



DRILL STEM TEST REPORT

Prepared For: **Samuel Gary, Jr. & Associates**

1515 Wynkoop St. Ste # 700
Denver, CO 80202

ATTN: John Rakowski

Haddon #3-5

5/19S/10W-Rice

Start Date: 2011.10.27 @ 14:24:10

End Date: 2011.10.27 @ 21:32:10

Job Ticket #: 45269 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.11.07 @ 14:52:59

Samuel Gary, Jr. & Associates
5/19S/10W-Rice
Haddon #3-5
DST # 1
Lansing J&K
2011.10.27



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Samuel Gary, Jr. & Associates

5/19S/10W-Rice

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ATTN: John Rakowski

Job Ticket: 45269

DST#: 1

Test Start: 2011.10.27 @ 14:24:10

GENERAL INFORMATION:

Formation: **Lansing J&K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:14:00

Time Test Ended: 21:32:10

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3165.00 ft (KB) To 3210.00 ft (KB) (TVD)

Reference Elevations: 1752.00 ft (KB)

Total Depth: 3440.00 ft (KB) (TVD)

1744.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8354 Inside

Press @ Run Depth: 23.10 psig @ 3168.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.10.27 End Date: 2011.10.27

Last Calib.: 2011.10.27

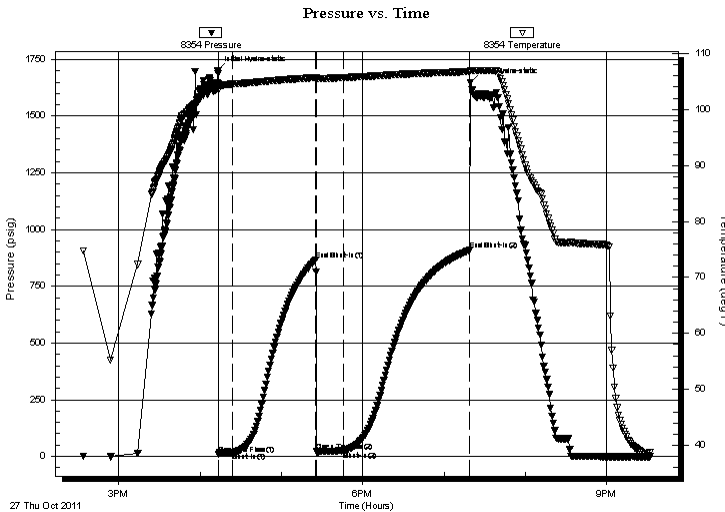
Start Time: 14:34:10 End Time: 21:32:10

Time On Btm: 2011.10.27 @ 16:13:10

Time Off Btm: 2011.10.27 @ 19:19:40

TEST COMMENT: IF-Few initial bubbles. No blow.
ISI-No Return.
FF-Surging w eak surface blow @ 3 minutes.
FSI-No Return. Times- 10-60-20-90

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1701.39	104.52	Initial Hydro-static
1	9.92	103.52	Open To Flow (1)
11	18.11	104.55	Shut-In(1)
72	865.28	105.68	End Shut-In(1)
73	21.19	105.51	Open To Flow (2)
93	23.10	105.69	Shut-In(2)
186	908.46	106.76	End Shut-In(2)
187	1648.66	106.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100%Mud	0.02

Gas Rates

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



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TOOL DIAGRAM

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Job Ticket: 45269

DST#: 1

ATTN: John Rakowski

Test Start: 2011.10.27 @ 14:24:10

Tool Information

Drill Pipe:	Length: 3130.00 ft	Diameter: 3.80 inches	Volume: 43.91 bbl	Tool Weight: 3500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 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: 5000.00 lb
			Total Volume: 44.06 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3165.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	276.00 ft			
Tool Length:	306.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Recorder	0.00	8650	Fluid	3135.00	
Change Over Sub	1.00			3136.00	
Shut In Tool	5.00			3141.00	
Sampler	2.00			3143.00	
Hydraulic tool	5.00			3148.00	
Jars	5.00			3153.00	
Safety Joint	3.00			3156.00	
Packer	5.00			3161.00	30.00 Bottom Of Top Packer
Packer	4.00			3165.00	
Stubb	1.00			3166.00	
Perforations	2.00			3168.00	
Recorder	0.00	8354	Inside	3168.00	
Recorder	0.00	8520	Outside	3168.00	
Perforations	37.00			3205.00	
Blank Off Sub	1.00			3206.00	276.00 Tool Interval
Packer	5.00			3211.00	
Change Over Sub	1.00			3212.00	
Recorder	0.00	8653	Below	3212.00	
Drill Pipe	220.00			3432.00	
Change Over Sub	1.00			3433.00	
Perforations	5.00			3438.00	
Bullnose	3.00			3441.00	1000305.00 Bottom Packers & Anchor
Total Tool Length:	306.00				



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FLUID SUMMARY

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Haddon #3-5

Job Ticket: 45269

DST#: 1

ATTN: John Rakowski

Test Start: 2011.10.27 @ 14:24:10

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	100%Mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

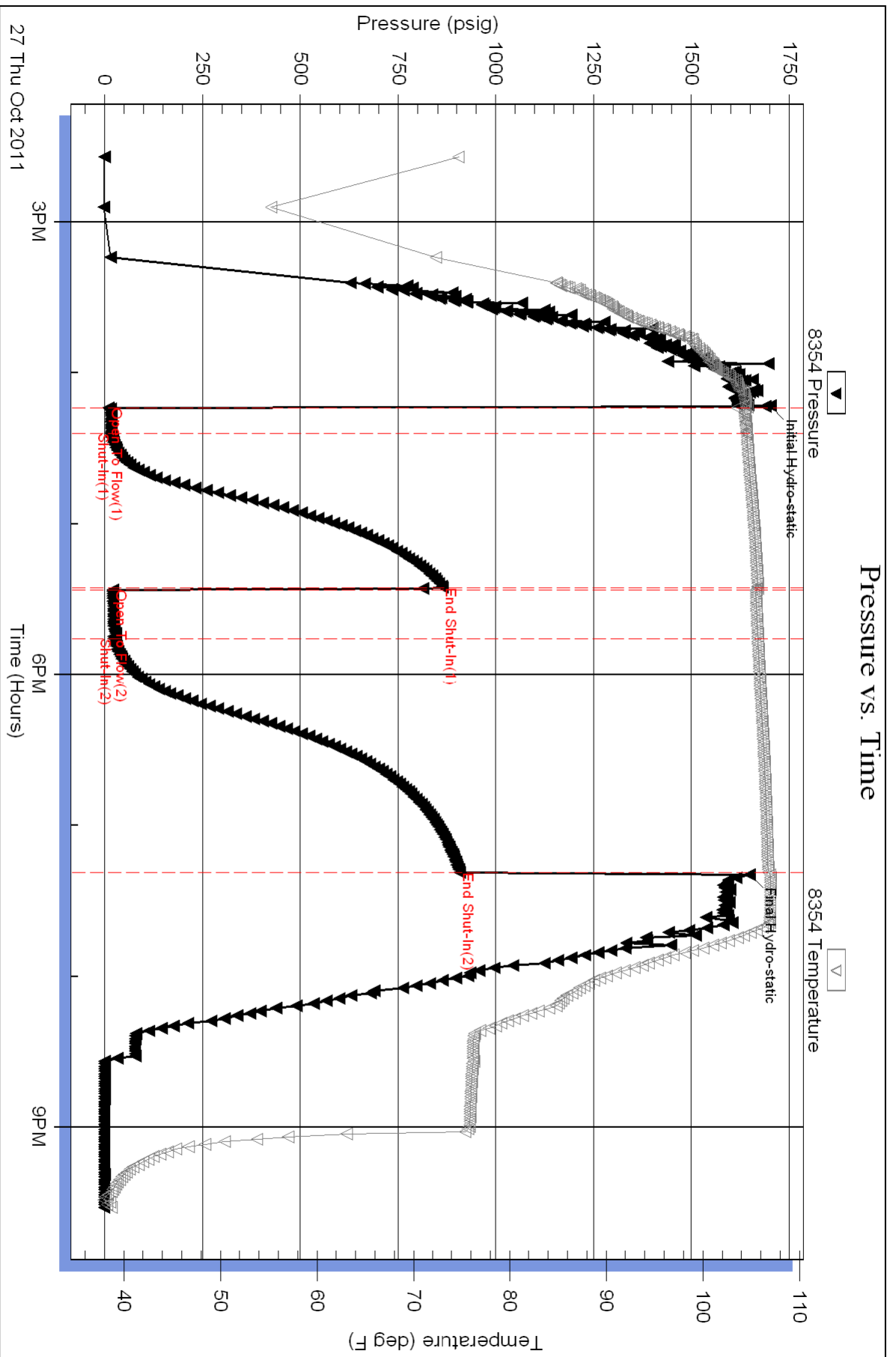
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler- 4000 ML Mud with Oil specs. 75# Pressure.

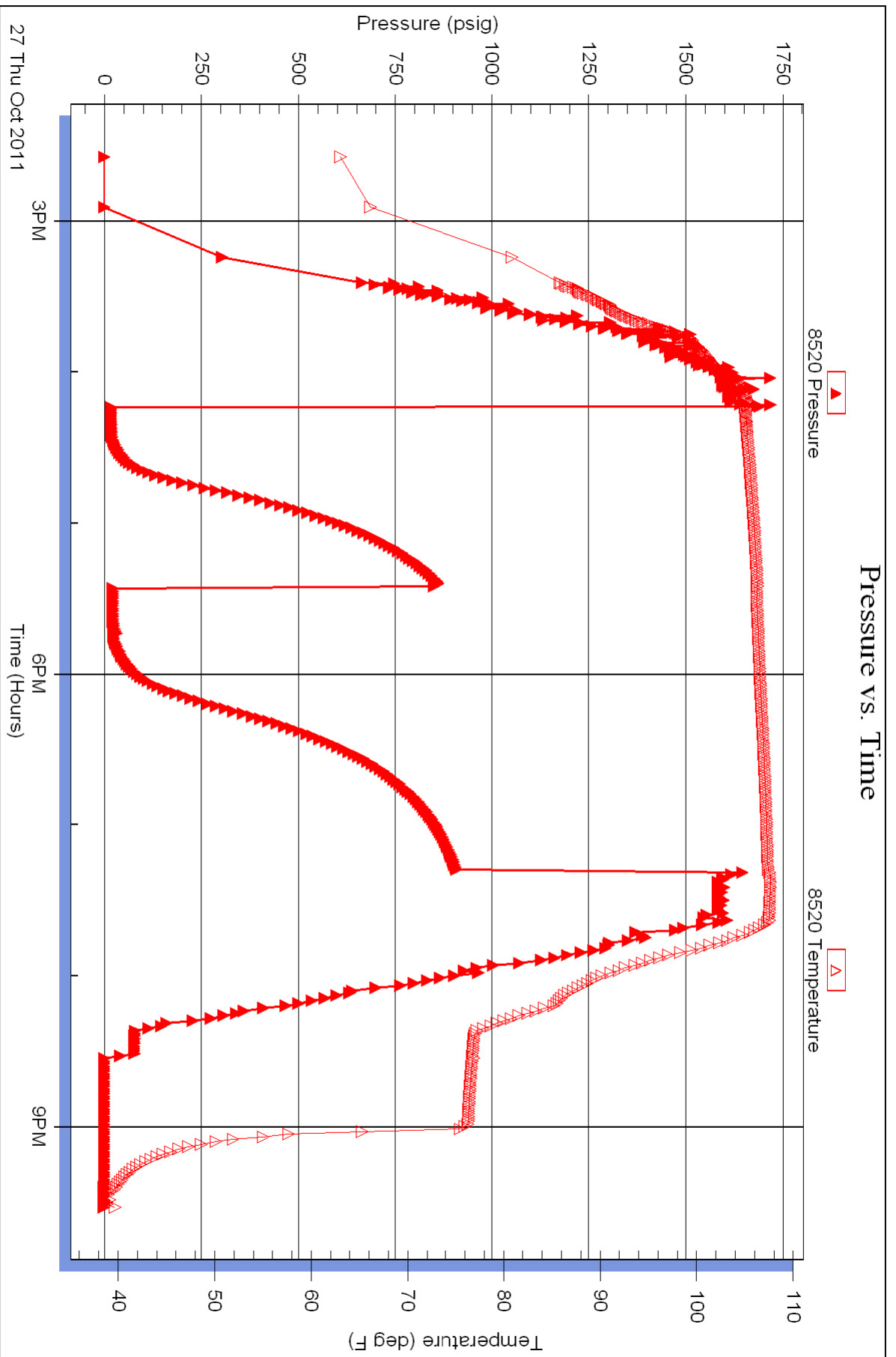


Serial #: 8520

Outside Samuel Gary, Jr. & Associates

Haddon #3-5

DST Test Number: 1



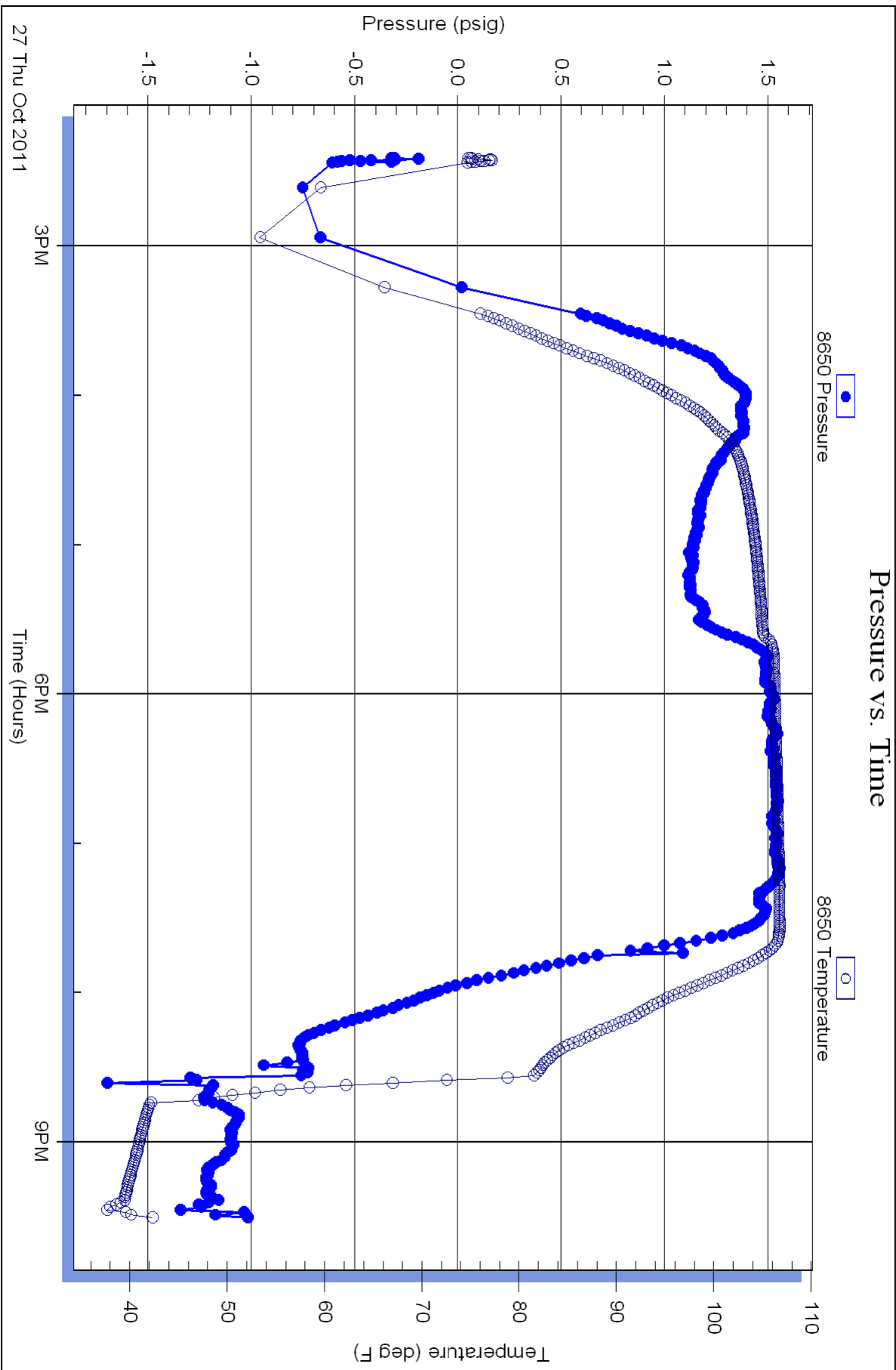
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Fluid

Samuel Gary, Jr. & Associates

Haddon #3-5

DST Test Number: 1

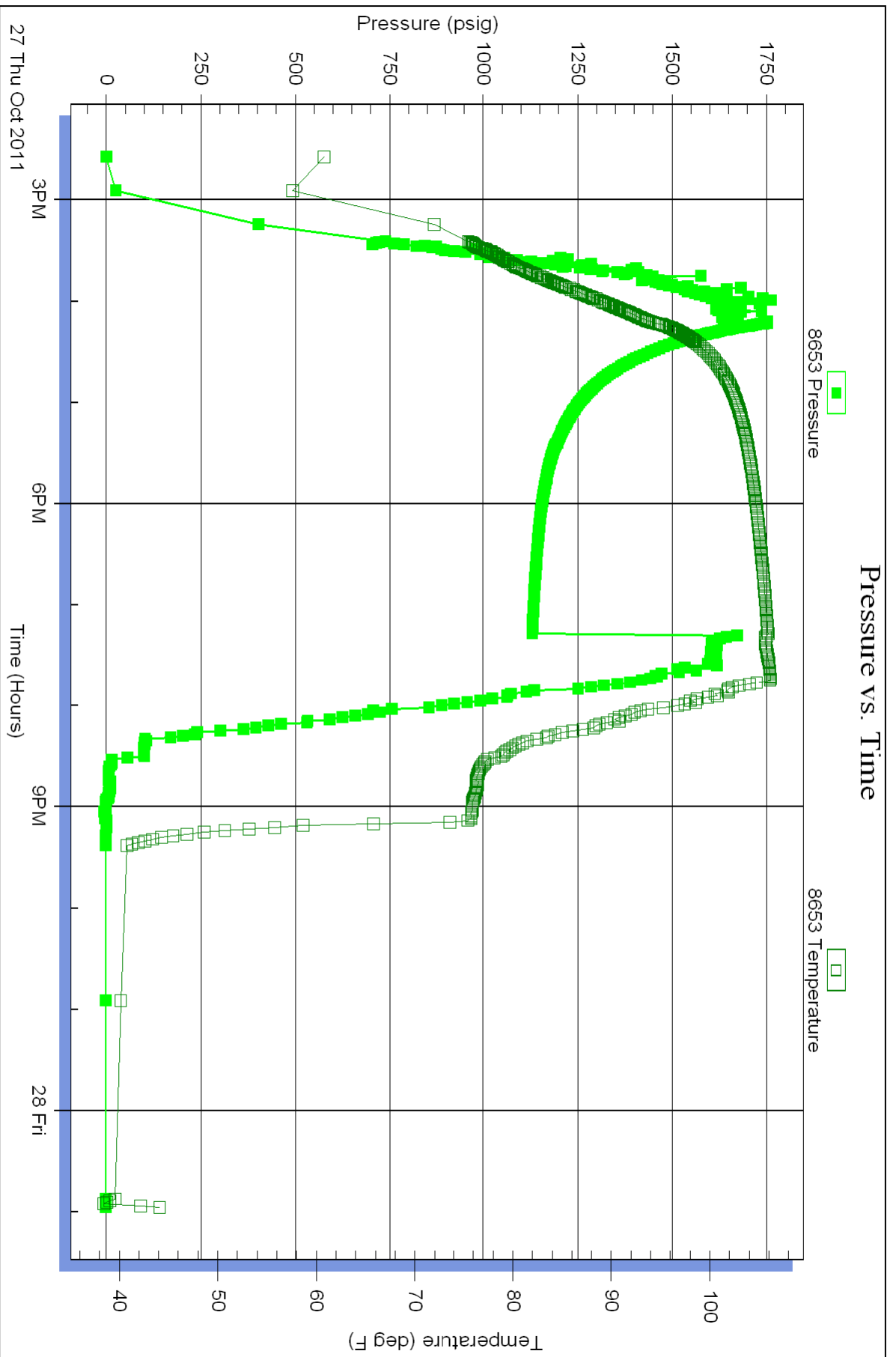


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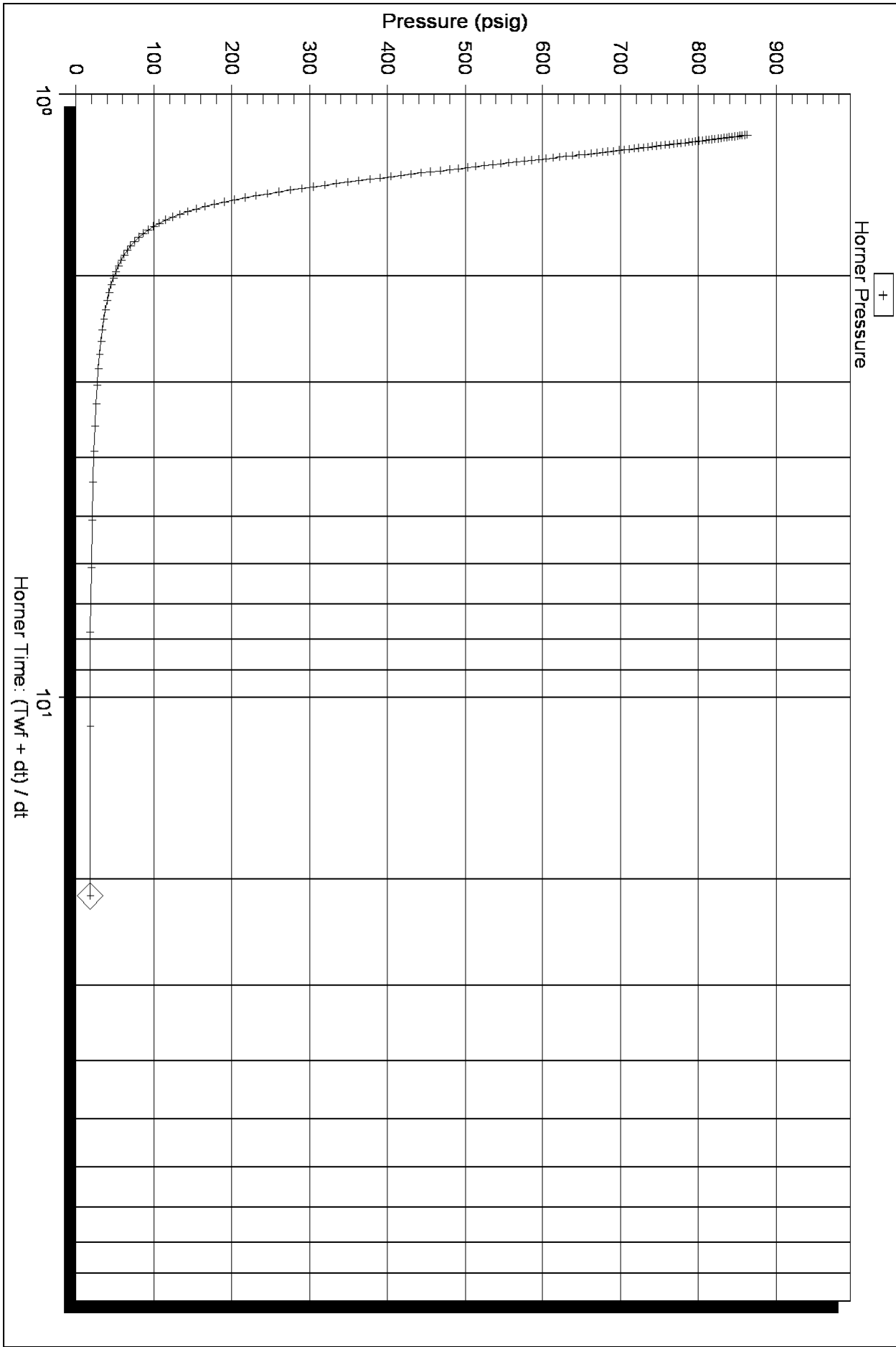
Below (Stratton) Gary, Jr. & Associates

Haddon #3-5

DST Test Number: 1



Horner Plot



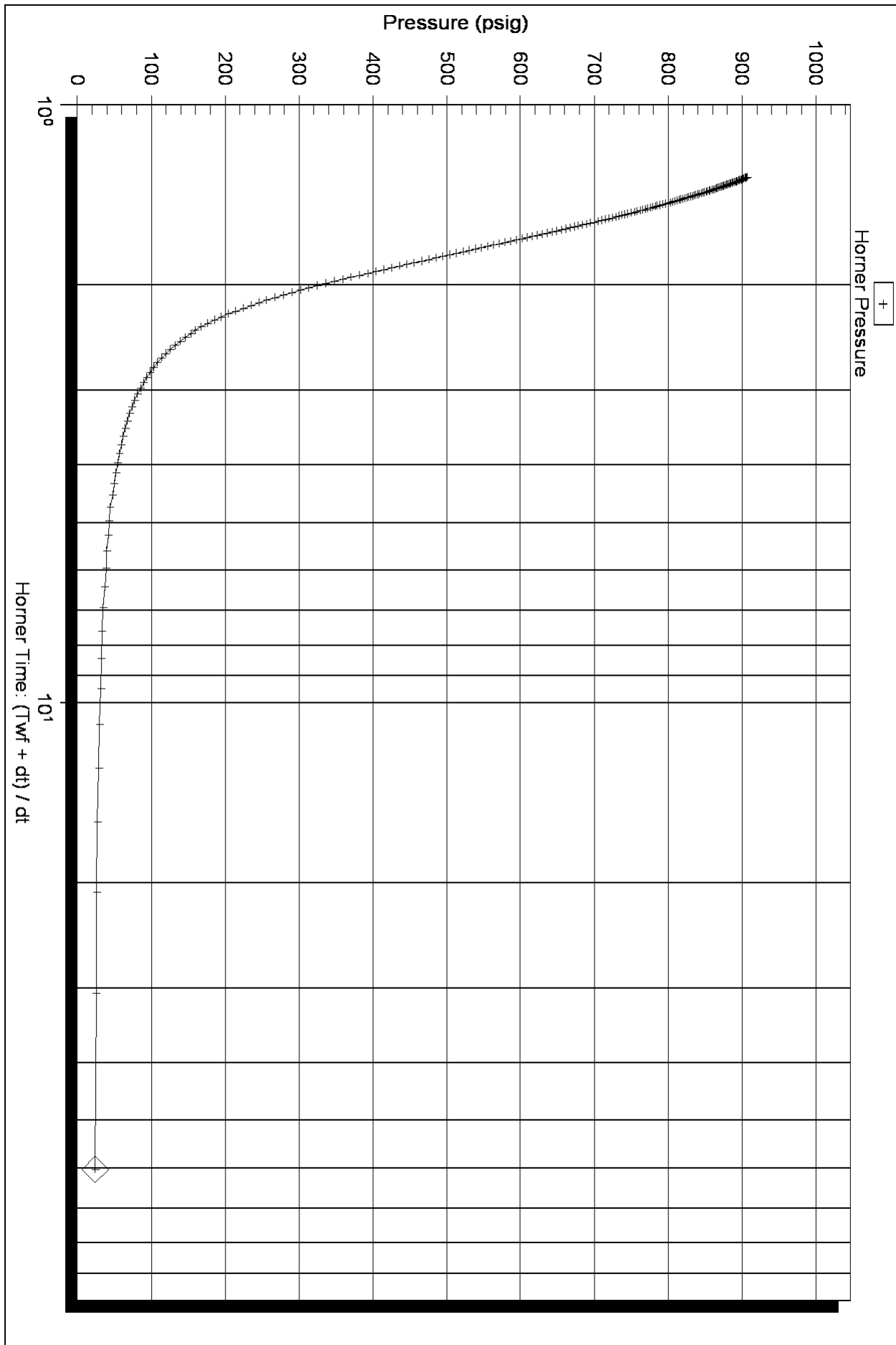
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P* :

Slope (m) : kpa/log cycle

Flow Cycle: 1

Horner Plot



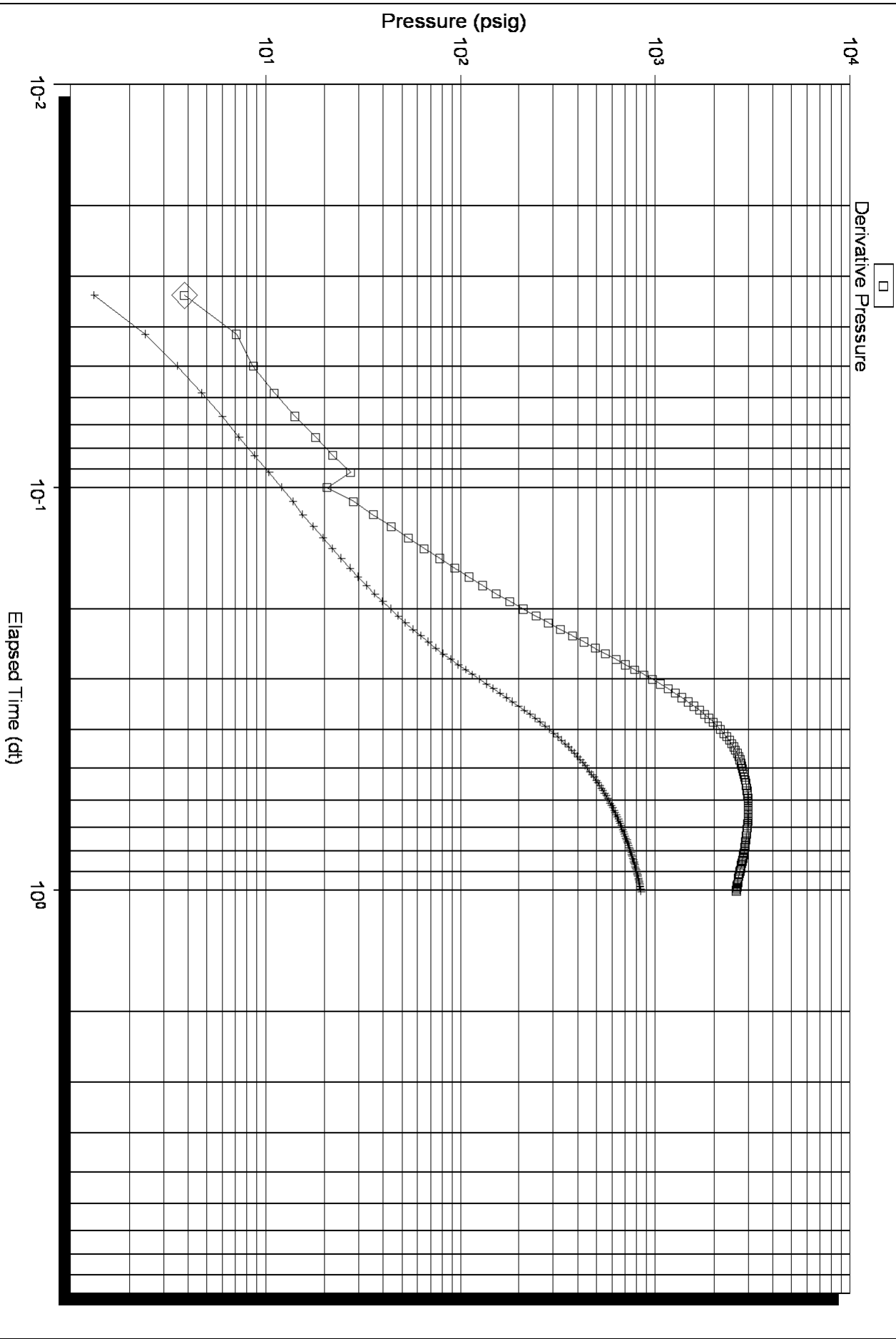
Serial Number: 8354 (Inside)

P* :

Slope (m) : kpa/log cycle

Flow Cycle: 2

Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Derivative

