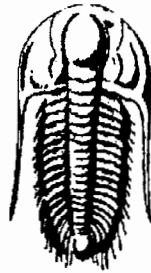


COPY



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **R.P.Nixon**

207 W. 12 th. St.  
Hays, Ks. 67601-3839

ATTN: Dan Nixon

**24--13s--19w**

**Jacobs # 5**

Start Date: 2004.06.15 @ 21:45:08

End Date: 2004.06.16 @ 03:47:08

Job Ticket #: 19445                      DST #: 1

RECEIVED  
AUG 18 2004  
KCC WICHITA

R.P.Nixon

Jacobs # 5

24--13s--19w


DST # 1

L.K.C.

2004.06.15

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

101218.

	<b>DRILL STEM TEST REPORT</b>	
	R.P.Nixon 207 W.12 th.St. Hays,Ks.67601-3839 ATTN: Dan Nixon	<b>Jacobs # 5</b> <b>24-13s-19w</b> Job Ticket: 19445 <b>DST#: 1</b> Test Start: 2004.06.15 @ 21:45:08

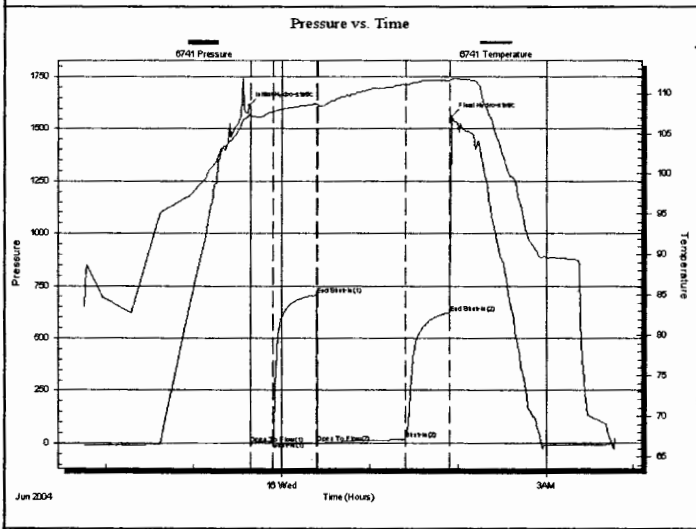
**GENERAL INFORMATION:**

Formation: <b>L.Kc.-</b>	Test Type: <b>Conventional Bottom Hole</b>
Deviated: <b>No</b> Whipstock: <b>ft (KB)</b>	Tester: <b>John Schmidt</b>
Time Tool Opened: <b>23:39:08</b>	Unit No: <b>18</b>
Time Test Ended: <b>03:47:08</b>	
<b>Interval: 3426.00 ft (KB) To 3490.00 ft (KB) (TVD)</b>	Reference Elevations: <b>2062.00 ft (KB)</b>
Total Depth: <b>3490.00 ft (KB) (TVD)</b>	<b>2056.00 ft (CF)</b>
Hole Diameter: <b>7.88 inches</b> Hole Condition: <b>Fair</b>	KB to GR/CF: <b>6.00 ft</b>

**Serial #: 6741      Inside**

Press@RunDepth: <b>17.31 psig @ 3430.00 ft (KB)</b>	Capacity: <b>7000.00 psig</b>
Start Date: <b>2004.06.15</b> End Date: <b>2004.06.16</b>	Last Calib.: <b>2004.06.16</b>
Start Time: <b>21:45:09</b> End Time: <b>03:47:08</b>	Time On Btm: <b>2004.06.15 @ 23:37:38</b>
	Time Off Btm: <b>2004.06.16 @ 01:55:38</b>

**TEST COMMENT:** IF-Weak built to 1" in.      ISI-Dead  
 FF-Weak built to 1" in.      FSI-Dead



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1614.23	107.28	Initial Hydro-static
2	-6.42	107.29	Open To Flow (1)
17	9.89	107.72	Shut-In(1)
46	706.55	108.76	End Shut-In(1)
47	-2.19	108.62	Open To Flow (2)
107	17.31	111.10	Shut-In(2)
137	621.64	111.67	End Shut-In(2)
138	1560.79	111.78	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
80.00	Drilling mud few oil spots	0.84

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

R.P.Nixon  
207 W.12 th.St.  
Hays,Ks.67601-3839  
ATTN: Dan Nixon

**Jacobs # 5**  
**24-13s-19w**  
Job Ticket: 19445      **DST#: 1**  
Test Start: 2004.06.15 @ 21:45:08

### Tool Information


Drill Pipe:	Length: 3388.00 ft	Diameter: 3.80 inches	Volume: 47.52 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume: 47.67 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	3426.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	84.00 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			3407.00	
Shut In Tool	5.00			3412.00	
Hydraulic tool	5.00			3417.00	
Packer	4.00			3421.00	20.00      Bottom Of Top Packer
Packer	5.00			3426.00	
Stubb	1.00			3427.00	
Perforations	2.00			3429.00	
Change Over Sub	1.00			3430.00	
Recorder	0.00	6741	Inside	3430.00	
Blank Spacing	31.00			3461.00	
Change Over Sub	1.00			3462.00	
Recorder	0.00	11084	Outside	3462.00	
Perforations	25.00			3487.00	
Bullnose	3.00			3490.00	64.00      Bottom Packers & Anchor

**Total Tool Length: 84.00**

 <b>TRILOBITE TESTING, INC.</b>		DRILL STEM TEST REPORT		FLUID SUMMARY							
		R.P.Nixon		Jacobs # 5							
207 W.12 th.St. Hays,Ks.67601-3839		24-13s-19w		Job Ticket: 19445      DST#: 1							
ATTN: Dan Nixon		Test Start: 2004.06.15 @ 21:45:08									
<b>Mud and Cushion Information</b>											
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:	bbl								
Water Loss:	7.99 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" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Length ft</th> <th style="width: 55%;">Description</th> <th style="width: 30%;">Volume bbl</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">80.00</td> <td>Drilling mud few oil spots</td> <td style="text-align: center;">0.840</td> </tr> </tbody> </table>						Length ft	Description	Volume bbl	80.00	Drilling mud few oil spots	0.840
Length ft	Description	Volume bbl									
80.00	Drilling mud few oil spots	0.840									
Total Length:	80.00 ft	Total Volume:	0.840 bbl								
Num Fluid Samples:	0	Num Gas Bombs:	0	Serial #:							
Laboratory Name:		Laboratory Location:									
Recovery Comments:											

Serial #: 6741

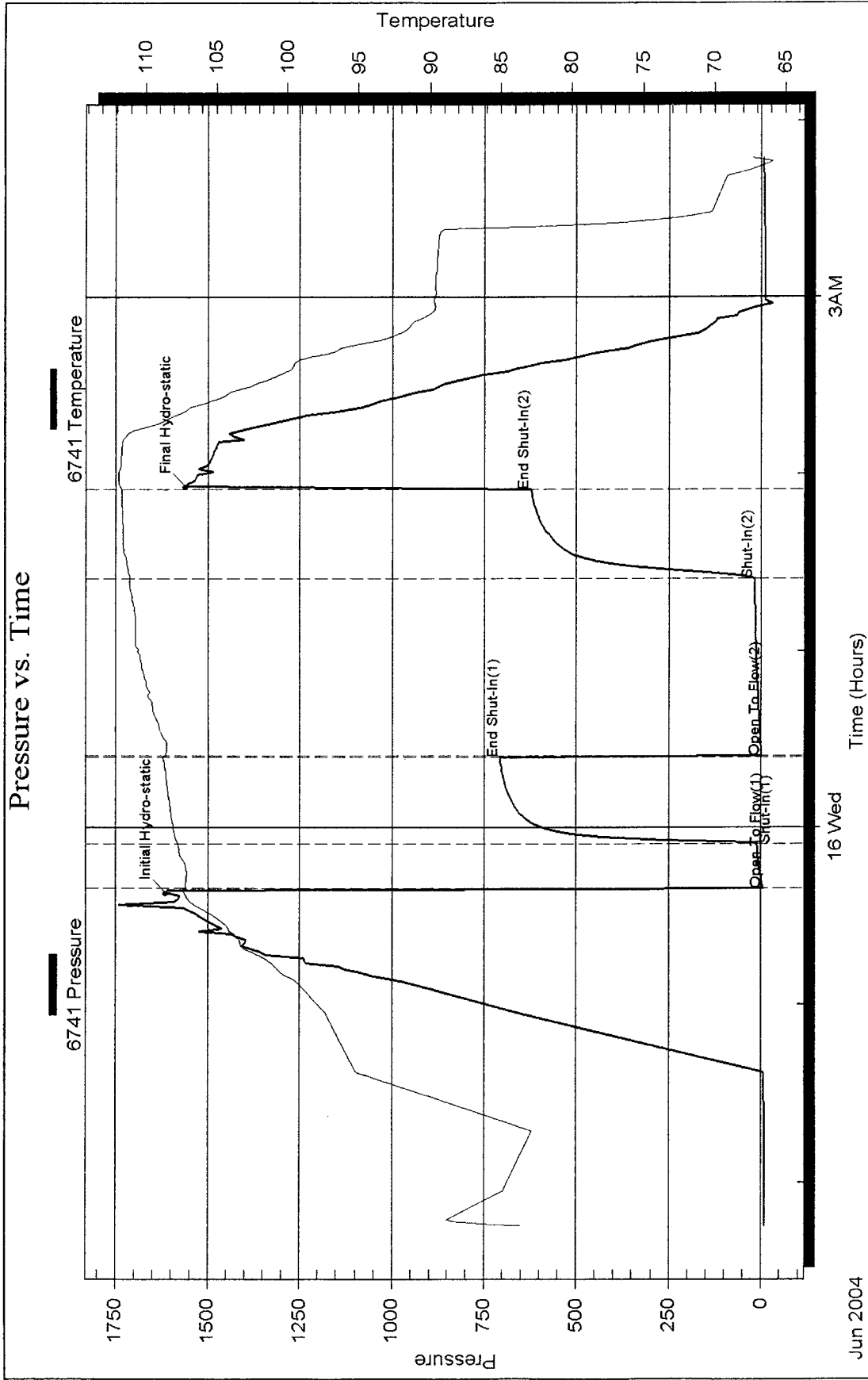
Inside

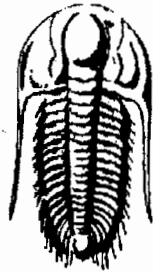
R.P.Nixon

24--13s--19w

DST Test Number: 1

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **R.P.Nixon**

207 W.12 th.St.  
Hays,Ks.67601-3839

ATTN: Dan Nixon

**24--13s--19w**

**Jacobs # 5**

Start Date: 2004.06.16 @ 16:04:56

End Date: 2004.06.16 @ 21:41:56

Job Ticket #: 19446                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

R.P.Nixon


Jacobs # 5

24--13s--19w

DST # 2

L.Kc.-

2004.06.16

	<b>DRILL STEM TEST REPORT</b>	
	R.P.Nixon 207 W.12 th.St. Hays,Ks.67601-3839 ATTN: Dan Nixon	Jacobs # 5 24-13s-19w Job Ticket: 19446      DST#: 2 Test Start: 2004.06.16 @ 16:04:56

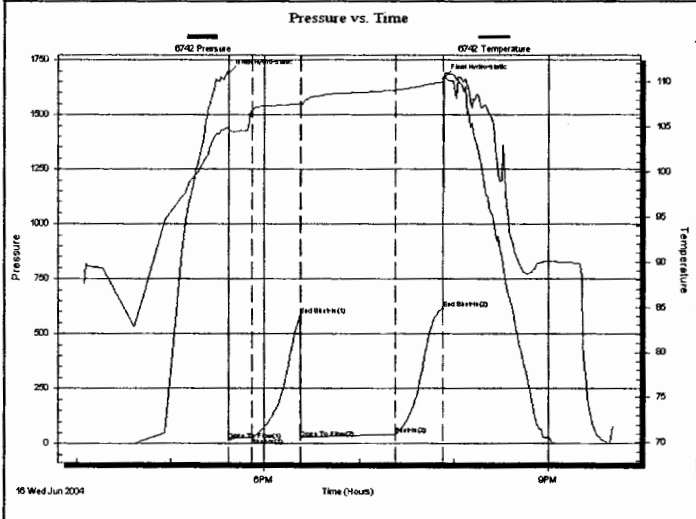
**GENERAL INFORMATION:**

Formation: <b>L.Kc.-</b>	Test Type: <b>Conventional Bottom Hole</b>
Deviated: <b>No</b> Whipstock: <b>ft (KB)</b>	Tester: <b>John Schridt</b>
Time Tool Opened: <b>17:37:56</b>	Unit No: <b>18</b>
Time Test Ended: <b>21:41:56</b>	Reference Elevations: <b>2062.00 ft (KB)</b>
Interval: <b>3486.00 ft (KB) To 3554.00 ft (KB) (TVD)</b>	<b>2056.00 ft (CF)</b>
Total Depth: <b>3490.00 ft (KB) (TVD)</b>	KB to GR/CF: <b>6.00 ft</b>
Hole Diameter: <b>7.88 inches</b> Hole Condition: <b>Fair</b>	

**Serial #: 6742    Inside**

Press@RunDepth: <b>42.25 psig @ 3490.00 ft (KB)</b>	Capacity: <b>7000.00 psig</b>
Start Date: <b>2004.06.16</b> End Date: <b>2004.06.16</b>	Last Calib.: <b>2004.06.16</b>
Start Time: <b>16:05:01</b> End Time: <b>21:41:55</b>	Time On Btm: <b>2004.06.16 @ 17:37:26</b>
	Time Off Btm: <b>2004.06.16 @ 19:53:26</b>

**TEST COMMENT:** IF-Weak to fair blow built to 6" in.      IS-Dead  
 FF-Strong B.O.B. 1 min.      FSI-Dead



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1689.42	104.92	Initial Hydro-static
1	15.83	104.56	Open To Flow (1)
15	26.79	106.90	Shut-In(1)
46	584.89	107.63	End Shut-In(1)
46	24.56	107.58	Open To Flow (2)
106	42.25	109.09	Shut-In(2)
136	617.21	109.95	End Shut-In(2)
136	1665.61	110.42	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
75.00	GMCO-20%G-30%M-50%oil	0.77
0.00	540 gas in pipe	0.00

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

R.P.Nixon  
207 W.12 th.St.  
Hays,Ks.67601-3839  
ATTN: Dan Nixon

**Jacobs # 5**  
**24-13s-19w**  
Job Ticket: 19446      **DST#: 2**  
Test Start: 2004.06.16 @ 16:04:56

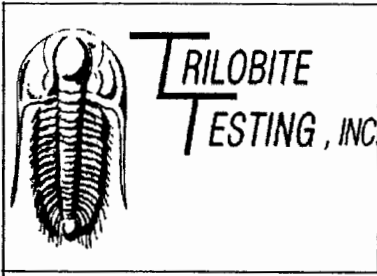
### Tool Information

Drill Pipe:	Length: 3450.00 ft	Diameter: 3.80 inches	Volume: 48.39 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 48.54 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3486.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	88.00 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			3467.00	
Shut In Tool	5.00			3472.00	
Hydraulic tool	5.00			3477.00	
Packer	4.00			3481.00	20.00      Bottom Of Top Packer
Packer	5.00			3486.00	
Stubb	1.00			3487.00	
Perforations	2.00			3489.00	
Change Over Sub	1.00			3490.00	
Recorder	0.00	6742	Inside	3490.00	
Blank Spacing	31.00			3521.00	
Change Over Sub	1.00			3522.00	
Recorder	0.00	11084	Outside	3522.00	
Perforations	29.00			3551.00	
Bullnose	3.00			3554.00	68.00      Bottom Packers & Anchor

**Total Tool Length: 88.00**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

R.P.Nixon  
 207 W.12 th.St.  
 Hays,Ks.67601-3839  
 ATTN: Dan Nixon

Jacobs # 5  
 24-13s-19w  
 Job Ticket: 19446      DST#:2  
 Test Start: 2004.06.16 @ 16:04:56

### 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: bbl		
Water Loss: 7.98 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
75.00	GMCO-20%G-30%M-50%oil	0.770
0.00	540 gas in pipe	0.000

Total Length: 75.00 ft      Total Volume: 0.770 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

Serial #: 6742

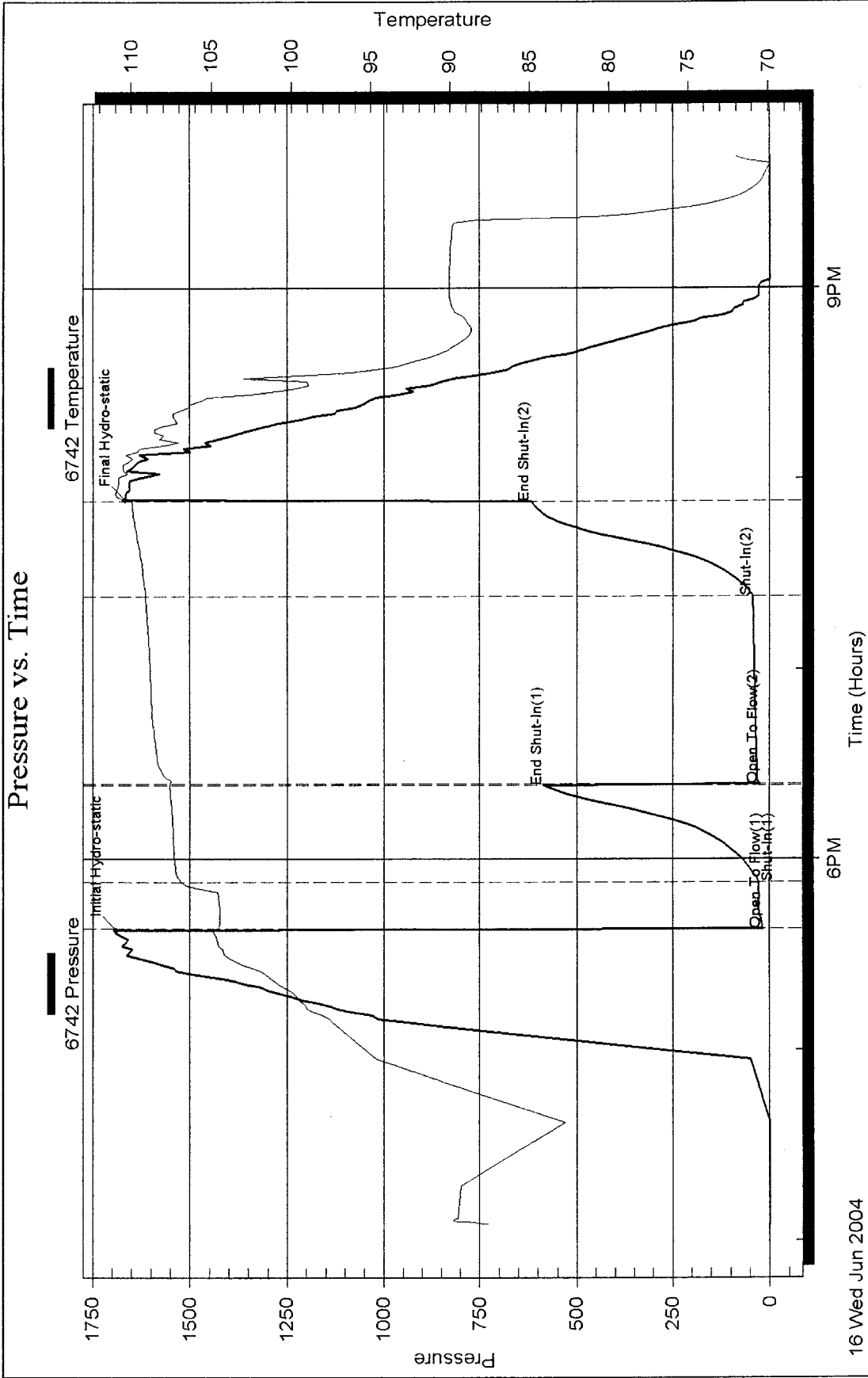
Inside

R.P.Nixon

24--13s--19w

DST Test Number: 2

### Pressure vs. Time



16 Wed Jun 2004