



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

Bogleigh Wallah West TR 1-4

Start Date: 2011.07.20 @ 12:28:05

End Date: 2011.07.20 @ 19:20:59

Job Ticket #: 43515 DST #: 2

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Assoc. inc

Bogleigh Wallah West TR 1-4

1515 Wynkoop St.
Suite 700
Denver Co. 80202
ATTN: Clayton Camozzi

4-16s-16w Rush

Job Ticket: 43515

DST#: 2

Test Start: 2011.07.20 @ 12:28:05

GENERAL INFORMATION:

Formation: **LKC"F-upper G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:09:10

Time Test Ended: 19:20:59

Test Type: Conventional Bottom Hole

Tester: Andy Carreira

Unit No: 39

Interval: 3248.00 ft (KB) To 3279.00 ft (KB) (TVD)

Reference Elevations: 1915.00 ft (KB)

Total Depth: 3279.00 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 @ RunDepth: 62.01 psig @ 3249.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.07.20 End Date: 2011.07.20

Last Calib.: 2011.07.20

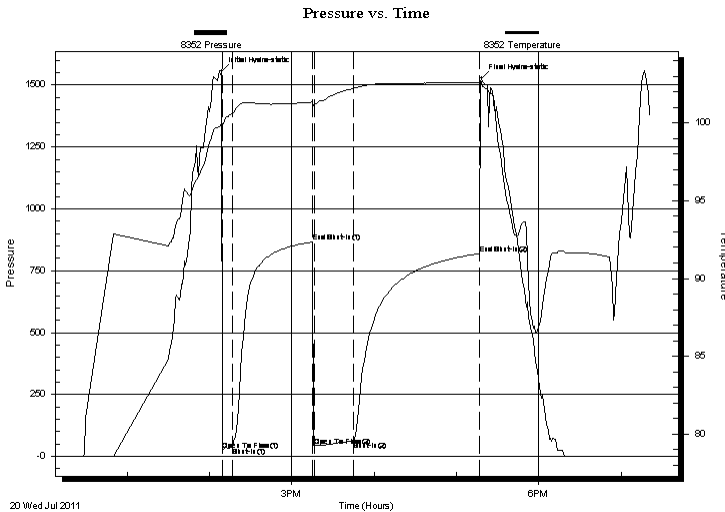
Start Time: 12:28:05 End Time: 19:20:59

Time On Btm: 2011.07.20 @ 14:08:50

Time Off Btm: 2011.07.20 @ 17:18:20

TEST COMMENT: IF:(5min) 3 inch blow
IS:(60min) No Return
FF:(30min) BOB, 4 min.
FS:(90min)Return Blow , Built to 2 inches

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1555.01	100.11	Initial Hydro-static
1	23.34	99.44	Open To Flow (1)
8	36.85	100.57	Shut-In(1)
67	866.59	101.34	End Shut-In(1)
68	41.69	101.13	Open To Flow (2)
97	62.01	102.21	Shut-In(2)
189	819.78	102.61	End Shut-In(2)
190	1526.51	102.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GMCWO g=20% m=15% w =20% o=45%	1.41
0.00	GIP=420ft	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr. & Assoc. inc

Bogleigh Wallah West TR 1-4

1515 Wynkoop St.
Suite 700
Denver Co. 80202
ATTN: Clayton Camozzi

4-16s-16w Rush

Job Ticket: 43515

DST#: 2

Test Start: 2011.07.20 @ 12:28:05

Tool Information

Drill Pipe:	Length: 3190.00 ft	Diameter: 3.80 inches	Volume: 44.75 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: 60000.00 lb
		Total Volume: 44.90 bbl		Tool Chased 4.00 ft
Drill Pipe Above KB:	7.15 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3248.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	66.00 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			3214.00	
Recorder	0.00	8647	Fluid	3214.00	
Blank Spacing	5.00			3219.00	
Shut In Tool	5.00			3224.00	
Sampler	2.00			3226.00	
Hydraulic tool	5.00			3231.00	
Jars	5.00			3236.00	
Safety Joint	3.00			3239.00	
Packer	5.00			3244.00	35.00 Bottom Of Top Packer
Packer	4.00			3248.00	
Stubb	1.00			3249.00	
Recorder	0.00	8017	Inside	3249.00	
Recorder	0.00	8352	Outside	3249.00	
Perforations	27.00			3276.00	
Bullnose	3.00			3279.00	31.00 Bottom Packers & Anchor

Total Tool Length: 66.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Assoc. inc

Bogleigh Wallah West TR 1-4

1515 Wynkoop St.
Suite 700
Denver Co. 80202
ATTN: Clayton Camozzi

4-16s-16w Rush

Job Ticket: 43515

DST#: 2

Test Start: 2011.07.20 @ 12:28:05

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

88000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.55 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	GMCWO g=20% m=15% w =20% o=45%	1.409
0.00	GIP=420ft	0.000

Total Length: 120.00 ft Total Volume: 1.409 bbl

Num Fluid Samples: 0

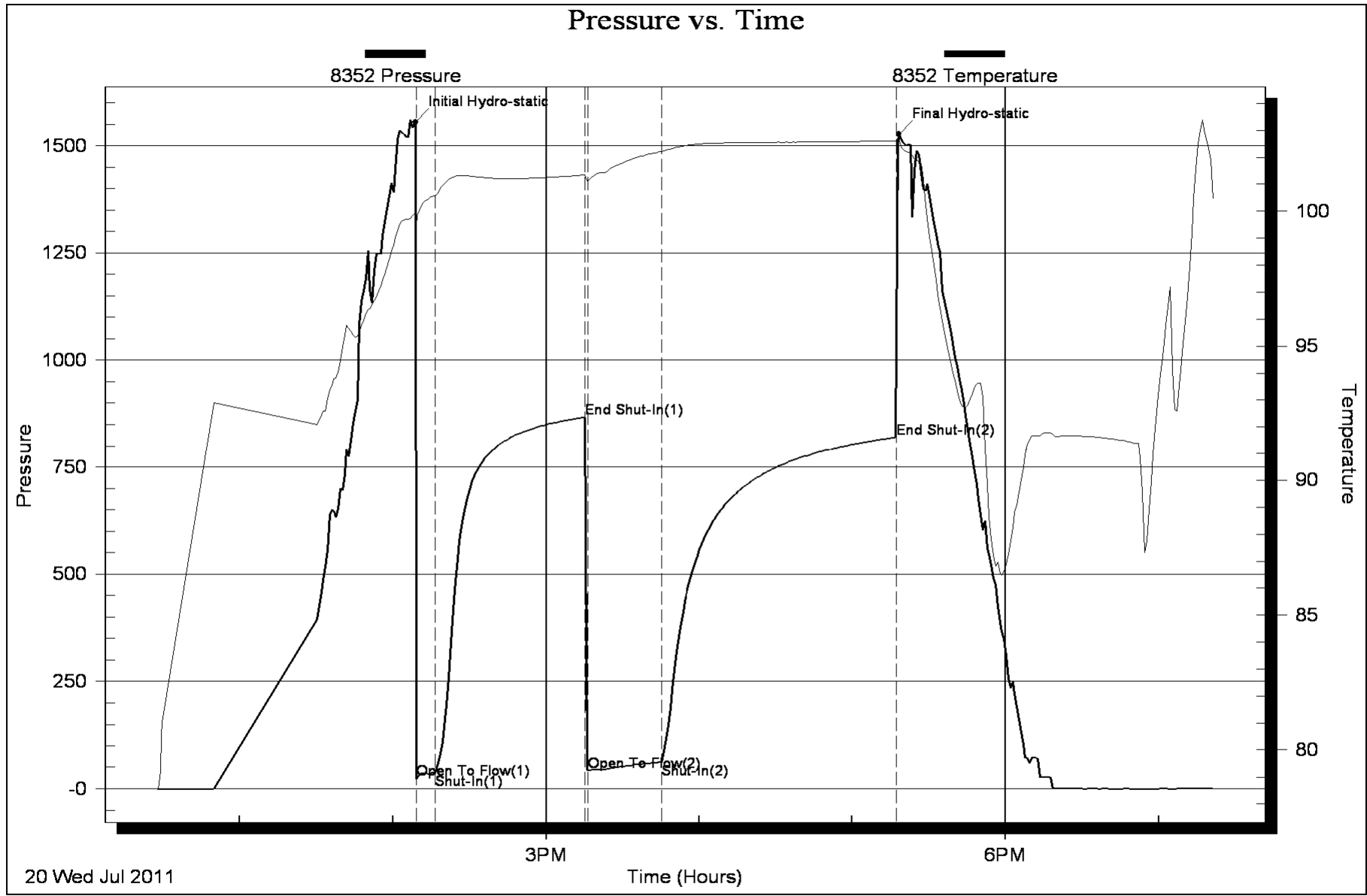
Num Gas Bombs: 0

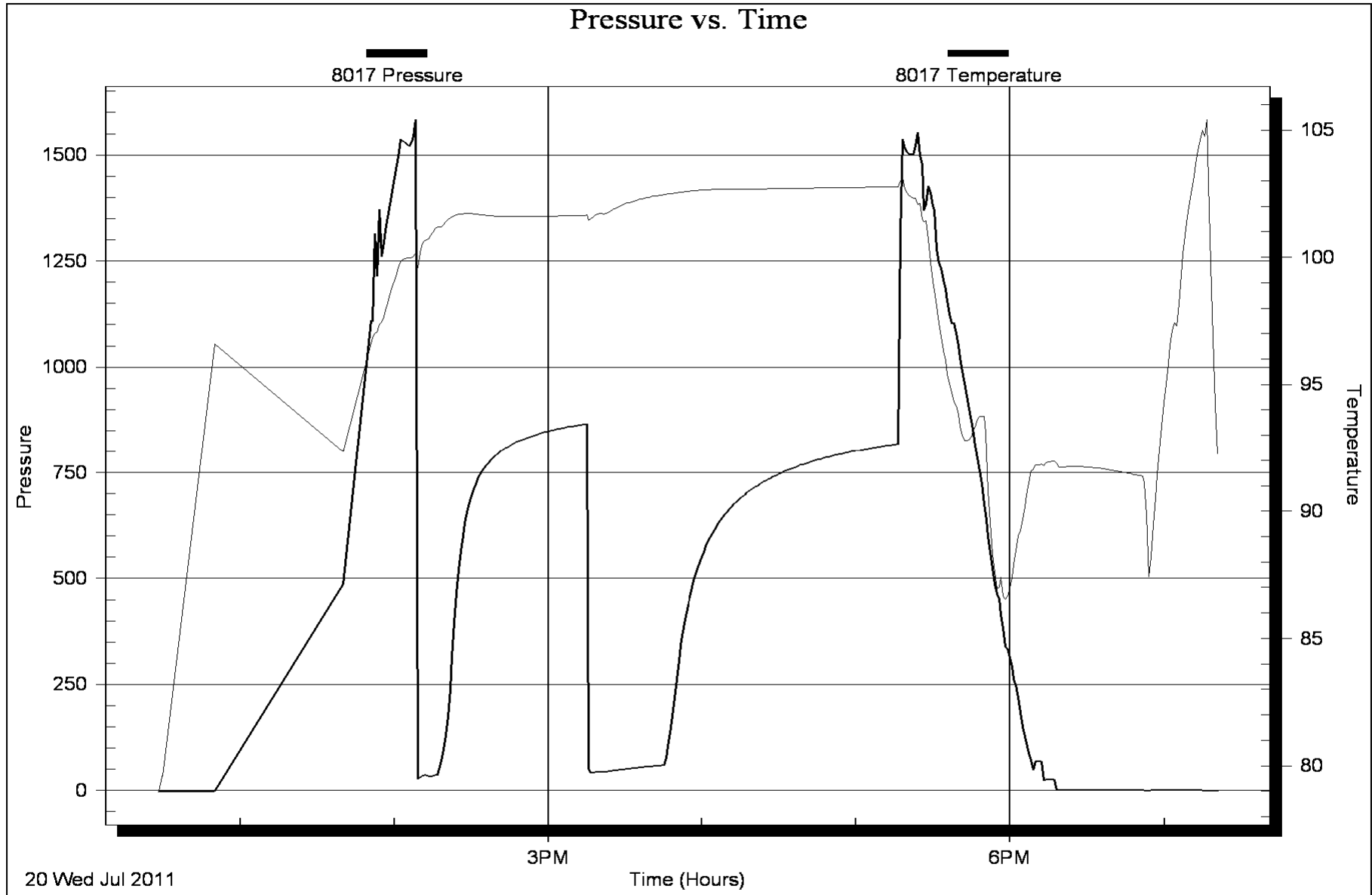
Serial #:

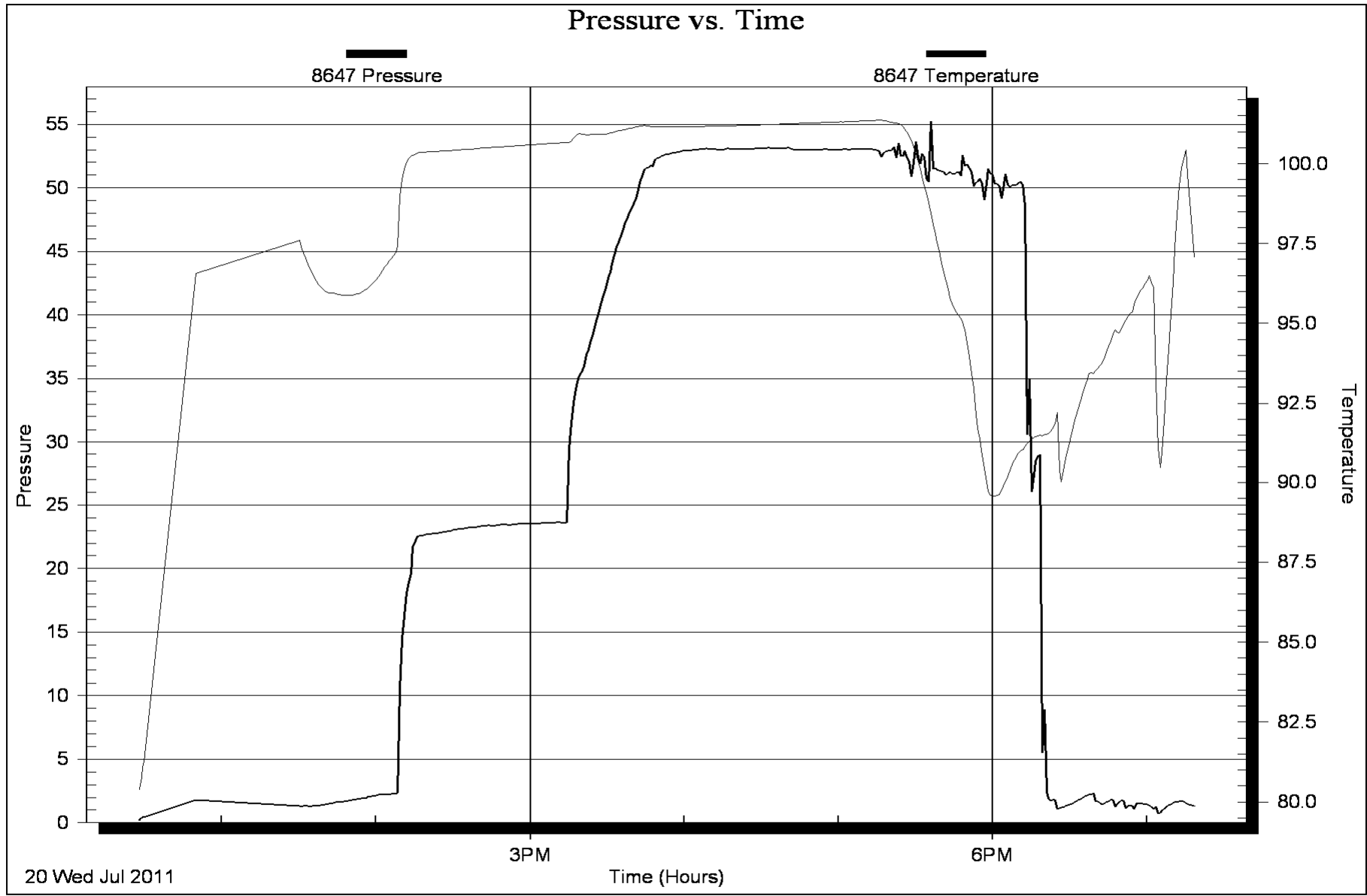
Laboratory Name:

Laboratory Location:

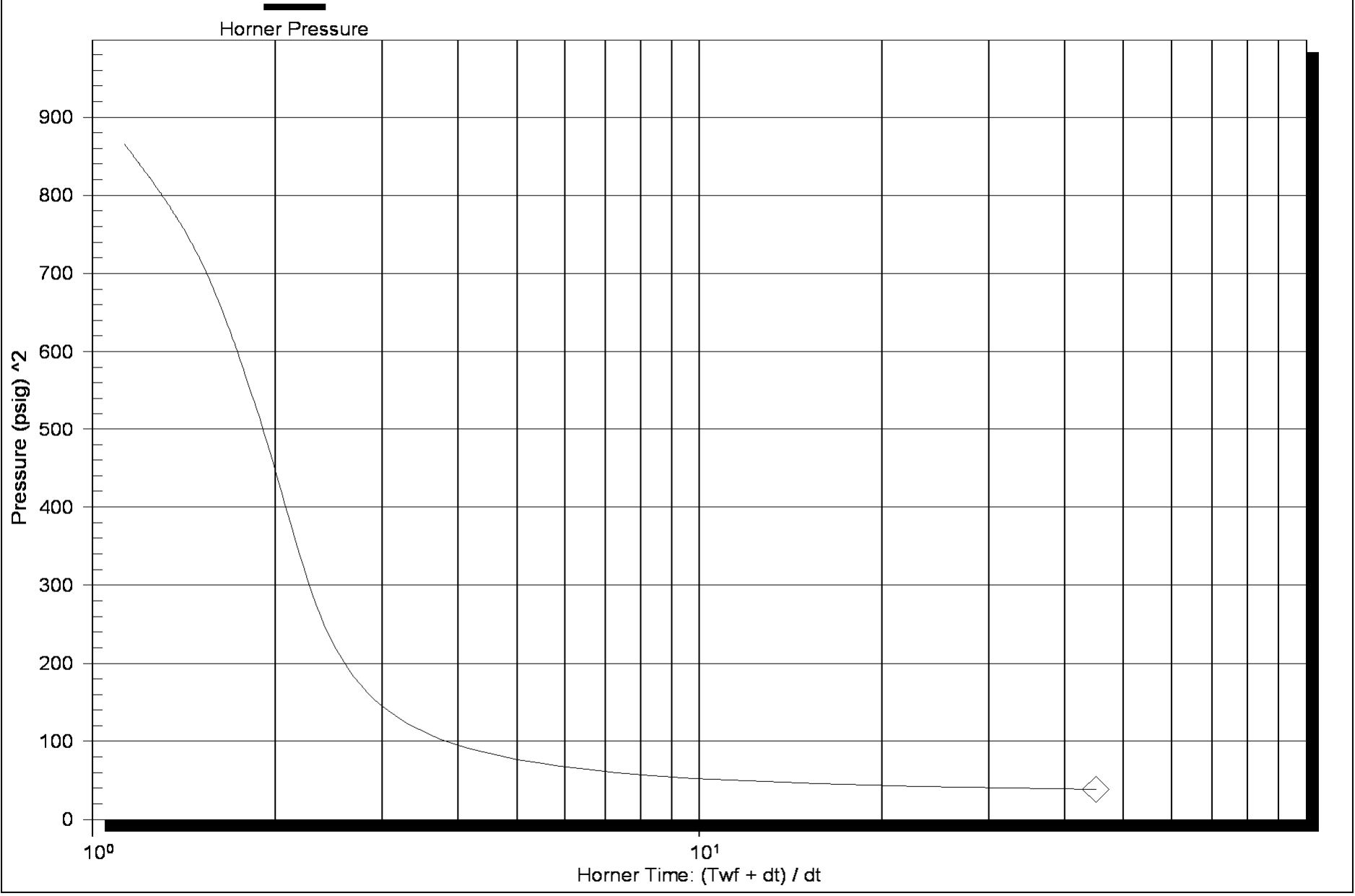
Recovery Comments: Sampler Data- gas=2.2cf w ater=800ml oil=1200ml pressure=375lbs



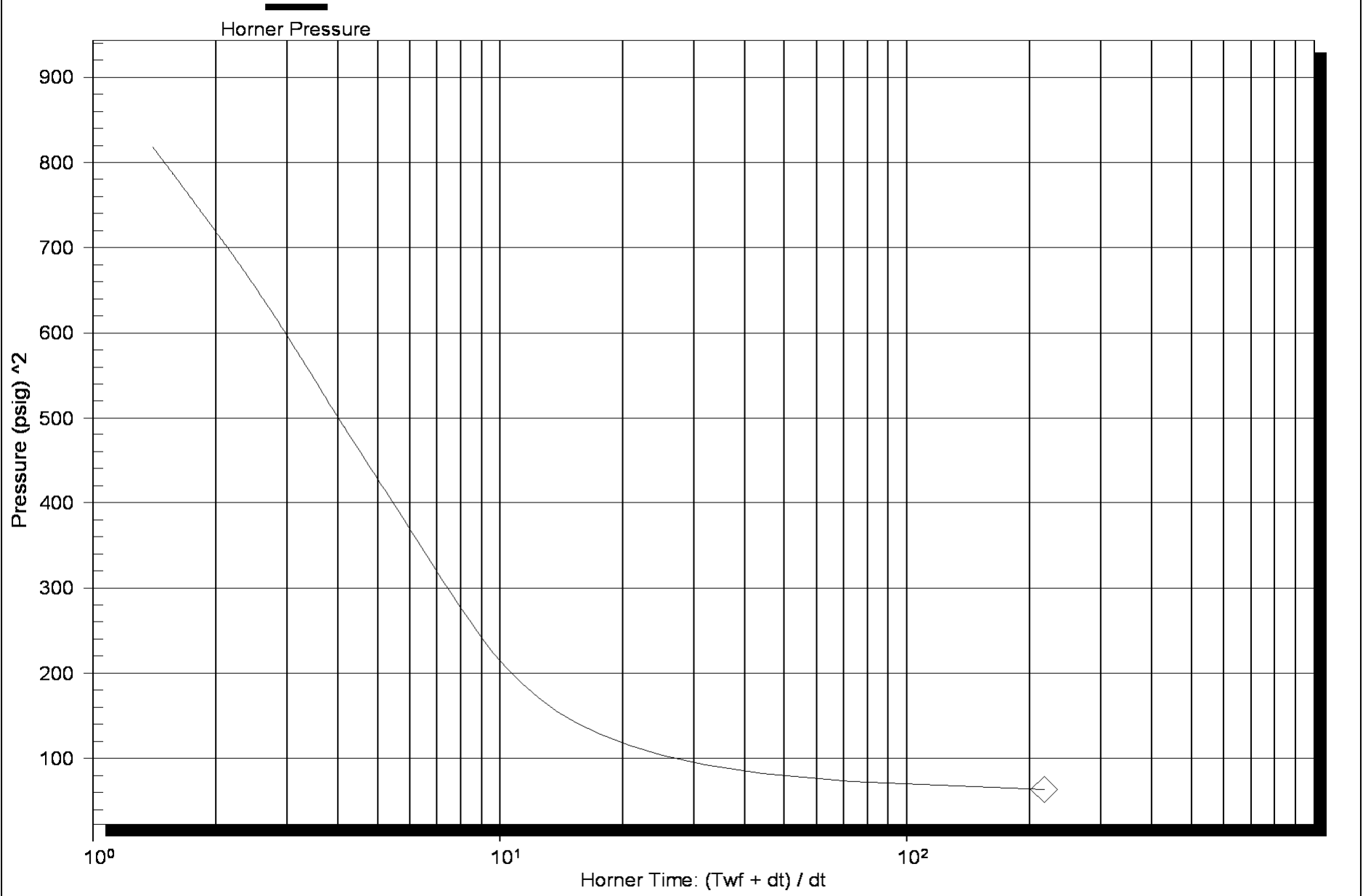




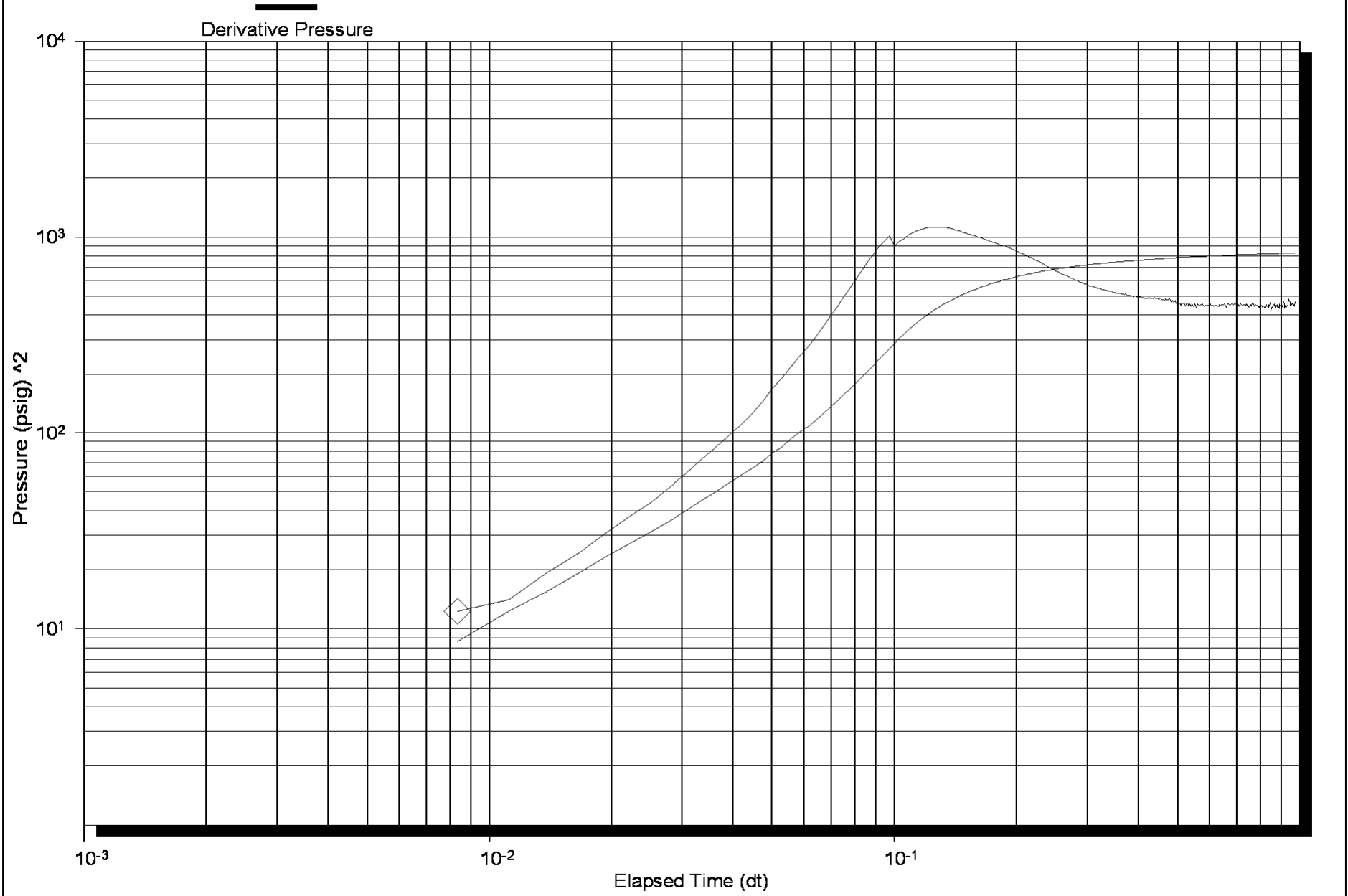
Horner Plot



Horner Plot



Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Derivative

