



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates

23-12s-17w Ellis KS

1515 Wynkoop STE 700
Denver CO 80202

Doris Schmidt 1-23

ATTN: Chris Mitchell

Job Ticket: 54751

DST#: 2

Test Start: 2013.07.31 @ 00:15:00

GENERAL INFORMATION:

Formation: **KC "I-J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:02:45

Time Test Ended: 06:36:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 53

Interval: 3524.00 ft (KB) To 3568.00 ft (KB) (TVD)

Reference Elevations: 2134.00 ft (KB)

Total Depth: 3568.00 ft (KB) (TVD)

2126.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6799

Inside

Press @ Run Depth: 29.70 psig @ 3525.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.31

End Date:

2013.07.31

Last Calib.: 2013.07.31

Start Time: 00:15:05

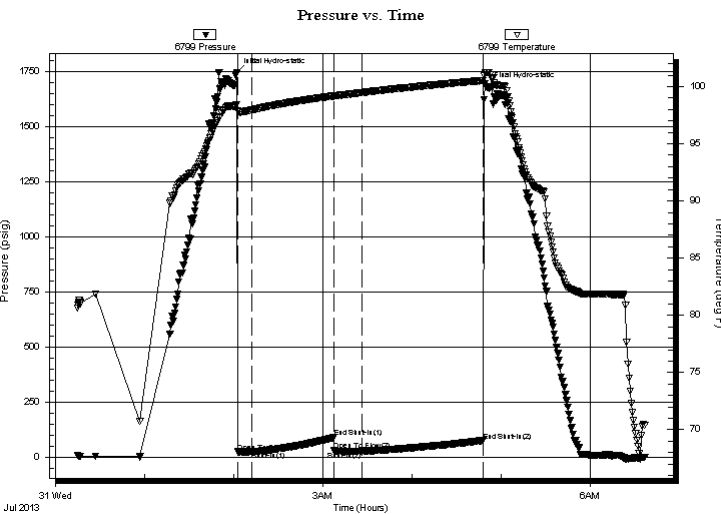
End Time:

06:36:44

Time On Btm: 2013.07.31 @ 02:02:00

Time Off Btm: 2013.07.31 @ 04:50:30

TEST COMMENT: 10min IF-1 1/2in blow
60min ISI-No blow
20min FF-No blow
80min FSI-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1744.64	98.41	Initial Hydro-static
1	25.09	97.92	Open To Flow (1)
10	26.27	97.96	Shut-In(1)
66	90.78	99.19	End Shut-In(1)
66	30.62	99.18	Open To Flow (2)
85	29.70	99.49	Shut-In(2)
167	75.85	100.54	End Shut-In(2)
169	1680.79	101.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	OCM 15%O 85%M	0.07

* Recovery from multiple tests

Gas Rates

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



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Total Depth: 3568.00 ft (KB) (TVD)

2126.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: **8655** Fluid

Press @ RunDepth: psig @ 3488.00 ft (KB)

Start Date: 2013.07.31

End Date:

2013.07.31

Start Time: 00:15:05

End Time:

06:38:29

Capacity: 8000.00 psig

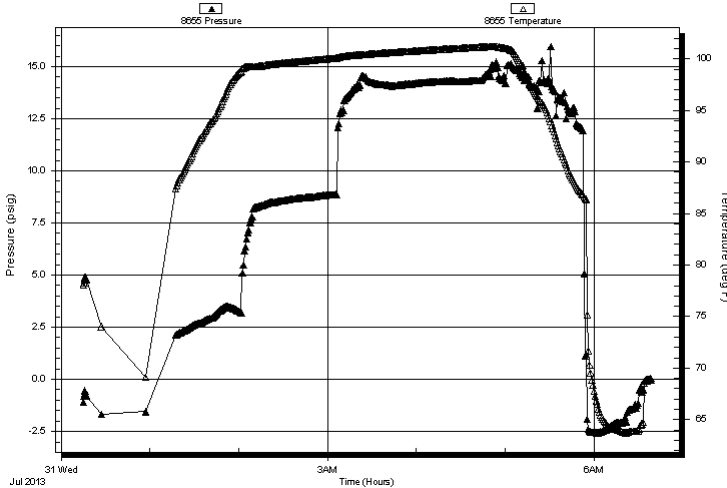
Last Calib.: 2013.07.31

Time On Btm:

Time Off Btm:

TEST COMMENT: 10min IF-1 1/2in blow
60min ISI-No blow
20min FF-No blow
80min FSI-No blow

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	OCM 15%O 85%M	0.07

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

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23-12s-17w Ellis KS

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Job Ticket: 54751

DST#: 2

ATTN: Chris Mitchell

Test Start: 2013.07.31 @ 00:15:00

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	OCM 15%O 85%M	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

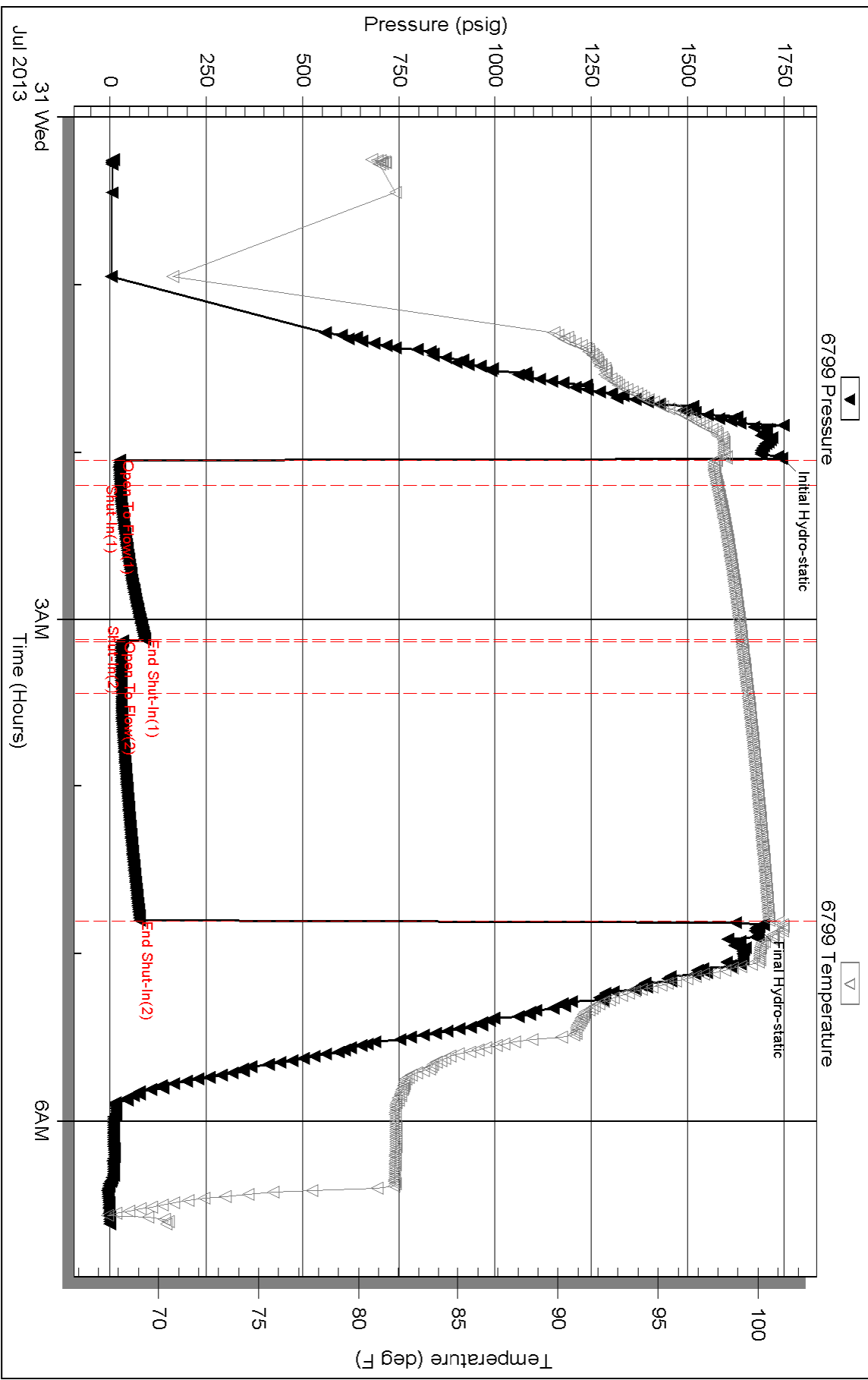
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Samler Data 1400 ml M 200ml O

Pressure vs. Time



Serial #: 8655

Fluid

Samuel Gary Jr. & Associates

Doris Schmidt 1-23

DST Test Number: 2

