



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr & Associates Inc

Willy Nilly #16A-32-916

1515 Wynkoop STE 700
Denver CO 80202+2062

32-9s-16w Rooks KS

ATTN: Wyatt Urban

Job Ticket: 65989

DST#: 5

Test Start: 2019.08.29 @ 20:45:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:48:02

Time Test Ended: 05:06:02

Test Type: Conventional Bottom Hole (Reset)

Tester: Spencer J Staab

Unit No: 84

Interval: 3514.00 ft (KB) To 3526.00 ft (KB) (TVD)

Reference Elevations: 2053.00 ft (KB)

Total Depth: 3526.00 ft (KB) (TVD)

2045.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8374

Inside

Press@RunDepth: 119.87 psig @ 3515.00 ft (KB)

Capacity: psig

Start Date: 2019.08.29

End Date:

2019.08.30

Last Calib.:

2019.08.30

Start Time: 20:45:01

End Time:

05:06:02

Time On Btm:

2019.08.29 @ 23:47:47

Time Off Btm:

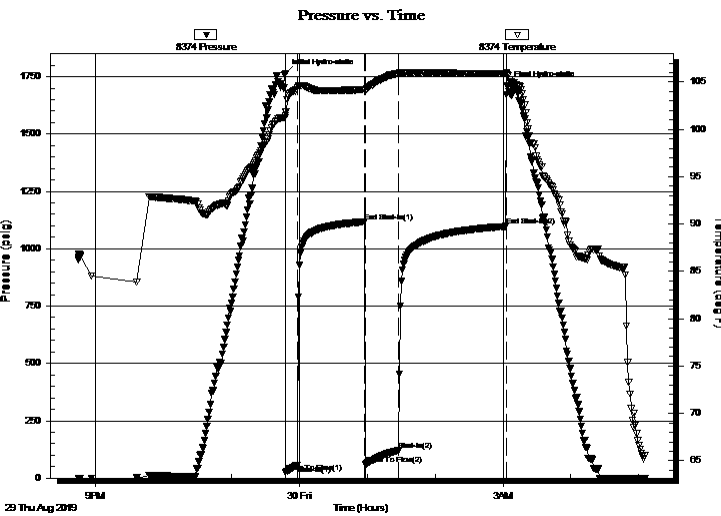
2019.08.30 @ 03:04:02

TEST COMMENT: 10-IF-Fair; Built to 7&1/4"

60-ISI-No Return

30-FF-BOB 22 mins; Built to 12&1/2"

90-FSI-Weak Surface; Died 45 mins in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1764.63	101.84	Initial Hydro-static
1	23.80	101.45	Open To Flow (1)
11	55.63	104.41	Shut-In(1)
71	1116.80	104.18	End Shut-In(1)
71	60.81	104.03	Open To Flow (2)
100	119.87	105.92	Shut-In(2)
196	1097.73	105.88	End Shut-In(2)
197	1712.51	105.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	GSOCMW 5%G 5%O 10%M 80%W	0.37
60.00	GOCMW 5%G 10%O 30%M 55%W	0.44
60.00	GWCOM 10%G 10%W 15%O 65%M	0.44
50.00	GO 15%G 85%O	0.42
0.00	60' GIP 100%G	0.00

Gas Rates

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

* Recovery from multiple tests



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2045.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8372 Outside

Press@RunDepth: psig @ 3515.00 ft (KB)

Capacity: psig

Start Date: 2019.08.29

End Date:

2019.08.30

Last Calib.:

2019.08.30

Start Time: 20:45:01

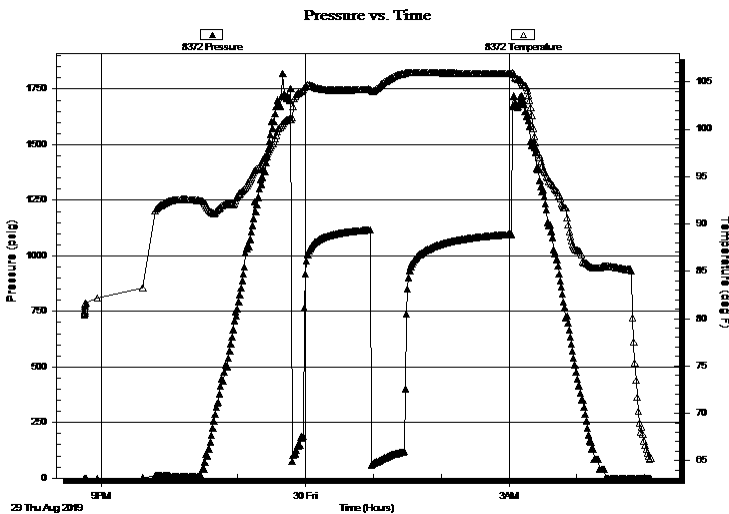
End Time:

05:06:02

Time On Btm:

Time Off Btm:

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50.00	GO 15%G 85%O	0.42
0.00	60' GIP 100%G	0.00

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FLUID SUMMARY

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Denver CO 80202+2062

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Job Ticket: 65989

DST#: 5

ATTN: Wyatt Urban

Test Start: 2019.08.29 @ 20:45:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

24000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
50.00	GSOCMW 5%G 5%O 10%M 80%W	0.367
60.00	GOCMW 5%G 10%O 30%M 55%W	0.441
60.00	GWCOM 10%G 10%W 15%O 65%M	0.441
50.00	GO 15%G 85%O	0.415
0.00	60' GIP 100%G	0.000

Total Length: 220.00 ft Total Volume: 1.664 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

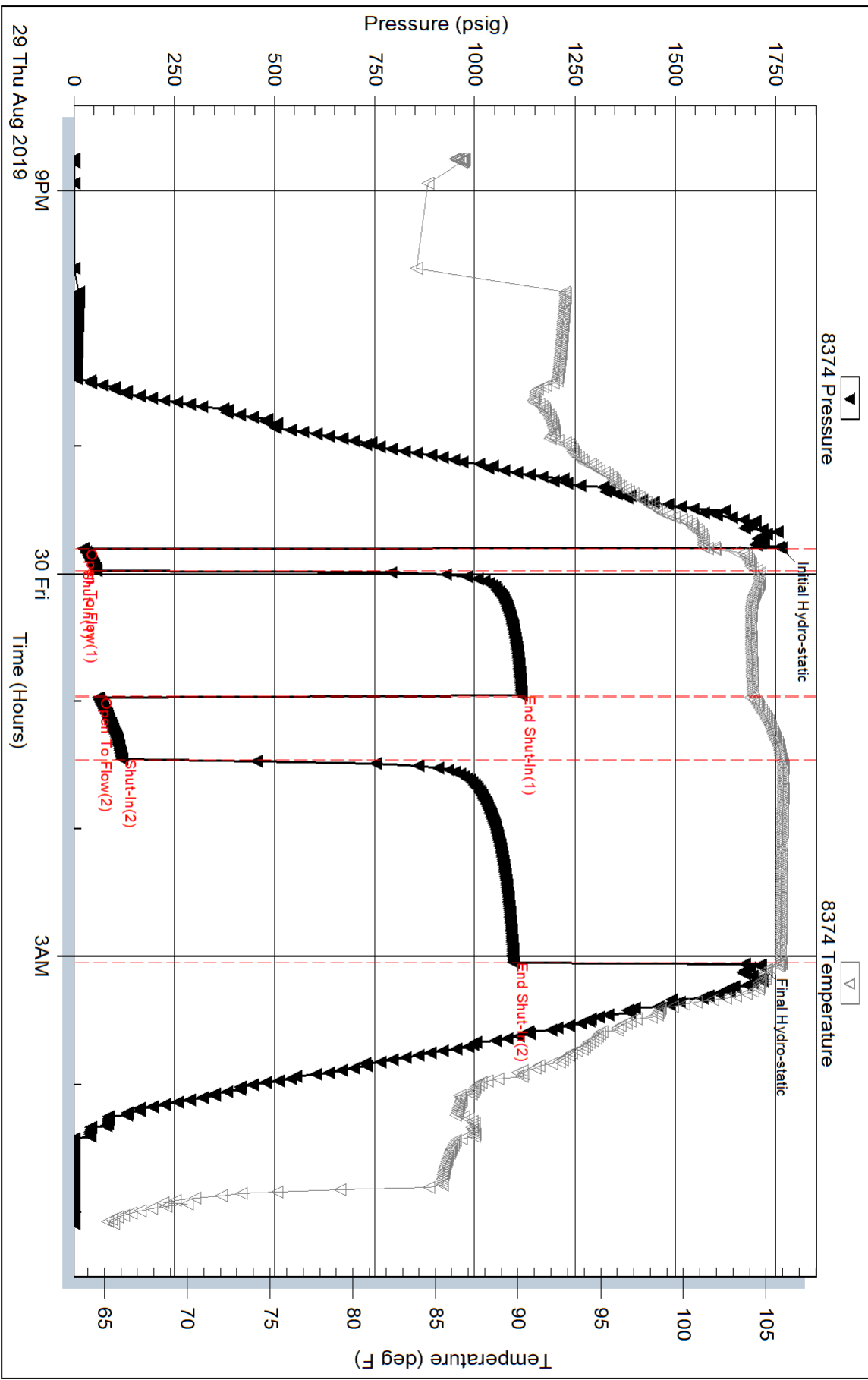
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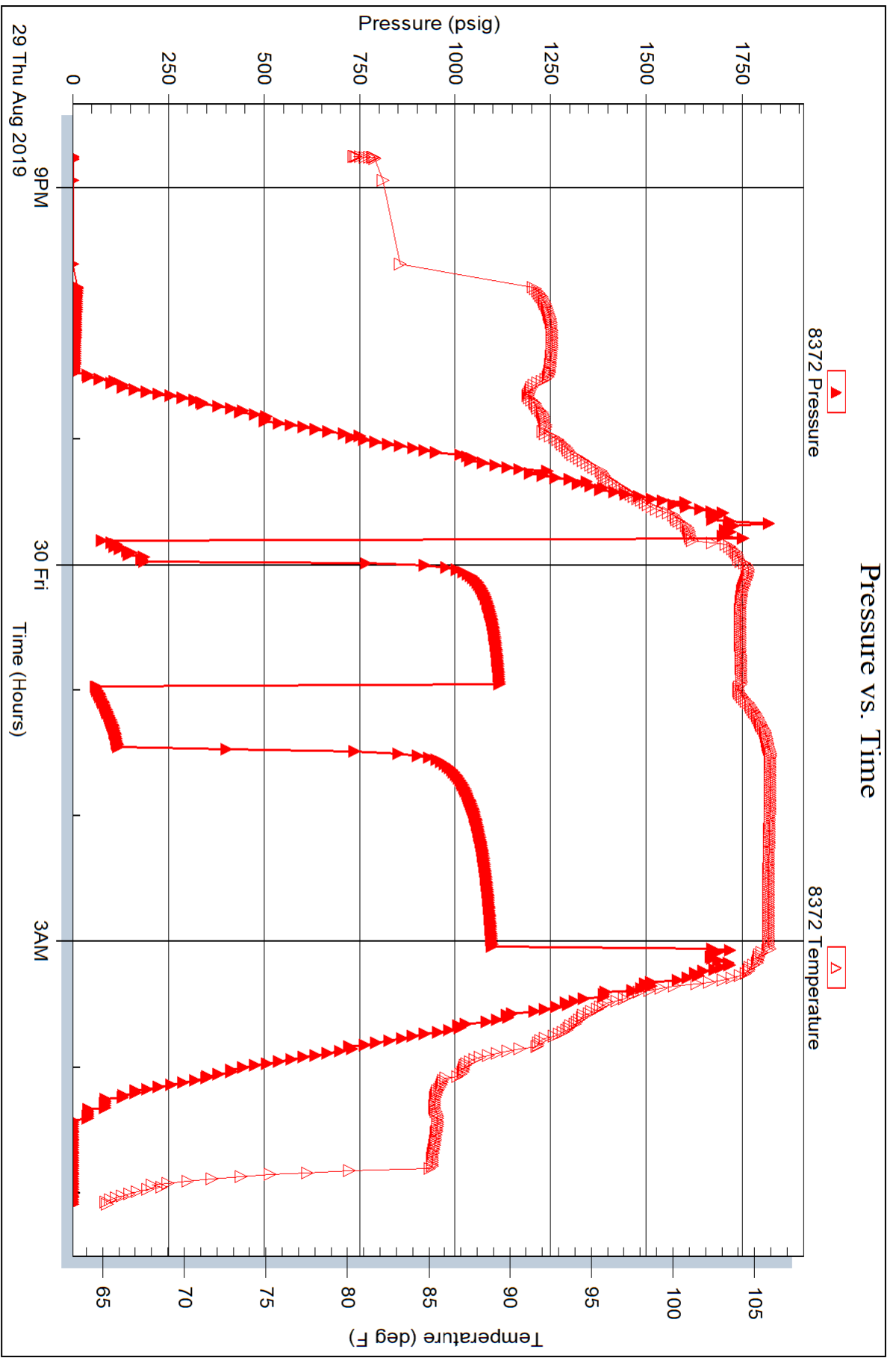
Recovery Comments: 2#LCM

RW=.301@66F

Sampler-100mL G, 500mL Oil, 600mL Mud, 800mL Water @535PSI

Pressure vs. Time





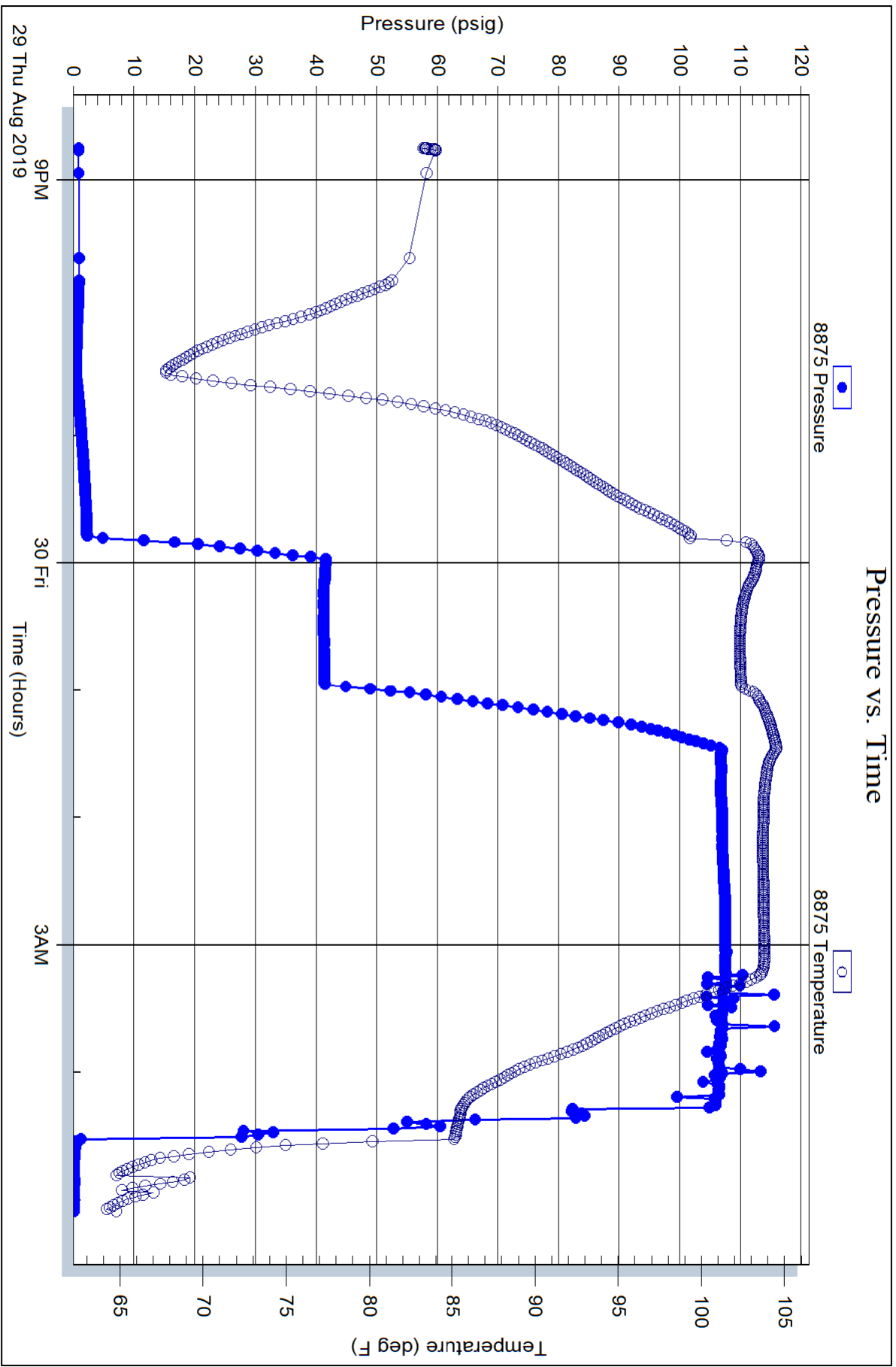
Serial #: 8875

Fluid

Samuel Gary Jr & Associates Inc

32-95-16w Rocks KS

DST Test Number: 5



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Ref. No: 65989

Printed: 2019.08.30 @ 07:07:22