



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Co.

33-32s-12w Barber Ks

125 N. Market, Ste.1000
Wichita Ks.67202

Bartholow GU#2

ATTN: Scott Alberg

Job Ticket: 50959

DST#: 1

Test Start: 2013.04.05 @ 15:19:10

GENERAL INFORMATION:

Formation: **Snyderville**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:49:25

Time Test Ended: 00:21:10

Test Type: Conventional Bottom Hole (Initial)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 3818.00 ft (KB) To 3736.00 ft (KB) (TVD)

Reference Elevations: 1619.00 ft (KB)

Total Depth: 3746.00 ft (KB) (TVD)

1607.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 12.00 ft

Serial #: 8370

Inside

Press @ Run Depth: 109.93 psig @ 3719.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.04.05

End Date:

2013.04.06

Last Calib.:

2013.04.06

Start Time:

15:19:15

End Time:

00:21:10

Time On Btm:

2013.04.05 @ 17:47:40

Time Off Btm:

2013.04.05 @ 21:54:10

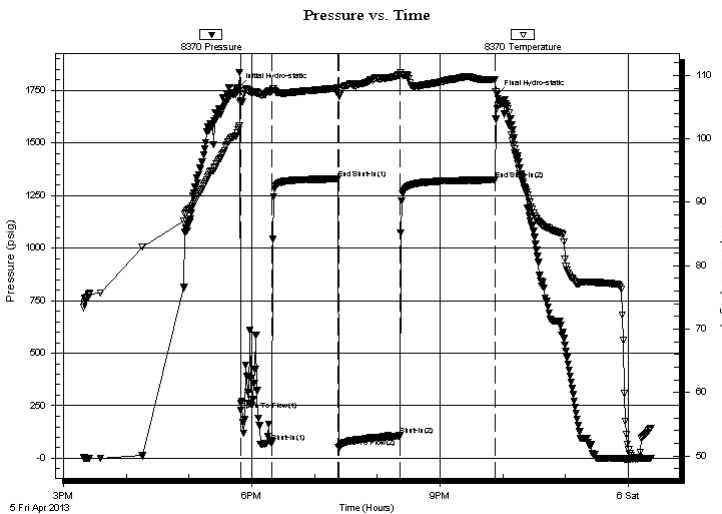
TEST COMMENT: IF: Strong blow . B.O.B. in 30 secs. GTS in 14 mins. (see gas flow report)

Comment: 16+ ft. of hard fill on btm. Slid tool 12 - 13 ft.

ISI: No blow .

FF: Strong blow . (see gas flow report)

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1764.55	101.81	Initial Hydro-static
2	229.70	106.00	Open To Flow (1)
32	78.47	107.43	Shut-In(1)
95	1328.65	108.01	End Shut-In(1)
96	53.50	106.78	Open To Flow (2)
154	109.93	110.07	Shut-In(2)
245	1323.93	109.32	End Shut-In(2)
247	1730.82	104.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
122.00	GOCMW 22%g 13%o 29%m 36%w	0.60
0.00	Rw .13 ohms @52 deg	0.00
61.00	GOCVM 22%g 6%o 14%w 58%m	0.30
50.00	GCM 4%g 96%m	0.70

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	5.00	71.07
Last Gas Rate	0.38	32.00	169.97
Max. Gas Rate	0.38	32.00	169.97



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FLUID SUMMARY

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Bartholow GU#2

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Test Start: 2013.04.05 @ 15:19:10

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:

87000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
122.00	GOCMW 22%g 13%o 29%m 36%w	0.600
0.00	Rw .13 ohms@52 deg	0.000
61.00	GOCWM 22%g 6%o 14%w 58%m	0.300
50.00	GCM 4%g 96%m	0.701

Total Length: 233.00 ft

Total Volume: 1.601 bbl

Num Fluid Samples: 0

Num Gas Bombs: 1

Serial #: gp-1

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



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GAS RATES

Woolsey Operating Co.

33-32s-12w Barber Ks

125 N. Market, Ste.1000
Wichita Ks.67202

Bartholow GU#2

Job Ticket: 50959

DST#: 1

ATTN: Scott Alberg

Test Start: 2013.04.05 @ 15:19:10

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	20	0.38	5.00	71.07
1	30	0.38	10.00	89.38
2	10	0.38	17.00	115.03
2	20	0.38	23.00	137.00
2	30	0.38	27.00	151.66
2	40	0.38	30.00	162.65
2	50	0.38	31.00	166.31
2	60	0.38	32.00	169.97

Pressure vs. Time

