

Geological Report

American Warrior, Inc.

Riedel C #1-31

2170' FNL & 2304' FEL

Sec. 31 T13s R19w

Ellis County, Kansas



American Warrior, Inc.

General Data

Well Data: American Warrior, Inc.
Riedel C #1-31
2170' FNL & 2304' FEL
Sec. 31 T13s R19w
Ellis County, Kansas
API # 15-051-26667-0000

Drilling Contractor: Discovery Drilling Co. Inc. Rig #3

Geologist: Jason T Alm

Spud Date: February 13, 2014

Completion Date: February 18, 2014

Elevation: 2271' Ground Level
2279' Kelly Bushing

Directions: Ellis KS, South on Ellis Blacktop to Victoria Rd.
East 4 1/2 mi. North into location.

Casing: 211' 8 5/8" surface casing
3994' 5 1/2" production casing

Samples: 10' wet and dry, 3250' to RTD

Drilling Time: 3100' to RTD

Electric Logs: Pioneer Energy Services "Y. Ruiz"
CNL/CDL, DIL, MEL

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

Problems: None

Remarks: None

Formation Tops

Formation	American Warrior, Inc. Riedel C #1-31 Sec. 31 T13s R19w 2170' FNL & 2304' FEL
Anhydrite	1559', +720
Base	1603', +676
Topeka	3269', -990
Heebner	3522', -1243
Toronto	3542', -1263
Lansing	3562', -1283
BKc	3806', -1527
Marmaton	3845', -1566
Arbuckle	3893', -1614
LTD	3995', -1716
RTD	3993', -1714

Significant Sample Zone Descriptions

LKc “C” zone	<p>(3590’, -1311) Not Tested Ls – Fine to sub-crystalline, oolitic with poor oomoldic and vuggy porosity, light scattered oil stain in porosity, no show of free oil, no odor, no fluorescents.</p>
LKc “I” zone	<p>(3719’, -1440) Covered in DST #1 Ls – Fine to sub-crystalline, oolitic with poor oomoldic and oolitic porosity, light to fair oil stain and saturation, slight show of free oil, light odor.</p>
LKc “J” zone	<p>(3738’, -1459) Covered in DST #1 Ls – Fine crystalline, oolitic packstone with fair to good oomoldic porosity, light to heavy oil stain and saturation, fair show of free oil, light odor, light to fair yellow fluorescents.</p>
LKc “K” zone	<p>(3762’, -1483) Not Tested Ls – Fine crystalline, oolitic packstone with poor oomoldic and oolitic porosity, light to good oil stain and saturation, fair show of free oil, light odor.</p>
Arbuckle	<p>(3893’, -1614): Covered in DST #2 Dolo – Fine to coarse rhombic crystalline with fair to good inter-crystalline and vuggy porosity, light to heavy oil stain and saturation in porosity, good show of free oil, good odor, fair to good cut fluorescents, fairly heavy oolitic chert.</p>

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

DST #1

Lansing-Kansas City "H thru J" zones

Interval (3673' – 3755') Anchor Length 82'

IHP	– 1774 #	
IFP	– 45" – B.O.B. 29 min.	15-42 #
ISI	– 45" – W.S.B.	872 #
FFP	– 45" – B.O.B. Immediately	36-64 #
FSI	– 45" – W.S.B.	940 #
FHP	– 1718 #	
BHT	– 109°F	

Recovery: 385' GIP
115' GOCM 30% Oil

DST #2

Arbuckle

Interval (3851' – 3909') Anchor Length 58'

IHP	– 1901 #	
IFP	– 10" – B.O.B. 1½ min.	120-294 #
ISI	– 30" – Built to 4 in.	1164 #
FFP	– 10" – B.O.B. 1 min.	292-423 #
FSI	– 30" – Built to 1 in.	1160 #
FHP	– 1851 #	
BHT	– 118°F	

Recovery: 180' GIP
515' GCO API 35°
370' GMCO 60% Oil
120' GVSWOCM 20% Oil, 5% Water

Structural Comparison

	American Warrior, Inc. Riedel C #1-31 Sec. 31 T13s R19w 2170' FNL & 2304' FEL	Sid Tomlinson Riedel B #1 Sec. 31 T13s R19w N2 SW NE		Texas Company Geo Riedel #5 Sec. 31 T13s R19w NE NW SE	
Formation					
Anhydrite	1559', +720	1564', +707	(+13)	NA	NA
Base	1603', +676	NA	NA	NA	NA
Topeka	3269', -990	NA	NA	3260', -989	(+1)
Heebner	3522', -1243	3519', -1248	(+5)	3521', -1250	(+7)
Toronto	3542', -1263	3544', -1273	(+10)	NA	NA
Lansing	3562', -1283	3565', -1294	(+11)	3560', -1289	(+6)
BKc	3806', -1527	NA	NA	NA	NA
Marmaton	3845', -1566	NA	NA	NA	NA
Arbuckle	3893', -1614	3948', -1677	(+63)	3899', -1628	(+14)

Summary

The location for the Riedel C #1-31 was found via 3-D seismic survey. The new well ran structurally as expected via the survey. Two Drill Stem Tests were conducted both of which recovered commercial amounts of oil from the Lansing-Kansas City and Arbuckle Formations. After all gathered data had been examined the decision was made to run 5 ½ inch production casing to further evaluate the Riedel C #1-31 well.

Recommended Perforations		
Primary:		
Arbuckle	(3896' – 3903')	DST #2
Secondary:		
LKc "J" zone	(3746' – 3752')	DST #1
Before Abandonment:		
LKc "K" zone	(3770' – 3775')	Not Tested
LKc "C" zone	(3594' – 3600')	Not Tested
Perf and Squeeze:		
Arbuckle	(3922' – 3924')	

Respectfully Submitted,

Jason T Alm
Hard Rock Consulting, Inc.