



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

john jay darrah jr

9 9s 23w graham

p.o. box 2786
wichta, ks 67201

brush creek unit 403

ATTN: seth evanson

Job Ticket: 53822

DST#: 2

Test Start: 2013.06.25 @ 13:50:00

GENERAL INFORMATION:

Formation: **LKC " G - K "**

Deviated: No Whipstock: 2394.00 ft (KB)

Time Tool Opened: 16:36:30

Time Test Ended: 23:55:00

Test Type: Conventional Bottom Hole (Reset)

Tester: jim svaty

Unit No: 41

Interval: 3758.00 ft (KB) To 3925.00 ft (KB) (TVD)

Reference Elevations: 2394.00 ft (KB)

Total Depth: 3925.00 ft (KB) (TVD)

2389.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8322 Outside

Press @ Run Depth: 574.55 psig @ 3760.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.06.25

End Date:

2013.06.25

Last Calib.:

2013.06.26

Start Time: 13:50:01

End Time:

23:54:40

Time On Btm:

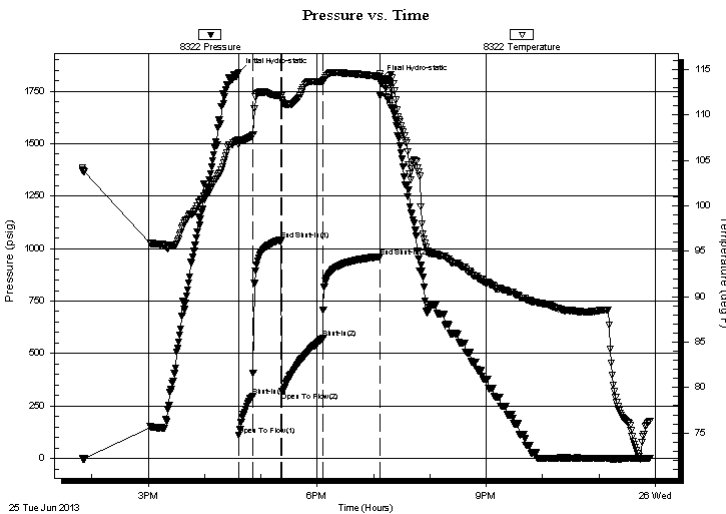
2013.06.25 @ 16:36:10

Time Off Btm:

2013.06.25 @ 19:06:50

TEST COMMENT: 15-IFP- BOB in 1min. 45sec.
30-ISIP- BOB in 16min.
45-FFP- BOB in 1min. 45sec.
60-FSIP- BOB in 8min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1839.61	107.18	Initial Hydro-static
1	111.46	106.72	Open To Flow (1)
16	297.94	107.72	Shut-In(1)
46	1039.55	112.07	End Shut-In(1)
46	317.67	111.53	Open To Flow (2)
90	574.55	113.65	Shut-In(2)
151	961.88	114.23	End Shut-In(2)
151	1804.62	114.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
688.00	GMCO 20%m 30%g 50%o	6.93
188.00	GMCO 10%m 45%g 45%o	2.64
563.00	GMCO 10%m 20%g 70%o	7.90
62.00	GMCO 30%g 30%m 40%o	0.87
79.00	GOCM 10%g 20%o 70%m	1.11
0.00	1060 GIP	0.00

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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ATTN: seth evanson

Test Start: 2013.06.25 @ 13:50:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: sec/qt

Cushion Volume:

bbbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
688.00	GMCO 20%m 30%g 50%o	6.927
188.00	GMCO 10%m 45%g 45%o	2.637
563.00	GMCO 10%m 20%g 70%o	7.897
62.00	GMCO 30%g 30%m 40%o	0.870
79.00	GOCM 10%g 20%o 70%m	1.108
0.00	1060 GIP	0.000

Total Length: 1580.00 ft

Total Volume: 19.439 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

