



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Samuel Gary Jr Associates Inc

25-10s-30w Sheridan,KS

1515 Wynkoop STE 700
Denver CO 80202

Kevin Zerr 1-25

Job Ticket: 42423

DST#: 5

ATTN: Clayton Camozzi

Test Start: 2015.03.17 @ 03:21:00

GENERAL INFORMATION:

Formation: **LKC "K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:42:00

Time Test Ended: 11:39:45

Test Type: Conventional Straddle (Reset)

Tester: Cody Bloedorn

Unit No: 73

Interval: 4157.00 ft (KB) To 4214.00 ft (KB) (TVD)

Reference Elevations: 2868.00 ft (KB)

Total Depth: 4667.00 ft (KB) (TVD)

2860.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8648

Inside

Press@RunDepth: 420.28 psig @ 4195.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.03.17

End Date:

2015.03.17

Last Calib.:

2015.03.17

Start Time: 03:21:05

End Time:

11:39:44

Time On Btm:

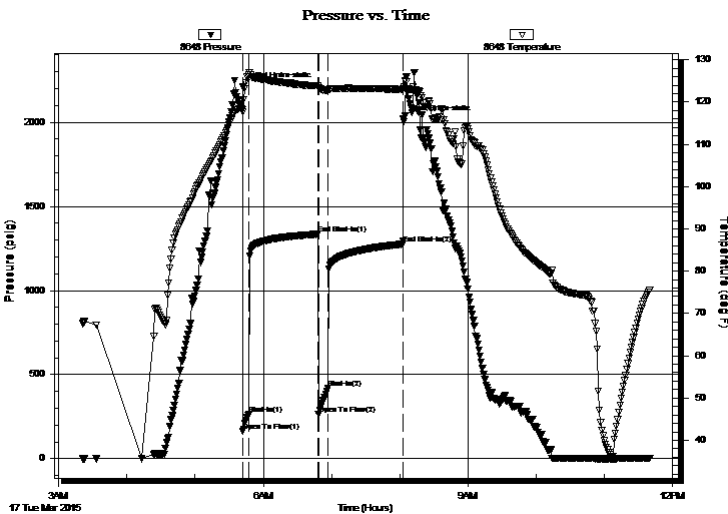
2015.03.17 @ 05:41:45

Time Off Btm:

2015.03.17 @ 08:03:15

TEST COMMENT: 05 - IF- B.O.B. in 2 minutes
60 - IS- No return
10 - FF- B.O.B. in 2 minutes
60 - FS- No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2209.55	118.22	Initial Hydro-static
1	162.80	117.58	Open To Flow (1)
6	265.92	126.53	Shut-In(1)
67	1335.27	123.80	End Shut-In(1)
67	265.50	123.30	Open To Flow (2)
75	420.28	122.75	Shut-In(2)
141	1275.92	122.99	End Shut-In(2)
142	2018.52	123.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
434.00	MW, 5%M, 95%W	5.81
372.00	MW, 50%M, 50%W	5.22
67.00	Mud - Oil spots, 100%M	0.94

Gas Rates

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

* Recovery from multiple tests



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Test Type: Conventional Straddle (Reset)

Tester: Cody Bloedorn

Unit No: 73

Interval: 4157.00 ft (KB) To 4214.00 ft (KB) (TVD)

Total Depth: 4667.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2868.00 ft (KB)

2860.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8958 Fluid

Press@RunDepth: psig @ 4124.00 ft (KB)

Start Date: 2015.03.17 End Date: 2015.03.17

Start Time: 03:21:05 End Time: 11:39:14

Capacity: 8000.00 psig

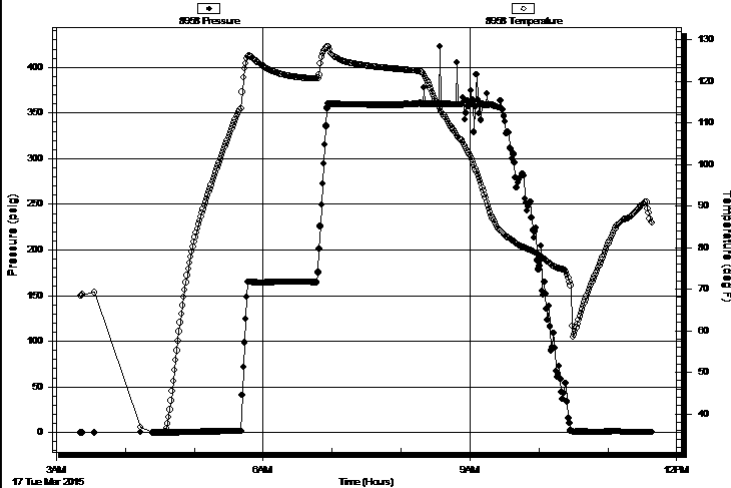
Last Calib.: 2015.03.17

Time On Btm:

Time Off Btm:

TEST COMMENT: 05 - IF- B.O.B. in 2 minutes
60 - IS- No return
10 - FF- B.O.B. in 2 minutes
60 - FS- No return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
434.00	MW, 5%M, 95%W	5.81
372.00	MW, 50%M, 50%W	5.22
67.00	Mud - Oil spots, 100%M	0.94

Gas Rates

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

* Recovery from multiple tests



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DRILL STEM TEST REPORT

Samuel Gary Jr Associates Inc

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Kevin Zerr 1-25

Job Ticket: 42423

DST#: 5

ATTN: Clayton Camozzi

Test Start: 2015.03.17 @ 03:21:00

GENERAL INFORMATION:

Formation: **LKC "K"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:42:00
 Time Test Ended: 11:39:45
Interval: 4157.00 ft (KB) To 4214.00 ft (KB) (TVD)
 Total Depth: 4667.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

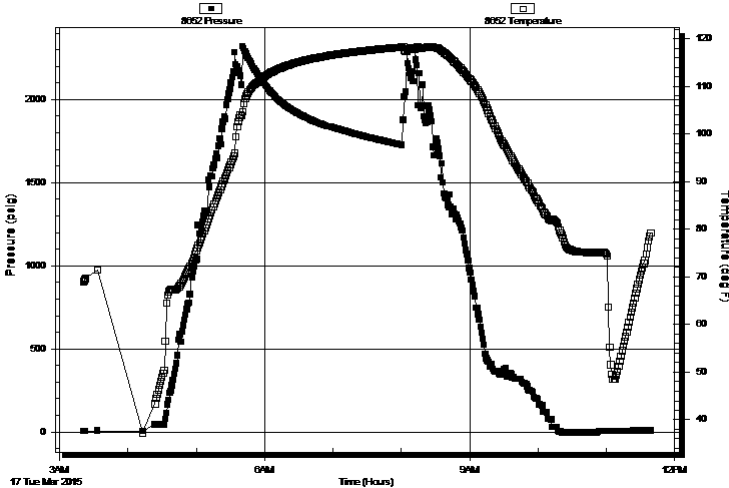
Test Type: Conventional Straddle (Reset)
 Tester: Cody Bloedorn
 Unit No: 73
 Reference Elevations: 2868.00 ft (KB)
 2860.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8652 Below (Straddle)

Press@RunDepth: psig @ 4661.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.03.17 End Date: 2015.03.17 Last Calib.: 2015.03.17
 Start Time: 03:21:05 End Time: 11:38:44 Time On Btm:
 Time Off Btm:

TEST COMMENT: 05 - IF- B.O.B. in 2 minutes
 60 - IS- No return
 10 - FF- B.O.B. in 2 minutes
 60 - FS- No return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
434.00	MW, 5%M, 95%W	5.81
372.00	MW, 50%M, 50%W	5.22
67.00	Mud - Oil spots, 100%M	0.94

Gas Rates

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

* Recovery from multiple tests



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DRILL STEM TEST REPORT

FLUID SUMMARY

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25-10s-30w Sheridan,KS

1515 Wynkoop STE 700
Denver CO 80202

Kevin Zerr 1-25

Job Ticket: 42423

DST#: 5

ATTN: Clayton Camozzi

Test Start: 2015.03.17 @ 03:21:00

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:

95000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.40 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
434.00	MW, 5%M, 95%W	5.815
372.00	MW, 50%M, 50%W	5.218
67.00	Mud - Oil spots, 100%M	0.940

Total Length: 873.00 ft Total Volume: 11.973 bbl

Num Fluid Samples: 0

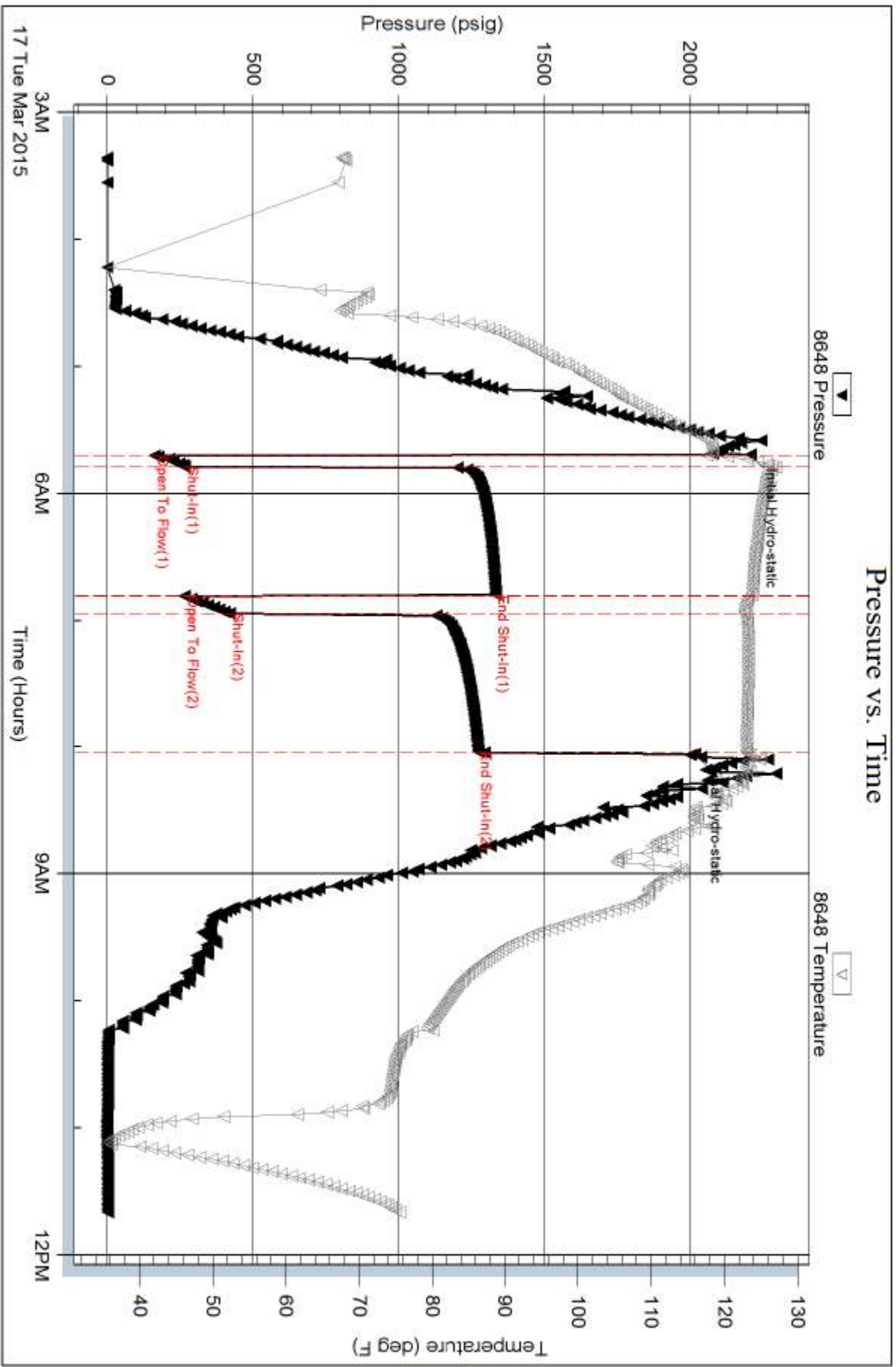
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .14 @ 39 Degrees = 95000



Serial #: 8958

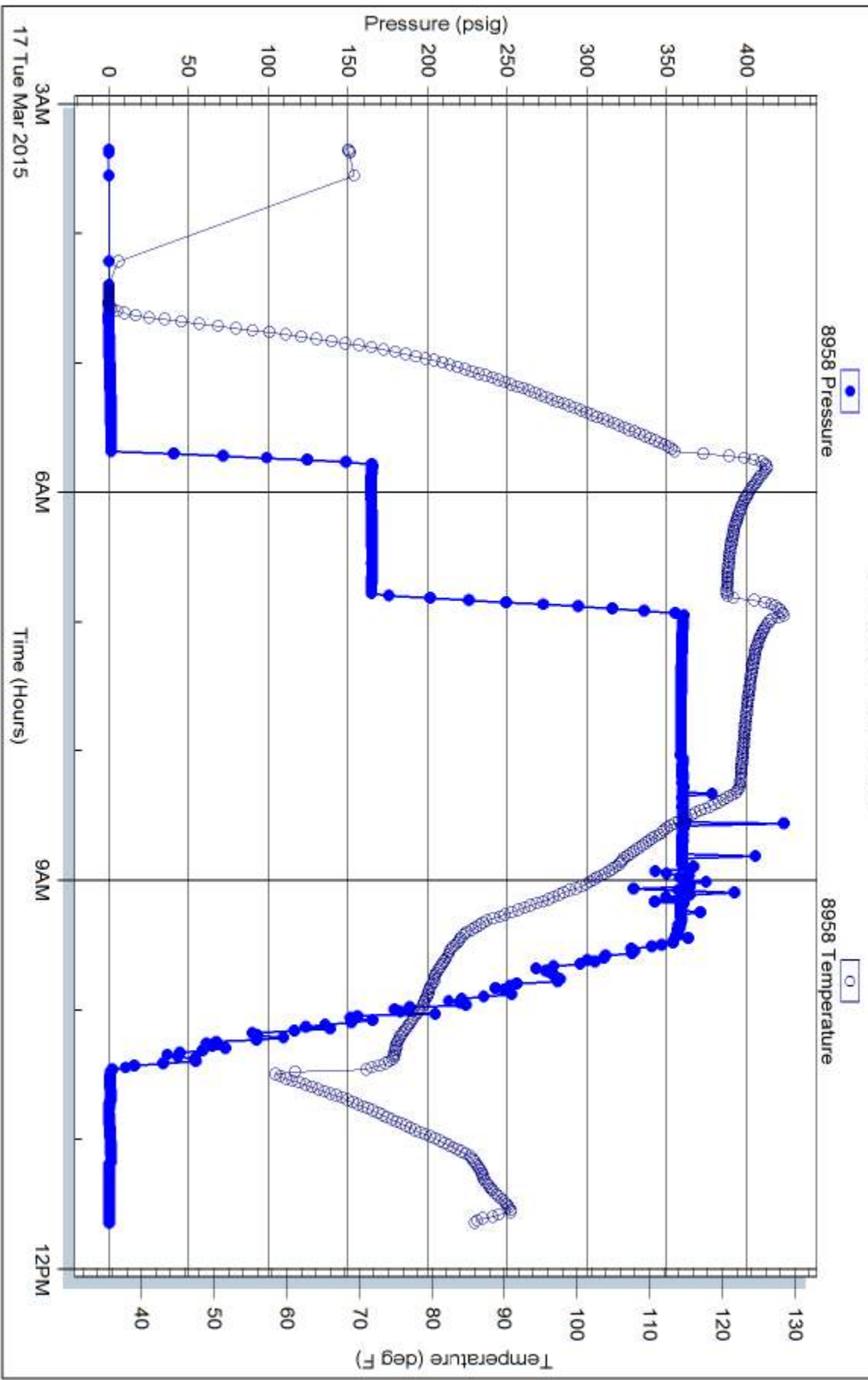
Fluid

Samuel Gary Jr Associates Inc

Kevin Zerr 1-25

DST Test Number: 5

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 42423

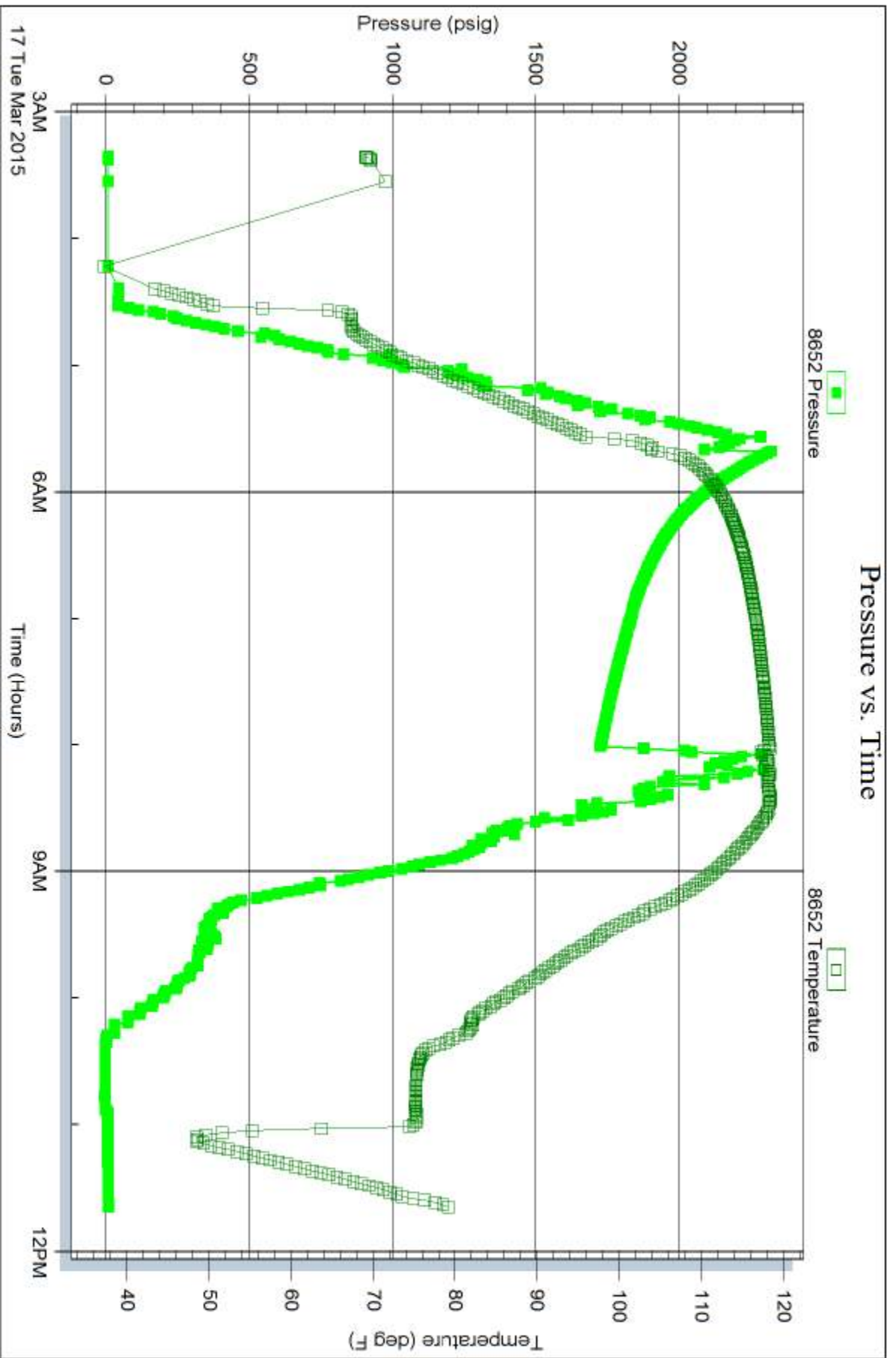
Printed: 2015.03.17 @ 11:57:48

Serial #: 8652

Below (Stratton) Gary Jr Associates Inc

Kevin Zerr 1-25

DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 42423

Printed: 2015.03.17 @ 11:57:48