



## DRILL STEM TEST REPORT

Prepared For: **Shelby Resources**

2717 Canal Blvd. Hays Kansas 67601

ATTN: Charlie Sturdavant

**Penny 1-16**

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

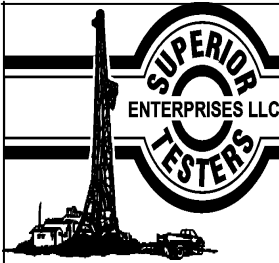
Start Date: 2012.10.03 @ 01:01:00

End Date: 2012.10.03 @ 07:33:30

Job Ticket #: 17275                      DST #: 1

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

Printed: 2012.10.03 @ 05:47:24



# DRILL STEM TEST REPORT

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

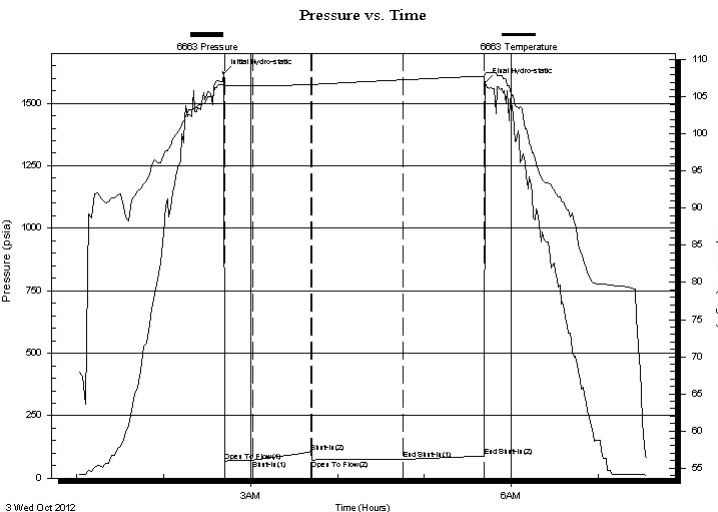
**16-19s-12w-Barton**  
**Penny 1-16**  
 Job Ticket: 17275      **DST#: 1**  
 Test Start: 2012.10.03 @ 01:01:00

## GENERAL INFORMATION:

Formation: **Lansing A-F**  
 Deviated: No Whipstock:      ft (KB)  
 Time Tool Opened: 02:42:00  
 Time Test Ended: 07:33:30  
**Interval: 3180.00 ft (KB) To 3260.00 ft (KB) (TVD)**  
 Total Depth: 3260.00 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: 71.64 psia @ 3256.27 ft (KB)      Capacity: 5000.00 psia  
 Start Date: 2012.10.03      End Date: 2012.10.03      Last Calib.: 2012.10.03  
 Start Time: 01:01:00      End Time: 07:33:30      Time On Btm: 2012.10.03 @ 02:41:30  
    Time Off Btm: 2012.10.03 @ 05:42:00

**TEST COMMENT:** 1st Open 15 minutes Very weak surface blow.  
 1st Shut in 45 minutes No blow back  
 2nd Open 60 minutes Weak surface blow  
 2nd Shut in 60 minutes No blow back



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psia) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1620.21         | 106.78       | Initial Hydro-static |
| 1           | 68.20           | 106.48       | Open To Flow (1)     |
| 20          | 71.64           | 106.47       | Shut-In(1)           |
| 60          | 105.10          | 106.71       | Shut-In(2)           |
| 61          | 72.08           | 106.70       | Open To Flow (2)     |
| 124         | 75.16           | 107.32       | End Shut-In(1)       |
| 180         | 88.42           | 107.81       | End Shut-In(2)       |
| 181         | 1583.44         | 108.16       | Final Hydro-static   |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 5.00        | Mud 100%    | 0.02         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

## Gas Rates

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



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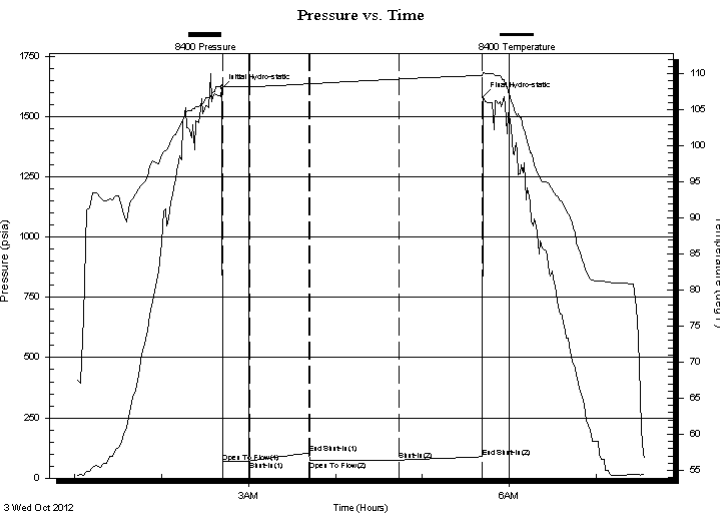
**16-19s-12w-Barton**  
**Penny 1-16**  
 Job Ticket: 17275      **DST#: 1**  
 Test Start: 2012.10.03 @ 01:01:00

## GENERAL INFORMATION:

Formation: **Lansing A-F**  
 Deviated: No Whipstock:                      ft (KB)  
 Time Tool Opened: 02:42:00  
 Time Test Ended: 07:33:30  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Dustin Ellis  
 Unit No: 3315-Great Bend-25  
 Interval: **3180.00 ft (KB) To 3260.00 ft (KB) (TVD)**  
 Total Depth: 3260.00 ft (KB) (TVD)  
 Reference Elevations: 1883.00 ft (KB)  
 1874.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 9.00 ft

**Serial #: 8400      Outside**  
 Press @ RunDepth: 88.58 psia @ 3257.27 ft (KB)      Capacity: 5000.00 psia  
 Start Date: 2012.10.03      End Date: 2012.10.03      Last Calib.: 2012.10.03  
 Start Time: 01:01:00      End Time: 07:33:30      Time On Btm: 2012.10.03 @ 02:41:30  
 Time Off Btm: 2012.10.03 @ 05:42:00

**TEST COMMENT:** 1st Open 15 minutes Very weak surface blow.  
 1st Shut in 45 minutes No blow back  
 2nd Open 60 minutes Weak surface blow  
 2nd Shut in 60 minutes No blow back



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psia) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1616.34         | 108.45       | Initial Hydro-static |
| 1           | 67.57           | 108.09       | Open To Flow (1)     |
| 20          | 71.08           | 108.22       | Shut-In(1)           |
| 60          | 104.88          | 108.63       | End Shut-In(1)       |
| 61          | 71.69           | 108.62       | Open To Flow (2)     |
| 123         | 74.93           | 109.28       | Shut-In(2)           |
| 180         | 88.58           | 109.78       | End Shut-In(2)       |
| 181         | 1582.00         | 110.20       | Final Hydro-static   |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 5.00        | Mud 100%    | 0.02         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

## 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: 17275      **DST#: 1**  
 Test Start: 2012.10.03 @ 01:01:00

**Tool Information**

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 2967.00 ft | Diameter: 3.80 inches | Volume: 41.62 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: 62000.00 lb  |
|                           |                    |                       | <u>Total Volume: 42.68 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 23.25 ft           |                       |                                | String Weight: Initial 60000.00 lb |
| Depth to Top Packer:      | 3180.00 ft         |                       |                                | Final 60000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 80.27 ft           |                       |                                |                                    |
| Tool Length:              | 100.27 ft          |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

| <b>Tool Description</b> | <b>Length (ft)</b> | <b>Serial No.</b> | <b>Position</b> | <b>Depth (ft)</b> | <b>Accum. Lengths</b> |
|-------------------------|--------------------|-------------------|-----------------|-------------------|-----------------------|
|-------------------------|--------------------|-------------------|-----------------|-------------------|-----------------------|

|                 |       |      |         |         |                                    |
|-----------------|-------|------|---------|---------|------------------------------------|
| Shut-In Tool    | 5.00  |      |         | 3165.00 |                                    |
| Hydraulic Tool  | 5.00  |      |         | 3170.00 |                                    |
| Packer          | 5.00  |      |         | 3175.00 | 20.00      Bottom Of Top Packer    |
| Packer          | 5.00  |      |         | 3180.00 |                                    |
| Anchor          | 5.00  |      |         | 3185.00 |                                    |
| Change Over Sub | 0.75  |      |         | 3185.75 |                                    |
| Drill Pipe      | 61.77 |      |         | 3247.52 |                                    |
| Change Over Sub | 0.75  |      |         | 3248.27 |                                    |
| Anchor          | 7.00  |      |         | 3255.27 |                                    |
| Recorder        | 1.00  | 6663 | Inside  | 3256.27 |                                    |
| Recorder        | 1.00  | 8400 | Outside | 3257.27 |                                    |
| Bull Plug       | 3.00  |      |         | 3260.27 | 80.27      Bottom Packers & Anchor |

**Total Tool Length: 100.27**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

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**16-19s-12w-Barton**  
**Penny 1-16**  
 Job Ticket: 17275      **DST#: 1**  
 Test Start: 2012.10.03 @ 01:01:00

### 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: 49.00 sec/qt          | Cushion Volume: bbl        |                 |         |
| Water Loss: 8.00 in <sup>3</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m               | Gas Cushion Pressure: psia |                 |         |
| Salinity: 8200.00 ppm            |                            |                 |         |
| Filter Cake: 1.00 inches         |                            |                 |         |

### Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 5.00         | Mud 100%    | 0.025         |

Total Length: 5.00 ft      Total Volume: 0.025 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

