



**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: 58756

**DST#: 2**

Test Start: 2014.04.12 @ 18:37:56

## GENERAL INFORMATION:

Formation: **LKC "B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:44:56

Time Test Ended: 04:04:26

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan L

Unit No: 48

**Interval: 3546.00 ft (KB) To 3570.00 ft (KB) (TVD)**

Reference Elevations: 2416.00 ft (KB)

Total Depth: 3570.00 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@RunDepth: 115.48 psig @ 3547.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.04.12

End Date:

2014.04.13

Last Calib.: 2014.04.13

Start Time: 18:37:57

End Time:

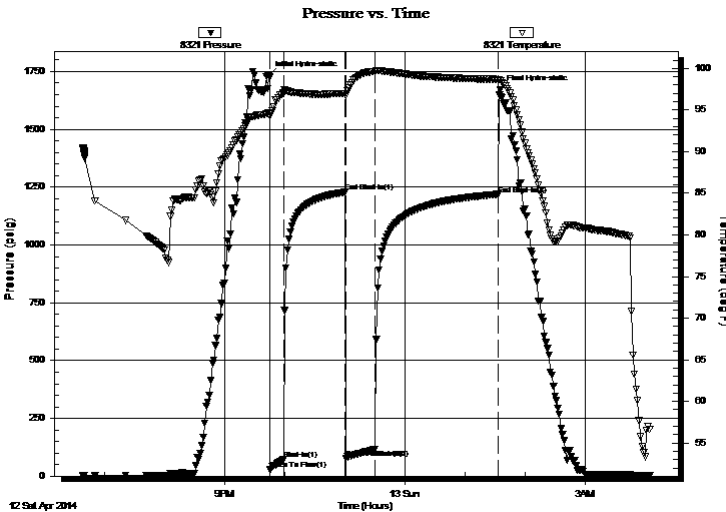
04:04:26

Time On Btm: 2014.04.12 @ 21:43:26

Time Off Btm: 2014.04.13 @ 01:34:26

TEST COMMENT: 015- IF- Slow ly built to 4"  
060- IS- No blow  
030- FF- Slow ly built to 4"  
120- FS- No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1733.18	94.63	Initial Hydro-static
2	29.08	94.28	Open To Flow (1)
15	72.69	97.04	Shut-In(1)
77	1228.19	96.96	End Shut-In(1)
78	77.88	96.75	Open To Flow (2)
107	115.48	99.59	Shut-In(2)
229	1218.90	98.68	End Shut-In(2)
231	1669.76	98.60	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
200.00	MW, 60%W 40%M	1.67

\* Recovery from multiple tests

## Gas Rates

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



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Job Ticket: 58756

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Test Start: 2014.04.12 @ 18:37:56

## GENERAL INFORMATION:

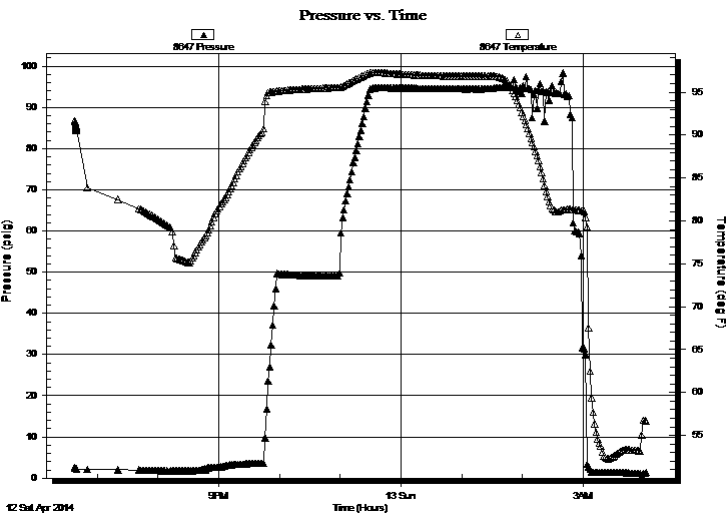
Formation: **LKC "B"**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 21:44:56  
 Tester: Brannan L  
 Time Test Ended: 04:04:26  
 Unit No: 48  
 Interval: **3546.00 ft (KB) To 3570.00 ft (KB) (TVD)**  
 Reference Elevations: 2416.00 ft (KB)  
 Total Depth: 3570.00 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 @ 3518.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.04.12 End Date: 2014.04.13 Last Calib.: 2014.04.13  
 Start Time: 18:37:51 End Time: 04:02:20 Time On Btm:  
 Time Off Btm:

TEST COMMENT: 015- IF- Slow ly built to 4"  
 060- IS- No blow  
 030- FF- Slow ly built to 4"  
 120- FS- No blow



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
200.00	MW, 60%W 40%M	1.67

\* Recovery from multiple tests

## Gas Rates

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



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**FLUID SUMMARY**

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ATTN: Clayton Camozzi

**Bales #1-26**

Job Ticket: 58756

**DST#: 2**

Test Start: 2014.04.12 @ 18:37:56

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 8.79 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 2000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

deg API

Water Salinity: 45000 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
200.00	MW, 60%W 40%M	1.674

Total Length: 200.00 ft      Total Volume: 1.674 bbl

Num Fluid Samples: 0

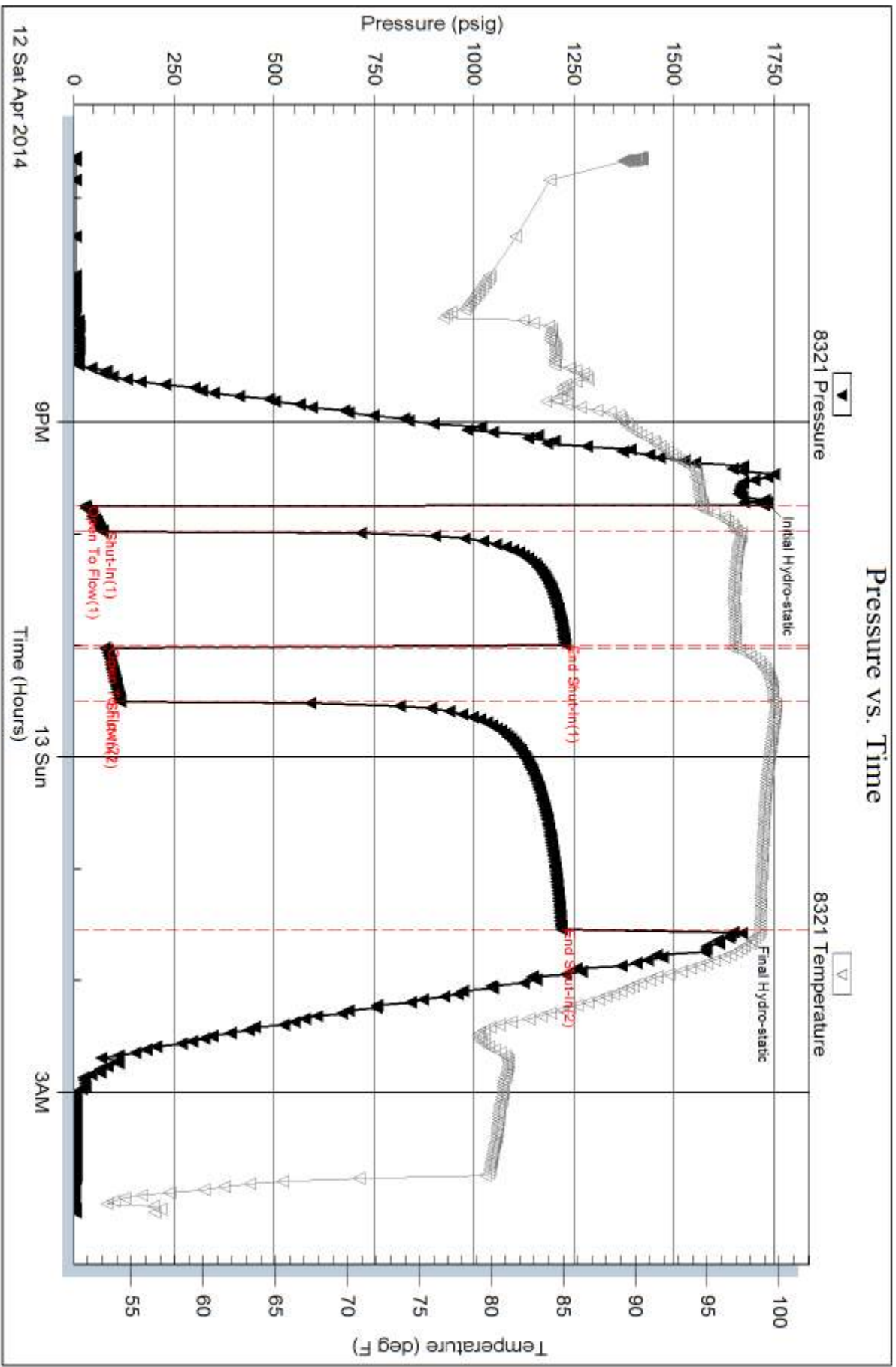
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler: 200mL M & 1800mL W @ 40PSI



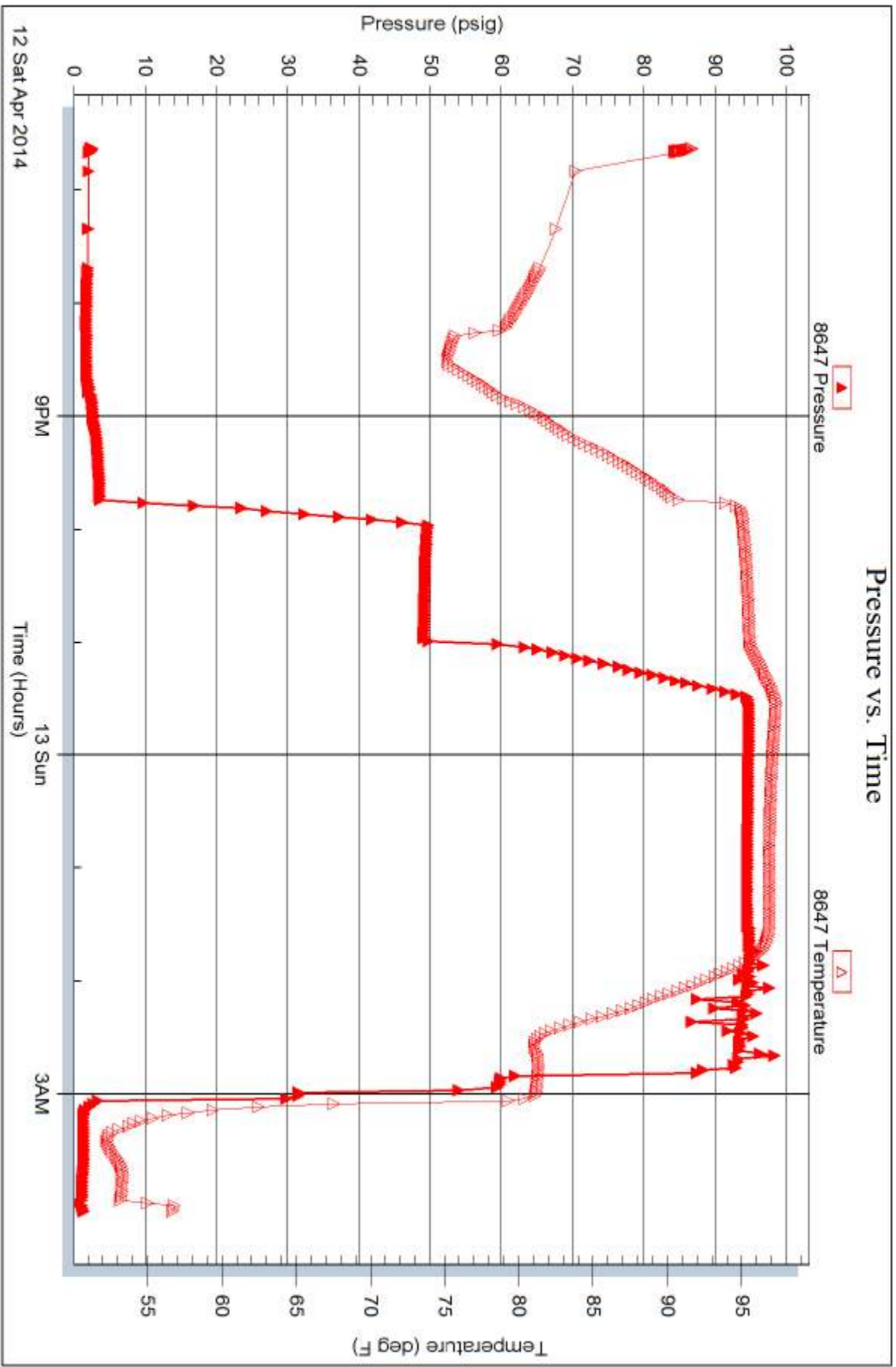
Serial #: 8647

Fluid

Samuel Gary J. & Associates, Inc.

Bales #1-26

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 58756

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