



## DRILL STEM TEST REPORT

Prepared For: **Shelby Resources L.L.C**

2717 Canal Blvd Hays KS 67601

ATTN: Jeremy Schwartzs

### **Reif Trust #1-23**

### **23-18-14 Barton**

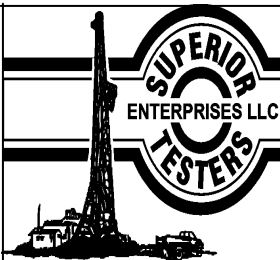
Start Date: 2014.05.20 @ 18:00:00

End Date: 2014.05.21 @ 01:12:30

Job Ticket #: 19242                      DST #: 2

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

Printed: 2014.05.21 @ 02:31:04



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 2717 Canal Blvd Hays KS 67601  
 ATTN: Jeremy Schwartz

**23-18-14 Barton**  
**Reif Trust #1-23**  
 Job Ticket: 19242      **DST#: 2**  
 Test Start: 2014.05.20 @ 18:00:00

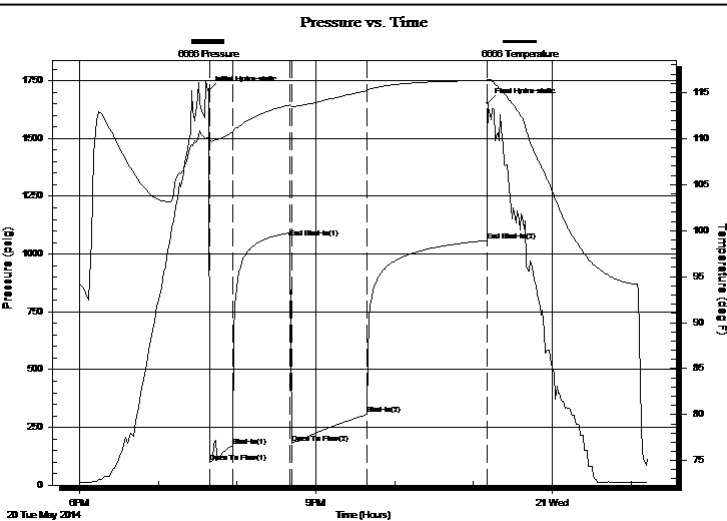
## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 19:39:30  
 Tester: Jared Scheck  
 Time Test Ended: 01:12:30  
 Unit No: 3335-Great Bend-25  
 Interval: **3371.00 ft (KB) To 3411.00 ft (KB) (TVD)**  
 Reference Elevations: 1914.00 ft (KB)  
 Total Depth: 3411.00 ft (KB) (TVD)  
 1901.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 13.00 ft

## Serial #: 6666

Press@RunDepth: 306.44 psig @ ft (KB)      Capacity: 5000.00 psig  
 Start Date: 2014.05.20      End Date: 2014.05.21      Last Calib.: 2014.05.21  
 Start Time: 18:00:00      End Time: 01:12:30      Time On Btm: 2014.05.20 @ 19:38:30  
 Time Off Btm: 2014.05.20 @ 23:11:00

**TEST COMMENT:** 1st Opening 15 Minutes-Strong blow built bottom of bucket in 9 1/2 minutes  
 1st Shut-in 45 Minutes-No blow back  
 2nd Opening 60 Minutes-Strong blow built bottom of bucket in 10 1/2 minutes  
 2nd Shut-in 90 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1708.96	110.19	Initial Hydro-static
1	98.38	109.75	Open To Flow (1)
18	168.11	110.69	Shut-In(1)
62	1069.38	113.67	End Shut-In(1)
63	181.93	113.49	Open To Flow (2)
121	306.44	115.20	Shut-In(2)
212	1058.99	116.31	End Shut-In(2)
213	1653.32	116.44	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
330.00	gas oil 10%gas 90%oil	1.62
390.00	gas oil 10%gas 90%oil	5.47
0.00	gravity oil 44	0.00

## Gas Rates

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



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 ATTN: Jeremy Schwartz

**23-18-14 Barton**  
**Reif Trust #1-23**  
 Job Ticket: 19242 **DST#: 2**  
 Test Start: 2014.05.20 @ 18:00:00

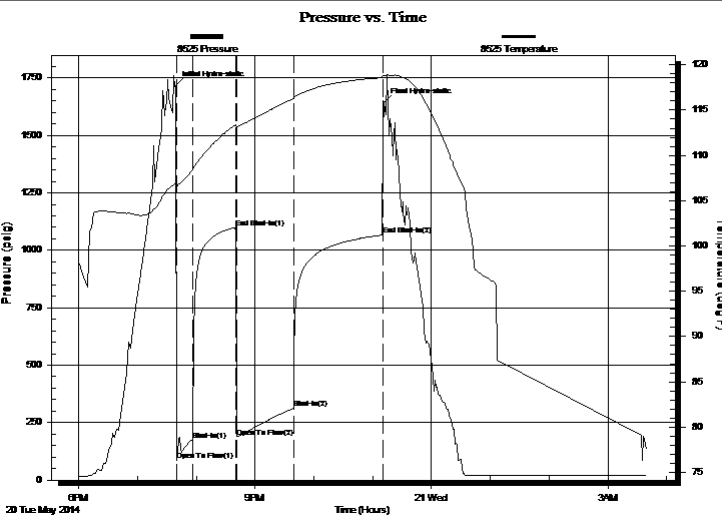
## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 19:39:30 Tester: Jared Scheck  
 Time Test Ended: 01:12:30 Unit No: 3335-Great Bend-25  
 Interval: **3371.00 ft (KB) To 3411.00 ft (KB) (TVD)** Reference Elevations: 1914.00 ft (KB)  
 Total Depth: 3411.00 ft (KB) (TVD) 1901.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

## Serial #: 8525

Press@RunDepth: 1066.53 psig @ ft (KB) Capacity: 5000.00 psig  
 Start Date: 2014.05.20 End Date: 2014.05.21 Last Calib.: 2014.05.21  
 Start Time: 18:00:00 End Time: 03:40:00 Time On Btm: 2014.05.20 @ 19:38:30  
 Time Off Btm: 2014.05.20 @ 23:11:30

**TEST COMMENT:** 1st Opening 15 Minutes-Strong blow built bottom of bucket in 9 1/2 minutes  
 1st Shut-in 45 Minutes-No blow back  
 2nd Opening 60 Minutes-Strong blow built bottom of bucket in 10 1/2 minutes  
 2nd Shut-in 90 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1715.02	106.96	Initial Hydro-static
1	86.97	106.63	Open To Flow (1)
18	174.68	108.40	Shut-In(1)
62	1098.76	113.34	End Shut-In(1)
63	188.57	113.15	Open To Flow (2)
121	312.64	116.25	Shut-In(2)
212	1066.53	118.57	End Shut-In(2)
213	1642.48	118.80	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
330.00	gas oil 10%gas 90%oil	1.62
390.00	gas oil 10%gas 90%oil	5.47
0.00	gravity oil 44	0.00

## Gas Rates

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



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TOOL DIAGRAM

Shelby Resources L.L.C  
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**23-18-14 Barton**  
**Reif Trust #1-23**  
 Job Ticket: 19242      **DST#: 2**  
 Test Start: 2014.05.20 @ 18:00:00

## Tool Information

Drill Pipe:	Length: 3023.00 ft	Diameter: 3.80 inches	Volume: 42.40 bbl	Tool Weight: 1000.00 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: 330.00 ft	Diameter: 2.25 inches	Volume: 1.62 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 44.02 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3371.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	68.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3348.00	
Hydraulic Tool	5.00			3353.00	
Jars	6.00			3359.00	
Safety Joint	2.00			3361.00	
Top Packer	5.00			3366.00	
Packer	5.00			3371.00	28.00      Bottom Of Top Packer
Anchor	35.00			3406.00	
Recorder	1.00	6666	Inside	3407.00	
Recorder	1.00	8525	Outside	3408.00	
Bull Plug	3.00			3411.00	40.00      Anchor Tool
<b>Total Tool Length:</b>	<b>68.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

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### Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.20 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5400.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
330.00	gas oil 10%gas 90%oil	1.623
390.00	gas oil 10%gas 90%oil	5.471
0.00	gravity oil 44	0.000

Total Length: 720.00 ft      Total Volume: 7.094 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: gravity oil 44

### Pressure vs. Time

