



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

18/10s/30w Sheridan KS

1515 Wynkoop STE 700
Denver, CO 80202

Ottley #1-18

Job Ticket: 60840

DST#: 4

ATTN: Clayton Camozzi

Test Start: 2014.12.20 @ 20:11:00

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:16:45

Time Test Ended: 03:56:15

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 83

Interval: 4404.00 ft (KB) To 4451.00 ft (KB) (TVD)

Reference Elevations: 2941.00 ft (KB)

Total Depth: 4451.00 ft (KB) (TVD)

2933.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8791 Inside

Press @ Run Depth: 37.11 psig @ 4405.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.12.20

End Date:

2014.12.21

Last Calib.: 2014.12.21

Start Time: 20:11:05

End Time:

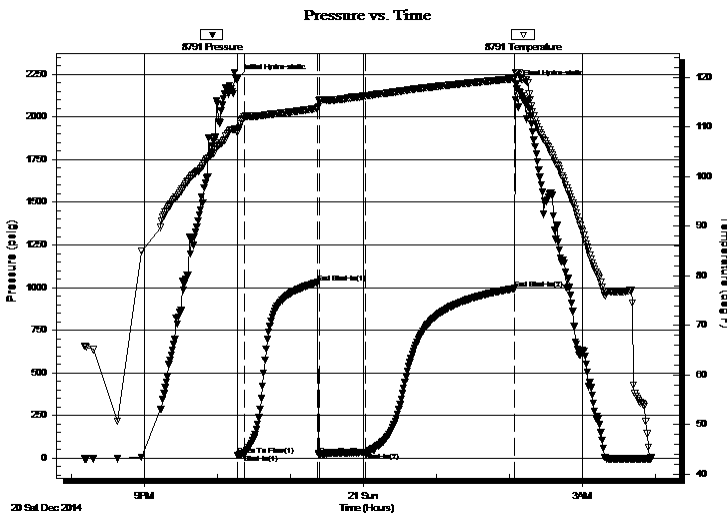
03:56:14

Time On Btm: 2014.12.20 @ 22:16:30

Time Off Btm: 2014.12.21 @ 02:05:30

TEST COMMENT: 5 - IF: Blow built to 1 1/2"
60 - ISI: Some weak surface blow back
40 - FF: 2" Blow at open, built to 9"
120 - FSI: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2222.23	109.59	Initial Hydro-static
1	16.45	108.92	Open To Flow (1)
6	26.21	112.03	Shut-In(1)
66	1029.82	113.80	End Shut-In(1)
68	19.80	115.29	Open To Flow (2)
106	37.11	116.23	Shut-In(2)
228	995.11	119.76	End Shut-In(2)
229	2192.38	120.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	SOCM 88% m, 7% o, 5% g	0.42
0.00	GIP = 80'+	0.00

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

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Ottley #1-18

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DST#: 4

ATTN: Clayton Camozzi

Test Start: 2014.12.20 @ 20:11:00

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: 68.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	SOCM 88% _m , 7% _o , 5% _g	0.419
0.00	GIP = 80'+	0.000

Total Length: 50.00 ft Total Volume: 0.419 bbl

Num Fluid Samples: 0

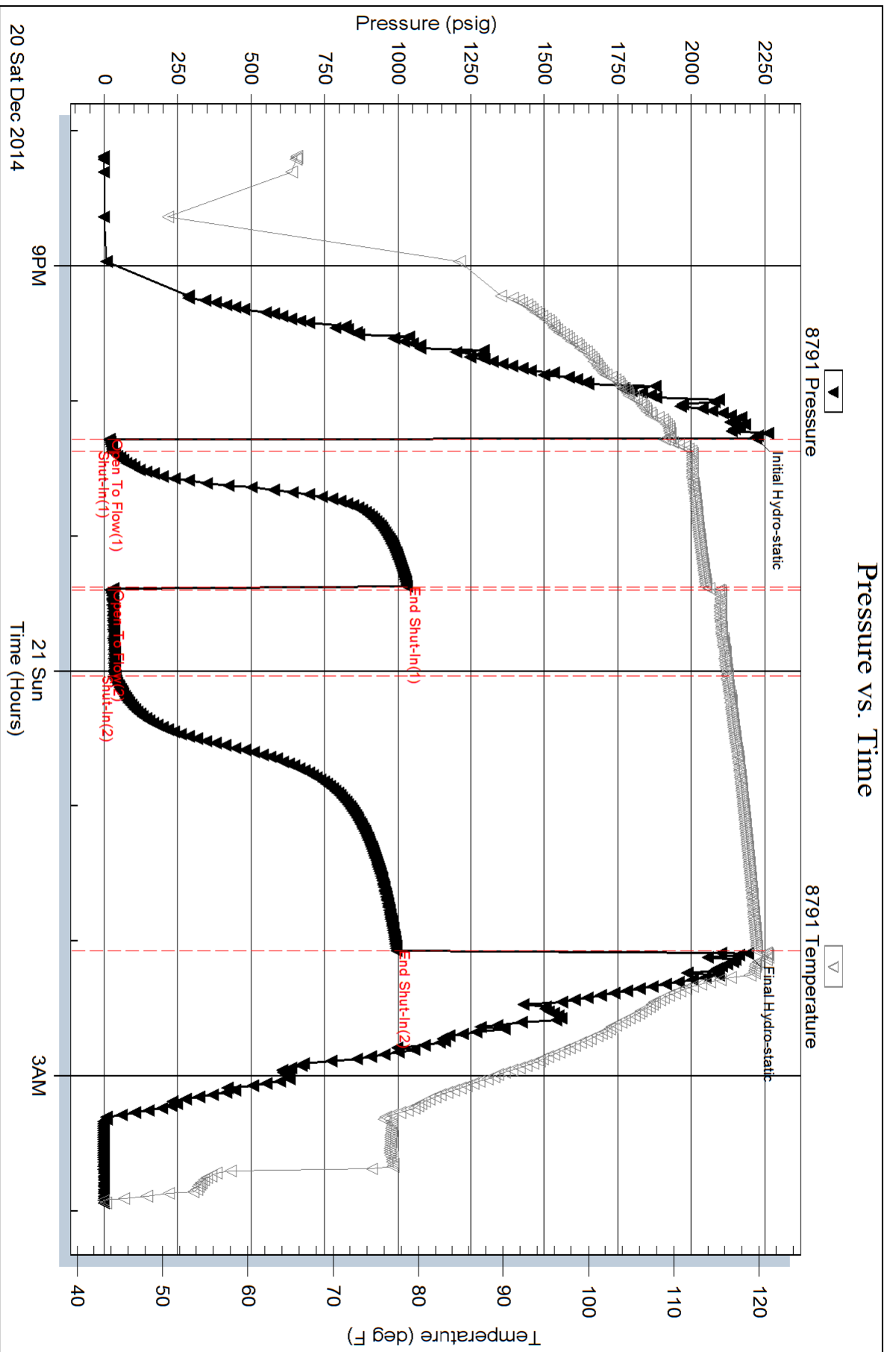
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



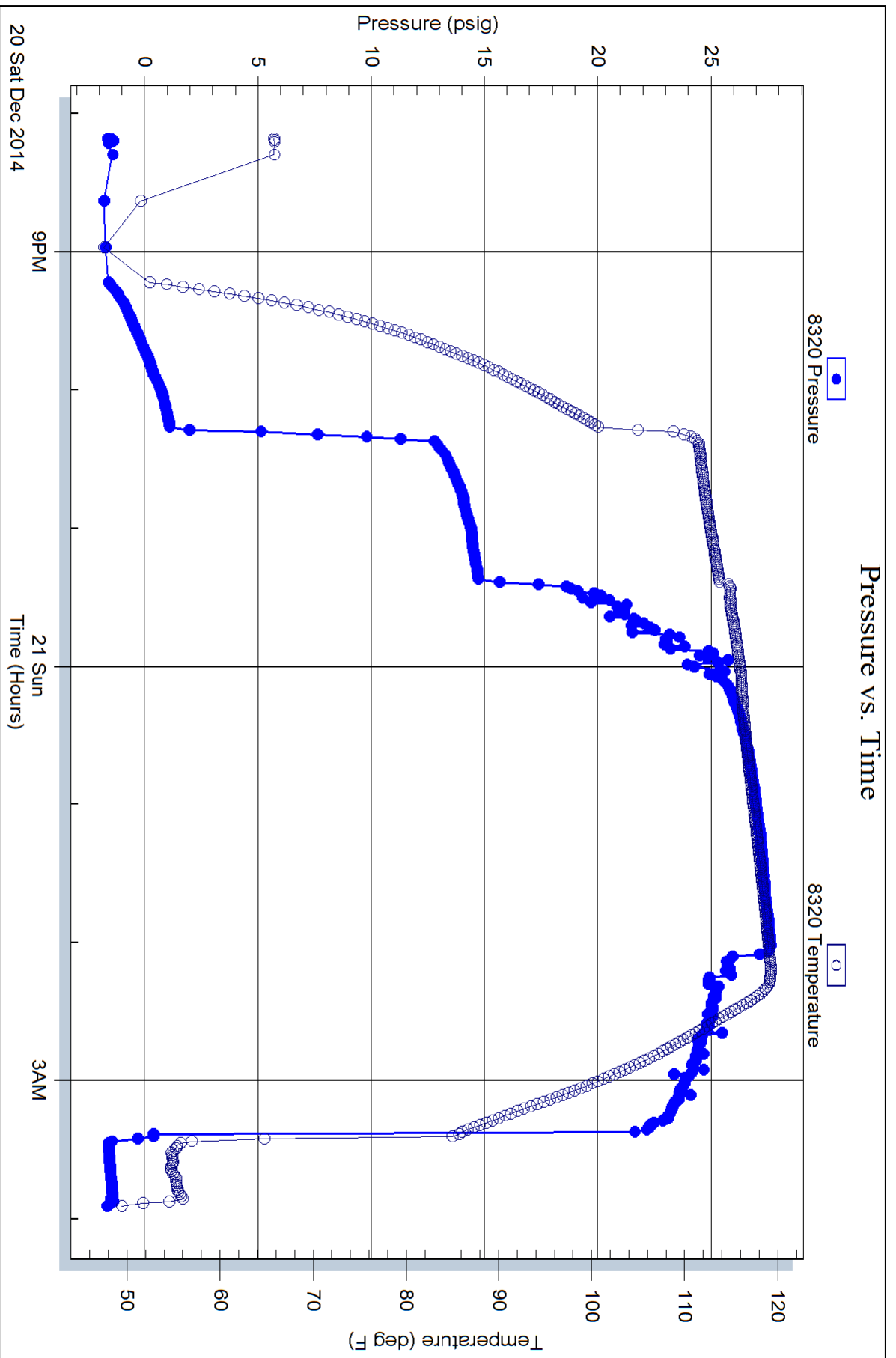
Serial #: 8320

Fluid

Samuel Gary Jr. & Associates Inc.

Ottley #1-18

DST Test Number: 4



Triobite Testing, Inc

Ref. No: 60840

Printed: 2014.12.21 @ 06:09:40