



## DRILL STEM TEST REPORT

Prepared For: **SHELBY RESOURCES LLC**

2717 CANAL BLVD SUITE C  
HAYS, KANSAS 67601

ATTN: KEITH REAVIS

### **STOSS 1-24**

#### **24-18s-14w BARTON**

Start Date: 2016.09.13 @ 01:52:00

End Date: 2016.09.13 @ 00:00:00

Job Ticket #: 01130                      DST #: 4

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

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 Test Start: 2016.09.13 @ 01:52:00

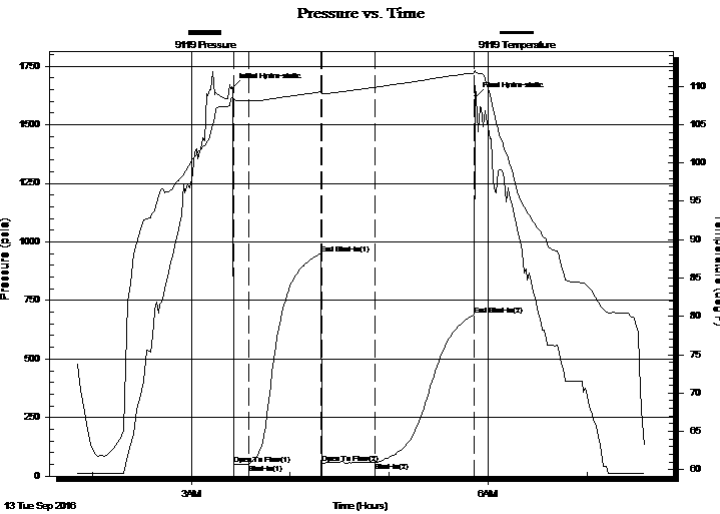
## GENERAL INFORMATION:

Formation: **ARBUCKLE**  
 Deviated: No      Whipstock:      ft (KB)  
 Time Tool Opened: 00:00:00  
 Time Test Ended: 00:00:00  
**Interval: 3369.00 ft (KB) To 3415.00 ft (KB) (TVD)**  
 Total Depth: 3415.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches      Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: GENE BUDIG  
 Unit No: 1-18  
 Reference Elevations: 1908.00 ft (KB)  
 1897.00 ft (CF)  
 KB to GR/CF: 11.00 ft

## Serial #: 9119      Inside

Press@RunDepth: 689.89 psia @ 3410.34 ft (KB)      Capacity: 5000.00 psia  
 Start Date: 2016.09.13      End Date: 2016.09.13      Last Calib.: 2016.09.13  
 Start Time: 01:50:00      End Time: 07:35:30      Time On Btm: 2016.09.13 @ 03:25:00  
 Time Off Btm: 2016.09.13 @ 05:52:30

**TEST COMMENT:** 1ST OPENING 10 MINUTES VERY WEAK SURFACE BLOW THROUGH OUT  
 1ST SHUT-IN 45 MINUTES NO BLOW BACK  
 2ND OPENING 30 MINUTES NO BLOW  
 2ND SHUT-IN 60 MINUTES NO BLOW BACK



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1657.83	108.61	Initial Hydro-static
1	49.22	108.22	Open To Flow (1)
10	52.52	108.14	Shut-In(1)
54	948.44	109.27	End Shut-In(1)
54	54.24	108.99	Open To Flow (2)
87	57.97	109.88	Shut-In(2)
147	689.89	111.73	End Shut-In(2)
148	1621.36	111.82	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	OIL CUT MUD 85 MUD 15 OIL	0.05
1.00	CLEAN OIL	0.00

## Gas Rates

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



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**STOSS 1-24**  
 Job Ticket: 01130 **DST#: 4**  
 Test Start: 2016.09.13 @ 01:52:00

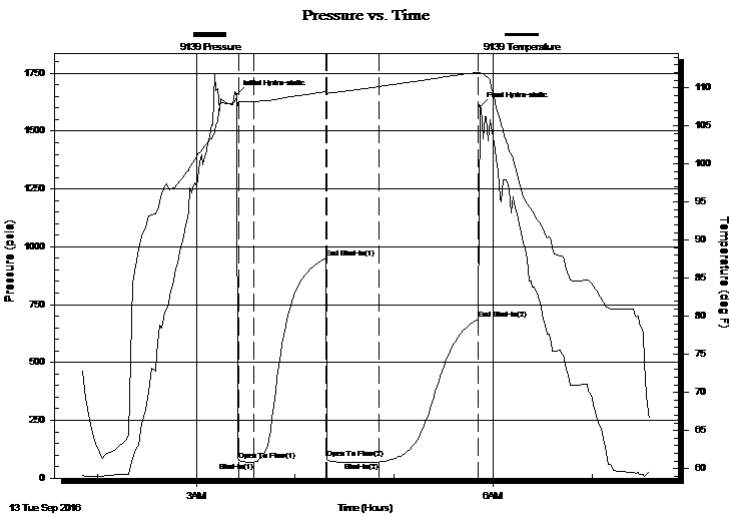
## GENERAL INFORMATION:

Formation: **ARBUCKLE**  
 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: 1-18  
 Interval: **3369.00 ft (KB) To 3415.00 ft (KB) (TVD)** Reference Elevations: 1908.00 ft (KB)  
 Total Depth: 3415.00 ft (KB) (TVD) 1897.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

**Serial #: 9139 Outside**  
 Press@RunDepth: 689.74 psia @ 3410.34 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2016.09.13 End Date: 2016.09.13 Last Calib.: 2016.09.13  
 Start Time: 01:50:00 End Time: 07:35:30 Time On Btm: 2016.09.13 @ 03:24:30  
 Time Off Btm: 2016.09.13 @ 05:52:00

**TEST COMMENT:** 1ST OPENING 10 MINUTES VERY WEAK SURFACE BLOW THROUGH OUT  
 1ST SHUT-IN 45 MINUTES NO BLOW BACK  
 2ND OPENING 30 MINUTES NO BLOW  
 2ND SHUT-IN 60 MINUTES NO BLOW BACK

## PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1658.94	108.55	Initial Hydro-static
1	79.51	108.20	Open To Flow (1)
11	68.99	108.20	Shut-In(1)
54	950.21	109.48	End Shut-In(1)
55	85.87	109.26	Open To Flow (2)
87	69.90	110.16	Shut-In(2)
147	689.74	112.01	End Shut-In(2)
148	1607.31	111.97	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	OIL CUT MUD 85 MUD 15 OIL	0.05
1.00	CLEAN OIL	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

SHELBY RESOURCES LLC

24-18s-14w BARTON

2717 CANAL BLVD SUITE C  
HAYS, KANSAS 67601

STOSS 1-24

Job Ticket: 01130

DST#: 4

ATTN: KEITH REAVIS

Test Start: 2016.09.13 @ 01:52:00

## 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: 2.76 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 90.00 ft	Diameter: 2.25 inches	Volume: 0.44 bbl	Weight to Pull Loose: 64000.00 lb
			Total Volume: 46.06 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3369.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.34 ft			
Tool Length:	75.34 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3345.00	
Hydraulic tool	5.00			3350.00	
Jars	7.00			3357.00	
Safety Joint	2.00		Fluid	3359.00	
Top Packer	5.00			3364.00	
Packer	5.00			3369.00	29.00 Bottom Of Top Packer
Anchor	3.00			3372.00	
Change Over Sub	0.75			3372.75	
Drill Pipe	31.84			3404.59	
Change Over Sub	0.75			3405.34	
Anchor	5.00			3410.34	
Recorder	0.00	9119	Inside	3410.34	
Recorder	0.00	9139	Outside	3410.34	
Bullnose	5.00			3415.34	46.34 Anchor Tool

**Total Tool Length: 75.34**



# DRILL STEM TEST REPORT

FLUID SUMMARY

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Test Start: 2016.09.13 @ 01:52:00

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 55.00 sec/qt  
Water Loss: 8.40 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 3100.00 ppm  
Filter Cake: 1.00 inches

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

Oil API: deg API  
Water Salinity: ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	OIL CUT MUD 85 MUD 15 OIL	0.049
1.00	CLEAN OIL	0.005

Total Length: 11.00 ft      Total Volume: 0.054 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

