



**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: 47540

DST#: 1

Test Start: 2012.05.30 @ 13:40:16

GENERAL INFORMATION:

Formation: **Pawnee**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:43:16
 Time Test Ended: 21:54:16
 Interval: **4490.00 ft (KB) To 4527.00 ft (KB) (TVD)**
 Total Depth: 4527.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Gary Pevoteaux
 Unit No: 56
 Reference Elevations: 1454.00 ft (KB)
 1441.00 ft (CF)
 KB to GR/CF: 13.00 ft

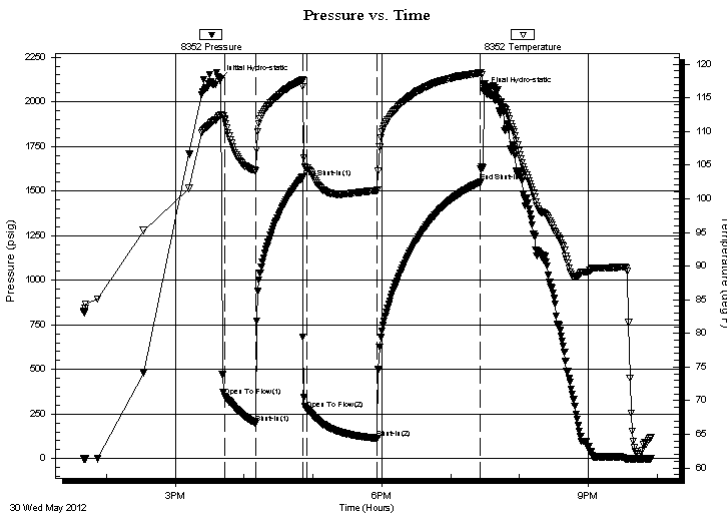
Serial #: 8352

Outside

Press @ Run Depth: 113.94 psig @ 4491.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.05.30 End Date: 2012.05.30 Last Calib.: 2012.05.30
 Start Time: 13:40:21 End Time: 21:54:15 Time On Btm: 2012.05.30 @ 15:38:46
 Time Off Btm: 2012.05.30 @ 19:28:46

TEST COMMENT: IF: Strong blow . GTS in 90 secs. (see gas flow report)
 IS: No blow .
 FF: Strong blow . (see gas flow report)
 FS: No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2125.25	112.36	Initial Hydro-static
5	348.02	111.67	Open To Flow (1)
32	198.09	104.19	Shut-In (1)
72	1576.85	117.63	End Shut-In (1)
76	279.79	104.56	Open To Flow (2)
138	113.94	101.23	Shut-In (2)
227	1549.71	118.71	End Shut-In (2)
230	2058.78	116.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	GCM	0.12

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.75	100.00	1786.91
Last Gas Rate	0.75	36.00	787.24
Max. Gas Rate	0.75	100.00	1786.91



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FLUID SUMMARY

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125 N. Market , Ste. 1000
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Luthi GU#5
Job Ticket: 47540 **DST#: 1**
Test Start: 2012.05.30 @ 13:40:16

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:	4000 ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.19 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	GCM	0.123

Total Length: 25.00 ft Total Volume: 0.123 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.

36-33s-11w Barber Ks.

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

Luthi GU#5

Job Ticket: 47540

DST#: 1

ATTN: Scott Alberg

Test Start: 2012.05.30 @ 13:40:16

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	5	0.75	100.00	1786.91
1	5	0.75	100.00	1786.91
1	15	0.75	90.00	1630.71
1	20	0.75	80.00	1474.51
1	30	0.75	71.00	1333.94
2	10	0.75	88.00	1599.47
2	20	0.75	67.00	1271.46
2	30	0.75	54.00	1068.40
2	40	0.75	46.00	943.44
2	60	0.75	36.00	787.24

Pressure vs. Time

