

# **Geological Report**

American Warrior, Inc.  
**O'Brate-Finney #1-36**  
1828' FNL & 1483' FEL  
Sec 36, T25s, R31w  
Finney County, Kansas



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
O'Brate-Finney #1-36  
1828' FNL & 1483' FEL  
Sec. 36, T25s, R31w  
Finney County, Kansas  
API # 15-055-22394-00-00

Drilling Contractor: Duke Drilling Co. Rig #5

Geologist: Luke Thompson

Spud Date: July 25, 2015

Completion Date: August 5, 2015

Elevation 2787' G.L.  
2798' K.B.

Directions: From the intersection of Highway 50 and Main St.  
in Pierceville, KS, go 1.8 miles south to Annie  
Scheer/K Rd, go East 0.5 miles to trail, now go  
South 1.3 miles and east into.

Casing: 1708' 8 5/8" #24 Surface Casing  
4034' 5 1/2" #15.5 Production Casing

Samples: 3900' to RTD 10' Wet & Dry

Drilling Time: 3900' to RTD

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

Drillstem Tests: Two-Trilobite Testing "Brandon Turley"

Problems: Lost Circulation @ 1211'

**Formation Tops**  
**O'Brate-Finney #1-36**  
**Sec. 36, T25s, R31w**  
**1828' FNL & 1483' FEL**

<b>Anhydrite</b>	<b>1824' +974</b>
<b>Base</b>	<b>1902 +896</b>
<b>Chase</b>	<b>2594' +204</b>
<b>Krider</b>	<b>2626' +172</b>
<b>Winfield</b>	<b>2682' +116</b>
<b>Towanda</b>	<b>2737' +61</b>
<b>Fort Riley</b>	<b>2792' +6</b>
<b>Council Grove</b>	<b>2856' -58</b>
<b>Heebner</b>	<b>3990' -1192</b>
<b>Lansing</b>	<b>4048' -1240</b>
<b>Stark</b>	<b>4416' -1618</b>
<b>Bkc</b>	<b>4549' -1751</b>
<b>Marmaton</b>	<b>4567' -1769</b>
<b>Pawnee</b>	<b>4650' -1852</b>
<b>Fort Scott</b>	<b>4675' -1877</b>
<b>Cherokee</b>	<b>4692' -1894</b>
<b>Morrow</b>	<b>4859' -2061</b>
<b>Miss</b>	<b>4878' -2080</b>
<b>RTD</b>	<b>4950' -2009</b>
<b>LTD</b>	<b>4948' -2007</b>

## Sample Zone Descriptions

**Marmaton (4605', -1807): Covered in DST #1**

Limestone, cream, sub-crystalline, slightly chalky, scattered recrystallization, poor scattered inter-crystalline porosity, poor-fair show of free oil, fair-good show of free oil when crushed, fair odor. Gas 105 units hotwire.

**Morrow (4874', -2076 & 4885', -2087): Covered in DST #2**

**4874'** Few cuttings, Sandstone, grey, fine grained, sub-round, fair-well sorted, poor inter-crystalline porosity, tight, scattered dead oil stain, show of free oil when broke, no odor, slow stream cut. Gas 183 units hotwire.

**4885'** Limestone, white, sandy, chalky, scattered brown stain, dead oil stain, good show of free oil when broke, fair-good stream cut, slight odor. Gas 197 units hotwire.

## Drill Stem Tests

Trilobite Testing  
"Brandon Turley"

### DST #1

#### Marmaton

Interval (4590' – 4630') Anchor Length 40'

IHP - 2283 #

IFP - 30" – WSB dead in 6 min 19-28 #

ISI - 30" – No return 934 #

FFP - 10" – no blow 26-27 #

FSIP - pulled test N/A

FHP - 2214 #

BHT - 118° F

**Recovery:** 5' M

### DST #2

#### Morrow/St. Gen.

Interval (4850' – 4910') Anchor Length 60'

IHP - 2575 #

IFP - 30" – WSB dead in 8 min 21-37#

ISI - 30" – No Return 56 #

FFP - 10" – No Blow 27-34 #

FSIP - Pulled Test N/A

FHP - 2392 #

BHT - 120 ° F

**Recovery:** 5' M

## Structural Comparison

	American Warrior, Inc. O'Brate-Finney #1-36 Sec. 36, T25s, R31w 1828' FNL & 1483' FEL		American Warrior, Inc. O'Brate-Finney #2-36 Sec. 36, T25s, R31w 597' FNL & 1828' FWL		American Warrior, Inc. O'Brate-Finney #1-25 Sec. 25, T25s, R31w 141' FSL & 1876' FEL
<b>Formation</b>					
<b>Heebner</b>	3990' -1192	<b>-19</b>	3967' -1173	<b>-20</b>	3954' -1172
<b>Lansing</b>	4048' -1240	<b>-22</b>	4012' -1218	<b>-21</b>	4001' -1219
<b>Stark</b>	4416' -1618	<b>-30</b>	4382' -1588	<b>-26</b>	4374' -1592
<b>BKC</b>	4549' -1751	<b>-20</b>	4525' -1731	<b>-25</b>	4508' -1726
<b>Marmaton</b>	4567' -1769	<b>-15</b>	4548' -1754	<b>-18</b>	4533' -1751
<b>Pawnee</b>	4650' -1852	<b>-26</b>	4620' -1826	<b>-31</b>	4603' -1821
<b>Fort Scott</b>	4675' -1877	<b>-23</b>	4648' -1854	<b>-29</b>	4630' -1848
<b>Cherokee</b>	4692' -1894	<b>-31</b>	4657' -1863	<b>-36</b>	4640' -1858
<b>Morrow</b>	4859' -2061	<b>-51</b>	4804' -2010	<b>-59</b>	4784' -2002
<b>Miss</b>	4878' -2080	<b>-52</b>	4822' -2028	<b>-47</b>	4815' -2033

## Summary

The location for the O'Brate-Finney #1-36 well was found via 3-D seismic survey. The new well ran structurally as expected. Two drill stem test were conducted, none 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 O'Brate-Finney #1-36 well.

## Perforations

<b>Primary:</b>	<b>Krider</b>	<b>2629' – 2633'</b>
<b>Secondary:</b>	<b>Council Grove</b>	<b>2985' – 2988'</b>
		<b>2964' – 2967'</b>
	<b>Towanda</b>	<b>2738' – 2743'</b>

**Before Abandonment:      Winfield                      2696' – 2700'**

**2684' – 2687'**

**Krider                                      2654' – 2658'**

**Water Injection:                      Plattsmouth                      3967' – 3987'**

Respectfully Submitted,

Lukas Thompson  
American Warrior, Inc.