



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: 63118

DST#: 1

Test Start: 2017.11.28 @ 04:40:54

GENERAL INFORMATION:

Formation: **KC Iola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:24:45

Time Test Ended: 17:29:29

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Unit No: 73

Interval: 4560.00 ft (KB) To 4590.00 ft (KB) (TVD)

Reference Elevations: 2339.00 ft (KB)

Total Depth: 4590.00 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: 90.66 psig @ 4587.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.11.28

End Date:

2017.11.28

Last Calib.: 2017.11.28

Start Time: 04:40:55

End Time:

17:29:29

Time On Btm: 2017.11.28 @ 11:24:15

Time Off Btm: 2017.11.28 @ 14:56:29

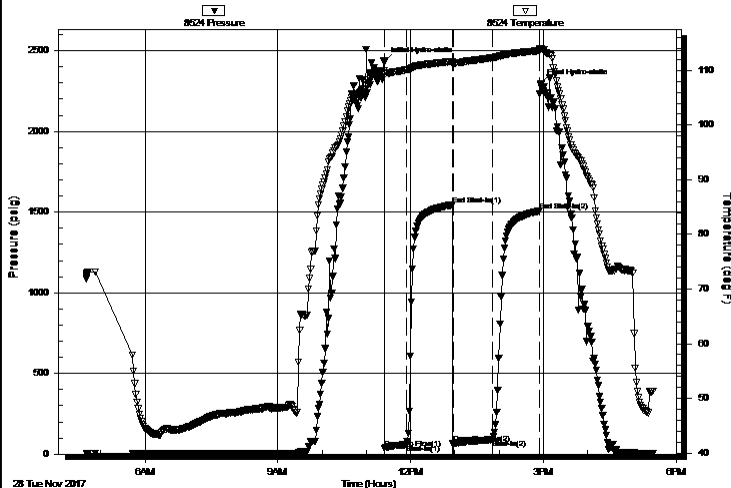
TEST COMMENT: 30- IF- Slowly built to 1.5"

60- IS- No blow

60- FF- .25" blow

60- FSI- No blow

Pressure vs. Time



PRESSURE SUMMARY

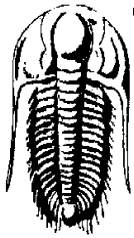
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2430.04	110.05	Initial Hydro-static
1	36.91	109.39	Open To Flow (1)
30	58.22	110.08	Shut-In(1)
92	1544.21	111.66	End Shut-In(1)
94	66.11	111.33	Open To Flow (2)
147	90.66	112.32	Shut-In(2)
211	1507.44	113.61	End Shut-In(2)
213	2298.59	113.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
93.00	WM, 40%W 60%M	0.46

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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2327.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 6771 Inside

Press@RunDepth: psig @ 4587.00 ft (KB)

Start Date: 2017.11.28

End Date:

2017.11.28

Start Time: 04:41:02

End Time:

17:29:21

Capacity: 8000.00 psig

Last Calib.: 2017.11.28

Time On Btm:

Time Off Btm:

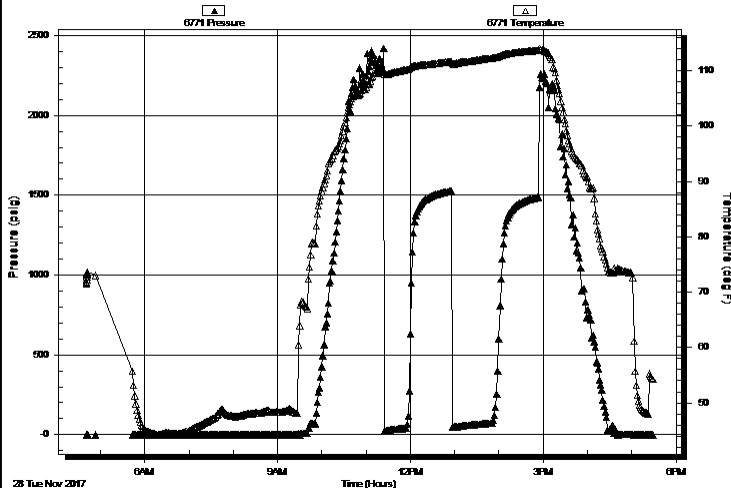
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Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
93.00	WM, 40%W 60%M	0.46

Gas Rates

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FLUID SUMMARY

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: 63118

DST#: 1

Test Start: 2017.11.28 @ 04:40:54

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 47.00 sec/qt

Water Loss: 9.18 in³

Resistivity: ohm.m

Salinity: 6400.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API: deg API

Water Salinity: 19000 ppm

ft
bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
93.00	WM, 40%W 60%M	0.457

Total Length: 93.00 ft Total Volume: 0.457 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

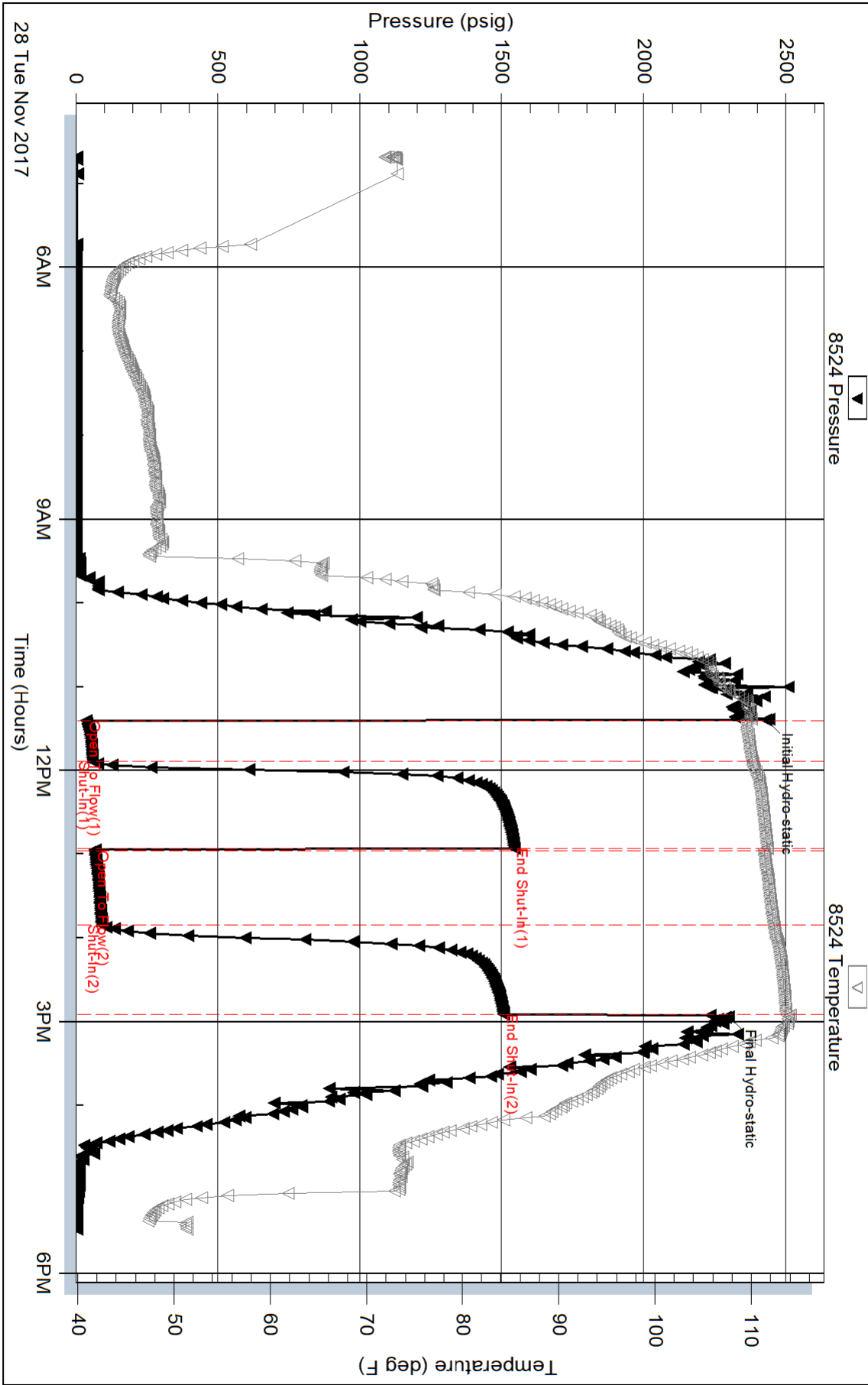
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .26@53deg

Pressure vs. Time



Serial #: 6771

Inside

Woodsey Operating Company, LLC

Unruh A #1

DST Test Number: 1

