



DRILL STEM TEST REPORT

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

1515 Wynkoop St. Ste 700
Denver, CO 80202

ATTN: Clayton Camozzi

9/18S/11W-Barton

Kirby Krier 1-9

Start Date: 2011.05.10 @ 21:30:26

End Date: 2011.05.11 @ 04:10:56

Job Ticket #: 42881 DST #: 4

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



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TESTING, INC**

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Test Start: 2011.05.10 @ 21:30:26

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:50:26

Time Test Ended: 04:10:56

Test Type: Conventional Straddle

Tester: Dustin Rash

Unit No: 38

Interval: 3320.00 ft (KB) To 3330.00 ft (KB) (TVD)

Reference Elevations: 1776.00 ft (KB)

Total Depth: 3439.00 ft (KB) (TVD)

1769.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 7.00 ft

Serial #: 8354 Inside

Press @ Run Depth: 401.71 psig @ 3322.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.05.10

End Date: 2011.05.11

Last Calib.: 2011.05.11

Start Time: 21:40:26

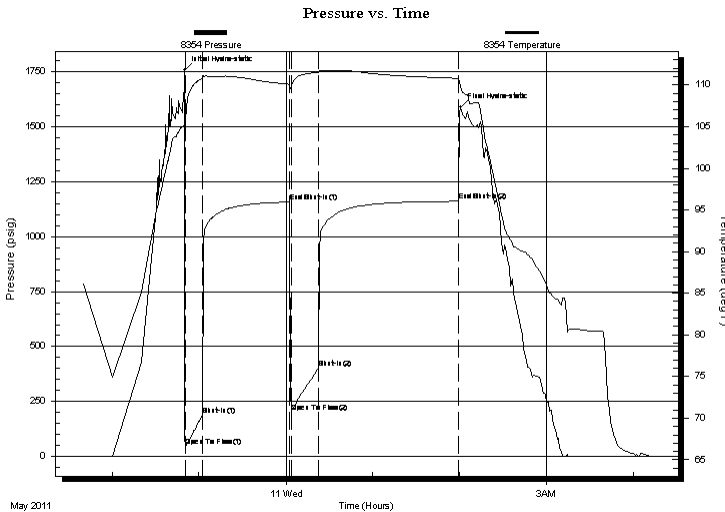
End Time: 04:10:56

Time On Btm: 2011.05.10 @ 22:50:06

Time Off Btm: 2011.05.11 @ 02:00:26

TEST COMMENT: IF-Strong building blow . BOB in 2 minutes 10 seconds.
ISI-No Return.
FF-Strong building blow . BOB in 3 minutes.
FSI-No Return. Time Intervals- 10-60-20-90

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1756.75	105.31	Initial Hydro-static
1	46.90	104.88	Open To Flow (1)
13	189.44	110.82	Shut-In(1)
73	1158.06	110.10	End Shut-In(1)
74	203.89	109.56	Open To Flow (2)
93	401.71	111.54	Shut-In(2)
189	1161.22	110.81	End Shut-In(2)
191	1587.54	109.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
565.00	95%Water/5%Mud	7.93
186.00	80%Water/20%Mud	2.61
124.00	60%Mud/40%Water	1.74

Gas Rates

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



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TOOL DIAGRAM

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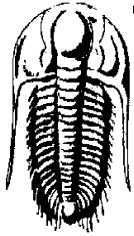
Test Start: 2011.05.10 @ 21:30:26

Tool Information

Drill Pipe:	Length: 3305.00 ft	Diameter: 3.80 inches	Volume: 46.36 bbl	Tool Weight:	3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	4000.00 lb
			<u>Total Volume: 46.36 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3320.00 ft			Final	54000.00 lb
Depth to Bottom Packer:	3327.00 ft				
Interval between Packers:	7.00 ft				
Tool Length:	149.00 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	8653	Fluid	3290.00	
Change Over Sub	1.00			3291.00	
Shut In Tool	5.00			3296.00	
Sampler	2.00			3298.00	
Hydraulic tool	5.00			3303.00	
Jars	5.00			3308.00	
Safety Joint	3.00			3311.00	
Packer	5.00			3316.00	30.00 Bottom Of Top Packer
Packer	4.00			3320.00	
Stubb	1.00			3321.00	
Perforations	1.00			3322.00	
Recorder	0.00	8354	Inside	3322.00	
Recorder	0.00	8520	Outside	3322.00	
Perforations	4.00			3326.00	
Blank Off Sub	1.00			3327.00	7.00 Tool Interval
Packer	4.00			3331.00	
Change Over Sub	1.00			3332.00	
Recorder	0.00	8647	Below	3332.00	
Drill Pipe	93.00			3425.00	
Change Over Sub	1.00			3426.00	
Perforations	10.00			3436.00	
Bullnose	3.00			3439.00	112.00 Bottom Packers & Anchor
Total Tool Length:	149.00				



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FLUID SUMMARY

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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:

16000 ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 37.91 in³

Gas Cushion Type:

Resistivity: 0.40 ohm.m

Gas Cushion Pressure:

psig

Salinity: 42000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
565.00	95%Water/5%Mud	7.925
186.00	80%Water/20%Mud	2.609
124.00	60%Mud/40%Water	1.739

Total Length: 875.00 ft Total Volume: 12.273 bbl

Num Fluid Samples: 0

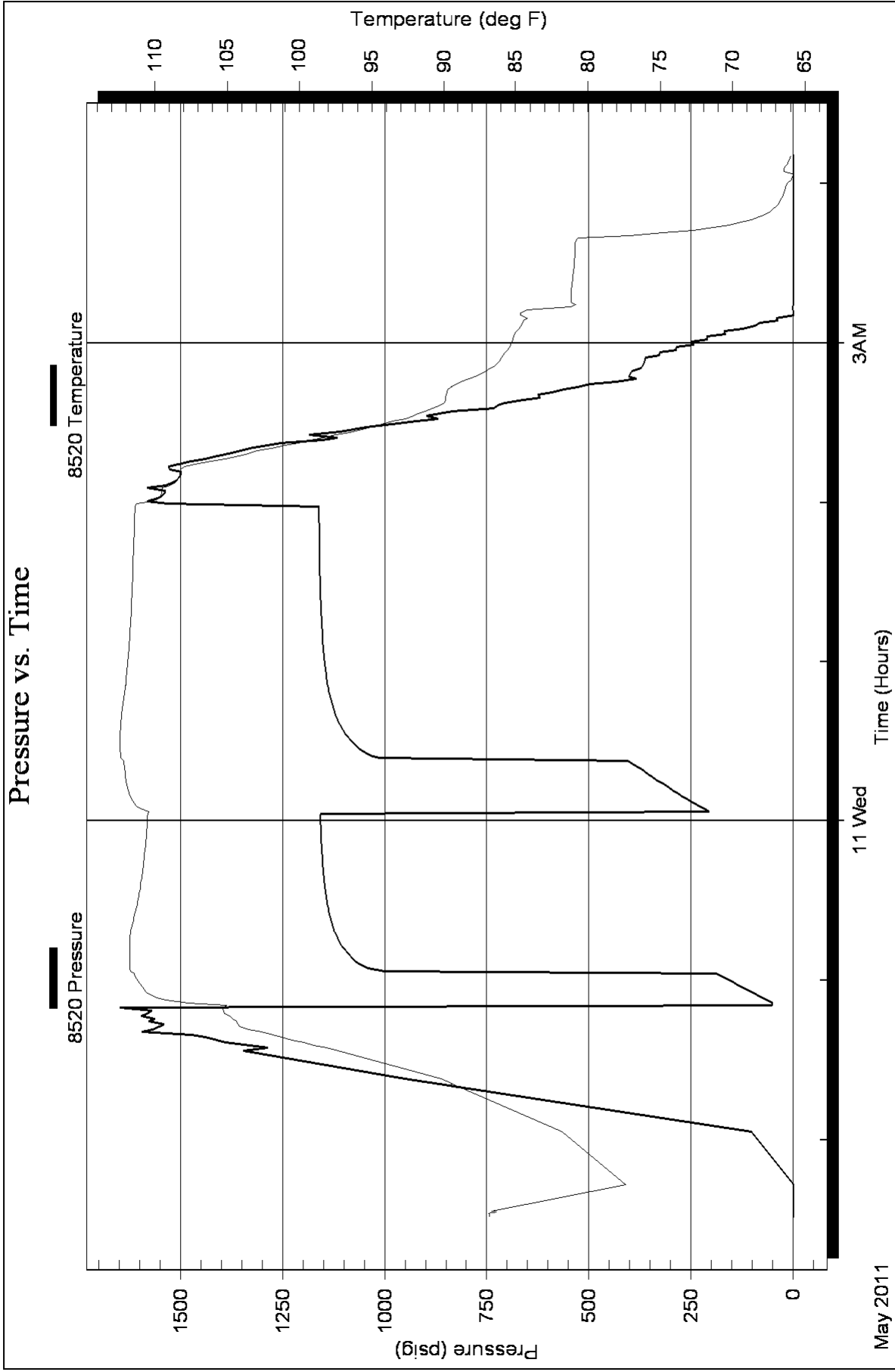
Num Gas Bombs: 0

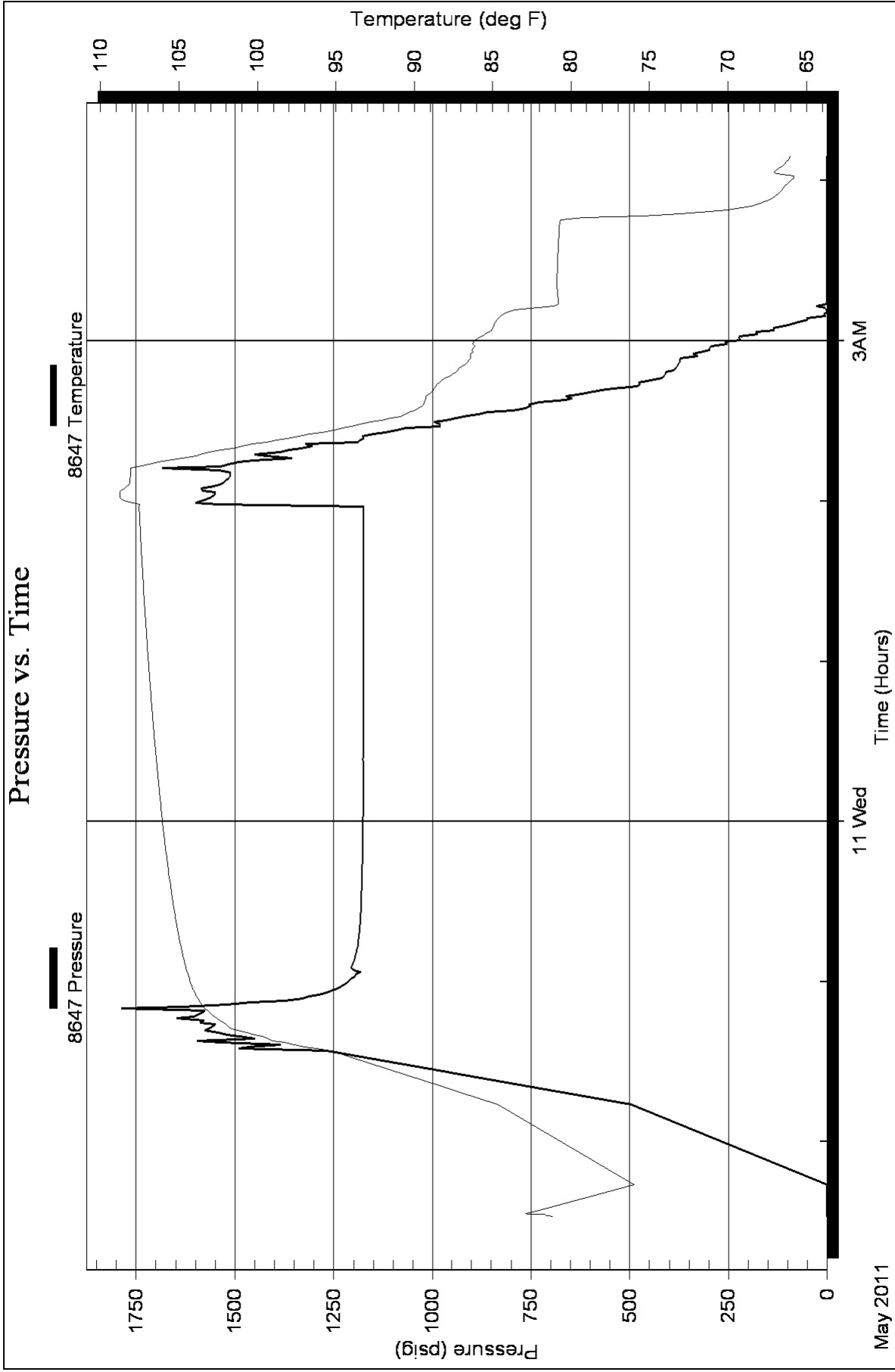
Serial #:

Laboratory Name:

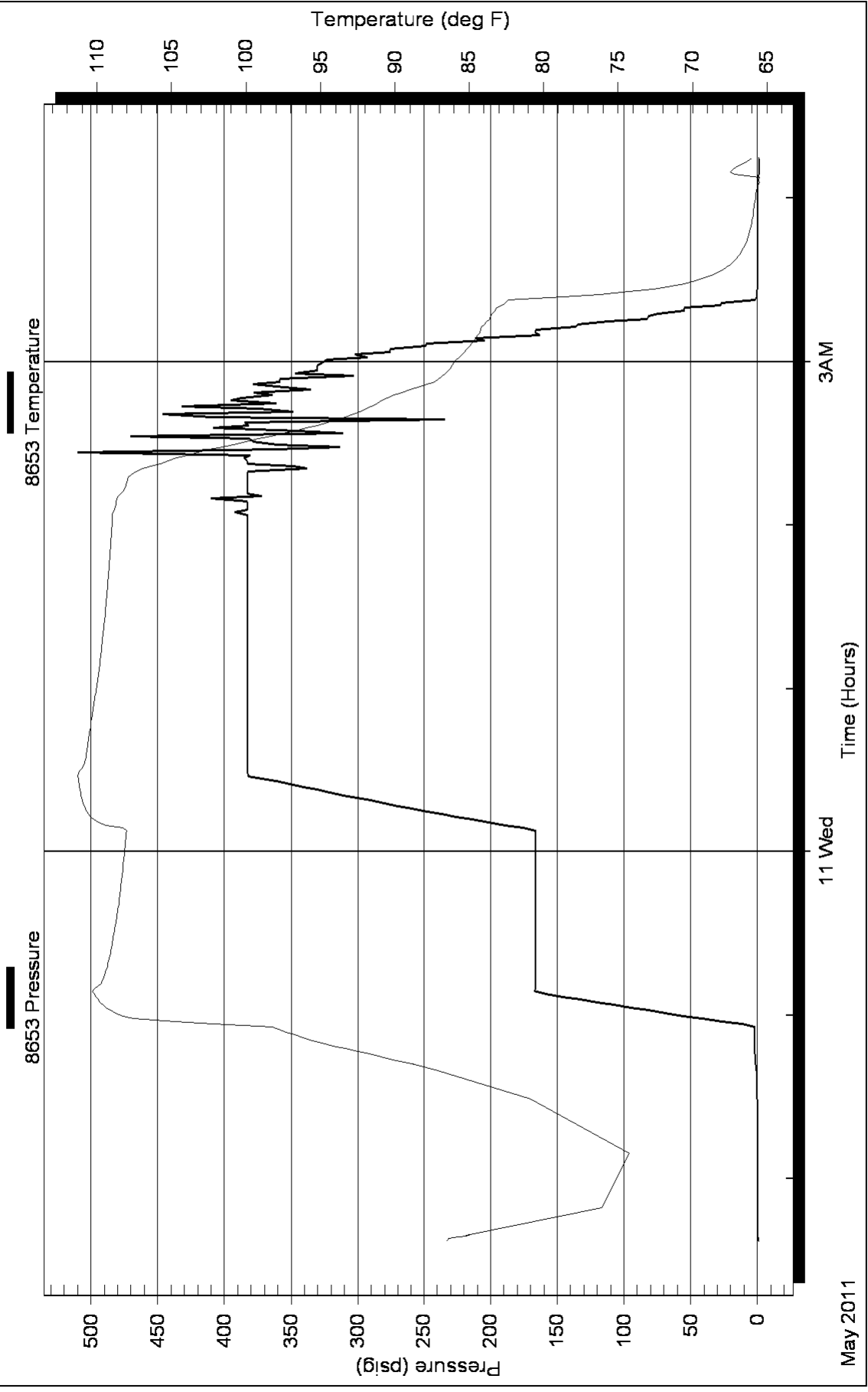
Laboratory Location:

Recovery Comments: Sampler-2000 ML-Water 700# Pressure. RW-.440@67-15000 chlorides.

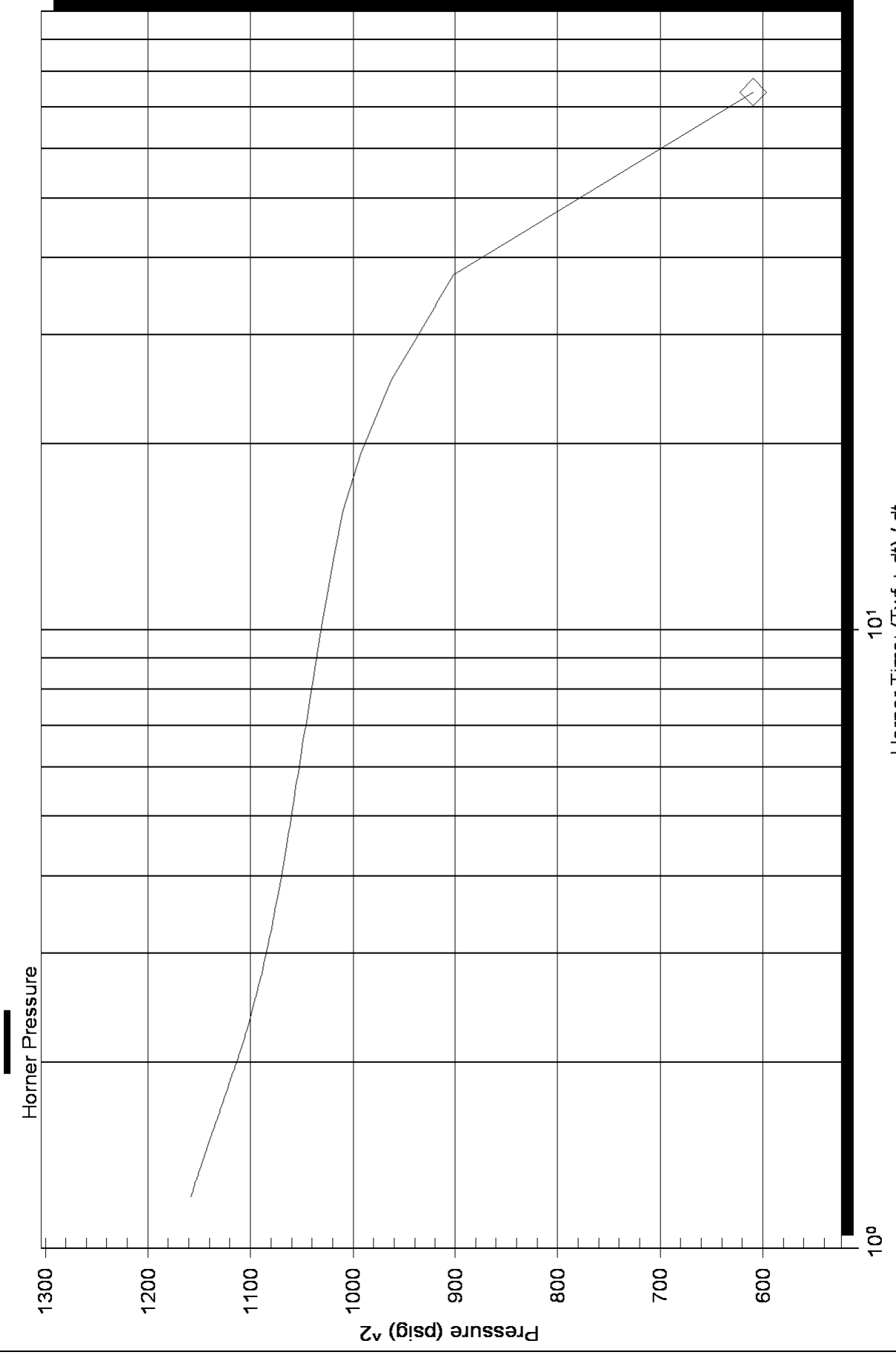




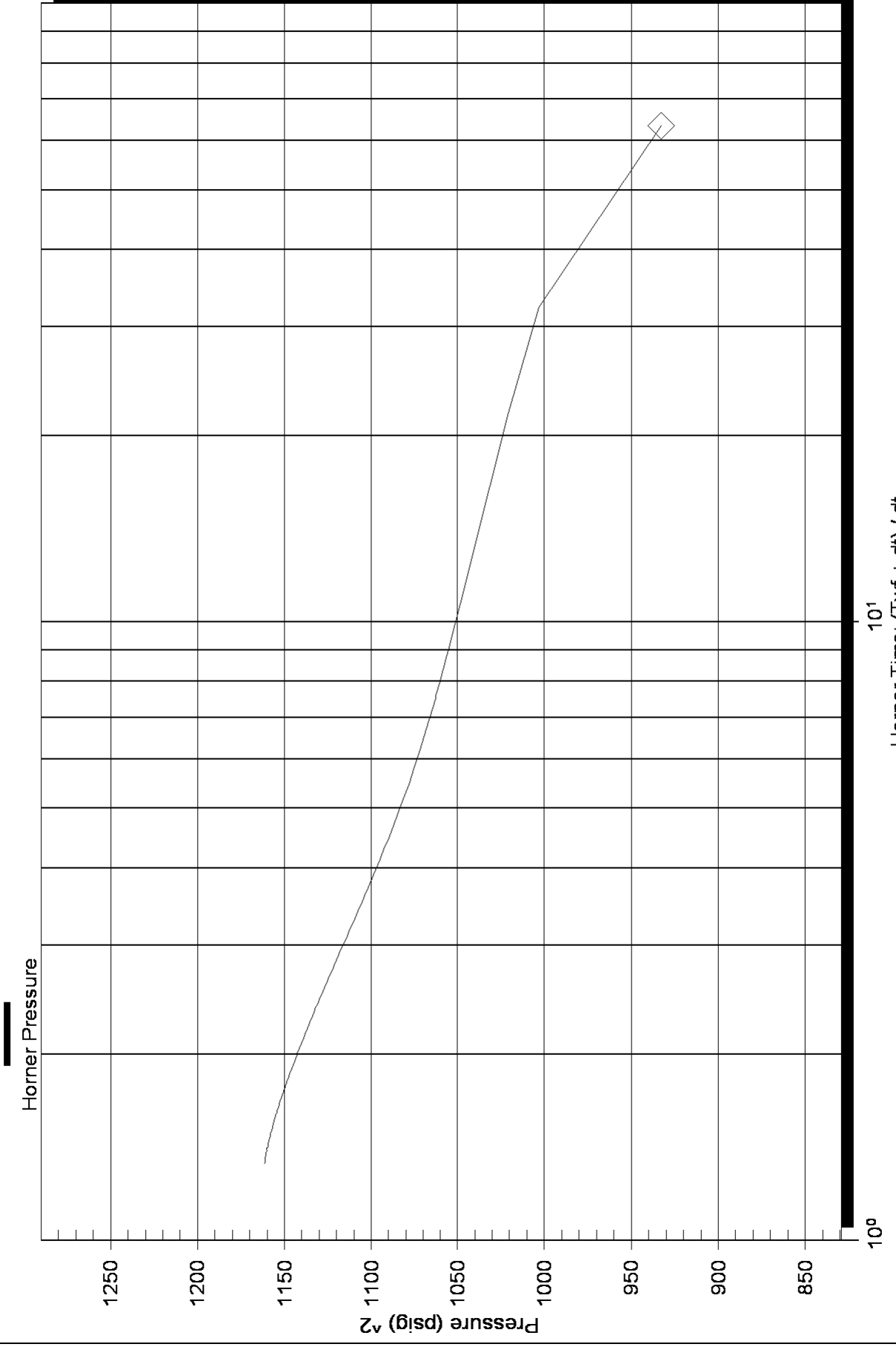
Pressure vs. Time



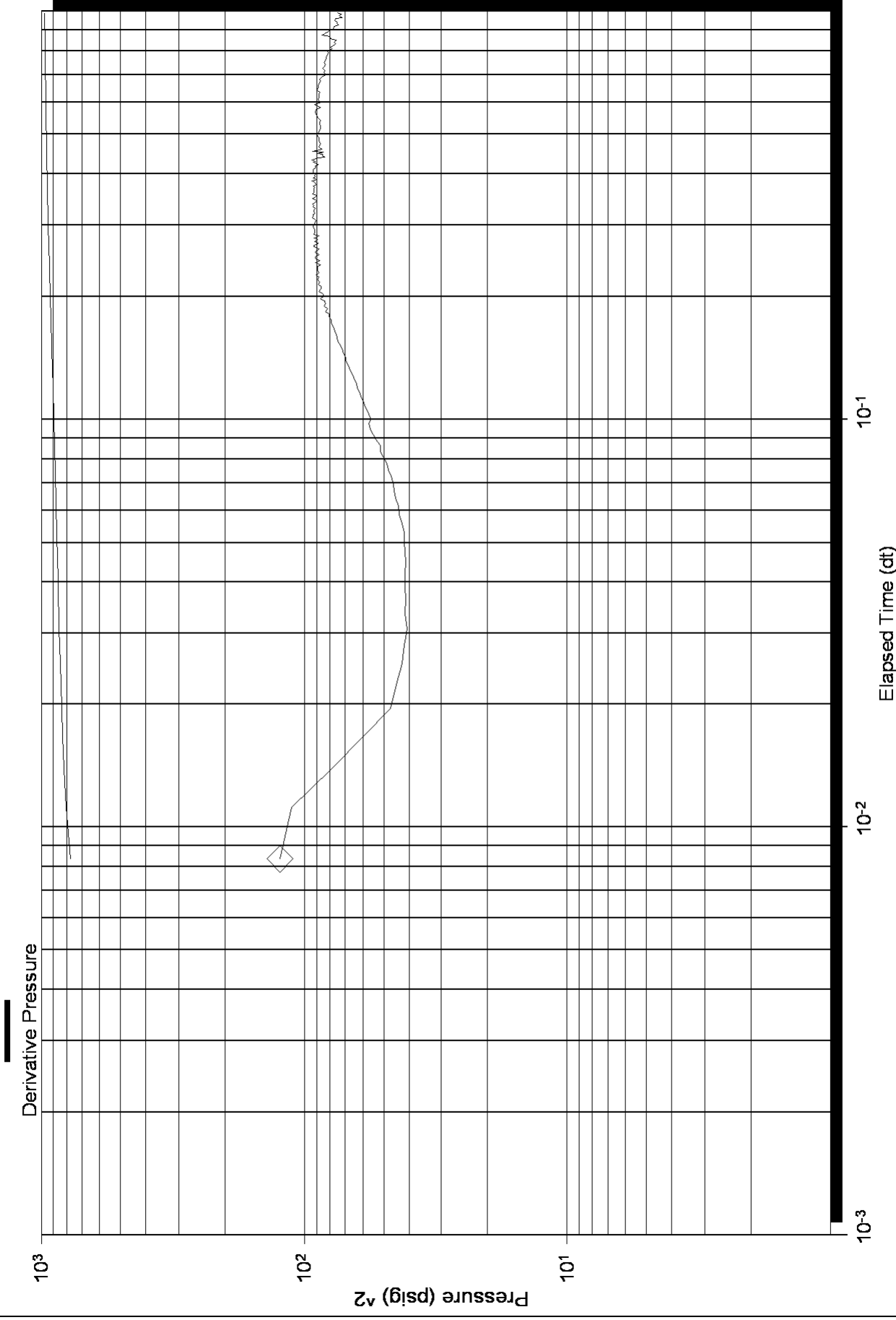
Homer Plot



Homer Plot



Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Derivative

