



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: 56815

DST#: 3

Test Start: 2014.03.26 @ 09:10:00

GENERAL INFORMATION:

Formation: **LKC-B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:15:30

Time Test Ended: 17:24:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Kreuzer Jr.

Unit No: 61

Interval: 3506.00 ft (KB) To 3550.00 ft (KB) (TVD)

Reference Elevations: 2373.00 ft (KB)

Total Depth: 3550.00 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: 101.70 psig @ 3509.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.26 End Date: 2014.03.26

Last Calib.: 2014.03.26

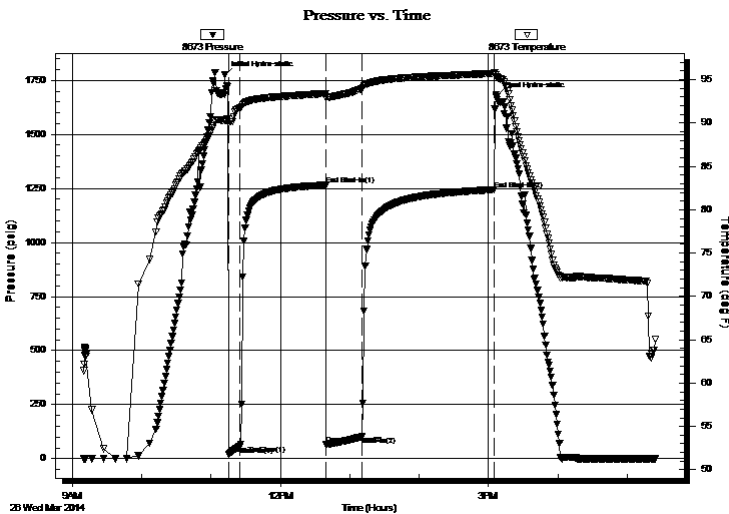
Start Time: 09:10:05 End Time: 17:24:29

Time On Btm: 2014.03.26 @ 11:12:00

Time Off Btm: 2014.03.26 @ 15:07:00

TEST COMMENT: IF: Strong blow , Built to 5 1/2 in. over 10 mins
IS: No blow back
FF: Strong blow , Built to B.O.B in 12 mins
FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1774.12	90.27	Initial Hydro-static
4	20.24	89.89	Open To Flow (1)
13	56.52	91.72	Shut-In(1)
87	1265.33	93.40	End Shut-In(1)
88	66.92	92.96	Open To Flow (2)
119	101.70	93.98	Shut-In(2)
233	1244.48	95.71	End Shut-In(2)
235	1673.01	95.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	sampler go-2000ml-40%g60%o-700psi	0.00
119.00	gocm-10%g40%o60%m	0.59
62.00	go-30%g70%o	0.87
50.00	go-10%g90%o	0.70
0.00	gravity-36@70=35	0.00

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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STE. 700 Denver Co.
80202

Neurnberger #1-1

Job Ticket: 56815

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2014.03.26 @ 09:10:00

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: 50.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
0.00	sampler go-2000ml-40%g60%o-700psi	0.000
119.00	gocm-10%g40%o60%m	0.585
62.00	go-30%g70%o	0.870
50.00	go-10%g90%o	0.701
0.00	gravity-36@70=35	0.000

Total Length: 231.00 ft

Total Volume: 2.156 bbf

Num Fluid Samples: 0

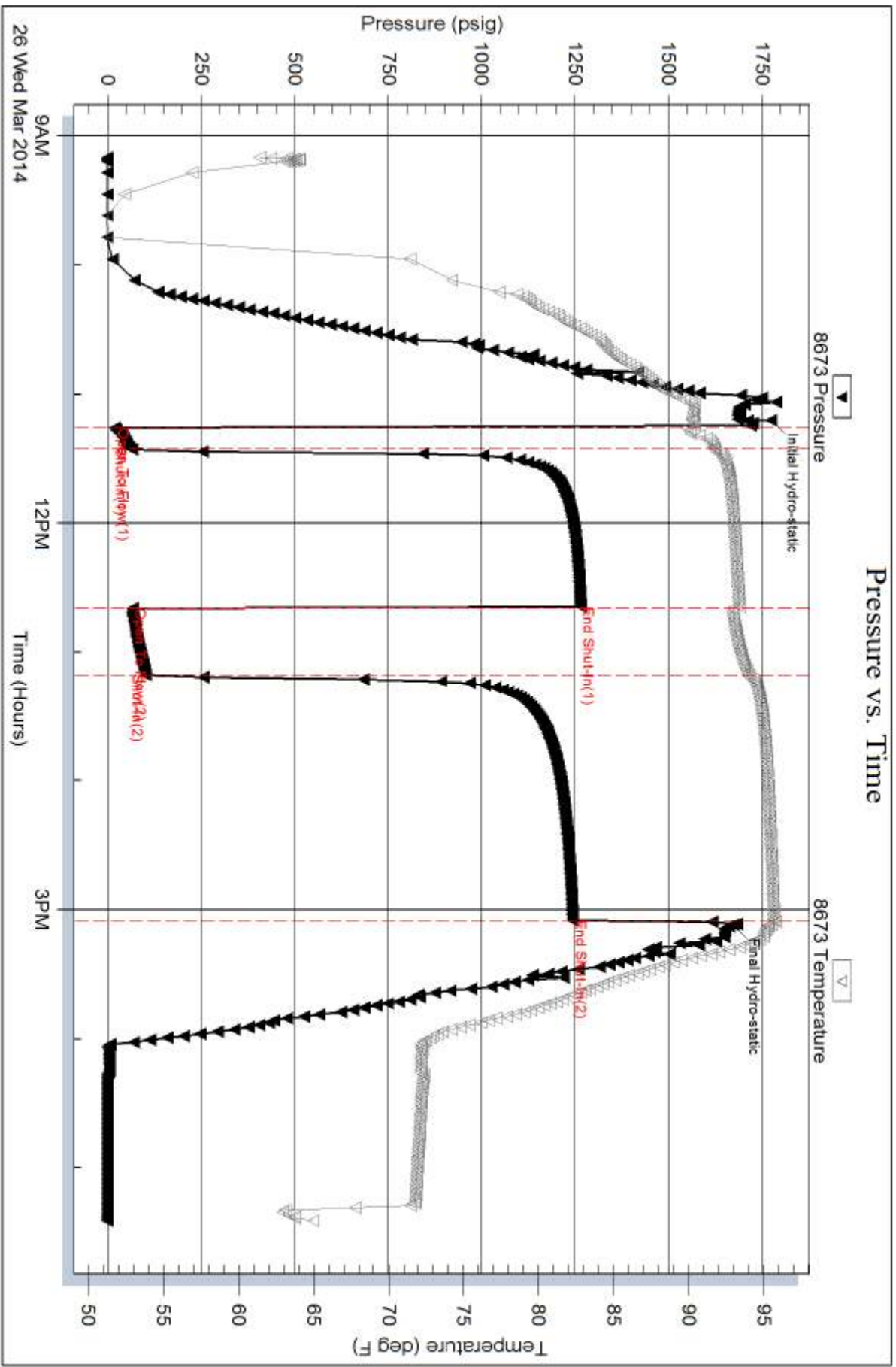
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 8791

Fluid

Sam Gary & Associates Inc.

Neumberger #1-1

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 56815

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