



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: 55864

DST#: 2

Test Start: 2013.11.23 @ 06:15:00

GENERAL INFORMATION:

Formation: **LANS. "B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:20:30

Time Test Ended: 14:44:00

Test Type: Conventional Bottom Hole (Reset)

Tester: BOB HAMEL

Unit No: 61

Interval: 3373.00 ft (KB) To 3436.00 ft (KB) (TVD)

Reference Elevations: 2157.00 ft (KB)

Total Depth: 3436.00 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: 281.40 psig @ 3411.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.23

End Date:

2013.11.23

Last Calib.: 2013.11.23

Start Time: 06:15:01

End Time:

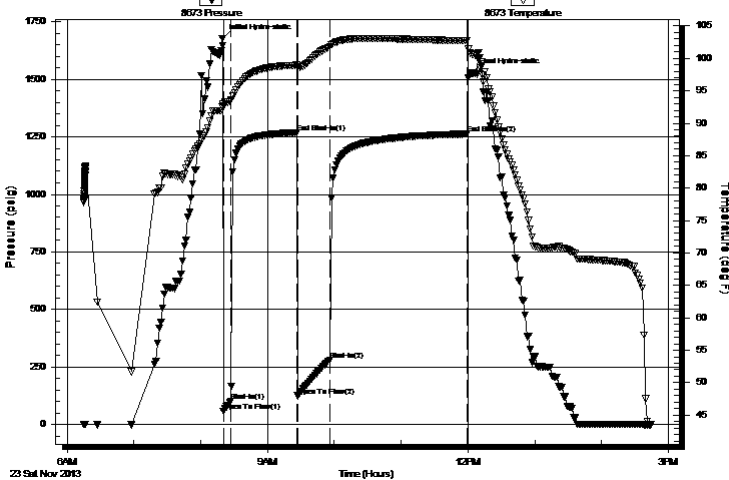
14:44:00

Time On Btm: 2013.11.23 @ 08:19:30

Time Off Btm: 2013.11.23 @ 12:03:30

TEST COMMENT: I.F. - 5 - 1/2 INT. BLOW BUILT TO (B.O.B. IN 5 MIN.)
I.S.I. - 60 - NO B.B.
F.F. - 30 - 1/4 INT BLOW BUILT TO (B.O.B. IN 6 MIN.)
F.S.I. - 120 - NO B.B.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1677.32	92.53	Initial Hydro-static
1	56.69	92.75	Open To Flow (1)
8	102.64	93.49	Shut-In(1)
67	1268.57	98.95	End Shut-In(1)
68	125.02	98.62	Open To Flow (2)
97	281.40	101.80	Shut-In(2)
220	1262.69	102.70	End Shut-In(2)
224	1526.96	100.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
189.00	S,O,S,M,W, 5%OIL 10% MUD 85%	W2.36R
252.00	O,C,M,W, 15% OIL 30% MUD 55%	W3.53
214.00	O,C,M, 20% OIL 80% MUD	3.00

Gas Rates

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

* Recovery from multiple tests



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TESTING, INC**

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FLUID SUMMARY

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1515 WYNKOOP SUITE 700
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HARDY #1-14

Job Ticket: 55864

DST#: 2

Test Start: 2013.11.23 @ 06:15:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 54.00 sec/qt
Water Loss: 7.20 in³
Resistivity: ohm.m
Salinity: 500.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
189.00	S,O,S,M,W, 5%OIL 10% MUD 85% WATER	2.360
252.00	O,C,M,W, 15% OIL 30% MUD 55% WATER	3.535
214.00	O,C,M, 20% OIL 80% MUD	3.002

Total Length: 655.00 ft Total Volume: 8.897 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: SAMPLER RECOVERY = 2,000 M.L. TOTAL FLUID 10M.L. OIL / 1,990 M.L. WATER P.S.I. = 60
RESISTIVITY = .165 OHMS @ 53 F
CHLORIDES = 68,000

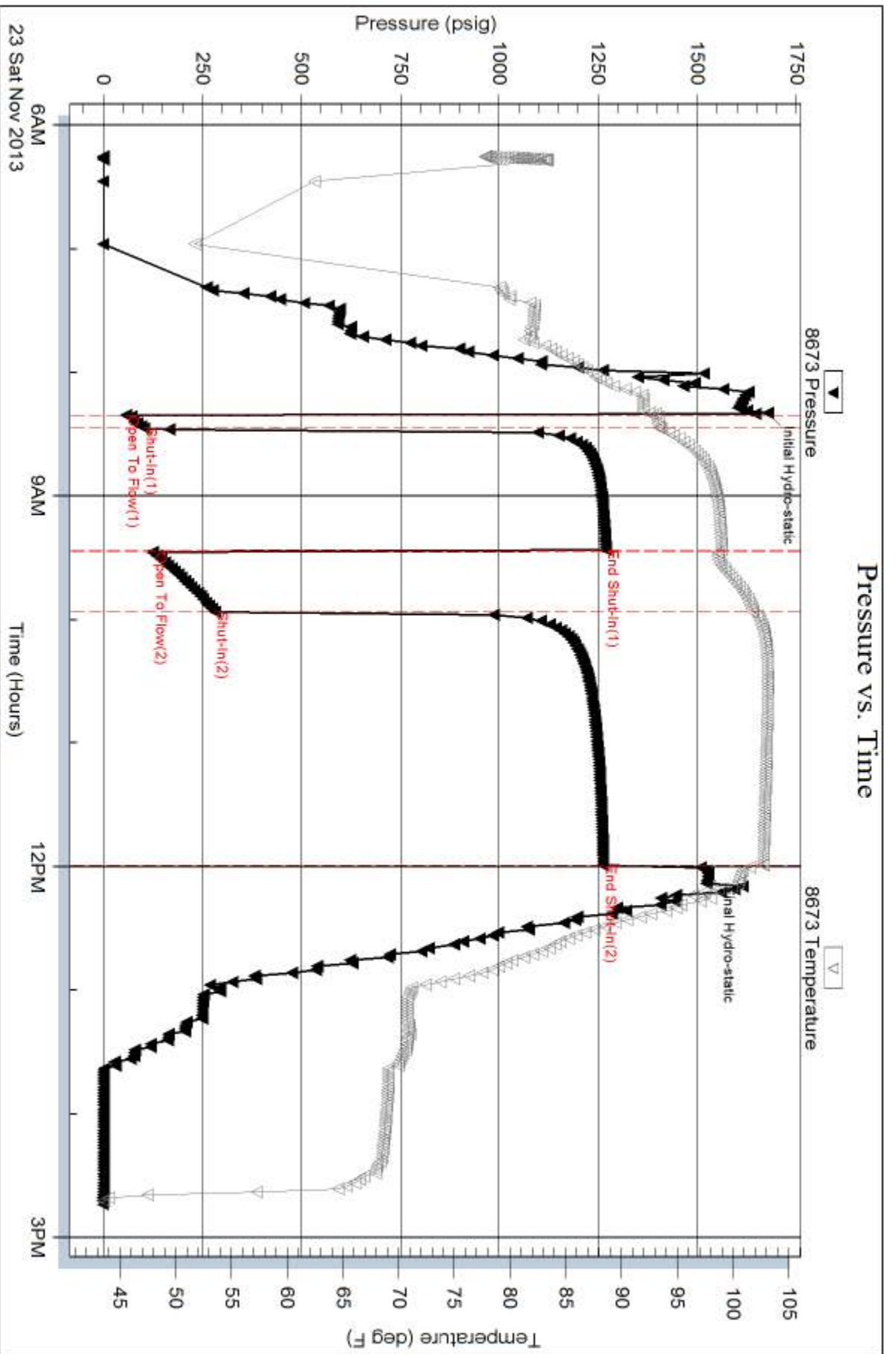
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Inside

SAMUEL GARY & ASSOC. INC.

HARDY #1-14

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 55864

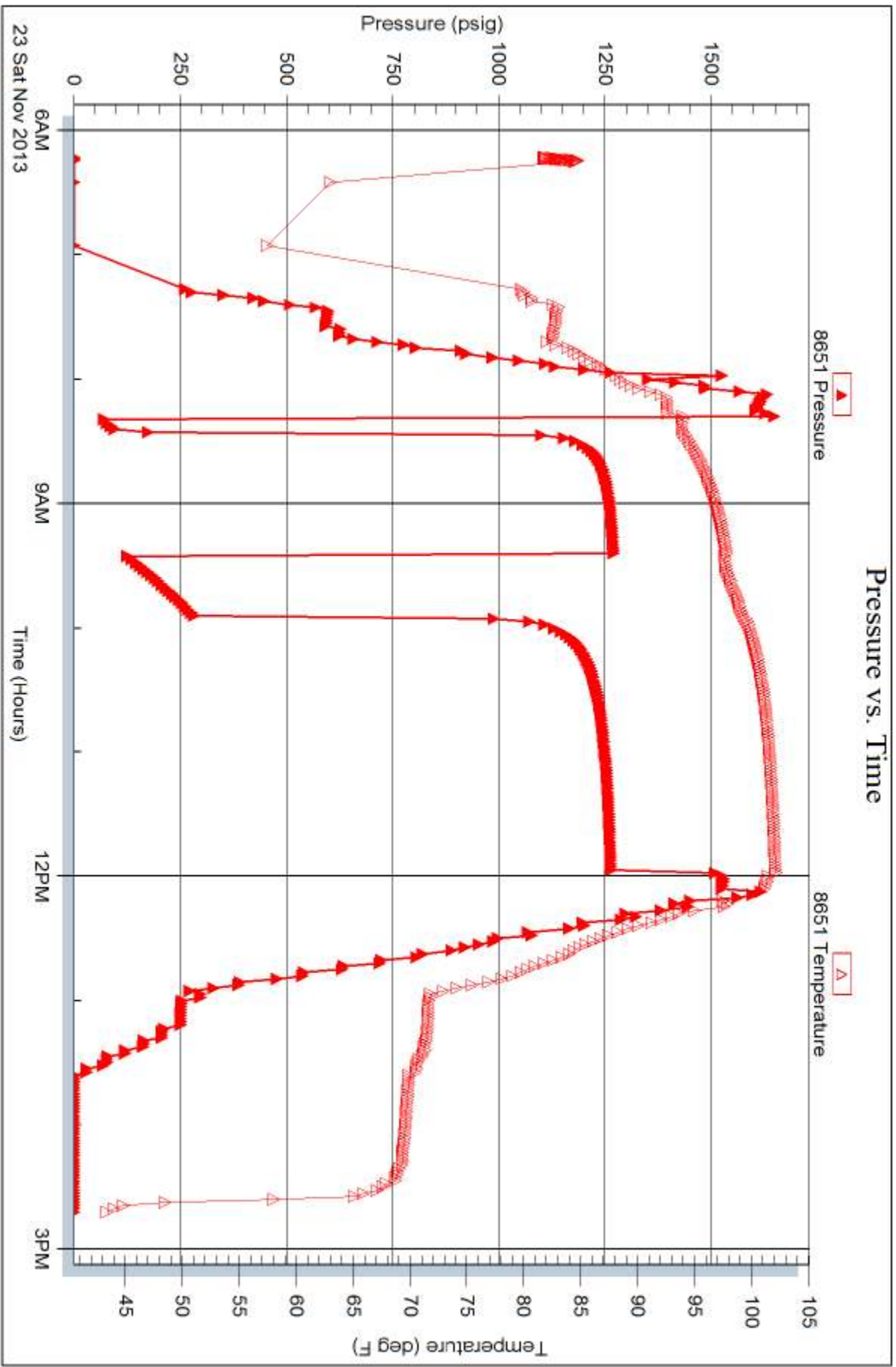
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SAMUEL GARY & ASSOC. INC.

HARDY #1-14

DST Test Number: 2



Tribble Testing, Inc

Ref. No: 55864

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