

DRILL STEM TEST REPORT

Prepared For: **Oxy USA, Inc.**

P.O.Box 2528
Liberal, Ks 67901

ATTN: Marvin Harvey

26/31S/34W Seward

Federal Land Bank H-1

Start Date: 2005.06.27 @ 14:07:28

End Date: 2005.06.28 @ 02:41:41

Job Ticket #: 21261 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Oxy USA, Inc.

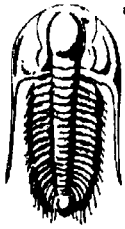
Federal Land Bank H-1

26/31S/34W Seward

DST # 1

Marmaton

2005.06.27



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Oxy USA, Inc.

P.O.Box 2528
Liberal, Ks 67901

ATTN: Marvin Harvey

Federal Land Bank H-1

26/31S/34W Seward

Job Ticket: 21261

DST#: 1

Test Start: 2005.06.27 @ 14:07:28

GENERAL INFORMATION:

Formation: **Marmaton**

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

Time Tool Opened: 18:26:11

Time Test Ended: 02:41:41

Interval: **4772.00 ft (KB) To 4790.00 ft (KB) (TVD)**

Total Depth: **4790.00 ft (KB) (TVD)**

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

Test Type: **Conventional Bottom Hole**

Tester: **Dustin Rash**

Unit No: **17**

Reference Elevations: **2814.00 ft (KB)**

2803.00 ft (CF)

KB to GR/CF: **11.00 ft**

Serial #: 6770

Inside

Press@RunDepth: **105.98 psig @ 4774.00 ft (KB)**

Start Date: **2005.06.27**

End Date:

2005.06.28

Start Time: **14:07:28**

End Time:

02:41:41

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2005.06.27 @ 18:23:11**

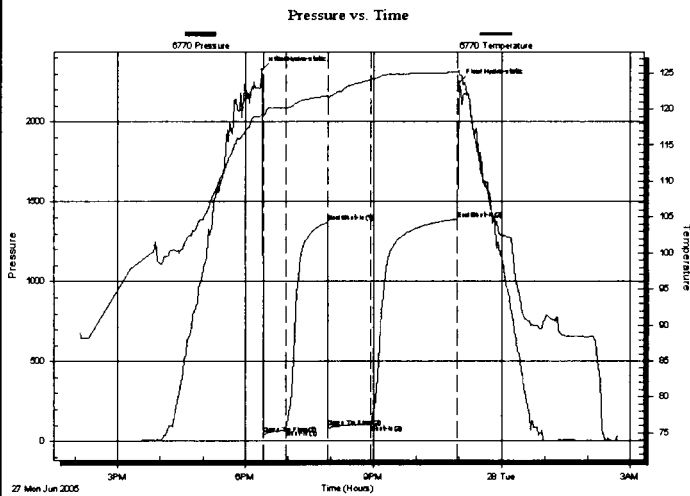
Time Off Btm: **2005.06.27 @ 22:59:56**

TEST COMMENT: F-Fair building blow . BOB in 5 min.

IS-No blow back.

FF-Weak building blow . BOB in 27 min.

FSI-No blow back.



PRESSURE SUMMARY

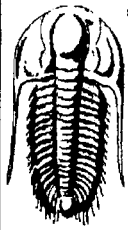
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2323.26	119.17	Initial Hydro-static
4	41.43	119.11	Open To Flow (1)
35	71.30	120.12	Shut-In(1)
93	1369.01	121.82	End Shut-In(1)
94	84.51	121.49	Open To Flow (2)
154	105.98	124.03	Shut-In(2)
275	1391.11	125.07	End Shut-In(2)
277	2244.90	124.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	100% Mud	0.15
60.00	60% Mud 30%Gas 5%w ater 5% Oil	0.30
60.00	60% Mud 25%Gas 10% Water 5% Oil	0.30
60.00	5% Mud 85% Water 10%Oil	0.52

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy USA, Inc.

Federal Land Bank H-1

P.O.Box 2528
Liberal, Ks 67901

26/31S/34W Seward

Job Ticket: 21261

DST#: 1

ATTN: Marvin Harvey

Test Start: 2005.06.27 @ 14:07:28

Tool Information

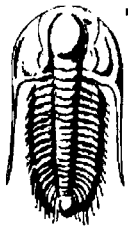
Drill Pipe:	Length: 4562.00 ft	Diameter: 3.80 inches	Volume: 63.99 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 21000.00 lb
Drill Collar:	Length: 185.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 10000.00 lb
			<u>Total Volume: 64.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4772.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	18.00 ft			
Tool Length:	48.00 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			4743.00	
Shut In Tool	5.00			4748.00	
Sampler	3.00			4751.00	
HMV	5.00			4756.00	
Jars	5.00			4761.00	
Safety Joint	2.00			4763.00	
Packer	5.00			4768.00	30.00 Bottom Of Top Packer
Packer	4.00			4772.00	
Stubb	1.00			4773.00	
Perforations	1.00			4774.00	
Recorder	0.00	6770	Inside	4774.00	
Perforations	13.00			4787.00	
Recorder	0.00	10993	Inside	4787.00	
Bullnose	3.00			4790.00	18.00 Bottom Packers & Anchor

Total Tool Length: 48.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Oxy USA, Inc.

Federal Land Bank H-1

P.O.Box 2528
Liberal, Ks 67901

26/31S/34W Seward

Job Ticket: 21261 **DST#: 1**

ATTN: Marvin Harvey

Test Start: 2005.06.27 @ 14:07:28

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:	125000 ppm
Viscosity: 43.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.77 in ³	Gas Cushion Type:		
Resistivity: 0.06 ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	100% Mud	0.148
60.00	60% Mud 30%Gas 5%water 5% Oil	0.295
60.00	60% Mud 25%Gas 10% Water 5% Oil	0.295
60.00	5% Mud 85% Water 10%Oil	0.523

Total Length: 210.00ft Total Volume: 1.261 bbl

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

Laboratory Name: Laboratory Location:

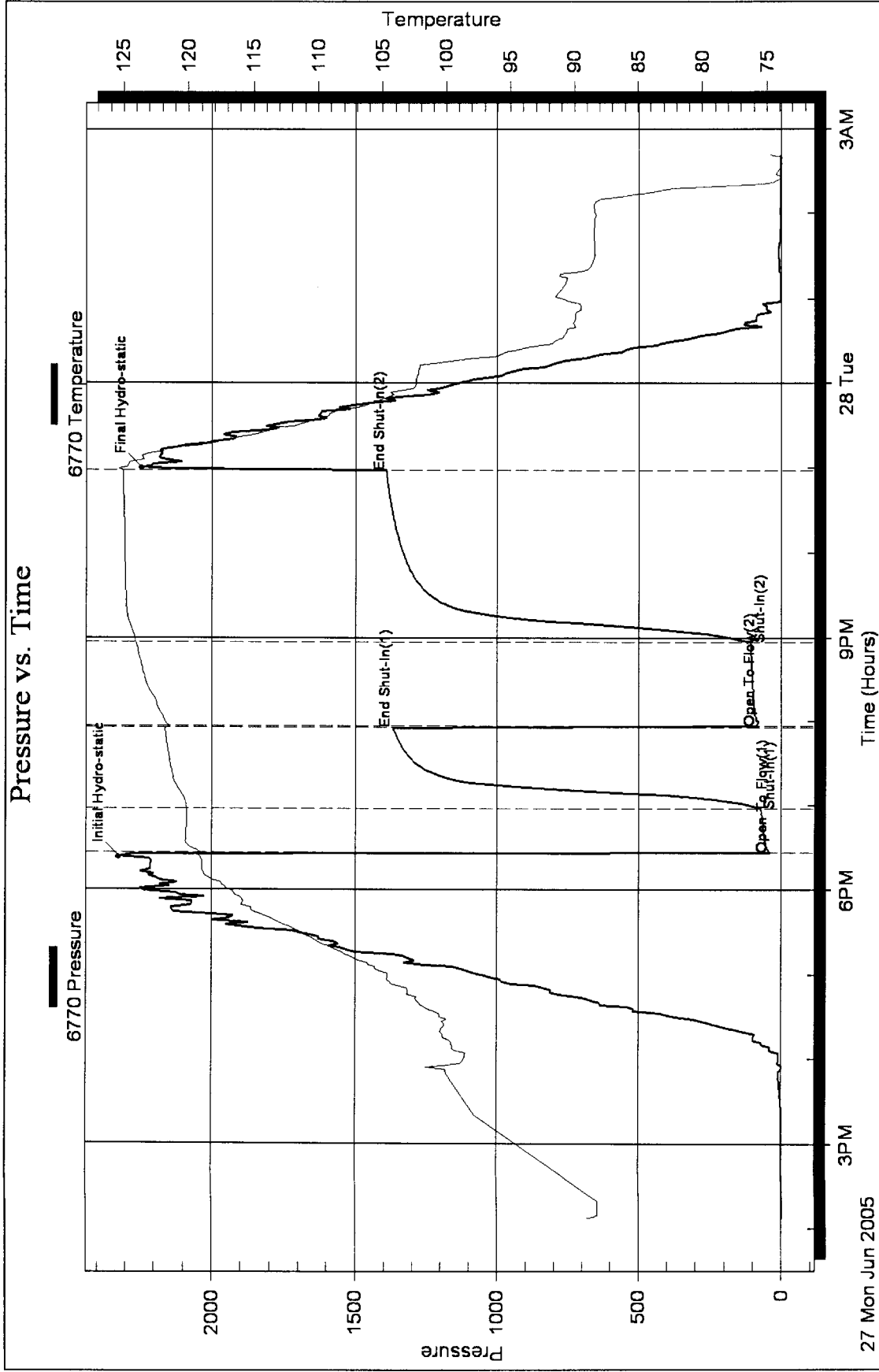
Recovery Comments:

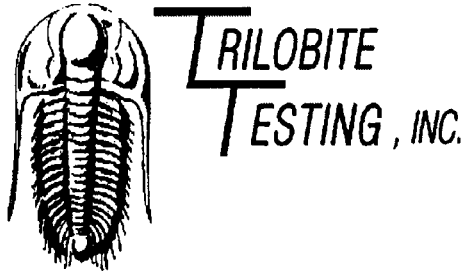
Serial #: 6770

Inside Oxy USA, Inc.

2631S/34W Sew ard

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Oxy USA, Inc.**

P.O.Box 2528
Liberal, Ks 67901

ATTN: Marvin Harvey

26/31S/34W Seward

Federal Land Bank H-1

Start Date: 2005.06.29 @ 19:13:24

End Date: 2005.06.30 @ 06:30:52

Job Ticket #: 21262 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Oxy USA, Inc.

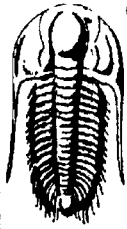
Federal Land Bank H-1

26/31S/34W Seward

DST # 2

Morrow Sand

2005.06.29



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Oxy USA, Inc.

Federal Land Bank H-1

P.O.Box 2528
Liberal, Ks 67901

26/31S/34W Seward

Job Ticket: 21262

DST#: 2

ATTN: Marvin Harvey

Test Start: 2005.06.29 @ 19:13:24

GENERAL INFORMATION:

Formation: **Morrow Sand**
 Deviated: **No Whipstock:** ft (KB)
 Time Tool Opened: 21:42:22
 Time Test Ended: 06:30:52

Test Type: **Conventional Bottom Hole**
 Tester: **Dustin Rash**
 Unit No: **20**

Interval: **5248.00 ft (KB) To 5312.00 ft (KB) (TVD)**
 Total Depth: **5312.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2814.00 ft (KB)**
2803.00 ft (CF)
 KB to GR/CF: **11.00 ft**

Serial #: 6770

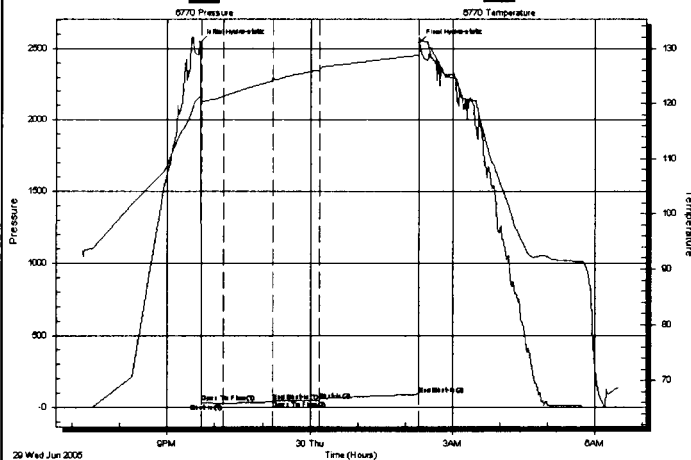
Inside

Press@RunDepth: **50.89 psig @ 5251.00 ft (KB)**
 Start Date: **2005.06.29** End Date: **2005.06.30**
 Start Time: **19:13:24** End Time: **06:30:52**

Capacity: **7000.00 psig**
 Last Calib.: **1899.12.30**
 Time On Btm: **2005.06.29 @ 21:40:37**
 Time Off Btm: **2005.06.30 @ 02:17:07**

TEST COMMENT: **IF-Weak blow . Built to 1/4 inch.**
IS-No Blow back.
FF-No blow .
FSI-No Blow back.

Pressure vs. Time



PRESSURE SUMMARY

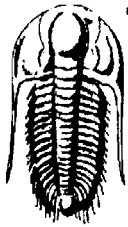
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2540.79	121.18	Initial Hydro-static
2	33.13	120.40	Open To Flow (1)
30	27.43	121.28	Shut-in(1)
92	40.33	124.03	End Shut-In(1)
93	46.85	125.30	Open To Flow (2)
152	50.89	126.04	Shut-in(2)
276	92.21	128.72	End Shut-In(2)
277	2540.25	132.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	100% Mud	0.10

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy USA, Inc.

Federal Land Bank H-1

P.O.Box 2528
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26/31S/34W Seward

Job Ticket: 21262

DST#: 2

ATTN: Marvin Harvey

Test Start: 2005.06.29 @ 19:13:24

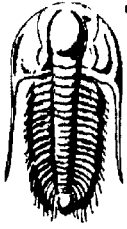
Tool Information

Drill Pipe:	Length: 5058.00 ft	Diameter: 3.80 inches	Volume: 70.95 bbl	Tool Weight: 2000.00 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: 185.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 71.86 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	5248.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	94.00 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			5219.00	
Shut In Tool	5.00			5224.00	
Sampler	3.00			5227.00	
Hydraulic tool	5.00			5232.00	
Jars	5.00			5237.00	
Safety Joint	2.00			5239.00	
Packer	5.00			5244.00	30.00 Bottom Of Top Packer
Packer	4.00			5248.00	
Stubb	1.00			5249.00	
Perforations	1.00			5250.00	
Change Over Sub	1.00			5251.00	
Recorder	0.00	6770	Inside	5251.00	
Drill Pipe	31.00			5282.00	
Change Over Sub	1.00			5283.00	
Perforations	26.00			5309.00	
Recorder	0.00	10993	Inside	5309.00	
Bullnose	3.00			5312.00	64.00 Bottom Packers & Anchor
Total Tool Length:	94.00				



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Federal Land Bank H-1

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26/31S/34W Seward

Job Ticket: 21262

DST#: 2

ATTN: Marvin Harvey

Test Start: 2005.06.29 @ 19:13:24

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:

2900 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.27 in³

Gas Cushion Type:

Resistivity: 1.90 ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	100% Mud	0.098

Total Length: 20.00 ft

Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

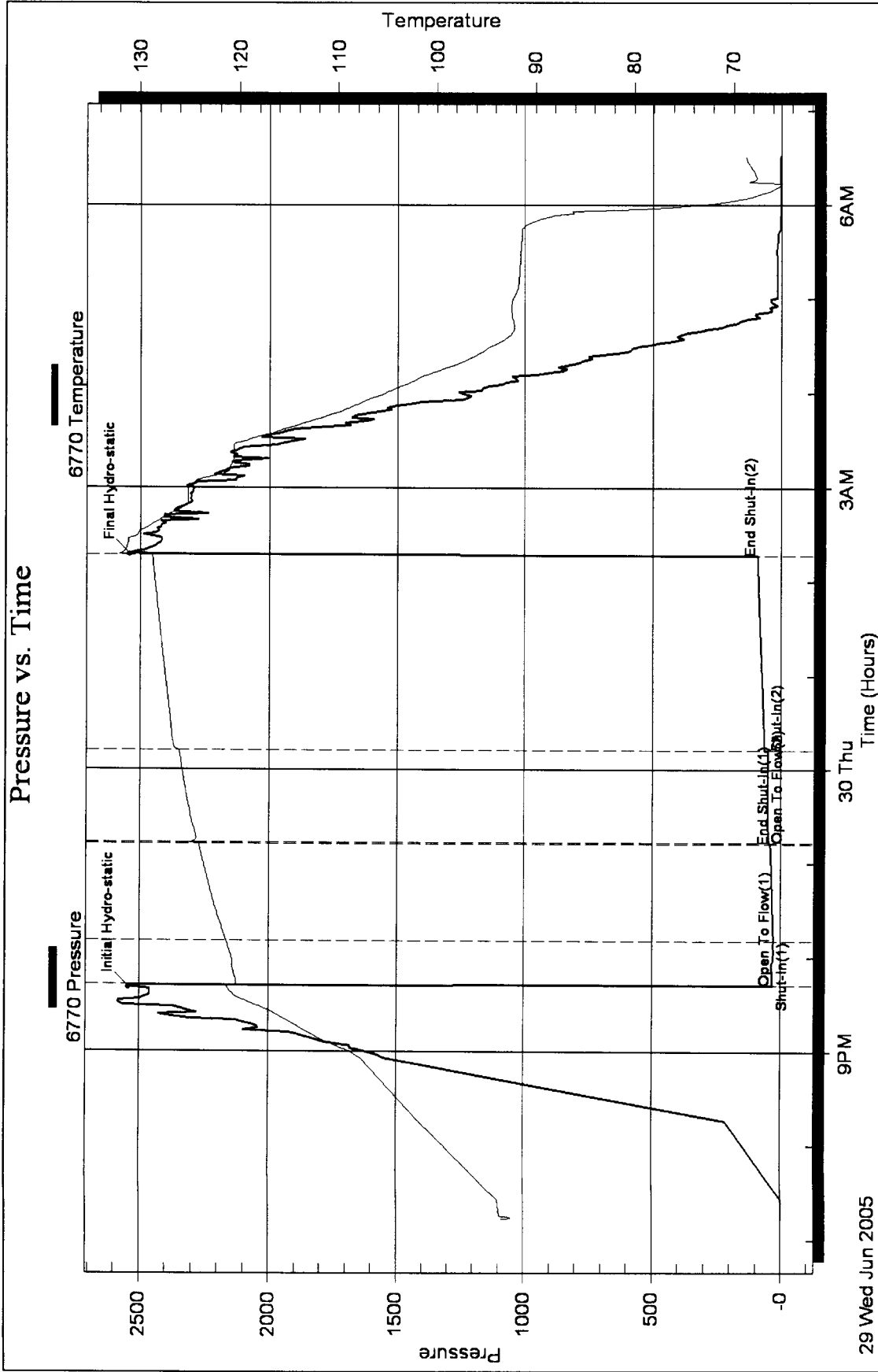


CHART PAGE

This is a photocopy of the actual AK-1 recorder chart.

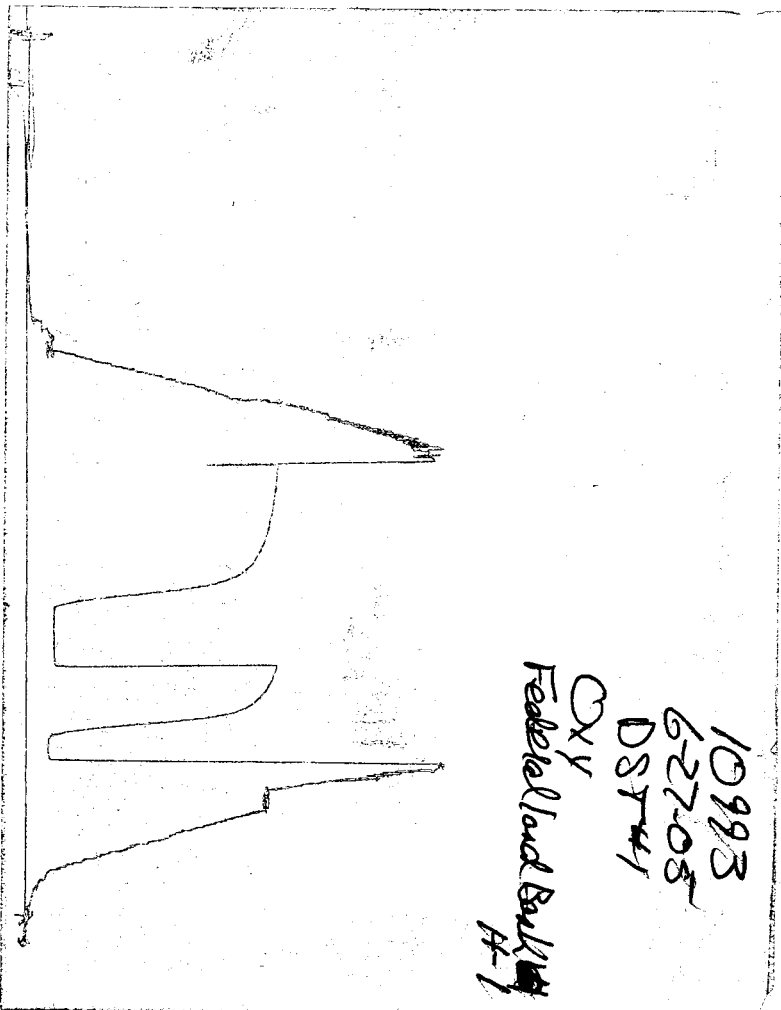


CHART PAGE
This is a photocopy of the actual AK-1 recorder chart.

