



## DRILL STEM TEST REPORT

Prepared For: **Shelby Resources LLC.**

2717 Canal Blvd.  
Hays Kansas 67601

ATTN: Jeremy Schwartz

### **Fenwick Unit 1-26**

### **26-21s-16w-Pawnee**

Start Date: 2014.07.24 @ 02:42:00

End Date: 2014.07.24 @ 09:44:00

Job Ticket #: 18901                      DST #: 1

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

Printed: 2014.07.24 @ 23:05:40



# DRILL STEM TEST REPORT

Shelby Resources LLC.

**26-21s-16w-Pawnee**

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Job Ticket: 18901

**DST#: 1**

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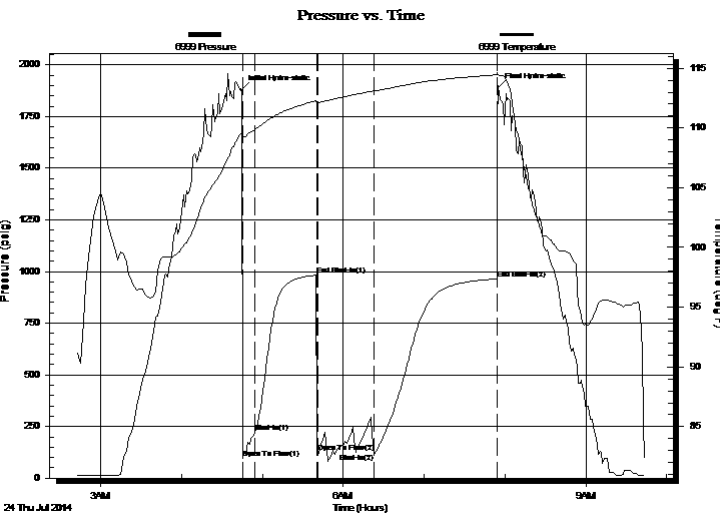
Test Start: 2014.07.24 @ 02:42:00

## GENERAL INFORMATION:

Formation: **Conglomerate**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 04:45:30  
 Time Test Ended: 09:44:00  
 Interval: **3756.00 ft (KB) To 3787.00 ft (KB) (TVD)**  
 Total Depth: 3787.00 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-40  
 Reference Elevations: 1984.00 ft (KB)  
 1975.00 ft (CF)  
 KB to GR/CF: 9.00 ft

**Serial #: 6999 Outside**  
 Press@RunDepth: 118.85 psig @ 3782.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.07.24 End Date: 2014.07.24 Last Calib.: 2014.07.24  
 Start Time: 02:42:00 End Time: 09:44:00 Time On Btm: 2014.07.24 @ 04:44:30  
 Time Off Btm: 2014.07.24 @ 07:55:00

**TEST COMMENT:** 1st Open 10 minutes Weak building blow built to 4.5 inches into a 5 gallon bucket of water.  
 1st Shut in 45 minutes No blow back  
 2nd Open 45 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 2 minutes.  
 2nd Shut in 90 minutes No blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1879.00	109.52	Initial Hydro-static
1	95.88	109.22	Open To Flow (1)
10	222.17	109.86	Shut-In(1)
56	982.02	112.29	End Shut-In(1)
57	126.91	112.14	Open To Flow (2)
99	118.85	113.09	Shut-In(2)
190	964.40	114.45	End Shut-In(2)
191	1892.08	114.46	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
64.00	Gassy oil cut mud	0.31
0.00	Mud 81% Gas 15% Oil 4%	0.00
64.00	Oil cut mud 98% Mud 2% Oil	0.31
0.00	150 Gas in pipe.	0.00

## Gas Rates

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



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Hays Kansas 67601

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Job Ticket: 18901

**DST#: 1**

ATTN: Jeremy Schwartz

Test Start: 2014.07.24 @ 02:42:00

## GENERAL INFORMATION:

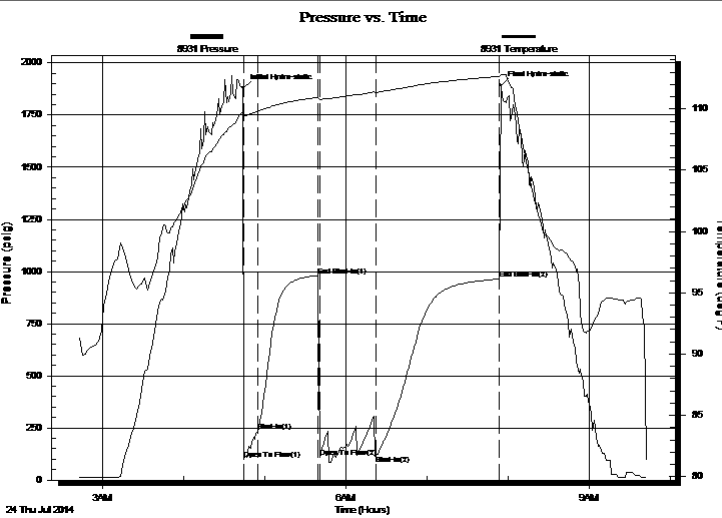
Formation: **Conglomerate**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 04:45:30  
 Time Test Ended: 09:44:00  
 Interval: **3756.00 ft (KB) To 3787.00 ft (KB) (TVD)**  
 Total Depth: 3787.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Dustin Ellis  
 Unit No: 3315-Great Bend-40  
 Reference Elevations: 1984.00 ft (KB)  
 1975.00 ft (CF)  
 KB to GR/CF: 9.00 ft

## Serial #: 8931

Inside

Press@RunDepth: 963.65 psig @ 3782.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.07.24 End Date: 2014.07.24 Last Calib.: 2014.07.24  
 Start Time: 02:42:00 End Time: 09:43:00 Time On Btm: 2014.07.24 @ 04:44:00  
 Time Off Btm: 2014.07.24 @ 07:54:30

**TEST COMMENT:** 1st Open 10 minutes Weak building blow built to 4.5 inches into a 5 gallon bucket of water.  
 1st Shut in 45 minutes No blow back  
 2nd Open 45 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 2 minutes.  
 2nd Shut in 90 minutes No blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1878.13	109.78	Initial Hydro-static
1	99.76	109.30	Open To Flow (1)
11	235.49	109.80	Shut-In(1)
56	981.09	110.97	End Shut-In(1)
57	109.13	110.76	Open To Flow (2)
99	118.37	111.36	Shut-In(2)
190	963.65	112.67	End Shut-In(2)
191	1892.22	112.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
64.00	Gassy oil cut mud	0.31
0.00	Mud 81% Gas 15% Oil 4%	0.00
64.00	Oil cut mud 98% Mud 2%Oil	0.31
0.00	150 Gas in pipe.	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Shelby Resources LLC.

**26-21s-16w-Pawnee**

2717 Canal Blvd.  
Hays Kansas 67601

**Fenwick Unit 1-26**

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**DST#: 1**

ATTN: Jeremy Schwartz

Test Start: 2014.07.24 @ 02:42:00

## Tool Information

Drill Pipe:	Length: 3537.00 ft	Diameter: 3.80 inches	Volume: 49.61 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: 216.97 ft	Diameter: 2.25 inches	Volume: 1.07 bbl	Weight to Pull Loose: 94000.00 lb
			<u>Total Volume: 50.68 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.97 ft			String Weight: Initial 81000.00 lb
Depth to Top Packer:	3756.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	59.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3733.00	
Hydraulic tool	5.00			3738.00	
Jars	6.00			3744.00	
Safety Joint	2.00			3746.00	
Top Packer	5.00			3751.00	
Packer	5.00			3756.00	28.00 Bottom Of Top Packer
Perforations	26.00			3782.00	
Recorder	0.00	8931	Inside	3782.00	
Recorder	0.00	6999	Outside	3782.00	
Bull Plug	5.00			3787.00	31.00 Anchor Tool
<b>Total Tool Length:</b>	<b>59.00</b>				



# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shelby Resources LLC.

**26-21s-16w-Pawnee**

2717 Canal Blvd.  
Hays Kansas 67601

**Fenwick Unit 1-26**

Job Ticket: 18901

**DST#: 1**

ATTN: Jeremy Schwartz

Test Start: 2014.07.24 @ 02:42:00

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 53.00 sec/qt  
Water Loss: 8.80 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 4800.00 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
64.00	Gassy oil cut mud	0.315
0.00	Mud 81% Gas 15% Oil 4%	0.000
64.00	Oil cut mud 98% Mud 2%Oil	0.315
0.00	150 Gas in pipe.	0.000

Total Length: 128.00 ft      Total Volume: 0.630 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

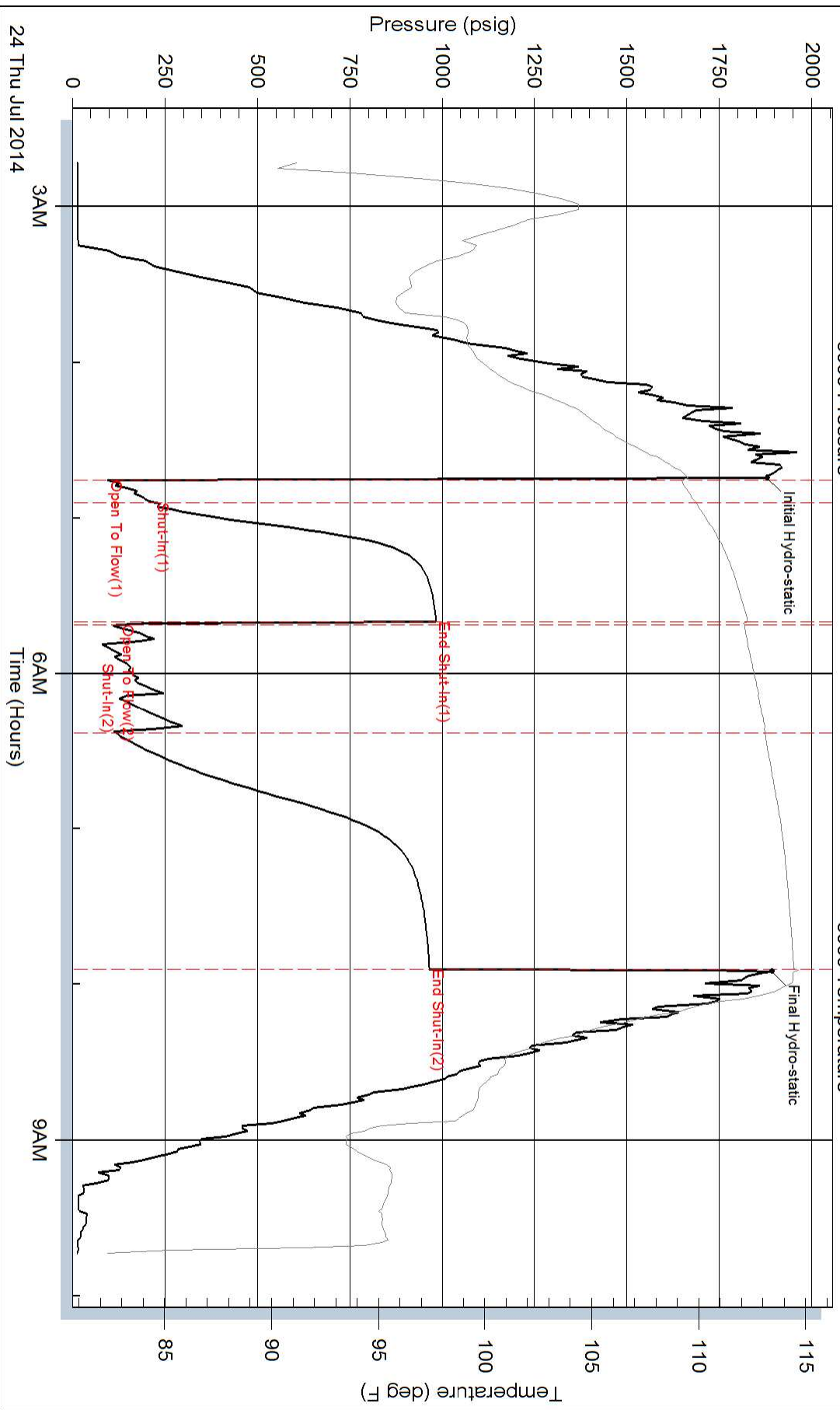
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time



# Pressure vs. Time

