

Geological Report

American Warrior, Inc.

Lillie #3-30

1324' FNL & 2179' FEL

Sec 30, T16s, R10w

Ellsworth County, Kansas



American Warrior, Inc.

General Data

Well Data: American Warrior, Inc.
Lillie #3-30
1324' FNL & 2179' FEL
Sec 30, T16s, R10w
Ellsworth County, Kansas
API # 15-053-21339-00-00

Drilling Contractor: Discovery Drilling Rig #2

Geologist: Luke Thompson

Spud Date: October 14, 2015

Completion Date: October 22, 2015

Elevation 1882' G.L.
1890' K.B.

Directions: From the North side of Hollyrood, KS, at the intersection of Hwy 156 and Ave T go 3.8 miles west to County Line Rd on Ave T, go 3 miles North to Rd Q, go 0.5 miles East, go South 0.25 miles on Lease Rd and East into.

Casing: 392' 8 5/8" #23 Surface Casing
3488' 5 1/2" #15.5 Production Casing

Samples: 2600' to RTD 10' Wet & Dry

Drilling Time: 2500' to RTD

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

Drillstem Tests: Five-Trilobite Testing "Jared Scheck"

Problems: none encountered

Formation Tops

Lillie #3-30

1324' FNL & 2179' FEL

Sec 30, T16s, R10w

Anhydrite	684' +1206
Base	710' +1180
Howard	2582' -692
Topeka	2620' -730
Lecompton	2758' -868
Plattsmouth	2832' -942
Heebner	2912' -1022
Toronto	2932' -1042
Douglas	2942' -1052
Brown Lime	3014' -1124
Lansing	3034' -1144
Stark	3251' -1361
BKC	3310' -1420
Conglomerate	3339' -1449
Arbuckle	3384' -1494
RTD	3500' -1610
LTD	3502' -1612

Sample Zone Descriptions

- Lansing A-B (3050', -1160): Covered in DST #1**
Limestone, cream, fine to sub-crystalline, occasionally oolitic, fair scattered oomoldic porosity, occasional vuggy porosity, good odor, fair scattered stain and saturation, fair show of free oil. Gas 30 units hotwire.
- Lansing G (3142', -1252): Covered in DST #2 & 3**
Limestone, cream, tan, oolitic, good oomoldic porosity, strong odor, good stain on 40% of cuttings, fair saturation, good show of free oil. Gas 25 units hotwire.
- Lansing H-J (3177', -1280 & 3218', -1328) Covered in DST #4**
(Lansing H; 3177') Limestone, cream, oolitic, poor oomoldic porosity, slight odor, fair stain, fair saturation, fair show of free oil. Gas 87 units hotwire.
(Lansing J; 3218') Limestone, tan, oolitic, good oomoldic porosity, strong odor, scattered fair stain, fair saturation, fair show of free oil. Gas 75 units hotwire.
- Arbuckle (3396', -1506) Covered in DST #5**
Dolomite, tan, fine crystalline, sucrosic, fair inter-crystalline porosity, strong odor, poor stain, fair saturation, fair slow stream cut, good show of free oil when broke. Gas 70 units hotwire.

Drill Stem Tests

Trilobite Testing

“Jared Scheck”

DST #1

Lansing A-B

Interval (3020' - 3061') Anchor Length 41'

IHP - 1506 #

IFP - 30” – BOB 112-168 #

ISI - 45” – 1" return 710 #

FFP - 45” – BOB 204-305 #

FSIP - 60” – No Return 720 #

FHP - 1412 #

BHT - 108° F

Recovery: GTS 5 1/2" in second open
2399' GIP
600' MCW

DST #2

Lansing G

Interval (3125' - 3160') Anchor Length 35'

Tool Plugged

Results N/A

DST #3

Lansing G

Interval (3126' - 3160') Anchor Length 34'

IHP - 1590 #

IFP - 45” – WSB built to 3/4" 20-28#

ISI - 45” – no return 407 #

FFP - 45” – WSB 32-44 #

FSIP - 45” – no return 395 #

FHP - 1458 #

BHT - 106 ° F

Recovery: 60' MW

DST #4**Lansing H-J**

Interval (3163' – 3240') Anchor Length 77'

IHP - 1607 #

IFP - 30" – WSB built to 6" 39-69#

ISI - 45" – No Return 638 #

FFP - 45" – WSB built to 6" 75-100 #

FSIP - 45" – no return 605 #

FHP - 1526 #

BHT - 103 ° F

Recovery: 25' GIP

35' OGCM (20% G & 10% O)

120' OGCM (15% G & 5% O)

DST #5**Arbuckle (straddle test)**

Interval (3334' – 3412') Anchor Length 78', Tail Pipe 88'

IHP - 1787 #

IFP - 45" – 5 1/2" blow 84-130 #

ISI - 45" – No Return 1062 #

FFP - 45" – 3" blow 137-189 #

FSIP - 45" – No Return 1036 #

FHP - 1706 #

BHT - 109 ° F

Recovery: 120' OWCM (5% O)

180' OWCM (5% O)

Structural Comparison

	American Warrior, Inc. Lillie #3-30 Sec. 30, T16s, R10w 1324' FNL & 2179' FEL		American Warrior, Inc. Lillie #2-30 Sec. 30, T16s, R10w 633' FNL & 2097' FEL		American Warrior, Inc. Lillie #1 Sec. 30, T16s, R10w 2970' FSL & 2310' FEL
Formation					
Topeka	2620' -730	+4	2624' -734	0	2610' -730
Heebner	2912' -1022	+4	2916' -1026	-3	2902' -1019
Toronto	2932' -1042	+3	2935' -1045	-4	2921' -1038
Douglas	2942' -1052	+4	2946' -1056	-3	2932' -1049
Brown Lm	3014' -1124	+4	3018' -1128	-3	3004' -1121
Lansing	3034' -1144	+4	3038' -1148	-4	3023' -1140
Stark	3251' -1361	+5	3256' -1366		
BKC	3310' -1420	+3	3313' -1423		
Conglom.	3339' -1449	+1	3340' -1450	-5	3327' -1444
Arbuckle	3384' 1494	-30	3354' -1464	-25	3352' -1469

Summary

The location for the Lillie #3-30 well was found via 3-D seismic survey. The new well ran structurally as expected. Five drill stem tests were conducted, two of which recovered commercial quantities of oil. After all the gathered data had been examined, the decision was made to run 5 ½" casing to further evaluate the Lillie #3-30 well.

Perforations

Primary: **Arbuckle** **3400' - 3405' (first)**

3393' - 3397' (second)

3385' - 3388' (third)

Secondary:	Lansing J	3212' - 3218'
	Lansing H	3176' - 3180'

Before Abandonment:	Toronto	2933' - 2936'
	Plattsmouth	2903' - 2905'
		2847' - 2851'
	Topeka	2663' - 2666'

Respectfully Submitted,

Lukas Thompson
American Warrior, Inc.