

DRILL STEM TEST REPORT

Prepared For: **Sam Gary Jr.& assoc.inc.**

1515 Wynkoop, Ste 700
Denver Co. 80202

ATTN: Tom Fertal

36-15s-16w Ellis

Boxberger #2-36

Start Date: 2010.07.22 @ 13:50:01

End Date: 2010.07.22 @ 22:43:00

Job Ticket #: 039890 DST #: 3

Trilobite Testing, Inc

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

Sam Gary Jr.& assoc.inc.

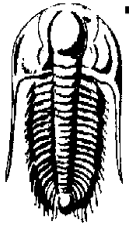
Boxberger #2-36

36-15s-16w Ellis

DST # 3

LKC-F

2010.07.22



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

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Boxberger #2-36

1515 Wynkoop, Ste 700
Denver Co. 80202

36-15s-16w Ellis

Job Ticket: 039890

DST#: 3

ATTN: Tom Fertal

Test Start: 2010.07.22 @ 13:50:01

GENERAL INFORMATION:

Formation: **LKC-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:33:45

Time Test Ended: 22:43:00

Test Type: Conventional Bottom Hole

Tester: Andy Carreira

Unit No: 53

Interval: 3257.00 ft (KB) To 3278.00 ft (KB) (TVD)

Reference Elevations: 1930.00 ft (KB)

Total Depth: 3233.00 ft (KB) (TVD)

1922.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6669 Outside

Press@RunDepth: 89.87 psig @ 3258.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.07.22

End Date:

2010.07.22

Last Calib.: 2010.07.22

Start Time: 13:50:01

End Time:

22:43:00

Time On Btm: 2010.07.22 @ 15:31:45

Time Off Btm: 2010.07.22 @ 20:08:15

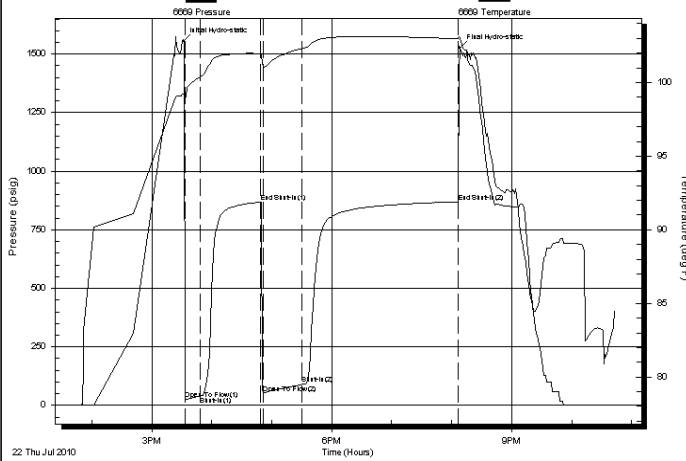
TEST COMMENT: IF: BOB, 2 min.

IS: No return

FF: BOB, right away

FS: Return blow 2 min after bleedoff, building to BOB, 30 min.

Pressure vs. Time



PRESSURE SUMMARY

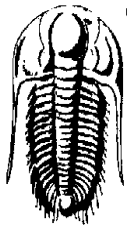
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1555.81	99.23	Initial Hydro-static
2	26.02	98.92	Open To Flow (1)
17	40.67	100.39	Shut-In(1)
78	868.19	101.97	End Shut-In(1)
80	52.81	101.12	Open To Flow (2)
119	89.87	102.32	Shut-In(2)
275	869.27	102.99	End Shut-In(2)
277	1527.06	102.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	GOM g=40% o=30% m=30%	0.87
186.00	GO	2.61
0.00	2356 ft = GIP	0.00

Gas Rates

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



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Total Depth: 3233.00 ft (KB) (TVD)

1922.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6668 Inside

Press@RunDepth: psig @ 3258.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.07.22

End Date: 2010.07.22

Last Calib.: 2010.07.22

Start Time: 13:50:01

End Time: 13:52:41

Time On Btm:

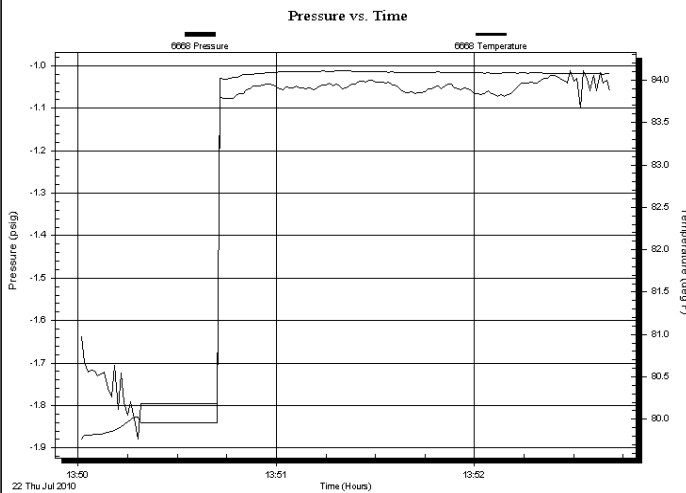
Time Off Btm:

TEST COMMENT: IF: BOB, 2 min.

IS: No return

FF: BOB, right away

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PRESSURE SUMMARY

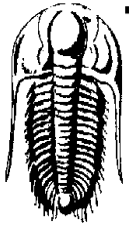
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
62.00	GOM g=40% o=30% m=30%	0.87
186.00	GO	2.61
0.00	2356 ft = GIP	0.00

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Sam Gary Jr. & assoc. inc.

Boxberger #2-36

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36-15s-16w Ellis

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ATTN: Tom Fertal

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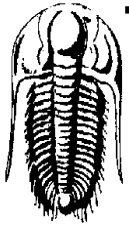
Tool Information

Drill Pipe:	Length: 3249.00 ft	Diameter: 3.80 inches	Volume: 45.57 bbl	Tool Weight: 3000.00 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: 65000.00 lb
			<u>Total Volume: 45.57 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3257.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	49.00 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	5.00			3253.00	28.00 Bottom Of Top Packer
Packer	4.00			3257.00	
Stubb	1.00			3258.00	
Recorder	0.00	6668	Inside	3258.00	
Recorder	0.00	6669	Outside	3258.00	
Perforations	17.00			3275.00	
Bullnose	3.00			3278.00	21.00 Bottom Packers & Anchor

Total Tool Length: 49.00



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FLUID SUMMARY

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DST#: 3

ATTN: Tom Fertal

Test Start: 2010.07.22 @ 13:50:01

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: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.37 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4600.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	GOM g=40% o=30% m=30%	0.870
186.00	GO	2.609
0.00	2356 ft = GIP	0.000

Total Length: 248.00 ft Total Volume: 3.479 bbl

Num Fluid Samples: 0

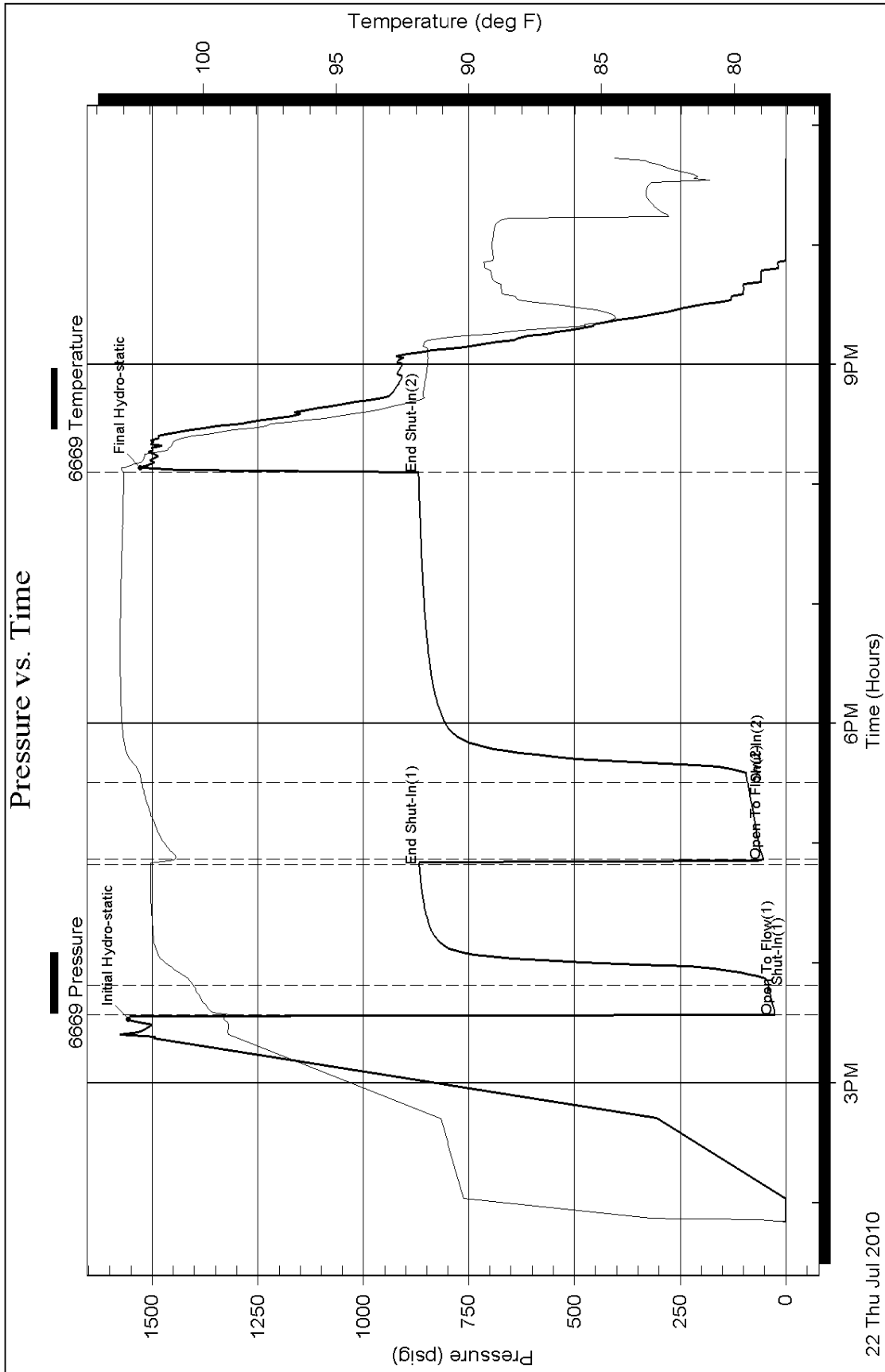
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



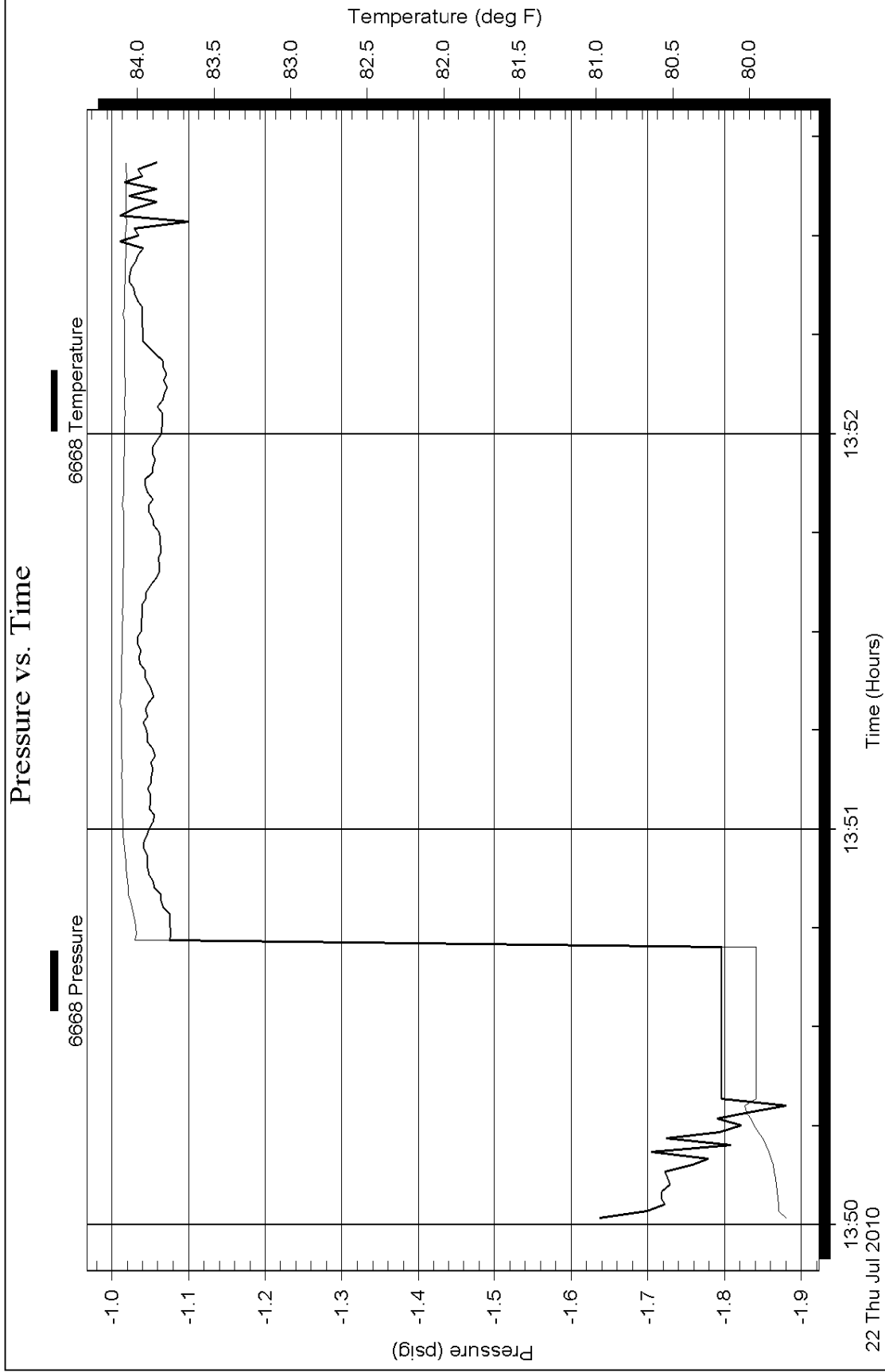
Serial #: 6668

Inside

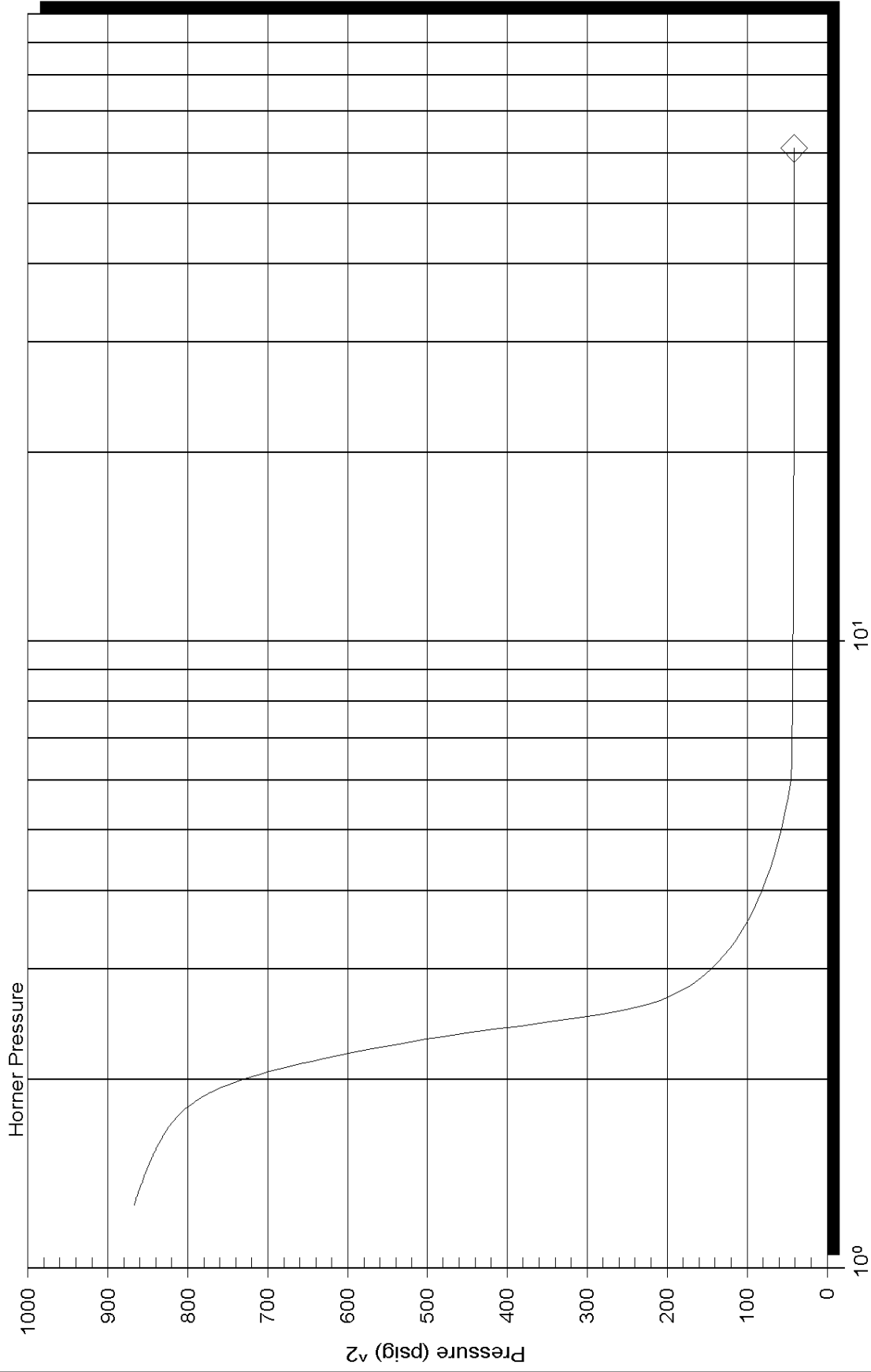
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DST Test Number: 3



Horner Plot



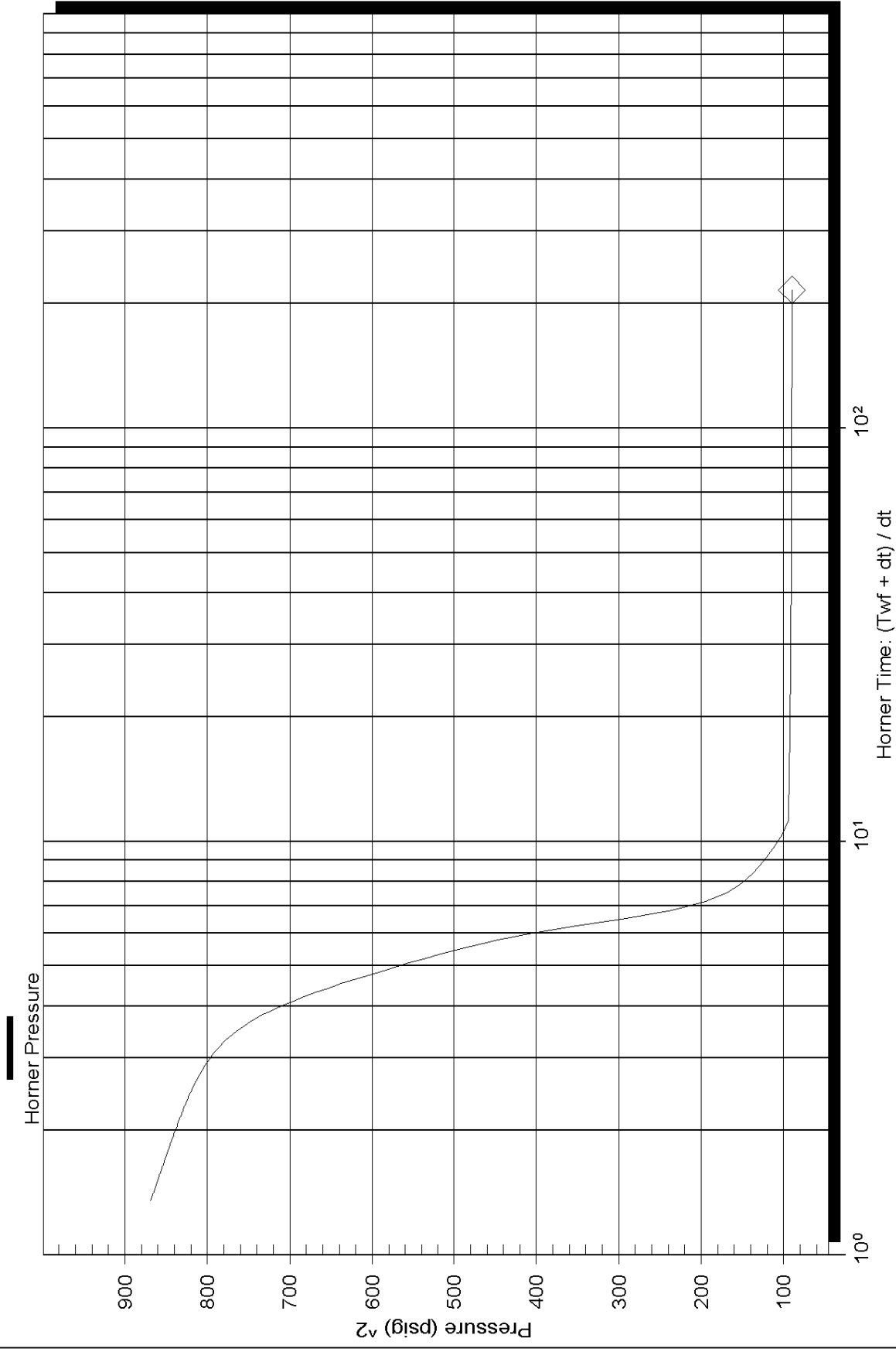
Serial Number: 6669 (Outside)

P* :

Slope (m) : kpa/log cycle

Flow Cycle: 1

Horner Plot

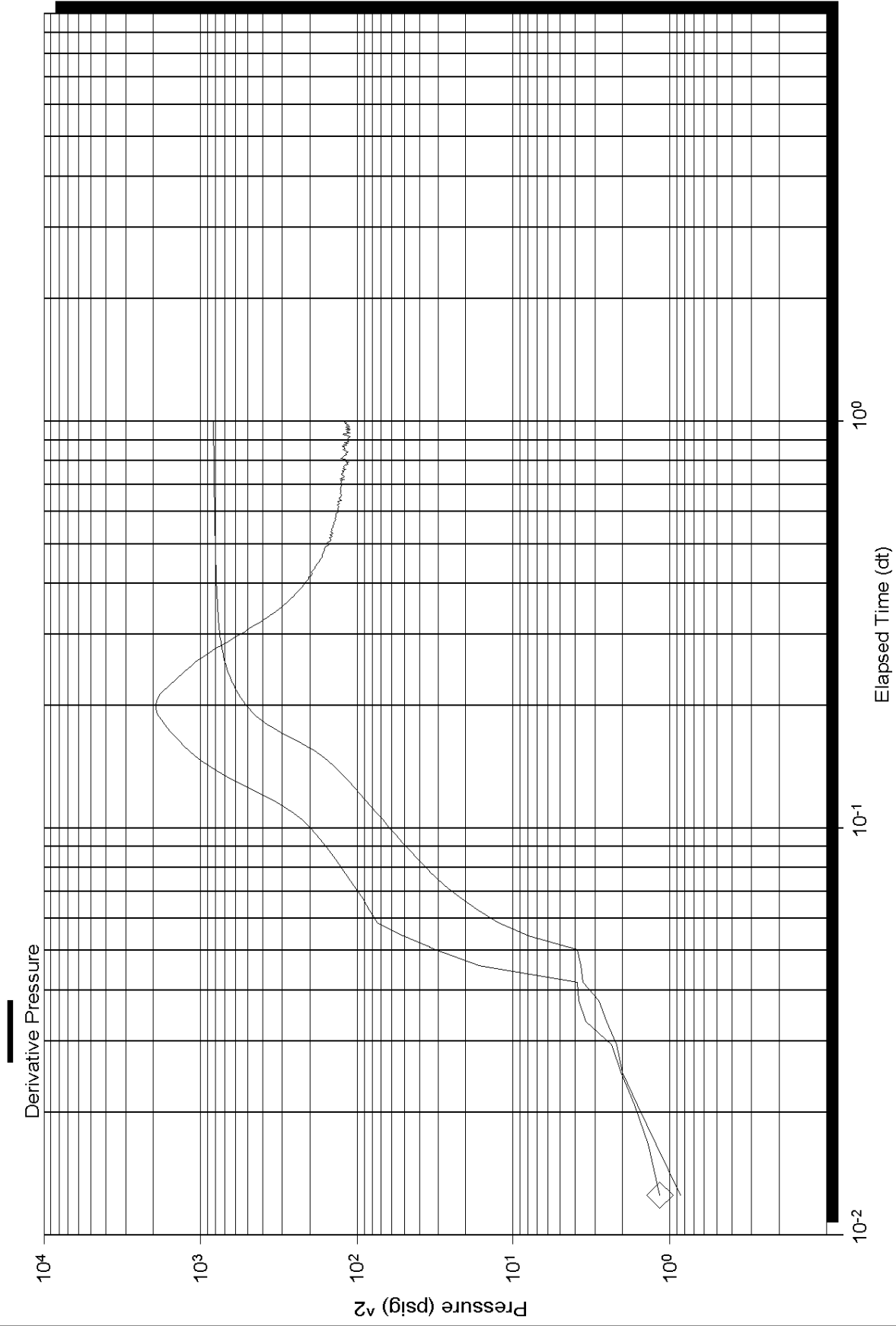


Serial Number: 6669 (Outside)

P* : Slope (m) : kpa/log cycle

Flow Cycle: 2

Log-Log and Pseudo-Log-Derivative



Log-Log and Pseudo-Log-Derivative

