



DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr. & Associates**

1515 Wynkoop Suite 700
Denver CO 80202

ATTN: Chris Mitchel

Wahl Trust #1-32

32-14s-15w Russell,KS

Start Date: 2012.09.26 @ 18:58:43

End Date: 2012.09.27 @ 03:33:13

Job Ticket #: 47874 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.10.01 @ 14:33:53

Samuel Gary Jr. & Associates

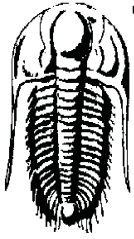
32-14s-15w Russell,KS

Wahl Trust #1-32

DST # 4

H-I-J

2012.09.26



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TESTING, INC**

DRILL STEM TEST REPORT

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32-14s-15w Russell, KS

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Denver CO 80202

Wahl Trust #1-32

Job Ticket: 47874

DST#: 4

ATTN: Chris Mitchel

Test Start: 2012.09.26 @ 18:58:43

GENERAL INFORMATION:

Formation: **H-I-J**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 20:48:13

Time Test Ended: 03:33:13

Test Type: Conventional Bottom Hole (Reset)

Tester: Jason McLemore

Unit No: 54

Interval: 3245.00 ft (KB) To 3310.00 ft (KB) (TVD)

Reference Elevations: 1885.00 ft (KB)

Total Depth: 3310.00 ft (KB) (TVD)

1877.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8366

Inside

Press@RunDepth: 53.00 psig @ 3282.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.26

End Date:

2012.09.27

Last Calib.:

2012.09.27

Start Time: 18:58:45

End Time:

03:33:13

Time On Btm:

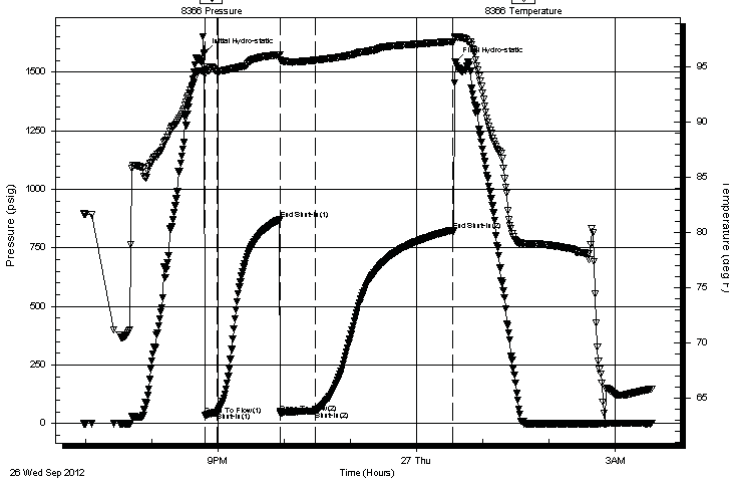
2012.09.26 @ 20:47:58

Time Off Btm:

2012.09.27 @ 00:34:58

TEST COMMENT: 10 Min. IFP-Weak Blow , Built to 1"
60 Min. ISI-Dead
30 Min. FFP-Weak Blow , Built to 2-1/4"
120 Min. FSI-Dead

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1583.70	95.05	Initial Hydro-static
1	34.57	94.31	Open To Flow (1)
12	47.61	94.62	Shut-In(1)
68	871.76	96.12	End Shut-In(1)
69	44.09	95.63	Open To Flow (2)
100	53.00	95.63	Shut-In(2)
225	825.18	97.34	End Shut-In(2)
227	1545.88	97.78	Final Hydro-static

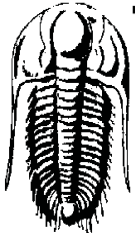
Recovery

Length (ft)	Description	Volume (bbl)
40.00	OCM-20%O-80%M	0.29

Gas Rates

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

* Recovery from multiple tests



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Tester: Jason McLemore

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Interval: 3245.00 ft (KB) To 3310.00 ft (KB) (TVD)

Reference Elevations: 1885.00 ft (KB)

Total Depth: 3310.00 ft (KB) (TVD)

1877.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8789 Outside

Press@RunDepth: psig @ 3282.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.26 End Date: 2012.09.27

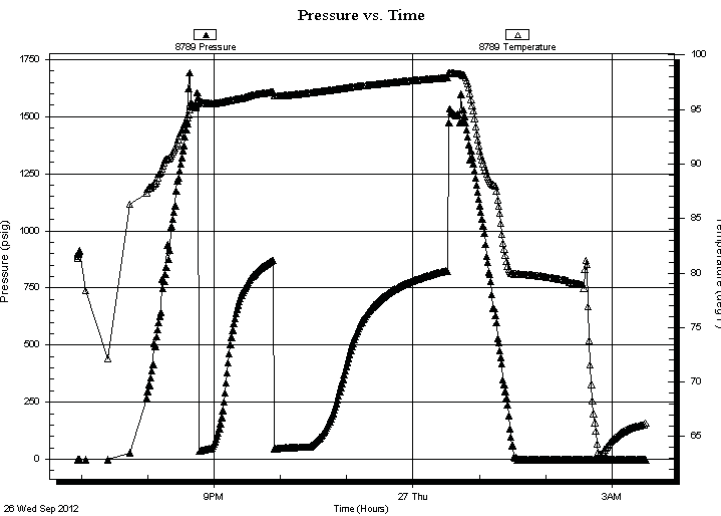
Last Calib.: 2012.09.27

Start Time: 18:56:20 End Time: 03:31:03

Time On Btm:

Time Off Btm:

TEST COMMENT: 10 Min. IFP-Weak Blow , Built to 1"
60 Min. ISI-Dead
30 Min. FFP-Weak Blow , Built to 2-1/4"
120 Min. FSI-Dead



PRESSURE SUMMARY

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

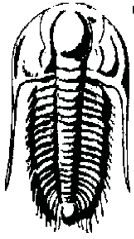
Recovery

Length (ft)	Description	Volume (bbl)
40.00	OCM-20%O-80%M	0.29

Gas Rates

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

* Recovery from multiple tests



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Job Ticket: 47874

DST#: 4

ATTN: Chris Mitchel

Test Start: 2012.09.26 @ 18:58:43

GENERAL INFORMATION:

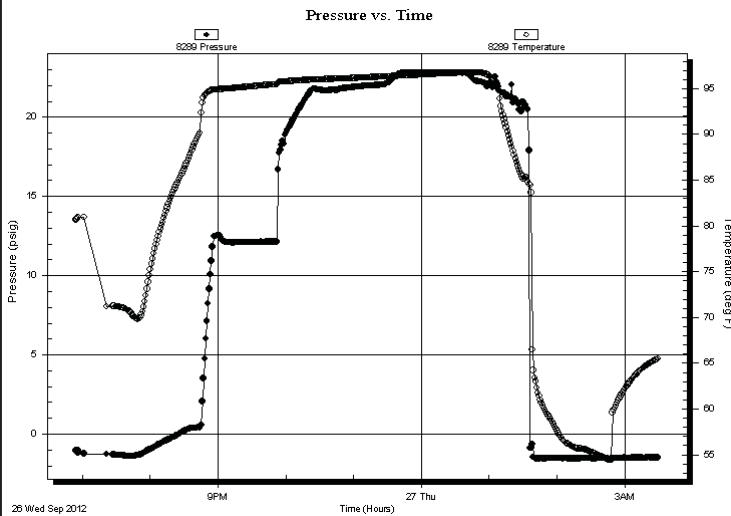
Formation: **H-I-J**
 Deviated: No Whipstock: 0.00 ft (KB)
 Time Tool Opened: 20:48:13
 Time Test Ended: 03:33:13
 Interval: **3245.00 ft (KB) To 3310.00 ft (KB) (TVD)**
 Total Depth: 3310.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jason McLemore
 Unit No: 54
 Reference Elevations: 1885.00 ft (KB)
 1877.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8289

Fluid

Press@RunDepth: psig @ 3210.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.09.26 End Date: 2012.09.27 Last Calib.: 2012.09.27
 Start Time: 18:54:35 End Time: 03:29:48 Time On Btm:
 Time Off Btm:

TEST COMMENT: 10 Min. IFP-Weak Blow , Built to 1"
 60 Min. ISI-Dead
 30 Min. FFP-Weak Blow , Built to 2-1/4"
 120 Min. FSI-Dead



PRESSURE SUMMARY

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

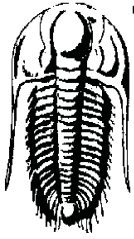
Recovery

Length (ft)	Description	Volume (bbl)
40.00	OCM-20%O-80%M	0.29

* Recovery from multiple tests

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr. & Associates

32-14s-15w Russell, KS

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Denver CO 80202

Wahl Trust #1-32

Job Ticket: 47874

DST#: 4

ATTN: Chris Mitchel

Test Start: 2012.09.26 @ 18:58:43

Tool Information

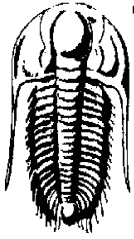
Drill Pipe:	Length: 3190.00 ft	Diameter: 3.80 inches	Volume: 44.75 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 44.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3245.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	65.00 ft			
Tool Length:	100.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Recorder	0.00	8289	Fluid	3210.00	
Change Over Sub	5.00			3215.00	
Shut In Tool	5.00			3220.00	
Sampler	3.00			3223.00	
Hydraulic tool	5.00			3228.00	
Jars	5.00			3233.00	
Safety Joint	2.00			3235.00	
Packer	5.00			3240.00	35.00 Bottom Of Top Packer
Packer	5.00			3245.00	
Stubb	1.00			3246.00	
Perforations	3.00			3249.00	
Change Over Sub	1.00			3250.00	
Blank Spacing	31.00			3281.00	
Change Over Sub	1.00			3282.00	
Recorder	0.00	8366	Inside	3282.00	
Recorder	0.00	8789	Outside	3282.00	
Perforations	25.00			3307.00	
Bullnose	3.00			3310.00	65.00 Bottom Packers & Anchor

Total Tool Length: 100.00



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FLUID SUMMARY

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Job Ticket: 47874

DST#: 4

ATTN: Chris Mitchel

Test Start: 2012.09.26 @ 18:58:43

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	OCM-20%O-80%M	0.288

Total Length: 40.00 ft Total Volume: 0.288 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler-250#, 1000ml Oil, 3000ml Drilling Mud

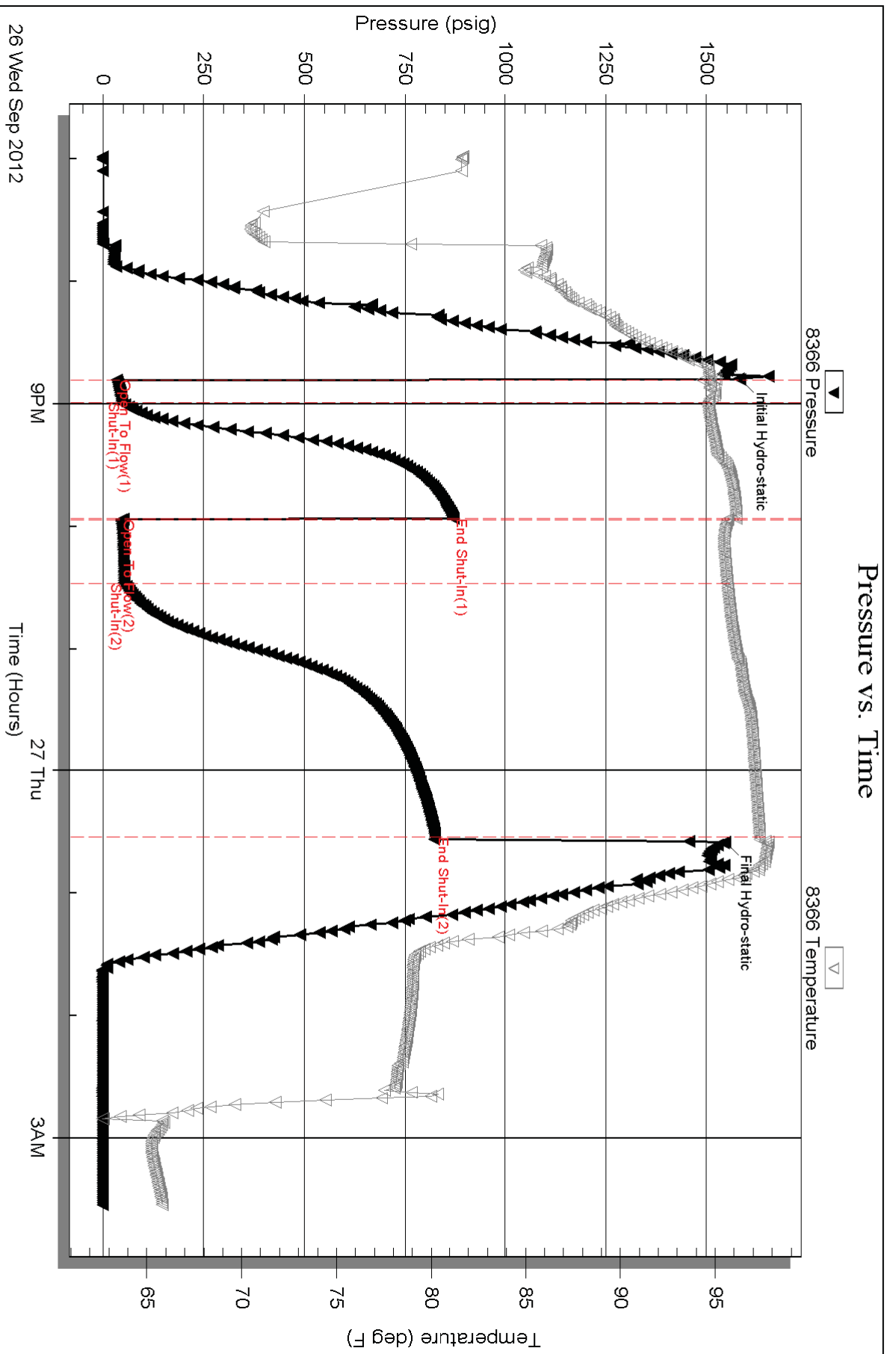
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Inside

Samuel Gary Jr. & Associates

Wahl Trust #1-32

DST Test Number: 4

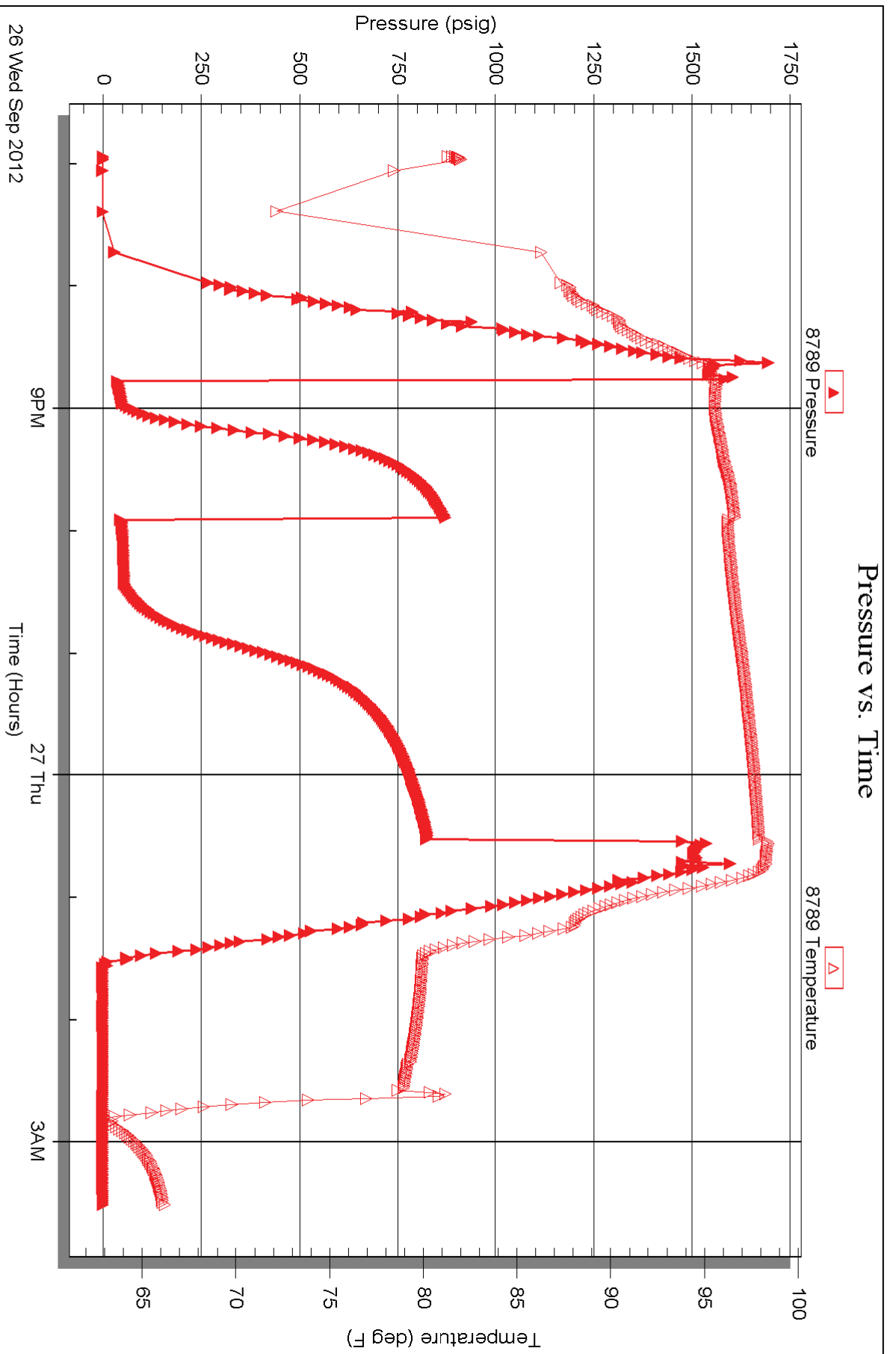


Serial #: 8789

Outside Samuel Gary Jr. & Associates

Wahl Trust #1-32

DST Test Number: 4



Serial #: 8289

Fluid

Samuel Gary Jr. & Associates

Wahl Trust #1-32

DST Test Number: 4

