



DRILL STEM TEST REPORT

Prepared For: **American Warrior Co Inc**

3118 Cumming Rd.
Garden City KS 67846

ATTN: Jason Alm

SNS #4-7

7-20s-20w Pawnee,KS

Start Date: 2015.03.28 @ 16:55:52

End Date: 2015.03.28 @ 23:46:31

Job Ticket #: 60577 DST #: 1

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

Printed: 2015.03.30 @ 11:46:14



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

American Warrior Co Inc

7-20s-20w Pawnee,KS

3118 Cumming Rd.
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SNS #4-7

Job Ticket: 60577

DST#: 1

ATTN: Jason Alm

Test Start: 2015.03.28 @ 16:55:52

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:53:02

Time Test Ended: 23:46:31

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 70

Interval: 4379.00 ft (KB) To 4389.00 ft (KB) (TVD)

Reference Elevations: 2252.00 ft (KB)

Total Depth: 4389.00 ft (KB) (TVD)

2244.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8018 Inside

Press@RunDepth: 342.22 psig @ 4380.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.03.28

End Date:

2015.03.28

Last Calib.:

2015.03.28

Start Time: 16:55:52

End Time:

23:46:31

Time On Btm:

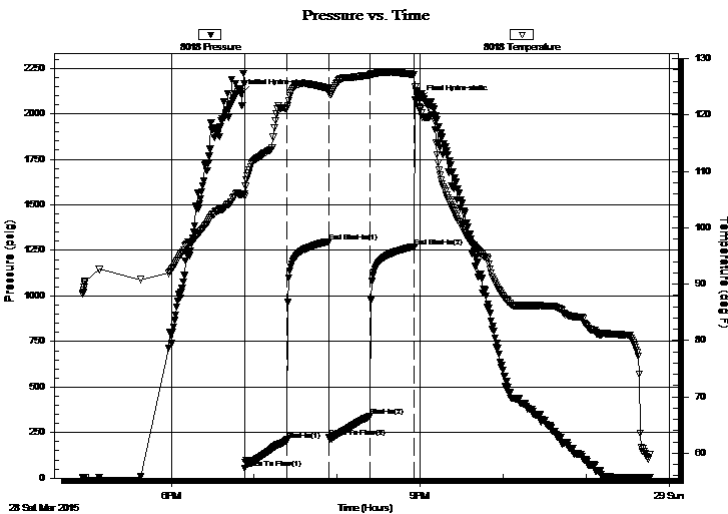
2015.03.28 @ 18:50:47

Time Off Btm:

2015.03.28 @ 20:59:47

TEST COMMENT: 30-IFP-w k to strg in 7min
30-ISIP-1" bl bk
30-FFP-w k to strg in 7 min
30-FSIP-3/4"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2109.86	105.85	Initial Hydro-static
3	54.11	105.57	Open To Flow (1)
33	210.43	121.16	Shut-In(1)
64	1294.89	124.65	End Shut-In(1)
64	221.71	124.16	Open To Flow (2)
93	342.22	127.07	Shut-In(2)
125	1269.96	127.15	End Shut-In(2)
129	2077.06	121.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	250' GIP	0.00
90.00	SMGO 15%G6%M79%O	0.99
775.00	CO	10.87

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Co Inc

7-20s-20w Pawnee,KS

3118 Cumming Rd.
Garden City KS 67846

SNS #4-7

Job Ticket: 60577

DST#: 1

ATTN: Jason Alm

Test Start: 2015.03.28 @ 16:55:52

Tool Information

Drill Pipe:	Length: 4341.00 ft	Diameter: 3.80 inches	Volume: 60.89 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 61.04 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4379.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	39.00 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			4351.00	
Shut In Tool	5.00			4356.00	
Hydraulic tool	5.00			4361.00	
Jars	5.00			4366.00	
Safety Joint	3.00			4369.00	
Packer	5.00			4374.00	29.00 Bottom Of Top Packer
Packer	5.00			4379.00	
Stubb	1.00			4380.00	
Recorder	0.00	8018	Inside	4380.00	
Recorder	0.00	8700	Outside	4380.00	
Perforations	6.00			4386.00	
Bullnose	3.00			4389.00	10.00 Bottom Packers & Anchor

Total Tool Length: 39.00



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FLUID SUMMARY

American Warrior Co Inc

7-20s-20w Pawnee,KS

3118 Cumming Rd.
Garden City KS 67846

SNS #4-7

Job Ticket: 60577

DST#: 1

ATTN: Jason Alm

Test Start: 2015.03.28 @ 16:55:52

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	250' GIP	0.000
90.00	SMGO 15%G6%M79%O	0.989
775.00	CO	10.871

Total Length: 865.00 ft Total Volume: 11.860 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8018

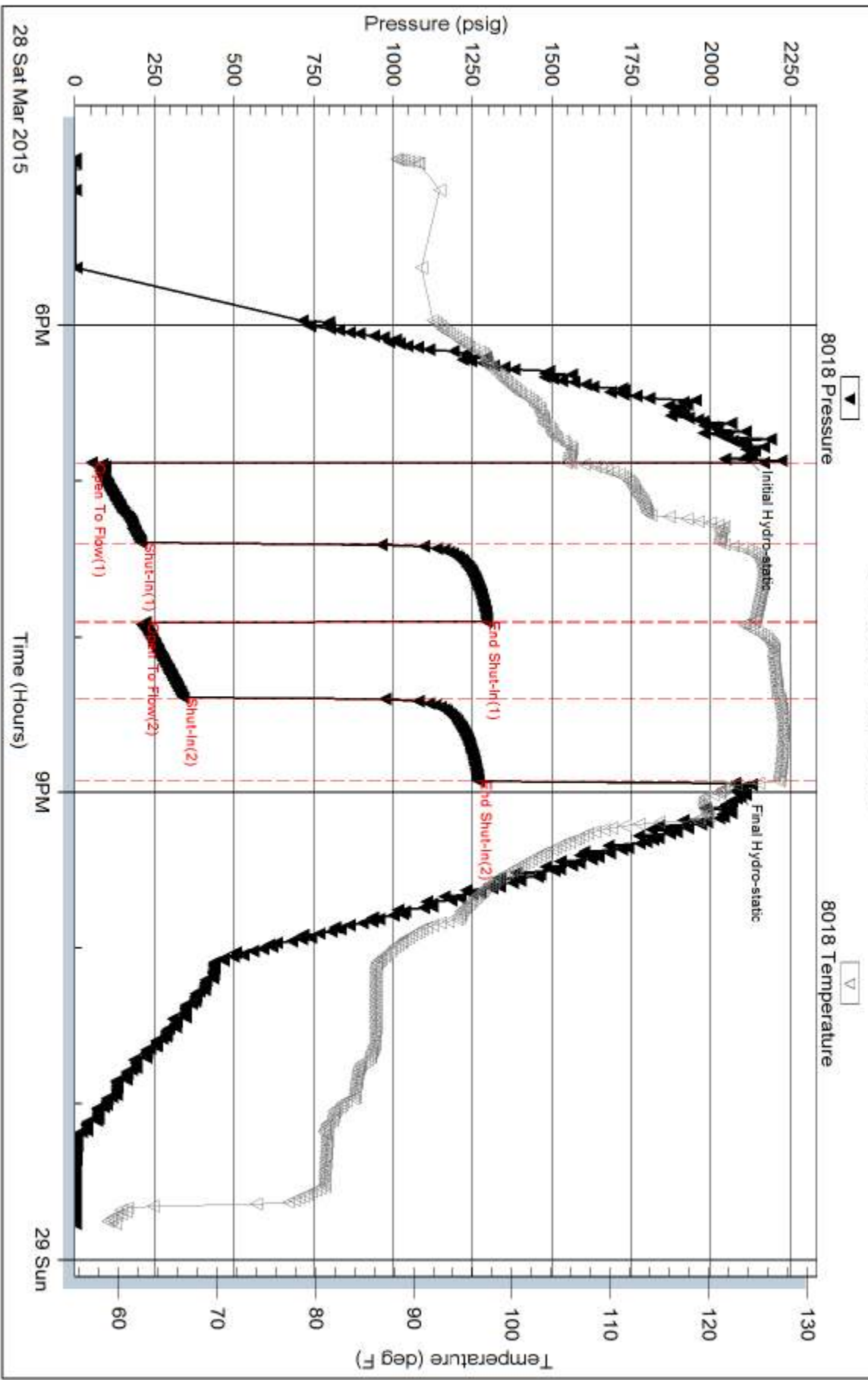
Inside

American Warrior Co Inc

SNS #4-7

DST Test Number: 1

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 60577

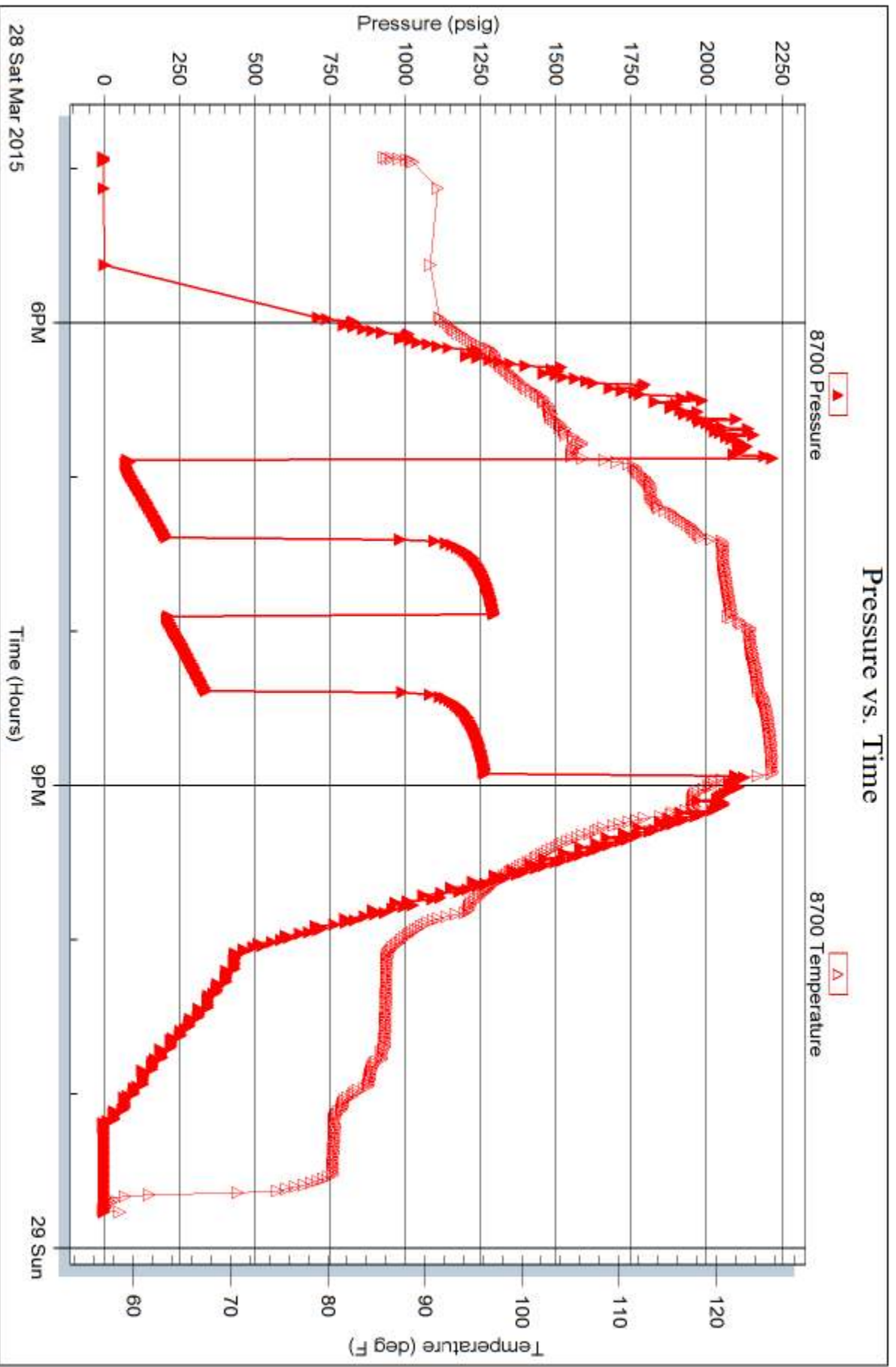
Printed: 2015.03.30 @ 11:46:17

Serial #: 8700

Outside American Warrior Co Inc

SNS #4-7

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 60577

Printed: 2015.03.30 @ 11:46:17



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 60577

4/10

Well Name & No. SNS #4-7 Test No. 1 Date 3-28-15
 Company AMERICAN WARRIOR Co. Inc Elevation 2252 KB 2244 GL
 Address 3118 Cumming Rd. GARDEN CITY, Ks 67846
 Co. Rep / Geo. JASON ALM Rig DISCOVERY rig 3
 Location: Sec. 7 Twp. 20^s Rge. 20^w Co. PAWNEE State Ks

Interval Tested 4379-4389 Zone Tested MISS
 Anchor Length 10 Drill Pipe Run 4341 Mud Wt. 9.1
 Top Packer Depth 4374 Drill Collars Run 30 Vis 55
 Bottom Packer Depth 4379 Wt. Pipe Run - WL 7.2
 Total Depth 4389 Chlorides 2400 ppm System LCM 1#
 Blow Description IFP - WEAK TO STRG IN 7MIN
ISIP - 1" Blow BACK
FFP - WEAK TO STRG IN 7MIN
FSIP - 3/4" Blow BACK

Rec	Feet of	%gas	%oil	%water	%mud
<u>90</u>	<u>SM60</u>	<u>15</u>	<u>79</u>	<u>6</u>	
<u>775</u>	<u>CO</u>				
<u>250</u>	<u>GIP</u>				

Rec Total 865 BHT _____ Gravity 34 API RW - @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2109</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1450</u>
(B) First Initial Flow <u>54</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1655</u>
(C) First Final Flow <u>210</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1850</u>
(D) Initial Shut-In <u>1294</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>2050</u>
(E) Second Initial Flow <u>221</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>2346</u>
(F) Second Final Flow <u>342</u>	<input checked="" type="checkbox"/> Mileage <u>112 RT</u> 112	Comments _____
(G) Final Shut-In <u>1269</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>2077</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Total <u>1587</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total <u>1587</u>	

Approved By _____ Our Representative RAY SCHWAGER back
goe

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