

# **Geological Report**

**American Warrior, Inc.**

**Hubin #2-10 B**

**455' FSL & 2220' FWL**

**Sec. 10, T23s, R23w**

**Hodgeman County, Kansas**



**American Warrior, Inc.**

## General Data

Well Data: American Warrior, Inc.  
Hubin #2-10 B  
455' FSL & 2220' FWL  
Sec. 10, T23s, R23w  
Hodgeman County, Kansas  
API # 15-083-21954-00-00

Drilling Contractor: Duke Drilling Co. Rig #5

Geologist: Kevin Timson

Spud Date: August 3, 2018

Completion Date: August 12, 2018

Elevation 2318' G.L.  
3329' K.B.

Directions: From the south side of Jetmore, KS. Go East .7 miles on L Rd. Go 1 miles South on 219 Rd. Go 2 miles East on K Rd. North into.

Casing: 265' 8 5/8" #23 Surface Casing  
4650' 5 1/2" #15.5 Production Casing

Samples: 4220' to RTD 10' Wet & Dry

Drilling Time: 3800' to RTD

Electric Logs: Pioneer Energy Services "Ian Mabb"  
Stack-Micro

Drillstem Tests: One-Trilobite Testing "Brannan Lonsdale"

Problems: Initial Hubin #2-10 hole lost and skidded

**Formation Tops**  
**Hubin #2-10 B**  
**Sec. 10, T23s, R23w**  
**455' FSL & 2220' FWL**

<b>Anhydrite</b>	<b>1476' +853</b>
<b>Base</b>	<b>1510' +819</b>
<b>Heebner</b>	<b>3860' -1531</b>
<b>Lansing</b>	<b>3927' -1598</b>
<b>Stark</b>	<b>4227' -1898</b>
<b>Bkc</b>	<b>4304' -1975</b>
<b>Marmaton</b>	<b>4327' -1998</b>
<b>Pawnee</b>	<b>4416' -2087</b>
<b>Fort Scott</b>	<b>4465' -2136</b>
<b>Cherokee</b>	<b>4491' -2162</b>
<b>Basal Penn Cong</b>	<b>4529' -2200</b>
<b>Miss Warsaw</b>	<b>4552' -2223</b>
<b>RTD</b>	<b>4650' -2321</b>
<b>LTD</b>	<b>4650' -2321</b>

**Sample Zone Descriptions**

**Miss Warsaw (4570',-2241): Covered in DST #1**

Dolomite Gray. Sub crystalline. Good vuggy porosity, fair intercrystalline porosity. Very good stain. Good saturation. Fair to good show of free oil. Strong odor. 25 unit gas kick.

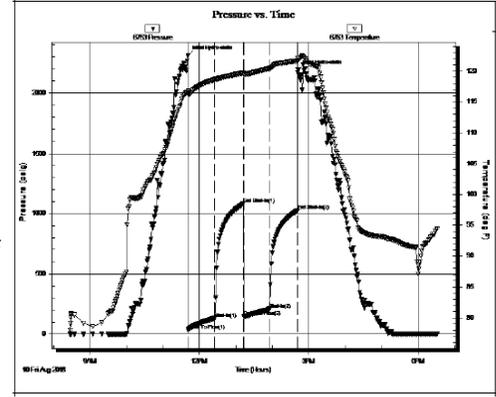
**Drill Stem Tests**  
 Trilobite Testing  
 “Brannan Lonsdale”

**DST #1**

**Miss Warsaw**

Interval (4506’ – 4579’) Anchor 73’

IHP - 2306 #  
 IFP - 45” – BOB in 42 min 34-130 #  
 ISI - 45” – No return 1078 #  
 FFP - 45” – BOB in 42 min 144-204 #  
 FSIP - 45” - No return 1024 #  
 FHP - 2188 #  
 BHT - 122° F



Recovery: 330' CGO (80% Oil, 20% Gas) Gravity: 31  
 180' OCM (20% Oil, 80% Mud)  
 90' GIP

**Structural Comparison**

Formation	American Warrior, Inc Hubin #2-10 B Sec 10, T23s, R23w 455' FSL & 2220' FWL		American Warrior Inc Hubin #1-10 Sec 10, T23s, R23w 1394' FSL & 2240' FWL		Tri-Ex Petro Hubin #1 Sec 10, T23s, R23w NA
Heebner	3860' -1531	+2	3888' -1533	+13	3888' -1544
Lansing	3927' -1598	-1	3952' -1597	+10	3952' -1608
Stark	4227' -1898	+5	4260' -1903	+17	4259' -1915
BKc	4304' -1975	+2	4332' -1977	+7	4326' -1982
Marmaton	4327' -1998	+4	4357' -2002	+8	4350' -2006
Pawnee	4416' -2087	+1	4443' -2088	+9	4440' -2096
Fort Scott	4465' -2136	+2	4493' -2138	+8	4488' -2144
Cherokee	4491' -2162	FL	4517' -2162	+8	4514' -2170
BPC	4529' -2200	FL	4555' -2200	NA	NA
Miss War.	4552' -2223	-1	4577' -2222	-1	4566' -2222

## Summary

The location for the Hubin #2-10 B well was found via 3-D seismic survey. The new well ran structurally as expected. One drill stem test was conducted, which recovered commercial amounts of oil from the Miss Warsaw formation. After all the gathered data had been examined, the decision was made to run 5 1/2" casing to further evaluate the Hubin #2-10 B well.

### Recommended Perforations

**Primary**                      **Warsaw**                      **(4570' to 4580')**

**Before Abandonment**                      **Warsaw**                      **(4600' to 4604')**

Respectfully Submitted,

Kevin Timson  
American Warrior, Inc.