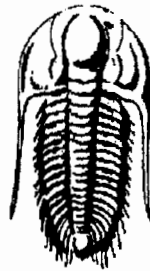


ORIGINAL



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **M.E.Klein & Assoc.**

P.O.Box 721436
Norman Ok. 73070

ATTN: Joe Baker

19-33s-6w Harper Ks.

Boomer Gates #1

Start Date: 2005.03.18 @ 01:56:02

End Date: 2005.03.18 @ 07:01:02

Job Ticket #: 20024

DST #: 1

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

RECEIVED
JUN - 6 2005
KCC WICHITA



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

ME Klein & Assoc.

P.O.Box 721436
Norman Ok. 73070

ATTN: Joe Baker

Boomer Gates #1

19-33s-6w Harper Ks.

Job Ticket: 20024

DST#: 1

Test Start: 2005.03.18 @ 01:56:02

GENERAL INFORMATION:

Formation: **Indian Cave**

Deviated: **No Whipstock:** ft (KB)

Time Tool Opened: 03:06:17

Time Test Ended: 07:01:02

Test Type: **Conventional Bottom Hole**

Tester: **Gary Pevoteaux**

Unit No: **23**

Interval: **2186.00 ft (KB) To 2250.00 ft (KB) (TVD)**

Total Depth: **2250.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Poor**

Reference Elevations: **1348.00 ft (KB)**

1340.00 ft (CF)

KB to GR/CF: **8.00 ft**

Serial #: 6755 Inside

Press@RunDepth: **41.02 psig @ 2187.00 ft (KB)**

Start Date: **2005.03.18**

End Date: **2005.03.18**

Start Time: **01:56:07**

End Time: **07:01:01**

Capacity: **7000.00 psig**

Last Calib.: **2005.03.18**

Time On Btmr: **2005.03.18 @ 03:04:47**

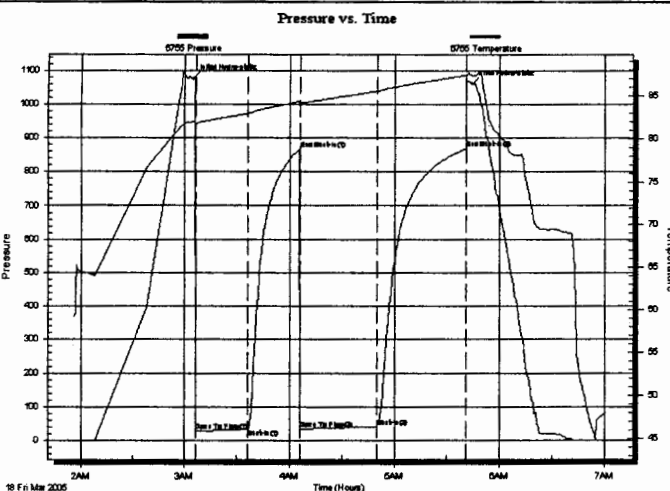
Time Off Btmr: **2005.03.18 @ 05:44:17**

TEST COMMENT: **IF:Weak blow . 1 - 2 1/2".**

IS:No blow .

FF:Weak blow . 1/4 - 1/2".

FS:No blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1075.33	81.94	Initial Hydro-static
2	27.53	81.72	Open To Flow (1)
32	33.01	82.92	Shut-In(1)
61	865.85	84.32	End Shut-In(1)
62	34.09	84.07	Open To Flow (2)
105	41.02	85.51	Shut-In(2)
156	867.60	87.35	End Shut-In(2)
160	1060.38	87.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	WM 26%w 74%w Rv .22 ohms @ 41 de 0.56	

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

ME Klein & Assoc.

P.O.Box 721436
Norman Ok.73070

ATTN: Joe Baker

Boomer Gates #1

19-33s-6w Harper Ks.

Job Ticket: 20024

DST#: 1

Test Start: 2005.03.18 @ 01:56:02

Tool Information

Drill Pipe:	Length: 2169.00 ft	Diameter: 3.80 inches	Volume: 30.43 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: 56000.00 lb
		Total Volume: 30.43 bbl		Tool Chased 2.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	2186.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	86.00 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			2165.00	
Shut In Tool	5.00			2170.00	
Hydraulic tool	5.00			2175.00	
Safety Joint	2.00			2177.00	
Packer	4.00			2181.00	22.00 Bottom Of Top Packer
Packer	5.00			2186.00	
Stubb	1.00			2187.00	
Recorder	0.00	6755	Inside	2187.00	
Perforations	24.00			2211.00	
Change Over Sub	1.00			2212.00	
Blank Spacing	32.00			2244.00	
Change Over Sub	1.00			2245.00	
Recorder	0.00	13222	Outside	2245.00	
Bullnose	5.00			2250.00	64.00 Bottom Packers & Anchor

Total Tool Length: 86.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

M.E. Klein & Assoc.

Boomer Gates #1

P.O. Box 721436
Norman Ok. 73070

19-33s-6w Harper Ks.

Job Ticket: 20024

DST#: 1

ATTN: Joe Baker

Test Start: 2005.03.18 @ 01:56:02

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

63000 ppm

Viscosity: 28.00 sec/qt

Cushion Volume:

bbl

Water Loss: 37.93 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 56000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	WM 26%w 74%w Rw .22 ohms @ 41 deg.	0.561

Total Length: 40.00 ft

Total Volume: 0.561 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

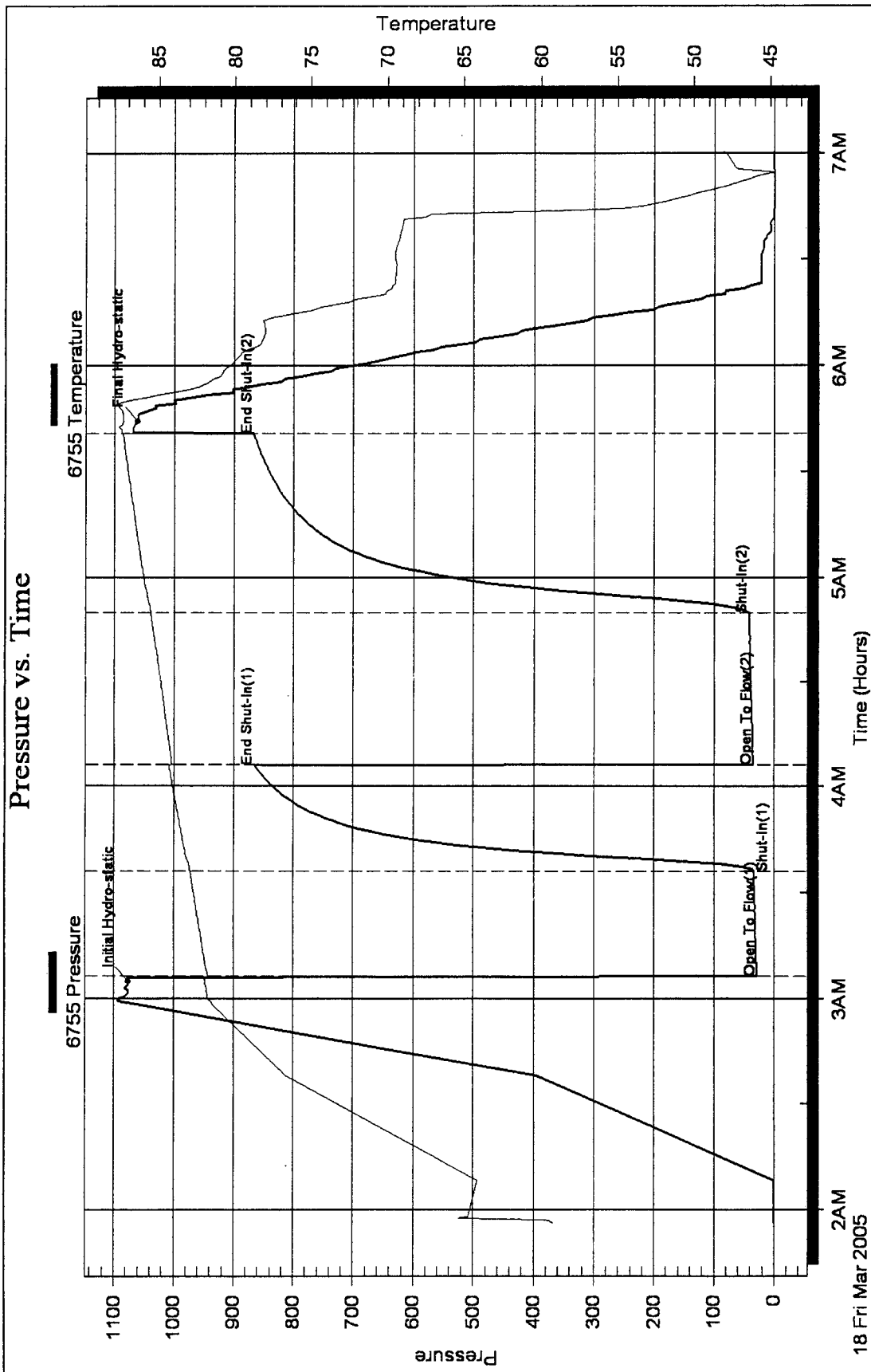
Serial #: none

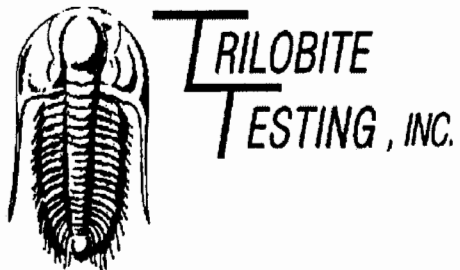
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **M.E.Klein & Assoc.**

P.O.Box 721436
Norman Ok.73070

ATTN: Joe Baker

19-33s-6w Harper Ks.

Boomer Gates #1

Start Date: 2005.03.22 @ 06:13:33

End Date: 2005.03.22 @ 14:24:48

Job Ticket #: 21875 DST #: 2

RECEIVED
JUN - 6 2005
KCC WICHITA

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

RECEIVED
JUN - 6 2005
KCC WICHITA



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

ME Klein & Assoc.

P.O. Box 721436
Norman Ok. 73070

ATTN: Joe Baker

Boomer Gates #1

19-33s-6w Harper Ks.

Job Ticket: 21875

DST#: 2

Test Start: 2005.03.22 @ 06:13:33

GENERAL INFORMATION:

Formation: **Miss.**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 08:06:48

Time Test Ended: 14:24:48

Test Type: **Conventional Bottom Hole**

Tester: **Davy Cline**

Unit No: **24**

Interval: **4464.00 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: **1348.00 ft (KB)**

1340.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6753

Inside

Press@RunDepth: **42.11 psig @ 4465.00 ft (KB)**

Start Date: **2005.03.22**

End Date:

2005.03.22

Start Time: **06:13:34**

End Time:

14:24:48

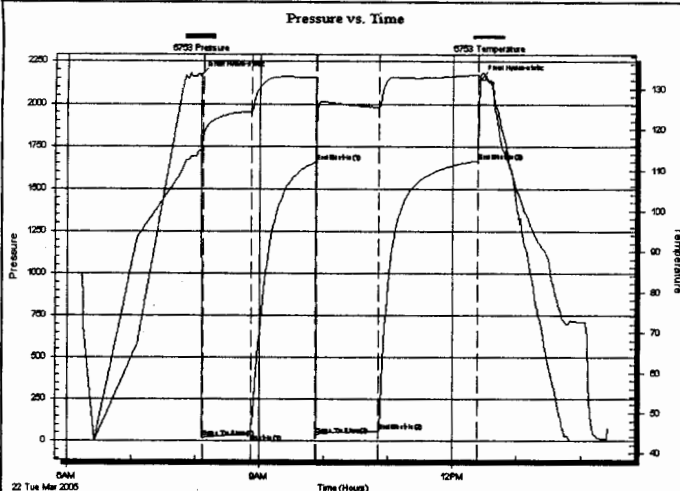
Capacity: **7000.00 psig**

Last Calib.: **2005.03.22**

Time On Btm: **2005.03.22 @ 08:04:33**

Time Off Btm: **2005.03.22 @ 12:26:33**

TEST COMMENT: IF: Strong blow. BOB 55sec.
IS: GTS right after shutting in tool. Bled off. No blow.
FF: Strong blow. BOB immediately. GTS. Gauged gas.
FSI: Bled off. No blow.



PRESSURE SUMMARY

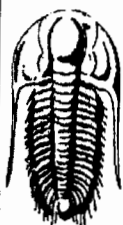
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2167.49	114.92	Initial Hydro-static
3	20.11	117.58	Open To Flow (1)
48	42.11	124.26	Shut-In (1)
108	1657.07	132.80	End Shut-In (1)
109	37.62	119.58	Open To Flow (2)
167	59.29	125.44	End Shut-In (2)
259	1666.38	133.55	End Shut-In (3)
262	2149.88	133.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	G & VSOOM 25%g less than 5%o 30%w1.28% m	

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	15.00	46.64
Last Gas Rate	0.25	14.00	45.05
Max. Gas Rate	0.25	15.00	46.64



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

ME Klein & Assoc.

P.O.Box 721436
Norman Ok. 73070

ATTN: Joe Baker

Boomer Gates #1

19-33s-6w Harper Ks.

Job Ticket: 21875

DST#: 2

Test Start: 2005.03.22 @ 06:13:33

Tool Information

Drill Pipe:	Length: 4468.00 ft	Diameter: 3.25 inches	Volume: 45.84 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: 95000.00 lb
			<u>Total Volume: 45.84 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	4464.00 ft			Final 75000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	54.00 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			4437.00	
Shut In Tool	5.00			4442.00	
Hydraulic tool	5.00			4447.00	
Jars	5.00			4452.00	
Safety Joint	2.00			4454.00	
Packer	5.00			4459.00	28.00 Bottom Of Top Packer
Packer	5.00			4464.00	
Stubb	1.00			4465.00	
Recorder	0.00	6753	Inside	4465.00	
Perforations	22.00			4487.00	
Recorder	0.00	13400	Outside	4487.00	
Bullnose	3.00			4490.00	26.00 Bottom Packers & Anchor

Total Tool Length: 54.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

ME Klein & Assoc.

Boomer Gates #1

P.O.Box 721436
Norman Ok. 73070

19-33s-6w Harper Ks.

Job Ticket: 21875

DST#: 2

ATTN: Joe Baker

Test Start: 2005.03.22 @ 06:13:33

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: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	G & VSOCM 25%g less than 5%o 30%w 40'	1.283

Total Length: 125.00 ft

Total Volume: 1.283 bbl

Num Fluid Samples: 1

Num Gas Bombs: 1

Serial #: DC

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

ME Klein & Assoc.

Boomer Gates #1

P.O. Box 721436
Norman Ok. 73070

19-33s-6w Harper Ks.

Job Ticket: 21875

DST#: 2

ATTN: Joe Baker

Test Start: 2005.03.22 @ 06:13:33

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	10	0.25	15.00	46.64
2	20	0.25	15.00	46.64
2	30	0.25	14.00	45.05
2	40	0.25	14.00	45.05
2	50	0.25	14.00	45.05
2	60	0.25	14.00	45.05

Serial #: 6753

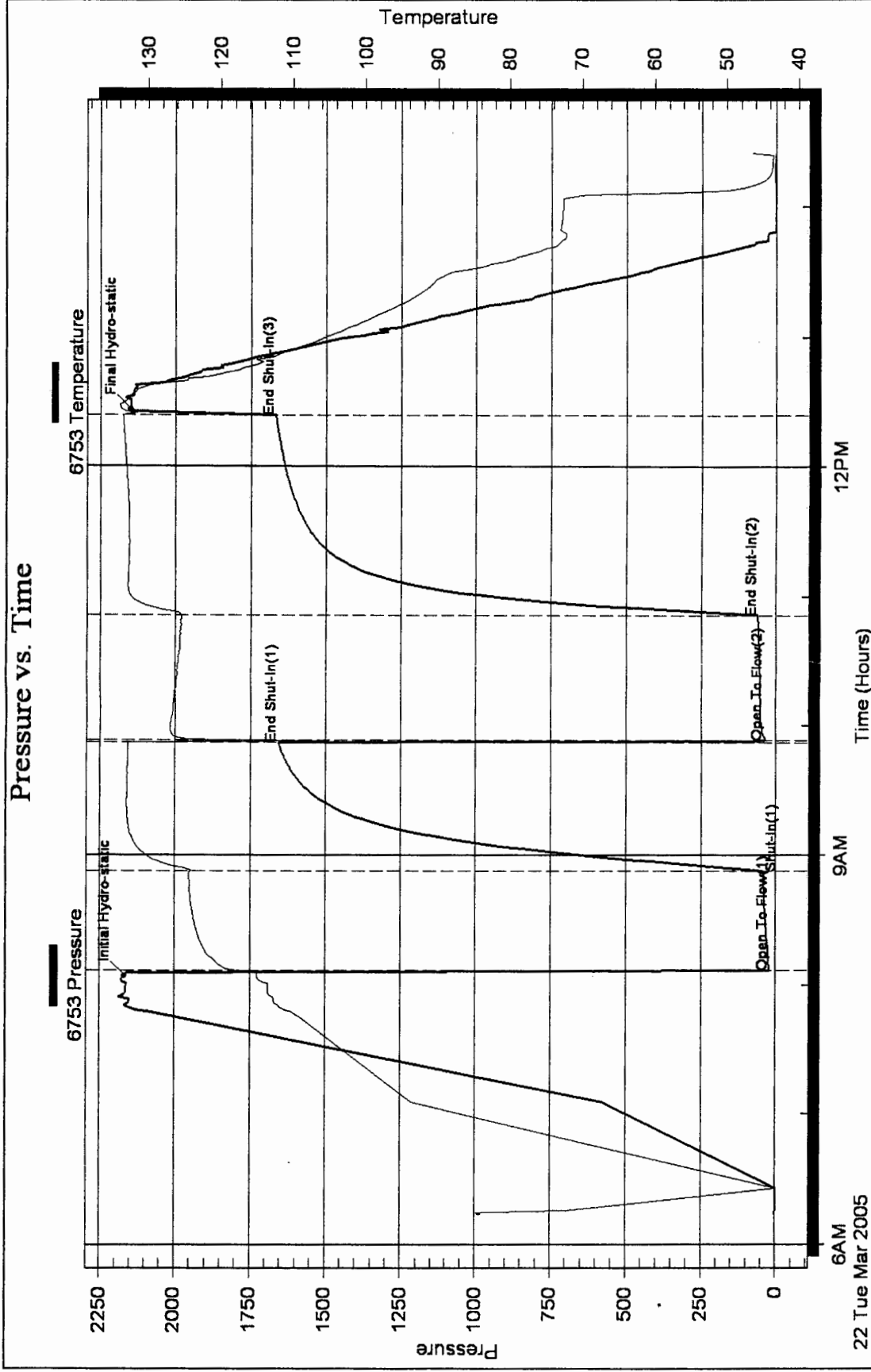
Inside

M.E. Klein & Assoc.

19-33s-6w Harper Ks.

DST Test Number: 2

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 21875

Printed: 2005.04.04 @ 11:33:11 Page 6