



## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399  
Garden City, KS 67846

ATTN: Jason Alm

### **Brenner Brother 1-30**

### **30-17s-21w Ness,KS**

Start Date: 2015.11.02 @ 02:00:00

End Date: 2015.11.02 @ 08:49:31

Job Ticket #: 61959                      DST #: 1

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

Printed: 2015.11.02 @ 11:20:16



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc  
 PO Box 399  
 Garden City, KS 67846  
 ATTN: Jason Alm

**30-17s-21w Ness, KS**  
**Brenner Brother 1-30**  
 Job Ticket: 61959 **DST#: 1**  
 Test Start: 2015.11.02 @ 02:00:00

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 04:15:01  
 Time Test Ended: 08:49:31  
 Interval: **4291.00 ft (KB) To 4300.00 ft (KB) (TVD)**  
 Total Depth: 4300.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 58  
 Reference Elevations: 2225.00 ft (KB)  
 2217.00 ft (CF)  
 KB to GR/CF: 8.00 ft

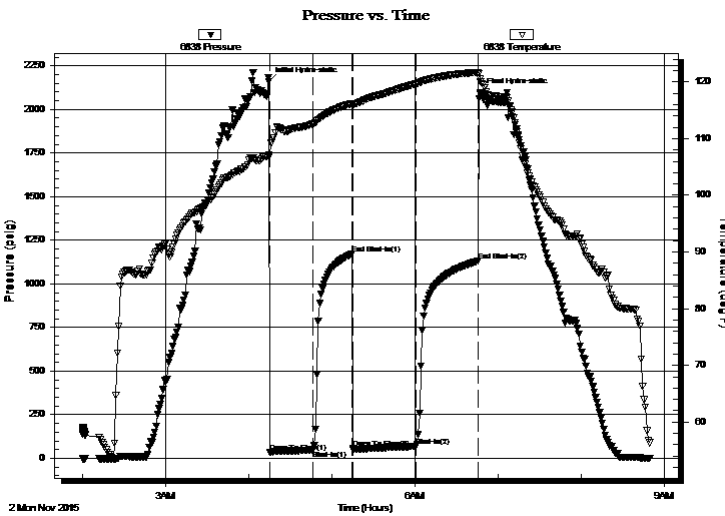
## Serial #: 6838

Inside

Press@RunDepth: 68.87 psig @ 4296.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.11.02 End Date: 2015.11.02 Last Calib.: 2015.11.02  
 Start Time: 02:00:01 End Time: 08:49:31 Time On Btm: 2015.11.02 @ 04:14:16  
 Time Off Btm: 2015.11.02 @ 06:46:31

TEST COMMENT: IFP 30 Minutes/Fair blow built to 6"  
 ISI 30 Minutes/No blow back  
 FFP 45 Minutes/Fair blow built to 9"  
 FSI 45 Minutes/Very weak surface blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2158.09	107.05	Initial Hydro-static
1	33.24	106.95	Open To Flow (1)
32	47.94	112.55	Shut-In(1)
60	1171.54	116.19	End Shut-In(1)
61	57.84	115.68	Open To Flow (2)
106	68.87	119.65	Shut-In(2)
151	1130.47	121.69	End Shut-In(2)
153	2096.56	120.53	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
63.00	OCMW Oil 5%/Mud 20%/Water 75%	0.61
31.00	MCWO Mud 20% Water 40% Oil 40%	0.43
31.00	MWCO Mud 10% Water 10% Oil 80%	0.43
0.00	63' GIP	0.00

## Gas Rates

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



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PO Box 399  
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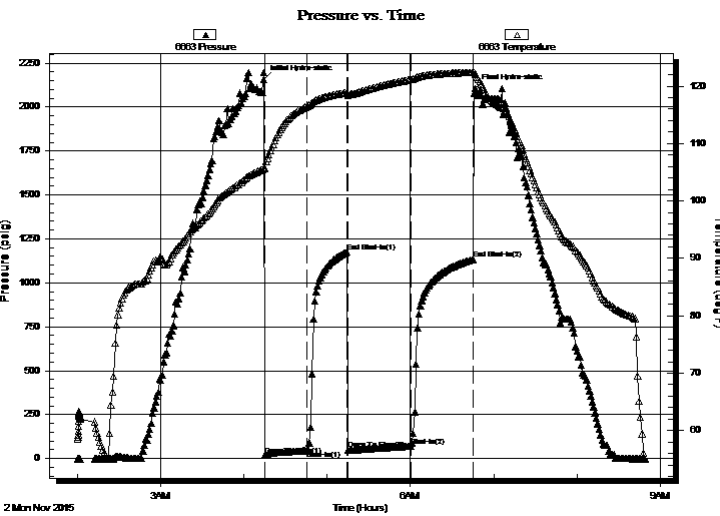
**30-17s-21w Ness, KS**  
**Brenner Brother 1-30**  
Job Ticket: 61959 **DST#: 1**  
Test Start: 2015.11.02 @ 02:00:00

## GENERAL INFORMATION:

Formation: **Mississippi**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 04:15:01  
Time Test Ended: 08:49:31  
Interval: **4291.00 ft (KB) To 4300.00 ft (KB) (TVD)**  
Total Depth: 4300.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Ken Swinney  
Unit No: 58  
Reference Elevations: 2225.00 ft (KB)  
2217.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 6663 Outside**  
Press@RunDepth: 1133.95 psig @ 4297.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2015.11.02 End Date: 2015.11.02 Last Calib.: 2015.11.02  
Start Time: 02:00:01 End Time: 08:49:31 Time On Btm: 2015.11.02 @ 04:14:16  
Time Off Btm: 2015.11.02 @ 06:46:31

**TEST COMMENT:** IFP 30 Minutes/Fair blow built to 6"  
ISI 30 Minutes/No blow back  
FFP 45 Minutes/Fair blow built to 9"  
FSI 45 Minutes/Very weak surface blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2155.75	105.68	Initial Hydro-static
1	19.84	105.72	Open To Flow (1)
32	44.89	116.52	Shut-In(1)
60	1174.87	118.87	End Shut-In(1)
61	50.08	118.46	Open To Flow (2)
106	69.87	121.14	Shut-In(2)
151	1133.95	122.39	End Shut-In(2)
153	2104.13	122.19	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
63.00	OCMW Oil 5%/Mud 20%/Water 75%	0.61
31.00	MCWO Mud 20% Water 40% Oil 40%	0.43
31.00	MWCO Mud 10% Water 10% Oil 80%	0.43
0.00	63' GIP	0.00

## 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

**30-17s-21w Ness, KS**  
**Brenner Brother 1-30**  
Job Ticket: 61959 **DST#: 1**  
Test Start: 2015.11.02 @ 02:00:00

**Tool Information**

Drill Pipe:	Length: 4251.00 ft	Diameter: 3.80 inches	Volume: 59.63 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: 64000.00 lb
			<u>Total Volume: 59.78 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4291.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	36.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Shut-In Tool	5.00			4269.00	
Hydraulic tool	5.00			4274.00	
Jars	5.00			4279.00	
Safety Joint	2.00			4281.00	
Top Packer	5.00			4286.00	
Packer	5.00			4291.00	27.00 Bottom Of Top Packer
Anchor	4.00			4295.00	
Recorder	1.00	6838	Inside	4296.00	
Recorder	1.00	6663	Outside	4297.00	
Bullnose	3.00			4300.00	9.00 Anchor Tool
<b>Total Tool Length:</b>	<b>36.00</b>				



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

American Warrior Inc  
PO Box 399  
Garden City, KS 67846  
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**30-17s-21w Ness,KS**  
**Brenner Brother 1-30**  
Job Ticket: 61959      **DST#: 1**  
Test Start: 2015.11.02 @ 02:00:00

## Mud and Cushion Information

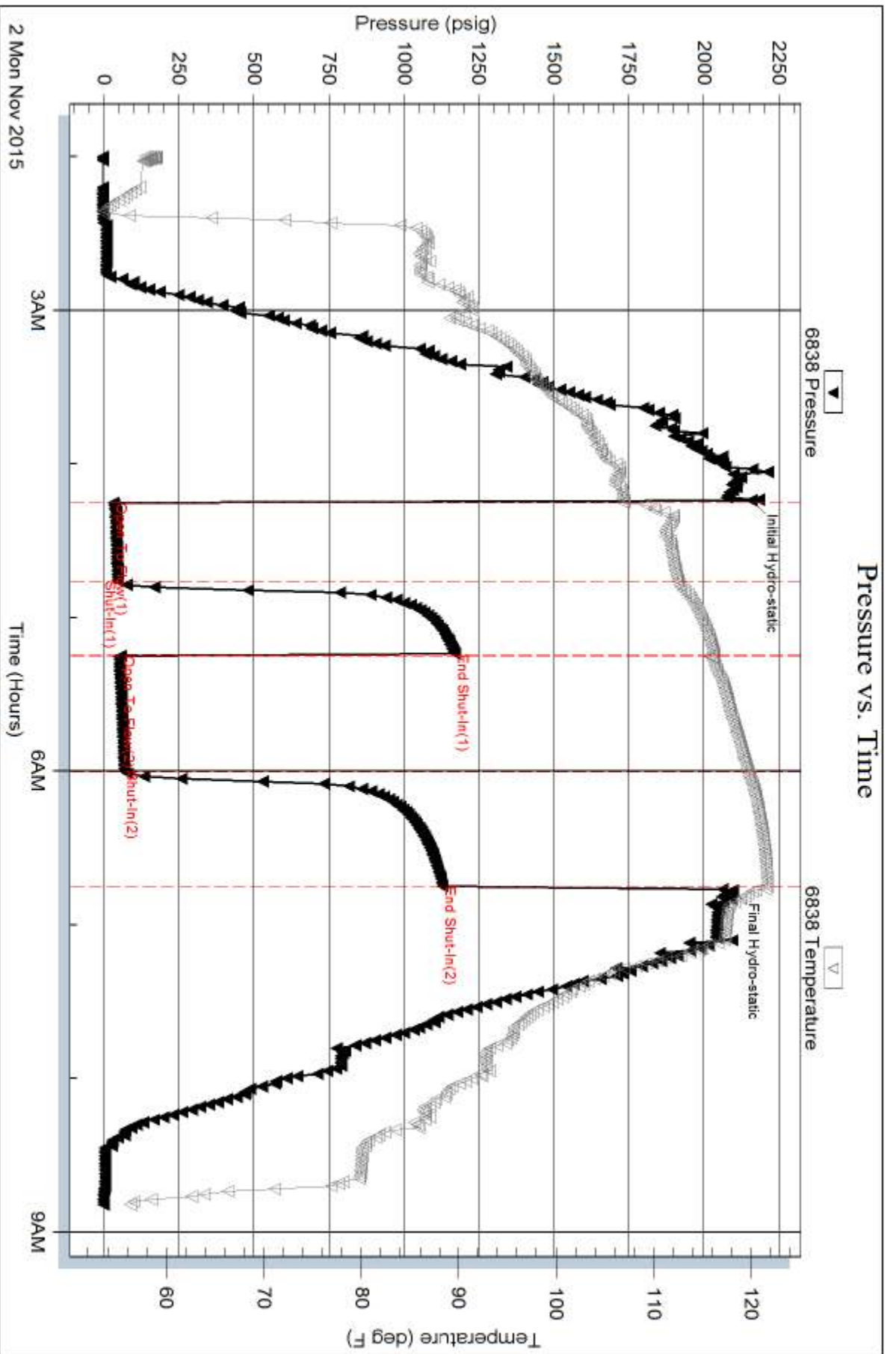
Mud Type: Gel Chem	Cushion Type:	Oil API: 35 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 14000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.78 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4400.00 ppm		
Filter Cake: 1.00 inches		

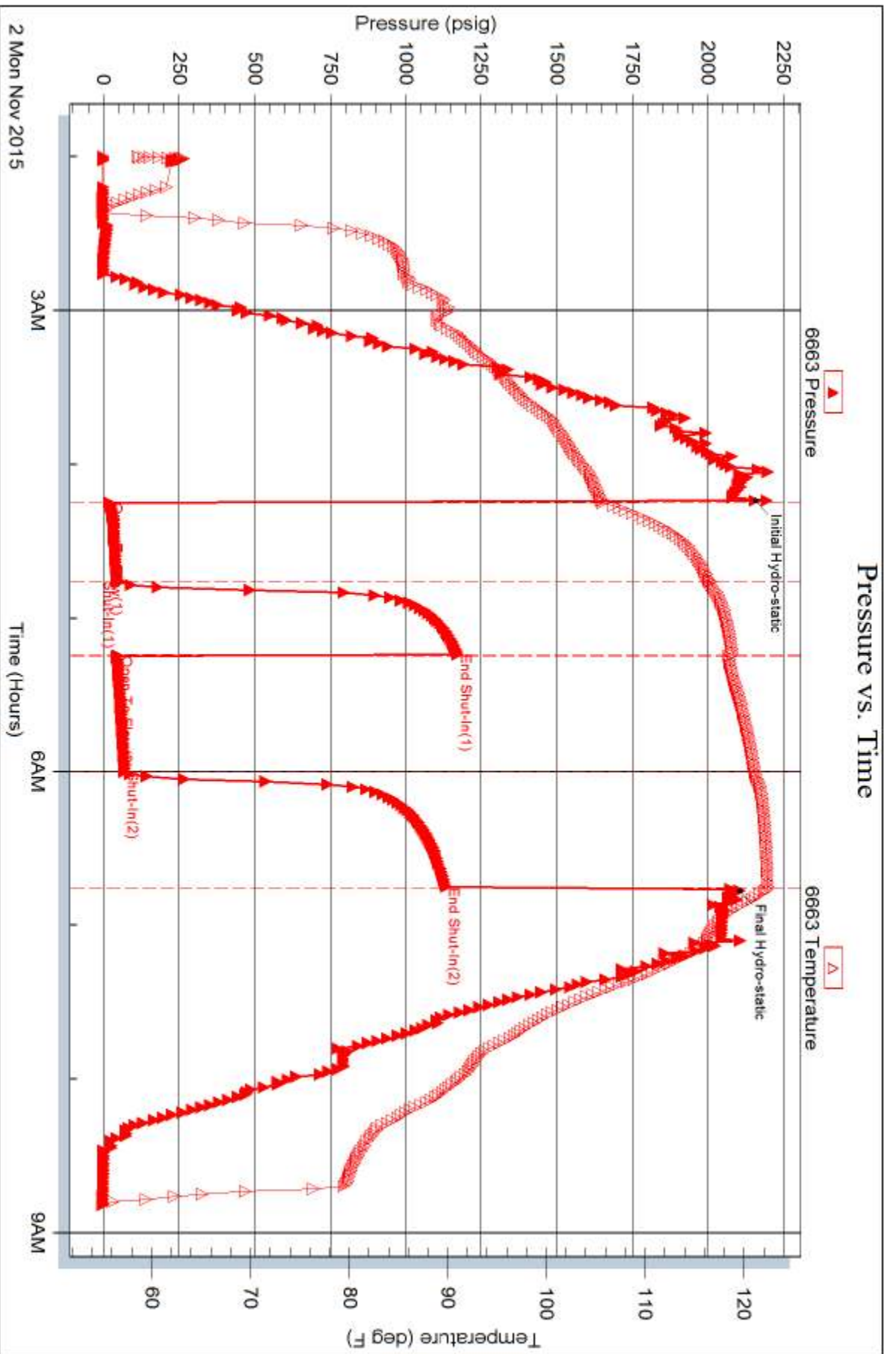
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
63.00	OCMW Oil 5%/Mud 20%/Water 75%	0.610
31.00	MCWO Mud 20% Water 40% Oil 40%	0.435
31.00	MWCO Mud 10% Water 10% Oil 80%	0.435
0.00	63' GIP	0.000

Total Length: 125.00 ft      Total Volume: 1.480 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: .56 ohms @ 55 deg.







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 61959

Well Name & No. Brenner Brothers #1-30 Test No. 1 Date 2 NOV 15  
 Company American Warrior Incorporated Elevation 2225 KB 2217 GL  
 Address 3118 Cummings Road PO Box 399 Garden City, Kansas 67846  
 Co. Rep / Geo. Jason Alm Rig Discovery Rig 3  
 Location: Sec. 30 Twp. 17S Rge. 21W Co. Ness State KS

Interval Tested 4291-4300 Zone Tested Mississippi  
 Anchor Length 9 Drill Pipe Run 4251 Mud Wt. 9.3  
 Top Packer Depth 4286 Drill Collars Run 30 Vis 50  
 Bottom Packer Depth 4291 Wt. Pipe Run — WL 8.8  
 Total Depth 4300 Chlorides 4400 ppm System LCM 1#

Blow Description Fair blow / Blow built to 6 inches  
No blow back  
Fair blow / Blow built to 9 inches  
Very weak blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>63</u>	<u>Oil cut Muddy Water</u>	<u>5</u>	<u>75</u>	<u>20</u>	<u>—</u>
<u>31</u>	<u>Mud cut Watery Oil</u>	<u>40</u>	<u>40</u>	<u>20</u>	<u>—</u>
<u>31</u>	<u>Mud and Water cut Oil</u>	<u>80</u>	<u>10</u>	<u>10</u>	<u>—</u>
<u>63</u>	<u>Gas in pipe</u>	<u>100</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Rec Total 125 BHT 121 Gravity 35 API RW .56 @ 55 °F Chlorides 14,000 ppm

(A) Initial Hydrostatic <u>2158</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1:07 am</u>
(B) First Initial Flow <u>33</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2:10 am</u>
(C) First Final Flow <u>47</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>4:15 am</u>
(D) Initial Shut-In <u>1171</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>6:45 am</u>
(E) Second Initial Flow <u>57</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>8:50 am</u>
(F) Second Final Flow <u>68</u>	<input checked="" type="checkbox"/> Mileage <u>94</u> <u>94</u>	Comments
(G) Final Shut-In <u>1130</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2096</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Day Standby	Total <u>1569</u>
Final Shut-In <u>45</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1569</u>	

Approved By [Signature] Our Representative [Signature]

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