



## DRILL STEM TEST REPORT

Prepared For: **Younger Energy Company**

9415 East Harry Street  
Suite 403 Building 400  
Wichita, Kansas 67207+5083

ATTN: Keith Reavis

**Kelly #1-33**

**33/21S/15W/Pawnee**

Start Date: 2013.06.22 @ 04:39:00

End Date: 2013.06.22 @ 10:00:00

Job Ticket #: 18134                      DST #: 4

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.06.22 @ 10:12:51



# DRILL STEM TEST REPORT

Younger Energy Company

**33/21S/15W/Pawnee**

9415 East Harry Street  
Suite 403 Building 400  
Wichita, Kansas 67207+5083  
ATTN: Keith Reavis

**Kelly #1-33**

Job Ticket: 18134

**DST#: 4**

Test Start: 2013.06.22 @ 04:39:00

## GENERAL INFORMATION:

Formation: **Simpson/Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:56:30

Time Test Ended: 10:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/56

**Interval: 3875.00 ft (KB) To 3935.00 ft (KB) (TVD)**

Reference Elevations: 1985.00 ft (KB)

Total Depth: 3935.00 ft (KB) (TVD)

1973.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Poor

KB to GR/CF: 12.00 ft

**Serial #: 6749**

**Inside**

Press @ Run Depth: 1344.09 psia @ 3931.30 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.06.22

End Date:

2013.06.22

Last Calib.:

2013.06.22

Start Time: 04:39:00

End Time:

10:00:00

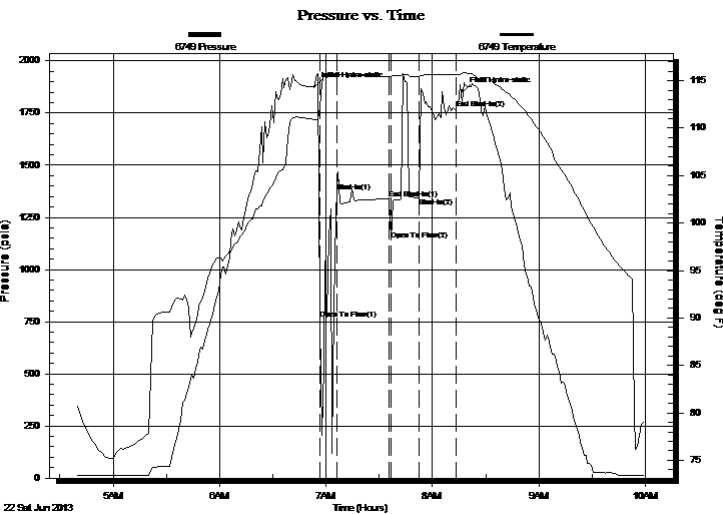
Time On Btm:

2013.06.22 @ 06:53:30

Time Off Btm:

2013.06.22 @ 08:17:00

**TEST COMMENT:** 1ST Open 10 Minutes/12 foot slide/blow at 7 inches after slide/Surging blow built to 9 1/2 inches  
1ST Shut In 30 Minutes/No blow back  
2ND Open 17 Minutes/Few bubbles at open/Flush tool/Weak surface blow for 1 minute  
2ND Shut In 20 Minutes/No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1875.15	110.92	Initial Hydro-static
3	763.96	112.16	Open To Flow (1)
13	1371.97	115.88	Shut-In(1)
42	1338.85	115.41	End Shut-In(1)
43	1140.52	115.45	Open To Flow (2)
59	1344.09	115.44	Shut-In(2)
80	1771.85	115.63	End Shut-In(2)
84	1853.89	115.87	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
105.00	Mud 100%	1.47

## Gas Rates

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



# DRILL STEM TEST REPORT

Younger Energy Company

**33/21S/15W/Pawnee**

9415 East Harry Street  
Suite 403 Building 400  
Wichita, Kansas 67207+5083  
ATTN: Keith Reavis

**Kelly #1-33**

Job Ticket: 18134

**DST#: 4**

Test Start: 2013.06.22 @ 04:39:00

## GENERAL INFORMATION:

Formation: **Simpson/Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:56:30

Time Test Ended: 10:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/56

**Interval: 3875.00 ft (KB) To 3935.00 ft (KB) (TVD)**

Reference Elevations: 1985.00 ft (KB)

Total Depth: 3935.00 ft (KB) (TVD)

1973.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Poor

KB to GR/CF: 12.00 ft

**Serial #: 6838 Outside**

Press @ Run Depth: 1748.13 psia @ 3932.30 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.06.22

End Date: 2013.06.22

Last Calib.: 2013.06.22

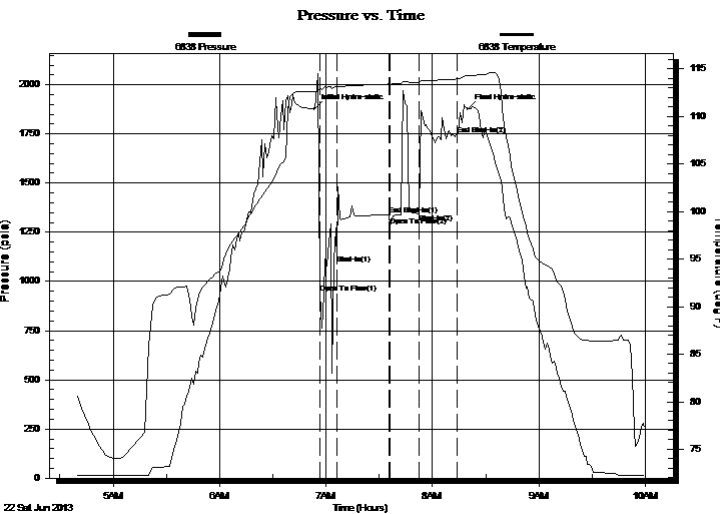
Start Time: 04:39:00

End Time: 10:00:00

Time On Btm: 2013.06.22 @ 06:53:30

Time Off Btm: 2013.06.22 @ 08:20:00

**TEST COMMENT:** 1ST Open 10 Minutes/12 foot slide/blow at 7 inches after slide/Surging blow built to 9 1/2 inches  
1ST Shut In 30 Minutes/No blow back  
2ND Open 17 Minutes/Few bubbles at open/Flush tool/Weak surface blow for 1 minute  
2ND Shut In 20 Minutes/No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1877.48	112.59	Initial Hydro-static
3	940.03	112.95	Open To Flow (1)
13	1091.16	112.97	Shut-In(1)
42	1339.35	113.41	End Shut-In(1)
43	1283.23	113.39	Open To Flow (2)
59	1345.12	113.57	Shut-In(2)
81	1748.13	113.94	End Shut-In(2)
87	1876.63	114.28	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
105.00	Mud 100%	1.47

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Younger Energy Company

**33/21S/15W/Pawnee**

9415 East Harry Street  
 Suite 403 Building 400  
 Wichita, Kansas 67207+5083  
 ATTN: Keith Reavis

**Kelly #1-33**

Job Ticket: 18134

**DST#: 4**

Test Start: 2013.06.22 @ 04:39:00

## Tool Information

Drill Pipe:	Length: 3866.00 ft	Diameter: 3.80 inches	Volume: 54.23 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 54.23 bbl</u>	Tool Chased 12.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3875.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.30 ft			
Tool Length:	87.30 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			3853.00	
Hydraulic Tool	5.00			3858.00	
Jars	5.00			3863.00	
Safety Joint	2.00			3865.00	
Packer	5.00			3870.00	27.00 Bottom Of Top Packer
Packer	5.00			3875.00	
Perforations	2.00			3877.00	
Change Over Sub	0.75			3877.75	
Drill Pipe	31.80			3909.55	
Change Over Sub	0.75			3910.30	
Anchor	20.00			3930.30	
Recorder	1.00	6749	Inside	3931.30	
Recorder	1.00	6838	Outside	3932.30	
Bullnose	3.00			3935.30	60.30 Bottom Packers & Anchor

**Total Tool Length: 87.30**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Younger Energy Company

**33/21S/15W/Pawnee**

9415 East Harry Street  
 Suite 403 Building 400  
 Wichita, Kansas 67207+5083  
 ATTN: Keith Reavis

**Kelly #1-33**

Job Ticket: 18134

**DST#: 4**

Test Start: 2013.06.22 @ 04:39:00

### Mud and Cushion Information

Mud Type: Gel Chem  
 Mud Weight: 9.00 lb/gal  
 Viscosity: 54.00 sec/qt  
 Water Loss: 8.00 in<sup>3</sup>  
 Resistivity: ohm.m  
 Salinity: 5300.00 ppm  
 Filter Cake: 1.00 inches

Cushion Type:  
 Cushion Length: ft  
 Cushion Volume: bbl  
 Gas Cushion Type:  
 Gas Cushion Pressure: psia

Oil API: deg API  
 Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
105.00	Mud 100%	1.473

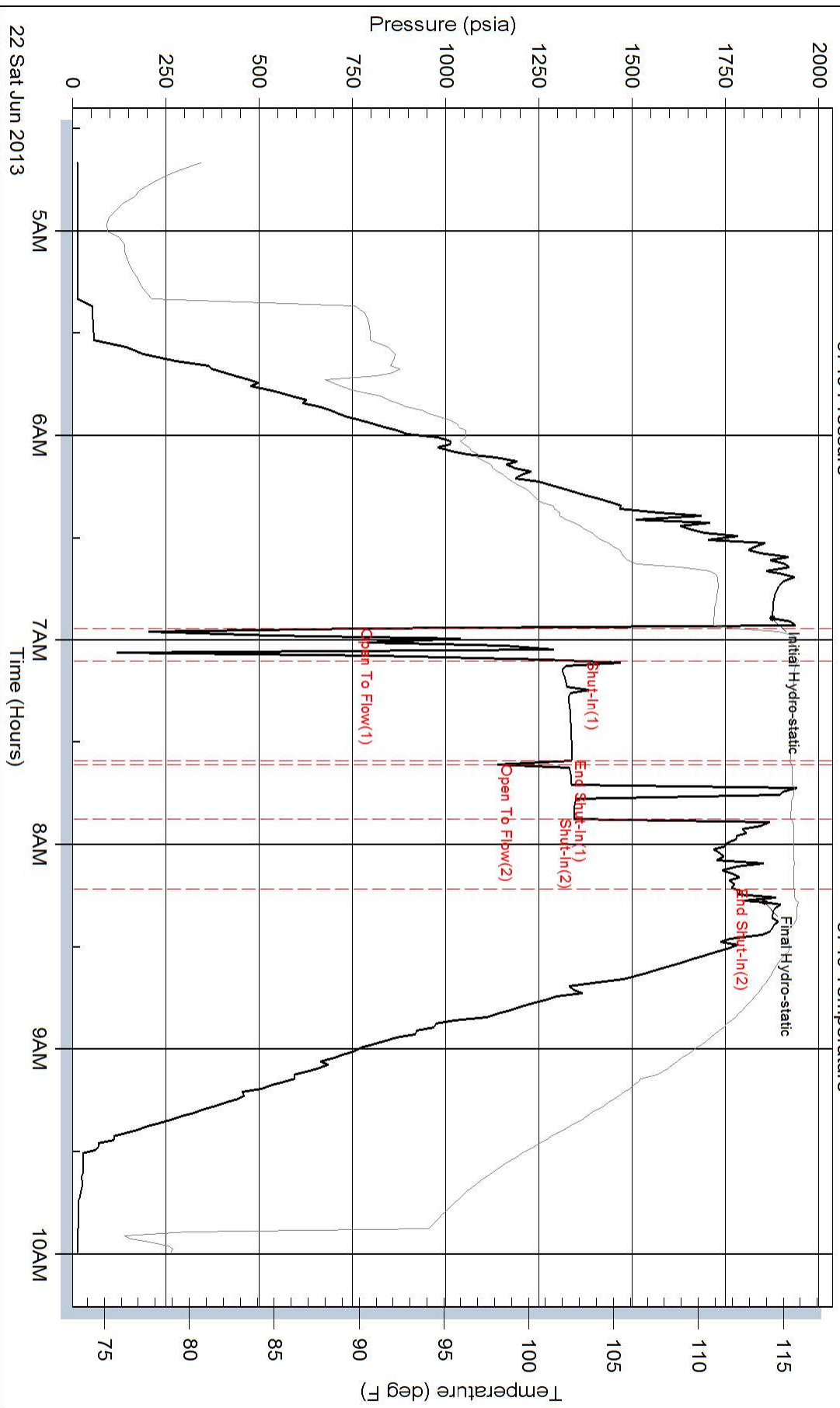
Total Length: 105.00 ft      Total Volume: 1.473 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:

### Pressure vs. Time



### Pressure vs. Time

