



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates

9/5s/22w Norton KS

1515 Wynkoop St. STE 700
Denver, CO 80202

Jacobs Trust #1-9

ATTN: Dan Pritchard

Job Ticket: 60780

DST#: 2

Test Start: 2014.11.07 @ 14:11:00

GENERAL INFORMATION:

Formation: **Toronto - LKC "A"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:59:15
 Time Test Ended: 22:41:45
 Interval: **3288.00 ft (KB) To 3341.00 ft (KB) (TVD)**
 Total Depth: 3341.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 2179.00 ft (KB)
 2171.00 ft (CF)
 KB to GR/CF: 8.00 ft

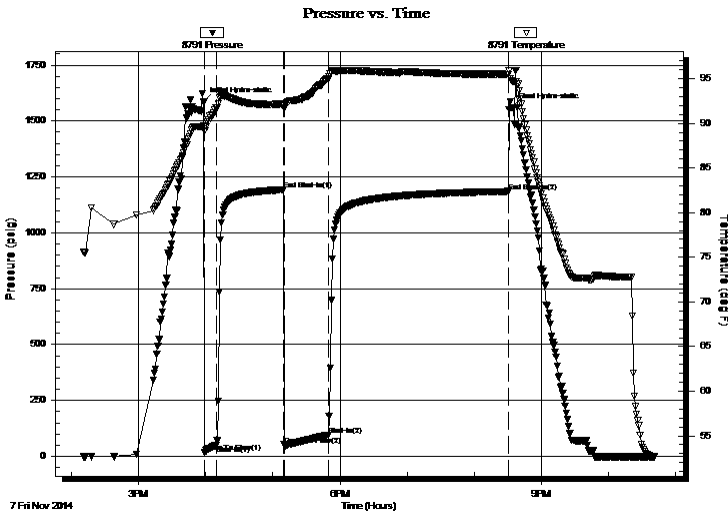
Serial #: 8791

Inside

Press @ Run Depth: 94.72 psig @ 3289.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.11.07 End Date: 2014.11.07 Last Calib.: 2014.11.07
 Start Time: 14:11:05 End Time: 22:41:44 Time On Btm: 2014.11.07 @ 15:58:15
 Time Off Btm: 2014.11.07 @ 20:33:15

TEST COMMENT: 10 - IF: 1/4" Blow at open, built to 4"
 60 - IS: No blow back
 40 - FF: 1/2" Blow at open, built to 9 1/2"
 160 - FS: Surface blow back, dead at 25 min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1584.90	89.73	Initial Hydro-static
1	17.45	89.18	Open To Flow (1)
11	49.75	91.69	Shut-In(1)
71	1192.86	92.15	End Shut-In(1)
72	51.88	91.69	Open To Flow (2)
111	94.72	94.92	Shut-In(2)
272	1185.19	95.48	End Shut-In(2)
275	1559.89	94.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
68.00	SO/MCW 67%w, 30%m, 3%o	0.67
62.00	WOCM 55%m, 22%o, 18%w, 5%g	0.87
30.00	SW/MCO 60%o, 32%m, 8%w	0.42
25.00	SMCO 94%o, 4%m, 2%g	0.35
0.00	GIP = 70'	0.00

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 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 bbbl
68.00	SO/MCW 67%w , 30%m, 3%o	0.671
62.00	WOCM 55%m, 22%o, 18%w , 5%g	0.870
30.00	SW/MCO 60%o, 32%m, 8%w	0.421
25.00	SMCO 94%o, 4%m, 2%g	0.351
0.00	GIP = 70'	0.000

Total Length: 185.00 ft Total Volume: 2.313 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

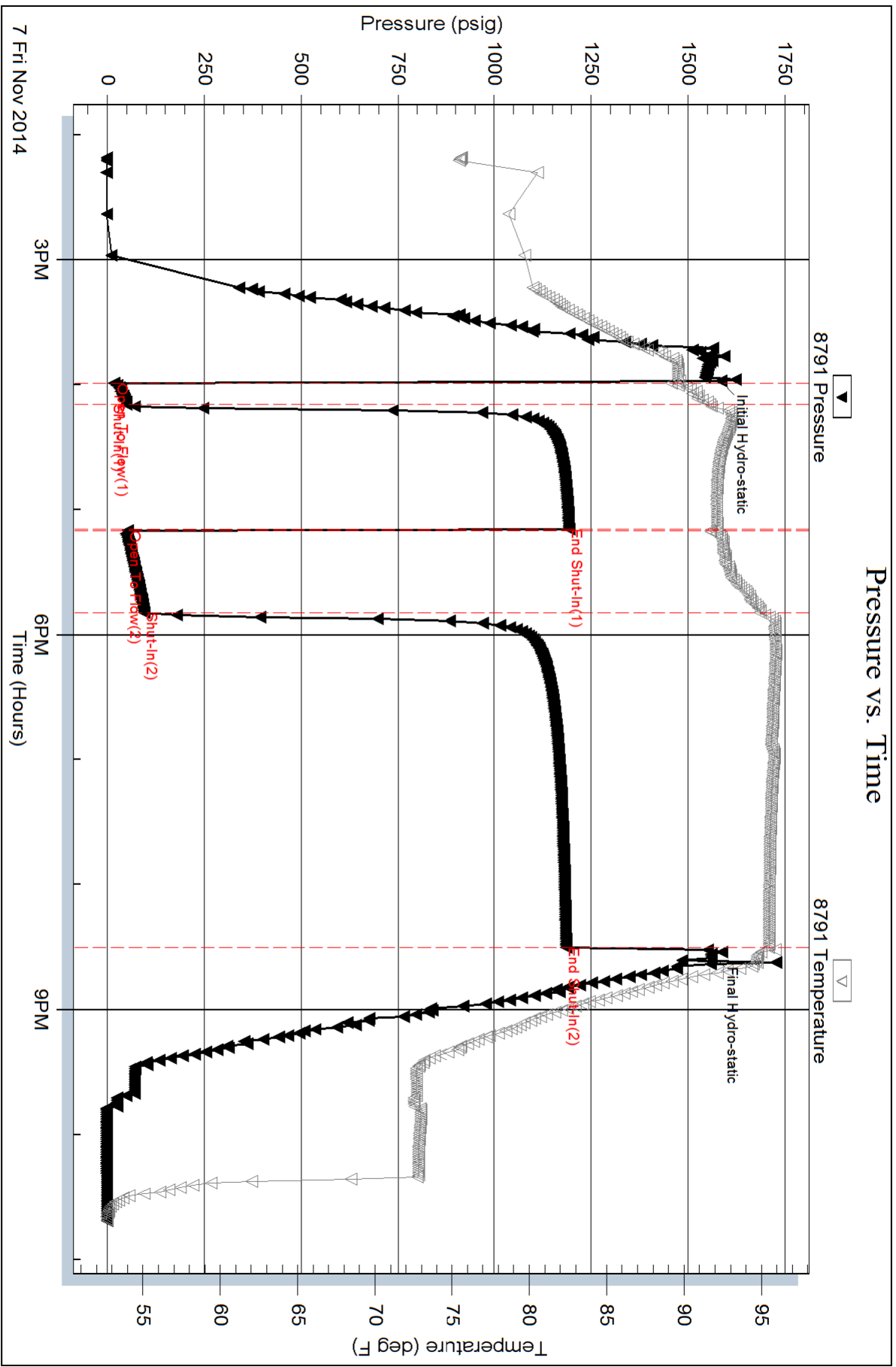
Laboratory Name:

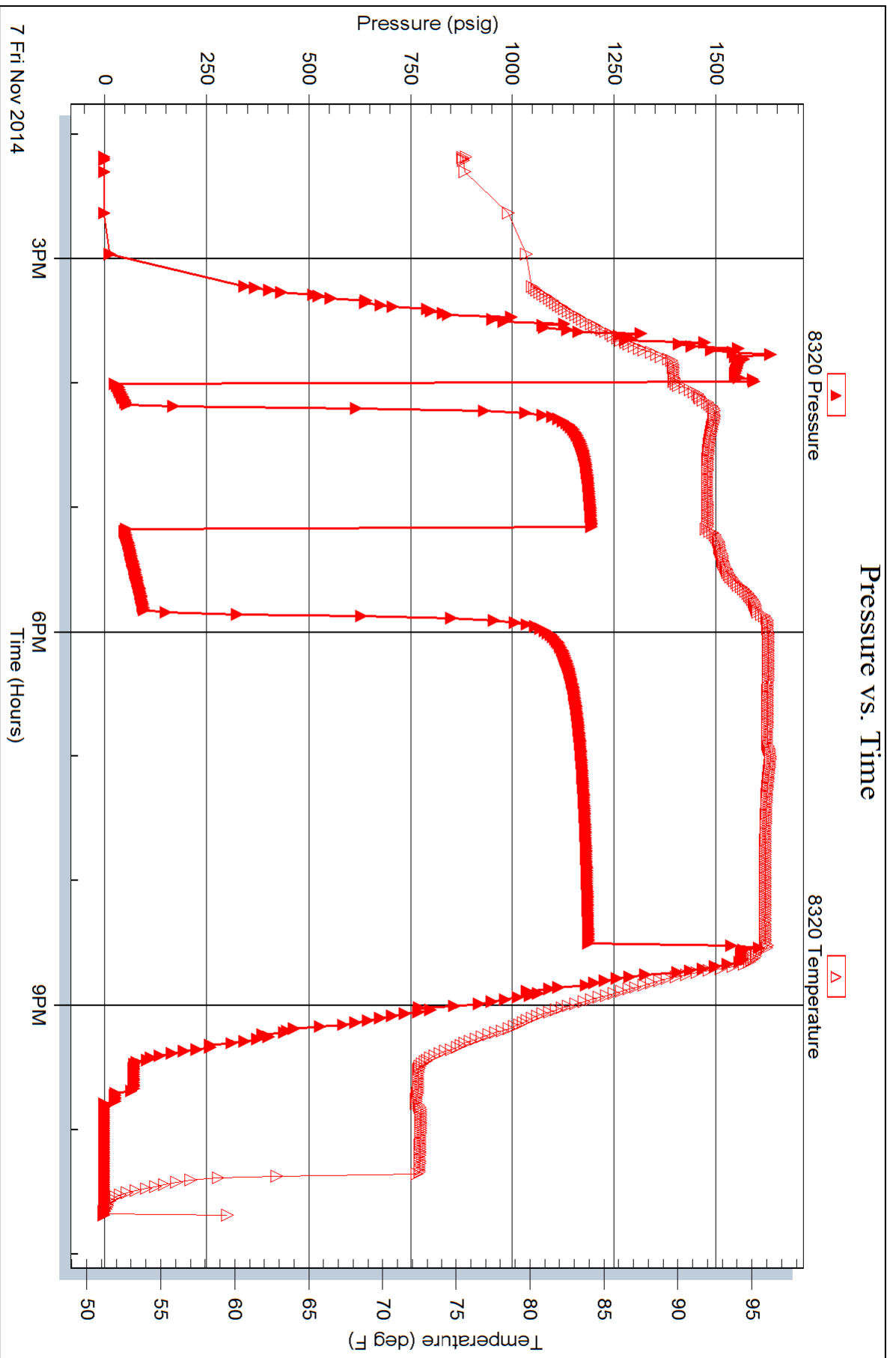
Laboratory Location:

Recovery Comments: Gravity = 28.6 api @ 56 deg F Corrected Gravity = 29 api

RW = .190 ohms @ 63.2 deg F Chlorides = 44,000 ppm

Sampler = 450 PSI, 1200 mL Water, 1100 mL SMWCO 96%o, 3%w , 1%m





Serial #: 8366

Fluid

Samuel Gary Jr. & Associates

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DST Test Number: 2

