

**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Company**

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**22-32s-17w Barber**

**Bloom Trust A-1**

Start Date: 2003.10.26 @ 03:54:43

End Date: 2003.10.26 @ 12:16:28

Job Ticket #: 17824                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Woolsey Operating Company

Bloom Trust A-1

22-32s-17w Barber

DST # 1

Snyderville

2003.10.26



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Woolsey Operating Company

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**Bloom Trust A-1**

**22-32s-17w Barber**

Job Ticket: 17824

DST#: 1

Test Start: 2003.10.26 @ 03:54:43

## GENERAL INFORMATION:

Formation: **Snyderville**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:13:28

Time Test Ended: 12:16:28

Test Type: Conventional Bottom Hole

Tester: Nathan

Unit No: 16

Interval: **3542.00 ft (KB) To 3566.00 ft (KB) (TVD)**

Total Depth: 3566.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1519.00 ft (KB)

1510.00 ft (CF)

KB to GR/CF: 9.00 ft

**Serial #: 3310 Inside**

Press@RunDepth: 16.85 psig @ 3543.00 ft (KB)

Start Date: 2003.10.26

End Date: 2003.10.26

Start Time: 03:54:44

End Time: 12:16:28

Capacity: 7000.00 psig

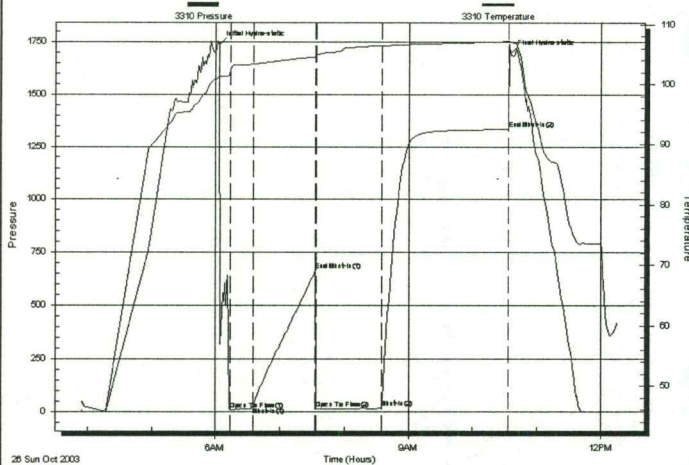
Last Calib.: 1899.12.30

Time On Btm: 2003.10.26 @ 06:03:28

Time Off Btm: 2003.10.26 @ 10:35:13

TEST COMMENT: IF-Weak blow building O.B.B. in 10min  
ISI-No blow  
FF-Strong blow O.B.B. as soon as tool opened  
FSI-No blow

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1735.60	101.24	Initial Hydro-static
10	11.84	102.41	Open To Flow (1)
32	25.42	103.39	Shut-In(1)
90	665.95	104.62	End Shut-In(1)
91	13.32	104.83	Open To Flow (2)
152	16.85	106.52	Shut-In(2)
270	1333.80	107.23	End Shut-In(2)
272	1695.27	107.18	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	Drlg mud	0.21

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

ATTN: Mike Maune

Job Ticket: 17824

**DST#: 1**

Test Start: 2003.10.26 @ 03:54:43

**Tool Information**

Drill Pipe:	Length: 3532.00 ft	Diameter: 3.80 inches	Volume: 49.54 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<b>Total Volume: 49.54 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3542.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	51.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3516.00	
Shut In Tool	5.00			3521.00	
Hydraulic tool	5.00			3526.00	
Jars	5.00			3531.00	
Safety Joint	2.00			3533.00	
Packer	4.00			3537.00	27.00 Bottom Of Top Packer
Packer	5.00			3542.00	
Stubb	1.00			3543.00	
Recorder	0.00	3310	Inside	3543.00	
Perforations	21.00			3564.00	
Recorder	0.00	13630	Outside	3564.00	
Bullnose	2.00			3566.00	24.00 Bottom Packers & Anchor

**Total Tool Length: 51.00**



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17824

**DST#: 1**

ATTN: Mike Maune

Test Start: 2003.10.26 @ 03:54:43

### 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: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 14.29 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.02 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Drig mud	0.210

Total Length: 15.00 ft

Total Volume: 0.210 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

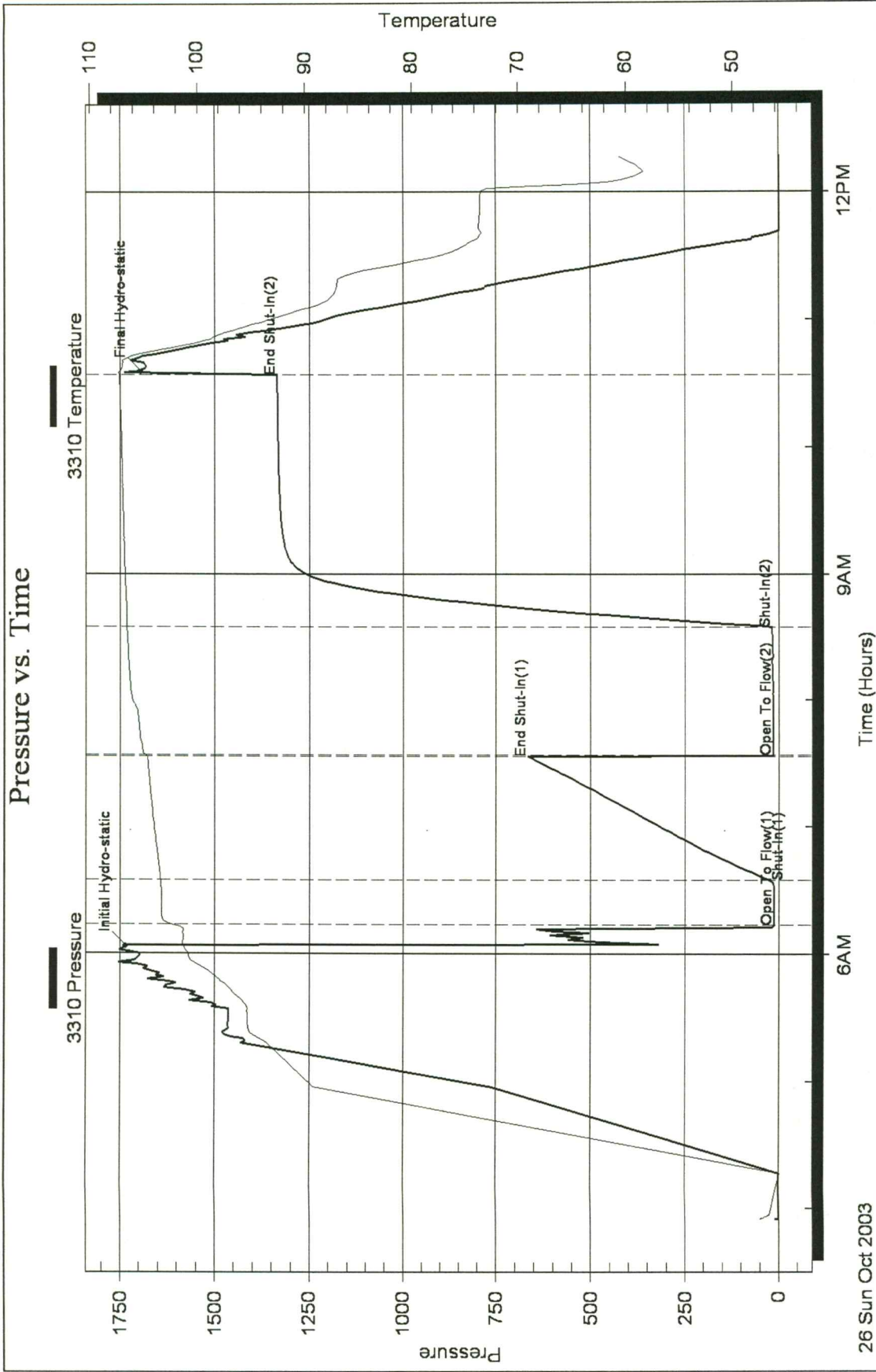
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Company**

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**22-32s-17w Barber**

**Bloom Trust A-1**

Start Date: 2003.10.26 @ 19:00:48

End Date: 2003.10.27 @ 03:22:48

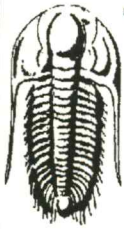
Job Ticket #: 17825                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17825

**DST#: 2**

ATTN: Mike Maune

Test Start: 2003.10.26 @ 19:00:48

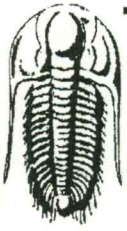
### Tool Information

Drill Pipe:	Length: 3563.00 ft	Diameter: 3.80 inches	Volume: 49.98 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 48000.00 lb
			<b>Total Volume: 49.98 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3558.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	18.00 ft			
Tool Length:	45.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3532.00	
Shut In Tool	5.00			3537.00	
Hydraulic tool	5.00			3542.00	
Jars	5.00			3547.00	
Safety Joint	2.00			3549.00	
Packer	4.00			3553.00	27.00 Bottom Of Top Packer
Packer	5.00			3558.00	
Stubb	1.00			3559.00	
Recorder	0.00	3310	Inside	3559.00	
Perforations	15.00			3574.00	
Recorder	0.00	13630	Outside	3574.00	
Bullnose	2.00			3576.00	18.00 Bottom Packers & Anchor

**Total Tool Length: 45.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17825

**DST#: 2**

ATTN: Mike Maune

Test Start: 2003.10.26 @ 19:00:48

**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:

8200 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 12.72 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.02 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
45.00	Gassy Drlg mud	0.631

Total Length: 45.00 ft      Total Volume: 0.631 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE**  
**TESTING, INC.**

# DRILL STEM TEST REPORT

**GAS RATES**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17825

**DST#: 2**

ATTN: Mike Maune

Test Start: 2003.10.26 @ 19:00:48

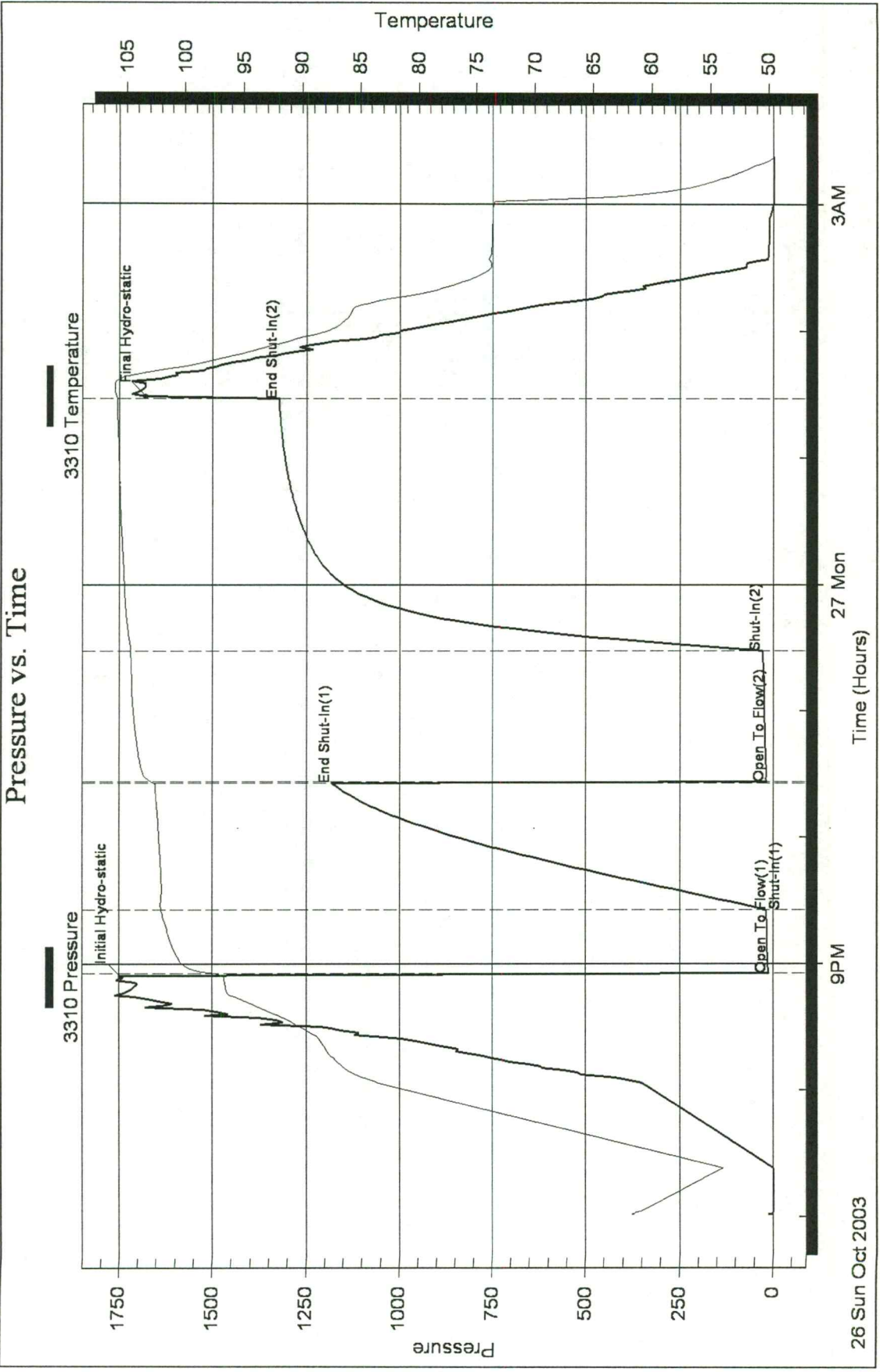
## Gas Rates Information

Temperature: 59 deg C  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
2	55	0.13	1.50	5.95
2	60	0.13	2.00	6.14

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Company**

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**22-32s-17w Barber**

**Bloom Trust A-1**

Start Date: 2003.10.27 @ 21:22:41

End Date: 2003.10.28 @ 05:20:56

Job Ticket #: 17976                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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**TRILOBITE  
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# DRILL STEM TEST REPORT

Woolsey Operating Company

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**Bloom Trust A-1**

**22-32s-17w Barber**

Job Ticket: 17976

DST#: 3

Test Start: 2003.10.27 @ 21:22:41

## GENERAL INFORMATION:

Formation: **Lansing A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:05:26

Time Test Ended: 05:20:56

Test Type: Conventional Bottom Hole

Tester: Nathan & Nick

Unit No: 16

Interval: **3744.00 ft (KB) To 3760.00 ft (KB) (TVD)**

Total Depth: 3760.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1519.00 ft (KB)

1510.00 ft (CF)

KB to GR/CF: 9.00 ft

**Serial #: 3310 Inside**

Press@RunDepth: 58.80 psig @ 3745.00 ft (KB)

Start Date: 2003.10.27

End Date:

2003.10.28

Start Time: 21:22:42

End Time:

05:20:56

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2003.10.27 @ 23:03:26

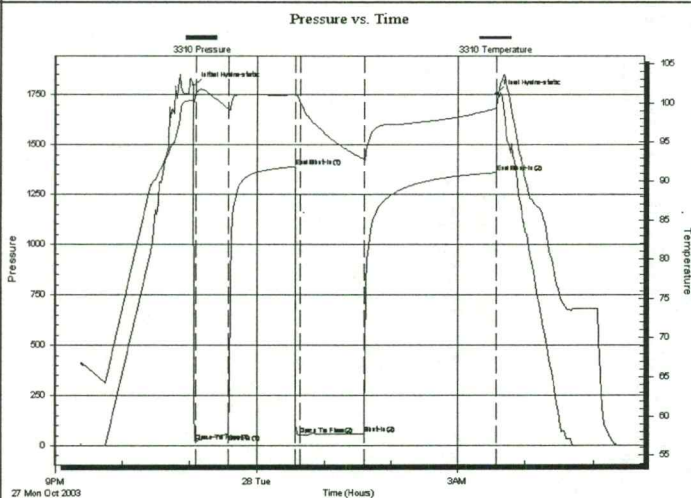
Time Off Btm: 2003.10.28 @ 03:34:11

TEST COMMENT: IF- Strong blow o.b.b. 25 sec; GTS 9 min (see gas volume report)

ISI-No Blow

FF-Strong blow GTS as soon as tool opened (see gas volume report)

FSI-No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1795.49	100.33	Initial Hydro-static
2	18.87	101.08	Open To Flow (1)
31	57.78	99.15	Shut-In(1)
90	1390.78	101.04	End Shut-In(1)
95	51.75	100.07	Open To Flow (2)
152	58.80	92.75	Shut-In(2)
271	1360.25	99.30	End Shut-In(2)
271	1753.99	99.54	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
92.00	gassy mud	1.29

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	3.00	63.74
Last Gas Rate	0.50	11.00	171.34
Max. Gas Rate	0.38	19.00	122.35



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17976

**DST#: 3**

ATTN: Mike Maune

Test Start: 2003.10.27 @ 21:22:41

### Tool Information

Drill Pipe:	Length: 3720.00 ft	Diameter: 3.80 inches	Volume: 52.18 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 52.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3744.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3718.00	
Shut In Tool	5.00			3723.00	
Hydraulic tool	5.00			3728.00	
Jars	5.00			3733.00	
Safety Joint	2.00			3735.00	
Packer	4.00			3739.00	27.00 Bottom Of Top Packer
Packer	5.00			3744.00	
Stubb	1.00			3745.00	
Recorder	0.00	3310	Inside	3745.00	
Perforations	13.00			3758.00	
Recorder	0.00	13630	Outside	3758.00	
Bullnose	2.00			3760.00	16.00 Bottom Packers & Anchor

**Total Tool Length: 43.00**



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

ATTN: Mike Maune

Job Ticket: 17976

DST#: 3

Test Start: 2003.10.27 @ 21:22:41

### 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:

9200 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 15.94 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 7500.00 ppm

Filter Cake: 0.02 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
92.00	gassy mud	1.291

Total Length: 92.00 ft      Total Volume: 1.291 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

ATTN: Mike Maune

Job Ticket: 17976

**DST#: 3**

Test Start: 2003.10.27 @ 21:22:41

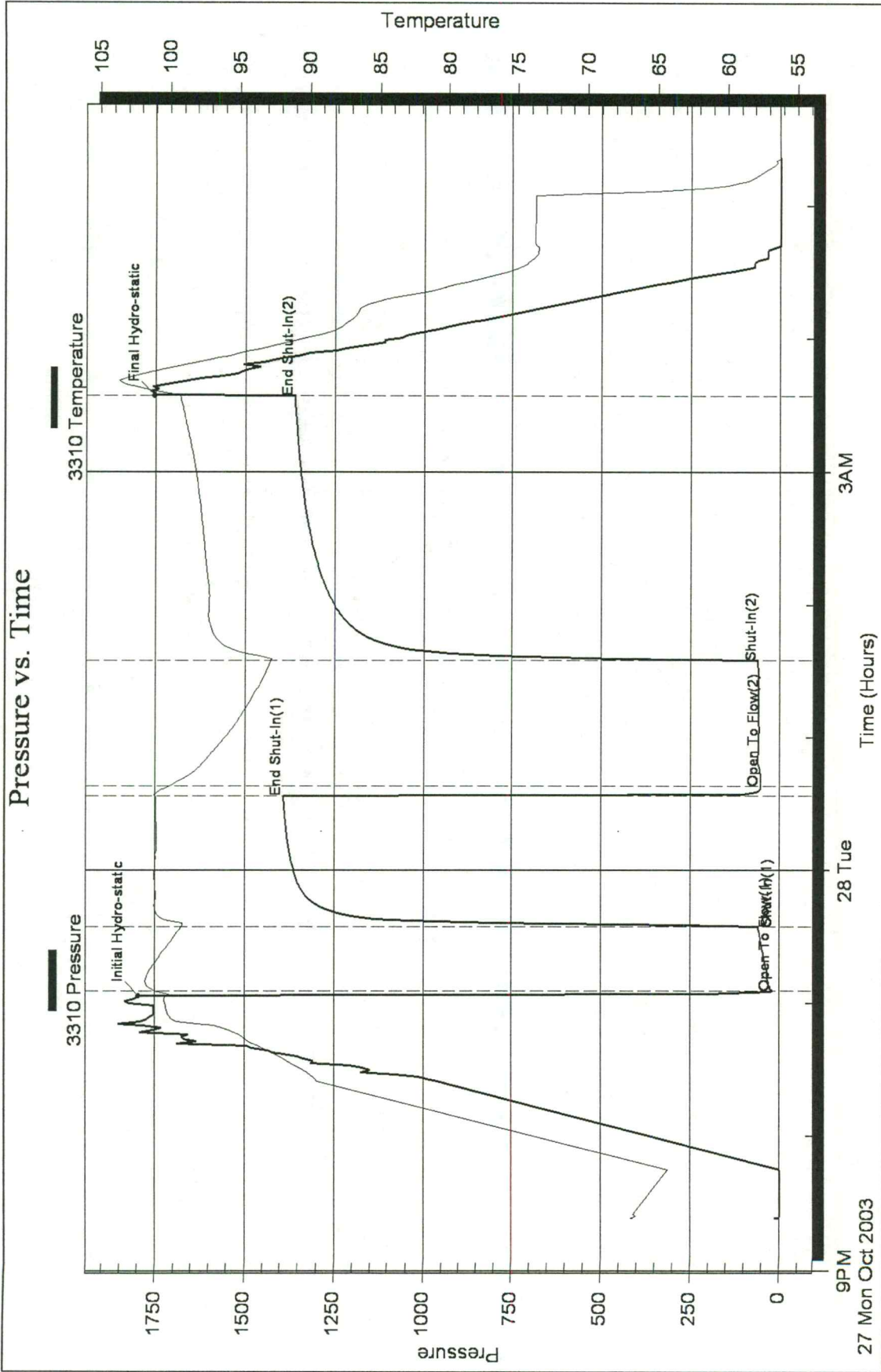
### Gas Rates Information

Temperature: 59 deg C  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
1	10	0.38	3.00	63.74
1	15	0.38	6.50	76.56
1	20	0.38	11.50	94.88
1	25	0.38	15.50	109.53
1	30	0.38	19.00	122.35
2	5	0.50	14.50	194.95
2	10	0.50	15.00	198.32
2	15	0.50	15.50	201.70
2	20	0.50	12.50	181.46
2	25	0.50	11.00	171.34
2	30	0.50	11.00	171.34
2	35	0.50	11.00	171.34
2	40	0.50	11.00	171.34
2	45	0.50	11.00	171.34
2	50	0.50	11.00	171.34
2	55	0.50	11.00	171.34
2	60	0.50	11.00	171.34

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Company**

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**22-32s-17w Barber**

**Bloom Trust A-1**

Start Date: 2003.10.30 @ 02:14:11

End Date: 2003.10.30 @ 10:12:41

Job Ticket #: 17977                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Woolsey Operating Company

Bloom Trust A-1

22-32s-17w Barber

DST # 4

Mississippi

2003.10.30



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Woolsey Operating Company

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**Bloom Trust A-1**

**22-32s-17w Barber**

Job Ticket: 17977

DST#: 4

Test Start: 2003.10.30 @ 02:14:11

## GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:13:56

Time Test Ended: 10:12:41

Test Type: Bottom Hole

Tester: Gary & Nick

Unit No: 16

Interval: **4312.00 ft (KB) To 4344.00 ft (KB) (TVD)**

Total Depth: 4344.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1519.00 ft (KB)

1510.00 ft (CF)

KB to GR/CF: 9.00 ft

**Serial #: 6770**

Inside

Press@RunDepth: 20.23 psig @ 4313.00 ft (KB)

Start Date: 2003.10.30

End Date: 2003.10.30

Start Time: 02:14:12

End Time: 10:12:41

Capacity: 7000.00 psig

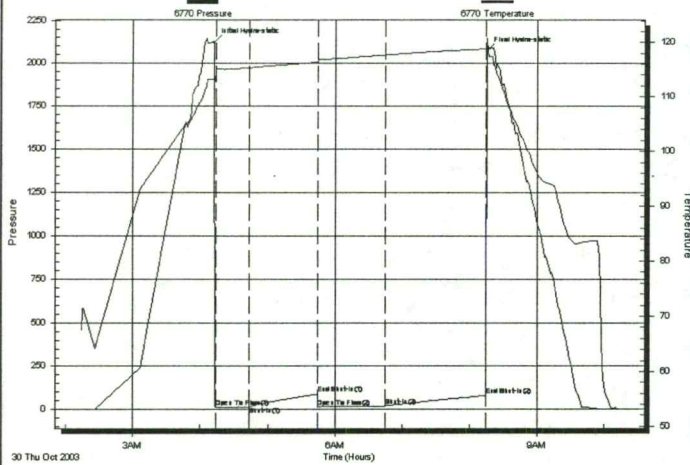
Last Calib.: 2003.10.30

Time On Btm: 2003.10.30 @ 04:12:11

Time Off Btm: 2003.10.30 @ 08:15:41

TEST COMMENT: IF- Weak blow slowly building to 5 in.  
IS- No Blow  
FF- Weak blow 3/4 to 1 in  
FS- Weak blow 1/2 slowly decreased to No Blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2124.15	113.29	Initial Hydro-static
2	12.83	114.65	Open To Flow (1)
32	16.29	115.36	Shut-In(1)
92	88.12	116.39	End Shut-In(1)
93	12.34	116.38	Open To Flow (2)
153	20.23	117.69	Shut-In(2)
242	79.61	118.80	End Shut-In(2)
244	2076.15	120.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
8.00	Mud with a few oil specs.	0.11
0.00	55 ft. of gas in pipe	0.00

Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17977

**DST#: 4**

ATTN: Mike Maune

Test Start: 2003.10.30 @ 02:14:11

### Tool Information

Drill Pipe:	Length: 4288.00 ft	Diameter: 3.80 inches	Volume: 60.15 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 56000.00 lb
			<u>Total Volume: 60.15 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4312.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	59.00 ft			
Number of Packers:	2	Diameter: 6.78 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4286.00	
Shut In Tool	5.00			4291.00	
Hydraulic tool	5.00			4296.00	
Jars	5.00			4301.00	
Safety Joint	2.00			4303.00	
Packer	4.00			4307.00	27.00 Bottom Of Top Packer
Packer	5.00			4312.00	
Stubb	1.00			4313.00	
Recorder	0.00	6770	Inside	4313.00	
Perforations	29.00			4342.00	
Recorder	0.00	13630	Outside	4342.00	
Bullnose	2.00			4344.00	32.00 Bottom Packers & Anchor

**Total Tool Length: 59.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Woolsey Operating Company  
125 N. Market, Suite 1000  
Wichita, Ks 67202  
  
ATTN: Mike Maune

**Bloom Trust A-1**  
**22-32s-17w Barber**  
Job Ticket: 17977      **DST#: 4**  
Test Start: 2003.10.30 @ 02:14:11

**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:	7600 ppm
Viscosity: 45.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 7600.00 ppm			
Filter Cake: 0.20 inches			

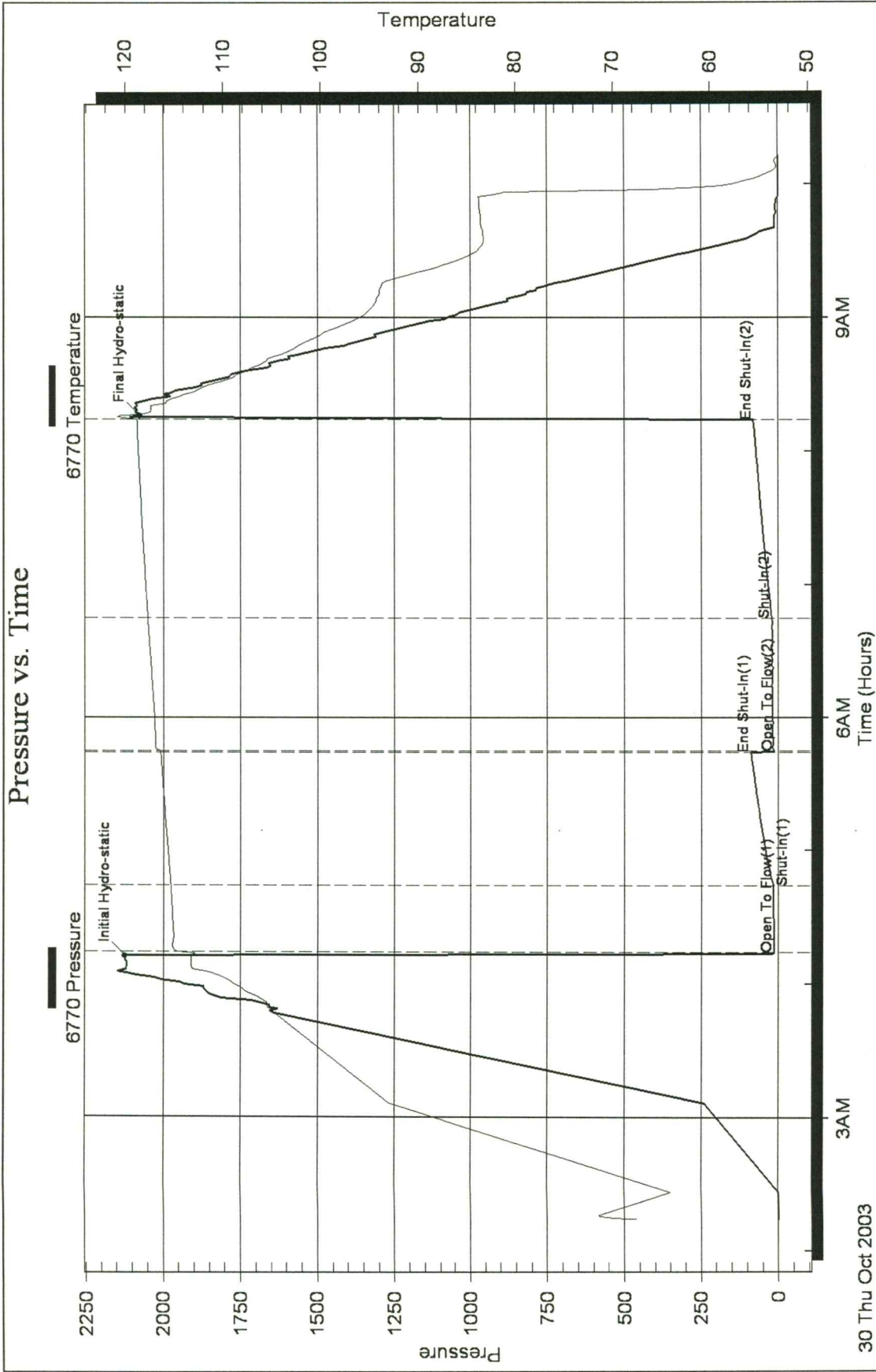
**Recovery Information**

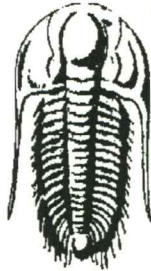
Recovery Table

Length ft	Description	Volume bbl
8.00	Mud with a few oil specs.	0.112
0.00	55 ft. of gas in pipe	0.000

Total Length: 8.00 ft      Total Volume: 0.112 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #: none  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Company**

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**22-32s-17w Barber**

**Bloom Trust A-1**

Start Date: 2003.10.30 @ 18:58:50

End Date: 2003.10.31 @ 02:41:35

Job Ticket #: 17978                      DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Woolsey Operating Company

Bloom Trust A-1

22-32s-17w Barber

DST # 5

Mississippi

2003.10.30



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Woolsey Operating Company

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**Bloom Trust A-1**

**22-32s-17w Barber**

Job Ticket: 17978

DST#: 5

Test Start: 2003.10.30 @ 18:58:50

## GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:46:20

Time Test Ended: 02:41:35

Test Type: Conventional Bottom Hole

Tester: Nick & Gary

Unit No: 16

Interval: **4346.00 ft (KB) To 4390.00 ft (KB) (TVD)**

Total Depth: 4390.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1519.00 ft (KB)

1510.00 ft (CF)

KB to GR/CF: 9.00 ft

**Serial #: 6770** Inside

Press@RunDepth: 26.09 psig @ 4347.00 ft (KB)

Start Date: 2003.10.30

End Date:

2003.10.31

Start Time: 18:59:00

End Time:

02:41:35

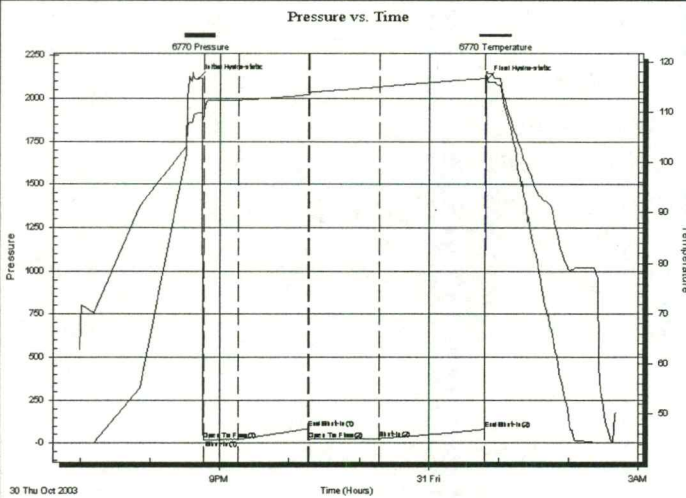
Capacity: 7000.00 psig

Last Calib.: 2003.10.31

Time On Btm: 2003.10.30 @ 20:41:50

Time Off Btm: 2003.10.31 @ 00:49:20

TEST COMMENT: IF- Weak blow slow ly building to 2 1/2 in  
IS- No Blow  
FF- Weak blow 1/2 - 2"  
FS- No Blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2116.34	109.73	Initial Hydro-static
5	20.41	109.38	Open To Flow (1)
35	20.49	112.35	Shut-In(1)
95	83.30	113.42	End Shut-In(1)
96	18.47	113.36	Open To Flow (2)
155	26.09	115.00	Shut-In(2)
246	79.44	116.66	End Shut-In(2)
248	2109.64	117.98	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	Drig Mud	0.28
0.00	40 ft Gas in pipe	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17978

**DST#: 5**

ATTN: Mike Maune

Test Start: 2003.10.30 @ 18:58:50

### Tool Information

Drill Pipe:	Length: 4352.00 ft	Diameter: 3.80 inches	Volume: 61.05 bbl	Tool Weight: 2400.00 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: 56000.00 lb
			<u>Total Volume: 61.05 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	4346.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	71.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4320.00	
Shut In Tool	5.00			4325.00	
Hydraulic tool	5.00			4330.00	
Jars	5.00			4335.00	
Safety Joint	2.00			4337.00	
Packer	4.00			4341.00	27.00 Bottom Of Top Packer
Packer	5.00			4346.00	
Stubb	1.00			4347.00	
Recorder	0.00	6770	Inside	4347.00	
Perforations	41.00			4388.00	
Recorder	0.00	13630	Outside	4388.00	
Bullnose	2.00			4390.00	44.00 Bottom Packers & Anchor

**Total Tool Length: 71.00**



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17978

**DST#: 5**

ATTN: Mike Maune

Test Start: 2003.10.30 @ 18:58:50

### 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:	6200 ppm
Viscosity: 42.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.59 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6200.00 ppm			
Filter Cake: 0.20 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Drig Mud	0.281
0.00	40 ft Gas in pipe	0.000

Total Length: 20.00 ft      Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6770

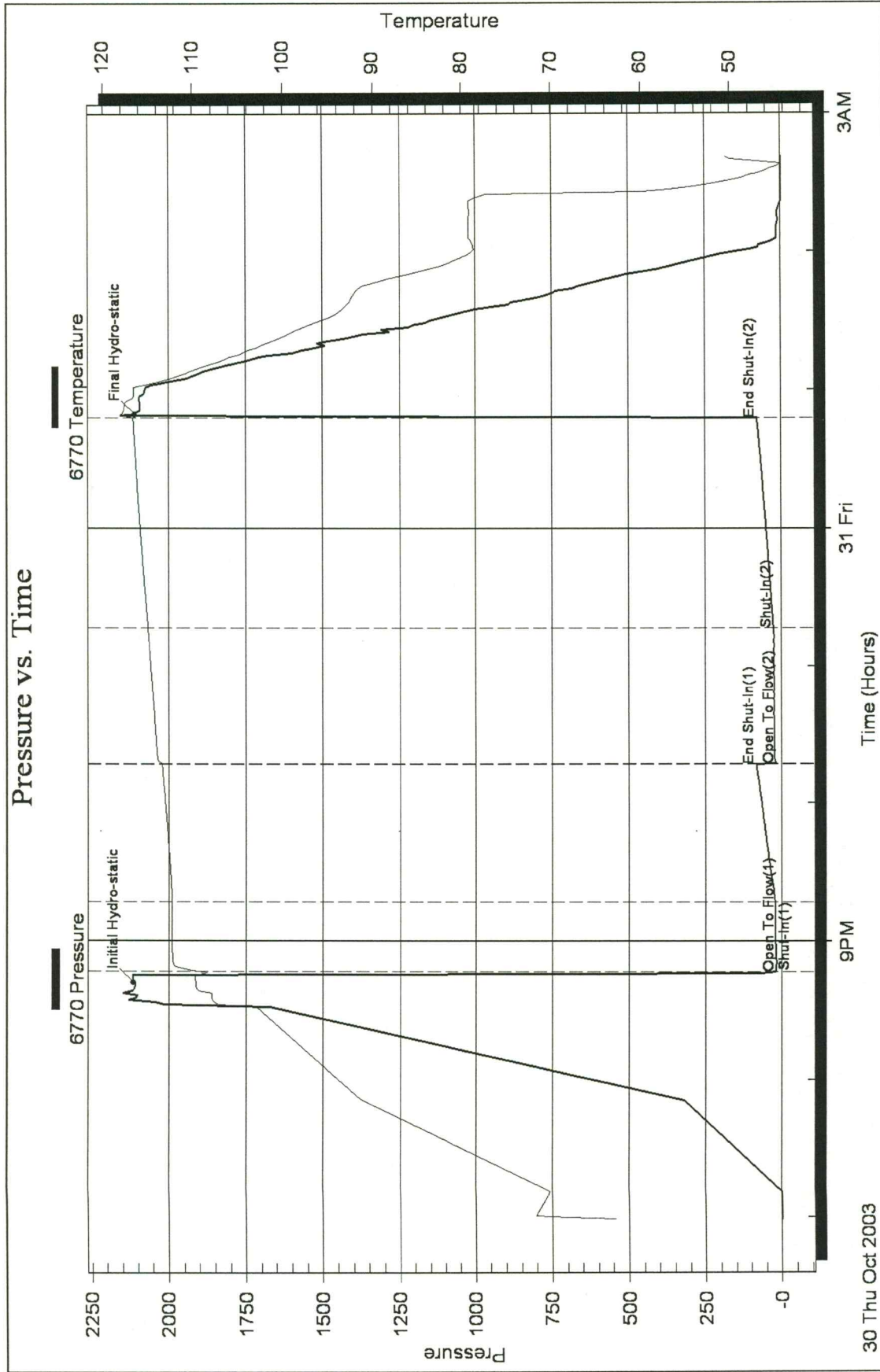
Inside

Woolsey Operating Company

22-32s-17w Barber

DST Test Number: 5

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Company**

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**22-32s-17w Barber**

**Bloom Trust A-1**

Start Date: 2003.11.01 @ 03:50:58

End Date: 2003.11.01 @ 12:04:28

Job Ticket #: 17979                      DST #: 6

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Woolsey Operating Company

125 N. Market, Suite 1000  
Wichita, Ks 67202

ATTN: Mike Maune

**Bloom Trust A-1**

**22-32s-17w Barber**

Job Ticket: 17979

DST#: 6

Test Start: 2003.11.01 @ 03:50:58

## GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:29:28

Time Test Ended: 12:04:28

Test Type: Conventional Bottom Hole

Tester: Nathan

Unit No: 16

Interval: **4602.00 ft (KB) To 4637.00 ft (KB) (TVD)**

Total Depth: 4637.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1519.00 ft (KB)

1510.00 ft (CF)

KB to GR/CF: 9.00 ft

**Serial #: 3310**

Inside

Press@RunDepth: 29.86 psig @ 4603.00 ft (KB)

Start Date: 2003.11.01

End Date: 2003.11.01

Start Time: 03:50:59

End Time: 12:04:28

Capacity: 7000.00 psig

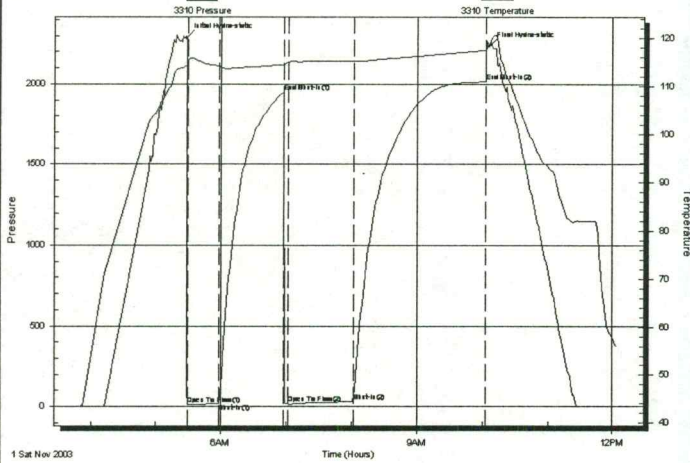
Last Calib.: 1899.12.30

Time On Btm: 2003.11.01 @ 05:27:58

Time Off Btm: 2003.11.01 @ 10:06:13

TEST COMMENT: IF-Strong blow building O.B.B. in :25sec  
IS-No blow  
FF-Strong blow O.B.B. as soon as tool opened; GTS in 2min  
FSI-No blow

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2290.24	114.25	Initial Hydro-static
2	14.52	115.24	Open To Flow (1)
31	18.55	114.14	Shut-In(1)
90	1952.26	114.58	End Shut-In(1)
94	16.89	115.01	Open To Flow (2)
154	29.86	115.20	Shut-In(2)
275	2015.24	117.51	End Shut-In(2)
279	2235.72	118.95	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
35.00	OCM 90% mud 8% oil 2% gas	0.49

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	1.50	5.95
Last Gas Rate	0.13	5.50	7.45
Max. Gas Rate	0.13	5.50	7.45



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17979

**DST#: 6**

ATTN: Mike Maune

Test Start: 2003.11.01 @ 03:50:58

### Tool Information

Drill Pipe:	Length: 4602.00 ft	Diameter: 3.80 inches	Volume: 64.55 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<b>Total Volume: 64.55 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	4602.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	62.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4576.00	
Shut In Tool	5.00			4581.00	
Hydraulic tool	5.00			4586.00	
Jars	5.00			4591.00	
Safety Joint	2.00			4593.00	
Packer	4.00			4597.00	27.00 Bottom Of Top Packer
Packer	5.00			4602.00	
Stubb	1.00			4603.00	
Recorder	0.00	3310	Inside	4603.00	
Perforations	32.00			4635.00	
Recorder	0.00	13630	Outside	4635.00	
Bullnose	2.00			4637.00	35.00 Bottom Packers & Anchor

**Total Tool Length: 62.00**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17979

**DST#: 6**

ATTN: Mike Maune

Test Start: 2003.11.01 @ 03:50:58

**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: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.02 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
35.00	OCM 90%mud 8%oil 2%gas	0.491

Total Length: 35.00 ft      Total Volume: 0.491 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

Woolsey Operating Company

**Bloom Trust A-1**

125 N. Market, Suite 1000  
Wichita, Ks 67202

**22-32s-17w Barber**

Job Ticket: 17979

**DST#: 6**

ATTN: Mike Maune

Test Start: 2003.11.01 @ 03:50:58

### Gas Rates Information

Temperature: 59 deg C  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
2	15	0.13	1.50	5.95
2	20	0.13	2.50	6.33
2	25	0.13	3.00	6.51
2	30	0.13	3.50	6.70
2	35	0.13	4.00	6.89
2	40	0.13	4.50	7.07
2	45	0.13	4.50	7.07
2	50	0.13	5.00	7.26
2	60	0.13	5.50	7.45

### Pressure vs. Time

