

TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Great Plains Energy Inc**

429 N Linden
Box 292
Wahoo NE 68066

ATTN: Dan Blankeneau

26-5-23-Norton-Ks

Sprigg # 1

Start Date: 2006.02.20 @ 16:10:20

End Date: 2006.02.20 @ 23:11:35

Job Ticket #: 23908

DST #: 1

15-137-20447-00-00

SE NE NW

990 FNL 2310 FNL

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

RECEIVED
SEP 18 2006
KCC WICHITA

15-137-20447

Great Plains Energy Inc

Sprigg # 1

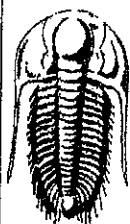
26-5-23-Norton-Ks

DST # 1

A-B

LKC

2006.02.20



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Great Plains Energy Inc

429 N Linden
Box 292
Wahoo NE 68066
ATTN: Dan Blankeneau

Sprigg # 1

26-5-23-Norton-Ks

Job Ticket: 23908

DST#: 1

Test Start: 2006.02.20 @ 16:10:20

GENERAL INFORMATION:

Formation: **A-B LKC**

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

Time Tool Opened: 17:51:05

Time Test Ended: 23:11:35

Test Type: **Conventional Bottom Hole**

Tester: **Dan Bangle**

Unit No: **21**

Interval: **3515.00 ft (KB) To 3560.00 ft (KB) (TVD)**

Total Depth: **3560.00 ft (KB) (TVD)**

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

Reference Elevations: **2343.00 ft (KB)**

2338.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 6741 **Inside**

Press@RunDepth: **84.91 psig @ 3523.00 ft (KB)**

Start Date: **2006.02.20**

End Date:

2006.02.20

Start Time: **16:10:22**

End Time:

23:11:35

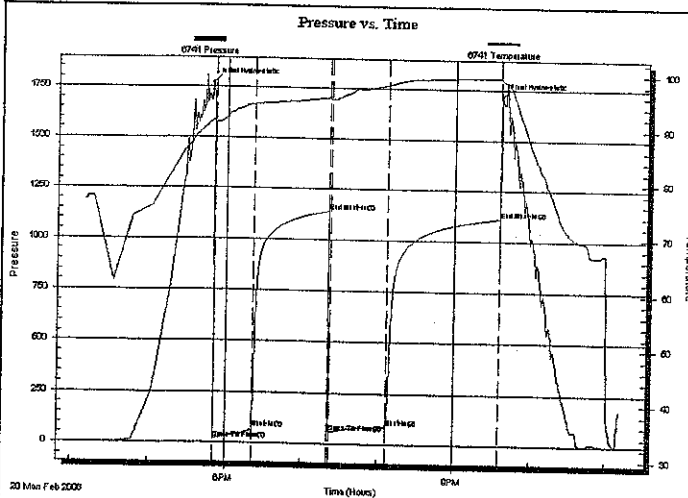
Capacity: **7000.00 psig**

Last Calib.: **2006.02.20**

Time On Btm: **2006.02.20 @ 17:48:50**

Time Off Btm: **2006.02.20 @ 21:36:35**

TEST COMMENT: IF-Weak building to 1 1/4"
FF-Weak steady surface blow
Times-30-60-45-90



PRESSURE SUMMARY

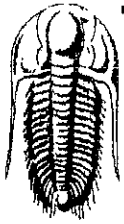
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1771.14	91.15	Initial Hydro-static
3	13.19	90.33	Open To Flow (1)
33	71.30	94.33	Shut-In(1)
92	1139.01	95.63	End Shut-In(1)
93	58.03	95.35	Open To Flow (2)
138	84.91	98.01	Shut-In(2)
227	1111.12	99.51	End Shut-In(2)
228	1716.78	99.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
140.00	Mdy Wtr Rw . 15 @ 75 = 55000ppm	0.87

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Great Plains Energy Inc

Sprigg # 1

429 N Linden
Box 292
Wahoo NE 68066
ATTN: Dan Blankeneau

26-5-23-Norton-Ks

Job Ticket: 23908

DST#: 1

Test Start: 2006.02.20 @ 16:10:20

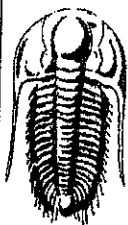
Tool Information

Drill Pipe:	Length: 3380.00 ft	Diameter: 3.80 inches	Volume: 47.41 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:	25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	45000.00 lb
			Total Volume: 48.00 bbl	Tool Chased	1.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3515.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	50.00 ft				
Tool Length:	74.00 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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Change Over Sub	1.00			3492.00	
Shut In Tool	5.00			3497.00	
Hydraulic tool	5.00			3502.00	
Jars	5.00			3507.00	
Safety Joint	3.00			3510.00	
Packer	5.00			3515.00	24.00 Bottom Of Top Packer
Packer - Shale	5.00			3520.00	
Stubb	1.00			3521.00	
Perforations	1.00			3522.00	
Change Over Sub	1.00			3523.00	
Recorder	0.00	6741	Inside	3523.00	
Drill Pipe	31.00			3554.00	
Change Over Sub	1.00			3555.00	
Recorder	0.00	13254	Outside	3555.00	
Perforations	7.00			3562.00	
Bullnose	3.00			3565.00	50.00 Anchor Tool

Total Tool Length: 74.00



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc

Sprigg # 1

429 N Linden

26-5-23-Norton-Ks

Box 292

Wahoo NE 68066

Job Ticket: 23908

DST#: 1

ATTN: Dan Blankeneau

Test Start: 2006.02.20 @ 16:10:20

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 6.79 in³

Resistivity: ohm.m

Salinity: 1000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: deg API

Water Salinity: 55000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
140.00	Mdy Wtr Rw . 15 @ 75 = 55000ppm	0.871

Total Length: 140.00 ft Total Volume: 0.871 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

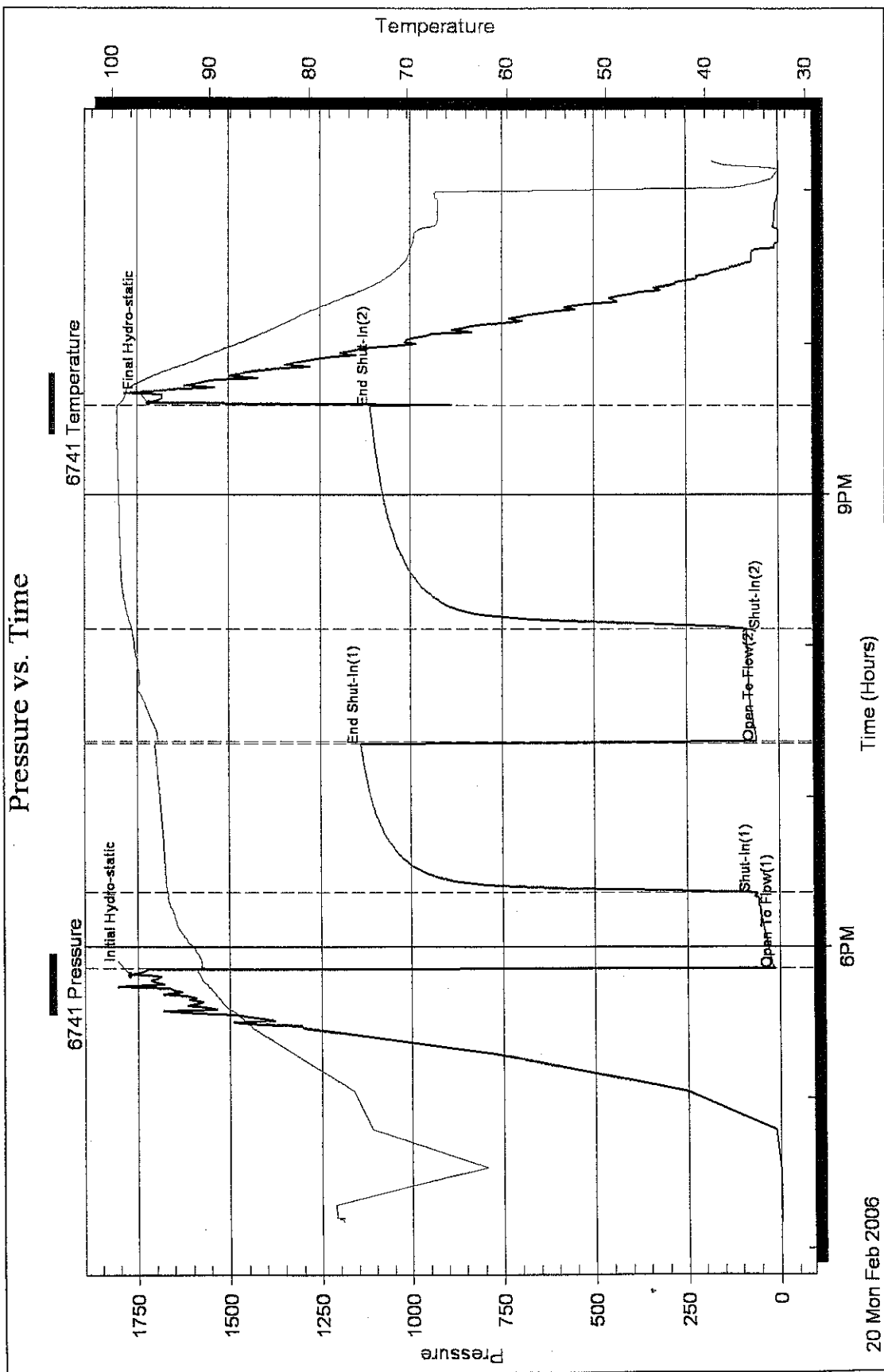
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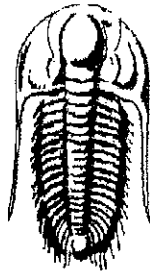
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Great Plains Energy Inc**

429 N Linden
Box 292
Wahoo NE 68066

ATTN: Dan Blankeneau

26-5-23-Norton-Ks

Sprigg # 1

Start Date: 2006.02.21 @ 10:37:52

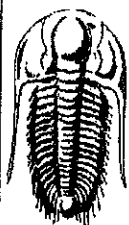
End Date: 2006.02.21 @ 17:46:52

Job Ticket #: 23909 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Great Plains Energy Inc

429 N Linden
Box 292
Wahoo NE 68066
ATTN: Dan Blankeneau

Sprigg # 1

26-5-23-Norton-Ks

Job Ticket: 23909

DST#: 2

Test Start: 2006.02.21 @ 10:37:52

GENERAL INFORMATION:

Formation: **C-D-E-F- L**

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

Time Tool Opened: 12:26:07

Time Test Ended: 17:46:52

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: **3559.00 ft (KB) To 3598.00 ft (KB) (TVD)**

Total Depth: **3598.00 ft (KB) (TVD)**

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

Reference Elevations: **2343.00 ft (KB)**

2338.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 6741 Inside

Press@RunDepth: **67.20 psig @ 3560.00 ft (KB)**

Start Date: **2006.02.21**

End Date:

2006.02.21

Start Time: **10:37:54**

End Time:

17:46:52

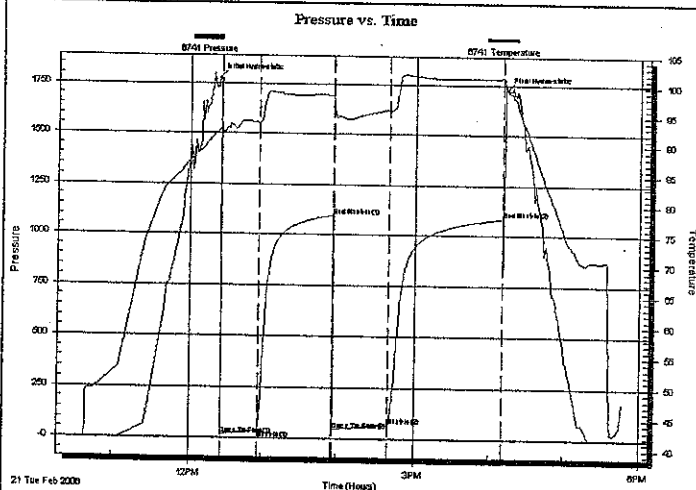
Capacity: **7000.00 psig**

Last Calib.: **2006.02.21**

Time On Btmr: **2006.02.21 @ 12:23:52**

Time Off Btmr: **2006.02.21 @ 16:13:07**

TEST COMMENT: IF-Weak building to 3/4"
FF-Weak steady surface blow
Times-30-60-45-90



PRESSURE SUMMARY

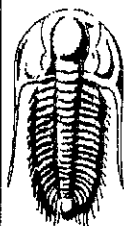
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1774.05	92.38	Initial Hydro-static
3	15.90	92.29	Open To Flow (1)
33	38.75	93.64	Shut-In(1)
93	1096.03	98.41	End Shut-In(1)
93	42.11	97.29	Open To Flow (2)
137	67.20	95.93	Shut-In(2)
227	1082.51	101.46	End Shut-In(2)
230	1725.44	99.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
98.00	Mdy Wtr Rw .18 @ 80 = 78000ppm	0.48
2.00	CO	0.01

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Great Plains Energy Inc

Sprigg # 1

429 N Linden

26-5-23-Norton-Ks

Box 292

Job Ticket: 23909

DST#: 2

Wahoo NE 68066

Test Start: 2006.02.21 @ 10:37:52

ATTN: Dan Blankeneau

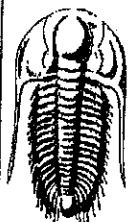
Tool Information

Drill Pipe:	Length: 3441.00 ft	Diameter: 3.80 inches	Volume: 48.27 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: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 45000.00 lb
		Total Volume: 48.86 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3559.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	39.00 ft			
Tool Length:	68.00 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			3531.00	
Shut In Tool	5.00			3536.00	
Hydraulic tool	5.00			3541.00	
Jars	5.00			3546.00	
Safety Joint	3.00			3549.00	
Packer	5.00			3554.00	29.00 Bottom Of Top Packer
Packer	5.00			3559.00	
Stubb	1.00			3560.00	
Recorder	0.00	6741	Inside	3560.00	
Perforations	35.00			3595.00	
Recorder	0.00	13254	Outside	3595.00	
Bullnose	3.00			3598.00	39.00 Bottom Packers & Anchor

Total Tool Length: 68.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy Inc

Sprigg # 1

429 N Linden

26-5-23-Norton-Ks

Box 292

Job Ticket: 23909

DST#: 2

Wahoo NE 68066

Test Start: 2006.02.21 @ 10:37:52

ATTN: Dan Blankeneau

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:

78000 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
98.00	Mdy Wtr Rw .18 @ 80 = 78000ppm	0.482
2.00	CO	0.010

Total Length: 100.00 ft

Total Volume: 0.492 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6741

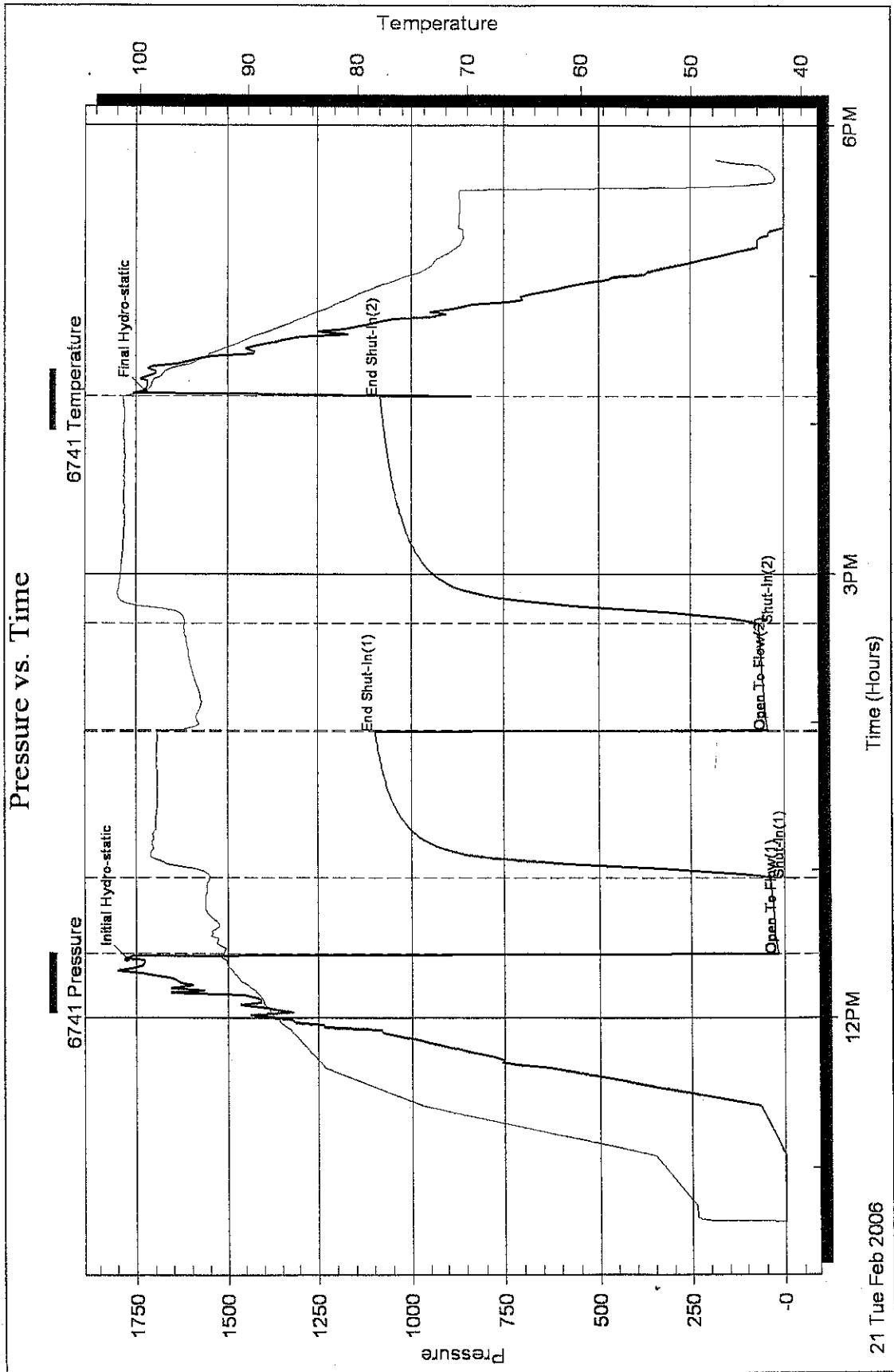
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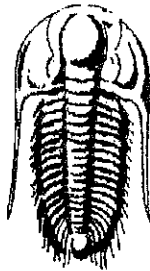
Great Plains Energy Inc

26-5-23-Norfolk-Ks

DST Test Number: 2

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Great Plains Energy Inc**

429 N Linden
Box 292
Wahoo NE 68066

ATTN: Dan Blankeneau

26-5-23-Norton-Ks

Sprigg # 1

Start Date: 2006.02.22 @ 08:57:11

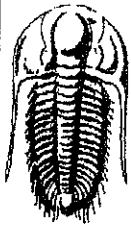
End Date: 2006.02.22 @ 15:25:41

Job Ticket #: 23910 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Great Plains Energy Inc

429 N Linden
Box 292
Wahoo NE 68066
ATTN: Dan Blankeneau

Sprigg # 1

26-5-23-Norton-Ks

Job Ticket: 23910

DST#: 3

Test Start: 2006.02.22 @ 08:57:11

GENERAL INFORMATION:

Formation: H-I-J-K-L

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:53:41

Time Test Ended: 15:25:41

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: 3624.00 ft (KB) To 3715.00 ft (KB) (TVD)

Total Depth: 3715.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2343.00 ft (KB)

2338.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741

Inside

Press@RunDepth: 27.97 psig @ 3627.00 ft (KB)

Start Date: 2006.02.22

End Date:

2006.02.22

Start Time: 08:57:13

End Time:

15:25:41

Capacity: 7000.00 psig

Last Calib.: 2006.02.22

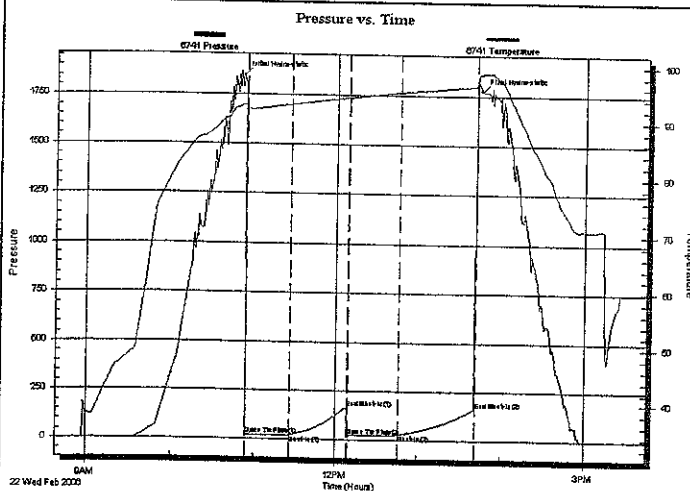
Time On Btm: 2006.02.22 @ 10:51:11

Time Off Btm: 2006.02.22 @ 13:44:26

TEST COMMENT: IF-Weak steady surface blow

FF-No blow

Times-30-45-30-60



PRESSURE SUMMARY

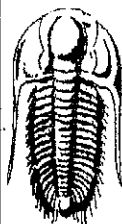
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1848.07	92.86	Initial Hydro-static
3	17.75	92.40	Open To Flow (1)
36	20.86	92.95	Shut-In (1)
78	166.33	94.22	End Shut-In (1)
78	21.20	94.17	Open To Flow (2)
115	27.97	95.23	Shut-In (2)
170	161.51	96.45	End Shut-In (2)
174	1777.38	98.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	DM	0.05

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Great Plains Energy Inc

Sprigg # 1

429 N Linden
Box 292
Wahoo NE 68066

26-5-23-Norton-Ks

Job Ticket: 23910

DST#: 3

ATTN: Dan Blankeneau

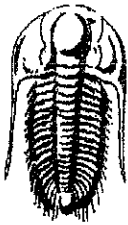
Test Start: 2006.02.22 @ 08:57:11

Tool Information

Drill Pipe:	Length: 3504.00 ft	Diameter: 3.80 inches	Volume: 49.15 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:	25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	50000.00 lb
		Total Volume:	49.74 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	44000.00 lb
Depth to Top Packer:	3624.00 ft			Final	44000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	91.00 ft				
Tool Length:	120.00 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			3596.00	
Shut In Tool	5.00			3601.00	
Hydraulic tool	5.00			3606.00	
Jars	5.00			3611.00	
Safety Joint	3.00			3614.00	
Packer	5.00			3619.00	29.00 Bottom Of Top Packer
Packer	5.00			3624.00	
Stubb	1.00			3625.00	
Perforations	1.00			3626.00	
Change Over Sub	1.00			3627.00	
Recorder	0.00	6741	Inside	3627.00	
Drill Pipe	62.00			3689.00	
Change Over Sub	1.00			3690.00	
Recorder	0.00	13254	Outside	3690.00	
Perforations	22.00			3712.00	
Bullnose	3.00			3715.00	91.00 Bottom Packers & Anchor
Total Tool Length:		120.00			



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FLUID SUMMARY

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Sprigg # 1

429 N Linden

26-5-23-Norton-Ks

Box 292

Job Ticket: 23910

DST#: 3

Wahoo NE 68066

Test Start: 2006.02.22 @ 08:57:11

ATTN: Dan Blankeneau

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: 58.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	DM	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

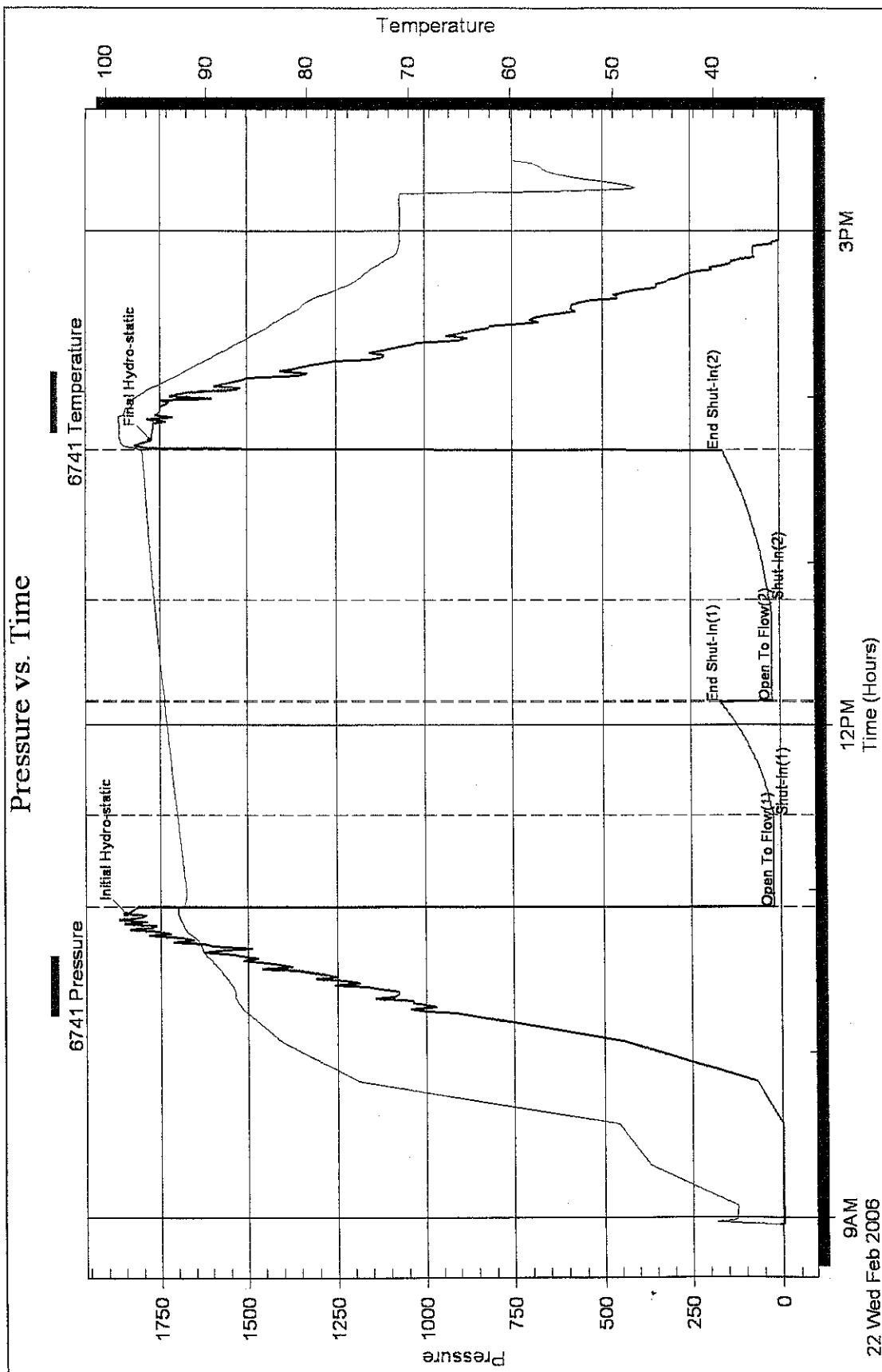


CHART PAGE

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

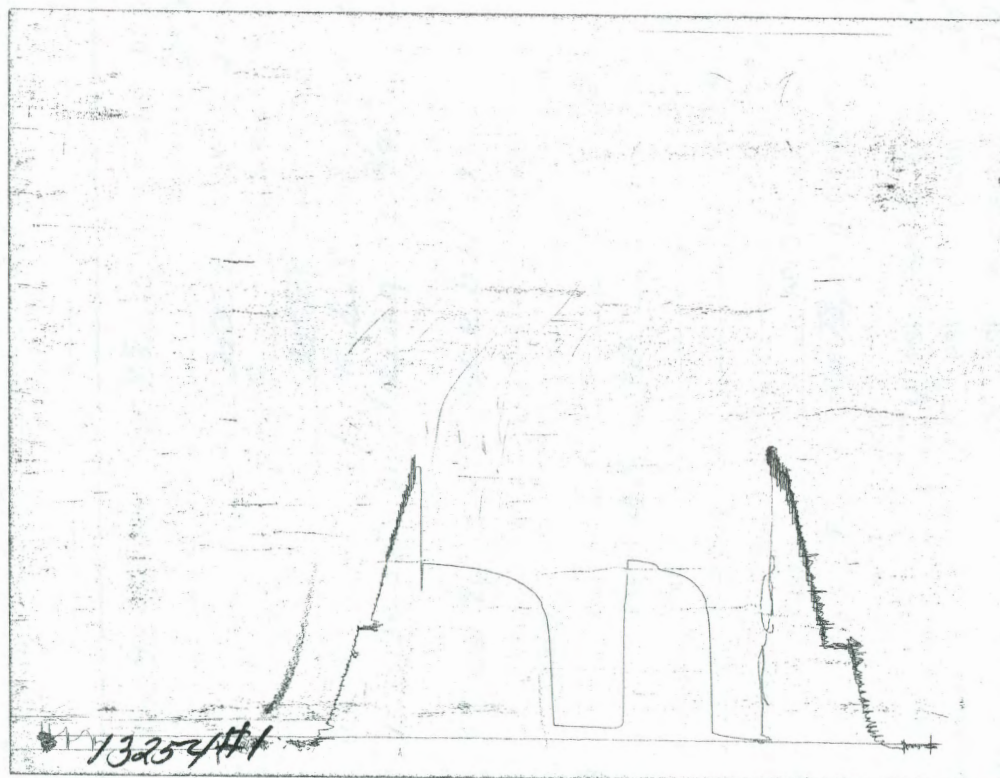


CHART PAGE

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

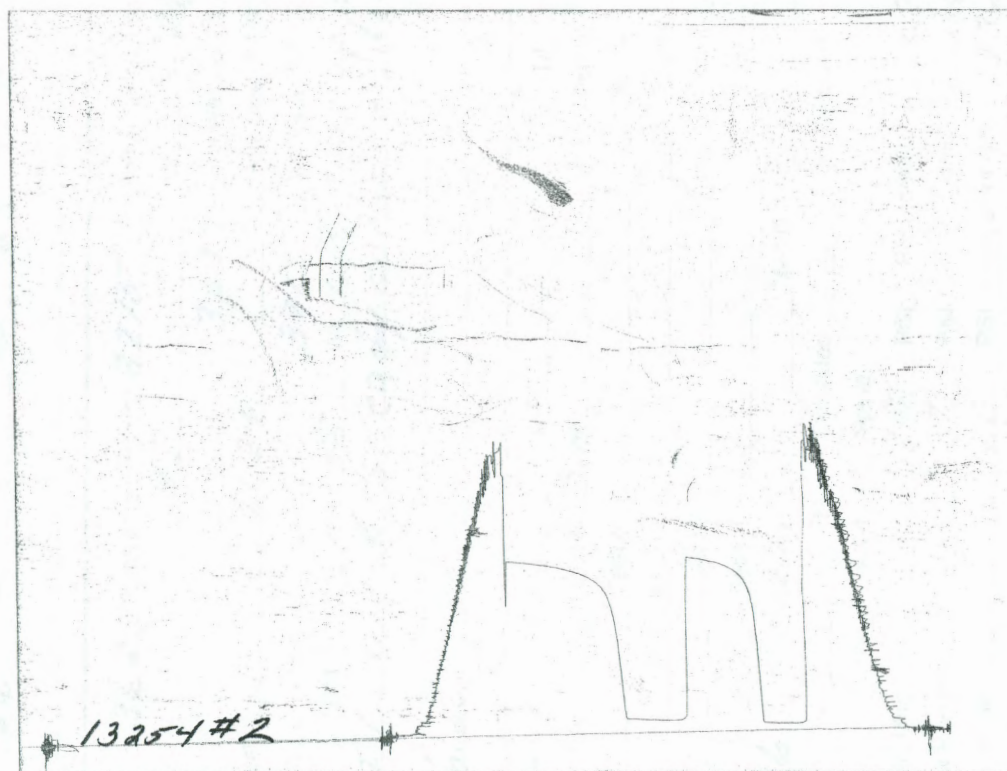


CHART PAGE

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

