



DRILL STEM TEST REPORT

Prepared For: **American Warrior Incorporated**

PO Box 399
Garden City, Kansas 67846

ATTN: Jason Alm

MMH #2-25

25-20s-21w Ness,KS

Start Date: 2015.01.10 @ 13:20:00

End Date: 2015.01.10 @ 20:57:53

Job Ticket #: 62040 DST #: 1

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

Printed: 2015.01.13 @ 10:50:00



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

American Warrior Incorporated

25-20s-21w Ness,KS

PO Box 399
Garden City, Kansas 67846

MMH #2-25

Job Ticket: 62040

DST#: 1

ATTN: Jason Alm

Test Start: 2015.01.10 @ 13:20:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:29:23

Time Test Ended: 20:57:53

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: S1

Interval: 4360.00 ft (KB) To 4367.00 ft (KB) (TVD)

Reference Elevations: 2215.00 ft (KB)

Total Depth: 4367.00 ft (KB) (TVD)

2207.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6749 Inside

Press@RunDepth: 225.14 psig @ 4363.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.10

End Date:

2015.01.10

Last Calib.:

2015.01.10

Start Time: 13:20:23

End Time:

20:57:53

Time On Btm:

2015.01.10 @ 15:28:43

Time Off Btm:

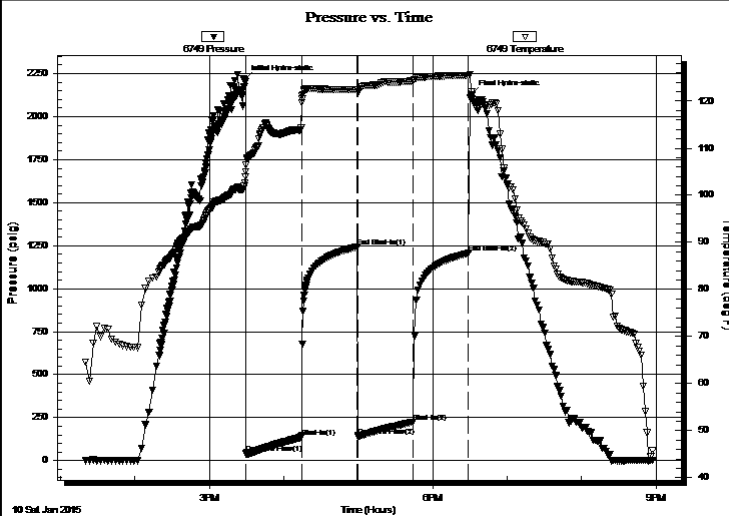
2015.01.10 @ 18:31:23

TEST COMMENT: IFP 45 Minutes BOB in 16 minutes 30 seconds

ISI 45 Minutes Blow back built to 2 1/2"

FFP 45 Minutes BOB in 32 minutes

FSI 45 Minutes Blow back built to 1 3/4"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2217.10	102.60	Initial Hydro-static
1	44.80	104.96	Open To Flow (1)
46	138.44	119.63	Shut-In(1)
91	1242.51	122.52	End Shut-In(1)
92	140.49	122.07	Open To Flow (2)
136	225.14	124.29	Shut-In(2)
181	1206.07	125.49	End Shut-In(2)
183	2128.46	122.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	Water with a show of oil Water 100%	1.45
263.00	OCMW Mud 10% Oil 10% Water 80%	3.69
93.00	Clean Oil 100%	1.30
0.00	201 feet of gas in pipe	0.00

Gas Rates

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



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PO Box 399
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MMH #2-25

Job Ticket: 62040

DST#: 1

ATTN: Jason Alm

Test Start: 2015.01.10 @ 13:20:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:29:23

Time Test Ended: 20:57:53

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: S1

Interval: 4360.00 ft (KB) To 4367.00 ft (KB) (TVD)

Reference Elevations: 2215.00 ft (KB)

Total Depth: 4367.00 ft (KB) (TVD)

2207.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6663 Outside

Press@RunDepth: 1205.02 psig @ 4364.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.10

End Date:

2015.01.10

Last Calib.:

2015.01.10

Start Time: 13:20:01

End Time:

20:59:54

Time On Btm:

2015.01.10 @ 15:30:13

Time Off Btm:

2015.01.10 @ 18:32:24

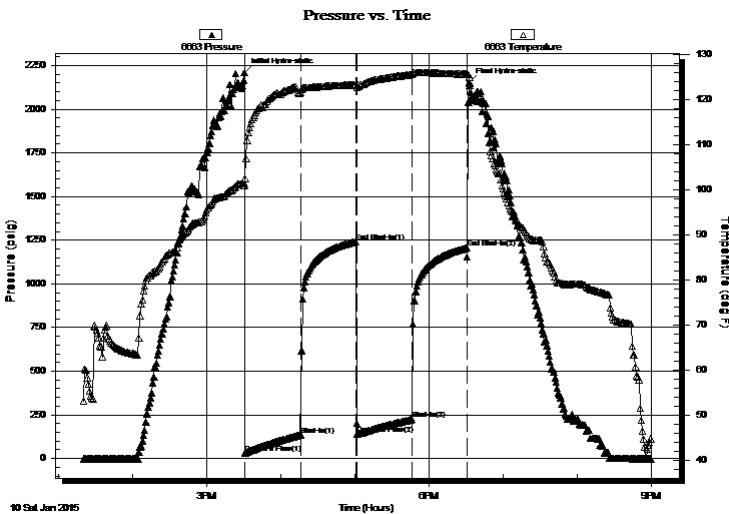
TEST COMMENT: IFP 45 Minutes BOB in 16 minutes 30 seconds

ISI 45 Minutes Blow back built to 2 1/2"

FFP 45 Minutes BOB in 32 minutes

FSI 45 Minutes Blow back built to 1 3/4"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2210.95	100.89	Initial Hydro-static
1	32.66	101.30	Open To Flow (1)
46	135.84	121.45	Shut-In(1)
91	1241.63	123.22	End Shut-In(1)
92	140.22	122.72	Open To Flow (2)
136	224.32	125.49	Shut-In(2)
181	1205.02	125.58	End Shut-In(2)
183	2153.11	124.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	Water with a show of oil Water 100%	1.45
263.00	OCMW Mud 10% Oil 10% Water 80%	3.69
93.00	Clean Oil 100%	1.30
0.00	201 feet of gas in pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Incorporated

25-20s-21w Ness, KS

PO Box 399
Garden City, Kansas 67846

MMH #2-25

Job Ticket: 62040

DST#: 1

ATTN: Jason Alm

Test Start: 2015.01.10 @ 13:20:00

Tool Information

Drill Pipe:	Length: 4311.00 ft	Diameter: 3.80 inches	Volume: 60.47 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: 31.53 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 60.63 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.53 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4360.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	7.00 ft			
Tool Length:	34.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			4338.00	
Hydraulic tool	5.00			4343.00	
Jars	5.00			4348.00	
Safety Joint	2.00			4350.00	
Top Packer	5.00			4355.00	
Packer	5.00			4360.00	27.00 Bottom Of Top Packer
Anchor	2.00			4362.00	
Recorder	1.00	6749	Inside	4363.00	
Recorder	1.00	6663	Outside	4364.00	
Bullnose	3.00			4367.00	7.00 Anchor Tool
Total Tool Length:	34.00				



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Incorporated

25-20s-21w Ness,KS

PO Box 399
Garden City, Kansas 67846

MMH #2-25

Job Ticket: 62040

DST#: 1

ATTN: Jason Alm

Test Start: 2015.01.10 @ 13:20:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 65.00 sec/qt
Water Loss: 9.98 in³
Resistivity: ohm.m
Salinity: 8100.00 ppm
Filter Cake: 2.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 37 deg API
Water Salinity: 27000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	Water with a show of oil Water 100%	1.452
263.00	OCMW Mud 10% Oil 10% Water 80%	3.689
93.00	Clean Oil 100%	1.305
0.00	201 feet of gas in pipe	0.000

Total Length: 480.00 ft Total Volume: 6.446 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

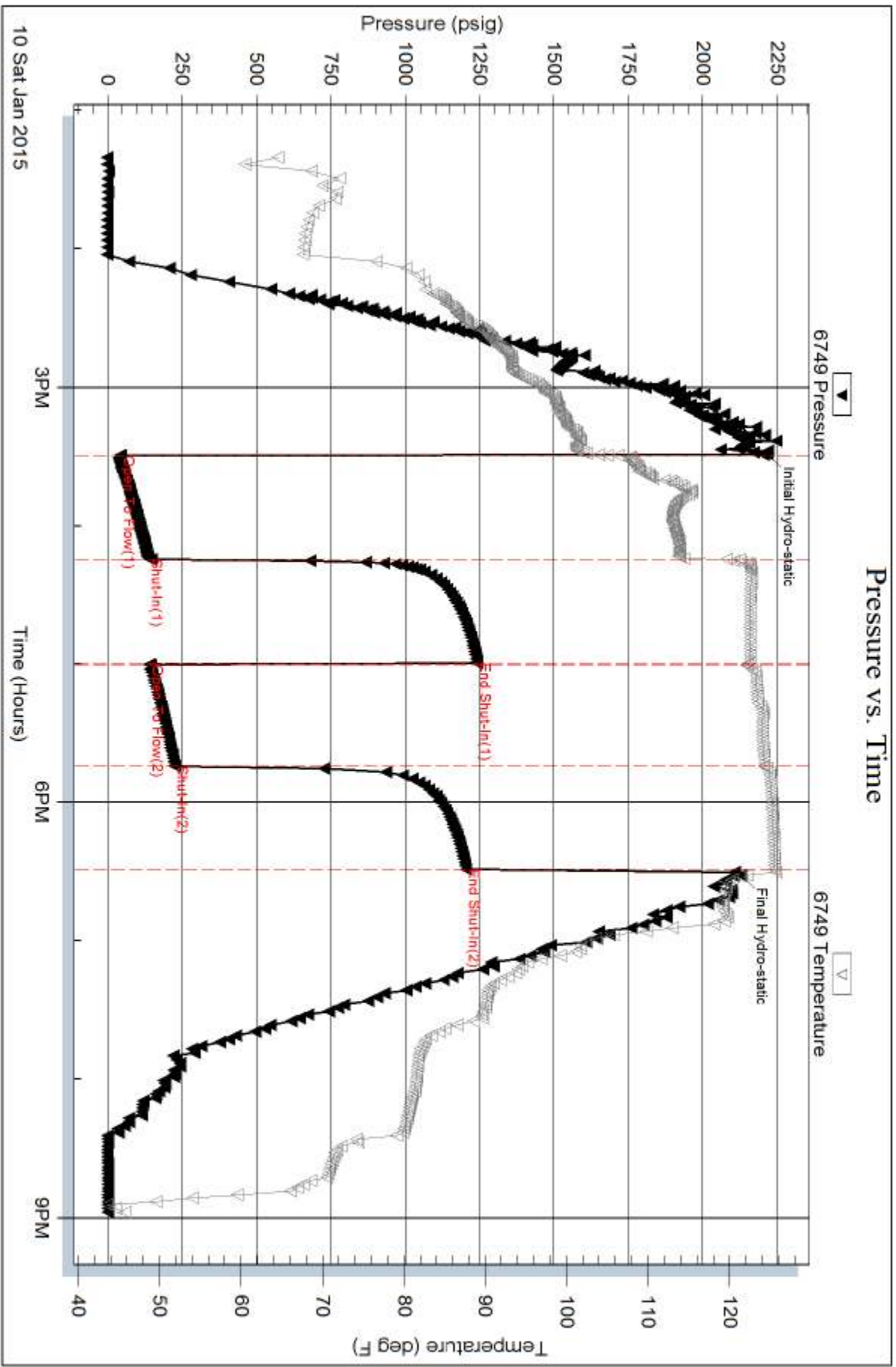
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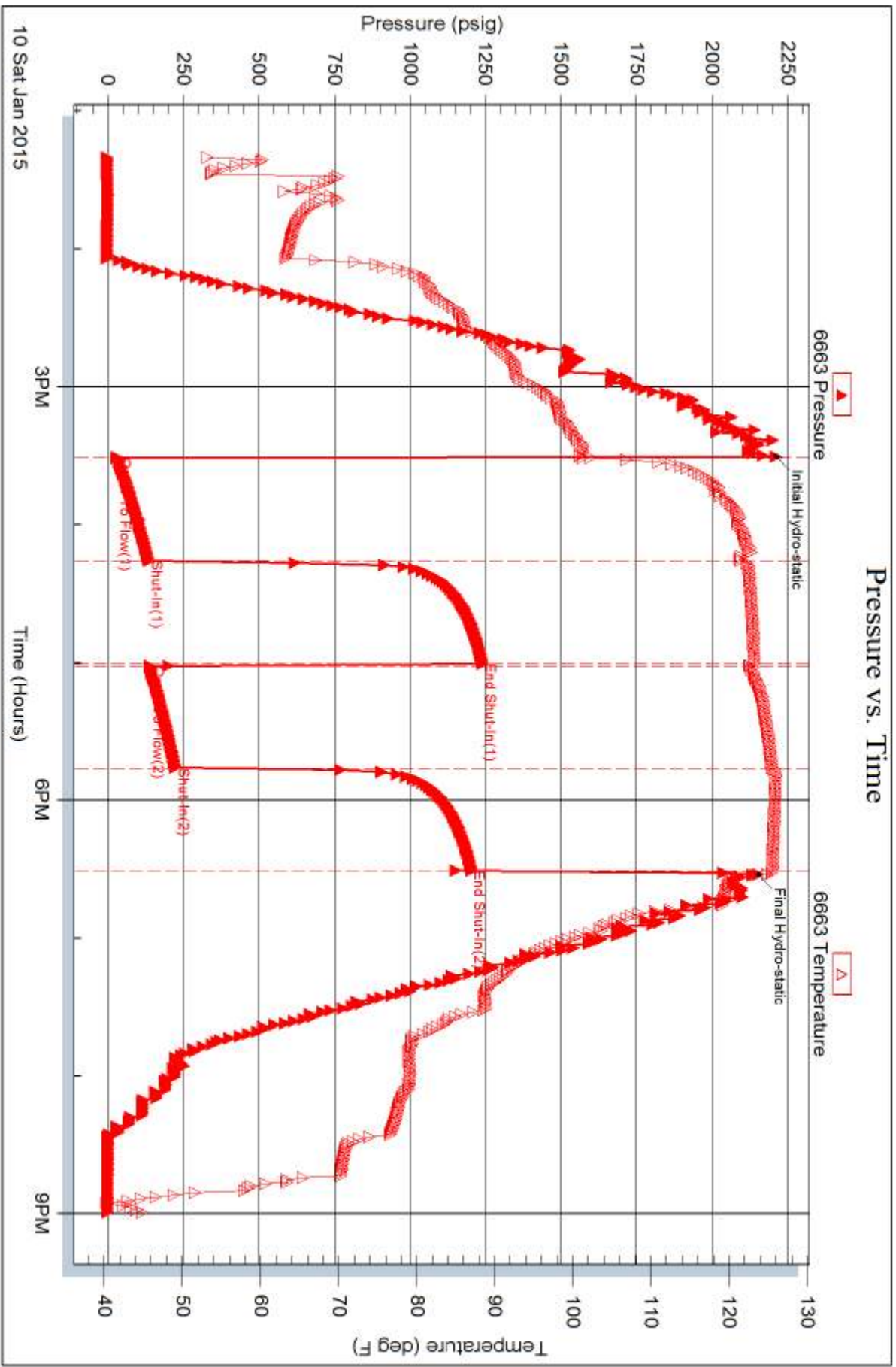
Inside

American Warrior Incorporated

MMH#2-25

DST Test Number: 1







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 62040

Well Name & No. MMH #2-25 Test No. 1 Date 10 Jan 15
 Company American Warrior Incorporated Elevation 2215 KB 2207 GL
 Address 3118 Cummings Road, PO Box 399, Garden City, Kansas 67846
 Co. Rep / Geo. Jason Alm Rig Discovery Rig #3
 Location: Sec. 25 Twp. 20S Rge. 21W Co. Ness State KS

Interval Tested 4360-4367 Zone Tested Mississippi
 Anchor Length 7 Drill Pipe Run 4311 Mud Wt. 9.2
 Top Packer Depth 4355 Drill Collars Run 31.35 Vis 65
 Bottom Packer Depth 4360 Wt. Pipe Run 0 WL 10.0
 Total Depth 4367 Chlorides 8100 ppm System LCM Trace
 Blow Description Good blow/Blow built to bottom of bucket in 16 minutes 30 seconds
Blow back built to 2 1/2 inches
Fair blow/Blow built to bottom of bucket in 32 minutes
Blow back built to 1 3/4 inch

Rec	Feet of	%gas	%oil	%water	%mud
<u>201</u>	<u>995 in pipe</u>	<u>100</u>			
<u>93</u>	<u>clean oil</u>		<u>100</u>		
<u>263</u>	<u>mud + oil cut water</u>		<u>10</u>	<u>80</u>	<u>10</u>
<u>124</u>	<u>Water with show of oil</u>			<u>100</u>	

Rec Total 480 BHT 126 Gravity 37 API RW .18 @ 62 ° F Chlorides 27,000 ppm
 (A) Initial Hydrostatic 2217 Test 1150 T-On Location 10:30 am
 (B) First Initial Flow 44 Jars 250 T-Started 1:20 pm
 (C) First Final Flow 138 Safety Joint 75 T-Open 3:31 pm
 (D) Initial Shut-In 1242 Circ Sub _____ T-Pulled 6:31 pm
 (E) Second Initial Flow 140 Hourly Standby _____ T-Out 8:57 pm
 (F) Second Final Flow 225 Mileage 110 110 Comments _____
 (G) Final Shut-In 1206 Sampler _____
 (H) Final Hydrostatic 2128 Straddle _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Initial Open 45 Shale Packer _____
 Initial Shut-In 45 Extra Packer _____
 Final Flow 45 Extra Recorder _____
 Final Shut-In 45 Day Standby _____
 Accessibility _____
 Sub Total 1585 Total 1585 MP/DST Disc't _____

Approved By [Signature] Our Representative [Signature]

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