



## DRILL STEM TEST REPORT

Prepared For: **American Warrior, Inc.**

PO Box 399  
Garden City, KS 67846

ATTN: Jason T Alm

### **Williams #11**

#### **36-19s-22w Ness,KS**

Start Date: 2016.03.08 @ 06:10:36

End Date: 2016.03.08 @ 16:58:06

Job Ticket #: 64846                      DST #: 1

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2016.03.09 @ 11:05:07



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior, Inc.

**36-19s-22w Ness, KS**

PO Box 399  
Garden City, KS 67846

**Williams #11**

Job Ticket: 64846

**DST#: 1**

ATTN: Jason T Alm

Test Start: 2016.03.08 @ 06:10:36

## GENERAL INFORMATION:

Formation: **Fort Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:59:36

Time Test Ended: 16:58:06

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Unit No: 73

**Interval: 4250.00 ft (KB) To 4310.00 ft (KB) (TVD)**

Reference Elevations: 2264.00 ft (KB)

Total Depth: 4310.00 ft (KB) (TVD)

2256.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6651**

**Inside**

Press@RunDepth: 21.57 psig @ 4274.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.03.08

End Date:

2016.03.08

Last Calib.:

2016.03.08

Start Time: 06:10:37

End Time:

16:58:06

Time On Btm:

2016.03.08 @ 13:58:36

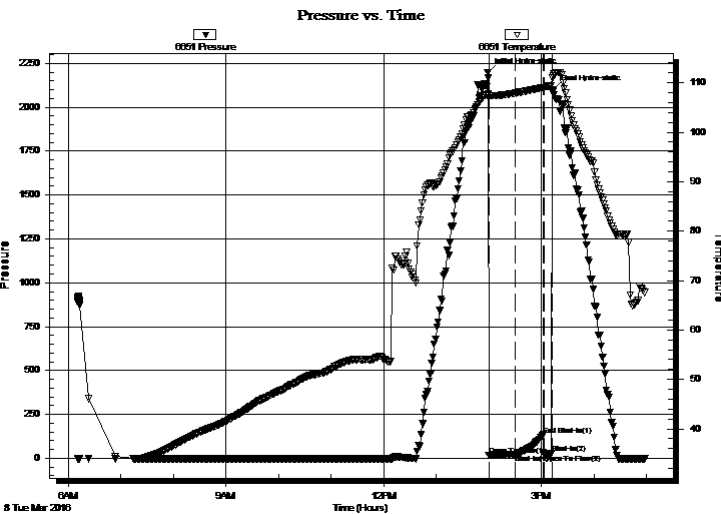
Time Off Btm:

2016.03.08 @ 15:13:06

TEST COMMENT: 30- IF- Weak surface blow throughout

30- IS- No blow

10- No blow Pulled tool



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2198.36         | 107.64       | Initial Hydro-static |
| 1           | 17.12           | 107.01       | Open To Flow (1)     |
| 31          | 21.57           | 107.91       | Shut-In(1)           |
| 63          | 134.22          | 109.03       | End Shut-In(1)       |
| 64          | 23.84           | 109.04       | Open To Flow (2)     |
| 73          | 26.04           | 109.44       | Shut-In(2)           |
| 75          | 2098.12         | 111.54       | Final Hydro-static   |

## Recovery

| Length (ft) | Description     | Volume (bbl) |
|-------------|-----------------|--------------|
| 15.00       | M w / oil spots | 0.07         |
|             |                 |              |
|             |                 |              |
|             |                 |              |
|             |                 |              |

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior, Inc.

**36-19s-22w Ness, KS**

PO Box 399  
Garden City, KS 67846

**Williams #11**

Job Ticket: 64846

**DST#: 1**

ATTN: Jason T Alm

Test Start: 2016.03.08 @ 06:10:36

## Tool Information

|                           |                    |                       |                      |                        |             |
|---------------------------|--------------------|-----------------------|----------------------|------------------------|-------------|
| Drill Pipe:               | Length: 4219.00 ft | Diameter: 3.82 inches | Volume: 59.81 bbl    | Tool Weight:           | 2500.00 lb  |
| Heavy Wt. Pipe:           | Length: ft         | Diameter: inches      | Volume: - bbl        | Weight set on Packer:  | 25000.00 lb |
| Drill Collar:             | Length: 31.00 ft   | Diameter: 2.25 inches | Volume: 0.15 bbl     | Weight to Pull Loose:  | 68000.00 lb |
|                           |                    |                       | <u>Total Volume:</u> | Tool Chased            | 0.00 ft     |
| Drill Pipe Above KB:      | 27.00 ft           |                       |                      | String Weight: Initial | 52000.00 lb |
| Depth to Top Packer:      | 4250.00 ft         |                       |                      | Final                  | 52000.00 lb |
| Depth to Bottom Packer:   | ft                 |                       |                      |                        |             |
| Interval between Packers: | 60.00 ft           |                       |                      |                        |             |
| Tool Length:              | 87.00 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        |            |          | 4224.00    |                               |
| Shut In Tool     | 5.00        |            |          | 4229.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 4234.00    |                               |
| Jars             | 5.00        |            |          | 4239.00    |                               |
| Safety Joint     | 2.00        |            |          | 4241.00    |                               |
| Packer           | 5.00        |            |          | 4246.00    | 27.00 Bottom Of Top Packer    |
| Packer           | 4.00        |            |          | 4250.00    |                               |
| Stubb            | 1.00        |            |          | 4251.00    |                               |
| Perforations     | 22.00       |            |          | 4273.00    |                               |
| Change Over Sub  | 1.00        |            |          | 4274.00    |                               |
| Recorder         | 0.00        | 6651       | Inside   | 4274.00    |                               |
| Recorder         | 0.00        | 6839       | Outside  | 4274.00    |                               |
| Drill Pipe       | 32.00       |            |          | 4306.00    |                               |
| Change Over Sub  | 1.00        |            |          | 4307.00    |                               |
| Bullnose         | 3.00        |            |          | 4310.00    | 60.00 Bottom Packers & Anchor |

**Total Tool Length: 87.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior, Inc.

**36-19s-22w Ness, KS**

PO Box 399  
Garden City, KS 67846

**Williams #11**

Job Ticket: 64846

**DST#: 1**

ATTN: Jason T Alm

Test Start: 2016.03.08 @ 06:10:36

## 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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5400.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

| Length<br>ft | Description    | Volume<br>bbl |
|--------------|----------------|---------------|
| 15.00        | Mw / oil spots | 0.074         |

Total Length: 15.00 ft      Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

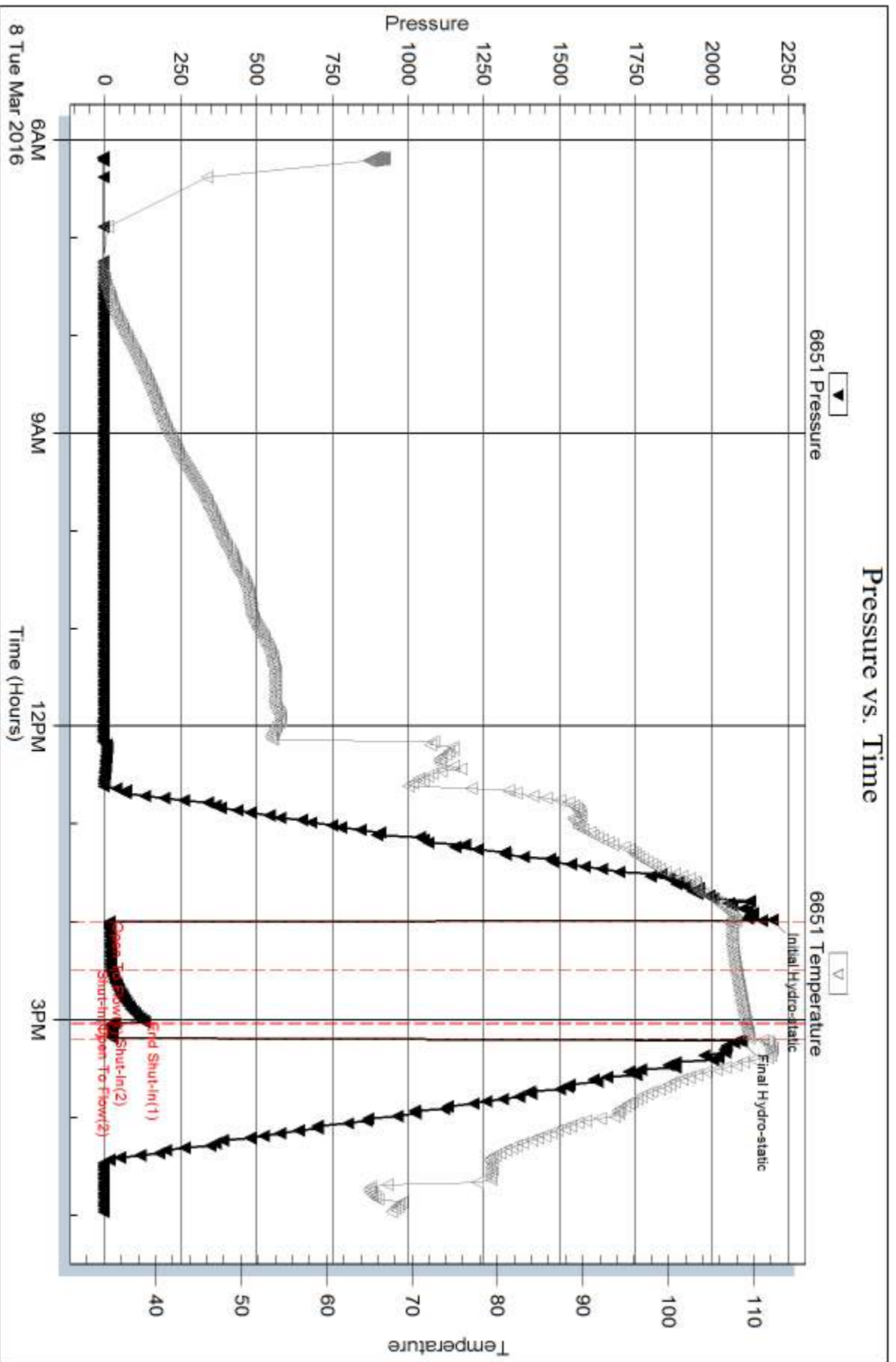
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time







## DRILL STEM TEST REPORT

Prepared For: **American Warrior, Inc.**

PO Box 399  
Garden City, KS 67846

ATTN: Jason T Alm

### **Williams #11**

#### **36-19s-22w Ness,KS**

Start Date: 2016.03.09 @ 01:32:43

End Date: 2016.03.09 @ 08:02:43

Job Ticket #: 64847                      DST #: 2

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2016.03.09 @ 11:04:23

American Warrior, Inc.  
36-19s-22w Ness,KS  
Williams #11  
DST # 2  
Miss  
2016.03.09





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

American Warrior, Inc.

**36-19s-22w Ness, KS**

PO Box 399  
Garden City, KS 67846

**Williams #11**

Job Ticket: 64847

**DST#: 2**

ATTN: Jason T Alm

Test Start: 2016.03.09 @ 01:32:43

## GENERAL INFORMATION:

Formation: **Miss**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 03:34:13  
 Time Test Ended: 08:02:43  
 Interval: **4322.00 ft (KB) To 4387.00 ft (KB) (TVD)**  
 Total Depth: 4387.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Brannan Lonsdale  
 Unit No: 73  
 Reference Elevations: 2264.00 ft (KB)  
 2256.00 ft (CF)  
 KB to GR/CF: 8.00 ft

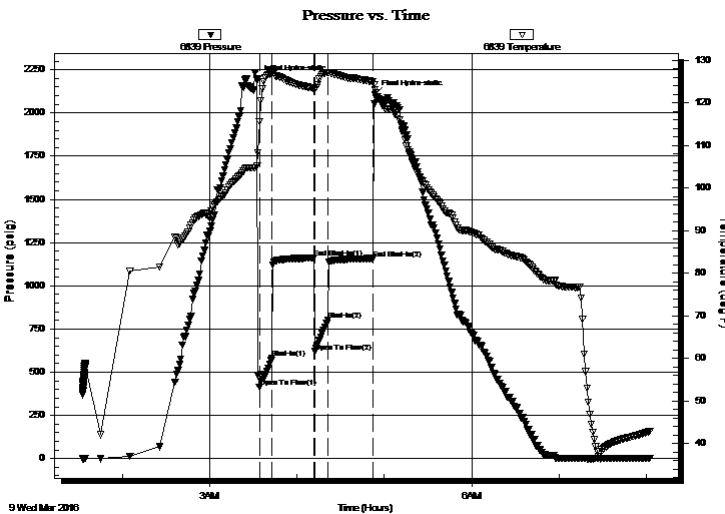
## Serial #: 6839

**Outside**

Press@RunDepth: 800.18 psig @ 4351.00 ft (KB)  
 Start Date: 2016.03.09 End Date: 2016.03.09  
 Start Time: 01:32:44 End Time: 08:02:43  
 Capacity: 8000.00 psig  
 Last Calib.: 2016.03.09  
 Time On Btm: 2016.03.09 @ 03:32:43  
 Time Off Btm: 2016.03.09 @ 04:53:43

TEST COMMENT: 10- IF- BOB 1 1/4 mins  
 30- IS- Surface blow  
 10- FF- BOB 1 1/2 mins  
 30- FSI- No blow

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2195.85         | 105.20       | Initial Hydro-static |
| 2           | 414.86          | 115.54       | Open To Flow (1)     |
| 10          | 583.43          | 126.91       | Shut-In(1)           |
| 39          | 1161.18         | 123.43       | End Shut-In(1)       |
| 40          | 619.06          | 123.18       | Open To Flow (2)     |
| 49          | 800.18          | 127.09       | Shut-In(2)           |
| 80          | 1158.01         | 125.00       | End Shut-In(2)       |
| 81          | 2106.33         | 123.04       | Final Hydro-static   |

## Recovery

| Length (ft) | Description          | Volume (bbl) |
|-------------|----------------------|--------------|
| 1205.00     | OCMW, 10%O 85%W 5%M  | 16.79        |
| 317.00      | WOCM, 10%O 10%W 80%M | 4.49         |
| 95.00       | M w / oil spots      | 1.35         |
|             |                      |              |
|             |                      |              |

## 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.

**36-19s-22w Ness, KS**

PO Box 399  
Garden City, KS 67846

**Williams #11**

Job Ticket: 64847

**DST#: 2**

ATTN: Jason T Alm

Test Start: 2016.03.09 @ 01:32:43

## Tool Information

|                           |                    |                       |                            |                                    |
|---------------------------|--------------------|-----------------------|----------------------------|------------------------------------|
| Drill Pipe:               | Length: 4282.00 ft | Diameter: 3.82 inches | Volume: 60.70 bbl          | Tool Weight: 2500.00 lb            |
| Heavy Wt. Pipe:           | Length: ft         | Diameter: inches      | Volume: - bbl              | Weight set on Packer: 25000.00 lb  |
| Drill Collar:             | Length: 31.00 ft   | Diameter: 2.25 inches | Volume: 0.15 bbl           | Weight to Pull Loose: 62000.00 lb  |
|                           |                    |                       | <u>Total Volume: - bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 18.00 ft           |                       |                            | String Weight: Initial 53000.00 lb |
| Depth to Top Packer:      | 4322.00 ft         |                       |                            | Final 60000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                            |                                    |
| Interval between Packers: | 65.00 ft           |                       |                            |                                    |
| Tool Length:              | 92.00 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  |      |         | 4296.00 |                               |
| Shut In Tool    | 5.00  |      |         | 4301.00 |                               |
| Hydraulic tool  | 5.00  |      |         | 4306.00 |                               |
| Jars            | 5.00  |      |         | 4311.00 |                               |
| Safety Joint    | 2.00  |      |         | 4313.00 |                               |
| Packer          | 5.00  |      |         | 4318.00 | 27.00 Bottom Of Top Packer    |
| Packer          | 4.00  |      |         | 4322.00 |                               |
| Stubb           | 1.00  |      |         | 4323.00 |                               |
| Perforations    | 27.00 |      |         | 4350.00 |                               |
| Change Over Sub | 1.00  |      |         | 4351.00 |                               |
| Recorder        | 0.00  | 6651 | Inside  | 4351.00 |                               |
| Recorder        | 0.00  | 6839 | Outside | 4351.00 |                               |
| Drill Pipe      | 32.00 |      |         | 4383.00 |                               |
| Change Over Sub | 1.00  |      |         | 4384.00 |                               |
| Bullnose        | 3.00  |      |         | 4387.00 | 65.00 Bottom Packers & Anchor |

**Total Tool Length: 92.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior, Inc.

**36-19s-22w Ness, KS**

PO Box 399  
Garden City, KS 67846

**Williams #11**

Job Ticket: 64847

**DST#: 2**

ATTN: Jason T Alm

Test Start: 2016.03.09 @ 01:32:43

## 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:

42000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5400.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

| Length<br>ft | Description          | Volume<br>bbl |
|--------------|----------------------|---------------|
| 1205.00      | OCMW, 10%O 85%W 5%M  | 16.794        |
| 317.00       | WOCM, 10%O 10%W 80%M | 4.494         |
| 95.00        | M w / oil spots      | 1.347         |

Total Length: 1617.00 ft      Total Volume: 22.635 bbl

Num Fluid Samples: 0

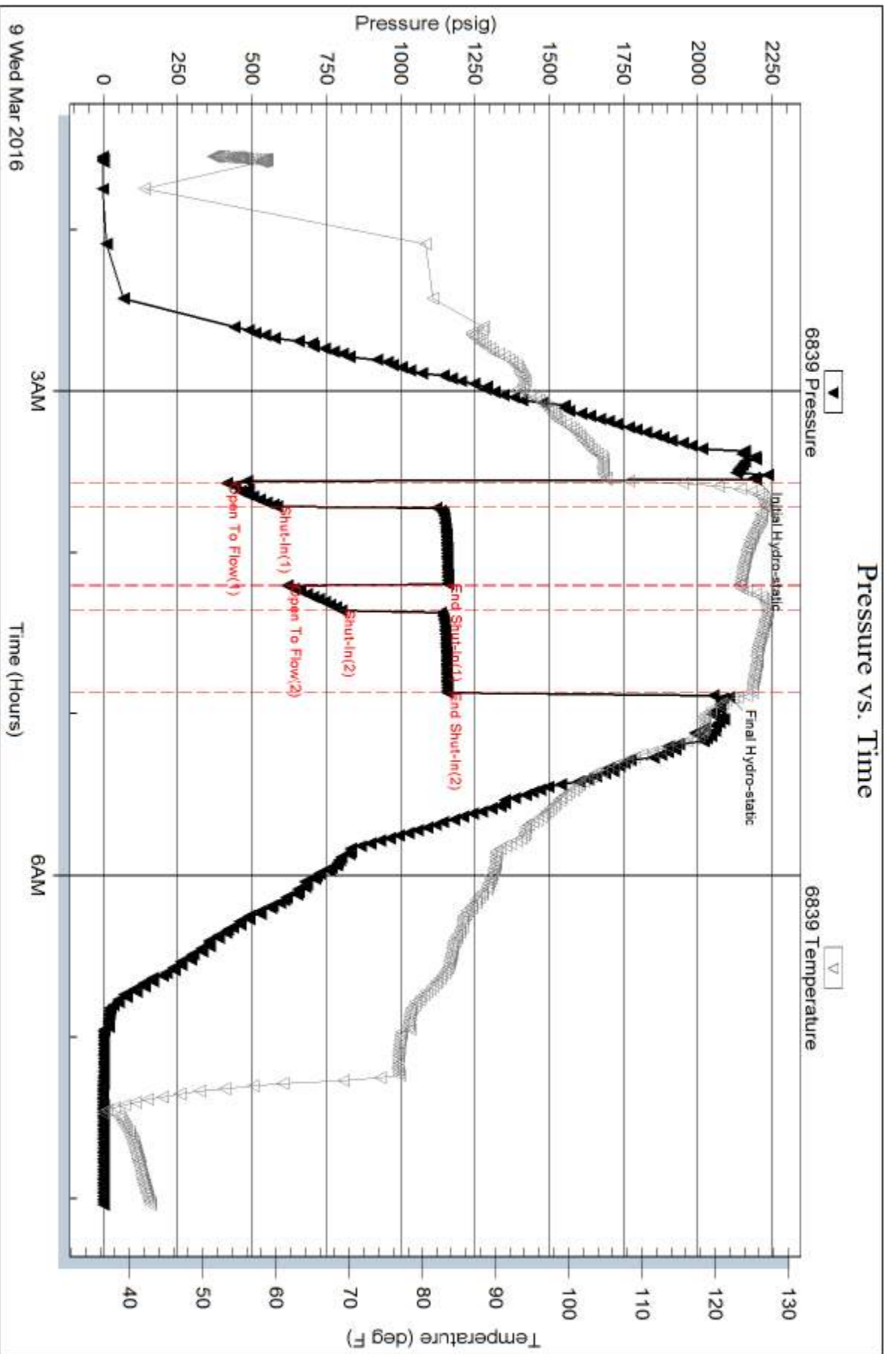
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



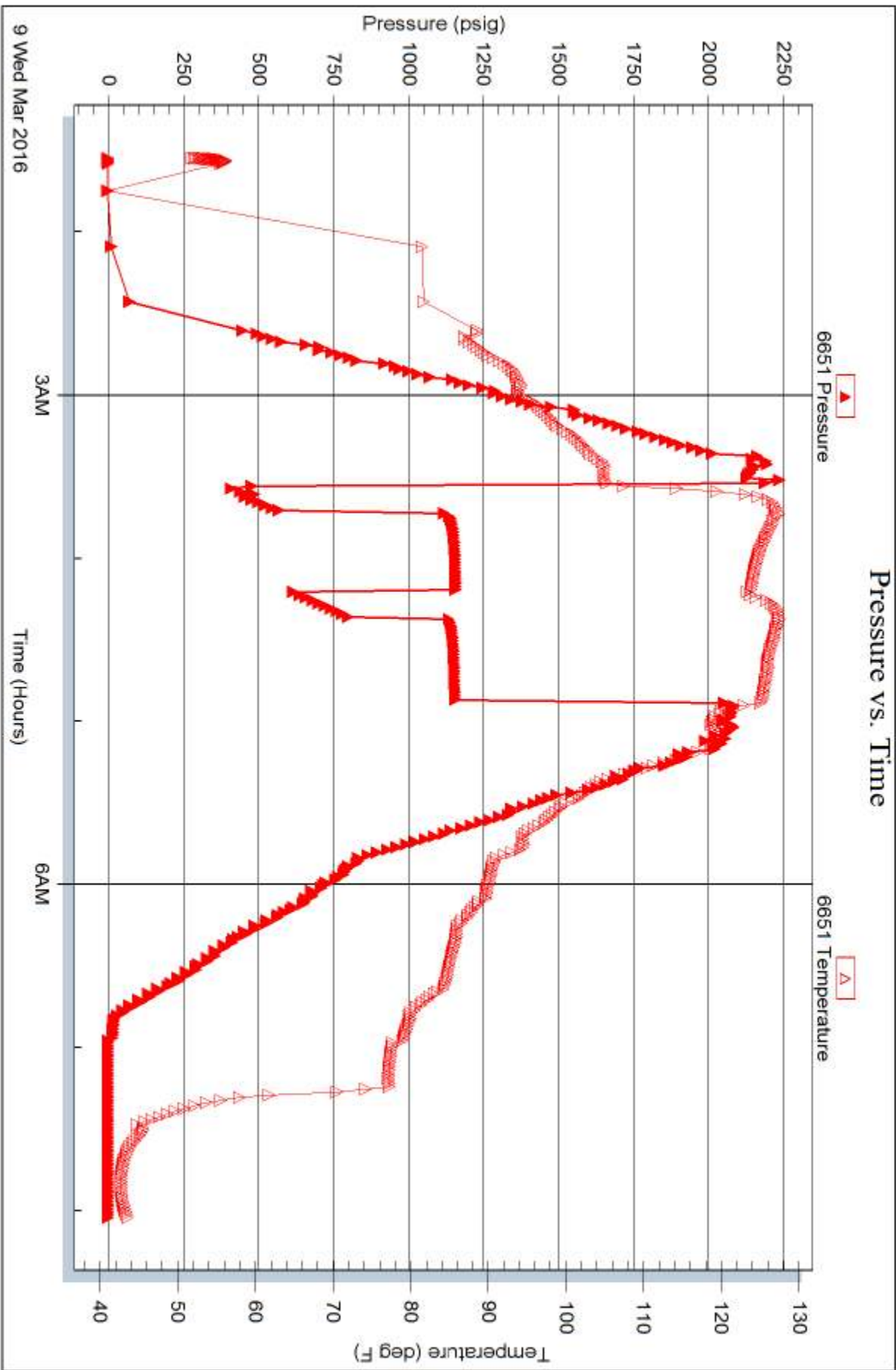
Serial #: 6651

Inside

American Warrior, Inc.

Williams #11

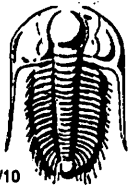
DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 64847

Printed: 2016.03.09 @ 11:04:26



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 64846

Well Name & No. Williams #11 Test No. 1 Date 3/8/16  
 Company American Warrior, Inc. Elevation 2264 KB 2256 GL  
 Address 318 Cummings Rd, PO Box 399 Garden City, KS 67846  
 Co. Rep / Geo. Jason T Alm Rig Discovery #3  
 Location: Sec. 36 Twp. 19 S Rge. 22 W Co. Ness State KS

Interval Tested 4250 - 4310 Zone Tested Fort Scott  
 Anchor Length 60' Drill Pipe Run 4219 Mud Wt. 8.9  
 Top Packer Depth 4245 Drill Collars Run 31 Vis 51  
 Bottom Packer Depth 4250 Wt. Pipe Run --- WL 8.0  
 Total Depth 4310 Chlorides 5,400 ppm System LCM ---  
 Blow Description IF- Weak surface blow  
ISI- No blow  
FF- No blow Pulled tool

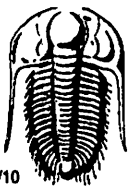
| Rec       | Feet of               | %gas | %oil | %water | %mud |
|-----------|-----------------------|------|------|--------|------|
| <u>15</u> | <u>M w/ oil spots</u> |      |      |        |      |
|           |                       |      |      |        |      |
|           |                       |      |      |        |      |
|           |                       |      |      |        |      |
|           |                       |      |      |        |      |

Rec Total 15' BHT 109° Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2198  Test 1150 T-On Location 0546  
 (B) First Initial Flow 17  Jars 250 T-Started 0610  
 (C) First Final Flow 22  Safety Joint 75 T-Open 1359 ~~1658~~  
 (D) Initial Shut-In 134  Circ Sub \_\_\_\_\_ T-Pulled 1509  
 (E) Second Initial Flow 24  Hourly Standby \_\_\_\_\_ T-Out 1658  
 (F) Second Final Flow 26  Mileage 122 RT 91.50 Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2098  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1566.50  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1566.50

Approved By \_\_\_\_\_ Our Representative Brannan Lonsdale

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. 64847

Well Name & No. Williams #11 Test No. 2 Date 3/9/16  
 Company American Warrior, Inc. Elevation 2264 KB 2256 GL  
 Address 3118 Cummins Rd. PO Box 349 Garden City, KS 67846  
 Co. Rep / Geo. Scott Corsair Rig Discovery #3  
 Location: Sec. 36 Twp. 19 S Rge. 22 W Co. Ness State KS

Interval Tested 4322-4387 Zone Tested Miss  
 Anchor Length 65' Drill Pipe Run 4282 Mud Wt. 8.9  
 Top Packer Depth 4317 Drill Collars Run 31 Vis 51  
 Bottom Packer Depth 4322 Wt. Pipe Run — WL 8.0  
 Total Depth 4387 Chlorides 5400 ppm System LCM 1#

Blow Description IF - BOB 1 1/4 mins  
ISL - Surface Blow  
FF - BOB 1 1/2 mins  
PSI - No blow

| Rec         | Feet of                        | %gas      | %oil      | %water    | %mud      |
|-------------|--------------------------------|-----------|-----------|-----------|-----------|
| <u>1205</u> | <u>Feet of OCMW</u>            | <u>10</u> | <u>10</u> | <u>85</u> | <u>5</u>  |
| <u>317</u>  | <u>Feet of WOCM</u>            | <u>10</u> | <u>10</u> | <u>10</u> | <u>80</u> |
| <u>95</u>   | <u>Feet of NA w/ oil spots</u> |           |           |           |           |
|             |                                |           |           |           |           |
|             |                                |           |           |           |           |

Rec Total 1617 BHT 125° Gravity \_\_\_\_\_ API RW .27 @ 42 °F Chlorides 4200 ppm  
 (A) Initial Hydrostatic 2196  Test 1150 T-On Location 0129  
 (B) First Initial Flow 415  Jars 250 T-Started 0032  
 (C) First Final Flow 583  Safety Joint 75 T-Open 0332  
 (D) Initial Shut-In 1161  Circ Sub \_\_\_\_\_ T-Pulled 0452  
 (E) Second Initial Flow 619  Hourly Standby \_\_\_\_\_ T-Out 0802  
 (F) Second Final Flow 800  Mileage 122 RT 91.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1158  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2106  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1566.50  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1566.50

Approved By \_\_\_\_\_ Our Representative Brannon Lonsdale

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.