



DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr. and Associates, Inc.**

1515 Wynkoop St. Ste 700
Denver, CO 80202

ATTN: Claton Camozzi

15-16-16 Rush, Ks

Scheuerman-Hopkins et al 1-15

Start Date: 2011.07.30 @ 03:53:08

End Date: 2011.07.30 @ 11:28:38

Job Ticket #: 44157 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



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TESTING, INC.**

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Job Ticket: 44157

DST#: 2

ATTN: Claton Camozzi

Test Start: 2011.07.30 @ 03:53:08

GENERAL INFORMATION:

Formation: **LKC "C-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:38:38

Time Test Ended: 11:28:38

Test Type: Conventional Bottom Hole

Tester: Brian Fairbank

Unit No: 41

Interval: 3253.00 ft (KB) To 3283.00 ft (KB) (TVD)

Reference Elevations: 1943.00 ft (KB)

Total Depth: 3283.00 ft (KB) (TVD)

1935.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8372 Inside

Press @ Run Depth: 81.70 psig @ 3255.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.07.30

End Date:

2011.07.30

Last Calib.:

2011.07.30

Start Time: 03:53:09

End Time:

11:28:38

Time On Btm:

2011.07.30 @ 05:37:38

Time Off Btm:

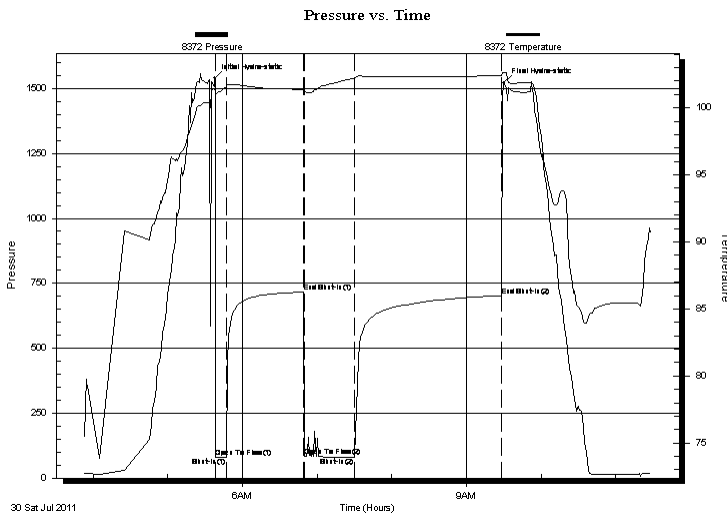
2011.07.30 @ 09:30:08

TEST COMMENT: 10 - IFP - weak blow throughout 1/4" - 1"

60 - ISI - no blow back

40 - FFP - no blow 18 min - 1/4"

120 - FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1539.22	101.34	Initial Hydro-static
1	81.54	100.91	Open To Flow (1)
10	80.69	101.59	Shut-In(1)
71	716.11	101.38	End Shut-In(1)
72	84.75	101.20	Open To Flow (2)
113	81.70	102.21	Shut-In(2)
231	701.64	102.40	End Shut-In(2)
233	1521.86	102.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	MW 70%W, 30%M	0.15
80.00	DRL MUD 100%	1.12

Gas Rates

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



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Total Depth: 3283.00 ft (KB) (TVD)

1935.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8365

Fluid

Press @ RunDepth: psig @ 3219.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.07.30

End Date:

2011.07.30

Last Calib.:

2011.07.30

Start Time:

03:53:52

End Time:

11:28:51

Time On Btm:

Time Off Btm:

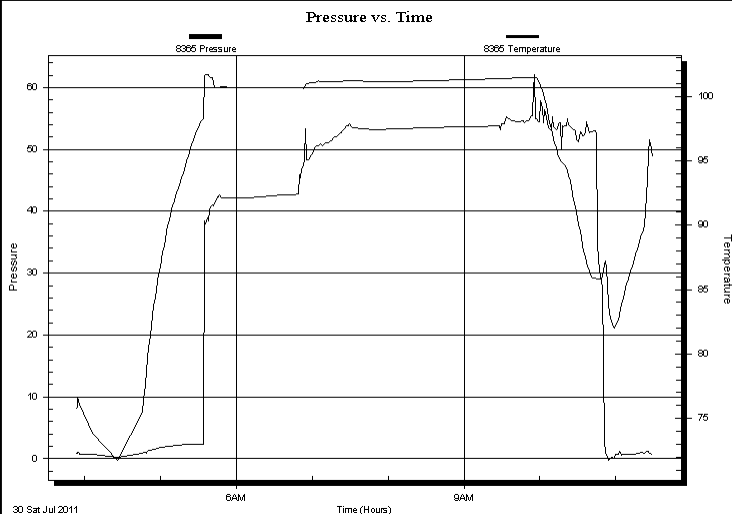
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Recovery

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TOOL DIAGRAM

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Job Ticket: 44157

DST#: 2

ATTN: Claton Camozzi

Test Start: 2011.07.30 @ 03:53:08

Tool Information

Drill Pipe:	Length: 3220.00 ft	Diameter: 3.80 inches	Volume: 45.17 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 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: 65000.00 lb
			Total Volume: 45.32 bbl	Tool Chased 15.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3253.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	64.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Recorder	0.00	8365	Fluid	3219.00	
Blank Spacing	5.00			3224.00	
Shut In Tool	5.00			3229.00	
Sampler	2.00			3231.00	
Hydraulic tool	5.00			3236.00	
Jars	5.00			3241.00	
Safety Joint	2.00			3243.00	
Packer	5.00			3248.00	34.00 Bottom Of Top Packer
Packer	5.00			3253.00	
Stubb	1.00			3254.00	
Perforations	1.00			3255.00	
Recorder	0.00	8372	Inside	3255.00	
Recorder	0.00	8734	Outside	3255.00	
Perforations	25.00			3280.00	
Bullnose	3.00			3283.00	30.00 Bottom Packers & Anchor

Total Tool Length: 64.00



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FLUID SUMMARY

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DST#: 2

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Test Start: 2011.07.30 @ 03:53:08

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:

63000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
30.00	MW 70%W, 30%M	0.148
80.00	DRL MUD 100%	1.122

Total Length: 110.00 ft Total Volume: 1.270 bbl

Num Fluid Samples: 0

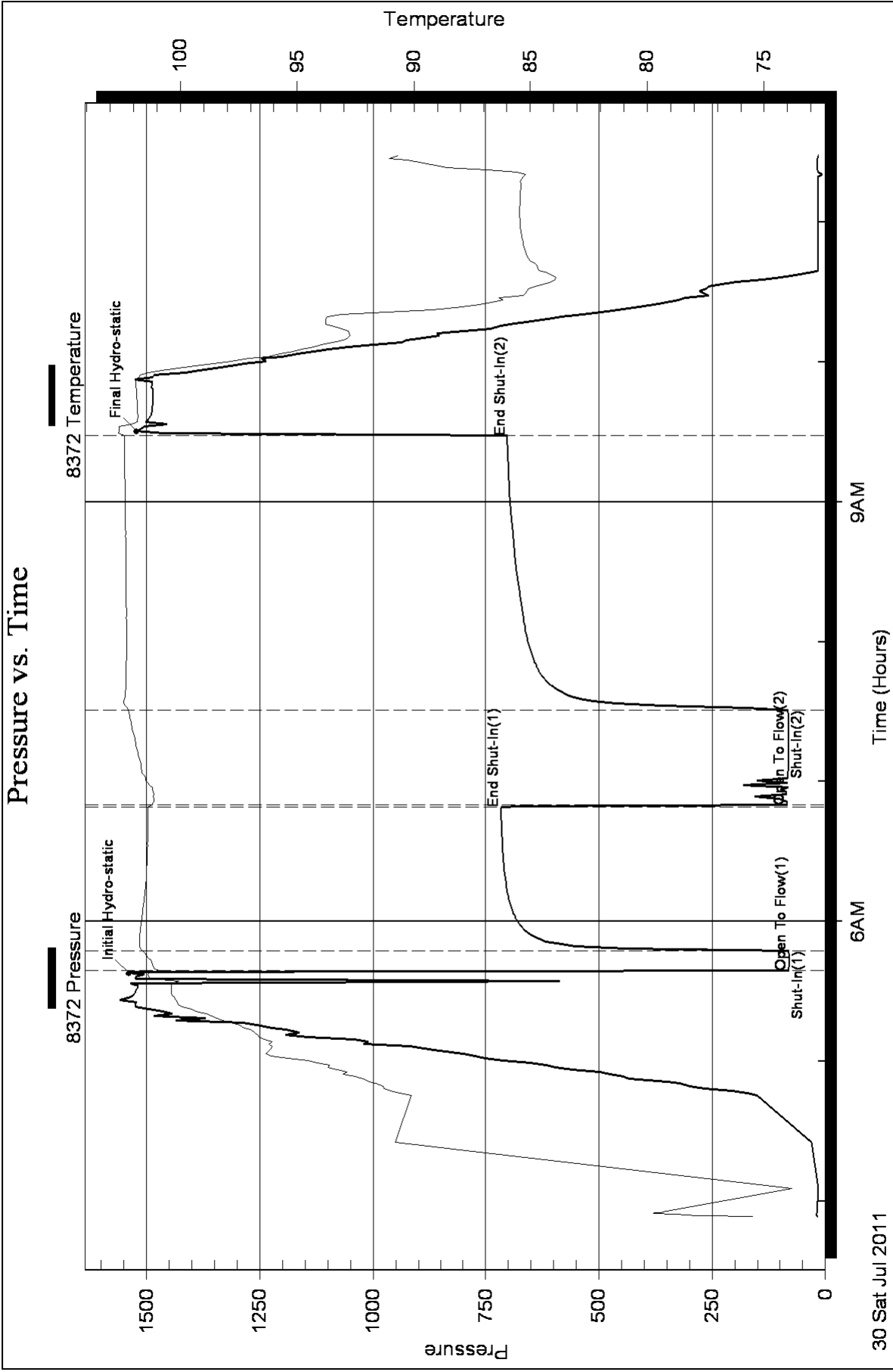
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: M 800 ML, W 3200 ML, 100 LBS



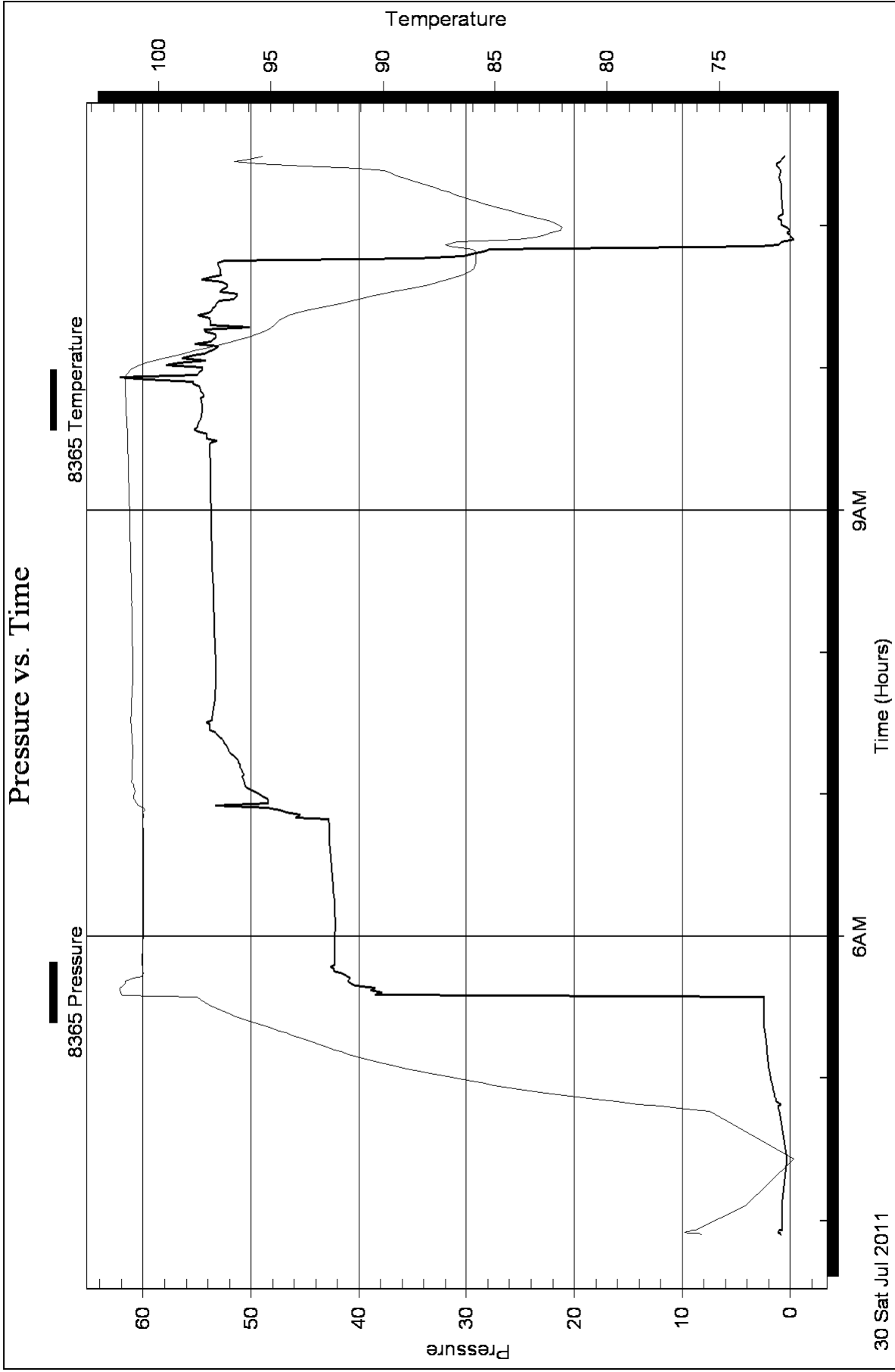
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Fluid

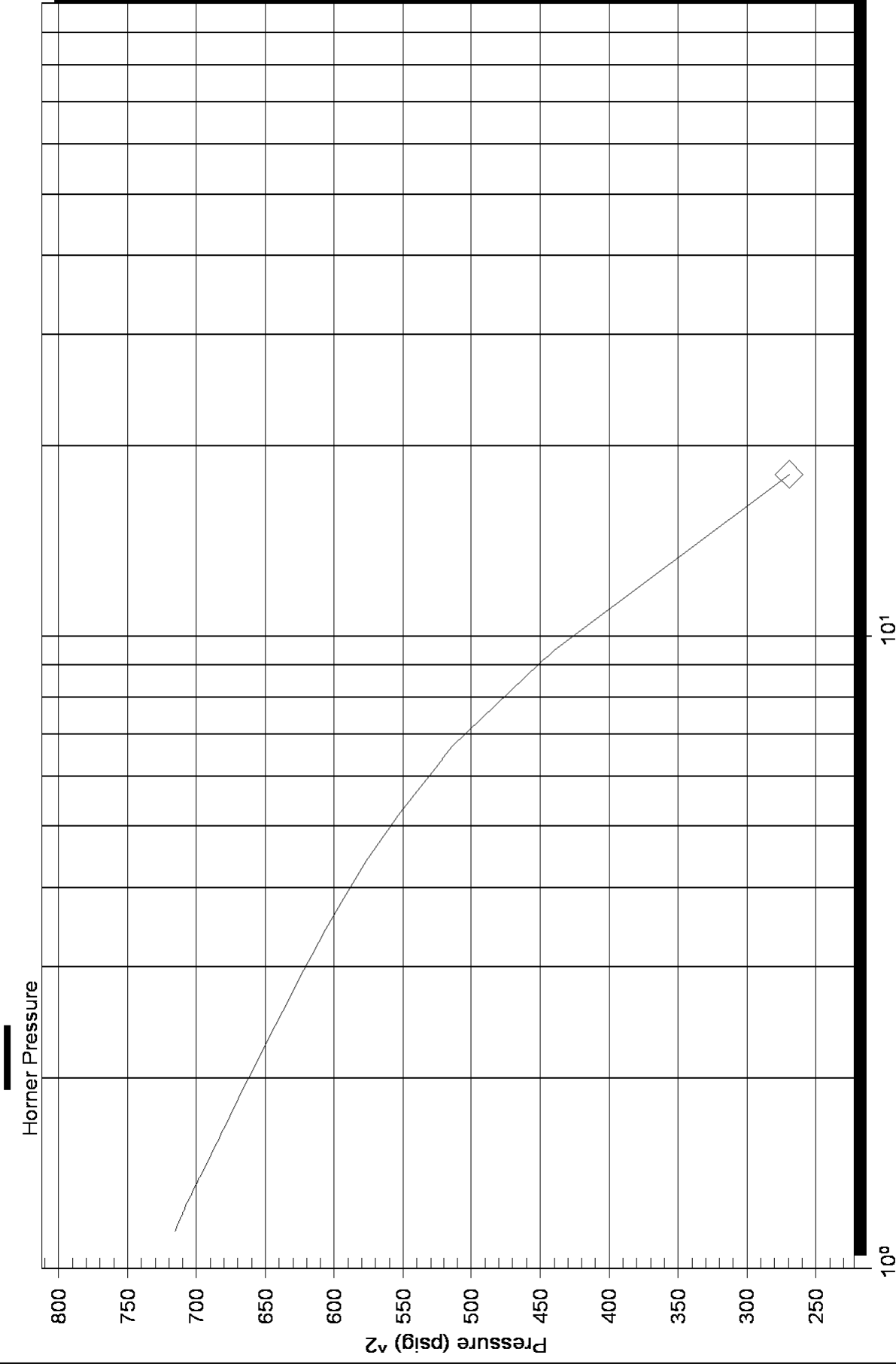
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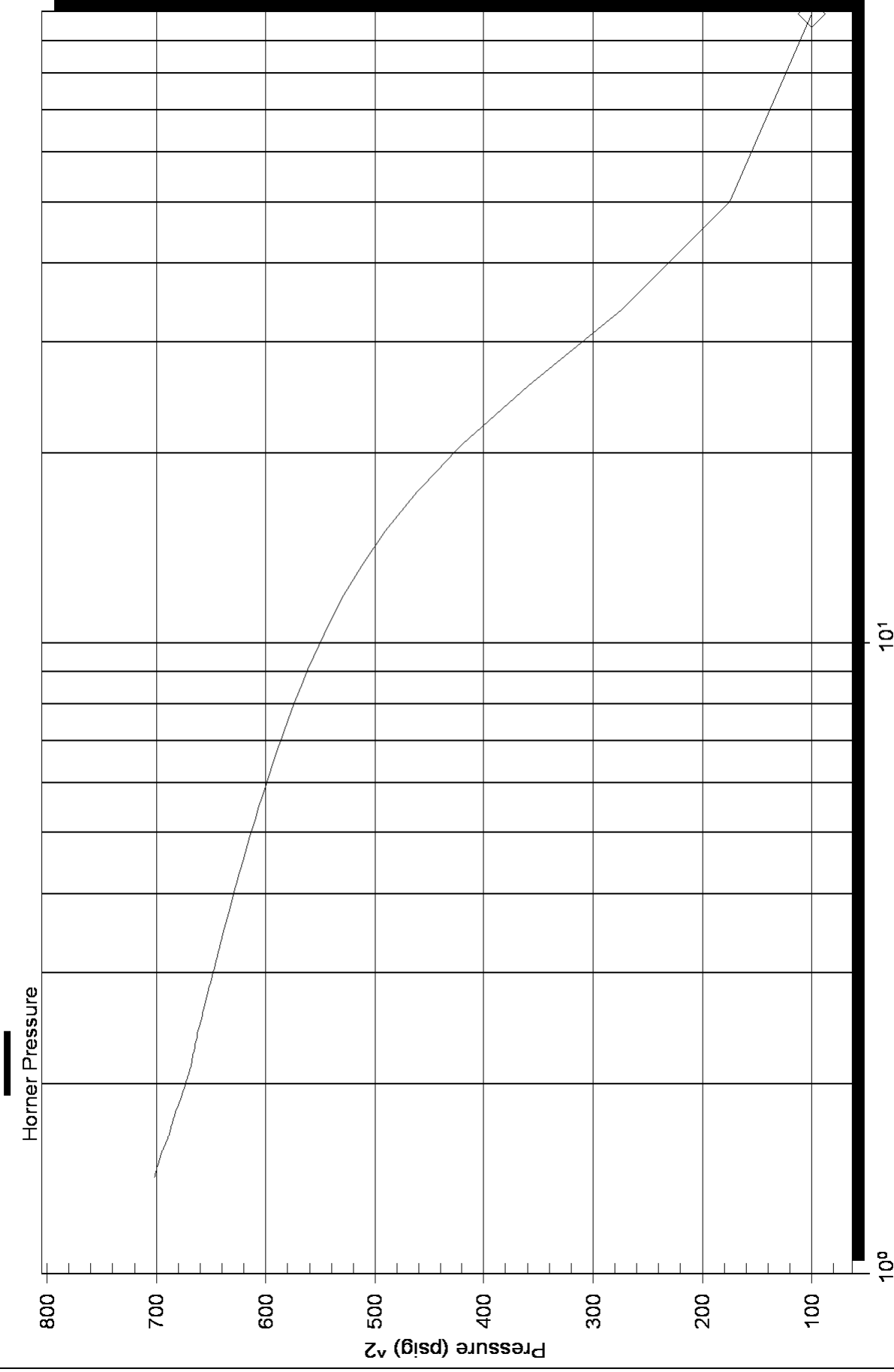
DST Test Number: 2



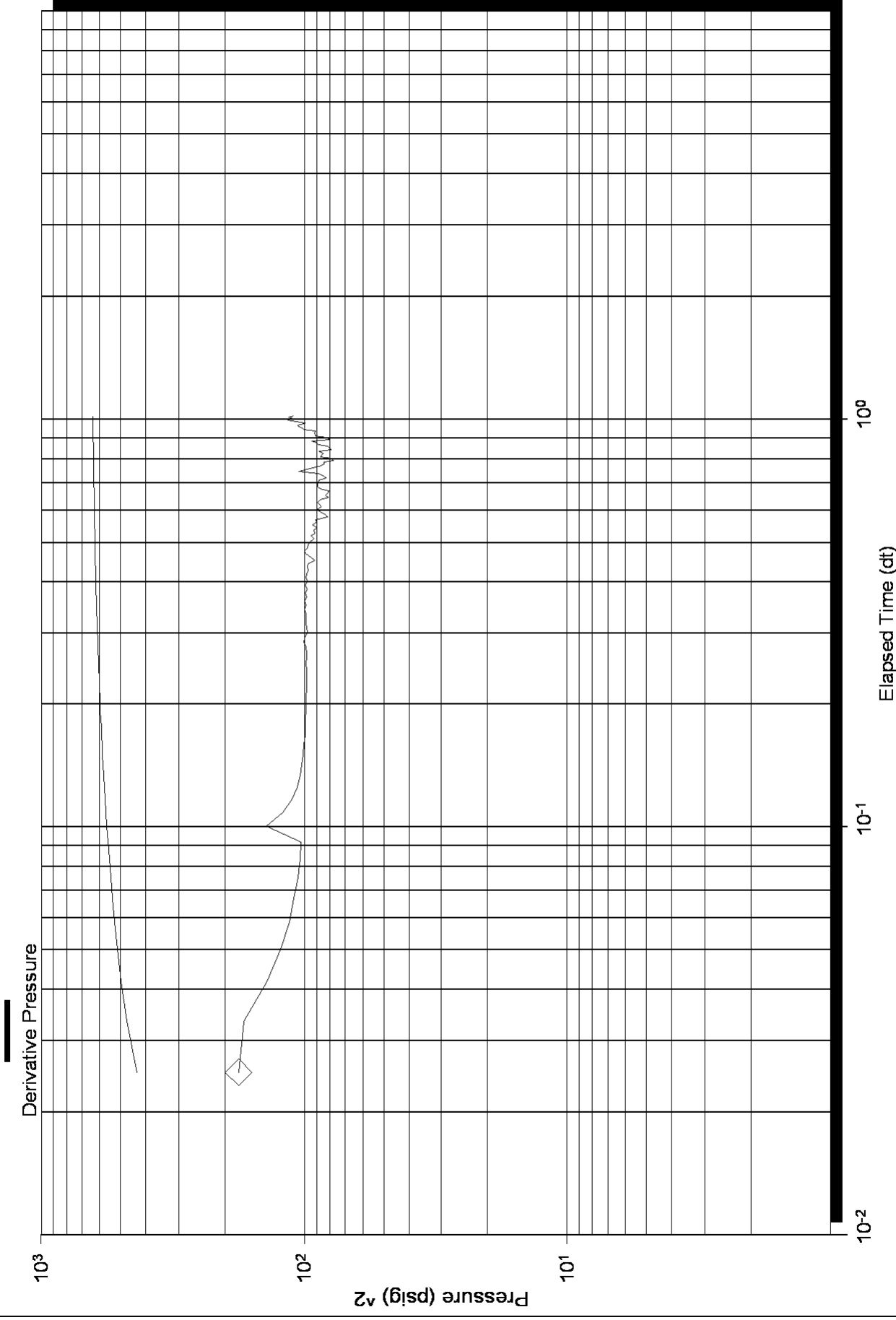
Homer Plot



Homer Plot



Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Derivative

