



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Co.
125 N. Market, Ste. 1000
Wichita Ks. 67202
ATTN: Scott Alberg

36-33s-11w Barber Ks.

Luthi GU#5

Job Ticket: 47541

DST#: 2

Test Start: 2012.06.01 @ 08:56:24

GENERAL INFORMATION:

Formation: **Viola**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:31:54
 Time Test Ended: 20:34:54
 Interval: **4890.00 ft (KB) To 4950.00 ft (KB) (TVD)**
 Total Depth: 4950.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Gary Pevoteaux
 Unit No: 56
 Reference Elevations: 1454.00 ft (KB)
 1441.00 ft (CF)
 KB to GR/CF: 13.00 ft

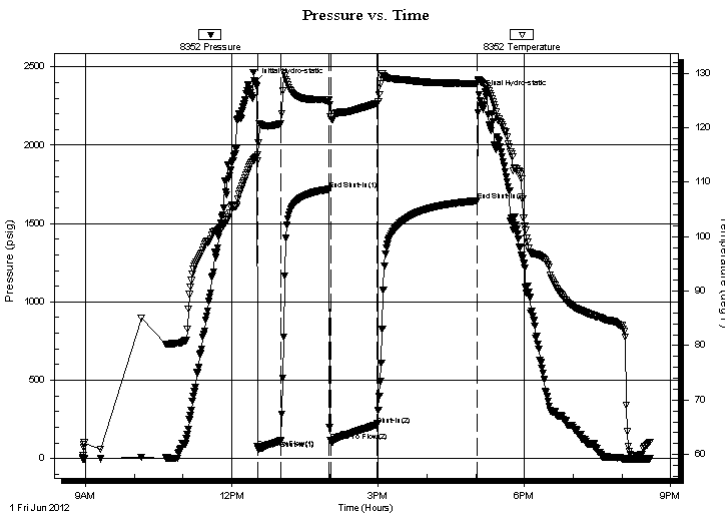
Serial #: 8352

Outside

Press @ Run Depth: 215.73 psig @ 4891.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.06.01 End Date: 2012.06.01 Last Calib.: 2012.06.01
 Start Time: 08:56:29 End Time: 20:34:54 Time On Btm: 2012.06.01 @ 12:28:09
 Time Off Btm: 2012.06.01 @ 17:03:54

TEST COMMENT: IF: Strong blow . GTS in 12 mins. (see gas flow report)
 IS: No blow .
 FF: Strong blow . (see gas flow report)
 FS: Fair to strong blow . B.O.B.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2401.63	114.32	Initial Hydro-static
4	63.77	115.08	Open To Flow (1)
33	114.16	120.77	Shut-In(1)
92	1718.82	125.09	End Shut-In(1)
94	113.61	121.93	Open To Flow (2)
151	215.73	124.46	Shut-In(2)
274	1645.18	128.16	End Shut-In(2)
276	2322.42	128.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	GOCM 32%g 30%o 38%m	0.89
455.00	CGO 38% g 62%o	6.38

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	5.00	71.07
Last Gas Rate	0.38	6.00	74.73
Max. Gas Rate	0.38	8.00	82.06



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Luthi GU#5
Job Ticket: 47541 **DST#: 2**
Test Start: 2012.06.01 @ 08:56:24

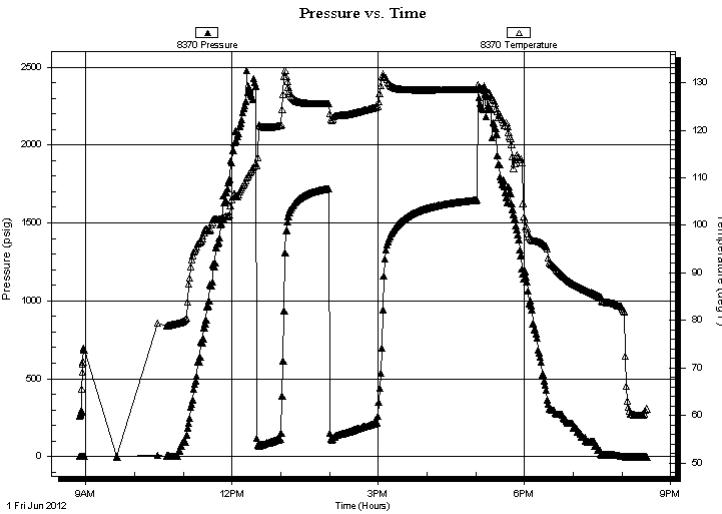
GENERAL INFORMATION:

Formation: **Viola**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 12:31:54 Tester: Gary Pevoteaux
Time Test Ended: 20:34:54 Unit No: 56

Interval: **4890.00 ft (KB) To 4950.00 ft (KB) (TVD)** Reference Elevations: 1454.00 ft (KB)
Total Depth: 4950.00 ft (KB) (TVD) 1441.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 13.00 ft

Serial #: 8370 Inside
Press @ Run Depth: psig @ 4891.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.06.01 End Date: 2012.06.01 Last Calib.: 2012.06.01
Start Time: 08:52:13 End Time: 20:31:08 Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Strong blow . GTS in 12 mins. (see gas flow report)
IS: No blow .
FF: Strong blow . (see gas flow report)
FS: Fair to strong blow . B.O.B.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
180.00	GOCM 32%g 30%o 38% m	0.89
455.00	CGO 38% g 62% o	6.38

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	5.00	71.07
Last Gas Rate	0.38	6.00	74.73
Max. Gas Rate	0.38	8.00	82.06

* Recovery from multiple tests



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DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co.

36-33s-11w Barber Ks.

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

Luthi GU#5

Job Ticket: 47541

DST#: 2

ATTN: Scott Alberg

Test Start: 2012.06.01 @ 08:56:24

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

5000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	GOCM 32%g 30%o 38%m	0.885
455.00	CGO 38% g 62%o	6.382

Total Length: 635.00 ft

Total Volume: 7.267 bbl

Num Fluid Samples: 0

Num Gas Bombs: 1

Serial #: gp-2

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



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DRILL STEM TEST REPORT

GAS RATES

Woolsey Operating Co.

36-33s-11w Barber Ks.

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

Luthi GU#5

Job Ticket: 47541

DST#: 2

ATTN: Scott Alberg

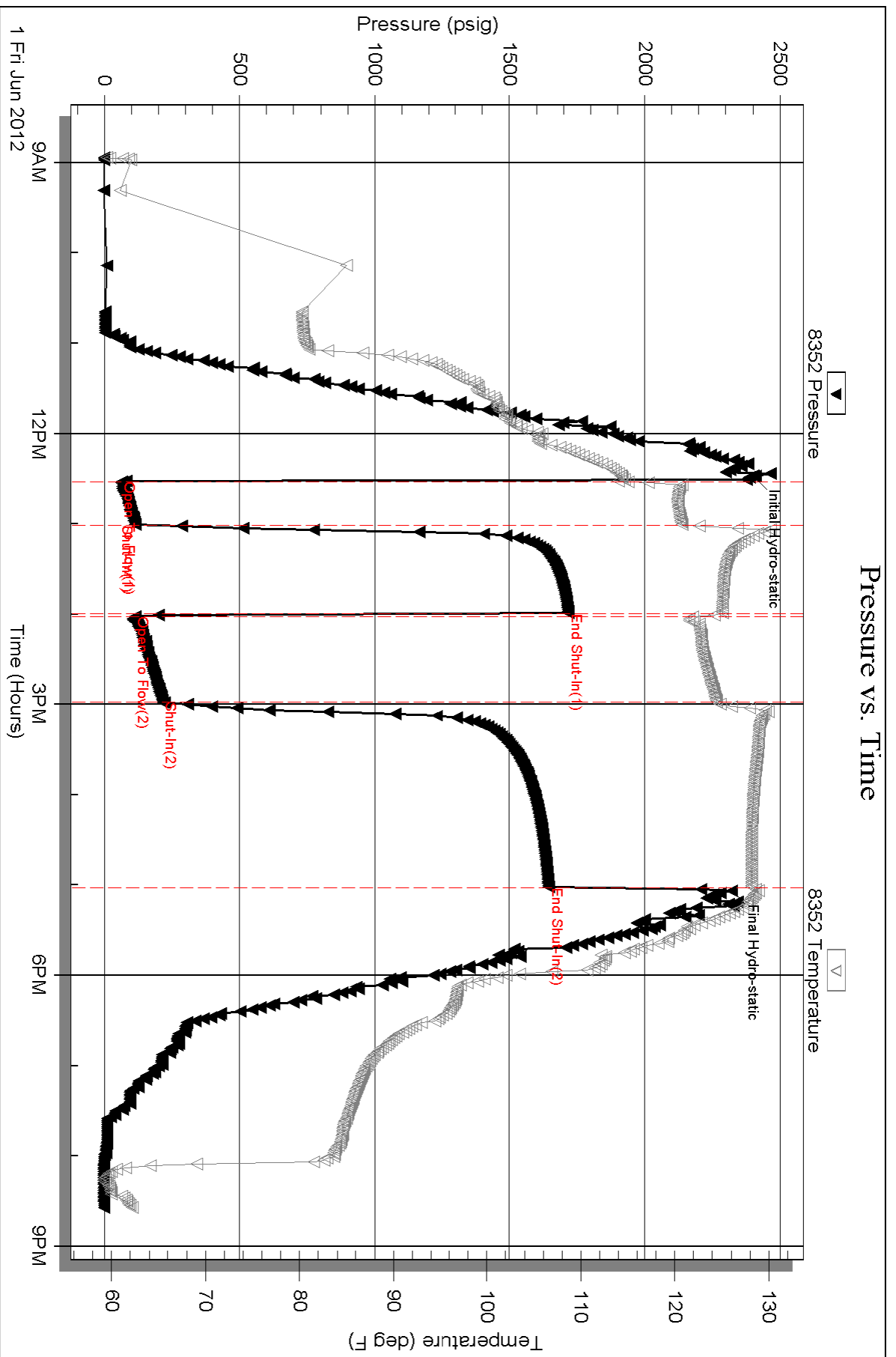
Test Start: 2012.06.01 @ 08:56:24

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	6.00	74.73
2	10	0.38	6.00	74.73
2	20	0.38	7.00	78.39
2	30	0.38	8.00	82.06
2	40	0.38	7.00	78.39
2	50	0.38	7.00	78.39
2	60	0.38	6.00	74.73



Serial #: 8370

Inside

Woodsey Operating Co.

Luthi GU#5

DST Test Number: 2

Pressure vs. Time

