



DRILL STEM TEST REPORT

Prepared For: **Sam Gary & Associates Inc**

1515 Wynkoop St Ste 700
Denver Colo 80202

ATTN: Clayton Comozzi

23-15-16-Ellis-Ks

Leas 1-23

Start Date: 2011.03.31 @ 08:37:33

End Date: 2011.03.31 @ 15:53:33

Job Ticket #: 042407 DST #: 2

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



TRILOBITE TESTING, INC

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Leas 1-23

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Test Start: 2011.03.31 @ 08:37:33

GENERAL INFORMATION:

Formation: **K-L LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:10:13

Time Test Ended: 15:53:33

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: 3330.00 ft (KB) To 3355.00 ft (KB) (TVD)

Reference Elevations: 1870.00 ft (KB)

Total Depth: 3355.00 ft (KB) (TVD)

1862.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8354 Inside

Press @ Run Depth: 42.30 psig @ 3331.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.03.31

End Date:

2011.03.31

Last Calib.:

2011.03.31

Start Time:

08:47:33

End Time:

15:53:33

Time On Btm:

2011.03.31 @ 10:10:03

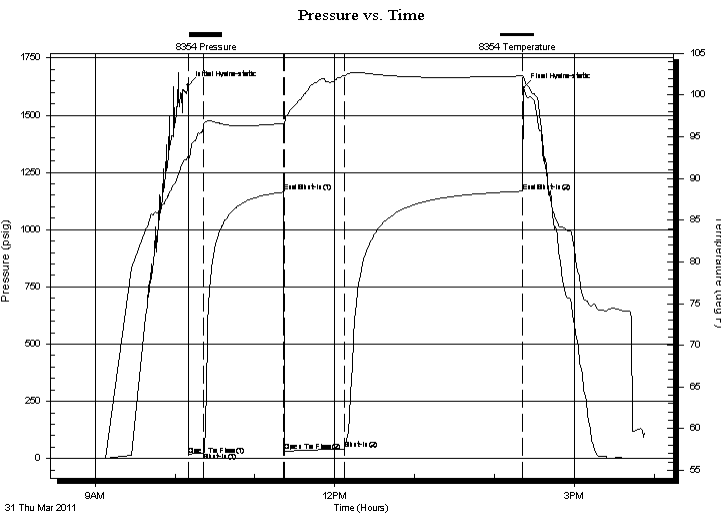
Time Off Btm:

2011.03.31 @ 14:22:03

TEST COMMENT: IF-Weak steady surface blow

FF-Weak steady surface blow

Times-10-60-45-135



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1631.29	92.65	Initial Hydro-static
1	13.99	92.02	Open To Flow (1)
12	25.51	96.32	Shut-In(1)
72	1164.03	96.59	End Shut-In(1)
72	29.62	96.37	Open To Flow (2)
117	42.30	102.33	Shut-In(2)
251	1167.60	102.29	End Shut-In(2)
252	1618.56	102.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mdy Wtr	0.07
0.00	Rw .17 @ 70 42000ppm	0.00

Gas Rates

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



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TOOL DIAGRAM

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Tool Information

Drill Pipe:	Length: 3287.00 ft	Diameter: 3.80 inches	Volume: 46.11 bbl	Tool Weight:	3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 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: 46.26 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3330.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	25.00 ft				
Tool Length:	60.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3296.00	
Recorder	0.00	8520	Inside	3296.00	
Blank Spacing	5.00			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	3.00			3321.00	
Packer	5.00			3326.00	35.00 Bottom Of Top Packer
Packer	4.00			3330.00	
Stubb	1.00			3331.00	
Recorder	0.00	8354	Inside	3331.00	
Recorder	0.00	8653	Outside	3331.00	
Perforations	21.00			3352.00	
Bullnose	3.00			3355.00	25.00 Bottom Packers & Anchor

Total Tool Length: 60.00



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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:

42000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.38 in³

Gas Cushion Type:

Resistivity: 1.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Mdy Wtr	0.074
0.00	Rw .17 @ 70 42000ppm	0.000

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

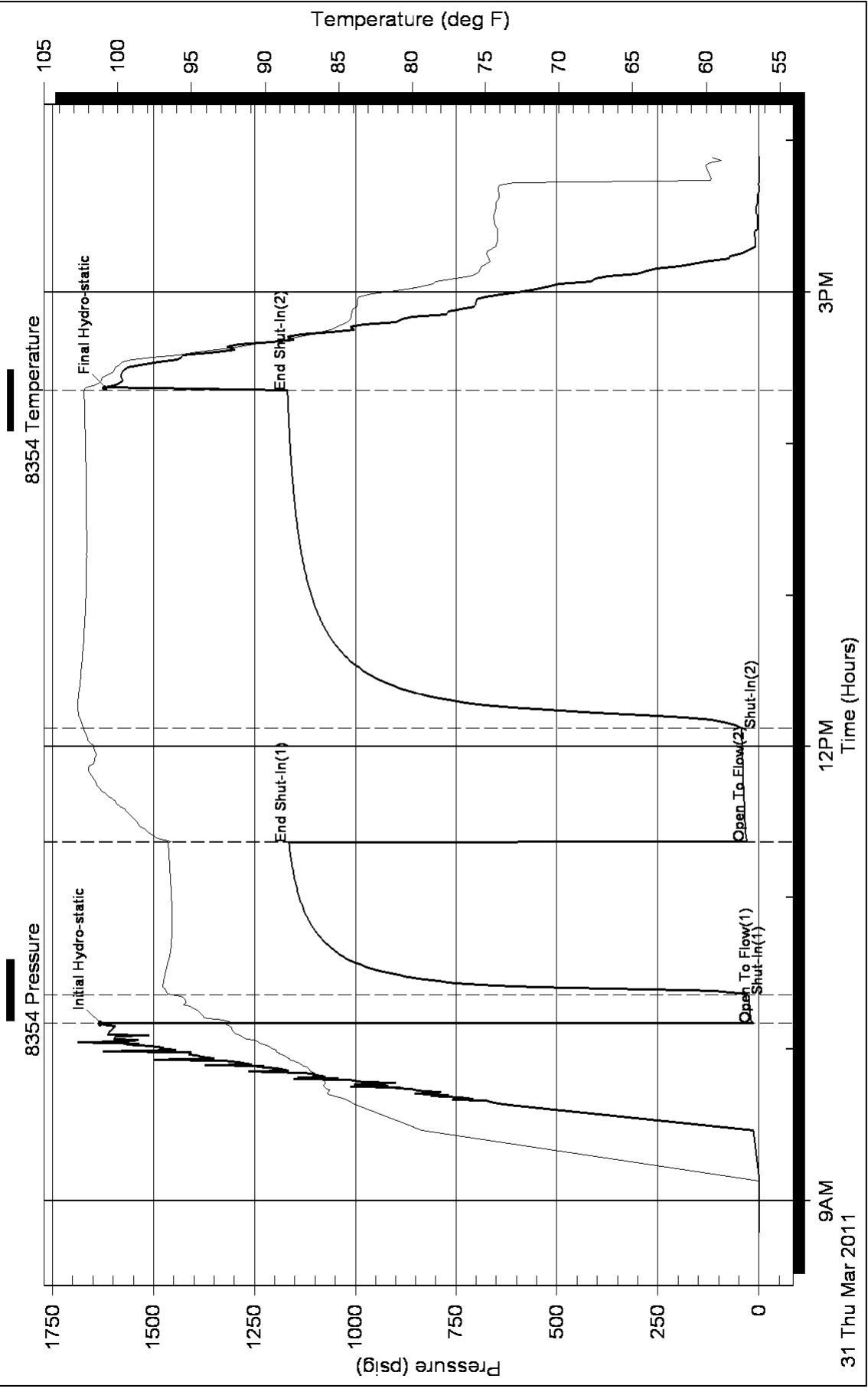
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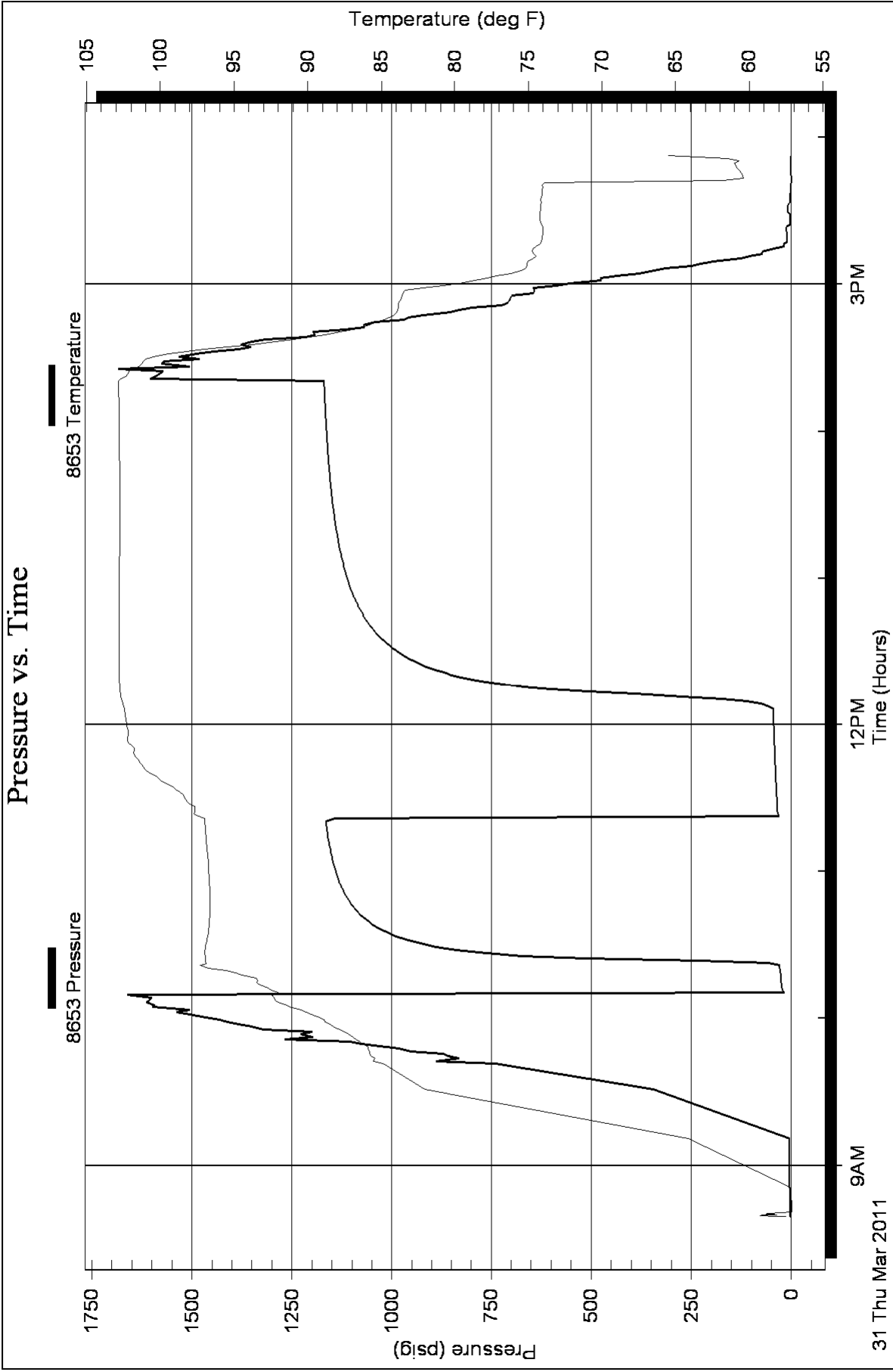
Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler Gas 0 Oil 0 Mud 0 Wtr 2000 ml PSI 362 Total 2000 ml

Pressure vs. Time





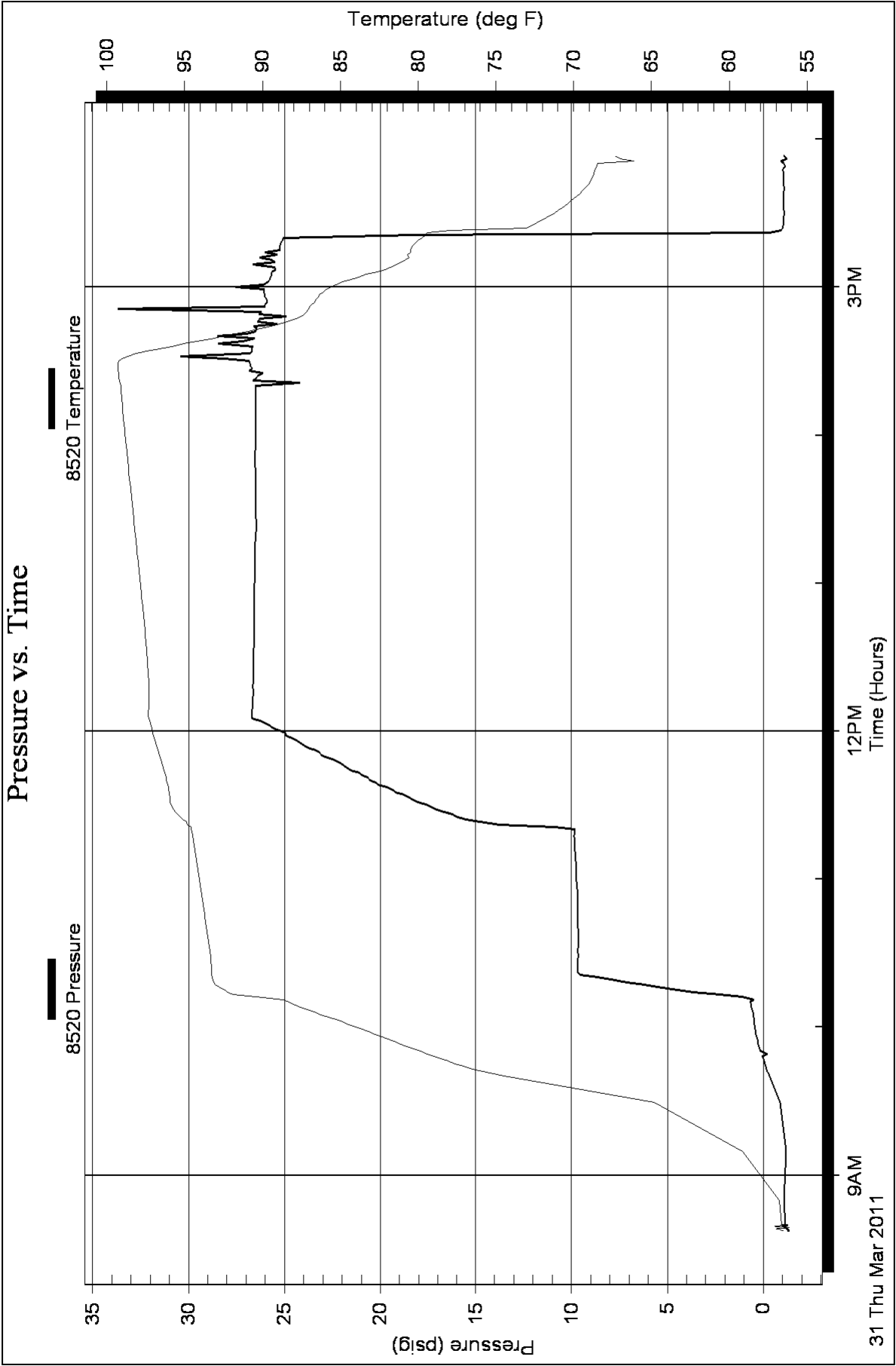
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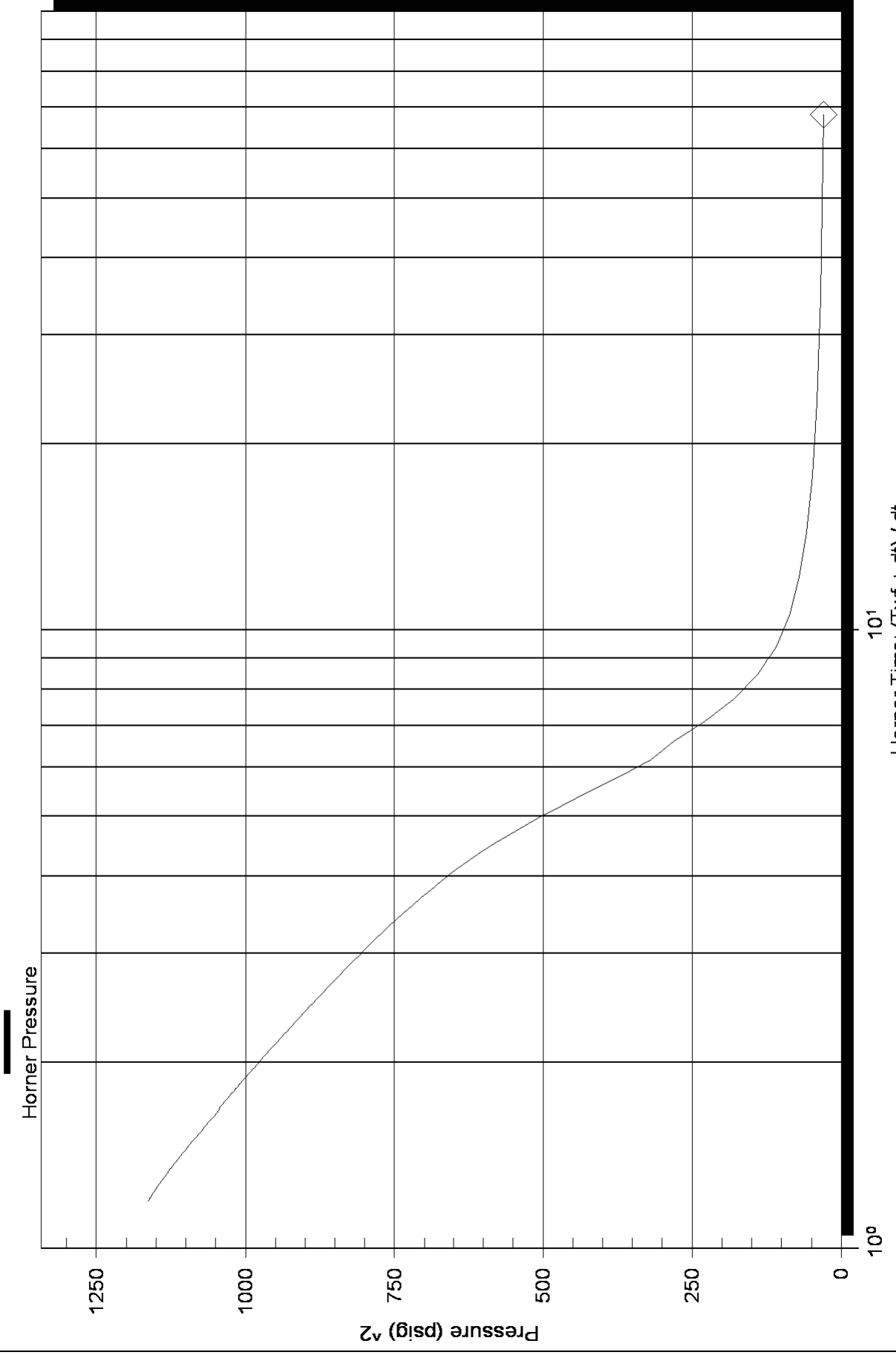
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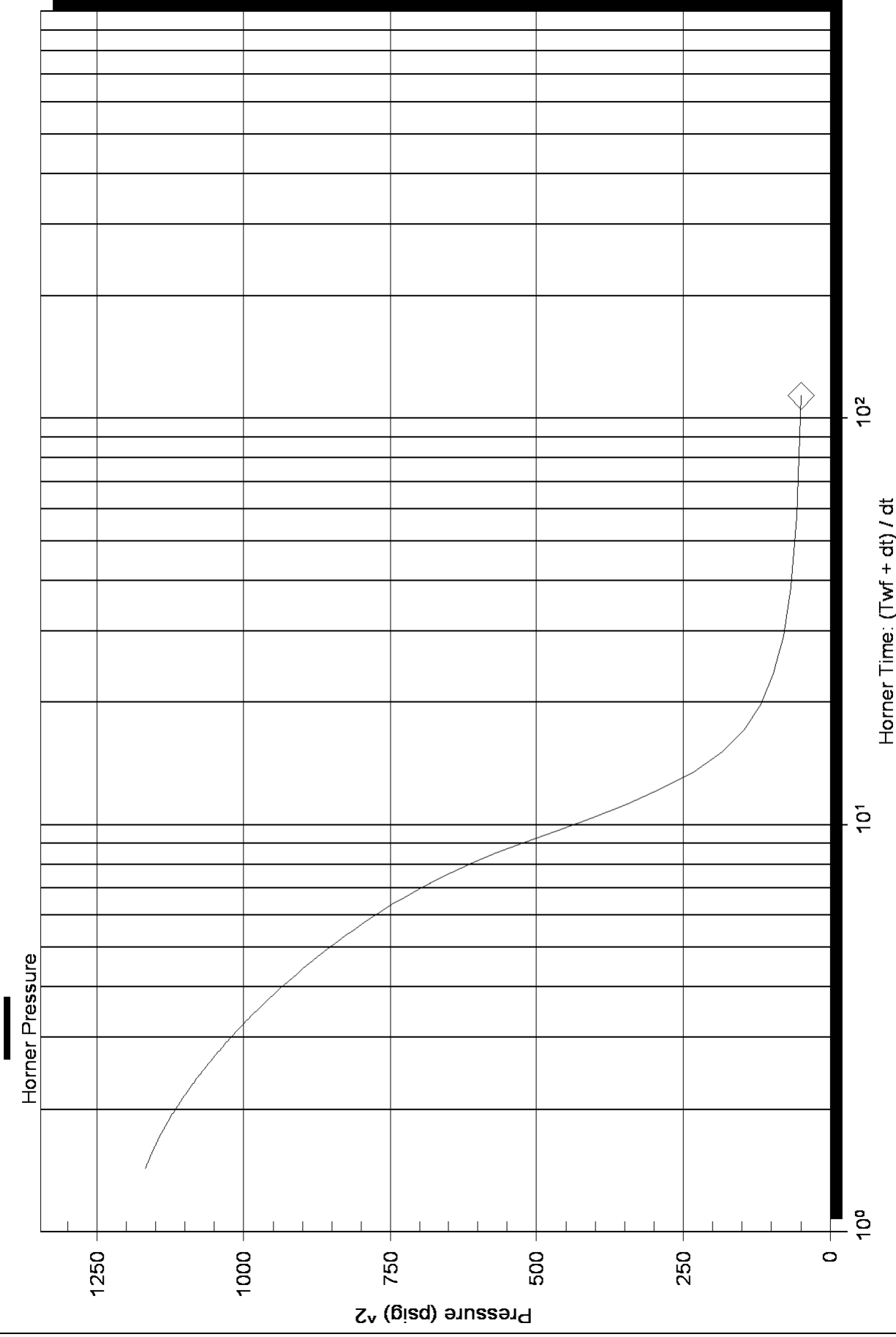
DST Test Number: 2



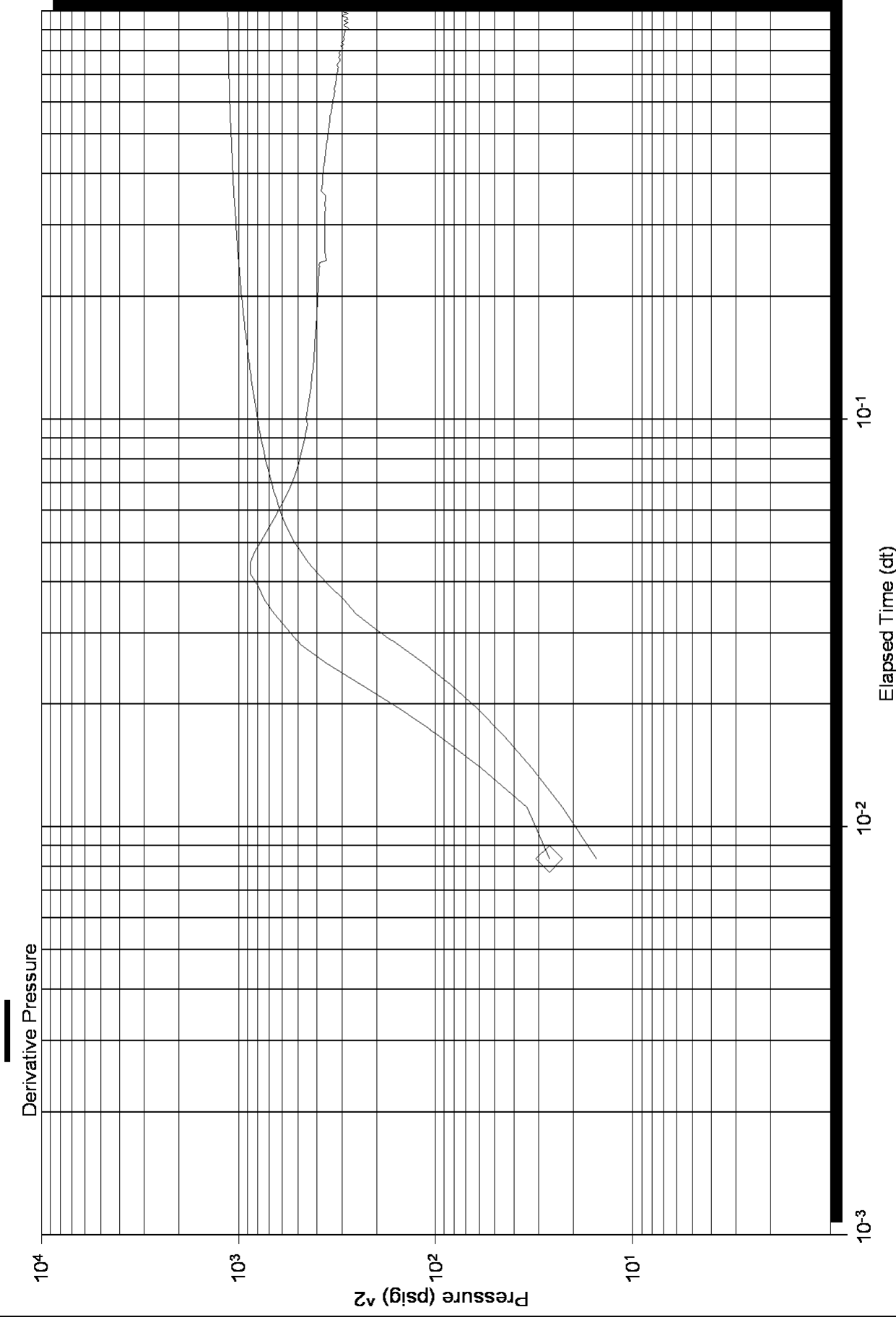
Homer Plot



Homer Plot



Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Derivative

