15-095-21868



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Co. LLC**

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

34-29s-9w-Kingman

Bohrer #3

Start Date: 2004.03.19 @ 07:15:22

End Date: 2004.03.19 @ 12:50:07

Job Ticket #: 18617 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

RECEIVED
KANSAS CORPORATION COMMISSION

JUL 17 2008

CONSERVATION DIVISION
WICHITA, KS

DRILL STEM TEST REPORT

Woolsey Operating Co. LLC

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

Bohrer #3

34-29s-9w-Kingman

Job Ticket: 18617 **DST#: 1**

Test Start: 2004.03.19 @ 07:15:22

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened:
Time Test Ended: 12:50:07

Test Type: Conventional Bottom Hole
Tester: Jason Mclemore
Unit No: 24

Interval: 4176.00 ft (KB) To 4186.00 ft (KB) (TVD)
Total Depth: 4186.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

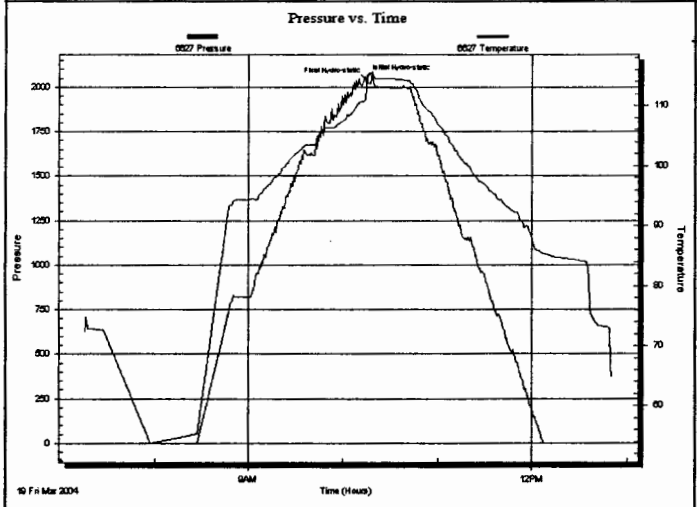
Reference Elevations: 1589.00 ft (KB)
1578.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6627 **Inside**

Press@RunDepth: psig @ 4178.00 ft (KB)
Start Date: 2004.03.19 End Date: 2004.03.19
Start Time: 07:15:24 End Time: 12:50:07

Capacity: 7000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2004.03.19 @ 10:14:22
Time Off Btm: 2004.03.19 @ 10:15:22

TEST COMMENT: IFP- Packer Failure, Wont Seat



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2048.72	111.03	Initial Hydro-static
1	2029.83	115.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	Mud	1.82

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Co. LLC

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

Bohrer #3

34-29s-9w-Kingman

Job Ticket: 18617 **DST#: 1**

Test Start: 2004.03.19 @ 07:15:22

Tool Information

Drill Pipe:	Length:	4158.00 ft	Diameter:	3.80 inches	Volume:	58.33 bbl	Tool Weight:	1800.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight set on Packer:	36000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:	57000.00 lb
					Total Volume:	58.33 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		10.00 ft					String Weight: Initial	56000.00 lb
Depth to Top Packer:		4176.00 ft					Final	57000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		10.00 ft						
Tool Length:		38.00 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			4149.00		
Shut In Tool	5.00			4154.00		
Hydraulic tool	5.00			4159.00		
Jars	5.00			4164.00		
Safety Joint	2.00			4166.00		
Packer	5.00			4171.00	28.00	Bottom Of Top Packer
Packer	5.00			4176.00		
Stubb	1.00			4177.00		
Perforations	1.00			4178.00		
Recorder	0.00	6627	Inside	4178.00		
Perforations	5.00			4183.00		
Recorder	0.00	13252	Outside	4183.00		
Bullnose	3.00			4186.00	10.00	Bottom Packers & Anchor
Total Tool Length:	**38.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co. LLC

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

Bohrer #3

34-29s-9w-Kingman

Job Ticket: 18617 **DST#: 1**

Test Start: 2004.03.19 @ 07:15:22

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:	44.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	11.97 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

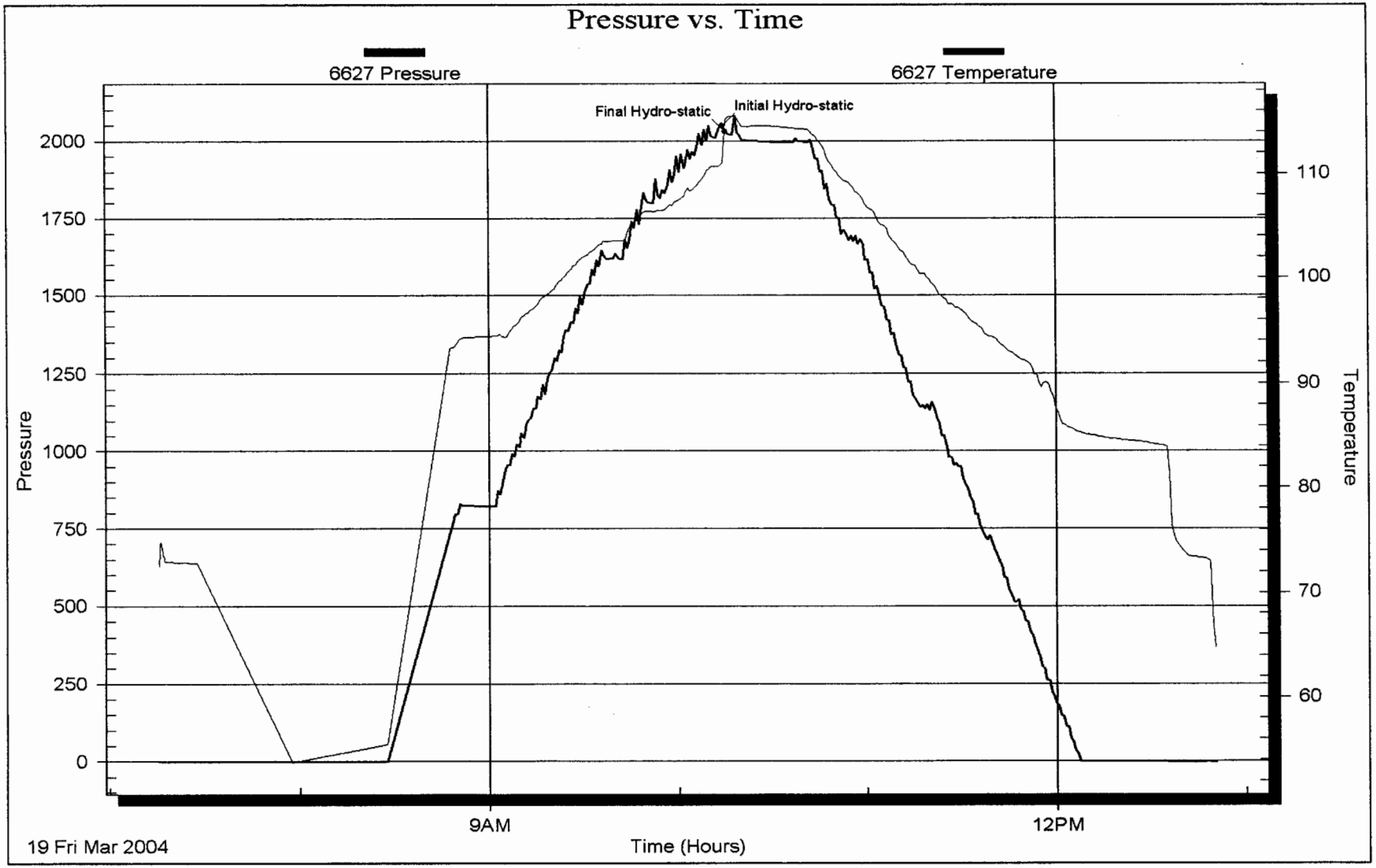
Length ft	Description	Volume bbl
130.00	Mud	1.824

Total Length: 130.00 ft Total Volume: 1.824 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6627 Pressure
6627 Temperature
Final Hydro-static
Initial Hydro-static
2000
1750
1500
1250
1000
750
500
250
0
Pressure
110
100
90
80
70
60
Temperature
9AM
12PM
19 Fri Mar 2004
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Co. LLC**

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

34-29s-9w-Kingman

Bohrer #3

Start Date: 2004.03.19 @ 20:16:14

End Date: 2004.03.20 @ 04:37:44

Job Ticket #: 18618 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

DRILL STEM TEST REPORT

Woolsey Operating Co. LLC

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

Bohrer #3

34-29s-9w-Kingman

Job Ticket: 18618 **DST#: 2**

Test Start: 2004.03.19 @ 20:16:14

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:53:29
Time Test Ended: 04:37:44

Test Type: Conventional Bottom Hole
Tester: Jason Mclemore
Unit No: 24

Interval: 4149.00 ft (KB) To 4192.00 ft (KB) (TVD)
Total Depth: 4192.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

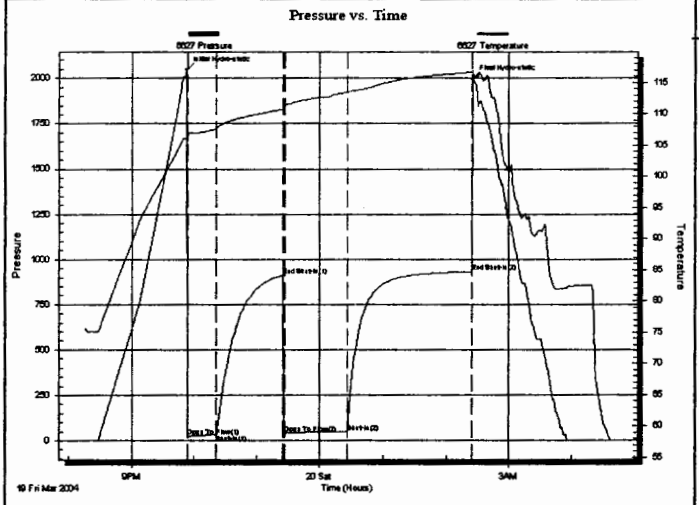
Reference Elevations: 1589.00 ft (KB)
1578.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6627 **Inside**

Press@RunDepth: 44.19 psig @ 4153.00 ft (KB)
Start Date: 2004.03.19 End Date: 2004.03.20
Start Time: 20:16:16 End Time: 04:37:44

Capacity: 7000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2004.03.19 @ 21:52:14
Time Off Btm: 2004.03.20 @ 02:24:44

TEST COMMENT: IFP-Strong Blow , BOB in 1 min. No Blow back
FFP-Strong Blow ,BOB on Opening, GTS in 30 min, No Blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2044.79	106.01	Initial Hydro-static
2	21.16	106.10	Open To Flow (1)
29	33.47	107.65	Shut-In(1)
93	910.86	110.76	End Shut-In(1)
94	36.06	111.25	Open To Flow (2)
155	44.19	113.42	Shut-In(2)
273	931.54	116.64	End Shut-In(2)
273	1995.88	116.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
75.00	Mud	1.05

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	7.50	80.23
Last Gas Rate	0.25	2.00	26.02
Max. Gas Rate	0.38	7.50	80.23

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Co. LLC

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

Bohrer #3

34-29s-9w-Kingman

Job Ticket: 18618 **DST#: 2**

Test Start: 2004.03.19 @ 20:16:14

Tool Information

Drill Pipe:	Length:	4158.00 ft	Diameter:	3.80 inches	Volume:	58.33 bbl	Tool Weight:		1800.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight set on Packer:		30000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		53000.00 lb
					Total Volume:	58.33 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		37.00 ft					String Weight:	Initial	53000.00 lb
Depth to Top Packer:		4149.00 ft						Final	53000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		43.00 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			4122.00		
Shut In Tool	5.00			4127.00		
Hydraulic tool	5.00			4132.00		
Jars	5.00			4137.00		
Safety Joint	2.00			4139.00		
Packer	5.00			4144.00	28.00	Bottom Of Top Packer
Packer	5.00			4149.00		
Stubb	1.00			4150.00		
Perforations	2.00			4152.00		
Change Over Sub	1.00			4153.00		
Recorder	0.00	6627	Inside	4153.00		
Blank Spacing	30.00			4183.00		
Change Over Sub	1.00			4184.00		
Perforations	5.00			4189.00		
Recorder	0.00	13252	Outside	4189.00		
Bullnose	3.00			4192.00	43.00	Bottom Packers & Anchor
Total Tool Length:	**71.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co. LLC

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

Bohrer #3

34-29s-9w-Kingman

Job Ticket: 18618 **DST#: 2**

Test Start: 2004.03.19 @ 20:16:14

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:	44.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	11.97 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
75.00	Mud	1.052

Total Length: 75.00 ft Total Volume: 1.052 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 Co. LLC

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

Bohrer #3

34-29s-9w-Kingman

Job Ticket: 18618 **DST#: 2**

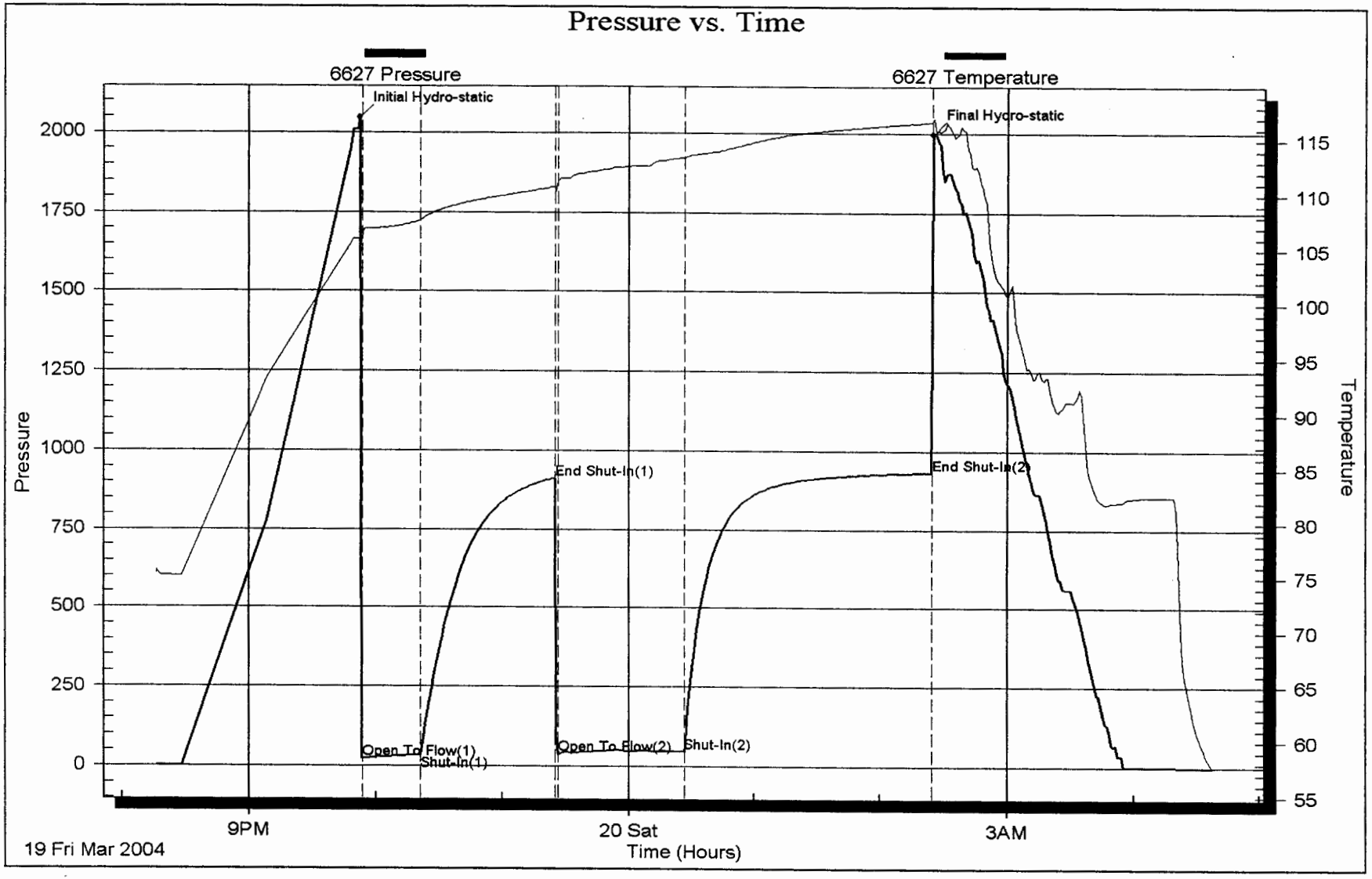
Test Start: 2004.03.19 @ 20:16:14

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	30	0.38	7.50	80.23
2	35	0.38	3.50	65.57
2	40	0.25	4.75	30.38
2	45	0.25	3.50	28.40
2	50	0.25	2.50	26.81
2	55	0.25	2.00	26.02
2	60	0.25	2.00	26.02


Pressure vs. Time
6627 Pressure
6627 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure
Temperature
2000
1750
1500
1250
1000
750
500
250
0
115
110
105
100
95
90
85
80
75
70
65
60
55
9PM
20 Sat
3AM
19 Fri Mar 2004
Time (Hours)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Co. LLC**

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

34-29s-9w-Kingman

Bohrer #3

Start Date: 2004.03.20 @ 12:30:11

End Date: 2004.03.20 @ 21:33:11

Job Ticket #: 18619 DST #: 3

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

DRILL STEM TEST REPORT

Woolsey Operating Co. LLC

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

Bohrer #3

34-29s-9w-Kingman

Job Ticket: 18619 **DST#: 3**

Test Start: 2004.03.20 @ 12:30:11

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:51:56
Time Test Ended: 21:33:11

Test Type: Conventional Bottom Hole
Tester: Jason Mclemore
Unit No: 24

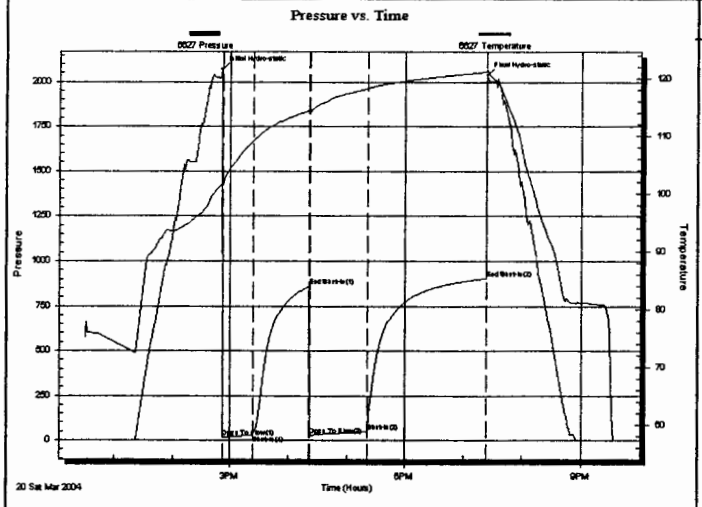
Interval: 4192.00 ft (KB) To 4204.00 ft (KB) (TVD)
Total Depth: 4204.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 1589.00 ft (KB)
1578.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6627 **Inside**
Press@RunDepth: 49.93 psig @ 4196.00 ft (KB)
Start Date: 2004.03.20 End Date: 2004.03.20
Start Time: 12:30:13 End Time: 21:33:11

Capacity: 7000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2004.03.20 @ 14:50:56
Time Off Btm: 2004.03.20 @ 19:23:41

TEST COMMENT: IFP-Plugging Action For 7 min., Then BOB
ISI-Blow back Built to 3-1/2"
FFP-BOB On Open
FSI-No Blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2069.04	101.67	Initial Hydro-static
1	14.59	101.47	Open To Flow (1)
33	28.66	109.07	Shut-In(1)
91	858.05	114.38	End Shut-In(1)
91	24.96	114.08	Open To Flow (2)
151	49.93	118.17	Shut-In(2)
273	902.37	121.13	End Shut-In(2)
273	2036.76	121.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	Muddy Water	1.12

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Operating Co. LLC

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

Bohrer #3

34-29s-9w-Kingman

Job Ticket: 18619 **DST#: 3**

Test Start: 2004.03.20 @ 12:30:11

Tool Information

Drill Pipe:	Length:	4190.00 ft	Diameter:	3.80 inches	Volume:	58.77 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight set on Packer:		30000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	Weight to Pull Loose:		54000.00 lb
					Total Volume:	58.77 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		26.00 ft					String Weight:	Initial	54000.00 lb
Depth to Top Packer:		4192.00 ft						Final	54000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		12.00 ft							
Tool Length:		40.00 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			4165.00		
Shut In Tool	5.00			4170.00		
Hydraulic tool	5.00			4175.00		
Jars	5.00			4180.00		
Safety Joint	2.00			4182.00		
Packer	5.00			4187.00	28.00	Bottom Of Top Packer
Packer	5.00			4192.00		
Stubb	1.00			4193.00		
Perforations	3.00			4196.00		
Recorder	0.00	6627	Inside	4196.00		
Perforations	5.00			4201.00		
Recorder	0.00	13252	Outside	4201.00		
Bullnose	3.00			4204.00	12.00	Bottom Packers & Anchor
Total Tool Length:	**40.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co. LLC

125 N. Market
Wichita, KS. 67202

ATTN: Vern Schrag

Bohrer #3

34-29s-9w-Kingman

Job Ticket: 18619 **DST#: 3**

Test Start: 2004.03.20 @ 12:30:11

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:	35000 ppm
Viscosity:	430.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	5.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

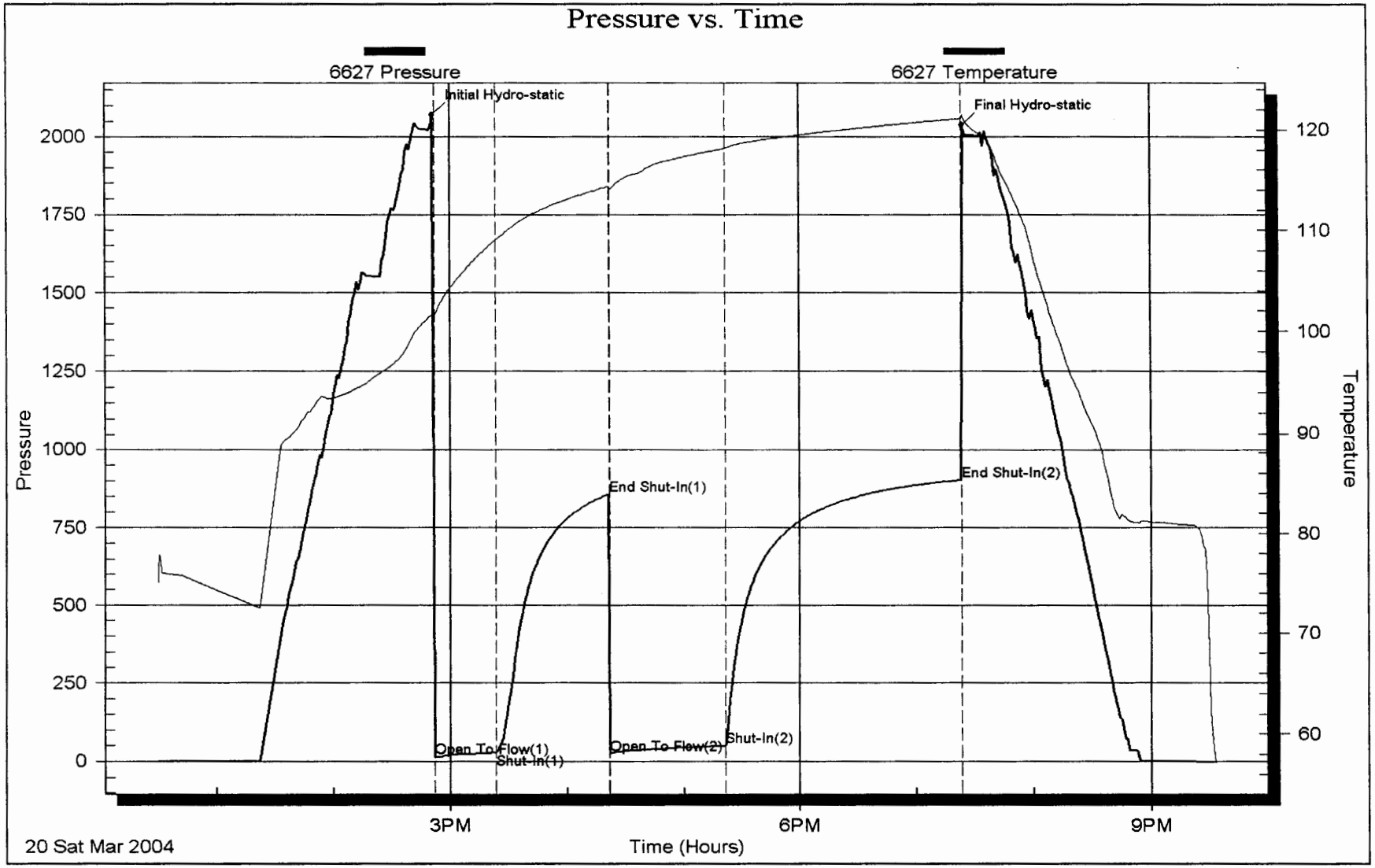
Length ft	Description	Volume bbl
80.00	Muddy Water	1.122

Total Length: 80.00 ft Total Volume: 1.122 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6627 Pressure
6627 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure
Temperature
2000
1750
1500
1250
1000
750
500
250
0
120
110
100
90
80
70
60
3PM
6PM
9PM
20 Sat Mar 2004
Time (Hours)