



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

15/2s/36w Rawlins KS

1515 Wynkoop St. STE 700
Denver, CO 80202

Frisbie #1-15

Job Ticket: 62155

DST#: 5

ATTN: Clayton Camozzi

Test Start: 2015.02.12 @ 01:20:00

GENERAL INFORMATION:

Formation: **Upper Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:04:00

Time Test Ended: 09:11:30

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

Interval: 4636.00 ft (KB) To 4676.00 ft (KB) (TVD)

Reference Elevations: 3330.00 ft (KB)

Total Depth: 4676.00 ft (KB) (TVD)

3325.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8791

Inside

Press@RunDepth: 16.60 psig @ 4637.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.02.12

End Date:

2015.02.12

Last Calib.:

2015.02.12

Start Time:

01:20:05

End Time:

09:11:29

Time On Btm:

2015.02.12 @ 04:03:45

Time Off Btm:

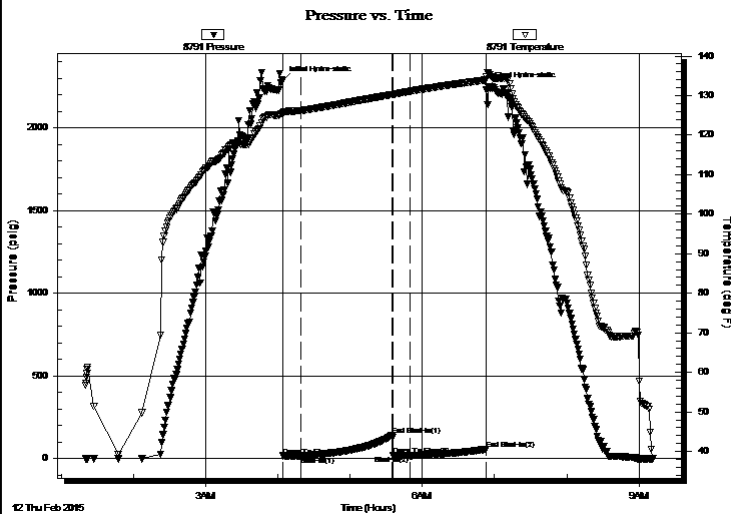
2015.02.12 @ 06:54:45

TEST COMMENT: 15 - IF: 1/2" Blow at open, built to 1 1/4" (Diesel in bucket)

75 - IS: No blow back

15 - FF: A few bubbles at open, then No blow

60 - FS: No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2286.38	125.52	Initial Hydro-static
1	15.16	125.16	Open To Flow (1)
16	15.76	126.22	Shut-In(1)
91	138.50	130.26	End Shut-In(1)
92	16.26	130.26	Open To Flow (2)
106	16.60	131.07	Shut-In(2)
169	55.01	133.97	End Shut-In(2)
171	2252.66	135.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOCM 97% m, 3% o	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates Inc.

15/2s/36w Rawlins KS

1515 Wynkoop St. STE 700
Denver, CO 80202

Frisbie #1-15

Job Ticket: 62155

DST#: 5

ATTN: Clayton Camozzi

Test Start: 2015.02.12 @ 01:20:00

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: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	SOCM 97% m, 3% o	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

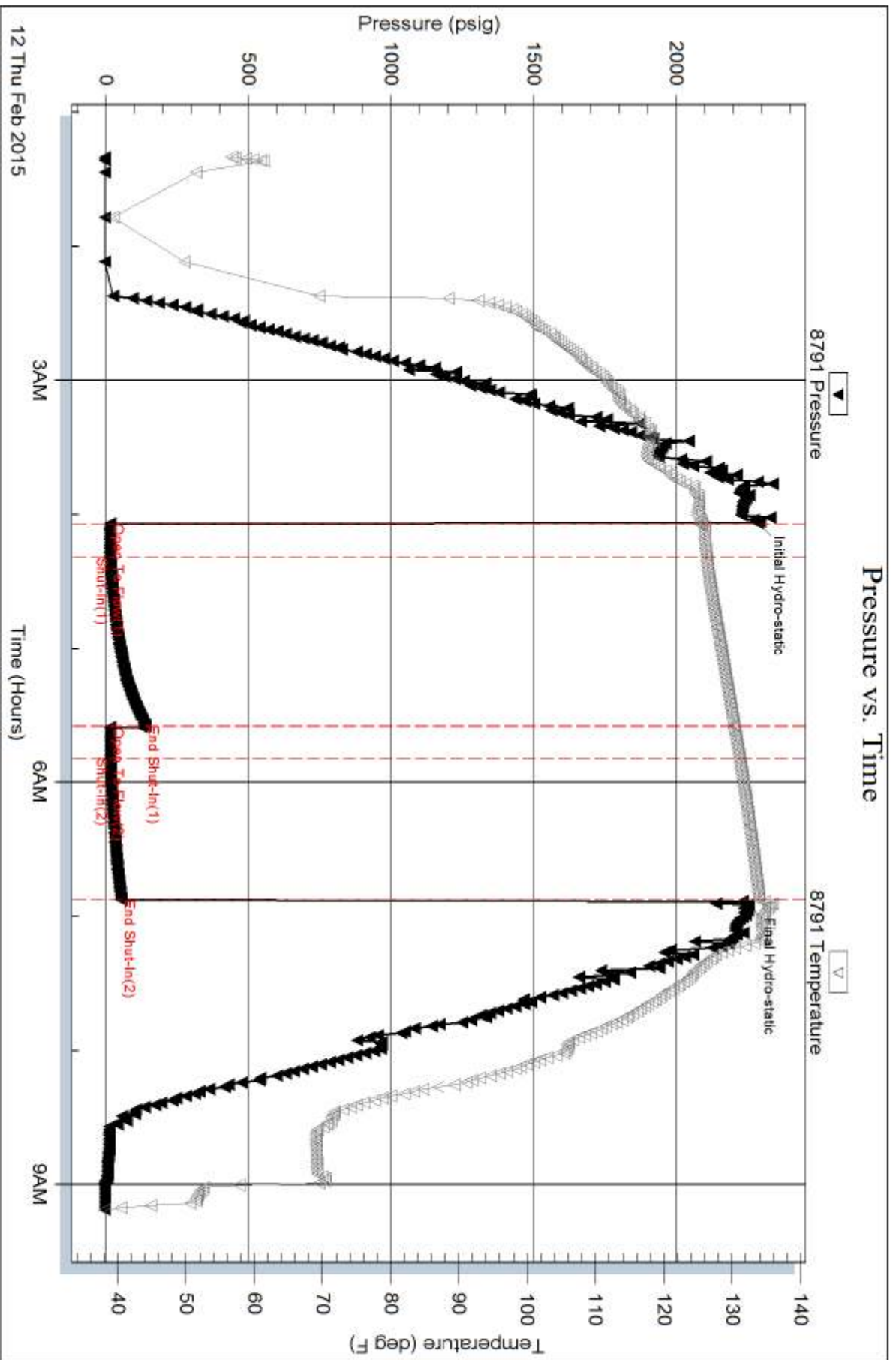
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



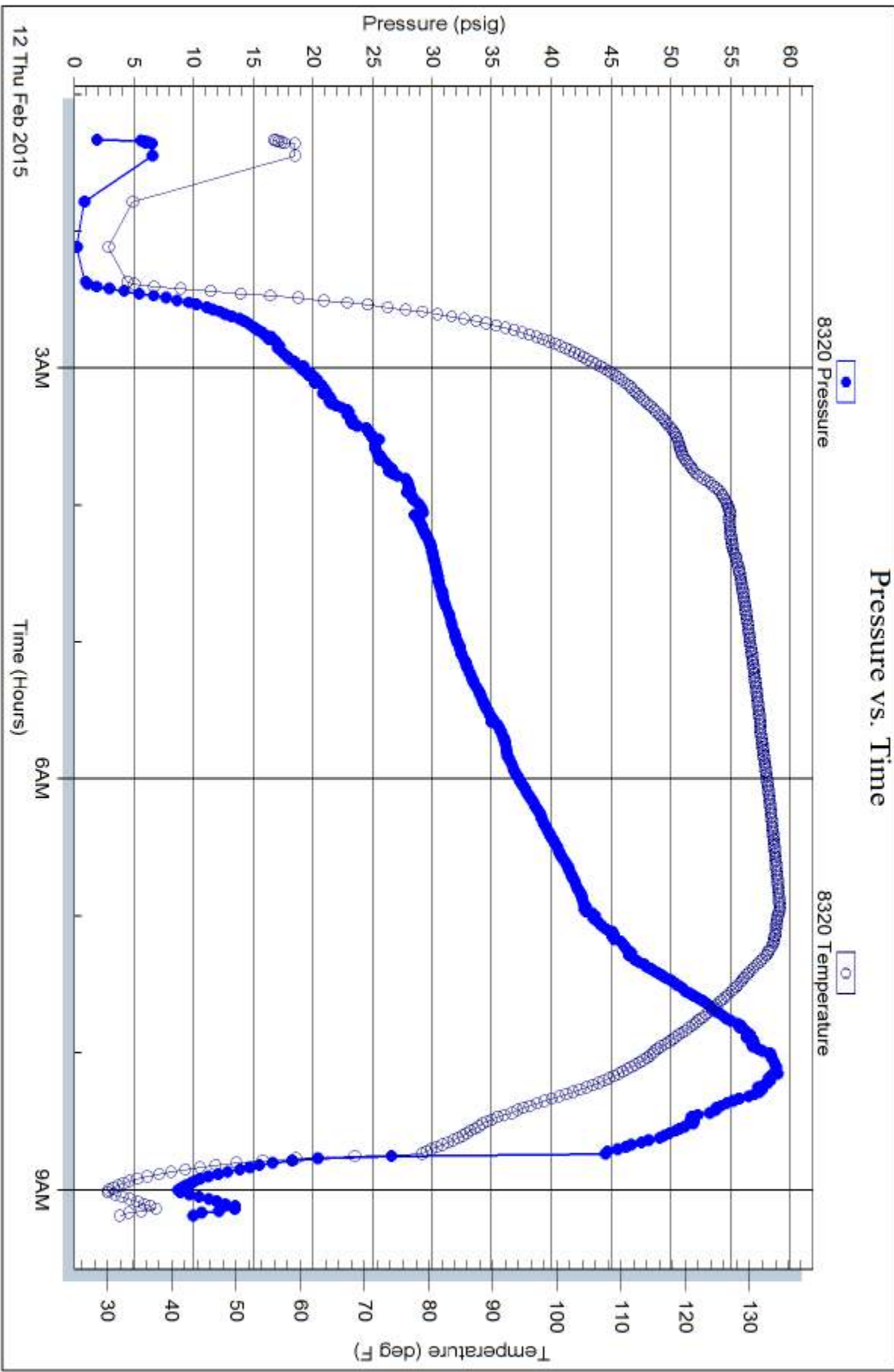
Serial #: 8320

Fluid

Samuel Gary Jr. & Associates Inc.

Frisbie #1-15

DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 62155

Printed: 2015.02.12 @ 09:37:40