

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: 2010.07.21 @ 23:00:01

End Date: 2010.07.22 @ 06:12:15

Job Ticket #: 039889 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Sam Gary Jr.& assoc.inc.

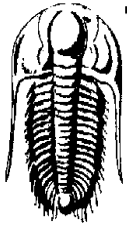
Boxberger #2-36

36-15s-16w Ellis

DST # 2

LKC-D&E

2010.07.21



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DRILL STEM TEST REPORT

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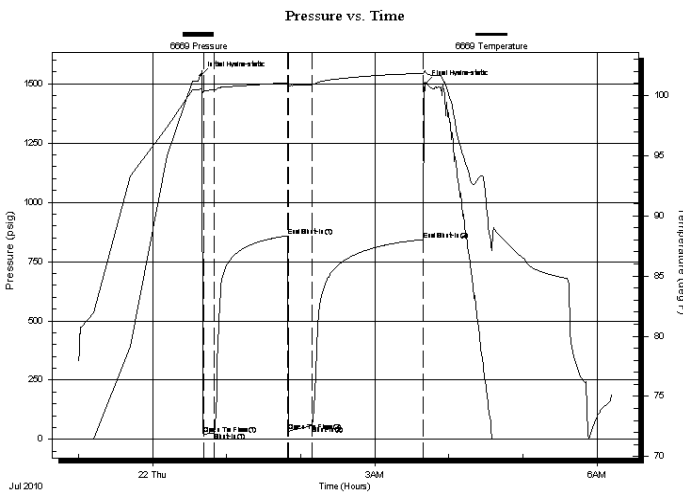
Boxberger #2-36
36-15s-16w Ellis
 Job Ticket: 039889 **DST#: 2**
 Test Start: 2010.07.21 @ 23:00:01

GENERAL INFORMATION:

Formation: **LKC-D&E**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:41:30
 Time Test Ended: 06:12:15
 Test Type: Conventional Bottom Hole
 Tester: Andy Carreira
 Unit No: 53
 Interval: **3236.00 ft (KB) To 3258.00 ft (KB) (TVD)**
 Total Depth: 3233.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Reference Elevations: 1930.00 ft (KB)
 1922.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6669 Outside
 Press@RunDepth: 58.51 psig @ 3237.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.07.21 End Date: 2010.07.22 Last Calib.: 2010.07.22
 Start Time: 23:00:01 End Time: 06:12:15 Time On Btm: 2010.07.22 @ 00:38:45
 Time Off Btm: 2010.07.22 @ 03:41:00

TEST COMMENT: IF: BOB, 2 min
 IS: Return blow, 3 min after bled off, half inch, steady.
 FF: BOB, right away.
 FS: Return blow, 2 min after bled off, building to 9 inches



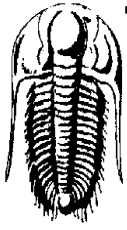
PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1534.61	100.57	Initial Hydro-static
3	22.86	100.34	Open To Flow (1)
11	28.75	100.47	Shut-In(1)
71	858.40	101.08	End Shut-In(1)
72	32.81	100.81	Open To Flow (2)
91	58.51	100.92	Shut-In(2)
181	843.13	101.85	End Shut-In(2)
183	1499.54	101.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	GMCO 10%=g 10%=m 80%=o	1.74
0.00	1984 ft = GIP	0.00

Gas Rates

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



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Job Ticket: 039889

DST#: 2

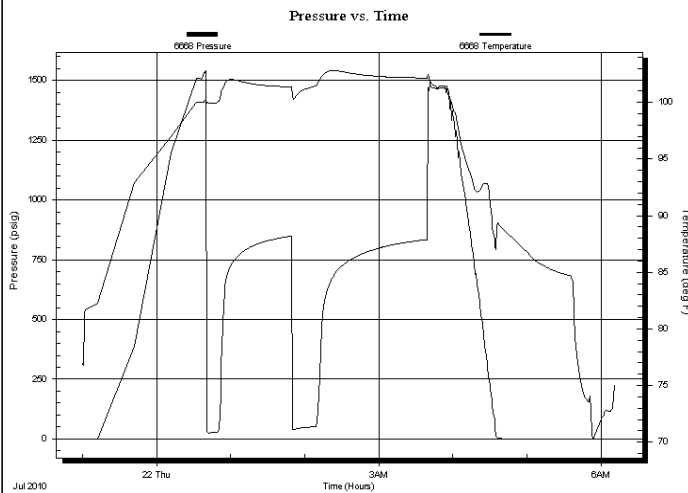
Test Start: 2010.07.21 @ 23:00:01

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 Reference Elevations: 1930.00 ft (KB)
 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 @ 3237.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2010.07.21 End Date: 2010.07.22 Last Calib.: 2010.07.22
 Start Time: 23:00:01 End Time: 06:12:15 Time On Btm:
 Time Off Btm:

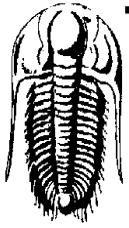
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PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bbl)
124.00	GMCO 10%=g 10%=m 80%=o	1.74
0.00	1984 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

1515 Wynkoop, Ste 700
Denver Co. 80202

36-15s-16w Ellis

Job Ticket: 039889

DST#: 2

ATTN: Tom Fertal

Test Start: 2010.07.21 @ 23:00:01

Tool Information

Drill Pipe:	Length: 3223.00 ft	Diameter: 3.80 inches	Volume: 45.21 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: 64000.00 lb
			<u>Total Volume: 45.21 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3236.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	50.00 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			3209.00	
Shut In Tool	5.00			3214.00	
Hydraulic tool	5.00			3219.00	
Jars	5.00			3224.00	
Safety Joint	3.00			3227.00	
Packer	5.00			3232.00	28.00 Bottom Of Top Packer
Packer	4.00			3236.00	
Stubb	1.00			3237.00	
Recorder	0.00	6668	Inside	3237.00	
Recorder	0.00	6669	Outside	3237.00	
Perforations	18.00			3255.00	
Bullnose	3.00			3258.00	22.00 Bottom Packers & Anchor

Total Tool Length: 50.00



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FLUID SUMMARY

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36-15s-16w Ellis

Job Ticket: 039889

DST#: 2

ATTN: Tom Fertal

Test Start: 2010.07.21 @ 23:00:01

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
124.00	GMCO 10%=g 10%=m 80%=o	1.739
0.00	1984 ft = GIP	0.000

Total Length: 124.00 ft Total Volume: 1.739 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

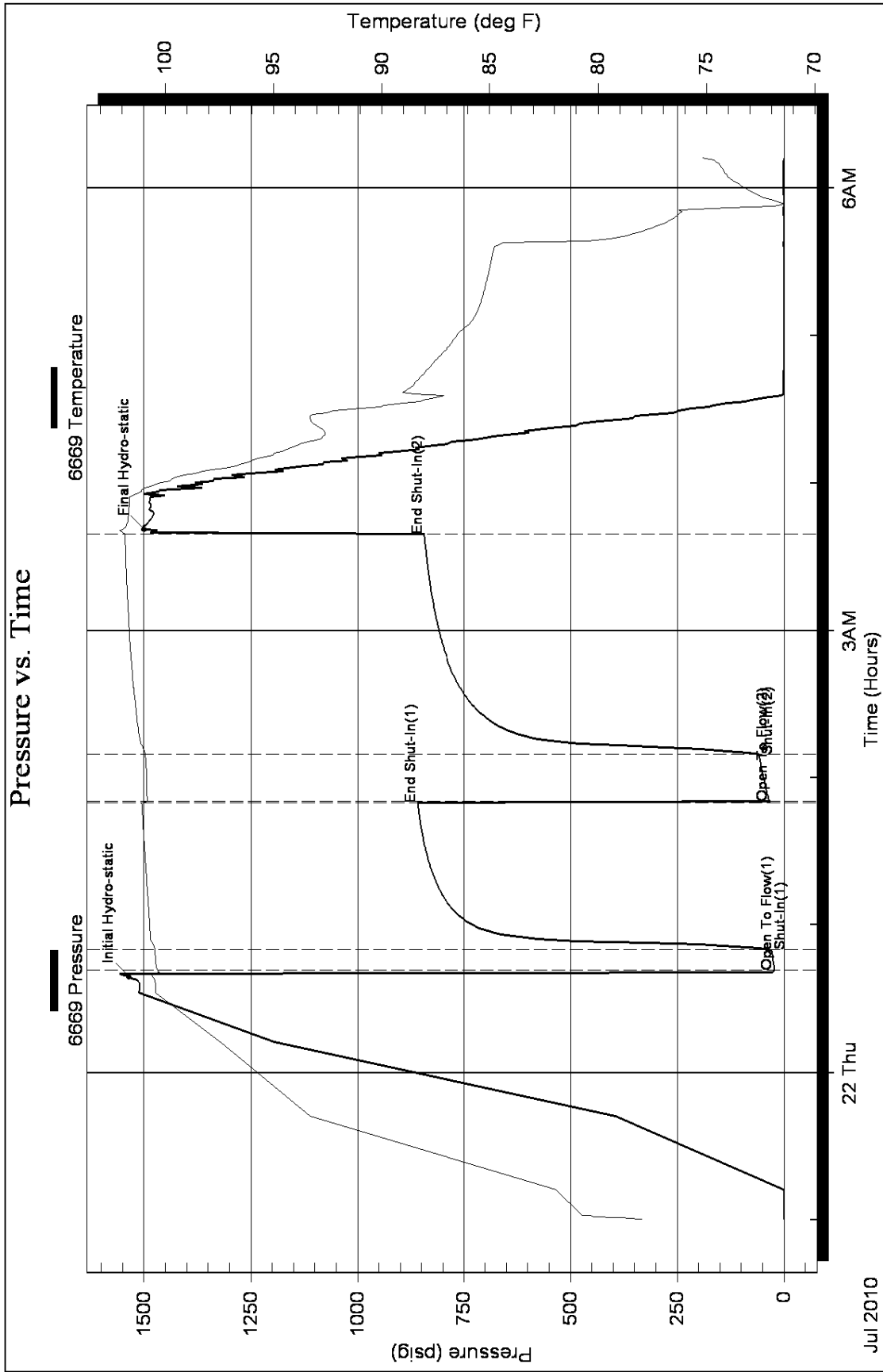
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



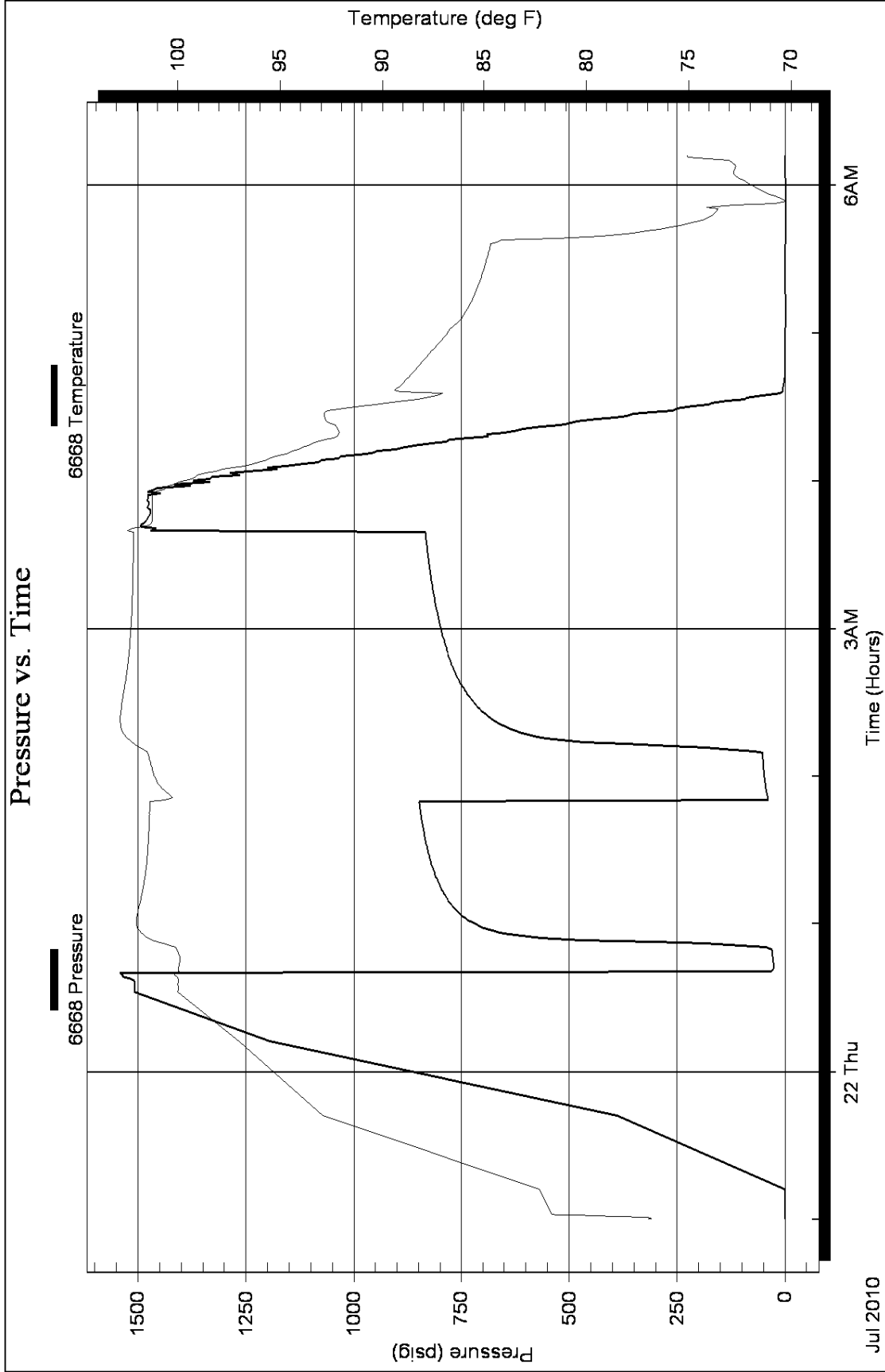
Serial #: 6668

Inside

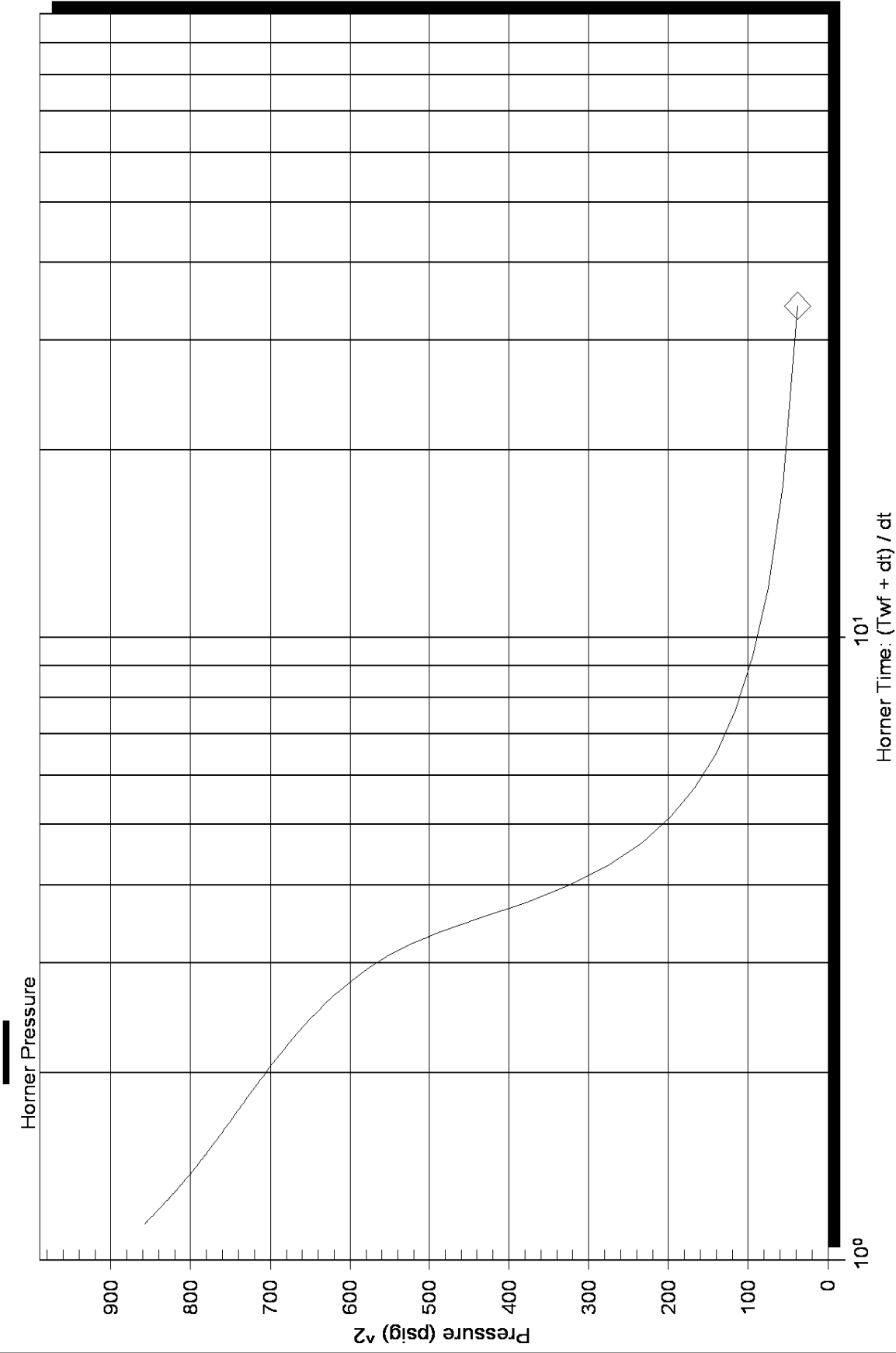
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DST Test Number: 2



Horner Plot



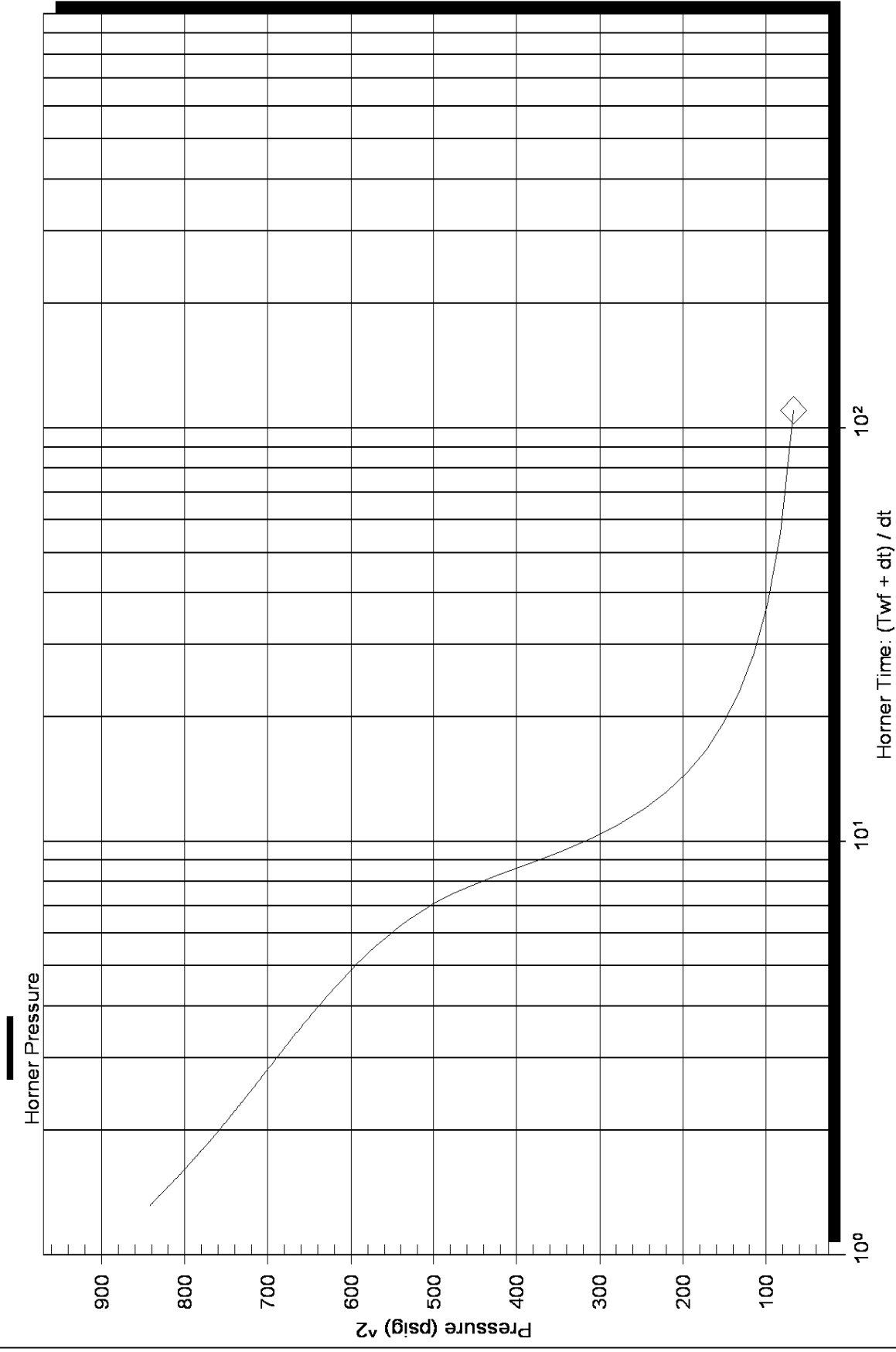
Serial Number: 6669 (Outside)

P* :

Slope (m) : kpa/log cycle

Flow Cycle: 1

Horner Plot

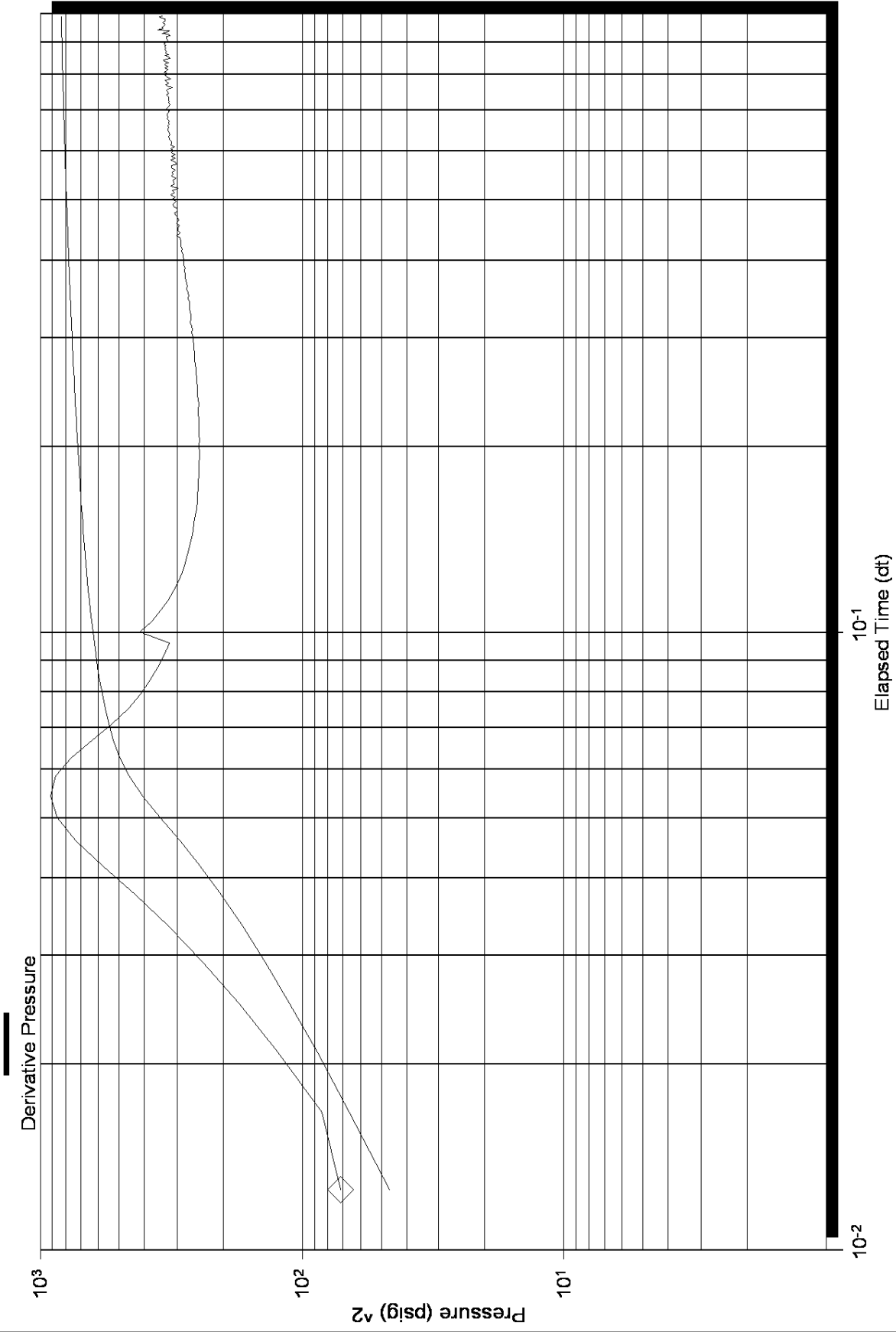


Serial Number: 6669 (Outside)

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

Flow Cycle: 2

Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Log-Derivative

