



DRILL STEM TEST REPORT

Prepared For: **Larson Operating Company**

562 West Highway 4
Olmitz KS 67564

ATTN: BOB Lewallyn

19-18s-26w Ness

Lois 1-19

Start Date: 2006.01.31 @ 17:46:54

End Date: 2006.02.01 @ 03:27:34

Job Ticket #: 23282 DST #: 1

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Larson Operating Company

Lois 1-19

562 West Highway 4
Olmitz KS 67564

19-18s-26w Ness

Job Ticket: 23282

DST#: 1

ATTN: BOB Lew allyn

Test Start: 2006.01.31 @ 17:46:54

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:47:34

Time Test Ended: 03:27:34

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **4424.00 ft (KB) To 4462.00 ft (KB) (TVD)**

Total Depth: 4462.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2670.00 ft (KB)

2660.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6772

Inside

Press@RunDepth: 331.47 psig @ 4425.00 ft (KB)

Start Date: 2006.01.31

End Date:

2006.02.01

Start Time: 17:46:54

End Time:

03:27:34

Capacity: 7000.00 psig

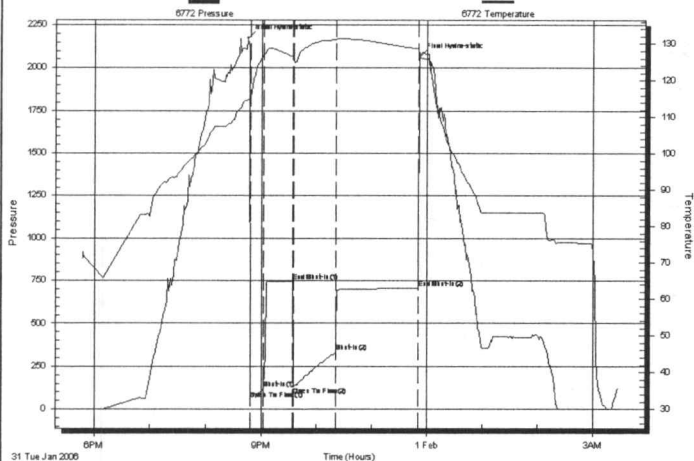
Last Calib.: 1899.12.30

Time On Btm: 2006.01.31 @ 20:45:19

Time Off Btm: 2006.01.31 @ 23:51:33

TEST COMMENT: IF: 1/4 blow BOB in 2 1/2 min.
IS: 9 min to bleed off built to 6 in 30 min.
FF: 1/4 blow BOB in 3 min. Gas to surface in 25 min.
FS: 30 min to bleed off. BOB in 8 min.

Pressure vs. Time



PRESSURE SUMMARY

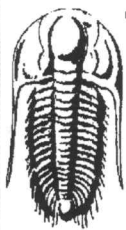
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2172.26	114.91	Initial Hydro-static
3	57.12	114.39	Open To Flow (1)
18	121.99	126.87	Shut-In (1)
50	747.73	126.53	End Shut-In (1)
50	133.35	125.79	Open To Flow (2)
96	331.47	131.11	Shut-In (2)
186	705.57	128.66	End Shut-In (2)
187	2065.22	126.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	gocm 40%g 10%o 50%m	0.61
754.00	go 30%g 70%o	10.58

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Larson Operating Company

Lois 1-19

562 West Highway 4
Olmitz KS 67564

19-18s-26w Ness

Job Ticket: 23282

DST#: 1

ATTN: BOB Lew allyn

Test Start: 2006.01.31 @ 17:46:54

Tool Information

Drill Pipe:	Length: 4296.00 ft	Diameter: 3.80 inches	Volume: 60.26 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose:	75000.00 lb
			Total Volume: 60.87 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	4424.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	38.00 ft				
Tool Length:	65.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Stubb	1.00			4398.00	
Shut In Tool	5.00			4403.00	
Hydraulic tool	5.00			4408.00	
Jars	5.00			4413.00	
Safety Joint	2.00			4415.00	
Packer	5.00			4420.00	27.00 Bottom Of Top Packer
Packer	4.00			4424.00	
Stubb	1.00			4425.00	
Recorder	0.00	6772	Inside	4425.00	
Perforations	32.00			4457.00	
Recorder	0.00	7437	Outside	4457.00	
Bullnose	5.00			4462.00	38.00 Bottom Packers & Anchor

Total Tool Length: 65.00



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FLUID SUMMARY

Larson Operating Company

Lois 1-19

562 West Highway 4
Olmitz KS 67564

19-18s-26w Ness

Job Ticket: 23282

DST#: 1

ATTN: BOB Lew allyn

Test Start: 2006.01.31 @ 17:46:54

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	gocm 40%g 10%o 50%m	0.610
754.00	go 30%g 70%o	10.577

Total Length: 878.00 ft

Total Volume: 11.187 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

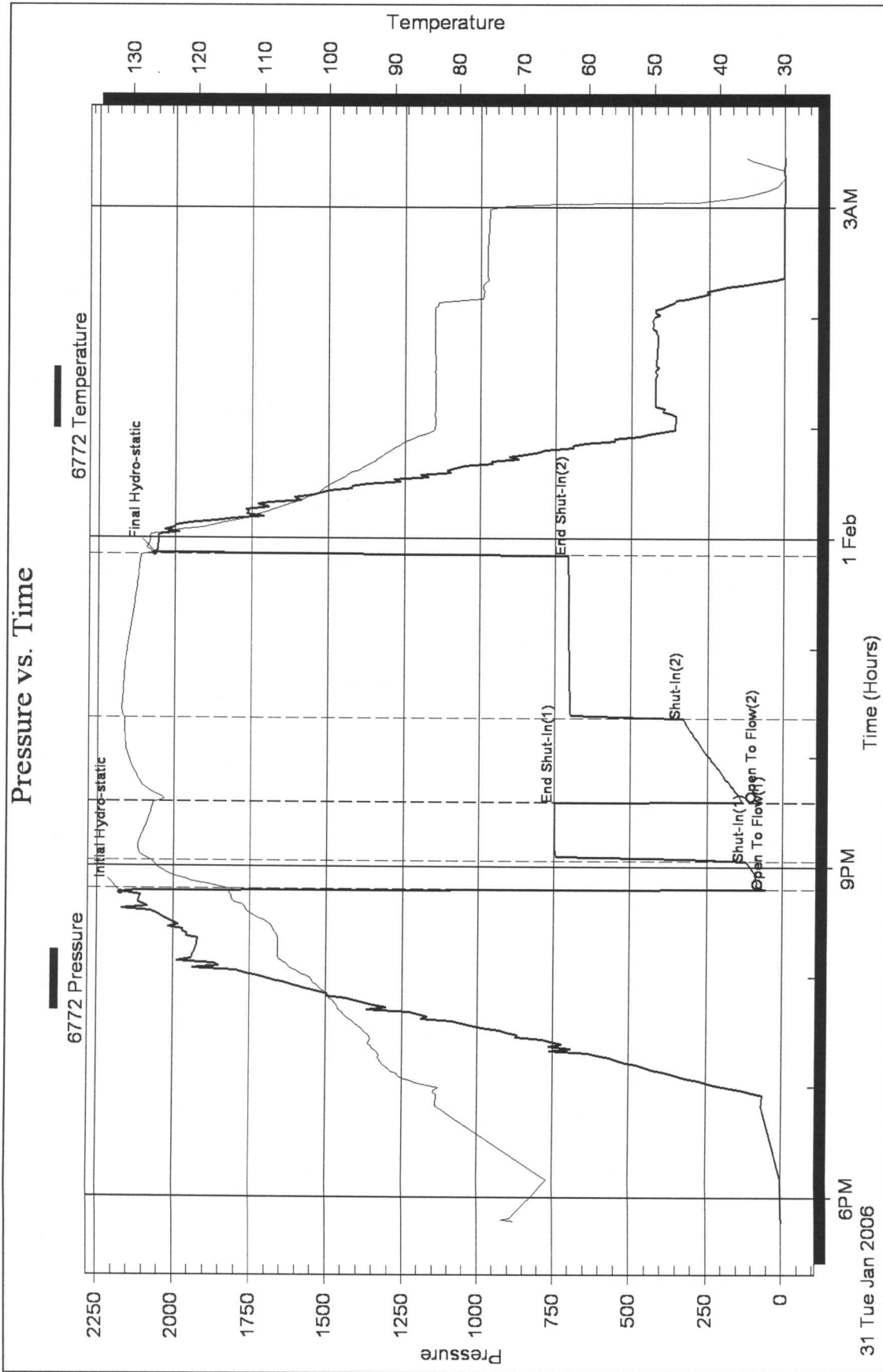
Serial #: 6772

Inside

Larson Operating Company

19-18s-26w Ness

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Larson Operating Company**

562 West Highway 4
Olmitz KS 67564

ATTN: BOB Lewallyn

19-18s-26w Ness

Lois 1-19

Start Date: 2006.02.01 @ 22:10:22

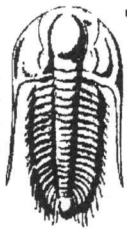
End Date: 2006.02.02 @ 05:18:01

Job Ticket #: 23183 DST #: 2

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DRILL STEM TEST REPORT

Larson Operating Company

Lois 1-19

562 West Highway 4
Olmitz KS 67564

19-18s-26w Ness

Job Ticket: 23183

DST#: 2

ATTN: BOB Lew allyn

Test Start: 2006.02.01 @ 22:10:22

GENERAL INFORMATION:

Formation: **Mississippi**

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

Time Tool Opened: 00:45:17

Time Test Ended: 05:18:01

Test Type: **Conventional Bottom Hole**

Tester: **Brandon Turley**

Unit No: **35**

Interval: **4588.00 ft (KB) To 4626.00 ft (KB) (TVD)**

Total Depth: **4626.00 ft (KB) (TVD)**

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

Reference Elevations: **2670.00 ft (KB)**

2660.00 ft (CF)

KB to GR/CF: **10.00 ft**

Serial #: **6772**

Inside

Press@RunDepth: **45.57 psig @ 4589.00 ft (KB)**

Start Date: **2006.02.01**

End Date:

2006.02.02

Start Time: **22:10:22**

End Time:

05:18:01

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2006.02.02 @ 00:43:02**

Time Off Btm: **2006.02.02 @ 03:01:46**

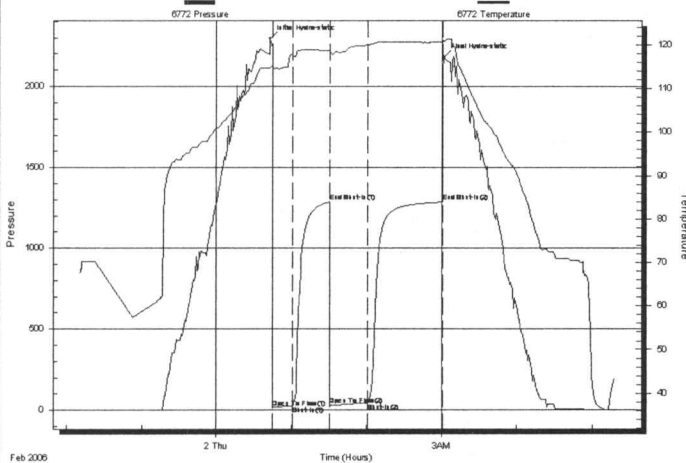
TEST COMMENT: IF: 1/4 blow died in 7 min.

IS: No return.

FF: No blow.

FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2293.27	114.73	Initial Hydro-static
3	14.57	114.13	Open To Flow (1)
18	26.04	117.66	Shut-In(1)
48	1285.58	118.61	End Shut-In(1)
48	29.74	118.15	Open To Flow (2)
78	45.57	120.04	Shut-In(2)
138	1285.23	120.55	End Shut-In(2)
139	2180.78	120.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	ocm 10%o 90% m	0.30

Gas Rates

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

Larson Operating Company

Lois 1-19

562 West Highway 4
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19-18s-26w Ness

Job Ticket: 23183

DST#: 2

ATTN: BOB Lew allyn

Test Start: 2006.02.01 @ 22:10:22

Tool Information

Drill Pipe:	Length: 4453.00 ft	Diameter: 3.80 inches	Volume: 62.46 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 70000.00 lb
			Total Volume: 63.07 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4588.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	38.00 ft			
Tool Length:	65.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4562.00	
Shut In Tool	5.00			4567.00	
Hydraulic tool	5.00			4572.00	
Jars	5.00			4577.00	
Safety Joint	2.00			4579.00	
Packer	5.00			4584.00	27.00 Bottom Of Top Packer
Packer	4.00			4588.00	
Stubb	1.00			4589.00	
Recorder	0.00	6772	Inside	4589.00	
Perforations	32.00			4621.00	
Recorder	0.00	7437	Outside	4621.00	
Bullnose	5.00			4626.00	38.00 Bottom Packers & Anchor

Total Tool Length: 65.00



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Job Ticket: 23183

DST#: 2

ATTN: BOB Lew allyn

Test Start: 2006.02.01 @ 22:10:22

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	ocm 10%o 90%m	0.295

Total Length: 60.00 ft

Total Volume: 0.295 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

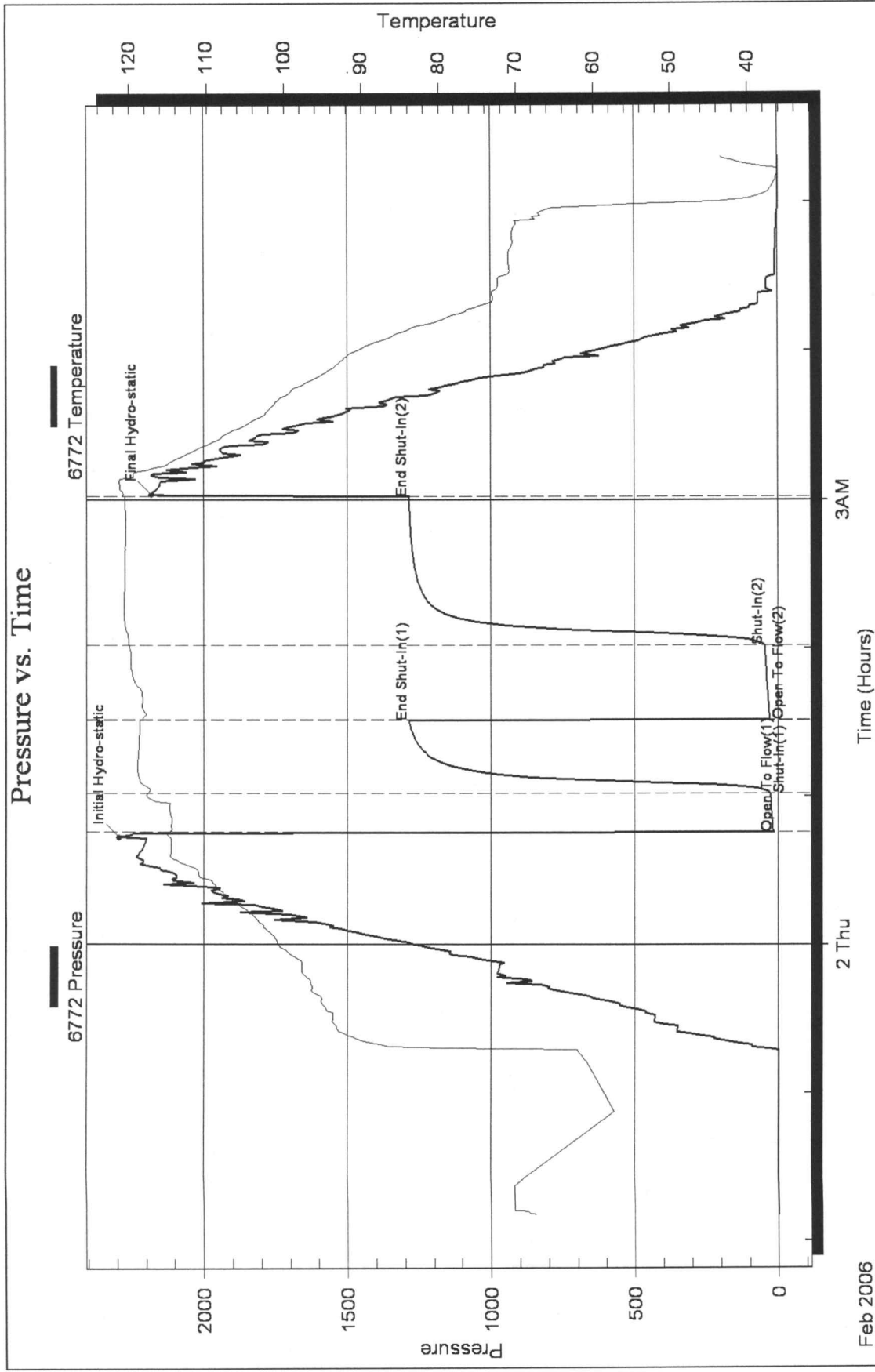


CHART PAGE

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

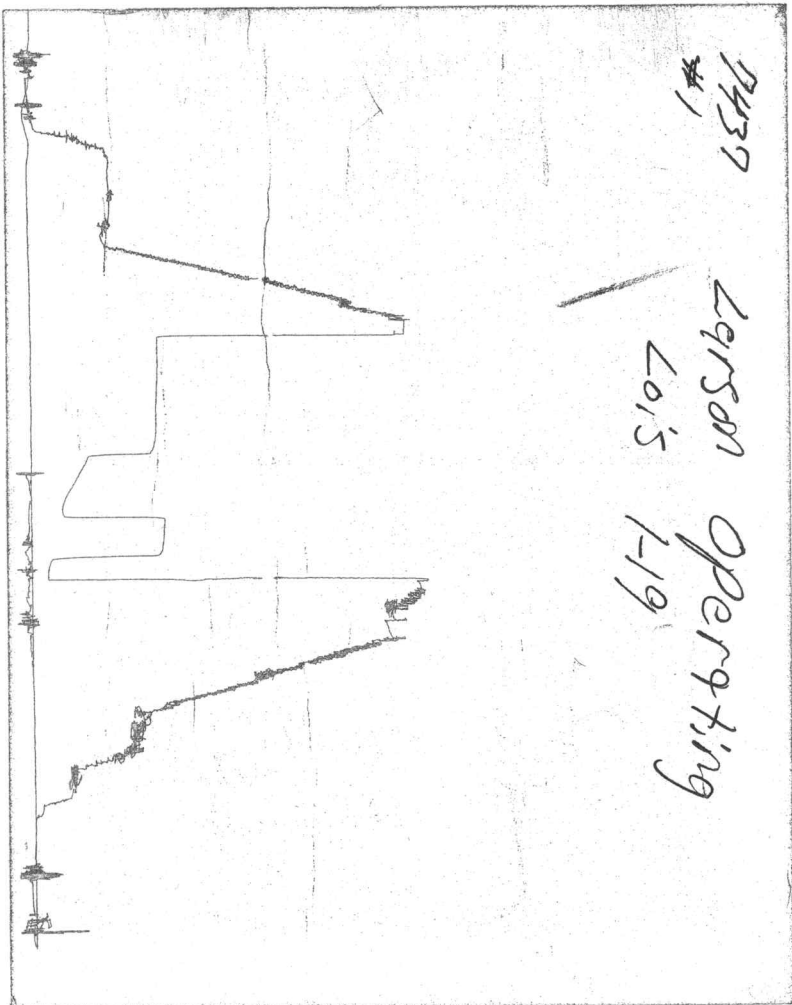


CHART PAGE

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

