



## DRILL STEM TEST REPORT

Prepared For: **Shelby Resources LLC**

13949 W Colfax bld.1 Sut 120  
Lakewood ,Colorado 80401

ATTN: Jeremy Schwartz

### **Slattery #1-16**

#### **16-18s-14w**

Start Date: 2019.10.03 @ 21:24:00

End Date: 2019.10.03 @ 02:01:00

Job Ticket #: 01374                      DST #: 3

Eagle Testers  
1309 Patton Road    Great Bend, Kansas 67530  
620-791-7394

Printed: 2019.10.03 @ 02:32:03

Shelby Resources LLC  
16-18s-14w  
Slattery #1-16  
DST # 3  
Arbuckle  
2019.10.03



# DRILL STEM TEST REPORT

Shelby Resources LLC

16-18s-14w

13949 W Colfax bld.1 Sut 120  
Lakewood, Colorado 80401

Slattery #1-16

Job Ticket: 01374

DST#: 3

ATTN: Jeremy Schwartz

Test Start: 2019.10.03 @ 21:24:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:15:00

Time Test Ended: 02:01:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 1

Interval: **3434.00 ft (KB) To 3481.00 ft (KB) (TVD)**

Reference Elevations: 1964.00 ft (KB)

Total Depth: 3481.00 ft (KB) (TVD)

1959.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

## Serial #: 9119

Press@RunDepth: 61.09 psig @ ft (KB)

Capacity: psig

Start Date: 2019.10.02

End Date:

2019.10.03

Last Calib.:

1899.12.30

Start Time: 21:27:00

End Time:

02:06:00

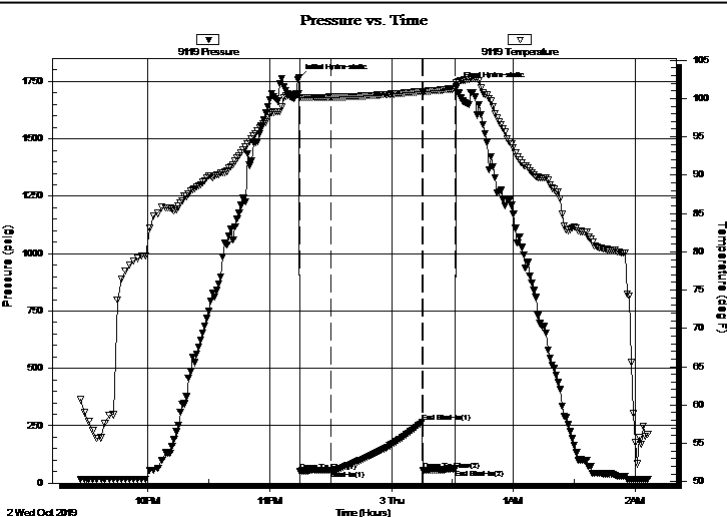
Time On Btm:

2019.10.02 @ 23:14:30

Time Off Btm:

2019.10.03 @ 00:32:00

TEST COMMENT: 1st Opening 15 Minutes weak surface blow for 14 minutes and died  
1st Shut-In 45 Minutes  
2nd Opening 20 Minutes no blow flushed tool no help  
2nd AShut-In None Taken



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1764.38         | 100.61       | Initial Hydro-static |
| 1           | 51.95           | 100.16       | Open To Flow (1)     |
| 16          | 55.97           | 100.16       | Shut-In(1)           |
| 61          | 264.78          | 100.94       | End Shut-In(1)       |
| 61          | 57.38           | 100.91       | Open To Flow (2)     |
| 77          | 61.09           | 101.28       | End Shut-In(2)       |
| 78          | 1725.91         | 102.11       | Final Hydro-static   |

## Recovery

| Length (ft) | Description                              | Volume (bbl) |
|-------------|------------------------------------------|--------------|
| 20.00       | very slightly oil cut mud 3% Oil 97% Mud | 0.10         |
|             |                                          |              |
|             |                                          |              |
|             |                                          |              |
|             |                                          |              |

## Gas Rates

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



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Total Depth: 3481.00 ft (KB) (TVD)

1959.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

## Serial #: 9139

Press@RunDepth: 257.38 psig @ ft (KB)

Capacity: psig

Start Date: 2019.10.02

End Date:

2019.10.03

Last Calib.:

1899.12.30

Start Time: 21:27:00

End Time:

02:05:30

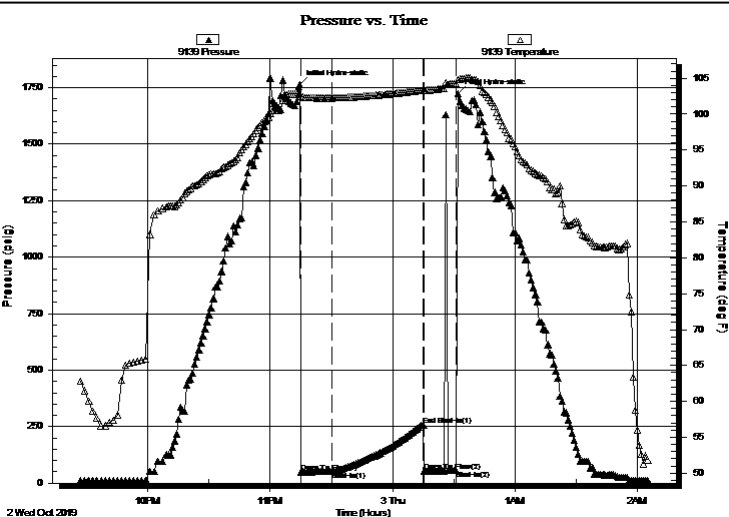
Time On Btm:

2019.10.02 @ 23:14:30

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1st Shut-In 45 Minutes  
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2nd AShut-In None Taken



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1765.05         | 102.84       | Initial Hydro-static |
| 1           | 48.31           | 102.44       | Open To Flow (1)     |
| 16          | 51.89           | 102.26       | Shut-In(1)           |
| 61          | 257.38          | 103.33       | End Shut-In(1)       |
| 61          | 53.32           | 103.30       | Open To Flow (2)     |
| 77          | 57.39           | 104.30       | Shut-In(2)           |
| 78          | 1723.08         | 104.81       | Final Hydro-static   |

## Recovery

| Length (ft) | Description                              | Volume (bbl) |
|-------------|------------------------------------------|--------------|
| 20.00       | very slightly oil cut mud 3% Oil 97% Mud | 0.10         |
|             |                                          |              |
|             |                                          |              |
|             |                                          |              |
|             |                                          |              |

## Gas Rates

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



# DRILL STEM TEST REPORT

## TOOL DIAGRAM

Shelby Resources LLC

16-18s-14w

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Lakewood, Colorado 80401

Slattery #1-16

Job Ticket: 01374

DST#: 3

ATTN: Jeremy Schwartz

Test Start: 2019.10.03 @ 21:24:00

### Tool Information

|                           |                    |                       |                   |                                    |
|---------------------------|--------------------|-----------------------|-------------------|------------------------------------|
| Drill Pipe:               | Length: 3312.00 ft | Diameter: 3.80 inches | Volume: 46.46 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: 120.00 ft  | Diameter: 2.25 inches | Volume: 0.59 bbl  | Weight to Pull Loose: 78000.00 lb  |
|                           |                    | Total Volume:         | 47.05 bbl         | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 28.00 ft           |                       |                   | String Weight: Initial 46000.00 lb |
| Depth to Top Packer:      | 3434.00 ft         |                       |                   | Final 46000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                   |                                    |
| Interval between Packers: | 46.76 ft           |                       |                   |                                    |
| Tool Length:              | 76.76 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  |      |         | 3409.00 |                               |
| Hydraulic tool  | 5.00  |      |         | 3414.00 |                               |
| Jars            | 5.00  |      |         | 3419.00 |                               |
| Safety Joint    | 5.00  |      |         | 3424.00 |                               |
| Packer          | 5.00  |      |         | 3429.00 | 30.00 Bottom Of Top Packer    |
| Packer          | 5.00  |      | Fluid   | 3434.00 |                               |
| Anchor          | 5.00  |      |         | 3439.00 |                               |
| Change Over Sub | 0.75  |      |         | 3439.75 |                               |
| Drill Pipe      | 31.26 |      |         | 3471.01 |                               |
| Change Over Sub | 0.75  |      | Inside  | 3471.76 |                               |
| Anchor          | 4.00  |      |         | 3475.76 |                               |
| Recorder        | 0.00  | 9119 | Inside  | 3475.76 |                               |
| Recorder        | 0.00  | 9139 | Outside | 3475.76 |                               |
| Bullnose        | 5.00  |      |         | 3480.76 | 46.76 Bottom Packers & Anchor |

**Total Tool Length: 76.76**



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## FLUID SUMMARY

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## Mud and Cushion Information

Mud Type: Water

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 8.29 in<sup>3</sup>

Resistivity: ohm.m

Salinity: 7000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

## Recovery Information

Recovery Table

| Length<br>ft | Description                              | Volume<br>bbl |
|--------------|------------------------------------------|---------------|
| 20.00        | very slightly oil cut mud 3% Oil 97% Mud | 0.098         |

Total Length: 20.00 ft

Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

