



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: 53514

DST#: 1

ATTN: Steve Reed

Test Start: 2013.09.09 @ 15:43:00

GENERAL INFORMATION:

Formation: **Toronto - Lkc " A "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:48:00

Time Test Ended: 22:21:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ryan Nichols

Unit No: 41

Interval: 3319.00 ft (KB) To 3385.00 ft (KB) (TVD)

Reference Elevations: 2191.00 ft (KB)

Total Depth: 3385.00 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: 43.62 psig @ 3320.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.09

End Date:

2013.09.09

Last Calib.:

2013.09.09

Start Time: 15:43:01

End Time:

22:21:00

Time On Btm:

2013.09.09 @ 17:47:50

Time Off Btm:

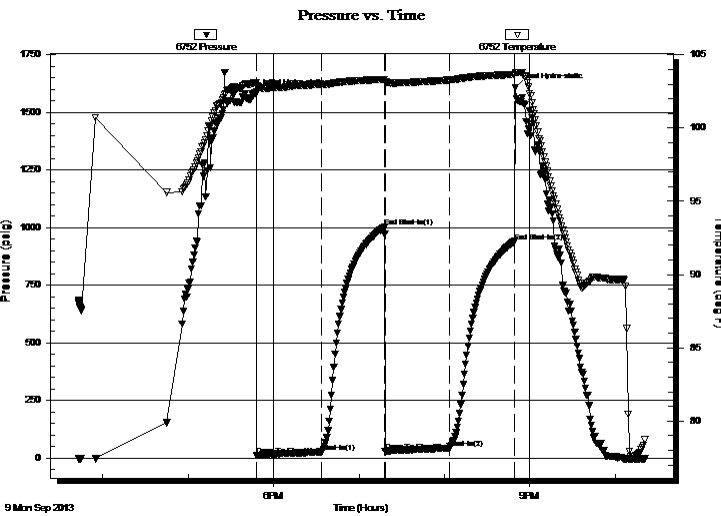
2013.09.09 @ 20:49:50

TEST COMMENT: 45 IF - Surface blow built to 1/4"

45 ISI - No return

45 FF - No blow

45 FSI - No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1582.15	103.09	Initial Hydro-static
1	11.04	102.44	Open To Flow (1)
46	27.08	102.96	Shut-In(1)
91	1002.92	103.31	End Shut-In(1)
91	30.38	103.09	Open To Flow (2)
136	43.62	103.28	Shut-In(2)
182	940.02	103.64	End Shut-In(2)
182	1606.33	103.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	Mud w/oil spots - 100%M	0.30

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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	Mud w /oil spots - 100%M	0.300

Total Length: 61.00 ft Total Volume: 0.300 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

