



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates, Inc.

**35/4s/23w Norton KS**

1515 Wynkoop St. STE 700  
Denver, CO 80202

**Hager Trust #2-35**

Job Ticket: 52752

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2013.06.22 @ 21:04:00

## GENERAL INFORMATION:

Formation: **Toronto - Upper LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:13:00

Time Test Ended: 04:41:45

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 57

**Interval: 3397.00 ft (KB) To 3445.00 ft (KB) (TVD)**

Reference Elevations: 2297.00 ft (KB)

Total Depth: 3445.00 ft (KB) (TVD)

2289.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8671**

**Inside**

Press @ Run Depth: 95.94 psig @ 3398.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.06.22

End Date:

2013.06.23

Last Calib.:

2013.06.23

Start Time:

21:04:05

End Time:

04:41:44

Time On Btm:

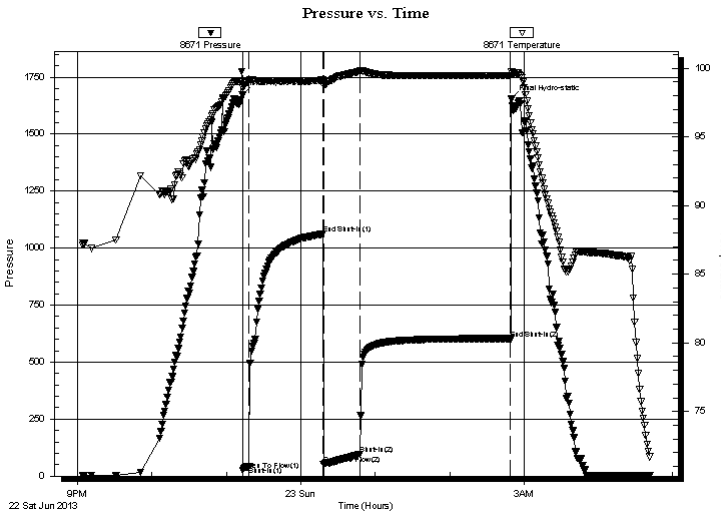
2013.06.22 @ 23:12:45

Time Off Btm:

2013.06.23 @ 02:50:00

**TEST COMMENT:** 5 - IF: Blow built to 3 1/4"  
60 - IS: No blow back  
30 - FF: Blow built to BOB (11") in 29 min.  
120 - FSI: No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1671.06	99.08	Initial Hydro-static
1	24.04	98.07	Open To Flow (1)
6	42.83	99.00	Shut-In(1)
65	1062.18	99.12	End Shut-In(1)
66	51.11	98.72	Open To Flow (2)
95	95.94	99.75	Shut-In(2)
217	603.04	99.46	End Shut-In(2)
218	1653.31	99.73	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
67.00	Watery Mud 51%w, 49%w	0.67
63.00	MCW 70%w, 30%m	0.88
30.00	WCM 64%w, 36%w	0.42
0.00	Sampler: 140 PSI 700 mL W 400 mL M	0.00

## Gas Rates

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





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**FLUID SUMMARY**

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## 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:

22500 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 300.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
67.00	Watery Mud 51%m, 49%w	0.667
63.00	MCW 70%w, 30%m	0.884
30.00	WCM 64%m, 36%w	0.421
0.00	Sampler: 140 PSI 700 mL W 400 mL M	0.000

Total Length: 160.00 ft

Total Volume: 1.972 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .313 ohms @ 71.8 deg F Chlorides = 22,500 ppm

Serial #: 8671

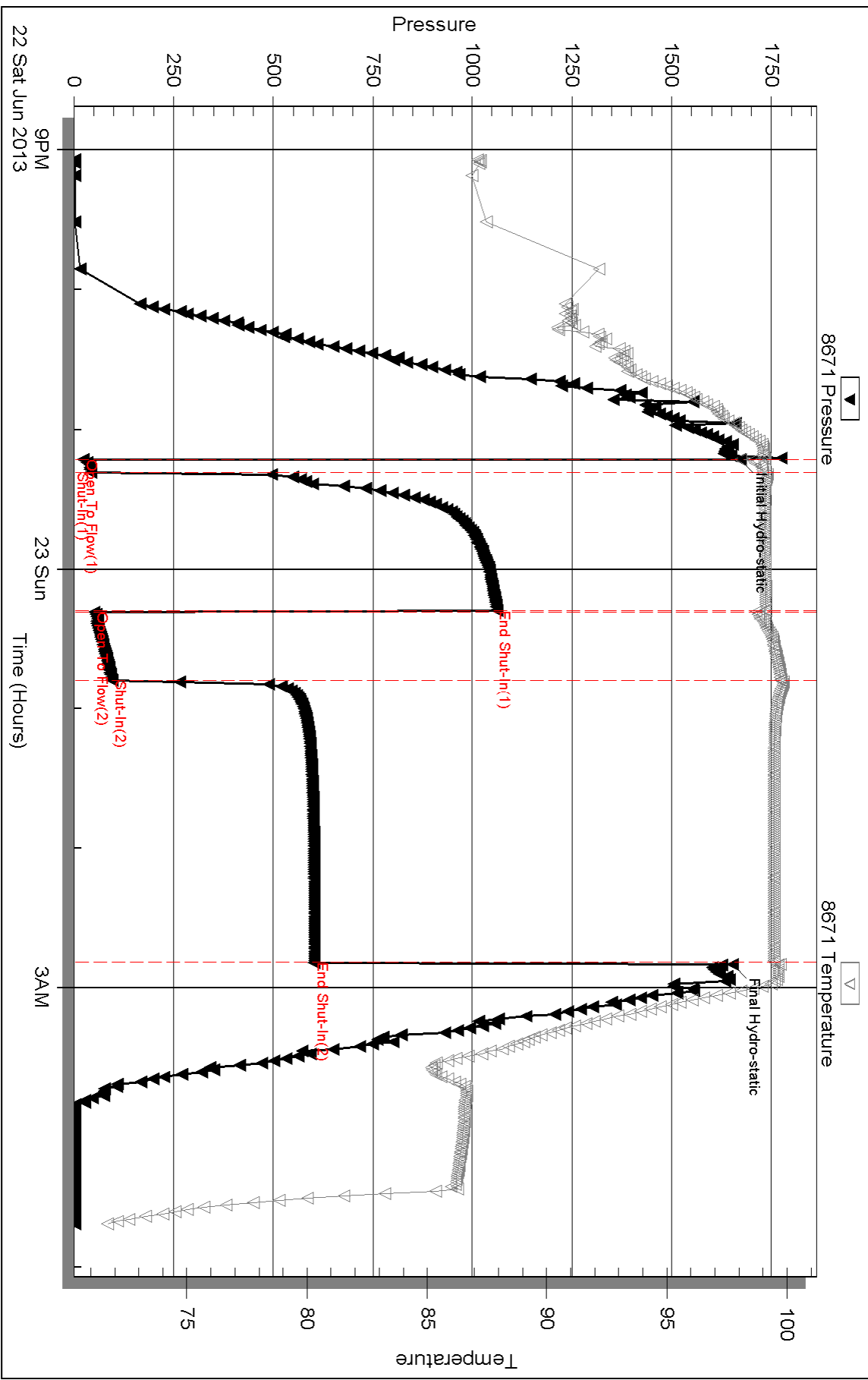
Inside

Samuel Gary Jr. & Associates, Inc.

Hager Trust #2-35

DST Test Number: 1

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 52752

Printed: 2013.06.25 @ 08:57:12

