

Geological Report

Kaufman #1-30
2166' FSL & 2157' FWL
Sec. 30 T13s R19w
Ellis County, Kansas



American Warrior, Inc.

General Data

Well Data: American Warrior, Inc.
Kaufman #1-30
2166' FSL & 2157' FWL
Sec. 30 T13s R19w
Ellis County, Kansas
API # 15-051-26826-0000

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

Geologist: Jason T Alm

Spud Date: April 11, 2016

Completion Date: April 17, 2016

Elevation: 2157' Ground Level
2165' Kelly Bushing

Directions: Yocemento KS, West 3.5 mi. on Hwy 40, South 2.5
mi. East into location.

Casing: 225' 8 5/8" surface casing
3913' 5 1/2" production casing

Samples: 10' wet and dry, 3150' to RTD

Drilling Time: 3100' to RTD

Electric Logs: Pioneer Energy Services "Dan Schmidt"
CNL/CDL, DIL, MEL, BHCS

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

Problems: None

Remarks: None

Formation Tops

Formation	American Warrior, Inc. Kaufman #1-30 Sec. 30 T13s R19w 2166' FSL & 2157' FWL
Anhydrite	1474', +691
Base	1523', +642
Topeka	3186', -1021
Heebner	3426', -1261
Toronto	3448', -1283
Lansing	3467', -1302
BKC	3721', -1556
Marmaton	3757', -1592
Arbuckle	3804', -1639
LTD	3914', -1749
RTD	3915', -1750

Sample Zone Descriptions

- LKC “J” zone** (3650’, -1485): **Covered in DST #1**
Ls – Fine crystalline, oolitic with poor to fair oomoldic and scattered oolitic porosity, light to fair oil stain with light spotted saturation, slight show of free oil, light odor, fair yellow fluorescents.
- LKC “K” zone** (3670’, -1505): **Covered in DST #1**
Ls – Fine to sub-crystalline, oolitic with scattered poor oomoldic porosity, light spotted oil stain, slight show of free oil, very light odor, dull yellow fluorescents.
- Marmaton** (3757’, -1592): **Not Tested**
Ls – Δ – Fine to sub-crystalline with very scattered vugular porosity, few pcs with tarry stain, chert – orange to light gray to white with scattered poor vugular porosity, light scattered tarry stain, no show of free oil, no odor, no fluorescents.
- Arbuckle** (3804’, -1639): **Covered in DST #2**
Ls – Fine to medium rhombic and sucrosic crystalline with fair inter-crystalline and vuggy porosity, light to fair oil stain with light spotted saturation, slight show of free oil when broken, light to fair odor, fair yellow fluorescents.

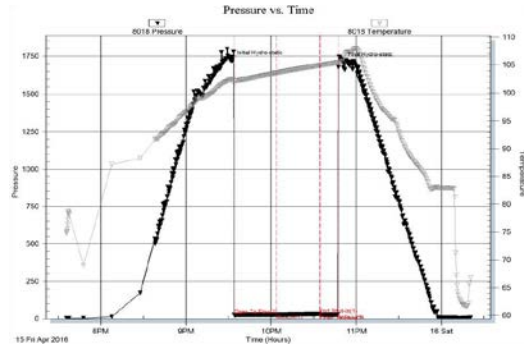
Trilobite Testing, Inc.
 “Ray Schwager”

DST #1 LKC I thru K zones

Interval (3616’ – 3695’) Anchor Length 79’

- IHP – 1720 #
- IFP – 30” – W.S.B. 25-27 #
- ISI – 30” – Dead 32 #
- FFP – 10” – Dead 26-28 #
- FHP – 1708 #
- BHT – 105°F

Recovery: 2’ Mud

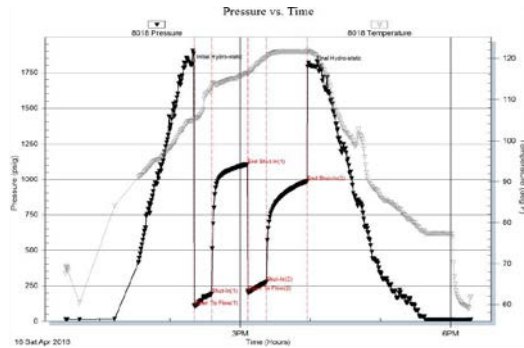


DST #2 Arbuckle

Interval (3778’ – 3825’) Anchor Length 47’

- IHP – 1804 #
- IFP – 15” – B.O.B. 2 min. 108-194 #
- ISI – 30” – W.S.B. 1105 #
- FFP – 15” – B.O.B. 4 min. 211-275 #
- FSI – 30” – Built to 1 in. 986 #
- FHP – 1794 #
- BHT – 121°F

Recovery: 124’ GIP
 250’ GCO 37° API
 124’ MGO 60% Oil
 190’ MGO 50% Oil
 62’ OCMW 10% Oil, 80% Water



Structural Comparison

	American Warrior, Inc. Kaufman #1-30 Sec. 30 T13s R19w 2166' FSL & 2157' FWL	Stickle Drilling Martin #1 Sec. 30 T13s R19w 2310' FNL & 2310' FEL		Texas Company Mary Orth Sec. 30 T13s R19w SE SW SW	
Formation					
Anhydrite	1474', +691	NA	NA	NA	NA
Base	1523', +642	NA	NA	NA	NA
Topeka	3186', -1021	NA	NA	NA	NA
Heebner	3426', -1261	3478', -1295	(+34)	3443', -1249	(-12)
Toronto	3448', -1283	3505', -1322	(+39)	3466', -1272	(-11)
Lansing	3467', -1302	3522', -1339	(+37)	3486', -1292	(-10)
BKC	3721', -1556	NA	NA	3741', -1547	(-9)
Marmaton	3757', -1592	3822', -1639	(+47)	NA	NA
Arbuckle	3804', -1639	3938', -1755	(+116)	3821', -1627	(-12)

Summary

The location for the Kaufman #1-30 was found via 3-D seismic survey. The new well ran structurally slightly lower than expected via the survey. Two Drill Stem Tests were conducted one of which recovered commercial amounts of oil from the Arbuckle Formation. After all gathered data had been examined the decision was made to run 5 ½ inch production casing to further evaluate the Kaufman #1-30 well.

Recommended Perforations

Primary:		
Arbuckle	3806' – 3816'	DST #2
Before Abandonment:		
Marmaton	3760' – 3774'	Not Tested

Respectfully Submitted,

Jason T Alm
Hard Rock Consulting, Inc.