



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53516

DST#: 3

ATTN: Steve Reed

Test Start: 2013.09.11 @ 11:53:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:32:20

Time Test Ended: 16:36:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 41

Interval: 3566.00 ft (KB) To 3616.00 ft (KB) (TVD)

Reference Elevations: 2191.00 ft (KB)

Total Depth: 3616.00 ft (KB) (TVD)

2186.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6752 Inside

Press @ Run Depth: psig @ 3567.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.11 End Date: 2013.09.11

Last Calib.: 2013.09.11

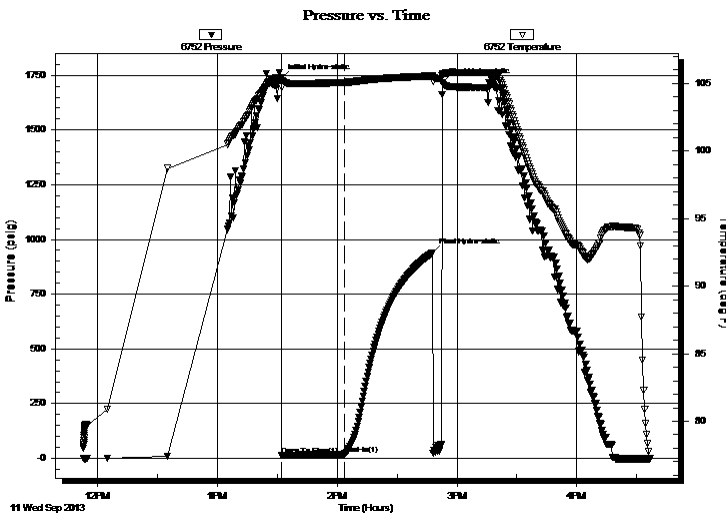
Start Time: 11:53:01 End Time: 16:36:40

Time On Btm: 2013.09.11 @ 13:32:10

Time Off Btm: 2013.09.11 @ 14:47:40

TEST COMMENT: 30 IF - Surface blow died @ 26 mins
45 ISI - No return
5 FF - No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1736.32	105.44	Initial Hydro-static
1	12.60	104.74	Open To Flow (1)
32	19.88	105.08	Shut-In(1)
76	938.23	105.56	Final Hydro-static
81	1714.32	105.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w/oil spots	0.05

Gas Rates

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

* Recovery from multiple tests



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2186.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press @ Run Depth: psig @ 3567.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.11 End Date: 2013.09.11

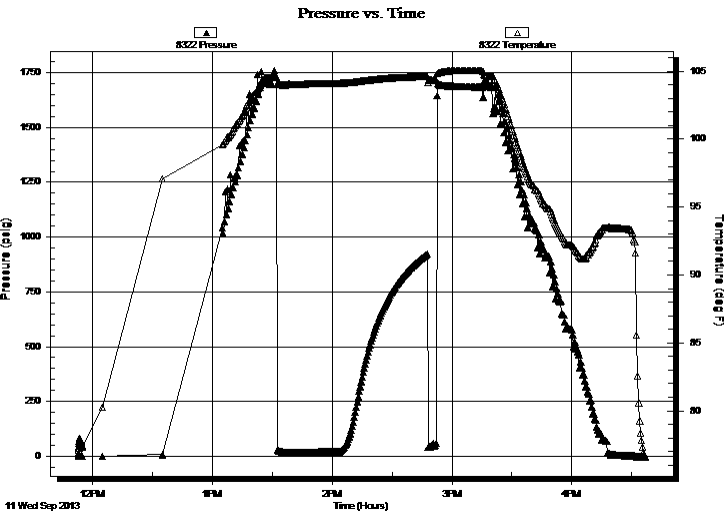
Last Calib.: 2013.09.11

Start Time: 11:53:01 End Time: 16:36:40

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 IF - Surface blow died @ 26 mins
45 ISI - No return
5 FF - No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w/oil spots	0.05

* Recovery from multiple tests

Gas Rates

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



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DRILL STEM TEST REPORT

FLUID SUMMARY

Black Diamond Oil

25 - 5S - 21W - Norton Ks

P.O. Box 641
Hays KS 67601

Kemper B #1

Job Ticket: 53516

DST#: 3

ATTN: Steve Reed

Test Start: 2013.09.11 @ 11:53:00

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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud w /oil spots	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

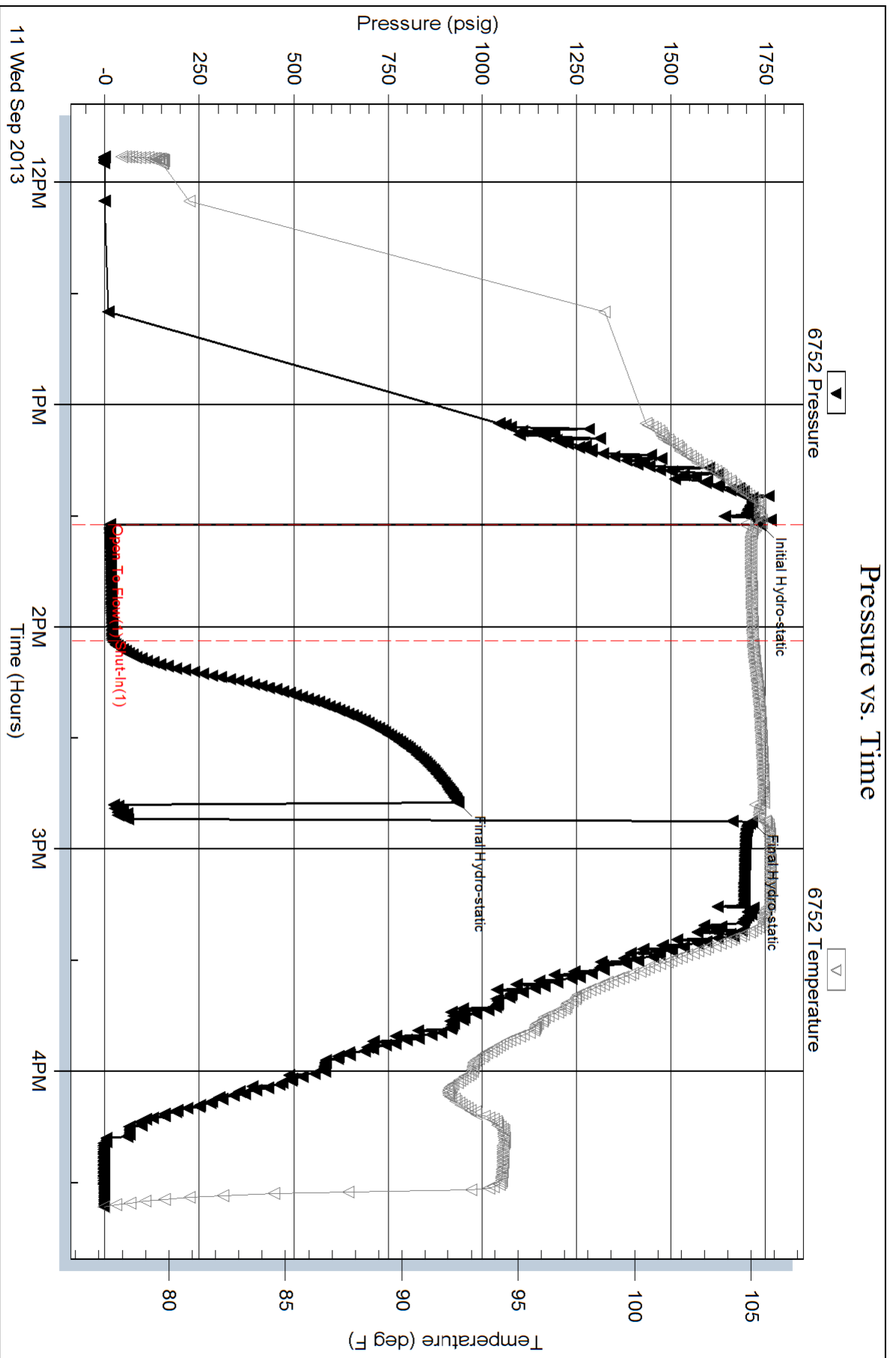
Serial #: 6752

Inside

Black Diamond Oil

Kemper B #1

DST Test Number: 3



Serial #: 8322

Outside Black Diamond Oil

Kemper B #1

DST Test Number: 3

