



**NOTES**

Company: American Warrior, Inc.

Lease: Hoelscher #2-10

Field: Wildcat

Location: NE-NW-SW-SE

Sec: 10 Twsp: 18S Rge: 10W

County: Rice State: Kansas

KB: 1800' GL: 1792'

API #: 15-195-22796-00-00

Contractor: Duke Drilling, Inc. (Rig #8)

Spud: 09/12/2014 Comp: 09/18/2014

RTD: 3400' LTD: 3399'




Mud Up: 2600' Type Mud: Chemical

Samples Saved From: 2700' to RTD  
 Drilling Time Kept From: 2700' to RTD  
 Samples Examined From: 2700' to RTD  
 Geological Supervision from: 2700' to RTD  
 Geologist on Well: Wyatt Urban

Surface Casing: 8 5/8@415'

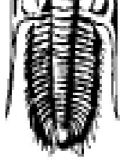
Electronic Surveys: Logged by Pioneer Energy Resources: MEL, DIL, CNL/CDL

# American Warrior

DRILLING WELL					COMPARISON WELL				COMPARISON WELL			
American Warrior- Hoelscher 2-10					American Warrior-Hoelscher 1-10				Phil-Han- Shonyo #1			
 10-18S-10W oil 1800 KB					 SE NW NW SE 10-18S-10W oil 1787 KB				 dry hole 10-18S-10W 1790 KB			
					Structural Relationship				Structural Relationship			
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Heebner	2824	-1024	2824	-1024	2806	-1019	-5	-5				
Toronto	2839	-1039	2842	-1042	2819	-1032	-7	-10				
Douglas	2853	-1053	2854	-1054	2832	-1045	-8	-9				
Brown Lime	2942	-1142	2944	-1144	2927	-1140	-2	-4				
Lansing	2959	-1159	2962	-1162	2938	-1151	-8	-11	2946	-1159	0	-3
BKC	3228	-1428	3233	-1433	3218	-1431	3	-2				
Conglomerate	3264	-1464	3268	-1468	3246	-1459	-5	-9				
Arbuckle	3284	-1484	3281	-1481	3277	-1490	6	9	3280	-1493	9	12
RTD	3400	-1600	3400	-1600	3400	-1613	13	13				
LTD	3399	-1599	3399	-1599	3402	-1615	16	16				



**DRILL STEM TEST REPORT**



**TESTING, INC**

American Warrior  
3118 Cummings Rd  
Garden City Kansas 67846  
ATTN: Wyatt Urban

**10-18s-10w-Rice**

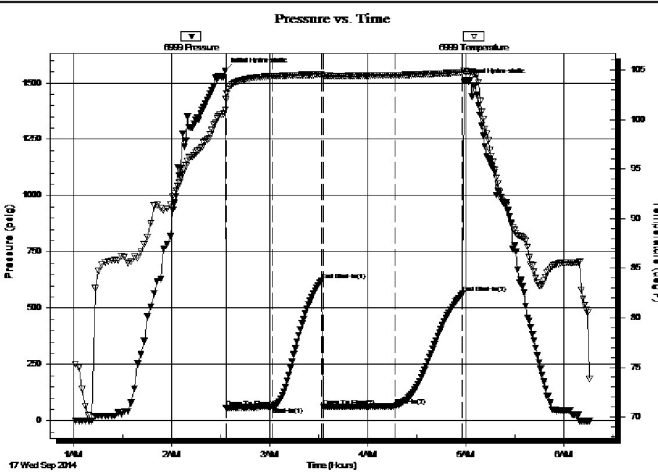
**Hoelscher 2-10**  
Job Ticket: 60320 **DST#: 1**  
Test Start: 2014.09.17 @ 01:00:00

**GENERAL INFORMATION:**

Formation: **Lansing H-I-J**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 02:33:00  
Time Test Ended: 06:16:00  
Interval: **3078.00 ft (KB) To 3164.00 ft (KB) (TVD)**  
Total Depth: 3164.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Dustin Ellis  
Unit No: S2-Great Bend-80  
Reference Elevations: 1800.00 ft (KB)  
1792.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 6999 Outside**  
Press@RunDepth: 64.60 psig @ 3159.76 ft (KB) Capacity: 5000.00 psig  
Start Date: 2014.09.17 End Date: 2014.09.17 Last Calib.: 2014.09.17  
Start Time: 01:01:00 End Time: 06:16:00 Time On Btm: 2014.09.17 @ 02:32:30  
Time Off Btm: 2014.09.17 @ 04:58:30

**TEST COMMENT:** 1st Open 30 minutes Weak blow built to 1 inch into a 5 gallon bucket of water.  
1st Shut in 30 minutes No blow back.  
2nd Open 45 minutes Weak surface blow died off.  
2nd Shut in 45 minutes No blow back.



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1555.12	100.97	Initial Hydro-static
1	58.13	102.02	Open To Flow (1)
29	61.29	104.35	Shut-In(1)
59	623.71	104.52	End Shut-In(1)
60	61.73	104.43	Open To Flow (2)
104	64.60	104.46	Shut-In(2)
145	564.76	104.72	End Shut-In(2)
146	1506.09	104.92	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%	0.14

**Gas Rates**

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

**Image Header 04**



**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

American Warrior  
3118 Cummings Rd  
Garden City Kansas 67846  
ATTN: Wyatt Urban

**10-18s-10w-Rice**  
**Hoelscher 2-10**  
Job Ticket: 60321 **DST#: 2**  
Test Start: 2014.09.17 @ 05:00:00

**GENERAL INFORMATION:**

Formation: **Arbuckle**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 06:32:30  
Time Test Ended: 16:47:53  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Dustin Ellis  
Unit No: S2-Great Bend-80

Interval: 3220.00 ft (KB) To 3294.00 ft (KB) (TVD)  
 Total Depth: 3294.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair

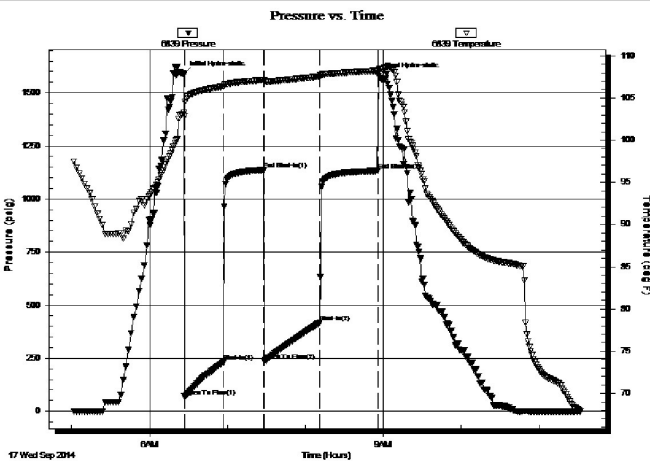
Reference Elevations: 1800.00 ft (KB)  
 1792.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 6839**

Inside

Press@RunDepth: 416.70 psig @ 3289.94 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.09.16 End Date: 2014.09.17 Last Calib.: 2014.09.18  
 Start Time: 23:45:00 End Time: 11:31:53 Time On Btm: 2014.09.17 @ 06:26:23  
 Time Off Btm: 2014.09.17 @ 08:56:23

TEST COMMENT: 1st Open 30 minutes Strong building blow built to bottom bucket in 5 minutes.  
 1st Shut in 30 minutes No blow back.  
 2nd Open 45 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 7 minutes.  
 2nd Shut in 45 minutes No blow back.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1587.20	103.23	Initial Hydro-static
1	69.75	102.89	Open To Flow (1)
31	231.12	106.36	Shut-In(1)
62	1136.94	107.13	End Shut-In(1)
62	237.78	106.90	Open To Flow (2)
105	416.70	107.56	Shut-In(2)
149	1132.92	108.24	End Shut-In(2)
150	1581.74	108.38	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
693.00	Clean oil 100%	9.72
242.00	Oil cut mud 85% Oil 15% Mud	3.39
63.00	Oil cut mud 76% Oil 24% Mud	0.88

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

### ROCK TYPES

Dolprim	shale, grn	Carbon Sh	shale, red
Lmst fw<7	shale, gry		

### ACCESSORIES

<b>MINERAL</b> Chert, dark Chert, tripolitic	<b>FOSSIL</b> Oomoldic	<b>STRINGER</b> Chert Sandstone
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### OTHER SYMBOLS

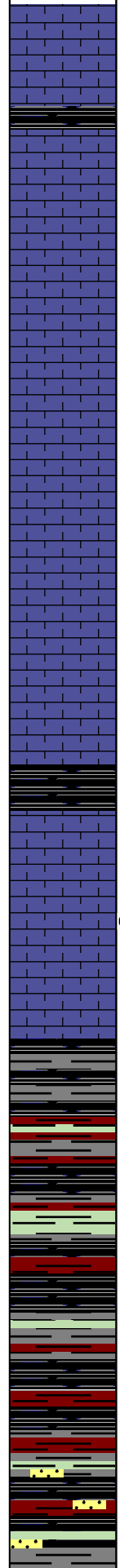
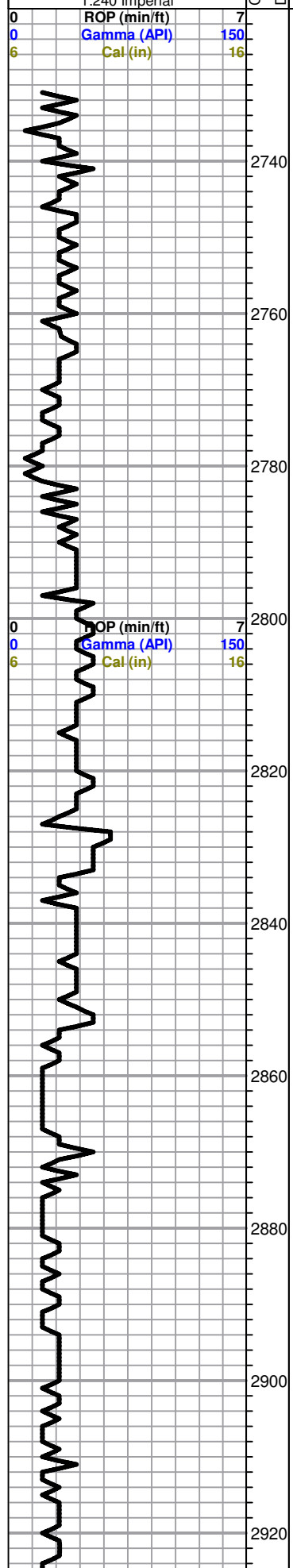
<b>Oil Show</b> Good Show Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas	<b>DST</b> DST Int DST alt Core tail pipe
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Printed by GEOstrip VC Striplog version 4.0.8.7 (www.grsi.ca)

Curve Track #1 ROP (min/ft) Gamma (API) Cal (in)	Depth   Intervals DST Lithology Oil Show	Geological Descriptions	TG, C1 - C5 Total Gas (units) C1 (units) C2 (units) C3 (units) C4 (units)
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Cored Interval  
DST Interval

1:240 Imperial



Black carb Sh.

2740

LS, cream, tan, chalky, foss, poor visible porosity, no shows

2760

LS, cream, tan, buff, FXL, chalky, poor visible porosity, no shows

2780

LS, tan, gry, FXL, few foss, poor visible porosity, chalky in parts, no shows

2800

**Heebner 2824.0 (-1024.0)**

Black carb Sh.

2820

LS, cream, tan, F-Med XLN, poor scattered porosity, chalky, NSFO, trc. brown stain

2840

**Douglas 2853.0 (-1053.0)**

Sh. maroon, gry, greenish, mica, silty

2860

Sh. maroon, gry, black, greenish, Trc. Sd. gry, F. grain, well sorted, no shows,

2880

Sh. black, gry, maroon, silty, mica, trc. Sd. gry, F. grain, well sorted, no shows

2900

2920

1:240 Imperial

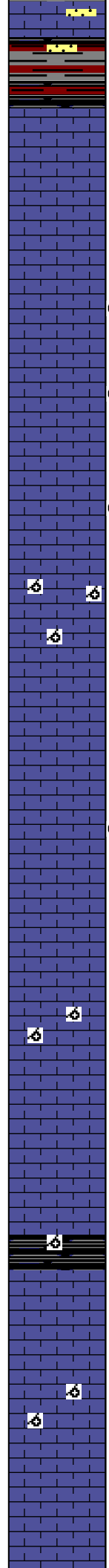
0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

2940  
2960  
2980  
3000  
3020  
3040  
3060  
3080  
3100  
3120  
3140

ROP (min/ft) 7  
Gamma (API) 150  
CGR (in) 16

**D  
S  
T**



LS, cream, tan, FXL, chalky, poor visible porosity, no shows

Sh. gry, maroon, silty, trc. sd. A/A

**Brown Lime 2942.0 (-1142.0)**

LS, brown, FXL, dense, poor visible porosity, cherty, no shows

**Lansing 2959.0 (-1159.0)**

LS, cream, tan, F-Med. XLN, few foss, poor scattered porosity, NSFO trc. black stain, no odor

LS, tan, brown, FXL, dense, poor scattered vuggy porosity, trc. SFO, Lt. black stain, no odor

LS, tan, FL, foss, poor scattered porosity, NSFO, Trc. Lt. brown stain, odor???

LS, cream, tan, FXL, ool, poor vuggy porosity, barren

LS, cream, tan, FXL, poor visible porosity, poor INXLN porosity,

LS, tan, ool, V. chalky, poor scattered porosity, poor INXLN porosity, Trc. SFO, no odor

LS, cream, tan, F-Med XLN, V. chalky in pts, poor visible porosity, no shows

LS, tan, oom, good oom vuggy porosity, NSFO, no odor

LS, tan, brown, FXL, dense, few foss, poor visible porosity, no shows

Black carb sh.

LS, cream, gry, F-Med. XLN, few ool, poor scattered oom porosity, no shows

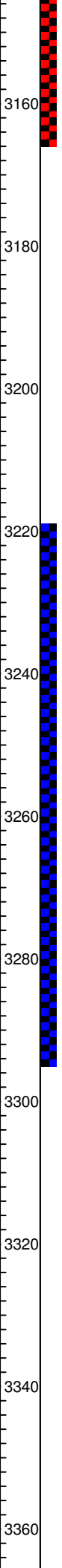
LS, cream, gry, fxl, dense, cherty in parts, poor scattered porosity, no shows,

0	<b>Total Gas (units)</b>	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

**DST #1 3109-3164**  
30-30-45-45

Blow: Built to 9"

# 1



0 FOP (min/ft) 7  
 0 Gamma (API) 150  
 6 Gal (in) 16

D  
S  
T  
#  
2

LS, cream, tan, oom, fair oom vuggy porosity, chalky, trc. Lt. SFO, no odor,

LS, cream, tan, F-Med XLN, chalky, poor visible porosity, no shows, Trc. chert, opaque, white

Black carb Sh

LS, cream, tan, FXL, dense, few foss, poor scattered porosity, no shows

LS, tan, FXL, dense, poor visible porosity, no shows

**BKC 3228.0 (-1428.0)**

Sh. gry, maroon, black carb, waxey,

Sh. gry, maroon, greenish, waxey,

LS, cream tan, FXL, chalky, poor scattered porosity, no shows

**Conglomerate 3268.0 (-1468.0)**

Sh, maroon, soft, V.C. cherts

**Arbuckle 3284.0 (-1484.0)**

Dol. tan, buff, F-Med XLN, poor scattered porosity, poor to fair INXLN porosity, Lt. SFO, odor, lt. brown stain

Dol. tan, buff, FXL, poor to fair INXLN porosity, NSFO, Ft. odor, Lt black stain

Dol. white, tan, FXL dense, poor visible porosity, poor INXLN porosity, no shows

Dol. white, tan, FXL, dense, poor scattered porosity, no shows

Recovery:  
10' Mud

Pressures:

ISIP 623 psi  
 FSIP 564 psi  
 IFP 58-61 psi  
 FFP 61-64 psi  
 HSH 1555-1506 psi

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

**DST # 2 3220-3294**

30-30-45-45

Blow: BOB 5 min.

Recovery

Rec. Total: 1008'

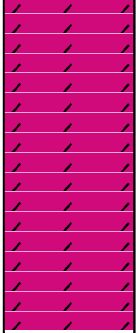
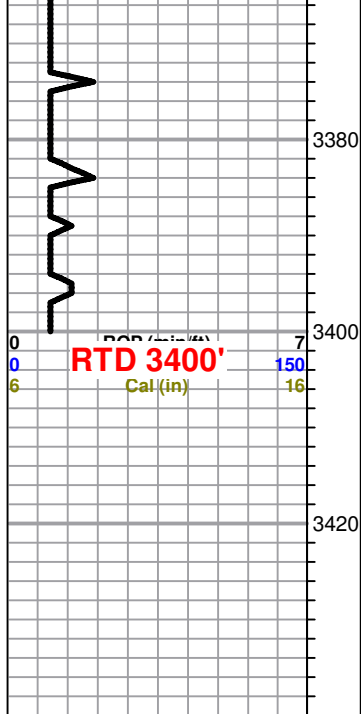
693' Clean Oil

242' OCM  
(85%O, 15%M)

63' OCM  
(76%O, 24%M)

Pressures:

ISIP 1136 psi  
 FSIP 1132 psi  
 IFP 69-231 psi  
 FFP 237-416 psi  
 HSH 1587-1581 psi



Dol. A/A

Dol. white, gry, FXL, dense, poor visible porosity, no shows, Trc. few Qtz. Lg. grains, heavily fractured, no shows

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

3380  
3400  
3420