



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Samuel Gart Jr. and Associates

**18-10s-22w Graham KS**

1515 Wynkoop Dr. STE 700  
Denver CO, 80202

**Griffith et al 1-18**

ATTN: Chris Mitchell

Job Ticket: 56084

**DST#: 1**

Test Start: 2014.02.28 @ 22:22:00

## GENERAL INFORMATION:

Formation: **LKC "K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:04:15

Time Test Ended: 06:13:45

Test Type: Conventional Straddle (Initial)

Tester: Cody Bloedorn

Unit No: 73

**Interval: 3834.00 ft (KB) To 3874.00 ft (KB) (TVD)**

Reference Elevations: 2362.00 ft (KB)

Total Depth: 4159.00 ft (KB) (TVD)

2354.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8655**

**Inside**

Press @ Run Depth: 27.66 psig @ 3835.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.28

End Date:

2014.03.01

Last Calib.:

2014.03.01

Start Time: 22:22:05

End Time:

06:13:44

Time On Btm:

2014.03.01 @ 01:04:00

Time Off Btm:

2014.03.01 @ 03:35:00

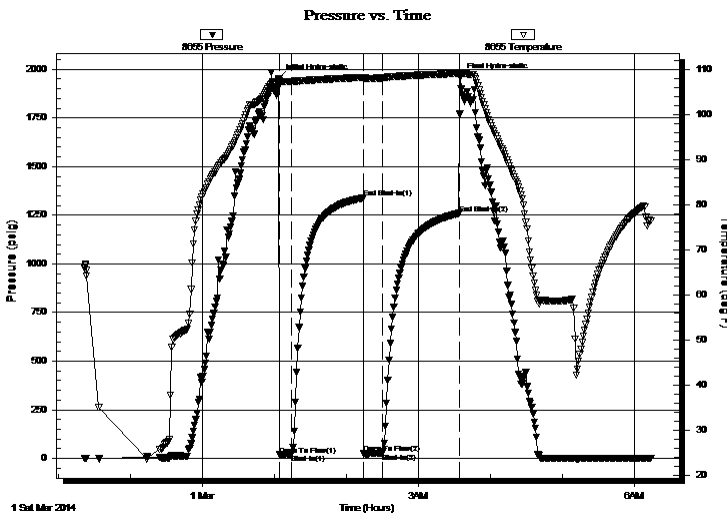
**TEST COMMENT:** 10 - IF- 1 1/4" blow

60 - IS- No return

15 - FF- No blow

60 - FS- No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1953.74	107.45	Initial Hydro-static
1	17.99	106.56	Open To Flow (1)
11	22.21	107.30	Shut-In(1)
71	1339.17	108.25	End Shut-In(1)
71	24.32	107.91	Open To Flow (2)
87	27.66	108.14	Shut-In(2)
150	1259.75	109.12	End Shut-In(2)
151	1957.13	109.36	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud with oil spots, 100%M	0.05

## Gas Rates

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



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Job Ticket: 56084

**DST#: 1**

Test Start: 2014.02.28 @ 22:22:00

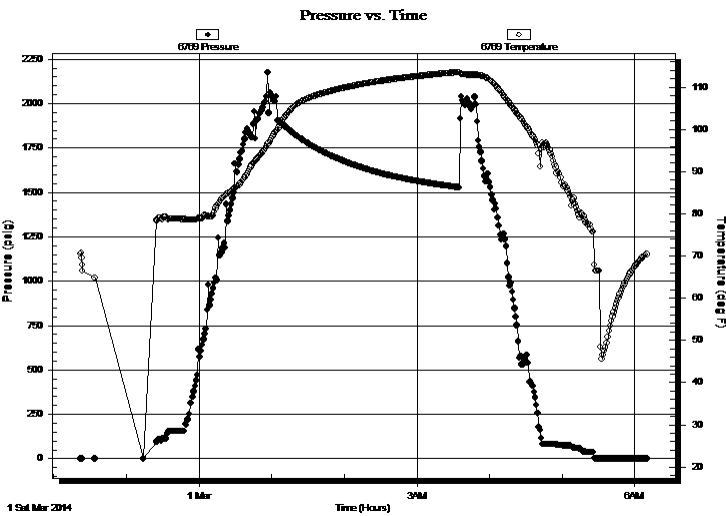
### GENERAL INFORMATION:

Formation: **LKC "K"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 01:04:15  
 Time Test Ended: 06:13:45  
**Interval: 3834.00 ft (KB) To 3874.00 ft (KB) (TVD)**  
 Total Depth: 4159.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Fair  
 Test Type: Conventional Straddle (Initial)  
 Tester: Cody Bloedorn  
 Unit No: 73  
 Reference Elevations: 2362.00 ft (KB)  
 2354.00 ft (CF)  
 KB to GR/CF: 8.00 ft

### Serial #: 6769 Below (Straddle)

Press@RunDepth: psig @ 4160.00 ft (KB)  
 Start Date: 2014.02.28 End Date: 2014.03.01  
 Start Time: 22:22:05 End Time: 06:10:29  
 Capacity: 8000.00 psig  
 Last Calib.: 2014.03.01  
 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** 10 - IF- 1 1/4" blow  
 60 - IS- No return  
 15 - FF- No blow  
 60 - FS- No return



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w ith oil spots, 100%M	0.05

### Gas Rates

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



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**18-10s-22w Graham KS**

**Griffith et al 1-18**

Job Ticket: 56084

**DST#: 1**

Test Start: 2014.02.28 @ 22:22:00

## GENERAL INFORMATION:

Formation: **LKC "K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:04:15

Time Test Ended: 06:13:45

**Interval: 3834.00 ft (KB) To 3874.00 ft (KB) (TVD)**

Total Depth: 4159.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Straddle (Initial)

Tester: Cody Bloedorn

Unit No: 73

Reference Elevations: 2362.00 ft (KB)

2354.00 ft (CF)

KB to GR/CF: 8.00 ft

## Serial #: 8875

## Fluid

Press@RunDepth: psig @ 3798.00 ft (KB)

Start Date: 2014.02.28

End Date:

2014.03.01

Start Time: 22:22:05

End Time:

06:15:14

Capacity: 8000.00 psig

Last Calib.:

2014.03.01

Time On Btm:

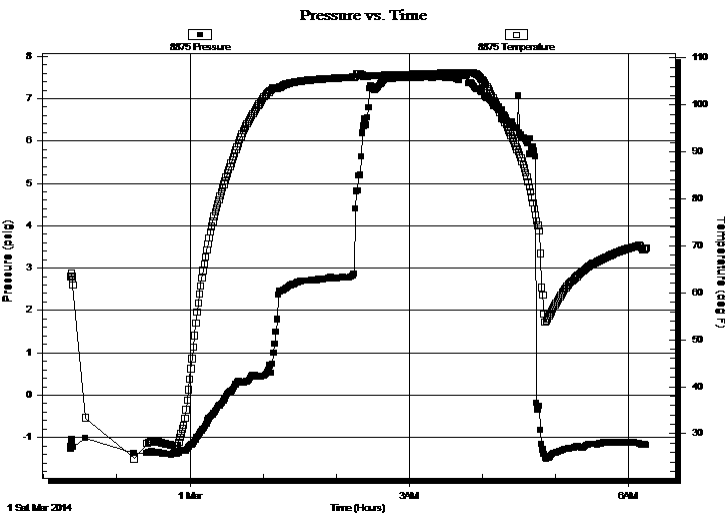
Time Off Btm:

**TEST COMMENT:** 10 - IF- 1 1/4" blow

60 - IS- No return

15 - FF- No blow

60 - FS- No return



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w ith oil spots, 100%M	0.05

## Gas Rates

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



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Samuel Gart Jr. and Associates

**18-10s-22w Graham KS**

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**Griffith et al 1-18**

Job Ticket: 56084

**DST#: 1**

ATTN: Chris Mitchell

Test Start: 2014.02.28 @ 22:22:00

## 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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud w ith oil spots, 100%M	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

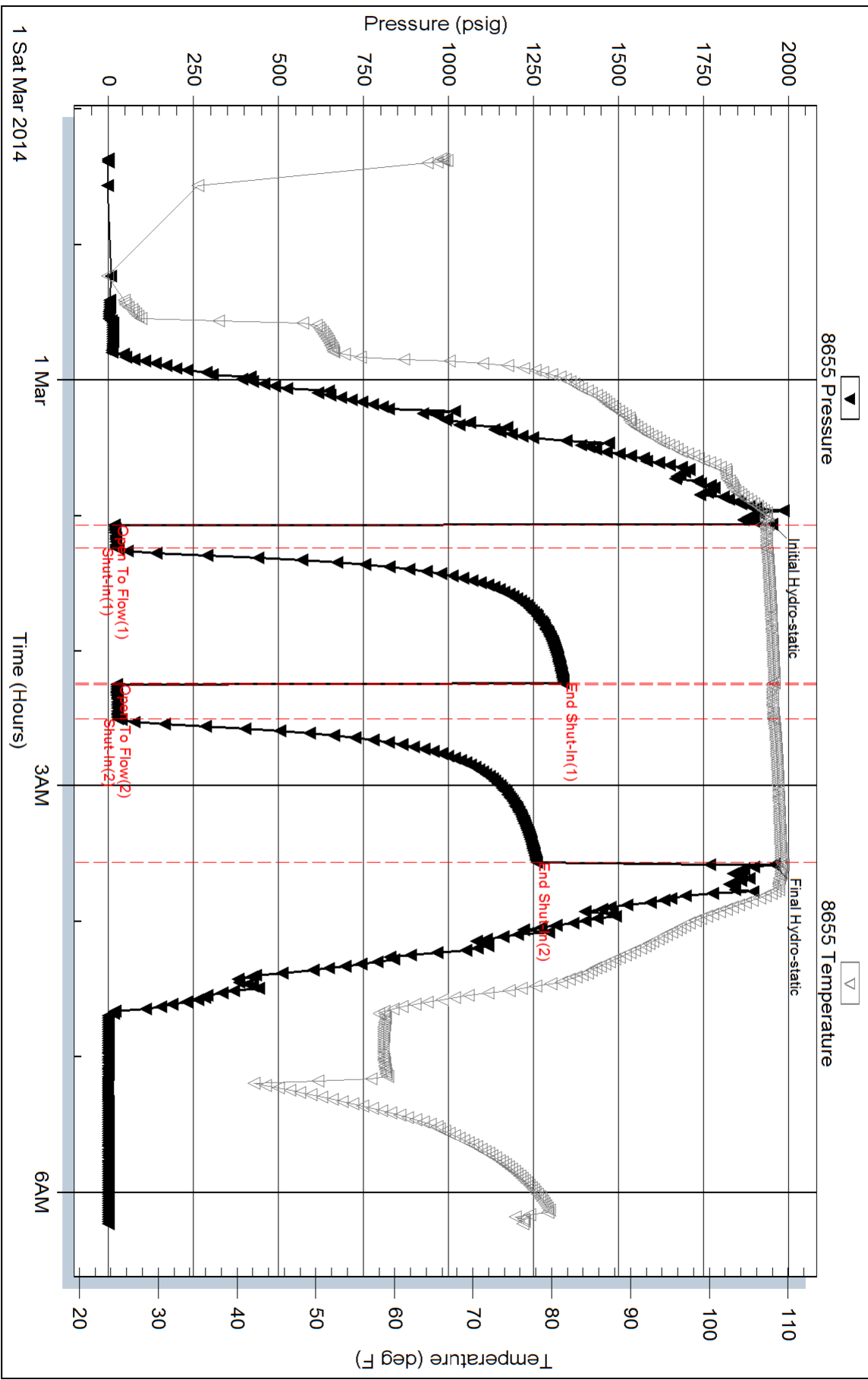
Serial #:

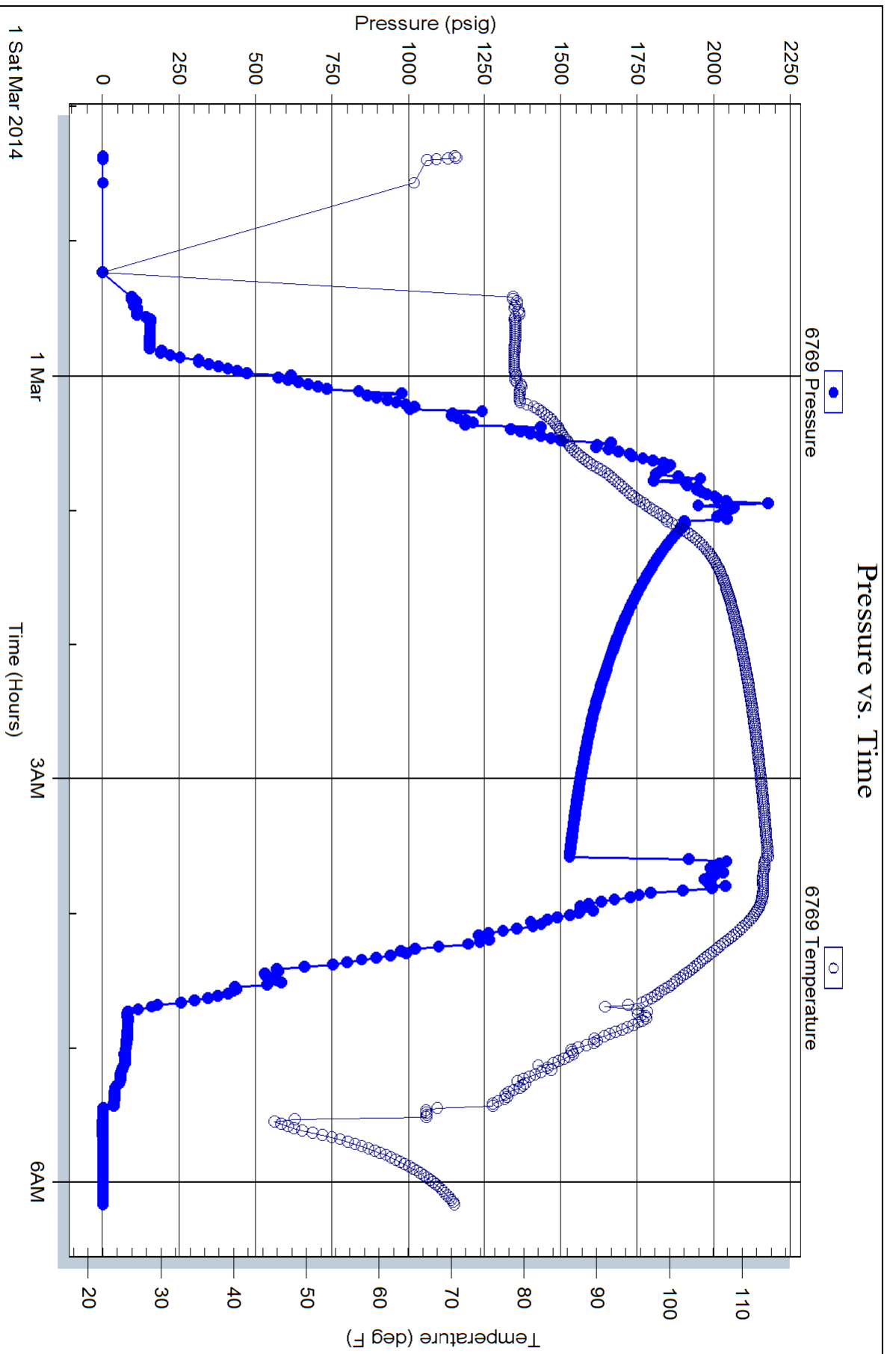
Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler: filled w ith mud, 2000ML, No PSI on it.

# Pressure vs. Time





Serial #: 8875

Fluid

Samuel Gart Jr. and Associates

Griffith et al 1-18

DST Test Number: 1

