



## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399  
Garden City, KS 67846

ATTN: Jason Alm

### **Charvat #1-25**

#### **25-15s-11w Russel,KS**

Start Date: 2016.06.22 @ 23:07:00

End Date: 2016.06.23 @ 04:19:00

Job Ticket #: 65096                      DST #: 1

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

Printed: 2016.06.24 @ 11:18:31



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

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**25-15s-11w Russel,KS**

**Charvat #1-25**

Job Ticket: 65096

**DST#: 1**

Test Start: 2016.06.22 @ 23:07:00

## GENERAL INFORMATION:

Formation: **Conglomerate Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:47:00

Time Test Ended: 04:19:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72

**Interval: 3242.00 ft (KB) To 3280.00 ft (KB) (TVD)**

Reference Elevations: 1783.00 ft (KB)

Total Depth: 3280.00 ft (KB) (TVD)

1775.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8960 Outside**

Press@RunDepth: 37.60 psig @ 3277.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.06.22

End Date:

2016.06.23

Last Calib.:

2016.06.23

Start Time: 23:07:05

End Time:

04:18:59

Time On Btm:

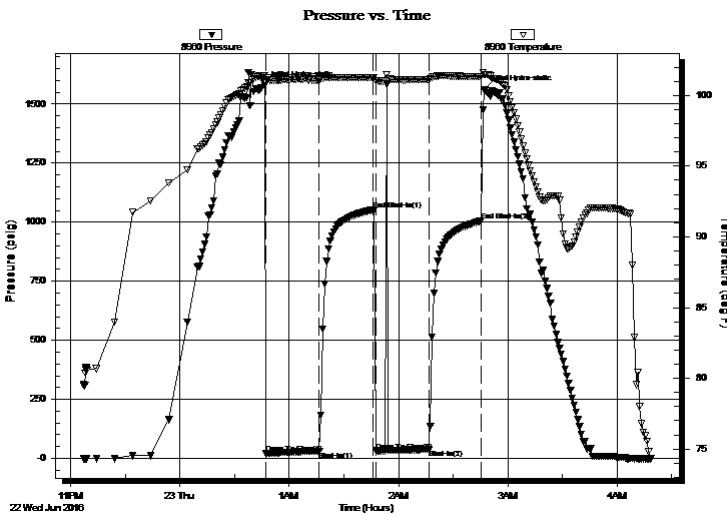
2016.06.23 @ 00:46:30

Time Off Btm:

2016.06.23 @ 02:47:00

TEST COMMENT: I.F. 30 Weak blow built to 2"  
I.S.I. 30 No blow back  
F.F. 30 No blow / flush tool / weak blow built to 1"  
F.S.I. 30 No blow back

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1579.67         | 101.41       | Initial Hydro-static |
| 1           | 19.98           | 100.92       | Open To Flow (1)     |
| 30          | 30.27           | 101.08       | Shut-In(1)           |
| 60          | 1052.09         | 101.25       | End Shut-In(1)       |
| 61          | 31.76           | 101.02       | Open To Flow (2)     |
| 90          | 37.60           | 101.12       | Shut-In(2)           |
| 119         | 1005.14         | 101.32       | End Shut-In(2)       |
| 121         | 1560.54         | 101.47       | Final Hydro-static   |

## Recovery

| Length (ft) | Description                 | Volume (bbl) |
|-------------|-----------------------------|--------------|
| 30.00       | Oily Mud /20% oil 80% mud   | 0.15         |
| 30.00       | Mud cut oil/ Mud 5% oil 95% | 0.42         |
|             |                             |              |
|             |                             |              |
|             |                             |              |

## Gas Rates

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



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**Charvat #1-25**

Job Ticket: 65096

**DST#: 1**

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Unit No: 72

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Reference Elevations: 1783.00 ft (KB)

Total Depth: 3280.00 ft (KB) (TVD)

1775.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 6741**

**Inside**

Press@RunDepth: 995.34 psig @ 3276.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.06.22

End Date:

2016.06.23

Last Calib.:

2016.06.23

Start Time: 23:07:05

End Time:

04:18:59

Time On Btm:

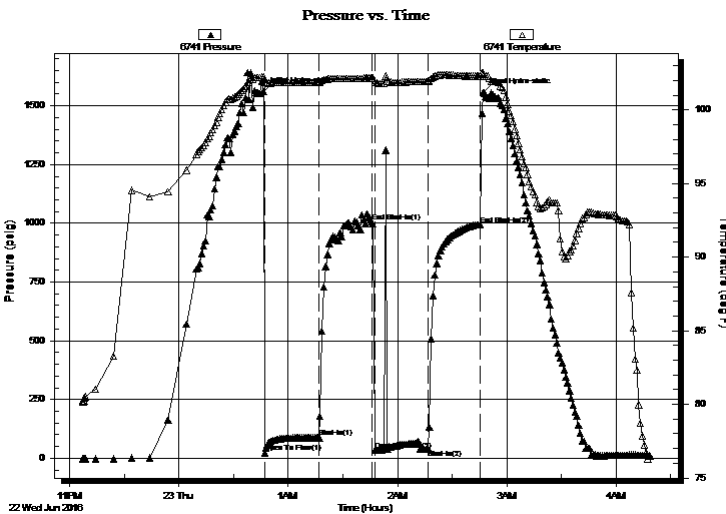
2016.06.23 @ 00:46:30

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**TEST COMMENT:** I.F. 30 Weak blow built to 2"  
I.S.I. 30 No blow back  
F.F. 30 No blow / flush tool / weak blow built to 1"  
F.S.I. 30 No blow back

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1562.55         | 102.26       | Initial Hydro-static |
| 1           | 23.26           | 101.83       | Open To Flow (1)     |
| 31          | 87.45           | 101.85       | Shut-In(1)           |
| 60          | 1005.77         | 102.16       | End Shut-In(1)       |
| 61          | 33.79           | 101.88       | Open To Flow (2)     |
| 91          | 38.52           | 101.93       | Shut-In(2)           |
| 119         | 995.34          | 102.28       | End Shut-In(2)       |
| 121         | 1557.91         | 102.50       | Final Hydro-static   |

## Recovery

| Length (ft) | Description                 | Volume (bbl) |
|-------------|-----------------------------|--------------|
| 30.00       | Oily Mud /20% oil 80% mud   | 0.15         |
| 30.00       | Mud cut oil/ Mud 5% oil 95% | 0.42         |
|             |                             |              |
|             |                             |              |
|             |                             |              |

## 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: Jason Alm

**25-15s-11w Russel,KS**  
**Charvat #1-25**  
Job Ticket: 65096  
Test Start: 2016.06.22 @ 23:07:00

**DST#: 1**

## Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3203.00 ft | Diameter: 3.80 inches | Volume: 44.93 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: 20000.00 lb  |
| Drill Collar:             | Length: 30.00 ft   | Diameter: 2.25 inches | Volume: 0.15 bbl               | Weight to Pull Loose: 60000.00 lb  |
|                           |                    |                       | <u>Total Volume: 45.08 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 18.00 ft           |                       |                                | String Weight: Initial 49000.00 lb |
| Depth to Top Packer:      | 3242.00 ft         |                       |                                | Final 49000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 38.00 ft           |                       |                                |                                    |
| Tool Length:              | 65.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

## Tool Description

| Tool Description          | Length (ft)  | Serial No. | Position | Depth (ft) | Accum. Lengths             |
|---------------------------|--------------|------------|----------|------------|----------------------------|
| Shut-In Tool              | 5.00         |            |          | 3220.00    |                            |
| Hydraulic tool            | 5.00         |            |          | 3225.00    |                            |
| Jars                      | 5.00         |            |          | 3230.00    |                            |
| Safety Joint              | 2.00         |            |          | 3232.00    |                            |
| Top Packer                | 5.00         |            |          | 3237.00    |                            |
| Packer                    | 5.00         |            |          | 3242.00    | 27.00 Bottom Of Top Packer |
| Anchor                    | 33.00        |            |          | 3275.00    |                            |
| Recorder                  | 1.00         | 6741       | Inside   | 3276.00    |                            |
| Recorder                  | 1.00         | 8960       | Outside  | 3277.00    |                            |
| Bullnose                  | 3.00         |            |          | 3280.00    | 38.00 Anchor Tool          |
| <b>Total Tool Length:</b> | <b>65.00</b> |            |          |            |                            |



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

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**25-15s-11w Russel,KS**  
**Charvat #1-25**  
Job Ticket: 65096      **DST#: 1**  
Test Start: 2016.06.22 @ 23:07:00

## Mud and Cushion Information

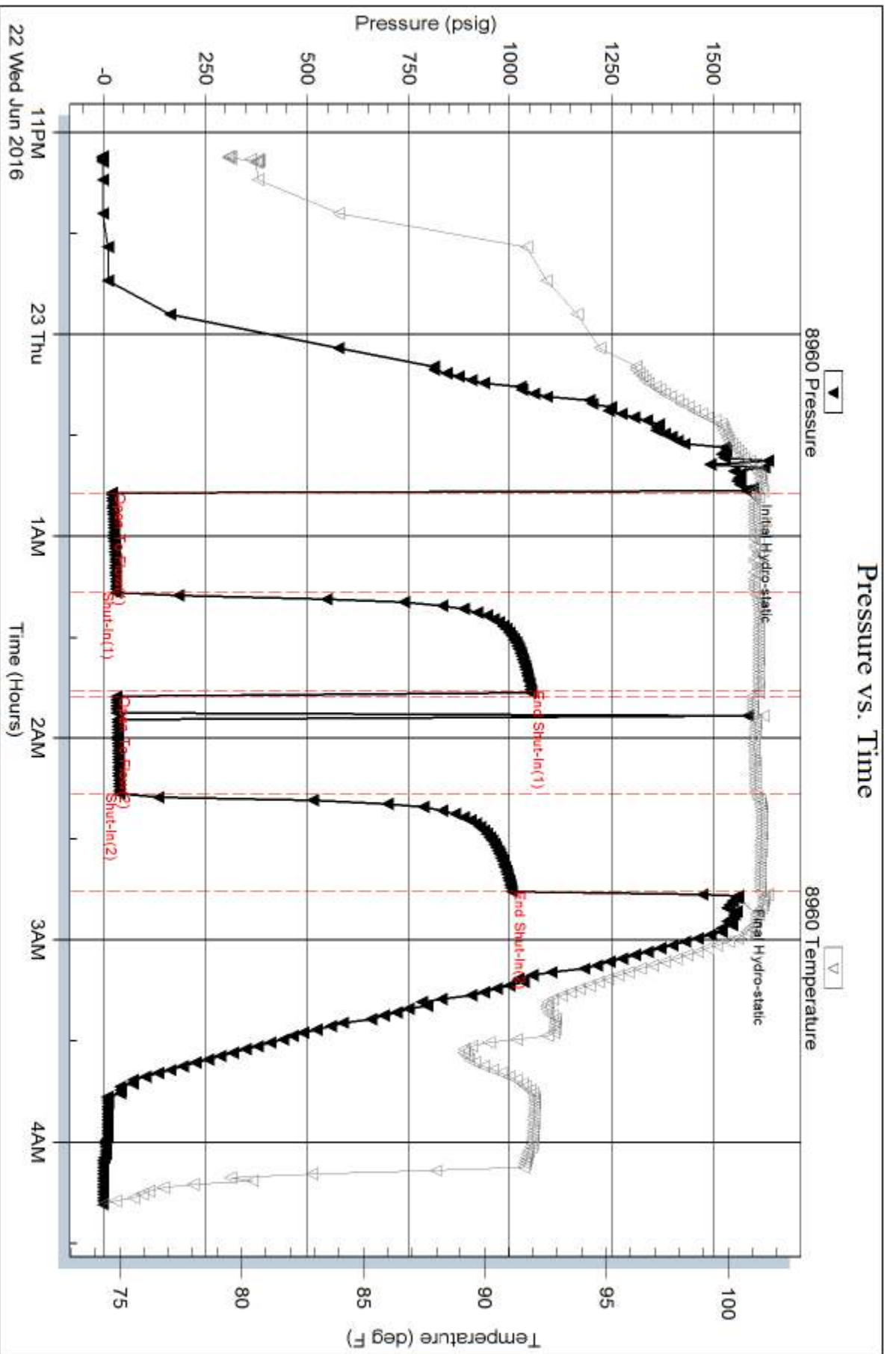
|                                  |                            |                     |
|----------------------------------|----------------------------|---------------------|
| Mud Type: Gel Chem               | Cushion Type:              | Oil API: 37 deg API |
| Mud Weight: 9.00 lb/gal          | Cushion Length: ft         | Water Salinity: ppm |
| Viscosity: 48.00 sec/qt          | Cushion Volume: bbl        |                     |
| Water Loss: 9.59 in <sup>3</sup> | Gas Cushion Type:          |                     |
| Resistivity: ohm.m               | Gas Cushion Pressure: psig |                     |
| Salinity: 4000.00 ppm            |                            |                     |
| Filter Cake: 1.00 inches         |                            |                     |

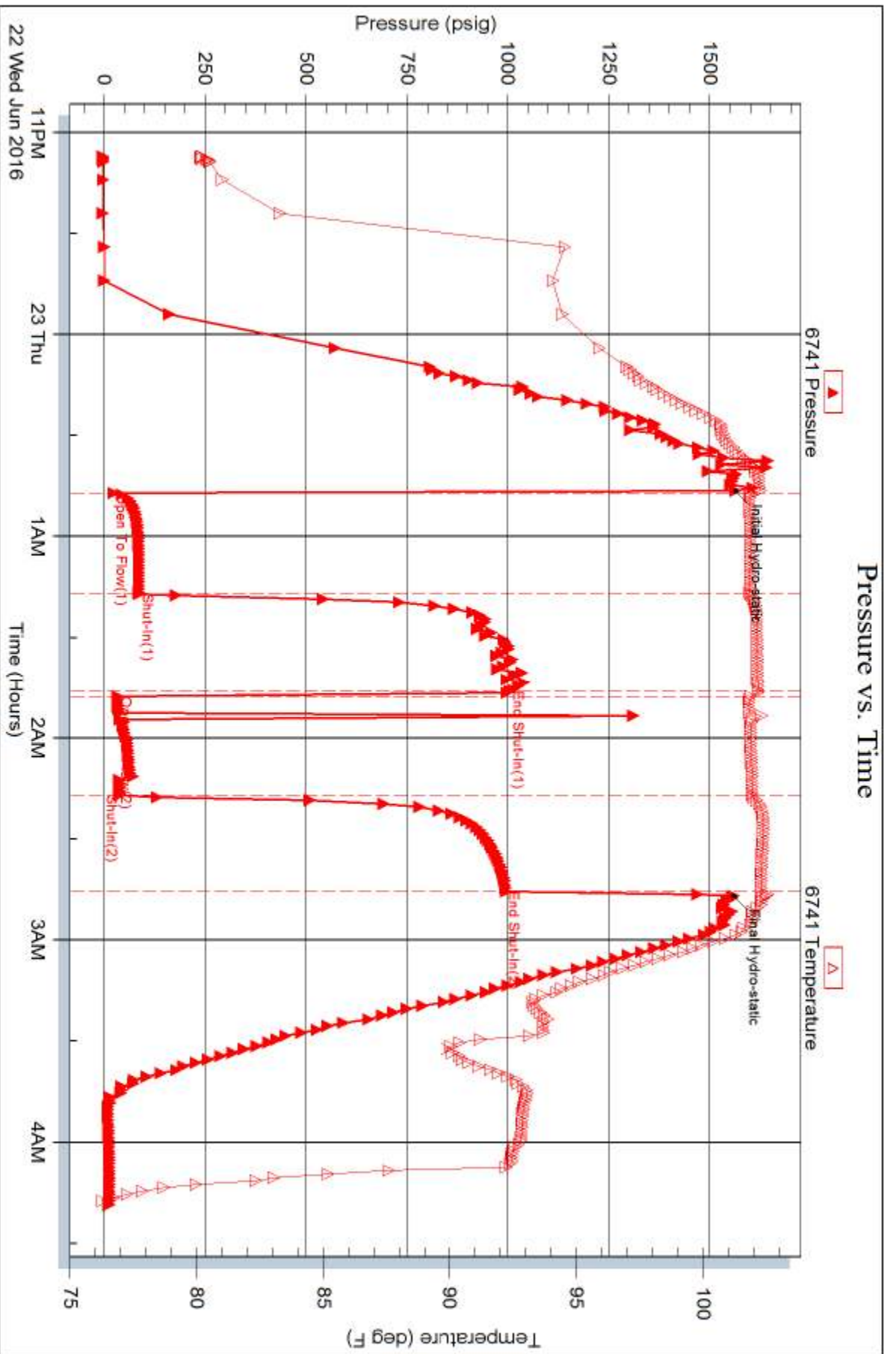
## Recovery Information

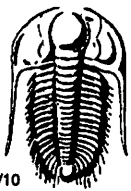
Recovery Table

| Length<br>ft | Description                 | Volume<br>bbl |
|--------------|-----------------------------|---------------|
| 30.00        | Oily Mud /20% oil 80% mud   | 0.148         |
| 30.00        | Mud cut oil/ Mud 5% oil 95% | 0.421         |

Total Length: 60.00 ft      Total Volume: 0.569 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. 65096

Well Name & No. Charvat #1-25 Test No. 1 Date 22 June 66  
 Company American Warrior Inc Elevation 1783 KB 1775 GL  
 Address PO Box 399 3118 Cummings Rd Garden City, KS 67846  
 Co. Rep / Geo. Jason Alm Rig Discovery Rig #3  
 Location: Sec. 25 Twp. 15S Rge. 11W Co. Russel State KS

Interval Tested 3242-3280 Zone Tested Conglomerate Sand  
 Anchor Length 38 Drill Pipe Run 3203 Mud Wt. 9.15  
 Top Packer Depth 3237 Drill Collars Run 30 Vis 48  
 Bottom Packer Depth 3242 Wt. Pipe Run — WL 9.6  
 Total Depth 3280 Chlorides 4,000 ppm System LCM Trace

Blow Description Initial flow weak blow built to 2 inches  
Initial shut in no blow back  
Final flow no blow flush tool blow built to 1 inch  
Final shut in no blow back

| Rec       | Feet of            | %gas | %oil      | %water | %mud      |
|-----------|--------------------|------|-----------|--------|-----------|
| <u>30</u> | <u>0.14 Mud</u>    |      | <u>20</u> |        | <u>80</u> |
| <u>30</u> | <u>Mud cut oil</u> |      | <u>95</u> |        | <u>5</u>  |
|           |                    |      |           |        |           |
|           |                    |      |           |        |           |
|           |                    |      |           |        |           |

Rec Total 60 BHT 102 Gravity 37 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1579  Test 1050 T-On Location 9:45 pm  
 (B) First Initial Flow 19  Jars 250 T-Started 11:08 pm  
 (C) First Final Flow 30  Safety Joint 75 T-Open 12:47 am  
 (D) Initial Shut-In 1052  Circ Sub — T-Pulled 2:47 am  
 (E) Second Initial Flow 31  Hourly Standby — T-Out 4:20 am  
 (F) Second Final Flow 37  Mileage 66 99 Comments loaded tools 6/23 16:30  
 (G) Final Shut-In 1005  Sampler —  
 (H) Final Hydrostatic 1560  Straddle —  Ruined Shale Packer —  
 Shale Packer —  Ruined Packer —  
 Extra Packer —  Extra Copies —  
 Extra Recorder — Sub Total 0  
 Day Standby — Total 1474  
 Accessibility — MP/DST Disc't —  
 Sub Total 1474

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