



## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc.**

PO Box 399  
Garden City KS 67846

ATTN: Jim Musgrove

### **Delbert #1-15**

#### **15-18s-10w Rice,KS**

Start Date: 2014.09.24 @ 06:28:00

End Date: 2014.09.24 @ 14:58:30

Job Ticket #: 60460                      DST #: 1

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

Printed: 2014.09.26 @ 10:12:47



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc.  
PO Box 399  
Garden City KS 67846  
ATTN: Jim Musgrove

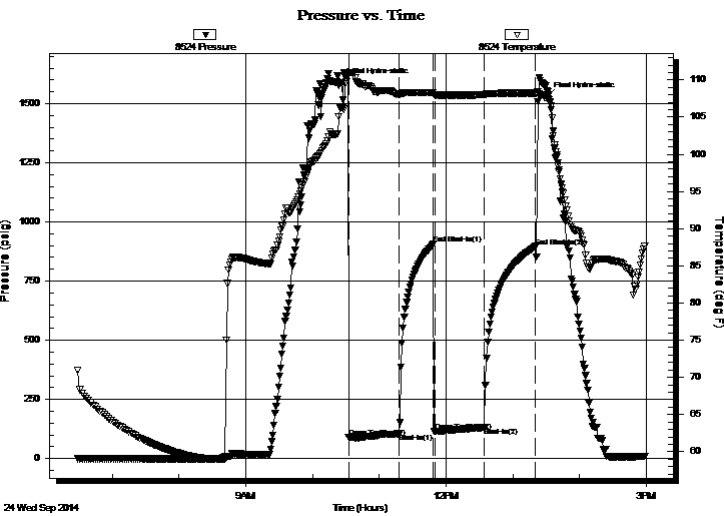
**15-18s-10w Rice, KS**  
**Delbert #1-15**  
Job Ticket: 60460 **DST#: 1**  
Test Start: 2014.09.24 @ 06:28:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 10:32:30  
Time Test Ended: 14:58:30  
Interval: **3206.00 ft (KB) To 3287.00 ft (KB) (TVD)**  
Total Depth: 3287.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Poor  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Shane Konzem  
Unit No: S3  
Reference Elevations: 1774.00 ft (KB)  
1766.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 8524 Inside**  
Press@RunDepth: 132.42 psig @ 3283.07 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.09.24 End Date: 2014.09.24 Last Calib.: 2014.09.24  
Start Time: 06:29:00 End Time: 14:58:30 Time On Btm: 2014.09.24 @ 10:24:30  
Time Off Btm: 2014.09.24 @ 13:31:00

TEST COMMENT: IFP 45 Fair blow built to 10"  
ISI 30 No blow back.  
FFP 45 Fair blow built to 8"  
FSI45 No blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1590.24	106.23	Initial Hydro-static
8	91.05	110.84	Open To Flow (1)
54	106.86	108.10	Shut-In(1)
84	905.20	108.30	End Shut-In(1)
86	114.48	107.99	Open To Flow (2)
130	132.42	108.01	Shut-In(2)
176	896.49	108.24	End Shut-In(2)
187	1529.86	107.48	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
74.00	100% Clean Oil	1.04
63.00	OCM 20% Oil, 80% Mud	0.88
63.00	OCM 5% Oil, 95% mud	0.88

## Gas Rates

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



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**Delbert #1-15**  
Job Ticket: 60460 **DST#: 1**  
Test Start: 2014.09.24 @ 06:28:00

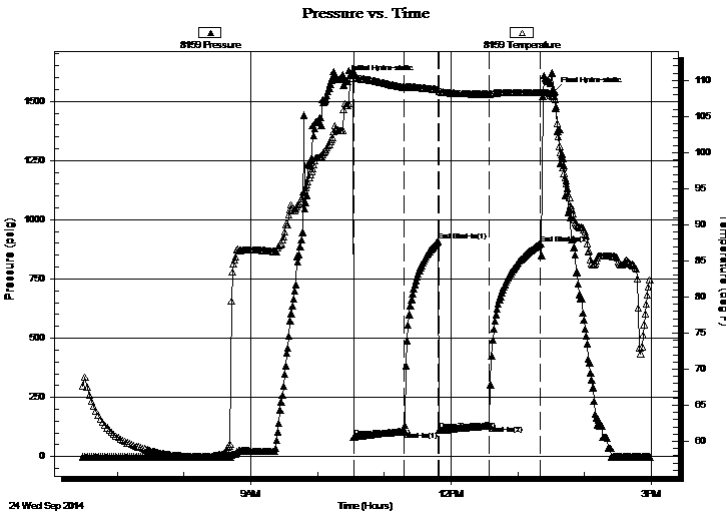
## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 10:32:30  
Time Test Ended: 14:58:30  
Interval: **3206.00 ft (KB) To 3287.00 ft (KB) (TVD)**  
Total Depth: 3287.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Poor  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Shane Konzem  
Unit No: S3  
Reference Elevations: 1774.00 ft (KB)  
1766.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 8159 Outside**  
Press@RunDepth: 898.68 psig @ 3284.07 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.09.24 End Date: 2014.09.24 Last Calib.: 2014.09.24  
Start Time: 06:29:00 End Time: 14:59:00 Time On Btm: 2014.09.24 @ 10:24:30  
Time Off Btm: 2014.09.24 @ 13:33:00

TEST COMMENT: IFP 45 Fair blow built to 10"  
ISI 30 No blow back.  
FFP 45 Fair blow built to 8"  
FSI45 No blow back.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1590.84	106.83	Initial Hydro-static
8	81.70	111.22	Open To Flow (1)
54	106.72	109.04	Shut-In(1)
84	909.15	108.74	End Shut-In(1)
85	110.42	108.49	Open To Flow (2)
130	131.32	108.08	Shut-In(2)
176	898.68	108.31	End Shut-In(2)
189	1539.94	107.51	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
74.00	100% Clean Oil	1.04
63.00	OCM 20% Oil, 80% Mud	0.88
63.00	OCM 5% Oil, 95% mud	0.88

## Gas Rates

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



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# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior Inc.  
PO Box 399  
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ATTN: Jim Musgrove

**15-18s-10w Rice,KS**  
**Delbert #1-15**  
Job Ticket: 60460 **DST#: 1**  
Test Start: 2014.09.24 @ 06:28:00

## Tool Information

Drill Pipe:	Length: 3210.00 ft	Diameter: 3.80 inches	Volume: 45.03 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 45.03 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3206.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	81.07 ft			
Tool Length:	101.07 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			3191.00	
Hydraulic tool	5.00			3196.00	
Packer	5.00			3201.00	20.00 Bottom Of Top Packer
Packer	5.00			3206.00	
Anchor	5.00			3211.00	
Change Over Sub	0.75			3211.75	
Drill Pipe	31.57			3243.32	
Change Over Sub	0.75			3244.07	
Anchor	38.00			3282.07	
Recorder	1.00	8524	Inside	3283.07	
Recorder	1.00	8159	Outside	3284.07	
Bull Plug	3.00			3287.07	81.07 Bottom Packers & Anchor

**Total Tool Length: 101.07**



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## FLUID SUMMARY

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**15-18s-10w Rice,KS**  
**Delbert #1-15**  
Job Ticket: 60460      **DST#: 1**  
Test Start: 2014.09.24 @ 06:28:00

### Mud and Cushion Information

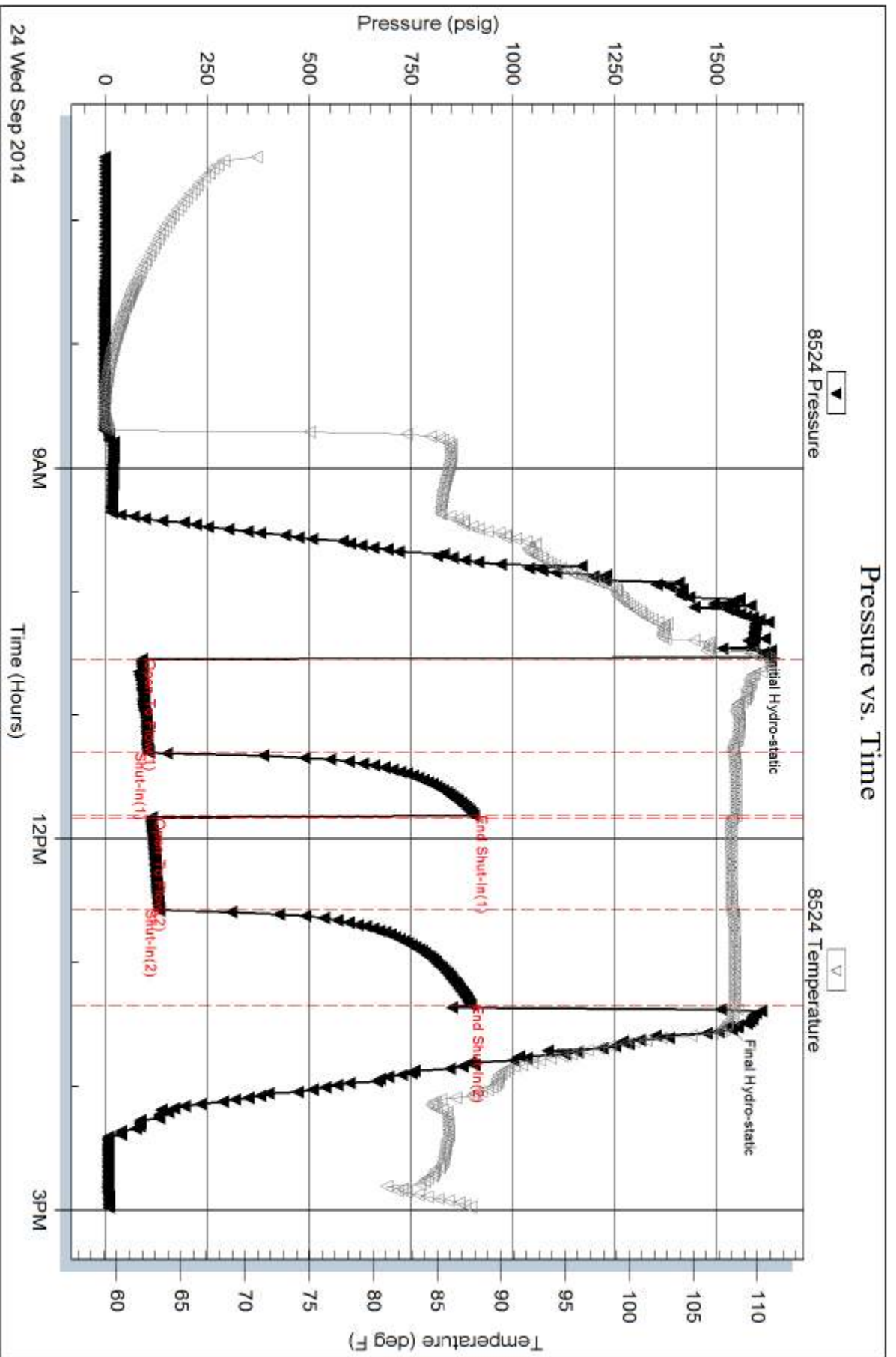
Mud Type: Gel Chem	Cushion Type:	Oil API: 42 deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 68.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.98 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4500.00 ppm		
Filter Cake: 2.00 inches		

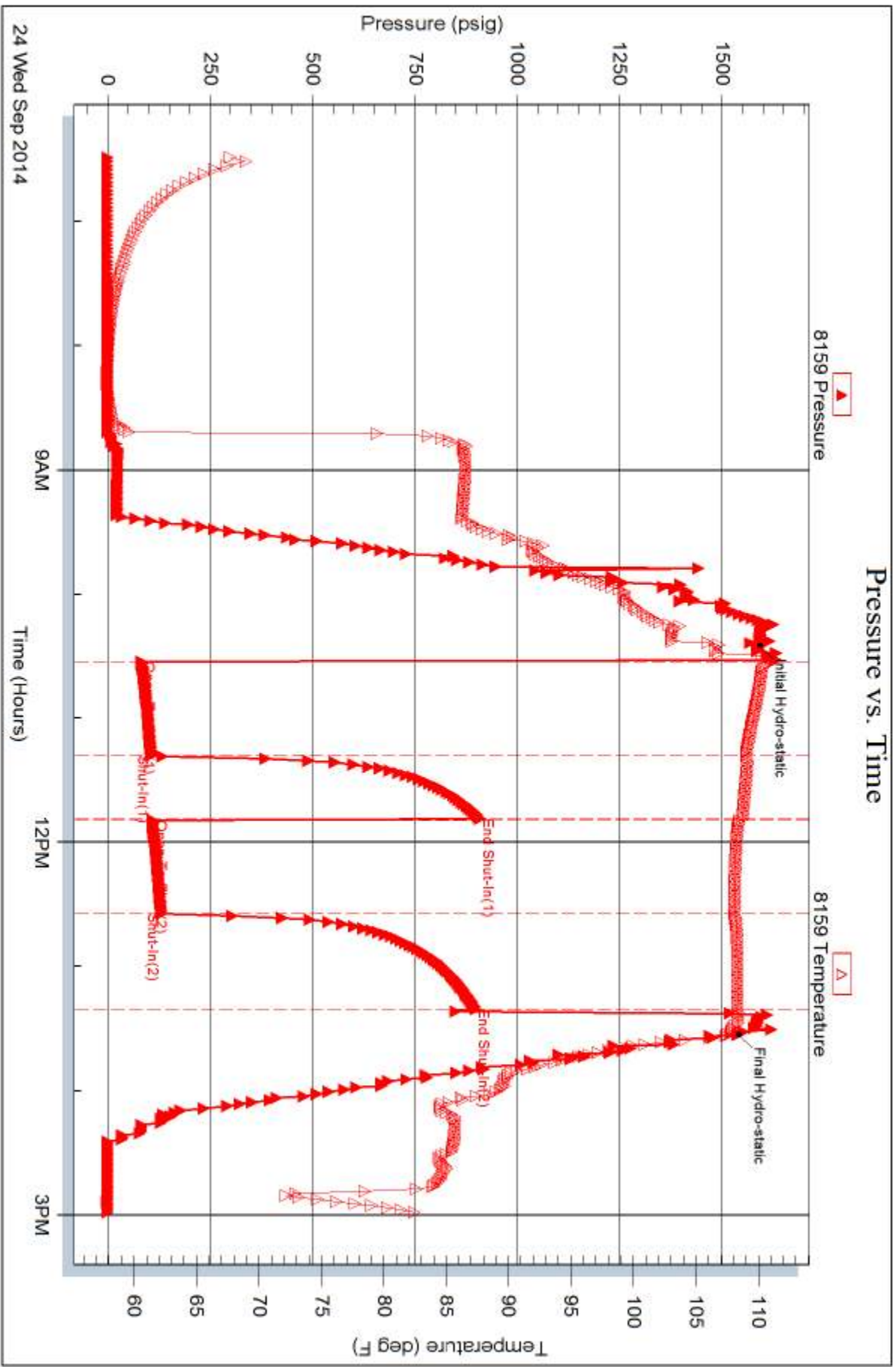
### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
74.00	100% Clean Oil	1.038
63.00	OCM 20% Oil, 80% Mud	0.884
63.00	OCM 5% Oil, 95% mud	0.884

Total Length: 200.00 ft      Total Volume: 2.806 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:





24 Wed Sep 2014

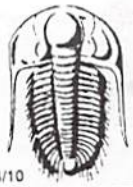
9AM

Time (Hours)

12PM

3PM





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 60460

Well Name & No. Delbert #1-15 Test No. 1 Date 9-24-14  
 Company American Warrior Inc Elevation 1774 KB 1766 GL  
 Address 3118 Cummings Rd P.O. Box 399 Garden City KS 67846  
 Co. Rep / Geo. Jim Musgrove Rig Duke #8  
 Location: Sec. 15 Twp. 18 S Rge. 10 W Co. Rice State KS

Interval Tested 3206 - 3287 Zone Tested Arbuckle  
 Anchor Length 81 Drill Pipe Run 3210 Mud Wt. 9.5  
 Top Packer Depth 3201 Drill Collars Run 0 Vis 68  
 Bottom Packer Depth 3206 Wt. Pipe Run 0 WL 8.0  
 Total Depth 3287 Chlorides 4500 ppm System LCM 0  
 Blow Description 1st Open - Fair blow built to 10 inches into water. 1st Shut In - No blow back. 2nd Open - Fair blow built to 8 inches into water.

Rec	Feet of	%gas	%oil	%water	%mud
<u>74</u>	<u>clean oil</u>	<u>100</u>			
<u>63</u>	<u>oil cnt mud</u>	<u>20</u>		<u>80</u>	
<u>63</u>	<u>oil cnt mud</u>	<u>5</u>		<u>95</u>	

Rec Total 200 BHT 110 Gravity 42 API RW 1 @ 1 °F Chlorides 1 ppm

(A) Initial Hydrostatic 1590  Test 1150 T-On Location 0600  
 (B) First Initial Flow 91  Jars \_\_\_\_\_ T-Started 0900  
 (C) First Final Flow 106  Safety Joint \_\_\_\_\_ T-Open 1035  
 (D) Initial Shut-In 905  Circ Sub \_\_\_\_\_ T-Pulled 1315  
 (E) Second Initial Flow 114  Hourly Standby \_\_\_\_\_ T-Out 1500  
 (F) Second Final Flow 132  Mileage 54 83.70 Comments \_\_\_\_\_  
 (G) Final Shut-In 896  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1529  Straddle \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_  
 Initial Open 45  Extra Packer \_\_\_\_\_  
 Initial Shut-In 30  Extra Recorder \_\_\_\_\_  
 Final Flow 45  Day Standby \_\_\_\_\_  
 Final Shut-In 45  Accessibility \_\_\_\_\_  
 Sub Total 1233.70 Total 1233.70  
 MP/DST Disc't \_\_\_\_\_

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.