



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates

1-5S-24W - Norton, KS

Nuernberger #3-1

Job Ticket: 55923

DST#: 1

ATTN: Dan Pritchard

Test Start: 2014.10.19 @ 05:53:00

GENERAL INFORMATION:

Formation: **LKC "A-B"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 08:08:30 Tester: Kevin Mack
 Time Test Ended: 13:51:30 Unit No: 66
 Interval: **3450.00 ft (KB) To 3494.00 ft (KB) (TVD)** Reference Elevations: 2316.00 ft (KB)
 Total Depth: 3494.00 ft (KB) (TVD) 2308.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 8.00 ft

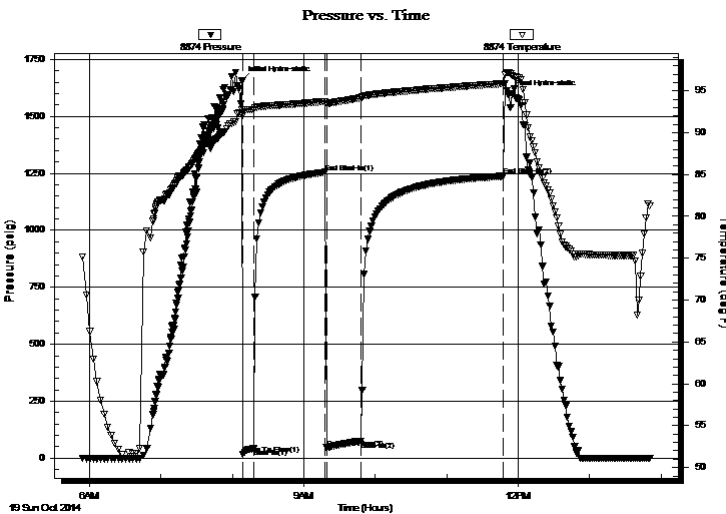
Serial #: 8874

Inside

Press@RunDepth: 75.64 psig @ 3451.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.10.19 End Date: 2014.10.19 Last Calib.: 2014.10.19
 Start Time: 05:54:00 End Time: 13:51:30 Time On Btm: 2014.10.19 @ 08:08:00
 Time Off Btm: 2014.10.19 @ 11:51:30

TEST COMMENT: 10 - IF- 1/4" Blow built to 3 1/2"
 60 - IS- No Return
 30 - FF- Surface Blow built to 8"
 120 - FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1654.73	92.69	Initial Hydro-static
1	17.20	92.04	Open To Flow (1)
10	41.92	92.77	Shut-In(1)
70	1253.87	93.73	End Shut-In(1)
71	45.35	93.45	Open To Flow (2)
100	75.64	94.15	Shut-In(2)
220	1237.25	95.85	End Shut-In(2)
224	1596.21	97.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MW 90W 10M	0.56
50.00	OSMW 15M 85W (oil spots)	0.70

Gas Rates

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



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FLUID SUMMARY

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Test Start: 2014.10.19 @ 05:53:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

55000 ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	MW 90W 10M	0.559
50.00	OSMW 15M 85W (oil spots)	0.701

Total Length: 110.00 ft Total Volume: 1.260 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .13 @ 80 = 55,000ppm

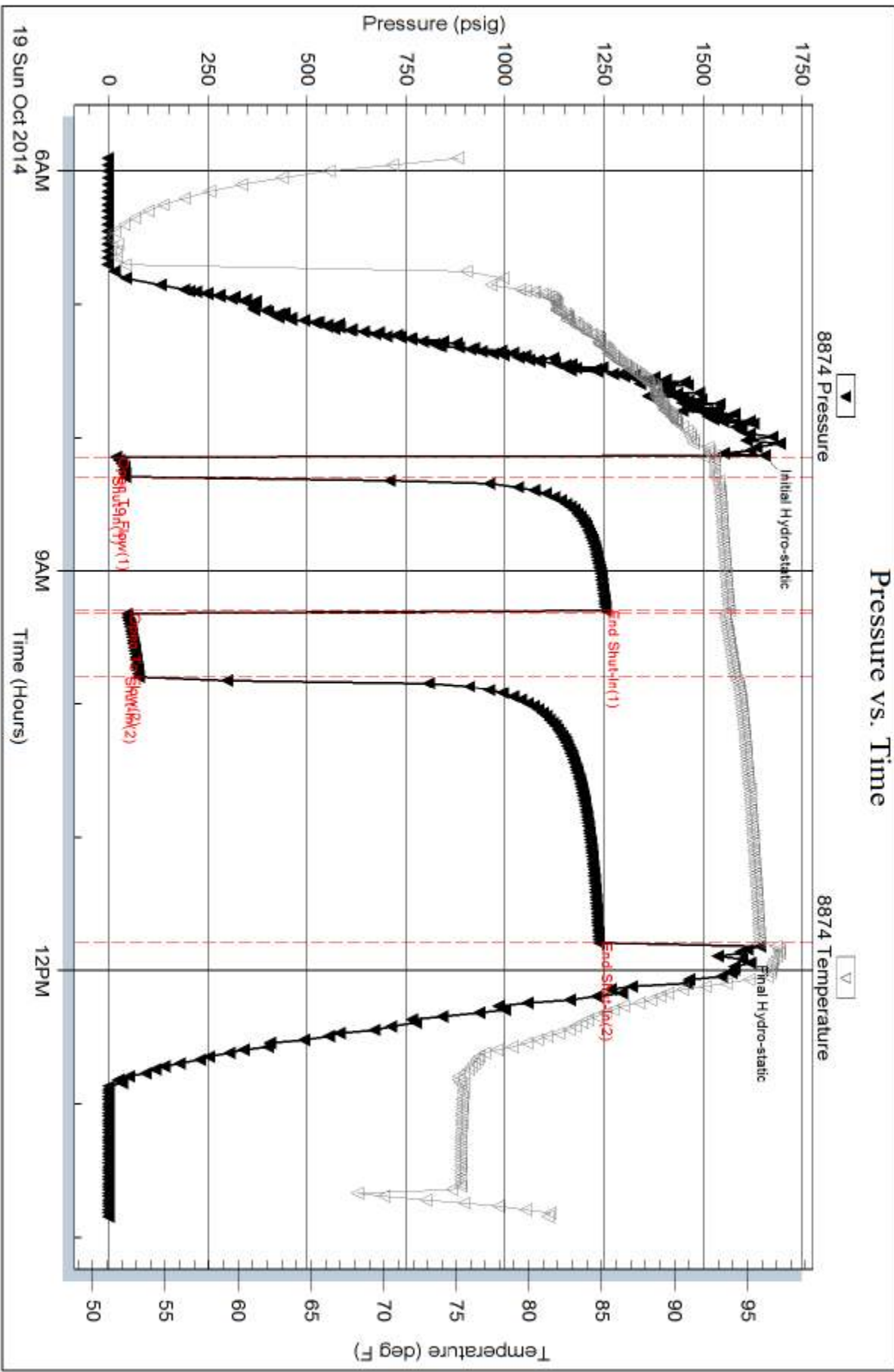
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Inside

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Number: #3-1

DST Test Number: 1



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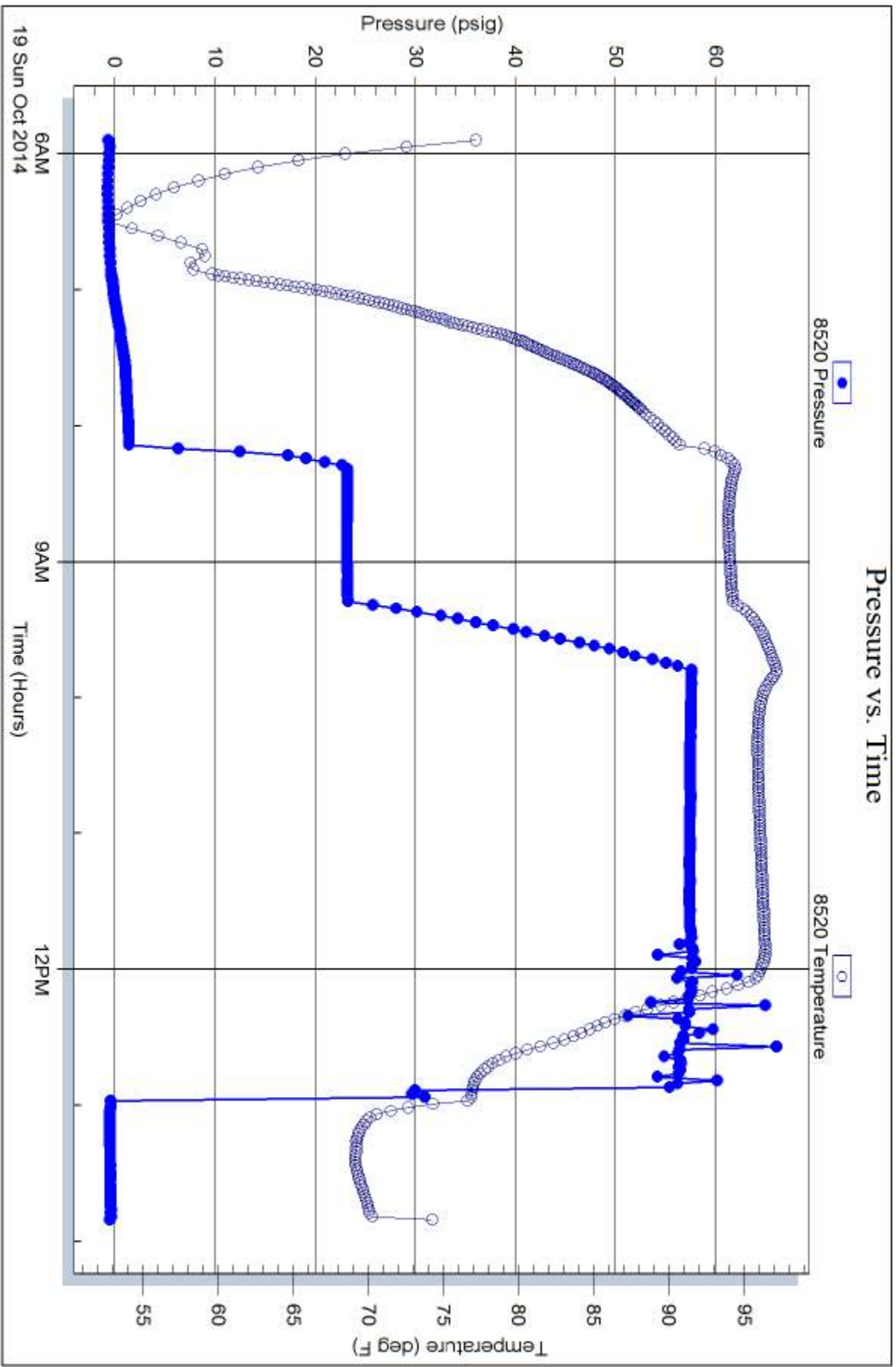
Serial #: 8520

Fluid

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Nuumberger #3-1

DST Test Number: 1



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