



DRILL STEM TEST REPORT

Prepared For: **Shelby Resources LLC**

621 17th Street SUITE 1155
Denver Colorado 80293

ATTN: Keith Revis

FRANCIS 1-36

36-21s-16w PAWNEE

Start Date: 2016.03.24 @ 11:43:00

End Date: 2016.03.24 @ 21:28:00

Job Ticket #: 01222 DST #: 6

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

Printed: 2016.03.24 @ 09:48:35



DRILL STEM TEST REPORT

Shelby Resources LLC
 621 17th Street SUITE 1155
 Denver Colorado 80293
 ATTN: Keith Revis

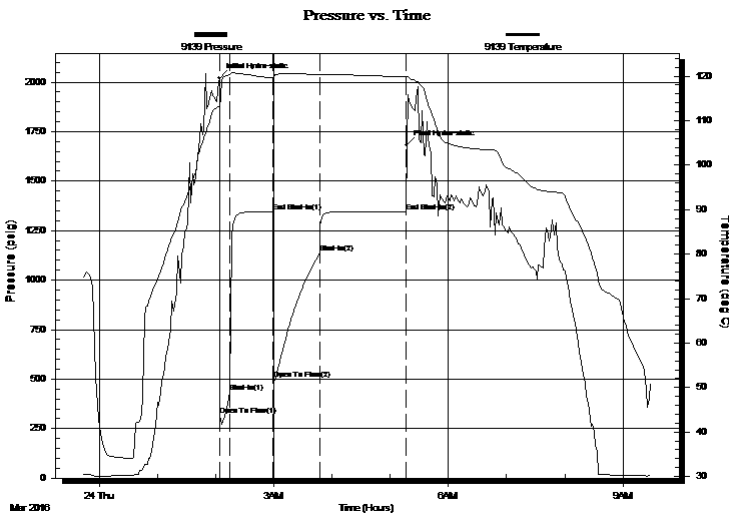
36-21s-16w PAWNEE
FRANCIS 1-36
 Job Ticket: 01222 **DST#: 6**
 Test Start: 2016.03.24 @ 11:43:00

GENERAL INFORMATION:

Formation: **ARBUCKLE**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:07:00
 Time Test Ended: 21:28:00
 Interval: **3914.00 ft (KB) To 3922.00 ft (KB) (TVD)**
 Total Depth: 4000.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Initial)
 Tester: GENE BUDIG
 Unit No: 1
 Reference Elevations: 1982.00 ft (KB)
 1971.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 9139 Inside
 Press@RunDepth: 1346.89 psig @ 3921.00 ft (KB) Capacity: 5000.00 psig
 Start Date: 2016.03.23 End Date: 2016.03.24 Last Calib.: 2016.03.24
 Start Time: 23:43:00 End Time: 09:28:30 Time On Btm: 2016.03.24 @ 02:04:00
 Time Off Btm: 2016.03.24 @ 05:17:00

TEST COMMENT: 1st OPENING 10 MINUTES STRONG BLOW BUILT TO THE BOTTOM OF THE BUCKET IN 1 MINUTES
 1st SHUT-IN 45 MINUTES=GOOD BLOW BACK
 2nd OPENING 45 MINUTES-STRONG BLOW GAS TO SURFACE
 2nd SHUT-IN 90 MINUTES GOOD BLOW BACK



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg C) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2020.51 | 113.43 | Initial Hydro-static |
| 1 | 317.18 | 112.55 | Open To Flow (1) |
| 11 | 434.16 | 120.40 | Shut-In(1) |
| 56 | 1346.74 | 119.58 | End Shut-In(1) |
| 56 | 498.92 | 119.35 | Open To Flow (2) |
| 104 | 1135.99 | 120.40 | Shut-In(2) |
| 193 | 1346.89 | 119.89 | End Shut-In(2) |
| 193 | 1682.20 | 119.95 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|--------------------------------------|--------------|
| 2150.00 | water chlorides 23,000 | 28.18 |
| 250.00 | slightly mud and water cut gassy oil | 3.51 |
| 0.00 | 60 gas 25 oil 7 mud 8 water | 0.00 |
| | | |
| | | |

Gas Rates

| | Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|----------------|-----------------|------------------|
| First Gas Rate | 0.13 | | |



DRILL STEM TEST REPORT

TOOL DIAGRAM

Shelby Resources LLC
 621 17th Street SUITE 1155
 Denver Colorado 80293
 ATTN: Keith Revis

36-21s-16w PAWNEE
FRANCIS 1-36
 Job Ticket: 01222 **DST#: 6**
 Test Start: 2016.03.24 @ 11:43:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3690.00 ft | Diameter: 3.80 inches | Volume: 51.76 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: 217.00 ft | Diameter: 2.25 inches | Volume: 1.07 bbl | Weight to Pull Loose: 84000.00 lb |
| | | | <u>Total Volume: 52.83 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 17.00 ft | | | String Weight: Initial 64000.00 lb |
| Depth to Top Packer: | 3914.00 ft | | | Final 72000.00 lb |
| Depth to Bottom Packer: | 3922.00 ft | | | |
| Interval between Packers: | 8.00 ft | | | |
| Tool Length: | 114.30 ft | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | |

Tool Comments: GAS Gauged 2nd opening
 10 minutes 4.120 mcf
 20 minutes 5.32 mcf
 30 minutes 4.76 mcf

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Shut In Tool | 5.00 | | | 3895.00 | |
| Hydraulic tool | 5.00 | | | 3900.00 | |
| Jars | 7.00 | | | 3907.00 | |
| Safety Joint | 2.00 | | Fluid | 3909.00 | |
| Packer | 5.00 | | | 3914.00 | 24.00 Bottom Of Top Packer |
| Anchor | 6.00 | | | 3920.00 | |
| Recorder | 1.00 | 9139 | Inside | 3921.00 | |
| Recorder | 1.00 | 91716 | Outside | 3922.00 | 8.00 Tool Interval |
| Packer | 5.00 | | | 3927.00 | |
| Anchor | 7.00 | | | 3934.00 | |
| Change Over Sub | 0.75 | | | 3934.75 | |
| Drill Pipe | 63.80 | | | 3998.55 | |
| Change Over Sub | 0.75 | | | 3999.30 | |
| Recorder | 0.00 | 9119 | Outside | 3999.30 | |
| Bullnose | 5.00 | | | 4004.30 | 82.30 Bottom Packers & Anchor |

Total Tool Length: 114.30



DRILL STEM TEST REPORT

FLUID SUMMARY

Shelby Resources LLC

36-21s-16w PAWNEE

621 17th Street SUITE 1155
Denver Colorado 80293

FRANCIS 1-36

Job Ticket: 01222

DST#: 6

ATTN: Keith Revis

Test Start: 2016.03.24 @ 11:43:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 74.00 sec/qt
Water Loss: 7.60 in³
Resistivity: 4000.00 ohm.m
Salinity: ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------------------------------|---------------|
| 2150.00 | w ater chlorides 23,000 | 28.182 |
| 250.00 | slightly mud and w ater cut gassy oil | 3.507 |
| 0.00 | 60 gas 25 oil 7 mud 8 w ater | 0.000 |

Total Length: 2400.00 ft Total Volume: 31.689 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

