



## DRILL STEM TEST REPORT

Prepared For: **SHELBY RESOURICES LLC**

2717 CANAL BLVD SUITE C  
HAYS, KANSAS 67601

ATTN: JEREMY SCHWARTZ

**NANCY 5-17**

**17-17S-13W**

Start Date: 2017.02.14 @ 05:10:00

End Date: 2017.02.14 @ 12:47:00

Job Ticket #: 12                      DST #: 1

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

Printed: 2017.02.14 @ 13:25:20

SHELBY RESOURICES LLC  
17-17S-13W  
NANCY 5-17  
DST # 1  
LANSING A-D  
2017.02.14



# DRILL STEM TEST REPORT

SHELBY RESOURICES LLC

17-17S-13W

2717 CANAL BLVD SUITE C  
HAYS, KANSAS 67601

NANCY 5-17

ATTN: JEREMY SCHWARTZ

Job Ticket: 12

DST#: 1

Test Start: 2017.02.14 @ 05:10:00

## GENERAL INFORMATION:

Formation: **LANSING A-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:04:00

Time Test Ended: 12:47:00

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1-36

Interval: **3209.00 ft (KB) To 3276.00 ft (KB) (TVD)**

Reference Elevations: 1972.00 ft (KB)

Total Depth: 3276.00 ft (KB) (TVD)

1961.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 9139

Inside

Press@RunDepth: 405.57 psia @ 3271.34 ft (KB)

Capacity: 5000.00 psia

Start Date: 2017.02.14

End Date: 2017.02.14

Last Calib.: 2017.02.14

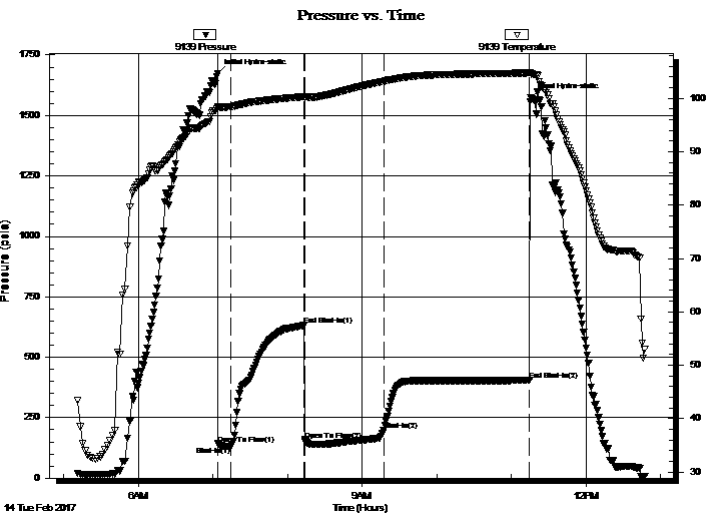
Start Time: 05:10:00

End Time: 12:47:30

Time On Btm: 2017.02.14 @ 07:03:30

Time Off Btm: 2017.02.14 @ 11:15:30

TEST COMMENT: 1ST OPENING 10 MINUTES WEAK BUILDING BLOW BUILT TO 6 INCHES INTO THE WATER  
1ST SHUT-IN 60 MINUTES NO BLOW BACK  
2ND OPENING 60 MINUTES WEAK BLOW BUILT TO BOTTOM OF A 5 GALLON BUCKET IN 28 MINUTES  
2ND SHUT-IN 90 MINUTES NO BLOW BACK



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1674.56	98.47	Initial Hydro-static
1	141.76	98.22	Open To Flow (1)
11	130.35	98.45	Shut-In(1)
70	631.67	100.33	End Shut-In(1)
70	158.57	100.16	Open To Flow (2)
134	198.63	103.22	Shut-In(2)
251	405.57	104.78	End Shut-In(2)
252	1573.98	104.61	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	MUDDY FROTHY OIL	0.15
60.00	SLIGHTY OIL CUT MUD	0.30
0.00	5 GAS 15 OIL 10 WATER 70 MUD	0.00
60.00	VERY SLIGHTLY OIL CUT MUD	0.30
0.00	5 OIL 95 MUD	0.00

## Gas Rates

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



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Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1-36

Interval: **3209.00 ft (KB) To 3276.00 ft (KB) (TVD)**

Reference Elevations: 1972.00 ft (KB)

Total Depth: 3276.00 ft (KB) (TVD)

1961.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: **91716** Outside

Press@RunDepth: 381.91 psia @ 3271.34 ft (KB)

Capacity: psia

Start Date: 2017.02.14

End Date:

2017.02.14

Last Calib.:

2017.02.14

Start Time: 05:10:00

End Time:

12:47:59

Time On Btm:

2017.02.14 @ 07:03:30

Time Off Btm:

2017.02.14 @ 11:15:30

TEST COMMENT: 1ST OPENING 10 MINUTES WEAK BUILDING BLOW BUILT TO 6 INCHES INTO THE WATER  
 1ST SHUT-IN 60 MINUTES NO BLOW BACK  
 2ND OPENING 60 MINUTES WEAK BLOW BUILT TO BOTTOM OF A 5 GALLON BUCKET IN 28 MINUTES  
 2ND SHUT-IN 90 MINUTES NO BLOW BACK

## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1643.77	98.12	Initial Hydro-static
1	89.44	98.26	Open To Flow (1)
11	92.09	98.48	Shut-In(1)
70	606.98	100.36	End Shut-In(1)
71	99.07	100.37	Open To Flow (2)
131	140.71	103.63	Shut-In(2)
134	190.70	103.86	Shut-In(3)
251	381.91	106.11	End Shut-In(2)
252	1614.70	106.11	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	MUDDY FROTHY OIL	0.15
60.00	SLIGHTY OIL CUT MUD	0.30
0.00	5 GAS 15 OIL 10 WATER 70 MUD	0.00
60.00	VERY SLIGHTLY OIL CUT MUD	0.30
0.00	5 OIL 95 MUD	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

SHELBY RESOURICES LLC

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NANCY 5-17

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Job Ticket: 12

DST#: 1

Test Start: 2017.02.14 @ 05:10:00

## Tool Information

Drill Pipe:	Length: 2995.00 ft	Diameter: 3.80 inches	Volume: 42.01 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: 210.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 68000.00 lb
			Total Volume: 43.04 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3209.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	67.34 ft			
Tool Length:	96.34 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			3185.00	
Hydraulic tool	5.00			3190.00	
Jars	7.00			3197.00	
Safety Joint	2.00		Fluid	3199.00	
Top Packer	5.00			3204.00	
Packer	5.00			3209.00	29.00 Bottom Of Top Packer
Anchor	5.00			3214.00	
Change Over Sub	0.75			3214.75	
Drill Pipe	31.84			3246.59	
Change Over Sub	0.75			3247.34	
Anchor	24.00			3271.34	
Recorder	0.00	9139	Inside	3271.34	
Recorder	0.00	91716	Outside	3271.34	
Bullnose	5.00			3276.34	67.34 Anchor Tool

**Total Tool Length: 96.34**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

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DST#: 1

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Test Start: 2017.02.14 @ 05:10:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 68.00 sec/qt  
Water Loss: 7.60 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 3800.00 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

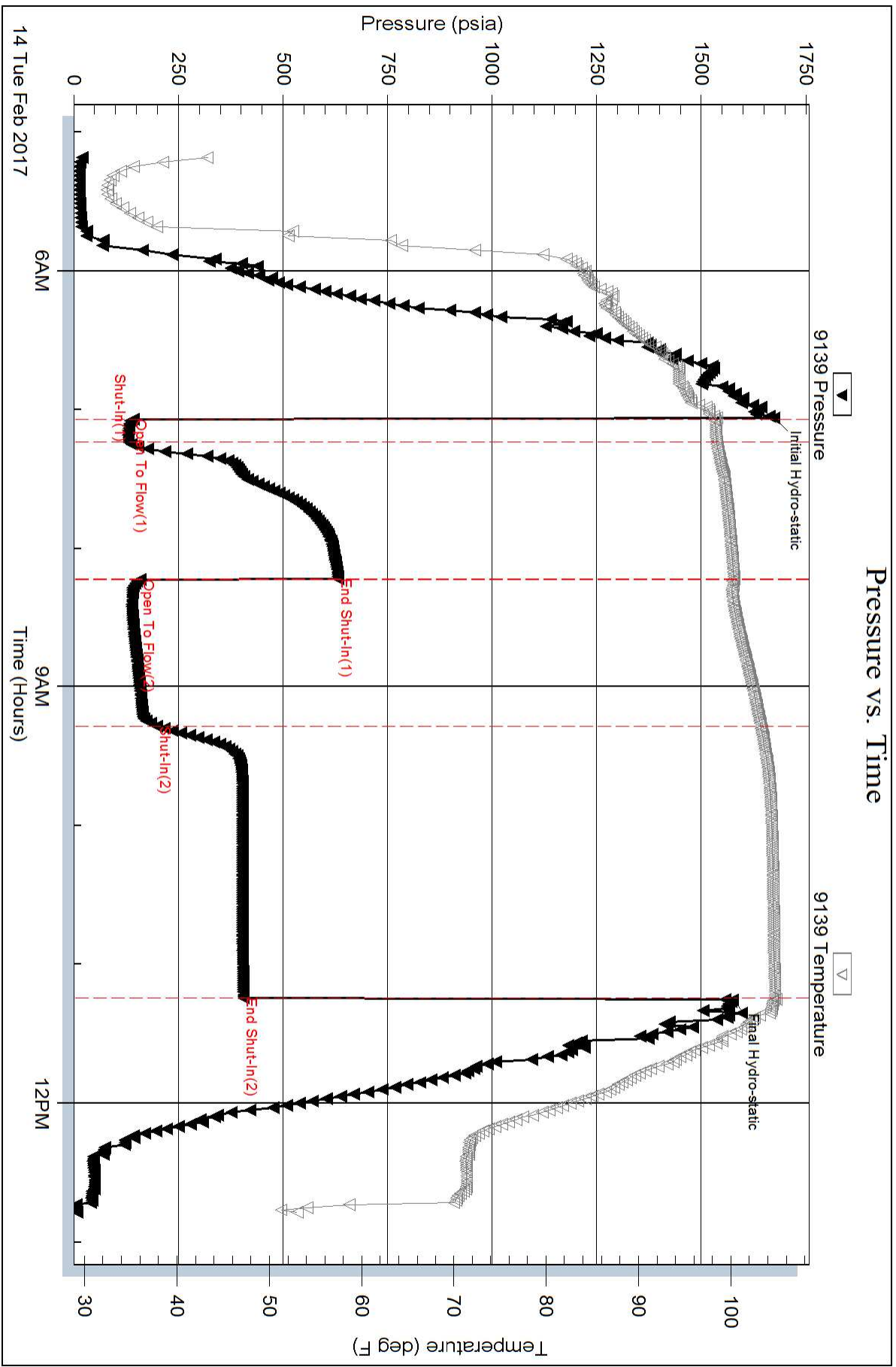
Length ft	Description	Volume bbl
30.00	MUDDY FROTHY OIL	0.148
60.00	SLIGHTY OIL CUT MUD	0.295
0.00	5 GAS 15 OIL 10 WATER 70 MUD	0.000
60.00	VERY SLIGHTLY OIL CUT MUD	0.295
0.00	5 OIL 95 MUD	0.000

Total Length: 150.00 ft      Total Volume: 0.738 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:



### Pressure vs. Time

