.5 miles South, East ½ mile on dirt road and South into location.

Casing: 440' 8 5/8" #24 Surface Casing
4966' 5 ½" #15.5 Production Casing
1907' Port Collar

Samples: 4050' to RTD 10' Wet & Dry

Drilling Time: 4050' to RTD

Electric Logs: Pioneer Energy Services "D. Schmidt"
Stacked-Micro

Drillstem Tests: Two, Trilobite Testing, Inc. "Ray Schwager"

Problems: None

Formation Tops

Kramer #3-31

Sec. 31, T24s, R29w

1982' FSL & 2199' FEL

Anhydrite	1944' +891
Base	2007' +828
Heebner	4125' -1290
Toronto	4139' -1304
Lansing	4216' -1381
Stark	4497' -1662
Bkc	4635' -1800
Marmaton	4641' -1806
Pawnee	4722' -1887
Fort Scott	4747' -1912
Cherokee	4760' -1925
Morrow	4883' -2048
St. Louis	4897' -2062
RTD	5000' -2165
LTD	5003' -2168

Sample Zone Descriptions

Fort Scott

(4747', -1912): Covered in DST #1

Ls – Sub-crystalline with fair vuggy and fair oomoldic porosity. Very slight stain. No saturation in porosity. No show of free oil. 25 Units Hotwire.

Morrow Sand

(4883', -2048): Covered in DST #2

Ss – Fine to medium grain. Fair to well sorted sub-angular to well rounded grains. Good stain. Good saturation. Show of free oil. Strong odor. 250 Units Hotwire.

Drill Stem Tests
Trilobite Testing Inc.
"Ray Schwager"

DST #1

Fort Scott Limestone

Interval (4715' – 4750') Anchor Length 35'

IHP	- 2384 #	
IFP	- 30" – WSB throughout	19-43 #
ISI	- 30" – No Return	1236 #
FFP	- 10" – No blow	47-55 #
FSIP	- Pull Tool	NA
FHP	- 2349 #	
BHT	- 119 ° F	

Recovery: 65' MW

DST #2

Morrow Sandstone

Interval (4840' – 4902') Anchor Length 62'

IHP	- 2413 #	
IFP	- 30" – WSB died in 20 min	25-25#
ISI	- 30" – No Return	61 #
FFP	- 10" – No blow flushed tool	23-35#
FSIP	- Pull Tool	NA
FHP	- 117 ° F	
BHT	- 2392#	

Recovery: 10' SOCM (1% Oil)

Structural Comparison

	American Warrior, Inc. Kramer #3-31 Sec. 31, T29s, R24w 1982' FSL & 2199' FEL		American Warrior, Inc. Kramer #1-31 Sec. 31, T24s, R29w 2306' FNL & 619' FEL		American Warrior, Inc. IKM #1-32 Sec 32, T24s, R29w 2336' FSL & 126' FWL
Formation					
Heebner	4125' -1290	+2	4121' -1292	-2	4114' -1288
Toronto	4139' -1304	FL	4133' -1304	-2	4128' -1302
Lansing	4216' -1381	-5	4205' -1376	-6	4201' -1375
Stark	4497' -1662	-1	4490' -1661	-1	4487' -1661
BKC	4635' -1800	-1	4628' -1799	-4	4622' -1796
Marmaton	4641' -1806	-2	4633' -1804	-5	4627' -1801
Pawnee	4722' -1887	+4	4720' -1891	+1	4714' -1888
Fort Scott	4747' -1912	+1	4742' -1913	-2	4736' -1910
Cherokee	4760' -1925	+1	4755' -1926	-2	4750' -1924
Morrow	4883' -2048	+1	4878' -2049	-3	4872' -2046
St. Louis	4897' -2062	+2	4893' -2064	FL	4888' -2062

Summary

The location for the Kramer #2-31 well was found via 3-D seismic survey. The new well ran structurally as expected. Two drill stem tests were conducted, which were both negative. However, the decision was made to run 5 ½" production casing in an attempt to frac the Morrow Sandstone formation.

Recommended Perforations

Primary:	Morrow:	(4886' – 4890')
Before Abandonment:	Fort Scott:	(4753' – 4755')
	Cherokee:	(4765' – 4767')

Respectfully Submitted,

Kevin Timson
American Warrior, Inc.

