



DRILL STEM TEST REPORT

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

1515 Wynkoop
Suite 700
Denver, CO. 80202

ATTN: Tom Fertal

Nilhas Trust

30-11s-21w-Trego

Start Date: 2012.04.15 @ 21:42:09

End Date: 2012.04.16 @ 04:01:09

Job Ticket #: 47321 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
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Printed: 2012.04.16 @ 10:37:47



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

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DST#: 1

Test Start: 2012.04.15 @ 21:42:09

GENERAL INFORMATION:

Formation: **Lansing A-C**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 23:21:54

Time Test Ended: 04:01:09

Test Type: Conventional Bottom Hole (Initial)

Tester: Jason McLemore

Unit No: 54

Interval: 3565.00 ft (KB) To 3623.00 ft (KB) (TVD)

Reference Elevations: 2282.00 ft (KB)

Total Depth: 3623.00 ft (KB) (TVD)

2274.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8366 Inside

Press @ Run Depth: 68.11 psig @ 3600.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.15

End Date:

2012.04.16

Last Calib.: 2012.04.16

Start Time: 21:42:11

End Time:

04:01:09

Time On Btm: 2012.04.15 @ 23:21:39

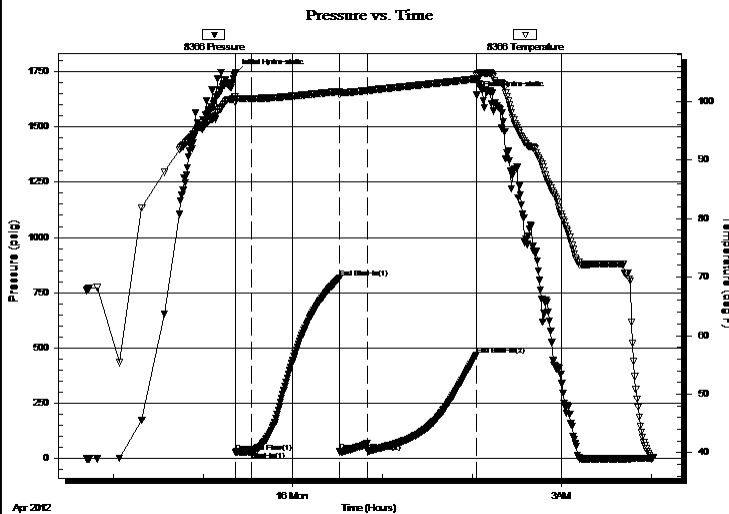
Time Off Btm: 2012.04.16 @ 02:03:09

TEST COMMENT: IFP-Weak Blow, Built to 1/2"

ISI-Dead

FFP-Dead

FSI-Dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1742.36	100.85	Initial Hydro-static
1	27.57	99.78	Open To Flow (1)
11	31.06	100.50	Shut-In(1)
70	814.91	101.70	End Shut-In(1)
70	31.05	101.16	Open To Flow (2)
89	68.11	101.87	Shut-In(2)
162	467.90	103.84	End Shut-In(2)
162	1642.77	104.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	VSOCM-1%O-99%M	0.02

Gas Rates

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



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TOOL DIAGRAM

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DST#: 1

Test Start: 2012.04.15 @ 21:42:09

Tool Information

Drill Pipe:	Length: 3516.00 ft	Diameter: 3.80 inches	Volume: 49.32 bbl	Tool Weight: 2000.00 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: 58000.00 lb
			Total Volume: 49.47 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3565.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	94.00 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			3530.00	
Change Over Sub	1.00			3531.00	
Recorder	0.00	8289	Fluid	3531.00	
Change Over Sub	5.00			3536.00	
Shut In Tool	5.00			3541.00	
Sampler	2.00			3543.00	
Hydraulic tool	5.00			3548.00	
Jars	5.00			3553.00	
Safety Joint	2.00			3555.00	
Packer	5.00			3560.00	36.00 Bottom Of Top Packer
Packer	5.00			3565.00	
Stubb	1.00			3566.00	
Perforations	1.00			3567.00	
Change Over Sub	1.00			3568.00	
Blank Spacing	31.00			3599.00	
Change Over Sub	1.00			3600.00	
Recorder	0.00	8366	Inside	3600.00	
Recorder	0.00	8789	Outside	3600.00	
Perforations	20.00			3620.00	
Bullnose	3.00			3623.00	58.00 Bottom Packers & Anchor

Total Tool Length: 94.00



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FLUID SUMMARY

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Job Ticket: 47321

DST#: 1

Test Start: 2012.04.15 @ 21:42:09

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 7.99 cm³

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	VSOCM-1%O-99%M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

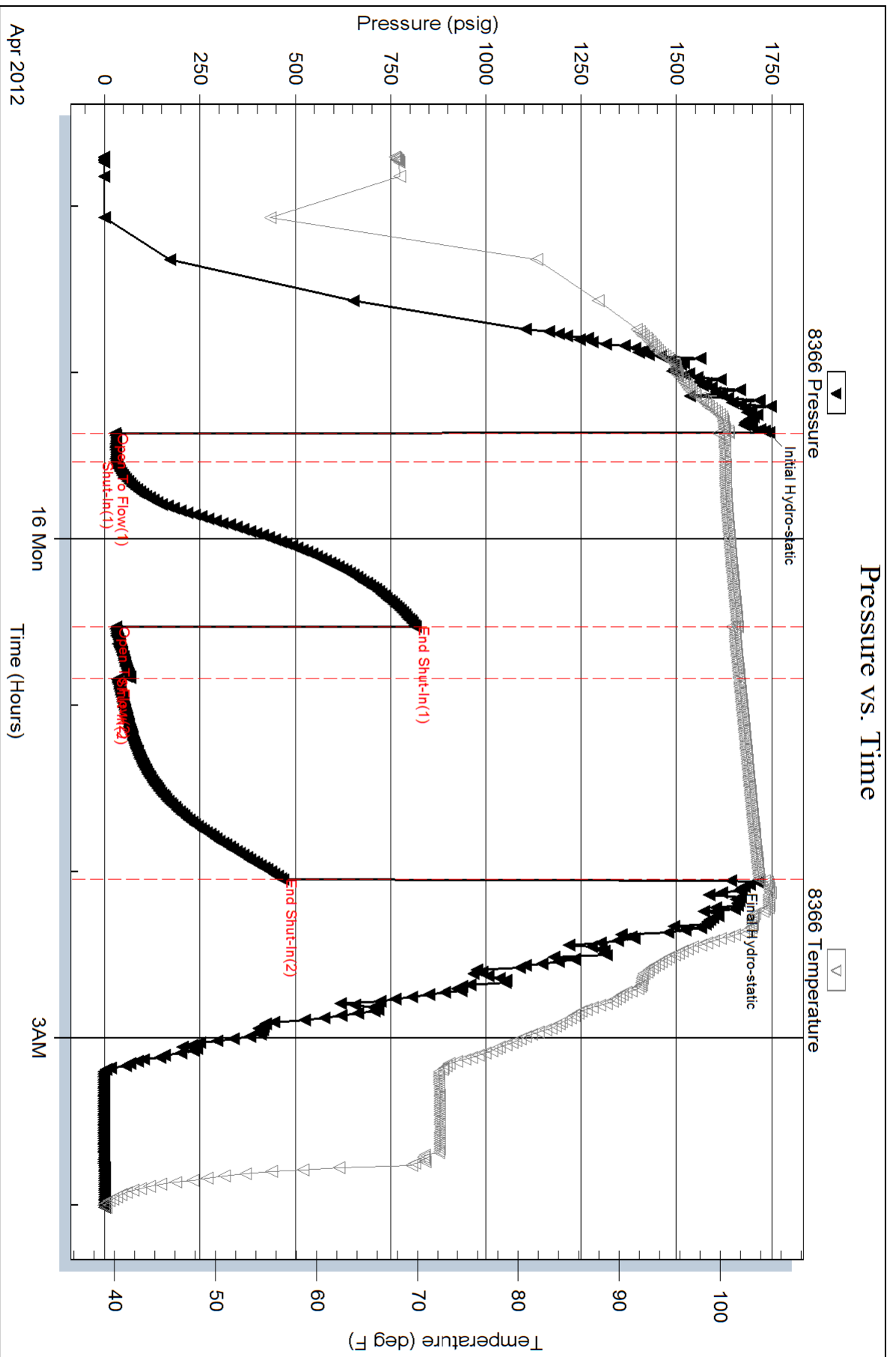
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler-55#,20 MLMud, 20ml Oil,1880ml Mud

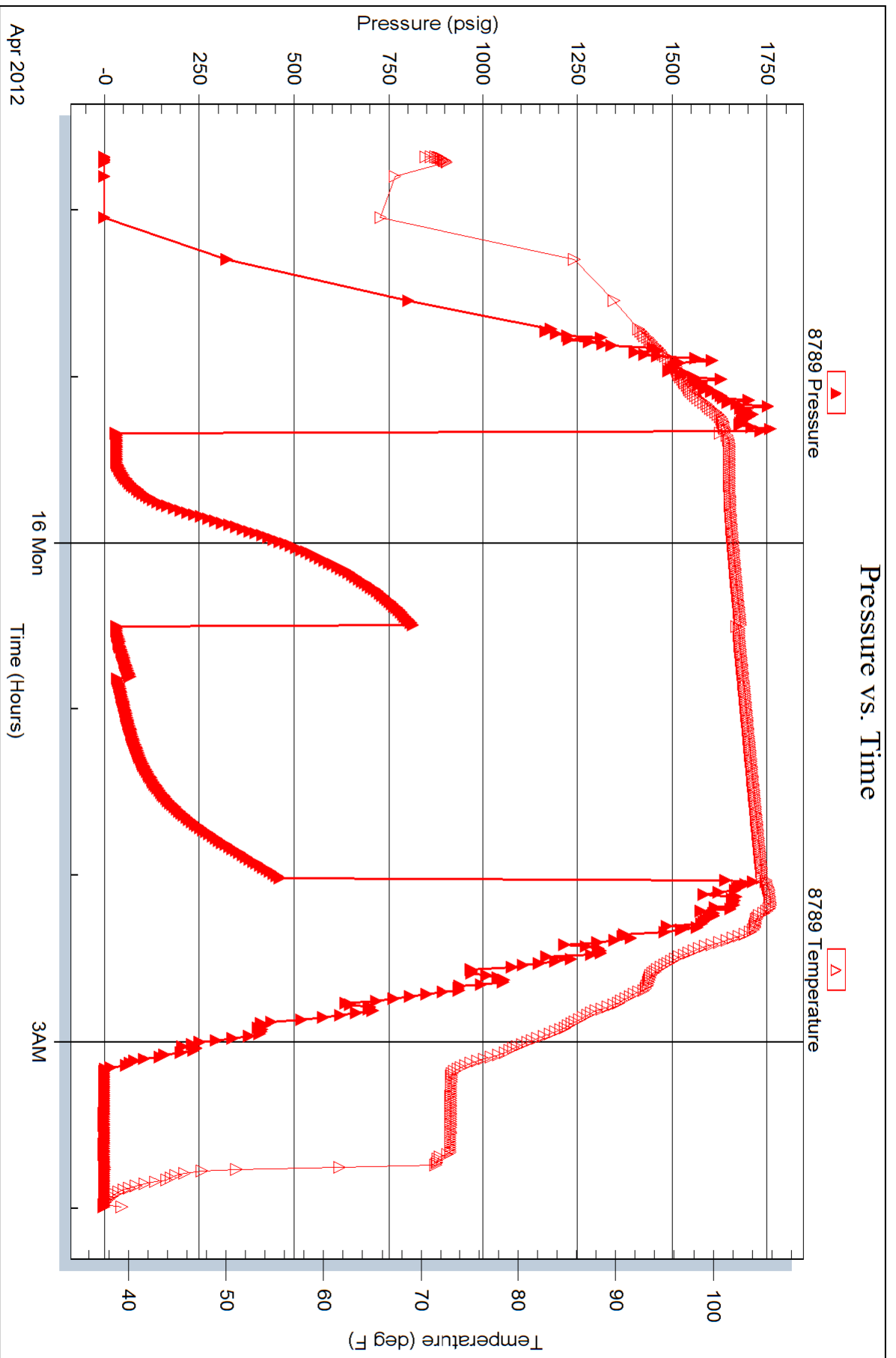


Serial #: 8789

Outside Sam Gary Jr. & Associates

Nilhas Trust

DST Test Number: 1



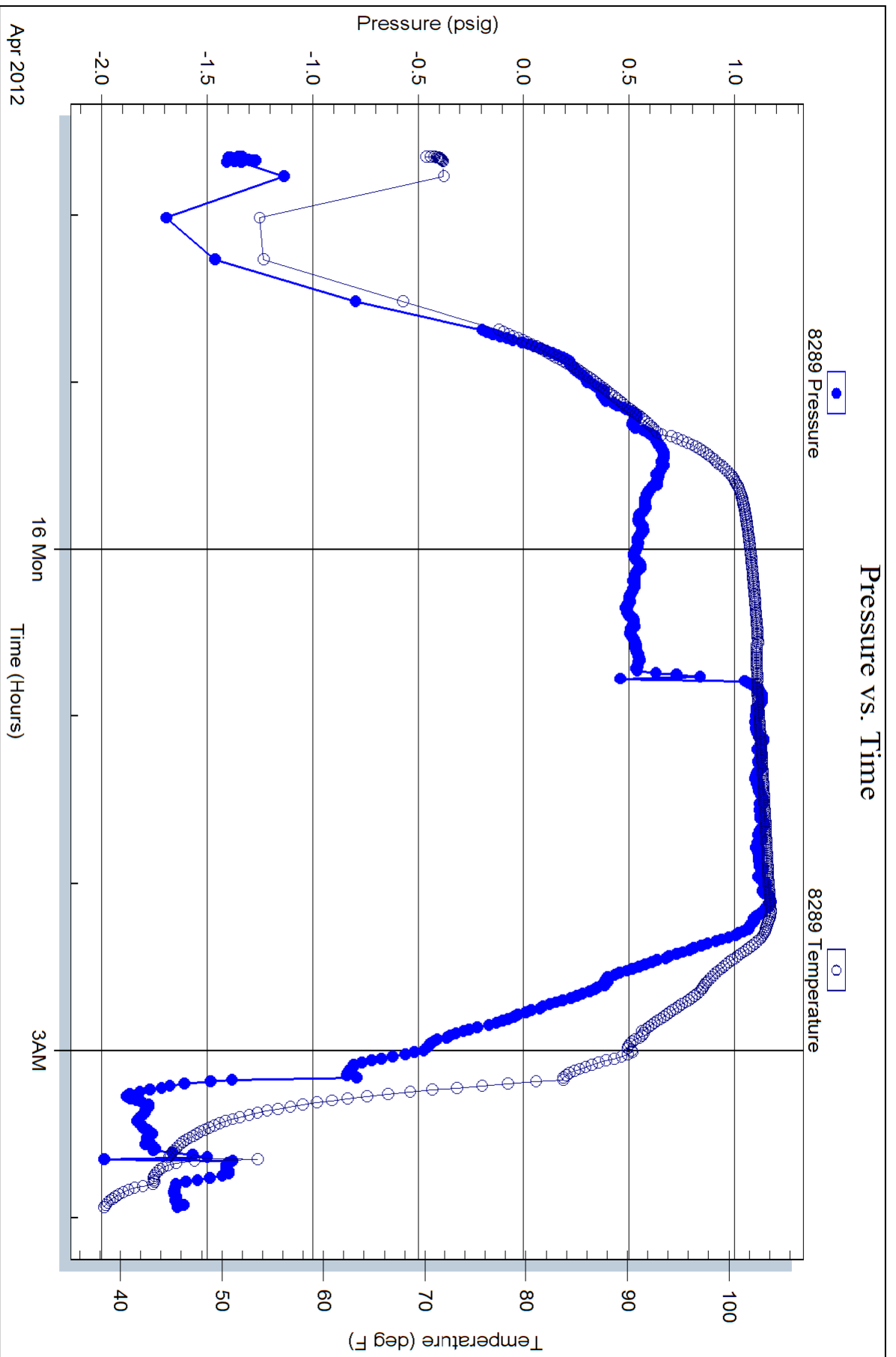
Serial #: 8289

Fluid

Sam Gary Jr. & Associates

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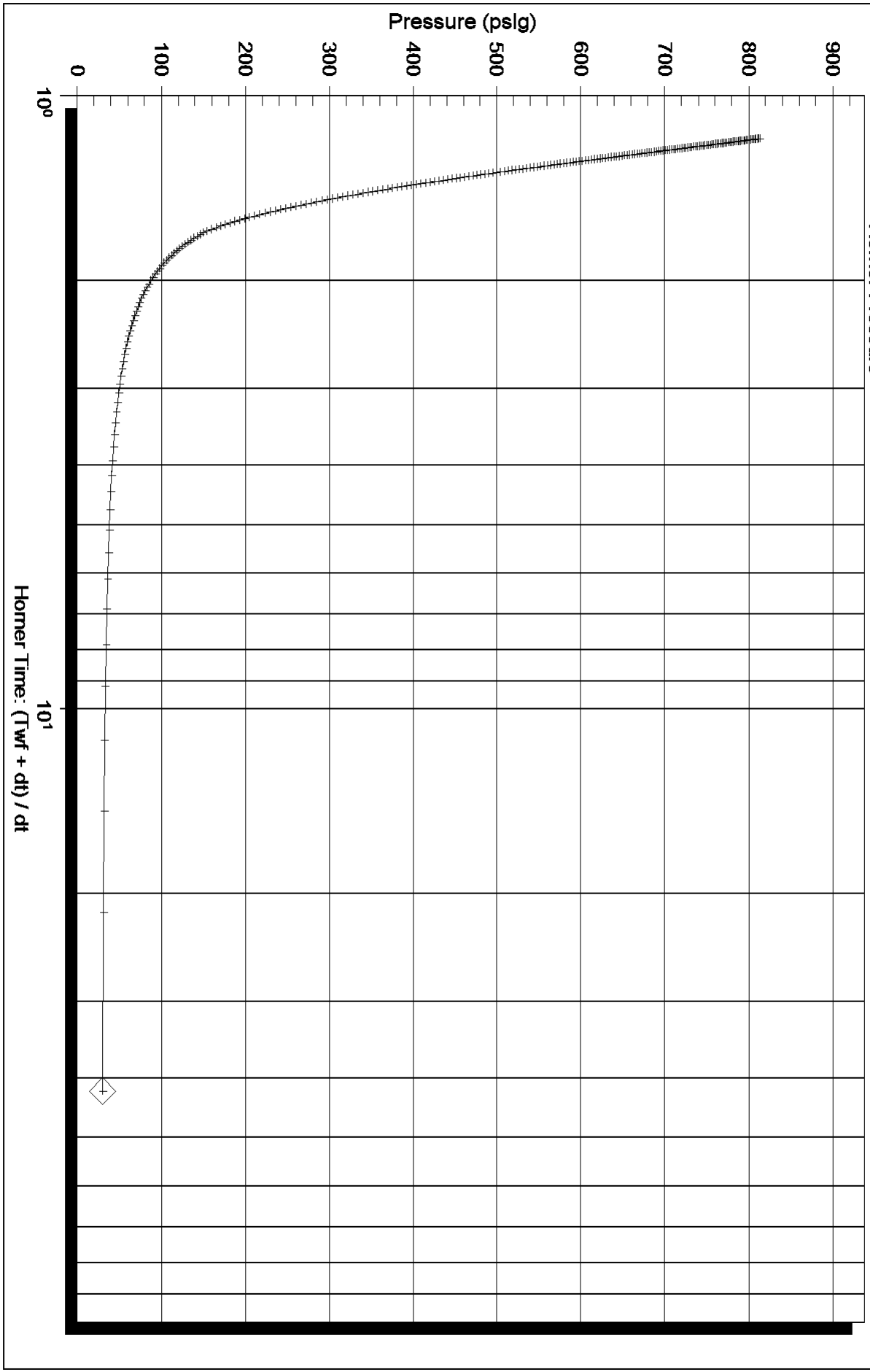
DST Test Number: 1



Horner Plot

Horner Pressure

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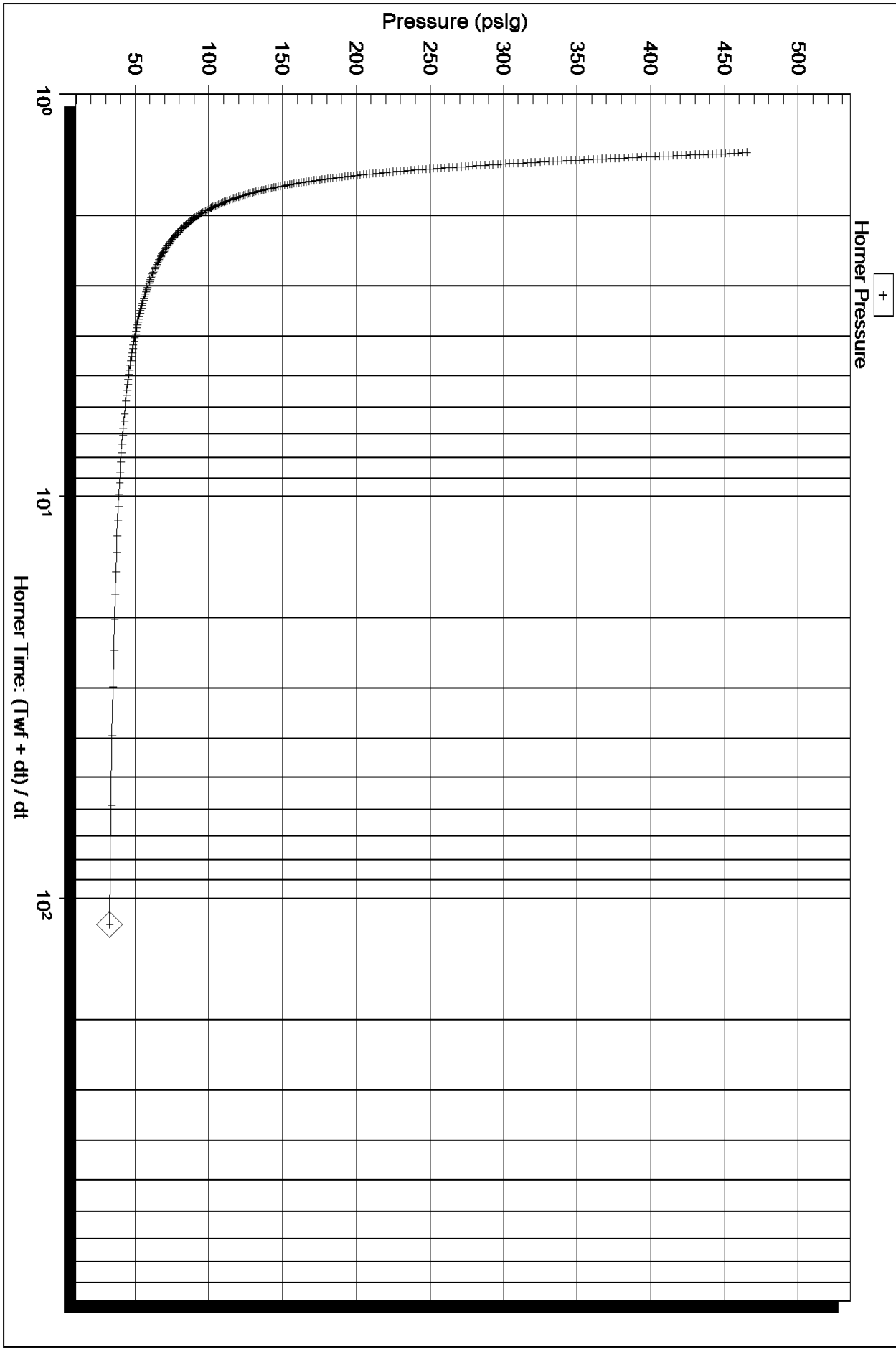
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P* :

Slope (m) : kpa/log cycle

Flow Cycle: 1

Horner Plot



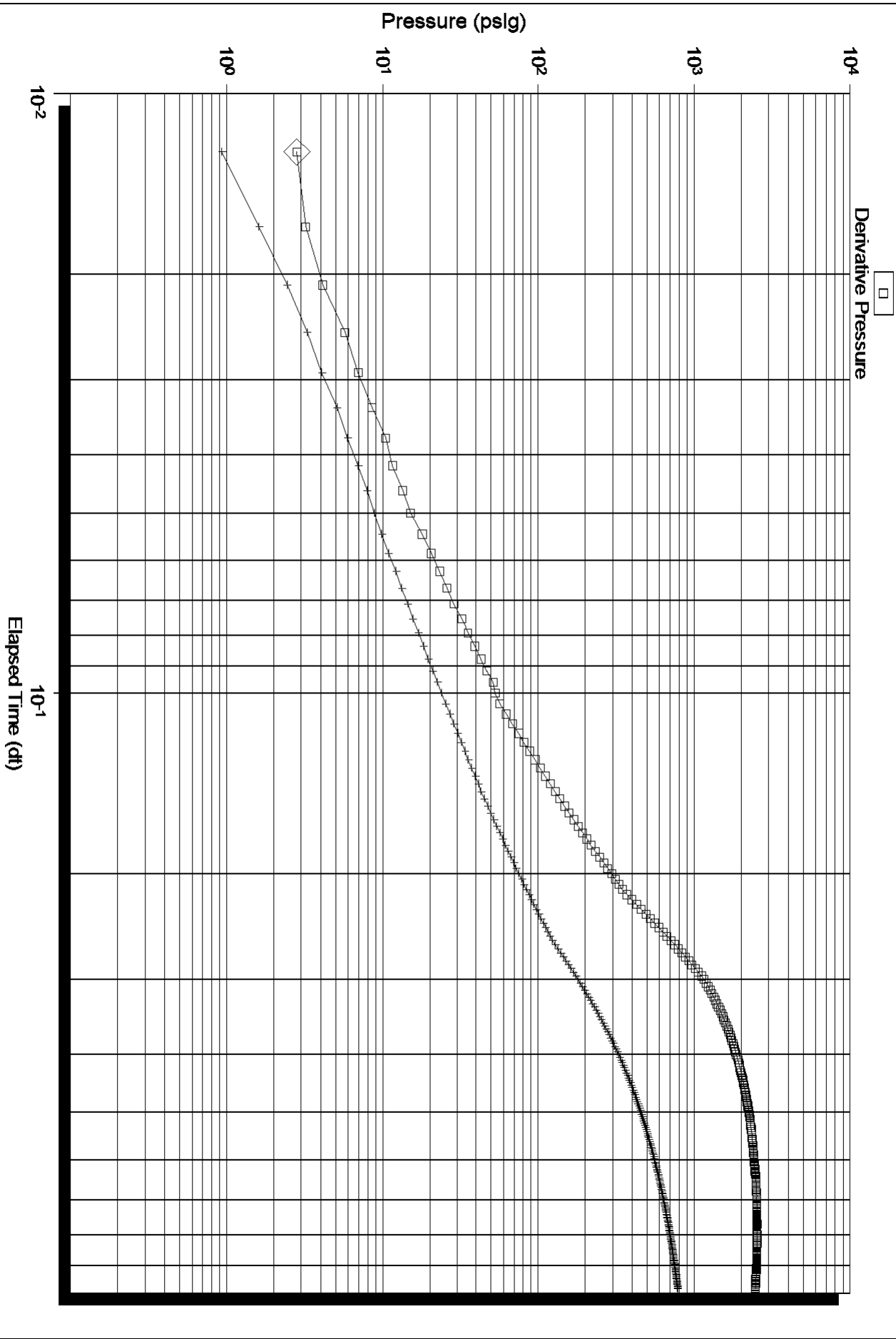
Serial Number: 8366 (Inside)

P* :

Slope (m) : kpa/log cycle

Flow Cycle: 2

Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Derivative

