



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc.
9915 W 21st ST.
STE B
Wichita KS 67205
ATTN: Jeff Lawler

34 - 2S - 24W Norton KS

Marvin Wudtke #34-1

Job Ticket: 56869 **DST#: 4**

Test Start: 2014.03.28 @ 00:33:00

GENERAL INFORMATION:

Formation: **LKC " D - F "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:05:30

Time Test Ended: 07:53:20

Test Type: Conventional Straddle (Reset)

Tester: Ryan Nichols

Unit No: 58

Interval: 3506.00 ft (KB) To 3544.00 ft (KB) (TVD)

Reference Elevations: 2466.00 ft (KB)

Total Depth: 3770.00 ft (KB) (TVD)

2458.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 6752

Inside

Press@RunDepth: 175.87 psig @ 3507.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.28

End Date:

2014.03.28

Last Calib.:

2014.03.28

Start Time: 00:33:01

End Time:

07:53:20

Time On Btm:

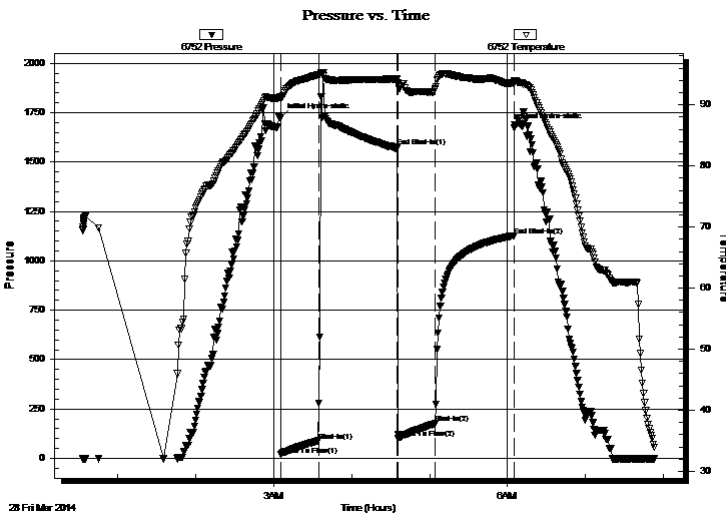
2014.03.28 @ 03:05:20

Time Off Btm:

2014.03.28 @ 06:05:20

TEST COMMENT: 30 IF - 1" blow built to BoB @ 18 mins
60 ISI - No return
30 FF - 1" blow built to BoB @ 13 mins
60 FSI - No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1723.57	91.34	Initial Hydro-static
1	17.76	90.93	Open To Flow (1)
29	88.66	94.93	Shut-In(1)
90	1575.67	94.22	End Shut-In(1)
91	99.96	93.36	Open To Flow (2)
120	175.87	92.68	Shut-In(2)
180	1127.35	93.62	End Shut-In(2)
181	1675.79	93.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	WCM - 40%W - 60%M	1.49
126.00	WCM - 50%W - 50%M	1.77
95.00	MCW - 5%M - 95%W	1.33

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

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STE B

Job Ticket: 56869

DST#: 4

Wichita KS 67205

Test Start: 2014.03.28 @ 00:33:00

ATTN: Jeff Lawler

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 750.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
126.00	WCM - 40%W - 60%M	1.485
126.00	WCM - 50%W - 50%M	1.767
95.00	MCW - 5%M - 95%W	1.333

Total Length: 347.00 ft Total Volume: 4.585 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .300 @ 36 DEG F

CHLORIDES = 50,000 PPM

