



DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr & Assoc Inc**

1515 Wynkoop Ste700
Denver CO 80202

ATTN: Chris Mitchell

Dumler-Kraft etal #1

29-15s-15w Russell,KS

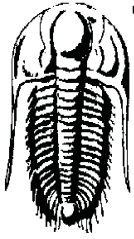
Start Date: 2012.09.24 @ 14:45:08

End Date: 2012.09.24 @ 23:26:33

Job Ticket #: 48686 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.09.27 @ 13:16:21



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Samuel Gary Jr & Assoc Inc

29-15s-15w Russell,KS

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Denver CO 80202

Dumler-Kraft etal #1

ATTN: Chris Mitchell

Job Ticket: 48686

DST#: 2

Test Start: 2012.09.24 @ 14:45:08

GENERAL INFORMATION:

Formation: **LKC I-base**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:54:33

Time Test Ended: 23:26:33

Test Type: Conventional Straddle (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 3330.00 ft (KB) To 3418.00 ft (KB) (TVD)

Reference Elevations: 1919.00 ft (KB)

Total Depth: 3587.00 ft (KB) (TVD)

1909.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8369

Inside

Press@RunDepth: 93.23 psig @ 3336.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.24

End Date:

2012.09.24

Last Calib.:

2012.09.24

Start Time: 14:45:08

End Time:

23:26:33

Time On Btm:

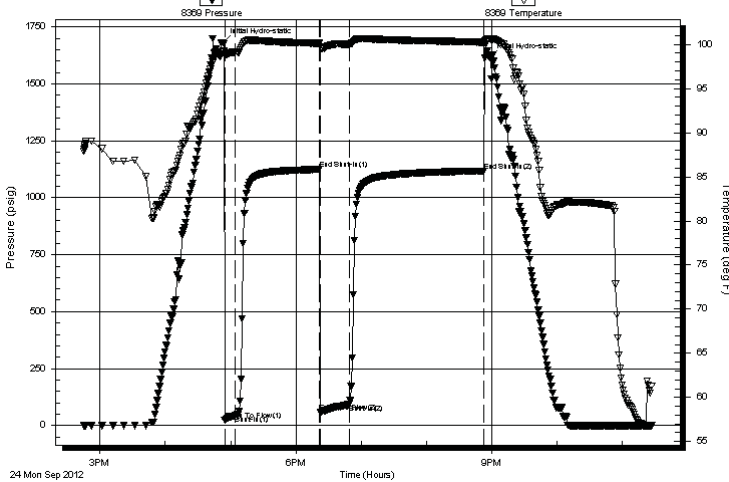
2012.09.24 @ 16:52:33

Time Off Btm:

2012.09.24 @ 20:58:02

TEST COMMENT: 10-IFP-w k to a gd bl 1/2" to 8" bl
75-ISIP-no bl
30-FFP-1/4" to bottom of bucket in 14 min
120-FSIP-3/4" bl bk

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1680.49	99.20	Initial Hydro-static
2	23.42	98.73	Open To Flow (1)
12	44.63	99.13	Shut-In(1)
89	1124.84	100.14	End Shut-In(1)
90	58.58	99.71	Open To Flow (2)
117	93.23	100.04	Shut-In(2)
240	1118.03	100.26	End Shut-In(2)
246	1613.56	100.61	Final Hydro-static

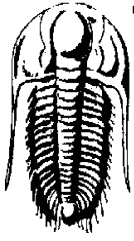
Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
0.00	255' Gip	0.00
55.00	O&GCM 5%G15%O80%M	0.77
130.00	GMO 15%G10%M75%O	1.82

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

* Recovery from multiple tests



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Job Ticket: 48686

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1909.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8700 Outside

Press@RunDepth: psig @ 3336.00 ft (KB)

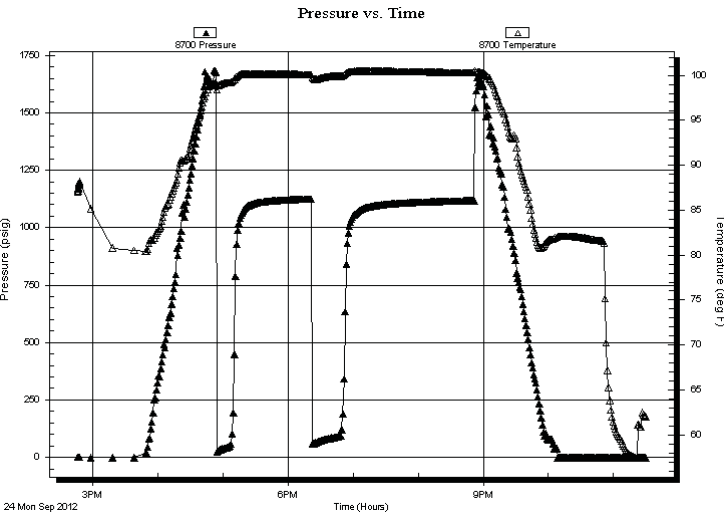
Capacity: 8000.00 psig

Start Date: 2012.09.24 End Date: 2012.09.24 Last Calib.: 2012.09.24

Start Time: 14:46:08 End Time: 23:30:03 Time On Btm:

Time Off Btm:

TEST COMMENT: 10-IFP-w k to a gd bl 1/2" to 8" bl
75-ISIP-no bl
30-FFP-1/4" to bottom of bucket in 14 min
120-FSIP-3/4" bl bk



PRESSURE SUMMARY

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

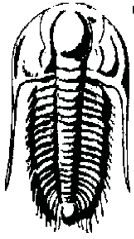
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0.00	255' Gip	0.00
55.00	O&GCM 5%G15%O80%M	0.77
130.00	GMO 15%G10%M75%O	1.82

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Gas Rates

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



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Job Ticket: 48686

DST#: 2

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Total Depth: 3587.00 ft (KB) (TVD)

1909.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8374 Below (Straddle)

Press@RunDepth: psig @ 3430.00 ft (KB)

Start Date: 2012.09.24

End Date:

2012.09.24

Start Time: 14:45:58

End Time:

23:32:23

Capacity: 8000.00 psig

Last Calib.:

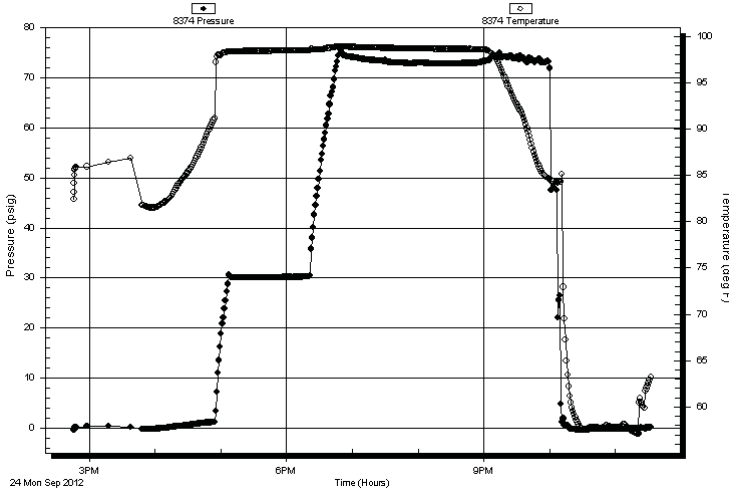
2012.09.24

Time On Btm:

Time Off Btm:

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30-FFP-1/4" to bottom of bucket in 14 min
120-FSIP-3/4" bl bk

Pressure vs. Time



PRESSURE SUMMARY

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

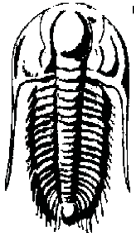
Recovery

Length (ft)	Description	Volume (bbl)
0.00	255' Gip	0.00
55.00	O&GCM 5%G15%O80%M	0.77
130.00	GMO 15%G10%M75%O	1.82

Gas Rates

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

* Recovery from multiple tests



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DRILL STEM TEST REPORT

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Denver CO 80202

Dumler-Kraft etal #1

ATTN: Chris Mitchell

Job Ticket: 48686

DST#: 2

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1909.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8736

Fluid

Press@RunDepth: psig @ 3295.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.24

End Date:

2012.09.24

Last Calib.:

2012.09.24

Start Time: 14:45:24

End Time:

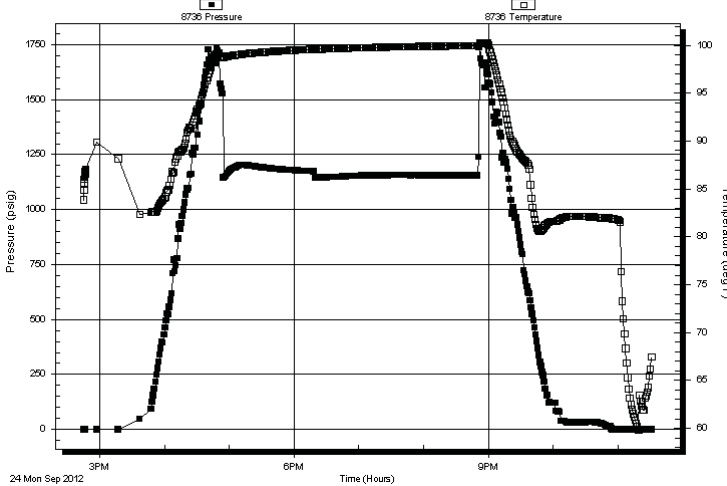
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Time On Btm:

Time Off Btm:

TEST COMMENT: 10-IFP-w k to a gd bl 1/2" to 8" bl
75-ISIP-no bl
30-FFP-1/4" to bottom of bucket in 14 min
120-FSIP-3/4" bl bk

Pressure vs. Time



PRESSURE SUMMARY

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

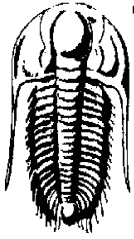
Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
0.00	255' Gip	0.00
55.00	O&GCM 5%G15%O80%M	0.77
130.00	GMO 15%G10%M75%O	1.82

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr & Assoc Inc

29-15s-15w Russell,KS

1515 Wynkoop Ste700
Denver CO 80202

Dumler-Kraft etal #1

Job Ticket: 48686

DST#: 2

ATTN: Chris Mitchell

Test Start: 2012.09.24 @ 14:45:08

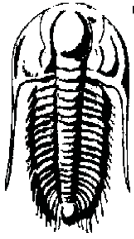
Tool Information

Drill Pipe:	Length: 3301.00 ft	Diameter: 3.80 inches	Volume: 46.30 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 46.30 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3330.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	3418.00 ft			
Interval between Packers:	88.00 ft			
Tool Length:	296.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Recorder	0.00	8736	Fluid	3295.00	
Blank Spacing	5.00			3300.00	
Change Over Sub	1.00			3301.00	
Shut In Tool	5.00			3306.00	
Sampler	2.00			3308.00	
Hydraulic tool	5.00			3313.00	
Jars	5.00			3318.00	
Safety Joint	2.00			3320.00	
Packer	5.00			3325.00	35.00 Bottom Of Top Packer
Packer	5.00			3330.00	
Stubb	1.00			3331.00	
Perforations	5.00			3336.00	
Recorder	0.00	8369	Inside	3336.00	
Recorder	0.00	8700	Outside	3336.00	
Blank Spacing	64.00			3400.00	
Perforations	14.00			3414.00	
Blank Off Sub	1.00			3415.00	
Blank Spacing	3.00			3418.00	88.00 Tool Interval
Packer	5.00			3423.00	
Stubb	1.00			3424.00	
Perforations	6.00			3430.00	
Recorder	0.00	8374	Below	3430.00	
Blank Spacing	158.00			3588.00	
Bullnose	3.00			3591.00	173.00 Bottom Packers & Anchor
Total Tool Length:	296.00				



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FLUID SUMMARY

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1515 Wynkoop Ste700
Denver CO 80202

Dumler-Kraft etal #1

Job Ticket: 48686

DST#: 2

ATTN: Chris Mitchell

Test Start: 2012.09.24 @ 14:45:08

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: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.74 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5900.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	255' Gip	0.000
55.00	O&GCM 5%G15%O80%M	0.772
130.00	GMO 15%G10%M75%O	1.824

Total Length: 185.00 ft Total Volume: 2.596 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler Data: 380 PSI 330MLgas 1650MLOil 220ML mud

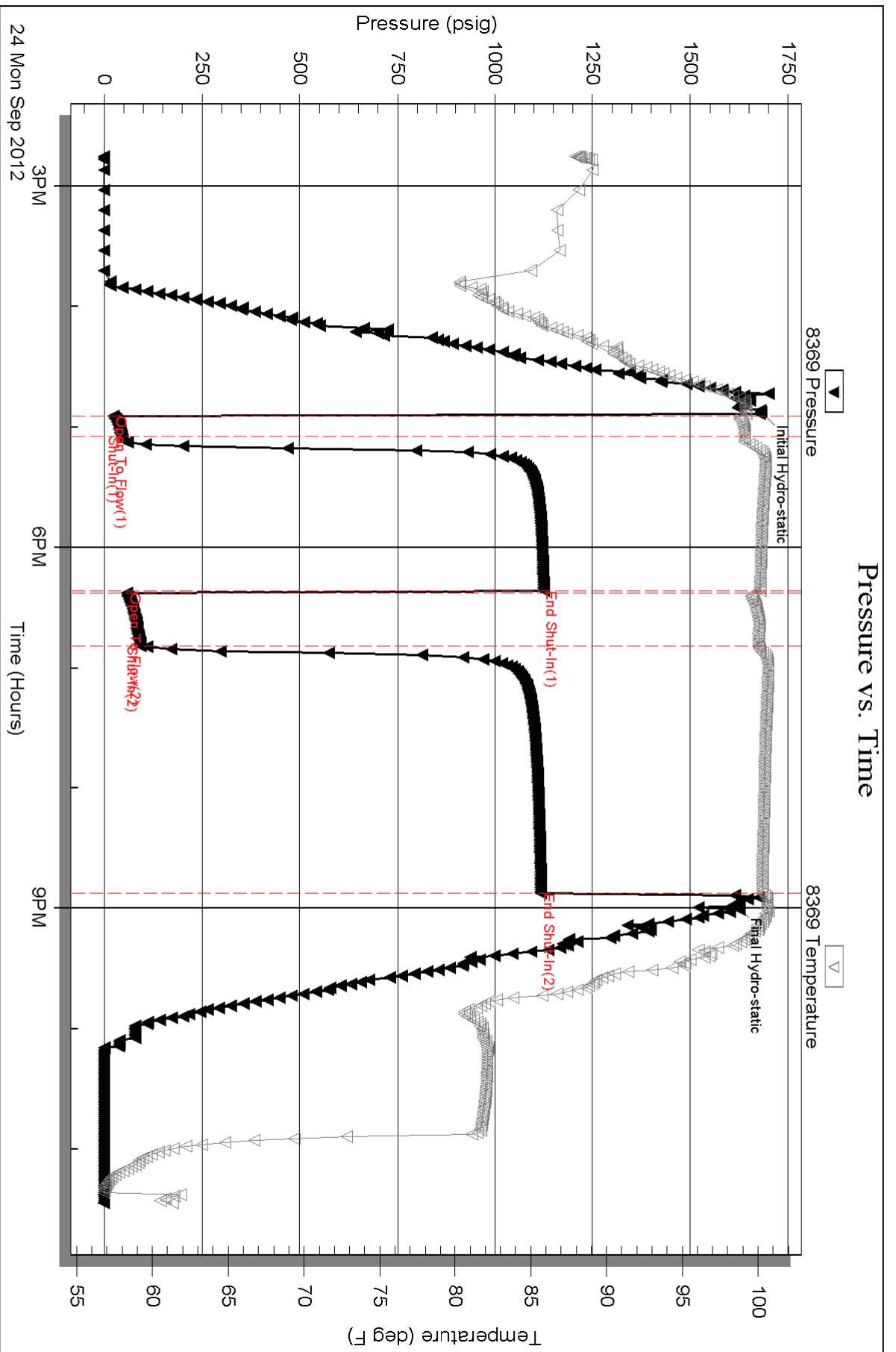
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Inside

Samuel Gary Jr & Assoc Inc

Dunbar-Kraft etal #1

DST Test Number: 2

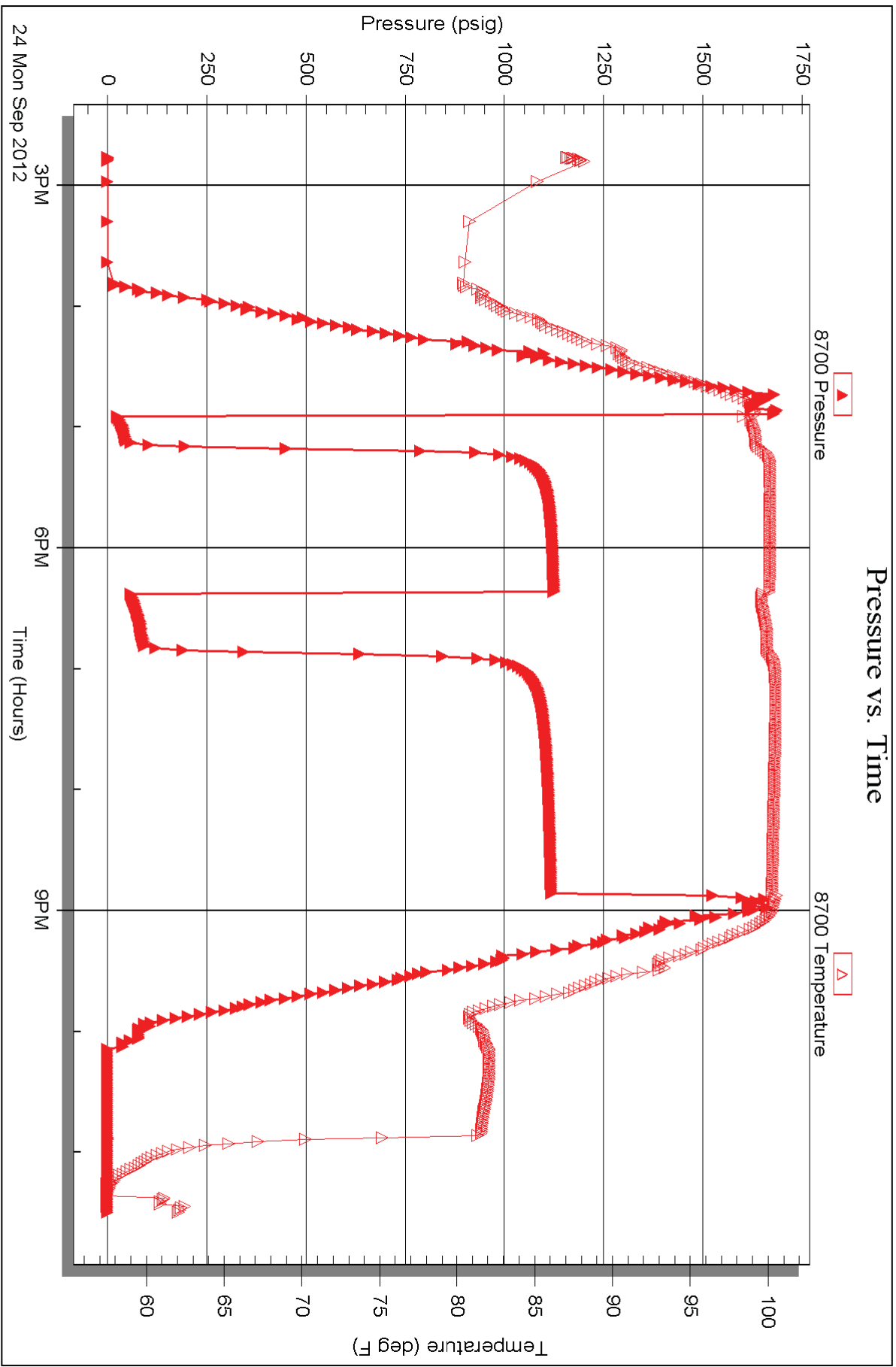


Serial #: 8700

Outside Samuel Gary Jr & Assoc Inc

Dumler-Kraft etal #1

DST Test Number: 2

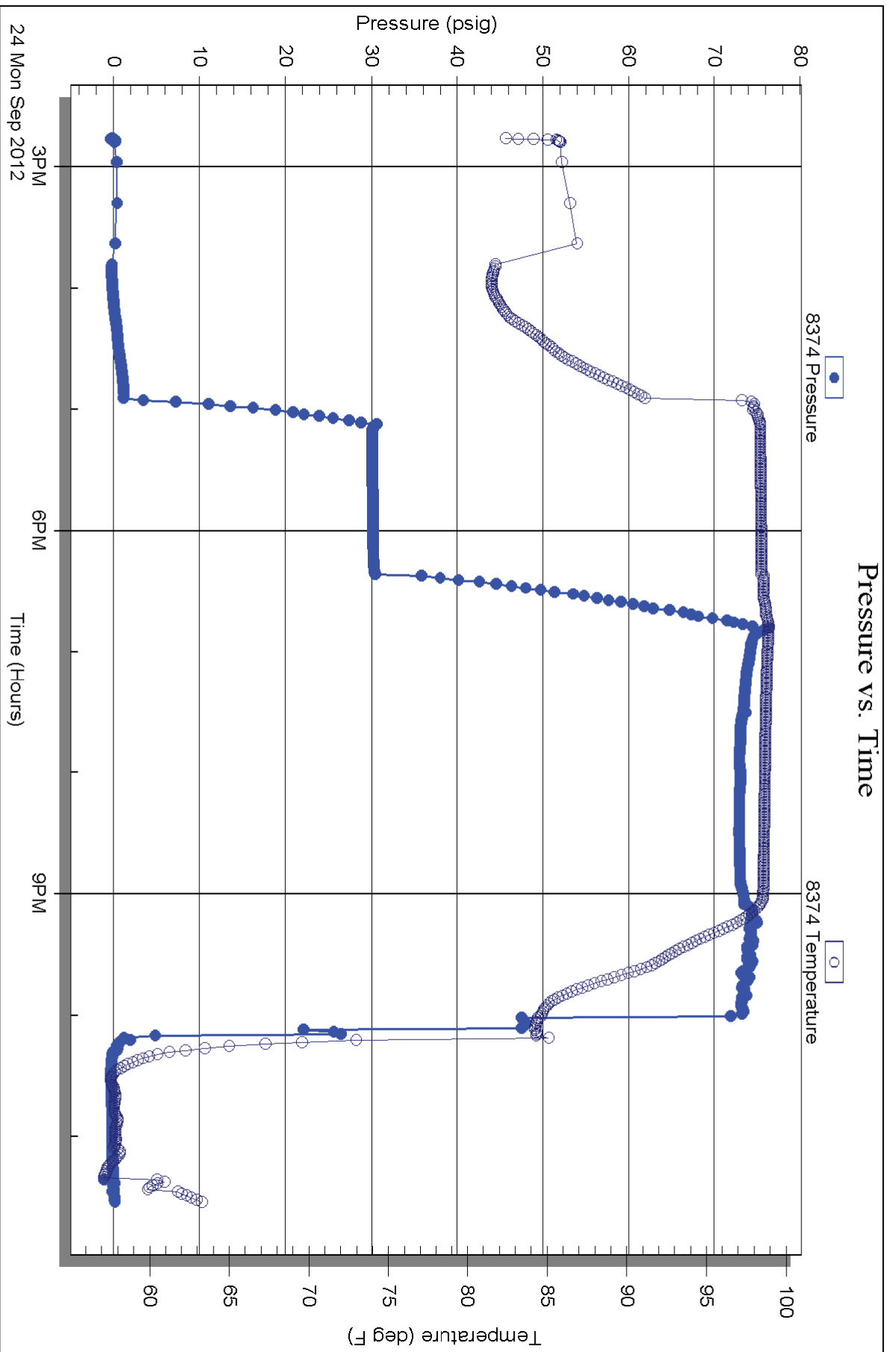


Serial #: 8374

Below (Stratton) Gary Jr & Assoc Inc

Dunker-Kraft etal #1

DST Test Number: 2



Serial #: 8736

Fluid

Samuel Gary Jr & Assoc Inc

Dumler-Kraft etal #1

DST Test Number: 2

