



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates, Inc.

26-4S-23W Norton, Ks

1515 Wynkoop
Ste. 700
Denver, CO 80202
ATTN: Clayton Camozzi

Bales #1-26

Job Ticket: 58758

DST#: 4

Test Start: 2014.04.14 @ 21:58:55

GENERAL INFORMATION:

Formation: **Reagen Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:22:55

Time Test Ended: 05:26:55

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan L

Unit No: 48

Interval: 3800.00 ft (KB) To 3812.00 ft (KB) (TVD)

Reference Elevations: 2416.00 ft (KB)

Total Depth: 3812.00 ft (KB) (TVD)

2408.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8321 Outside

Press @ Run Depth: 30.23 psig @ 3801.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.04.14

End Date:

2014.04.15

Last Calib.:

2014.04.15

Start Time: 21:58:56

End Time:

05:26:55

Time On Btm:

2014.04.15 @ 00:22:25

Time Off Btm:

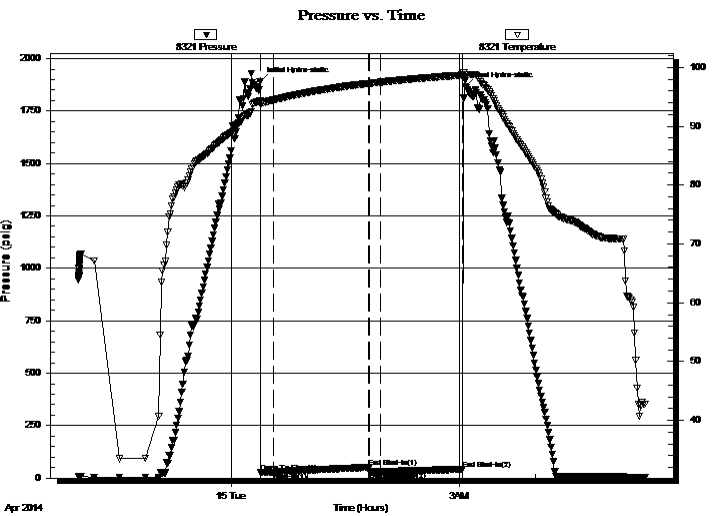
2014.04.15 @ 03:04:55

TEST COMMENT: 10- IF- Surface blow built to .25"

75- IS- No blow

10- FF- No blow

60- FSI- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1890.48	94.27	Initial Hydro-static
1	26.95	93.74	Open To Flow (1)
11	28.91	94.44	Shut-In(1)
86	50.96	97.25	End Shut-In(1)
87	30.24	97.27	Open To Flow (2)
95	30.23	97.48	Shut-In(2)
160	41.57	98.68	End Shut-In(2)
163	1866.60	98.71	Final Hydro-static

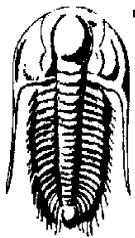
Recovery

Length (ft)	Description	Volume (bbl)
3.00	M	0.01

* Recovery from multiple tests

Gas Rates

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



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Unit No: 48

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Reference Elevations: 2416.00 ft (KB)

Total Depth: 3812.00 ft (KB) (TVD)

2408.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8647 Fluid

Press @ RunDepth: psig @ 3772.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.04.14 End Date: 2014.04.15 Last Calib.: 2014.04.15

Start Time: 21:58:54 End Time: 05:25:23 Time On Btm:

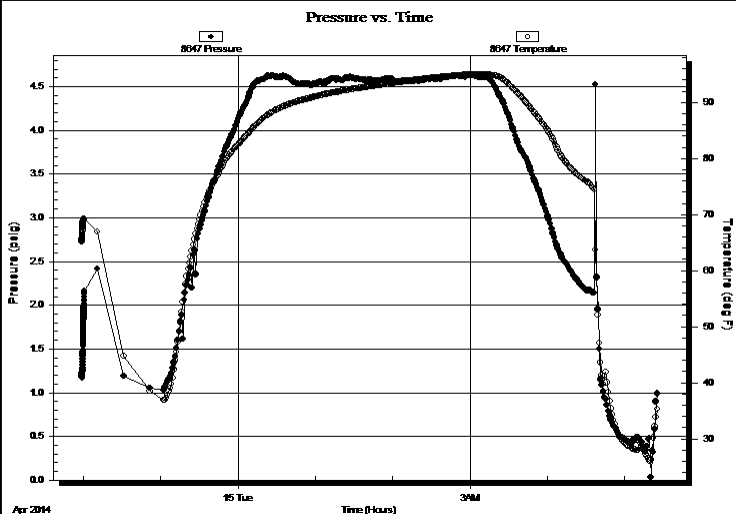
Time Off Btm:

TEST COMMENT: 10- IF- Surface blow built to .25"

75- ISI- No blow

10- FF- No blow

60- FSI- No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
3.00	M	0.01

Gas Rates

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

* Recovery from multiple tests



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DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates, Inc.

26-4S-23W Norton, Ks

1515 Wynkoop
Ste. 700
Denver, CO 80202

Bales #1-26

Job Ticket: 58758

DST#: 4

ATTN: Clayton Camozzi

Test Start: 2014.04.14 @ 21:58:55

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1750.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	M	0.015

Total Length: 3.00 ft Total Volume: 0.015 bbl

Num Fluid Samples: 0

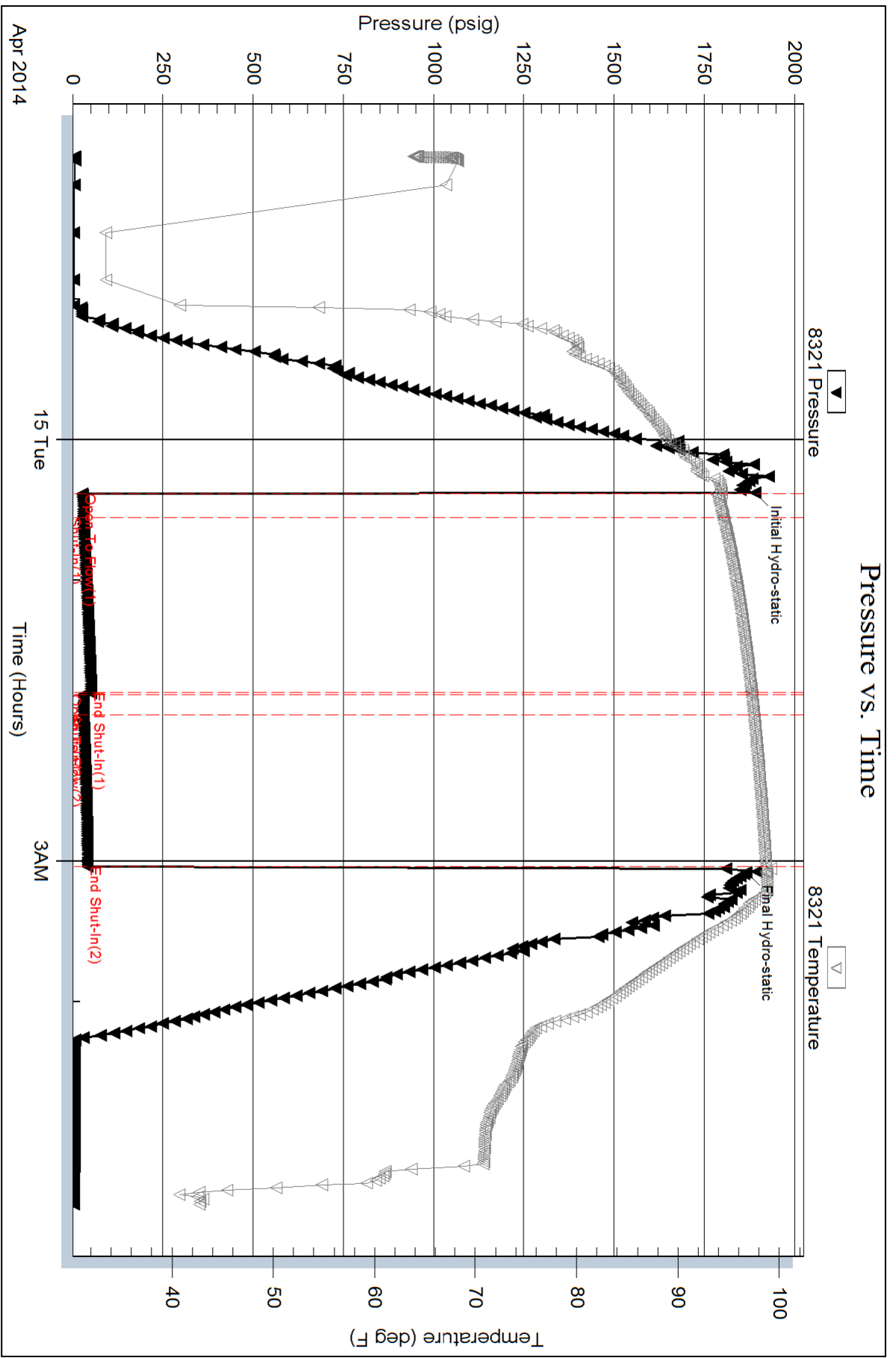
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler: 2000mL M@20PSI



Serial #: 8647

Fluid

Samuel Gary Jr. & Associates, Inc.

Bales #1-26

DST Test Number: 4

