



DRILL STEM TEST REPORT

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

1515 Wynkoop Ste. #700
Denver, CO 80202

ATTN: Tom Fertal

Wegele #1-32

32-15s-15w Russell,KS

Start Date: 2012.03.16 @ 17:29:30

End Date: 2012.03.17 @ 01:13:00

Job Ticket #: 47204 DST #: 1

Trilobite Testing, Inc
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TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary, Jr. & Associates, Inc.

32-15s-15w Russell, KS

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Job Ticket: 47204

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Test Start: 2012.03.16 @ 17:29:30

GENERAL INFORMATION:

Formation: **LKC "A-C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:00:20

Time Test Ended: 01:13:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3144.00 ft (KB) To 3219.00 ft (KB) (TVD)

Reference Elevations: 1915.00 ft (KB)

Total Depth: 3219.00 ft (KB) (TVD)

1905.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8354 Inside

Press @ Run Depth: 77.20 psig @ 3148.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.16

End Date: 2012.03.17

Last Calib.: 2012.03.17

Start Time: 17:39:30

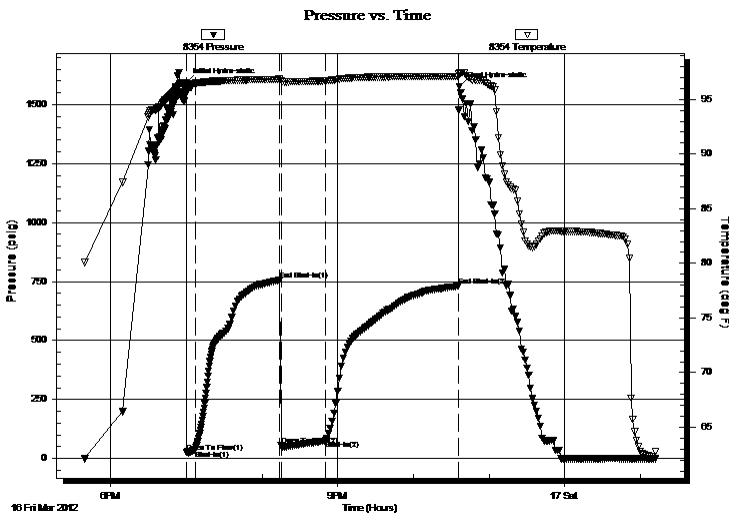
End Time: 01:13:00

Time On Btm: 2012.03.16 @ 19:00:10

Time Off Btm: 2012.03.16 @ 22:36:30

TEST COMMENT: IF-Strong building blow . BOB in 5 minutes 30 seconds.
ISI-No Return.
FF-Strong building blow . BOB in 35 seconds.
FSI-No Return. Times- 5-60-35-105

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1591.39	96.53	Initial Hydro-static
1	25.86	96.02	Open To Flow (1)
7	34.46	96.46	Shut-In(1)
74	754.60	96.84	End Shut-In(1)
75	54.23	96.70	Open To Flow (2)
111	77.20	96.69	Shut-In(2)
216	730.83	97.10	End Shut-In(2)
217	1577.00	97.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
135.00	20%Gas/20%Oil/60%Mud	1.89

Gas Rates

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



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TOOL DIAGRAM

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DST#: 1

ATTN: Tom Fertal

Test Start: 2012.03.16 @ 17:29:30

Tool Information

Drill Pipe:	Length: 3136.00 ft	Diameter: 3.80 inches	Volume: 43.99 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: 26000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 43.99 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3144.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	75.00 ft			
Tool Length:	105.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Recorder	0.00	8653	Fluid	3114.00	
Change Over Sub	1.00			3115.00	
Shut In Tool	5.00			3120.00	
Sampler	2.00			3122.00	
Hydraulic tool	5.00			3127.00	
Jars	5.00			3132.00	
Safety Joint	3.00			3135.00	
Packer	5.00			3140.00	30.00 Bottom Of Top Packer
Packer	4.00			3144.00	
Stubb	1.00			3145.00	
Perforations	3.00			3148.00	
Recorder	0.00	8354	Inside	3148.00	
Recorder	0.00	8520	Outside	3148.00	
Change Over Sub	1.00			3149.00	
Drill Pipe	62.00			3211.00	
Change Over Sub	1.00			3212.00	
Perforations	4.00			3216.00	
Bullnose	3.00			3219.00	75.00 Bottom Packers & Anchor

Total Tool Length: 105.00



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FLUID SUMMARY

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Wegele #1-32

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DST#: 1

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Test Start: 2012.03.16 @ 17:29:30

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

25 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 cm³

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 bbbl
135.00	20%Gas/20%Oil/60%Mud	1.894

Total Length: 135.00 ft Total Volume: 1.894 bbl

Num Fluid Samples: 0

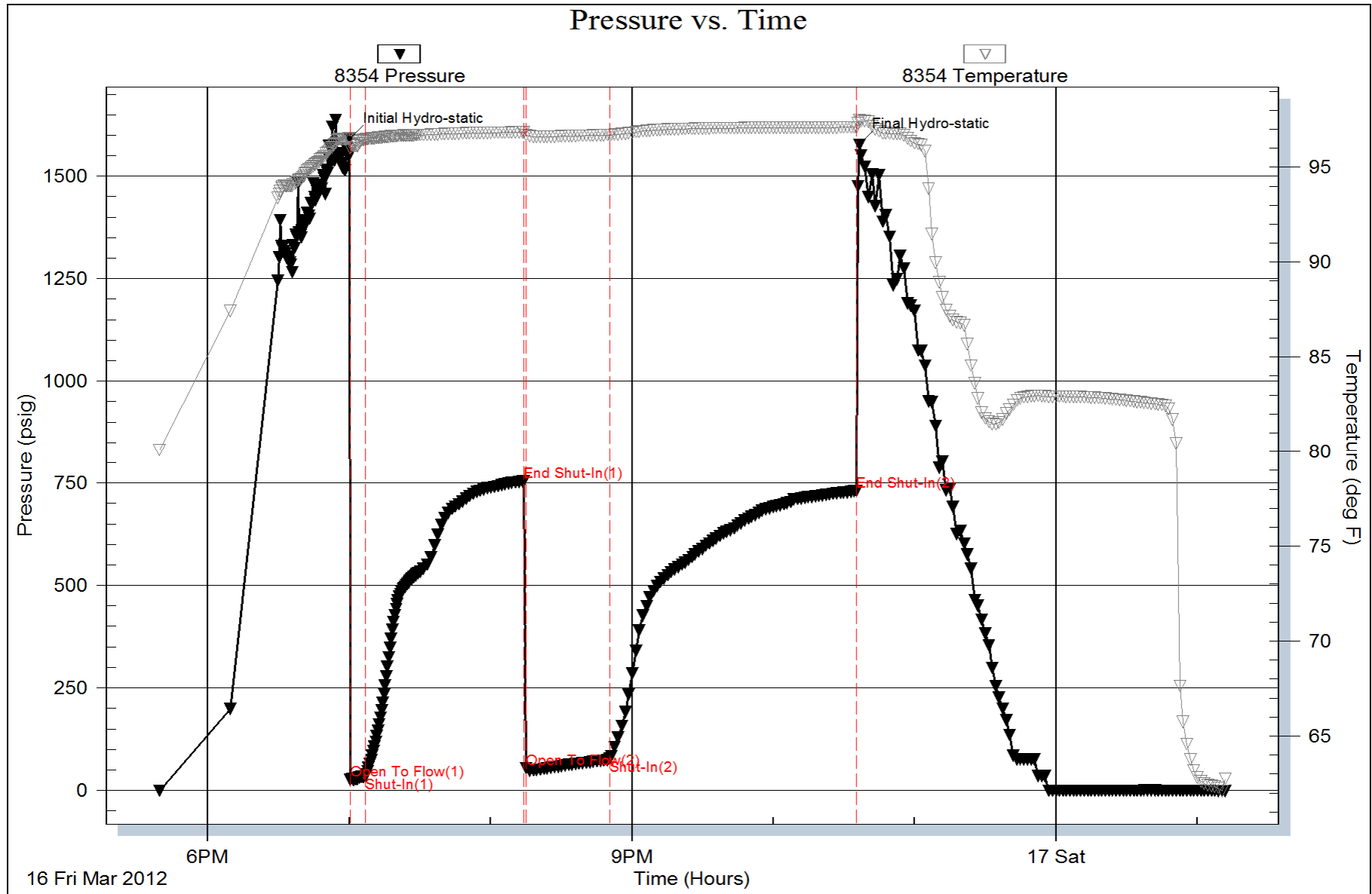
Num Gas Bombs: 0

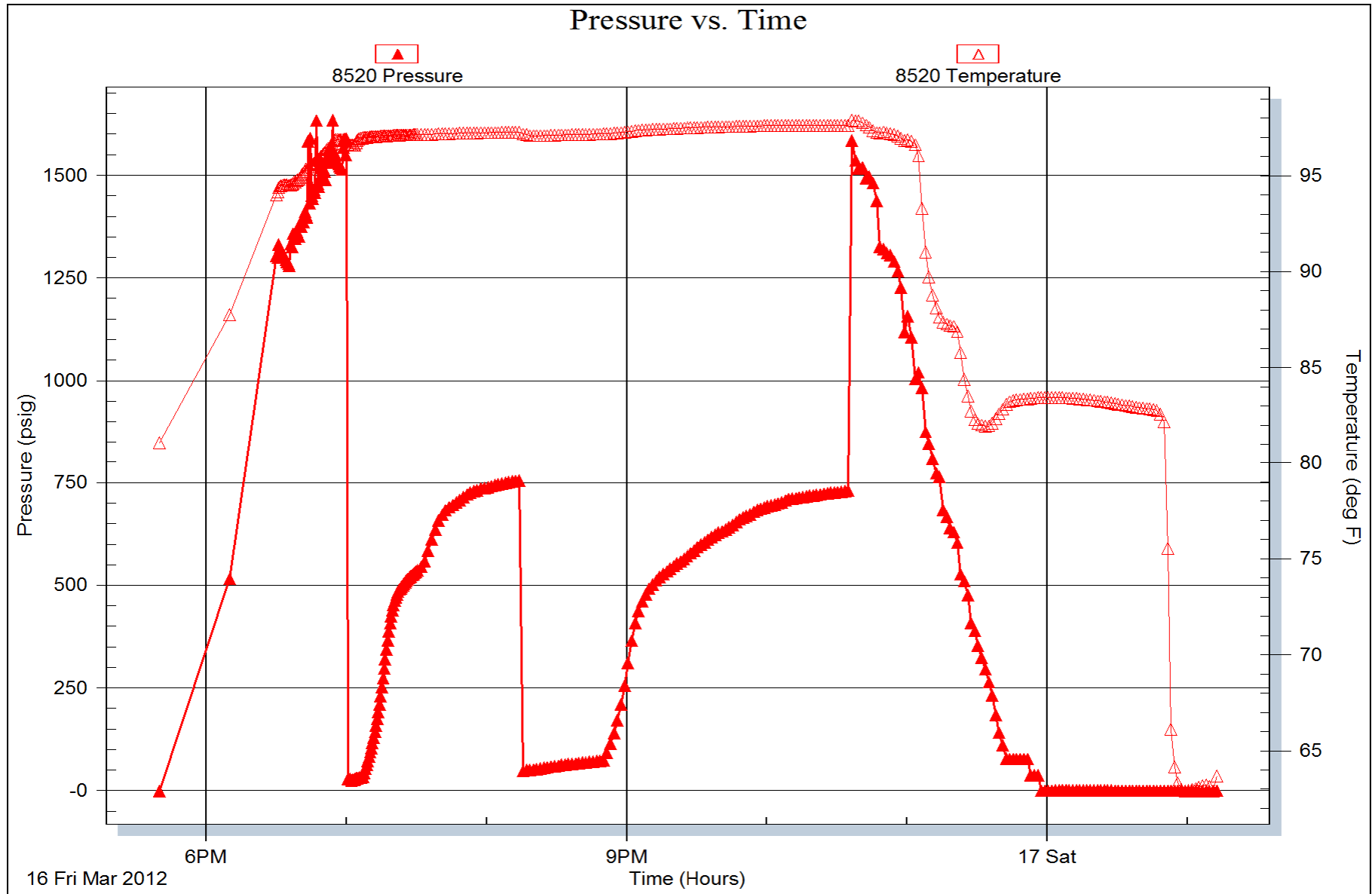
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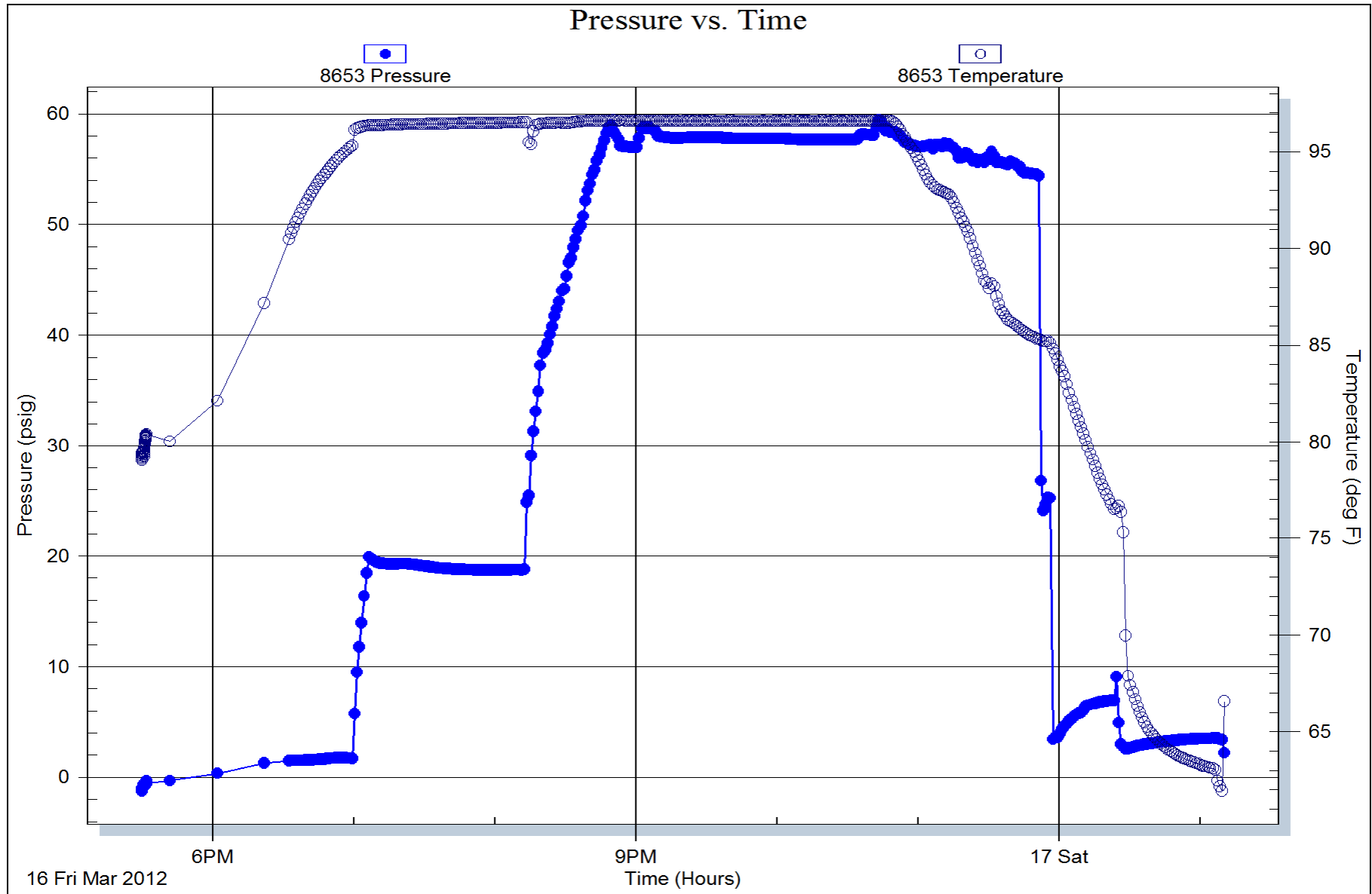
Laboratory Name:

Laboratory Location:

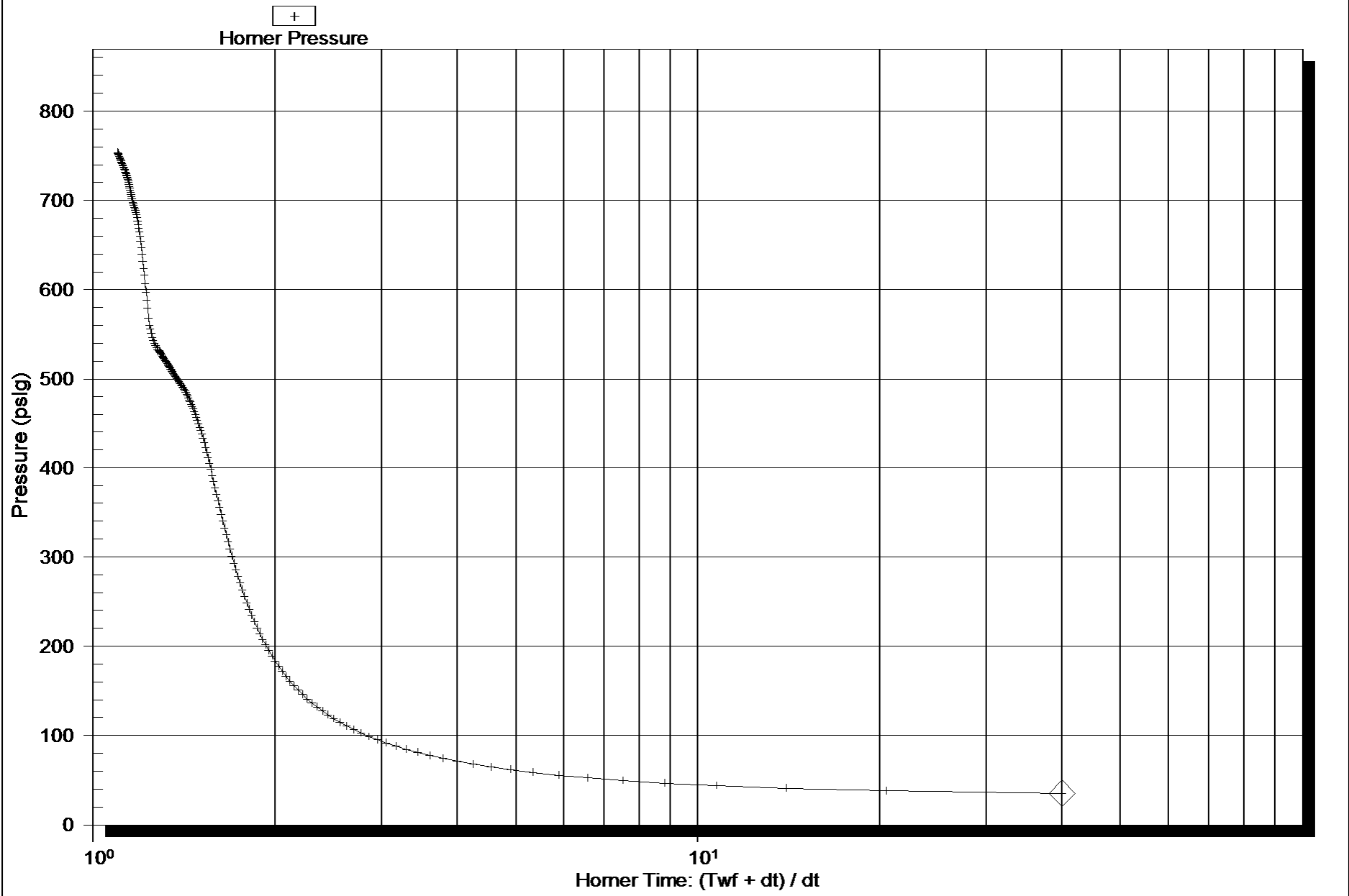
Recovery Comments: Sampler- 4000 mL Total. 2500 mL-Oil. 500 mL-Mud. 1000 mL- Gas.
Oil Gravity- 25



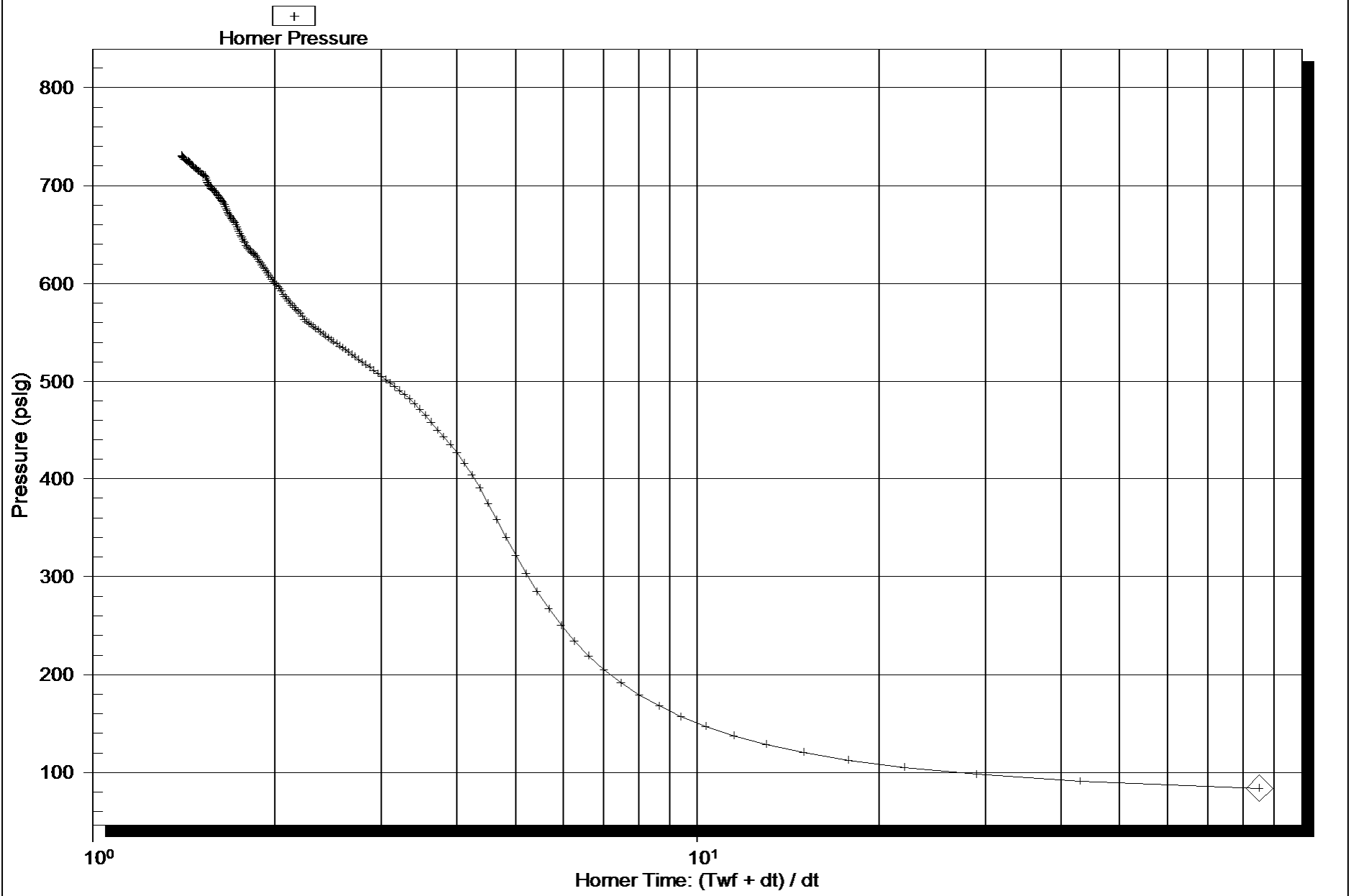




Horner Plot



Horner Plot



Log-Log and Pseudo-Derivative

