



## DRILL STEM TEST REPORT

Prepared For: **SamGary Jr**

1515 Wynkoop Ste 700  
Denver Co 80202

ATTN: Clayton Camozzi

**Sec19Twp17sRge15w**

**Stos-Stos 1-19**

Start Date: 2010.07.11 @ 06:50:02

End Date: 2010.07.11 @ 16:34:32

Job Ticket #: 38775                      DST #: 3

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



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TESTING, INC**

# DRILL STEM TEST REPORT

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Denver Co 80202  
ATTN: Clayton Camozzi

**Stos-Stos 1-19**  
**Sec19Twp17sRge15w**  
Job Ticket: 38775 **DST#: 3**  
Test Start: 2010.07.11 @ 06:50:02

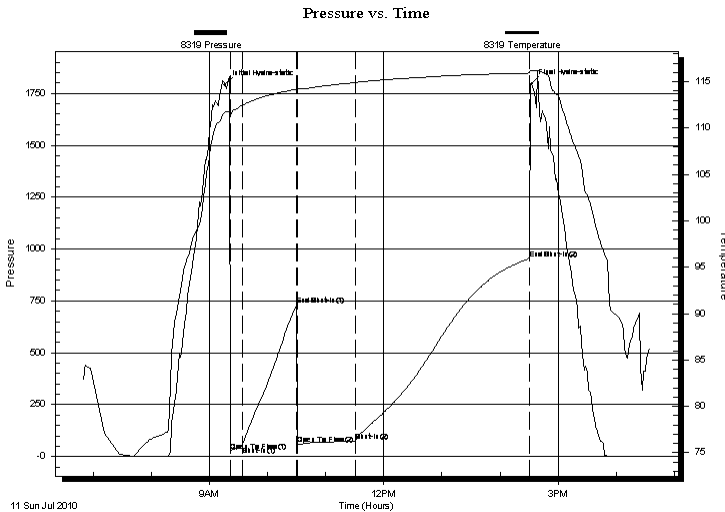
## GENERAL INFORMATION:

Formation: **Arb**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 09:21:32  
Time Test Ended: 16:34:32  
Interval: **3593.00 ft (KB) To 3602.00 ft (KB) (TVD)**  
Total Depth: 3773.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition:  
Test Type: Conventional Straddle  
Tester: Brett Dickinson  
Unit No: 47  
Reference Elevations: 2030.00 ft (KB)  
2021.00 ft (CF)  
KB to GR/CF: 9.00 ft

**Serial #: 8319 Inside**  
Press @ Run Depth: 75.73 psig @ 3594.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2010.07.11 End Date: 2010.07.11 Last Calib.: 2010.07.11  
Start Time: 06:50:07 End Time: 16:34:32 Time On Btm: 2010.07.11 @ 09:16:02  
Time Off Btm: 2010.07.11 @ 14:32:32

TEST COMMENT: IF-3in blow  
IS-No blow  
FF-5.25in blow  
FSI-No blow

## PRESSURE SUMMARY



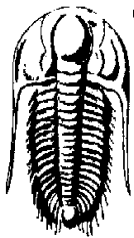
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1790.56	111.69	Initial Hydro-static
6	24.96	111.36	Open To Flow (1)
18	49.90	112.43	Shut-In(1)
74	731.69	114.16	End Shut-In(1)
75	58.22	114.18	Open To Flow (2)
135	75.73	114.91	Shut-In(2)
314	954.70	115.92	End Shut-In(2)
317	1796.39	116.20	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	SOCM 10%O 90%M	0.34
80.00	SGO 5%G 95%O	0.63
0.00	90ft GIP	0.00

## Gas Rates

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



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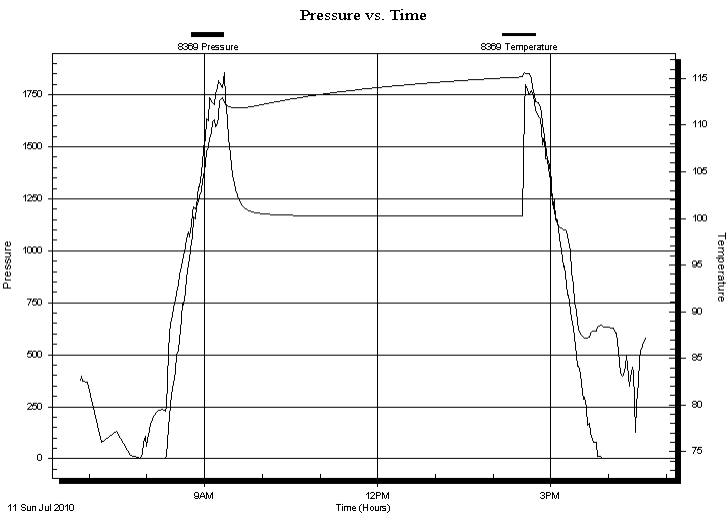
**Stos-Stos 1-19**  
**Sec19Twp17sRge15w**  
Job Ticket: 38775      **DST#: 3**  
Test Start: 2010.07.11 @ 06:50:02

**GENERAL INFORMATION:**

Formation: **Arb**  
Deviated: No    Whipstock:                      ft (KB)  
Time Tool Opened: 09:21:32  
Time Test Ended: 16:34:32  
Test Type: Conventional Straddle  
Tester: Brett Dickinson  
Unit No: 47  
Interval: **3593.00 ft (KB) To 3602.00 ft (KB) (TVD)**  
Reference Elevations: 2030.00 ft (KB)  
Total Depth: 3773.00 ft (KB) (TVD)    2021.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition:    KB to GR/CF: 9.00 ft

**Serial #: 8369      Below (Straddle)**  
Press@RunDepth:                      psig @ 3603.00 ft (KB)    Capacity: 8000.00 psig  
Start Date: 2010.07.11                      End Date: 2010.07.11    Last Calib.: 2010.07.11  
Start Time: 06:50:57                      End Time: 16:39:52    Time On Btm:  
Time Off Btm:

TEST COMMENT: IF-3in blow  
IS-No blow  
FF-5.25in blow  
FS-No blow



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bbl)
70.00	SOCM 10%O 90%M	0.34
80.00	SGO 5%G 95%O	0.63
0.00	90ft GIP	0.00

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



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1515 Wynkoop Ste 700  
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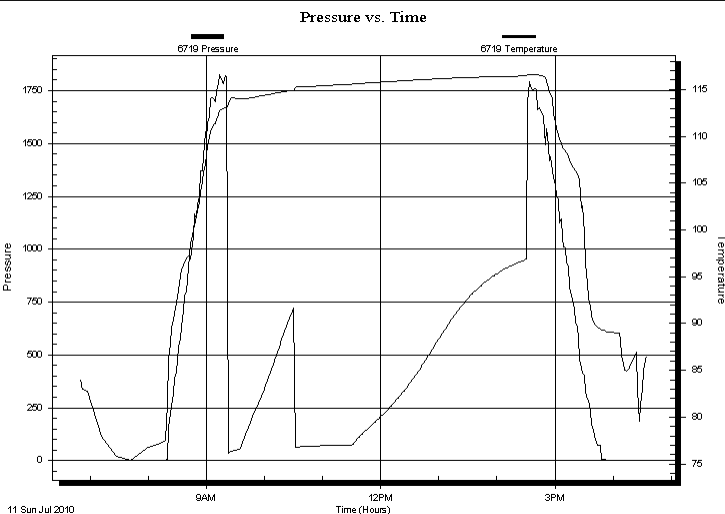
**Stos-Stos 1-19**  
**Sec19Twp17sRge15w**  
Job Ticket: 38775 **DST#: 3**  
Test Start: 2010.07.11 @ 06:50:02

## GENERAL INFORMATION:

Formation: **Arb**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 09:21:32  
Time Test Ended: 16:34:32  
Interval: **3593.00 ft (KB) To 3602.00 ft (KB) (TVD)**  
Total Depth: 3773.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition:  
Test Type: Conventional Straddle  
Tester: Brett Dickinson  
Unit No: 47  
Reference Elevations: 2030.00 ft (KB)  
2021.00 ft (CF)  
KB to GR/CF: 9.00 ft

**Serial #: 6719 Inside**  
Press @ Run Depth: psig @ 3598.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2010.07.11 End Date: 2010.07.11 Last Calib.: 2010.07.11  
Start Time: 06:50:13 End Time: 16:34:38 Time On Btm:  
Time Off Btm:

TEST COMMENT: IF-3in blow  
ISI-No blow  
FF-5.25in blow  
FSI-No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	SOCM 10%O 90%M	0.34
80.00	SGO 5%G 95%O	0.63
0.00	90ft GIP	0.00

## Gas Rates

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



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# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

SamGary Jr  
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ATTN: Clayton Camozzi

**Stos-Stos 1-19**  
**Sec19Twp17sRge15w**  
Job Ticket: 38775      **DST#: 3**  
Test Start: 2010.07.11 @ 06:50:02

**Tool Information**

Drill Pipe:	Length: 3467.00 ft	Diameter: 3.80 inches	Volume: 48.63 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume:</u>	Tool Chased	ft
			- bbl	String Weight: Initial	65000.00 lb
Drill Pipe Above KB:	25.00 ft			Final	66000.00 lb
Depth to Top Packer:	3593.00 ft				
Depth to Bottom Packer:	3602.00 ft				
Interval between Packers:	9.00 ft				
Tool Length:	206.00 ft				
Number of Packers:	3	Diameter:	6.75 inches		
Tool Comments:					

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
Change Over Sub	1.00			3567.00	
Shut In Tool	5.00			3572.00	
Hydraulic tool	5.00			3577.00	
Jars	4.00			3581.00	
Safety Joint	3.00			3584.00	
Packer	4.00			3588.00	27.00      Bottom Of Top Packer
Packer	5.00			3593.00	
Stubb	1.00			3594.00	
Recorder	0.00	8319	Inside	3594.00	
Perforations	4.00			3598.00	
Recorder	0.00	6719	Inside	3598.00	
Blank Off Sub	1.00			3599.00	
Blank Spacing	3.00			3602.00	9.00      Tool Interval
Packer	0.00			3602.00	
Stubb	1.00			3603.00	
Recorder	0.00	8369	Below	3603.00	
Perforations	3.00			3606.00	
Change Over Sub	1.00			3607.00	
Blank Spacing	155.00			3762.00	
Change Over Sub	1.00			3763.00	
Perforations	6.00			3769.00	
Bullnose	3.00			3772.00	170.00      Bottom Packers & Anchor

**Total Tool Length: 206.00**



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**FLUID SUMMARY**

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**Stos-Stos 1-19**  
**Sec19Twp17sRge15w**  
Job Ticket: 38775      **DST#: 3**  
Test Start: 2010.07.11 @ 06:50:02

**Mud and Cushion Information**

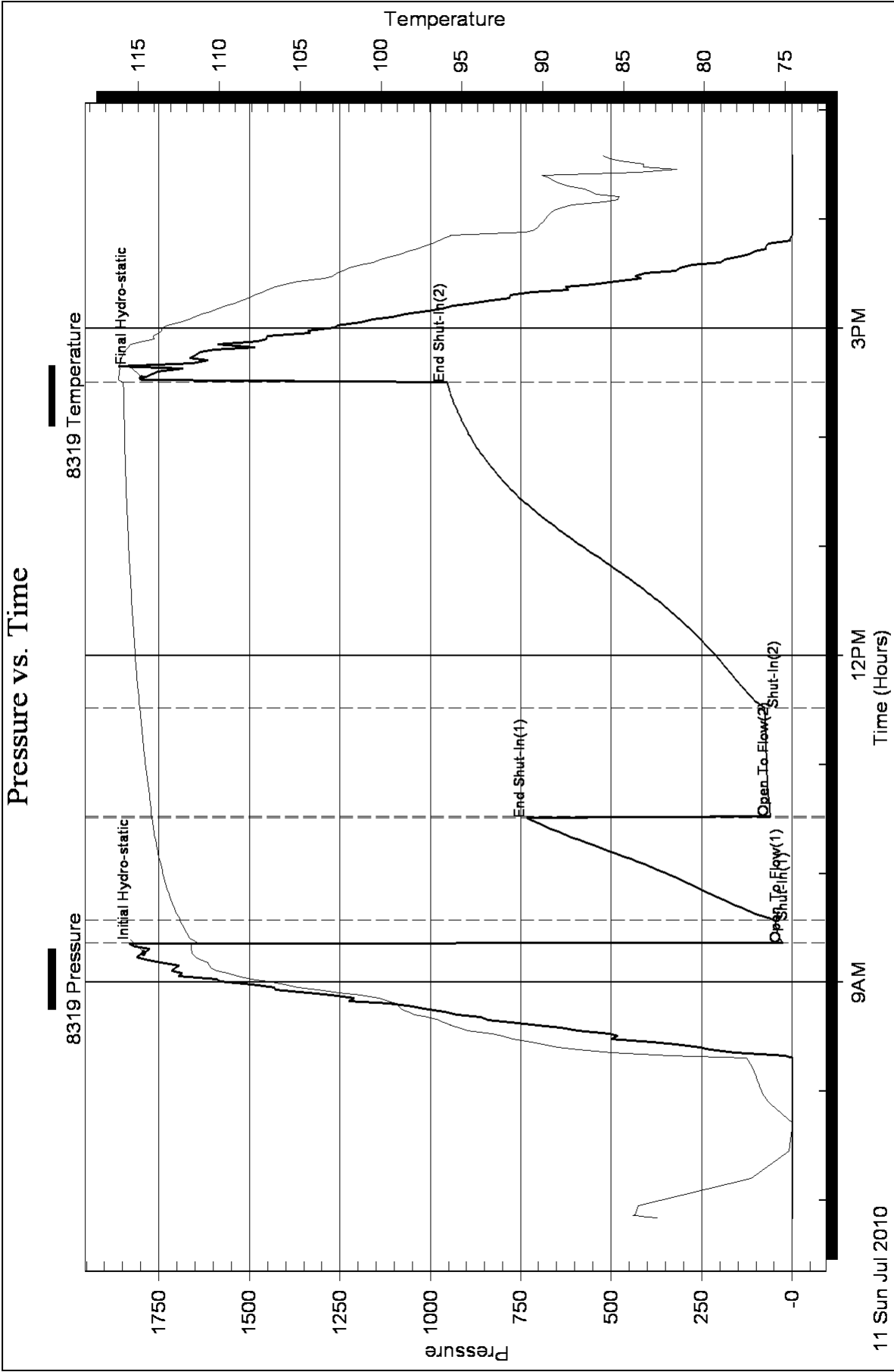
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 40.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.19 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6600.00 ppm			
Filter Cake: inches			

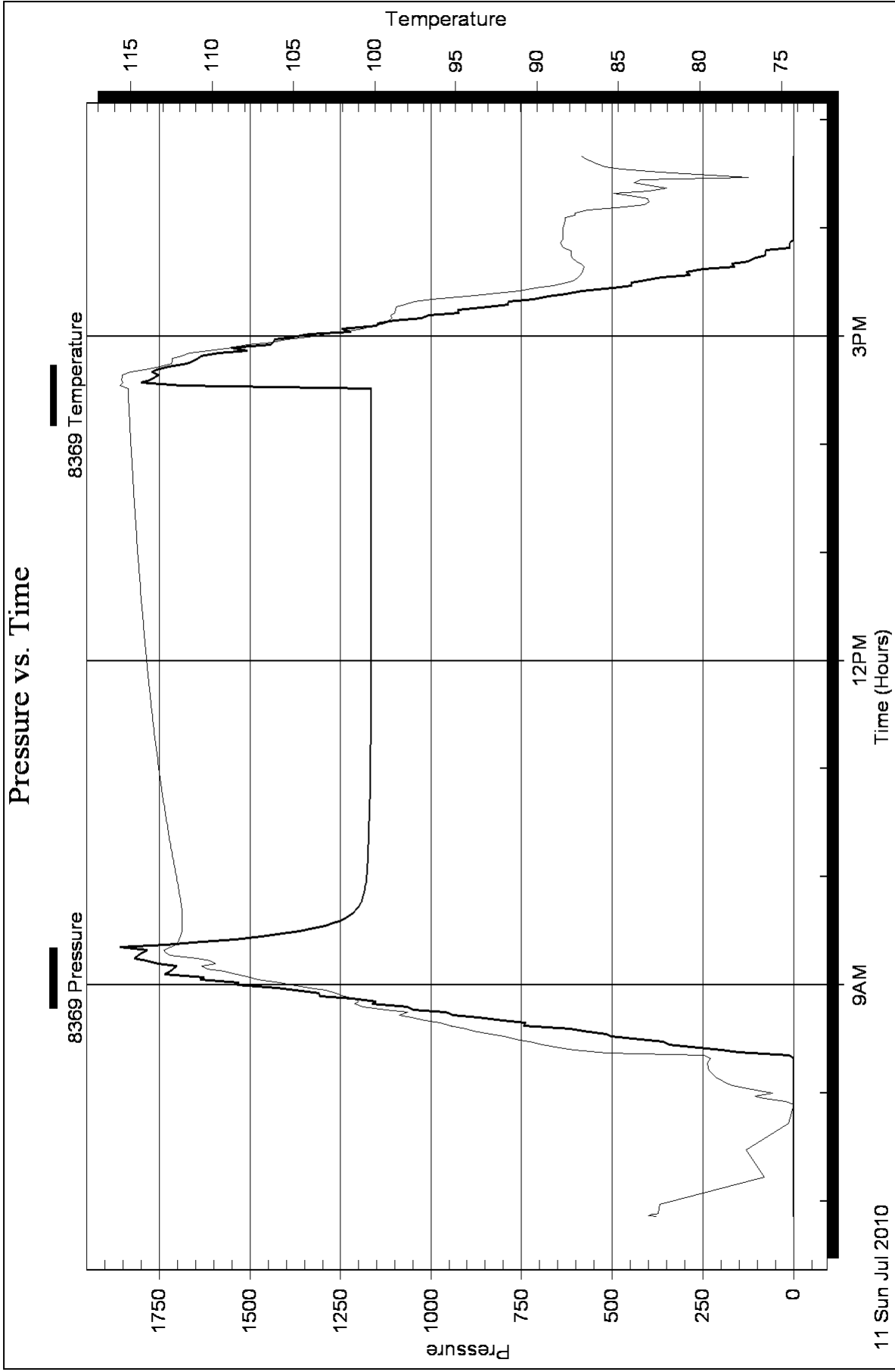
**Recovery Information**

Recovery Table

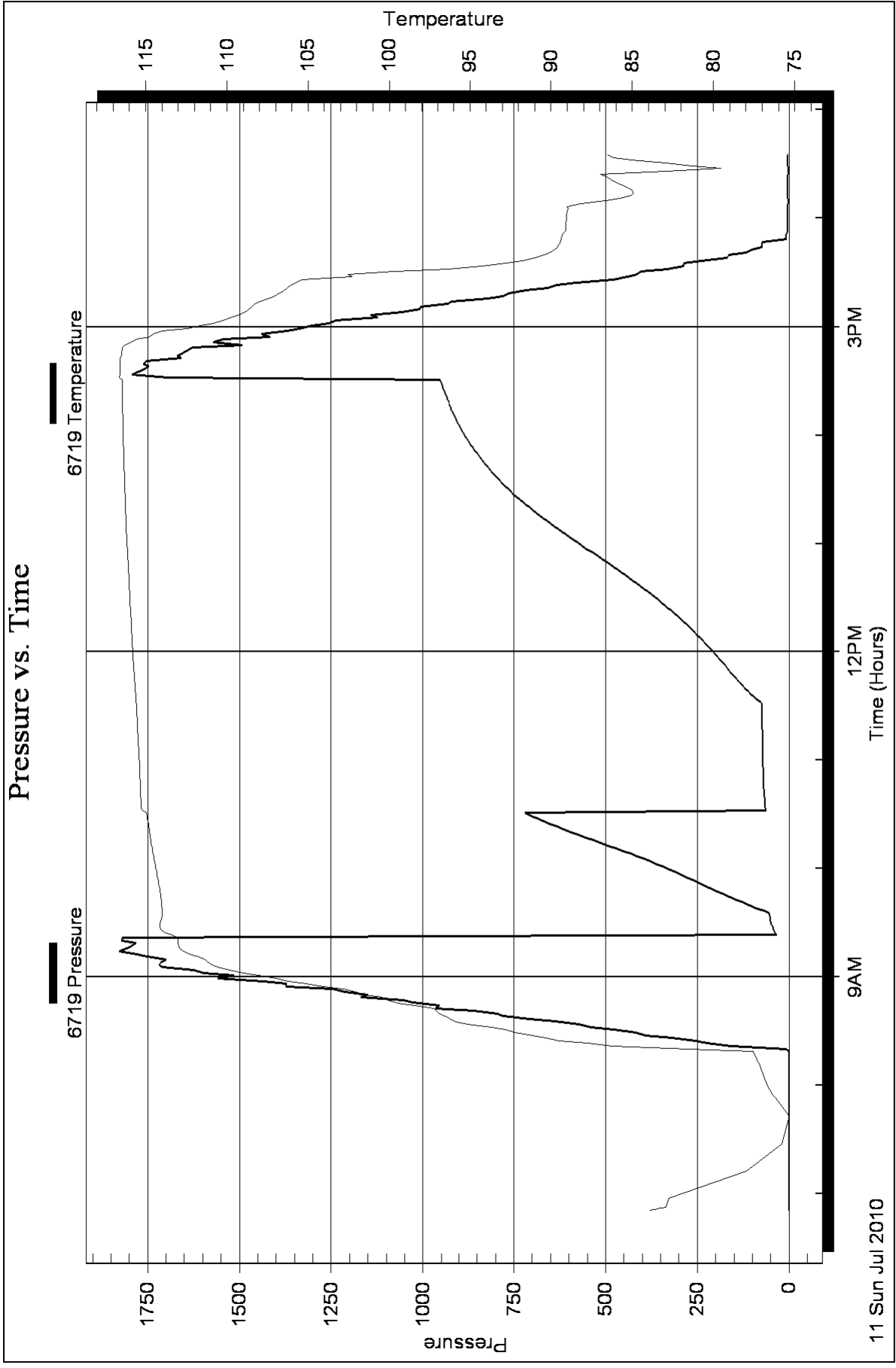
Length ft	Description	Volume bbl
70.00	SOCM 10%O 90%M	0.344
80.00	SGO 5%G 95%O	0.630
0.00	90ft GIP	0.000

Total Length: 150.00 ft      Total Volume: 0.974 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:



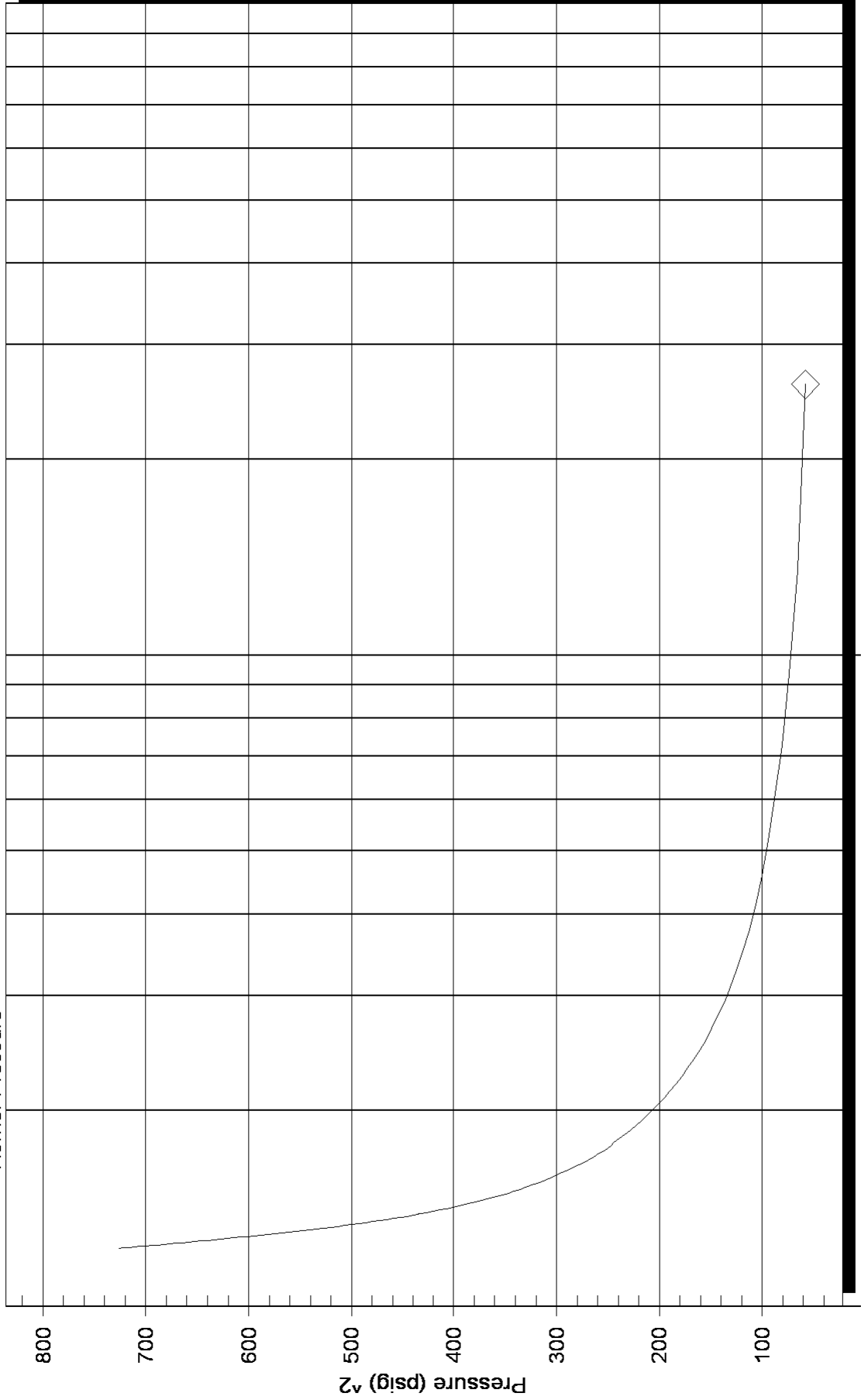






### Homer Plot

Horner Pressure



Horner Time: (Twf + dt) / dt

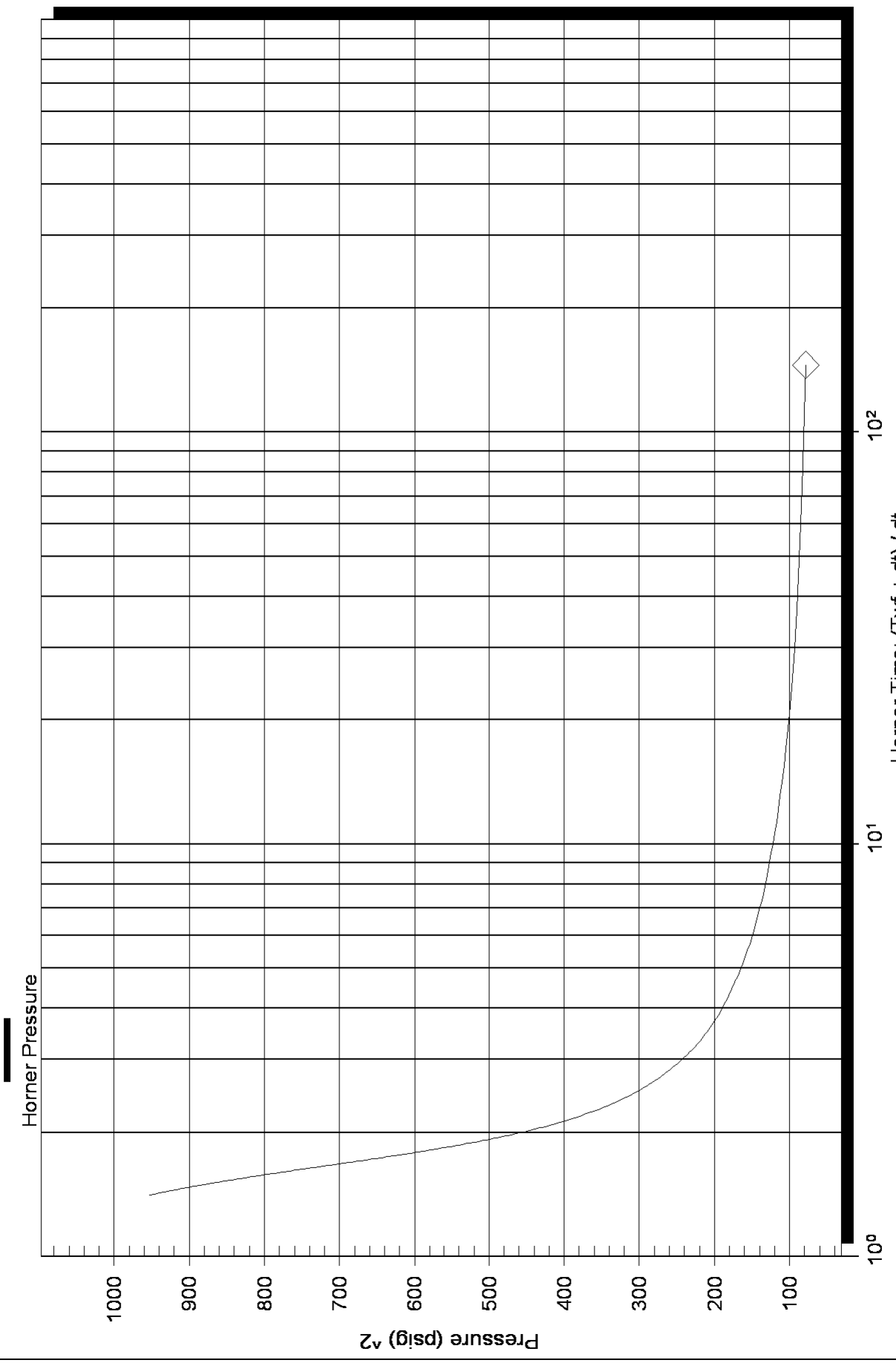
Slope (m) : kpa/log cycle

P\* :

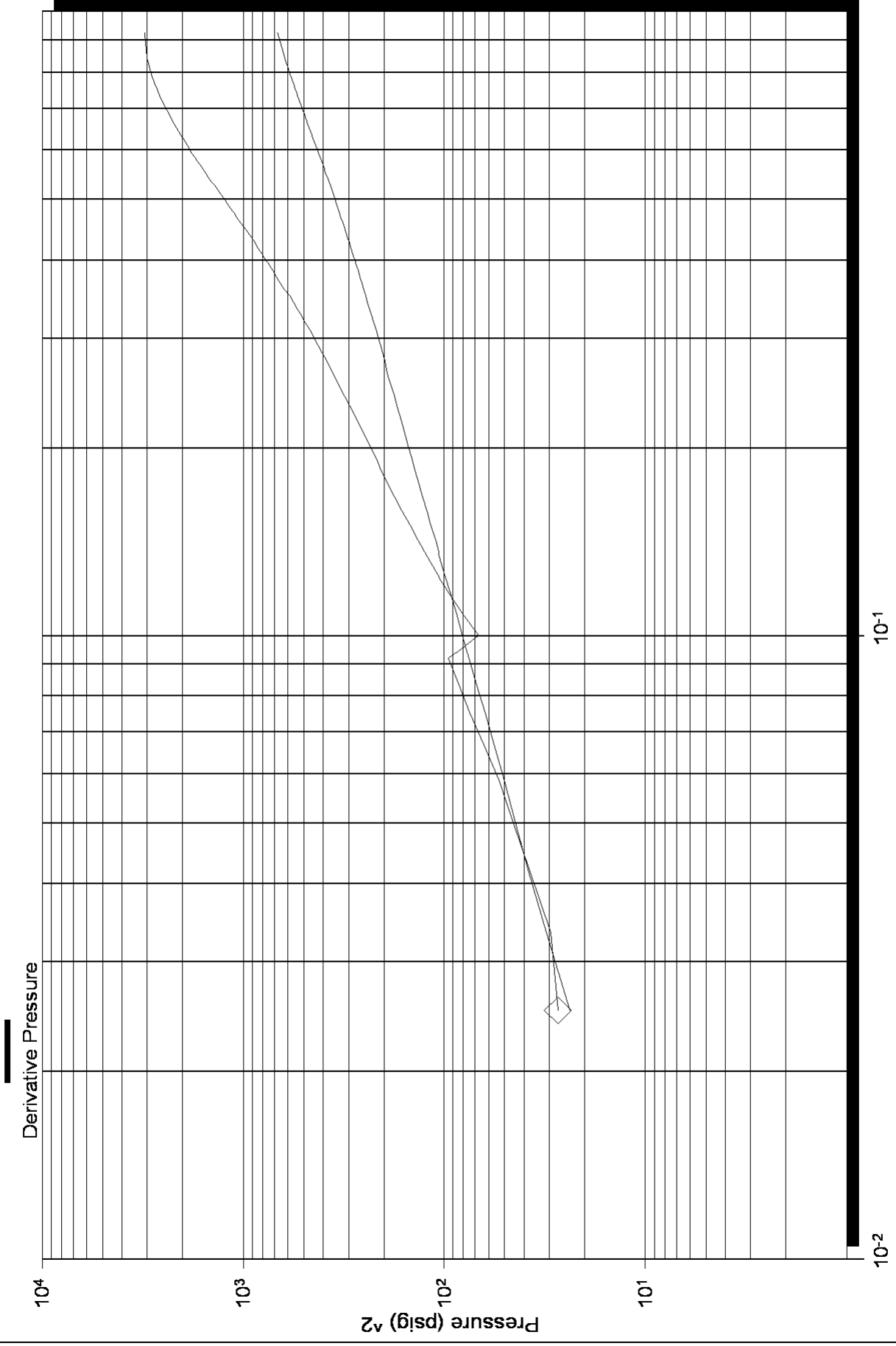
Serial Number: 8319 (Inside)

Flow Cycle: 1

# Homer Plot



# Log-Log and Pseudo-Derivative



# Log-Log and Pseudo-Derivative

