



## DRILL STEM TEST REPORT

Prepared For: **F.G.Holl Company**

9431 East Central Suite 100  
Wichita, Kansas 67206-2563

ATTN: Ryan Greenbaum

### **Foster Unit #1-5**

### **5-20s-16w Pawnee**

Start Date: 2012.06.07 @ 00:00:00

End Date: 2012.06.07 @ 00:00:00

Job Ticket #: 15872                      DST #: 5

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

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# DRILL STEM TEST REPORT

F.G.Holl Company  
 9431 East Central Suite 100  
 Wichita, Kansas 67206-2563  
 ATTN: Ryan Greenbaum

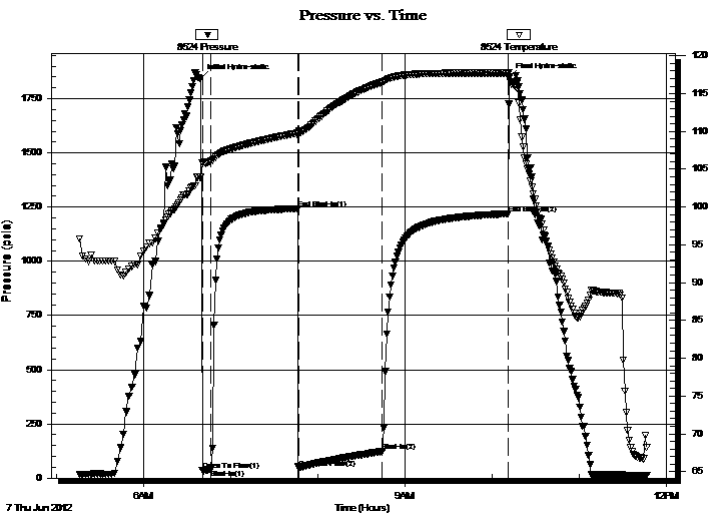
**5-20s-16w Pawnee**  
**Foster Unit #1-5**  
 Job Ticket: 15872      **DST#: 5**  
 Test Start: 2012.06.07 @ 00:00:00

### GENERAL INFORMATION:

Formation: <b>Arbuckle</b>			
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Bottom Hole (Initial)	
Time Tool Opened: 00:00:00		Tester: Gene Budig	
Time Test Ended: 00:00:00		Unit No: 3335	
<b>Interval: 3799.00 ft (KB) To 3811.00 ft (KB) (TVD)</b>		Reference Elevations: 2038.00 ft (KB)	
Total Depth: 3811.00 ft (KB) (TVD)		2030.00 ft (CF)	
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 8.00 ft	

<b>Serial #: 8524</b>	<b>Outside</b>				
Press @ Run Depth: 1219.65 psia @	3808.00 ft (KB)	Capacity: 5000.00 psia			
Start Date: 2012.06.07	End Date: 2012.06.07	Last Calib.: 2012.06.07			
Start Time: 05:15:00	End Time: 11:47:00	Time On Btm: 2012.06.07 @ 06:39:30			
		Time Off Btm: 2012.06.07 @ 10:12:00			

**TEST COMMENT:** 1st Opening 05 Minutes-Weak building blow built to 6 inches into the water  
 1st Shut-In 60 Minutes-No blow back  
 2nd Opening 60 Minutes-Weak building blow built to the bottom of a 5 gallon bucket in 22 minutes  
 2nd Shut-In- 90 Minutes-No blow back



### PRESSURE SUMMARY

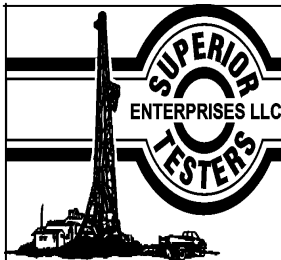
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1842.70	103.93	Initial Hydro-static
1	36.93	105.86	Open To Flow (1)
7	42.48	106.14	Shut-In(1)
67	1243.01	109.79	End Shut-In(1)
68	46.85	110.09	Open To Flow (2)
125	124.18	116.52	Shut-In(2)
212	1219.65	117.71	End Shut-In(2)
213	1848.68	116.97	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
0.00	180 Gas in the pipe	0.00
3.00	Clean oil	0.04
190.00	Slightly muddy w water chlorides 21000	2.67

### Gas Rates

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



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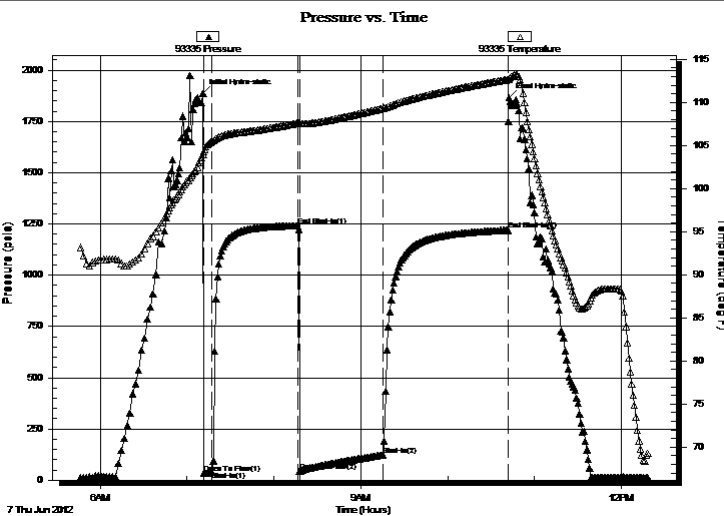
**5-20s-16w Pawnee**  
**Foster Unit #1-5**  
 Job Ticket: 15872      **DST#: 5**  
 Test Start: 2012.06.07 @ 00:00:00

## GENERAL INFORMATION:

Formation: <b>Arbuckle</b>			
Deviated: No Whipstock:		ft (KB)	Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 00:00:00			Tester: Gene Budig
Time Test Ended: 00:00:00			Unit No: 3335
<b>Interval: 3799.00 ft (KB) To 3811.00 ft (KB) (TVD)</b>			Reference Elevations: 2038.00 ft (KB)
Total Depth: 3811.00 ft (KB) (TVD)			2030.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair		KB to GR/CF: 8.00 ft

<b>Serial #: 93335</b>	<b>Inside</b>		
Press @ RunDepth: 1219.53 psia @ 3807.00 ft (KB)		Capacity:	5000.00 psia
Start Date: 2012.06.07	End Date: 2012.06.07	Last Calib.:	2012.06.07
Start Time: 05:45:00	End Time: 12:18:29	Time On Btm:	2012.06.07 @ 07:11:00
		Time Off Btm:	2012.06.07 @ 10:42:30

**TEST COMMENT:** 1st Opening 05 Minutes-Weak building blow built to 6 inches into the water  
 1st Shut-In 60 Minutes-No blow back  
 2nd Opening 60 Minutes-Weak building blow built to the bottom of a 5 gallon bucket in 22 minutes  
 2nd Shut-In- 90 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1886.20	103.92	Initial Hydro-static
1	31.87	104.31	Open To Flow (1)
6	40.67	105.50	Shut-In(1)
66	1242.01	107.60	End Shut-In(1)
67	45.00	107.61	Open To Flow (2)
124	123.38	109.29	Shut-In(2)
211	1219.53	112.66	End Shut-In(2)
212	1866.13	112.75	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	180 Gas in the pipe	0.00
3.00	Clean oil	0.04
190.00	Slightly muddy w ater chlorides 21000	2.67

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

F.G.Holl Company

**5-20s-16w Pawnee**

9431 East Central Suite 100  
Wichita, Kansas 67206-2563

**Foster Unit #1-5**

Job Ticket: 15872

**DST#: 5**

ATTN: Ryan Greenbaum

Test Start: 2012.06.07 @ 00:00:00

## Tool Information

Drill Pipe:	Length: 3789.00 ft	Diameter: 3.80 inches	Volume: 53.15 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.86 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 43000.00 lb
			<u>Total Volume: 53.15 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3799.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	12.00 ft			
Tool Length:	40.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3776.00	
Hydraulic Tool	5.00			3781.00	
Jars	6.00			3787.00	
Safety Joint	2.00			3789.00	
Packer	5.00			3794.00	28.00 Bottom Of Top Packer
Packer	5.00			3799.00	
Perforations	7.00			3806.00	
Recorder	1.00	93335	Inside	3807.00	
Recorder	1.00	8524	Outside	3808.00	
Bull Plug	3.00			3811.00	12.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>40.00</b>				



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## FLUID SUMMARY

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### Mud and Cushion Information

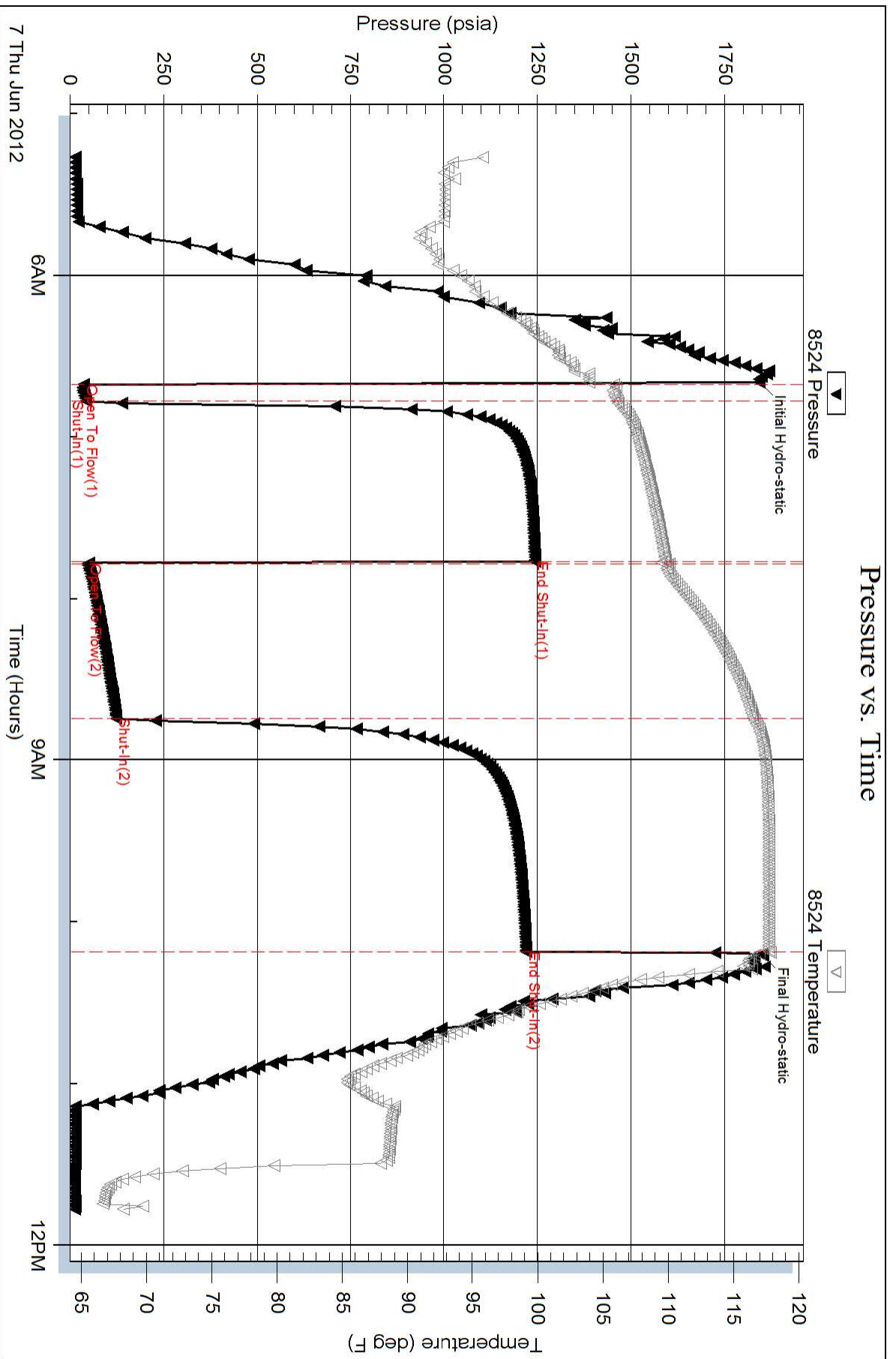
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.60 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 4000.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	180 Gas in the pipe	0.000
3.00	Clean oil	0.042
190.00	Slightly muddy w water chlorides 21000	2.665

Total Length: 193.00 ft      Total Volume: 2.707 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:



### Pressure vs. Time

