



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Company, LLC

11-29S-19W Kiowa, KS

125 N. Market
Ste. 1000
Wichita, KS 67202
ATTN: B. Klaver

Unruh A #1

Job Ticket: 63120

DST#: 3

Test Start: 2017.11.30 @ 21:49:31

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:30:22

Time Test Ended: 08:46:06

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan Lonsdale

Unit No: 73

Interval: 4952.00 ft (KB) To 5046.00 ft (KB) (TVD)

Reference Elevations: 2339.00 ft (KB)

Total Depth: 5046.00 ft (KB) (TVD)

2327.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

Serial #: 8524 Outside

Press@RunDepth: 52.11 psig @ 4978.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.11.30

End Date:

2017.12.01

Last Calib.: 2017.12.01

Start Time: 21:49:32

End Time:

08:46:06

Time On Btm: 2017.12.01 @ 02:29:52

Time Off Btm: 2017.12.01 @ 05:33:22

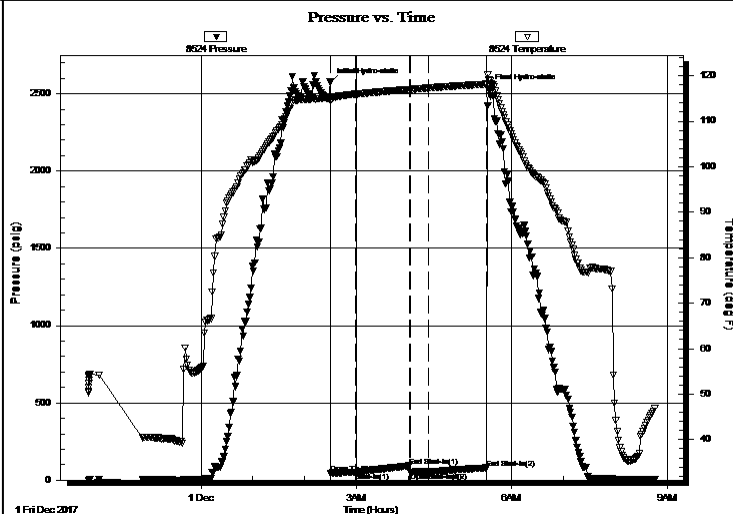
TEST COMMENT: 30- IF- Built to .75" in 8 mins then slowly died back to 1/4"

60- ISL- No blow

30- FF- No blow

60- FSI- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2571.01	115.38	Initial Hydro-static
1	44.31	114.55	Open To Flow (1)
29	49.10	115.93	Shut-In(1)
92	92.32	116.96	End Shut-In(1)
93	49.19	116.97	Open To Flow (2)
114	52.11	117.31	Shut-In(2)
181	79.83	118.15	End Shut-In(2)
184	2533.26	119.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	M	0.05

Gas Rates

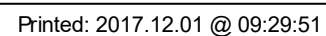
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



Test Start: 2017.11.30 @ 21:49:31

KB to GR/CF: 12.00 ft





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FLUID SUMMARY

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Job Ticket: 63120

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Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 11.19 in³

Resistivity: ohm.m

Salinity: 8500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	M	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8524

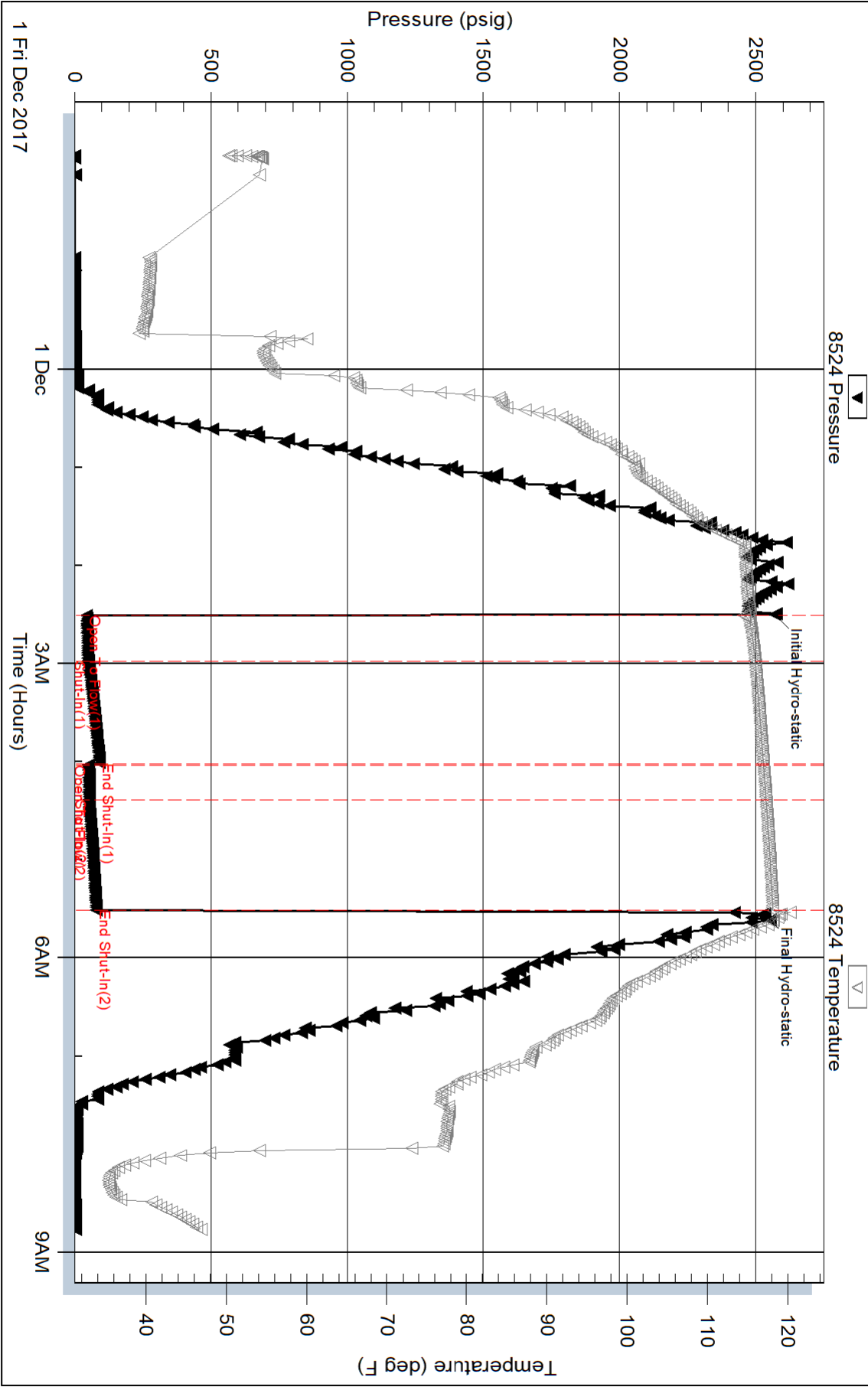
Outside

Woodsey Operating Company, LLC

Unruh A #1

DST Test Number: 3

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 63120

Printed: 2017.12.01 @ 09:29:51

Serial #: 6771

Inside

Woodsey Operating Company, LLC

Unruh A #1

DST Test Number: 3

