



DRILL STEM TEST REPORT

Prepared For: **SamGary Jr. Associates**

1515 Wynkoop STE 700
Denver Co

ATTN: Cloayton Camozzi

1-16-16, Rush Ks

Wagner Trust 3-1

Start Date: 2011.02.18 @ 16:35:14

End Date: 2011.02.19 @ 01:09:44

Job Ticket #: 41920 DST #: 1

Trilobite Testing, Inc
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TRILOBITE TESTING, INC.

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Wagner Trust 3-1

1515 Wynkoop STE 700
Denver Co

1-16-16, Rush Ks

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DST#: 1

ATTN: Cloayton Camozzi

Test Start: 2011.02.18 @ 16:35:14

GENERAL INFORMATION:

Formation: **KC"A-C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:58:14

Time Test Ended: 01:09:44

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: 47

Interval: 3175.00 ft (KB) To 3237.00 ft (KB) (TVD)

Reference Elevations: 1941.00 ft (KB)

Total Depth: 3237.00 ft (KB) (TVD)

1933.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8369 Outside

Press@RunDepth: 54.31 psig @ 3180.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.02.18

End Date: 2011.02.19

Last Calib.: 2011.02.19

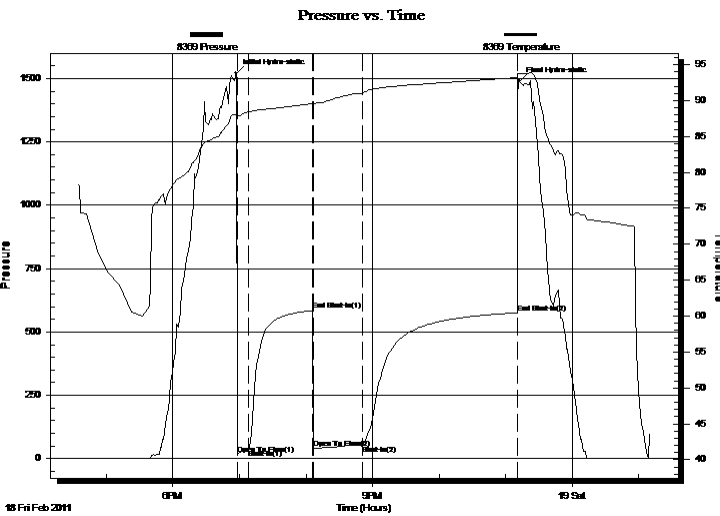
Start Time: 16:35:19

End Time: 01:09:44

Time On Btm: 2011.02.18 @ 18:57:14

Time Off Btm: 2011.02.18 @ 23:12:44

TEST COMMENT: IF-2.5in blow
ISI-No blow
FF-4.25in blow
FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1519.63	88.05	Initial Hydro-static
1	17.63	87.61	Open To Flow (1)
11	35.48	88.41	Shut-In(1)
69	584.47	89.58	End Shut-In(1)
70	39.76	89.51	Open To Flow (2)
114	54.31	91.07	Shut-In(2)
253	575.62	93.23	End Shut-In(2)
256	1488.29	93.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	Mud	0.71

Gas Rates

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



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TOOL DIAGRAM

SamGary Jr. Associates

Wagner Trust 3-1

1515 Wynkoop STE 700
Denver Co

1-16-16, Rush Ks

Job Ticket: 41920

DST#: 1

ATTN: Cloayton Camozzi

Test Start: 2011.02.18 @ 16:35:14

Tool Information

Drill Pipe:	Length: 3136.00 ft	Diameter: 3.80 inches	Volume: 43.99 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 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: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3175.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.00 ft			
Tool Length:	98.00 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			3140.00	
Recorder	0.00	8319	Fluid	3140.00	
Drill Pipe	5.00			3145.00	
Shut In Tool	5.00			3150.00	
Sampler	3.00			3153.00	
Hydraulic tool	5.00			3158.00	
Jars	5.00			3163.00	
Safety Joint	3.00			3166.00	
Packer	4.00			3170.00	36.00 Bottom Of Top Packer
Packer	5.00			3175.00	
Stubb	1.00			3176.00	
Perforations	3.00			3179.00	
Change Over Sub	1.00			3180.00	
Recorder	0.00	8369	Outside	3180.00	
Recorder	0.00	6719	Inside	3180.00	
Blank Spacing	31.00			3211.00	
Change Over Sub	1.00			3212.00	
Perforations	22.00			3234.00	
Bullnose	3.00			3237.00	62.00 Bottom Packers & Anchor

Total Tool Length: 98.00



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FLUID SUMMARY

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Job Ticket: 41920

DST#: 1

ATTN: Cloayton Camozzi

Test Start: 2011.02.18 @ 16:35:14

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: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6700.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	Mud	0.709

Total Length: 70.00 ft Total Volume: 0.709 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

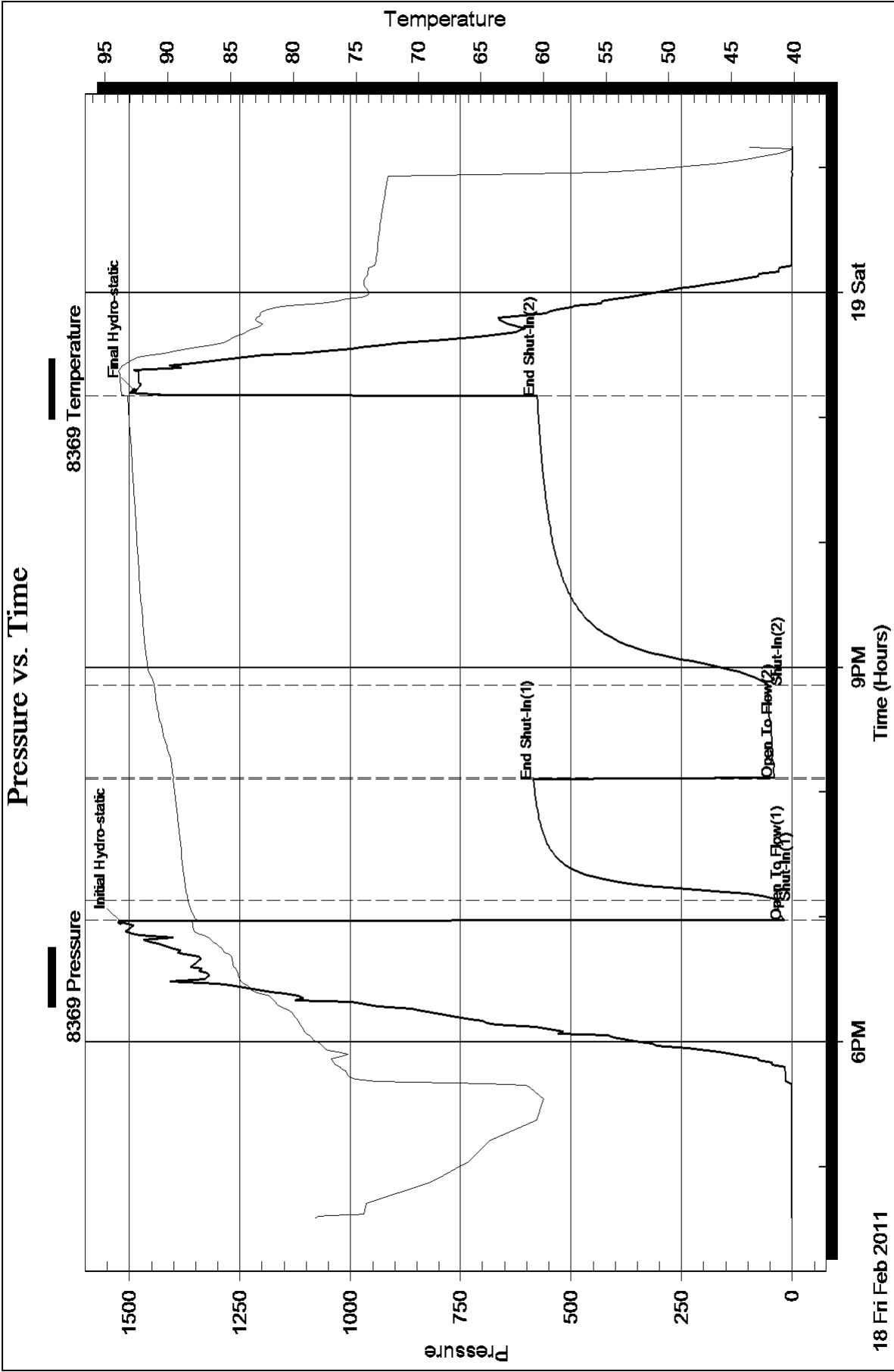
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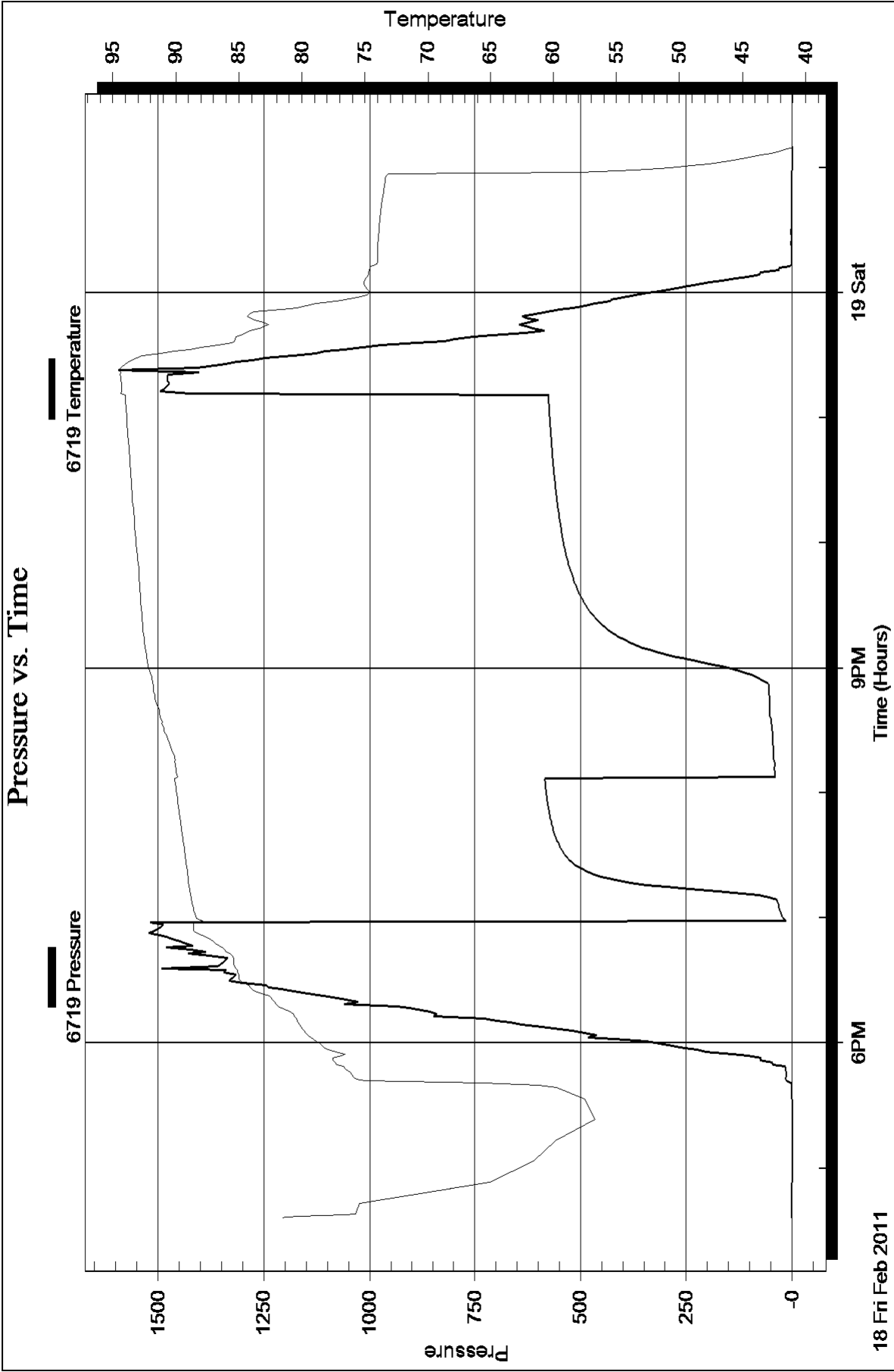
Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler Data
4000ml Mud

Pressure vs. Time





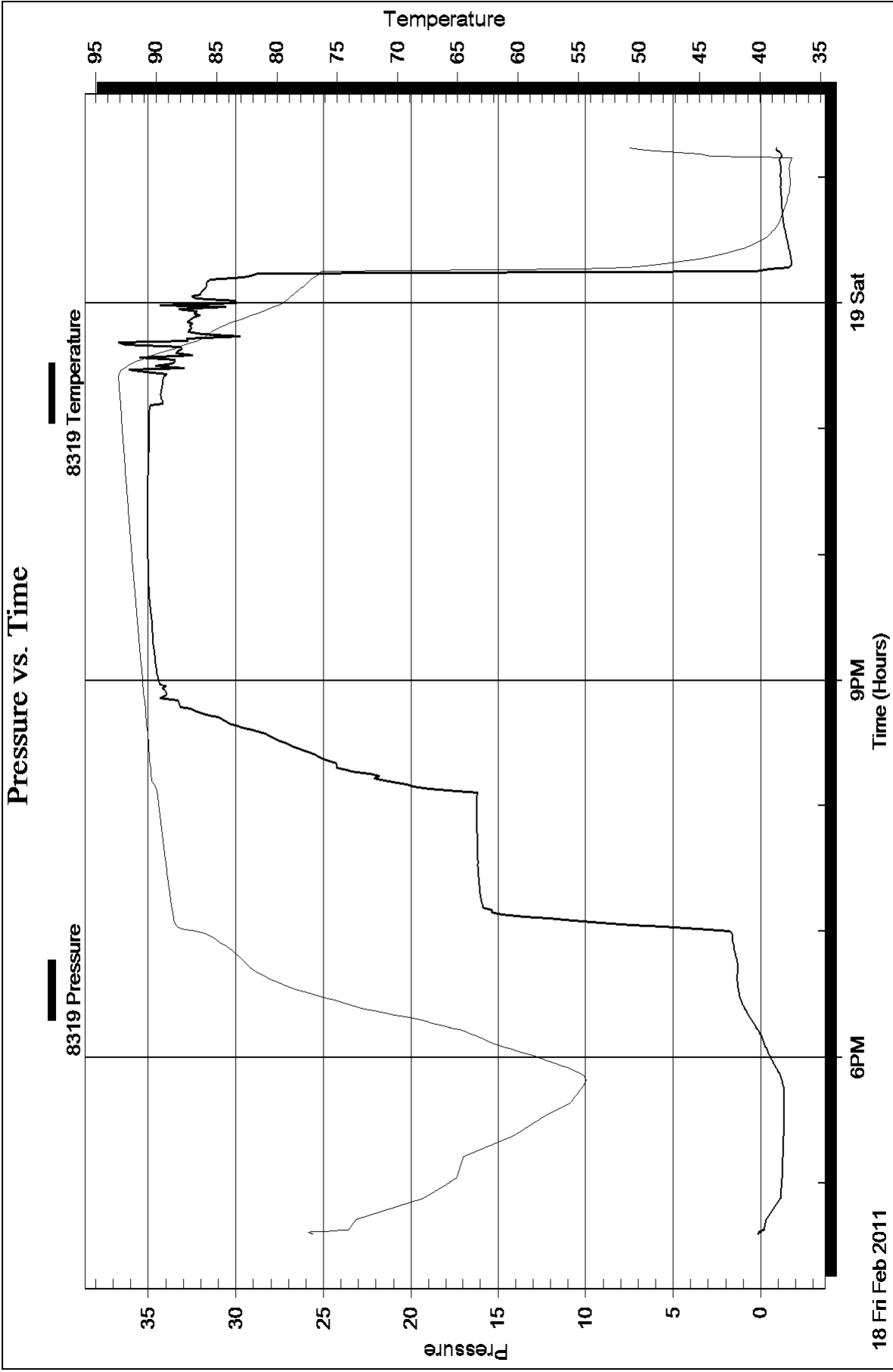
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Fluid

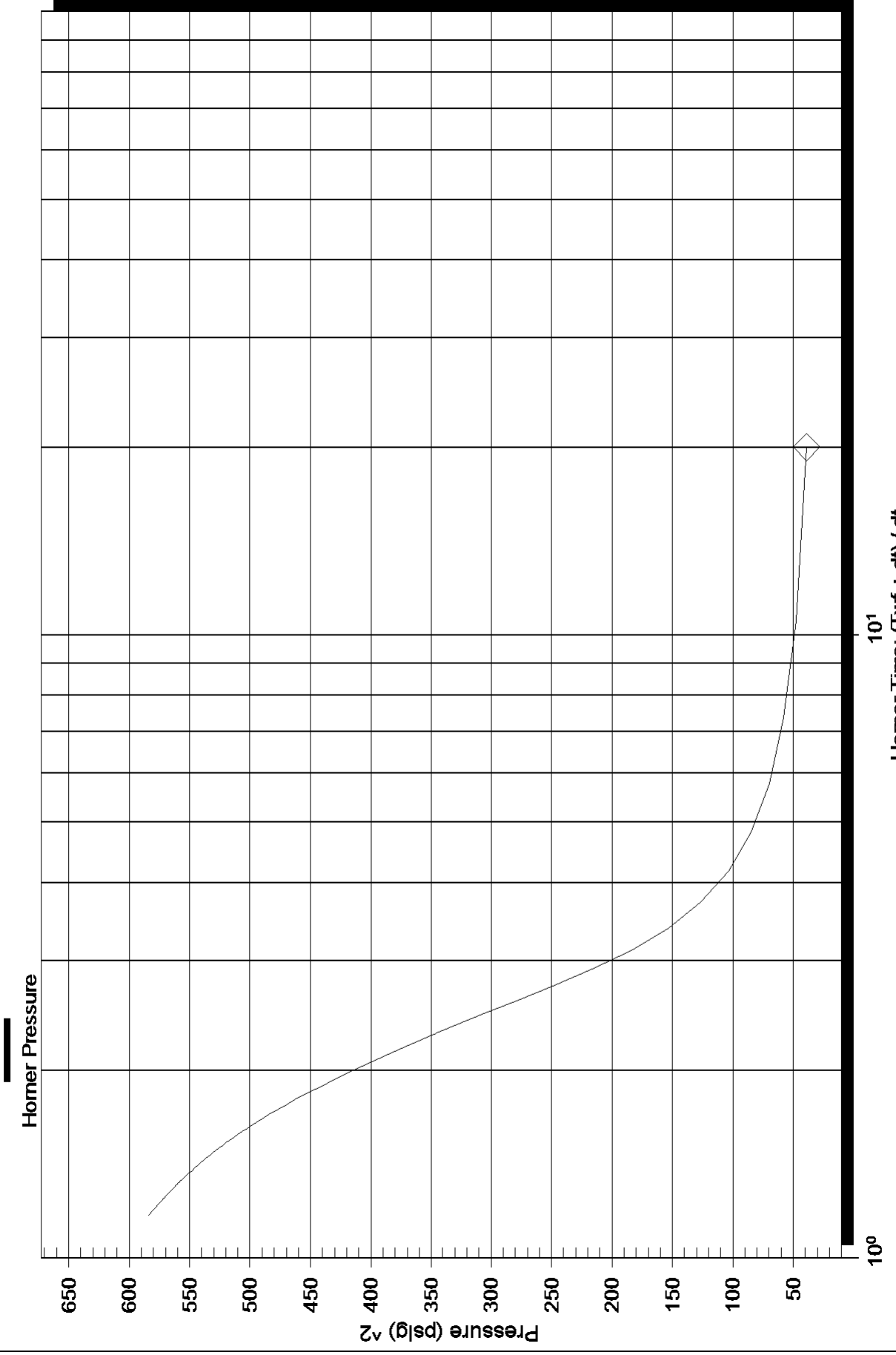
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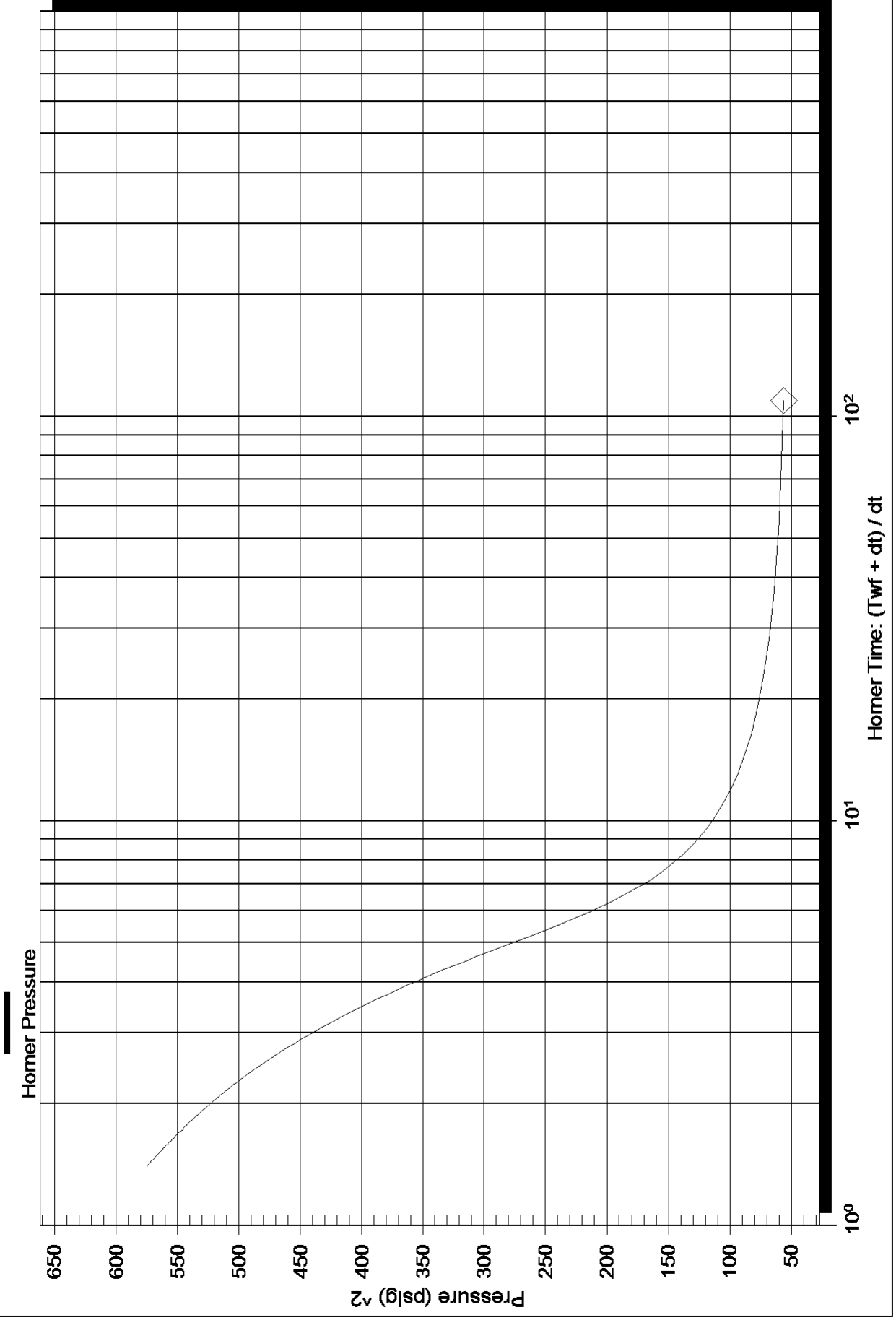
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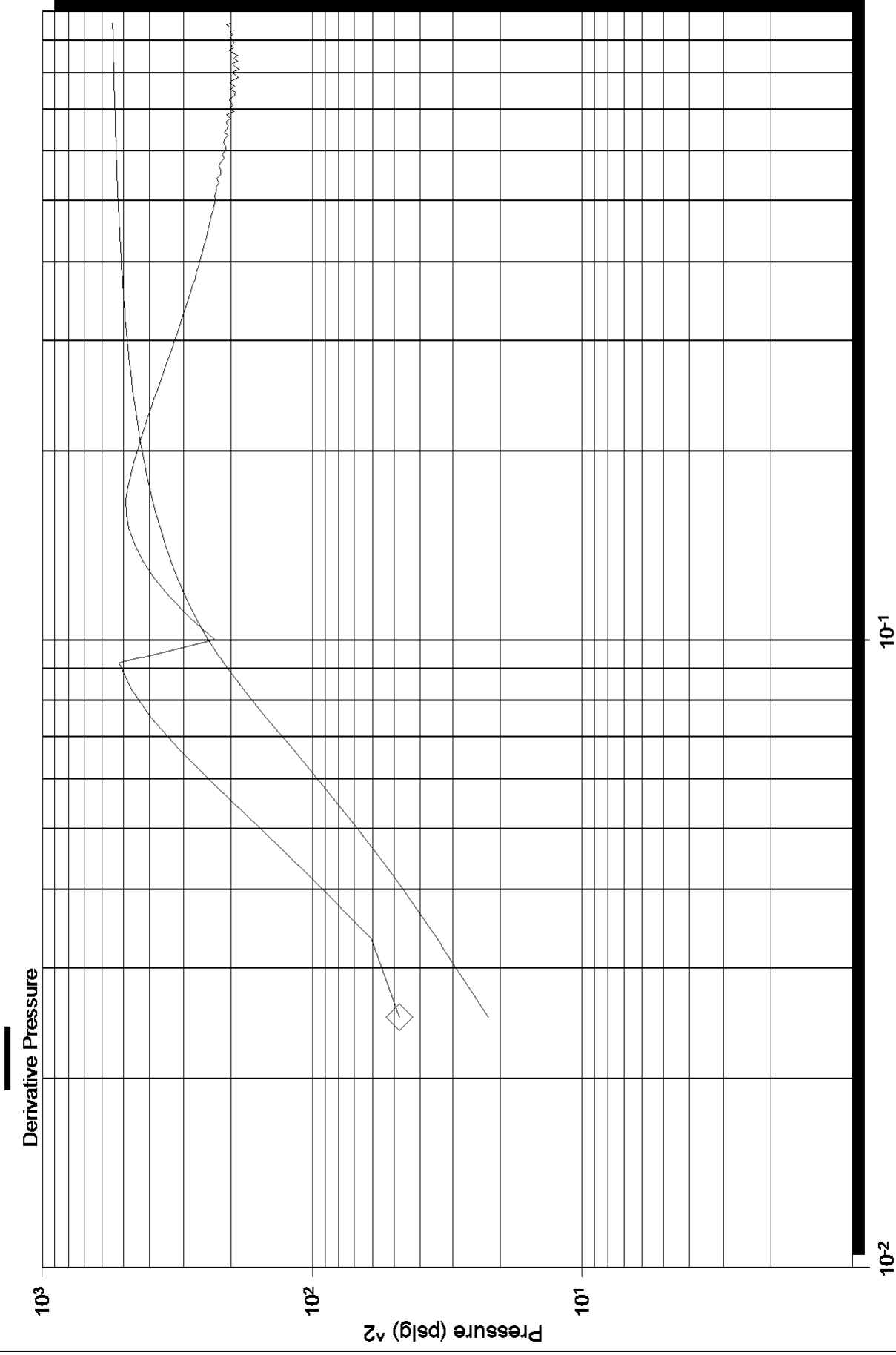
Homer Plot



Homer Plot



Log-Log and Pseudo-Log-Derivative



Log-Log and Pseudo-Derivative

