

DRILL STEM TEST REPORT

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

1515 Wynkoop
Ste 700

ATTN: Tom Fertal

4-18s-10w

Hoelscher Farms #1-4

Start Date: 2010.08.30 @ 06:55:53

End Date: 2010.08.30 @ 12:36:53

Job Ticket #: 38510 DST #: 2

Trilobite Testing, Inc

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

Samuel Gary Jr & Associates, Inc

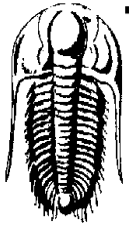
Hoelscher Farms #1-4

4-18s-10w

DST # 2

Arbuckle

2010.08.30



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

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Hoelscher Farms #1-4

1515 Wynkoop
Ste 700

4-18s-10w

Job Ticket: 38510

DST#: 2

ATTN: Tom Fertal

Test Start: 2010.08.30 @ 06:55:53

GENERAL INFORMATION:

Formation: **Arbucle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:34:23

Time Test Ended: 12:36:53

Test Type: Conventional Bottom Hole

Tester: Jeff Brown

Unit No: 44

Interval: 3257.00 ft (KB) To 3272.00 ft (KB) (TVD)

Reference Elevations: 1802.00 ft (KB)

Total Depth: 3230.00 ft (KB) (TVD)

1792.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8321

Inside

Press@RunDepth: 20.29 psig @ 3259.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.08.30

End Date:

2010.08.30

Last Calib.:

2010.08.30

Start Time: 06:55:54

End Time:

12:36:53

Time On Btm:

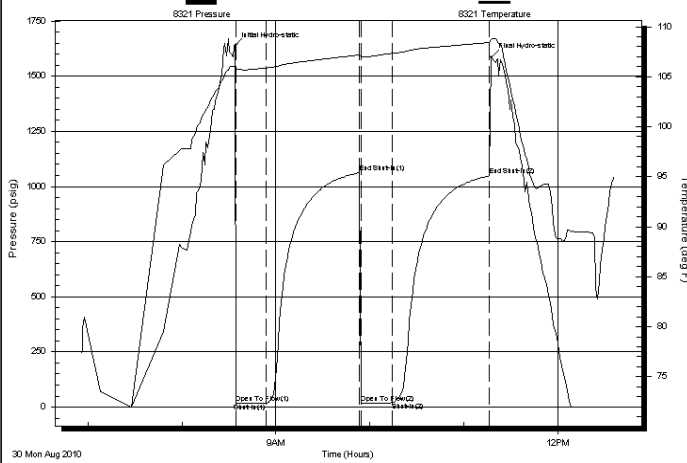
2010.08.30 @ 08:33:53

Time Off Btm:

2010.08.30 @ 11:17:53

TEST COMMENT: IFP-Weak surface blow built to 1/8 in
IS-Dead no blow back
FFP-Weak surfac blow died in 12 min
FSI-Dead no blow back

Pressure vs. Time



PRESSURE SUMMARY

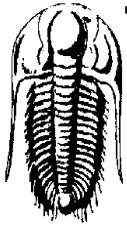
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1637.65	106.07	Initial Hydro-static
1	17.67	105.75	Open To Flow (1)
20	17.57	105.86	Shut-In(1)
80	1062.87	107.18	End Shut-In(1)
81	19.14	106.95	Open To Flow (2)
101	20.29	107.33	Shut-In(2)
163	1048.42	108.41	End Shut-In(2)
164	1586.51	108.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Free Oil	0.03
5.00	VSOCM	0.07

Gas Rates

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



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DST#: 2

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Total Depth: 3230.00 ft (KB) (TVD)

1792.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8672 Outside

Press@RunDepth: psig @ 3259.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.08.30 End Date: 2010.08.30

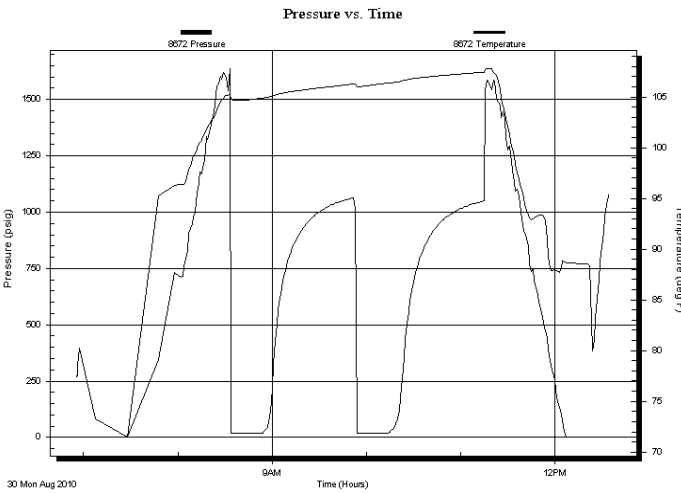
Last Calib.: 2010.08.30

Start Time: 06:55:36 End Time: 12:35:35

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP-Weak surface blow built to 1/8 in
IS-Dead no blow back
FFP-Weak surfac blow died in 12 min
FSI-Dead no blow back



PRESSURE SUMMARY

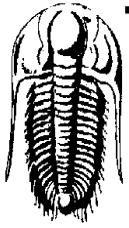
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Free Oil	0.03
5.00	VSOCM	0.07

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr & Associates, Inc

Hoelscer Farms #1-4

1515 Wynkoop
Ste 700

4-18s-10w

Job Ticket: 38510

DST#: 2

ATTN: Tom Fertal

Test Start: 2010.08.30 @ 06:55:53

Tool Information

Drill Pipe:	Length: 3259.00 ft	Diameter: 3.80 inches	Volume: 45.72 bbl	Tool Weight: 2200.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 39000.00 lb
			<u>Total Volume: 45.72 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	3257.00 ft			Final 32000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3230.00	
Shut In Tool	5.00			3235.00	
Hydraulic tool	5.00			3240.00	
Jars	5.00			3245.00	
Safety Joint	3.00			3248.00	
Packer	4.00			3252.00	28.00 Bottom Of Top Packer
Packer	5.00			3257.00	
Stubb	1.00			3258.00	
Perforations	1.00			3259.00	
Recorder	0.00	8321	Inside	3259.00	
Recorder	0.00	8672	Outside	3259.00	
Perforations	10.00			3269.00	
Bullnose	3.00			3272.00	15.00 Bottom Packers & Anchor

Total Tool Length: 43.00



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FLUID SUMMARY

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Job Ticket: 38510

DST#: 2

ATTN: Tom Fertal

Test Start: 2010.08.30 @ 06:55:53

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 41 deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 50.00 sec/l	Cushion Volume: bbl	
Water Loss: 12.17 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 7500.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Free Oil	0.028
5.00	VSOCM	0.070

Total Length: 7.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

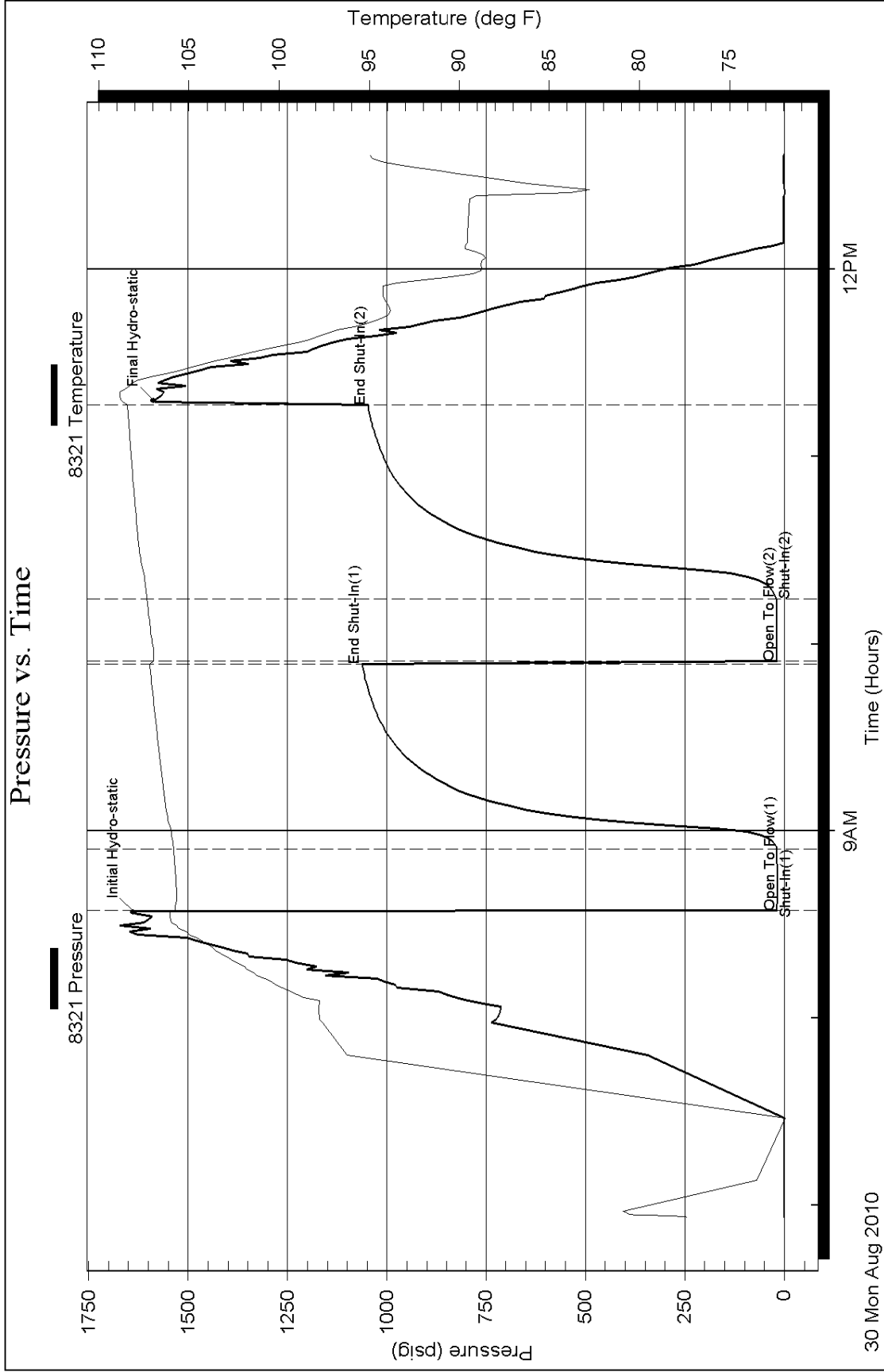
Serial #: 8321

Inside

Samuel Gary Jr & Associates, Inc

4-18s-10w

DST Test Number: 2

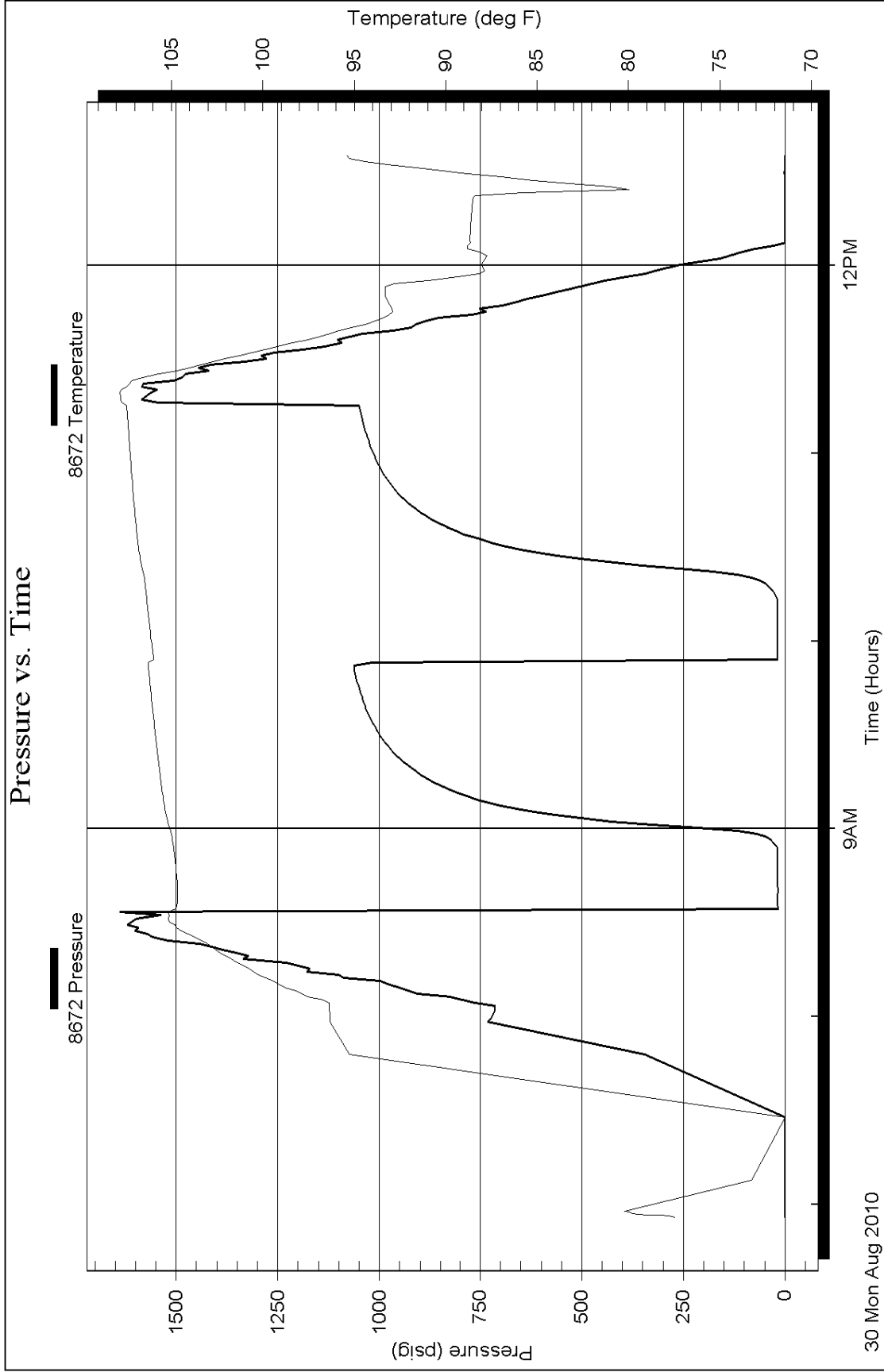


Serial #: 8672

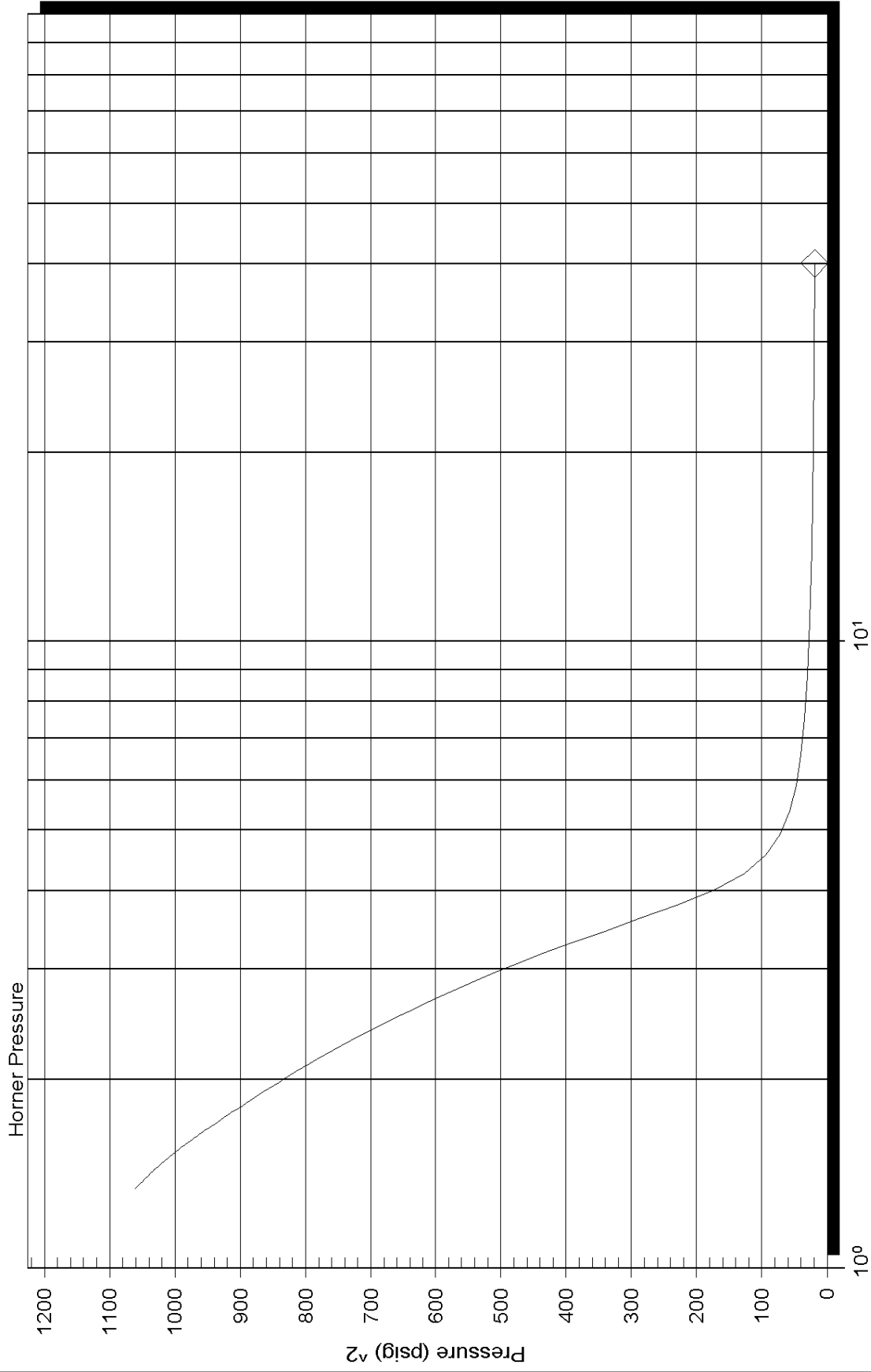
Outside Samuel Gary Jr & Associates, Inc

4-18s-10w

DST Test Number: 2



Horner Plot



Serial Number: 8321 (Inside)

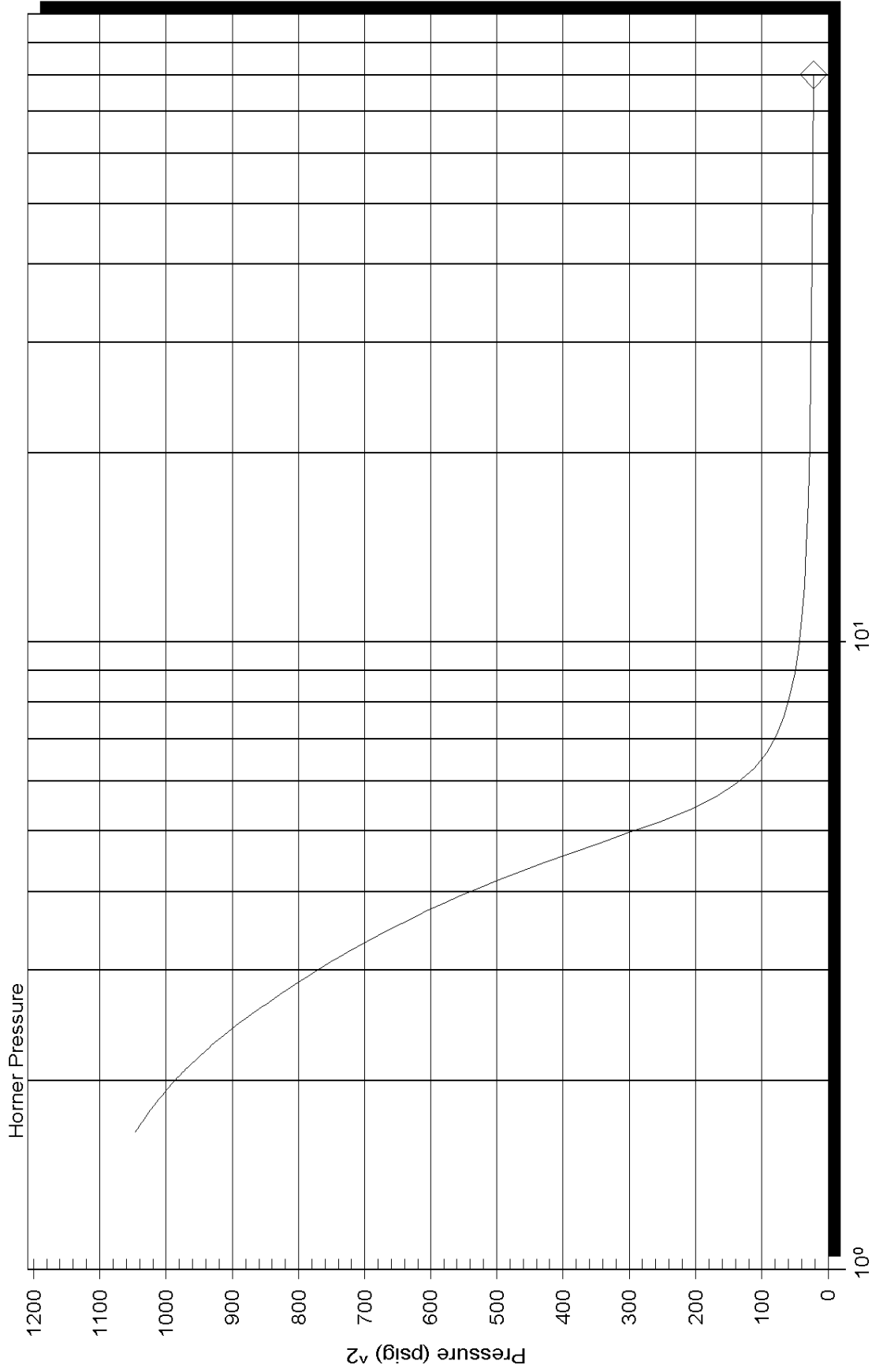
Slope (m) : kpa/log cycle

P* :

Horner Time: (Twf + dt) / dt

Flow Cycle: 1

Horner Plot



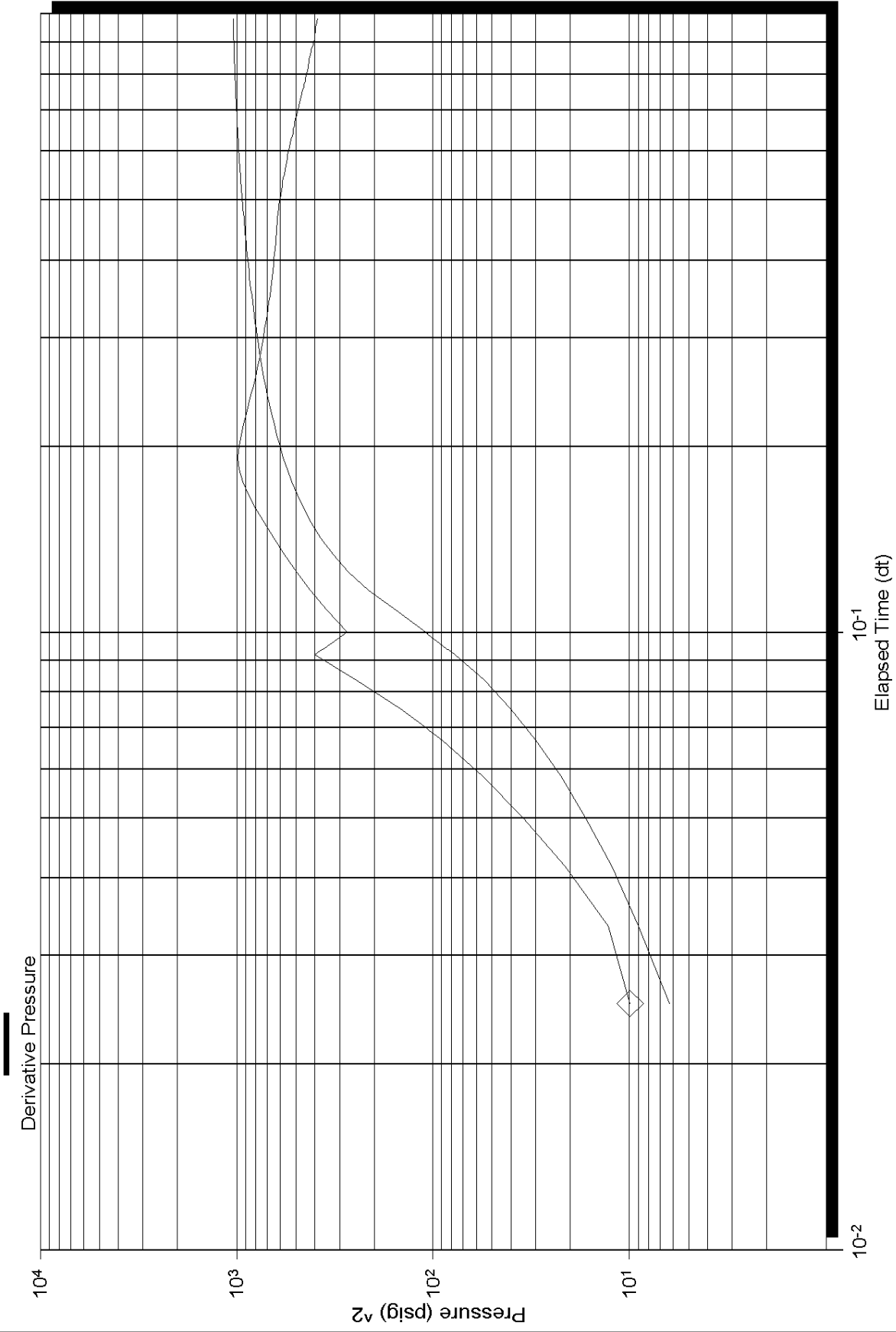
Serial Number: 8321 (Inside)

P* :

Slope (m) : kpa/log cycle

Flow Cycle: 2

Log-Log and Pseudo-Log-Derivative



Log-Log and Pseudo-Log-Derivative

