



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates, Inc

12-15-16 Ellis, KS

1515 Wynkoop
Ste 700
Denver, CO 80202
ATTN: Chris Mitchell

Truan 1-12

Job Ticket: 54437

DST#: 3

Test Start: 2013.09.10 @ 18:12:00

GENERAL INFORMATION:

Formation: **Lansing A-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:05:00

Time Test Ended: 02:23:30

Test Type: Conventional Straddle (Reset)

Tester: Brannan L

Unit No: 53

Interval: 3176.00 ft (KB) To 3216.00 ft (KB) (TVD)

Reference Elevations: 1908.00 ft (KB)

Total Depth: 3246.00 ft (KB) (TVD)

1898.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6799 Inside

Press @ Run Depth: 79.47 psig @ 3177.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.10

End Date:

2013.09.11

Last Calib.:

2013.09.11

Start Time: 18:12:05

End Time:

02:23:29

Time On Btm:

2013.09.10 @ 20:03:45

Time Off Btm:

2013.09.10 @ 23:42:45

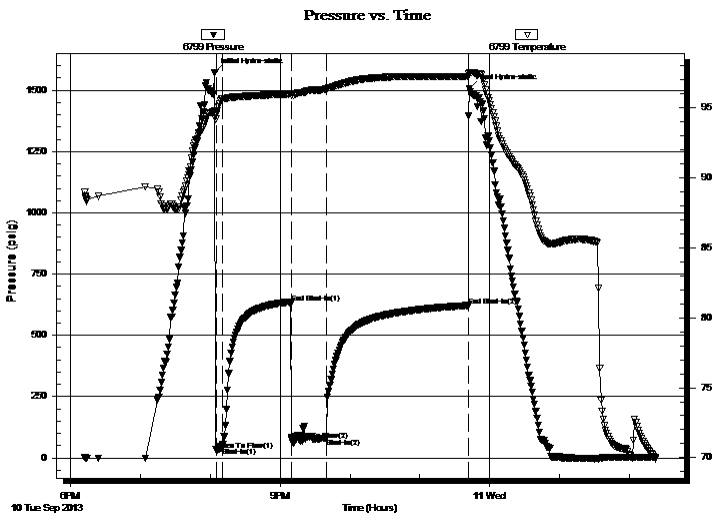
TEST COMMENT: 005- IF- 5"

060- IS- No blow

030- FF- Built to 8" in 16mins then slowly built another .5" over the final 14mins of flow period

120- FS- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1573.09	94.79	Initial Hydro-static
2	30.53	94.55	Open To Flow (1)
7	41.94	95.64	Shut-In(1)
66	634.05	95.99	End Shut-In(1)
67	73.31	95.91	Open To Flow (2)
96	79.47	96.32	Shut-In(2)
218	621.61	97.20	End Shut-In(2)
219	1506.41	97.51	Final Hydro-static

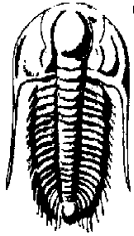
Recovery

Length (ft)	Description	Volume (bbl)
60.00	OWM, 5%O 25%W 70%M	0.82
65.00	M, 100%M	0.89

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

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Job Ticket: 54437

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Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 58.00 sec/qt
Water Loss: 7.98 in³
Resistivity: ohm.m
Salinity: 5100.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OWM, 5%O 25%W 70%M	0.820
65.00	M, 100%M	0.888

Total Length: 125.00 ft Total Volume: 1.708 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

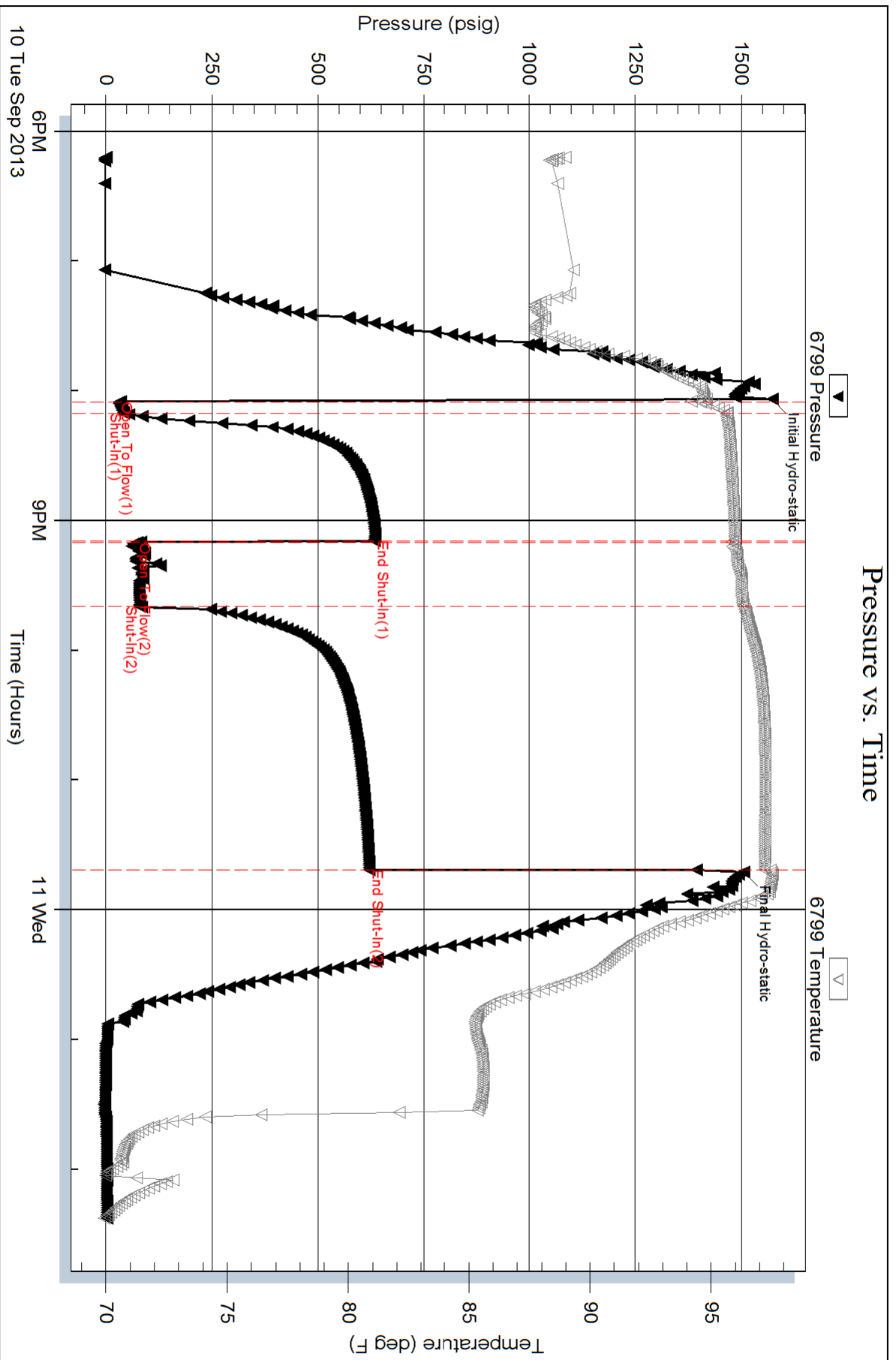
Serial #:

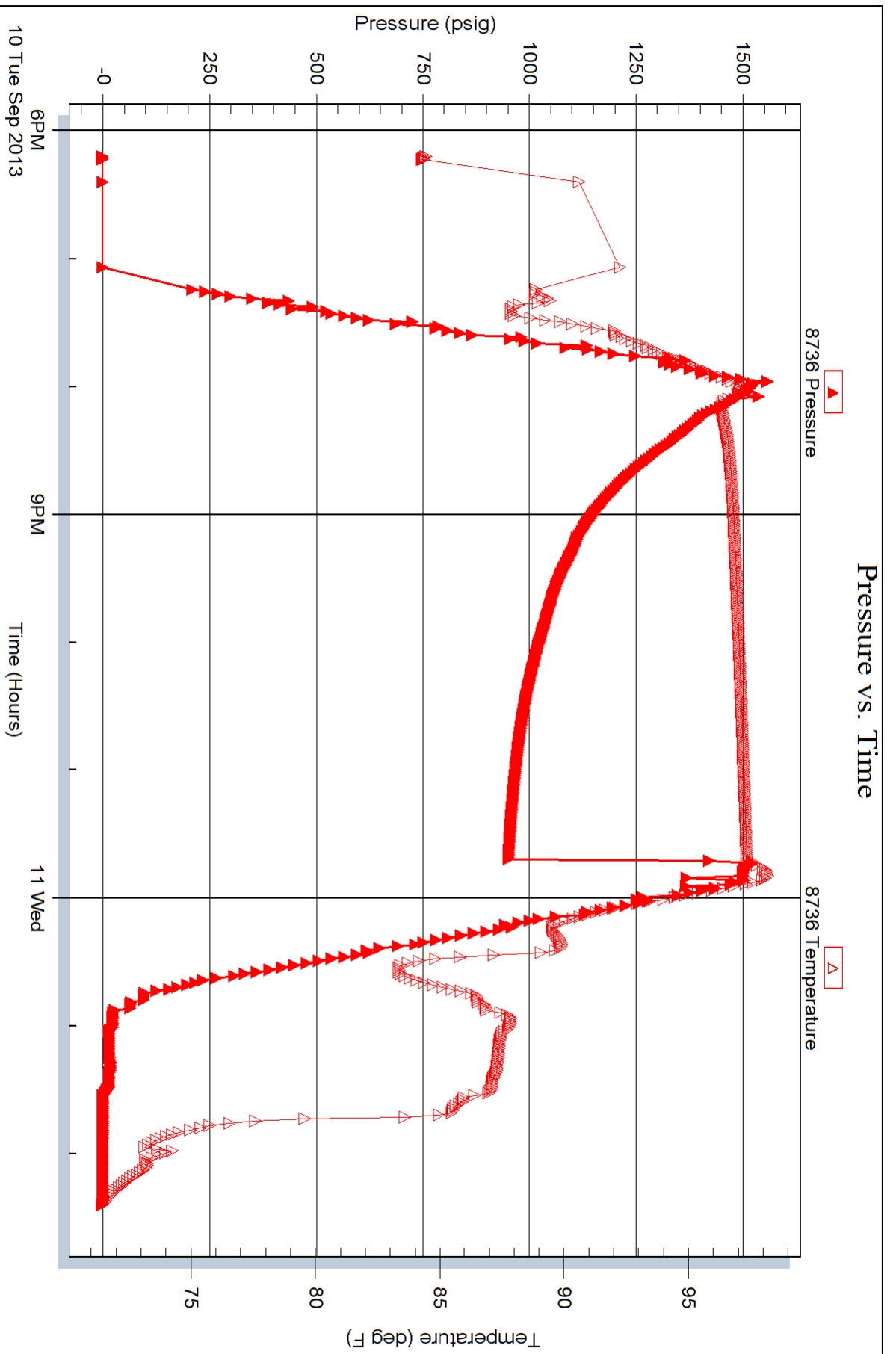
Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler: 1900mLM 100mLO@220PSI

Pressure vs. Time





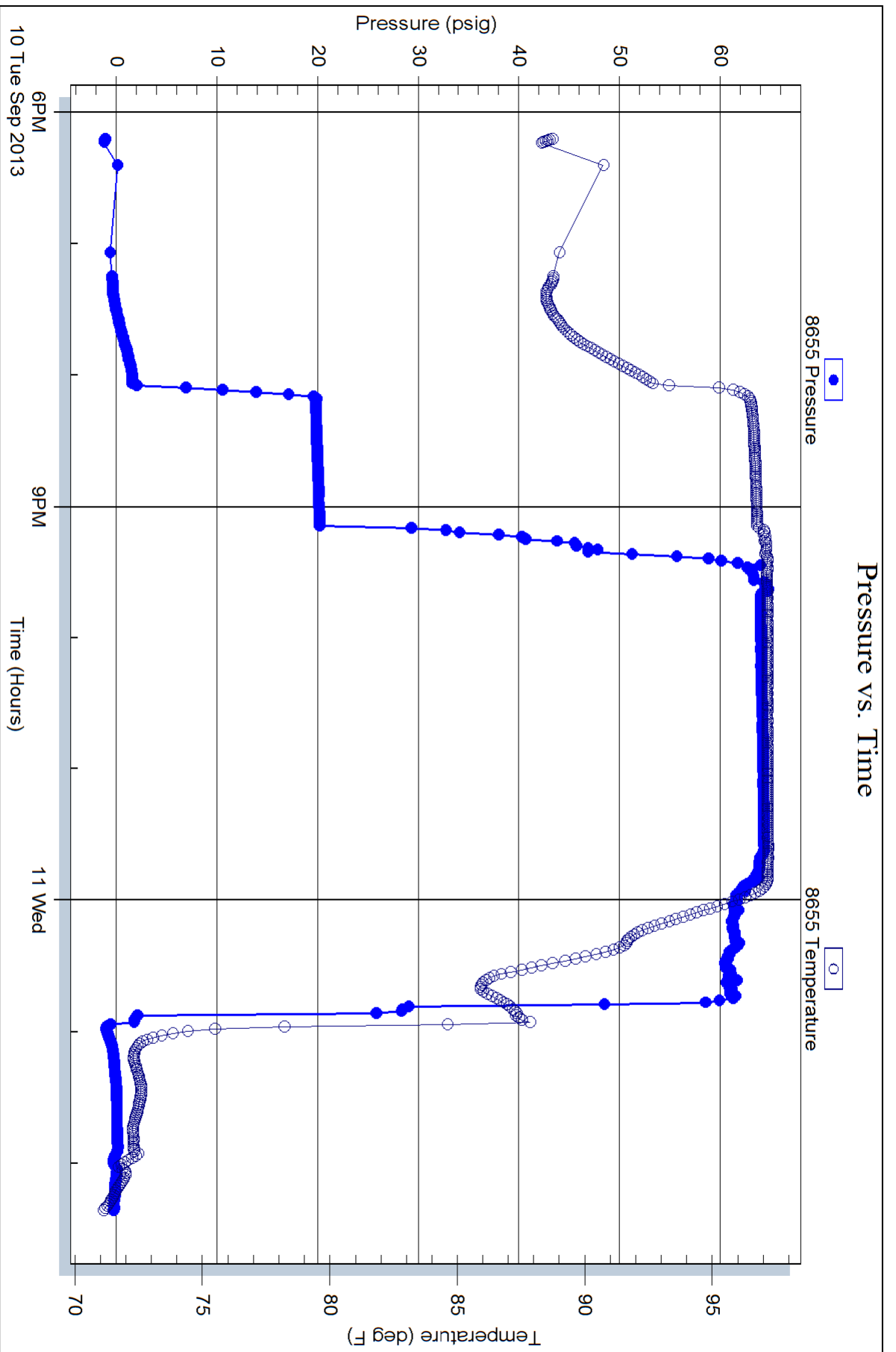
Serial #: 8655

Fluid

Samuel Gary Jr. & Associates, Inc

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DST Test Number: 3



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Ref. No: 54437

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