



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

SAMUEL GARY & ASSOC. INC.

SEC. 14 - 5 S. - 23 W. - NORTON CO.

1515 WYNKOOP SUITE 700
DENVER CO.
80202
ATTN: CLAYTON CAMOZZI

HARDY #1-14

Job Ticket: 55863

DST#: 1

Test Start: 2013.11.22 @ 13:45:00

GENERAL INFORMATION:

Formation: **TORONTO**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:16:30

Time Test Ended: 20:46:00

Test Type: Conventional Bottom Hole (Initial)

Tester: BOB HAMEL

Unit No: 61

Interval: 3333.00 ft (KB) To 3376.00 ft (KB) (TVD)

Reference Elevations: 2157.00 ft (KB)

Total Depth: 3376.00 ft (KB) (TVD)

2149.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8673

Inside

Press@RunDepth: 86.57 psig @ 3369.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.22

End Date:

2013.11.22

Last Calib.:

2013.11.22

Start Time: 13:45:01

End Time:

20:46:00

Time On Btm:

2013.11.22 @ 16:12:30

Time Off Btm:

2013.11.22 @ 19:00:00

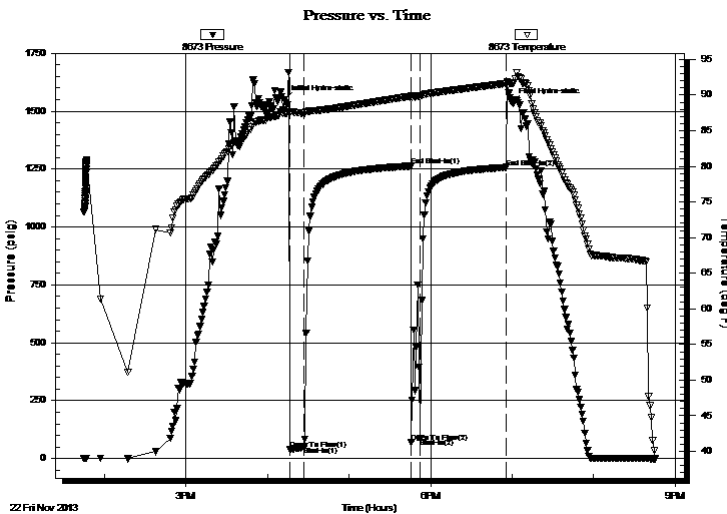
TEST COMMENT: I.F. - 10 - 1/4 INT. BLOW NO BUILD @ 10 MIN.

I.S.I. - 75 - NO B.B.

F.F. - 5 - W.S.B. DIES IN 2 MIN.

F.S.I. - 60 - NO B.B.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1550.90	87.36	Initial Hydro-static
4	38.02	87.45	Open To Flow (1)
15	50.81	87.47	Shut-In(1)
93	1262.91	89.84	End Shut-In(1)
94	71.05	89.48	Open To Flow (2)
100	86.57	89.72	Shut-In(2)
163	1257.43	91.62	End Shut-In(2)
168	1536.15	91.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	MUD 100%	0.05

Gas Rates

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



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ATTN: CLAYTON CAMOZZI

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Reference Elevations: 2157.00 ft (KB)

Total Depth: 3376.00 ft (KB) (TVD)

2149.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8651

Press@RunDepth: psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.22

End Date:

2013.11.22

Last Calib.:

2013.11.22

Start Time: 13:45:01

End Time:

20:46:00

Time On Btm:

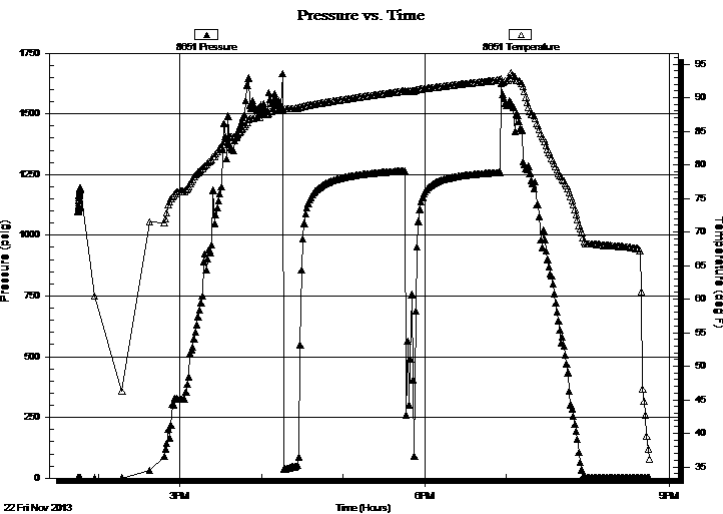
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TEST COMMENT: I.F. - 10 - 1/4 INT. BLOW NO BUILD @ 10 MIN.

I.S.I. - 75 - NO B.B.

F.F. - 5 - W.S.B. DIES IN 2 MIN.

F.S.I. - 60 - NO B.B.



PRESSURE SUMMARY

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

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
10.00	MUD 100%	0.05

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

SAMUEL GARY & ASSOC. INC.

SEC. 14 - 5 S. - 23 W. - NORTON CO.

1515 WYNKOOP SUITE 700
DENVER CO.
80202
ATTN: CLAYTON CAMOZZI

HARDY #1-14

Job Ticket: 55863

DST#: 1

Test Start: 2013.11.22 @ 13:45:00

GENERAL INFORMATION:

Formation: **TORONTO**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:16:30

Time Test Ended: 20:46:00

Test Type: Conventional Bottom Hole (Initial)

Tester: BOB HAMEL

Unit No: 61

Interval: 3333.00 ft (KB) To 3376.00 ft (KB) (TVD)

Reference Elevations: 2157.00 ft (KB)

Total Depth: 3376.00 ft (KB) (TVD)

2149.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8791

Press@RunDepth: psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.22 End Date: 2013.11.22

Last Calib.: 2013.11.22

Start Time: 13:45:01 End Time: 20:46:30

Time On Btm:

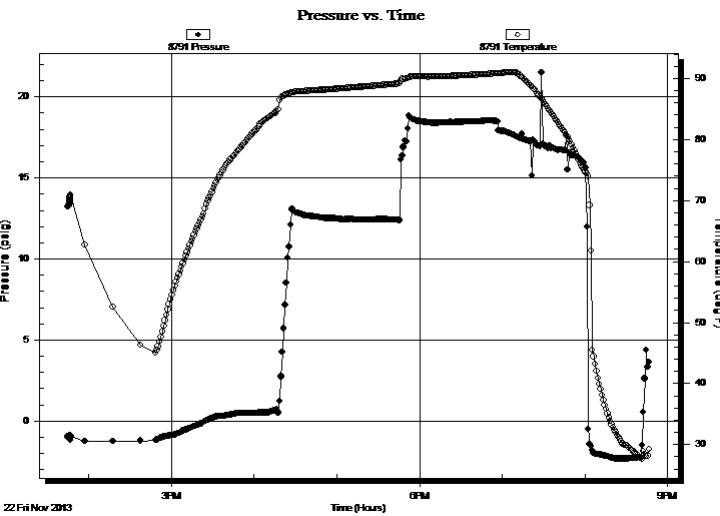
Time Off Btm:

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PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	MUD 100%	0.05

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

SAMUEL GARY & ASSOC. INC.

SEC. 14 - 5 S. - 23 W. - NORTON CO.

1515 WYNKOOP SUITE 700
DENVER CO.
80202
ATTN: CLAYTON CAMOZZI

HARDY #1-14

Job Ticket: 55863

DST#: 1

Test Start: 2013.11.22 @ 13:45:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 8.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 7.20 in³

Resistivity: ohm.m

Salinity: 500.00 ppm

Filter Cake: 2.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	MUD 100%	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 RECOVERY = 30 P.S.I. / 500 M.L. MUD

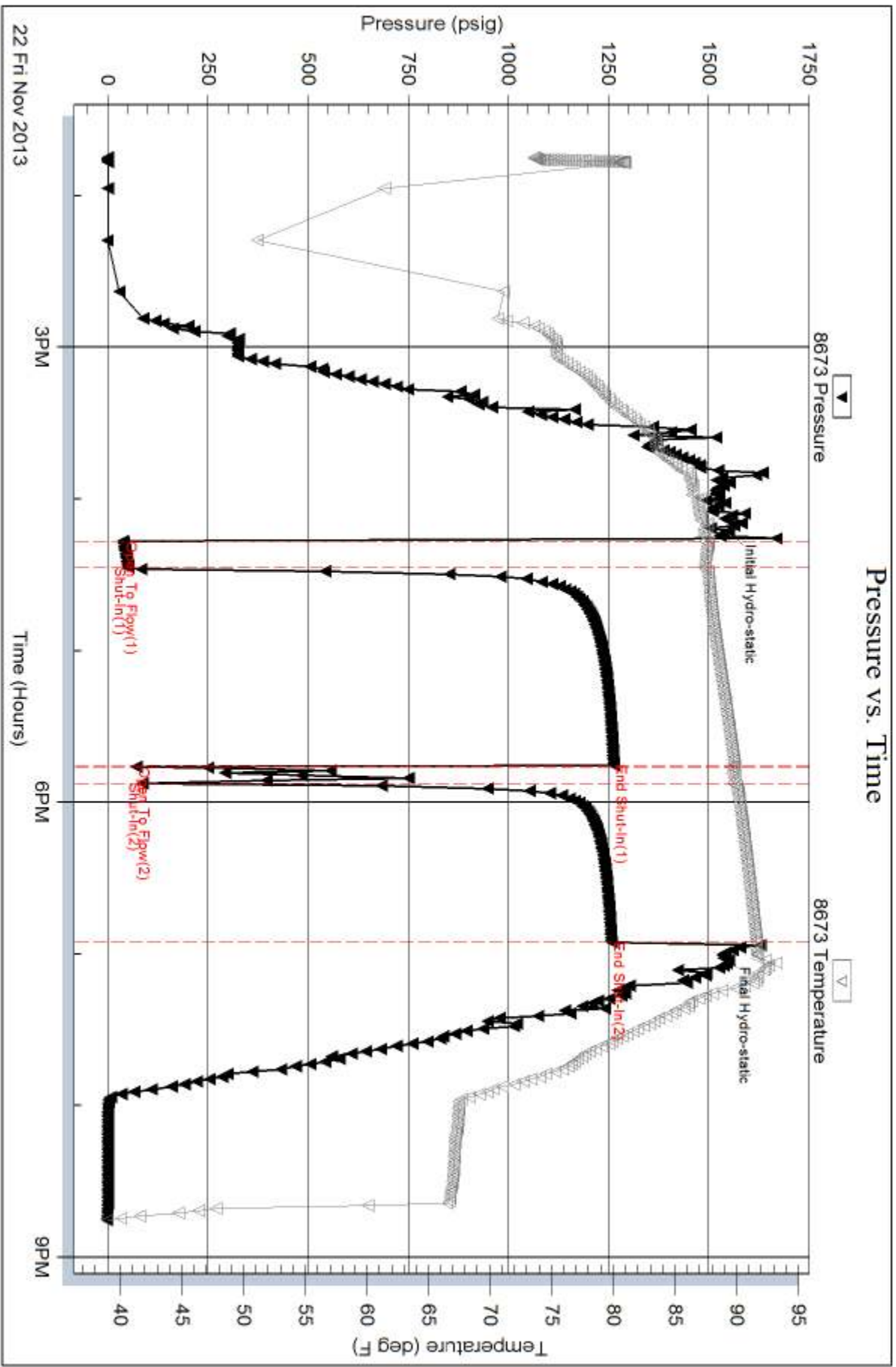
Serial #: 8673

Inside

SAMUEL GARY & ASSOC. INC.

HARDY #1-14

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 55863

Printed: 2013.11.23 @ 00:26:48

Serial #: 8651

SAMUEL GARY & ASSOC. INC.

HARDY #1-14

DST Test Number: 1

