



## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc.**

PO Box 399  
Garden City KS 67846

ATTN: Kevin Timson

**Ward # 1-2**

**2-25s-31w Finney,KS**

Start Date: 2014.11.23 @ 03:48:00

End Date: 2014.11.23 @ 12:00:24

Job Ticket #: 58717                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.11.26 @ 10:56:18



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc.  
 PO Box 399  
 Garden City KS 67846  
 ATTN: Kevin Timson

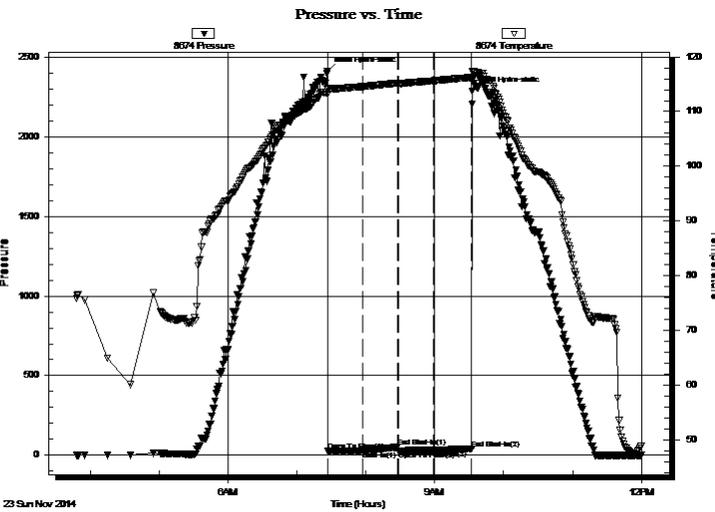
**2-25s-31w Finney,KS**  
**Ward # 1-2**  
 Job Ticket: 58717 **DST#: 1**  
 Test Start: 2014.11.23 @ 03:48:00

## GENERAL INFORMATION:

Formation: **Morrow**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 07:26:40  
 Time Test Ended: 12:00:24  
 Interval: **4870.00 ft (KB) To 4870.00 ft (KB) (TVD)**  
 Total Depth: 4870.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Will MacLean  
 Unit No: 71  
 Reference Elevations: 2868.00 ft (KB)  
 2857.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 8674 Inside**  
 Press@RunDepth: 30.16 psig @ 4821.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.11.23 End Date: 2014.11.23 Last Calib.: 2014.11.23  
 Start Time: 03:48:00 End Time: 12:00:24 Time On Btm: 2014.11.23 @ 07:26:25  
 Time Off Btm: 2014.11.23 @ 09:32:24

**TEST COMMENT:** IF- Weak Surface Blow Built to 1 1/2" Died Back to 1"  
 IS- No Blow  
 FF- No Blow  
 FS- No Blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2413.46	114.01	Initial Hydro-static
1	27.89	113.15	Open To Flow (1)
31	29.13	114.57	Shut-In(1)
62	51.04	115.19	End Shut-In(1)
62	29.00	115.18	Open To Flow (2)
92	30.16	115.62	Shut-In(2)
126	41.43	116.23	End Shut-In(2)
126	2287.72	117.31	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	100%m	0.21

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior Inc.  
PO Box 399  
Garden City KS 67846  
ATTN: Kevin Timson

**2-25s-31w Finney,KS**  
**Ward # 1-2**  
Job Ticket: 58717      **DST#: 1**  
Test Start: 2014.11.23 @ 03:48:00

**Tool Information**

Drill Pipe:	Length: 4801.00 ft	Diameter: 3.80 inches	Volume: 67.35 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	34000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	12000.00 lb
			<u>Total Volume: 67.35 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	64000.00 lb
Depth to Top Packer:	4818.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	52.00 ft				
Tool Length:	79.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

**Tool Description**

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Change Over Sub	1.00			4792.00	
Shut In Tool	5.00			4797.00	
Hydraulic tool	5.00			4802.00	
Jars	5.00			4807.00	
Safety Joint	2.00			4809.00	
Packer	5.00			4814.00	27.00 Bottom Of Top Packer
Packer	4.00			4818.00	
Stubb	1.00			4819.00	
Perforations	2.00			4821.00	
Recorder	0.00	8355	Outside	4821.00	
Recorder	0.00	8674	Inside	4821.00	
Perforations	10.00			4831.00	
Change Over Sub	1.00			4832.00	
Drill Pipe	32.00			4864.00	
Change Over Sub	1.00			4865.00	
Bullnose	5.00			4870.00	52.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>79.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior Inc.  
PO Box 399  
Garden City KS 67846  
ATTN: Kevin Timson

**2-25s-31w Finney,KS**  
**Ward # 1-2**  
Job Ticket: 58717      **DST#: 1**  
Test Start: 2014.11.23 @ 03:48:00

## Mud and Cushion Information

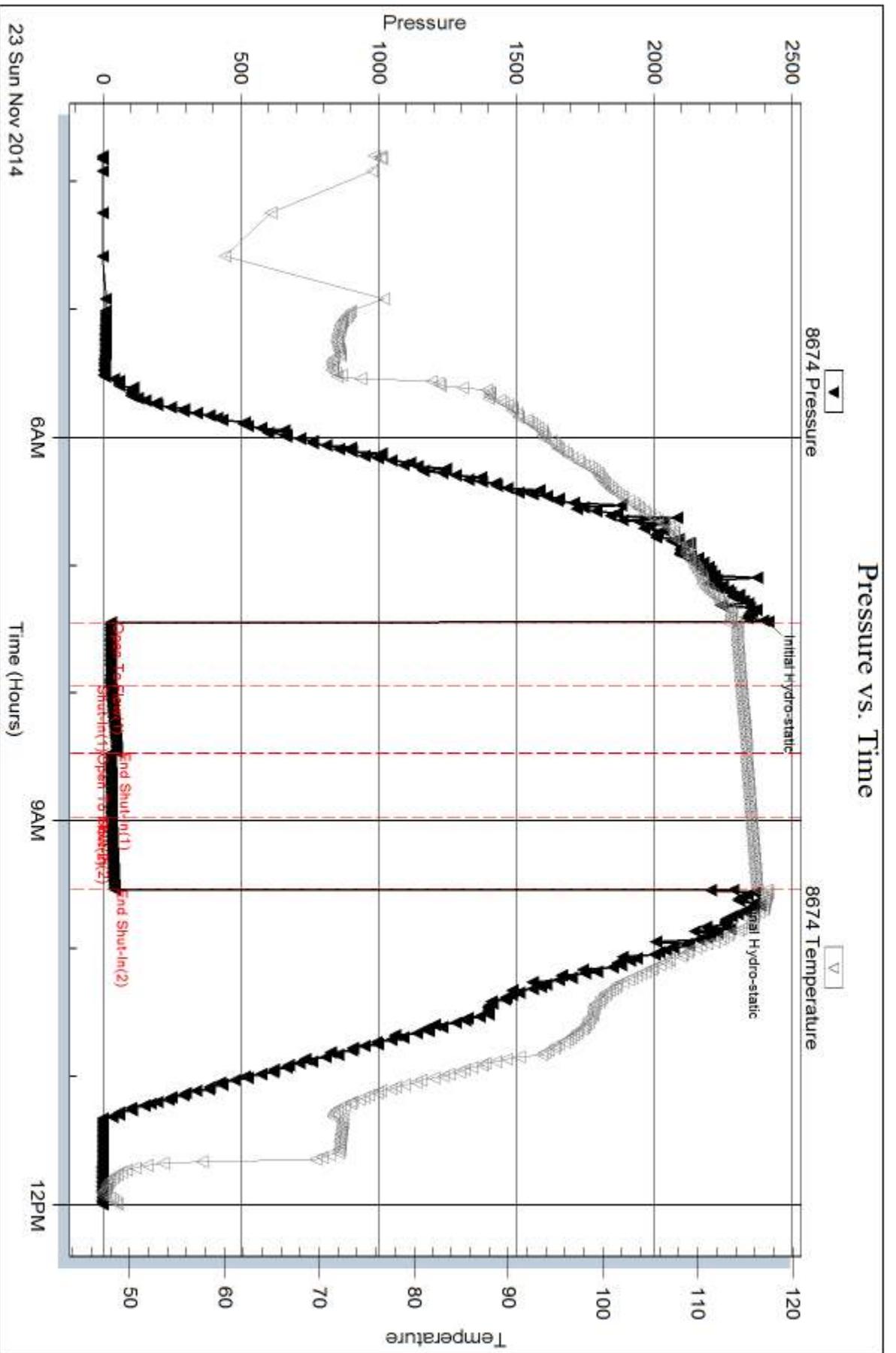
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 63.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.96 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2100.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	100%m	0.210

Total Length: 15.00 ft      Total Volume: 0.210 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

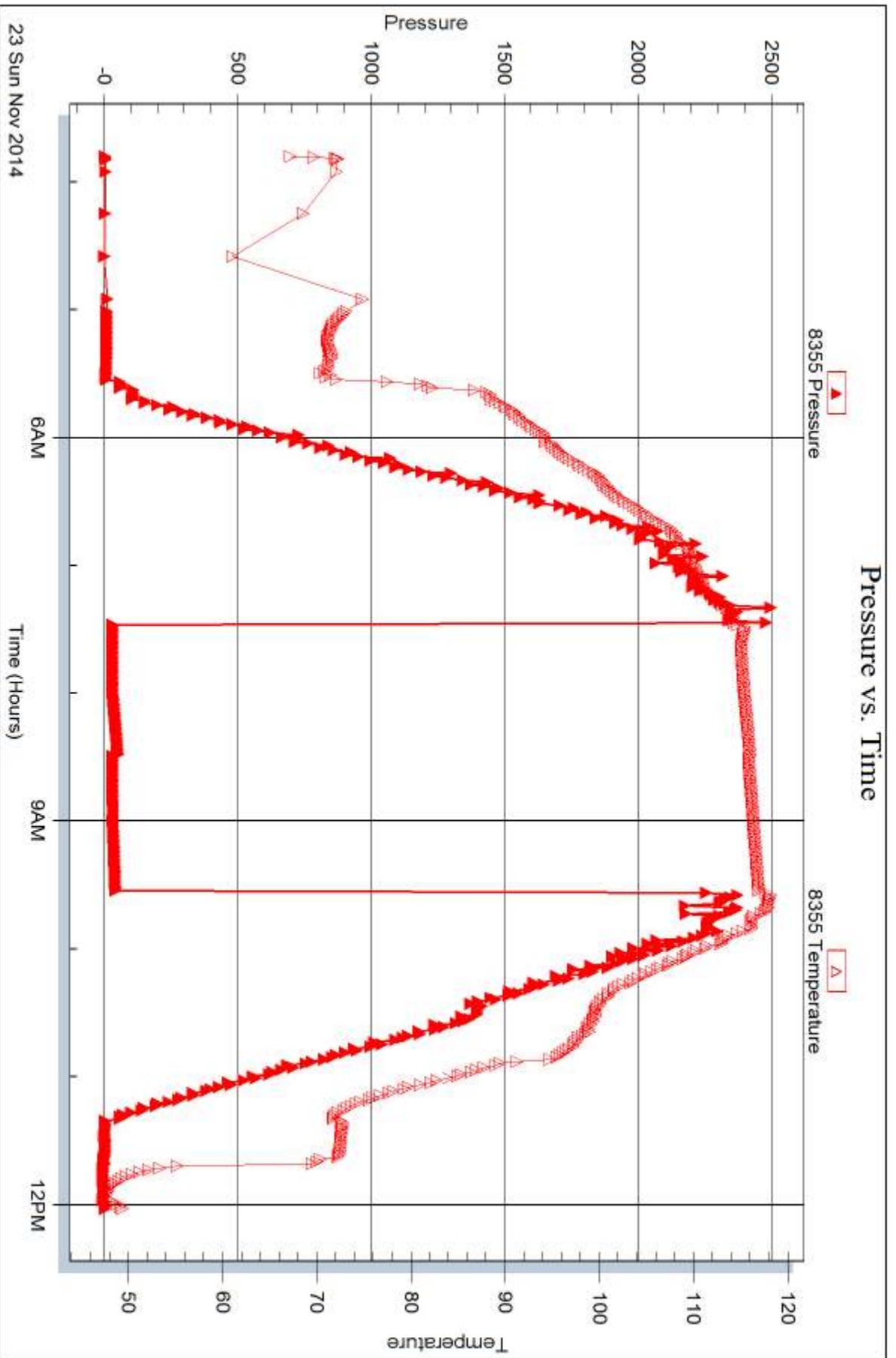


Serial #: 8355

Outside American Warrior Inc.

Ward # 1-2

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 58717

Printed: 2014.11.26 @ 10:56:19



## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc.**

PO Box 399  
Garden City KS 67846

ATTN: Kevin Timson

**Ward # 1-2**

**2-25s-31w Finney,KS**

Start Date: 2014.11.23 @ 22:52:00

End Date: 2014.11.24 @ 06:03:24

Job Ticket #: 58718                      DST #: 2

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.11.26 @ 10:56:00



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

American Warrior Inc.  
 PO Box 399  
 Garden City KS 67846  
 ATTN: Kevin Timson

**2-25s-31w Finney,KS**

**Ward # 1-2**

Job Ticket: 58718

**DST#: 2**

Test Start: 2014.11.23 @ 22:52:00

## GENERAL INFORMATION:

Formation: **St. Louis**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 01:03:40  
 Time Test Ended: 06:03:24  
 Interval: **4902.00 ft (KB) To 4935.00 ft (KB) (TVD)**  
 Total Depth: 4935.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Will MacLean  
 Unit No: 71  
 Reference Elevations: 2868.00 ft (KB)  
 2857.00 ft (CF)  
 KB to GR/CF: 11.00 ft

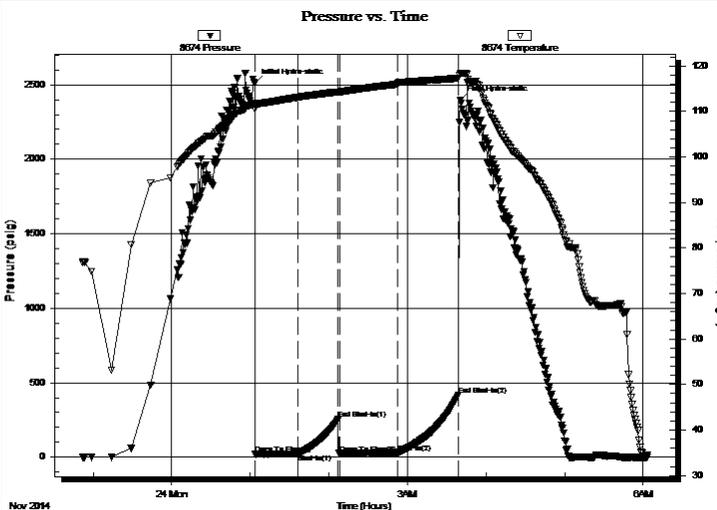
## Serial #: 8674

Inside

Press@RunDepth: 31.93 psig @ 4905.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.11.23 End Date: 2014.11.24 Last Calib.: 2014.11.24  
 Start Time: 22:52:00 End Time: 06:03:24 Time On Btm: 2014.11.24 @ 01:03:25  
 Time Off Btm: 2014.11.24 @ 03:40:24

TEST COMMENT: IF- Weak Surface Blow Built to 6 1/4"  
 IS- No Blow  
 FF- Weak Surface Blow Built to BOB in 39 1/2 min  
 FS- No Blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2513.61	111.77	Initial Hydro-static
1	21.63	110.58	Open To Flow (1)
33	23.18	113.09	Shut-In(1)
64	255.11	114.31	End Shut-In(1)
65	22.42	114.24	Open To Flow (2)
110	31.93	116.27	Shut-In(2)
156	418.08	117.33	End Shut-In(2)
157	2395.51	118.33	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	OGCM 9%oil 14%g	0.63
0.00	237' of GIP	0.00

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior Inc.  
PO Box 399  
Garden City KS 67846  
ATTN: Kevin Timson

**2-25s-31w Finney,KS**  
**Ward # 1-2**  
Job Ticket: 58718  
Test Start: 2014.11.23 @ 22:52:00

**DST#: 2**

## Tool Information

Drill Pipe:	Length: 4895.00 ft	Diameter: 3.80 inches	Volume: 68.66 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	28000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	8000.00 lb
			<u>Total Volume: 68.66 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	64000.00 lb
Depth to Top Packer:	4902.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	33.00 ft				
Tool Length:	60.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4876.00	
Shut In Tool	5.00			4881.00	
Hydraulic tool	5.00			4886.00	
Jars	5.00			4891.00	
Safety Joint	2.00			4893.00	
Packer	5.00			4898.00	27.00 Bottom Of Top Packer
Packer	4.00			4902.00	
Stubb	1.00			4903.00	
Perforations	2.00			4905.00	
Recorder	0.00	8355	Outside	4905.00	
Recorder	0.00	8674	Inside	4905.00	
Perforations	25.00			4930.00	
Bullnose	5.00			4935.00	33.00 Bottom Packers & Anchor

**Total Tool Length: 60.00**



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior Inc.  
PO Box 399  
Garden City KS 67846  
ATTN: Kevin Timson

**2-25s-31w Finney,KS**  
**Ward # 1-2**  
Job Ticket: 58718      **DST#: 2**  
Test Start: 2014.11.23 @ 22:52:00

## Mud and Cushion Information

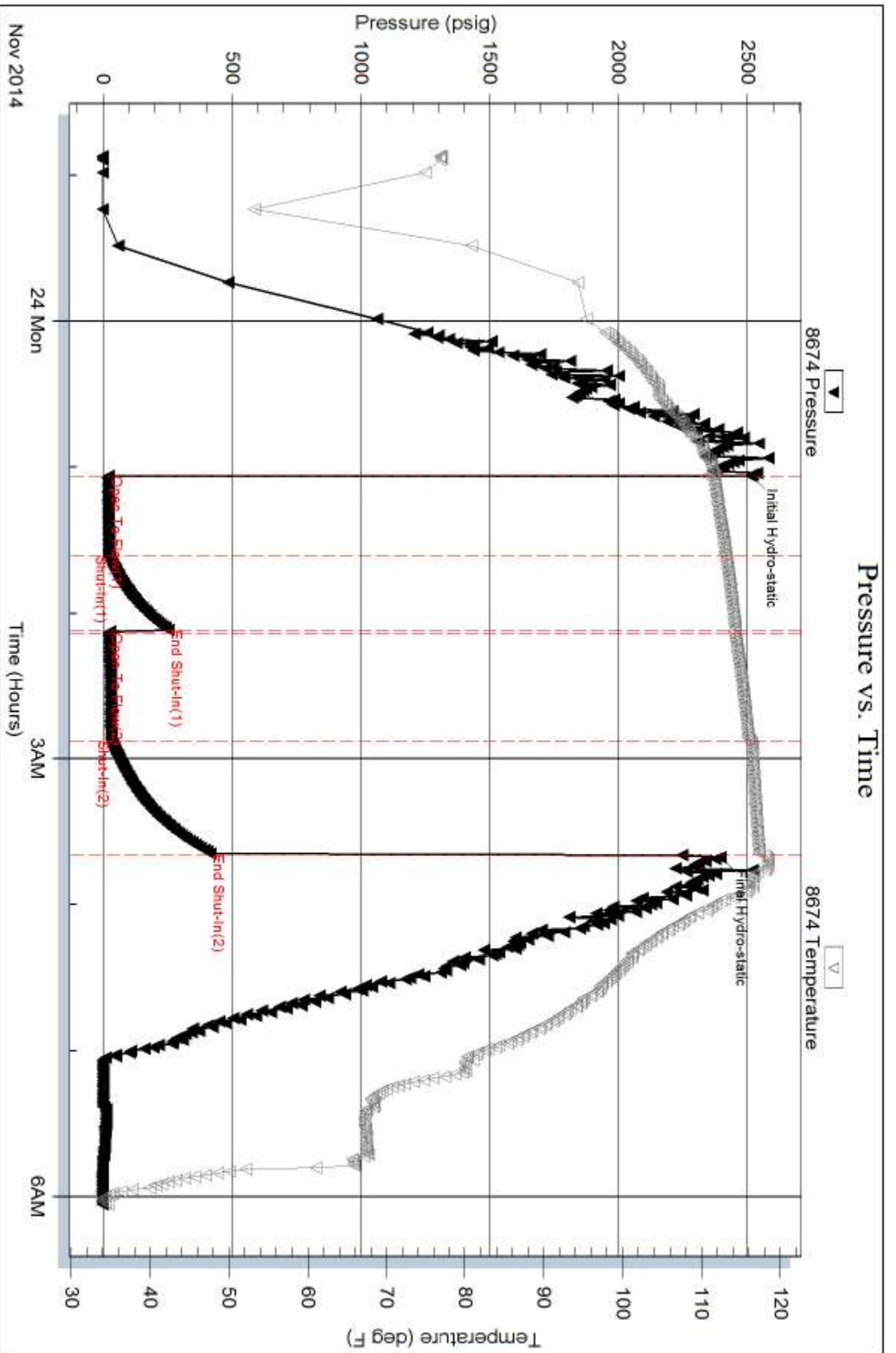
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.75 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2200.00 ppm			
Filter Cake: 1.00 inches			

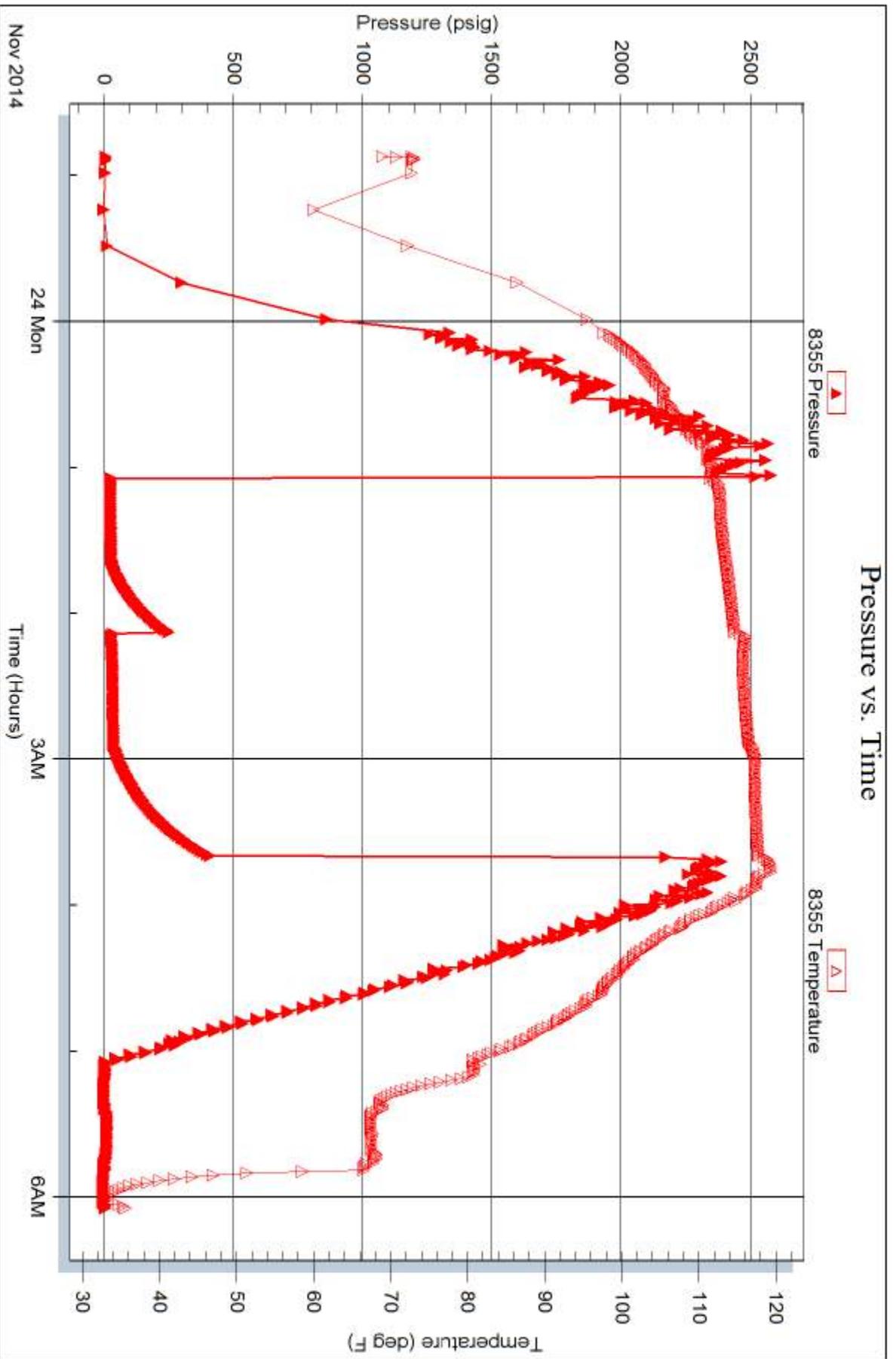
## Recovery Information

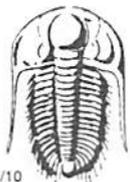
Recovery Table

Length ft	Description	Volume bbl
45.00	OGCM 9%oil 14%g	0.631
0.00	237' of GIP	0.000

Total Length: 45.00 ft      Total Volume: 0.631 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 58717

Well Name & No. Ward #1-2 Test No. DST #1 Date 11-23-14  
 Company American Namer Inc Elevation 2868 KB 2857 GL  
 Address P.O. Box 399 Garden City KS 67846  
 Co. Rep / Geo. Kevin Timson Rig Duke #10  
 Location: Sec. 2 Twp. 25S Rge. 3/W Co. Finney State KS

Interval Tested 4818-4870 Zone Tested Morrow  
 Anchor Length 52 Drill Pipe Run 4801 Mud Wt. 9.3  
 Top Packer Depth 4814 Drill Collars Run 0 Vis 6.3  
 Bottom Packer Depth 4818 Wt. Pipe Run 0 WL 8.0  
 Total Depth 4870 Chlorides 2100 ppm System LCM 116

Blow Description If Weak Surface Blow Built to 1 1/2" Died Back to 1"  
ISI - No Blow  
FF - No Blow  
FST - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 15 BHT 117 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

- (A) Initial Hydrostatic 2413
- (B) First Initial Flow 27
- (C) First Final Flow 29
- (D) Initial Shut-In 51
- (E) Second Initial Flow 29
- (F) Second Final Flow 30
- (G) Final Shut-In 41
- (H) Final Hydrostatic 2287

- Test 1250
- Jars 250
- Safety Joint 75
- Circ Sub NIC
- Hourly Standby \_\_\_\_\_
- Mileage 100 R/T 155
- Sampler \_\_\_\_\_
- Straddle \_\_\_\_\_
- Shale Packer \_\_\_\_\_
- Extra Packer \_\_\_\_\_
- Extra Recorder \_\_\_\_\_
- Day Standby \_\_\_\_\_
- Accessibility \_\_\_\_\_
- Sub Total 1730

T-On Location 2:08  
 T-Started 3:48  
 T-Open 7:26  
 T-Pulled 9:32  
 T-Out 12:00

Comments \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_  
 Sub Total 0  
 Total 1730.00  
 MP/DST Disc't \_\_\_\_\_

Initial Open 30  
 Initial Shut-In 30  
 Final Flow 30  
 Final Shut-In 30

Approved By \_\_\_\_\_ Our Representative Kevin Timson

TriLOBITE Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 58718

Well Name & No. Ward # 1-2 Test No. ~~H23 B12~~ Date 11-23-14  
 Company American Warrior Inc Elevation 2868 KB 2857 GL  
 Address P.O. Box 399 Garden City KS 67846  
 Co. Rep / Geo. Kevin Timson Rig Duke 10  
 Location: Sec. 2 Twp. 25S Rge. 31W Co. Finney State KS

Interval Tested 4902-4935 Zone Tested St. Louis  
 Anchor Length 33 Drill Pipe Run 4895 Mud Wt. 9.2  
 Top Packer Depth 4898 Drill Collars Run 0 Vis 56  
 Bottom Packer Depth 4902 Wt. Pipe Run 0 WL 8.8  
 Total Depth 4935 Chlorides 2200 ppm System LCM 216  
 Blow Description IF - Weak Surface Blow Built to 6 1/4"  
ISI - No Blow  
FF - Weak Surface Blow Built to BOB in 39 1/2 min  
FSI - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
45	OGCM	14	9	77	
	237' of G-IP				

Rec Total 45 BHT 117 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>2513</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>21:04</u>
(B) First Initial Flow <u>21</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>22:52</u>
(C) First Final Flow <u>23</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>1:03</u>
(D) Initial Shut-In <u>255</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>3:40</u>
(E) Second Initial Flow <u>22</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>6:03</u>
(F) Second Final Flow <u>31</u>	<input checked="" type="checkbox"/> Mileage <u>100 R/T</u> 155	Comments _____
(G) Final Shut-In <u>418</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>2395</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	Total <u>1730</u>
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility	
	Sub Total <u>1730</u>	

Approved By \_\_\_\_\_ Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.