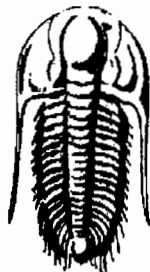


29-16s-23w  
Mishler 1-29

API 15-135-21317

Mull Drilling Co. Inc  
Mishler 1-29  
29-16s-23w Ness KS  
DST # 1  
Fort Scott  
2005.03.22



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

**DRILL STEM TEST REPORT**

Prepared For: **Mull Drilling Co. Inc**  
**CONFIDENTIAL**  
Box 2756  
Wichita, KS 67201-2756

**ORIGINAL**

ATTN: Mark Shreve

**KCC**

29-16s-23w Ness **MAY 06 2005**  
KS

Mishler 1-29 **CONFIDENTIAL**

Start Date: 2005.03.22 @ 17:40:09

End Date: 2005.03.22 @ 23:42:09

Job Ticket #: 21888 DST #: 1

**RECEIVED**  
**MAY - 9 2005**  
**KCC WICHITA**

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





**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co. Inc

**Mishler 1-29**

Box 2756  
Wichita, KS 67201-2756

**29-16s-23w Ness KS**

Job Ticket: 21888      **DST#: 1**

ATTN: Mark Shreve


Test Start: 2005.03.22 @ 17:40:09

### Tool Information

Drill Pipe:	Length: 4412.00 ft	Diameter: 3.80 inches	Volume: 61.89 bbl	Tool Weight: 2100.00 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: 46000.00 lb
			<u>Total Volume: 61.89 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	4410.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.00 ft			
Tool Length:	84.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				
10-30-30-60				

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4382.00	
Shut In Tool	5.00			4387.00	
Hydraulic tool	5.00			4392.00	
Jars	5.00			4397.00	
Safety Joint	3.00			4400.00	
Packer	5.00			4405.00	29.00      Bottom Of Top Packer
Packer	5.00			4410.00	
Stubb	1.00			4411.00	
Perforations	2.00			4413.00	
Change Over Sub	1.00			4414.00	
Recorder	0.00	6799	Inside	4414.00	
Drill Pipe	32.00			4446.00	
Change Over Sub	1.00			4447.00	
Recorder	0.00	13248	Outside	4447.00	
Perforations	15.00			4462.00	
Bullnose	3.00			4465.00	55.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>84.00</b>				



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

### FLUID SUMMARY

---

Mull Drilling Co. Inc  
Box 2756  
Wichita, KS 67201-2756  
ATTN: Mark Shreve

**Mishler 1-29**  
**29-16s-23w Ness KS**  
Job Ticket: 21888      **DST#: 1**  
Test Start: 2005.03.22 @ 17:40:09

**Mud and Cushion Information**

Mud Type: Polymer	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
1.00	mud	0.014

Total Length: 1.00 ft      Total Volume: 0.014 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

Serial #: 6799

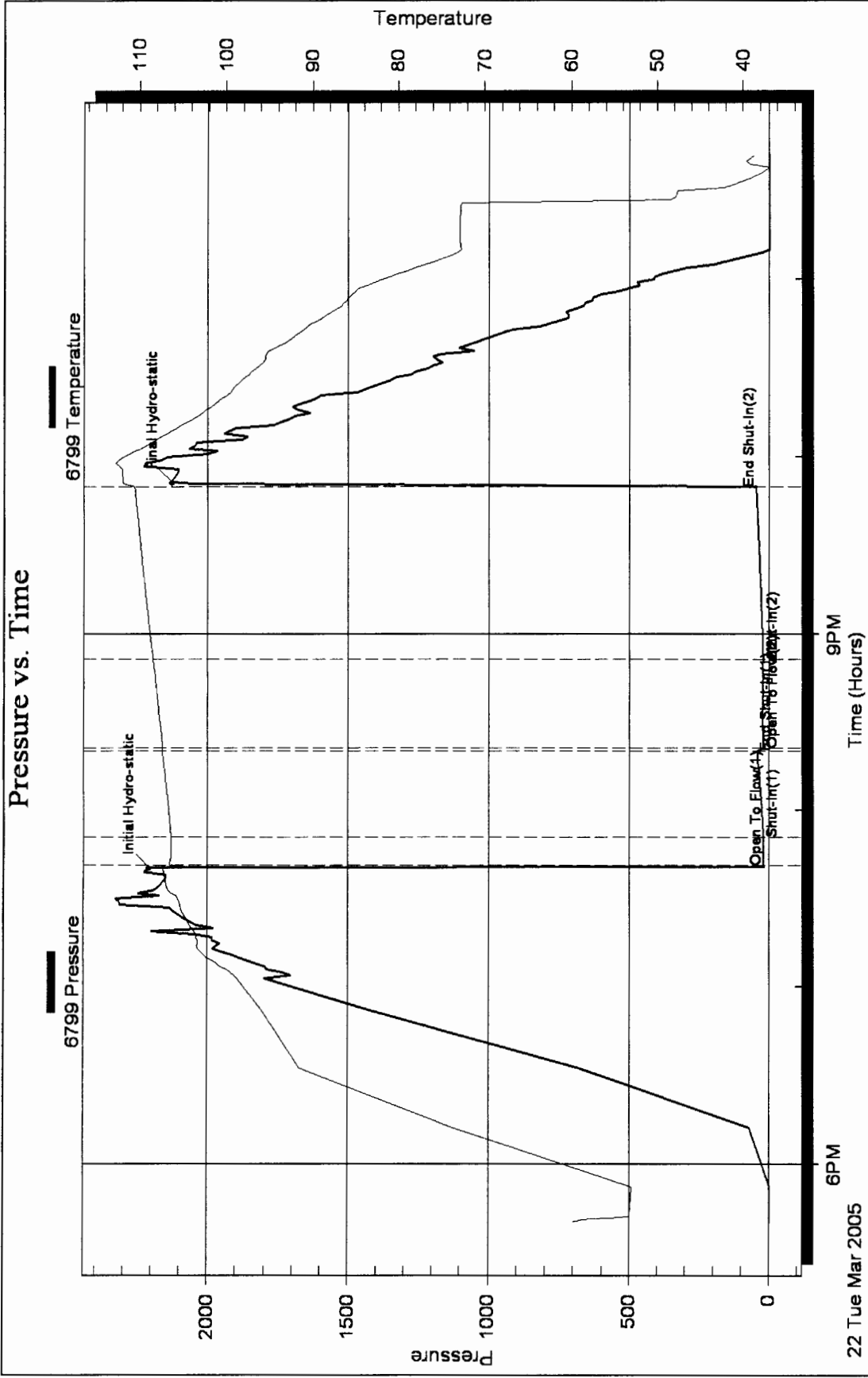
Inside

Mull Drilling Co. Inc

29-16s-23w Ness KS

DST Test Number: 1

### Pressure vs. Time

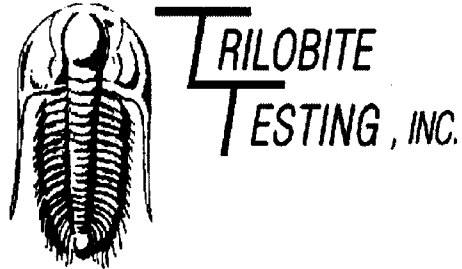


22 Tue Mar 2005

6PM

9PM

Time (Hours)



## DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co. Inc**

Box 2756  
Wichita, KS 67201-2756

ATTN: Mark Shreve

**29-16s-23w Ness KS**


**Mishler 1-29**

Start Date: 2005.03.23 @ 11:12:21

End Date: 2005.03.23 @ 18:45:51

Job Ticket #: 21889                      DST #: 2

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

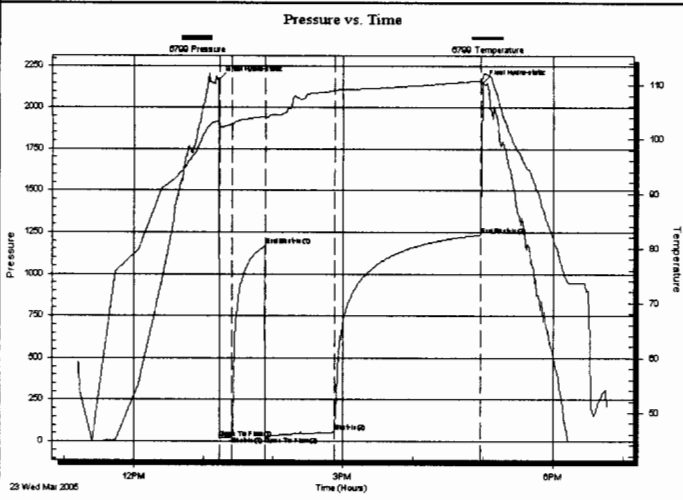
 <b>TRILOBITE TESTING, INC</b>	<b>DRILL STEM TEST REPORT</b>	
	Mull Drilling Co. Inc Box 2756 Wichita, KS 67201-2756 ATTN: Mark Shreve	<b>Mishler 1-29</b> <b>29-16s-23w Ness KS</b> Job Ticket: 21889      DST#: 2 Test Start: 2005.03.23 @ 11:12:21

**GENERAL INFORMATION:**

Formation: <b>Cherokee</b>	Test Type: Conventional Bottom Hole
Deviated: <b>No Whipstock:</b> ft (KB)	Tester: Paul Simpson
Time Tool Opened: 13:13:51	Unit No: 21
Time Test Ended: 18:45:51	Reference Elevations: 2502.00 ft (KB)
Interval: <b>4438.00 ft (KB) To 4515.00 ft (KB) (TVD)</b>	2493.00 ft (CF)
Total Depth: 4515.00 ft (KB) (TVD)	KB to GR/CF: 9.00 ft
Hole Diameter: 7.88 inches Hole Condition: Good	

<b>Serial #: 6799</b> <b>Inside</b>	Capacity: 7000.00 psig
Press@RunDepth: 55.46 psig @ 4442.00 ft (KB)	Last Calib.: 2004.03.23
Start Date: 2005.03.23      End Date: 2005.03.23	Time On Btm: 2005.03.23 @ 13:12:51
Start Time: 11:12:22      End Time: 18:45:51	Time Off Btm: 2005.03.23 @ 16:58:51

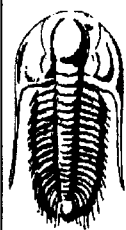
**TEST COMMENT:** F- weak 1/4" blow  
 FF- surface blow died in 20 minutes



PRESSURE SUMMARY			
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2168.68	103.39	Initial Hydro-static
1	18.61	102.43	Open To Flow (1)
12	27.09	102.69	Shut-In(1)
40	1167.32	104.16	End Shut-In(1)
41	28.53	103.83	Open To Flow (2)
100	55.46	108.95	Shut-In(2)
225	1235.22	110.82	End Shut-In(2)
226	2151.63	111.36	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
60.00	w m 40%W 60%M	0.84
15.00	mud	0.21

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Mull Drilling Co. Inc  
Box 2756  
Wichita, KS 67201-2756  
ATTN: Mark Shreve

**Mishler 1-29**  
**29-16s-23w Ness KS**  
Job Ticket: 21889      **DST#: 2**  
Test Start: 2005.03.23 @ 11:12:21

### Tool Information


Drill Pipe:	Length: 4413.00 ft	Diameter: 3.80 inches	Volume: 61.90 bbl	Tool Weight: 2100.00 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: 44000.00 lb
			<u>Total Volume: 61.90 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4438.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	79.00 ft			
Tool Length:	108.00 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			4410.00	
Shut In Tool	5.00			4415.00	
Hydraulic tool	5.00			4420.00	
Jars	5.00			4425.00	
Safety Joint	3.00			4428.00	
Packer	5.00			4433.00	29.00      Bottom Of Top Packer
Packer	5.00			4438.00	
Stubb	1.00			4439.00	
Perforations	2.00			4441.00	
Change Over Sub	1.00			4442.00	
Recorder	0.00	6799	Inside	4442.00	
Drill Pipe	62.00			4504.00	
Change Over Sub	1.00			4505.00	
Recorder	0.00	13248	Outside	4505.00	
Perforations	9.00			4514.00	
Bullnose	3.00			4517.00	79.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>108.00</b>				

 <b>TRILOBITE TESTING, INC</b>		DRILL STEM TEST REPORT		FLUID SUMMARY										
		Mull Drilling Co. Inc		Mishler 1-29										
Box 2756 Wichita, KS 67201-2756		29-16s-23w Ness KS		Job Ticket: 21889      DST#: 2										
ATTN: Mark Shreve		Test Start: 2005.03.23 @ 11:12:21												
<b>Mud and Cushion Information</b>														
Mud Type:	Polymer	Cushion Type:		Oil API:	deg API									
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	9000 ppm									
Viscosity:	63.00 sec/qt	Cushion Volume:	bbl											
Water Loss:	7.19 in <sup>3</sup>	Gas Cushion Type:												
Resistivity:	ohm.m	Gas Cushion Pressure:	psig											
Salinity:	ppm													
Filter Cake:	inches													
<b>Recovery Information</b>														
Recovery Table														
<table border="1"> <thead> <tr> <th>Length ft</th> <th>Description</th> <th>Volume bbl</th> </tr> </thead> <tbody> <tr> <td>60.00</td> <td>w m 40%W 60%M</td> <td>0.842</td> </tr> <tr> <td>15.00</td> <td>mud</td> <td>0.210</td> </tr> </tbody> </table>						Length ft	Description	Volume bbl	60.00	w m 40%W 60%M	0.842	15.00	mud	0.210
Length ft	Description	Volume bbl												
60.00	w m 40%W 60%M	0.842												
15.00	mud	0.210												
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: Rw .9 @ 53														

Serial #: 6799

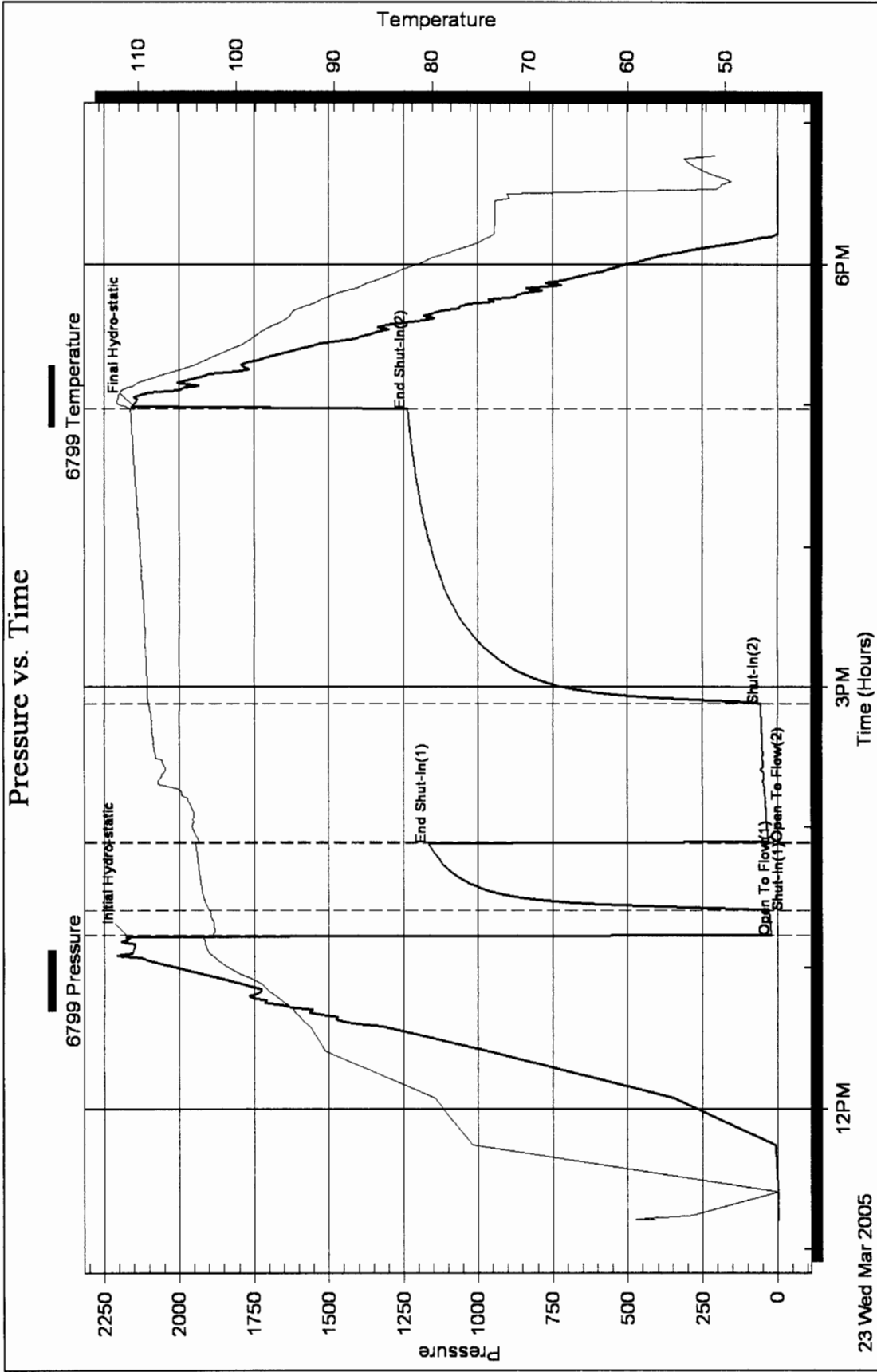
Inside

Mull Drilling Co. Inc

29-16s-23w Ness KS

DST Test Number: 2

### Pressure vs. Time



23 Wed Mar 2005

Triobite Testing, Inc

Ref. No: 21889

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