



## DRILL STEM TEST REPORT

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

ATTN: Clayton Camozzi

**1/16s/16w Rush KS**

**Wagner Trust 6-1**

Start Date: 2011.07.03 @ 17:15:43

End Date: 2011.07.04 @ 00:33:13

Job Ticket #: 43502                      DST #: 1

Trilobite Testing, Inc  
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Sam Gary Jr & Associates

**Wagner Trust 6-1**

**1/16s/16w Rush KS**

Job Ticket: 43502

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2011.07.03 @ 17:15:43

## GENERAL INFORMATION:

Formation: **Lansing A-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:11:13

Time Test Ended: 00:33:13

Test Type: Conventional Bottom Hole

Tester: Paul Simpson

Unit No: 36

**Interval: 3154.00 ft (KB) To 3216.00 ft (KB) (TVD)**

Reference Elevations: 1920.00 ft (KB)

Total Depth: 3216.00 ft (KB) (TVD)

1912.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8352 Outside**

Press @ Run Depth: 114.03 psig @ 3221.47 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.07.03

End Date:

2011.07.04

Last Calib.:

2011.07.04

Start Time:

17:15:48

End Time:

00:33:12

Time On Btm:

2011.07.03 @ 19:10:53

Time Off Btm:

2011.07.03 @ 22:20:53

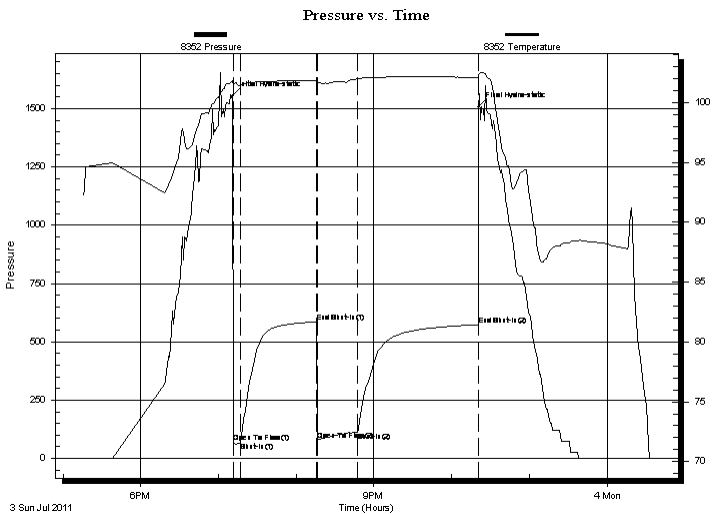
**TEST COMMENT:** IF 5- strong blow bottom of bucket in 90 seconds (tool) slid 2' and lost 5' of mud w hen opening)

ISI 60- weak surface blow

FF 30- strong blow -- bottom of bucket as soon as tool opened

FSI 90- 9"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1554.09	101.85	Initial Hydro-static
1	67.65	101.43	Open To Flow (1)
7	69.46	101.46	Shut-In(1)
65	585.81	101.83	End Shut-In(1)
66	77.54	101.63	Open To Flow (2)
97	114.03	101.99	Shut-In(2)
190	572.84	102.11	End Shut-In(2)
190	1506.65	102.32	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	gsy OCM 45% g 20%o 35%m	1.41
90.00	sl OCM 5%o 95%m	1.26
0.00	1400' gas in pipe	0.00

## Gas Rates

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







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**TOOL DIAGRAM**

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Test Start: 2011.07.03 @ 17:15:43

## Tool Information

Drill Pipe:	Length: 3096.00 ft	Diameter: 3.80 inches	Volume: 43.43 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - 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: 65000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3154.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	93.47 ft			
Tool Length:	129.47 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Recorder	0.00	8647	Fluid	3118.00	
Blank Spacing	5.00			3123.00	
Shut In Tool	5.00			3128.00	
Sampler	3.00			3131.00	
Hydraulic tool	5.00			3136.00	
Jars	5.00			3141.00	
Safety Joint	3.00			3144.00	
Packer	5.00			3149.00	36.00 Bottom Of Top Packer
Packer	5.00			3154.00	
Stubb	1.00			3155.00	
Perforations	2.00			3157.00	
Change Over Sub	0.60			3157.60	
Blank Spacing	31.00			3188.60	
Change Over Sub	1.00			3189.60	
Blank Spacing	31.27			3220.87	
Change Over Sub	0.60			3221.47	
Recorder	0.00	8017	Inside	3221.47	
Recorder	0.00	8352	Outside	3221.47	
Perforations	23.00			3244.47	
Bullnose	3.00			3247.47	93.47 Bottom Packers & Anchor

**Total Tool Length: 129.47**



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**FLUID SUMMARY**

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**Wagner Trust 6-1**

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Job Ticket: 43502

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2011.07.03 @ 17:15:43

## 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: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	gsy OCM 45% g 20%o 35%m	1.410
90.00	sl OCM 5%o 95%m	1.262
0.00	1400' gas in pipe	0.000

Total Length: 210.00 ft      Total Volume: 2.672 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

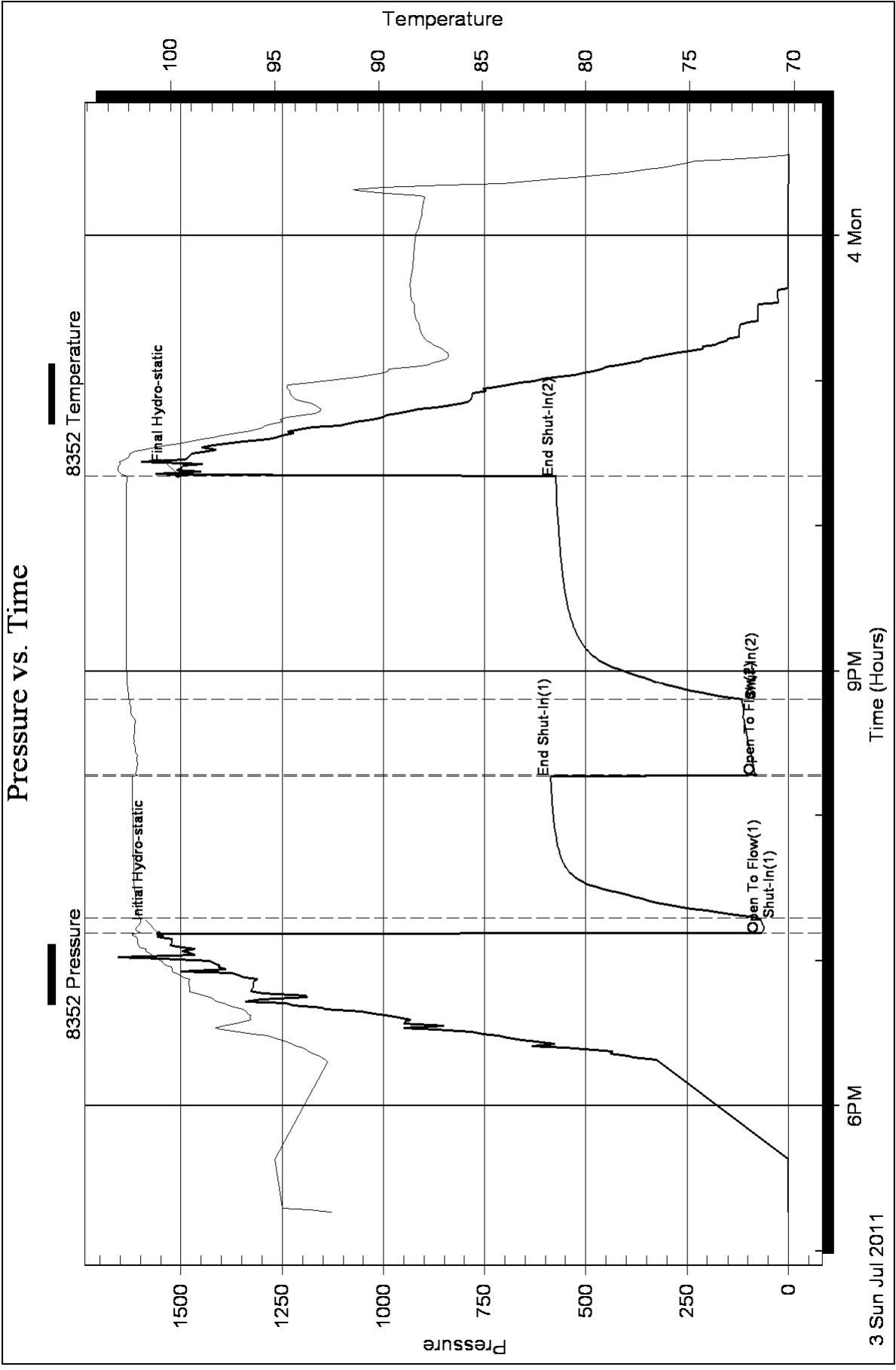
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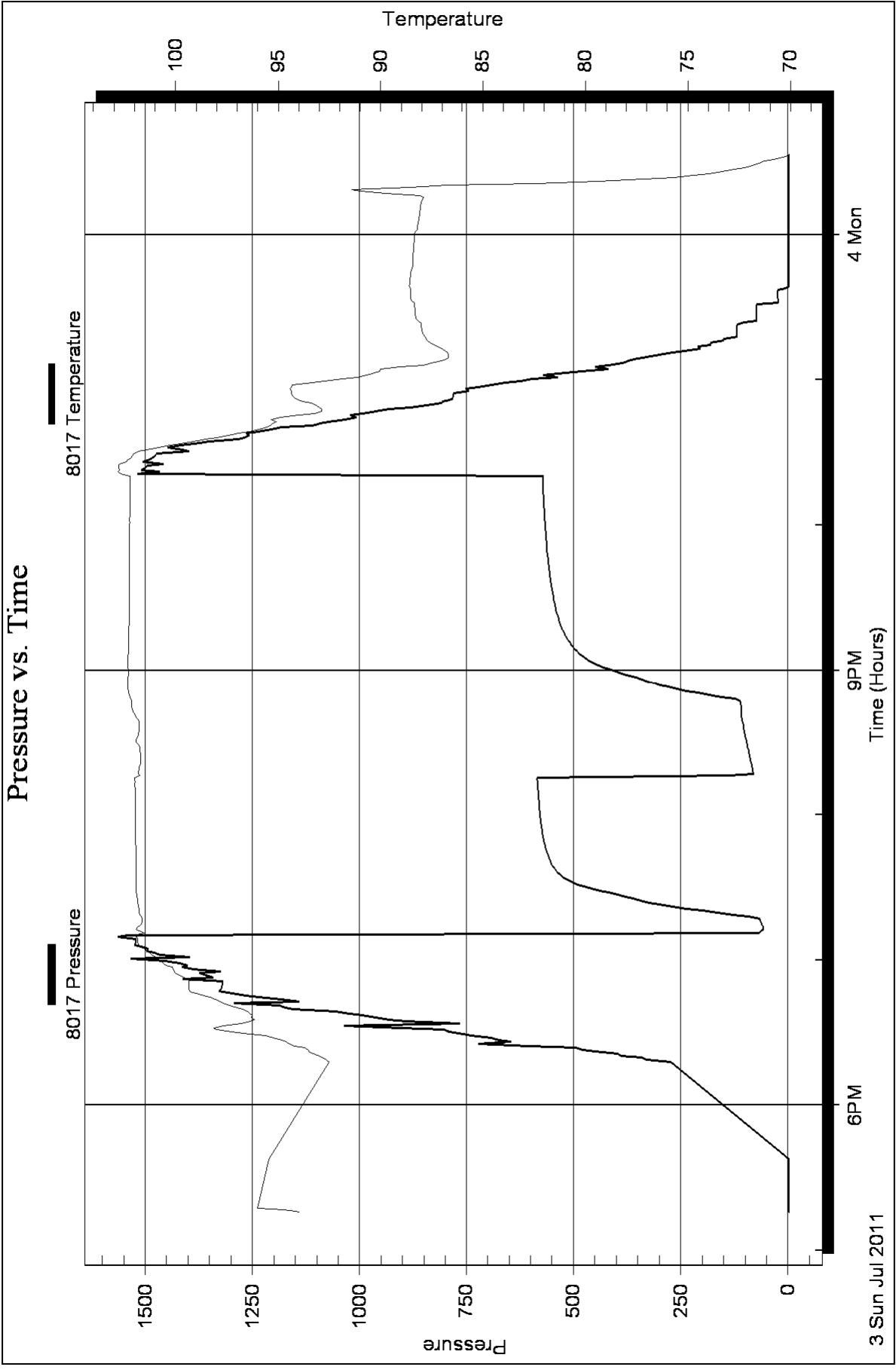
Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler1500ml OCM 30%o 70%m 490# 3.2 cf gas

### Pressure vs. Time







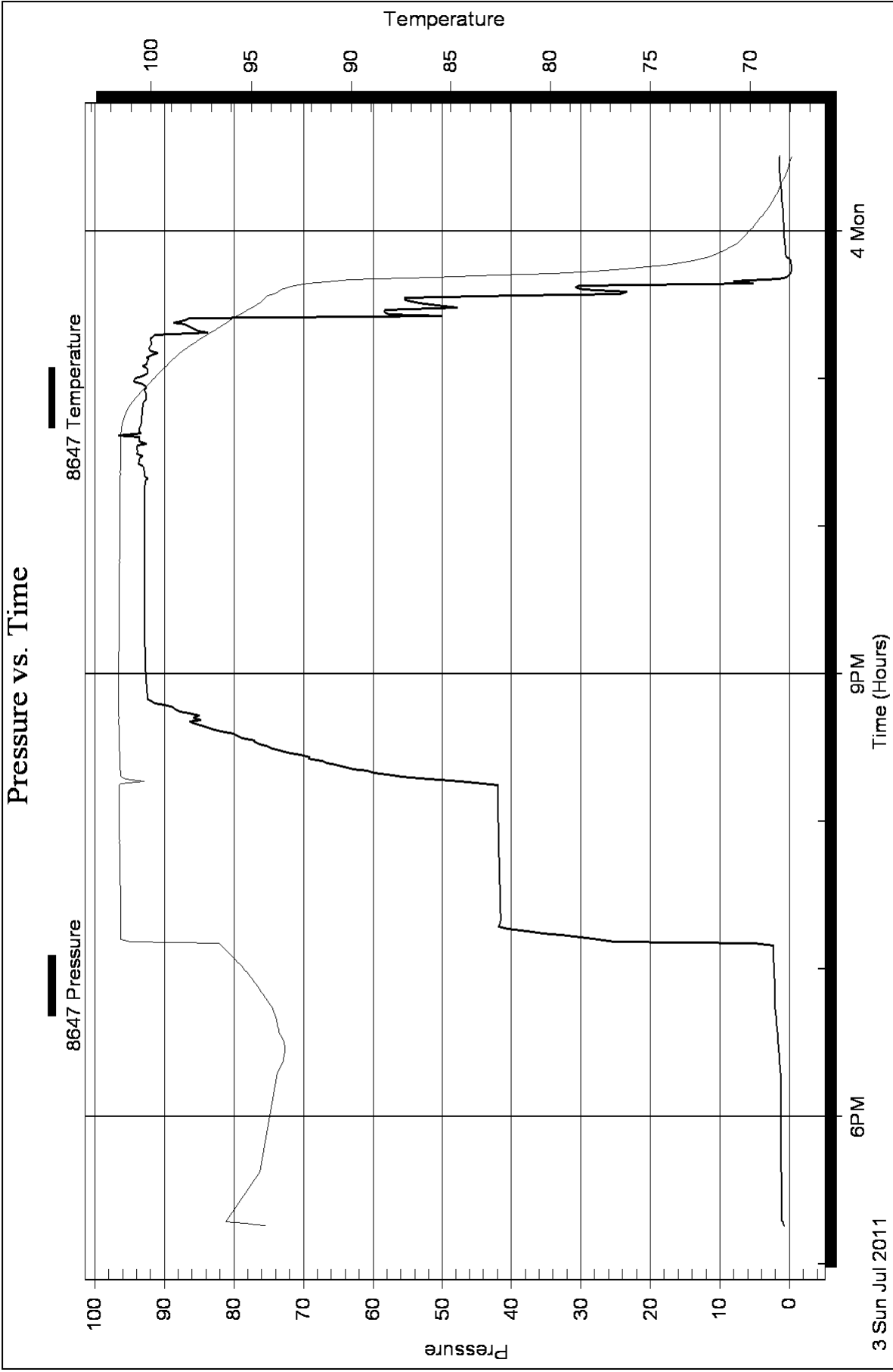
Serial #: 8647

Fluid

Sam Gary Jr & Associates

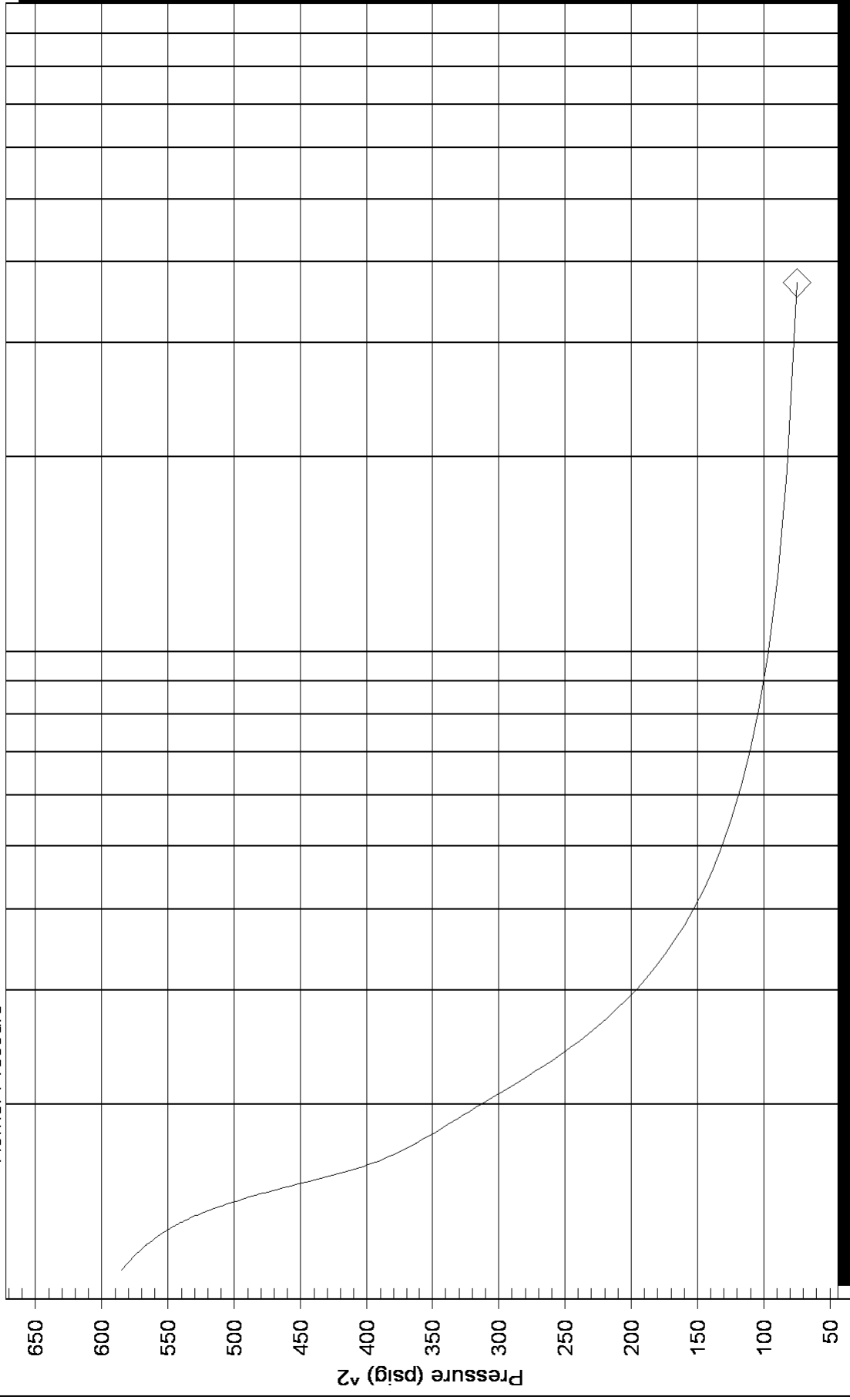
1/16s/16w Rush KS

DST Test Number: 1



### Homer Plot

Horner Pressure



10<sup>0</sup>

10<sup>1</sup>

Horner Time:  $(T_{wf} + dt) / dt$

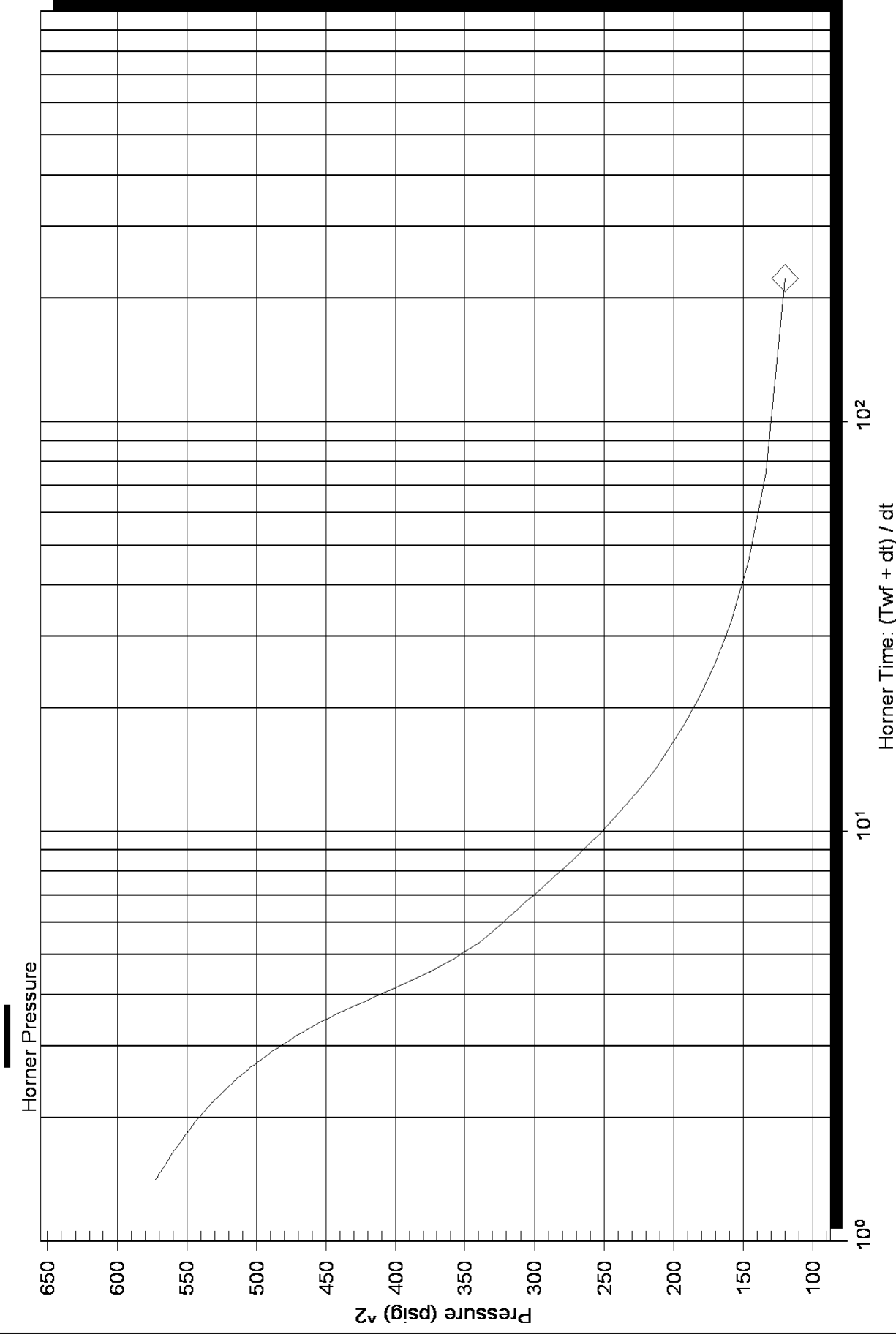
Slope (m) : kpa/log cycle

P\* :

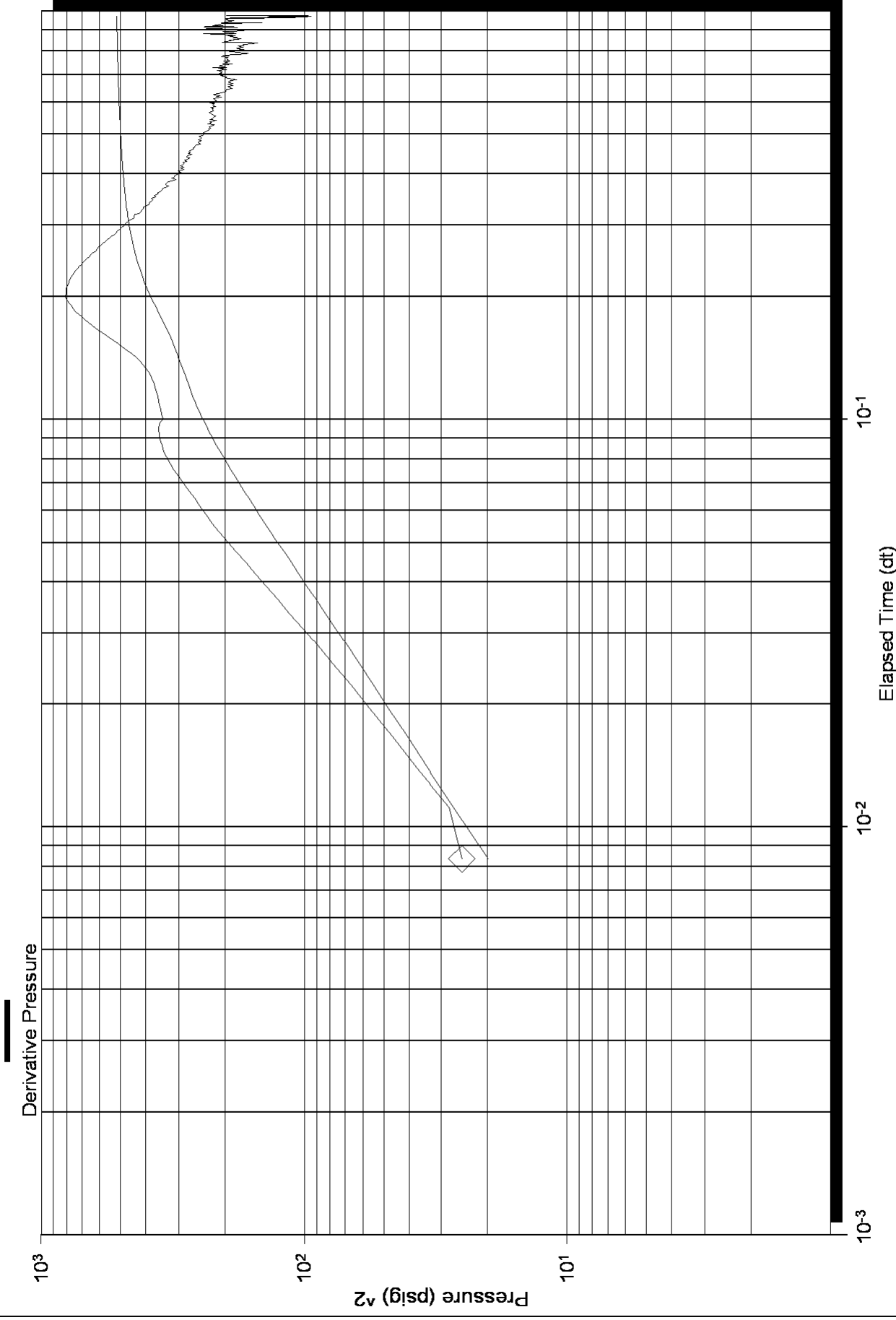
Serial Number: 8352 (Outside)

Flow Cycle: 1

### Homer Plot



# Log-Log and Pseudo-Derivative



### Log-Log and Pseudo-Derivative

