

CONFIDENTIAL

**31-32s-12w
ORIGINAL**

KCC
APR 06 2004
CONFIDENTIAL



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

ORIGINAL
Prepared for Woolsey Operating Company
125 N. Market Suite 1000
Wichita, Ks 67202

CONFIDENTIAL
ATTN: Wes Hansen

31-32s-12w Barber

KCC
Lonker #1
APR 06 2004

Start Date: 2003.12.20 @ 02:15:00

End Date: 2003.12.20 @ 11:12:00

Job Ticket #: 17999

DST #: 1

RECEIVED
KANSAS CORPORATION COMMISSION

APR 06 2004

CONSERVATION DIVISION
WICHITA, KS

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Woolsey Operating Company

Lonker #1

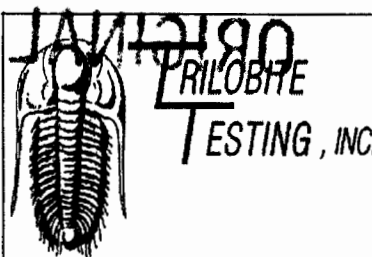
31-32s-12w Barber

DST # 1

Douglas

2003.12.20

W 51-258-12



DRILL STEM TEST REPORT

Woolsey Operating Company

Lonker #1

125 N. Market Suite 1000
Wichita, Ks 67202

31-32s-12w Barber

Job Ticket: 17999

DST#: 1

ATTN: Wes Hansen

Test Start: 2003.12.20 @ 02:15:00

GENERAL INFORMATION:

Formation: Douglas

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:17:38

Time Test Ended: 11:02:56

Test Type: Conventional Bottom Hole

Tester: Nathan

Unit No: 16

Interval: 3912.00 ft (KB) To 3980.00 ft (KB) (TVD)

Total Depth: 3980.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1801.00 ft (KB)

1793.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6751

Inside

Press@RunDepth: 232.77 psig @ 3947.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2003.12.20

End Date: 2003.12.20

Last Calib.: 1899.12.30

Start Time: 02:15:08

End Time: 11:02:56

Time On Btm: 2003.12.20 @ 04:13:26

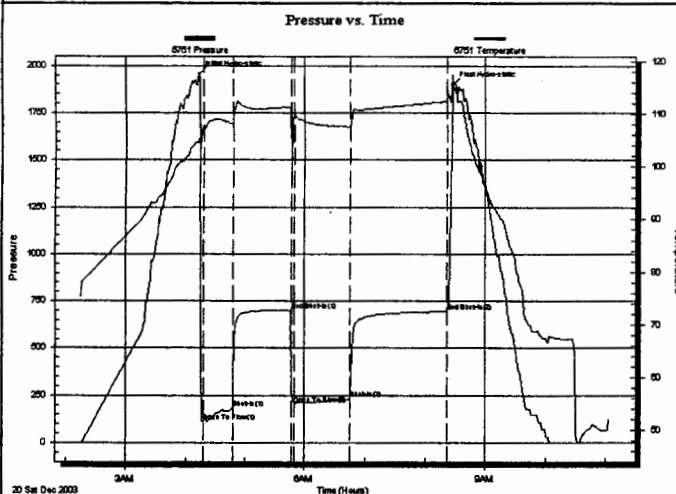
Time Off Btm: 2003.12.20 @ 08:26:43

TEST COMMENT: IF- Strong blow O.B.B. in :35 seconds; GTS in 9 minutes

IS- Strong blow O.B.B.; never bled off completely

FF- Strong blow O.B.B. as soon as tool opened

FSI- Strong blow O.B.B.; never bled off



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1953.57	105.30	Initial Hydro-static
5	109.46	107.74	Open To Flow (1)
35	180.68	107.94	Shut-In(1)
93	701.33	111.37	End Shut-In(1)
97	204.30	109.33	Open To Flow (2)
153	232.77	107.57	Shut-In(2)
248	694.54	112.36	End Shut-In(2)
254	1897.91	116.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	GCMW 95%mud 3%gas 2%w ater	3.48
62.00	GCMW 78%w ater 12%gas 10%mud	0.87
0.00	3472 feet of gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	8.00	82.06
Last Gas Rate	0.75	25.50	623.23
Max. Gas Rate	0.50	28.50	289.39

CONFIDENTIAL**ORIGINAL**
TRILOBITE
TESTING, INC.
DRILL STEM TEST REPORT
TOOL DIAGRAM

Woolsey Operating Company

Lonker #1

125 N. Market Suite 1000
Wichita, Ks 67202

31-32s-12w Barber

Job Ticket: 17999

DST#: 1

ATTN: Wes Hansen

Test Start: 2003.12.20 @ 02:15:00

Tool Information

Drill Pipe:	Length: 3913.00 ft	Diameter: 3.80 inches	Volume: 54.89 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: 84000.00 lb
			Total Volume: 54.89 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3912.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	95.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

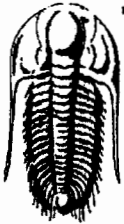
Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3886.00	
Shut In Tool	5.00			3891.00	
Hydraulic tool	5.00			3896.00	
Jars	5.00			3901.00	
Safety Joint	2.00			3903.00	
Packer	4.00			3907.00	27.00 Bottom Of Top Packer
Packer	5.00			3912.00	
Stubb	1.00			3913.00	
Change Over Sub	1.00			3914.00	
Blank Spacing	32.00			3946.00	
Change Over Sub	1.00			3947.00	
Recorder	0.00	6751	Inside	3947.00	
Perforations	30.00			3977.00	
Recorder	0.00	13630	Outside	3977.00	
Bullnose	3.00			3980.00	68.00 Bottom Packers & Anchor

Total Tool Length: 95.00

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1/11/04

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT		FLUID SUMMARY												
	Woolsey Operating Company 125 N. Market Suite 1000 Wichita, Ks 67202 ATTN: Wes Hansen		Lonker #1 31-32s-12w Barber Job Ticket: 17999 DST#: 1 Test Start: 2003.12.20 @ 02:15:00												
Mud and Cushion Information															
Mud Type: Gel Chem Mud Weight: 9.00 lb/gal Viscosity: 45.00 sec/qt Water Loss: 11.90 in ³ Resistivity: 0.00 ohm.m Salinity: 5000.00 ppm Filter Cake: 0.02 inches		Cushion Type: Cushion Length: ft Cushion Volume: bbl Gas Cushion Type: Gas Cushion Pressure: psig													
		Oil API: deg API Water Salinity: 60000 ppm													
Recovery Information															
Recovery Table															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Length ft</th> <th style="width: 60%;">Description</th> <th style="width: 25%;">Volume bbl</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">248.00</td> <td>GCMW 95% mud 3% gas 2% water</td> <td style="text-align: center;">3.479</td> </tr> <tr> <td style="text-align: center;">62.00</td> <td>GCMW 78% water 12% gas 10% mud</td> <td style="text-align: center;">0.870</td> </tr> <tr> <td style="text-align: center;">0.00</td> <td>3472 feet of gas in pipe</td> <td style="text-align: center;">0.000</td> </tr> </tbody> </table>				Length ft	Description	Volume bbl	248.00	GCMW 95% mud 3% gas 2% water	3.479	62.00	GCMW 78% water 12% gas 10% mud	0.870	0.00	3472 feet of gas in pipe	0.000
Length ft	Description	Volume bbl													
248.00	GCMW 95% mud 3% gas 2% water	3.479													
62.00	GCMW 78% water 12% gas 10% mud	0.870													
0.00	3472 feet of gas in pipe	0.000													
Total Length: 310.00 ft		Total Volume: 4.349 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

Lonker #1

125 N. Market Suite 1000
Wichita, Ks 67202

31-32s-12w Barber

Job Ticket: 17999

DST#: 1

ATTN: Wes Hansen

Test Start: 2003.12.20 @ 02:15:00

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 (m³/d)
1	10	0.38	8.00	82.06
1	15	0.38	25.00	144.33
1	20	0.50	28.50	289.39
1	25	0.75	12.00	412.36
2	5	0.75	16.00	474.84
2	10	0.75	25.00	615.42
2	20	0.75	25.00	615.42
2	30	0.75	24.50	607.61
2	40	0.75	24.50	607.61
2	50	0.75	25.50	623.23
2	60	0.75	25.50	623.23

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ORIGINAL

DST Test Number: 1

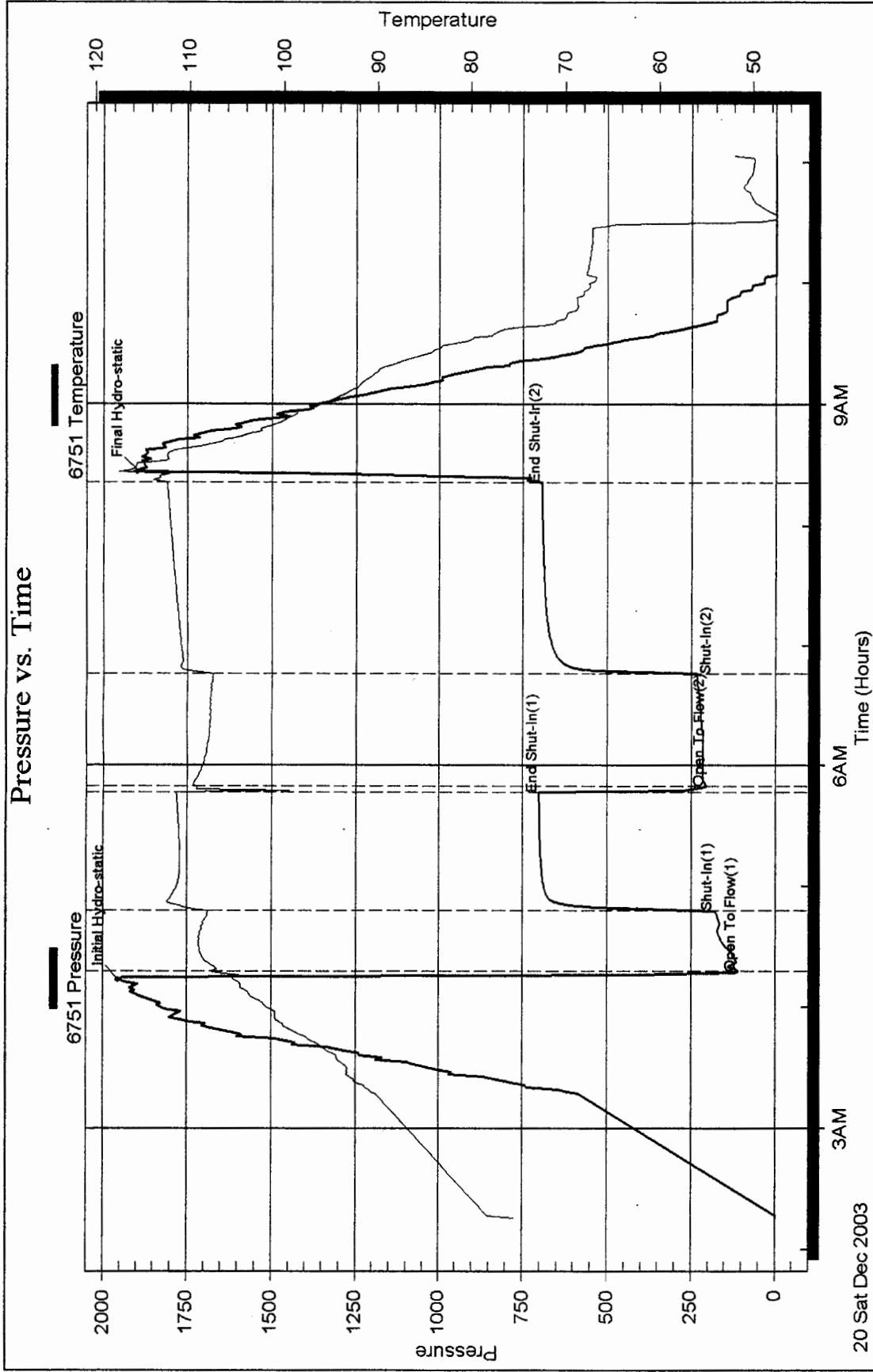
31-32s-12w Barber

Woolsey Operating Company

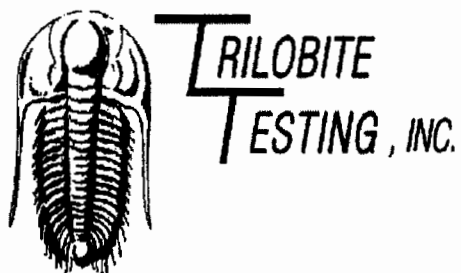
Inside

Serial #: 6751

Pressure vs. Time



CONFIDENTIAL



DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Company**

125 N. Market Suite 1000
Wichita, Ks 67202

ATTN: Wes Hansen

31-32s-12w Barber

Lonker #1

Start Date: 2003.12.21 @ 23:29:39

End Date: 2003.12.22 @ 09:15:24

Job Ticket #: 18000 DST #: 2

Trilobite Testing, Inc

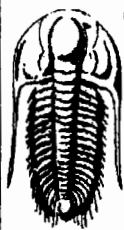
PO Box 362 Hays, KS 67601

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

KCC

APR 05 2004

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Woolsey Operating Company

125 N. Market Suite 1000
Wichita, Ks 67202

ATTN: Wes Hansen

Lonker #1

31-32s-12w Barber

Job Ticket: 18000

DST#: 2

Test Start: 2003.12.21 @ 23:29:39

GENERAL INFORMATION:

Formation: **Swope**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:25:54

Time Test Ended: 09:15:24

Test Type: Conventional Bottom Hole

Tester: Nathan

Unit No: 16

Interval: **4466.00 ft (KB) To 4490.00 ft (KB) (TVD)**

Total Depth: 4490.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1801.00 ft (KB)

1793.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6751

Inside

Press@RunDepth: 149.61 psig @ 4467.00 ft (KB)

Start Date: 2003.12.21

End Date:

2003.12.22

Start Time: 23:29:49

End Time:

09:15:23

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2003.12.22 @ 02:22:39

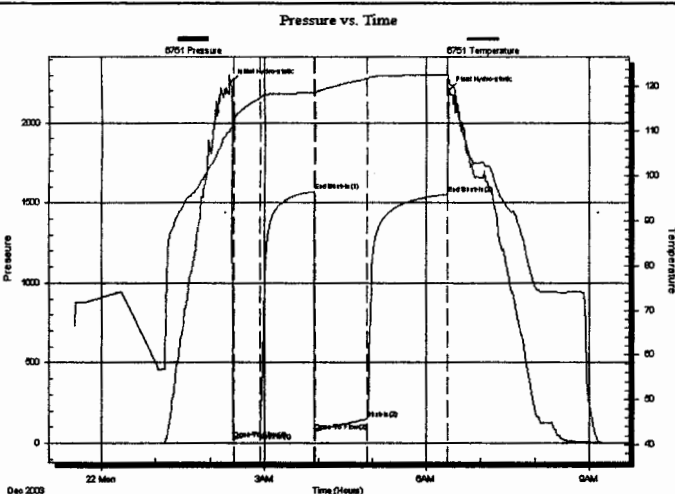
Time Off Btm: 2003.12.22 @ 06:25:39

TEST COMMENT: IF- Good blow building O.B.B. in 2 minutes 20 seconds

ISI- No blow

FF- Good blow building O.B.B. in 65 seconds; GTS in 29 minutes

FSI- Weak blow building to 1.5 inches



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2252.54	110.66	Initial Hydro-static
4	25.12	112.25	Open To Flow (1)
33	68.07	117.42	Shut-In (1)
93	1571.37	118.64	End Shut-In (1)
94	75.25	118.22	Open To Flow (2)
152	149.61	121.77	Shut-In (2)
242	1553.54	122.61	End Shut-In (2)
243	2207.81	120.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
186.00	56% gas 30% mud 8% water 6% oil	2.61
62.00	71% gas 15% oil 9% water 5% mud	0.87
124.00	92% water 6% mud 2% gas	1.74
0.00	4076 feet of gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	1.50	5.95
Last Gas Rate	0.13	2.00	6.14

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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Company

Lonker #1

125 N. Market Suite 1000
Wichita, Ks 67202

31-32s-12w Barber

Job Ticket: 18000

DST#: 2

ATTN: Wes Hansen

Test Start: 2003.12.21 @ 23:29:39

Tool Information

Drill Pipe:	Length: 4448.00 ft	Diameter: 3.80 inches	Volume: 62.39 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:	58000.00 lb
			Total Volume: 62.39 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	4466.00 ft			Final	52000.00 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			4440.00	
Shut In Tool	5.00			4445.00	
Hydraulic tool	5.00			4450.00	
Jars	5.00			4455.00	
Safety Joint	2.00			4457.00	
Packer	4.00			4461.00	27.00 Bottom Of Top Packer
Packer	5.00			4466.00	
Stubb	1.00			4467.00	
Recorder	0.00	6751	Inside	4467.00	
Perforations	20.00			4487.00	
Recorder	0.00	13630	Outside	4487.00	
Bullnose	3.00			4490.00	24.00 Bottom Packers & Anchor

Total Tool Length: 51.00

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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Company

Lonker #1

125 N. Market Suite 1000
Wichita, Ks 67202

31-32s-12w Barber

Job Ticket: 18000

DST#: 2

ATTN: Wes Hansen

Test Start: 2003.12.21 @ 23:29:39

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:

47000 ppm

Viscosity: 43.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.92 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
186.00	56%gas 30%mud 8%water 6%oil	2.609
62.00	71%gas 15%oil 9%water 5%mud	0.870
124.00	92%water 6%mud 2%gas	1.739
0.00	4076 feet of gas in pipe	0.000

Total Length: 372.00 ft

Total Volume: 5.218 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Woolsey Operating Company

Lonker #1

125 N. Market Suite 1000
Wichita, Ks 67202

31-32s-12w Barber

Job Ticket: 18000

DST#: 2

ATTN: Wes Hansen

Test Start: 2003.12.21 @ 23:29:39

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 ³ /d)
2	50	0.13	1.50	5.95
2	60	0.13	2.00	6.14

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APR 06 2004

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Serial #: 6751

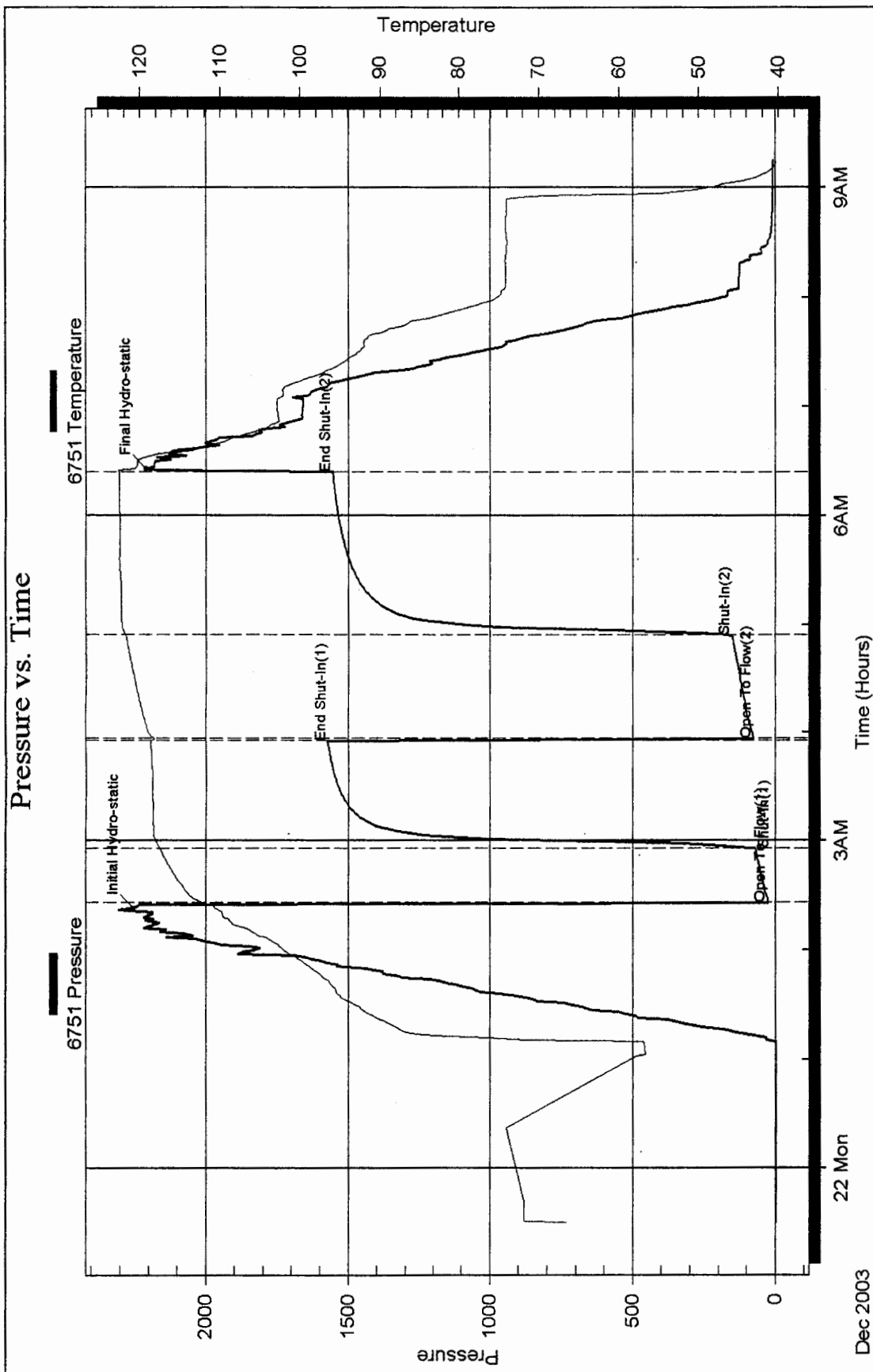
Inside

Woolsey Operating Company

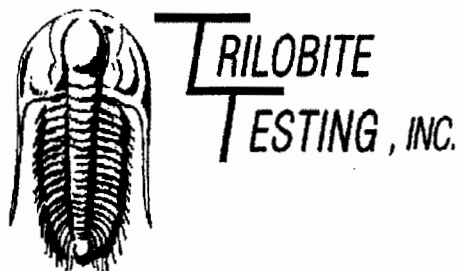
31-32s-12w Barber

DST Test Number: 2

Pressure vs. Time



CONFIDENTIAL



DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Company**

125 N. Market Suite 1000
Wichita, Ks 67202

ATTN: Wes Hansen

31-32s-12w Barber

Lonker #1

Start Date: 2003.12.23 @ 06:50:21

End Date: 2003.12.23 @ 15:55:51

Job Ticket #: 18001 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

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APR 05 2004

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Printed: 2003.12.30 @ 10:34:50 Page 1

Woolsey Operating Company

Lonker #1

31-32s-12w Barber

DST # 3

Mississippi

2003.12.23



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Company

125 N. Market Suite 1000
Wichita, Ks 67202

ATTN: Wes Hansen

Lonker #1

31-32s-12w Barber

Job Ticket: 18001

DST#: 3

Test Start: 2003.12.23 @ 06:50:21

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:06:36

Time Test Ended: 15:55:51

Test Type: Conventional Bottom Hole

Tester: Nathan

Unit No: 16

Interval: **4614.00 ft (KB) To 4652.00 ft (KB) (TVD)**

Total Depth: 4652.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1801.00 ft (KB)

1793.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6751

Inside

Press@RunDepth: 104.21 psig @ 4615.00 ft (KB)

Start Date: 2003.12.23

End Date:

2003.12.23

Start Time: 06:50:31

End Time:

15:55:50

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2003.12.23 @ 09:00:36

Time Off Btm: 2003.12.23 @ 13:33:36

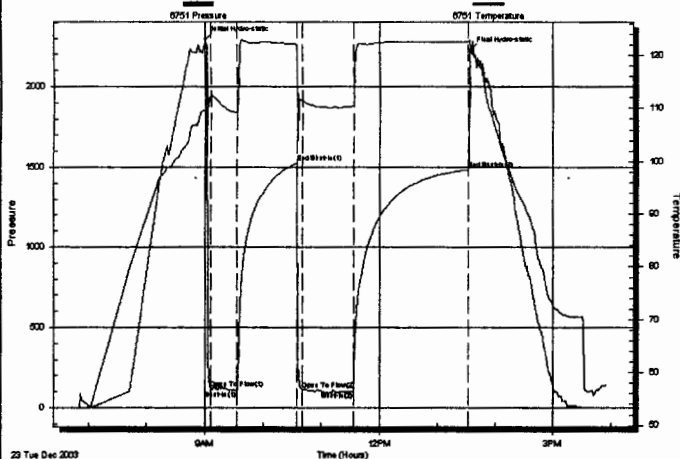
TEST COMMENT: IF- Strong blow O.B.B. in :20 seconds; GTS in 3 minutes 40 seconds

IS- Weak surface blow building to 1/2 inch

FF- Strong blow O.B.B. as soon as tool opened

FSI-Weak blow building to 1 inch

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2292.20	109.59	Initial Hydro-static
6	119.46	112.39	Open To Flow (1)
33	107.15	109.13	Shut-In (1)
95	1528.25	122.04	End Shut-In (1)
101	111.97	111.33	Open To Flow (2)
153	104.21	110.38	Shut-In (2)
272	1485.76	122.50	End Shut-In (2)
273	2225.79	122.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
186.00	GOCM 60%oil 22%gas 18%mud	2.61
62.00	GOCM 45%oil 40%gas 15%mud	0.87
0.00	4659 feet of gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.75	9.00	365.50
Last Gas Rate	0.63	6.00	218.29
Max. Gas Rate	0.75	15.00	459.22

CONFIDENTIAL



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Company

125 N. Market Suite 1000
Wichita, Ks 67202

ATTN: Wes Hansen

Lonker #1

31-32s-12w Barber

Job Ticket: 18001

DST#: 3

Test Start: 2003.12.23 @ 06:50:21

Tool Information

Drill Pipe:	Length: 4607.00 ft	Diameter: 3.80 inches	Volume: 64.62 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: 74000.00 lb
			Total Volume: 64.62 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4614.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	38.00 ft			
Tool Length:	65.00 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			4588.00	
Shut In Tool	5.00			4593.00	
Hydraulic tool	5.00			4598.00	
Jars	5.00			4603.00	
Safety Joint	2.00			4605.00	
Packer	4.00			4609.00	27.00 Bottom Of Top Packer
Packer	5.00			4614.00	
Stubb	1.00			4615.00	
Recorder	0.00	6751	Inside	4615.00	
Perforations	34.00			4649.00	
Recorder	0.00	13630	Outside	4649.00	
Bullnose	3.00			4652.00	38.00 Bottom Packers & Anchor

Total Tool Length: 65.00

KCC

APR 06 2004

CONFIDENTIAL



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Company

Lonker #1

125 N. Market Suite 1000
Wichita, Ks 67202

31-32s-12w Barber

Job Ticket: 18001

DST#: 3

ATTN: Wes Hansen

Test Start: 2003.12.23 @ 06:50:21

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: 45.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.37 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
186.00	GOCM 60%oil 22%gas 18%mud	2.609
62.00	GOCM 45%oil 40%gas 15%mud	0.870
0.00	4659 feet of gas in pipe	0.000

Total Length: 248.00 ft

Total Volume: 3.479 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Woolsey Operating Company

Lonker #1

125 N. Market Suite 1000
Wichita, Ks 67202

31-32s-12w Barber

Job Ticket: 18001

DST#: 3

ATTN: Wes Hansen

Test Start: 2003.12.23 @ 06:50:21

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 (m³/d)
1	10	0.75	9.00	365.50
1	15	0.75	8.50	357.69
1	20	0.75	7.00	334.26
2	25	0.75	6.00	318.64
2	30	0.75	5.50	310.83
2	10	0.75	15.00	459.22
2	20	0.75	7.50	342.07
2	30	0.75	5.50	310.83
2	40	0.75	3.00	271.79
2	50	0.63	6.00	218.29
2	60	0.63	6.00	218.29

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Serial #: 6751

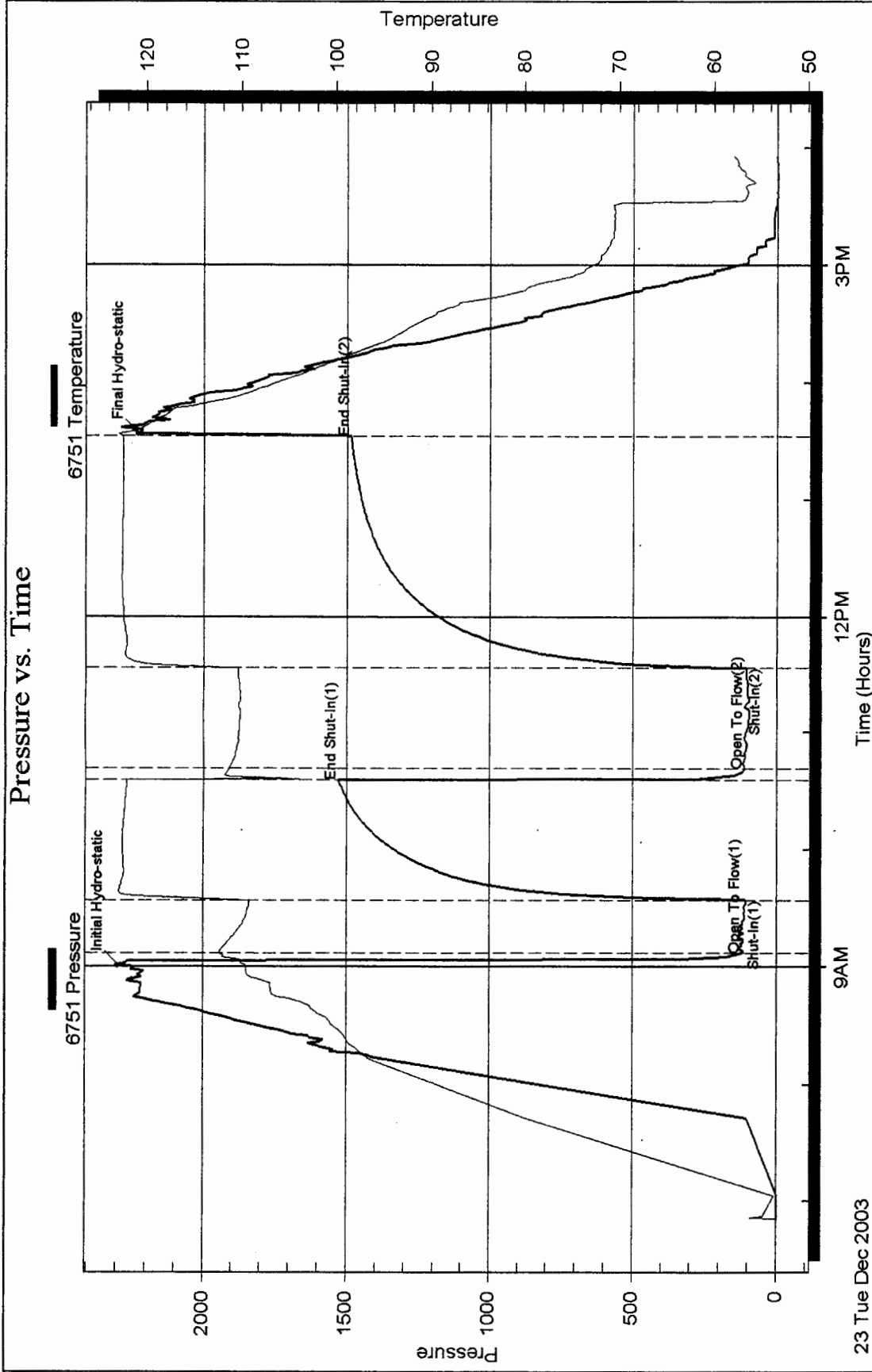
Inside

Woodsey Operating Company

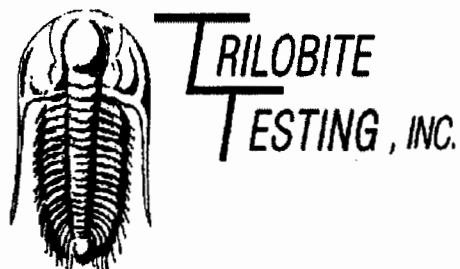
31-32s-12w Barber

DST Test Number: 3

Pressure vs. Time



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DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Company**

125 N. Market Suite 1000
Wichita, Ks 67202

ATTN: Wes Hansen

31-32s-12w Barber

Lonker #1

Start Date: 2003.12.27 @ 19:39:25

End Date: 2003.12.28 @ 04:11:40

Job Ticket #: 18002 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

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Printed: 2003.12.30 @ 10:35:11 Page 1

Woolsey Operating Company

Lonker #1

31-32s-12w Barber

DST # 4

Mississippi

2003.12.27



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Company

125 N. Market Suite 1000
Wichita, Ks 67202

ATTN: Wes Hansen

Lonker #1

31-32s-12w Barber

Job Ticket: 18002

DST#: 4

Test Start: 2003.12.27 @ 19:39:25

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:23:40

Time Test Ended: 04:11:40

Test Type: Conventional Bottom Hole

Tester: Nathan

Unit No: 16

Interval: **4652.00 ft (KB) To 4673.00 ft (KB) (TVD)**

Total Depth: 4673.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1801.00 ft (KB)

1793.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6751

Inside

Press@RunDepth: 22.94 psig @ 4653.00 ft (KB)

Start Date: 2003.12.27

End Date:

2003.12.28

Start Time: 19:39:35

End Time:

04:11:39

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2003.12.27 @ 21:20:40

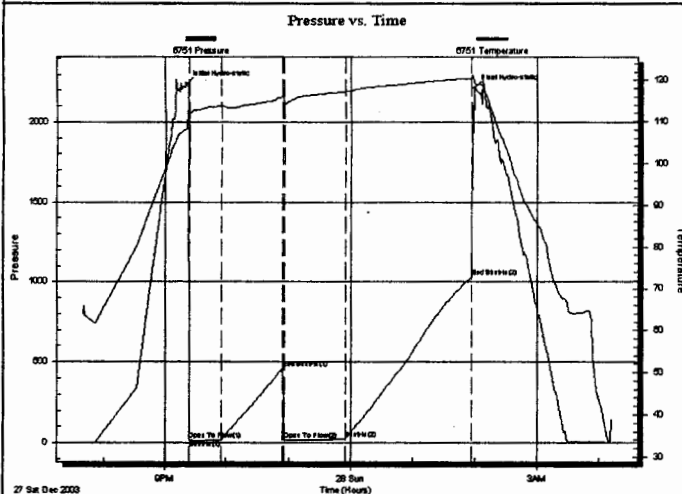
Time Off Btm: 2003.12.28 @ 01:59:40

TEST COMMENT: IF- Good blow building O.B.B. in 13minutes 20seconds

ISI- Weak surface blow throughout

FF- Good blow O.B.B. as soon as tool opened

FSI- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2240.80	108.25	Initial Hydro-static
3	18.04	112.22	Open To Flow (1)
35	16.57	113.74	Shut-In (1)
93	459.91	116.07	End Shut-In (1)
95	17.17	114.22	Open To Flow (2)
154	22.94	117.22	Shut-In (2)
276	1032.35	120.41	End Shut-In (2)
279	2216.83	119.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
32.00	OCM 58% mud 42% oil	0.45
0.00	588 feet of gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Company

Lonker #1

125 N. Market Suite 1000
Wichita, Ks 67202

31-32s-12w Barber

Job Ticket: 18002

DST#: 4

ATTN: Wes Hansen

Test Start: 2003.12.27 @ 19:39:25

Tool Information

Drill Pipe:	Length: 4640.00 ft	Diameter: 3.80 inches	Volume: 65.09 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: 90000.00 lb
			<u>Total Volume: 65.09 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4652.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	48.00 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			4626.00	
Shut In Tool	5.00			4631.00	
Hydraulic tool	5.00			4636.00	
Jars	5.00			4641.00	
Safety Joint	2.00			4643.00	
Packer	4.00			4647.00	27.00 Bottom Of Top Packer
Packer	5.00			4652.00	
Stubb	1.00			4653.00	
Recorder	0.00	6751	Inside	4653.00	
Perforations	17.00			4670.00	
Recorder	0.00	13630	Outside	4670.00	
Bullnose	3.00			4673.00	21.00 Bottom Packers & Anchor

Total Tool Length: 48.00

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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Company

Lonker #1

125 N. Market Suite 1000
Wichita, Ks 67202

31-32s-12w Barber

Job Ticket: 18002

DST#: 4

ATTN: Wes Hansen

Test Start: 2003.12.27 @ 19:39:25

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: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

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 bbl
32.00	OCM 58% mud 42% oil	0.449
0.00	588 feet of gas in pipe	0.000

Total Length: 32.00 ft

Total Volume: 0.449 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

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DST Test Number: 4

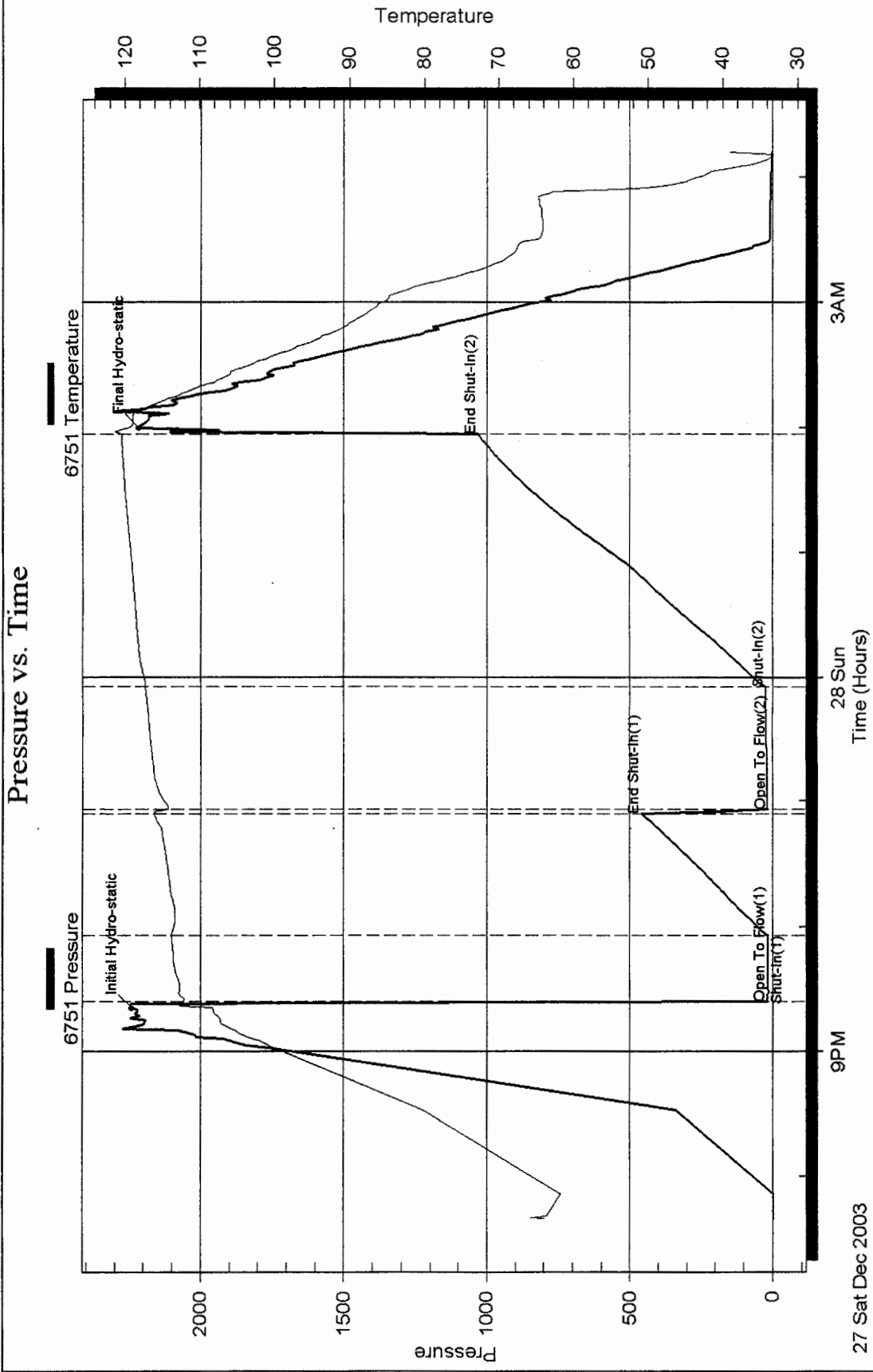
31-32s-12w Barber

Woolsey Operating Company

Inside

Serial #: 6751

Pressure vs. Time



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