

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: 63119

DST#: 2

Test Start: 2017.11.29 @ 14:00:34

GENERAL INFORMATION:

Formation: **KC Hertha**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:36:10

Time Test Ended: 23:07:09

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan Lonsdale

Unit No: 73

Interval: 4760.00 ft (KB) To 4792.00 ft (KB) (TVD)

Total Depth: 4792.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2339.00 ft (KB)

2327.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 8524 Outside

Press@RunDepth: 69.26 psig @ 4789.00 ft (KB)

Start Date: 2017.11.29

End Date:

2017.11.29

Start Time: 14:00:35

End Time:

23:07:09

Capacity: 8000.00 psig

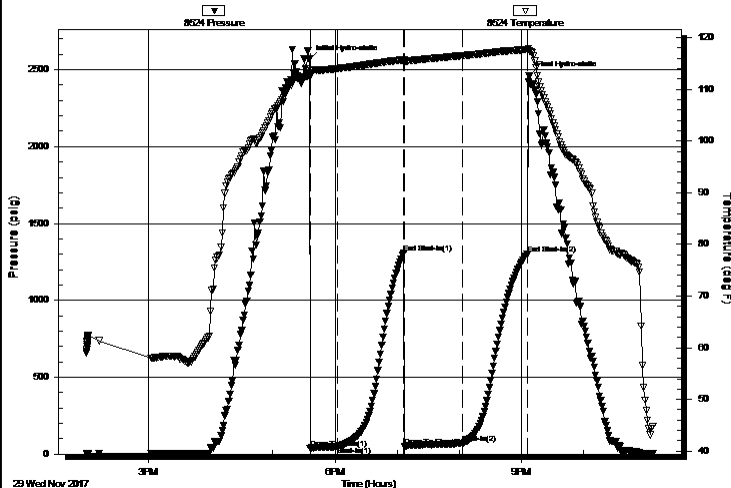
Last Calib.: 2017.11.29

Time On Btm: 2017.11.29 @ 17:35:10

Time Off Btm: 2017.11.29 @ 21:07:10

TEST COMMENT: 30- IF- Slow ly built to 3.5"
60- IS- No blow
60- FF- Built very slow ly to .75"
60- FSI- No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2568.20	112.73	Initial Hydro-static
1	38.90	112.60	Open To Flow (1)
28	50.00	114.04	Shut-In(1)
92	1308.99	115.72	End Shut-In(1)
92	50.80	115.42	Open To Flow (2)
148	69.26	116.53	Shut-In(2)
211	1303.20	117.68	End Shut-In(2)
212	2463.03	117.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	M	0.07
0.00	110' GIP	0.00

Gas Rates

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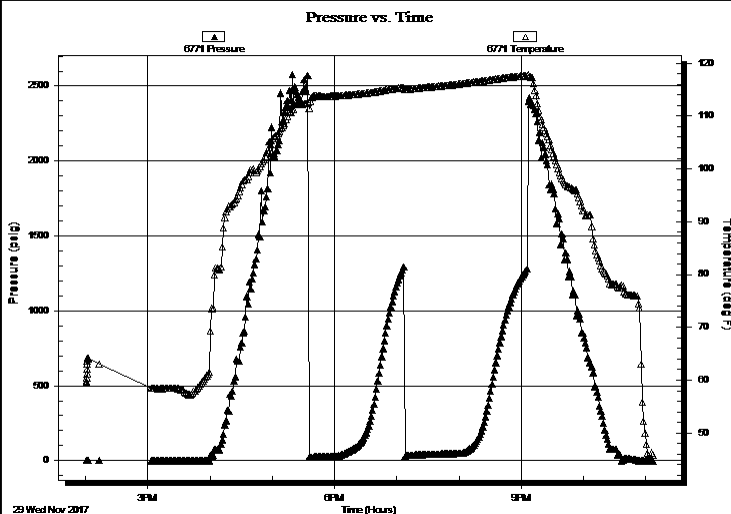
* Recovery from multiple tests



Test Start: 2017.11.29 @ 14:00:34

KB to GR/CF: 12.00 ft

TEST COMMENT: 30- IF- Slow ly built to 3.5"
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60- FF- Built very slow ly to .75"
60- FS- No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	M	0.07
0.00	110' GIP	0.00

* Recovery from multiple tests

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

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Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 9.59 in³

Resistivity: ohm.m

Salinity: 8400.00 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
15.00	M	0.074
0.00	110' GIP	0.000

Total Length: 15.00 ft

Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8524

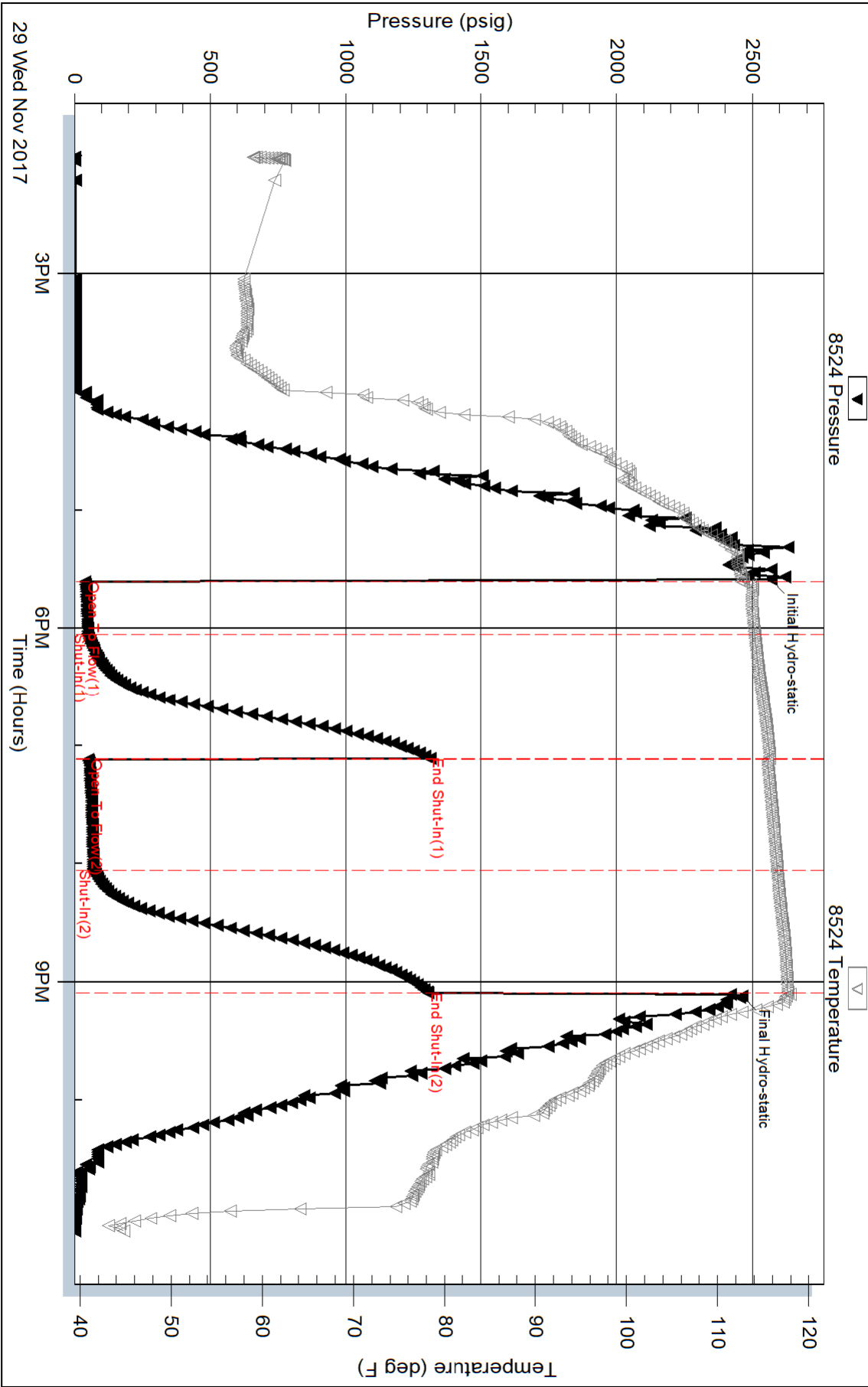
Outside

Woodsey Operating Company, LLC

Unruh A #1

DST Test Number: 2

Pressure vs. Time



Serial #: 6771

Inside

Woodsey Operating Company, LLC

Unruh A #1

DST Test Number: 2

