



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Samuel Gary Jr & Associaes.Inc

**20=15s=35w Logan,KS**

1515 WYNKOOP, STE 700  
Denver CO 80202

**Crouch 1-20**

Job Ticket: 58664

**DST#: 2**

ATTN: Clayton Camozzi

Test Start: 2015.06.03 @ 01:55:00

## GENERAL INFORMATION:

Formation: **"J"**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 03:30:00

Time Test Ended: 09:28:30

Test Type: Conventional Straddle (Reset)

Tester: Justin Harris

Unit No: 71

**Interval: 4237.00 ft (KB) To 4274.00 ft (KB) (TVD)**

Reference Elevations: 3243.00 ft (KB)

Total Depth: 4820.00 ft (KB) (TVD)

3237.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 6.00 ft

**Serial #: 8674 Inside**

Press@RunDepth: 49.32 psig @ 4238.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.06.03

End Date:

2015.06.03

Last Calib.:

2015.06.03

Start Time: 01:55:05

End Time:

09:28:29

Time On Btm:

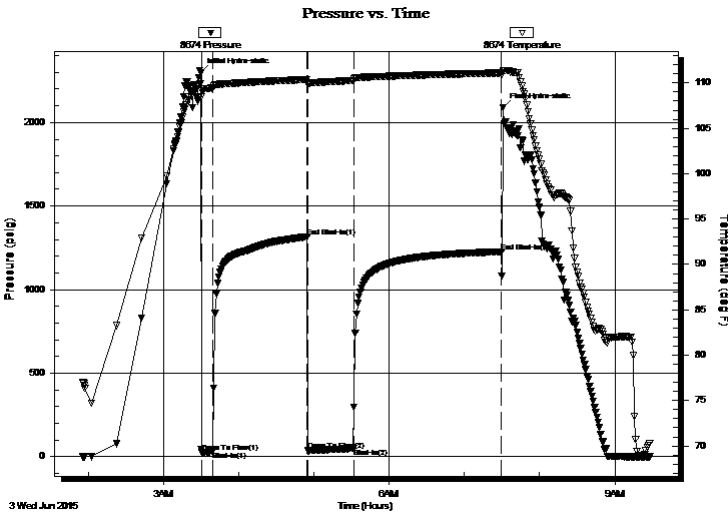
2015.06.03 @ 03:29:15

Time Off Btm:

2015.06.03 @ 07:30:45

**TEST COMMENT:** 10: Weak surface blow build to 1".  
75: No Return.  
35: Weak surface blow build to 1/2".  
120: No Return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2296.64	109.90	Initial Hydro-static
1	24.03	109.15	Open To Flow (1)
10	31.93	109.43	Shut-In(1)
85	1316.39	110.38	End Shut-In(1)
86	35.91	109.97	Open To Flow (2)
122	49.32	110.26	Shut-In(2)
241	1226.81	111.11	End Shut-In(2)
242	2087.99	111.38	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
31.00	MCW 40M 60W	0.15
37.00	MCW 40M 60W	0.51

## Gas Rates

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

\* Recovery from multiple tests



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Reference Elevations: 3243.00 ft (KB)

Total Depth: 4820.00 ft (KB) (TVD)

3237.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 6.00 ft

## Serial #: 8672

## Fluid

Press@RunDepth: psig @ 4209.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.06.03

End Date:

2015.06.03

Last Calib.:

2015.06.03

Start Time: 01:55:05

End Time:

09:31:29

Time On Btm:

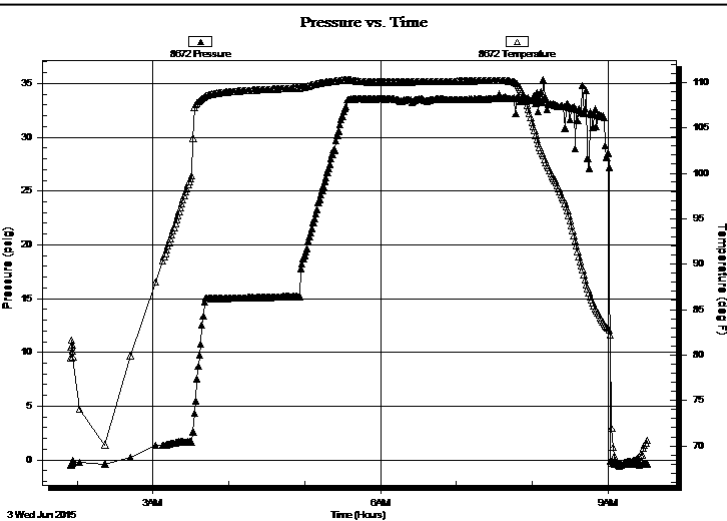
Time Off Btm:

TEST COMMENT: 10: Weak surface blow build to 1".

75: No Return.

35: Weak surface blow build to 1/2".

120: No Return.



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
31.00	MCW 40M 60W	0.15
37.00	MCW 40M 60W	0.51

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Samuel Gary Jr & Associaes.Inc

**20=15s=35w Logan,KS**

1515 WYNKOOP, STE 700  
Denver CO 80202

**Crouch 1-20**

Job Ticket: 58664

**DST#: 2**

ATTN: Clayton Camozzi

Test Start: 2015.06.03 @ 01:55:00

## GENERAL INFORMATION:

Formation: **"J"**

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Time Test Ended: 09:28:30

Test Type: Conventional Straddle (Reset)

Tester: Justin Harris

Unit No: 71

**Interval: 4237.00 ft (KB) To 4274.00 ft (KB) (TVD)**

Reference Elevations: 3243.00 ft (KB)

Total Depth: 4820.00 ft (KB) (TVD)

3237.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 6.00 ft

**Serial #: 8353 Below (Straddle)**

Press@RunDepth: psig @ 4275.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.06.03

End Date:

2015.06.03

Last Calib.:

2015.06.03

Start Time: 01:55:15

End Time:

09:29:45

Time On Btm:

Time Off Btm:

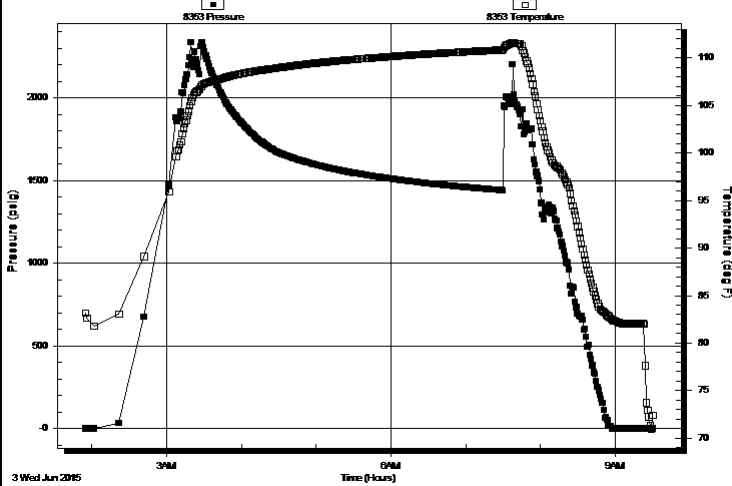
TEST COMMENT: 10: Weak surface blow build to 1".

75: No Return.

35: Weak surface blow build to 1/2".

120: No Return.

Pressure vs. Time



## PRESSURE SUMMARY

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

## Recovery

## Gas Rates

Length (ft)	Description	Volume (bbl)
31.00	MCW 40M 60W	0.15
37.00	MCW 40M 60W	0.51

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

\* Recovery from multiple tests



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Samuel Gary Jr & Associaes.Inc

**20=15s=35w Logan,KS**

1515 WYNKOOP, STE 700  
Denver CO 80202

**Crouch 1-20**

Job Ticket: 58664

**DST#: 2**

ATTN: Clayton Camozzi

Test Start: 2015.06.03 @ 01:55:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

23000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
31.00	MCW 40M 60W	0.152
37.00	MCW 40M 60W	0.514

Total Length: 68.00 ft      Total Volume: 0.666 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API RW .32 @ 71 F = 23000 Chlorides

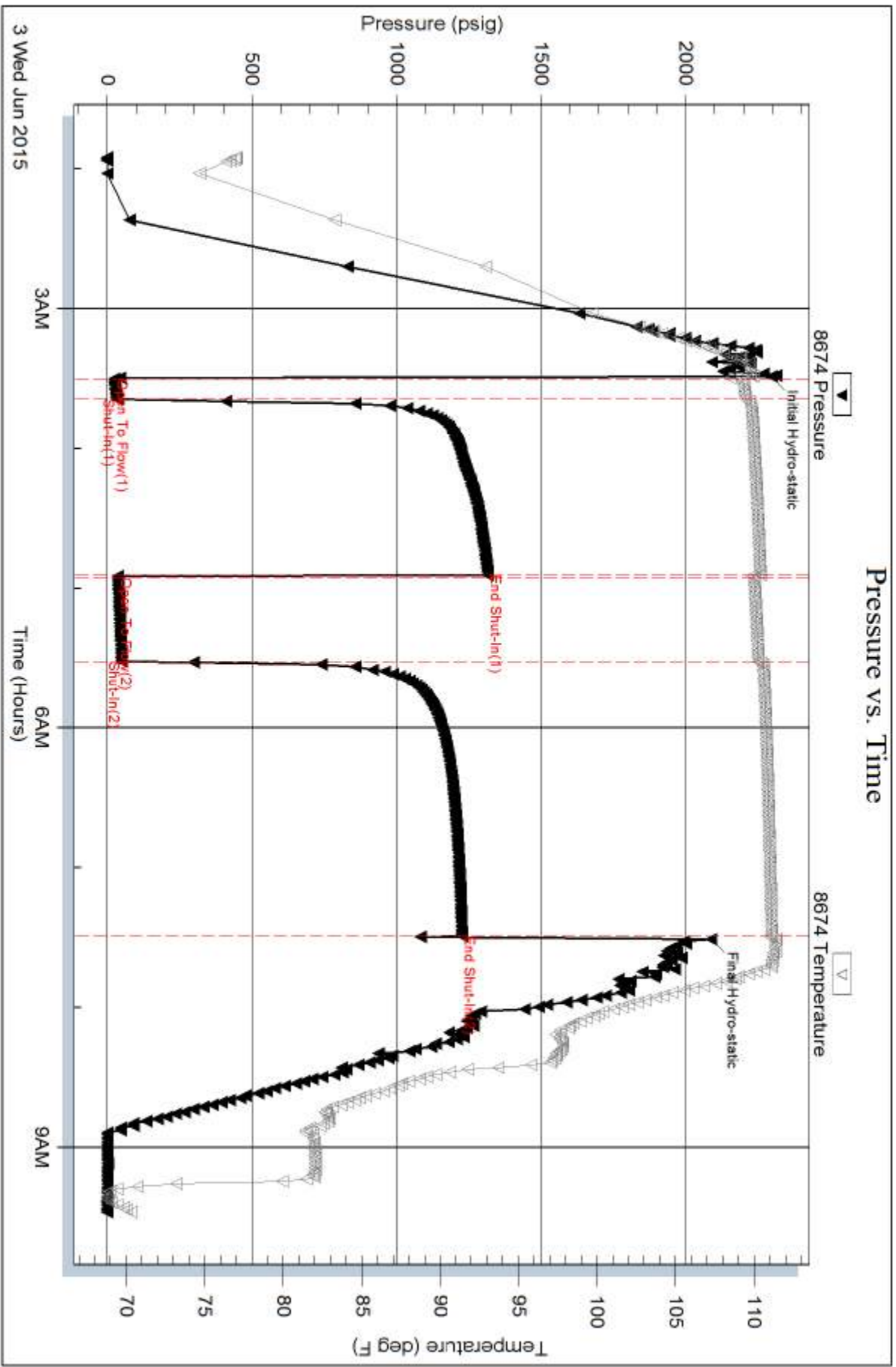
Serial #: 8674

Inside

Samuel Gary Jr & Associates, Inc

Couch 1-20

DST Test Number: 2



Serial #: 8672

Fluid

Samuel Gary Jr & Associates, Inc

Crouch 1-20

DST Test Number: 2

