



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Sam Gary & Associates Inc.

1 5 24w Norton Ks.

1515 Wynkoop
STE 700 Denver Co.
80202
ATTN: Clayton Camozzi

Neurnberger #1-1

Job Ticket: 56814

DST#: 2

Test Start: 2014.03.25 @ 16:35:00

GENERAL INFORMATION:

Formation: **LKC-A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:33:00

Time Test Ended: 22:54:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 3490.00 ft (KB) To 3510.00 ft (KB) (TVD)

Reference Elevations: 2373.00 ft (KB)

Total Depth: 3510.00 ft (KB) (TVD)

2363.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8673 Inside

Press@RunDepth: 21.75 psig @ 3491.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.25 End Date: 2014.03.25

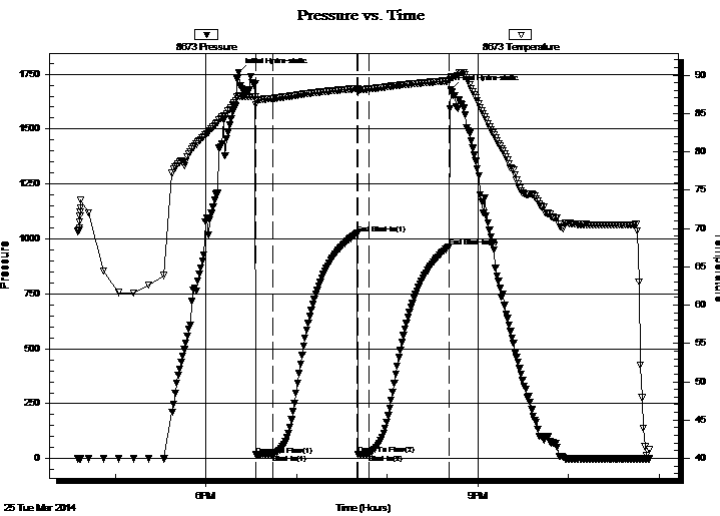
Last Calib.: 2014.03.25

Start Time: 16:35:05 End Time: 22:53:59

Time On Btm: 2014.03.25 @ 18:21:30

Time Off Btm: 2014.03.25 @ 20:42:00

TEST COMMENT: IF: Weak blow , Dead in 4 mins
IS: No blow back
FF: Weak blow , Dead in 4 mins.
FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1758.08	87.28	Initial Hydro-static
12	17.59	86.10	Open To Flow (1)
23	18.46	86.96	Shut-In(1)
79	1025.29	88.25	End Shut-In(1)
79	19.45	87.77	Open To Flow (2)
86	21.75	88.19	Shut-In(2)
139	963.67	89.26	End Shut-In(2)
141	1679.75	89.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	sampler-- 2000M 300PSI	0.00
5.00	mud w ith oil specs	0.02

* Recovery from multiple tests

Gas Rates

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



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Reference Elevations: 2373.00 ft (KB)

Total Depth: 3510.00 ft (KB) (TVD)

2363.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8791 Fluid

Press@RunDepth: psig @ 3455.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.25 End Date: 2014.03.25

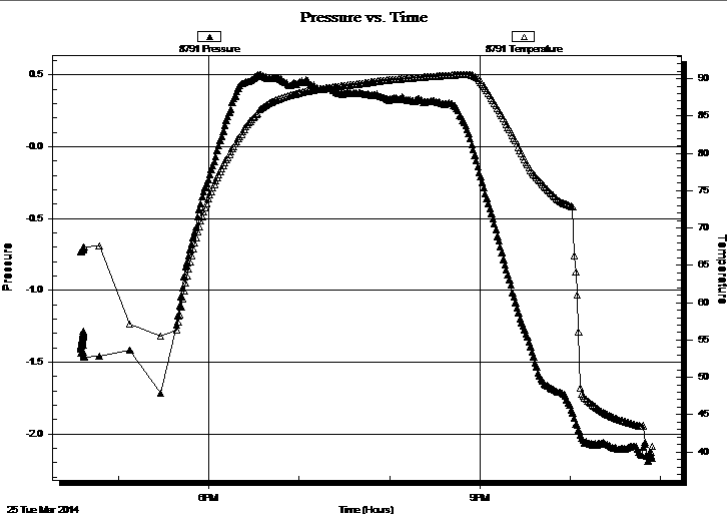
Last Calib.: 2014.03.25

Start Time: 16:35:01 End Time: 22:54:30

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Weak blow , Dead in 4 mins
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FS: No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	sampler-- 2000M 300PSI	0.00
5.00	mud w ith oil specs	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Sam Gary & Associates Inc.

1 5 24w Norton Ks.

1515 Wynkoop
STE 700 Denver Co.
80202

Neurnberger #1-1

Job Ticket: 56814

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2014.03.25 @ 16:35:00

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:

ppm

Viscosity: 73.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 67.87 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	sampler-- 2000M 300PSI	0.000
5.00	mud with oil specs	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

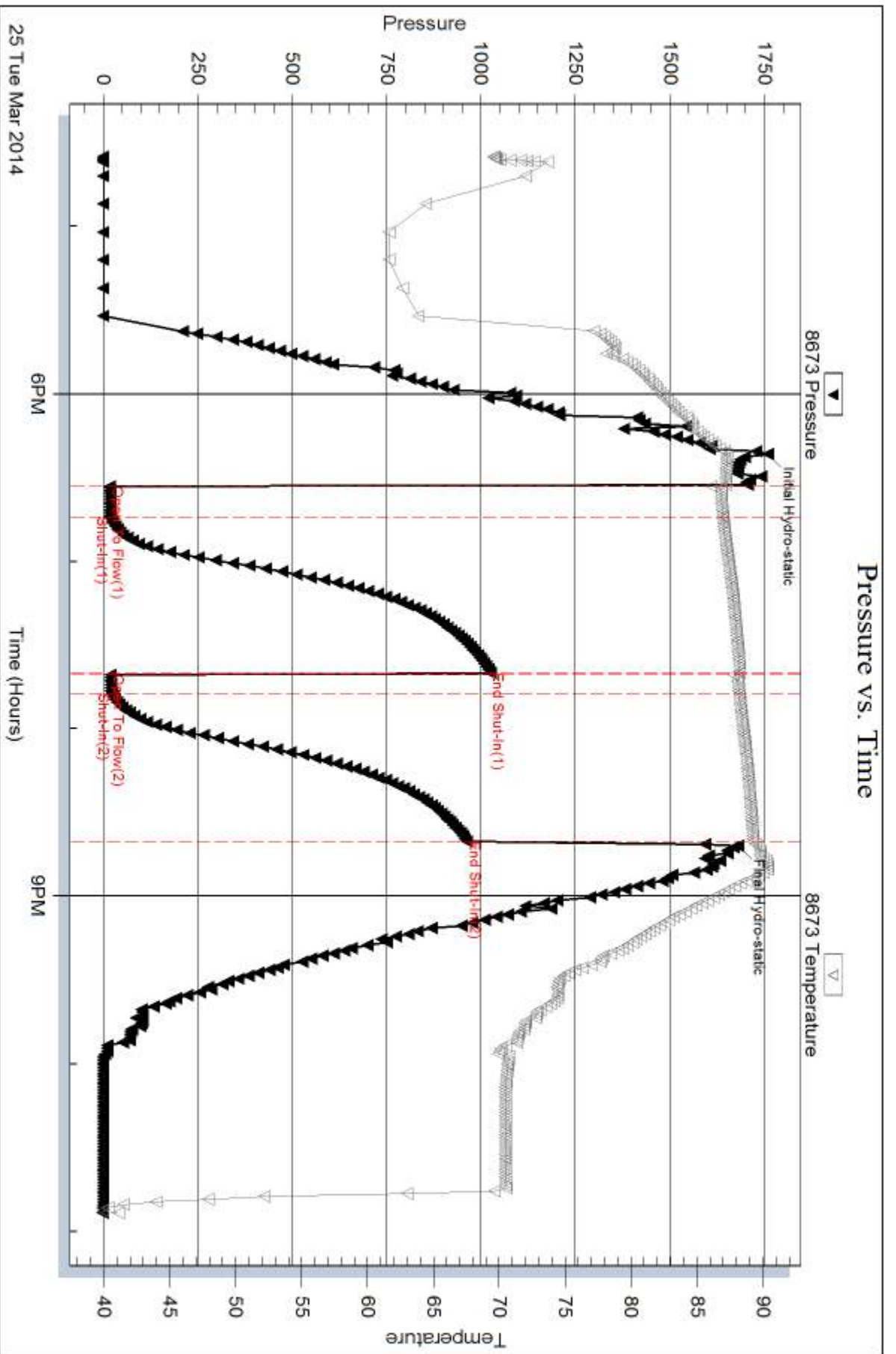
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



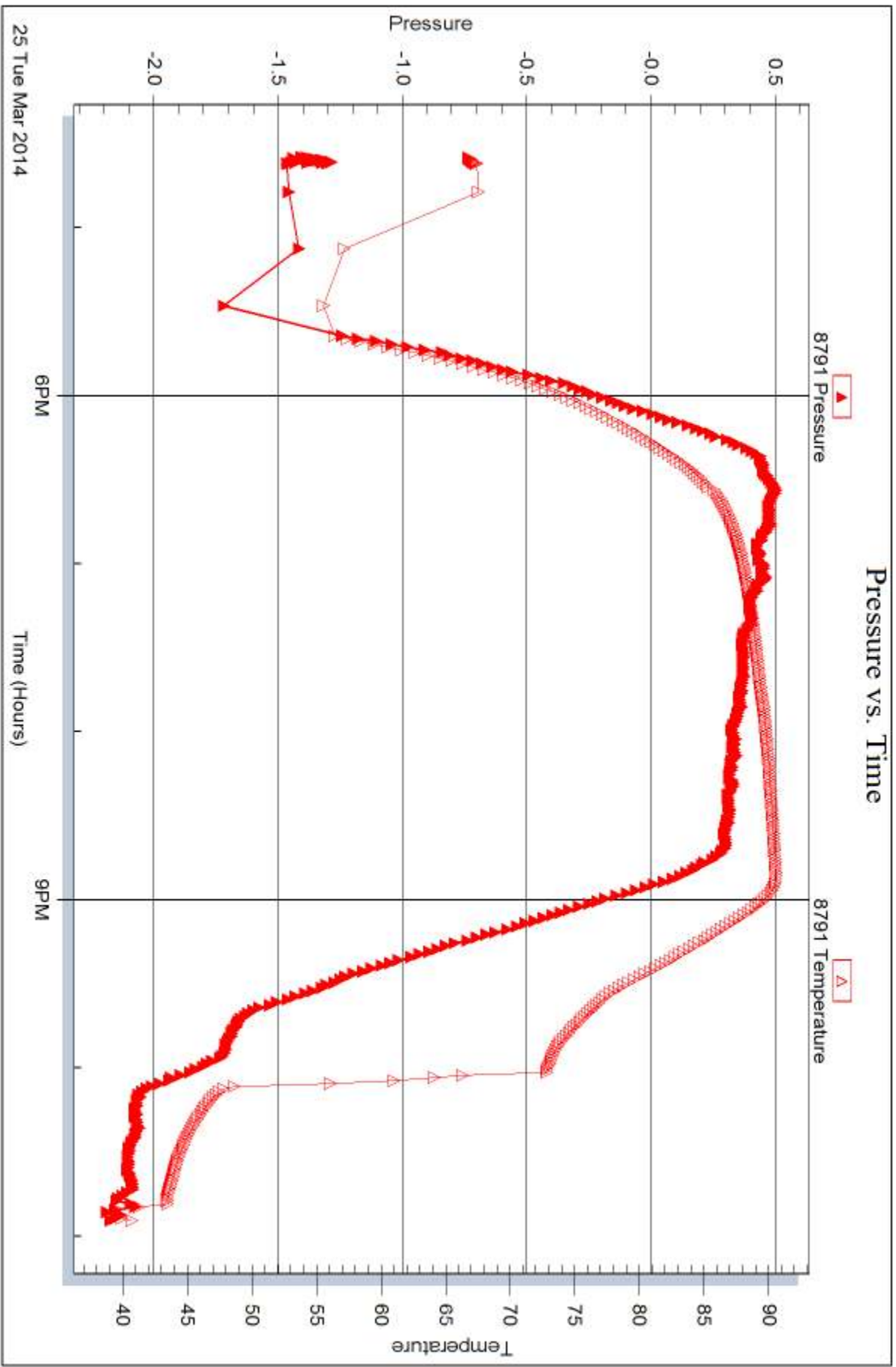
Serial #: 8791

Fluid

Sam Gary & Associates Inc.

Neumberger #1-1

DST Test Number: 2



25 Tue Mar 2014

6PM

Time (Hours)

9PM

Trilobite Testing, Inc

Ref. No: 56814

Printed: 2014.03.26 @ 20:18:21