



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr & Assoc, Inc

11 5s 23w Norton, Ks

1315 Wynkoop, STE 700
Denver, Co 80202

Hager Trust 1-11

Job Ticket: 52876

DST#: 1

ATTN: Clayton Camozzi

Test Start: 2013.07.09 @ 12:39:00

GENERAL INFORMATION:

Formation: **LKC - D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:32:00

Time Test Ended: 21:04:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 53

Interval: 3444.00 ft (KB) To 3476.00 ft (KB) (TVD)

Reference Elevations: 2255.00 ft (KB)

Total Depth: 3476.00 ft (KB) (TVD)

2247.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8678 Outside

Press @ Run Depth: 420.73 psig @ 3445.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.09

End Date: 2013.07.09

Last Calib.: 2013.07.09

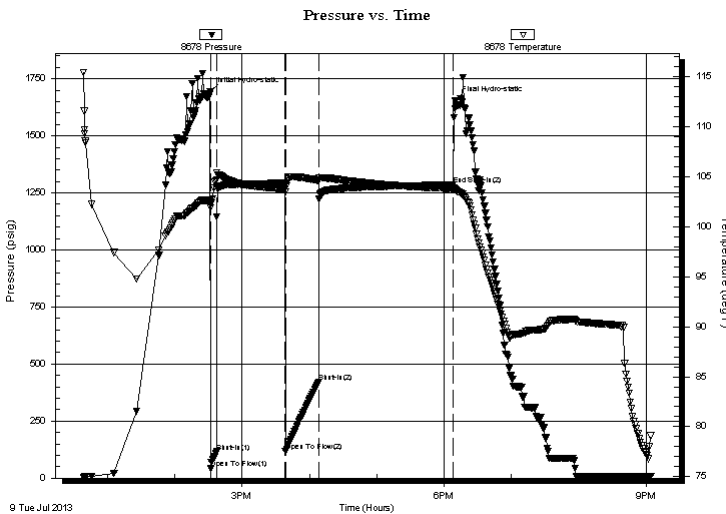
Start Time: 12:39:05

End Time: 21:03:59

Time On Btm: 2013.07.09 @ 14:31:45

Time Off Btm: 2013.07.09 @ 18:10:00

TEST COMMENT: IF: BOB @ 3 min.
IS: No return.
FF: BOB @ 3 min.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1692.61	102.66	Initial Hydro-static
1	41.64	101.89	Open To Flow (1)
6	114.80	104.70	Shut-In(1)
67	1292.18	103.79	End Shut-In(1)
67	116.41	103.49	Open To Flow (2)
97	420.73	104.61	Shut-In(2)
217	1284.16	103.80	End Shut-In(2)
219	1653.26	103.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
625.00	mcw 5m 95w	8.48
145.00	mcw 20m 80w (oil spots)	2.03
1.00	oil 100o	0.01

Gas Rates

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



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FLUID SUMMARY

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DST#: 1

ATTN: Clayton Camozzi

Test Start: 2013.07.09 @ 12:39:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

65000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
625.00	mcw 5m 95w	8.485
145.00	mcw 20m 80w (oil spots)	2.034
1.00	oil 100o	0.014

Total Length: 771.00 ft Total Volume: 10.533 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

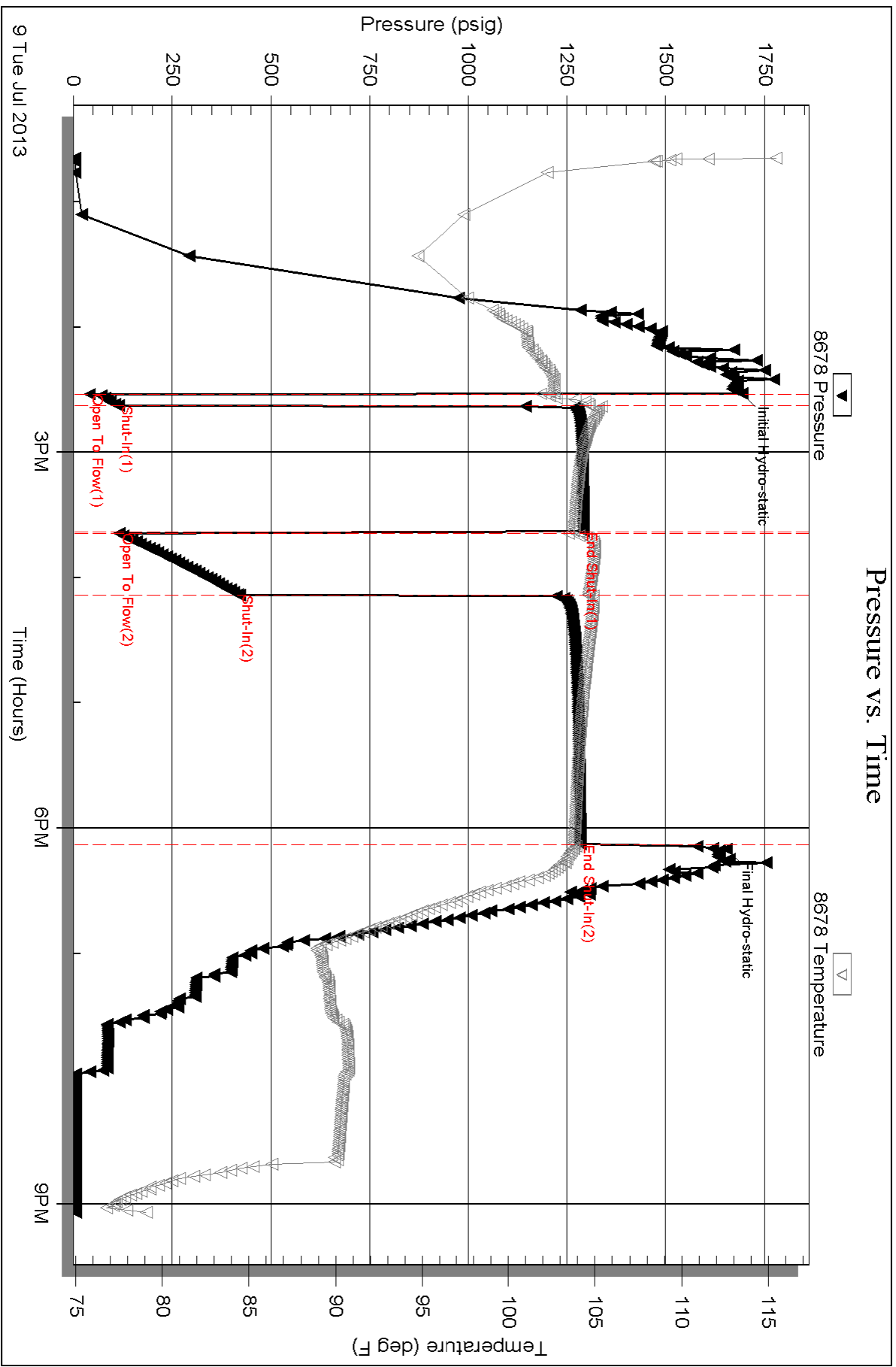
Recovery Comments: Sampler Data = 2000ml w ater w/oil spots
rw is .113 @ 74F = 65000ppm

Serial #: 8678

Outside Samuel Gary Jr & Assoc, Inc

Hager Trust 1-11

DST Test Number: 1



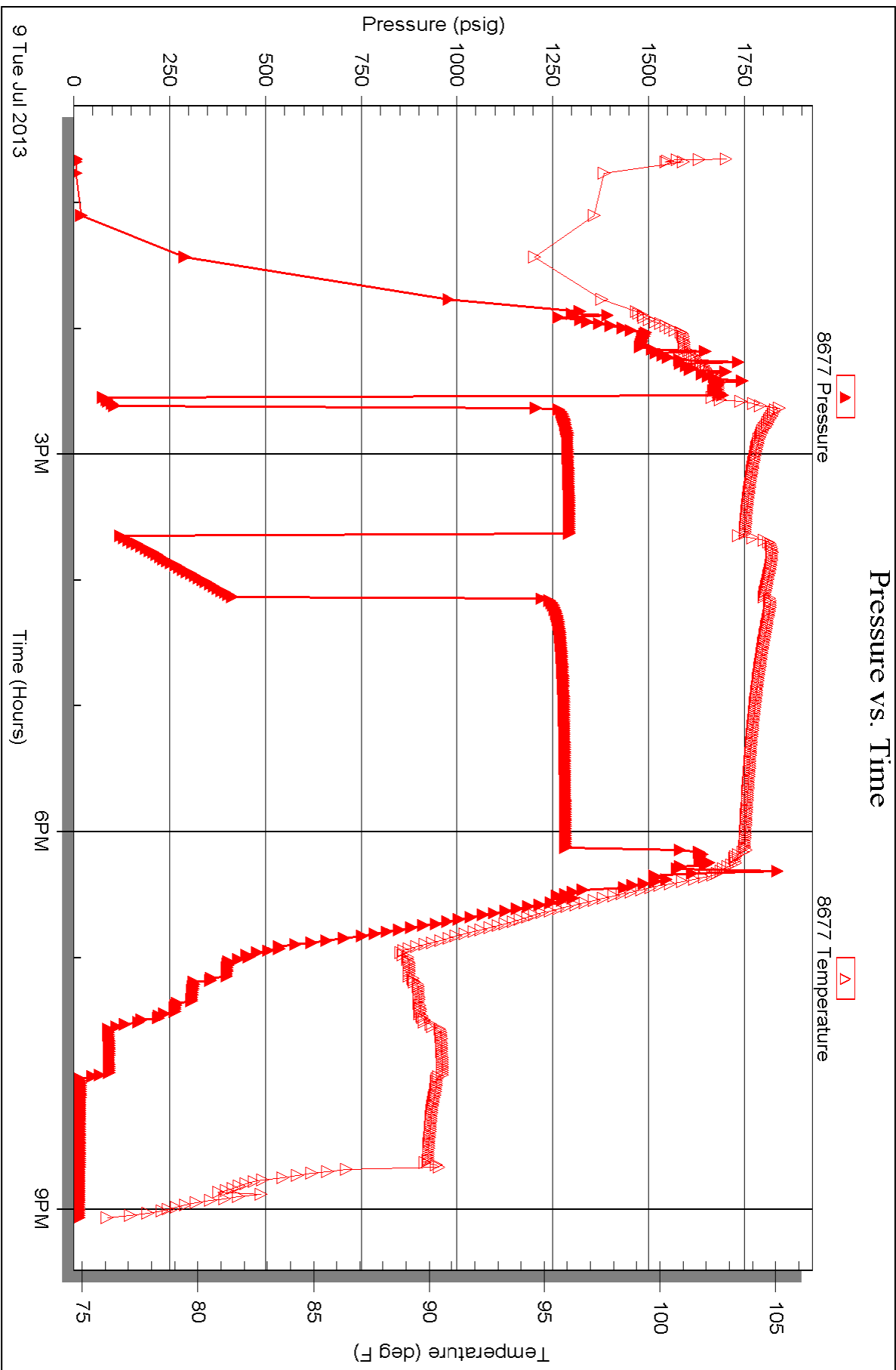
Serial #: 8677

Inside

Samuel Gary Jr & Assoc, Inc

Hager Trust 1-11

DST Test Number: 1



Serial #: 8522

Fluid

Samuel Gary Jr & Assoc, Inc

Hager Trust 1-11

DST Test Number: 1

