

DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr & Assoc Inc**

1515 Wnykoop Ste 700
Denver CO 80202

ATTN: Chris Mitchell

Ball #1-12

12-15s-16w Ellis,KS

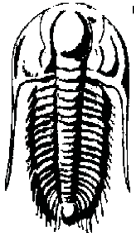
Start Date: 2013.03.01 @ 12:51:01

End Date: 2013.03.01 @ 21:27:26

Job Ticket #: 50360 DST #: 1

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

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TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Samuel Gary Jr & Assoc Inc

12-15s-16w Ellis,KS

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Ball #1-12

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Test Start: 2013.03.01 @ 12:51:01

GENERAL INFORMATION:

Formation: **LKC C-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:46:41

Time Test Ended: 21:27:26

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 42

Interval: 3189.00 ft (KB) To 3217.00 ft (KB) (TVD)

Reference Elevations: 1921.00 ft (KB)

Total Depth: 3217.00 ft (KB) (TVD)

1913.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8369

Inside

Press@RunDepth: 110.35 psig @ 3190.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.01

End Date:

2013.03.01

Last Calib.: 2013.03.01

Start Time: 12:51:01

End Time:

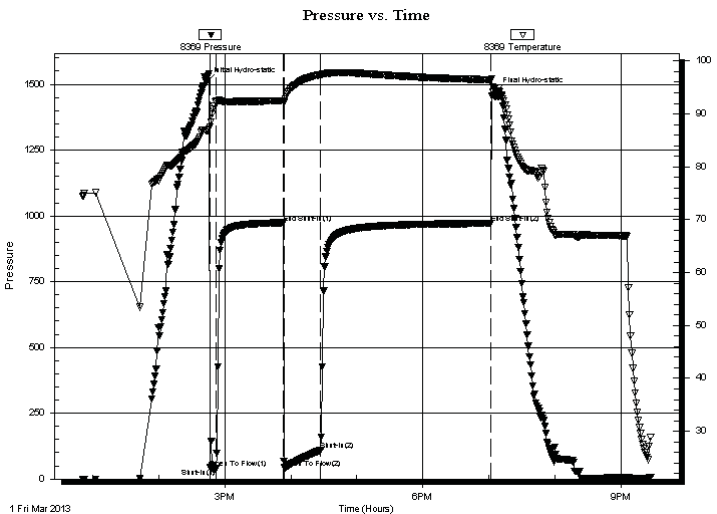
21:27:26

Time On Btm: 2013.03.01 @ 14:43:56

Time Off Btm: 2013.03.01 @ 19:06:25

TEST COMMENT: 5-IFP-w k to strg in 2 min
60-ISIP-no bl bk
35-FFP-strg bl thru-out
150-FSIP-2" bl bk

PRESSURE SUMMARY



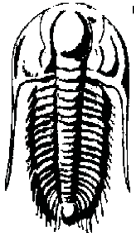
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1510.04	86.88	Initial Hydro-static
3	42.81	87.54	Open To Flow (1)
8	39.38	92.19	Shut-In(1)
70	973.72	92.43	End Shut-In(1)
70	42.88	92.29	Open To Flow (2)
104	110.35	97.41	Shut-In(2)
258	971.58	96.46	End Shut-In(2)
263	1472.96	93.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	Water	0.99
124.00	MGO 5%G20%W20%G55%O	1.74
0.00	1270'GIP	0.00

Gas Rates

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



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TESTING, INC**

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TOOL DIAGRAM

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Job Ticket: 50360

DST#: 1

ATTN: Chris Mitchell

Test Start: 2013.03.01 @ 12:51:01

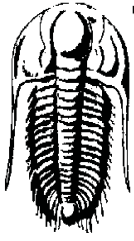
Tool Information

Drill Pipe:	Length: 3136.00 ft	Diameter: 3.80 inches	Volume: 43.99 bbl	Tool Weight:	2200.00 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
			<u>Total Volume: 44.14 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3189.00 ft			Final	56000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	28.00 ft				
Tool Length:	62.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Recorder	0.00	8374	Fluid	3155.00	
Blank Spacing	4.00			3159.00	
Change Over Sub	1.00			3160.00	
Shut In Tool	5.00			3165.00	
Sampler	2.00			3167.00	
Hydraulic tool	5.00			3172.00	
Jars	5.00			3177.00	
Safety Joint	2.00			3179.00	
Packer	5.00			3184.00	34.00 Bottom Of Top Packer
Packer	5.00			3189.00	
Stubb	1.00			3190.00	
Recorder	0.00	8369	Inside	3190.00	
Recorder	0.00	8700	Outside	3190.00	
Perforations	24.00			3214.00	
Bullnose	3.00			3217.00	28.00 Bottom Packers & Anchor

Total Tool Length: 62.00



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FLUID SUMMARY

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Ball #1-12

Job Ticket: 50360

DST#: 1

ATTN: Chris Mitchell

Test Start: 2013.03.01 @ 12:51:01

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

90000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	Water	0.989
124.00	MGO 5%G20%W20%G55%O	1.739
0.00	1270'GIP	0.000

Total Length: 214.00 ft Total Volume: 2.728 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler Data:500PSI 1000ML oil 500ML gas 500ML water RW .10@60F

Serial #: 8369

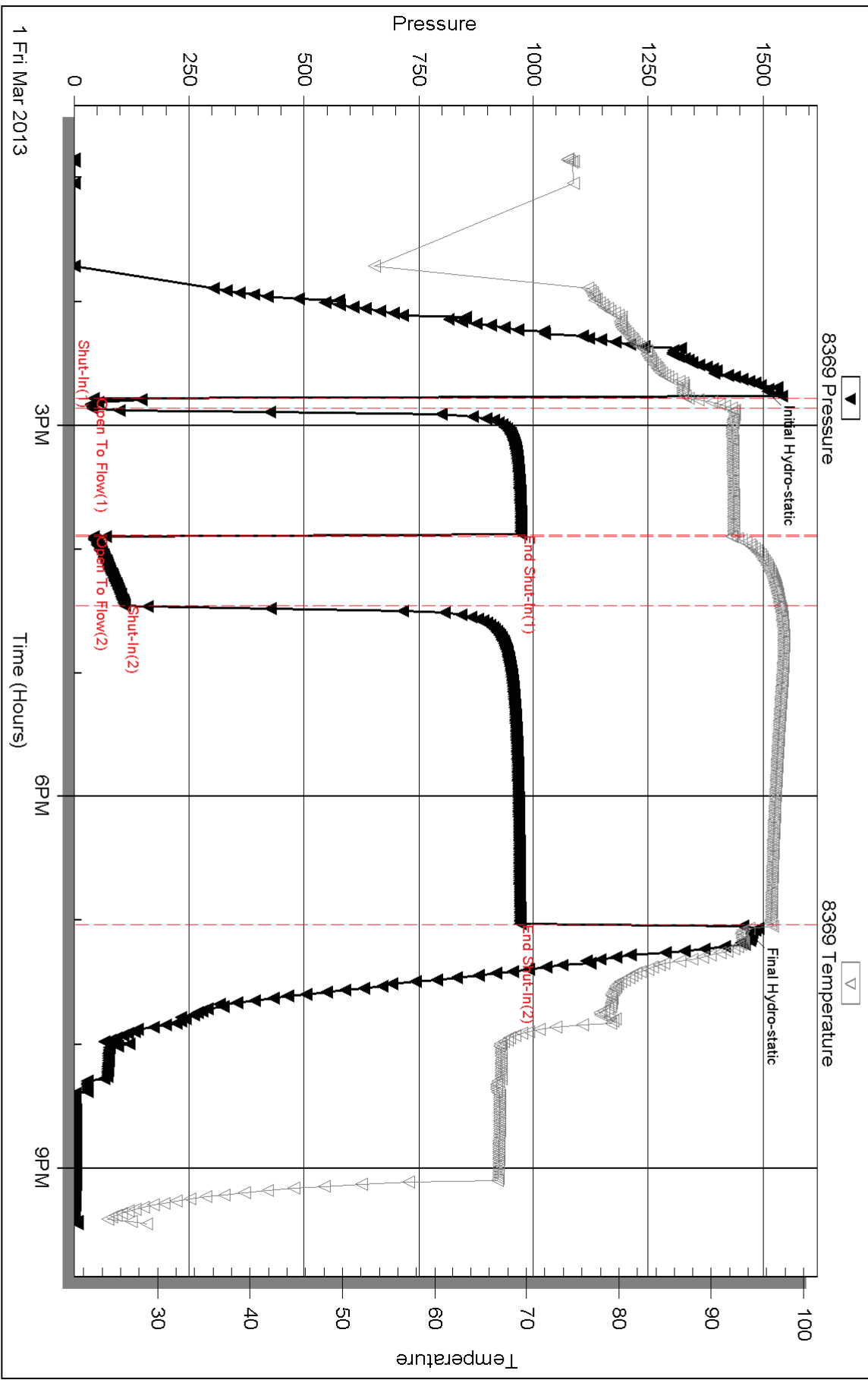
Inside

Samuel Gary Jr & Assoc Inc

Ball #1-12

DST Test Number: 1

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 50360

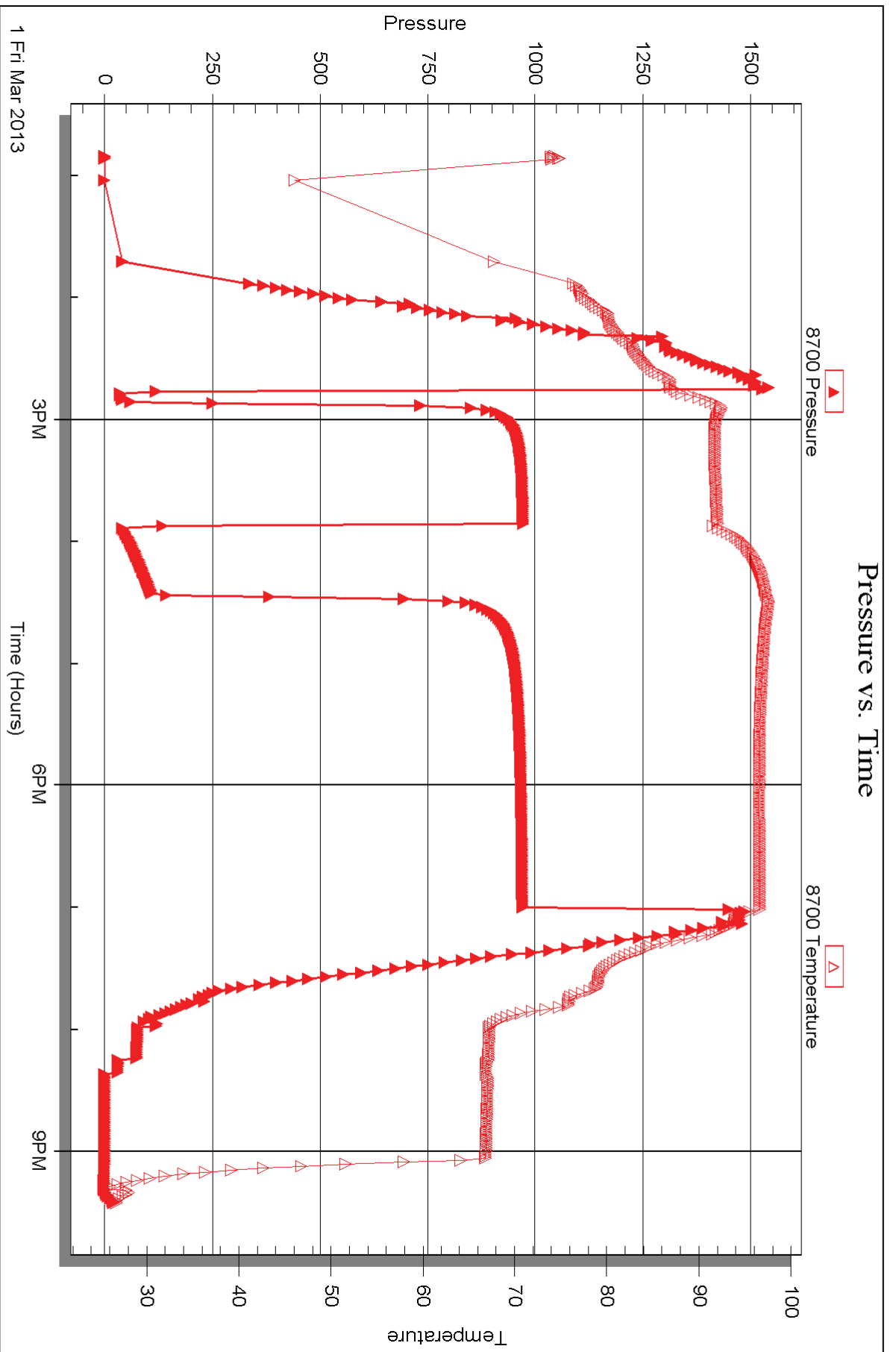
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Serial #: 8700

Outside Samuel Gary Jr & Assoc Inc

Ball #1-12

DST Test Number: 1



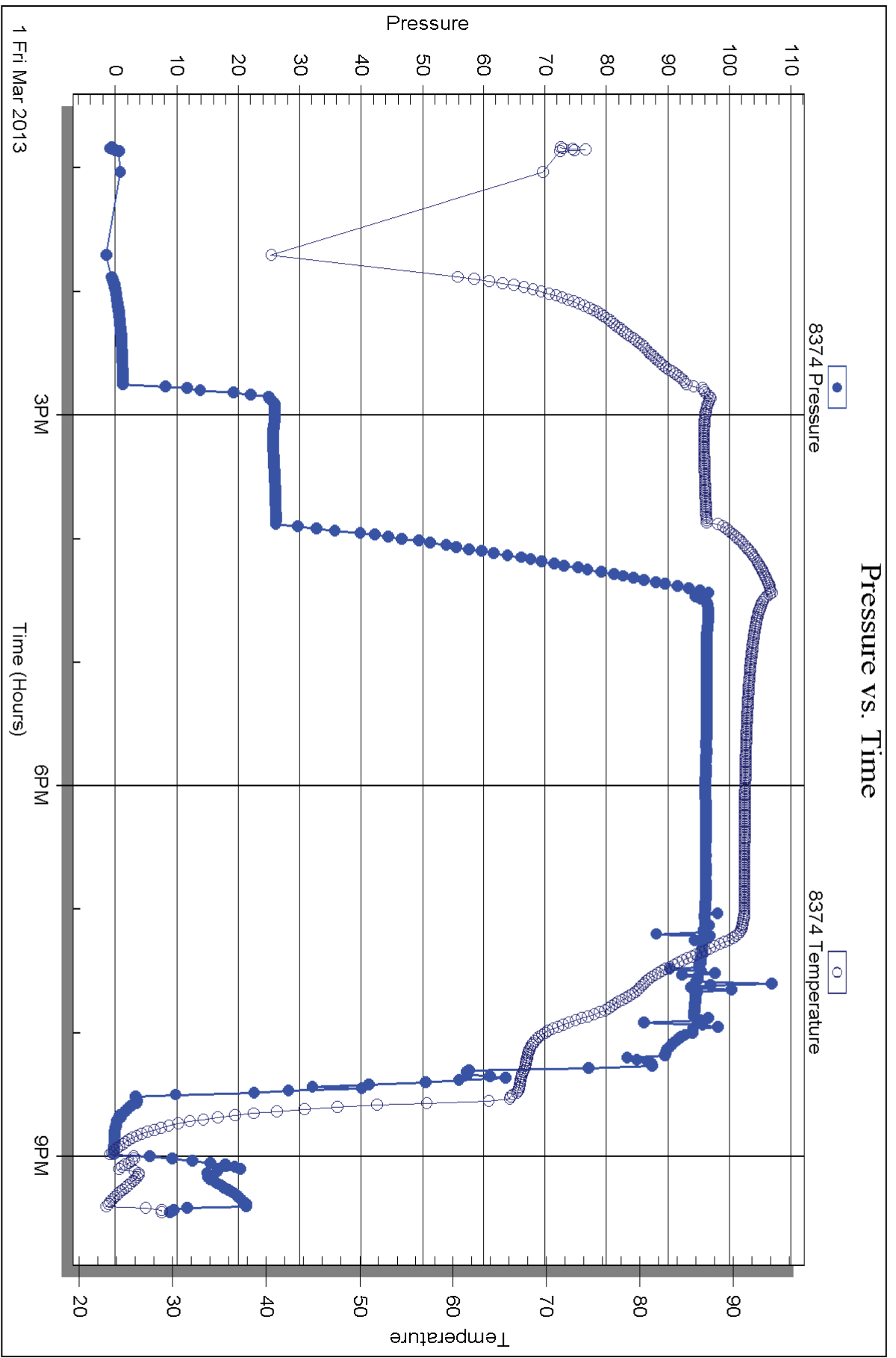
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Fluid

Samuel Gary Jr & Assoc Inc

Ball #1-12

DST Test Number: 1



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