



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates

1/5s/24w Norton KS

1515 Wynkoop STE 700
Denver, CO 80202

Marian et al #1-1

Job Ticket: 60099

DST#: 2

ATTN: Dan Pritchard

Test Start: 2014.10.27 @ 21:45:00

GENERAL INFORMATION:

Formation: **LKC "B"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 23:27:45
 Tester: James Winder
 Time Test Ended: 05:52:00
 Unit No: 57
 Interval: **3478.00 ft (KB) To 3504.00 ft (KB) (TVD)**
 Reference Elevations: 2348.00 ft (KB)
 Total Depth: 3504.00 ft (KB) (TVD)
 2340.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 8.00 ft

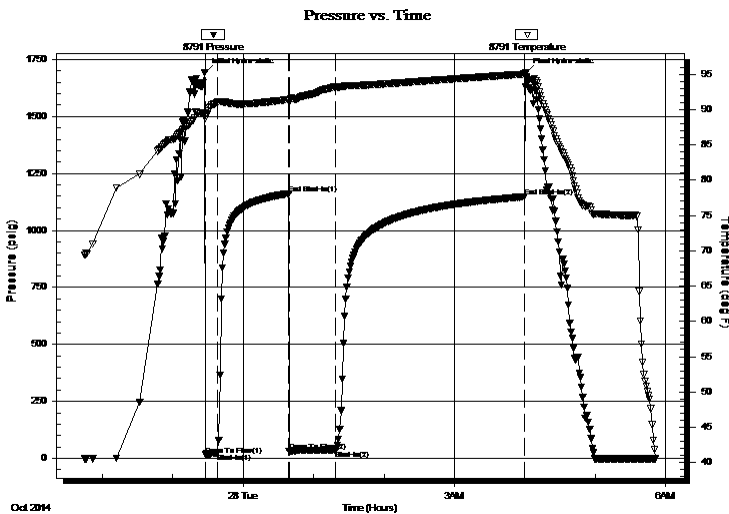
Serial #: 8791

Inside

Press @ Run Depth: 35.46 psig @ 3479.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.10.27 End Date: 2014.10.28 Last Calib.: 2014.10.28
 Start Time: 21:45:05 End Time: 05:51:59 Time On Btm: 2014.10.27 @ 23:27:30
 Time Off Btm: 2014.10.28 @ 04:01:00

TEST COMMENT: 10 - IF: Blow built to 1"
 60 - IS: No blow back
 40 - FF: Blow started at 2 min., built to 1 1/2"
 160 - FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1693.20	89.50	Initial Hydro-static
1	15.74	88.72	Open To Flow (1)
11	24.01	91.08	Shut-In(1)
72	1161.93	91.42	End Shut-In(1)
72	29.68	90.96	Open To Flow (2)
111	35.46	93.21	Shut-In(2)
273	1147.71	95.00	End Shut-In(2)
274	1693.15	94.47	Final Hydro-static

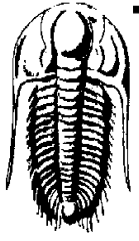
Recovery

Length (ft)	Description	Volume (bbl)
40.00	OWCM 64%w, 26%w, 10%o	0.28

Gas Rates

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

* Recovery from multiple tests



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Time Tool Opened: 23:27:45

Time Test Ended: 05:52:00

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Tester: James Winder

Unit No: 57

Interval: 3478.00 ft (KB) To 3504.00 ft (KB) (TVD)

Reference Elevations: 2348.00 ft (KB)

Total Depth: 3504.00 ft (KB) (TVD)

2340.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8320 Outside

Press @ RunDepth: psig @ 3479.00 ft (KB)

Start Date: 2014.10.27

End Date: 2014.10.28

Capacity: 8000.00 psig

Last Calib.: 2014.10.28

Start Time: 21:45:05

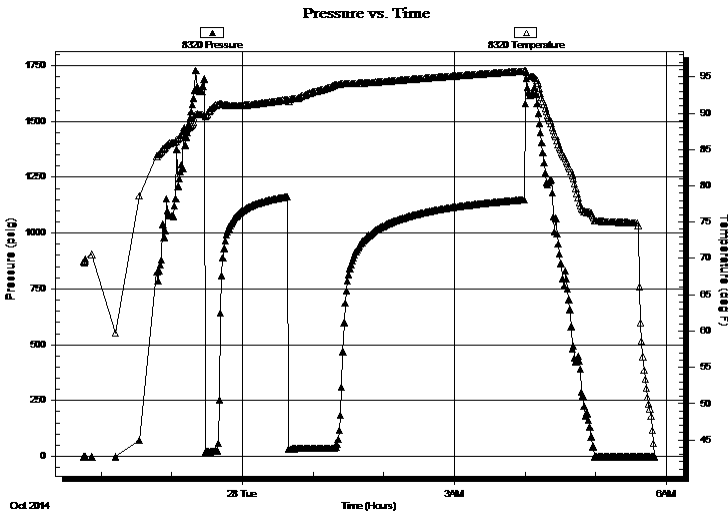
End Time: 05:50:44

Time On Btm:

Time Off Btm:

TEST COMMENT: 10 - IF: Blow built to 1"
60 - IS: No blow back
40 - FF: Blow started at 2 min., built to 1 1/2"
160 - FS: No blow back

PRESSURE SUMMARY



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

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
40.00	OWCM 64% <i>m</i> , 26% <i>w</i> , 10% <i>o</i>	0.28

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

* Recovery from multiple tests



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Job Ticket: 60099

DST#: 2

ATTN: Dan Pritchard

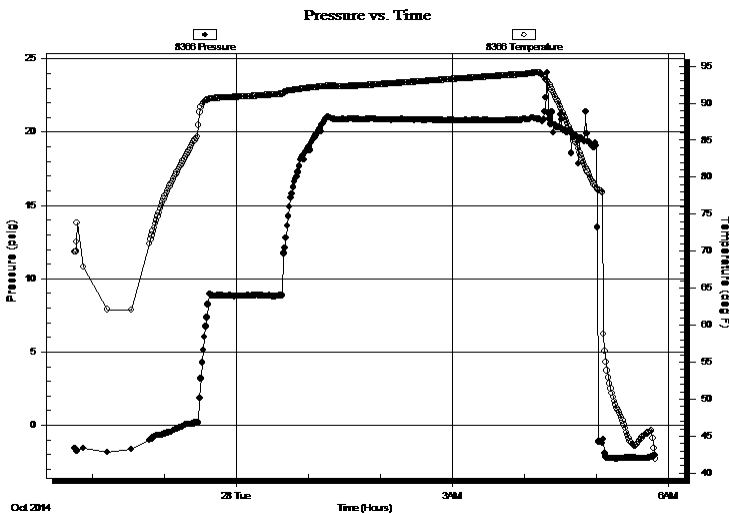
Test Start: 2014.10.27 @ 21:45:00

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Total Depth: 3504.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 2348.00 ft (KB)
2340.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8366 Fluid
Press @ Run Depth: psig @ 3443.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.10.27 End Date: 2014.10.28 Last Calib.: 2014.10.28
Start Time: 21:45:05 End Time: 05:49:44 Time On Btm:
Time Off Btm:

TEST COMMENT: 10 - IF: Blow built to 1"
60 - IS: No blow back
40 - FF: Blow started at 2 min., built to 1 1/2"
160 - FS: No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
40.00	OWCM 64% <i>m</i> , 26% <i>w</i> , 10% <i>o</i>	0.28

Gas Rates

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

* Recovery from multiple tests



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TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates

1/5s/24w Norton KS

1515 Wynkoop STE 700
Denver, CO 80202

Marian et al #1-1

Job Ticket: 60099

DST#: 2

ATTN: Dan Pritchard

Test Start: 2014.10.27 @ 21:45:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 71.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	OWCM 64%m, 26%w, 10%o	0.279

Total Length: 40.00 ft Total Volume: 0.279 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

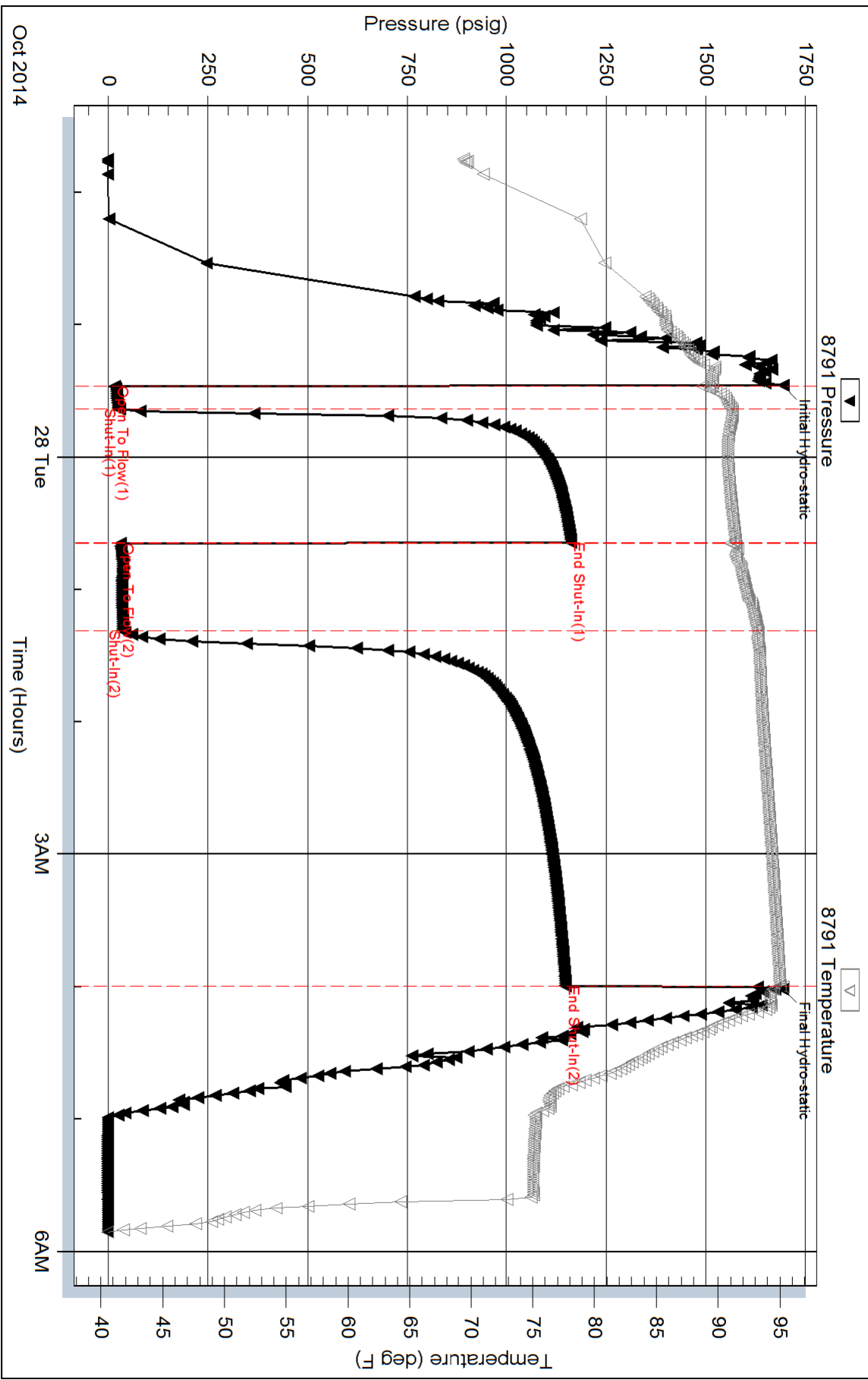
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler = 445 PSI, 2500 OWCM 64%m, 26%w, 5%o, 5%g

Pressure vs. Time

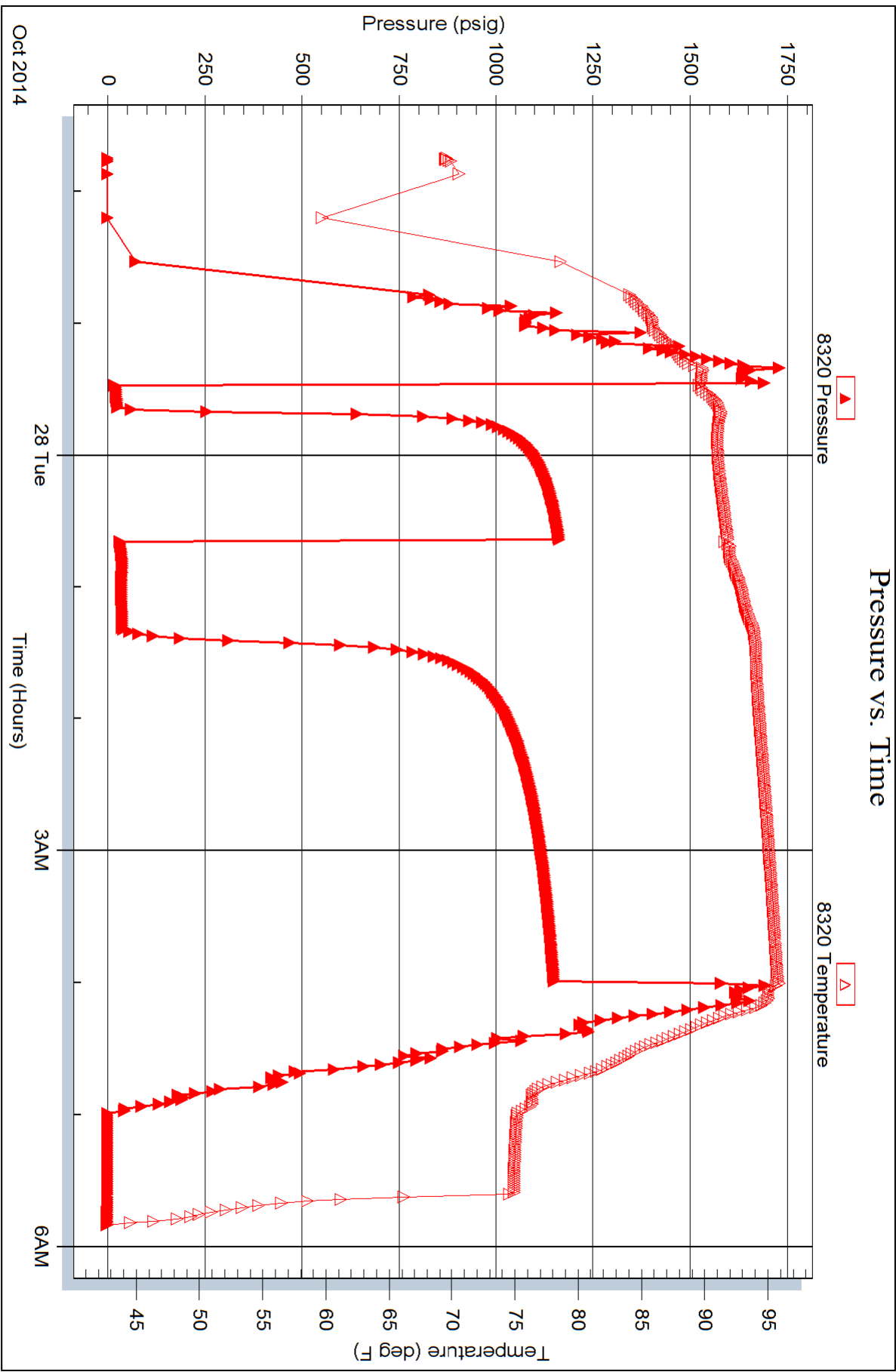


Serial #: 8320

Outside Samuel Gary Jr. & Associates

Marian et al #1-1

DST Test Number: 2



Serial #: 8366

Fluid

Samuel Gary Jr. & Associates

Marian et al #1-1

DST Test Number: 2

