



## DRILL STEM TEST REPORT

Prepared For: **Shelby Resources LLC**

2717 Canal Boulevard  
Suite C  
Hays, Kansas 67601

ATTN: Jeremy Schwartz

**Nancy 3-17**

**17/17S/13W/Barton**

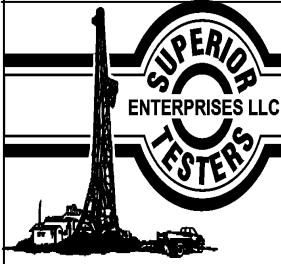
Start Date: 2014.05.09 @ 06:24:00

End Date: 2014.05.09 @ 13:08:30

Job Ticket #: 18257                      DST #: 5

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

Printed: 2014.05.09 @ 13:29:16



# DRILL STEM TEST REPORT

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17/17S/13W/Barton

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ATTN: Jeremy Schwartz

Nancy 3-17

Job Ticket: 18257 DST#: 5

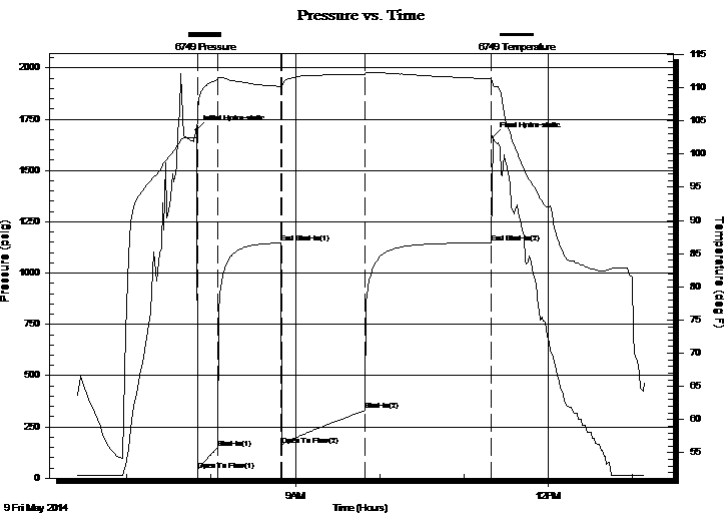
Test Start: 2014.05.09 @ 06:24:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 07:50:30 Tester: Ken Swinney  
 Time Test Ended: 13:08:30 Unit No: 3325 Great Bend/32  
 Interval: **3462.00 ft (KB) To 3468.00 ft (KB) (TVD)** Reference Elevations: 1978.00 ft (KB)  
 Total Depth: 3468.00 ft (KB) (TVD) 1965.00 ft (CF)  
 Hole Diameter: 7.80 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

**Serial #: 6749 Inside**  
 Press@RunDepth: 328.99 psig @ 3464.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.05.09 End Date: 2014.05.09 Last Calib.: 2014.05.09  
 Start Time: 06:24:00 End Time: 13:08:30 Time On Btm: 2014.05.09 @ 07:49:30  
 Time Off Btm: 2014.05.09 @ 11:20:30

**TEST COMMENT:** 1ST Open 15 Minutes/Good blow /Blow built to bottom of bucket in 10 minutes  
 1ST Shut In 45 Minutes/Very weak surface blow back  
 2ND Open 60 Minutes/Good blow /Blow built to bottom of bucket in 12 minutes  
 2ND Shut In 90 Minutes/No blow back



## PRESSURE SUMMARY

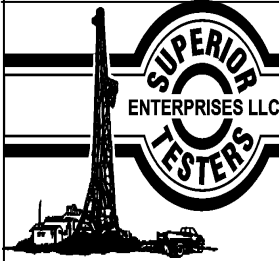
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1698.18	102.49	Initial Hydro-static
1	39.85	106.35	Open To Flow (1)
15	146.77	111.18	Shut-In(1)
60	1147.19	110.20	End Shut-In(1)
61	159.41	110.11	Open To Flow (2)
120	328.99	112.01	Shut-In(2)
210	1148.35	111.34	End Shut-In(2)
211	1663.88	110.50	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
620.00	Slightly Mud cut Water with show of Oil	5.71
0.00	Mud 2% Water 98%	0.00
93.00	Clean Oil 100%	1.30
0.00	Corrected Grav. Oil 31	0.00
0.00	Recov. Resist. .21 ohms @75 deg	0.00
0.00	Recov. Chlorides 19,000 ppm	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Shelby Resources LLC  
 2717 Canal Boulevard  
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 ATTN: Jeremy Schwartz

**17/17S/13W/Barton**  
**Nancy 3-17**  
 Job Ticket: 18257 **DST#: 5**  
 Test Start: 2014.05.09 @ 06:24:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 07:50:30  
 Time Test Ended: 13:08:30  
**Interval: 3462.00 ft (KB) To 3468.00 ft (KB) (TVD)**  
 Total Depth: 3468.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Fair

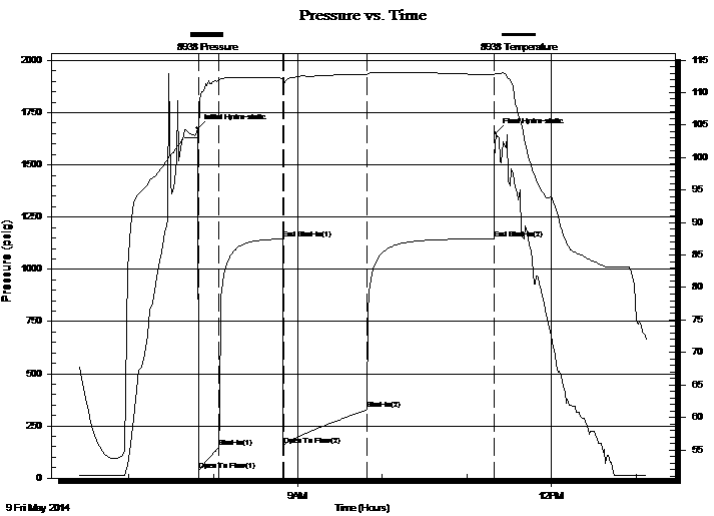
Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 3325 Great Bend/32  
 Reference Elevations: 1978.00 ft (KB)  
 1965.00 ft (CF)  
 KB to GR/CF: 13.00 ft

## Serial #: 8938

**Outside**

Press@RunDepth: 1147.53 psig @ 3465.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.05.09 End Date: 2014.05.09 Last Calib.: 2014.05.09  
 Start Time: 06:24:00 End Time: 13:08:00 Time On Btm: 2014.05.09 @ 07:48:30  
 Time Off Btm: 2014.05.09 @ 11:20:30

**TEST COMMENT:** 1ST Open 15 Minutes/Good blow /Blow built to bottom of bucket in 10 minutes  
 1ST Shut In 45 Minutes/Very weak surface blow back  
 2ND Open 60 Minutes/Good blow /Blow built to bottom of bucket in 12 minutes  
 2ND Shut In 90 Minutes/No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1675.21	103.05	Initial Hydro-static
1	35.67	103.01	Open To Flow (1)
16	146.53	111.88	Shut-In(1)
61	1146.23	112.22	End Shut-In(1)
62	158.14	111.57	Open To Flow (2)
121	328.02	112.80	Shut-In(2)
211	1147.53	112.75	End Shut-In(2)
212	1652.07	112.93	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
620.00	Slightly Mud cut Water with show of Oil	5.71
0.00	Mud 2% Water 98%	0.00
93.00	Clean Oil 100%	1.30
0.00	Corrected Grav. Oil 31	0.00
0.00	Recov. Resist. .21 ohms @75 deg	0.00
0.00	Recov. Chlorides 19,000 ppm	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Shelby Resources LLC  
 2717 Canal Boulevard  
 Suite C  
 Hays, Kansas 67601  
 ATTN: Jeremy Schwartz

**17/17S/13W/Barton**  
**Nancy 3-17**  
 Job Ticket: 18257      **DST#: 5**  
 Test Start: 2014.05.09 @ 06:24:00

## Tool Information

Drill Pipe:	Length: 3121.00 ft	Diameter: 3.80 inches	Volume: 43.78 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: 328.07 ft	Diameter: 2.25 inches	Volume: 1.61 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 45.39 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.07 ft			String Weight: Initial 71000.00 lb
Depth to Top Packer:	3462.00 ft			Final 73000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	6.00 ft			
Tool Length:	28.00 ft			
Number of Packers:	1	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			3445.00	
Hydraulic tool	5.00			3450.00	
Jars	5.00			3455.00	
Safety Joint	2.00			3457.00	
Packer	5.00			3462.00	22.00      Bottom Of Top Packer
Anchor	1.00			3463.00	
Recorder	1.00	6749	Inside	3464.00	
Recorder	1.00	8938	Outside	3465.00	
Bullnose	3.00			3468.00	6.00      Anchor Tool
<b>Total Tool Length:</b>	<b>28.00</b>				



# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shelby Resources LLC

**17/17S/13W/Barton**

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ATTN: Jeremy Schwartz

**Nancy 3-17**

Job Ticket: 18257

**DST#: 5**

Test Start: 2014.05.09 @ 06:24:00

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 68.00 sec/qt  
Water Loss: 7.20 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 4400.00 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

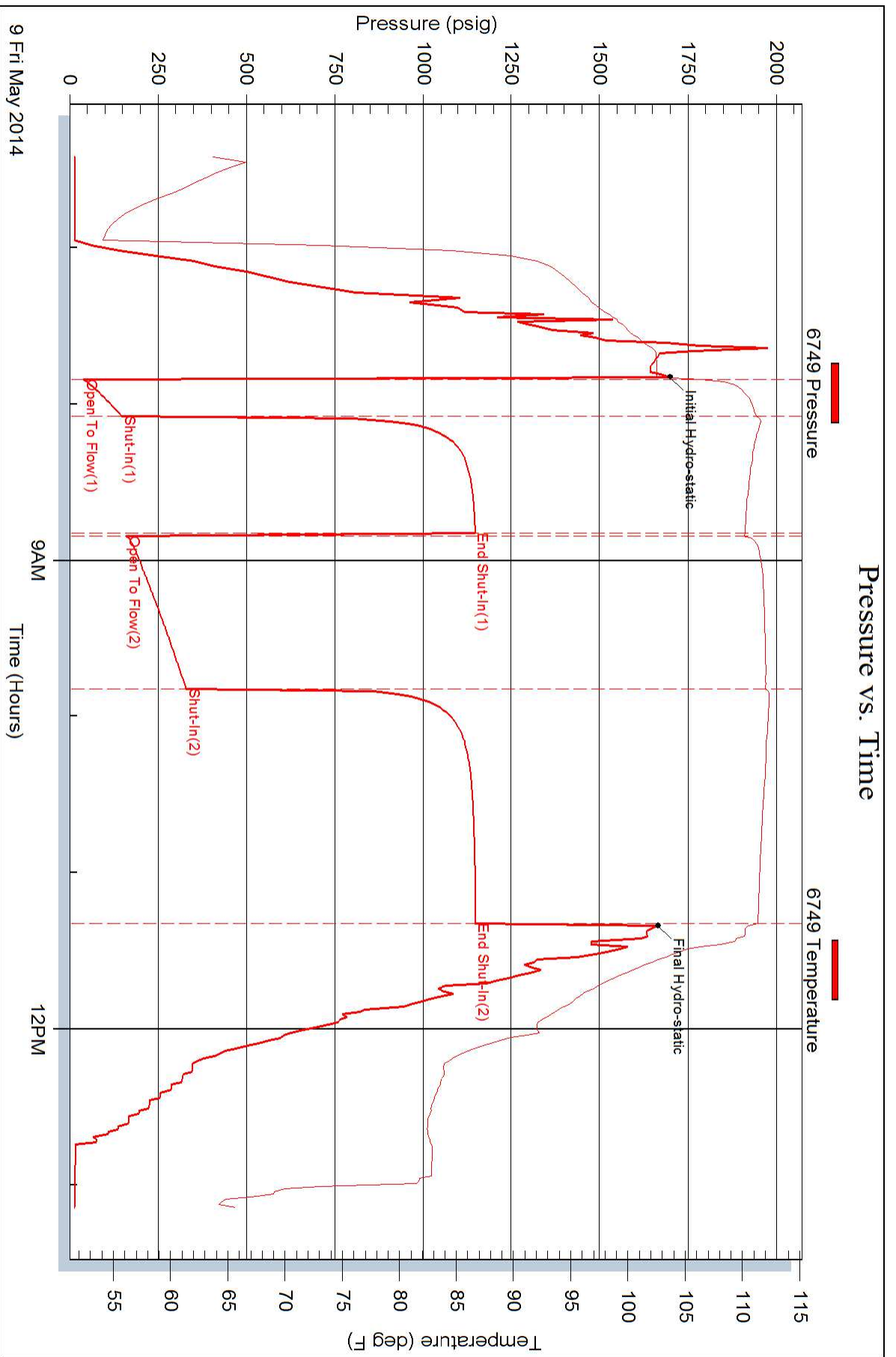
Recovery Table

Length ft	Description	Volume bbl
620.00	Slightly Mud cut Water with show of Oil	5.708
0.00	Mud 2% Water 98%	0.000
93.00	Clean Oil 100%	1.305
0.00	Corrected Grav. Oil 31	0.000
0.00	Recov. Resist. .21 ohms @75 deg	0.000
0.00	Recov. Chlorides 19,000 ppm	0.000

Total Length: 713.00 ft      Total Volume: 7.013 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

# Pressure vs. Time



### Pressure vs. Time

