



## DRILL STEM TEST REPORT

Prepared For: **Shelby Resources**

2717 Canal Blvd. Hays Kansas 67601

ATTN: Charlie Sturdavant

### **Penny 1-16**

#### **16-19s-12w-Barton**

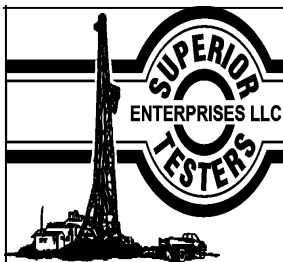
Start Date: 2012.10.06 @ 02:20:00

End Date: 2012.10.06 @ 08:55:00

Job Ticket #: 17855                      DST #: 6

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

Printed: 2012.10.06 @ 19:18:49



# DRILL STEM TEST REPORT

Shelby Resources  
 2717 Canal Blvd. Hays Kansas 67601  
 ATTN: Charlie Sturdavant

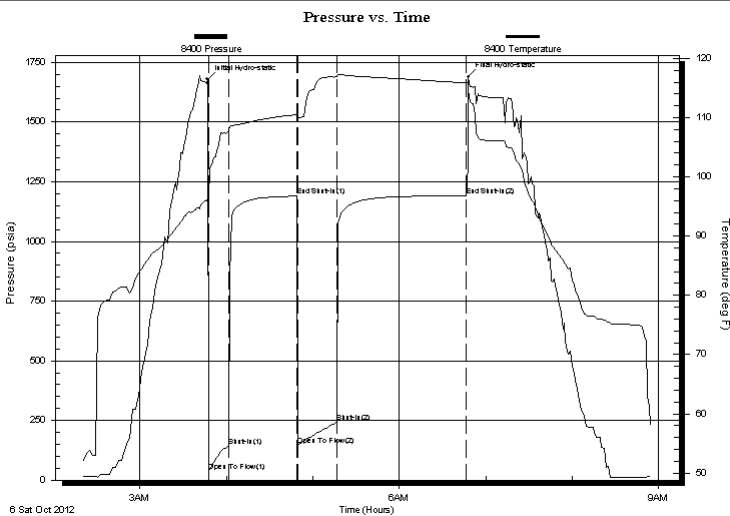
**16-19s-12w-Barton**  
**Penny 1-16**  
 Job Ticket: 17855      **DST#: 6**  
 Test Start: 2012.10.06 @ 02:20:00

### GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No      Whipstock:           ft (KB)      Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 03:47:30      Tester: Dustin Ellis  
 Time Test Ended: 08:55:00      Unit No: 3315-Great Bend-25  
 Interval: **3470.00 ft (KB) To 3480.00 ft (KB) (TVD)**      Reference Elevations: 1883.00 ft (KB)  
 Total Depth: 3480.00 ft (KB) (TVD)      1874.00 ft (CF)  
 Hole Diameter: 7.88 inches      Hole Condition: Fair      KB to GR/CF: 9.00 ft

**Serial #: 8400      Outside**  
 Press @ Run Depth: 242.00 psia @ 3477.00 ft (KB)      Capacity: 5000.00 psia  
 Start Date: 2012.10.06      End Date: 2012.10.06      Last Calib.: 2012.10.06  
 Start Time: 02:20:00      End Time: 08:55:00      Time On Btm: 2012.10.06 @ 03:47:00  
    Time Off Btm: 2012.10.06 @ 06:48:00

**TEST COMMENT:** 1st Open 15 minutes Fair building blow blew bottom bucket 11 minutes.  
 1st Shut in 45 minutes No blow back  
 2nd Open 30 minutes Fair building blow blew bottom bucket 13 minutes.  
 2nd Shut in 90 minutes No blow back



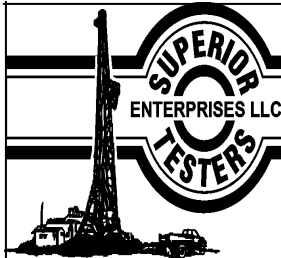
PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1678.96	96.23	Initial Hydro-static
1	38.59	96.19	Open To Flow (1)
15	143.53	107.88	Shut-In(1)
62	1189.65	110.48	End Shut-In(1)
63	148.02	110.10	Open To Flow (2)
90	242.00	116.99	Shut-In(2)
180	1191.66	115.88	End Shut-In(2)
181	1690.34	114.89	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
434.00	Water cut muddy oil	4.12
0.00	Oil 5% Mud 10% Water 85%	0.00
62.00	Mud cut w atery oil	0.87
0.00	Oil 5% Mud 90% Water 5%	0.00
0.00	Chlorides 34,000@76 degrees	0.00

### Gas Rates

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



# DRILL STEM TEST REPORT

Shelby Resources  
 2717 Canal Blvd. Hays Kansas 67601  
 ATTN: Charlie Sturdavant

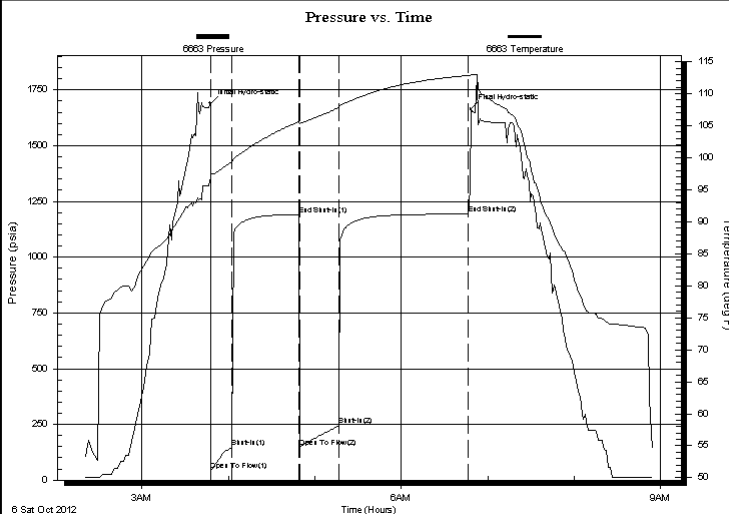
**16-19s-12w-Barton**  
**Penny 1-16**  
 Job Ticket: 17855 **DST#: 6**  
 Test Start: 2012.10.06 @ 02:20:00

### GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 03:47:30  
 Time Test Ended: 08:55:00  
 Interval: **3470.00 ft (KB) To 3480.00 ft (KB) (TVD)**  
 Total Depth: 3480.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Dustin Ellis  
 Unit No: 3315-Great Bend-25  
 Reference Elevations: 1883.00 ft (KB)  
 1874.00 ft (CF)  
 KB to GR/CF: 9.00 ft

**Serial #: 6663 Inside**  
 Press @ RunDepth: 1194.04 psia @ 3476.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2012.10.06 End Date: 2012.10.06 Last Calib.: 2012.10.06  
 Start Time: 02:20:00 End Time: 08:54:30 Time On Btm: 2012.10.06 @ 03:47:30  
 Time Off Btm: 2012.10.06 @ 06:48:30

**TEST COMMENT:** 1st Open 15 minutes Fair building blow blew bottom bucket 11 minutes.  
 1st Shut in 45 minutes No blow back  
 2nd Open 30 minutes Fair building blow blew bottom bucket 13 minutes.  
 2nd Shut in 90 minutes No blow back



### PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1689.34	96.90	Initial Hydro-static
1	43.03	97.36	Open To Flow (1)
15	146.37	99.41	Shut-In(1)
62	1191.81	105.62	End Shut-In(1)
62	149.38	105.39	Open To Flow (2)
90	244.64	107.84	Shut-In(2)
179	1194.04	112.84	End Shut-In(2)
181	1665.52	113.00	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
434.00	Water cut muddy oil	4.12
0.00	Oil 5% Mud 10% Water 85%	0.00
62.00	Mud cut w atery oil	0.87
0.00	Oil 5% Mud 90% Water 5%	0.00
0.00	Chlorides 34,000@76 degrees	0.00

### Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Shelby Resources  
 2717 Canal Blvd. Hays Kansas 67601  
 ATTN: Charlie Sturdavant

**16-19s-12w-Barton**  
**Penny 1-16**  
 Job Ticket: 17855      **DST#: 6**  
 Test Start: 2012.10.06 @ 02:20:00

## Tool Information

Drill Pipe:	Length: 3252.00 ft	Diameter: 3.80 inches	Volume: 45.62 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: 216.25 ft	Diameter: 2.25 inches	Volume: 1.06 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 46.68 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	26.25 ft			String Weight: Initial	61000.00 lb
Depth to Top Packer:	3470.00 ft			Final	61000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	10.00 ft				
Tool Length:	38.00 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			3447.00	
Hydraulic Tool	5.00			3452.00	
Jars	6.00			3458.00	
Safety Joint	2.00			3460.00	
Packer	5.00			3465.00	28.00      Bottom Of Top Packer
Packer	5.00			3470.00	
Anchor	5.00			3475.00	
Recorder	1.00	6663	Inside	3476.00	
Recorder	1.00	8400	Outside	3477.00	
Bull Plug	3.00			3480.00	10.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>38.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Shelby Resources  
2717 Canal Blvd. Hays Kansas 67601  
ATTN: Charlie Sturdavant

**16-19s-12w-Barton**  
**Penny 1-16**  
Job Ticket: 17855      **DST#: 6**  
Test Start: 2012.10.06 @ 02:20:00

### 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:	ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.80 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.20 ohm.m	Gas Cushion Pressure: psia		
Salinity: 5800.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
434.00	Water cut muddy oil	4.118
0.00	Oil 5% Mud 10% Water 85%	0.000
62.00	Mud cut w atery oil	0.870
0.00	Oil 5% Mud 90% Water 5%	0.000
0.00	Chlorides 34,000@76 degrees	0.000

Total Length: 496.00 ft      Total Volume: 4.988 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

### Pressure vs. Time

