



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates

1/5s/24w Norton KS

1515 Wynkoop STE 700
Denver, CO 80202

Marian et al #1-1

Job Ticket: 60098

DST#: 1

ATTN: Dan Pritchard

Test Start: 2014.10.27 @ 06:20:00

GENERAL INFORMATION:

Formation: **Toronto - LKC "A"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:13:00

Time Test Ended: 14:43:15

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 57

Interval: 3438.00 ft (KB) To 3480.00 ft (KB) (TVD)

Reference Elevations: 2348.00 ft (KB)

Total Depth: 3480.00 ft (KB) (TVD)

2340.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8791 Inside

Press@RunDepth: 61.49 psig @ 3439.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.10.27 End Date: 2014.10.27

Last Calib.: 2014.10.27

Start Time: 06:20:05 End Time: 14:43:14

Time On Btm: 2014.10.27 @ 08:12:45

Time Off Btm: 2014.10.27 @ 12:51:30

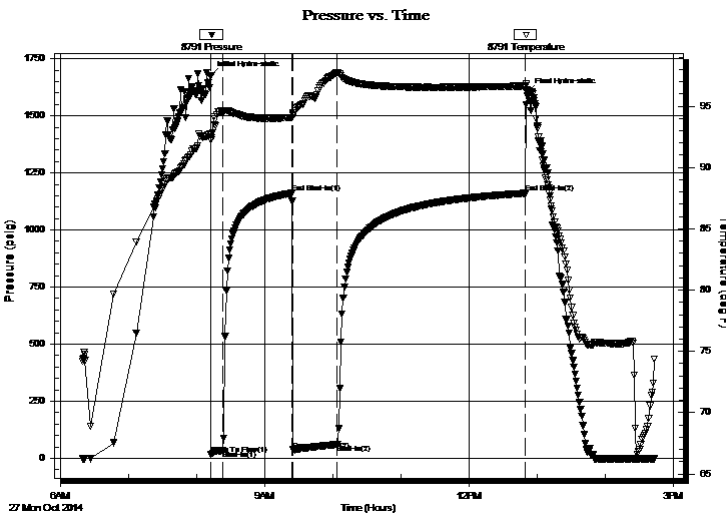
TEST COMMENT: 10 - IF: 1/4" Blow at open, built to 2 1/2"

60 - IS: No blow back

40 - FF: Blow built to 4 1/4"

160 - FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1677.33	92.73	Initial Hydro-static
1	17.55	92.29	Open To Flow (1)
11	35.86	94.52	Shut-In(1)
71	1161.20	94.07	End Shut-In(1)
73	36.76	94.29	Open To Flow (2)
112	61.49	97.74	Shut-In(2)
277	1161.05	96.63	End Shut-In(2)
279	1602.19	96.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	MCW w/trace oil 72%w , 28%m	1.12

Gas Rates

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



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Total Depth: 3480.00 ft (KB) (TVD)

2340.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8366 Fluid

Press@RunDepth: psig @ 3403.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.10.27

End Date:

2014.10.27

Last Calib.:

2014.10.27

Start Time: 06:20:05

End Time:

14:41:59

Time On Btm:

Time Off Btm:

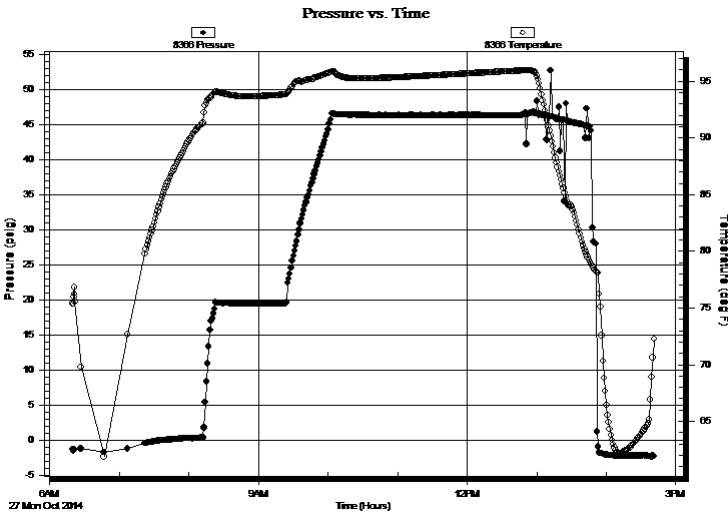
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PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
100.00	MCW w/trace oil 72%w, 28%m	1.12

Gas Rates

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



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TESTING, INC**

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FLUID SUMMARY

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1515 Wynkoop STE 700
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Marian et al #1-1

Job Ticket: 60098

DST#: 1

ATTN: Dan Pritchard

Test Start: 2014.10.27 @ 06:20:00

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:

42000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 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
100.00	MCW w/trace oil 72%w , 28%m	1.120

Total Length: 100.00 ft Total Volume: 1.120 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

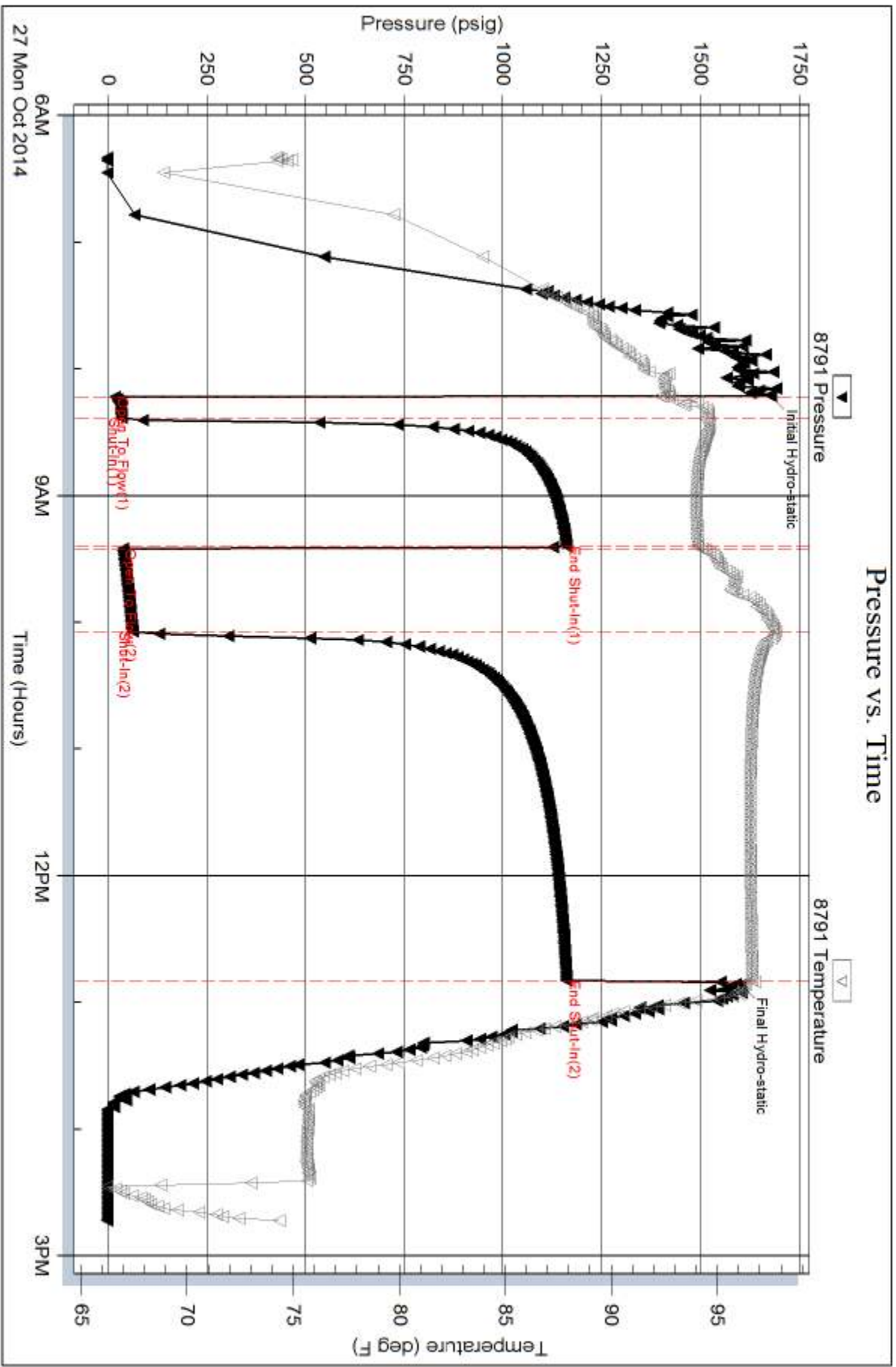
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .170 ohms @ 74.6 deg F Chlorides = 42,000 ppm

Sampler = 430 PSI, 1500 mL SMCW 93%w , 7%m, RW = .163 ohms @ 72.9 deg F Chlorides = 44,000 ppm



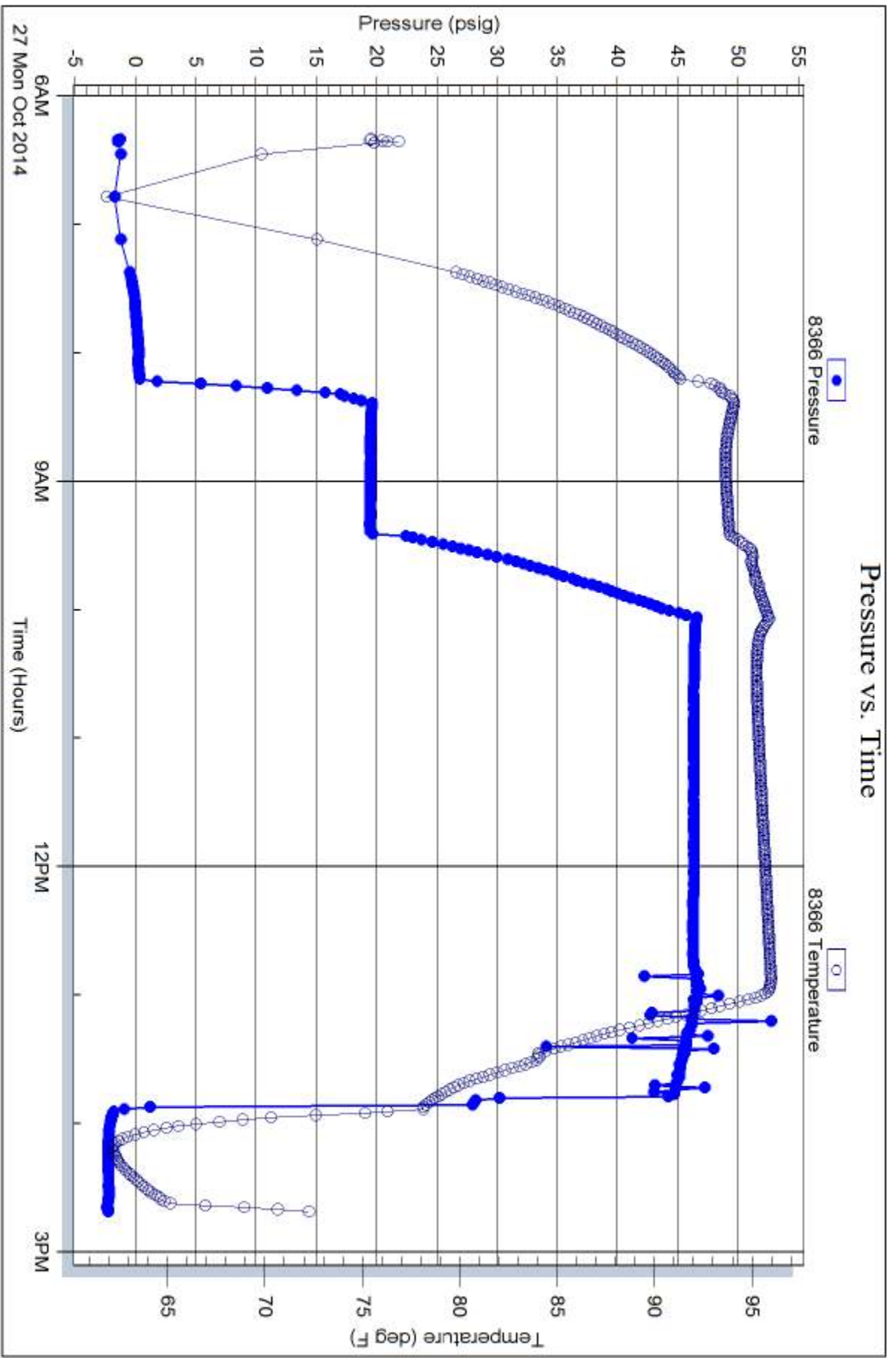
Serial #: 8366

Fluid

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DST Test Number: 1



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Ref. No: 60098

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