



## DRILL STEM TEST REPORT

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

PO Box 399  
Garden City, KS 67846

ATTN: Jason Alm

### **Elmer's #2-19**

#### **19-17s-21w Ness,KS**

Start Date: 2014.05.20 @ 11:18:00

End Date: 2014.05.20 @ 18:33:15

Job Ticket #: 57008                      DST #: 1

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

Printed: 2014.05.21 @ 11:16:15



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

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

**19-17s-21w Ness, KS**  
**Elmer's #2-19**  
 Job Ticket: 57008 **DST#: 1**  
 Test Start: 2014.05.20 @ 11:18:00

## GENERAL INFORMATION:

Formation: **Miss**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 13:27:15  
 Time Test Ended: 18:33:15  
 Interval: **4334.00 ft (KB) To 4346.00 ft (KB) (TVD)**  
 Total Depth: 4346.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jace Mckinny/ Justin  
 Unit No: 75  
 Reference Elevations: 2259.00 ft (KB)  
 2253.00 ft (CF)  
 KB to GR/CF: 6.00 ft

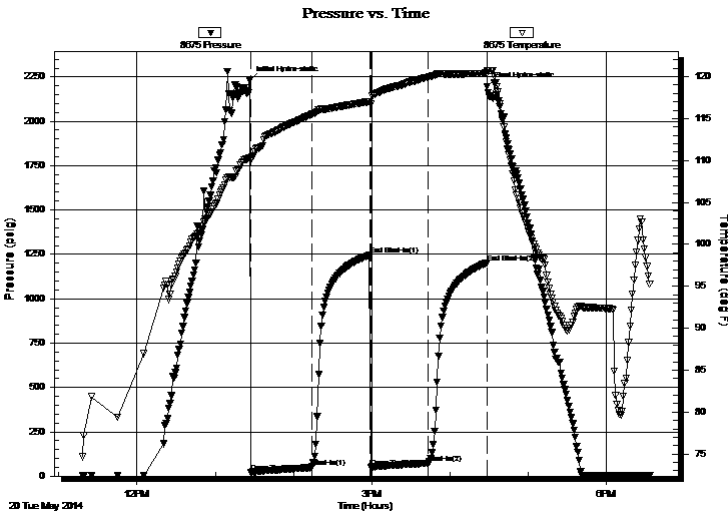
## Serial #: 8675

Inside

Press@RunDepth: 72.15 psig @ 4343.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.05.20 End Date: 2014.05.20 Last Calib.: 2014.05.20  
 Start Time: 11:18:15 End Time: 18:33:15 Time On Btm: 2014.05.20 @ 13:26:15  
 Time Off Btm: 2014.05.20 @ 16:28:45

TEST COMMENT: Built to 2 1/4" blow  
 No return blow  
 Built to 1 1/4" blow  
 No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2228.25	110.31	Initial Hydro-static
1	20.37	110.02	Open To Flow (1)
48	48.43	115.48	Shut-In(1)
92	1245.14	117.01	End Shut-In(1)
93	51.78	116.73	Open To Flow (2)
138	72.15	119.92	Shut-In(2)
182	1202.47	120.41	End Shut-In(2)
183	2196.70	120.69	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
58.00	mcw 10%M 90%W w ith oil scum	0.29
58.00	mcw 40%M 60%W w ith oil scum	0.29
10.00	mcw o 20%M 40%W 40%O	0.14

## Gas Rates

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



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PO Box 399  
Garden City, KS 67846

ATTN: Jason Alm

19-17s-21w Ness, KS

Elmer's #2-19

Job Ticket: 57008

DST#: 1

Test Start: 2014.05.20 @ 11:18:00

## GENERAL INFORMATION:

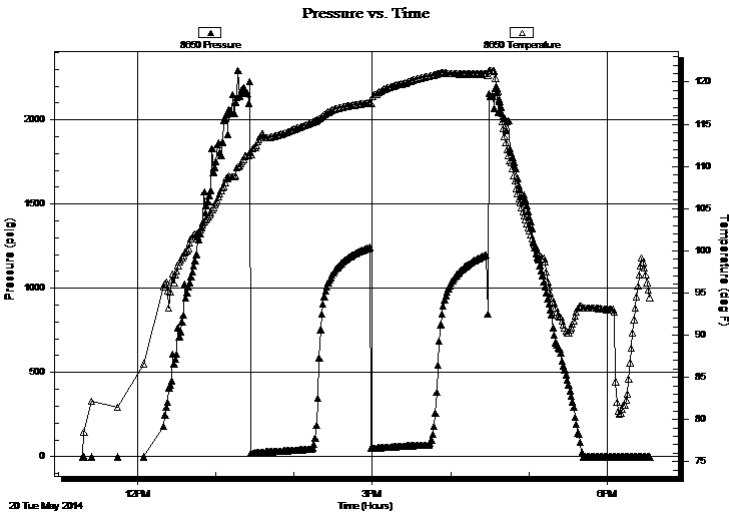
Formation: **Miss**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 13:27:15  
 Tester: Jace Mckinny/ Justin  
 Time Test Ended: 18:33:15  
 Unit No: 75  
 Interval: **4334.00 ft (KB) To 4346.00 ft (KB) (TVD)**  
 Reference Elevations: 2259.00 ft (KB)  
 Total Depth: 4346.00 ft (KB) (TVD)  
 2253.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Poor  
 KB to GR/CF: 6.00 ft

Serial #: **8650** Outside

Press@RunDepth: psig @ 4343.00 ft (KB)  
 Capacity: 8000.00 psig  
 Start Date: 2014.05.20 End Date: 2014.05.20 Last Calib.: 2014.05.20  
 Start Time: 11:18:15 End Time: 18:33:00 Time On Btm:  
 Time Off Btm:

TEST COMMENT: Built to 2 1/4" blow  
 No return blow  
 Built to 1 1/4" blow  
 No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
58.00	mcw 10%M 90%W w ith oil scum	0.29
58.00	mcw 40%M 60%W w ith oil scum	0.29
10.00	mcw o 20%M 40%W 40%O	0.14

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior, Inc.

**19-17s-21w Ness, KS**

PO Box 399  
Garden City, KS 67846

**Elmer's #2-19**

Job Ticket: 57008

**DST#: 1**

ATTN: Jason Alm

Test Start: 2014.05.20 @ 11:18:00

## Tool Information

Drill Pipe:	Length: 4222.63 ft	Diameter: 3.80 inches	Volume: 59.23 bbl	Tool Weight: 25000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 116.00 ft	Diameter: 2.25 inches	Volume: 0.57 bbl	Weight to Pull Loose: 83000.00 lb
			<u>Total Volume: 59.80 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.13 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4334.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	12.00 ft			
Tool Length:	39.50 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			4307.50	
Shut In Tool	5.00			4312.50	
Hydraulic tool	5.00			4317.50	
Jars	5.00			4322.50	
Safety Joint	2.50			4325.00	
Packer	5.00			4330.00	27.50 Bottom Of Top Packer
Packer	4.00			4334.00	
Stubb	1.00			4335.00	
Perforations	8.00			4343.00	
Change Over Sub	0.00			4343.00	
Recorder	0.00	8675	Inside	4343.00	
Recorder	0.00	8650	Outside	4343.00	
Drill Pipe	0.00			4343.00	
Change Over Sub	0.00			4343.00	
Perforations	0.00			4343.00	
Bullnose	3.00			4346.00	12.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>39.50</b>				



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**FLUID SUMMARY**

American Warrior, Inc.

**19-17s-21w Ness,KS**

PO Box 399  
Garden City, KS 67846

**Elmer's #2-19**

Job Ticket: 57008

**DST#: 1**

ATTN: Jason Alm

Test Start: 2014.05.20 @ 11:18:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

38000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.99 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
58.00	mcw 10%M 90%W with oil scum	0.285
58.00	mcw 40%M 60%W with oil scum	0.285
10.00	mcw o 20%M 40%W 40%O	0.140

Total Length: 126.00 ft      Total Volume: 0.710 bbl

Num Fluid Samples: 0

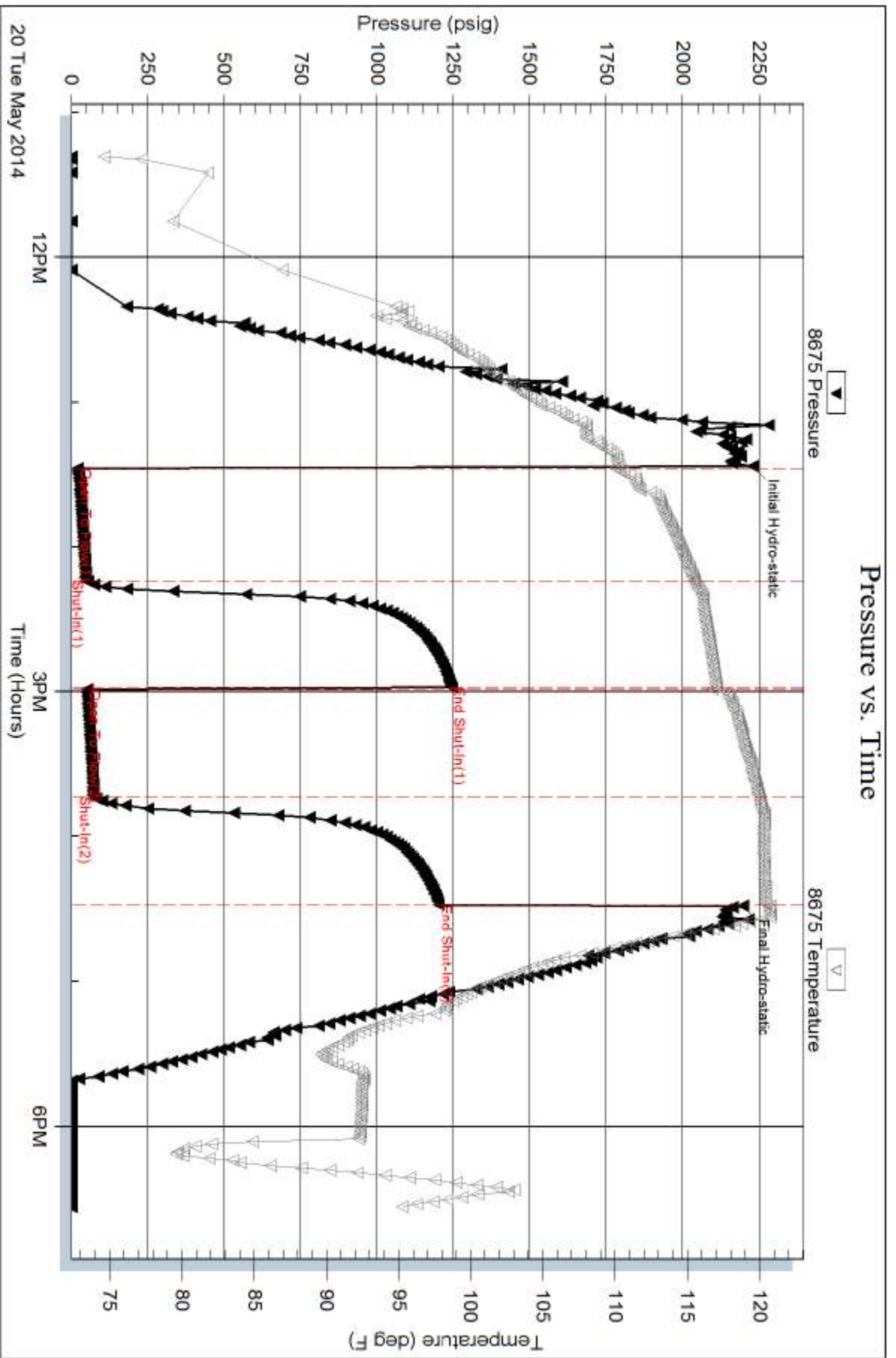
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .15 @ 90 F = 38,000

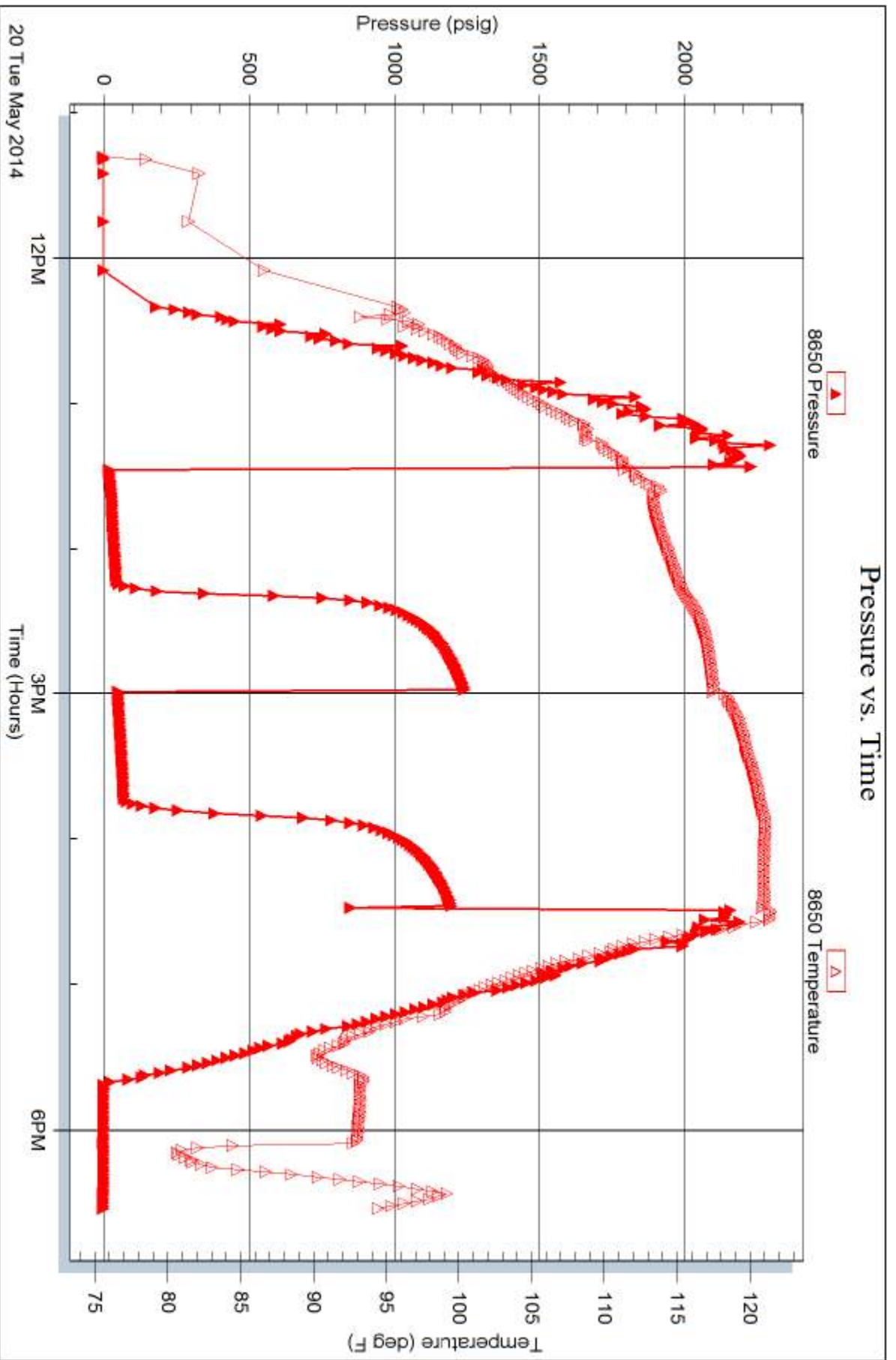


Serial #: 8650

Outside American Warrior, Inc.

Emer's #2-19

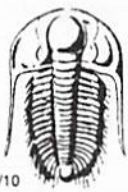
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 57008

Printed: 2014.05.21 @ 11:16:17



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 57008

Well Name & No. Elmer's 2-19 Test No. 1 Date 5/20/14  
 Company American Warrior, Inc. Elevation 2259 KB 2253 GL  
 Address 3118 Cummings RD P.O. Box 399 Garden city KS 67846  
 Co. Rep / Geo. Jason Alm Rig Petromark 1  
 Location: Sec. 19 Twp. 17S Rge. 21W Co. Ness Co. State Ks

Interval Tested 4334 - 4346 Zone Tested Miss  
 Anchor Length 12 Drill Pipe Run 4222.63 Mud Wt. 9.55  
 Top Packer Depth 4329 Drill Collars Run 116' Vis 52  
 Bottom Packer Depth 4334 Wt. Pipe Run \_\_\_\_\_ WL 10.0  
 Total Depth 4346 Chlorides 4400 ppm System LCM 0

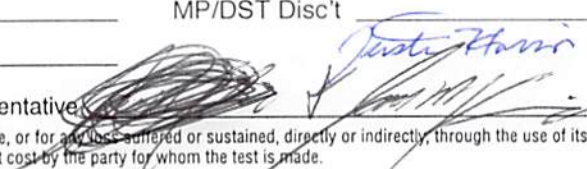
Blow Description Built to 2 1/4" below  
No return below  
Built to 1 1/4" below  
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>incl w/o</u>	<u>40</u>	<u>40</u>	<u>20</u>	<u>0</u>
<u>58</u>	<u>mcw with oil scum</u>		<u>60</u>	<u>40</u>	<u>0</u>
<u>58</u>	<u>mcw with oil scum</u>		<u>90</u>	<u>10</u>	<u>0</u>
____	____				
____	____				

Rec Total 126 BHT 120 Gravity \_\_\_\_\_ API RW 15 @ 90 ° F Chlorides 38,000 ppm  
 (A) Initial Hydrostatic 2,228  Test 1250 T-On Location 10:25  
 (B) First Initial Flow 20  Jars 250 T-Started 11:18  
 (C) First Final Flow 48  Safety Joint 75 T-Open 13:26  
 (D) Initial Shut-In 1,245  Circ Sub W/C T-Pulled 16:26  
 (E) Second Initial Flow 52  Hourly Standby \_\_\_\_\_ T-Out 18:33  
 (F) Second Final Flow 72  Mileage 160 RT 90rt 139.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1,202  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2,197  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1714.50  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1714.50

Initial Open 45  
 Initial Shut-In 45  
 Final Flow 45  
 Final Shut-In 45

Approved By \_\_\_\_\_

Our Representative 

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