



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates, Inc.

31-11S-12W Trego, KS

1515 Wynkoop STE. 700
Denver, CO 80202

John Nilhas 1-31

Job Ticket: 54009

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2014.02.27 @ 22:36:25

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:31:55

Time Test Ended: 07:55:55

Test Type: Conventional Straddle (Reset)

Tester: Brannan L

Unit No: 48

Interval: 3686.00 ft (KB) To 3710.00 ft (KB) (TVD)

Reference Elevations: 2343.00 ft (KB)

Total Depth: 3797.00 ft (KB) (TVD)

2338.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8321

Outside

Press@RunDepth: 46.42 psig @ 3687.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.27

End Date:

2014.02.28

Last Calib.:

2014.02.28

Start Time: 22:36:26

End Time:

07:55:55

Time On Btm:

2014.02.28 @ 01:29:55

Time Off Btm:

2014.02.28 @ 05:08:25

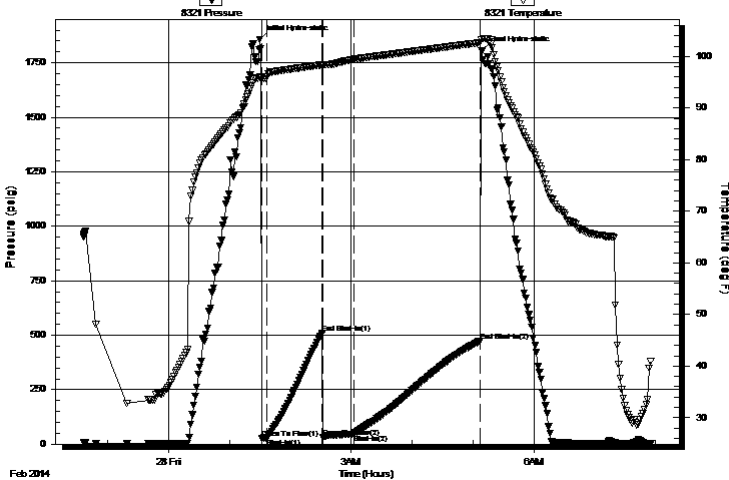
TEST COMMENT: 005- IF- Built to 2.5"

060- IS- No blow

030- FF- BOB 15mins

120- FS- No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1857.60	96.01	Initial Hydro-static
2	25.28	95.79	Open To Flow (1)
7	28.52	95.98	Shut-In(1)
62	508.10	98.39	End Shut-In(1)
63	32.06	98.31	Open To Flow (2)
93	46.42	99.40	Shut-In(2)
217	473.46	102.66	End Shut-In(2)
219	1804.33	103.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	MCO, 60%O	0.25
0.00	200' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



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DST#: 3

ATTN: Clayton Camozzi

Test Start: 2014.02.27 @ 22:36:25

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Test Type: Conventional Straddle (Reset)

Time Tool Opened: 01:31:55

Tester: Brannan L

Time Test Ended: 07:55:55

Unit No: 48

Interval: 3686.00 ft (KB) To 3710.00 ft (KB) (TVD)

Reference Elevations: 2343.00 ft (KB)

Total Depth: 3797.00 ft (KB) (TVD)

2338.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8652 Below (Straddle)

Press@RunDepth: psig @ 3792.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.27

End Date:

2014.02.28

Last Calib.:

2014.02.28

Start Time: 22:35:39

End Time:

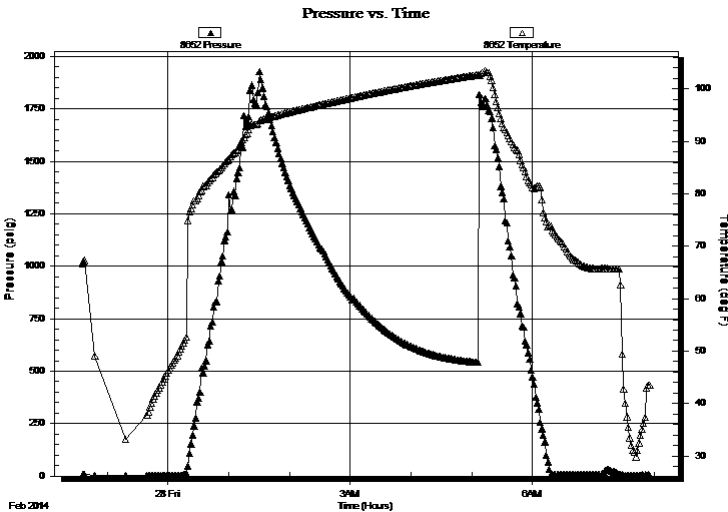
07:55:38

Time On Btm:

Time Off Btm:

TEST COMMENT: 005- IF- Built to 2.5"
060- IS- No blow
030- FF- BOB 15mins
120- FS- No blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
50.00	MCO, 60%O	0.25
0.00	200' GIP	0.00

Gas Rates

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

* Recovery from multiple tests



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Job Ticket: 54009

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2014.02.27 @ 22:36:25

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Test Type: Conventional Straddle (Reset)

Time Tool Opened: 01:31:55

Tester: Brannan L

Time Test Ended: 07:55:55

Unit No: 48

Interval: 3686.00 ft (KB) To 3710.00 ft (KB) (TVD)

Reference Elevations: 2343.00 ft (KB)

Total Depth: 3797.00 ft (KB) (TVD)

2338.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8647

Fluid

Press@RunDepth: psig @ 3657.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.27

End Date: 2014.02.28

Last Calib.: 2014.02.28

Start Time: 22:35:44

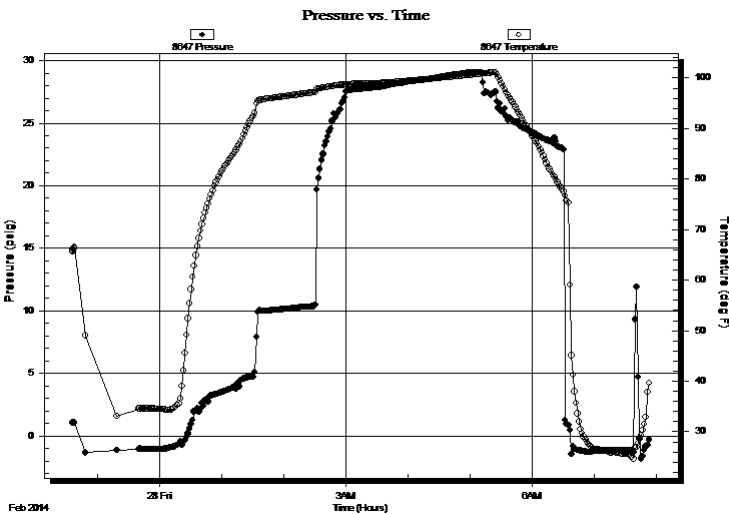
End Time: 07:53:43

Time On Btm:

Time Off Btm:

TEST COMMENT: 005- IF- Built to 2.5"
060- IS- No blow
030- FF- BOB 15mins
120- FS- No blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
50.00	MCO, 60%O	0.25
0.00	200' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



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DRILL STEM TEST REPORT

FLUID SUMMARY

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Job Ticket: 54009

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2014.02.27 @ 22:36:25

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

30 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 750.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	MCO, 60%O	0.246
0.00	200' GIP	0.000

Total Length: 50.00 ft Total Volume: 0.246 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

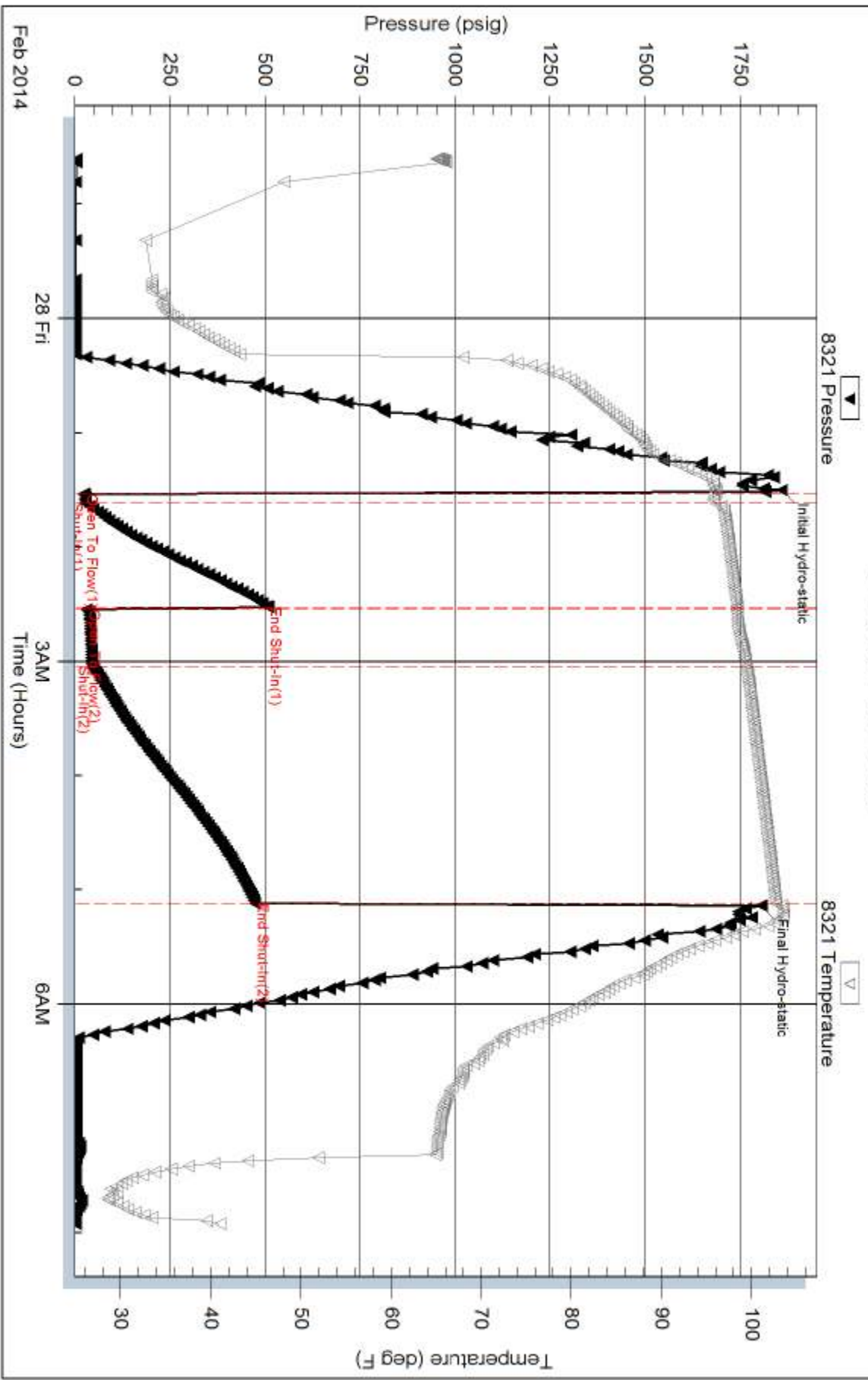
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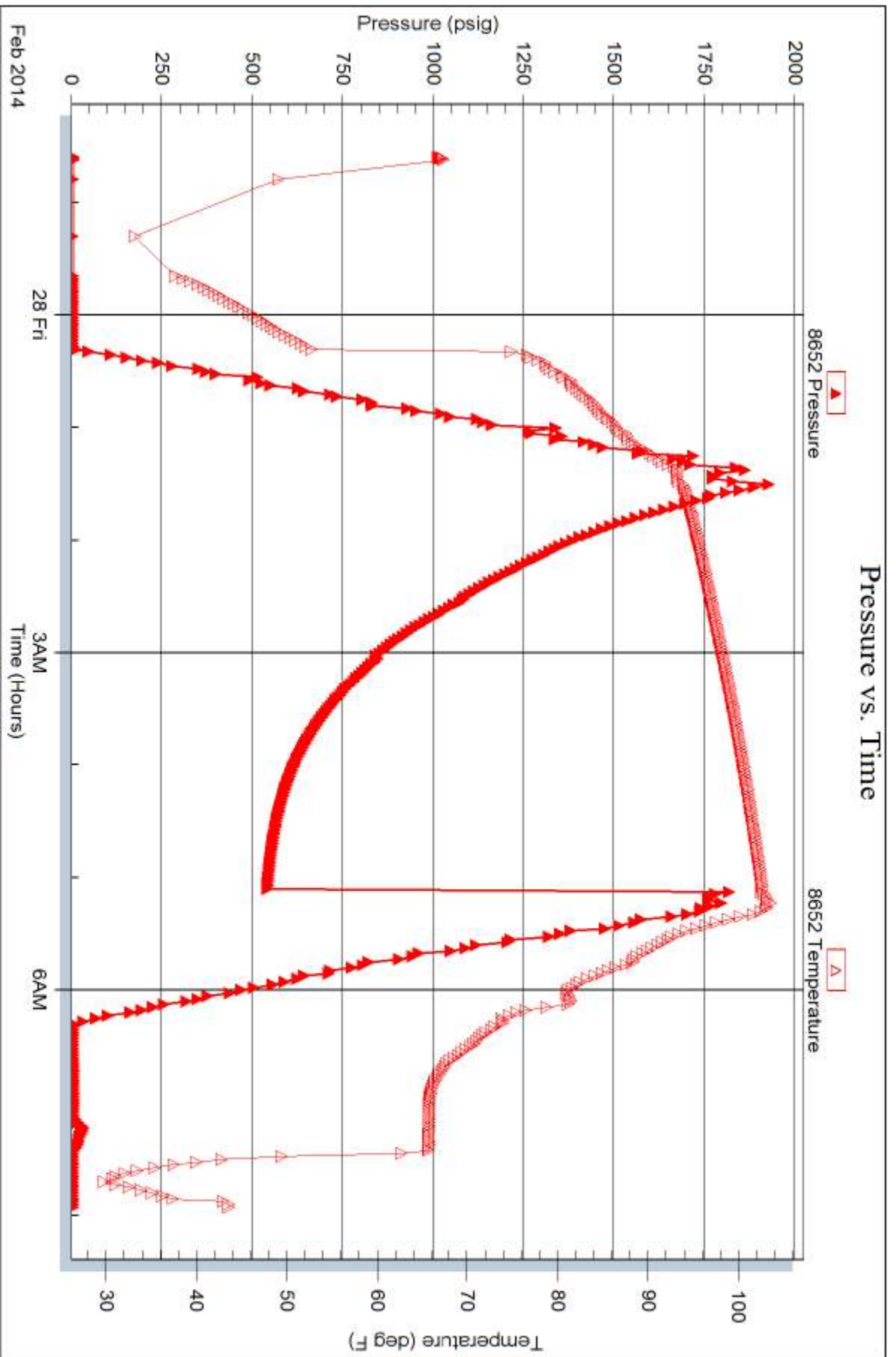
Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler: 1200mL O 800mL M

Pressure vs. Time





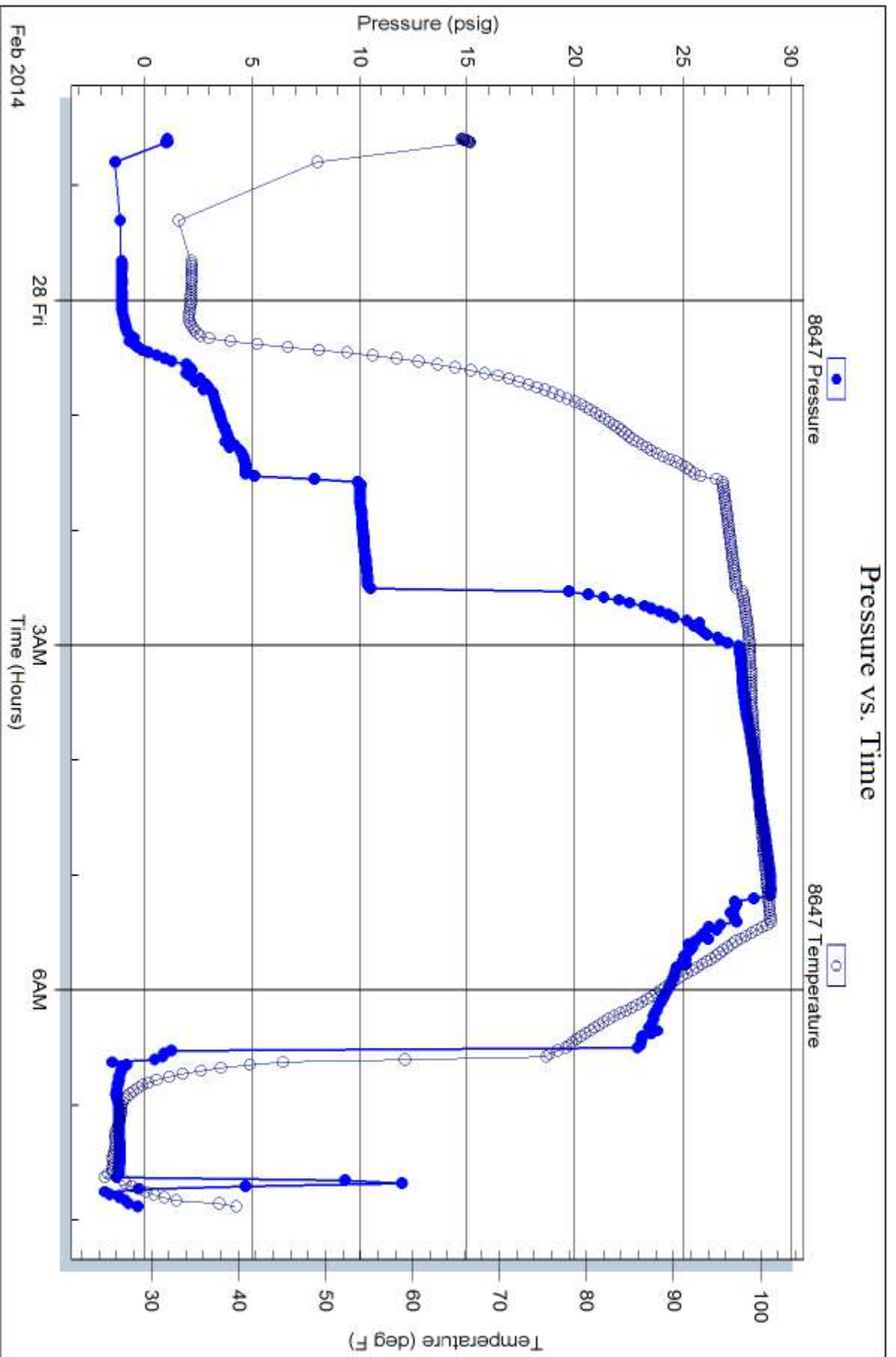
Serial #: 8647

Fluid

Samuel Gary Jr. & Associates, Inc.

John Nilnas 1-31

DST Test Number: 3



Tribble Testing, Inc

Ref. No: 54009

Printed: 2014.02.28 @ 08:27:13