



DRILL STEM TEST REPORT

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

1515 Wynkoop St.
Suite 700
Denver, CO 80202

ATTN: Clayton Camozzi

4-16s-16w Rush,KS

Bogleigh Wallah West TR 1-4

Start Date: 2011.07.22 @ 05:35:05

End Date: 2011.07.22 @ 13:51:09

Job Ticket #: 43517 DST #: 4

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



TRILOBITE TESTING, INC.

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Test Start: 2011.07.22 @ 05:35:05

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:21:00

Time Test Ended: 13:51:09

Test Type: Conventional Bottom Hole

Tester: Andy Carreira

Unit No: 39

Interval: 3472.00 ft (KB) To 3486.00 ft (KB) (TVD)

Reference Elevations: 1915.00 ft (KB)

Total Depth: 3486.00 ft (KB) (TVD)

1907.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8352 Outside

Press @ Run Depth: 56.13 psig @ 3473.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.07.22

End Date:

2011.07.22

Last Calib.:

2011.07.22

Start Time: 05:35:05

End Time:

13:51:10

Time On Btm:

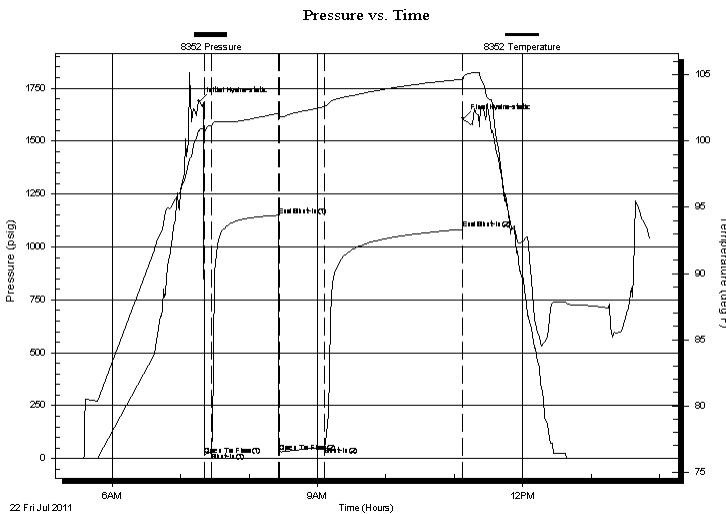
2011.07.22 @ 07:16:20

Time Off Btm:

2011.07.22 @ 11:07:39

TEST COMMENT: IF:(5min) 2 inch blow
IS:(60min) No Return
FF:(40min) BOB, 24 min.
FS:(120min) No Return

PRESSURE SUMMARY



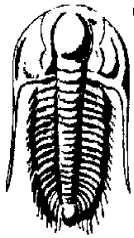
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1687.33	100.80	Initial Hydro-static
5	15.75	99.93	Open To Flow (1)
11	32.16	101.20	Shut-In(1)
70	1149.59	102.12	End Shut-In(1)
71	31.90	101.83	Open To Flow (2)
111	56.13	102.63	Shut-In(2)
231	1083.08	104.68	End Shut-In(2)
232	1608.50	104.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GMCO g=10% m=20% o=70%	0.57
40.00	CGO g=10% o=90%	0.56

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: 3437.00 ft	Diameter: 3.80 inches	Volume: 48.21 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: 30.15 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	62000.00 lb
			<u>Total Volume: 48.36 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	30.15 ft			String Weight: Initial	54000.00 lb
Depth to Top Packer:	3472.00 ft			Final	56000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	14.00 ft				
Tool Length:	49.00 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			3438.00	
Recorder	0.00	8647	Fluid	3438.00	
Blank Spacing	5.00			3443.00	
Shut In Tool	5.00			3448.00	
Sampler	2.00			3450.00	
Hydraulic tool	5.00			3455.00	
Jars	5.00			3460.00	
Safety Joint	3.00			3463.00	
Packer	5.00			3468.00	35.00 Bottom Of Top Packer
Packer	4.00			3472.00	
Stubb	1.00			3473.00	
Recorder	0.00	8017	Inside	3473.00	
Recorder	0.00	8352	Outside	3473.00	
Perforations	10.00			3483.00	
Bullnose	3.00			3486.00	14.00 Bottom Packers & Anchor

Total Tool Length: 49.00



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FLUID SUMMARY

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Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GMCO g=10% m=20% o=70%	0.567
40.00	CGO g=10% o=90%	0.561

Total Length: 100.00 ft Total Volume: 1.128 bbl

Num Fluid Samples: 0

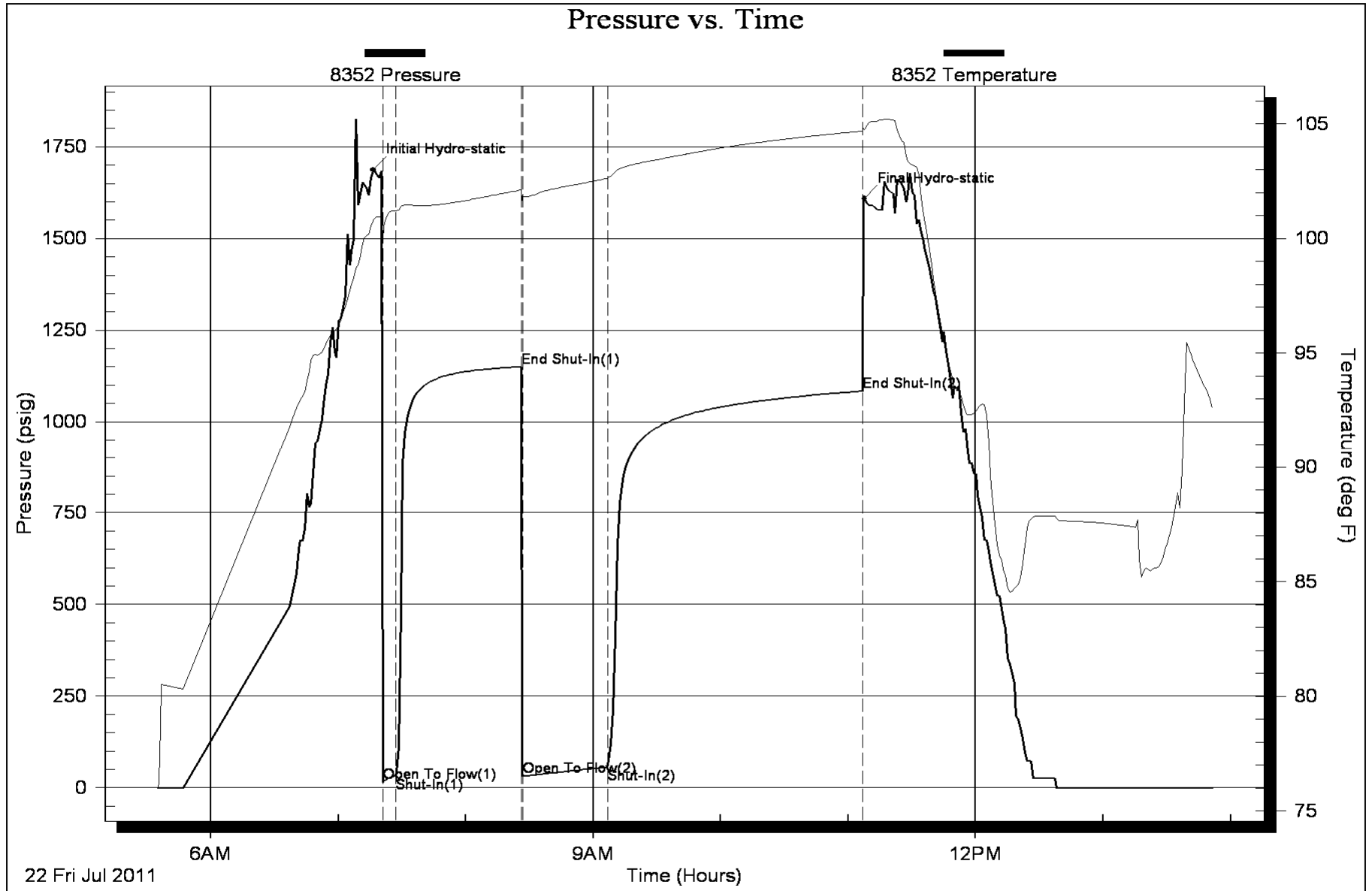
Num Gas Bombs: 0

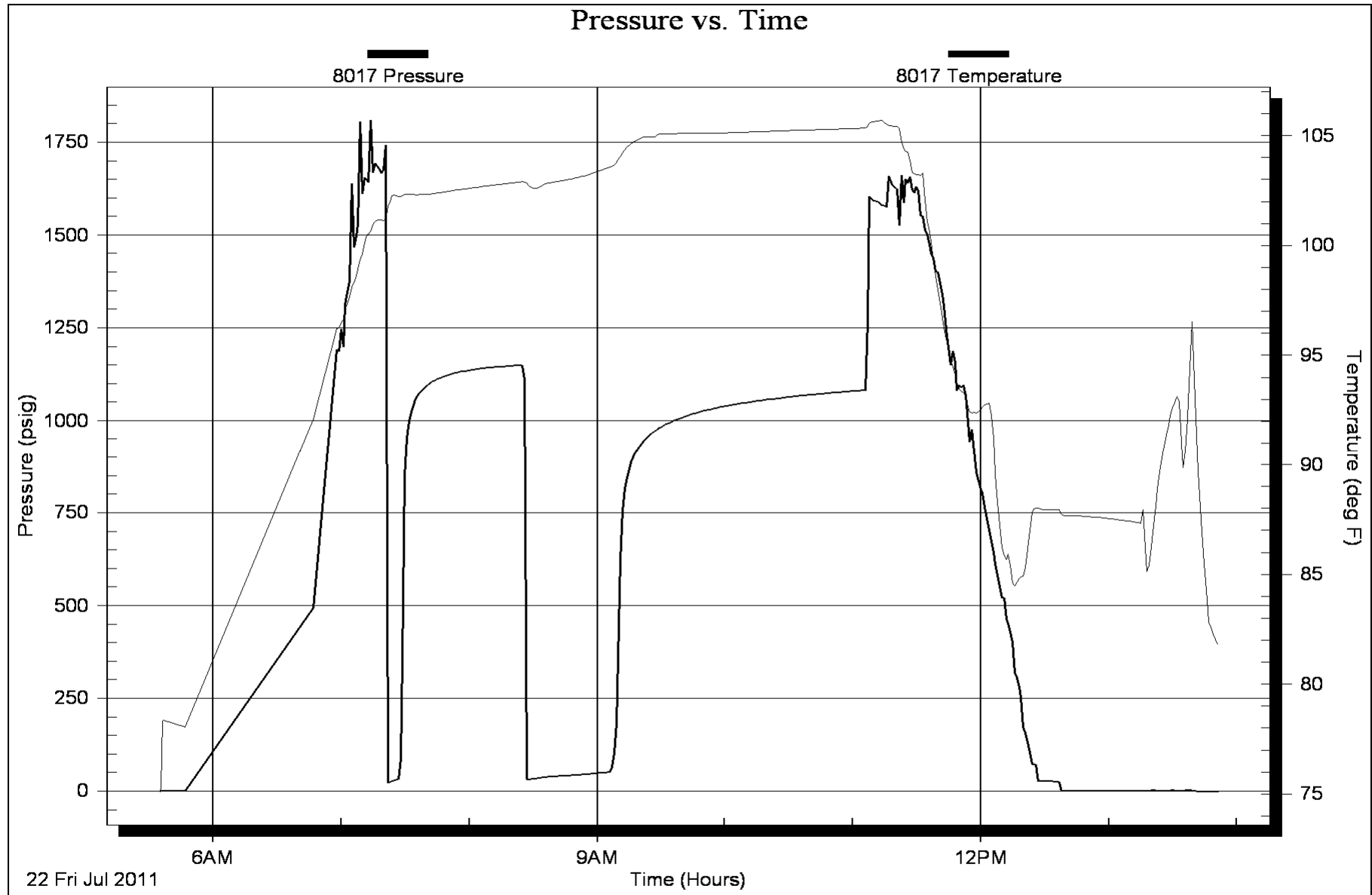
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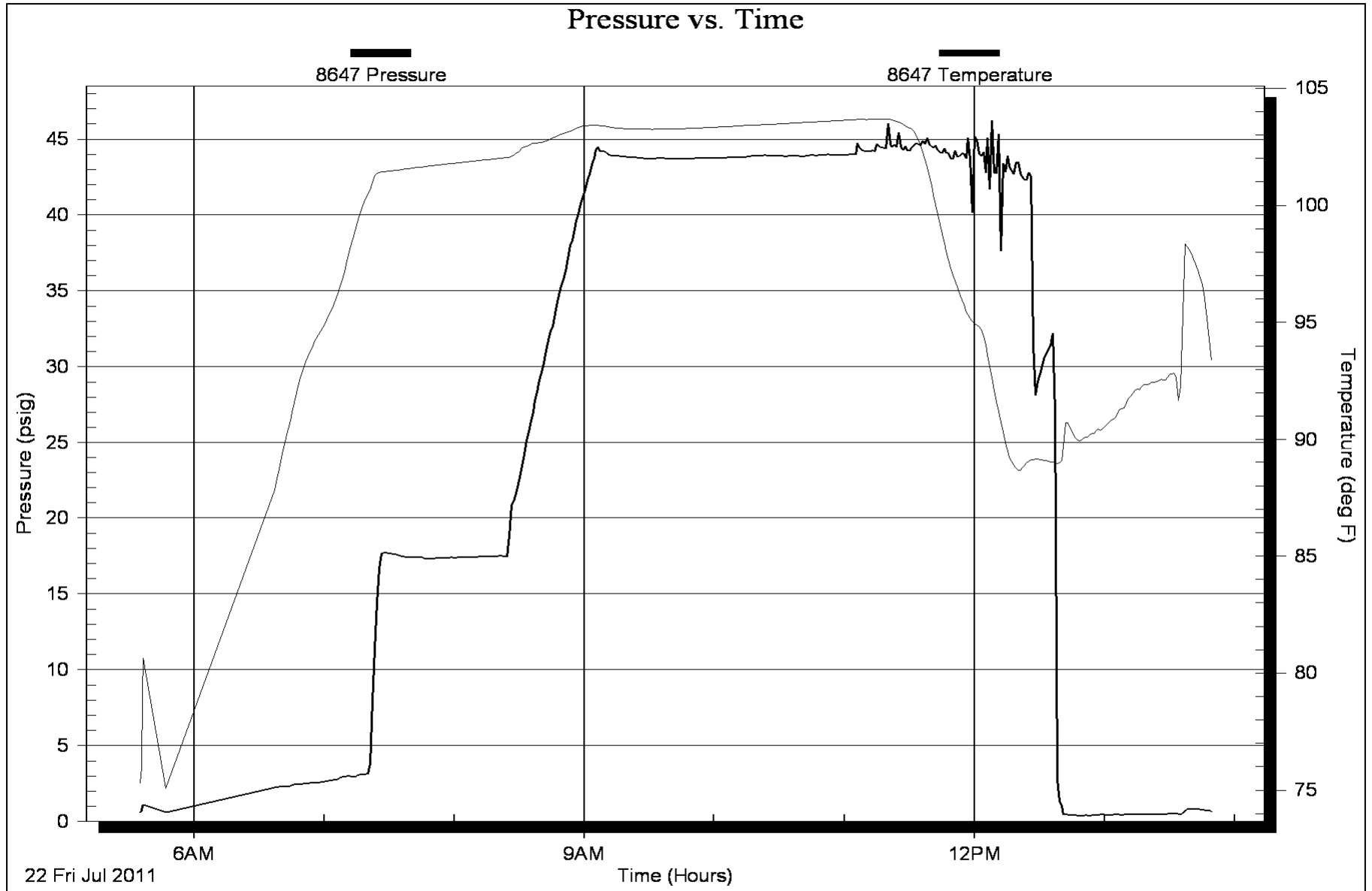
Laboratory Name:

Laboratory Location:

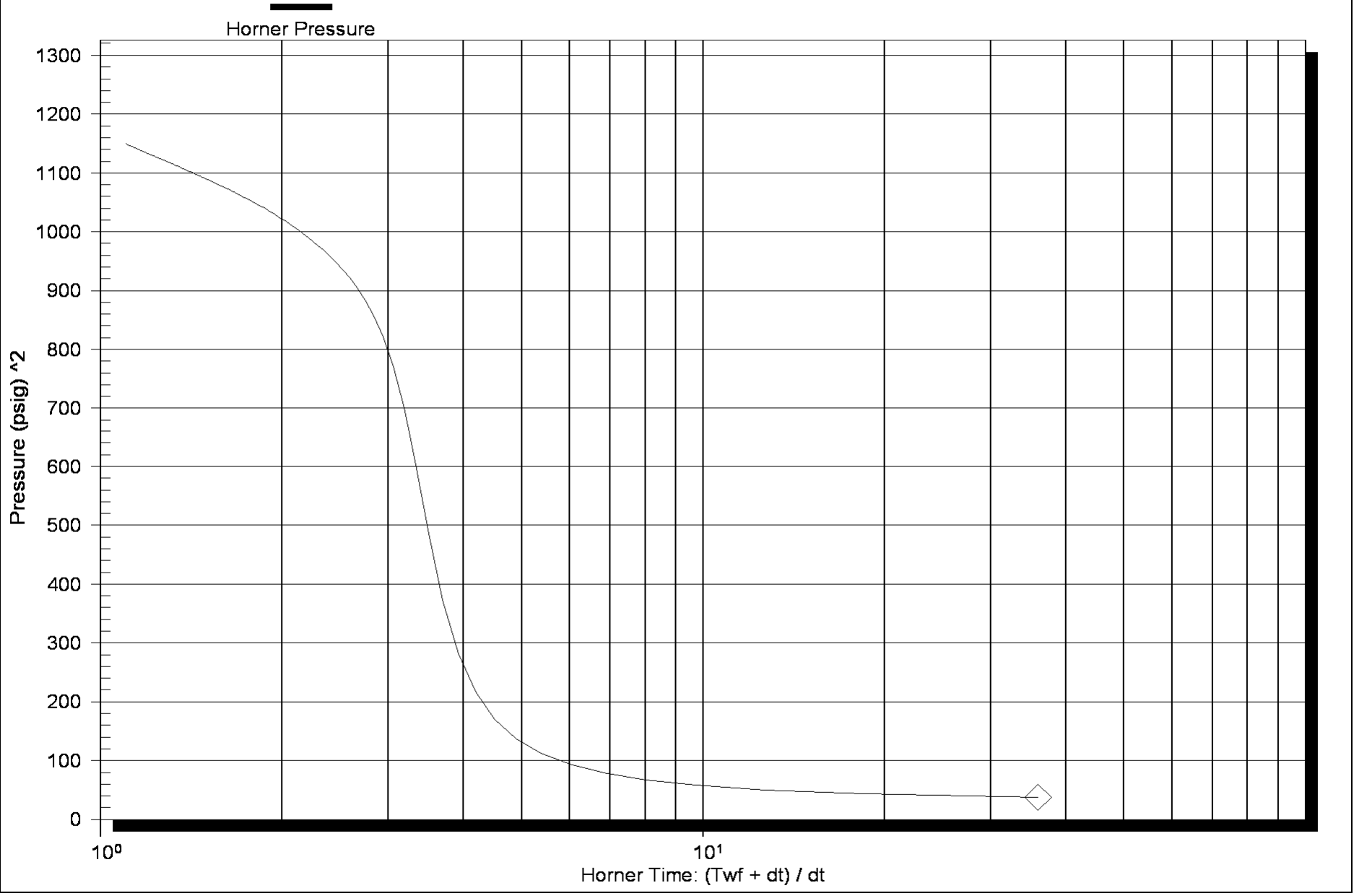
Recovery Comments: Sampler Data- gss=1.2cf oil=1500ml mud=100ml pressure=245lbs



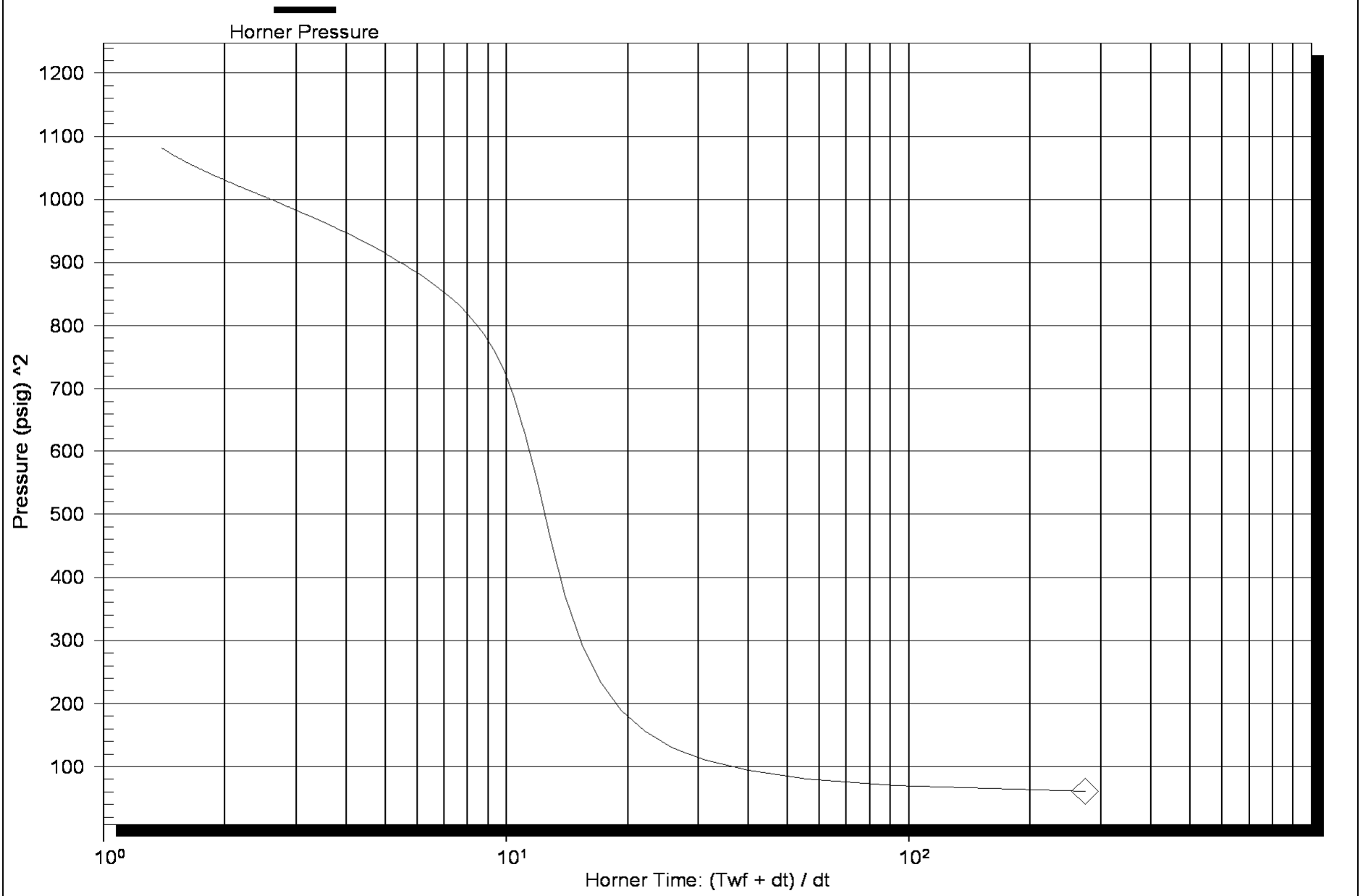




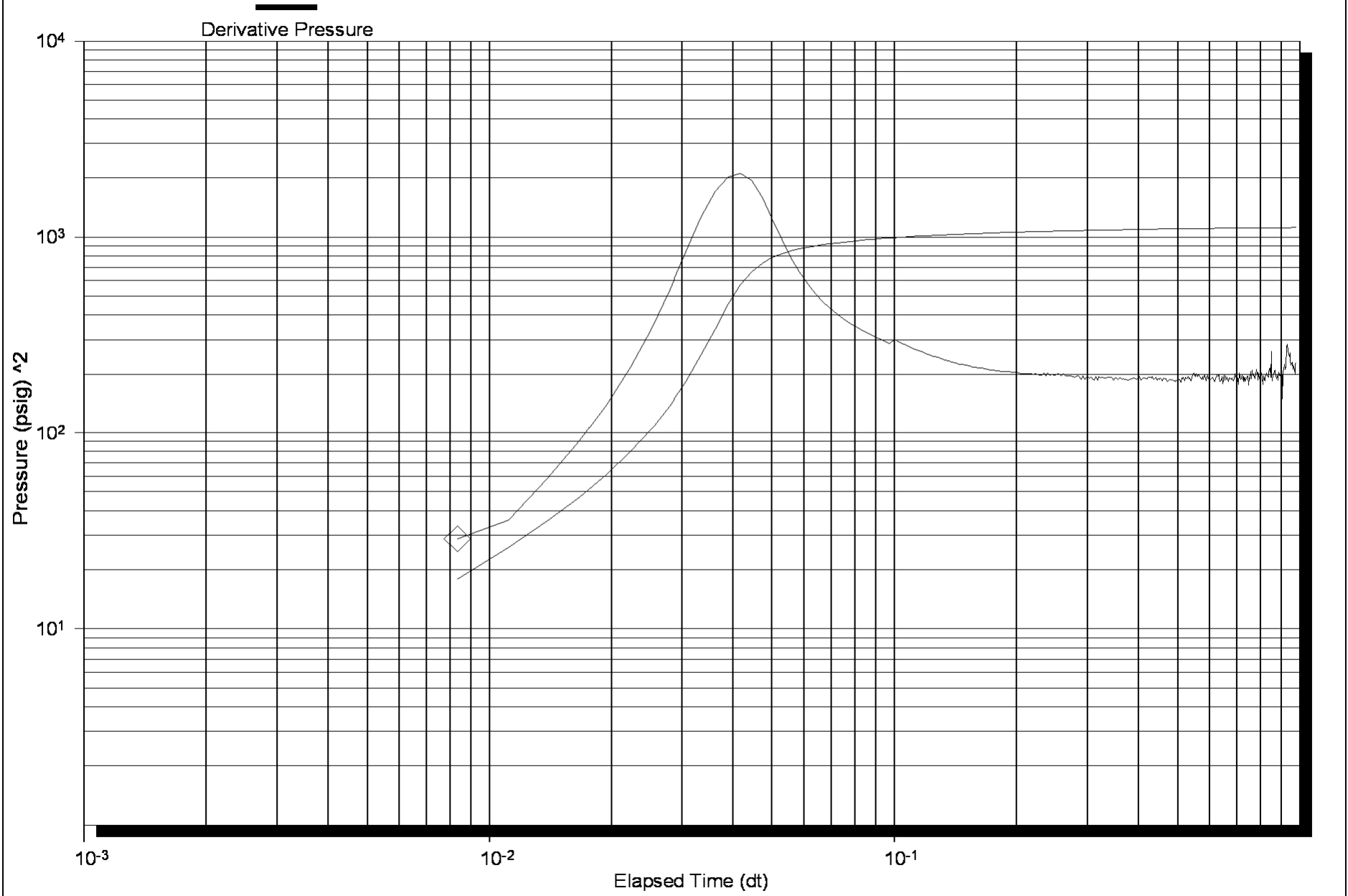
Horner Plot



Horner Plot



Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Derivative

