

15-009-25617

21-17s-13w

HP# 15-009-25617-00-00



## DRILL STEM TEST REPORT

Prepared For: **Scheck Oil Operations**

211 S Front St Russell KS 67665

ATTN: Steve Miller

**21-17w-13s Barton**

**Schnieder #2**

Start Date: 2009.10.26 @ 12:21:00

End Date: 2009.10.26 @ 19:21:00

Job Ticket #: 18645                      DST #: 1

Scheck Oil Operations

Schnieder #2

21-17w-13s Barton

DST # 1

Lansing

2009.10.26

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

Printed: 2011.10.29 @ 09:54:29



# DRILL STEM TEST REPORT

Scheck Oil Operations  
 211 S Front St Russell KS 67665  
 ATTN: Steve Miller

**Schnieder #2**  
**21-17w-13s Barton**  
 Job Ticket: 18645      DST#: 1  
 Test Start: 2009.10.26 @ 12:21:00

## GENERAL INFORMATION:

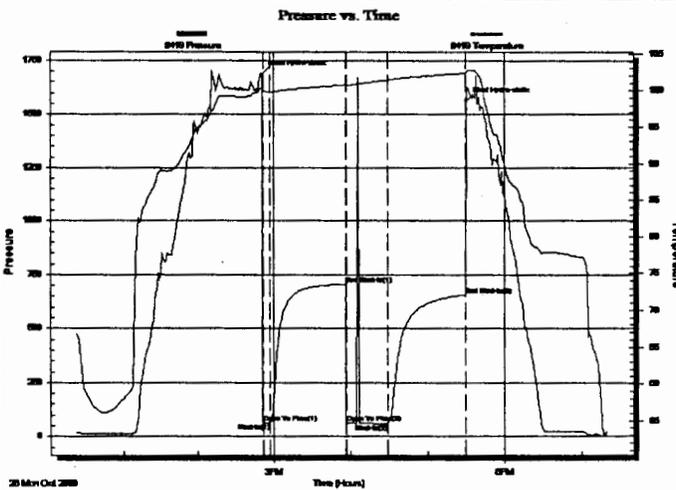
Formation: **Lansing**  
 Deviated: No      Whipstock:      ft (KB)  
 Time Tool Opened: 14:52:00  
 Time Test Ended: 19:21:00  
 Interval: **3222.00 ft (KB) To 3262.00 ft (KB) (TVD)**  
 Total Depth: **3262.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: 3320-GB-28  
 Reference Elevations: 1930.00 ft (KB)  
 1922.00 ft (CF)  
 KB to GRVCF: 8.00 ft

## Serial #: 8419

Inside

Press@RunDepth: 58.06 psia @ 3258.00 ft (KB)      Capacity: 5000.00 psia  
 Start Date: 2009.10.26      End Date: 2009.10.26      Last Calib.: 2011.10.26  
 Start Time: 12:22:00      End Time: 19:21:00      Time On Btm: 2009.10.26 @ 14:51:00  
 Time Off Btm: 2009.10.26 @ 17:30:00

**TEST COMMENT:** 1st Opening 5 Minutes-Very weak surge did not build  
 1st Shut-in 60 Minutes-No blow back  
 2nd Opening 30 Minutes- Very weak surge did not build flushed tool weak surge did not build  
 2nd Shut-in 60 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg C)	Annotation
0	1685.66	100.32	Initial Hydro-static
1	62.60	99.94	Open To Flow (1)
6	61.56	99.80	Shut-In(1)
65	705.34	100.79	End Shut-In(1)
66	61.93	100.70	Open To Flow (2)
98	58.06	101.41	Shut-In(2)
159	658.19	102.37	End Shut-In(2)
159	1564.61	102.48	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
8.00	mud	0.11

## Gas Rates

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





# DRILL STEM TEST REPORT

TOOL DIAGRAM

Scheck Oil Operations  
 211 S Front St Russell KS 67665  
 ATTN: Steve Miller

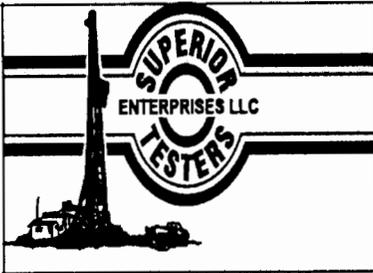
**Schnieder #2**  
**21-17w-13s Barton**  
 Job Ticket: 18645      DST#: 1  
 Test Start: 2009.10.26 @ 12:21:00

## Tool Information

Drill Pipe:	Length: 3214.00 ft	Diameter: 3.80 inches	Volume: 45.08 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	67000.00 lb
			<u>Total Volume: 45.08 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	3222.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	40.00 ft				
Tool Length:	60.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments: Flushed tool on 2nd opening weak surge did not build

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
SHut-InTool	5.00		Inside	3207.00	
Hydrolic Tool	5.00			3212.00	
Packer	5.00			3217.00	20.00      Bottom Of Top Packer
Packer	5.00			3222.00	
Anchor	35.00			3257.00	
Recorder	1.00	8419	Inside	3258.00	
Recorder	1.00	8524	Outside	3259.00	
Bullnose	3.00			3262.00	40.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>		<b>60.00</b>			



# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Scheck Oil Operations  
 211 S Front St Russell KS 67665  
 ATTN: Steve Miller

**Schnieder #2**  
**21-17w-13s Barton**  
 Job Ticket: 18645      **DST#: 1**  
 Test Start: 2009.10.26 @ 12:21:00

## 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: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.58 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 4800.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
8.00	mud	0.112

Total Length: 8.00 ft      Total Volume: 0.112 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: Flushed tool on 2nd opening weak surge did not build

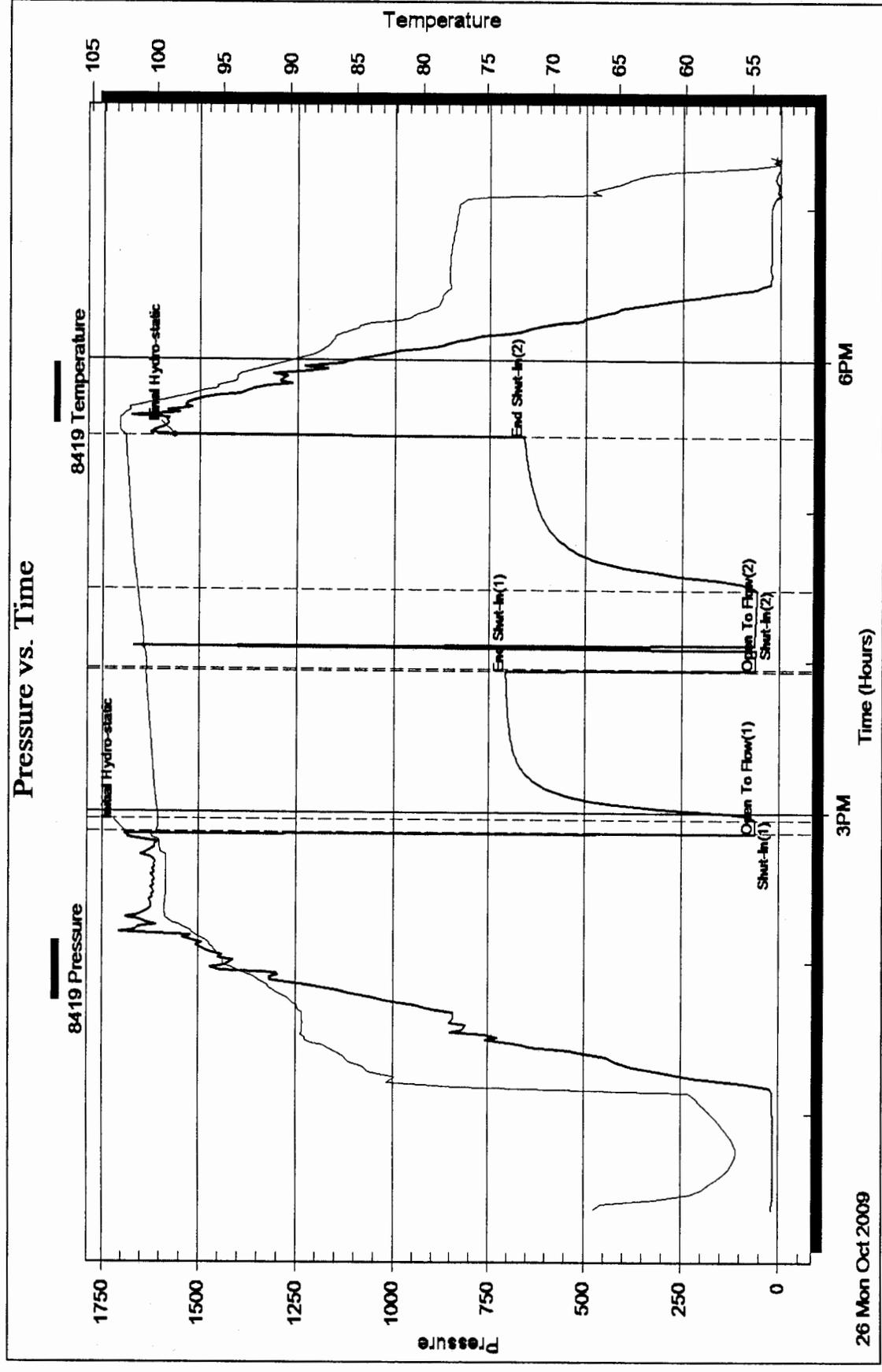
Serial #: 8419

Inside

Schedule Oil Operations

21-17w-13s Barton

DST Test Number: 1



26 Mon Oct 2009

Printed: 2011.10.29 @ 09:54:29

Ref. No: 18645

Superior Testers Enterprises LLC

Serial #: 8524

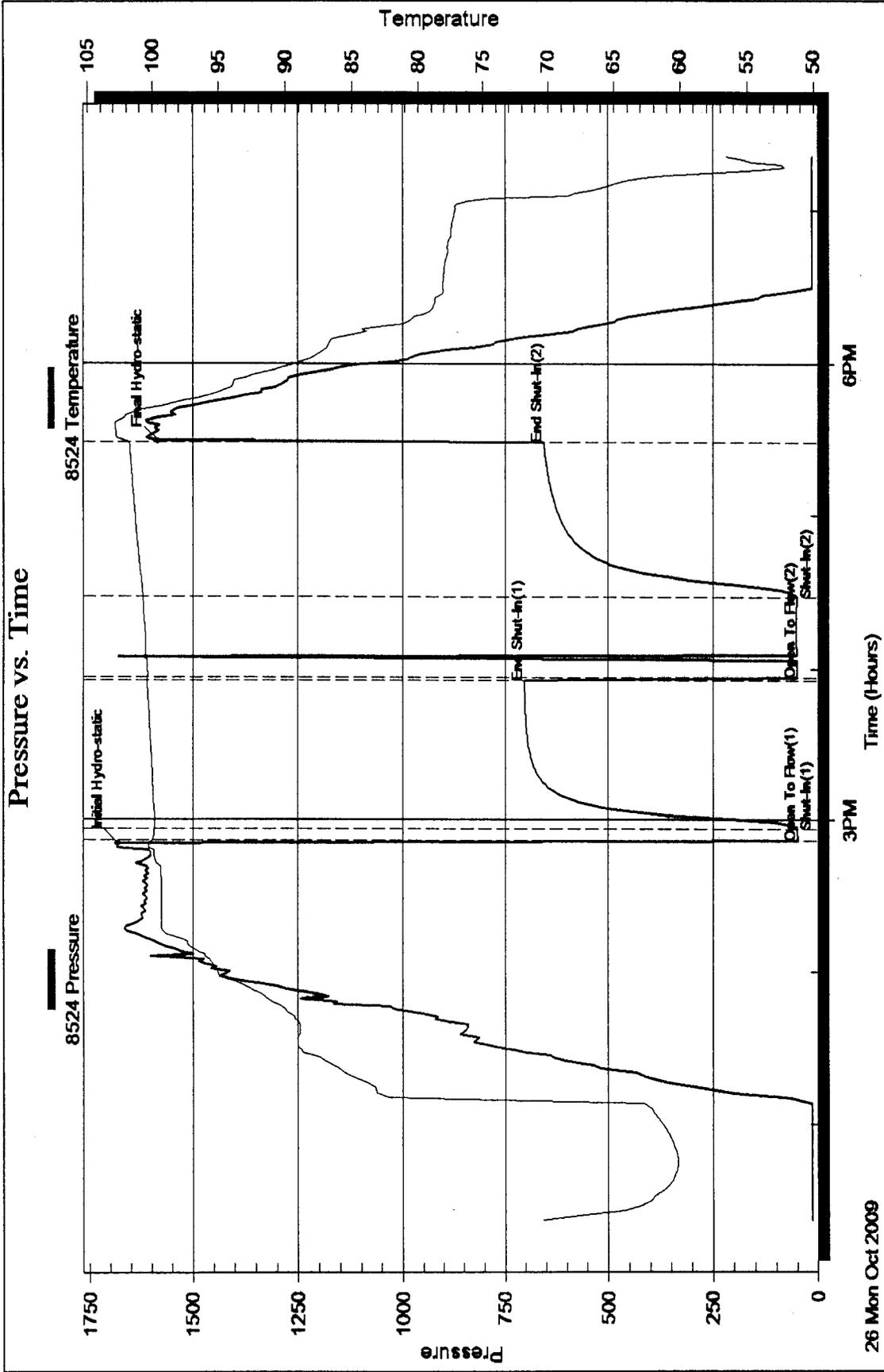
Outside

Scheck Oil Operations

21-17w-13s Barton

DST Test Number: 1

### Pressure vs. Time



26 Mon Oct 2009

Printed: 2011.10.29 @ 09:54:29

Ref. No: 18645

Superior Testers Enterprises LLC



## DRILL STEM TEST REPORT

Prepared For: **Scheck Oil Operations**

211 S Front St Russell KS 67665

ATTN: Steve Miller

**21-17w-13s Barton**

**Schnieder #2**

Start Date: 2011.10.26 @ 21:05:00

End Date: 2011.10.27 @ 04:26:00

Job Ticket #: 18646                      DST #: 2

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

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Scheck Oil Operations      Schnieder #2      21-17w-13s Barton      DST # 2      Arbuckle      2011.10.26







# DRILL STEM TEST REPORT

TOOL DIAGRAM

Scheck Oil Operations

**Schnieder #2**

211 S Front St Russell KS 67665

**21-17w-13s Barton**

Job Ticket: 18646

DST#: 2

ATTN: Steve Miller

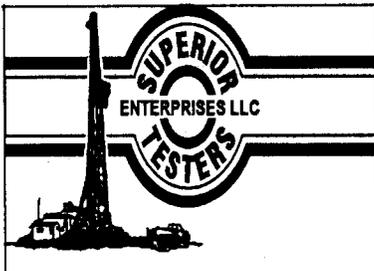
Test Start: 2011.10.26 @ 21:05:00

## Tool Information

Drill Pipe:	Length: 3373.00 ft	Diameter: 3.80 inches	Volume: 47.31 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	67000.00 lb
			<u>Total Volume: 47.31 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	3389.00 ft			Final	61000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	21.00 ft				
Tool Length:	41.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
SHut-InTool	5.00		Inside	3374.00	
Hydrolic Tool	5.00			3379.00	
Packer	5.00			3384.00	20.00 Bottom Of Top Packer
Packer	5.00			3389.00	
Anchor	16.00			3405.00	
Recorder	1.00	8419	Inside	3406.00	
Recorder	1.00	8524	Outside	3407.00	
Bullnose	3.00			3410.00	21.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>41.00</b>				



# DRILL STEM TEST REPORT

FLUID SUMMARY

Scheck Oil Operations

**Schnieder #2**

211 S Front St Russell KS 67665

**21-17w-13s Barton**

Job Ticket: 18646

**DST#: 2**

ATTN: Steve Miller

Test Start: 2011.10.26 @ 21:05:00

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.19 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.30 ohm.m	Gas Cushion Pressure: psia		
Salinity: 5000.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Cean gassy oil	0.842
60.00	Muddy w ater 40%mud 60%w ater	0.842
0.00	60 Gas in pipe	0.000
0.00	Chlorides 30,000	0.000
0.00	Resistivity .3 @ 65 degrees	0.000
0.00	Gravity oil 45	0.000

Total Length: 120.00 ft      Total Volume: 1.684 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

DST Test Number: 2

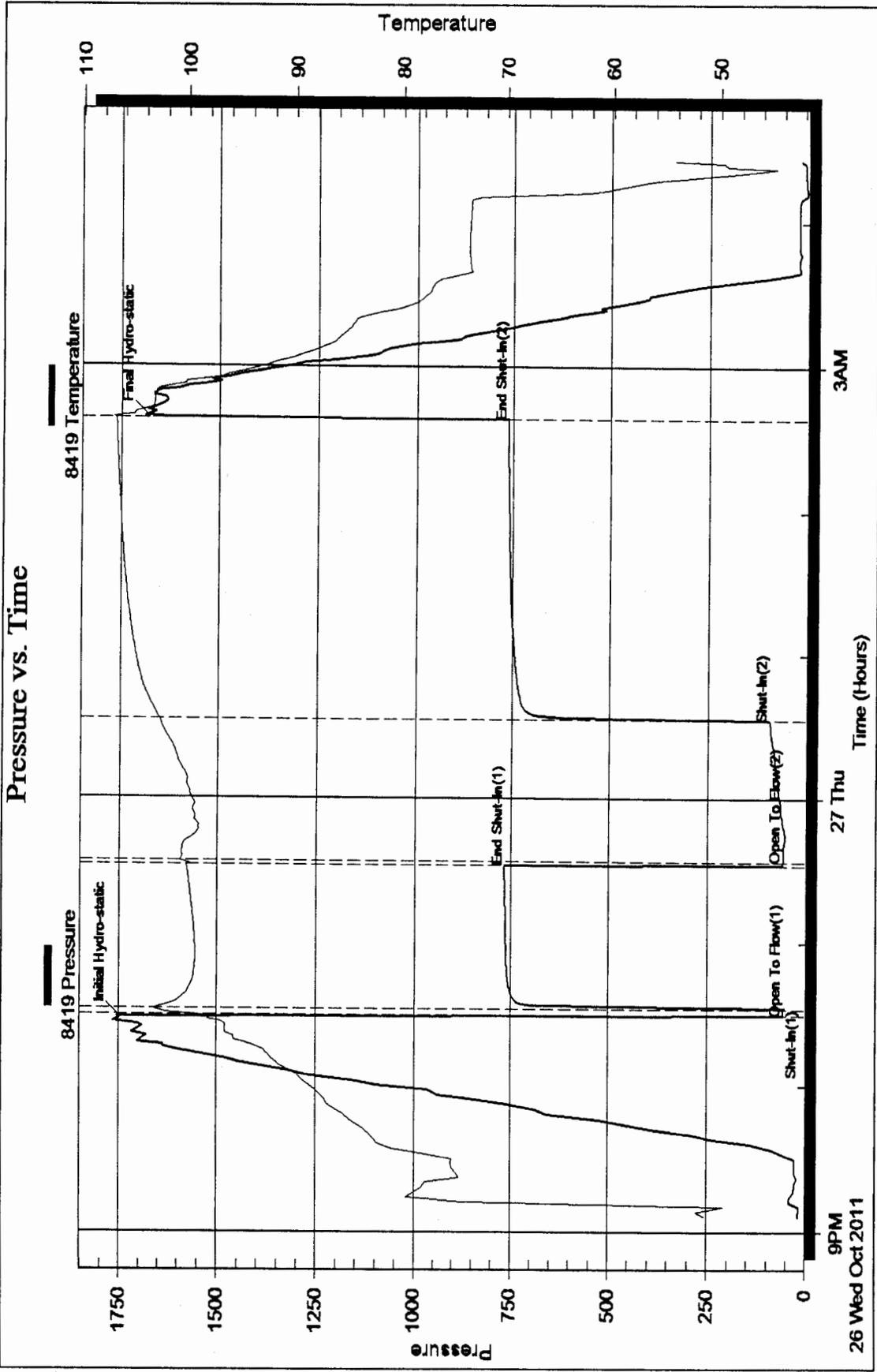
21-17w-13s Barton

Scheck Oil Operations

Inside

Serial #: 8419

### Pressure vs. Time



Printed: 2011.10.29 @ 09:54:54

Ref. No: 18646

Superior Testers Enterprises LLC

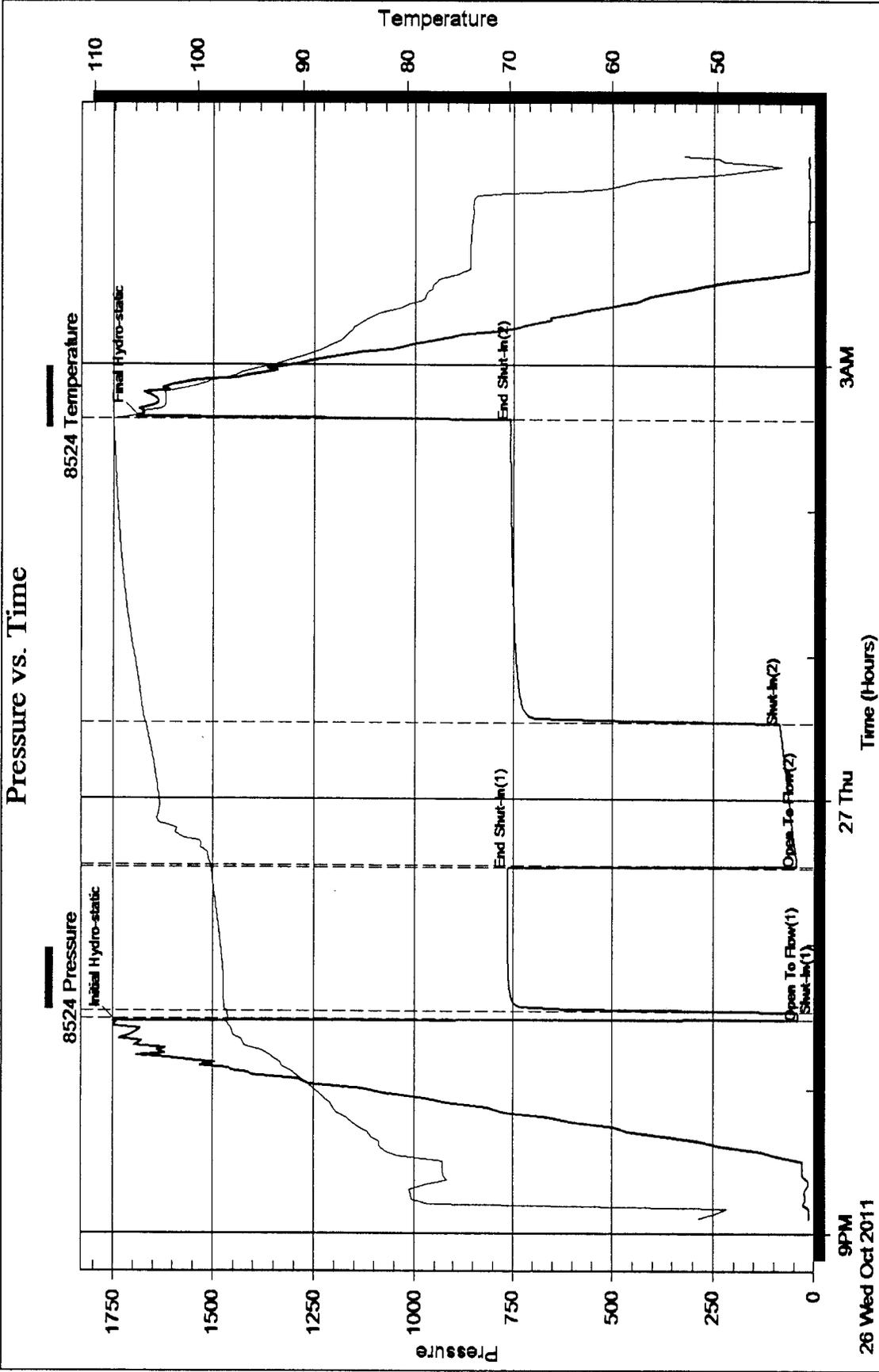
Serial #: 8524

Outside Scheck Oil Operations

21-17w-13s Barton

DST Test Number: 2

### Pressure vs. Time



Printed: 2011.10.29 @ 09:54:54

Ref. No: 18646

Superior Testers Enterprises LLC



## DRILL STEM TEST REPORT

Prepared For: **Scheck Oil Operations**

211 S Front St Russell KS 67665

ATTN: Steve Miller

**21-17w-13s Barton**

**Schnieder #2**

Start Date: 2011.10.27 @ 09:35:00

End Date: 2011.10.27 @ 15:35:00

Job Ticket #: 18647                      DST #: 3

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

Printed: 2011.10.29 @ 09:55:05

Scheck Oil Operations  
Schnieder #2  
21-17w-13s Barton  
DST # 3  
Arbuckle  
2011.10.27



# DRILL STEM TEST REPORT

Scheck Oil Operations  
 211 S Front St Russell KS 67665  
 ATTN: Steve Miller

**Schnieder #2**  
**21-17w-13s Barton**  
 Job Ticket: 18647      DST#: 3  
 Test Start: 2011.10.27 @ 09:35:00

## GENERAL INFORMATION:

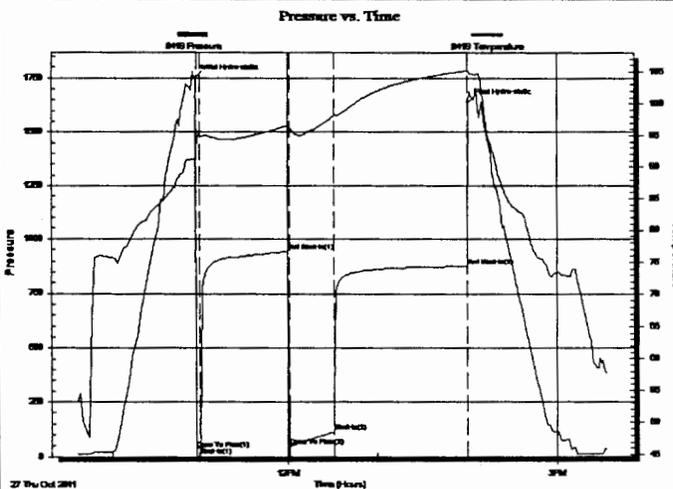
Formation: **Arbuckle**  
 Deviated: No      Whipstock:      ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 10:58:30      Tester: Jared Scheck  
 Time Test Ended: 15:35:00      Unit No: 3320-28-GB  
 Interval: **3410.00 ft (KB) To 3420.00 ft (KB) (TVD)**      Reference Elevations: 1930.00 ft (KB)  
 Total Depth: 3420.00 ft (KB) (TVD)      1922.00 ft (CF)  
 Hole Diameter: 7.88 inches      Hole Condition: Fair      KB to GR/CF: 8.00 ft

## Serial #: 8419

Inside

Press@RunDepth: 112.06 psia @ 3416.00 ft (KB)      Capacity: 5000.00 psia  
 Start Date: 2011.10.27      End Date: 2011.10.27      Last Calib.: 2011.10.27  
 Start Time: 09:36:00      End Time: 15:35:00      Time On Btm: 2011.10.27 @ 10:57:30  
 Time Off Btm: 2011.10.27 @ 14:00:30

TEST COMMENT: 1st Opening 3 Minutes-Weak building blow built 3 1/2 inches into bucket water in 3 minutes  
 1st Shut-in 60 Minutes-No blow back  
 2nd Opening 30 Minutes-Strong blow built bottom of bucket in 17 minutes  
 2nd Shut-in 90 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg C)	Annotation
0	1749.26	91.24	Initial Hydro-static
1	34.57	93.17	Open To Flow (1)
4	43.77	95.06	Shut-In(1)
63	942.34	96.59	End Shut-In(1)
64	47.19	96.52	Open To Flow (2)
94	112.06	98.08	Shut-In(2)
183	874.88	105.17	End Shut-In(2)
183	1639.45	105.17	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	Clean gassy oil 5 %gas 95%oil	0.21
60.00	Clean gassy oil 5%gas 95%oil	0.84
120.00	Oil cut watery mud 5%oil 15%mud 80%w	1.68
0.00	Chlorides 20,000	0.00
0.00	Gravity oil 45	0.00
0.00	Resistivity .4 @ 65 degrees	0.00

## Gas Rates

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





# DRILL STEM TEST REPORT

TOOL DIAGRAM

Scheck Oil Operations

**Schnieder #2**

211 S Front St Russell KS 67665

**21-17w-13s Barton**

Job Ticket: 18647

**DST#: 3**

ATTN: Steve Miller

Test Start: 2011.10.27 @ 09:35:00

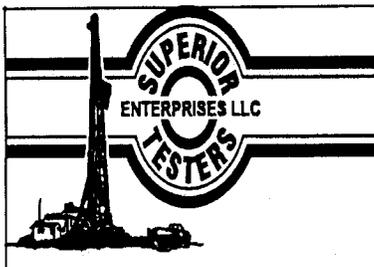
## Tool Information

Drill Pipe:	Length: 3396.00 ft	Diameter: 3.80 inches	Volume: 47.64 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 47.64 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3410.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	30.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
SHut-InTool	5.00		Inside	3395.00	
Hydrolic Tool	5.00			3400.00	
Packer	5.00			3405.00	20.00 Bottom Of Top Packer
Packer	5.00			3410.00	
Anchor	5.00			3415.00	
Recorder	1.00	8419	Inside	3416.00	
Recorder	1.00	8524	Outside	3417.00	
Bullnose	3.00			3420.00	10.00 Bottom Packers & Anchor

**Total Tool Length: 30.00**



# DRILL STEM TEST REPORT

FLUID SUMMARY

Scheck Oil Operations  
 211 S Front St Russell KS 67665  
 ATTN: Steve Miller

**Schnieder #2**  
**21-17w-13s Barton**  
 Job Ticket: 18647      DST#: 3  
 Test Start: 2011.10.27 @ 09:35:00

## 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: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.59 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 5000.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Clean gassy oil 5 %gas 95%oil	0.210
60.00	Clean gassy oil 5%gas 95%oil	0.842
120.00	Oil cut watery mud 5%oil 15%mud 80%water	1.683
0.00	Chlorides 20,000	0.000
0.00	Gravity oil 45	0.000
0.00	Resistivity .4 @ 65 degrees	0.000

Total Length: 195.00 ft      Total Volume: 2.735 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

DST Test Number: 3

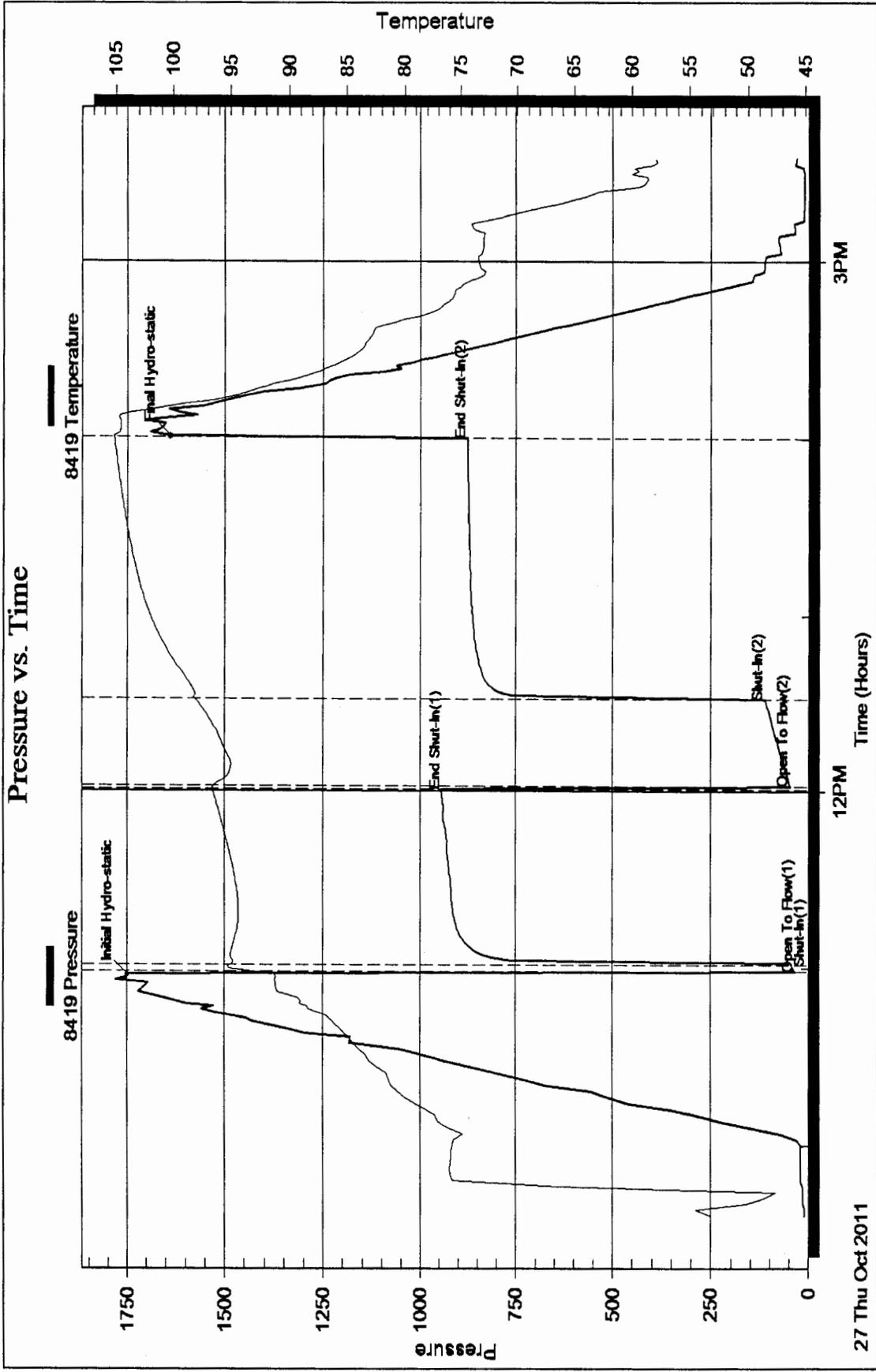
21-17w-13s Barton

Scheck Oil Operations

Inside

Serial #: 8419

### Pressure vs. Time



Printed: 2011.10.29 @ 09:55:06

Ref. No: 18647

Superior Testers Enterprises LLC

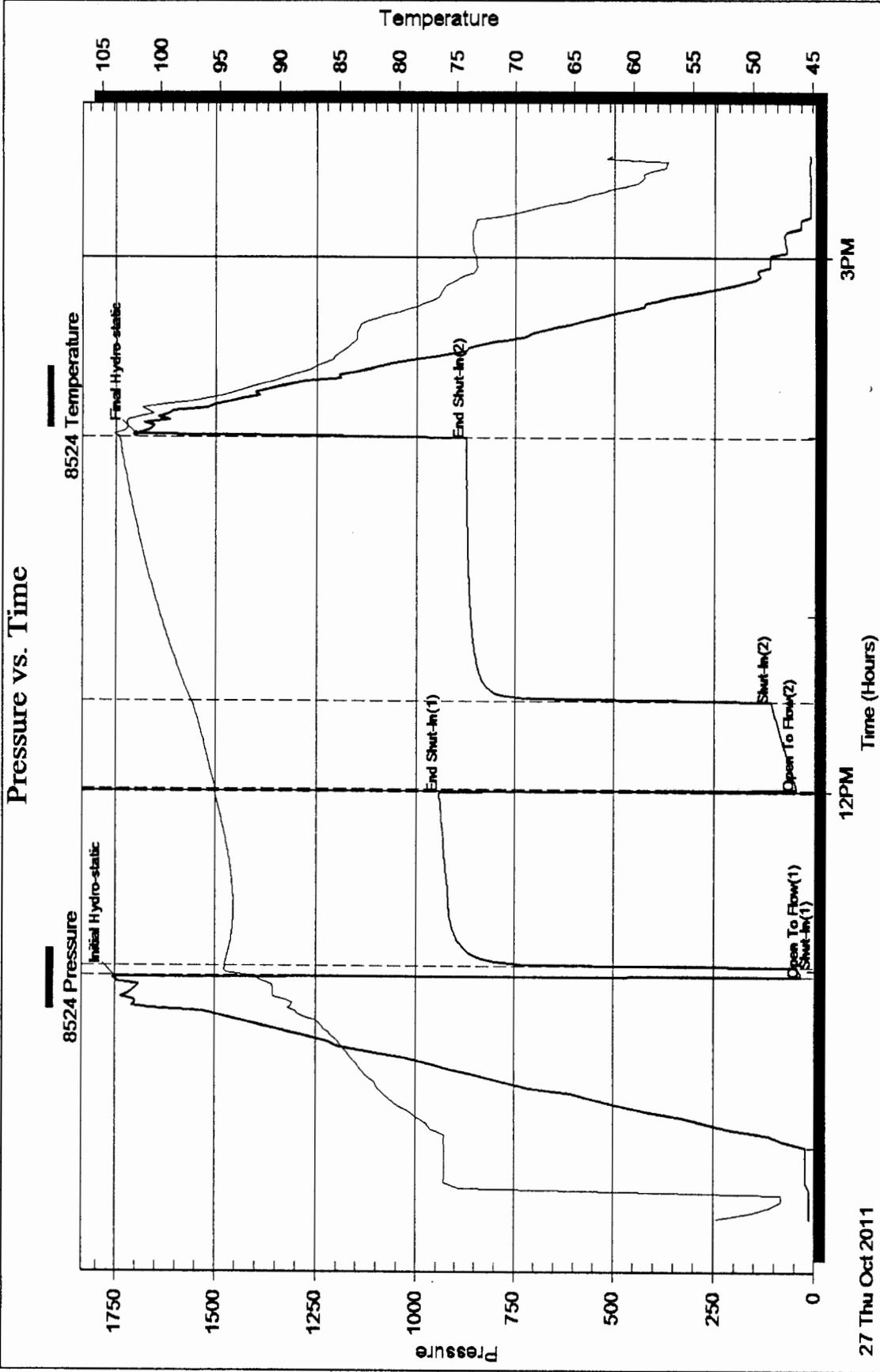
Serial #: 8524

Outside Scheck Oil Operations

21-17w-13s Barton

DST Test Number: 3

### Pressure vs. Time



27 Thu Oct 2011