



DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399
Garden City KS 67846

ATTN: Wyatt Urban

D&S #1-5

5 16s 10w Ellsworth,KS

Start Date: 2014.02.02 @ 11:15:00

End Date: 2014.02.02 @ 18:36:00

Job Ticket #: 50422 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.02.04 @ 14:19:16



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

American Warrior Inc
PO Box 399
Garden City KS 67846
ATTN: Wyatt Urban

5 16s 10w Ellsworth, KS

D&S #1-5

Job Ticket: 50422

DST#: 1

Test Start: 2014.02.02 @ 11:15:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: 1820.00 ft (KB)

Time Tool Opened: 13:33:15

Time Test Ended: 18:36:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jim Svaty

Unit No: 76

Interval: 3248.00 ft (KB) To 3303.00 ft (KB) (TVD)

Reference Elevations: 1820.00 ft (KB)

Total Depth: 3303.00 ft (KB) (TVD)

1811.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8289 Outside

Press@RunDepth: 771.27 psig @ 3267.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.02

End Date:

2014.02.02

Last Calib.: 2014.02.02

Start Time: 11:15:02

End Time:

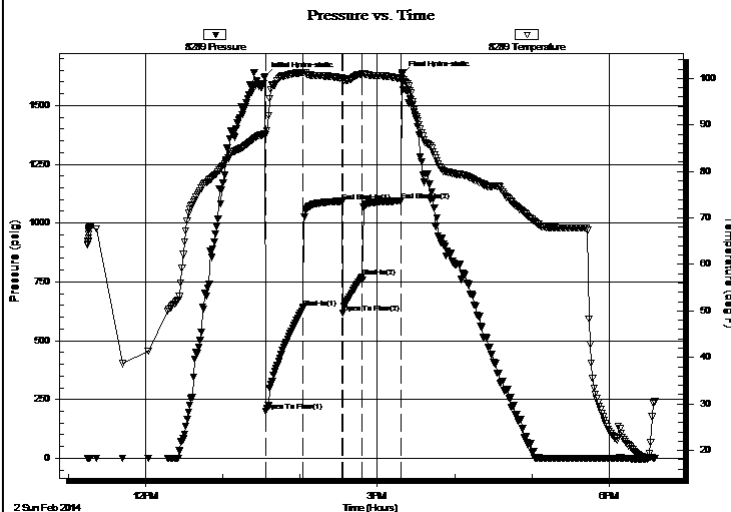
18:36:00

Time On Btm: 2014.02.02 @ 13:32:30

Time Off Btm: 2014.02.02 @ 15:19:00

TEST COMMENT: 30-IFP- BOB in 1 min.
30-ISIP- No Blow
15-FFP- BOB in 1 min.
30-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1622.72	88.03	Initial Hydro-static
1	199.41	87.89	Open To Flow (1)
30	640.95	101.23	Shut-In(1)
61	1092.44	100.05	End Shut-In(1)
61	616.76	99.87	Open To Flow (2)
76	771.27	100.93	Shut-In(2)
106	1093.91	99.94	End Shut-In(2)
107	1629.32	100.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	MCW 5% m 95% w	1.75
314.00	GMOCW 20% g 5% m 25% o 50% w	4.40
1250.00	GMWCO 25% g 10% m 20% w 45% o	17.53
95.00	OSGWCM 25% g 5% w 75% m	1.33
0.00	125 GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Garden City KS 67846
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5 16s 10w Ellsworth, KS

D&S #1-5

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Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1820.00 ft (KB)

1811.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 8789 Inside

Press@RunDepth: psig @ 3267.00 ft (KB)

Start Date: 2014.02.02

End Date:

2014.02.02

Start Time: 11:15:02

End Time:

18:35:45

Capacity: 8000.00 psig

Last Calib.:

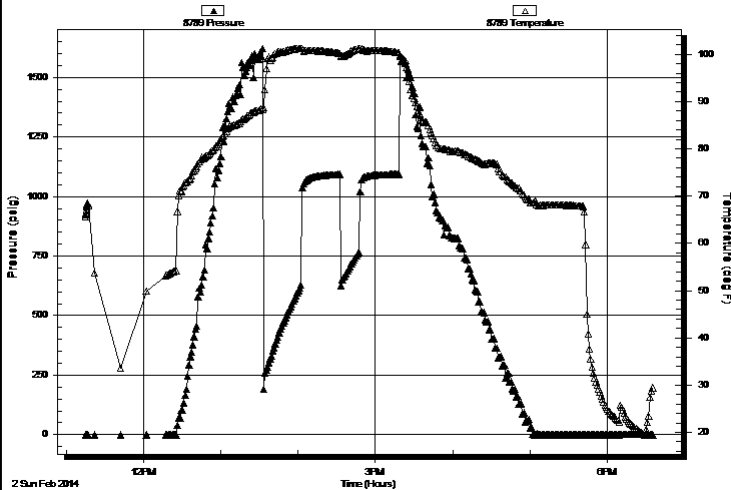
2014.02.02

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IFP- BOB in 1 min.
30-ISIP- No Blow
15-FFP- BOB in 1 min.
30-FSIP- No Blow

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
125.00	MCW 5% m 95% w	1.75
314.00	GMOCW 20% g 5% m 25% o 50% w	4.40
1250.00	GMWCO 25% g 10% m 20% w 45% o	17.53
95.00	OSGWCM 25% g 5% w 75% m	1.33
0.00	125 GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Inc

5 16s 10w Ellsworth,KS

PO Box 399
Garden City KS 67846

D&S #1-5

Job Ticket: 50422

DST#: 1

ATTN: Wyatt Urban

Test Start: 2014.02.02 @ 11:15:00

Tool Information

Drill Pipe:	Length:	3251.00 ft	Diameter:	3.80 inches	Volume:	45.60 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.75 inches	Volume:	0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:	46000.00 lb
					Total Volume:	45.60 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		31.00 ft					String Weight: Initial	38000.00 lb
Depth to Top Packer:		3248.00 ft					Final	44000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		55.00 ft						
Tool Length:		83.00 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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Change Over Sub	1.00		3221.00	
Shut In Tool	5.00		3226.00	
Hydraulic tool	5.00		3231.00	
Jars	5.00		3236.00	
Safety Joint	2.00		3238.00	
Packer	5.00		3243.00	28.00 Bottom Of Top Packer
Packer	5.00		3248.00	
Stubb	1.00		3249.00	
Perforations	18.00		3267.00	
Recorder	0.00	8789 Inside	3267.00	
Recorder	0.00	8289 Outside	3267.00	
Change Over Sub	1.00		3268.00	
Blank Spacing	31.00		3299.00	
Change Over Sub	1.00		3300.00	
Bullnose	3.00		3303.00	55.00 Bottom Packers & Anchor

Total Tool Length: 83.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Inc

5 16s 10w Ellsworth, KS

PO Box 399
Garden City KS 67846

D&S #1-5

Job Ticket: 50422

DST#: 1

ATTN: Wyatt Urban

Test Start: 2014.02.02 @ 11:15:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 7.59 in³

Resistivity: ohm.m

Salinity: 4800.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity: 26000 ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	MCW 5%m 95%w	1.753
314.00	GMOCW 20%g 5%m 25%o 50%w	4.405
1250.00	GMWCO 25%g 10%m 20%w 45%o	17.534
95.00	OSGWCM 25%g 5%w 75%m	1.333
0.00	125 GIP	0.000

Total Length: 1784.00 ft

Total Volume: 25.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

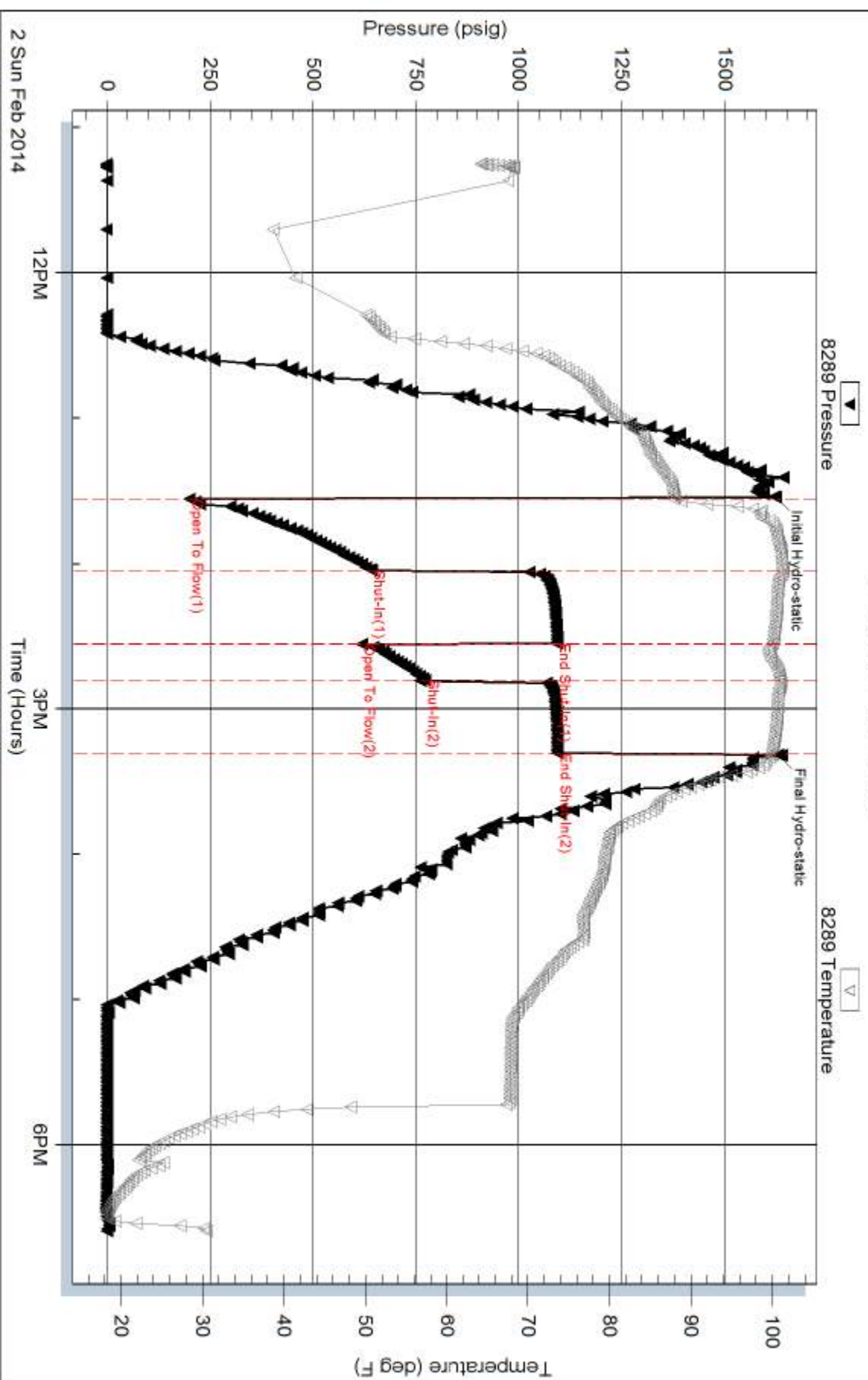
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .600 @ 30

Pressure vs. Time



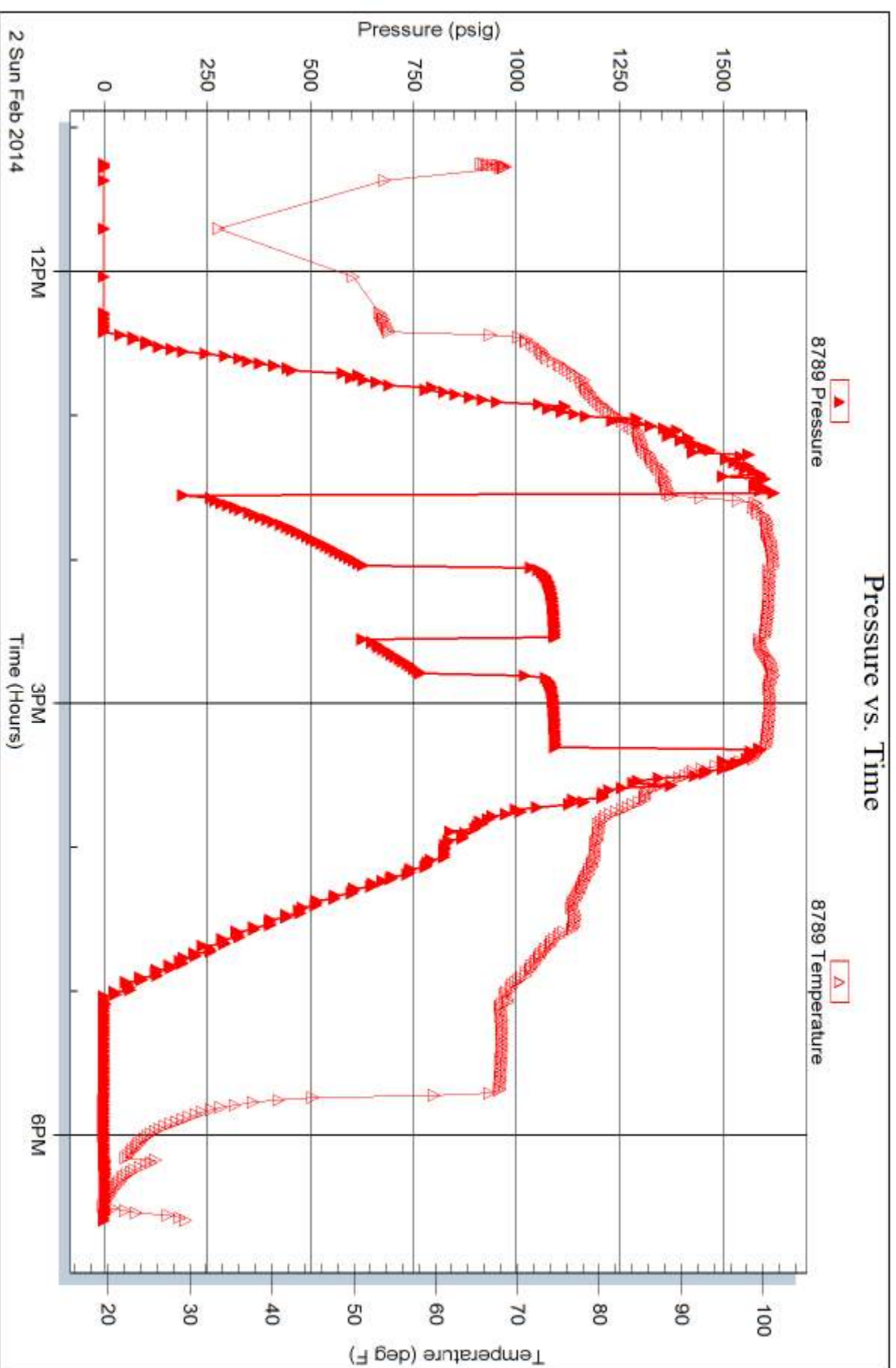
Serial #: 8789

Inside

American Warrior Inc

D&S #1-5

DST Test Number: 1





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50422

Well Name & No. D & S # 1-5 Test No. 1 Date 2-2-14
 Company American Warrior Inc Elevation 1820 KB 1811 GL
 Address 3118 Cummings Rd, Garden City KS 67846
 Co. Rep / Geo. Wyatt Urban Rig Duke 8
 Location: Sec. 5 Twp. 16^s Rge. 10^w Co. Ellsworth State KS

Interval Tested 3248-3303 Zone Tested Arbuckle
 Anchor Length 55 Drill Pipe Run 3251 Mud Wt. 9.4
 Top Packer Depth 3243 Drill Collars Run 0 Vis 58
 Bottom Packer Depth 3248 Wt. Pipe Run 0 WL 7.6
 Total Depth 3303 Chlorides 4800 ppm System LCM 0

Blow Description IFP - BOB in 1 min.

ISIP - No Blow

FFP - BOB in 1 min.

FSIP - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>125</u>	<u>MCW</u>		<u>95</u>	<u>5</u>	
<u>314</u>	<u>DMOCW</u>	<u>20</u>	<u>25</u>	<u>50</u>	<u>5</u>
<u>1250</u>	<u>DMWCO</u>	<u>25</u>	<u>45</u>	<u>20</u>	<u>10</u>
<u>95</u>	<u>OSDMCM</u>	<u>25</u>	<u>5</u>	<u>70</u>	
	<u>125 DIP</u>				

Rec Total 1784 BHT 100 Gravity _____ API RW 1600 @ 30 °F Chlorides 26000 ppm

(A) Initial Hydrostatic 1622
 (B) First Initial Flow 199
 (C) First Final Flow 640
 (D) Initial Shut-In 1092
 (E) Second Initial Flow 616
 (F) Second Final Flow 771
 (G) Final Shut-In 1093
 (H) Final Hydrostatic 1629

☒ Test 1150
☒ Jars 250
☒ Safety Joint 75
☐ Circ Sub _____
☐ Hourly Standby _____
☒ Mileage RT 112 173.60

T-On Location 07:20
 T-Started 11:15
 T-Open 13:33
 T-Pulled 15:18
 T-Out 18:36

Comments _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 15
 Final Shut-In 30

☐ Sampler _____
☐ Straddle _____
☐ Shale Packer _____
☐ Extra Packer _____
☐ Extra Recorder _____
☐ Day Standby _____
☐ Accessibility _____

☐ Ruined Shale Packer _____
☐ Ruined Packer _____
☐ Extra Copies _____
 Sub Total 0
 Total 1648.60

Sub Total 1648.60

Approved By _____

Our Representative _____

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.