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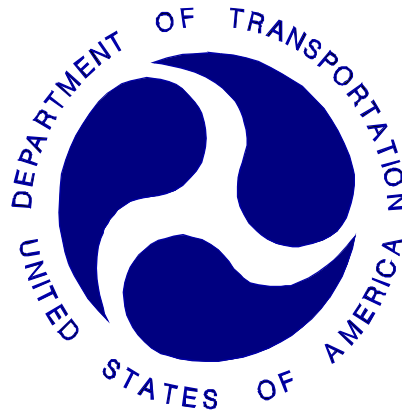
**NEW CAR ASSESSMENT PROGRAM
SIDE IMPACT TEST**

HONDA MOTOR CO., LTD.
2003 HONDA S2000
2-DOOR CONVERTIBLE

NHTSA NUMBER: M35308

VERIDIAN ENGINEERING TEST NUMBER: 8652-SNCAP-07

VERIDIAN ENGINEERING
TRANSPORTATION SCIENCES CENTER
P.O. BOX 400
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January 8, 2003

FINAL REPORT

U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Rulemaking
Office of Crashworthiness Standards
Mail Code: NVS-111
400 Seventh Street, SW, Room No. 5313
Washington, DC 20590

This Final Test Report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, under Contract No. DTNH22-98-D-02001. This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

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16. Abstract A 55/28 kph 90 ⁰ Impact Moving Deformable Barrier NCAP Side Impact Test was conducted on the subject 2003 Honda S2000 2-Door Convertible in accordance with the specifications of the Office of Crashworthiness Standards Test Procedure for the generation of consumer information on vehicle side crash protection. This test was conducted at the Veridian Engineering Crash Test Facility in Buffalo, New York, on January 8, 2003. The impact velocity of the Moving Deformable Barrier (MDB) was 61.15 kph, and the ambient temperature at the struck (driver's) side of the target vehicle at the time of impact was 21.1 ⁰ C. The target vehicle post-test maximum crush was 183 mm at levels 3 and 4. The test or target vehicle's performance is given below: <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 20%; text-align: center;"><u>Front SID H3</u></th> <th style="width: 20%;"></th> <th style="width: 20%; text-align: center;"><u>Rear SID H3</u></th> </tr> </thead> <tbody> <tr> <td>Left Upper Rib Acceleration:</td> <td style="text-align: center;">59</td> <td style="text-align: center;">g's</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Left Lower Rib Acceleration:</td> <td style="text-align: center;">55</td> <td style="text-align: center;">g's</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Lower Spine Acceleration:</td> <td style="text-align: center;">56</td> <td style="text-align: center;">g's</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Thoracic Trauma Index (TTI):</td> <td style="text-align: center;">57</td> <td style="text-align: center;">g's</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Pelvis Acceleration (PEV):</td> <td style="text-align: center;">54</td> <td style="text-align: center;">g's</td> <td style="text-align: center;">-</td> </tr> </tbody> </table> The door on the struck side of the vehicle did not separate from the body at the hinges or latches and the opposite door did not open during the side impact event.							<u>Front SID H3</u>		<u>Rear SID H3</u>	Left Upper Rib Acceleration:	59	g's	-	Left Lower Rib Acceleration:	55	g's	-	Lower Spine Acceleration:	56	g's	-	Thoracic Trauma Index (TTI):	57	g's	-	Pelvis Acceleration (PEV):	54	g's	-
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SECTION 1

PURPOSE AND TEST PROCEDURE

This side impact test is part of the FY2003 New Car Assessment Program Side Impact Protection sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-98-D-02001. The purpose of this test was to generate comparative side impact performance in a 2003 Honda S2000 2-Door Convertible. The test was conducted in accordance with the Office of Crashworthiness Standards' Laboratory Test Procedure dated July 1997.

SECTION 2

SUMMARY OF SIDE IMPACT TEST

A 2003 Honda S2000 2-Door Convertible was impacted on the left or driver's side by a Moving Deformable Barrier (MDB) which was moving forward in a 27° crabbed position to the monorail at a velocity of 61.15 kph (38.0 mph). The target vehicle was stationary and was positioned at an angle of 63° to the line of forward motion. The side impact test was conducted by the Veridian Engineering Transportation Sciences Center in Buffalo, New York on January 8, 2003. Pre- and post-test photographs of the test vehicle, the moving deformable barrier (MDB), and the Side Impact Hybrid III Dummy (SID H3) are included in Appendix A.

One restrained Side Impact Hybrid III Dummy (SID H3) was placed in the driver designated seating position (Pos. #1) according to the instructions specified in the OCWS Side Impact Laboratory Test Procedure which is dated July, 1997. The side impact test was documented by one real-time camera and 9 high-speed cameras. Camera locations and other pertinent camera information are included in this report.

The SID H3s were instrumented with the following accelerometers:

1. Left Upper Rib (LUR) uniaxial and redundant accelerometer (Y-direction)
2. Left Lower Rib (LLR) uniaxial and redundant accelerometer (Y-direction)
3. Lower Thoracic Spine (T₁₂) uniaxial and redundant accelerometer (Y-direction)
4. Pelvic (PEV) section uniaxial and redundant accelerometer (Y-direction)
5. Head triaxial accelerometers (X-, Y- and Z-direction)
6. Upper neck force and moment (X-, Y and Z-direction) load cells

A summary of the Side Impact Hybrid III Dummy (SID H3) configuration and verification test data can be found in Appendix C. A total of 43 channels of data were recorded. Appendix B contains the vehicle, MDB and dummy response data traces.

The following table summarizes the results of the test.

Injury Criteria	Front SID H3	Rear SID H3
TTI (g)	57	-
PEV (g)	54	-

AIR BAG DEPLOYMENT STATUS

	DRIVER	FRONT PASSENGER	REAR PASSENGER
Front Air Bag	Yes	Yes	-
Knee Bolster Bag	-	-	-
Side Air Bag	-	-	-
Side Curtain Bag	-	-	-

SECTION 3

SUMMARY OF TEST RESULTS

DATA SHEET 1

GENERAL TEST AND VEHICLE PARAMETER DATA

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 2003 Honda S2000 2-Door Convertible

Vehicle Body Color: Red VIN: JHMAP11412T008695

Vehicle NHTSA No.: M35308 Month & Year of Manufacture: 7/02

Engine Data: 4 Cylinders; - CID; 2.0 Liters; - cc

Engine Placement: X Longitudinal; or - Lateral

Transmission: 6 Speed; X Manual; - Automatic; - Overdrive

Final Drive: X Rear Wheel Drive; - Front Wheel Drive; - Four Wheel Drive

Odometer Reading 27 km

Supplemental Airbag Restraints:

Front Occupant: X Frontal; - Knee; - Side; - Curtain

Rear Occupant: - Frontal; - Knee; - Side; - Curtain

Options: X A/C; X Power Steering; X Power Brakes; X Power Windows

DATA FROM TIRE PLACARD

Recommended Tire Size: Front: P205/55R16 89W
Rear: P225/50R16 92W

*Recommended Cold Tire Pressure: 220 kpa FRONT; 220 kpa REAR

DATA FROM TIRE SIDEWALL:

Size of Tires on Test Vehicle: Front: P205/55R16 89W
Rear: P225/50R16 92W ; Manufacturer: Bridgestone

Tire Pressure with Maximum Capacity Vehicle Load: Front: 300 kPa; Rear: 300 kPa

Treadwear: 140 ; Traction: A ; Temperature: A

VEHICLE CAPACITY DATA:

Number of Occupants: 2 Front; - Rear; - 3rd Seat; 2 Total

Type of Front Seats: X Bucket; - Bench; - Split Bench

Type of Front Seat Back: - Fixed; X Adjustable with X Lever or - Knob

Vehicle Max Capacity Loading = 181.44 kg (A)

No. of Occupants x 68.04 kg. = 136.08 kg (B)

Vehicle Cargo Capacity = 45.36 kg (A-B)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

Left Front = 310.0 kg Left Rear = 325.0 kg

Right Front = 318.5 kg Right Rear = 318.0 kg

TOTAL FRONT = 628.5 kg TOTAL REAR = 643.0 kg

% of Total Weight = 49.4% % % of Total Weight = 50.6 %

TOTAL WEIGHT = 1271.5 kg

* Tire pressure used in test.

DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308

CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight with Max. Fluids = 1271.5 kg (A)
Maximum Cargo Carrying Capacity of Test Vehicle = 45.36 kg (B)
Weight of instrumented SID H3 Dummies (1 X 81.2 kg) = 81.2 kg (C)
TEST VEHICLE TARGET WEIGHT: = 1398.1 kg (A+B+C)

FULLY LOADED TEST VEHICLE (UDVW + 1 or 2 SID H3(s) + CARGO):

Left Front = 328.0 kg Left Rear = 391.0 kg
Right Front = 323.0 kg Right Rear = 359.0 kg
TOTAL FRONT = 651.0 kg TOTAL REAR = 750.0 kg
% of Total Weight = 46.5% % % of Total Weight = 53.5% %
TOTAL TEST WEIGHT = 1401.0 kg

AS TESTED WEIGHT OF TEST VEHICLE (1 OR 2 SID H3(s) + CARGO + EQUIPMENT & INSTRUMENTATION):

Left Front = 330.0 kg Left Rear = 386.5 kg
Right Front = 321.0 kg Right Rear = 352.5 kg
TOTAL FRONT = 651.0 kg TOTAL REAR = 739.0 kg
% of Total Weight = 46.8% % % of Total Weight = 53.2% %
TOTAL TEST WEIGHT = 1390.0 kg

TEST VEHICLE ATTITUDE (all dimensions in millimeters):

AS DELIVERED:

Left Front 673 Right Front 678 Left Rear 681 Right Rear 682

FULLY LOADED:

Left Front 667 Right Front 671 Left Rear 661 Right Rear 666

READY FOR TEST:

Left Front 667 Right Front 674 Left Rear 666 Right Rear 668

Test Vehicle Wheelbase: 2399 millimeters

C.G. = 1275 millimeters rearward of front wheel centerline

TOTAL VEHICLE LENGTH:

Right Side = 3986 millimeters
Left Side = 3985 millimeters
Centerline = 4120 millimeters

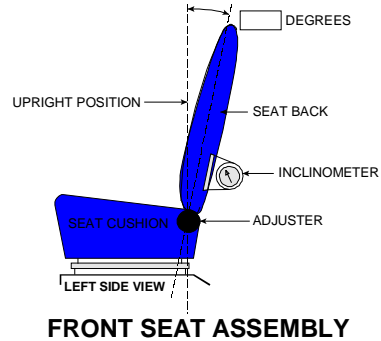
DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308

Nominal Design Riding Position for adjustable driver and passenger seat backs. Please describe how to position the inclinometer to measure the seat back angle. Include description of the location of the adjustment latch detent, if applicable.



FRONT SEAT CUSHION PLACEMENT: Where the rearmost locking position is defined as detent 0, move the seat forward to detent 11 (mid-travel position).

Total Length of Adjustment Travel: 220 millimeters

Total Number of Adjustment Positions or Detents: 23

FRONT SEAT BACK ADJUSTMENT POSITION: Where the most upright position is defined as detent 0, recline the seat back to detent 5.

Seat Back Torso Angle: 20 degrees

SECOND POSITION SEAT:

Total Length of Fore/Aft Adjustment Travel: - millimeters

Seat Back Adjustment Position: -

ADJUSTABLE STEERING COLUMN POSITION: Fixed

WINDOW POSITIONS: Left Front: Closed Left Rear: -

Right Front: Open Right Rear: -

Note: Windows will be in closed position on struck side of test vehicle and in open position on opposite side.

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

50.0 liters (Fuel Tank Usable Capacity)

45.8 liters used for test (92%-94% of Fuel Tank Usable Capacity)

LOCATION OF IMPACT POINT ON TEST VEHICLE SIDE TO BE IMPACTED:

Wheelbase = 2399 millimeters

Impact Point is 259.5 millimeters rearward of front axle centerline
(which is 940 millimeters forward of the wheelbase midpoint)

Actual Impact Point is 257.5 millimeters rearward of front axle centerline

DATA SHEET 2

TEST VEHICLE SUMMARY OF RESULTS

VEHICLE IDENTIFICATION:

Vehicle Year/Make/Model: 2003 Honda S2000

Body Style: 2-Door Convertible

VIN: JHMAP11412T008695

NHTSA No.: M35308

Test Date: January 8, 2003

Overall Length = 4120 millimeters; Overall Width = 1715 millimeters

VEHICLE TEST WEIGHT (Pre-Test):

Left Front = 330.0 kg Left Rear = 386.5 kg

Right Front = 321.0 kg Right Rear = 352.5 kg

TOTAL FRONT = 651.0 kg TOTAL REAR = 739.0 kg

TOTAL VEHICLE WEIGHT 1390.0 kg

Wheelbase = 2399 millimeters

Longitudinal C.G. from Center of Front Axle = 1275.44 millimeters

Impact Angle with Respect to Impactor = 90 degrees

ACTUAL IMPACT POINT

Actual Impact Point is 2 mm forward of nominal impact ref. line (Lateral)

Actual Impact Point is 0 mm above / below nominal impact point (Vertical)

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (170 mm above ground) = 36 millimeters

2. LEVEL 2 (385 mm above ground) = 174 millimeters

3. LEVEL 3 (578 mm above ground) = 183 millimeters

4. LEVEL 4 (704 mm above ground) = 183 millimeters

5. LEVEL 5 (1136 mm above ground) = 33 millimeters

Maximum Post-Test Intrusion = 183 millimeters

OCCUPANTS:

Front Passenger:

Rear Passenger:

Dummy Identification SID H3/015 SID H3/-

Restraints Used 3-Point active seat belt -

INSTRUMENTATION:

Number of Vehicle Data Channels: = 21

Number of Cameras: Onboard = 2

 Offboard = 8

 TOTAL = 10

DATA SHEET 3

MOVING DEFORMABLE BARRIER (MDB) SUMMARY

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308

MDB FACE MANUFACTURER AND SERIAL NUMBER:

Plascore: 072C1200-2; 001B1200

POSITION OF IMPACT (MDB) ON MONORAIL:

Crabbed 27° to left

MDB DETAILS:

Overall Width of Framework Carriage	=	<u>1250</u>	millimeters
Overall Length of MDB (incl. honeycomb impact face)	=	<u>4120</u>	millimeters
Wheelbase of Framework Carriage	=	<u>2590</u>	millimeters
Tread of Framework Carriage (Front & Rear)	=	<u>1875</u>	millimeters
C.G. Location Rearward of Front Axle	=	<u>1104</u>	millimeters

MDB WEIGHT:

Left Front	=	<u>409.5</u>	kg	Left Rear	=	<u>281.5</u>	kg
Right Front	=	<u>372.5</u>	kg	Right Rear	=	<u>299.0</u>	kg
TOTAL FRONT	=	<u>782.0</u>	kg	TOTAL REAR	=	<u>580.5</u>	kg
TOTAL MDB WEIGHT	=	<u>1362.5</u>	kg				
Impact Angle (MDB C/L to Target Vehicle C/L)	=	<u>90</u>	degrees				
Impact Speed	=	<u>61.15</u>	kph				

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

1. Row A at Center of Bumper Level	=	<u>204</u>	millimeters
2. Row B at Top of Bumper Level	=	<u>159</u>	millimeters
3. Row C at Mid Level	=	<u>133</u>	millimeters
4. Row D at Top of Stack Level	=	<u>109</u>	millimeters

INSTRUMENTATION:

Number of MDB Data Channels	=	<u>5</u>
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DATA SHEET 4

POST-TEST OBSERVATIONS

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308

TEST DUMMY INFORMATION AND CONTACT POINTS:

DESCRIPTION	FRONT SEAT	REAR SEAT
ATD Type/Serial No.	SID H3/015	SID H3/-
Head Contact:	Top of head to left roof header; Left side of face to top of door trim	-
Upper Torso Contact:	Arm to door trim above armrest	-
Lower Torso Contact:	Pelvis to door trim below armrest	-
Left Knee Contact:	Left knee to door trim below switch cluster	-
Right Knee Contact:	Right knee to left knee	-

POST TEST DOOR OPENING AND SEAT TRACK INFORMATION

DESCRIPTION	FRONT	REAR
Left Side Doors	Closed, Latched, and Inoperable	-
Right Side Doors	Closed, Latched, and Operable	-
Hatch/Other Door	-	-
Seat Movement (mm)	0 mm	-
Seat Back Failure	None	-

POST TEST STRUCTURAL OBSERVATIONS

CRITICAL AREAS OF PERFORMANCE	
Pillar Performance	No visible tears or separations
Sill Separation	None
Windshield Damage	None
Window Damage	Left door window shattered during the impact
Other Notable Effects	None

AIR BAG DEPLOYMENT STATUS:

	DRIVER	FRONT PASSENGER	REAR PASSENGER
Front Air Bag	Yes	Yes	-
Knee Bolster Bag	-	-	-
Side Air Bag	-	-	-
Side Curtain Bag	-	-	-

MDB LEFT EDGE IMPACT DATA

Measured Parameter	Units	Requirement	Value
Horizontal Offset	mm	± 50 mm	2 mm
Vertical Offset	mm	± 20 mm	0 mm

SECTION 4

OCCUPANT AND VEHICLE INFORMATION

DATA SHEET 5

SID H3 INSTRUMENTATION DATA

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308

	Front Dummy ID# 015				Rear Dummy ID# -				
	Pos. Direction		Neg. Direction		Pos. Direction		Neg. Direction		
	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	
HEAD ACCELERATIONS:									
Longitudinal	X	2.0	199.9	-37.4	66.0	-	-	-	-
Lateral	Y	66.7	66.3	-5.7	197.1	-	-	-	-
Vertical	Z	52.1	43.9	-0.8	26.2	-	-	-	-
Resultant	R	76.4	66.1	-	-	-	-	-	-
HIC		572.5				-			
NECK FORCES:									
Longitudinal	X	75.9	199.8	-832.6	47.0	-	-	-	-
Lateral	Y	910.3	46.5	-235.2	197.4	-	-	-	-
Vertical	Z	2232.5	45.0	-8.5	9.3	-	-	-	-
Resultant	R	2506.8	45.1	-	-	-	-	-	-
NECK MOMENTS:									
X		76.5	66.9	-51.1	41.8	-	-	-	-
Y		28.6	64.1	-44.2	45.2	-	-	-	-
Z		14.4	62.0	-8.5	30.8	-	-	-	-
Resultant	R	79.1	66.6	-	-	-	-	-	-
RIB ACCELERATIONS:									
Upper Rib Lateral	Y	59.0	32.5	-6.9	90.0	-	-	-	-
Upper Rib Lateral	Y(R)	58.5	32.5	-7.3	90.0	-	-	-	-
Lower Rib Lateral	Y	54.8	35.6	-11.1	90.0	-	-	-	-
Lower Rib Lateral	Y(R)	53.6	35.6	-11.2	90.0	-	-	-	-
SPINE ACCELERATIONS:									
Lower Lateral	Y	55.9	41.2	-21.2	68.8	-	-	-	-
Lower Lateral	Y(R)	55.8	41.2	-21.6	68.8	-	-	-	-
PELVIC ACCELERATIONS:									
Lateral	Y	54.0	30.6	-6.1	98.8	-	-	-	-
Lateral	Y(R)	55.1	30.6	-6.2	99.4	-	-	-	-

REFERENCE: Positive Direction: Longitudinal (X) = forward; Lateral (Y) = to right; Vertical (Z) = down

Note: Rib, Spine and Pelvis data has been FIR filtered, Y(R) denotes redundant Y direction accelerometer.

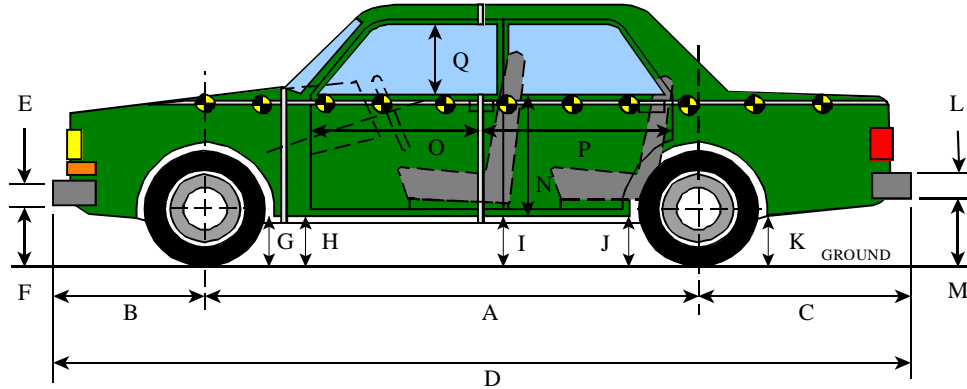
Head Accelerations and Neck Forces are filtered at SAE Class 1000, Neck Moments are filtered at SAE Class 600.

DATA SHEET 6

VEHICLE SIDE MEASUREMENTS

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308



LEFT SIDE VIEW

NOTE: all dimensions are in millimeters with tolerance of ± 3 mm

	PRE-TEST (as delivered)	PRE-TEST (as tested)	POST-TEST (as tested)	Δ CHANGE
A	2399	2399	2386	-13
B	792	-	802	802
C	929	-	925	925
D	4120	-	4113	-7
E	214	-	216	2
F	393	395	403	8
G	152	140	172	32
H	153	141	148	7
I	162	141	153	12
J1	139	118	118	0
J2	162	142	148	6
K	230	211	216	5
L	391	-	388	-3
M	290	259	278	19
N	591	-	555	-36
O	264	-	264	0
P	874	-	857	-17
Q	316	-	306	-10
R	3986	-	3987	1
S	3985	-	3970	-15
T	1715	-	1677	-38

D = Length at Centerline

E&L = Bumper Thickness

R = Right Side Length

S = Left Side Length

T = Width at B-Pillar

J1 = To Pinch Weld

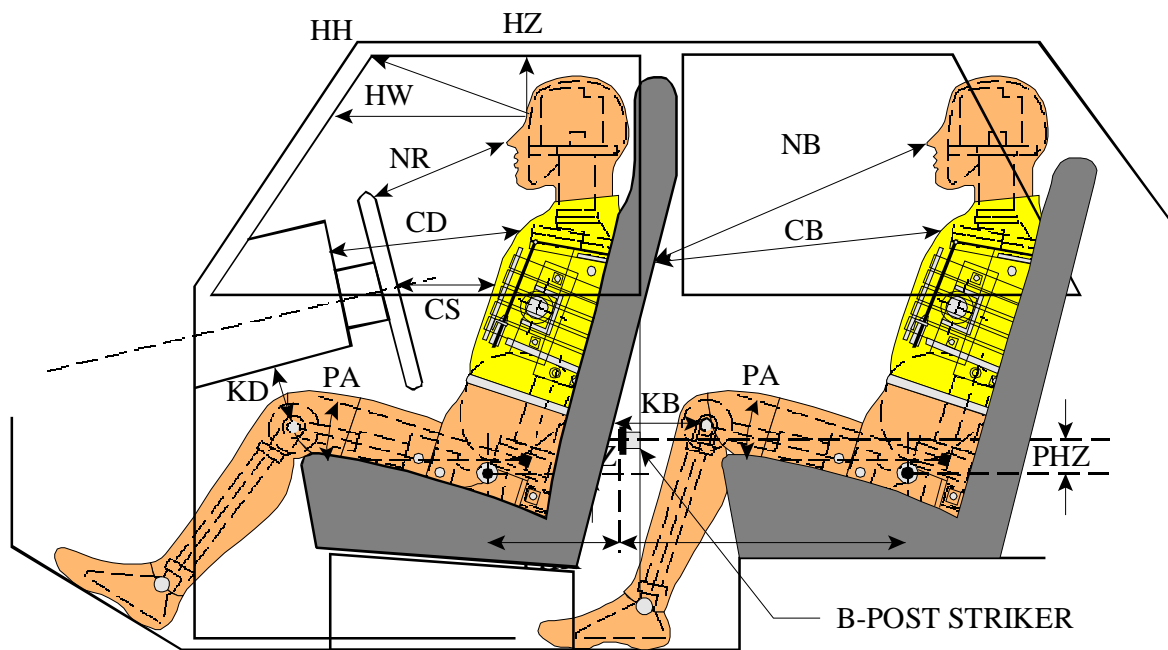
J2 = To Sill

DATA SHEET 7

SID H3 LONGITUDINAL CLEARANCE DIMENSIONS

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308



LEFT SIDE VIEW

NOTE: 2-DOOR VEHICLE SHOWN.
REAR DUMMY PHX & PHZ
MEASUREMENTS FOR A 4-DOOR
VEHICLE WOULD USE THE C-POST
STRIKER AS A REFERENCE POINT

NOTE: All dimensions are in millimeters with tolerance of ± 3 mm

	DRIVER ID# 015	LEFT REAR PASS. ID# -
HH	510	N/A
HW	660	N/A
HZ	174	-
NR/NB	467	-
CD/CB	505	-
CS	302	N/A
KDL(KDA°)/KBL(KBA°)	140 / (52 °)	- / (- °)
KDR(KBA°)/KBR(KBA°)	140 / (52 °)	- / (- °)
PA°	25 °	- °
PHX	295	-
PHZ	230	-

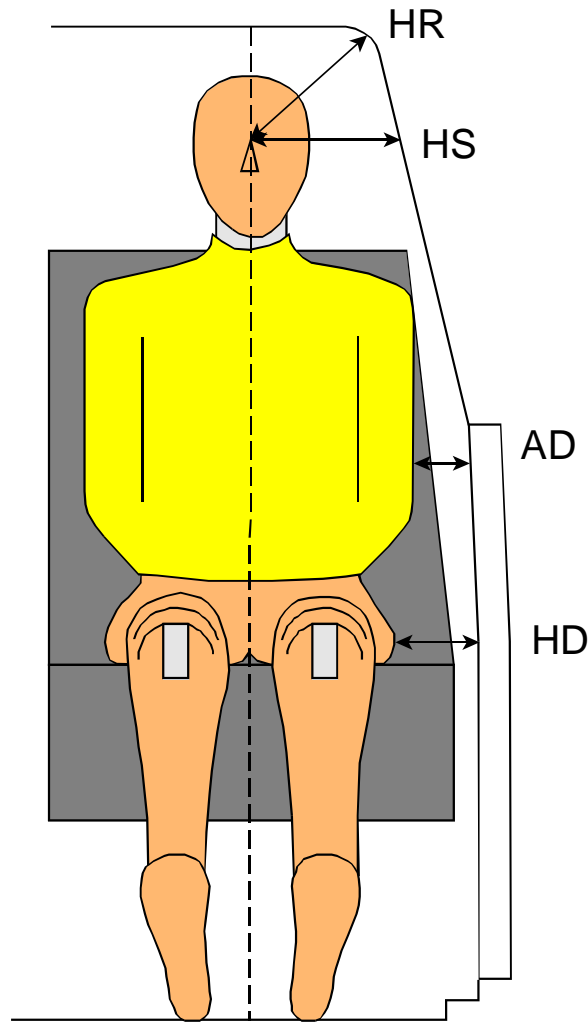
Note: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as a reference point.

DATA SHEET 8

SID H3 LATERAL CLEARANCE DIMENSIONS

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308



NOTE: All dimensions are in millimeters with tolerance of ± 3 mm

	DRIVER ID # 015	LEFT REAR PASS. ID # -
HR	200	-
HS	274	-
AD*	LOWER: 53 UPPER: 45	LOWER: - UPPER: -
HD	125	-

* Lower measurement is taken laterally at the center of the lower rib accelerometer height from the SID H3 arm segment to the closest part of the vehicle side.

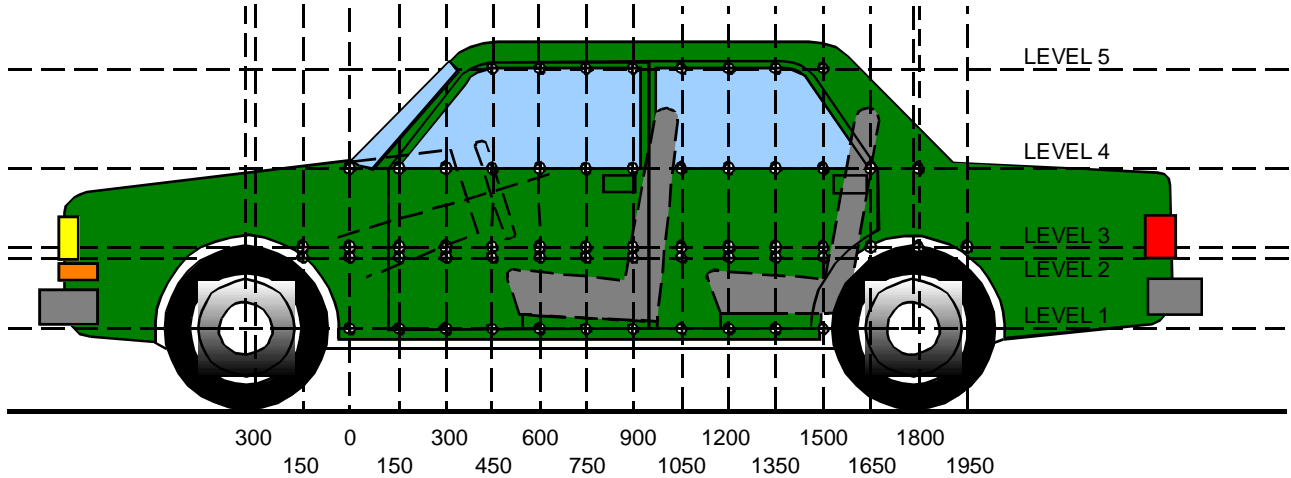
Upper measurement is taken laterally at the center of the upper rib accelerometer height from the SID H3 arm segment to the closest part of the vehicle side.

DATA SHEET 9

VEHICLE SIDE MEASUREMENTS

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308



LEFT SIDE VIEW

NOTE: All measurements are in millimeters (mm)

- LEVEL 5 - WINDOW TOP
- LEVEL 4 - WINDOW SILL
- LEVEL 3 - MID-DOOR
- LEVEL 2 - OCCUPANT H-POINT
- LEVEL 1 - AXLE CENTERLINE HEIGHT OR SILL TOP HEIGHT

MEASUREMENTS ARE TAKEN WHEN THE VEHICLE IS IN THE "AS TESTED" CONFIGURATION.

Measurements Along the Vertical 750 mm Line Shown Above:

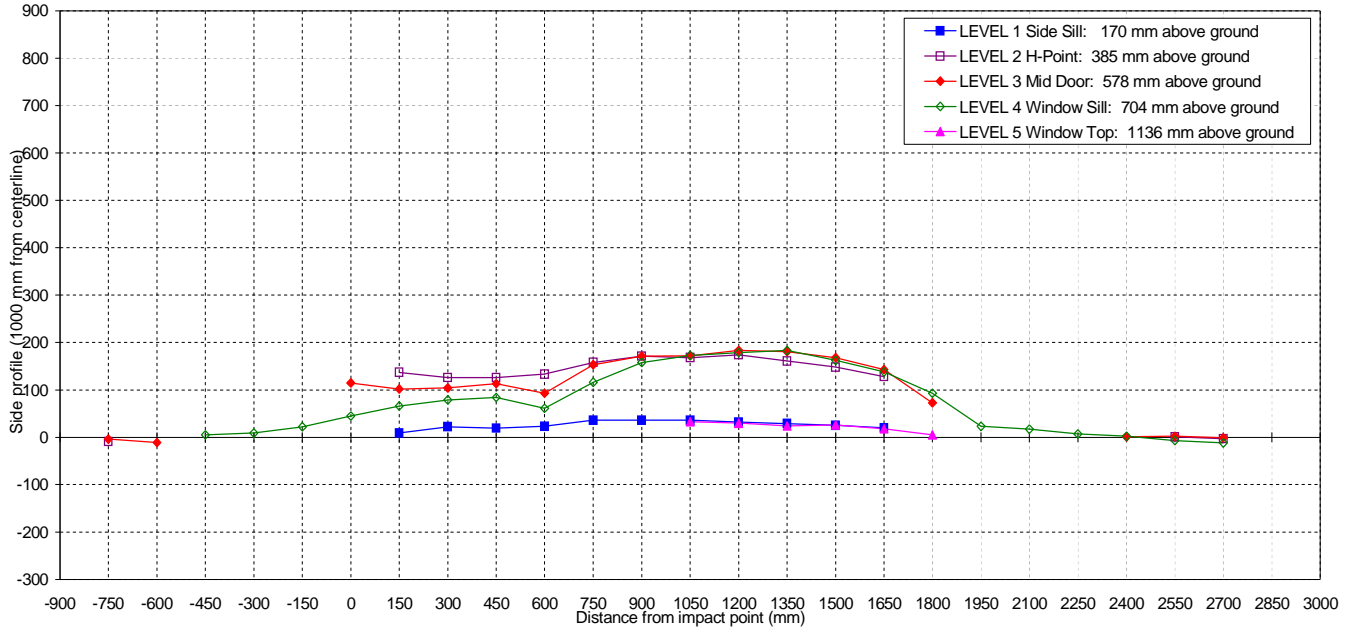
Level 5 @ Window Top	=	<u>1136</u>	millimeters
Level 4 @ Window Sill	=	<u>704</u>	millimeters
Level 3 @ Mid Door	=	<u>578</u>	millimeters
Level 2 @ Occupant H-Point	=	<u>385</u>	millimeters
Level 1 @ Axle Centerline Height (or Sill Top Height)	=	<u>170</u>	millimeters

DATA SHEET 10

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308



NOTE: All dimensions are in millimeters with a tolerance of ± 3 mm

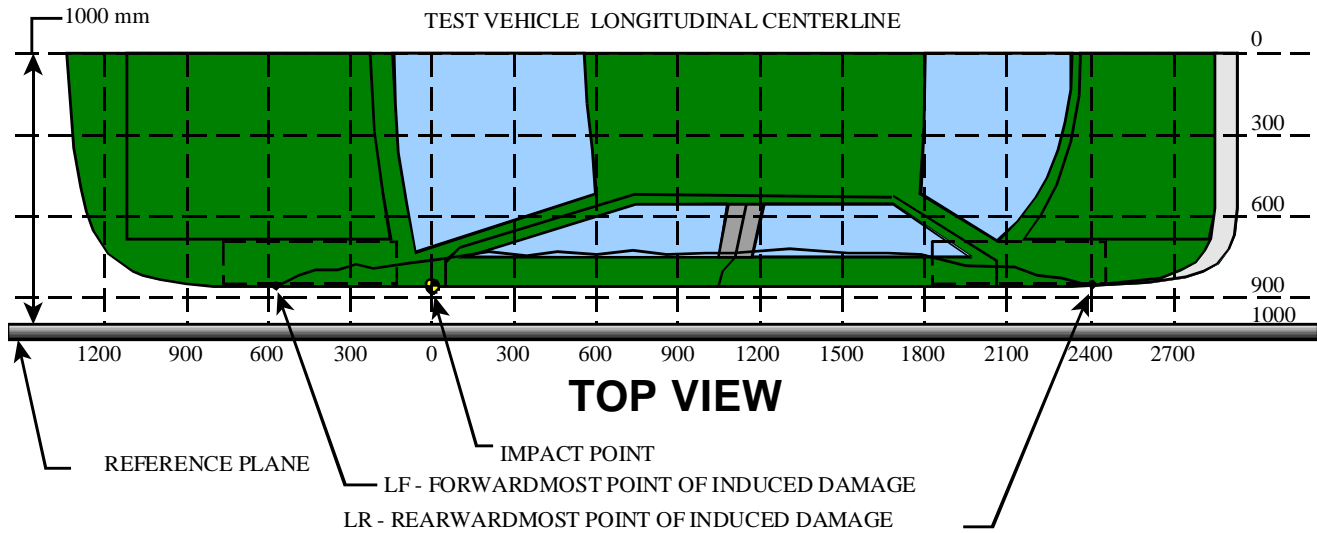
			DISTANCE IN MILLIMETERS (mm) FROM IMPACT POINT																												
LEVEL	HEIGHT (mm)		-900	-750	-600	-450	-300	-150	0	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000		
LEVEL 1 SIDE SILL	170	PRE	--	--	--	--	--	--	--	184	191	184	179	178	173	169	167	165	164	156	--	--	--	--	--	--	--	--	--		
		POST	--	--	--	--	--	--	--	--	193	213	203	202	214	209	205	199	194	189	176	--	--	--	--	--	--	--	--	--	
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9	22	19	23	36	36	36	32	29	25	20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
LEVEL 2 H POINT	385	PRE	--	283	--	--	--	--	--	159	167	161	158	152	149	146	146	150	151	151	--	--	--	--	--	--	165	224	--	--	
		POST	--	274	--	--	--	--	--	--	296	293	287	291	310	320	314	320	311	299	279	--	--	--	--	--	--	166	221	--	--
		CRUSH	N/A	-9	N/A	N/A	N/A	N/A	N/A	137	126	126	133	158	171	168	174	161	148	128	N/A	N/A	N/A	N/A	N/A	N/A	1	-3	N/A	N/A	
LEVEL 3 MID DOOR	578	PRE	--	377	226	--	--	--	141	162	163	157	153	147	144	140	138	140	143	139	134	--	--	--	132	175	225	--	--		
		POST	--	373	215	--	--	--	256	264	267	270	246	300	315	312	321	321	311	282	207	--	--	--	--	133	177	224	--	--	
		CRUSH	N/A	-4	-11	N/A	N/A	N/A	115	102	104	113	93	153	171	172	183	181	168	143	73	N/A	N/A	N/A	N/A	1	2	-1	N/A	N/A	
LEVEL 4 WINDOW SILL	704	PRE	--	--	--	329	204	191	206	206	197	188	174	163	153	147	147	148	145	147	146	146	141	148	173	205	246	--	--		
		POST	--	--	--	334	213	213	251	272	276	272	235	279	311	320	326	331	307	285	239	169	158	155	175	198	234	--	--		
		CRUSH	N/A	N/A	N/A	5	9	22	45	66	79	84	61	116	158	173	179	183	162	138	93	23	17	7	2	-7	-12	N/A	N/A		
LEVEL 5 WINDOW TOP	1136	PRE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	413	406	407	402	386	449	--	--	--	--	--	--	--		
		POST	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	446	436	431	428	404	454	--	--	--	--	--	--	--	
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	33	30	24	26	18	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

DATA SHEET 11

VEHICLE DAMAGE PROFILE DISTANCES

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308



NOTE: All dimensions are in millimeters with tolerance of ± 3 mm.

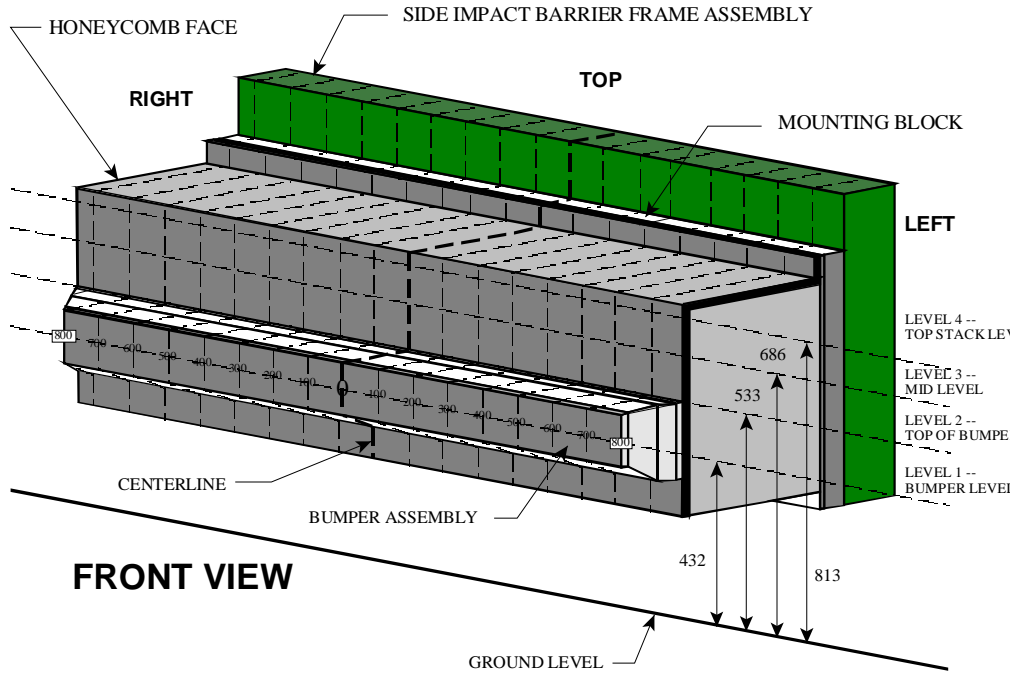
DPD MEASUREMENTS	POST TEST (mm)	PRETEST (mm)	STATIC CRUSH (mm)
1 (LR = 2430mm)	142	141	1
2	214	146	68
3	321	139	182
4	304	154	150
5	263	159	104
6 (LF = -450mm)	334	329	5

DATA SHEET 12

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308



NOTE: Dimensions are shown in millimeters, mm

NOTE: All dimensions are in millimeters with a tolerance of ± 3 mm

LEVEL	HEIGHT AT CL (mm)*		DISTANCE RIGHT OF CENTER (mm)									DISTANCE LEFT OF CENTER (mm)								
			800	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	800	
LEVEL 4 TOP STACK	813	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	
		POST	728	683	634	622	615	617	623	633	661	692	673	671	665	667	676	685	697	
		CRUSH	109	64	15	3	-4	-2	4	14	42	73	54	52	46	48	57	66	78	
LEVEL 3 MID LEVEL	686	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	
		POST	752	708	670	646	637	633	632	635	645	665	698	733	704	693	689	687	690	
		CRUSH	133	89	51	27	18	14	13	16	26	46	79	114	85	74	70	68	71	
LEVEL 2 TOP BUMPER	533	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	
		POST	778	755	734	721	714	710	708	705	702	703	715	741	749	739	732	722	715	
		CRUSH	159	136	115	102	95	91	89	86	83	84	96	122	130	120	113	103	96	
LEVEL 1 MID BUMPER	432	PRE	535	519	518	518	518	518	518	518	518	518	518	518	518	518	518	519	535	
		POST	739	716	717	694	673	659	653	650	649	647	651	663	685	680	672	665	667	
		CRUSH	204	197	199	176	155	141	135	132	131	129	133	145	167	162	154	146	132	

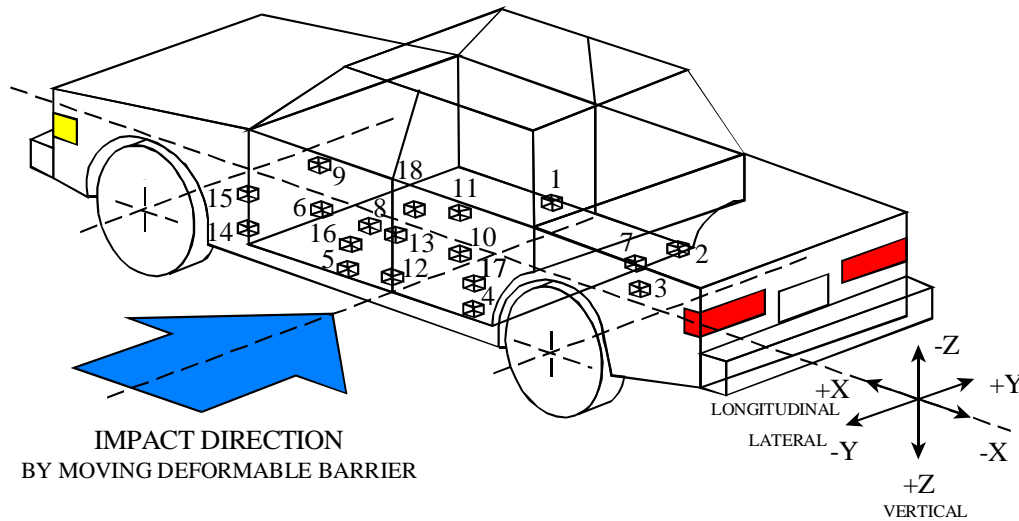
*Heights measured above ground level.

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308



- | | |
|------------------------------------|------------------------------------|
| 1-Right Side Sill @ Front Seat | 10-Midrear of Left Rear Door |
| 2-Right Side Sill @ Rear Seat | 11-Left Rear Door Upper Centerline |
| 3-Rear Floorpan Above Axle | 12-Left Lower B-Pillar |
| 4-Left Side Sill @ Rear Seat | 13-Left Middle B-Pillar |
| 5-Left Side Sill @ Front Seat | 14-Left Lower A-Pillar |
| 6-Left Front Door on Centerline | 15-Left Middle A-Pillar |
| 7-Right Rear Occupant Compartment | 16-Front Seat Track |
| 8-Midrear of Left Front Door | 17-Rear Seat Track |
| 9-Left Front Door Upper Centerline | 18-Vehicle CG |

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308

Accel. No.	Location	Coordinates (mm)±3 mm				Long. (x)		Lat. (y)		Vert. (z)		Resultant	
		X*	Y*	Z*		Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
1	Right Side Sill at Front Seat	2068	633	-265	pos.	2.3	54.5	25.2	11.2	21.2	20.9	††	-
					neg.	-8.4	15.8	-3.1	84.2	††	-	-	-
2	Right Side Sill at Rear Seat	1642	611	-256	pos.	2.1	54.8	28.8	10.9	11.3	25.5	29.7	10.8
					neg.	-8.1	16.3	-4.0	86.1	-6.6	73.6	-	-
3	Rear Floorpan Above Axle	682	-8	-527	pos.	8.7	26.2	29.2	42.5	19.9	26.0	32.7	18.9
					neg.	-12.4	21.2	-4.6	83.6	-17.5	19.2	-	-
4	Left Side Sill at Rear Seat	1558	-632	-270	pos.	-	-	53.4	4.7	-	-	-	-
					neg.	-	-	-10.2	21.3	-	-	-	-
5	Left Side Sill at Front Seat	2059	-631	-269	pos.	-	-	76.8	4.0	-	-	-	-
					neg.	-	-	-18.2	18.7	-	-	-	-
6	Left Front Door on Centerline	1943	-685	-601	pos.	-	-	174.2	8.7	-	-	-	-
					neg.	-	-	-93.2	15.0	-	-	-	-
7†	Right Rear Occupant Compartment	-	-	-	pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
8	Midrear of Left Front Door	1512	-641	-608	pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
9	Left Front Door Upper Centerline	1951	-640	-799	pos.	-	-	257.4	15.9	-	-	-	-
					neg.	-	-	-159.6	23.3	-	-	-	-
10†	Midrear of Left Rear Door	-	-	-	Pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
11†	Left Rear Door Upper Centerline	-	-	-	pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-

*Reference: X - Rear Bumper (+ Forward)

Y - Vehicle Centerline (+ To Right)

Z - Ground Level (+ Down)

**Accelerometer was not requested by COTR.

† Vehicle did not have a rear doors or a rear occupant compartments, transducers were not installed.

†† Right Side Sill at Front Seat Z accelerometer cable was cut at 24 ms.

‡ Accelerometer was removed to prevent interference with the SID lower ribs.

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8652-SNCRP-07

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308

Accel. No.	Location	Coordinates (mm)±3 mm				Long. (x)		Lat. (y)		Vert. (z)		Resultant	
		X*	Y*	Z*		Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
12	Left Lower B-Pillar	1524	-614	-318	pos.	-	-	156.8	4.9	-	-	-	-
					neg.	-	-	-27.7	18.2	-	-	-	-
13	Left Middle B-Pillar	1334	-619	-812	pos.	-	-	95.6	10.3	-	-	-	-
					neg.	-	-	-29.5	13.8	-	-	-	-
14	Left Lower A-Pillar	2524	-604	-522	pos.	-	-	125.0	8.3	-	-	-	-
					neg.	-	-	-131.5	17.3	-	-	-	-
15	Left Middle A-Pillar	2305	-617	-856	pos.	-	-	65.3	14.1	-	-	-	-
					neg.	-	-	-11.8	49.0	-	-	-	-
16	Front Seat Track	1594	-559	-208	pos.	-	-	29.8	10.3	-	-	-	-
					neg.	-	-	-8.3	49.7	-	-	-	-
17†	Rear Seat Track	-	-	-	pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
18	Vehicle CG	2154	-12	-506	pos.	2.3	63.7	23.3	35.7	13.5	50.8	26.2	12.1
					neg.	-12.2	12.2	-2.1	88.0	-7.7	13.9	-	-

*Reference: X - Rear Bumper (+ Forward) Y - Vehicle Centerline (+ To Right) Z - Ground Level (+ Down)

† Vehicle did not have a rear doors or a rear occupant compartments, transducer was not installed.

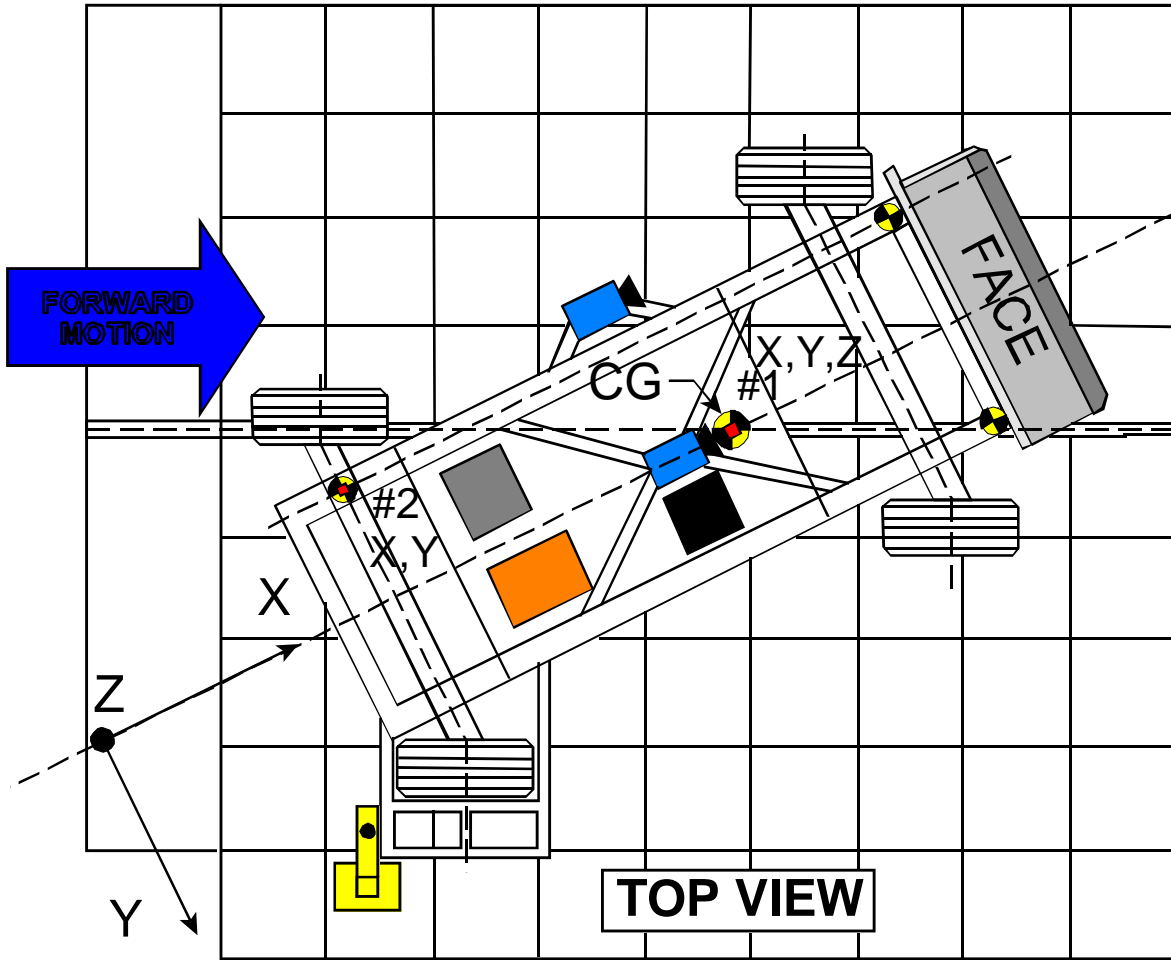
4-12

DATA SHEET 14

MDB ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308



Accel. No.	Location	Coordinates (millimeters)			Pos. Direct.		Neg. Direct.	
		X*	Y*	Z*	Max (g)	Time (msec)	Max (g)	Time (msec)
1	MDB Center of Gravity							
	Longitudinal... X	1859	0	-330	0.9	73.2	-23.4	29.4
	Lateral..... Y				3.7	61.3	-10.7	17.1
	Vertical..... Z				10.6	28.8	-22.6	33.9
	Resultant..... R				32.2	34.0	-	-
2	Rear Frame Member							
	Longitudinal... X	386	-660	-660	2.0	109.8	-25.7	38.8
	Lateral..... Y				3.6	23.3	-1.9	79.1

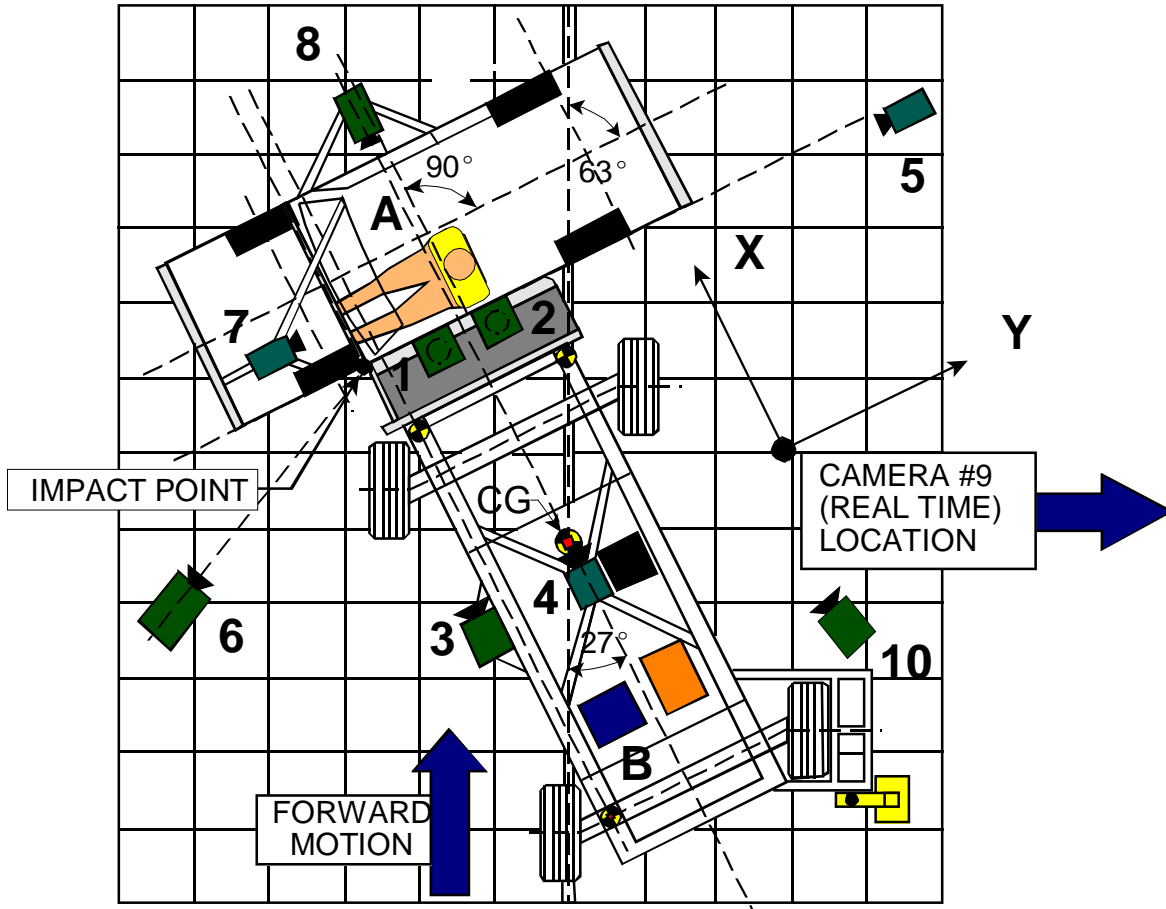
*Reference: X = Rear Bumper (+ Forward)
 Y = Vehicle Centerline (+ To Right)
 Z = Ground Level (+ Down)
 All measurements accurate to within ±3 mm.

DATA SHEET 15

HIGH SPEED CAMERA LOCATIONS AND DATA SUMMARY

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No. M35308



Camera No.	View	Coordinates (millimeters)			Angle (deg.)	Lens (mm)	Film Speed (fps)
		X*	Y*	Z*			
1	Overhead view of test vehicle	344	828	-4880	-90	8	1005
2	Overhead closeup view of impact plane	199	766	-4880	-90	12.5	1015
3	MDB onboard closeup view of impact point	-1470	0	-847	0	13	1030
4	MDB onboard view of driver dummy	-1140	838	-1586	-17	7.5	1030
5	Right side ground level overall view	0	8565	-1085	-5	25	1020
6	Secondary impact point view	2659	-3690	-1110	-4	25	1000
7	Left side ground level overall view	-1715	-1600	-1098	-10	13	1015
8	Test vehicle onboard driver front view	462	-196	-1045	-8	13	1020
9	Test vehicle onboard driver side view	1275	-1316	-980	-10	8	1015
10	Real time film coverage of test	-	-	-	-	-	24

* Reference (from point of impact); all measurements accurate to within ± 6 mm.

- X = (Impact Point) + Forward
- Y = (Impact Point) + To Right
- Z = (Ground Level) + Down

SECTION 5

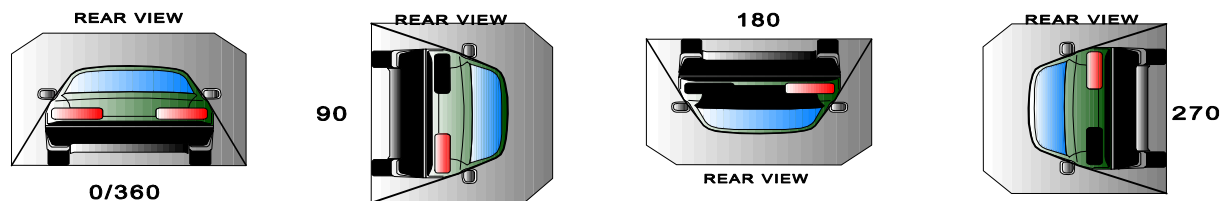
FUEL SYSTEM INTEGRITY

DATA SHEET 17

ROLLOVER DATA

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No.: M35308



I. DETERMINATION OF SOLVENT COLLECTION TIME PERIOD:

Rollover Stage	Rotation Time (spec. 1 -3 min)				FMVSS 301 Hold Time		Total Time				Next Whole Minute Interval	
	1	minutes	13	seconds	5	minutes	6	minutes	13	seconds	7	minutes
0° - 90°	1	minutes	13	seconds	5	minutes	6	minutes	13	seconds	7	minutes
90° - 180°	1	minutes	3	seconds	5	minutes	6	minutes	3	seconds	7	minutes
180°-270°	1	minutes	4	seconds	5	minutes	6	minutes	4	seconds	7	minutes
270°-360°	1	minutes	4	seconds	5	minutes	6	minutes	4	seconds	7	minutes

II. FMVSS 301 REQUIREMENTS: (Maximum allowable solvent spillage):

First 5 minutes from onset of rotation	6th min.	7th min.	8th min. (if required)
142 g	28 g	28 g	28 g

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

Rollover Stage	First 5 minutes from onset of rotation (g)	6th min. (g)	7th min. (g)	8th min. (if required) (g)
0° - 90°	0	0	0	N/A
90° - 180°	0	0	0	N/A
180°-270°	0	0	0	N/A
270°-360°	0	0	0	N/A

Note: Record spillage for whole minute intervals only as determined above.

IV. SOLVENT SPILLAGE LOCATION(S):

Rollover Stage	Spillage Location
0° - 90°	-
90° - 180°	-
180°-270°	-
270°-360°	-

SECTION 6

STRUCTURAL SURVEY MEASUREMENTS

DATA SHEET 18

TARGET VEHICLE STRUCTURAL MEASUREMENTS

Vehicle: 2003 Honda S2000 2-Door Convertible

NHTSA No.: M35308

	Elements	Pre-Test (mm)
1	Total length	4120
2	Total Width	1717
3	Bumper Top Height	505
4	Bumper Bottom Height	415
5	Longitudinal Member Top Height	490
6	Distance Between Longitudinal Members	818
7	Longitudinal Member Width	55
8	Engine top height	795
9	Engine bottom height	155
10	Engine and gearbox width	500
11	Front bumper-engine distance	853
12	Front shock absorber fixing height	725
13	Bonnet leading edge height	615
14	Front shock absorber fixing width	834
15	Front bumper – front axle distance	800
16	Front axle – a pillar distance	870
17	A-pillar – B pillar distance	1105
18	B-pillar – rear axle distance	420
19	B-pillar – C Pillar distance	-
20	Roof sill bottom height	1150
21	Roof sill top height	1215
22	Floor sill bottom height	170
23	Floor sill top height	392

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Figure A- 38	PRE-TEST RIGHT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION	A- 40
Figure A- 39	POST-TEST CLOSE-UP VIEW OF IMPACT POINT TARGET	A- 41
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Figure A-1 PRE-TEST FRONTAL VIEW OF TEST VEHICLE



Figure A-2 POST-TEST FRONTAL VIEW OF TEST VEHICLE



Figure A-3 PRE-TEST REAR VIEW OF TEST VEHICLE



Figure A-4 POST-TEST REAR VIEW OF TEST VEHICLE



Figure A-5 PRE-TEST IMPACTED SIDE VIEW OF TEST VEHICLE



Figure A-6 POST-TEST IMPACTED SIDE VIEW OF TEST VEHICLE



Figure A-7 PRE-TEST LEFT FRONT VIEW OF TEST VEHICLE



Figure A-8 POST-TEST LEFT FRONT VIEW OF TEST VEHICLE



Figure A-9 PRE-TEST LEFT REAR VIEW OF TEST VEHICLE



Figure A-10 POST-TEST LEFT REAR VIEW OF TEST VEHICLE



Figure A-11 PRE-TEST RIGHT FRONT VIEW OF TEST VEHICLE



Figure A-12 POST-TEST RIGHT FRONT VIEW OF TEST VEHICLE



Figure A-13 PRE-TEST RIGHT REAR VIEW OF TEST VEHICLE



Figure A-14 POST-TEST RIGHT REAR VIEW OF TEST VEHICLE



A-17

8652-SNCAP-07

Figure A-15 PRE-TEST FRONTAL VIEW OF IMPACTOR FACE



A-18

8652-SNCRAP-07

Figure A-16 POST-TEST FRONTAL VIEW OF IMPACTOR FACE



Figure A-17 PRE-TEST LEFT SIDE VIEW OF IMPACTOR FACE



A-20

8652-SNCA-P-07

Figure A-18 POST-TEST LEFT SIDE VIEW OF IMPACTOR FACE

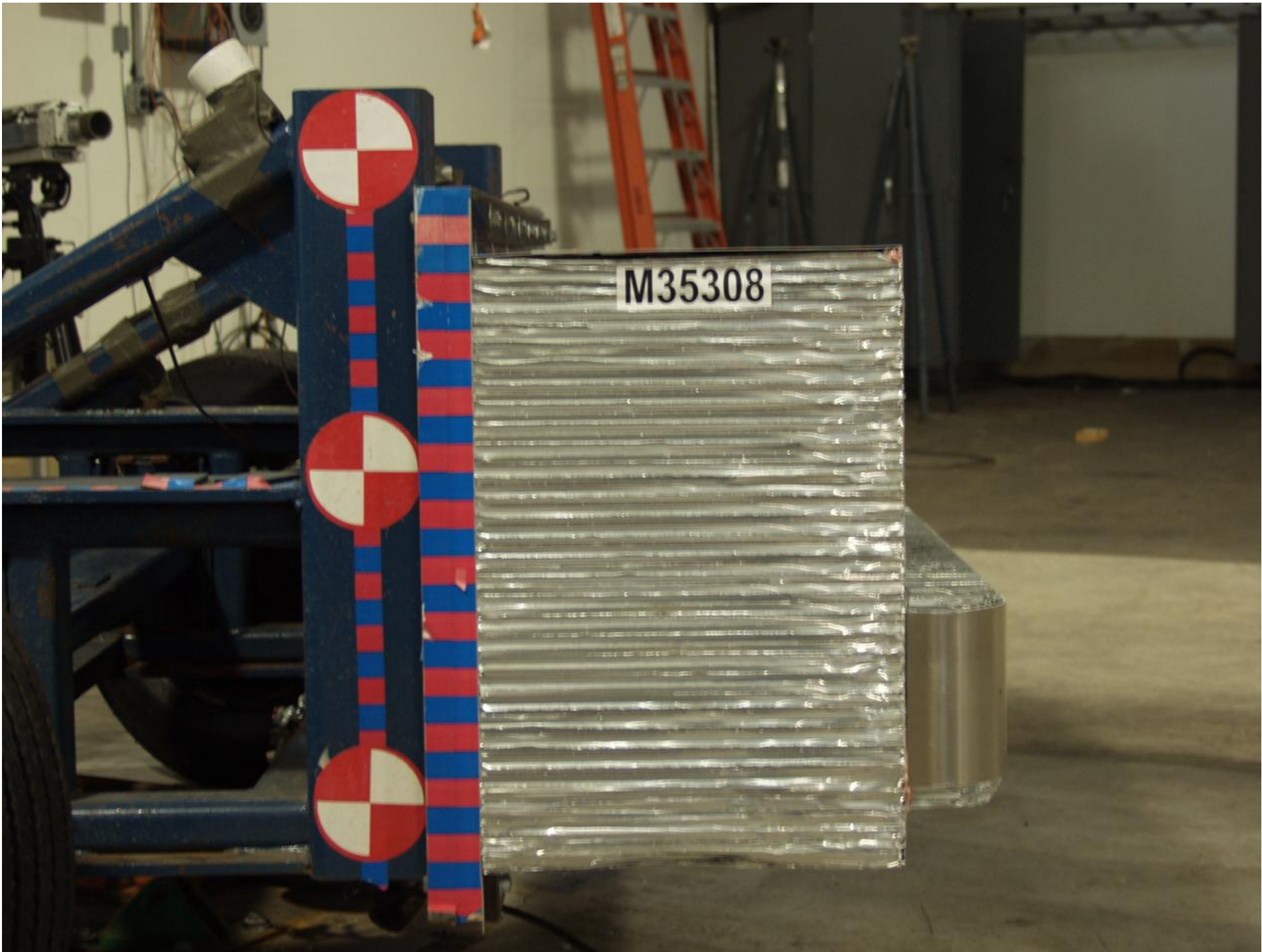


Figure A-19 PRE-TEST RIGHT SIDE VIEW OF IMPACTOR FACE



Figure A-20 POST-TEST RIGHT SIDE VIEW OF IMPACTOR FACE



Figure A-21 PRE-TEST TOP VIEW OF IMPACTOR FACE



Figure A-22 POST-TEST TOP VIEW OF IMPACTOR FACE



Figure A-23 PRE-TEST OVERHEAD VIEW OF ALIGNED MDB AND VEHICLE



Figure A-24 POST-TEST OVERHEAD VIEW OF MDB AND VEHICLE



A-27

8652-SNCRP-07

Figure A-25 PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID H3



Figure A-26 POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID H3

Not Applicable

Figure A-27 PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID H3

Not Applicable

Figure A-28 POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID H3



A-31

8652-SNCA-P-07

Figure A-29 PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID H3



A-32

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Figure A-30 POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID H3

Not Applicable

Figure A-31 PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID H3

Not Applicable

Figure A-32 POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID H3



A-35

8652-SNCAIP-07

Figure A-33 PRE-TEST INTERIOR OF FRONT DOOR



A-36

8652-SNCAIP-07

Figure A-34 POST-TEST INTERIOR OF FRONT DOOR SHOWING SID IMPACT LOCATIONS

Not Applicable

Figure A-35 PRE-TEST INTERIOR OF REAR DOOR

Not Applicable

Figure A-36 POST-TEST INTERIOR OF REAR DOOR SHOWING SID IMPACT LOCATIONS



A-39

8652-SNCRP-07

Figure A-37 PRE-TEST LEFT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION



A-40

8652-SNCRP-07

Figure A-38 PRE-TEST RIGHT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION



A-41

8652-SNCAP-07

Figure A-39 POST-TEST CLOSE-UP VIEW OF IMPACT POINT TARGET

MFD. IN JAPAN BY HONDA MOTOR CO., LTD; 7/'02
GVWR 3385LBS GAWR F 1565LBS R 1850LBS
THIS VEHICLE CONFORMS TO ALL APPLICABLE
FEDERAL MOTOR VEHICLE SAFETY, BUMPER,
AND THEFT PREVENTION STANDARDS IN EFFECT
ON THE DATE OF MANUFACTURE SHOWN ABOVE:

V.I.N. **JHMAP11412T008695**



PASSENGER CAR

Figure A-40 CLOSE-UP VIEW OF VEHICLE'S CERTIFICATION LABEL

TIRE INFORMATION

SEATING CAPACITY : 2	VEHICLE CAPACITY WEIGHT	400LBS	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
RECOMMENDED TIRE SIZE	COLD TIRE INFLATION PRESSURE		
205/55R16 89W	FRONT	220KPA, 32PSI	
225/50R16 92W	REAR	220KPA, 32PSI	
COMPACT SPARE TIRE	UP TO VEHICLE CAPACITY WEIGHT		
T125/70D16 96M	420KPA, 60PSI		

S2AB-A0

A-43

8652-SNCAP-07

Figure A-41 CLOSE-UP VIEW OF VEHICLE'S TIRE PLACARD LABEL



Figure A-42 IMPACT PHOTO



Figure A-43 ROLLOVER 90 DEGREES



Figure A-44 ROLLOVER 180 DEGREES

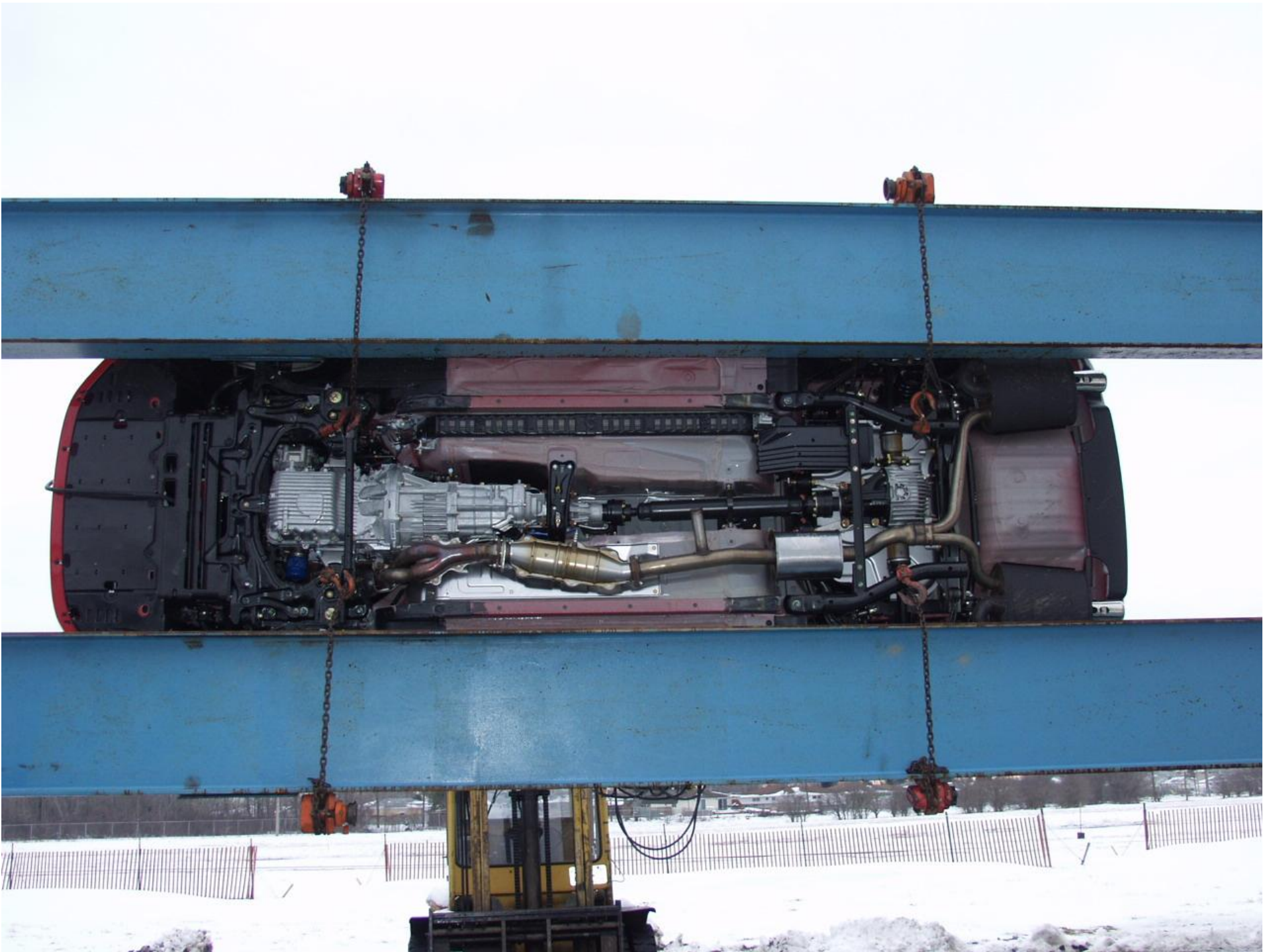


Figure A-45 ROLLOVER 270 DEGREES

A-47

8652-SNCCAP-07



Figure A-46 ROLLOVER 360 DEGREES

APPENDIX B

VEHICLE, MDB AND SID HYBRID III RESPONSE DATA

TABLE OF DATA PLOTS

DRIVER AND PASSENGER DUMMY INSTRUMENTATION PLOTS

ACCELERATION, FORCE AND MOMENT DATA - FILTER CLASS 1000, LOWER SPINE - FILTER CLASS 180
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
1	DRIVER HEAD (X) ACCELERATION VS TIME	B- 6
2	DRIVER HEAD (X) VELOCITY VS TIME	B- 7
3	DRIVER HEAD (Y) ACCELERATION VS TIME	B- 8
4	DRIVER HEAD (Y) VELOCITY VS TIME	B- 9
5	DRIVER HEAD (Z) ACCELERATION VS TIME	B- 10
6	DRIVER HEAD (Z) VELOCITY VS TIME	B- 11
7	DRIVER HEAD RESULTANT ACCELERATION VS TIME	B- 12
8	DRIVER UPPER NECK (X) FORCE VS TIME	B- 13
9	DRIVER UPPER NECK (Y) FORCE VS TIME	B- 14
10	DRIVER UPPER NECK (Z) FORCE VS TIME	B- 15
11	DRIVER UPPER NECK RESULTANT FORCE VS TIME	B- 16
12	DRIVER UPPER NECK (X) MOMENT VS TIME	B- 17
13	DRIVER UPPER NECK (Y) MOMENT VS TIME	B- 18
14	DRIVER UPPER NECK (Z) MOMENT VS TIME	B- 19
15	DRIVER UPPER NECK RESULTANT MOMENT VS TIME	B- 20
16	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 21
17	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 22
18	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 23
19	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 24
20	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 25
21	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 26
22	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 27
23	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 28

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS

ACCELERATION DATA - FIR FILTERED

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
24	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 29
25	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 30
26	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 31
27	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 32

TEST VEHICLE INSTRUMENTATION PLOTS
ACCELERATION DATA - FILTER CLASS 60
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
28	RIGHT SIDE SILL AT FRONT SEAT (X) ACCELERATION VS TIME	B- 33
29	RIGHT SIDE SILL AT FRONT SEAT (X) VELOCITY VS TIME	B- 34
30	RIGHT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 35
31	RIGHT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 36
32	RIGHT SIDE SILL AT FRONT SEAT (Z) ACCELERATION VS TIME	B- 37
33	RIGHT SIDE SILL AT FRONT SEAT (Z) VELOCITY VS TIME	B- 38
34	RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION VS TIME	B- 39
35	RIGHT SIDE SILL AT REAR SEAT (X) ACCELERATION VS TIME	B- 40
36	RIGHT SIDE SILL AT REAR SEAT (X) VELOCITY VS TIME	B- 41
37	RIGHT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 42
38	RIGHT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 43
39	RIGHT SIDE SILL AT REAR SEAT (Z) ACCELERATION VS TIME	B- 44
40	RIGHT SIDE SILL AT REAR SEAT (Z) VELOCITY VS TIME	B- 45
41	RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION VS TIME	B- 46
42	REAR FLOORPAN ABOVE AXLE (X) ACCELERATION VS TIME	B- 47
43	REAR FLOORPAN ABOVE AXLE (X) VELOCITY VS TIME	B- 48
44	REAR FLOORPAN ABOVE AXLE (Y) ACCELERATION VS TIME	B- 49
45	REAR FLOORPAN ABOVE AXLE (Y) VELOCITY VS TIME	B- 50
46	REAR FLOORPAN ABOVE AXLE (Z) ACCELERATION VS TIME	B- 51
47	REAR FLOORPAN ABOVE AXLE (Z) VELOCITY VS TIME	B- 52
48	REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION VS TIME	B- 53
49	LEFT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 54
50	LEFT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 55
51	LEFT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 56
52	LEFT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 57
53	LEFT FRONT DOOR ON CENTERLINE (Y) ACCELERATION VS TIME	B- 58
54	LEFT FRONT DOOR ON CENTERLINE (Y) VELOCITY VS TIME	B- 59
55	LEFT FRONT DOOR UPPER CENTERLINE (Y) ACCELERATION VS TIME	B- 60
56	LEFT FRONT DOOR UPPER CENTERLINE (Y) VELOCITY VS TIME	B- 61
57	LOWER B-POST (Y) ACCELERATION VS TIME	B- 62
58	LOWER B-POST (Y) VELOCITY VS TIME	B- 63
59	UPPER B-POST (Y) ACCELERATION VS TIME	B- 64
60	UPPER B-POST (Y) VELOCITY VS TIME	B- 65
61	LOWER A-POST (Y) ACCELERATION VS TIME	B- 66
62	LOWER A-POST (Y) VELOCITY VS TIME	B- 67
63	UPPER A-POST (Y) ACCELERATION VS TIME	B- 68
64	UPPER A-POST (Y) VELOCITY VS TIME	B- 69
65	FRONT SEAT TRACK (Y) ACCELERATION VS TIME	B- 70
66	FRONT SEAT TRACK (Y) VELOCITY VS TIME	B- 71

TEST VEHICLE INSTRUMENTATION PLOTS
ACCELERATION DATA - FILTER CLASS 60
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
67	VEHICLE CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 72
68	VEHICLE CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 73
69	VEHICLE CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 74
70	VEHICLE CENTER OF GRAVITY (Y) VELOCITY ACCELERATION VS TIME	B- 75
71	VEHICLE CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 76
72	VEHICLE CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 77
73	VEHICLE CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 78

MDB INSTRUMENTATION PLOTS
ACCELERATION DATA - FILTER CLASS 60
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
74	MDB CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 79
75	MDB CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 80
76	MDB CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 81
77	MDB CENTER OF GRAVITY (Y) VELOCITY VS TIME	B- 82
78	MDB CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 83
79	MDB CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 84
80	MDB CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 85
81	MDB REAR (X) ACCELERATION VS TIME	B- 86
82	MDB REAR (X) VELOCITY VS TIME	B- 87
83	MDB REAR (Y) ACCELERATION VS TIME	B- 88
84	MDB REAR (Y) VELOCITY VS TIME	B- 89

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS (REDUNDANT)
ACCELERATION DATA - FILTER CLASS 1000, LOWER SPINE - FILTER CLASS 180
INTEGRATION DATA - FILTER CLASS 180

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
85	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 90
86	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 91
87	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 92
88	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 93
89	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 94
90	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 95
91	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 96
92	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 97

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS (REDUNDANT)
ACCELERATION DATA - FIR FILTERED

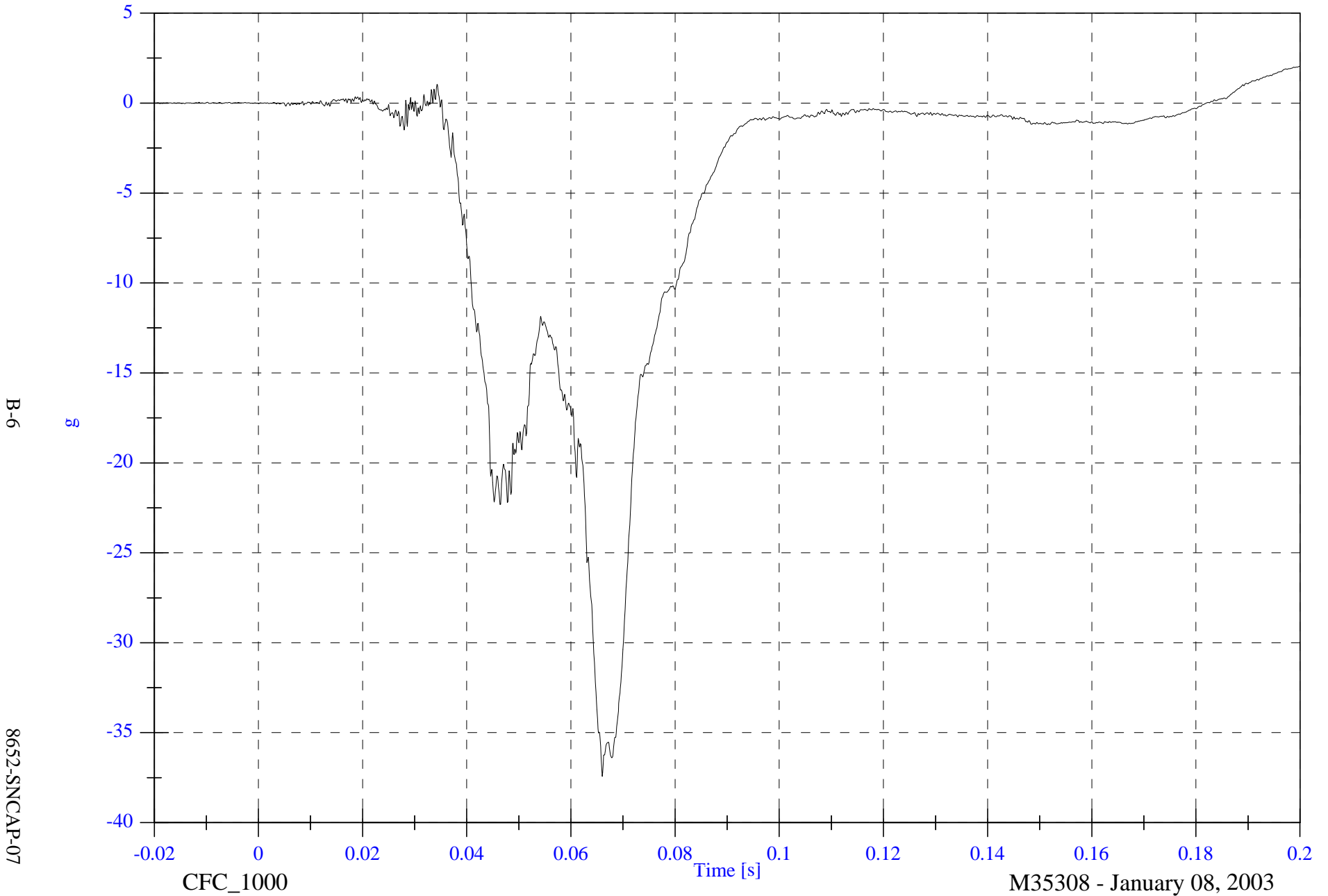
<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
93	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 98
94	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 99
95	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 100
96	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 101

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Head x

Max: 2.0 [g] at 0.200 [s]

Min: -37.4 [g] at 0.066 [s]



B-6

8652-SNCAP-07

CFC_1000

Time [s]

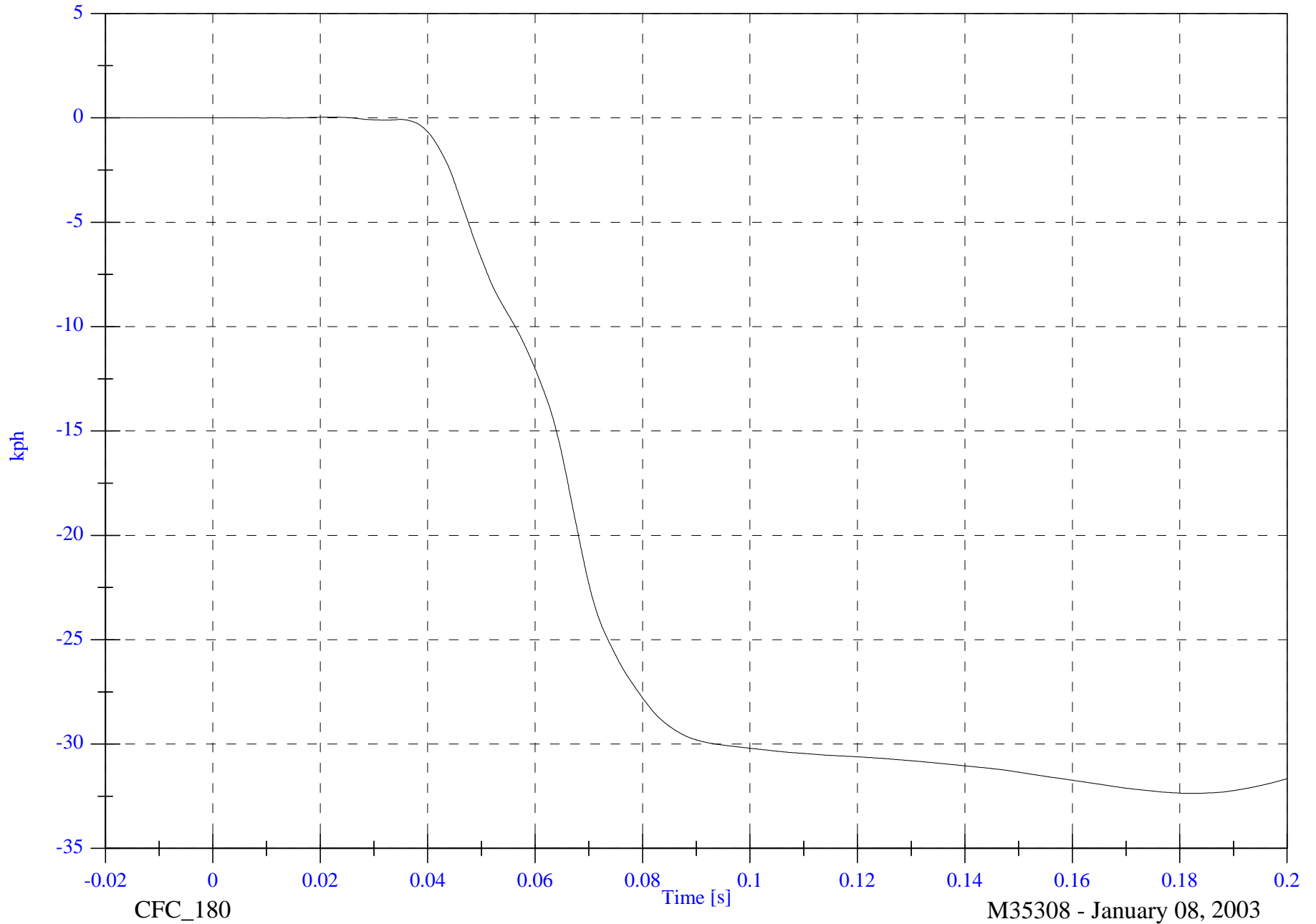
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Head x Velocity

Max: 0.0 [kph] at 0.022 [s]

Min: -32.4 [kph] at 0.182 [s]



B-7

8652-SNCAP-07

CFC_180

Time [s]

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

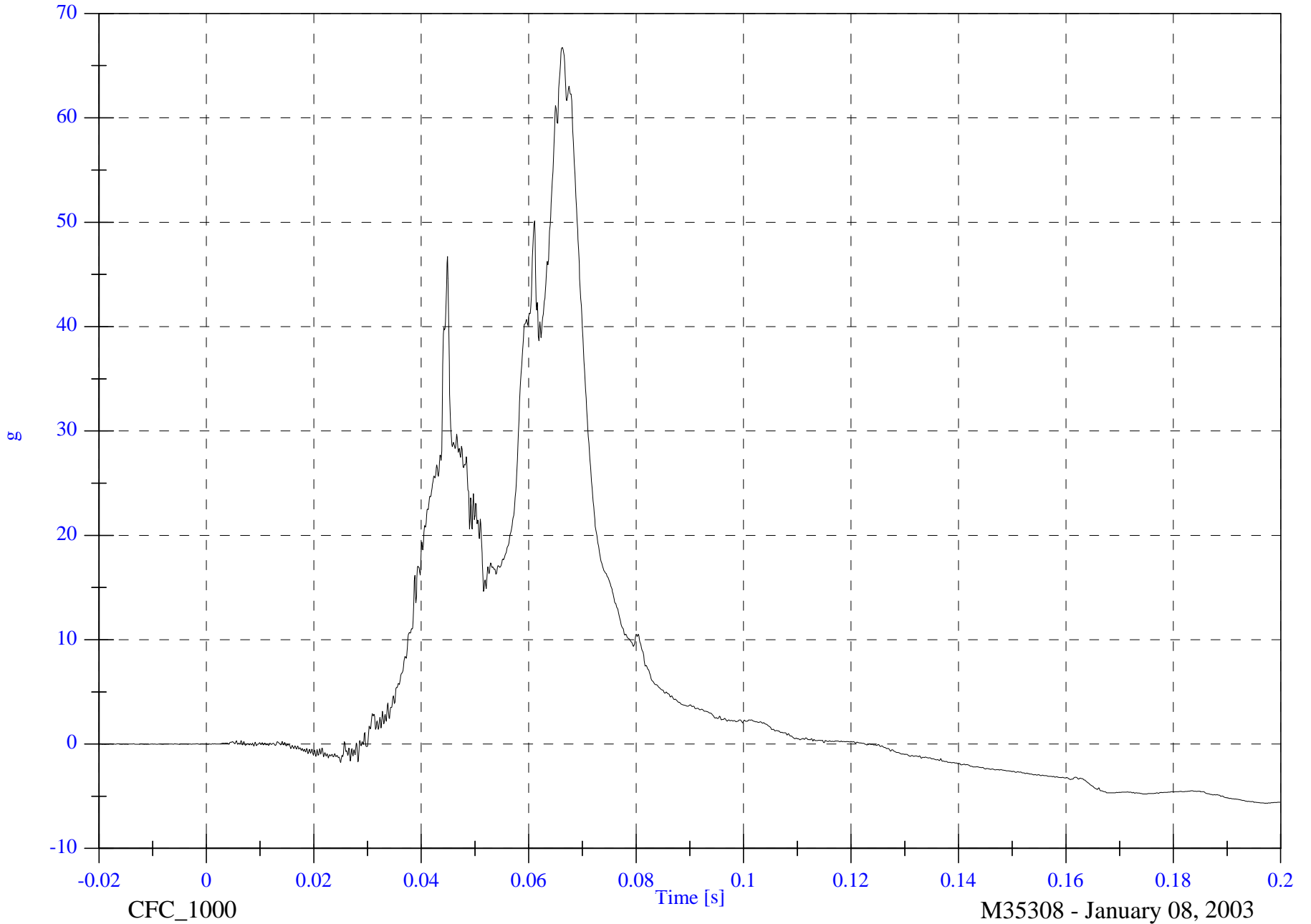
V2P1 Head y

Max: 66.7 [g] at 0.066 [s]

Min: -5.7 [g] at 0.197 [s]

B-8

8652-SNCAP-07

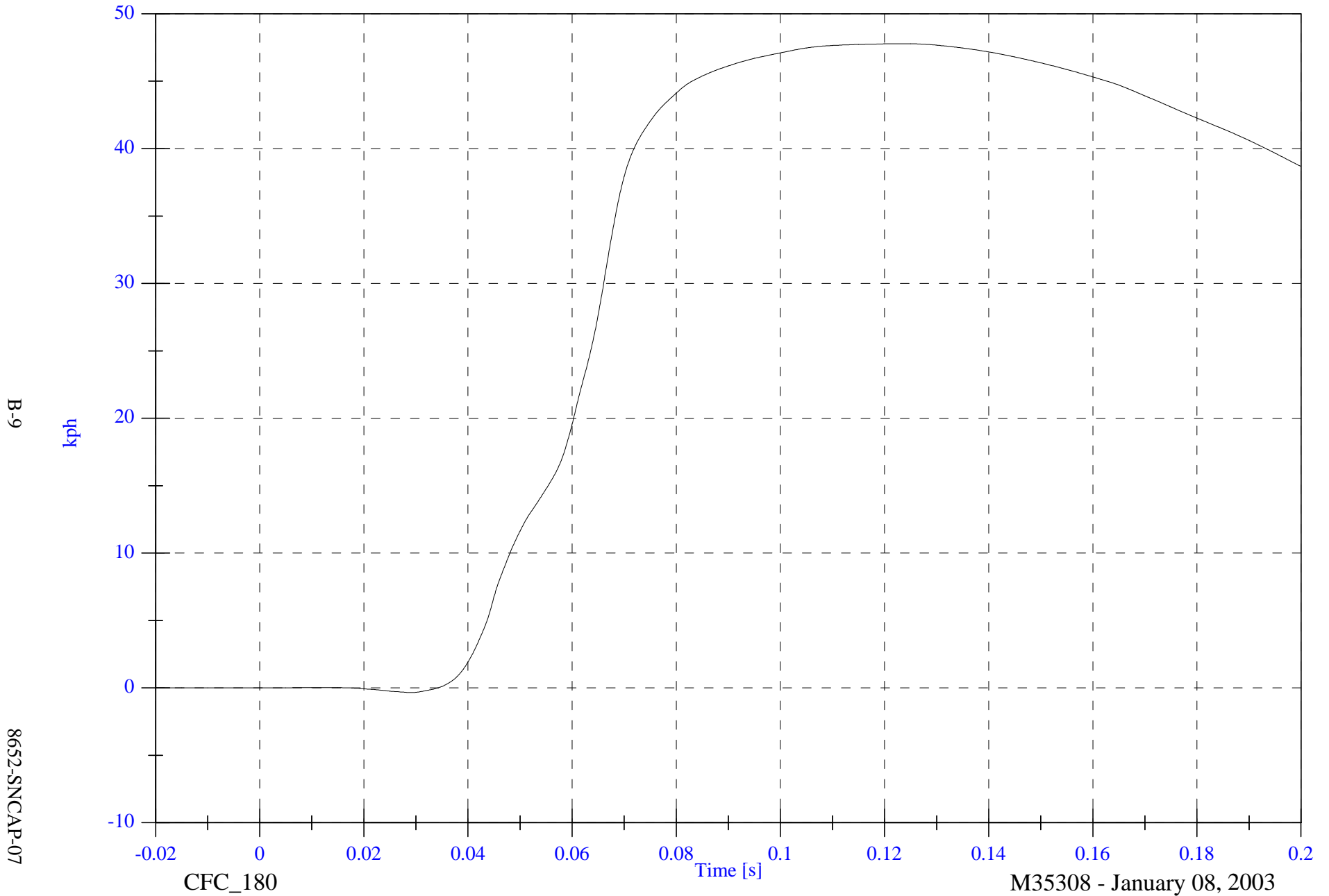


SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Head y Velocity

Max: 47.8 [kph] at 0.123 [s]

Min: -0.3 [kph] at 0.029 [s]



B-9

8652-SNCAP-07

CFC_180

Time [s]

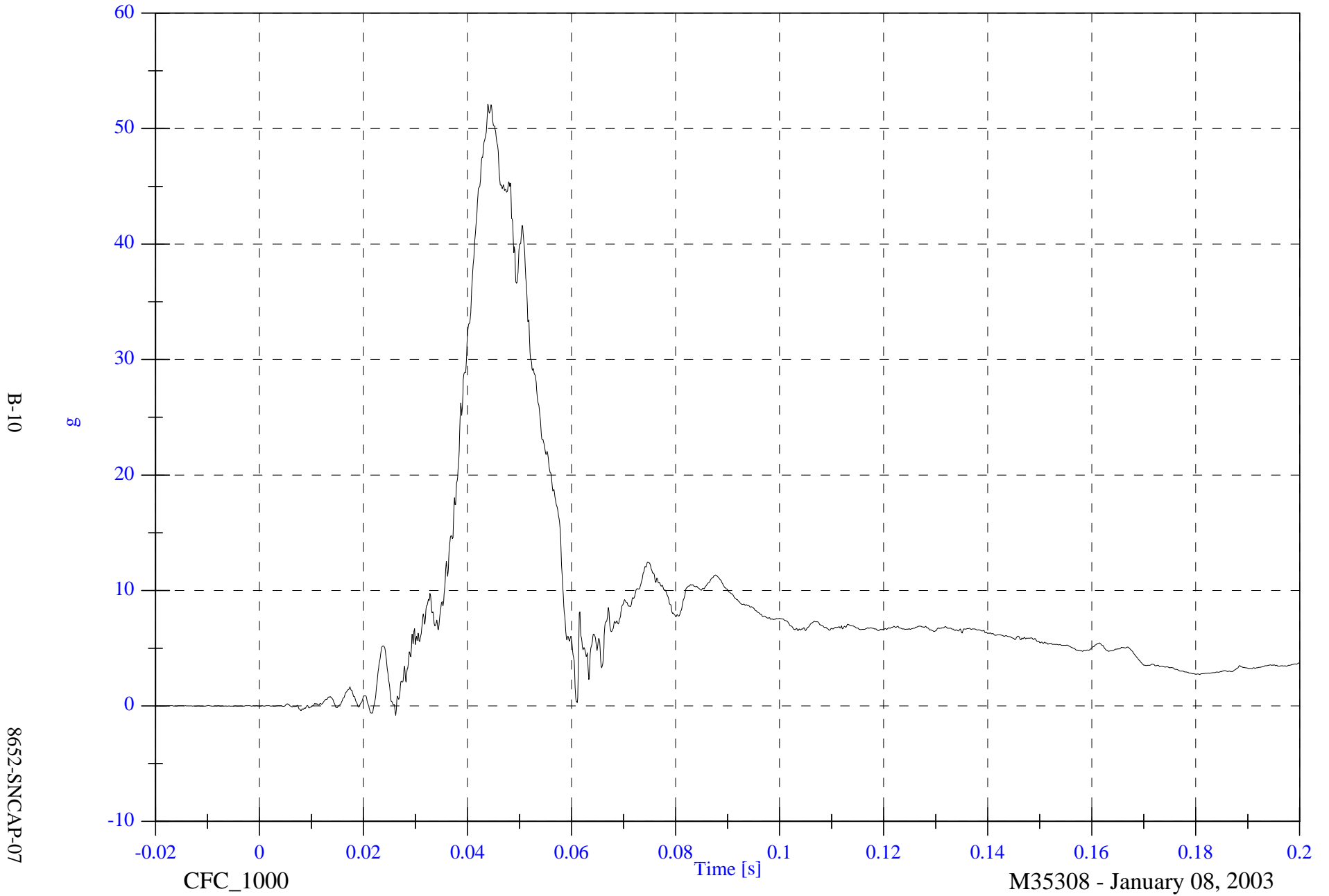
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Head z

Max: 52.1 [g] at 0.044 [s]

Min: -0.8 [g] at 0.026 [s]



B-10

8652-SNCAP-07

CFC_1000

Time [s]

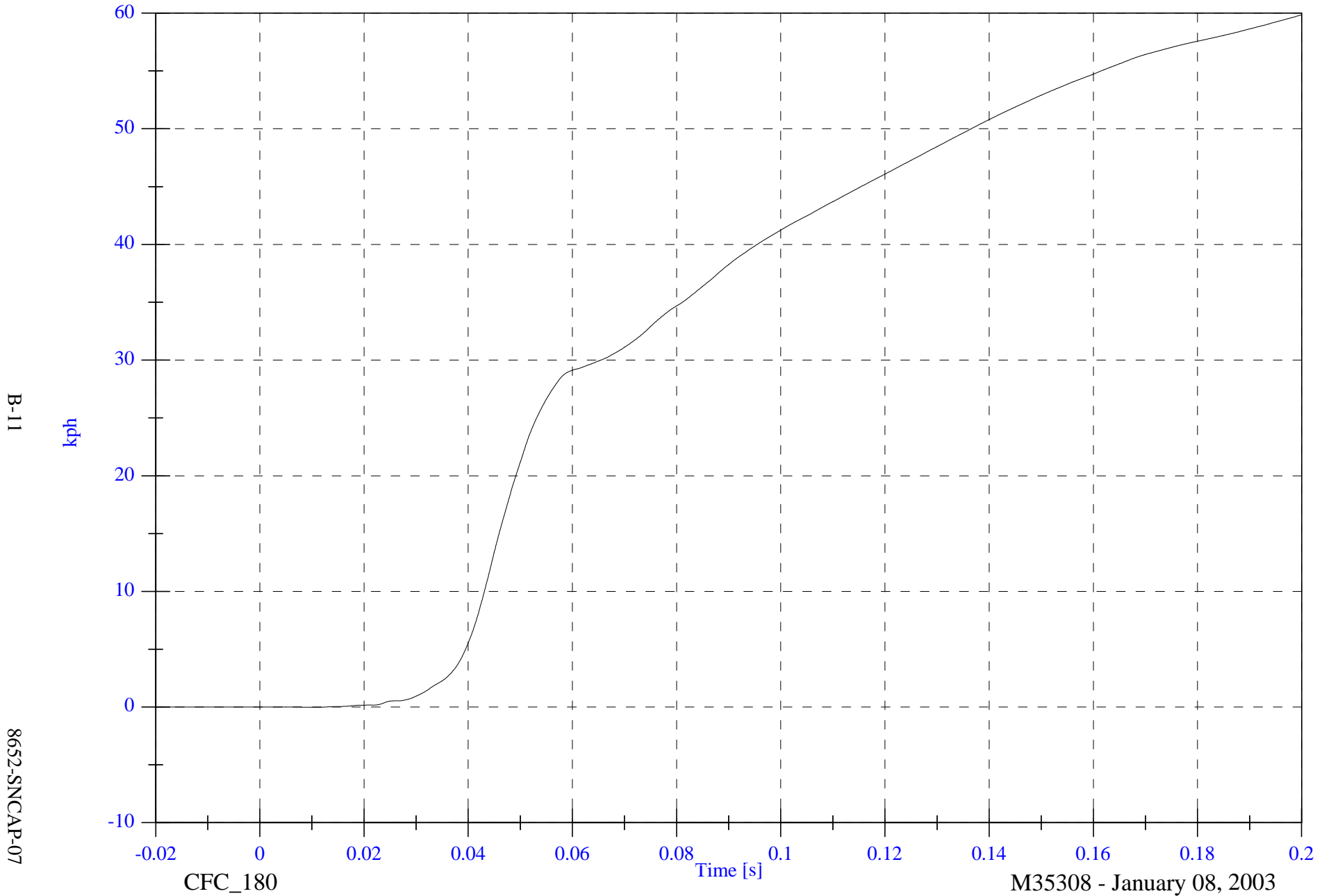
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Head z Velocity

Max: 59.8 [kph] at 0.200 [s]

Min: -0.0 [kph] at 0.010 [s]



B-11

8652-SNCAP-07

CFC_180

Time [s]

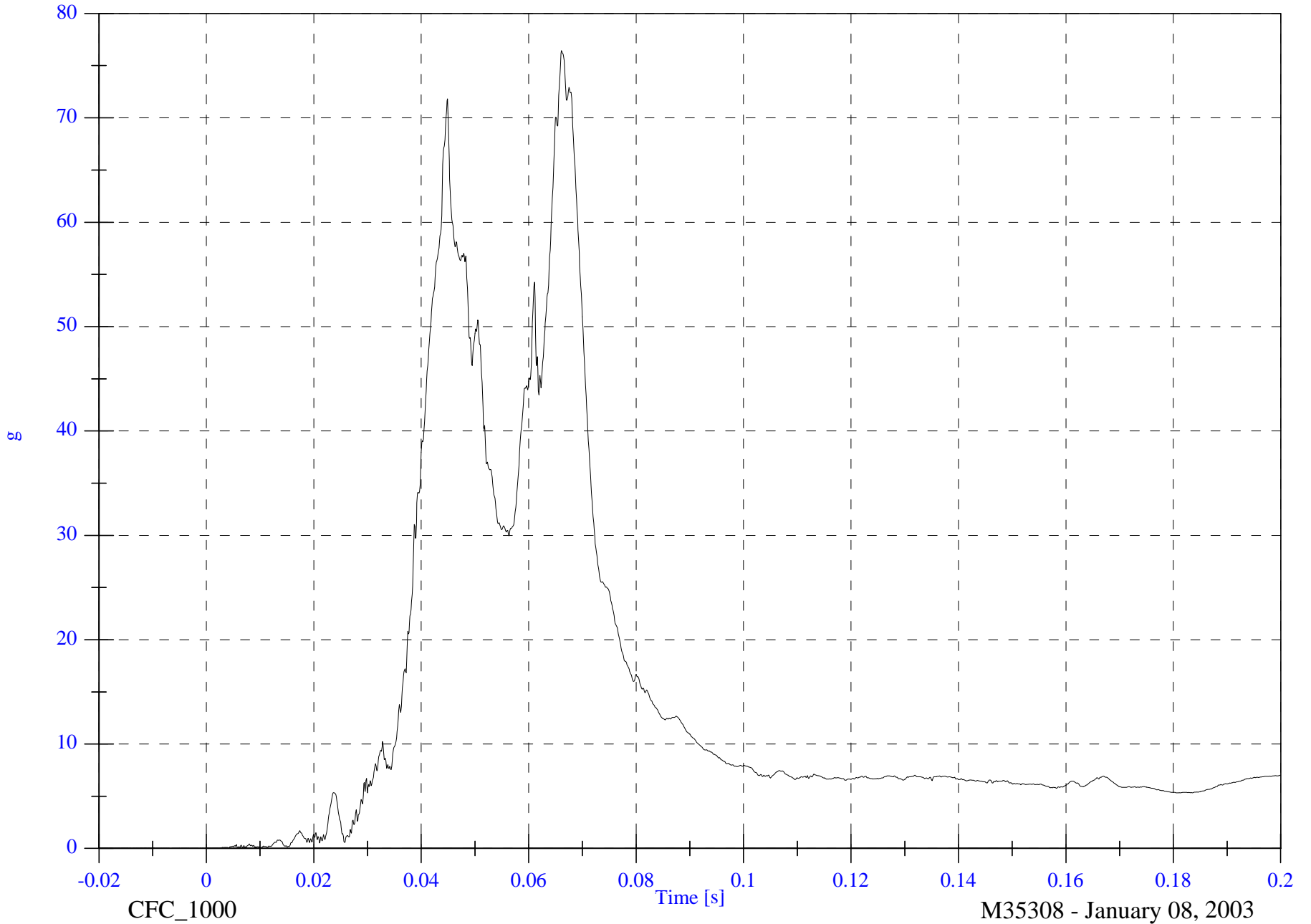
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Head Resultant

Max: 76.4 [g] at 0.066 [s]

Min: 0.0 [g] at -0.007 [s]



B-12

8652-SNCAP-07

CFC_1000

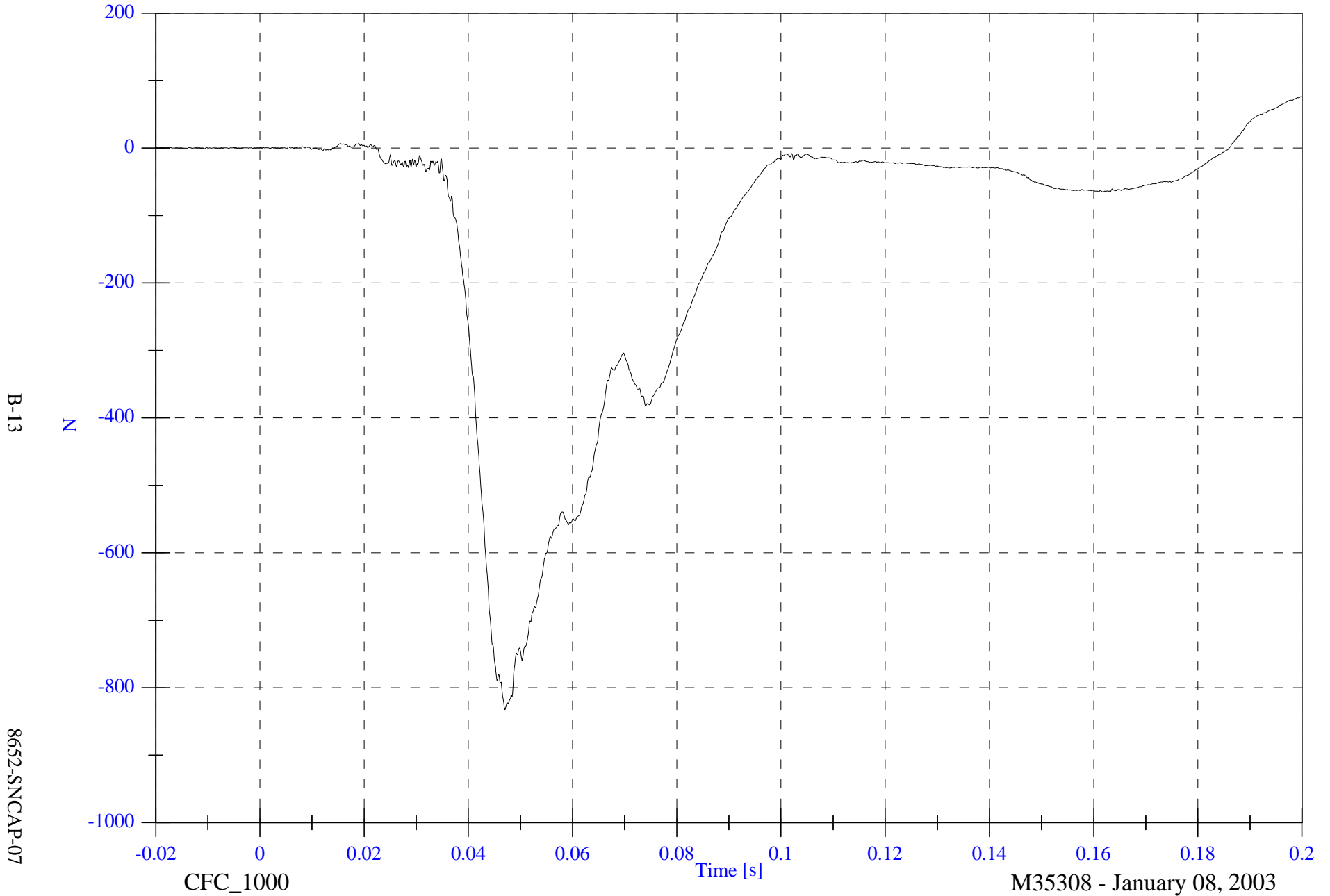
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 75.9 [N] at 0.200 [s]

V2P1 Upper Neck Fx

Min: -832.6 [N] at 0.047 [s]

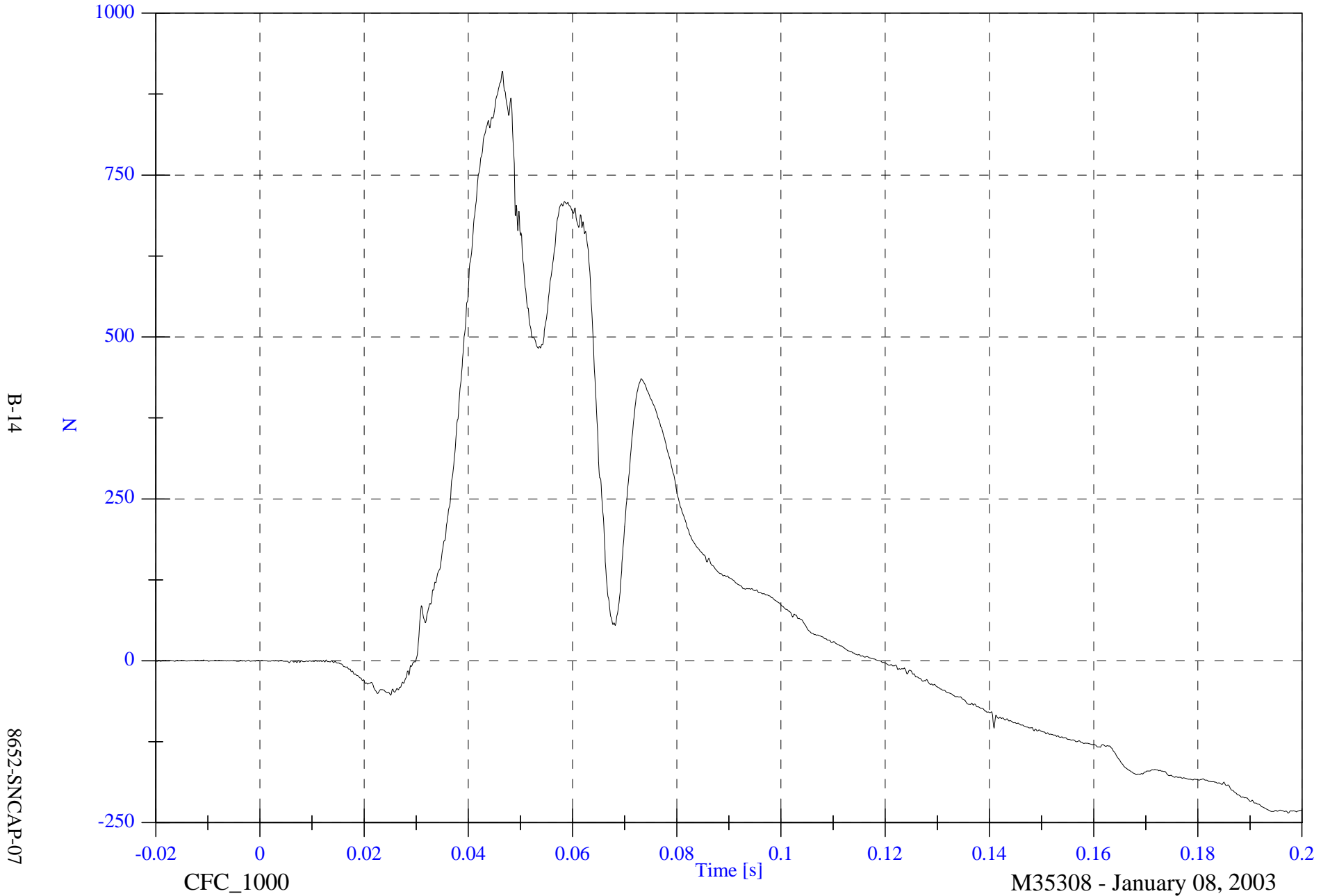


SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Upper Neck Fy

Max: 910.3 [N] at 0.046 [s]

Min: -235.2 [N] at 0.197 [s]



B-14

N

8652-SNCAP-07

CFC_1000

Time [s]

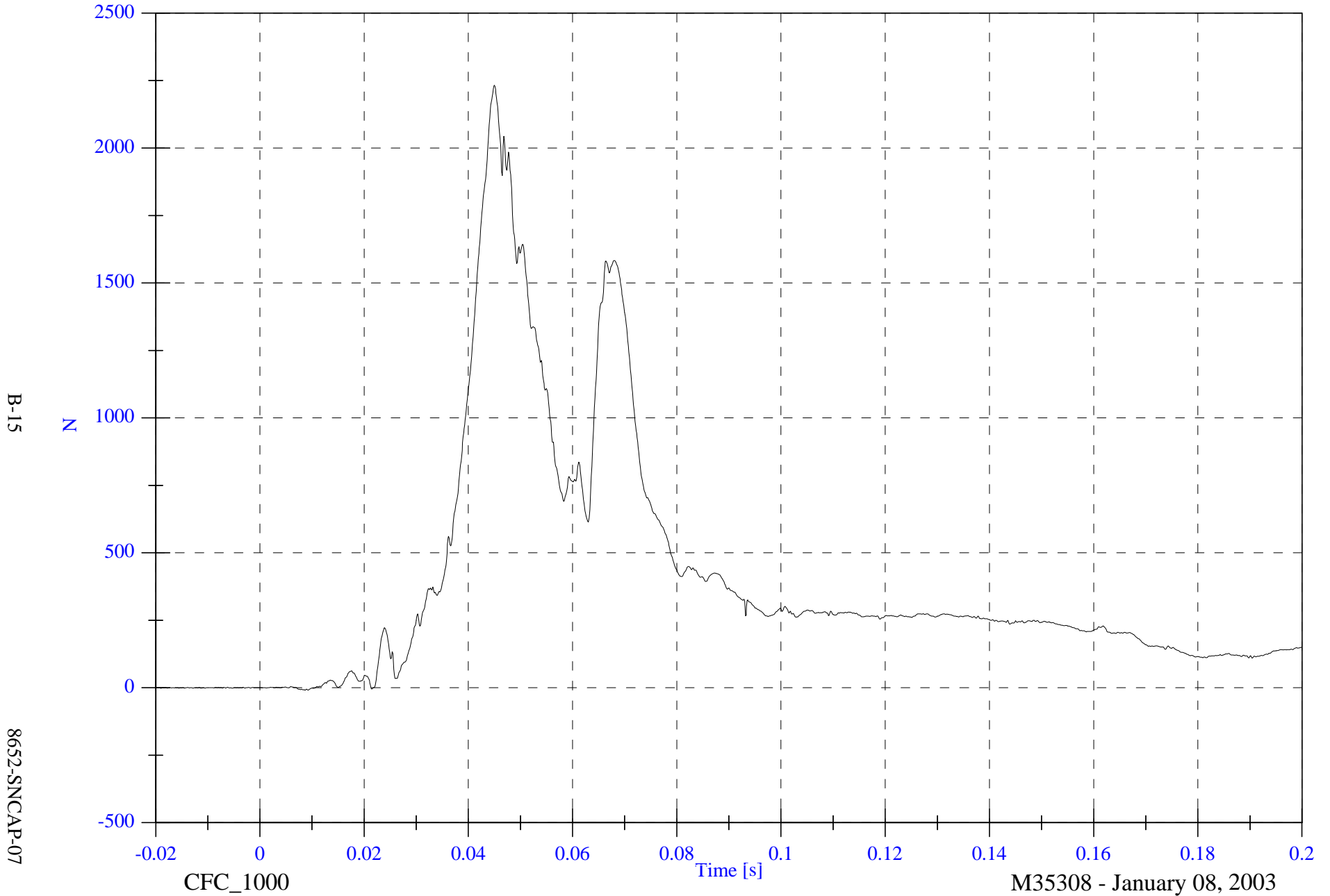
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Upper Neck Fz

Max: 2232.5 [N] at 0.045 [s]

Min: -8.5 [N] at 0.009 [s]



B-15

8652-SNCAP-07

CFC_1000

Time [s]

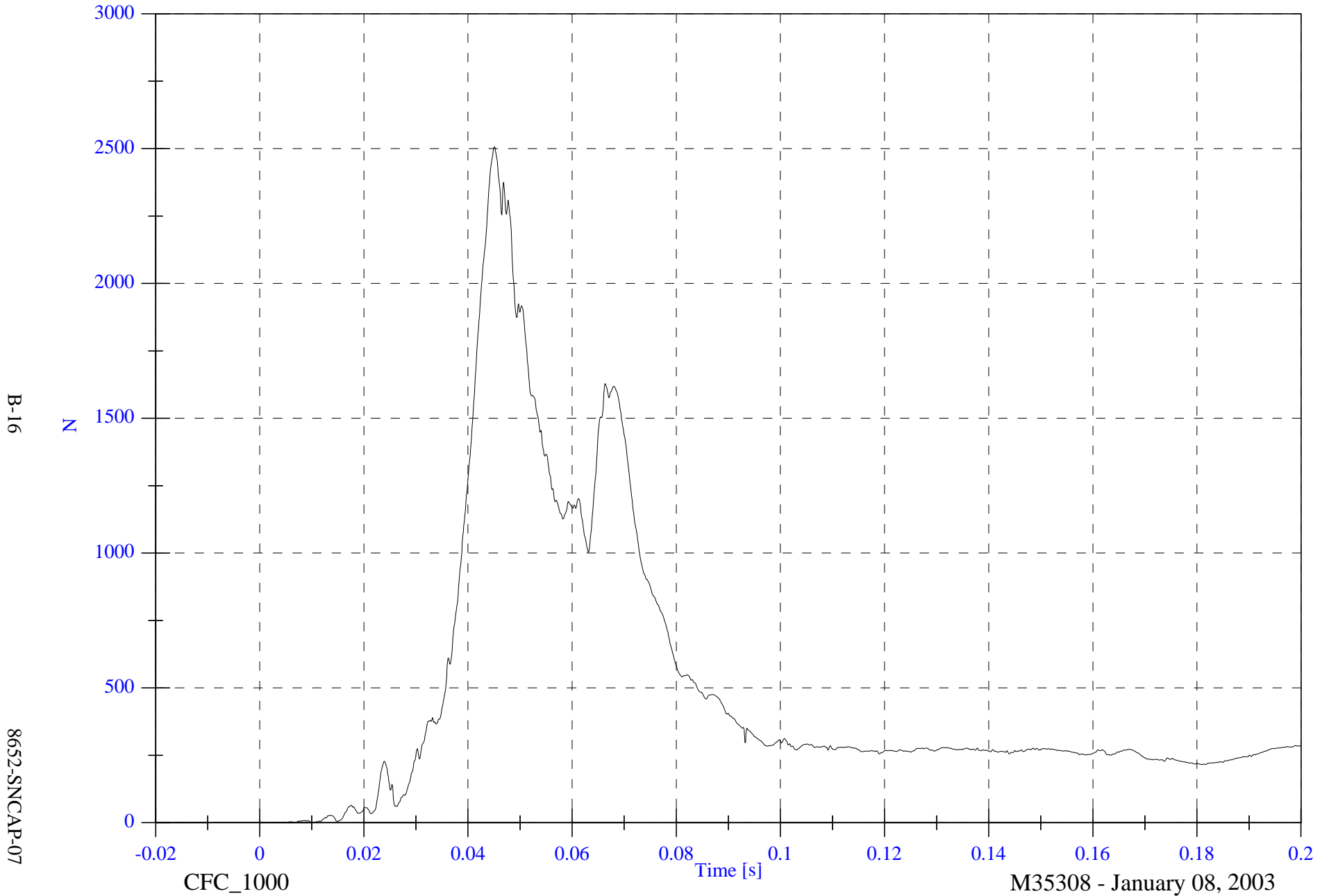
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Upper Neck F Resultant

Max: 2506.8 [N] at 0.045 [s]

Min: 0.1 [N] at -0.009 [s]



B-16

8652-SNCAP-07

CFC_1000

Time [s]

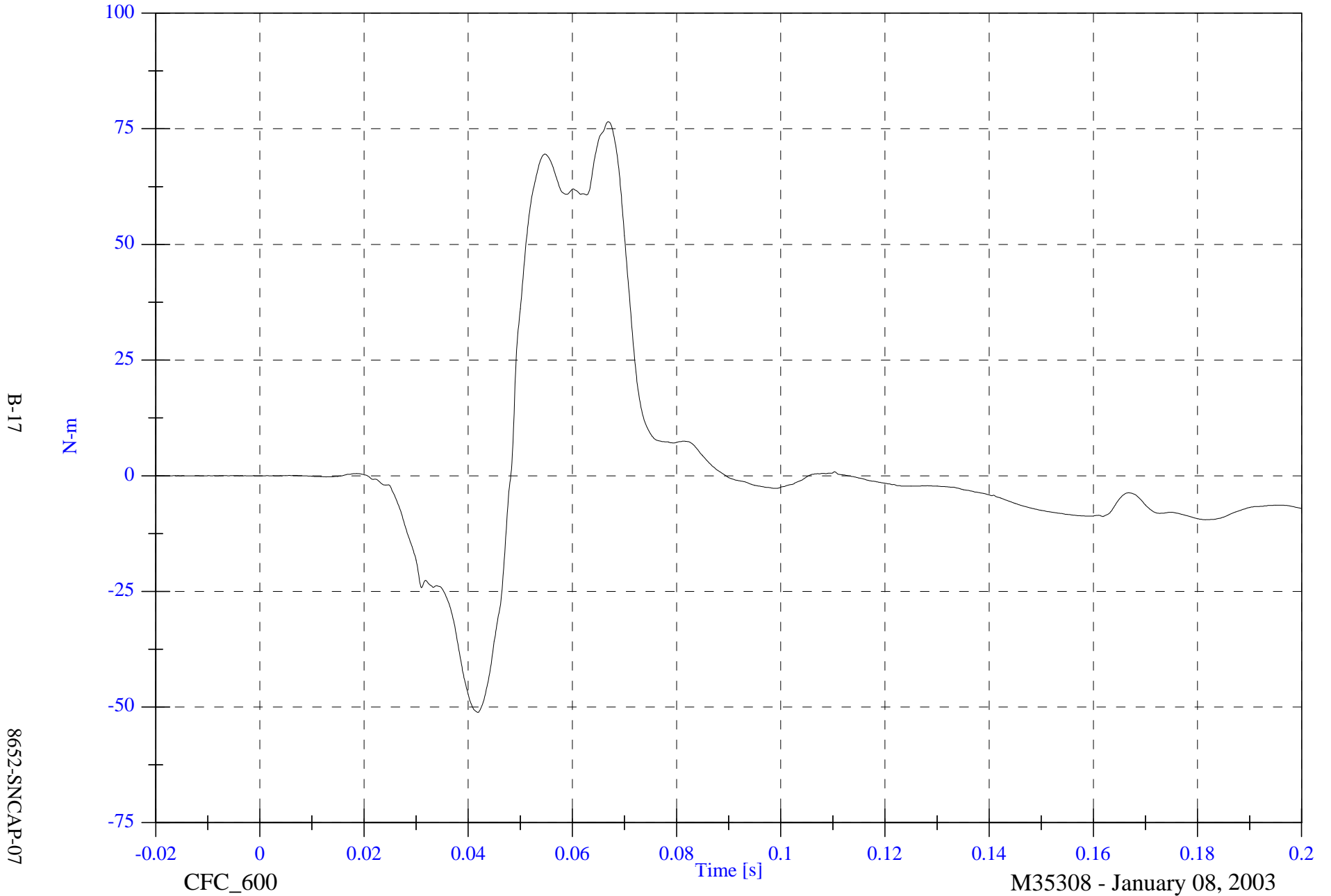
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Upper Neck Mx

Max: 76.5 [N-m] at 0.067 [s]

Min: -51.1 [N-m] at 0.042 [s]

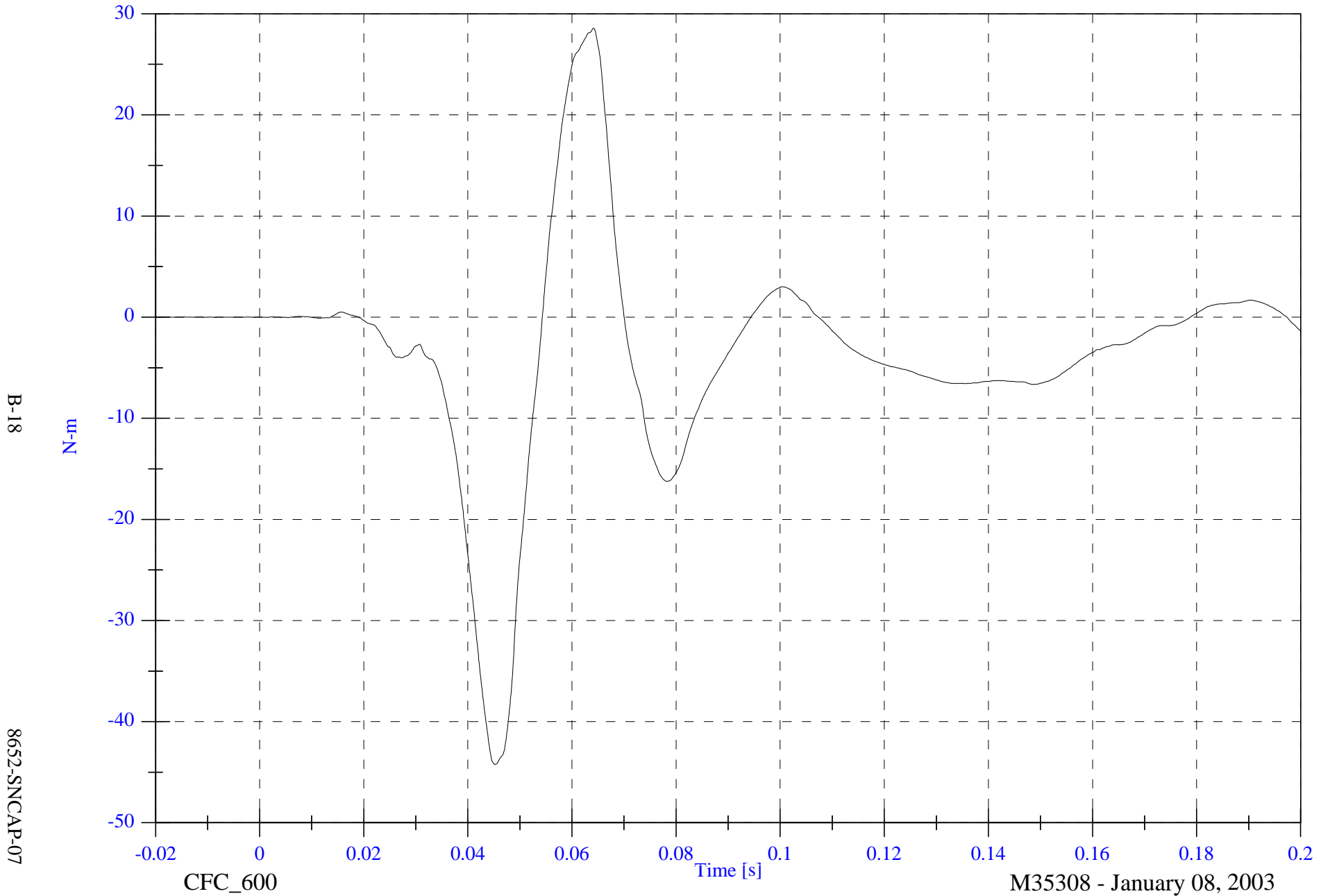


SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Upper Neck My

Max: 28.6 [N-m] at 0.064 [s]

Min: -44.2 [N-m] at 0.045 [s]



B-18

8652-SNCAP-07

CFC_600

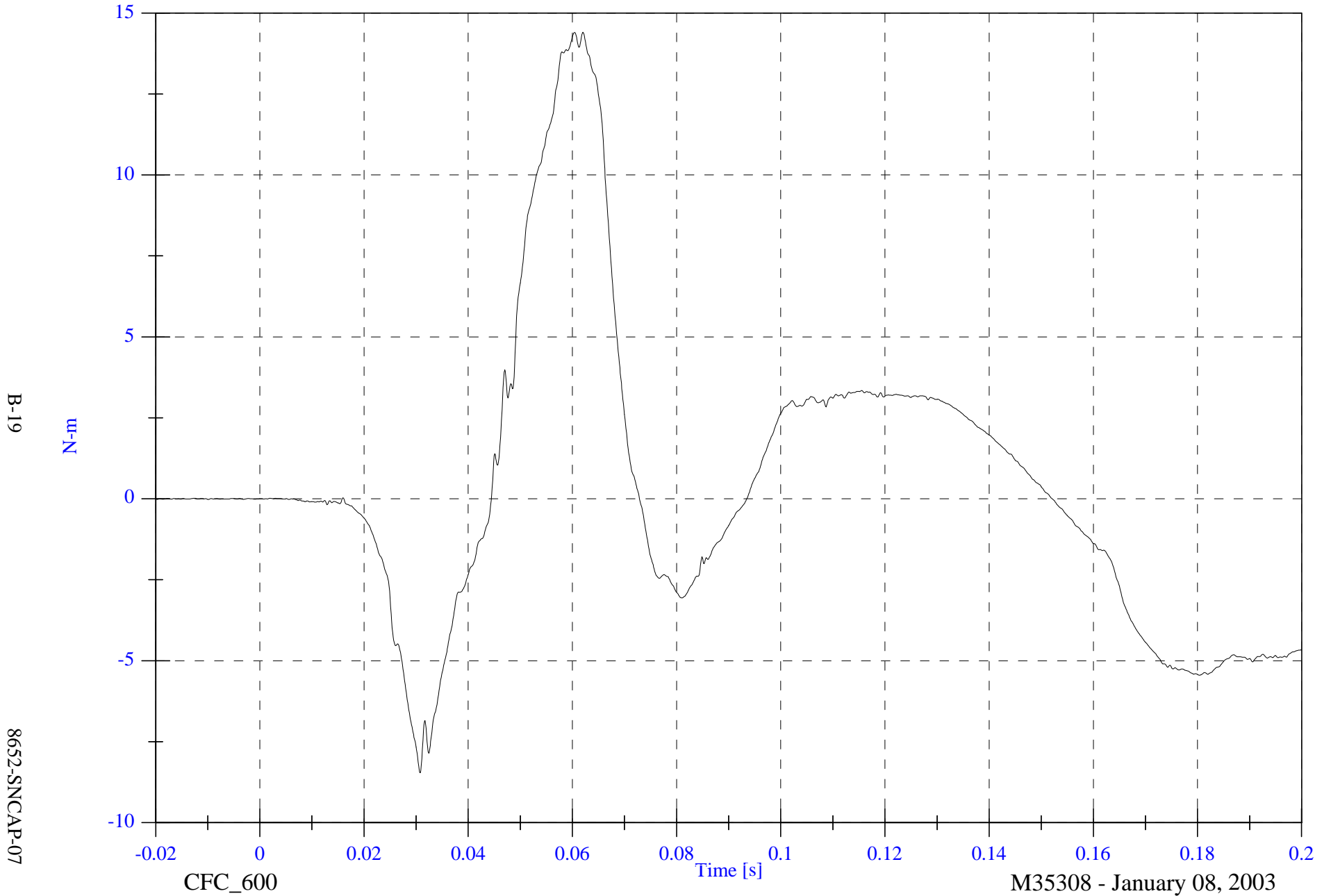
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 14.4 [N-m] at 0.062 [s]

V2P1 Upper Neck Mz

Min: -8.5 [N-m] at 0.031 [s]



B-19

8652-SNCAP-07

CFC_600

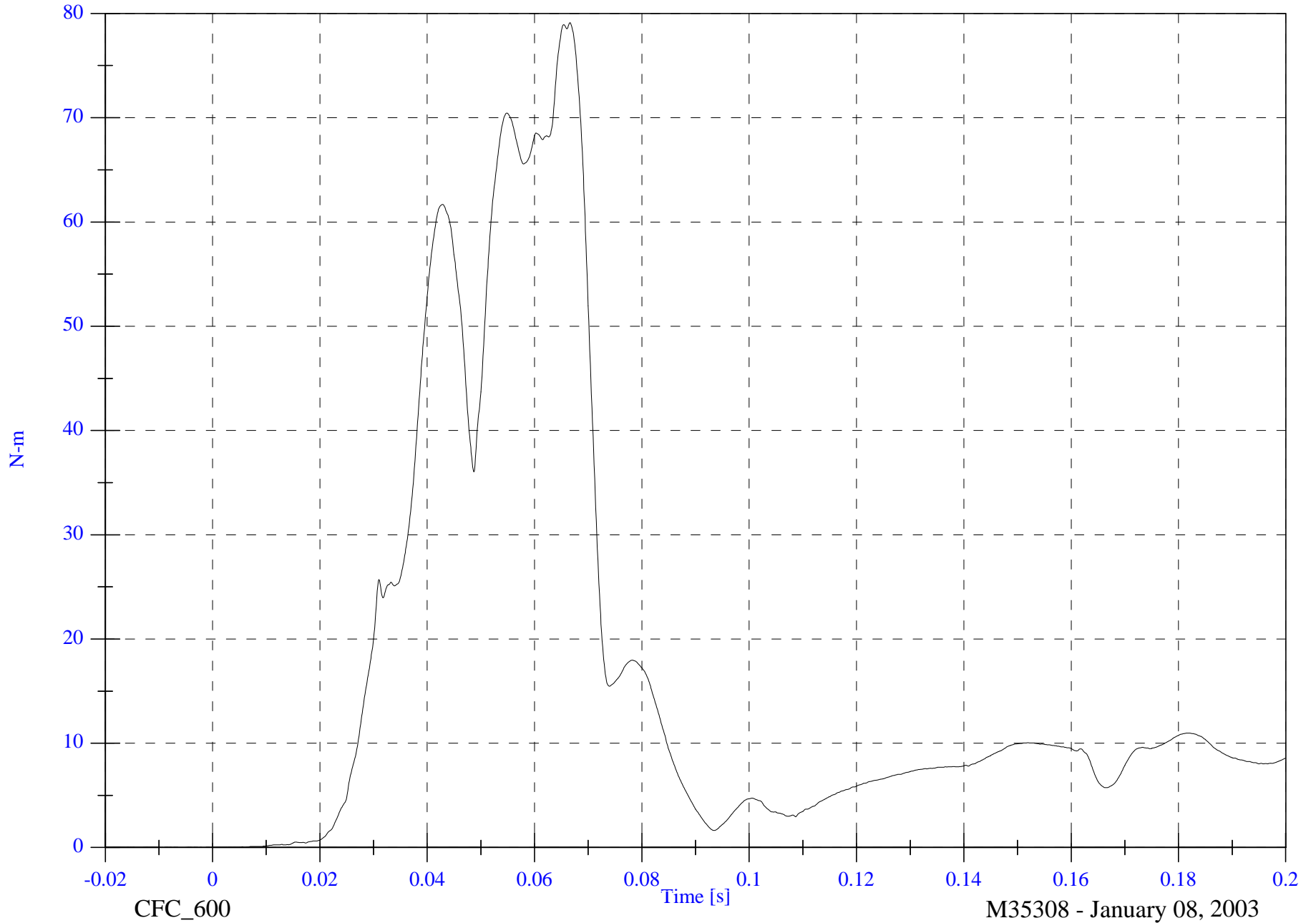
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Upper Neck M Resultant

Max: 79.1 [N-m] at 0.067 [s]

Min: 0.0 [N-m] at -0.016 [s]



B-20

8652-SNCAP-07

CFC_600

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

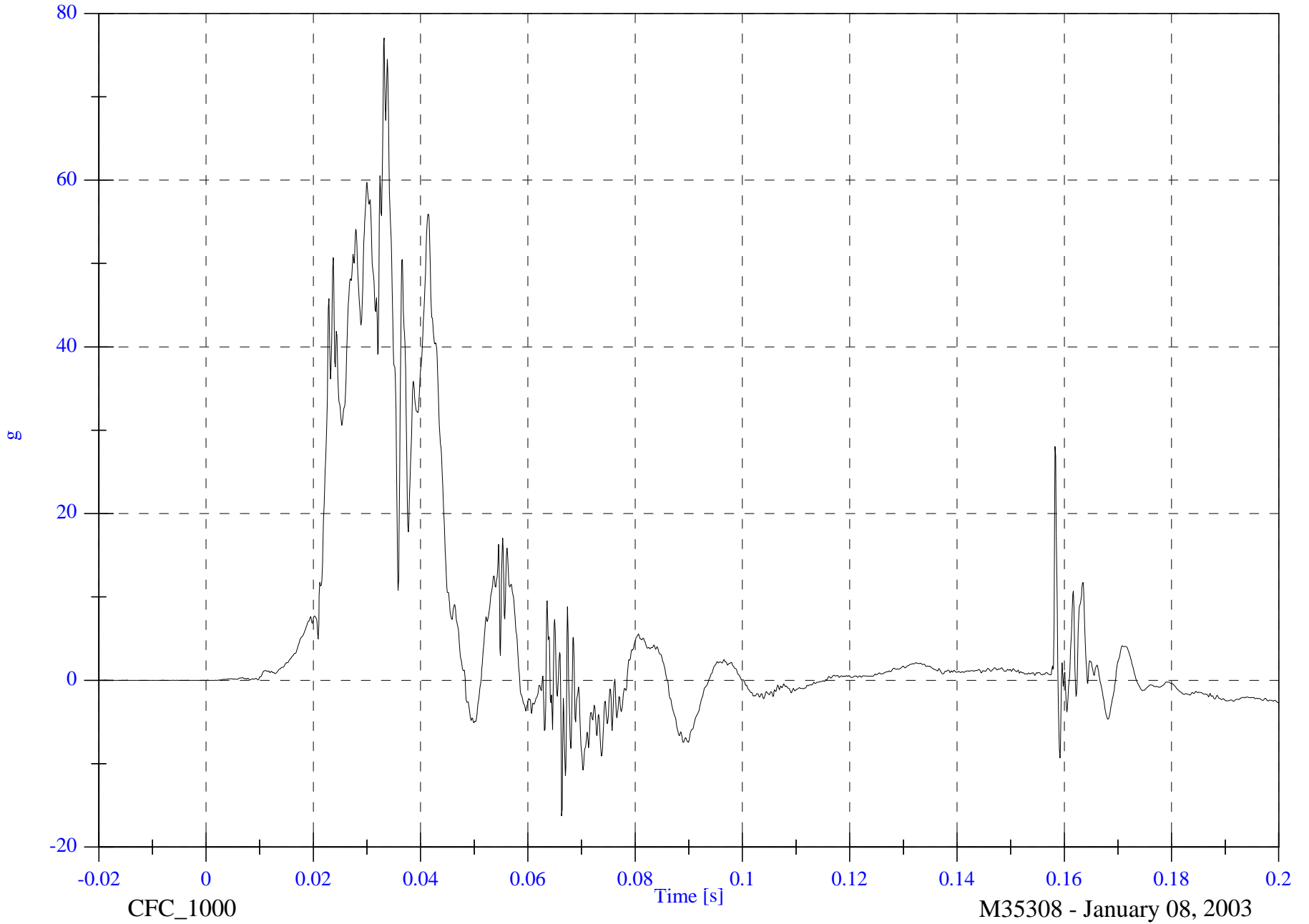
V2P1 Upper Rib y

Max: 77.1 [g] at 0.033 [s]

Min: -16.2 [g] at 0.066 [s]

B-21

8652-SNCAP-07

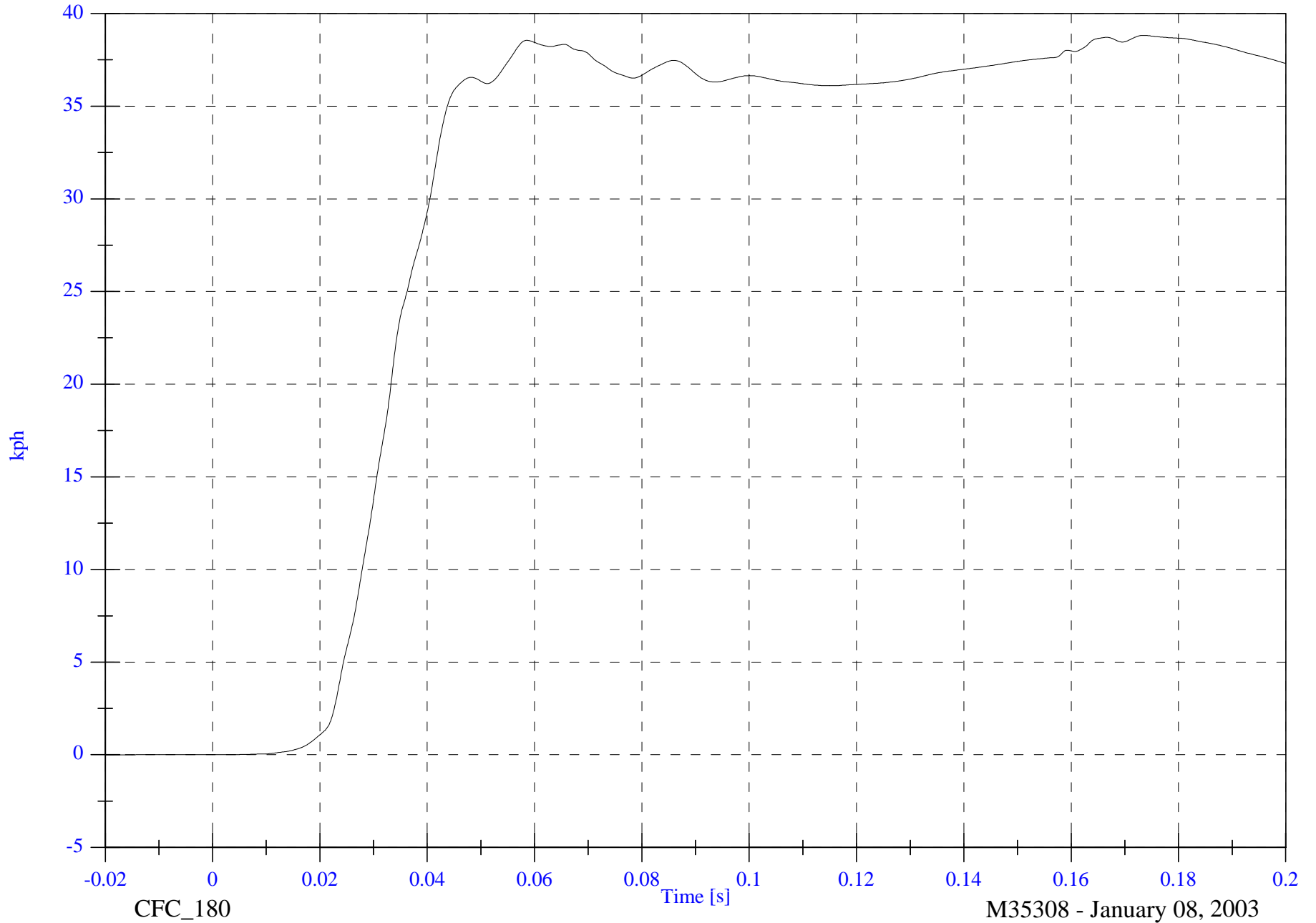


SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 38.8 [kph] at 0.173 [s]

V2P1 Upper Rib y Velocity

Min: -0.0 [kph] at -0.020 [s]



B-22

8652-SNCAP-07

CFC_180

Time [s]

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

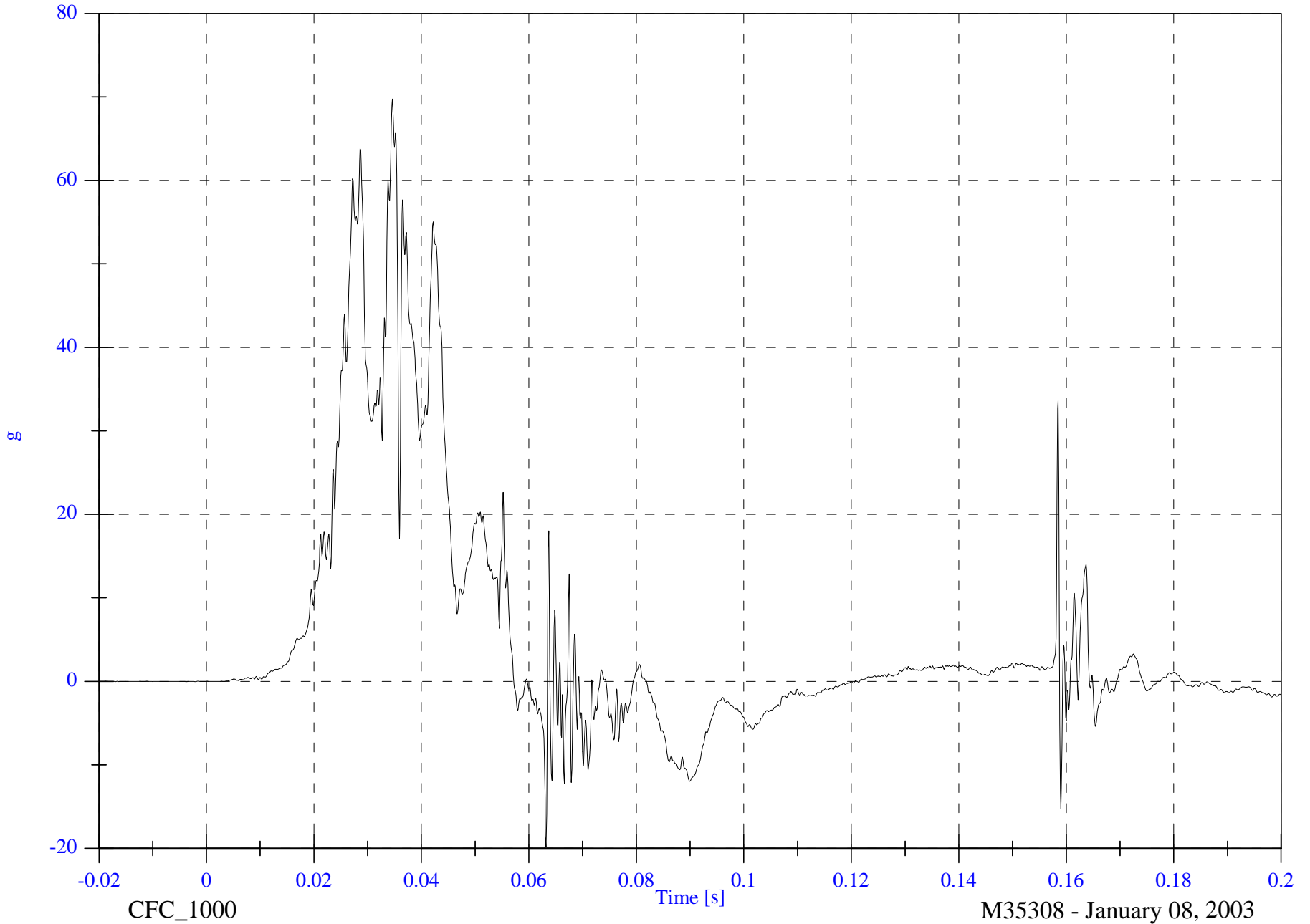
V2P1 Lower Rib y

Max: 69.7 [g] at 0.035 [s]

Min: -19.9 [g] at 0.063 [s]

B-23

8652-SNCAP-07



CFC_1000

Time [s]

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

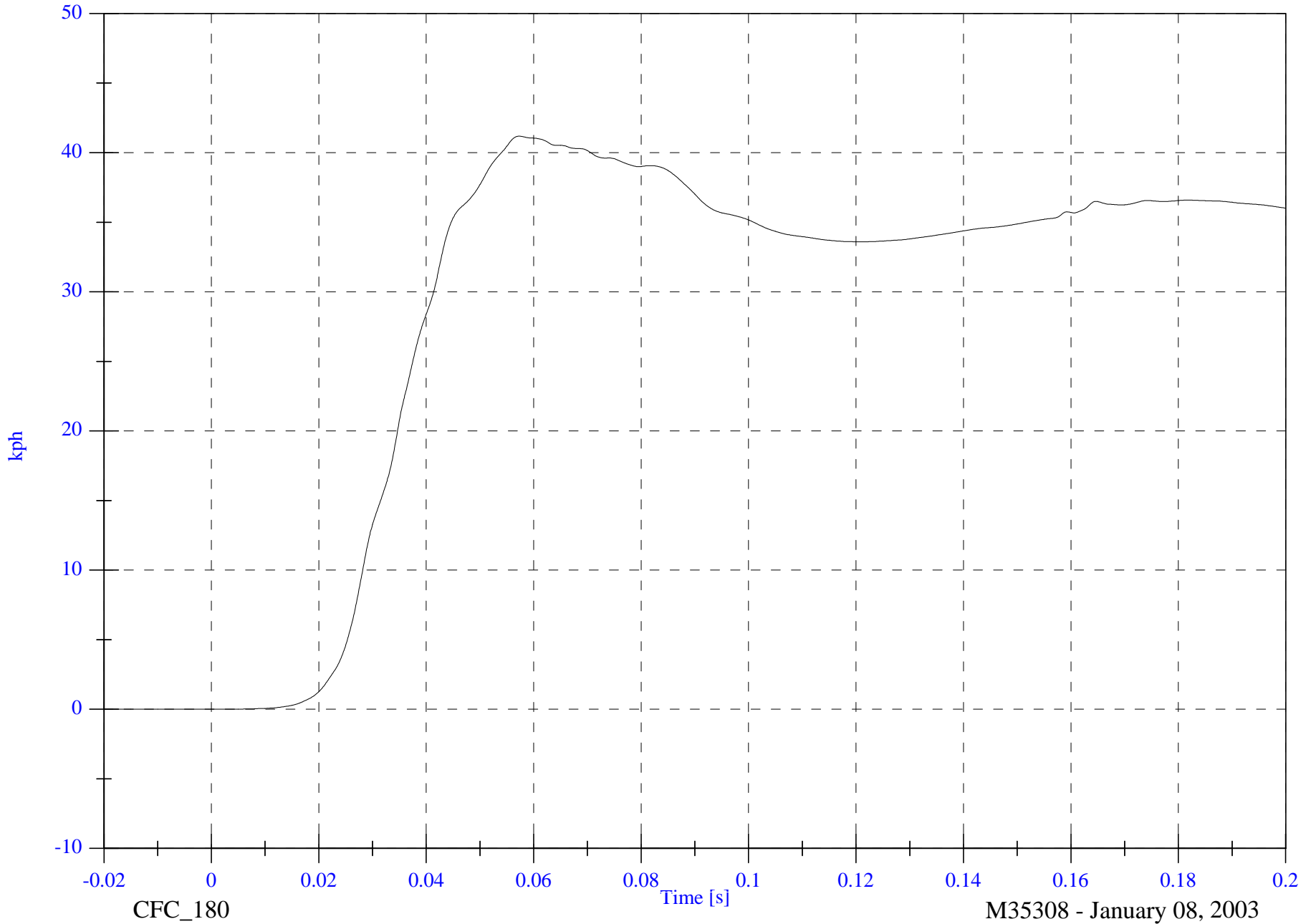
Max: 41.2 [kph] at 0.057 [s]

V2P1 Lower Rib y Velocity

Min: -0.0 [kph] at -0.020 [s]

B-24

8652-SNCAP-07



CFC_180

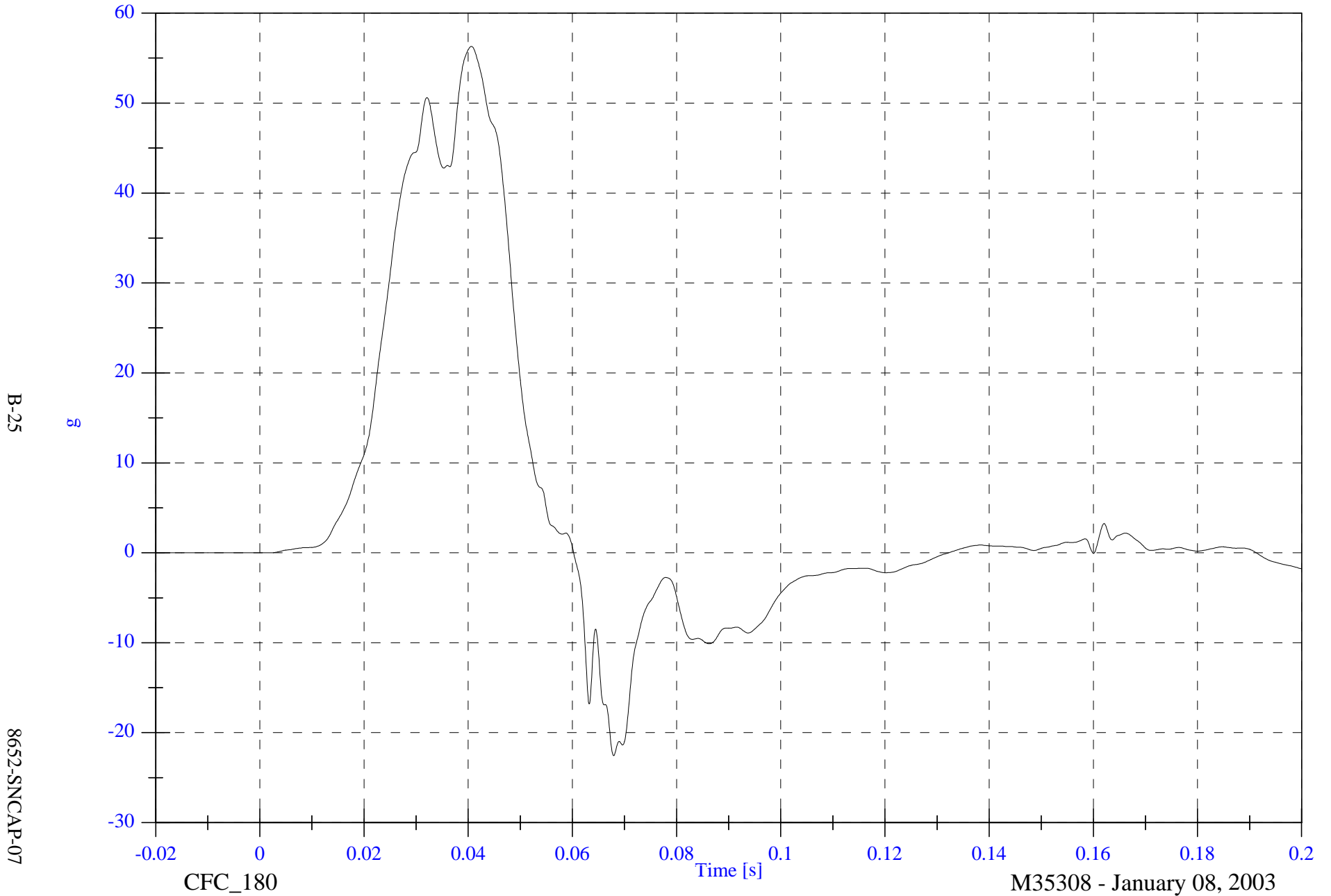
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Lower Spine y

Max: 56.3 [g] at 0.041 [s]

Min: -22.6 [g] at 0.068 [s]



SNCAP Test #2 - 2003 Honda S2000 Convertible

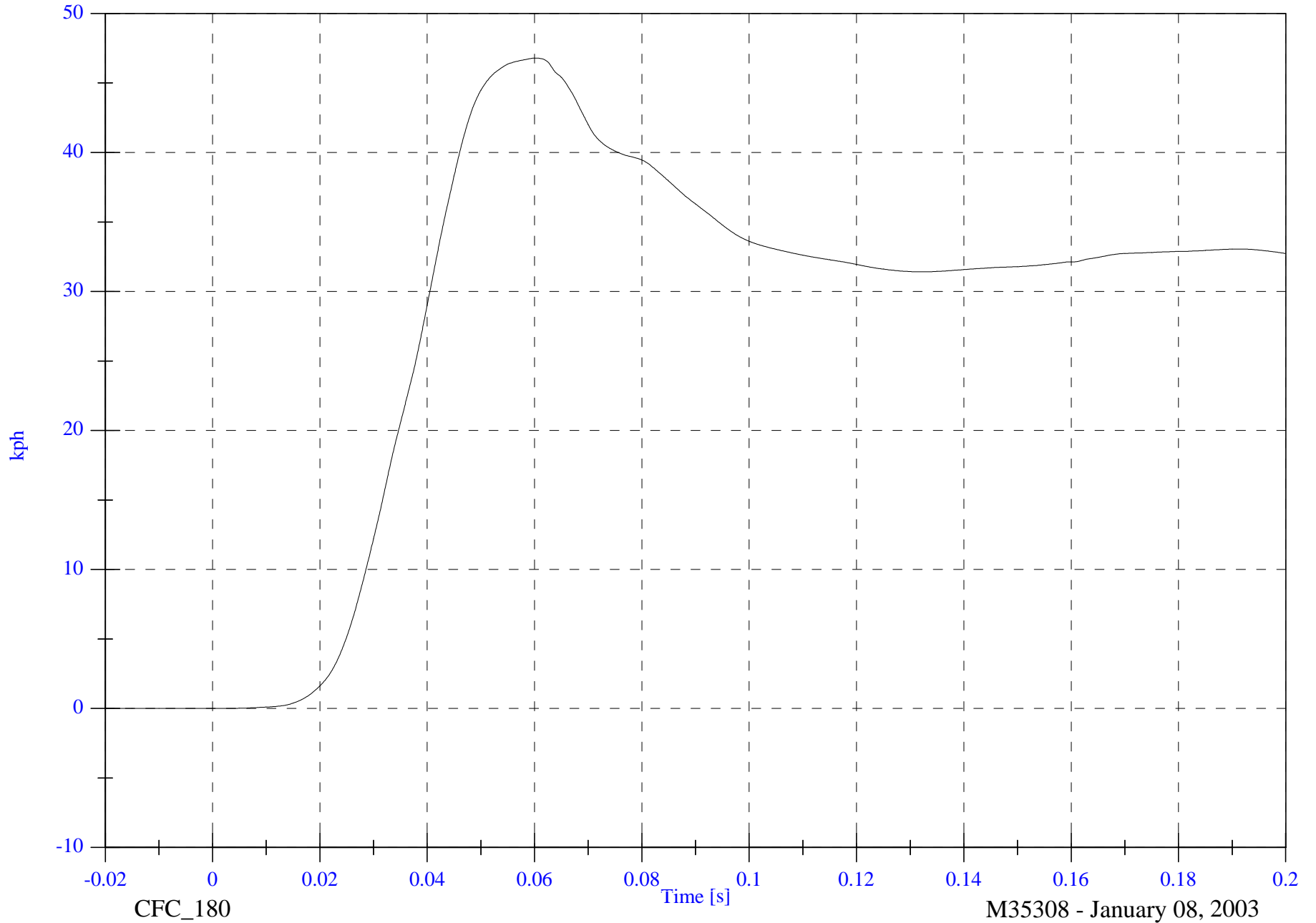
V2P1 Lower Spine y Velocity

Max: 46.8 [kph] at 0.060 [s]

Min: -0.0 [kph] at -0.020 [s]

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8652-SNCAP-07



CFC_180

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

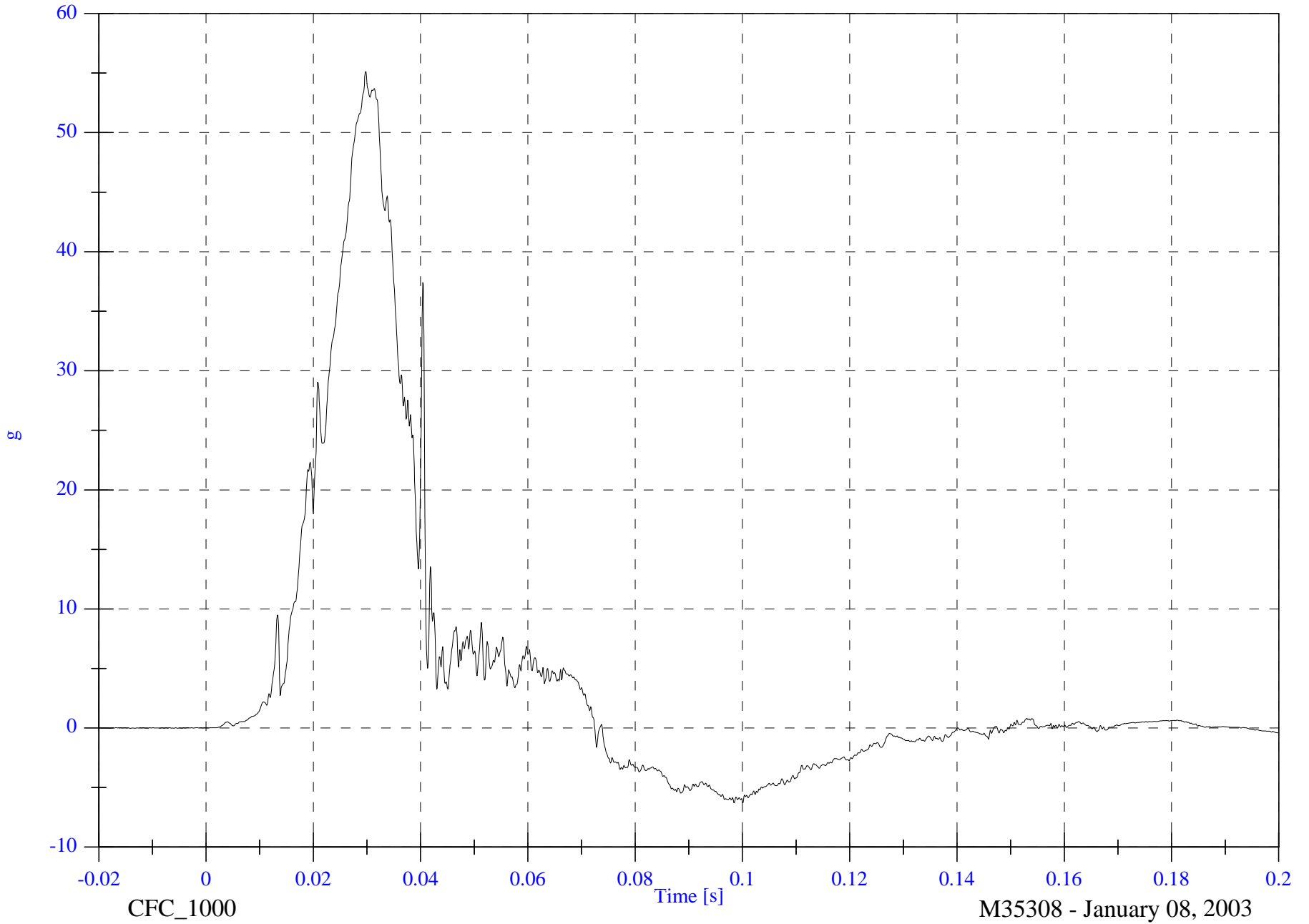
V2P1 Pelvic y

Max: 55.1 [g] at 0.030 [s]

Min: -6.3 [g] at 0.098 [s]

B-27

8652-SNCAP-07



CFC_1000

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

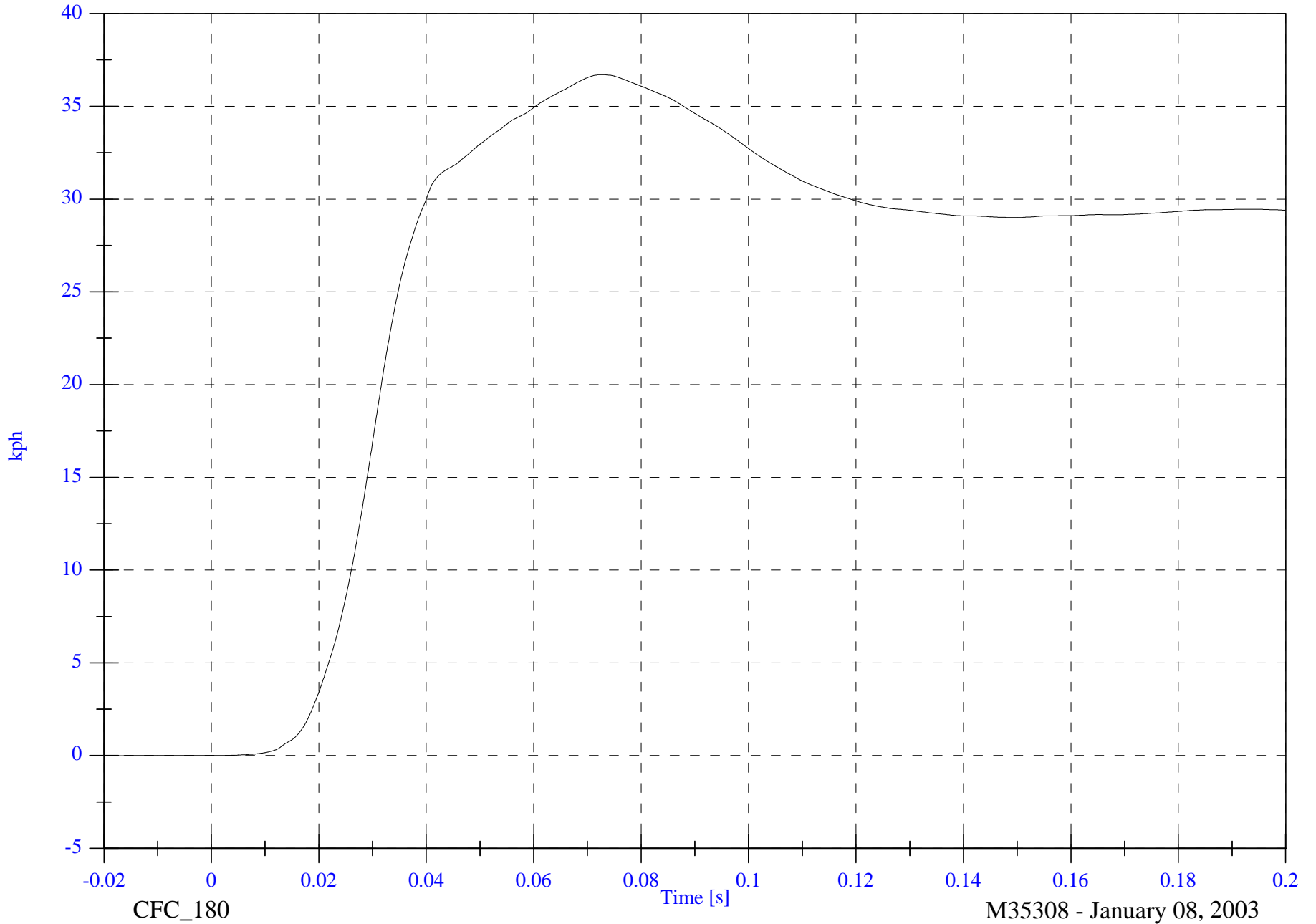
Max: 36.7 [kph] at 0.072 [s]

V2P1 Pelvic y Velocity

Min: -0.0 [kph] at -0.020 [s]

B-28

8652-SNCAP-07



CFC_180

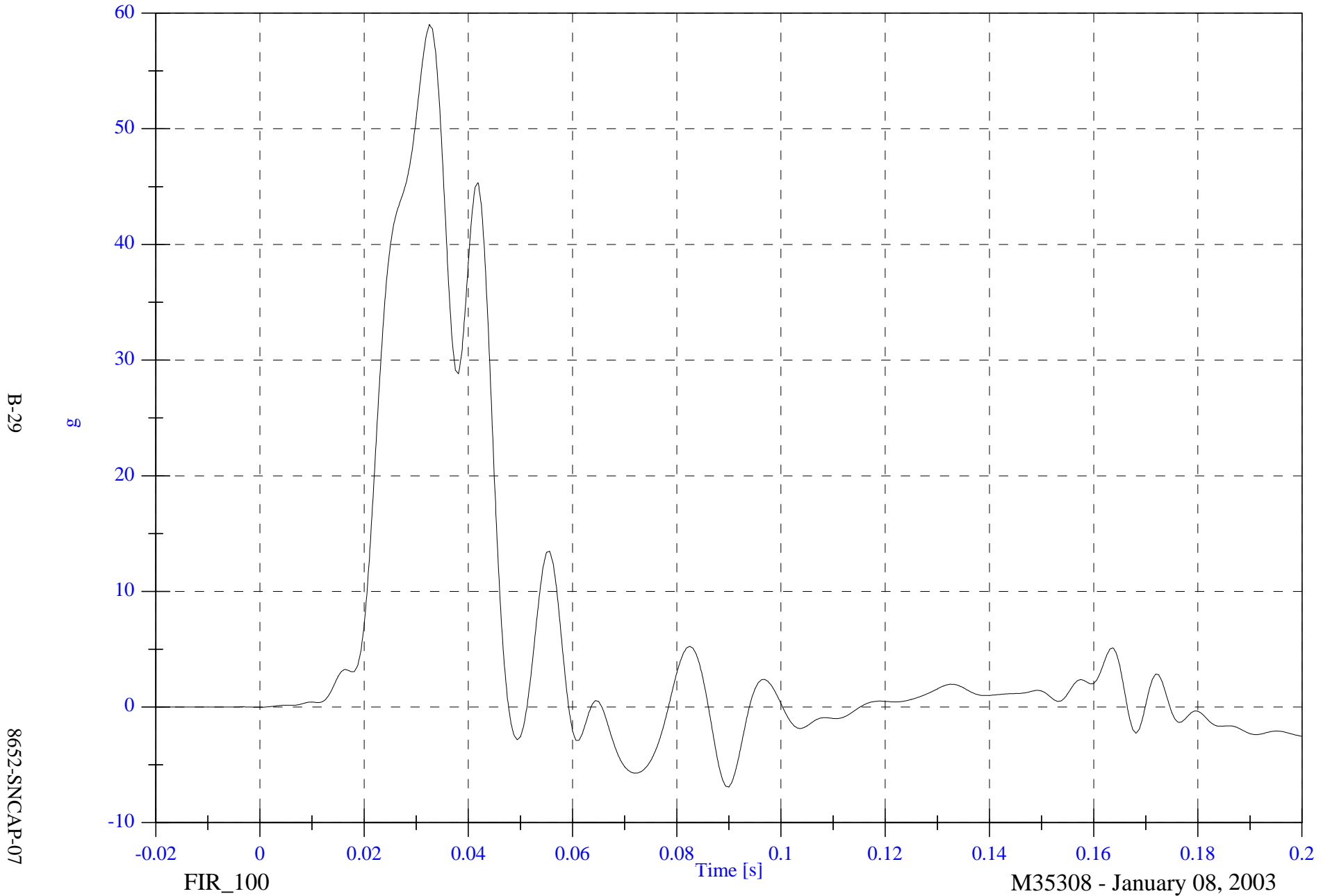
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Upper Rib y

Max: 59.0 [g] at 0.032 [s]

Min: -6.9 [g] at 0.090 [s]



B-29

8652-SNCAP-07

FIR_100

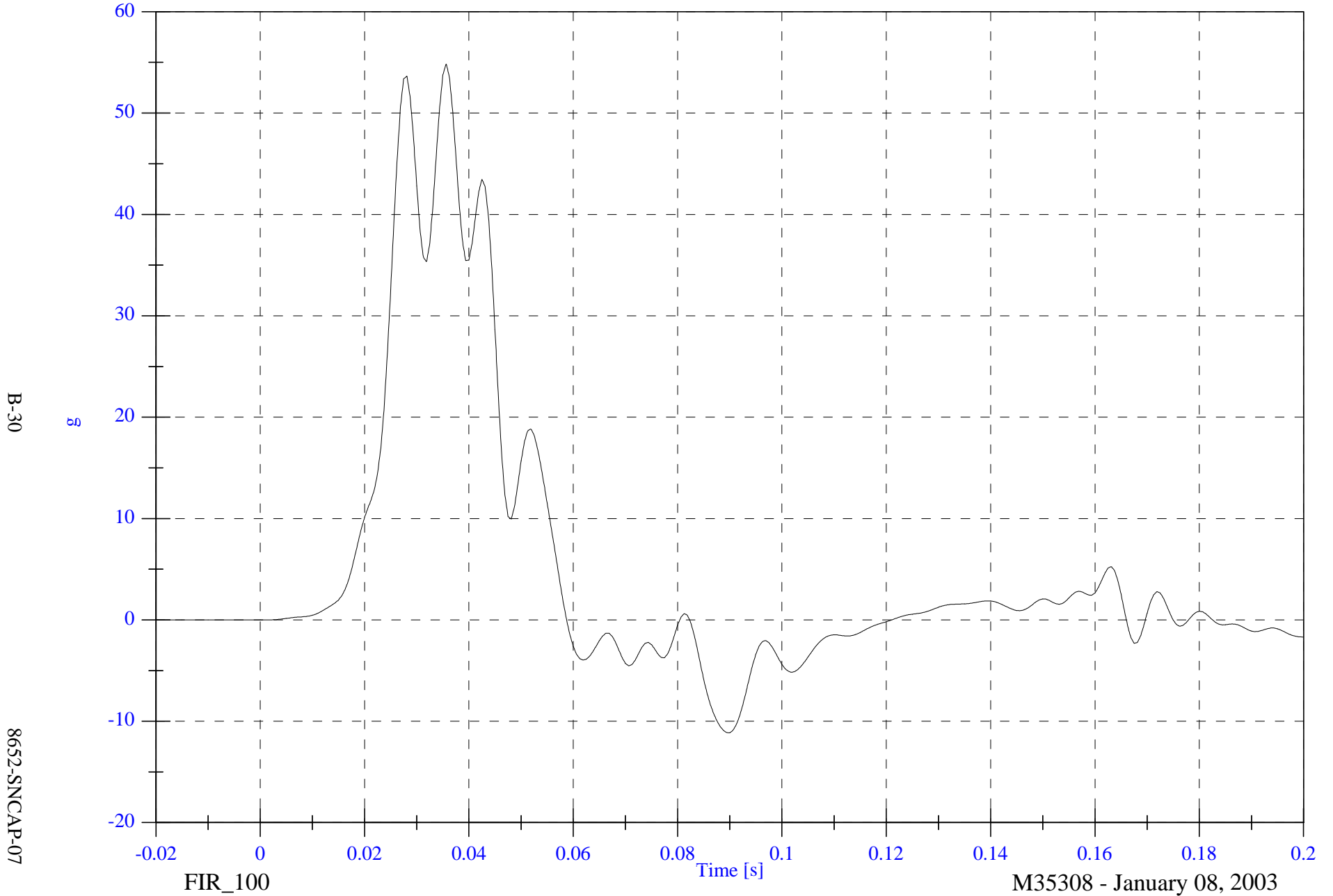
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Lower Rib y

Max: 54.8 [g] at 0.036 [s]

Min: -11.1 [g] at 0.090 [s]



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8652-SNCAP-07

FIR_100

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Lower Spine y

Max: 55.9 [g] at 0.041 [s]

Min: -21.2 [g] at 0.069 [s]



B-31

8652-SNCAP-07

FIR_100

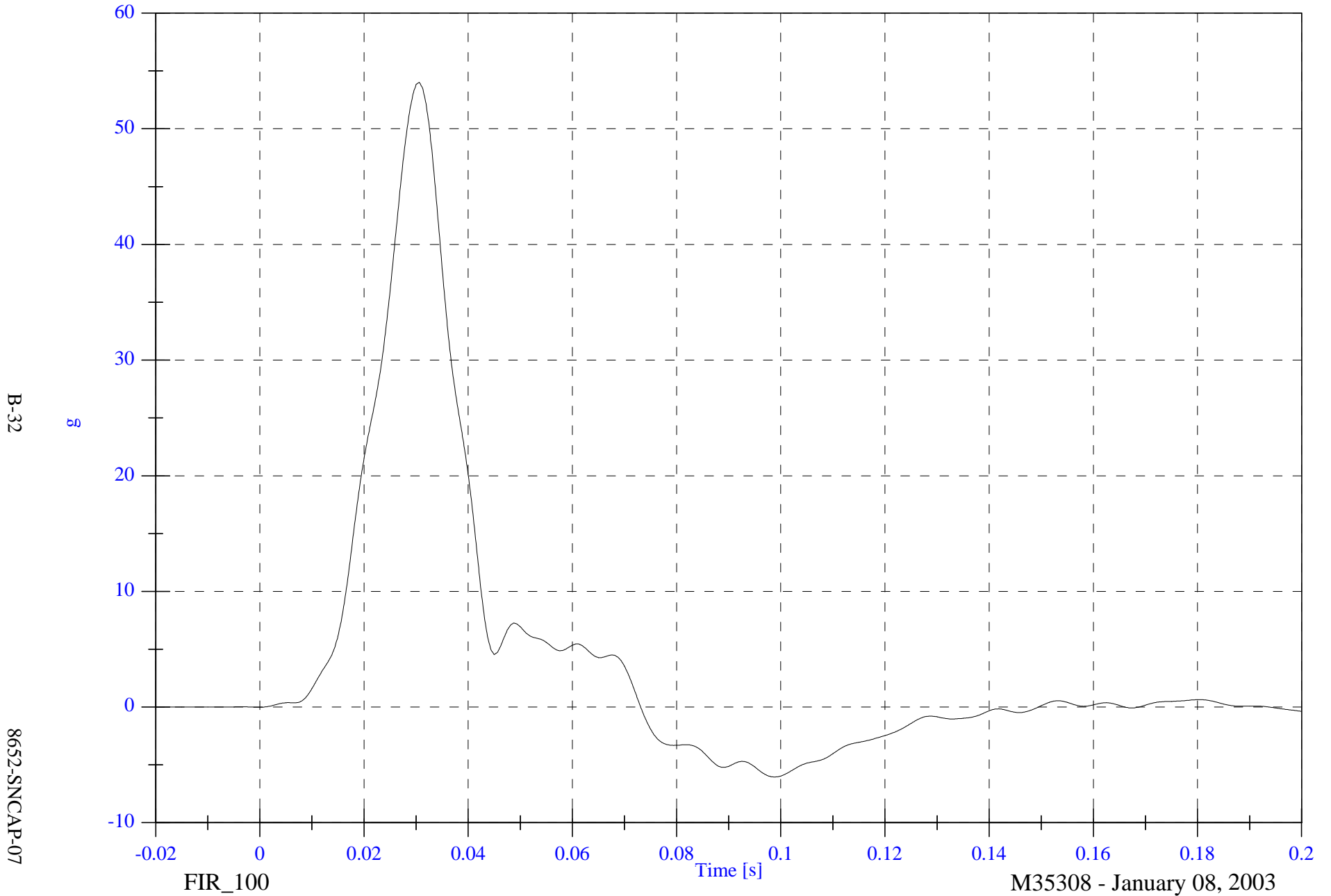
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Pelvic y

Max: 54.0 [g] at 0.031 [s]

Min: -6.1 [g] at 0.099 [s]



B-32

8652-SNCAP-07

FIR_100

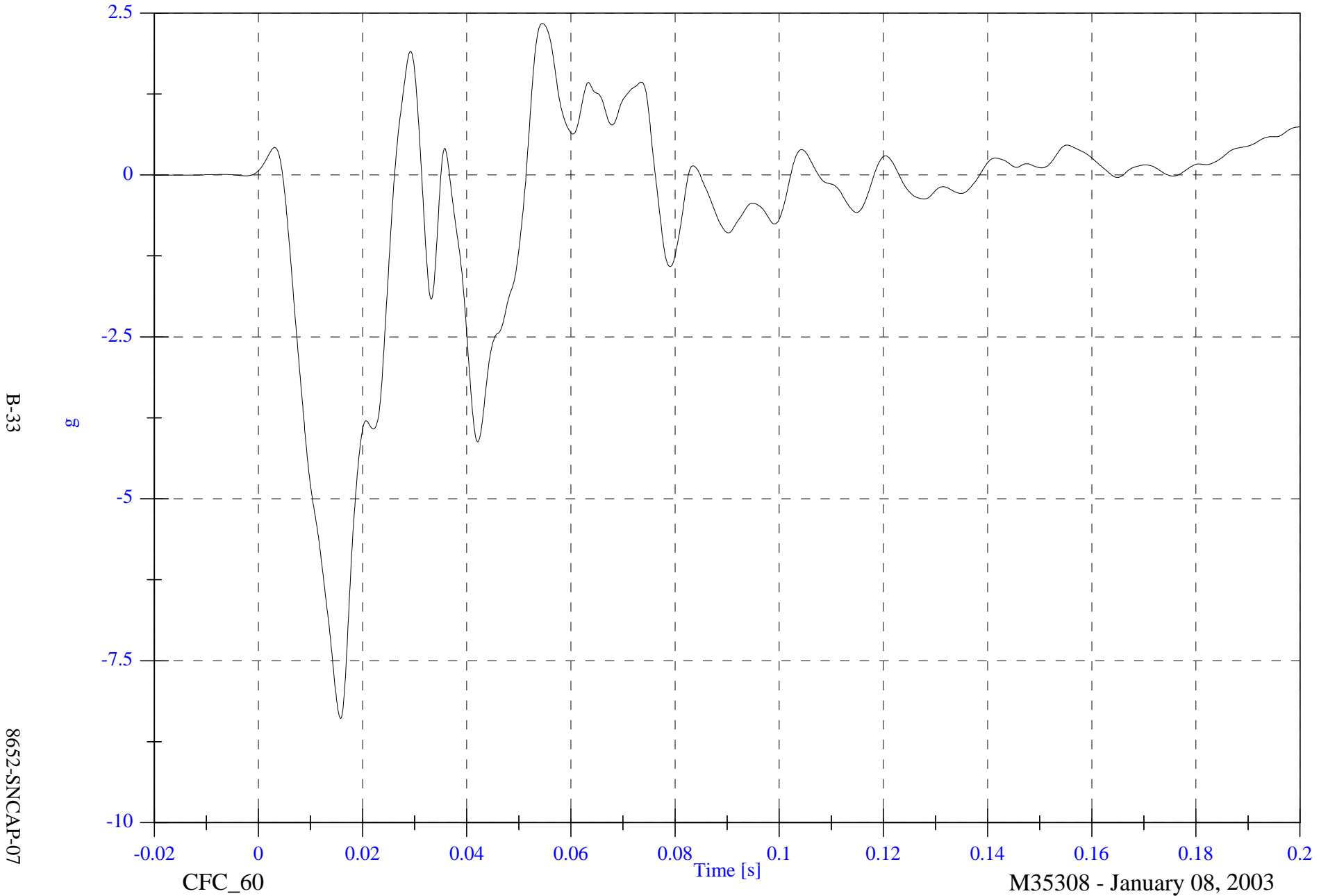
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A1 Right Front Sill x

Max: 2.3 [g] at 0.054 [s]

Min: -8.4 [g] at 0.016 [s]



SNCAP Test #2 - 2003 Honda S2000 Convertible

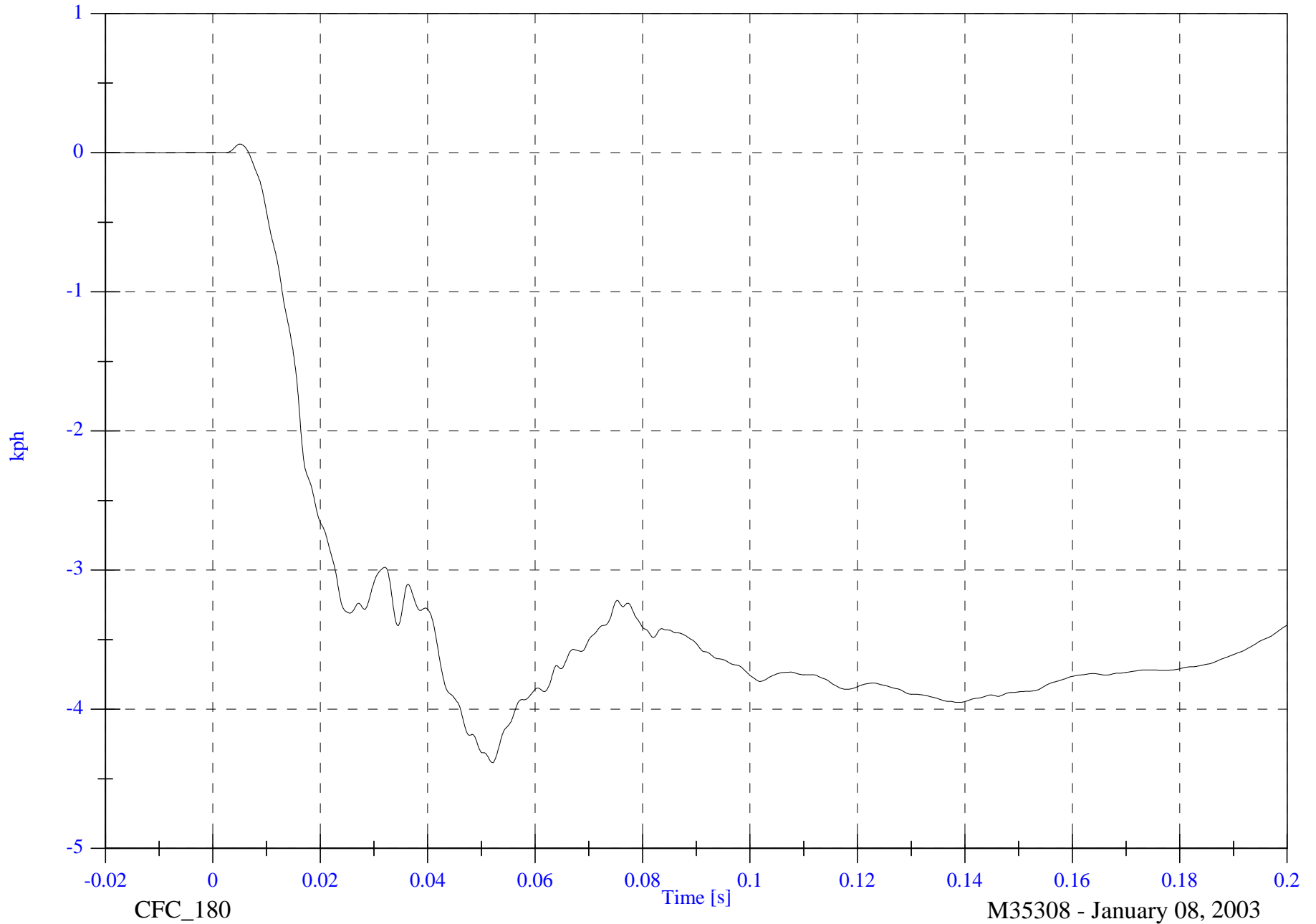
V2 A1 Right Front Sill x Velocity

Max: 0.1 [kph] at 0.005 [s]

Min: -4.4 [kph] at 0.052 [s]

B-34

8652-SNCAP-07



CFC_180

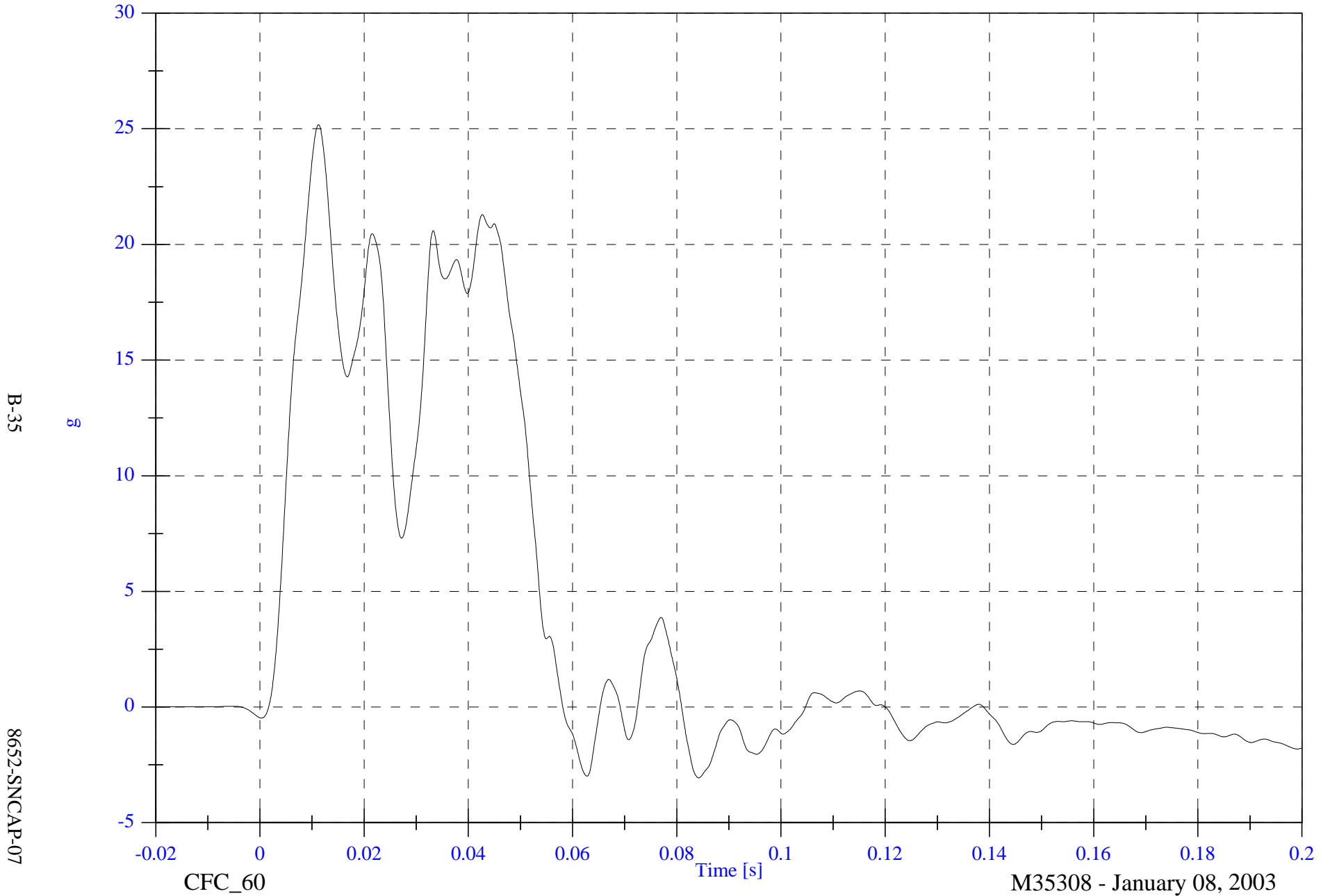
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A1 Right Front Sill y

Max: 25.2 [g] at 0.011 [s]

Min: -3.1 [g] at 0.084 [s]

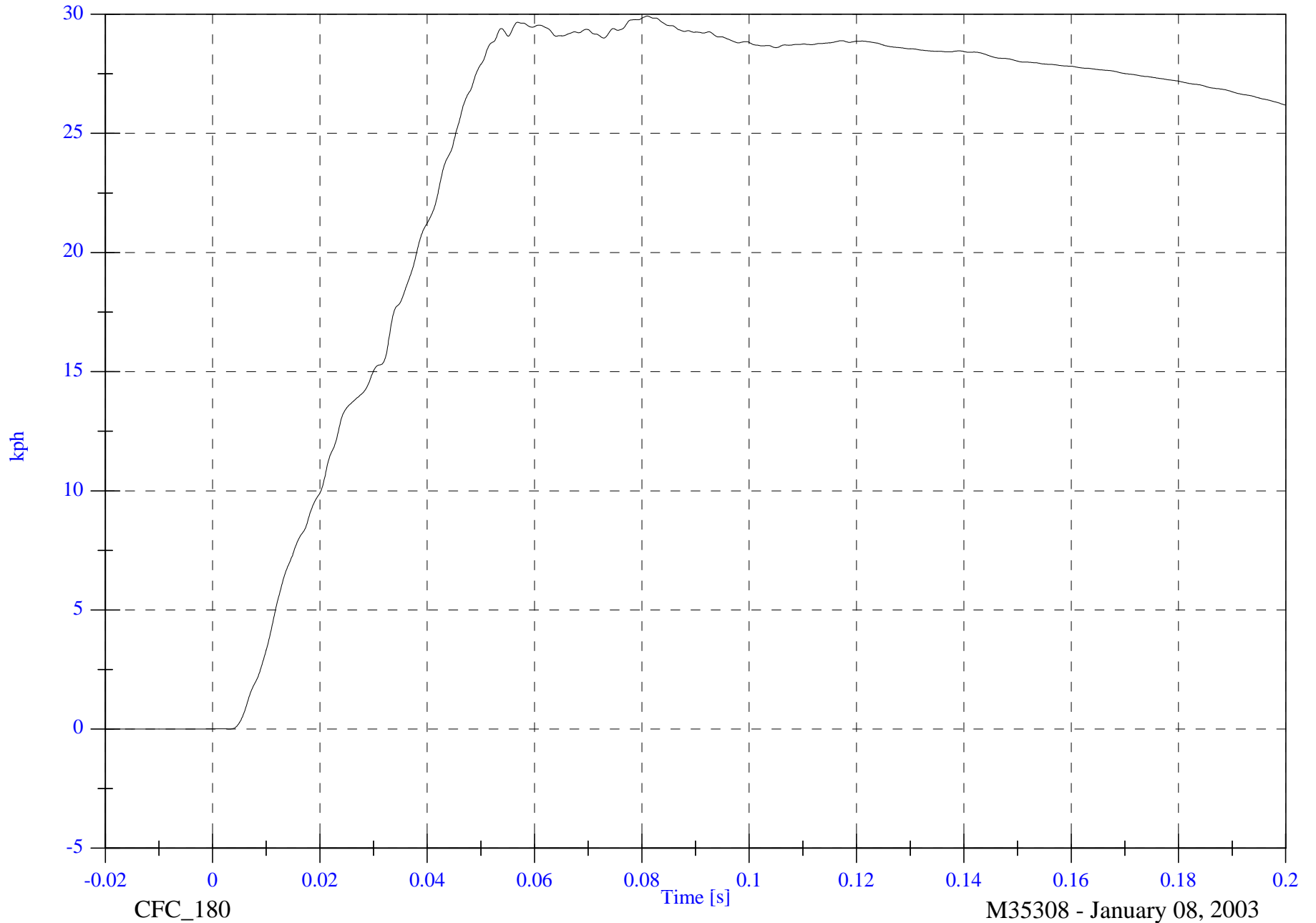


SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 29.9 [kph] at 0.081 [s]

V2 A1 Right Front Sill y Velocity

Min: -0.0 [kph] at -0.020 [s]



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8652-SNCAP-07

CFC_180

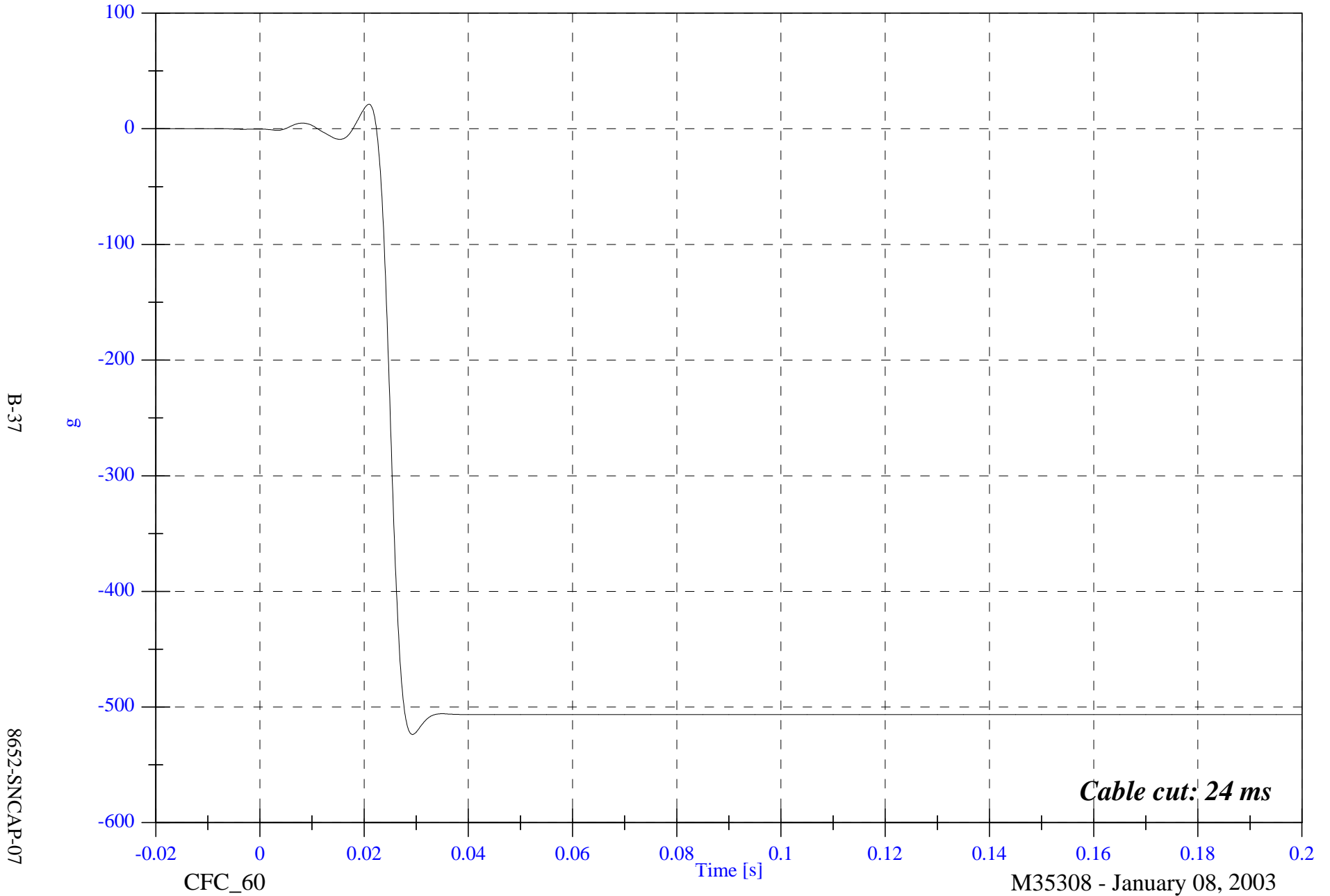
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A1 Right Front Sill z

Max: 21.2 [g] at 0.021 [s]

Min: -523.7 [g] at 0.029 [s]



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CFC_60

Time [s]

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

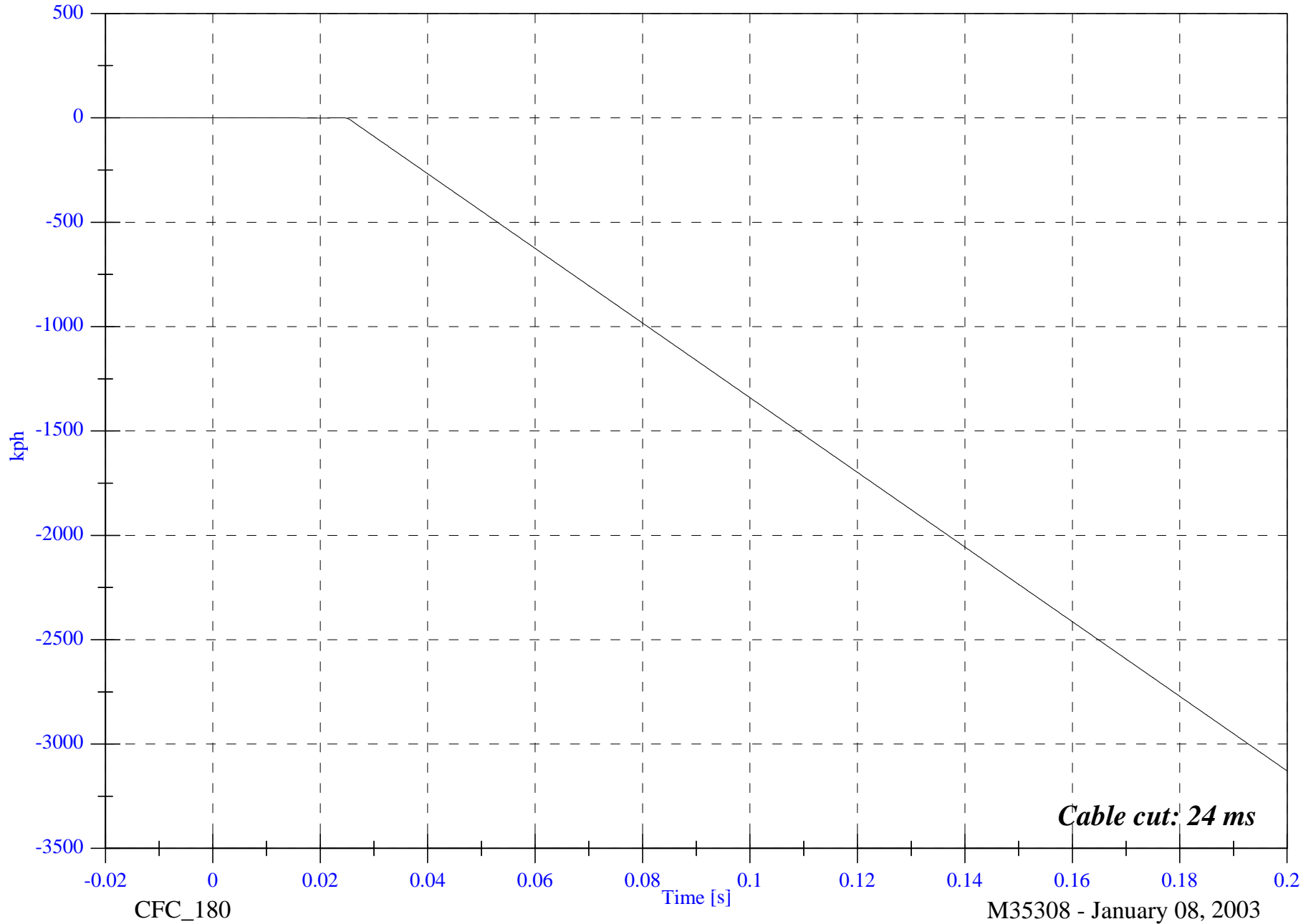
V2 A1 Right Front Sill z Velocity

Max: 0.6 [kph] at 0.011 [s]

Min: -3127.3 [kph] at 0.200 [s]

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8652-SNCAP-07



Cable cut: 24 ms

CFC_180

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

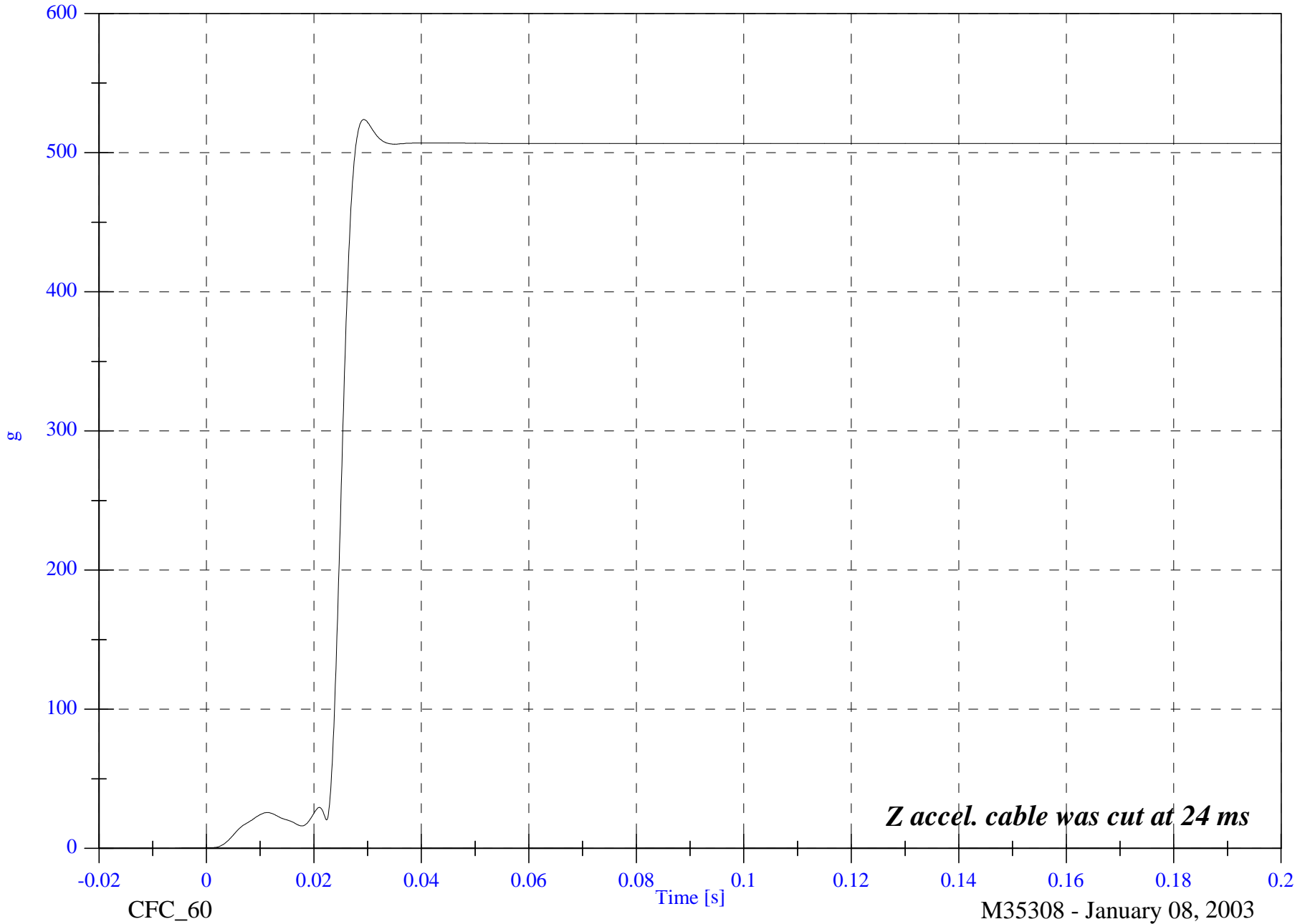
V2 A1 Right Front Sill Resultant

Max: 523.8 [g] at 0.029 [s]

Min: 0.0 [g] at -0.011 [s]

B-39

8652-SNCAP-07



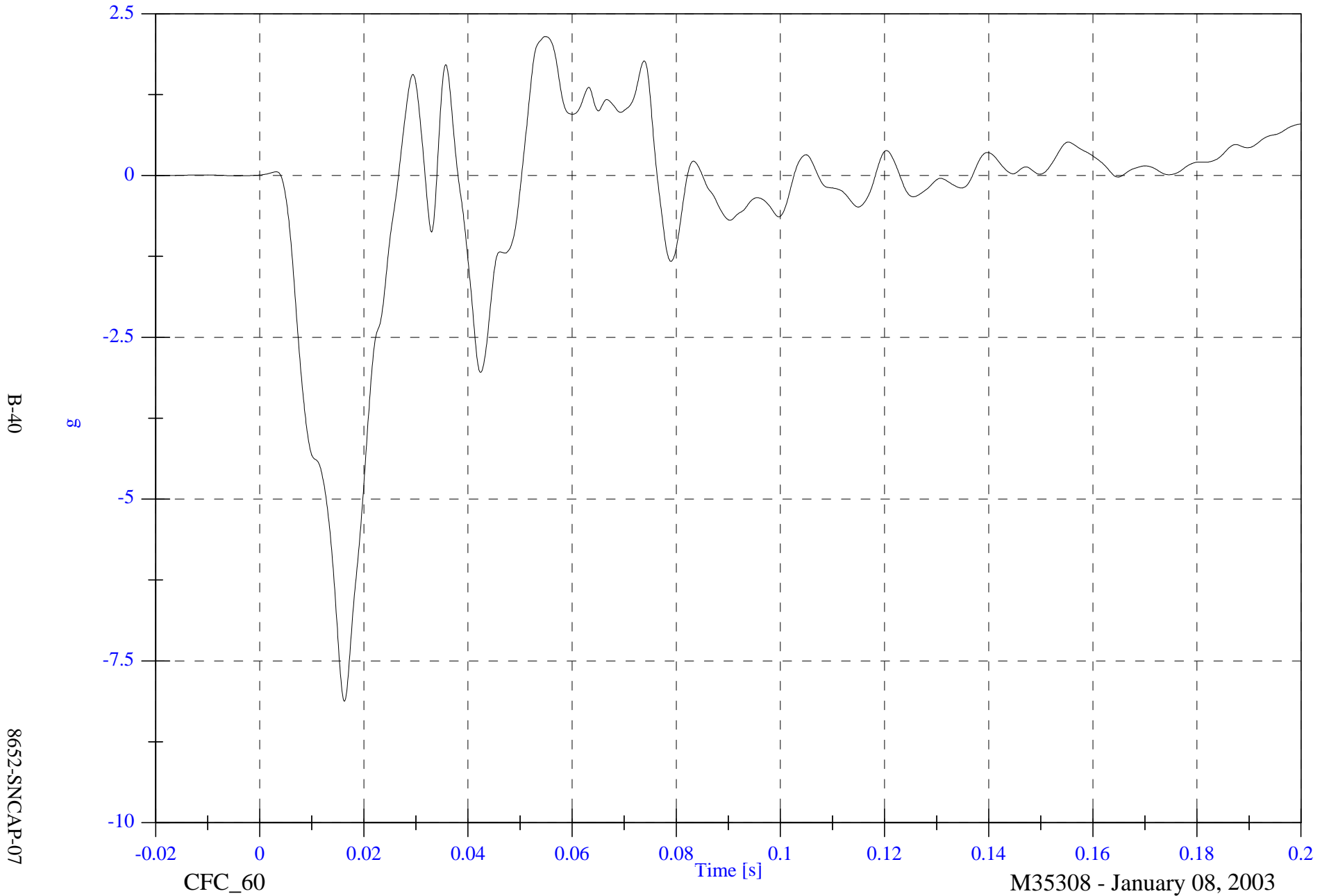
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 2.1 [g] at 0.055 [s]

V2 A2 Right Rear Sill x

Min: -8.1 [g] at 0.016 [s]



SNCAP Test #2 - 2003 Honda S2000 Convertible

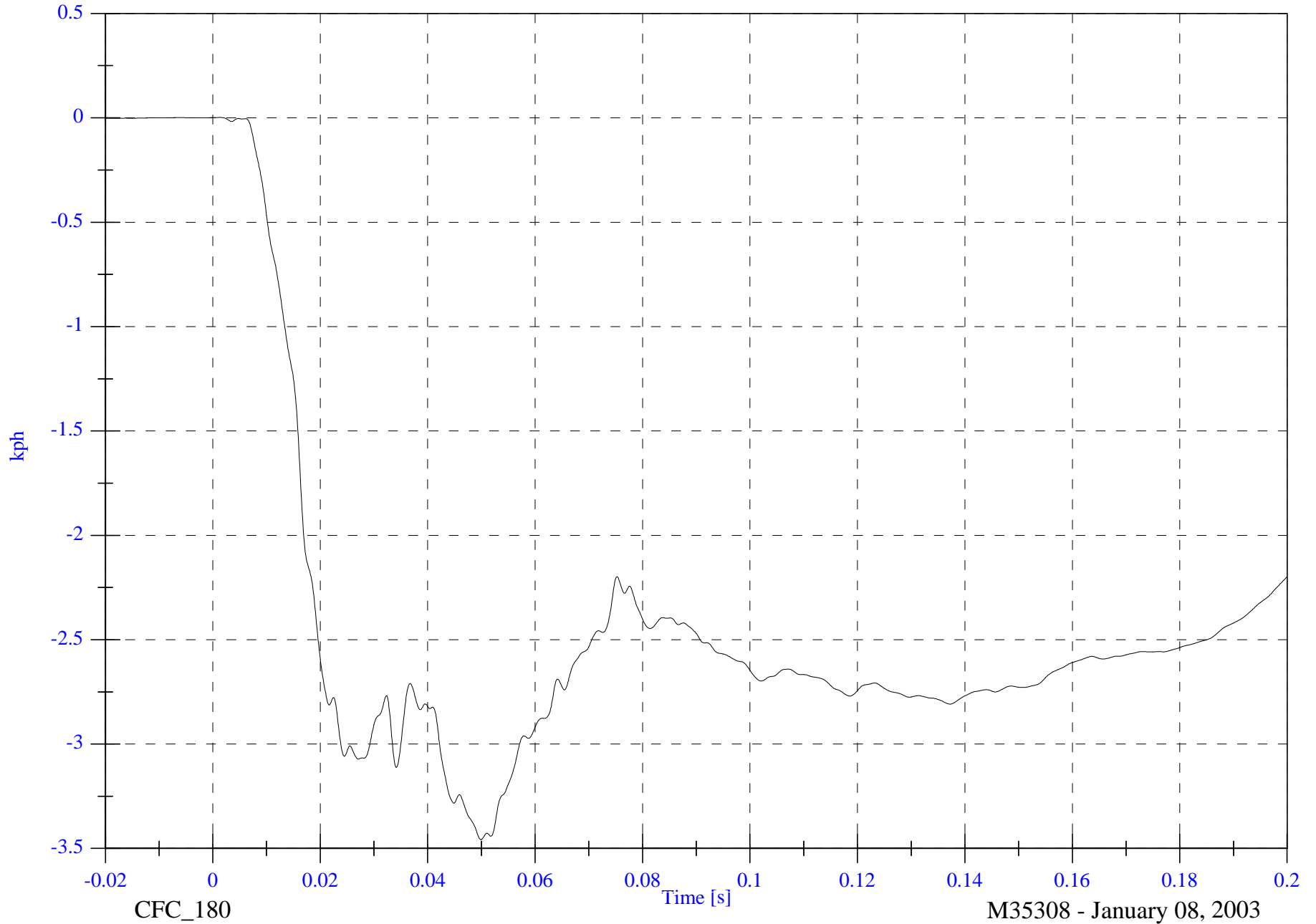
V2 A2 Right Rear Sill x Velocity

Max: 0.0 [kph] at 0.001 [s]

Min: -3.5 [kph] at 0.050 [s]

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8652-SNCAP-07



CFC_180

Time [s]

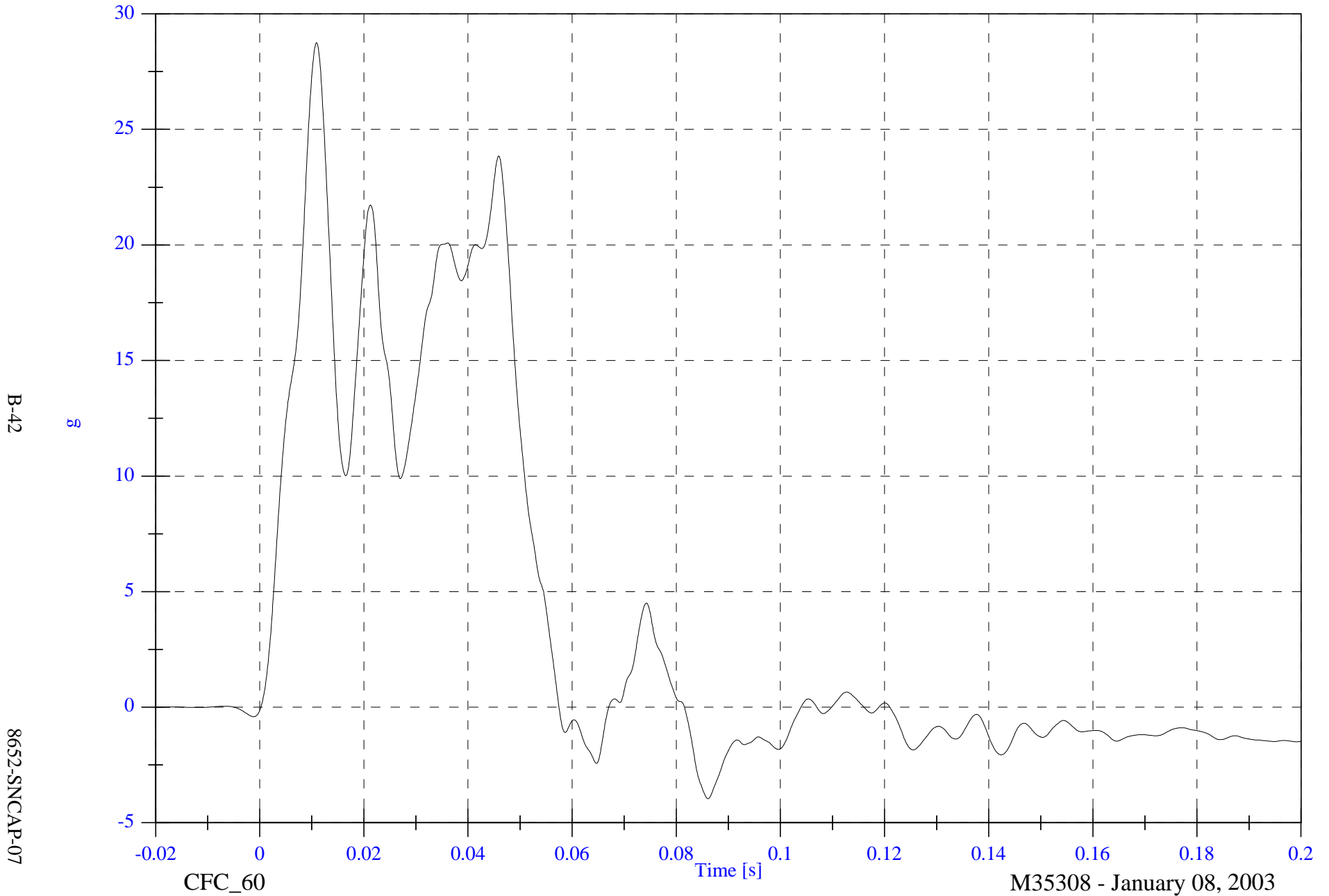
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A2 Right Rear Sill y

Max: 28.8 [g] at 0.011 [s]

Min: -4.0 [g] at 0.086 [s]

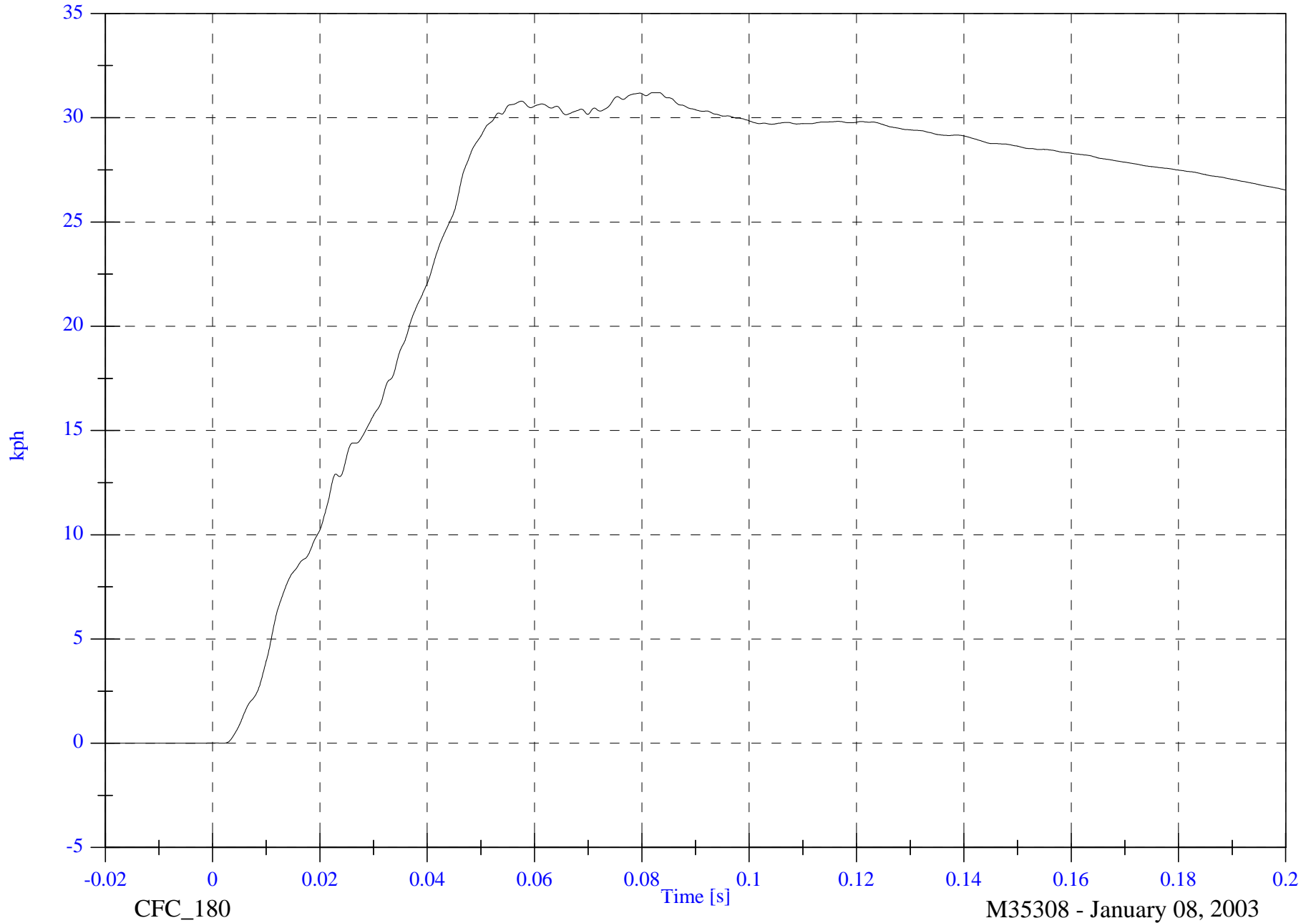


SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A2 Right Rear Sill y Velocity

Max: 31.2 [kph] at 0.083 [s]

Min: -0.0 [kph] at -0.019 [s]



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8652-SNCAP-07

CFC_180

Time [s]

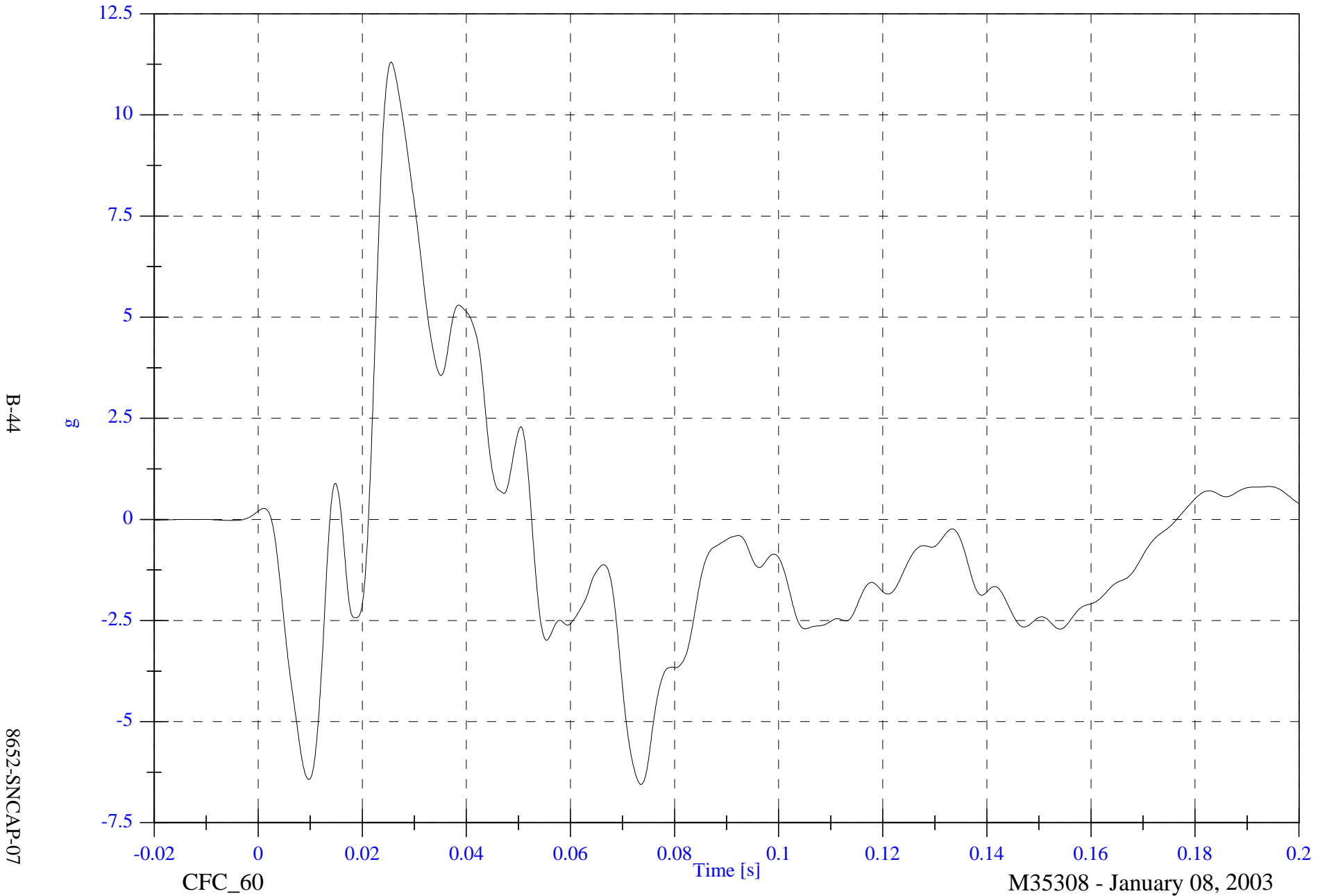
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A2 Right Rear Sill z

Max: 11.3 [g] at 0.025 [s]

Min: -6.6 [g] at 0.074 [s]



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8652-SNCAP-07

CFC_60

Time [s]

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

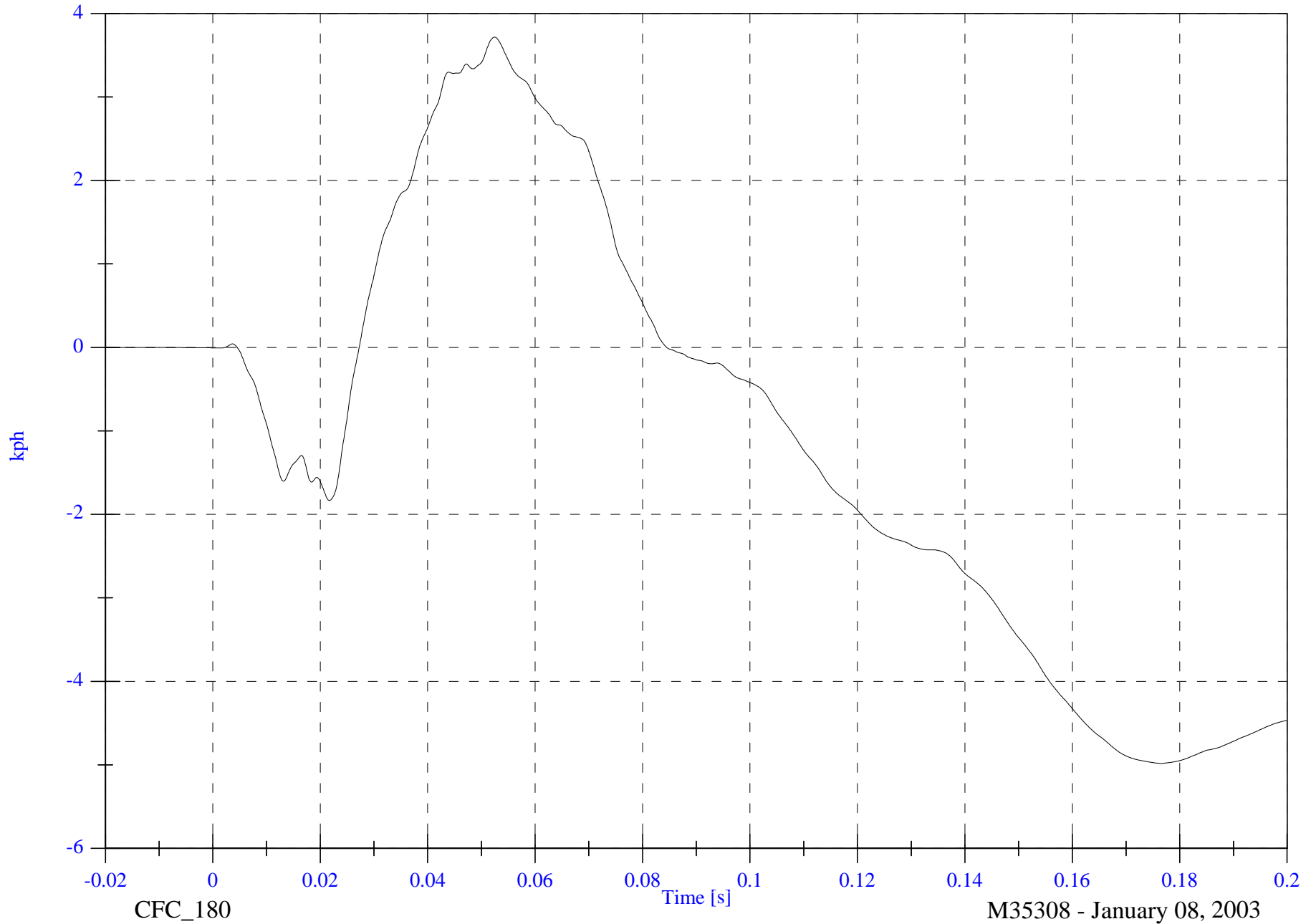
V2 A2 Right Rear Sill z Velocity

Max: 3.7 [kph] at 0.053 [s]

Min: -5.0 [kph] at 0.177 [s]

B-45

8652-SNCAP-07



CFC_180

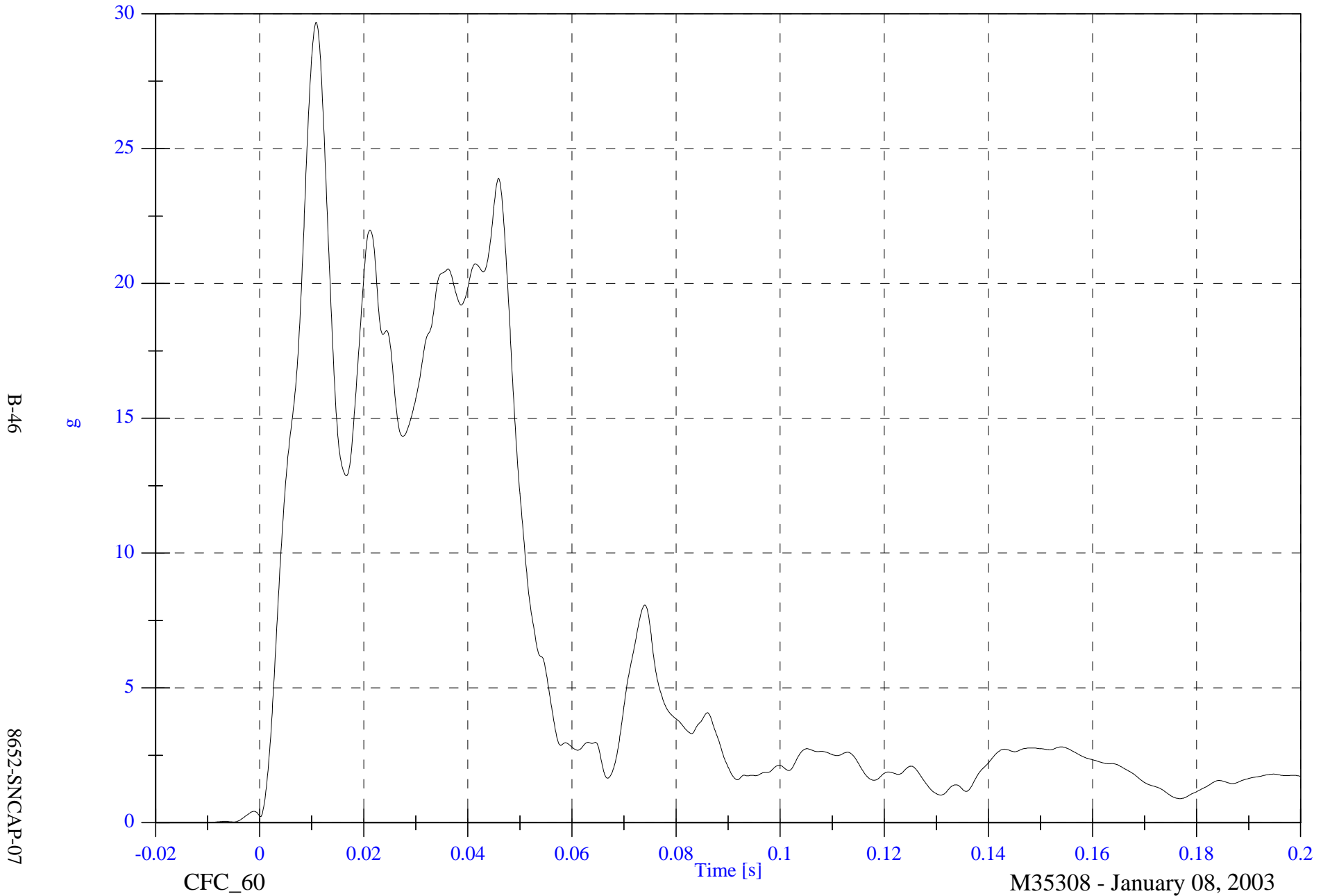
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A2 Right Rear Sill Resultant

Max: 29.7 [g] at 0.011 [s]

Min: 0.0 [g] at -0.015 [s]



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8652-SNCAP-07

SNCAP Test #2 - 2003 Honda S2000 Convertible

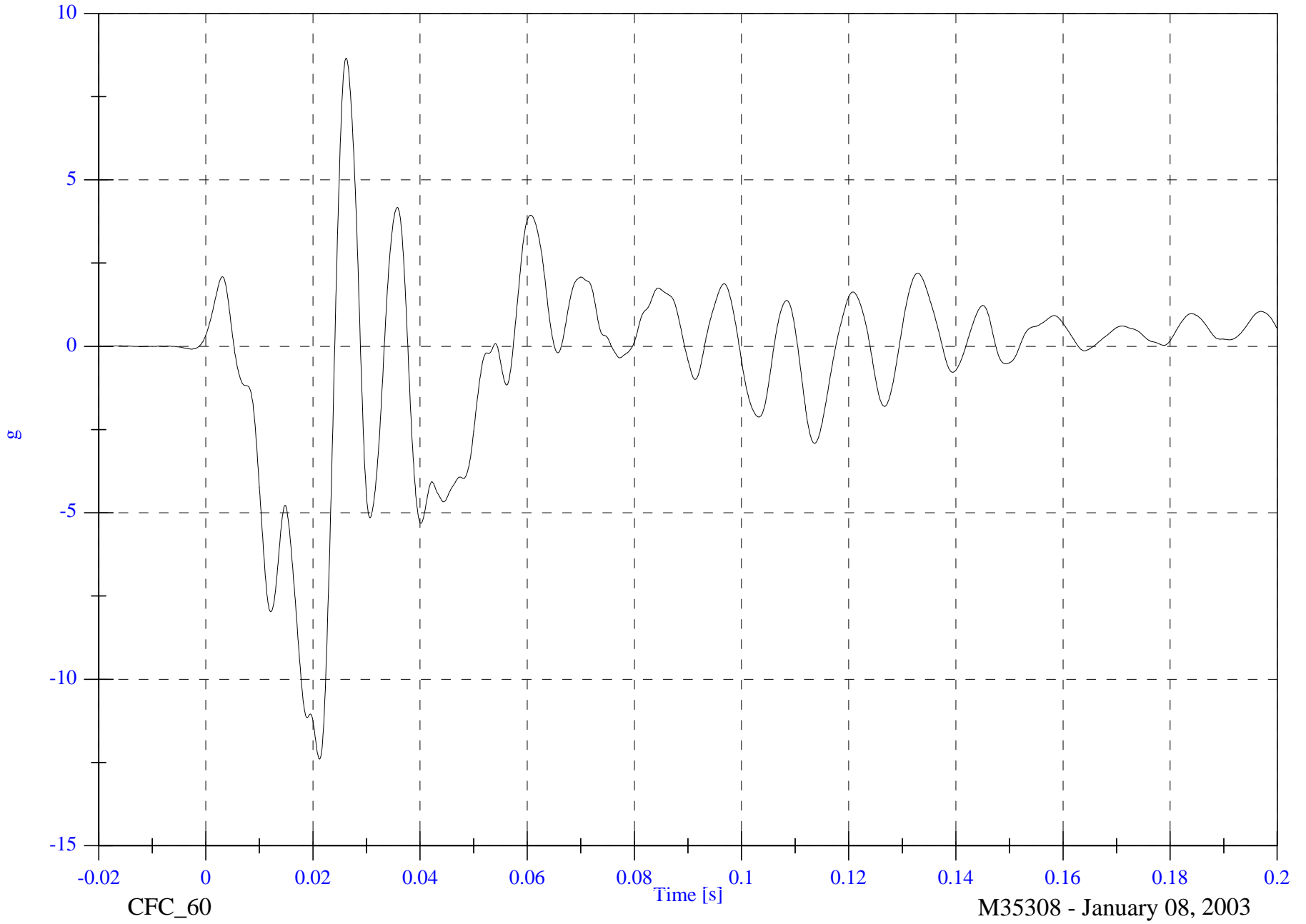
V2 A3 Rear Floorpan x

Max: 8.7 [g] at 0.026 [s]

Min: -12.4 [g] at 0.021 [s]

B-47

8652-SNCAP-07



CFC_60

Time [s]

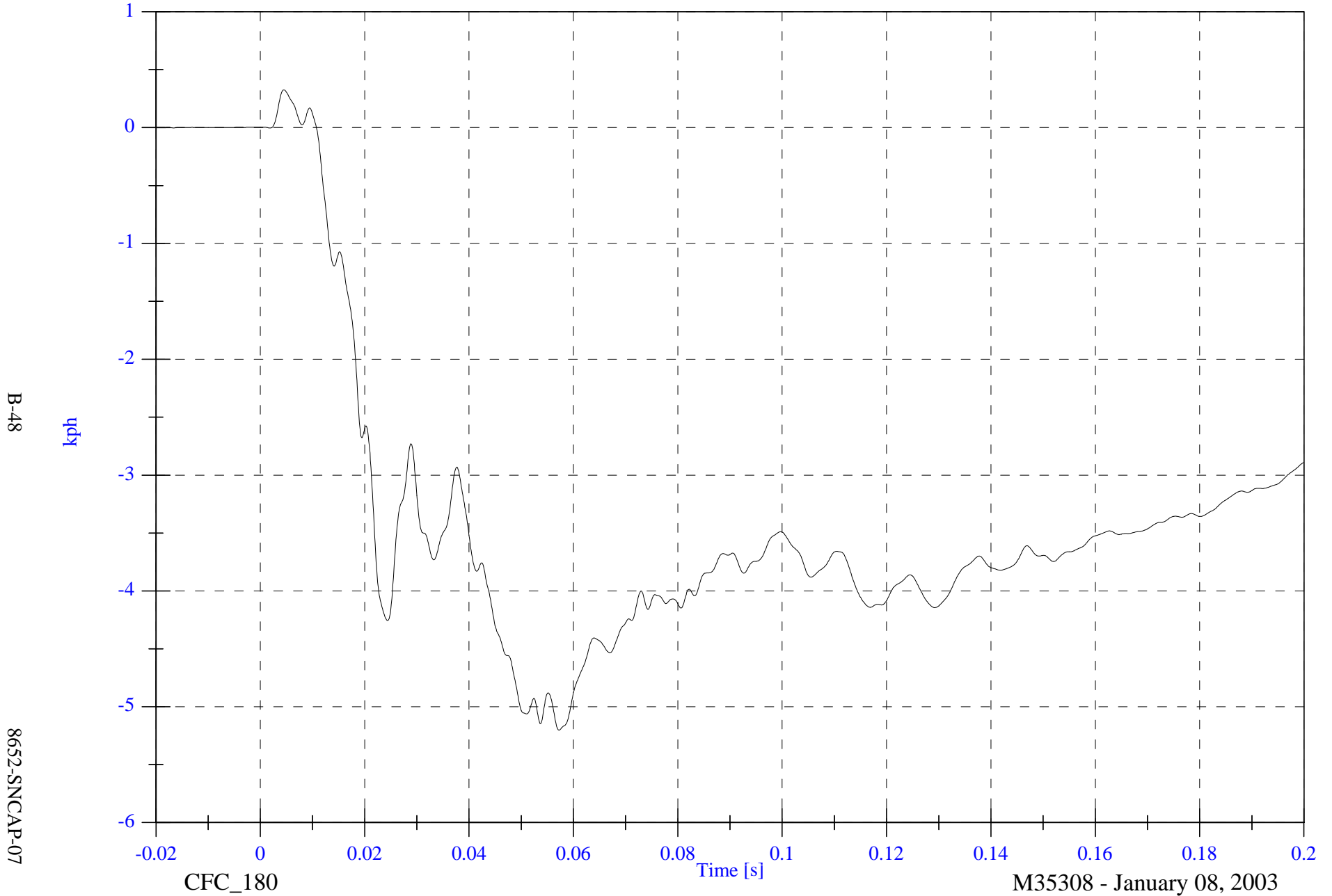
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A3 Rear Floorpan x Velocity

Max: 0.3 [kph] at 0.004 [s]

Min: -5.2 [kph] at 0.057 [s]



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8652-SNCAP-07

CFC_180

Time [s]

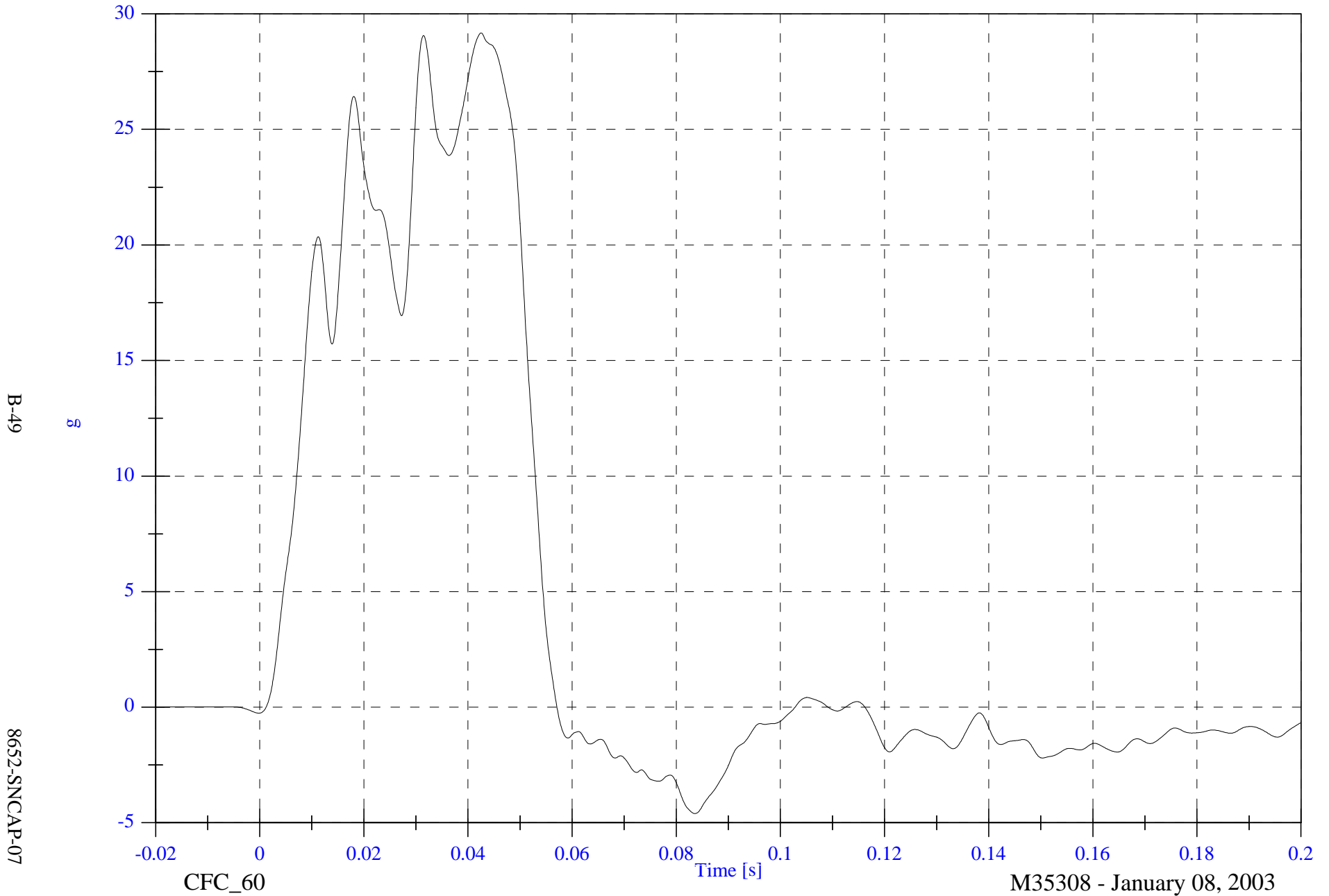
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A3 Rear Floorpan y

Max: 29.2 [g] at 0.043 [s]

Min: -4.6 [g] at 0.084 [s]



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CFC_60

Time [s]

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

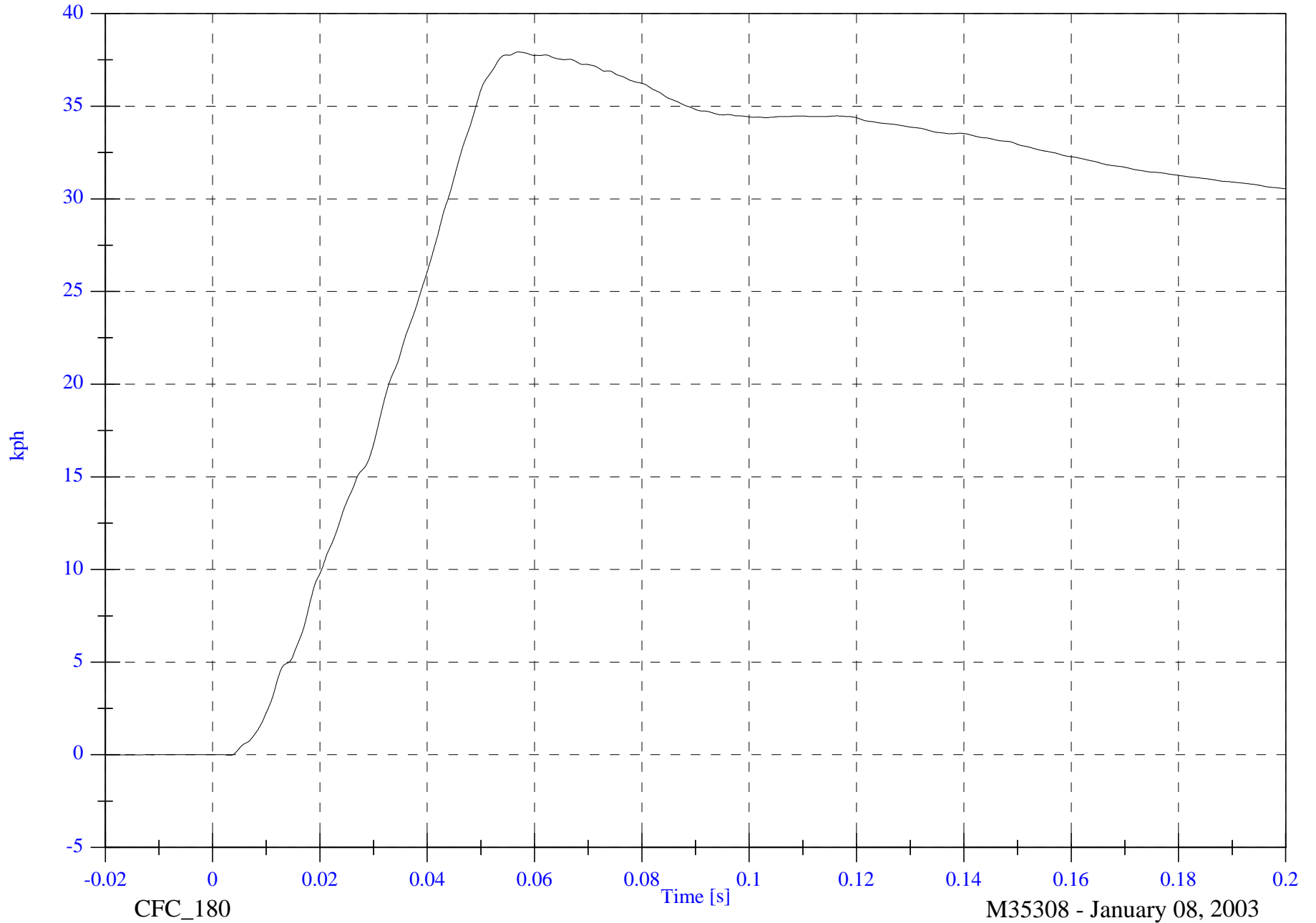
V2 A3 Rear Floorpan y Velocity

Max: 37.9 [kph] at 0.057 [s]

Min: -0.0 [kph] at 0.003 [s]

B-50

8652-SNCAP-07



CFC_180

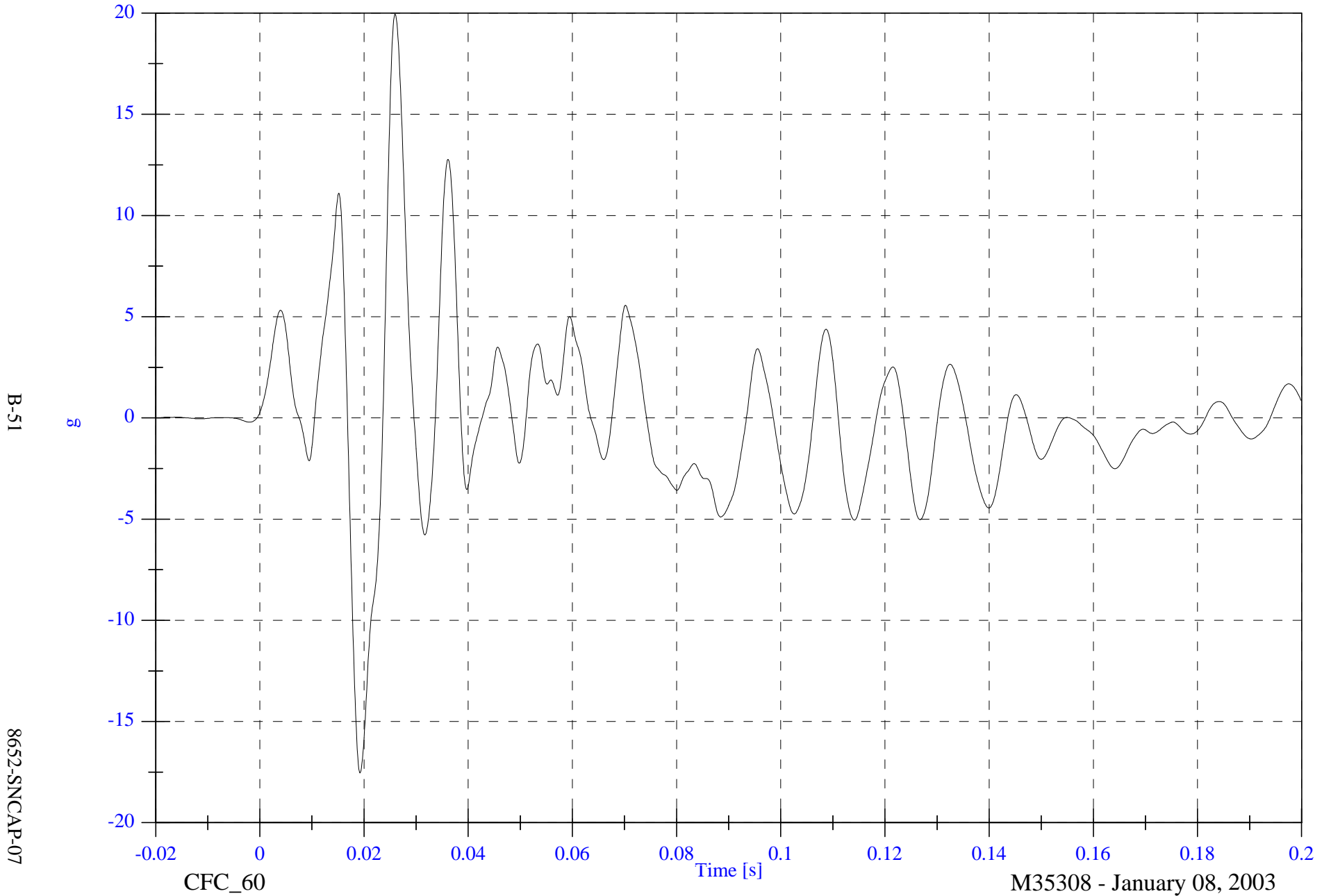
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A3 Rear Floorpan z

Max: 19.9 [g] at 0.026 [s]

Min: -17.5 [g] at 0.019 [s]



SNCAP Test #2 - 2003 Honda S2000 Convertible

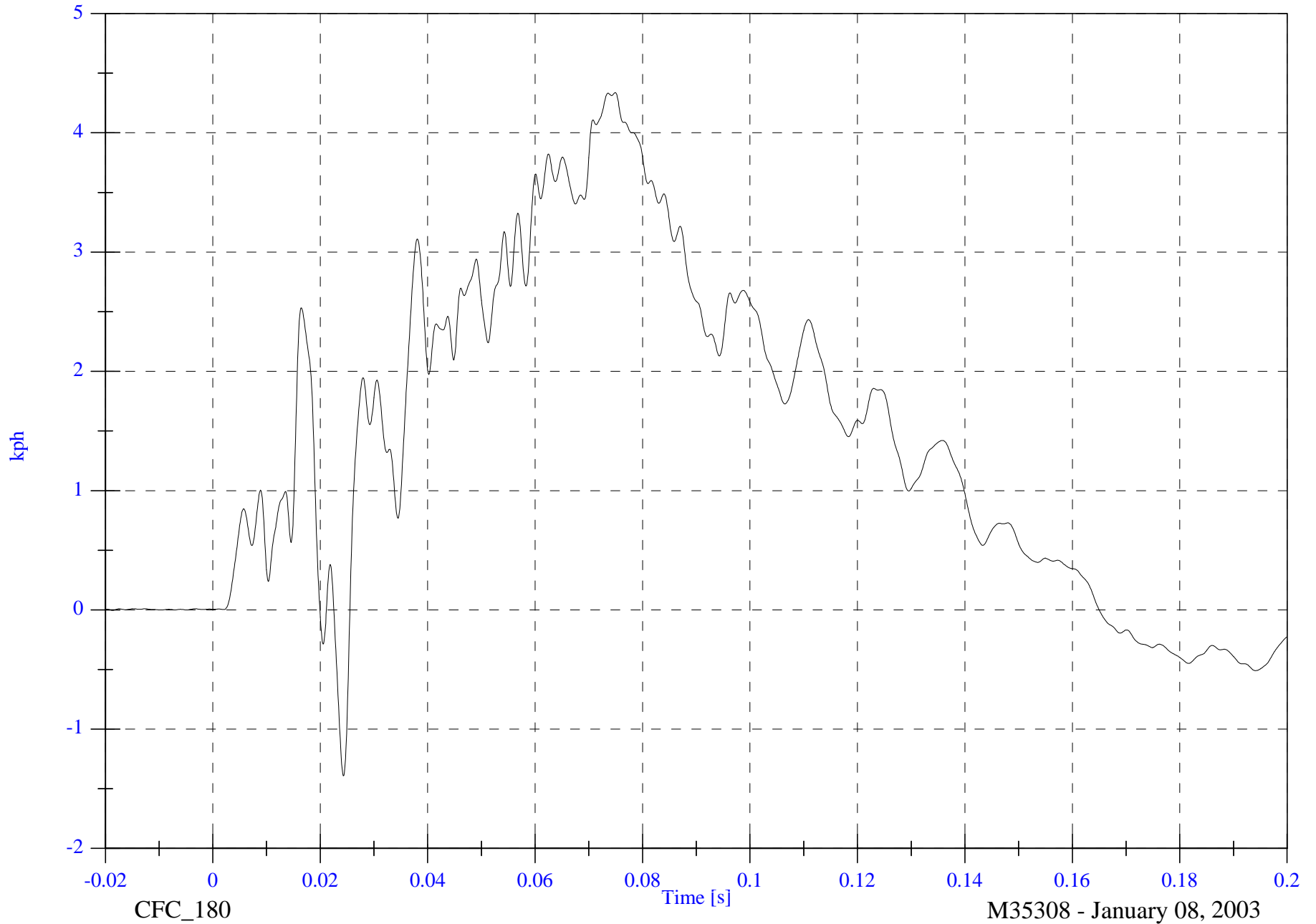
V2 A3 Rear Floorpan z Velocity

Max: 4.3 [kph] at 0.075 [s]

Min: -1.4 [kph] at 0.024 [s]

B-52

8652-SNCAP-07



CFC_180

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

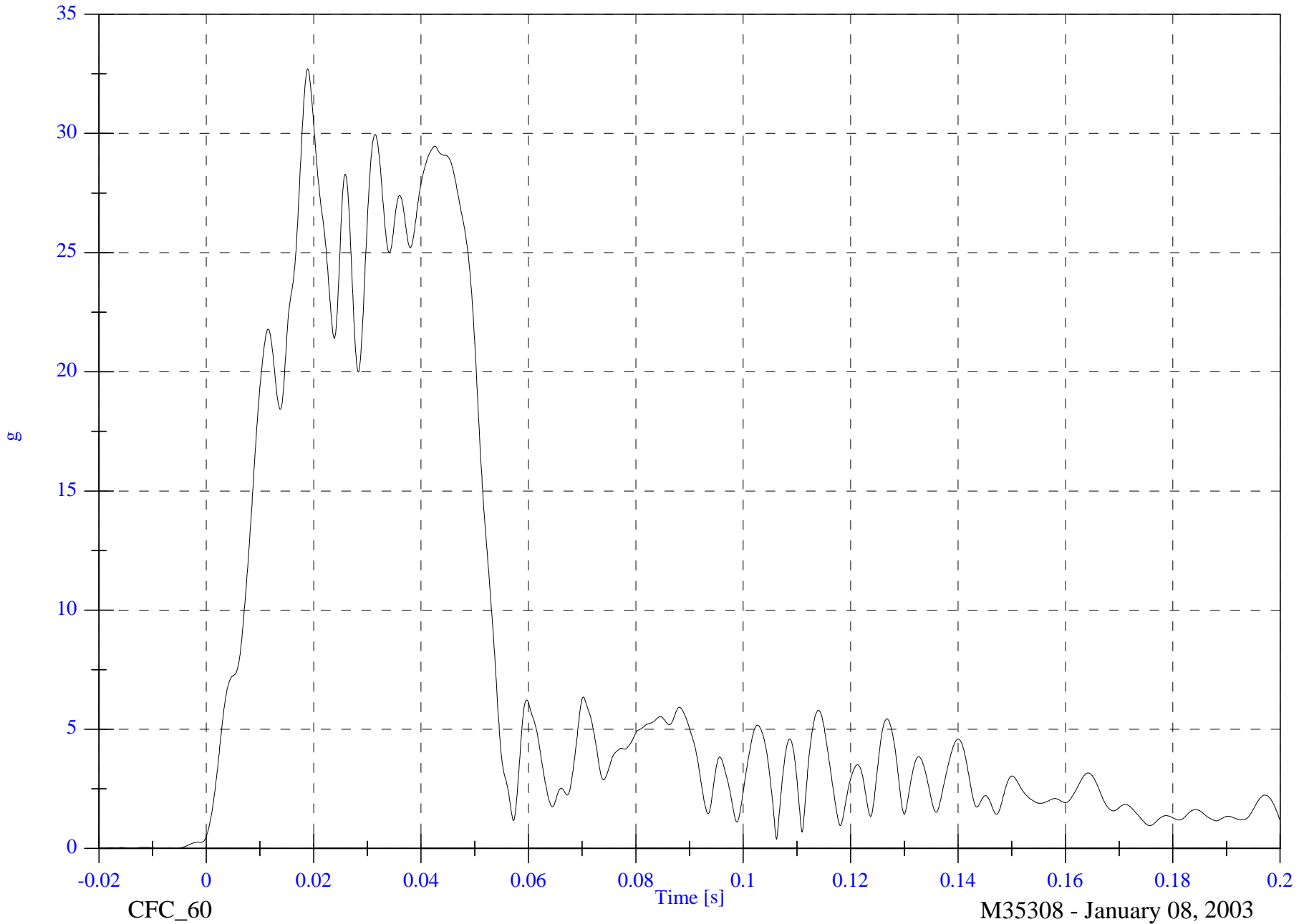
V2 A3 Rear Floorpan Resultant

Max: 32.7 [g] at 0.019 [s]

Min: 0.0 [g] at -0.019 [s]

B-53

8652-SNCAP-07



M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

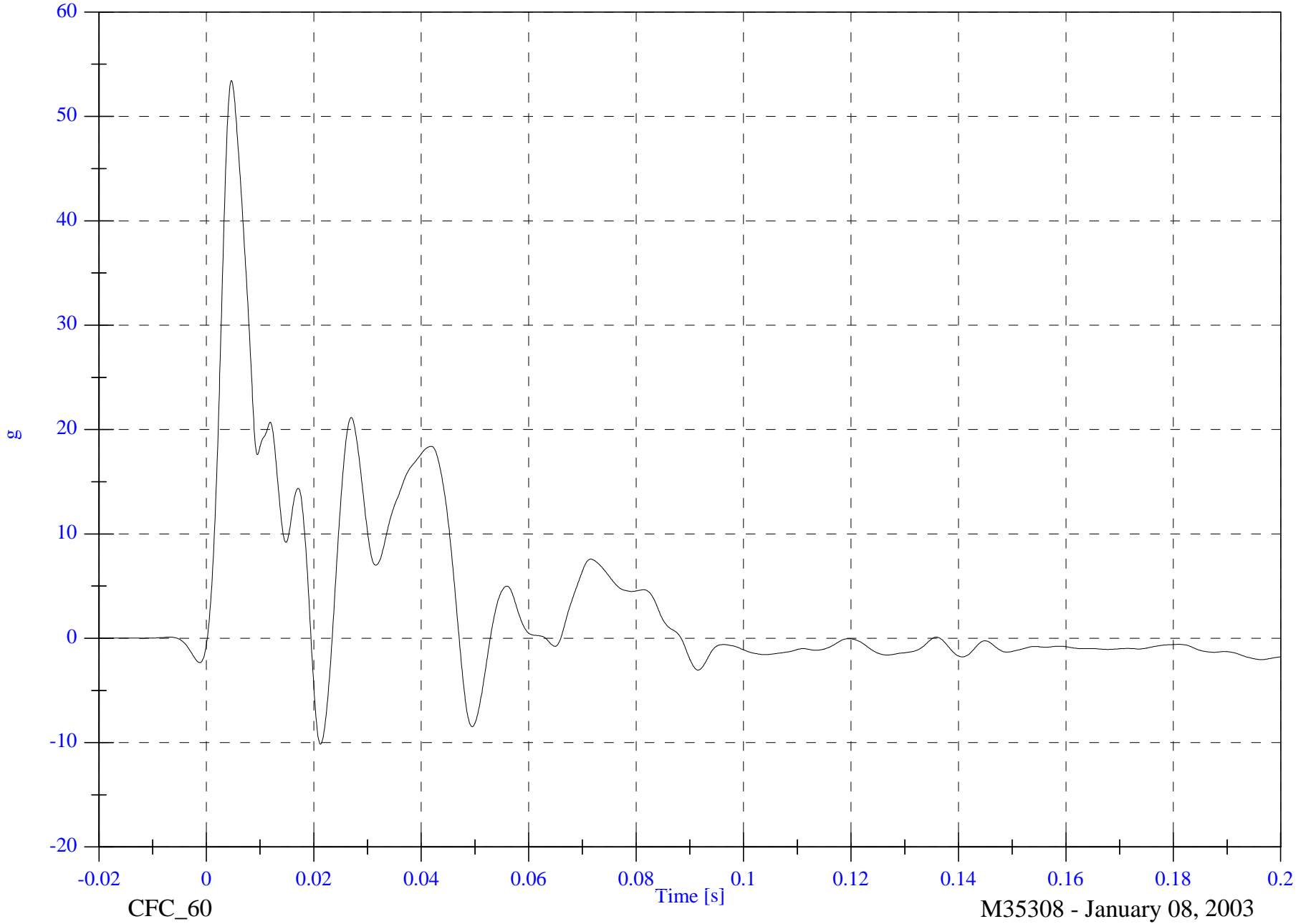
V2 A4 Left Rear Sill y

Max: 53.4 [g] at 0.005 [s]

Min: -10.2 [g] at 0.021 [s]

B-54

8652-SNCAP-07



CFC_60

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

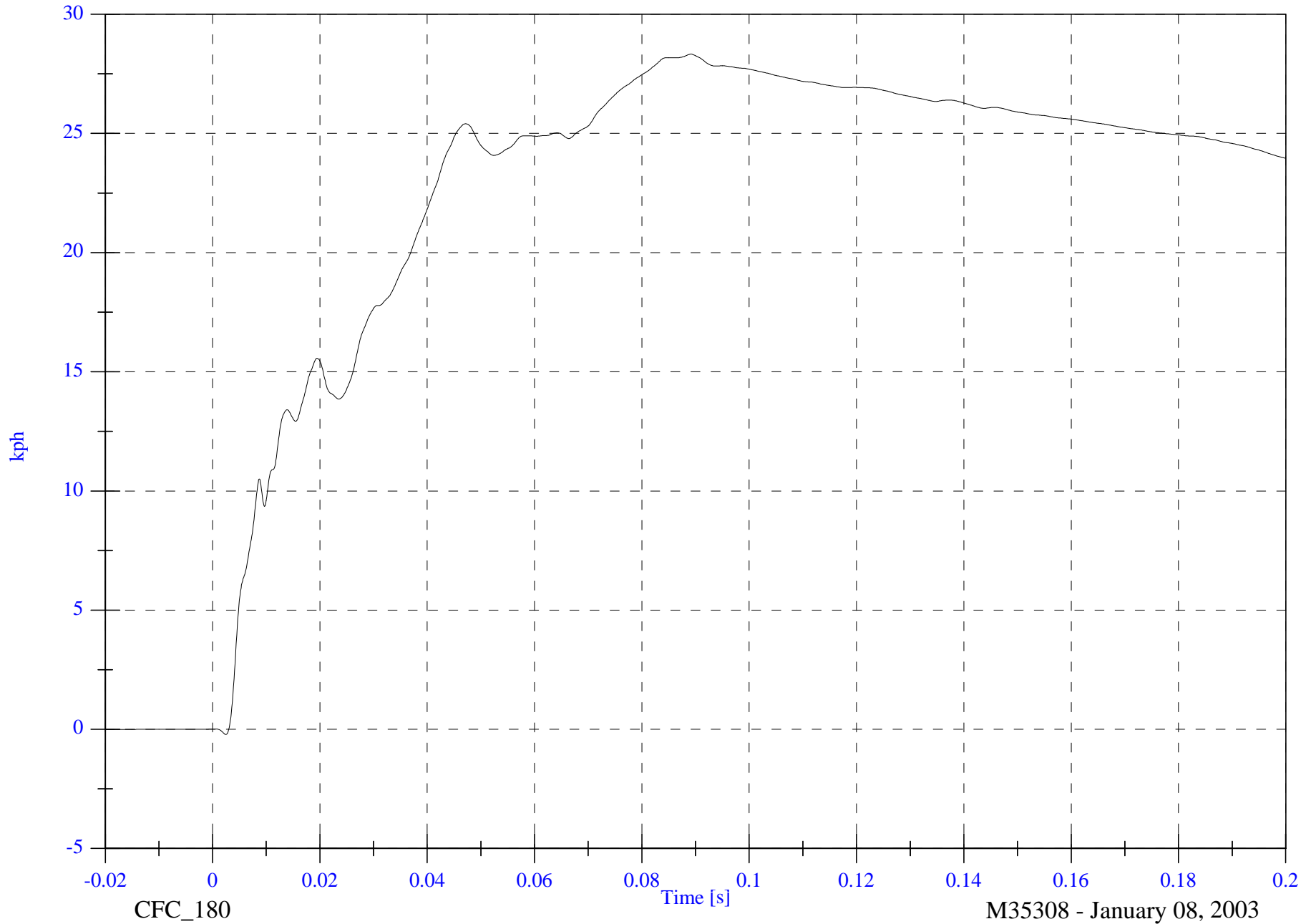
V2 A4 Left Rear Sill y Velocity

Max: 28.3 [kph] at 0.089 [s]

Min: -0.2 [kph] at 0.002 [s]

B-55

8652-SNCAP-07



CFC_180

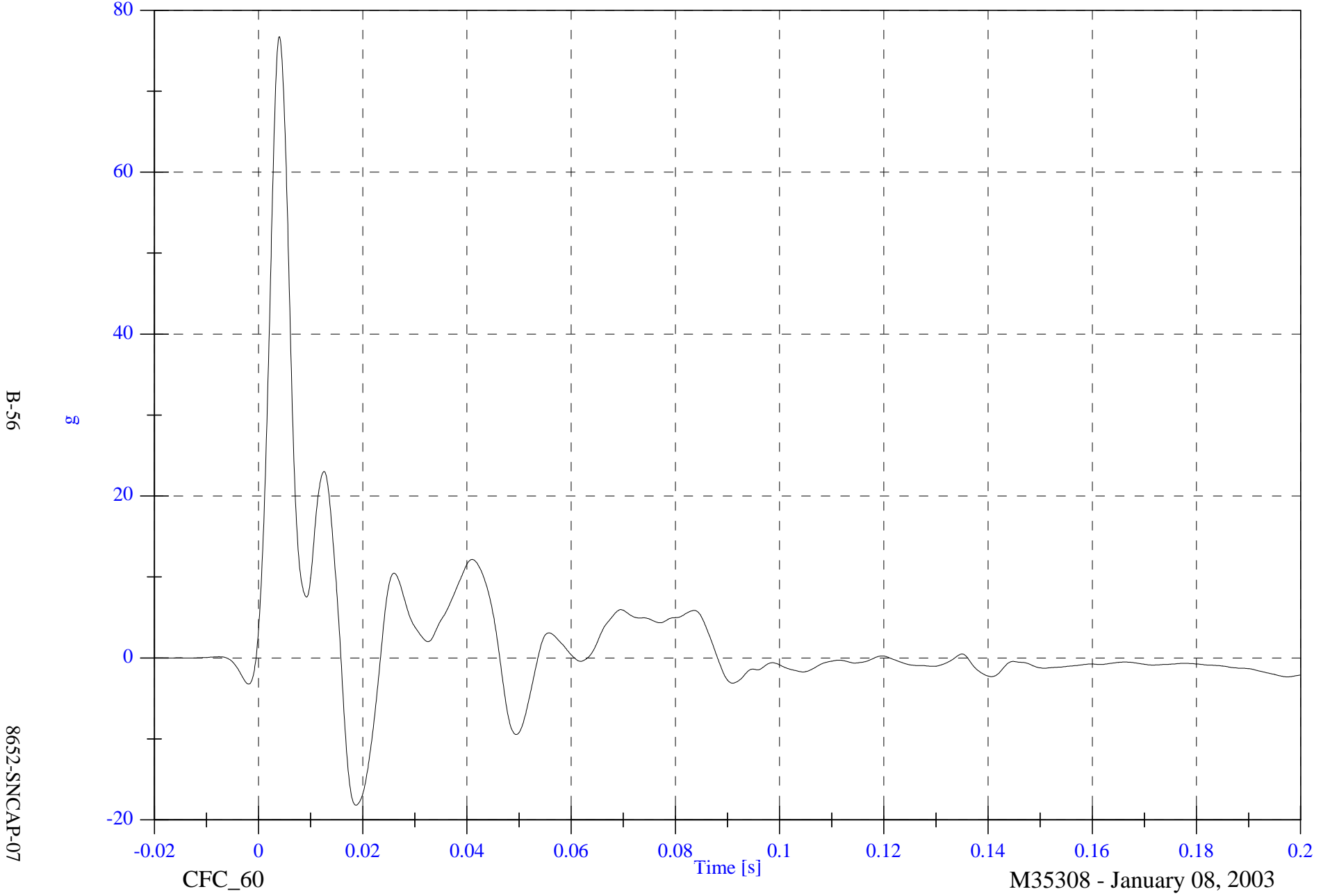
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A5 Left Front Sill y

Max: 76.8 [g] at 0.004 [s]

Min: -18.2 [g] at 0.019 [s]



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8652-SNCAP-07

CFC_60

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

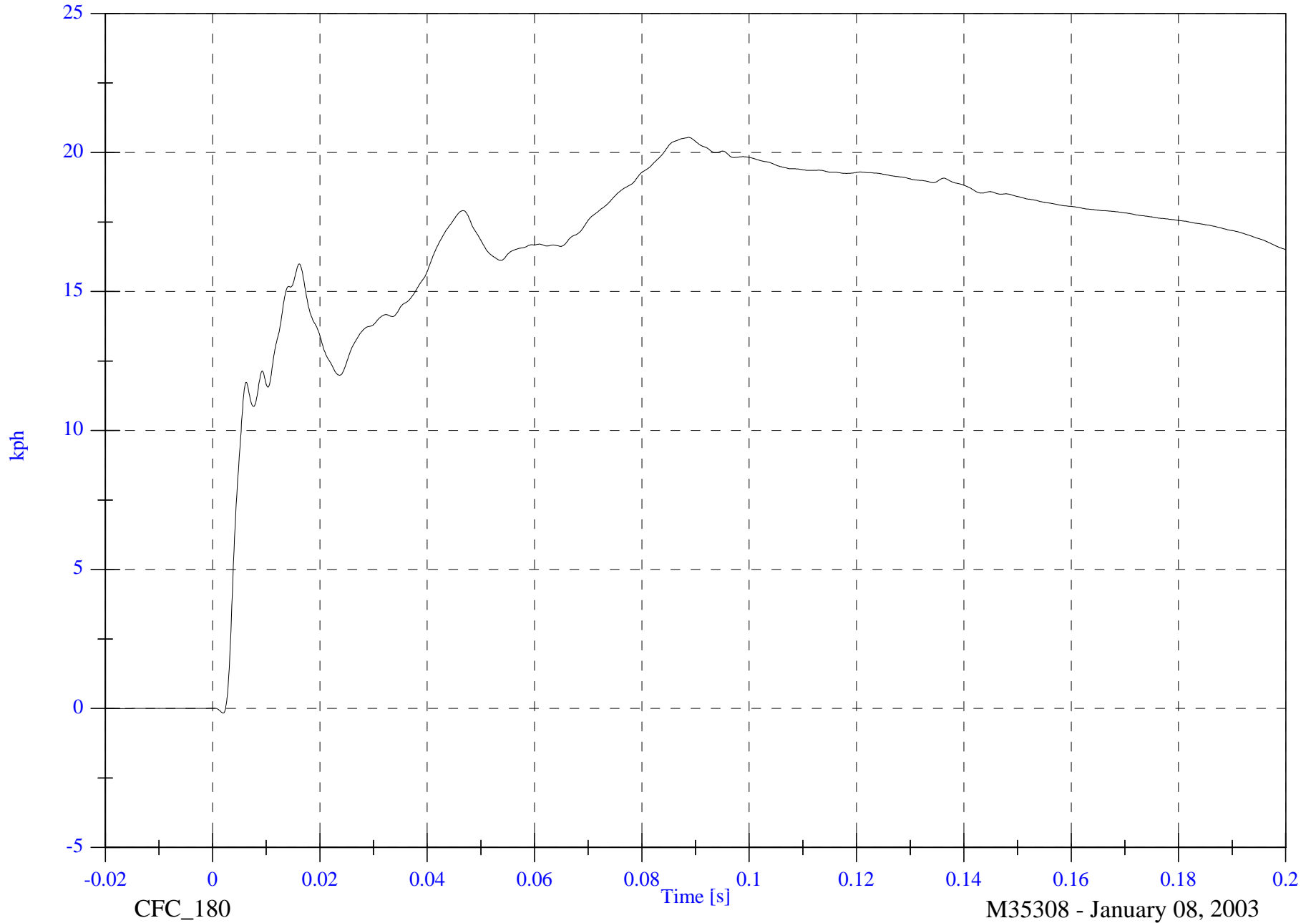
V2 A5 Left Front Sill y Velocity

Max: 20.5 [kph] at 0.089 [s]

Min: -0.2 [kph] at 0.002 [s]

B-57

8652-SNCAP-07



CFC_180

Time [s]

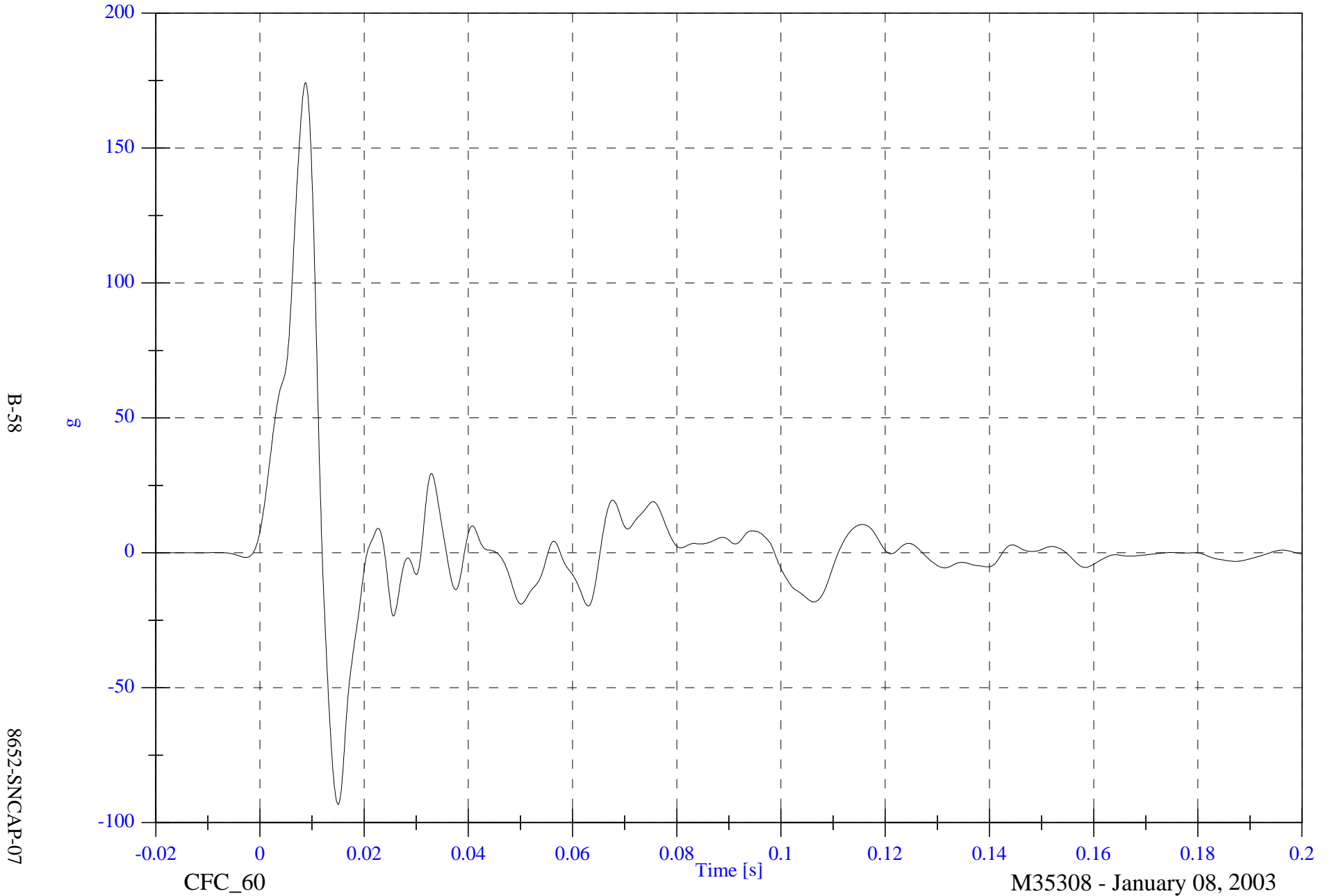
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A6 Left Front Door C/L y

Max: 174.2 [g] at 0.009 [s]

Min: -93.2 [g] at 0.015 [s]



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8652-SNCAP-07

SNCAP Test #2 - 2003 Honda S2000 Convertible

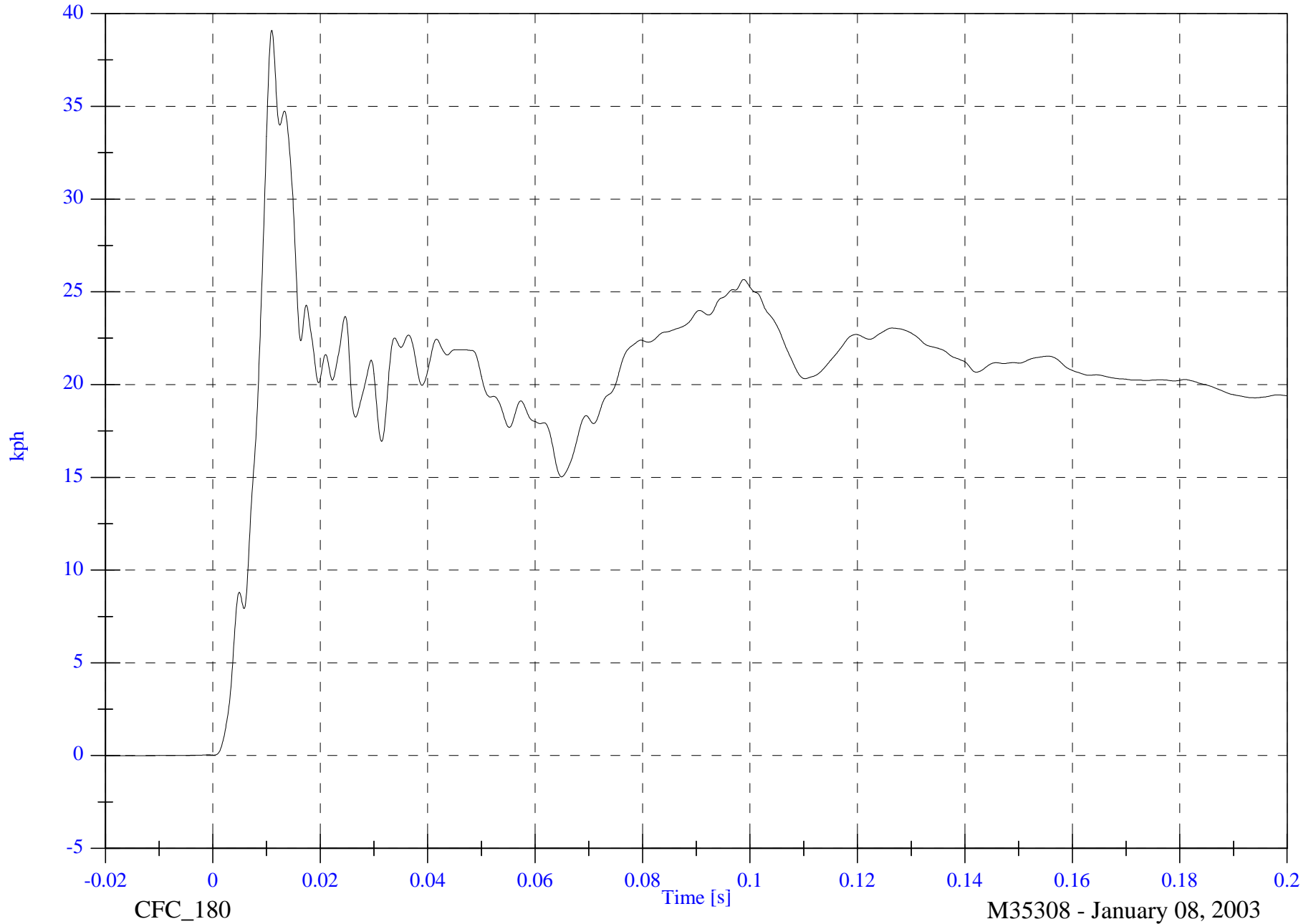
V2 A6 Left Front Door C/L y Velocity

Max: 39.1 [kph] at 0.011 [s]

Min: -0.0 [kph] at -0.020 [s]

B-59

8652-SNCAP-07



CFC_180

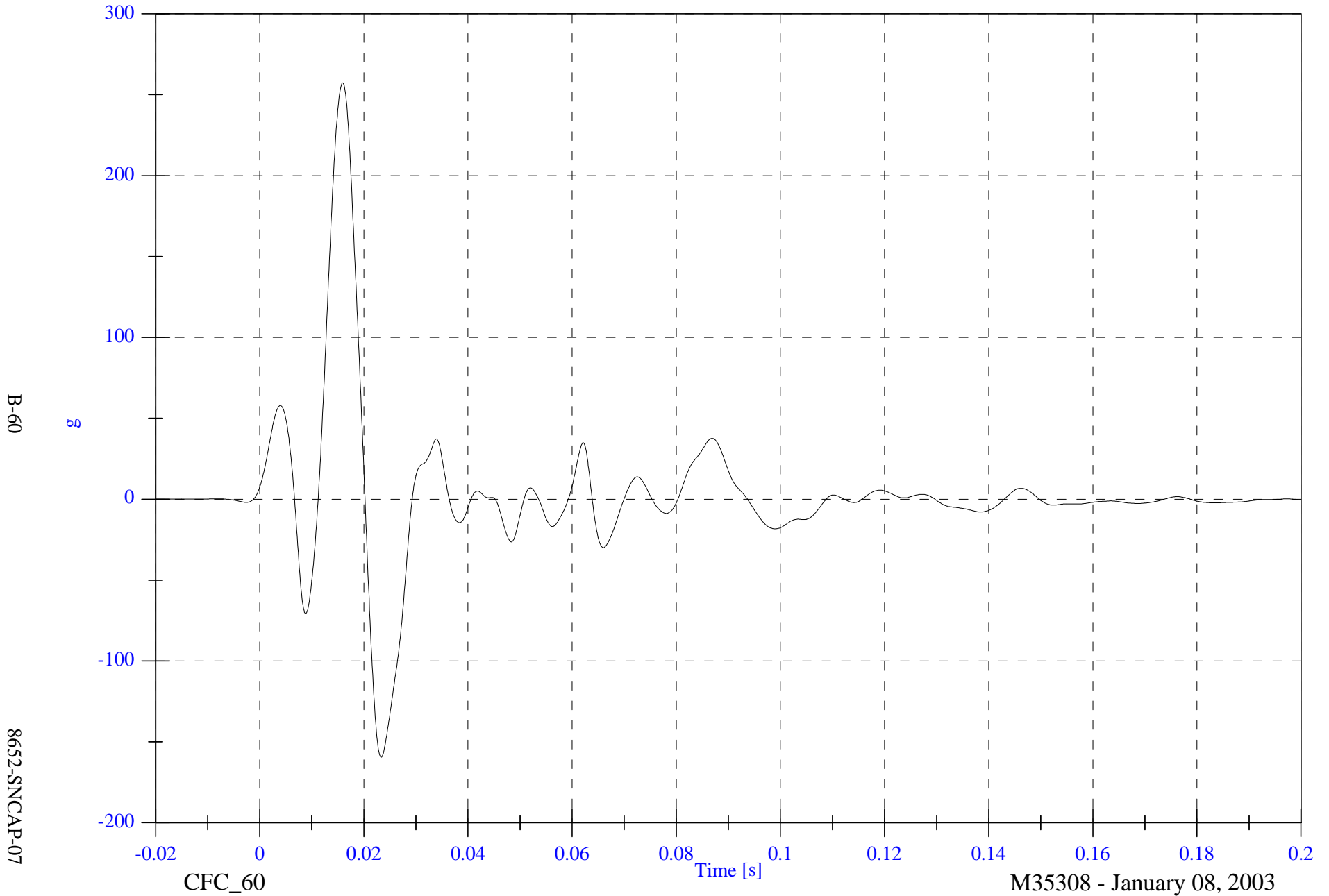
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A9 Left Front Door Upper C/L y

Max: 257.4 [g] at 0.016 [s]

Min: -159.6 [g] at 0.023 [s]

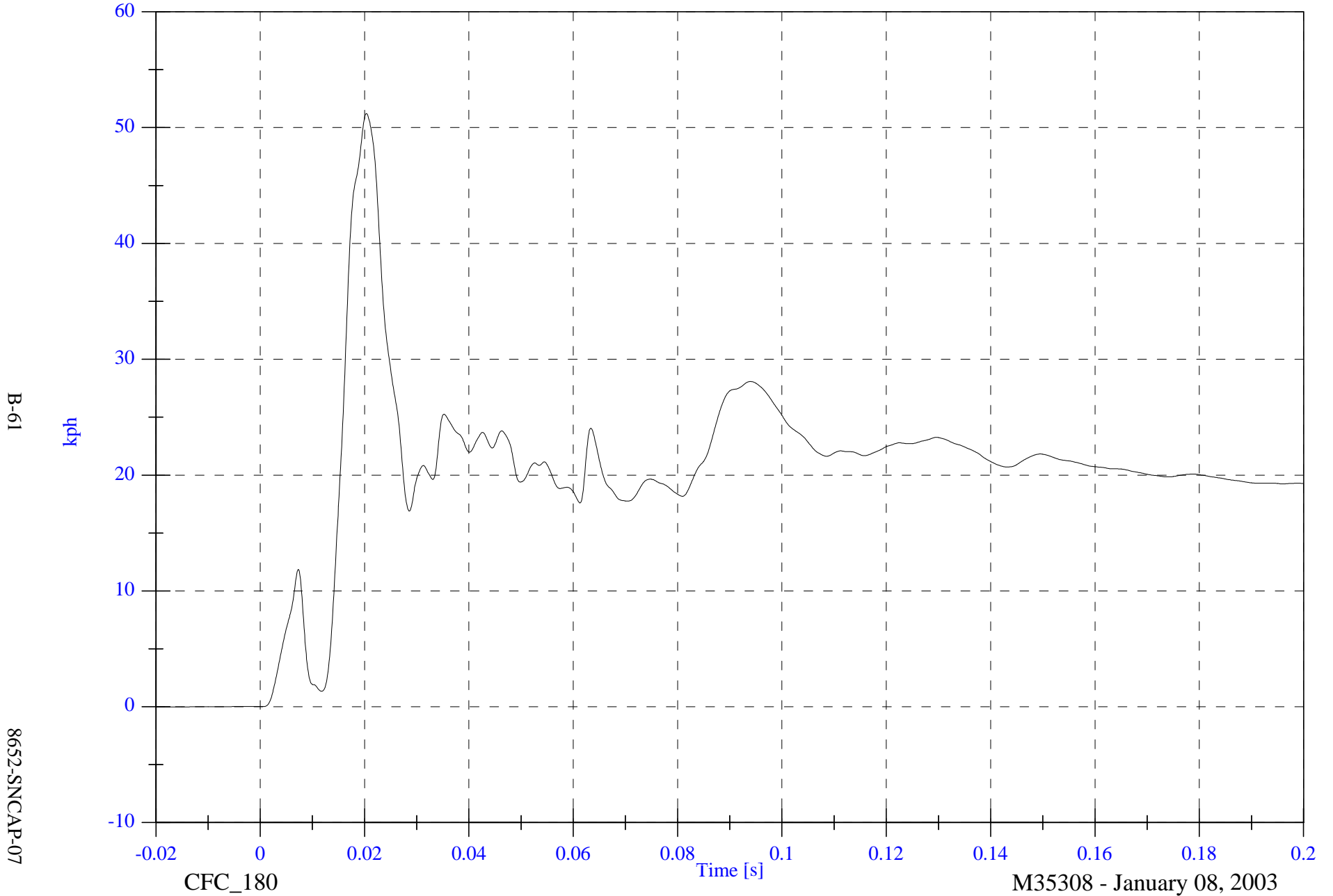


SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A9 Left Front Door Upper C/L y Velocity

Max: 51.2 [kph] at 0.020 [s]

Min: -0.0 [kph] at -0.020 [s]



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8652-SNCAP-07

CFC_180

Time [s]

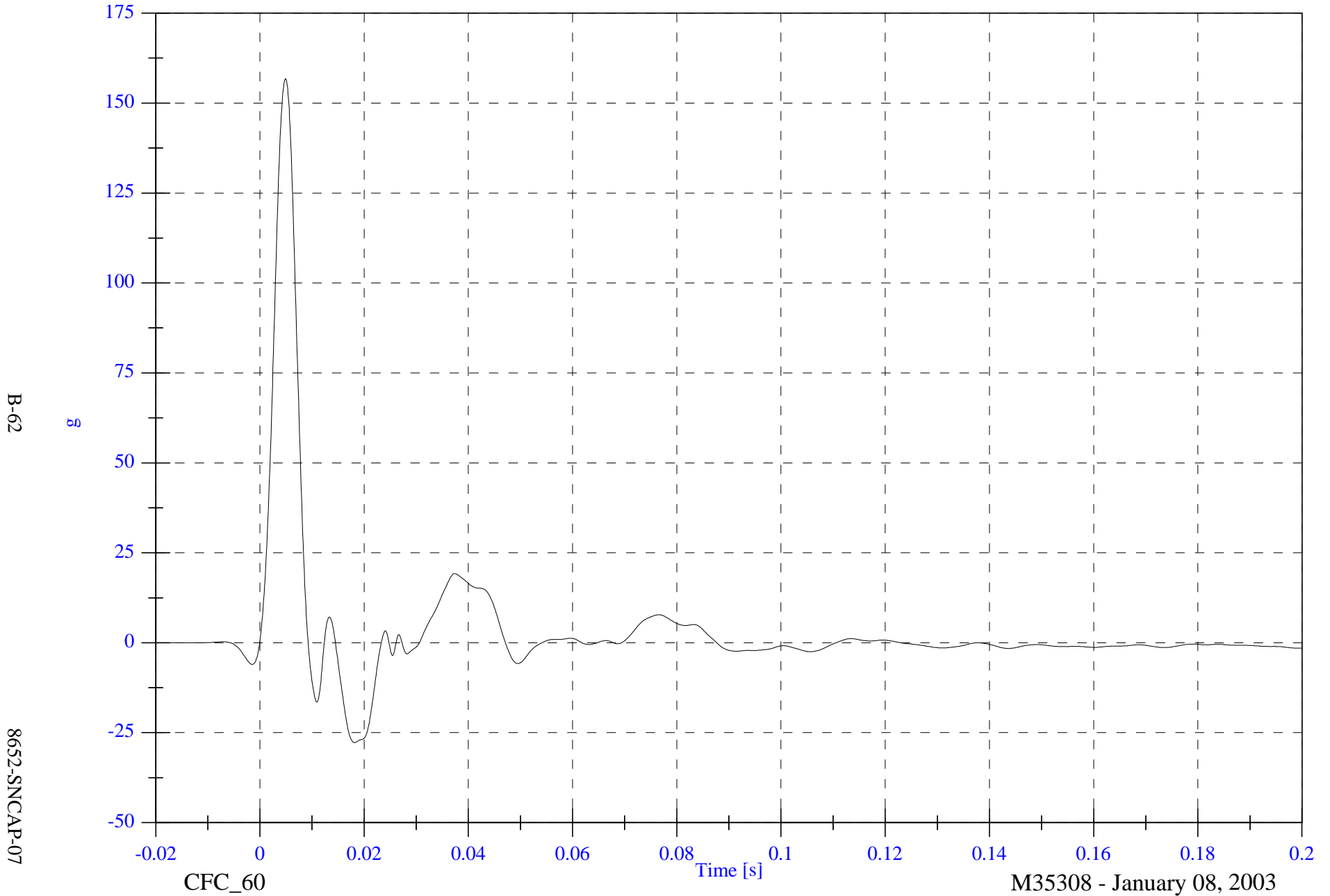
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A12 Left Lower B Post y

Max: 156.8 [g] at 0.005 [s]

Min: -27.7 [g] at 0.018 [s]

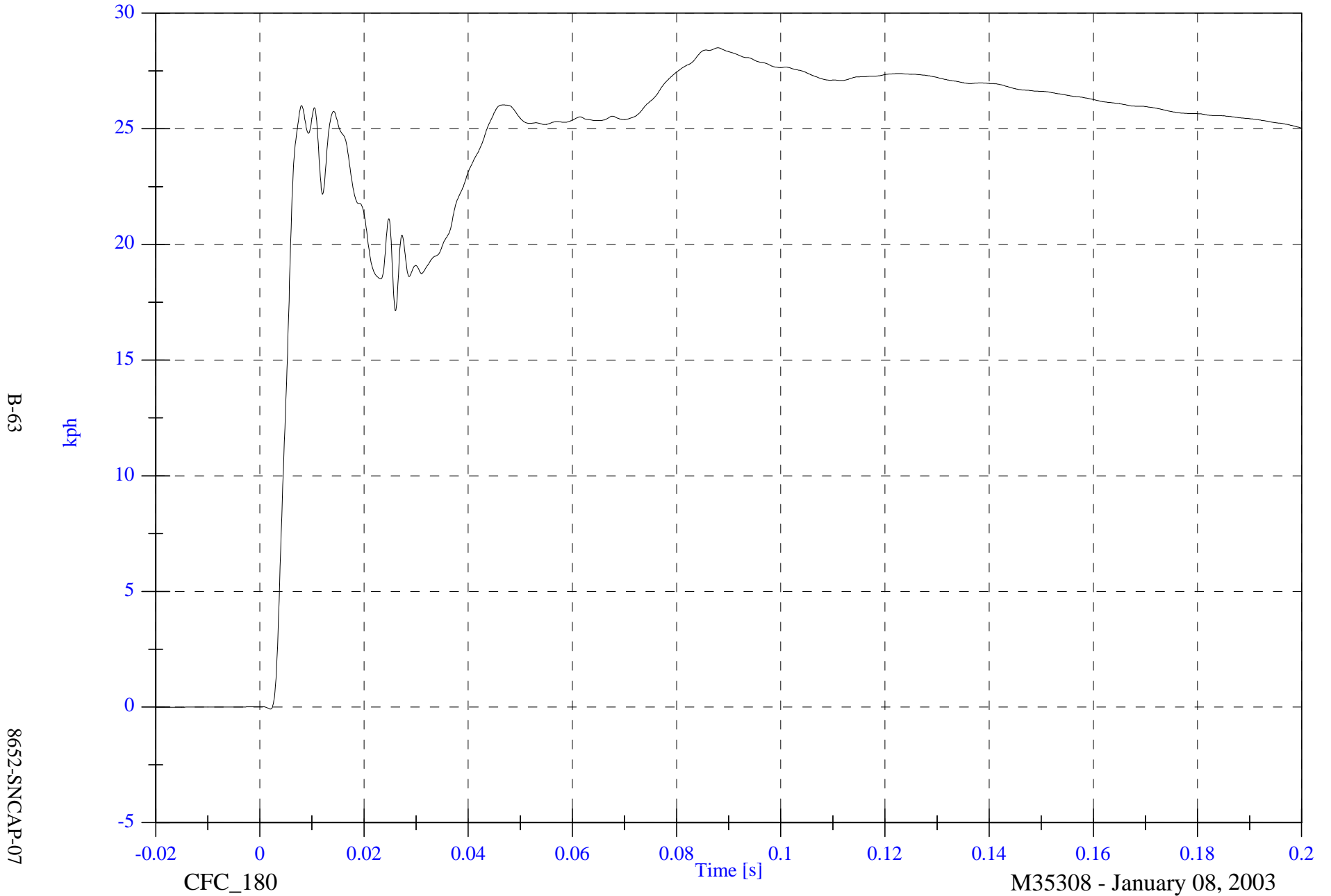


SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 28.5 [kph] at 0.088 [s]

V2 A12 Left Lower B Post y Velocity

Min: -0.1 [kph] at 0.002 [s]



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8652-SNCAP-07

CFC_180

Time [s]

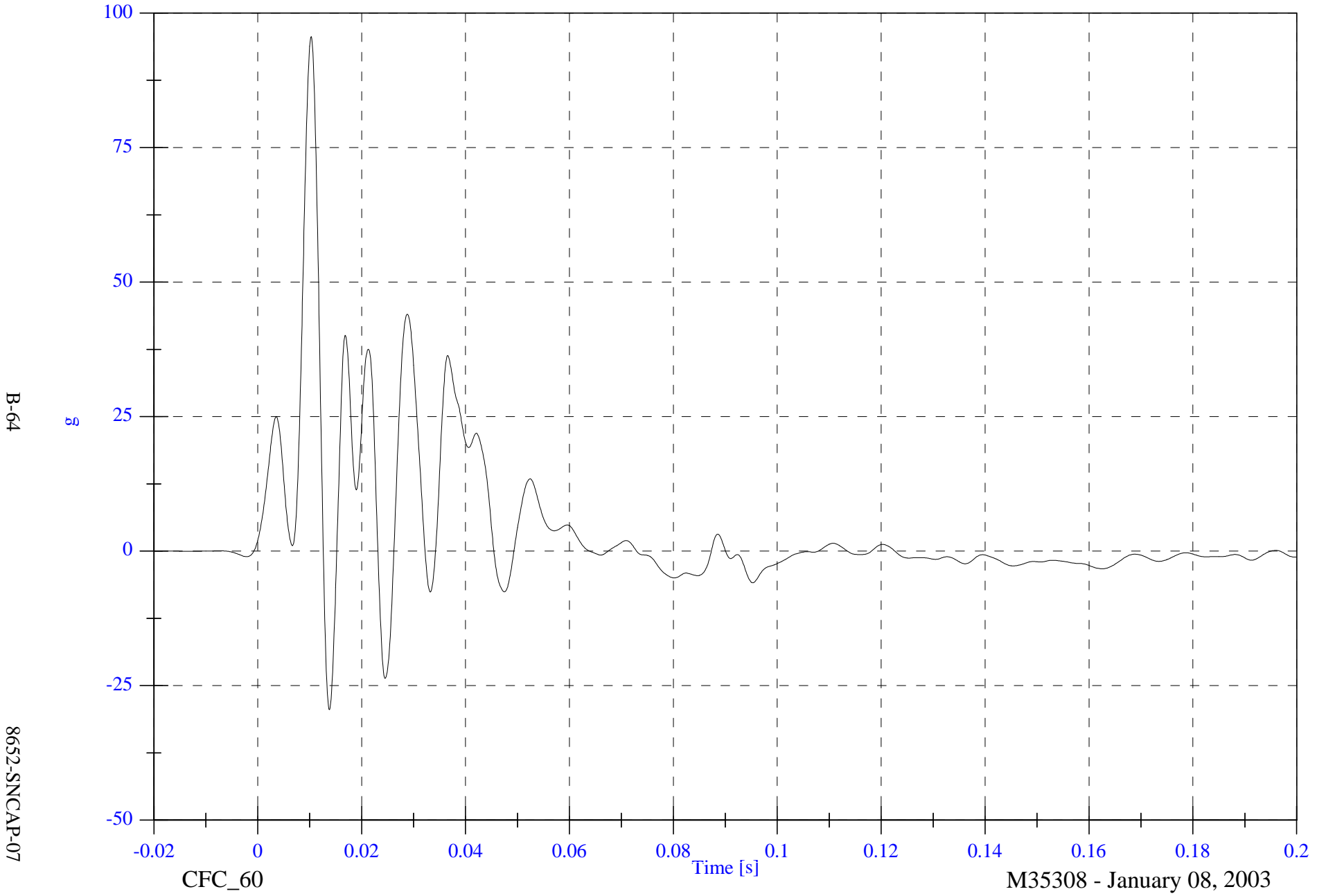
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A13 Left Middle B Post y

Max: 95.6 [g] at 0.010 [s]

Min: -29.5 [g] at 0.014 [s]



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8652-SNCAP-07

CFC_60

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A13 Left Middle B Post y Velocity

Max: 33.1 [kph] at 0.072 [s]

Min: -0.1 [kph] at 0.002 [s]

B-65

8652-SNCAP-07



CFC_180

Time [s]

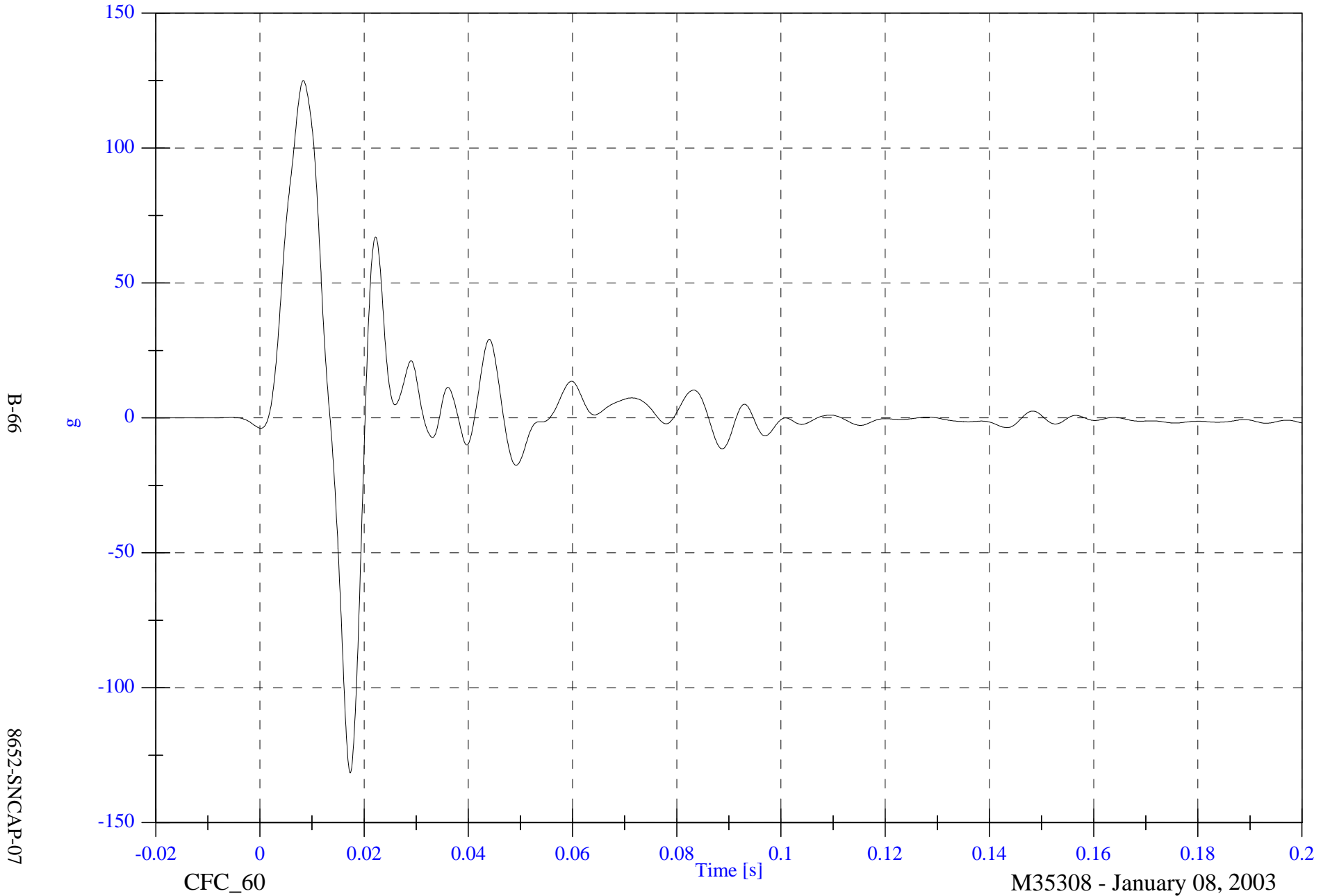
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A14 Left Lower A Post y

Max: 125.0 [g] at 0.008 [s]

Min: -131.5 [g] at 0.017 [s]



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8652-SNCAP-07

CFC_60

Time [s]

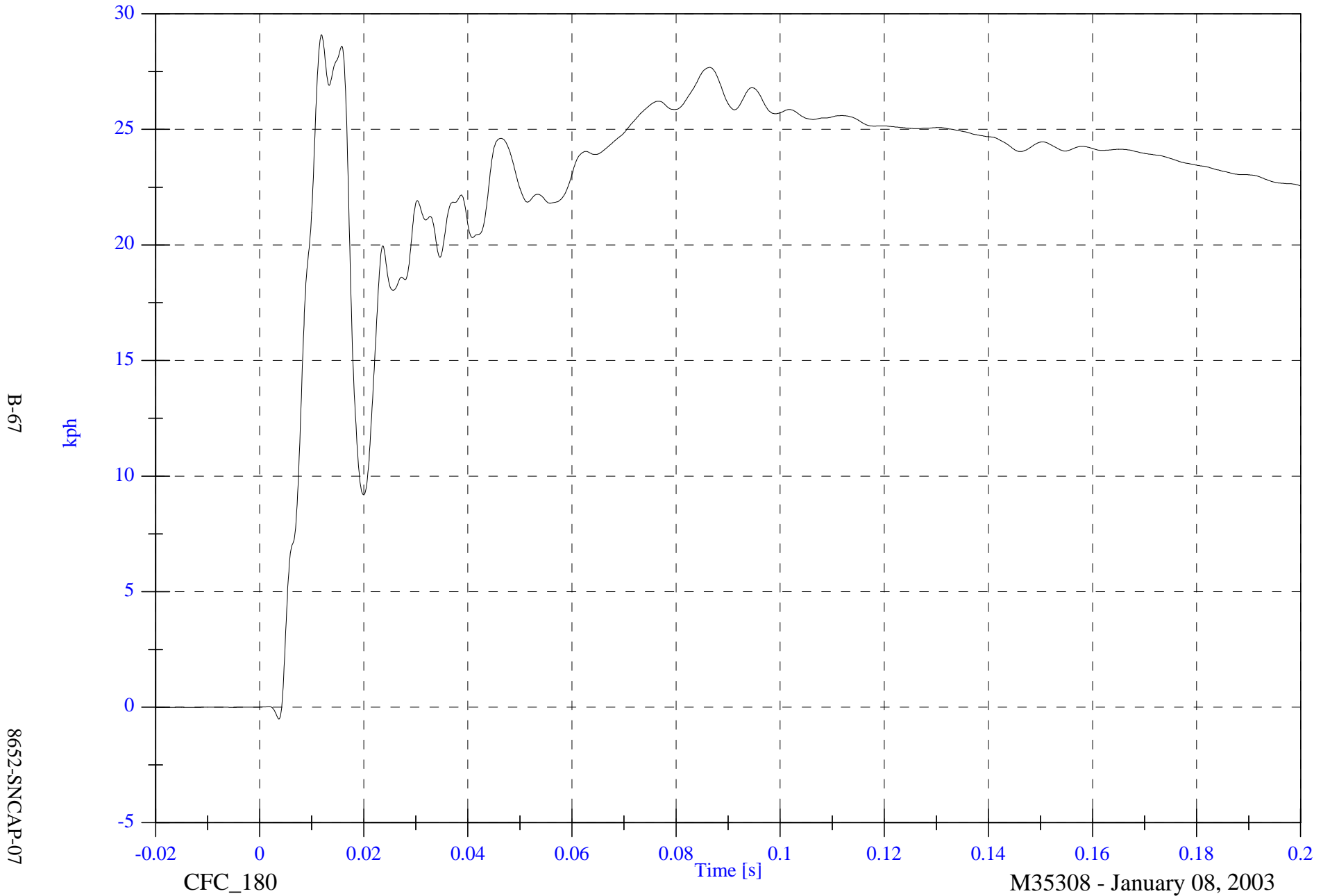
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 29.1 [kph] at 0.012 [s]

V2 A14 Left Lower A Post y Velocity

Min: -0.5 [kph] at 0.004 [s]



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8652-SNCAP-07

CFC_180

Time [s]

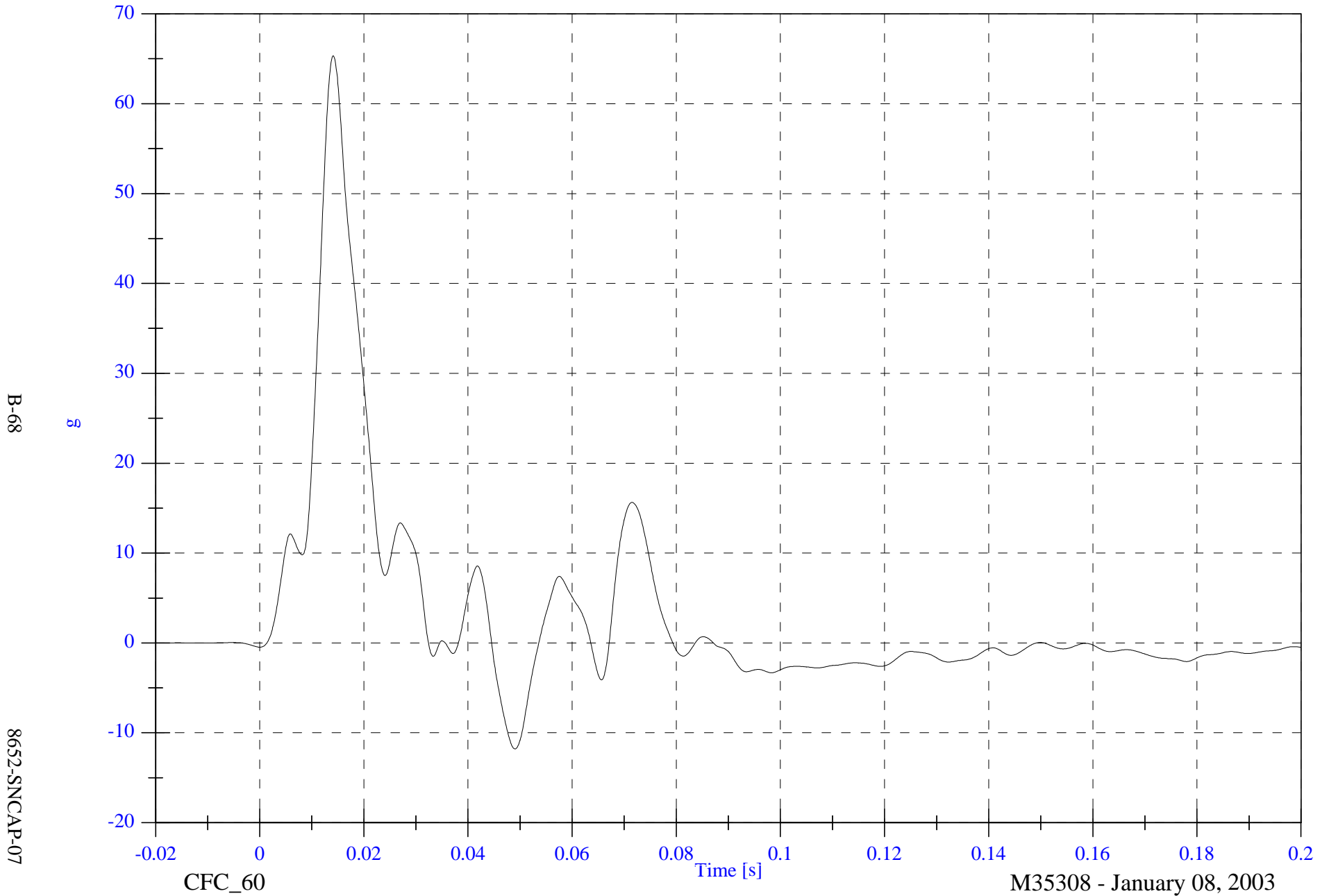
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A15 Left Mid A Post y

Max: 65.3 [g] at 0.014 [s]

Min: -11.8 [g] at 0.049 [s]



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8652-SNCAP-07

CFC_60

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

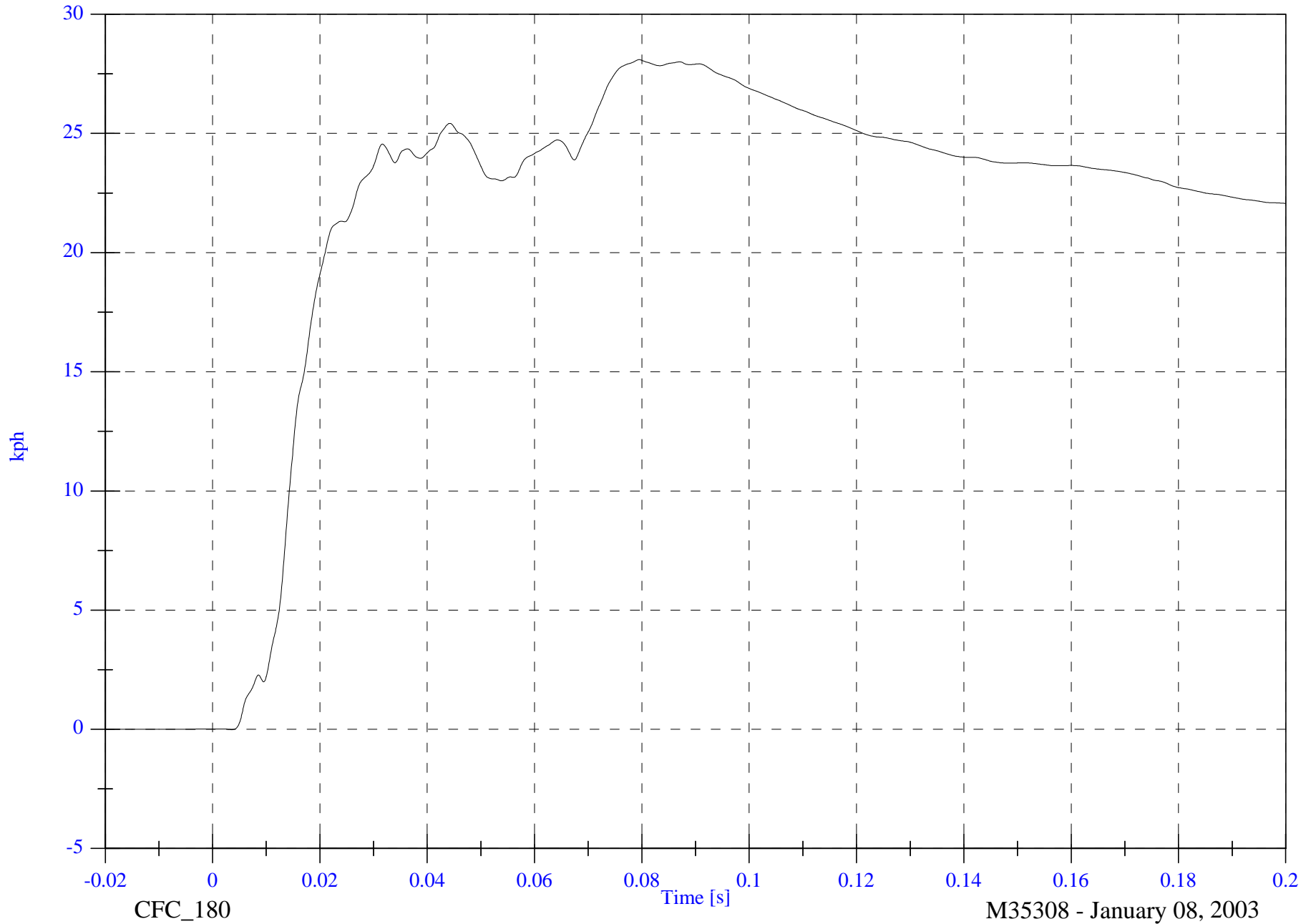
V2 A15 Left Mid A Post y Velocity

Max: 28.1 [kph] at 0.079 [s]

Min: -0.0 [kph] at 0.004 [s]

B-69

8652-SNCAP-07



CFC_180

Time [s]

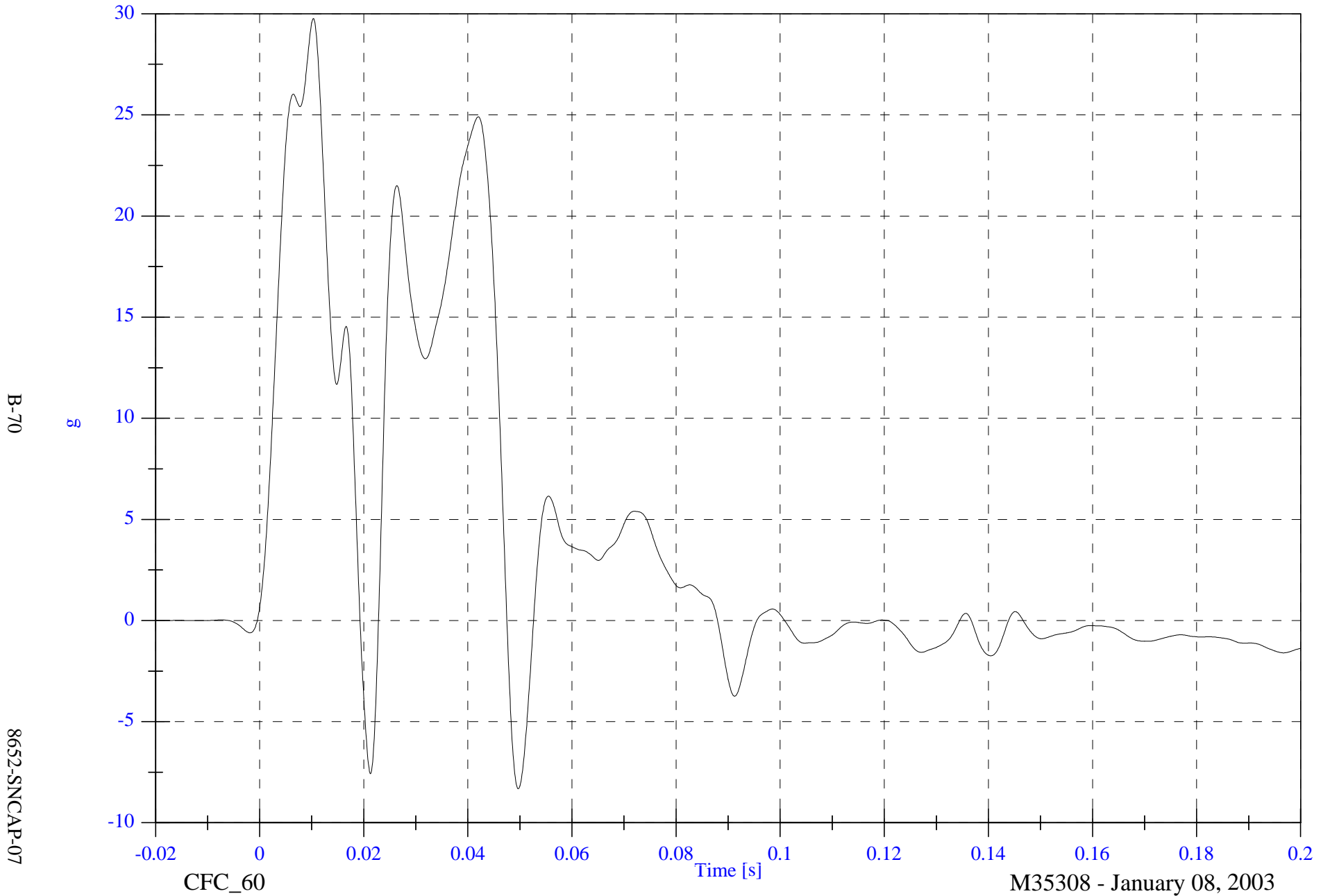
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A16 Front Seat Track y

Max: 29.8 [g] at 0.010 [s]

Min: -8.3 [g] at 0.050 [s]



SNCAP Test #2 - 2003 Honda S2000 Convertible

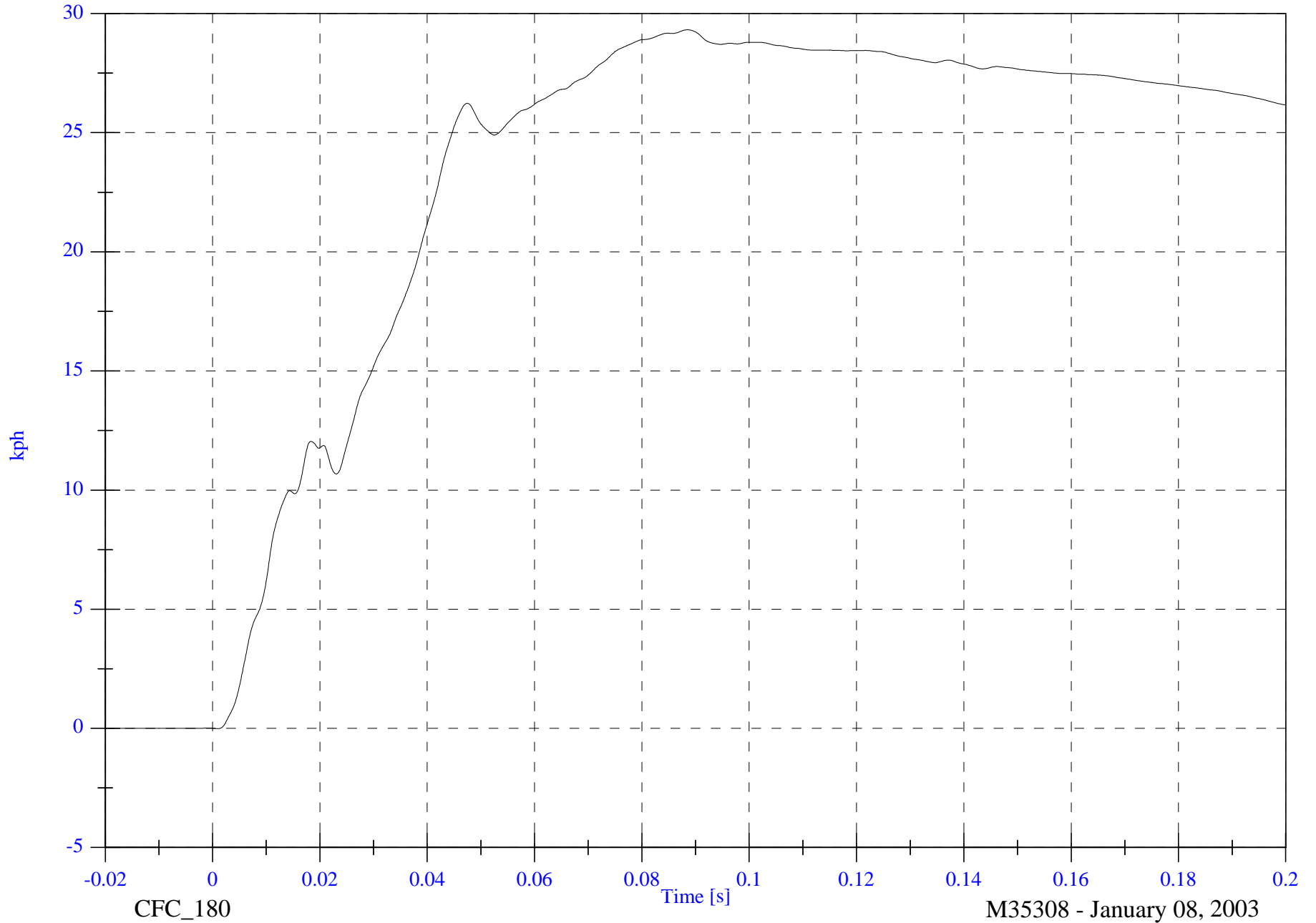
V2 A16 Front Seat Track y Velocity

Max: 29.3 [kph] at 0.088 [s]

Min: -0.0 [kph] at 0.001 [s]

B-71

8652-SNCAP-07



CFC_180

Time [s]

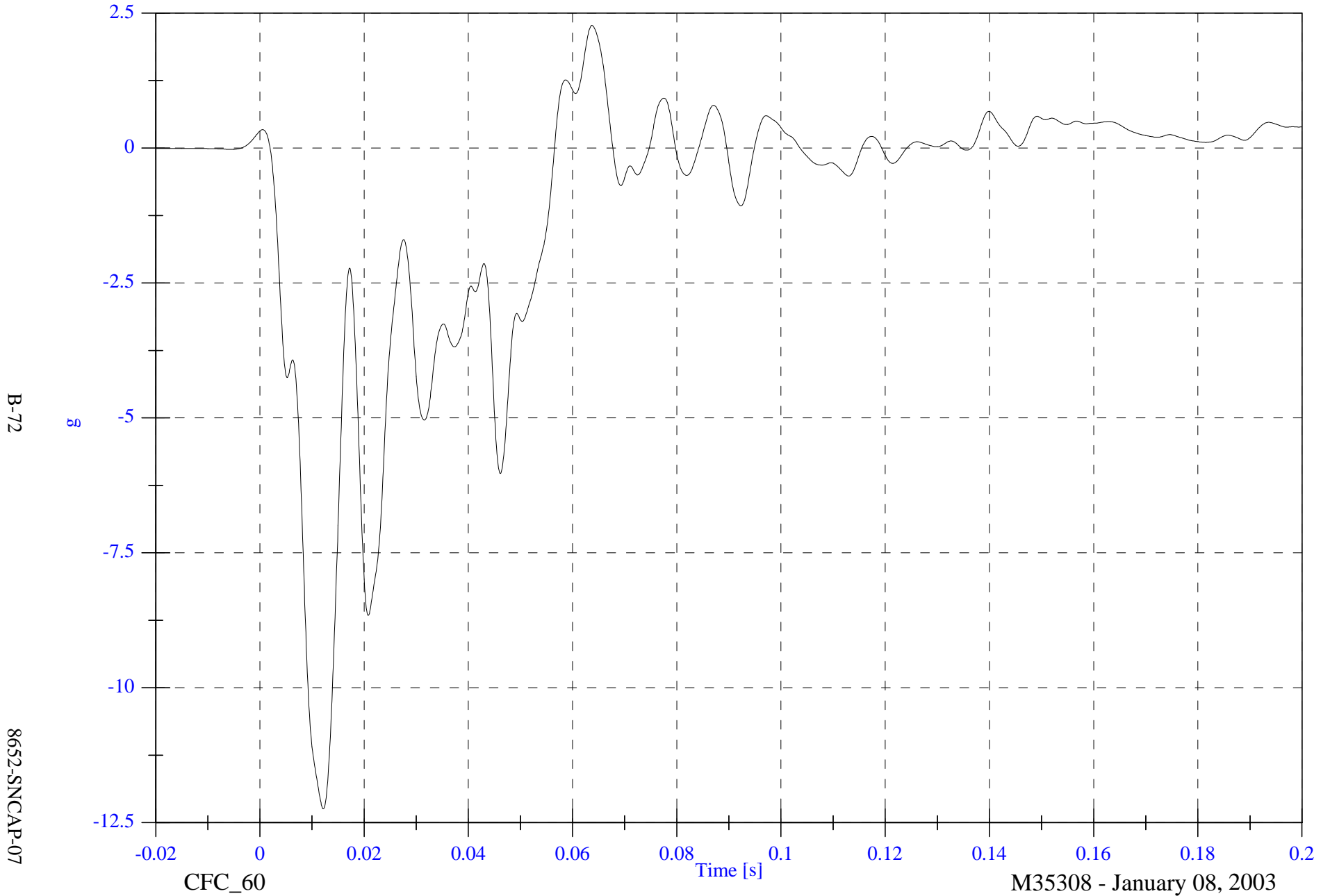
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 2.3 [g] at 0.064 [s]

V2 A18 Target CG x

Min: -12.2 [g] at 0.012 [s]



SNCAP Test #2 - 2003 Honda S2000 Convertible

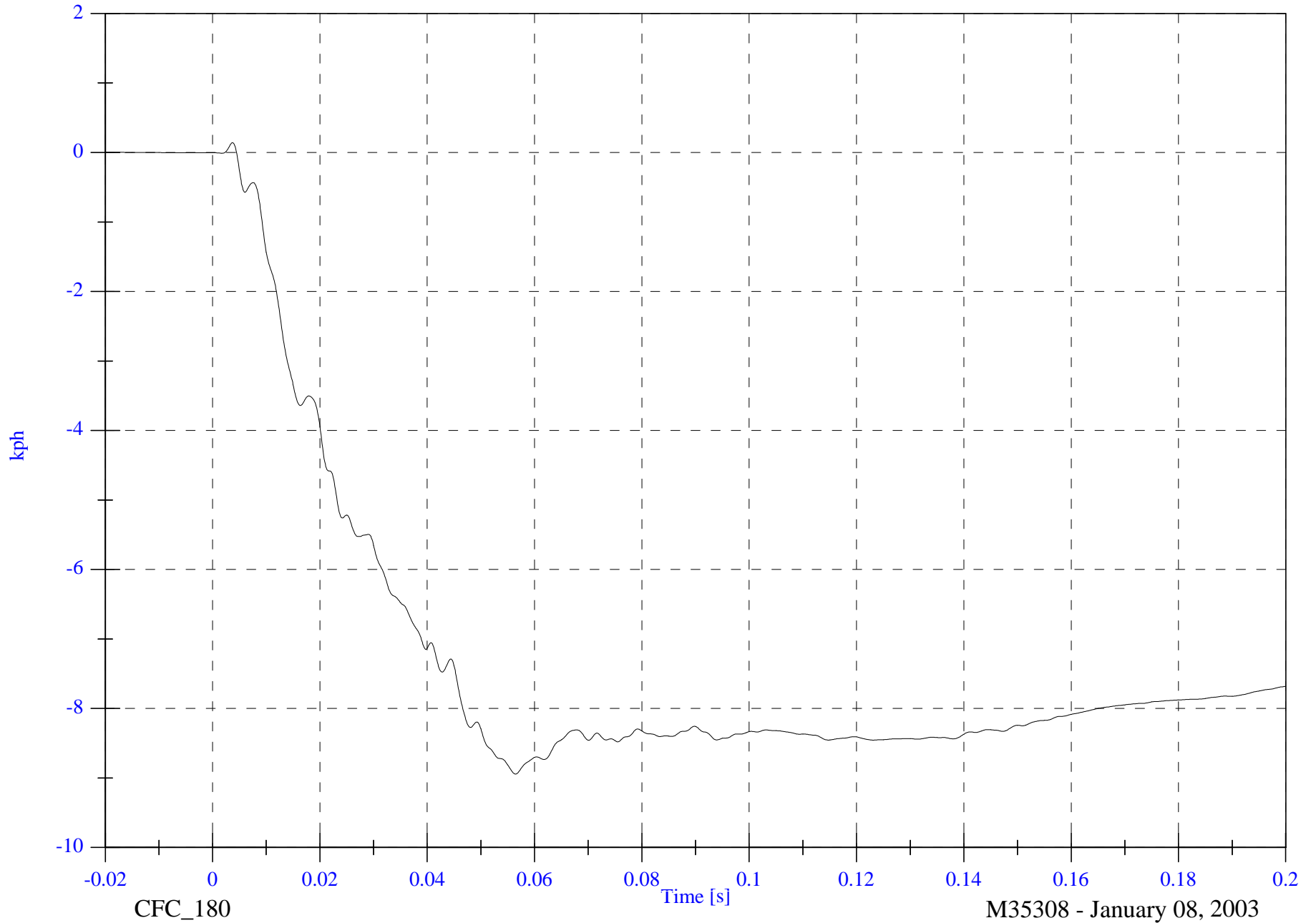
V2 A18 Target CG x Velocity

Max: 0.1 [kph] at 0.004 [s]

Min: -8.9 [kph] at 0.057 [s]

B-73

8652-SNCAP-07



CFC_180

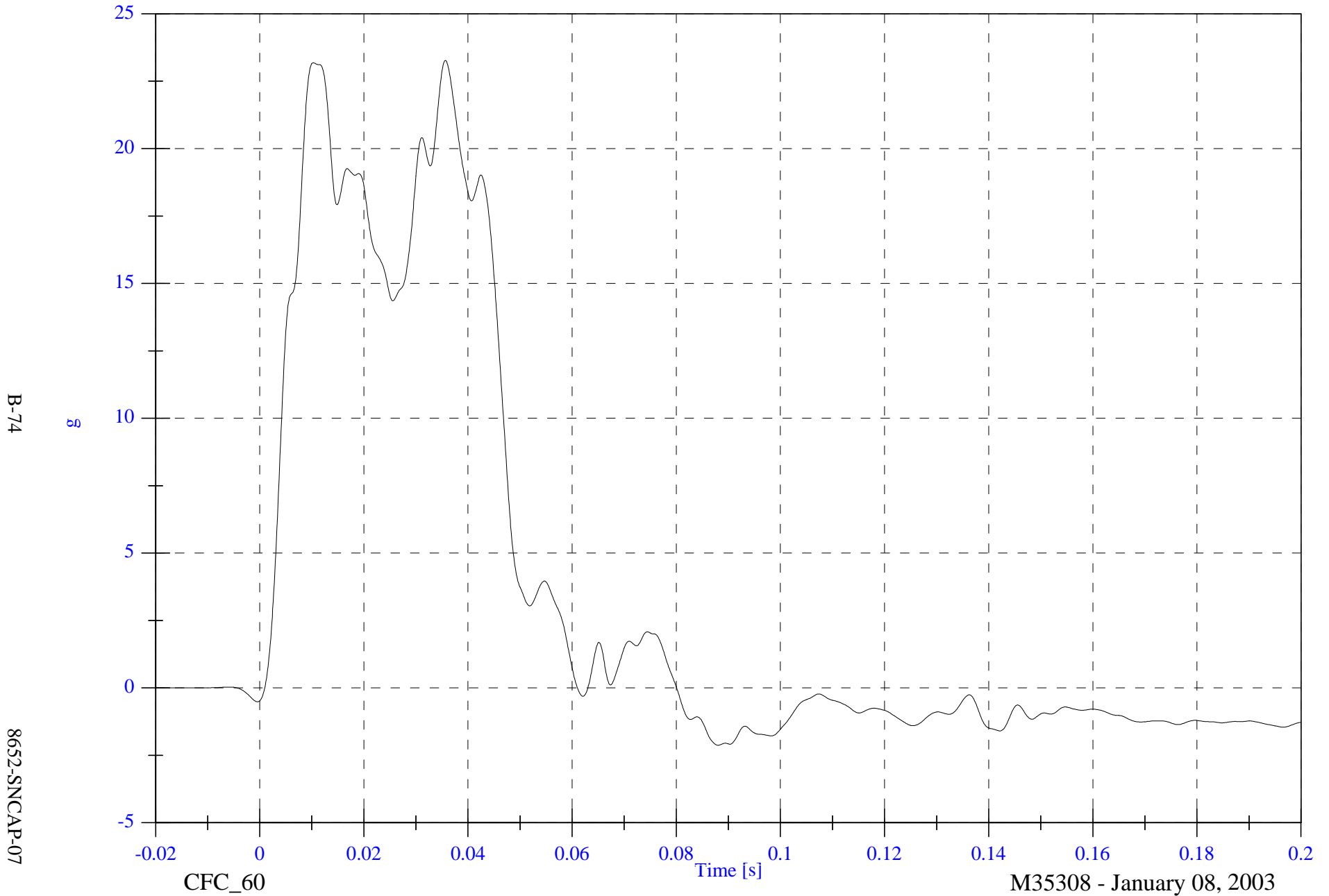
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A18 Target CG y

Max: 23.3 [g] at 0.036 [s]

Min: -2.1 [g] at 0.088 [s]



B-74

8652-SNCAP-07

CFC_60

Time [s]

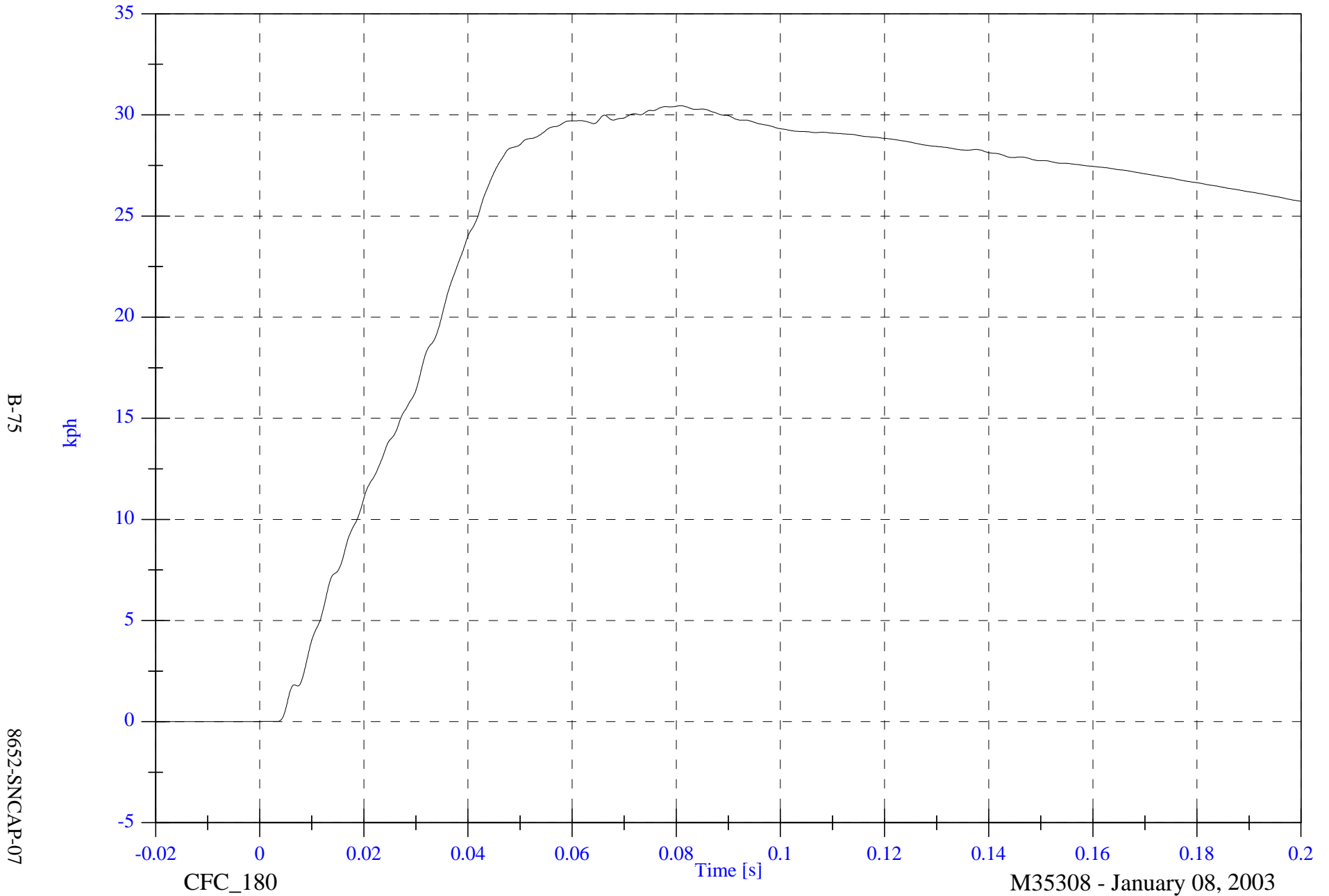
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A18 Target CG y Velocity

Max: 30.5 [kph] at 0.081 [s]

Min: -0.0 [kph] at -0.020 [s]



B-75

8652-SNCAP-07

CFC_180

Time [s]

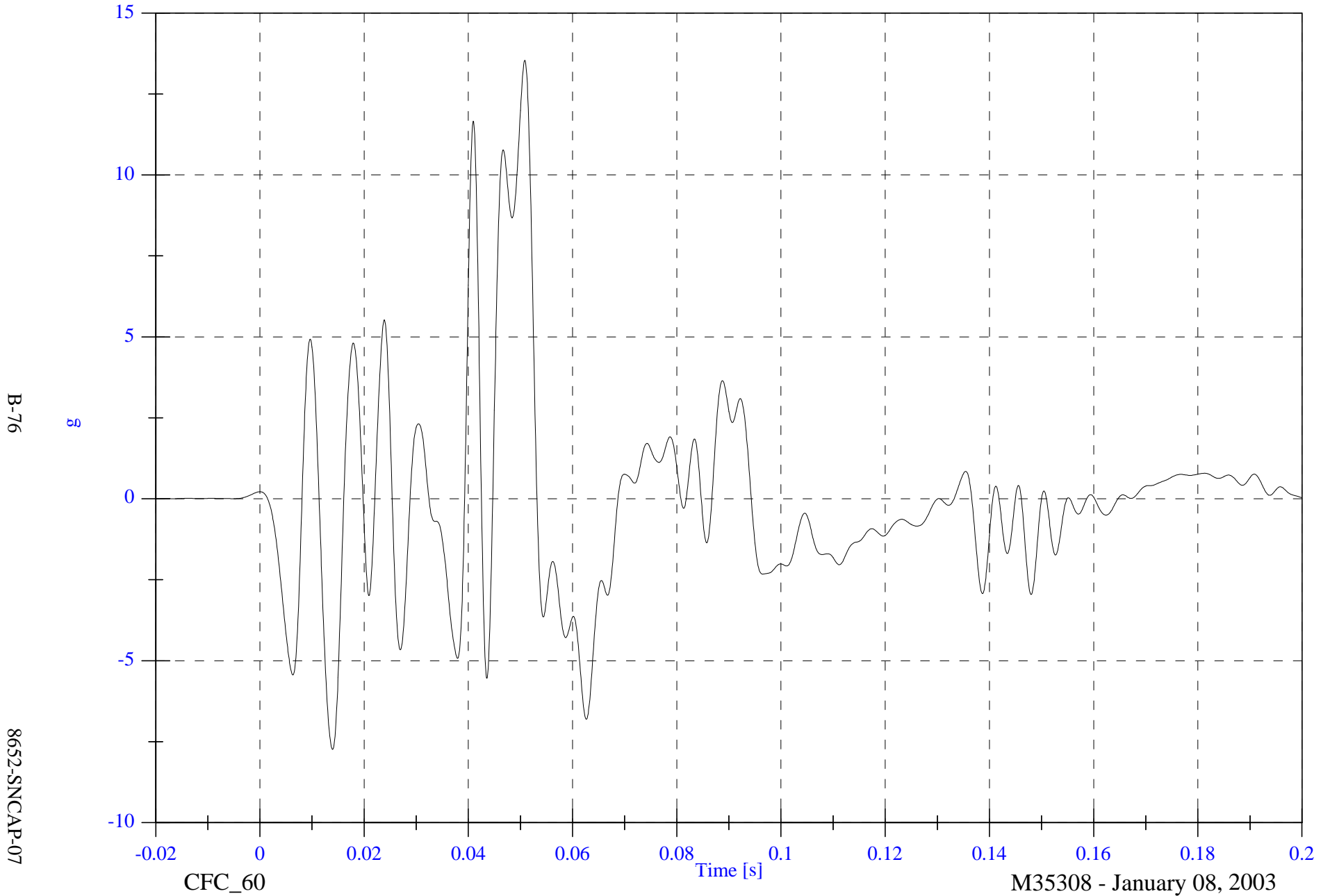
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A18 Target CG z

Max: 13.5 [g] at 0.051 [s]

Min: -7.7 [g] at 0.014 [s]

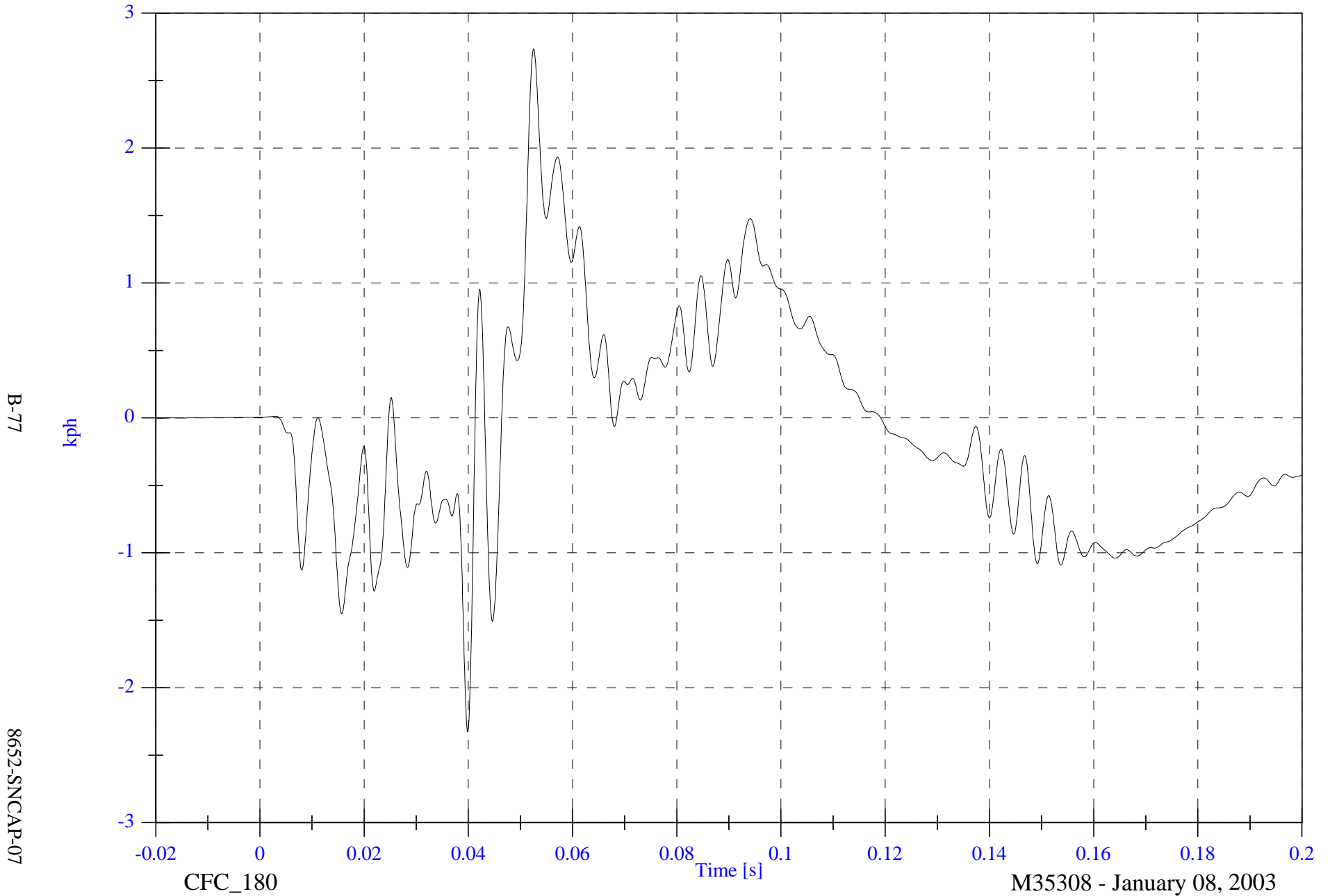


SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A18 Target CG z Velocity

Max: 2.7 [kph] at 0.053 [s]

Min: -2.3 [kph] at 0.040 [s]



B-77

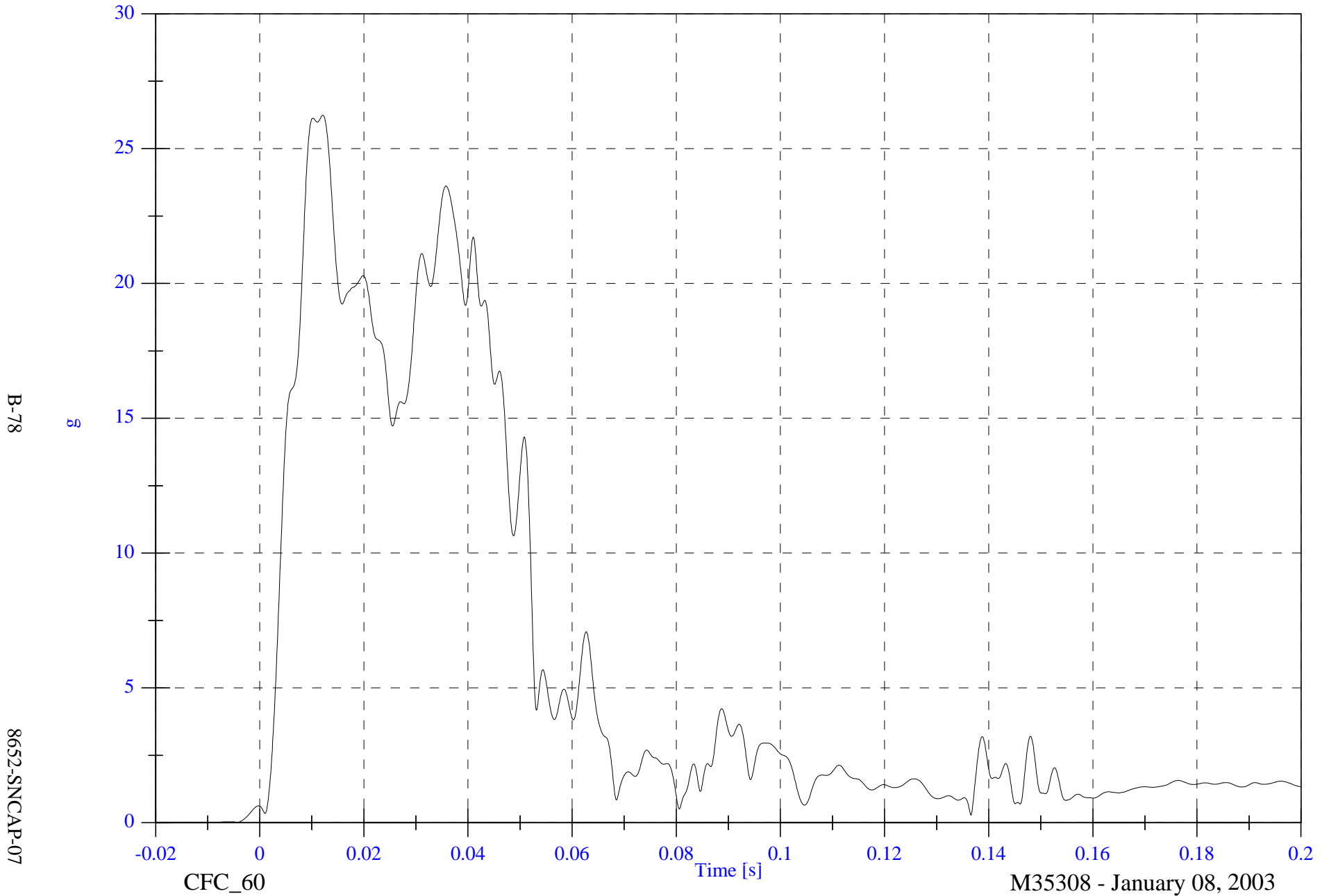
8652-SNCAP-07

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2 A18 Target CG Resultant

Max: 26.2 [g] at 0.012 [s]

Min: 0.0 [g] at -0.019 [s]



B-78

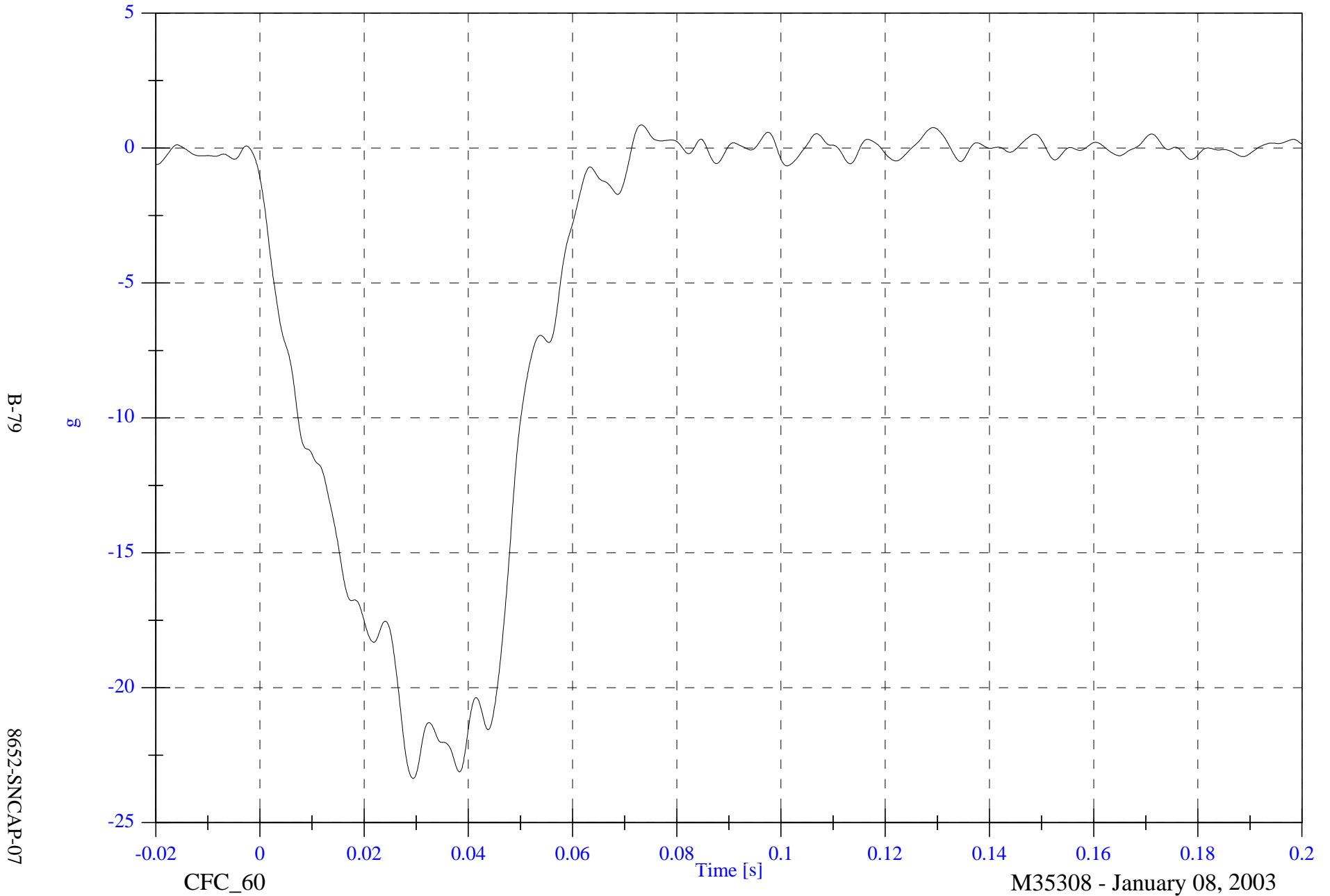
8652-SNCAP-07

SNCAP Test #2 - 2003 Honda S2000 Convertible

V1 Moving Barrier CG X

Max: 0.9 [g] at 0.073 [s]

Min: -23.4 [g] at 0.029 [s]

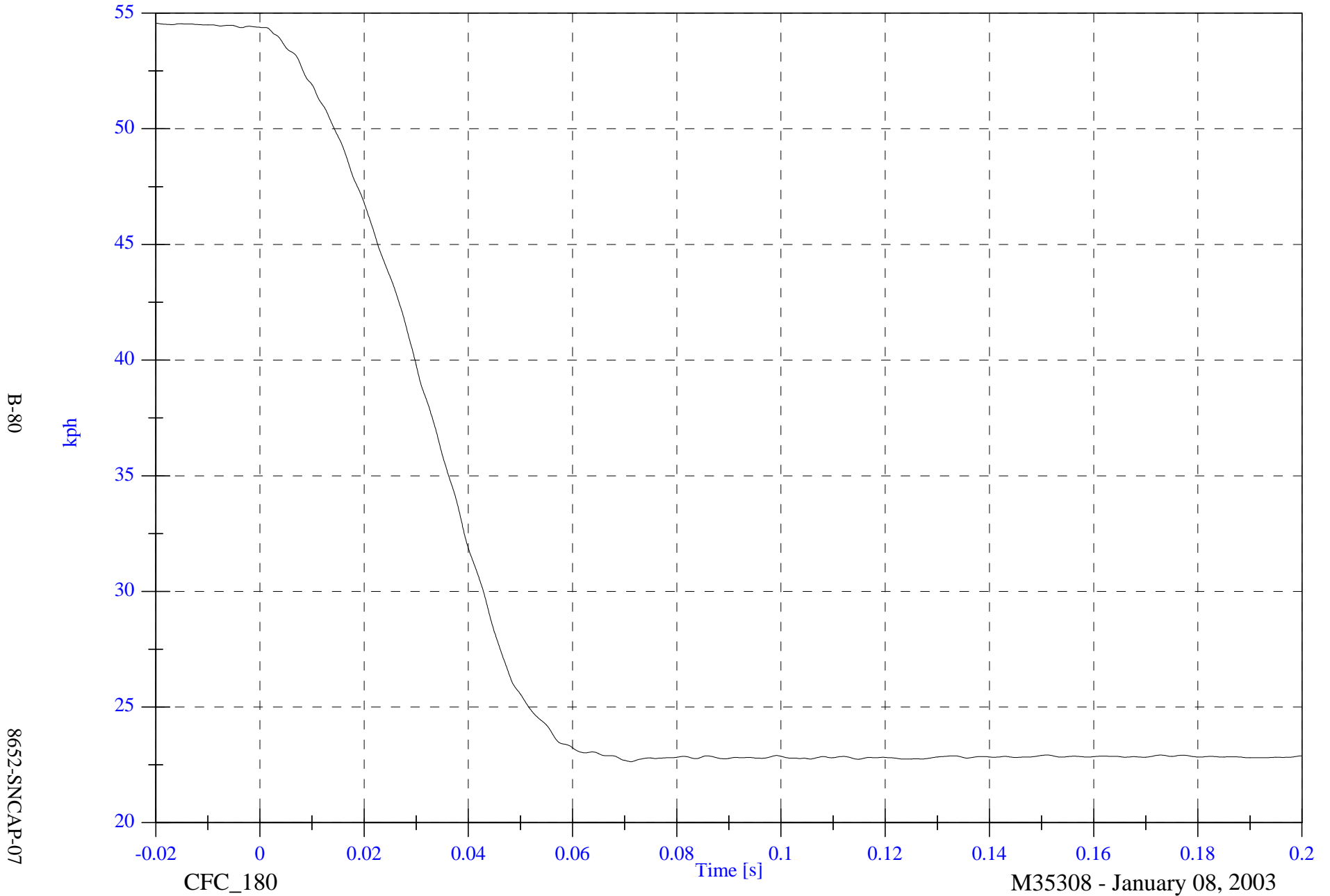


SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 54.6 [kph] at -0.020 [s]

V1 Moving Barrier CG X Velocity

Min: 22.6 [kph] at 0.071 [s]



B-80

8652-SNCAP-07

CFC_180

Time [s]

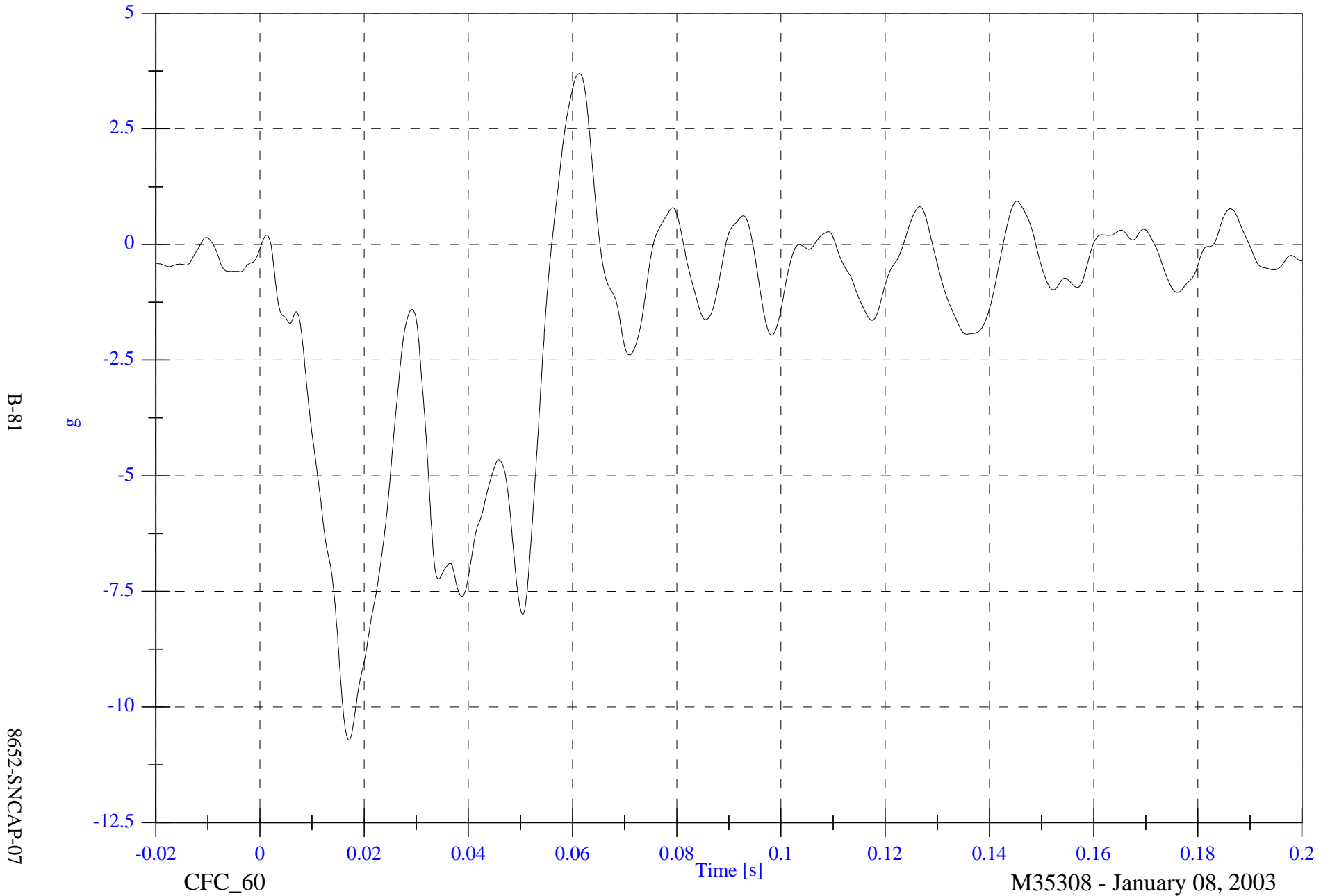
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V1 Moving Barrier CG Y

Max: 3.7 [g] at 0.061 [s]

Min: -10.7 [g] at 0.017 [s]



SNCAP Test #2 - 2003 Honda S2000 Convertible

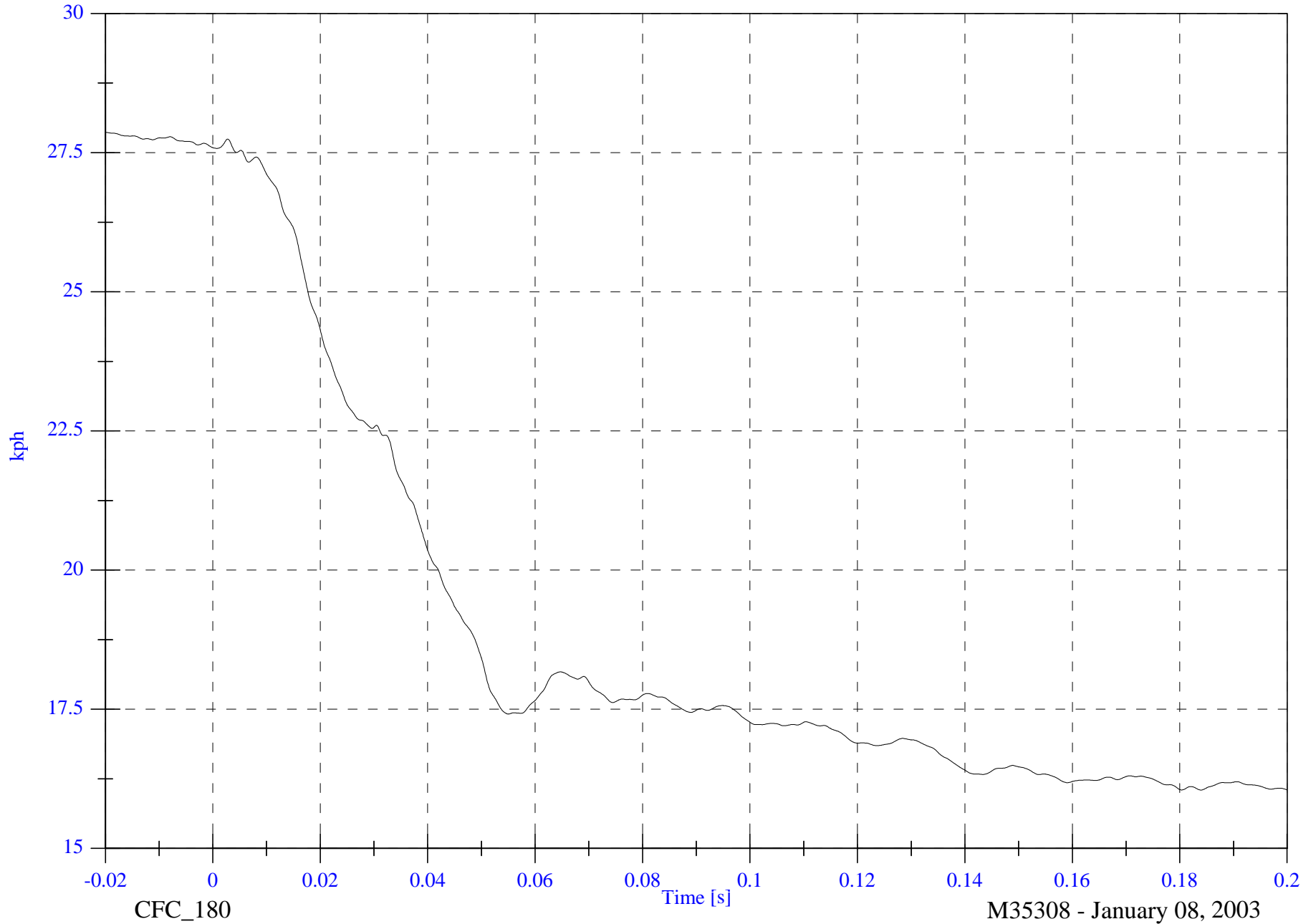
V1 Moving Barrier CG Y Velocity

Max: 27.9 [kph] at -0.020 [s]

Min: 16.0 [kph] at 0.184 [s]

B-82

8652-SNCAP-07



CFC_180

Time [s]

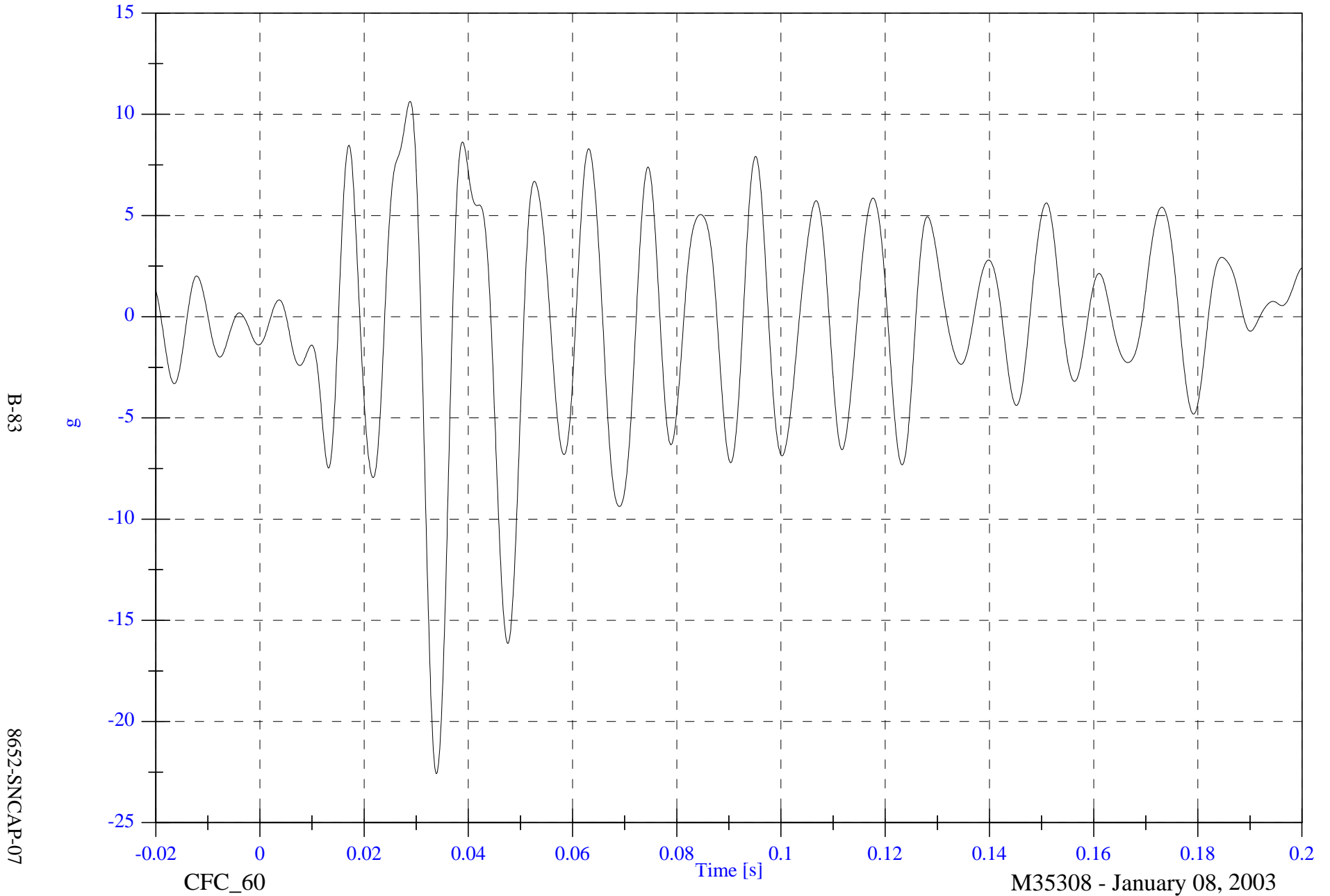
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V1 Moving Barrier CG Z

Max: 10.6 [g] at 0.029 [s]

Min: -22.6 [g] at 0.034 [s]



B-83

8652-SNCAP-07

CFC_60

Time [s]

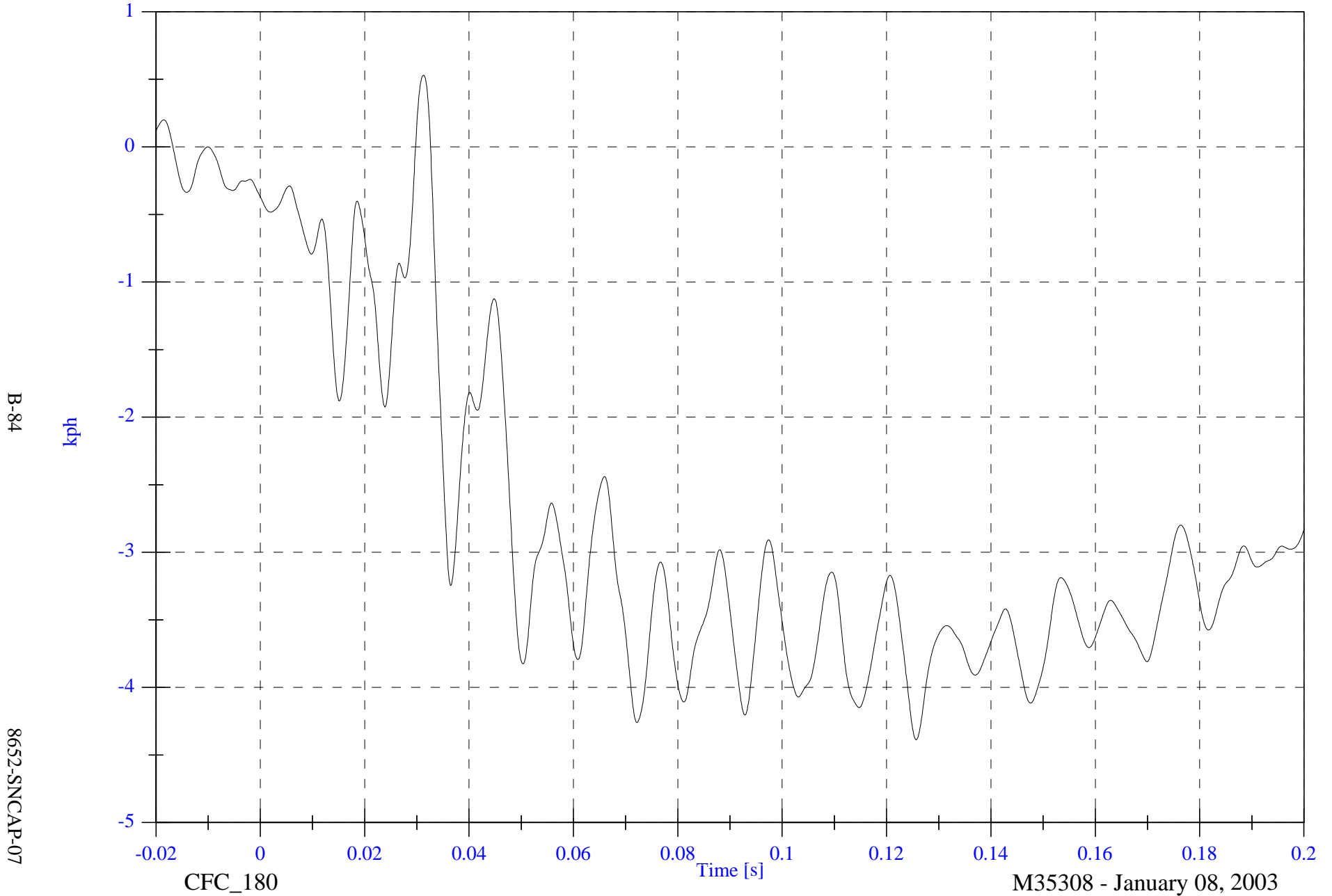
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V1 Moving Barrier CG Z Velocity

Max: 0.5 [kph] at 0.031 [s]

Min: -4.4 [kph] at 0.126 [s]



B-84

8652-SNCAP-07

CFC_180

Time [s]

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

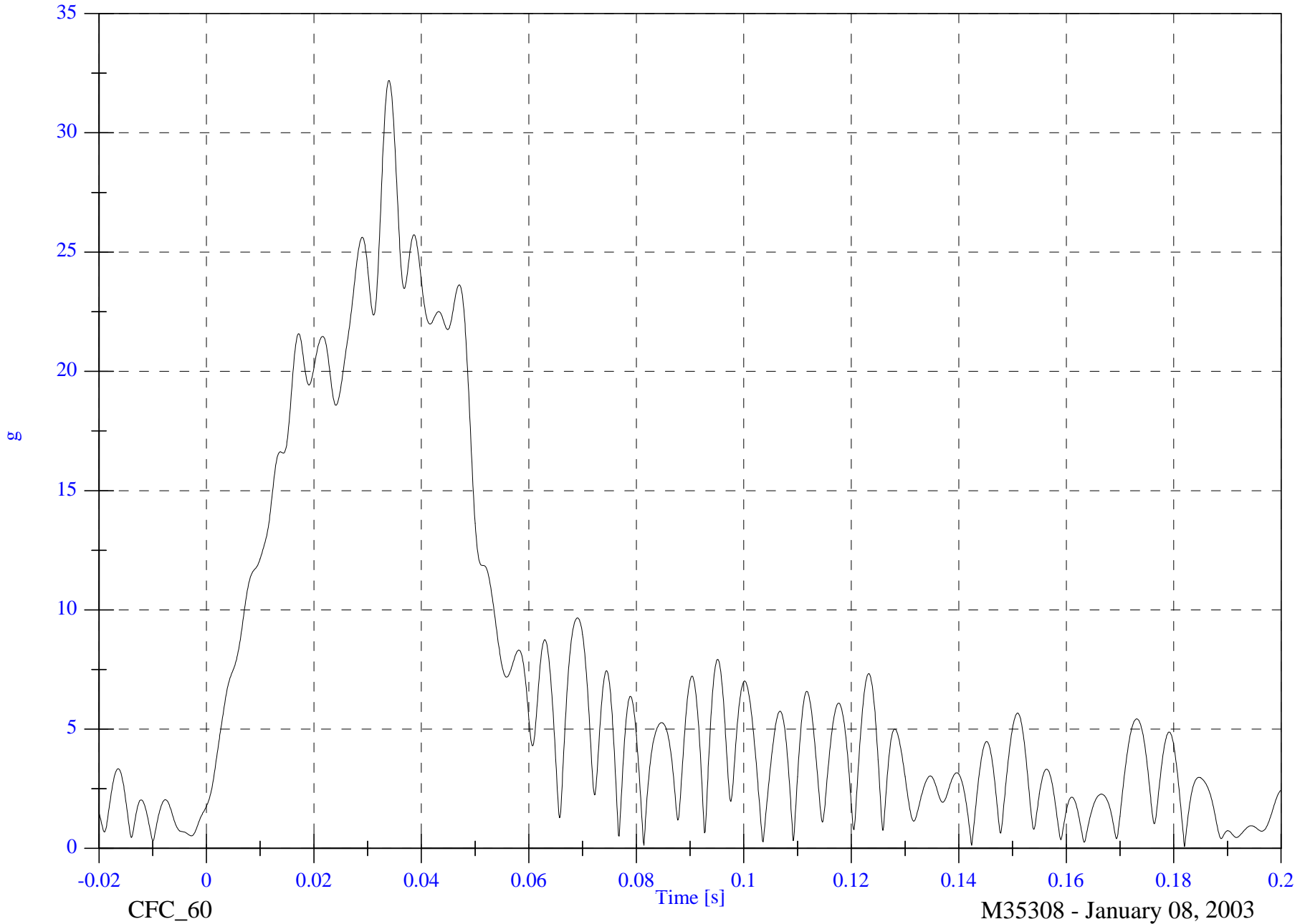
V1 Moving Barrier CG Resultant

Max: 32.2 [g] at 0.034 [s]

Min: 0.1 [g] at 0.182 [s]

B-85

8652-SNCAP-07



CFC_60

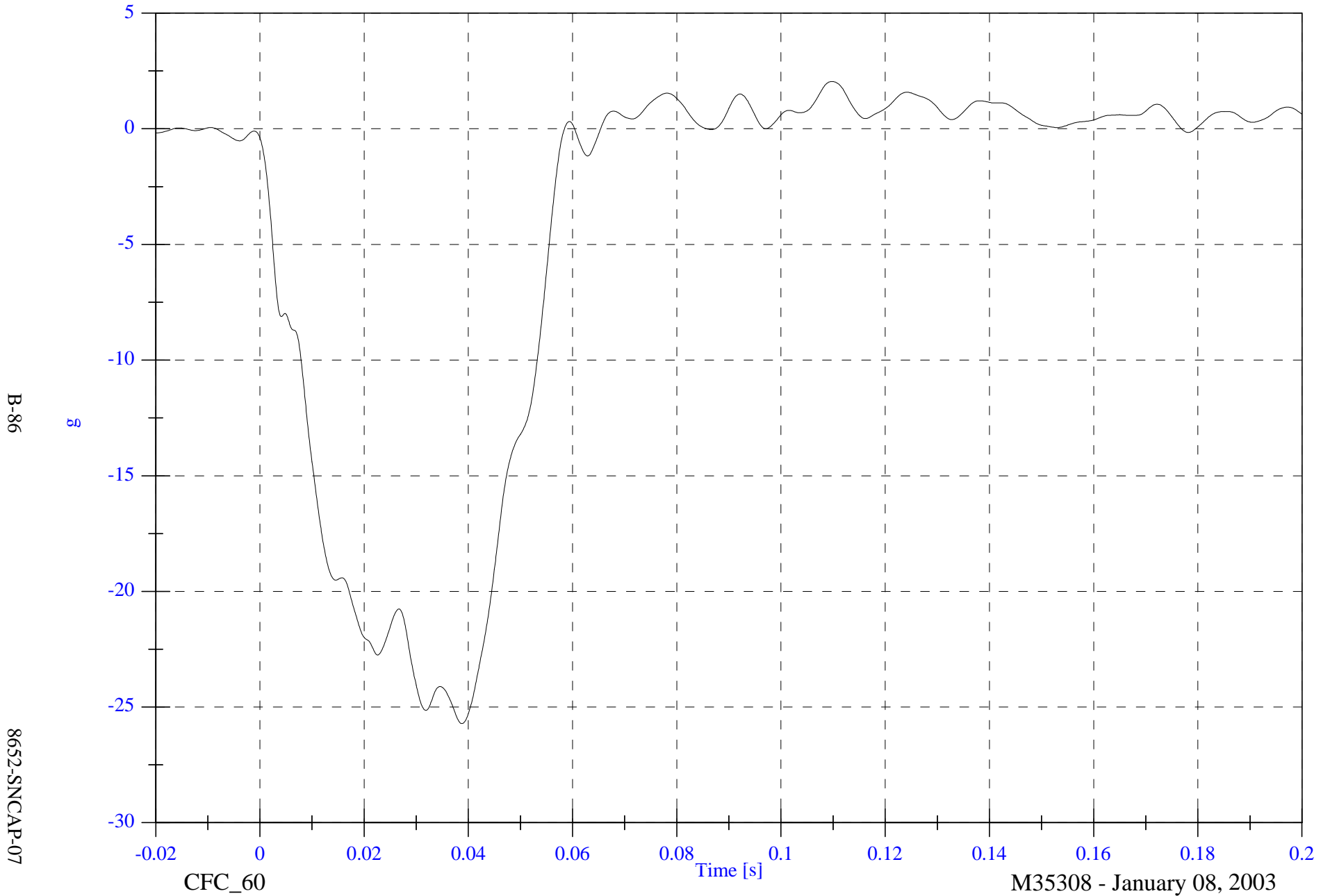
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V1 Moving Barrier Left Rail X

Max: 2.0 [g] at 0.110 [s]

Min: -25.7 [g] at 0.039 [s]

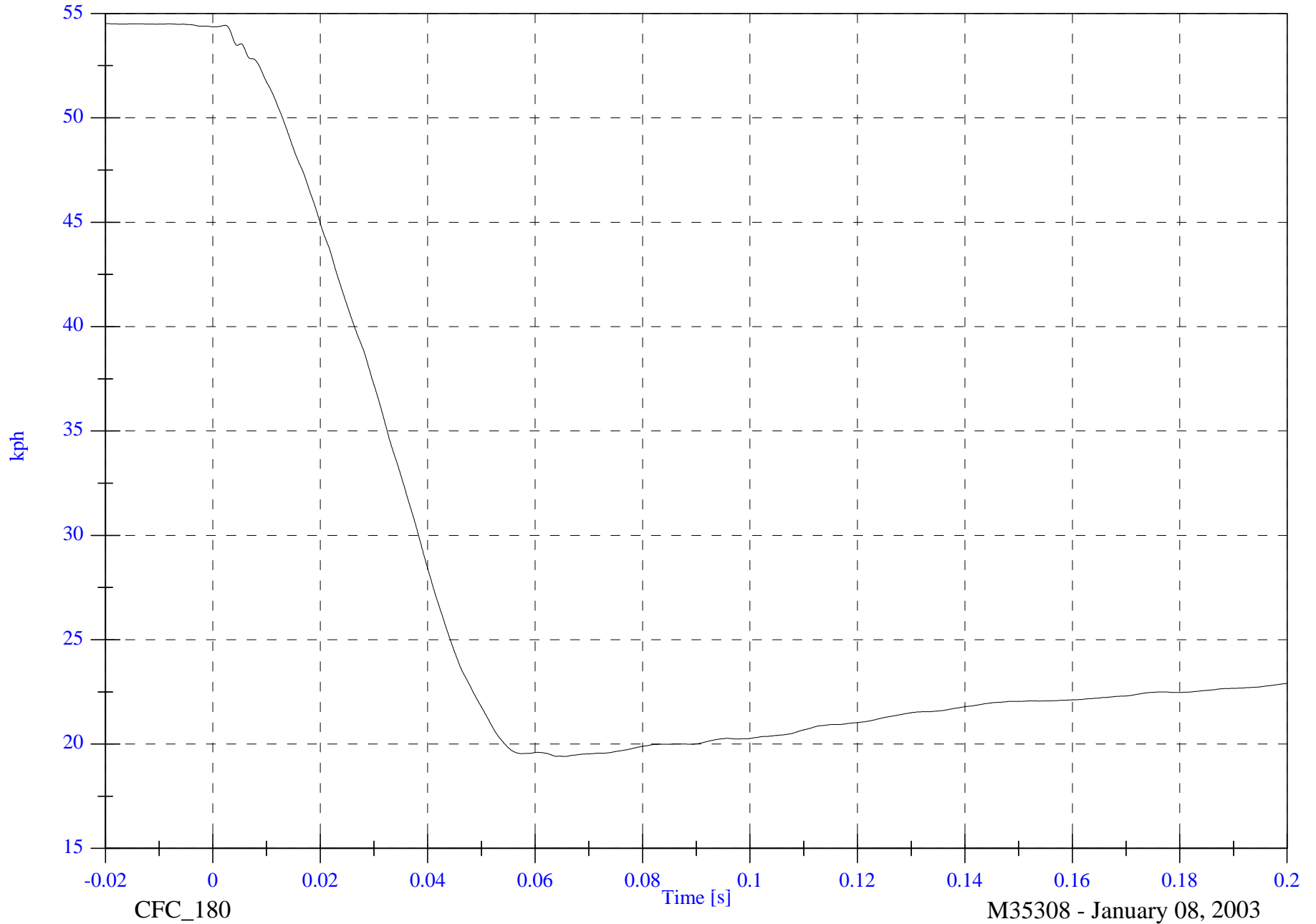


SNCAP Test #2 - 2003 Honda S2000 Convertible

V1 Moving Barrier Left Rail X Velocity

Max: 54.5 [kph] at -0.020 [s]

Min: 19.4 [kph] at 0.065 [s]



B-87

8652-SNCAP-07

CFC_180

Time [s]

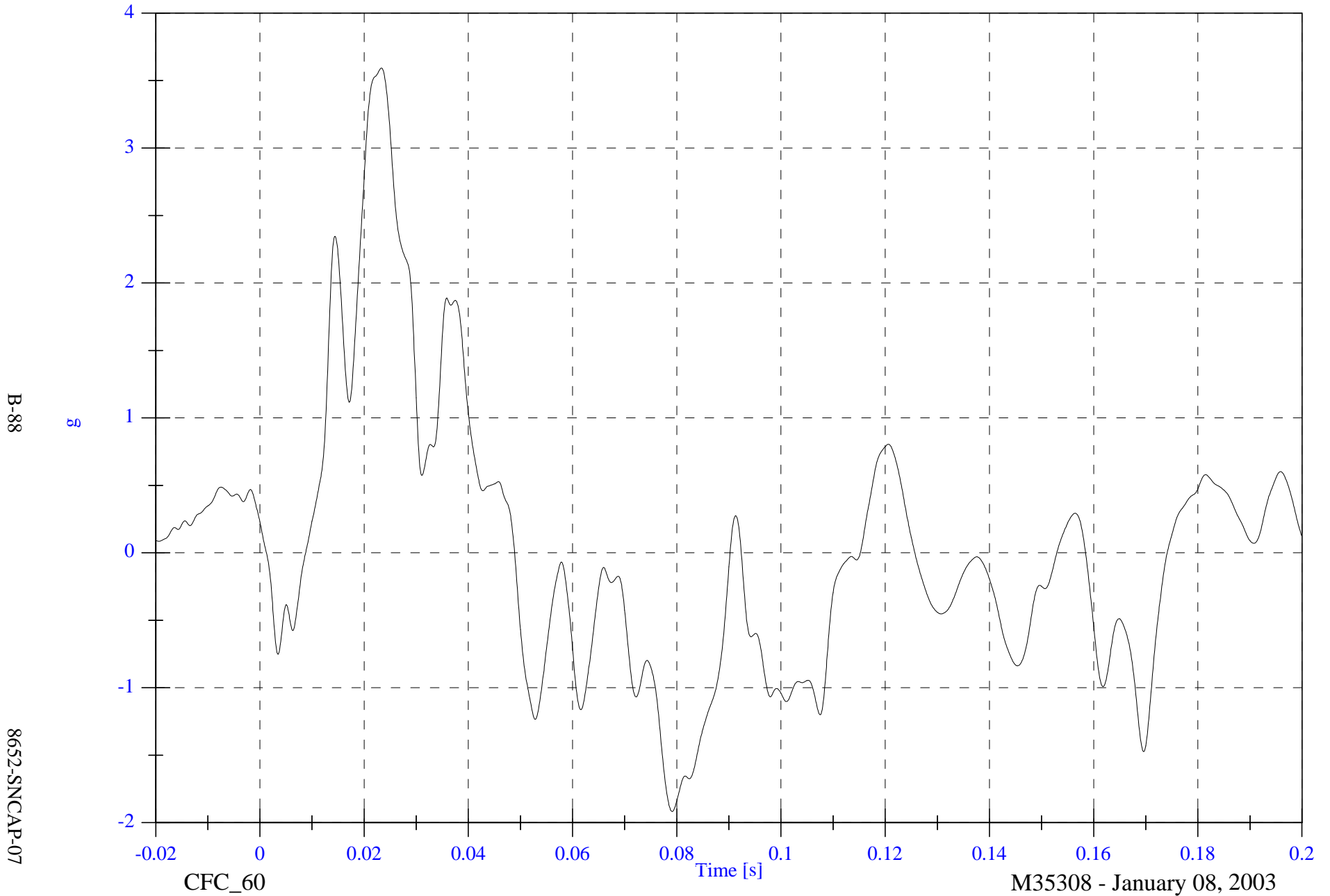
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V1 Moving Barrier Left Rail Y

Max: 3.6 [g] at 0.023 [s]

Min: -1.9 [g] at 0.079 [s]



SNCAP Test #2 - 2003 Honda S2000 Convertible

V1 Moving Barrier Left Rail Y Velocity

Max: 30.0 [kph] at 0.049 [s]

Min: 27.6 [kph] at 0.173 [s]



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8652-SNCAP-07

CFC_180

Time [s]

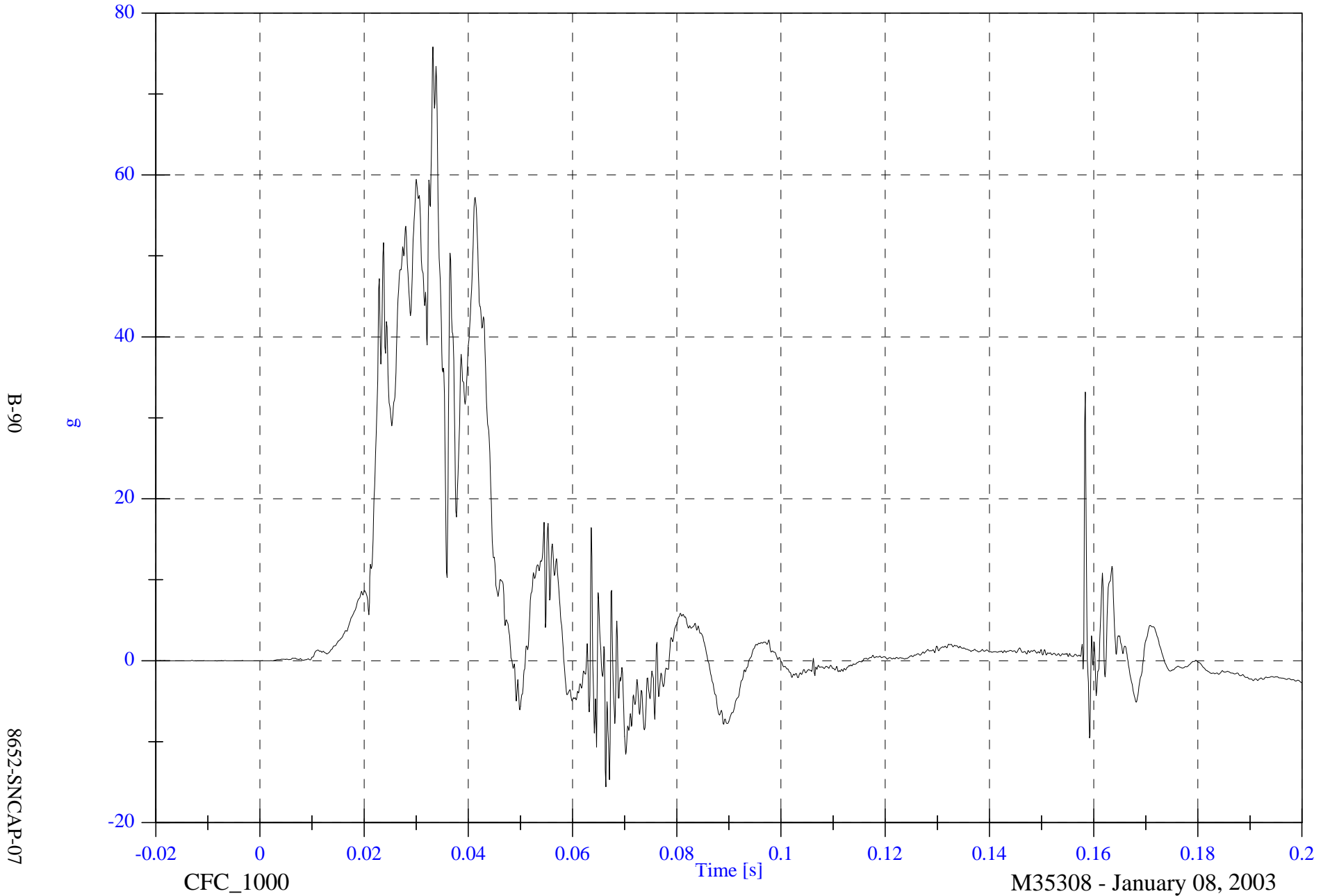
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Upper Rib Ry

Max: 75.8 [g] at 0.033 [s]

Min: -15.6 [g] at 0.066 [s]

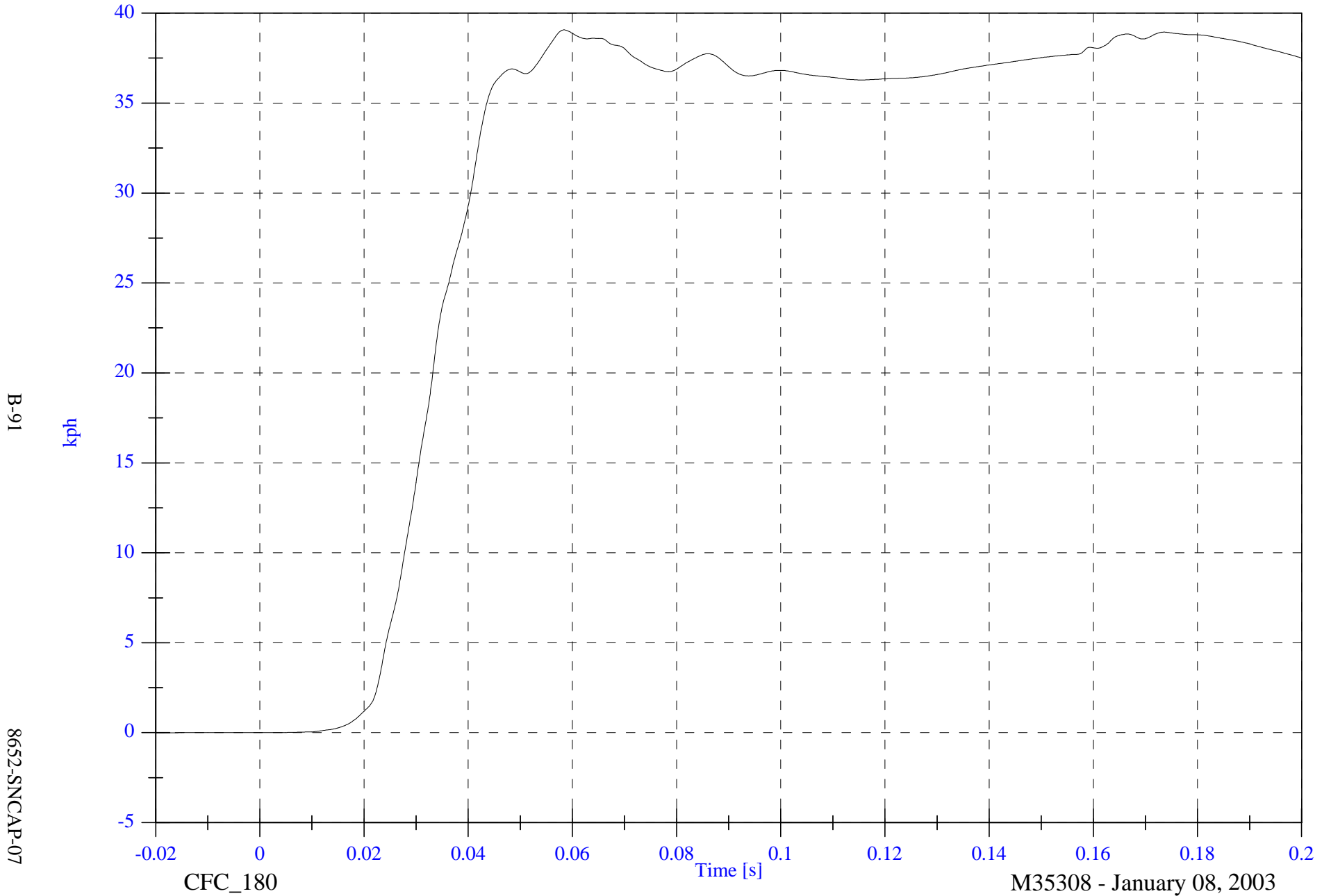


SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 39.1 [kph] at 0.058 [s]

V2P1 Upper Rib Ry Velocity

Min: -0.0 [kph] at -0.020 [s]



B-91

8652-SNCAP-07

CFC_180

Time [s]

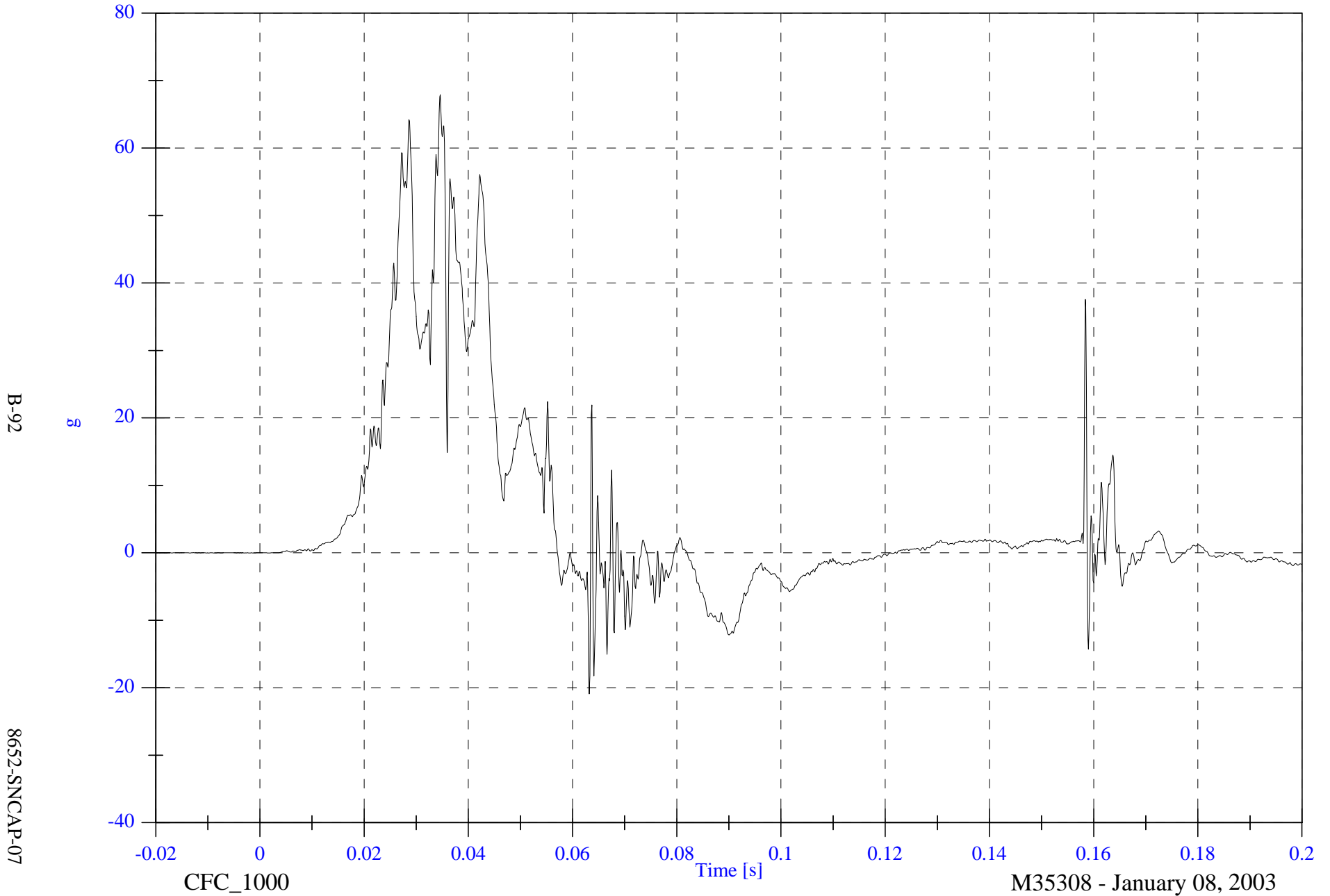
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Lower Rib Ry

Max: 67.9 [g] at 0.035 [s]

Min: -20.9 [g] at 0.063 [s]

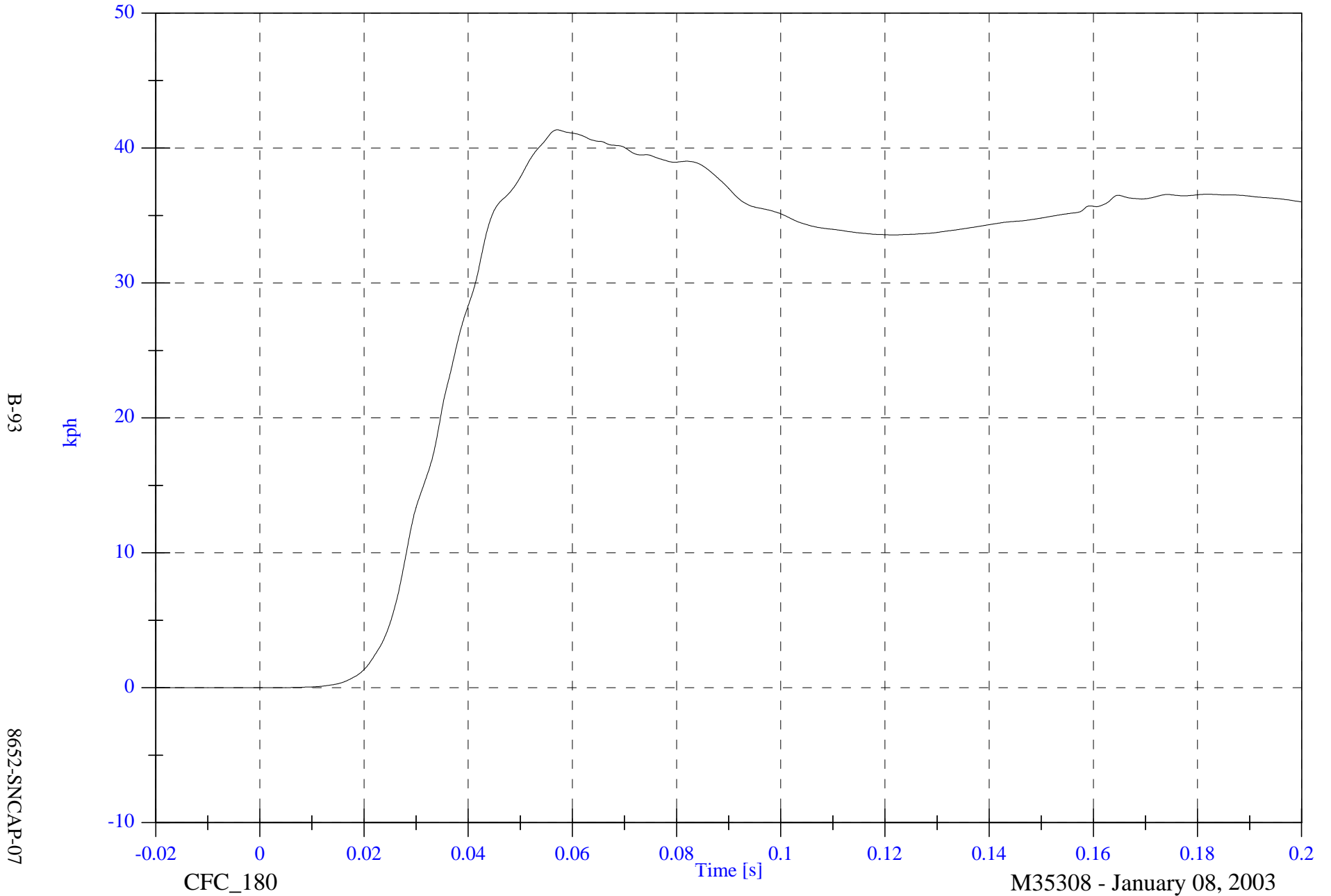


SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Lower Rib Ry Velocity

Max: 41.3 [kph] at 0.057 [s]

Min: -0.0 [kph] at -0.000 [s]



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8652-SNCAP-07

CFC_180

Time [s]

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Lower Spine Ry

Max: 56.5 [g] at 0.040 [s]

Min: -22.9 [g] at 0.068 [s]



B-94

8652-SNCAP-07

CFC_180

Time [s]

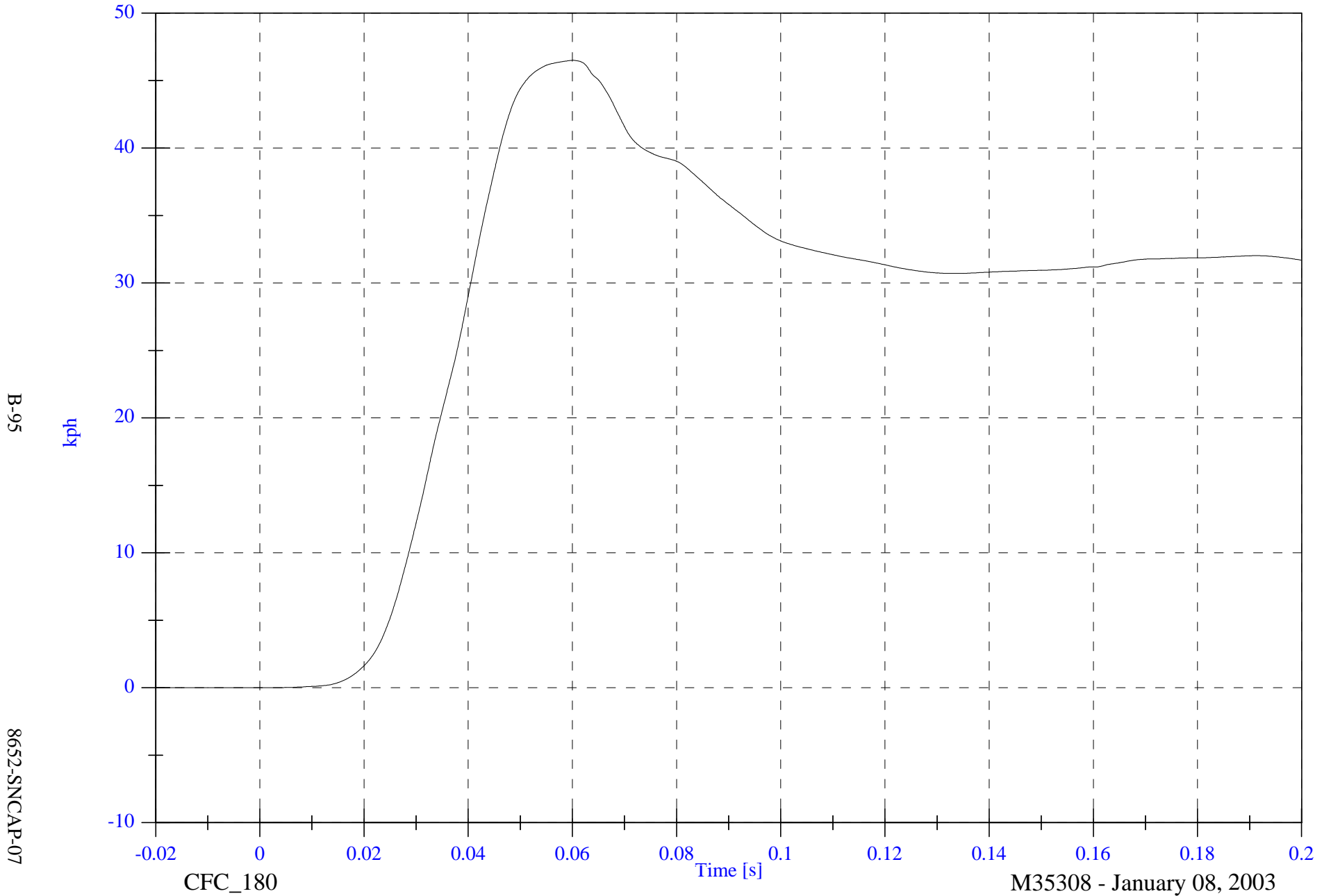
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Lower Spine Ry Velocity

Max: 46.5 [kph] at 0.060 [s]

Min: -0.0 [kph] at -0.015 [s]



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8652-SNCAP-07

CFC_180

Time [s]

M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Pelvic Ry

Max: 56.0 [g] at 0.030 [s]

Min: -6.4 [g] at 0.100 [s]

B-96

8652-SNCAP-07

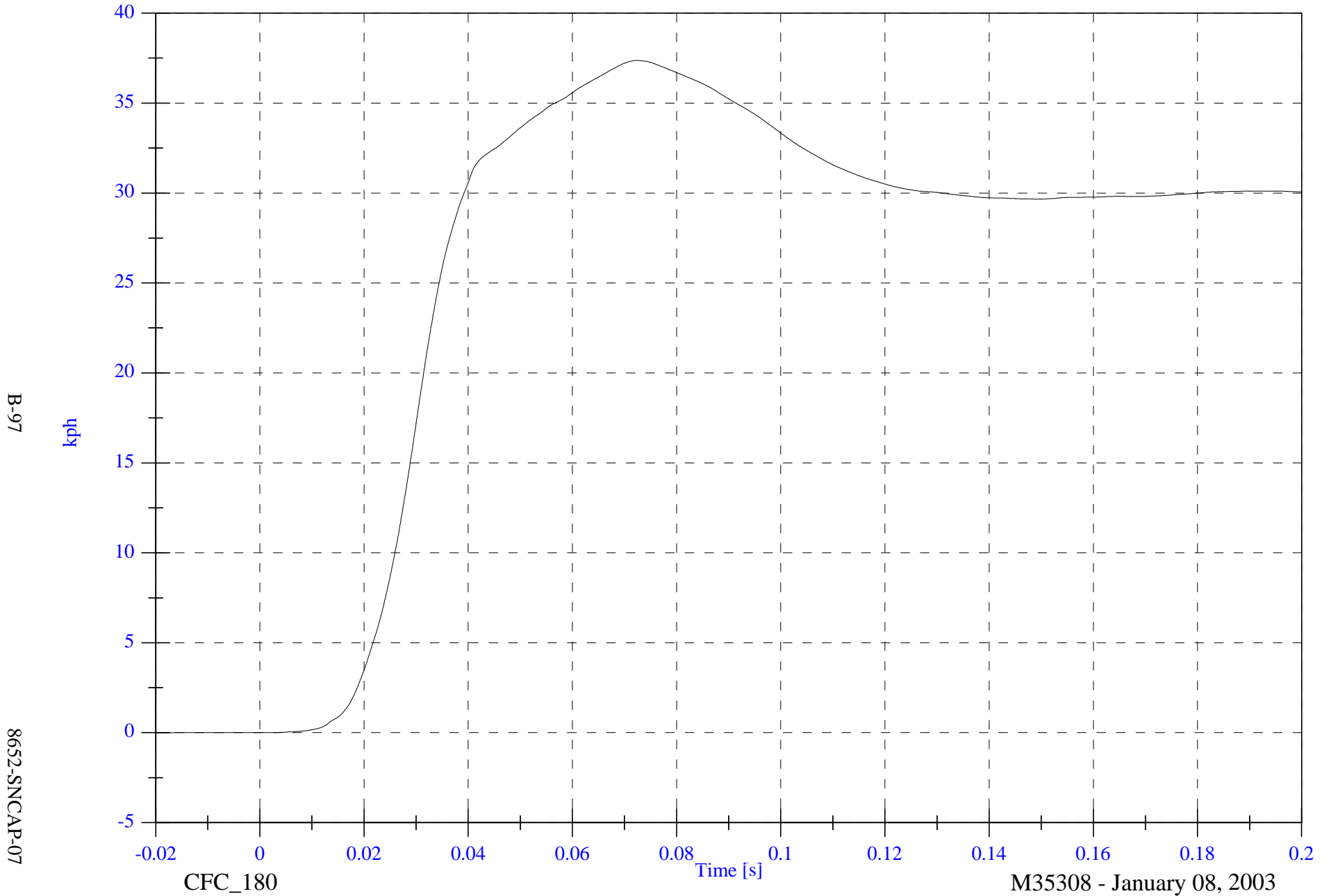


SNCAP Test #2 - 2003 Honda S2000 Convertible

Max: 37.4 [kph] at 0.072 [s]

V2P1 Pelvic Ry Velocity

Min: -0.0 [kph] at -0.018 [s]



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8652-SNCAP-07

CFC_180

Time [s]

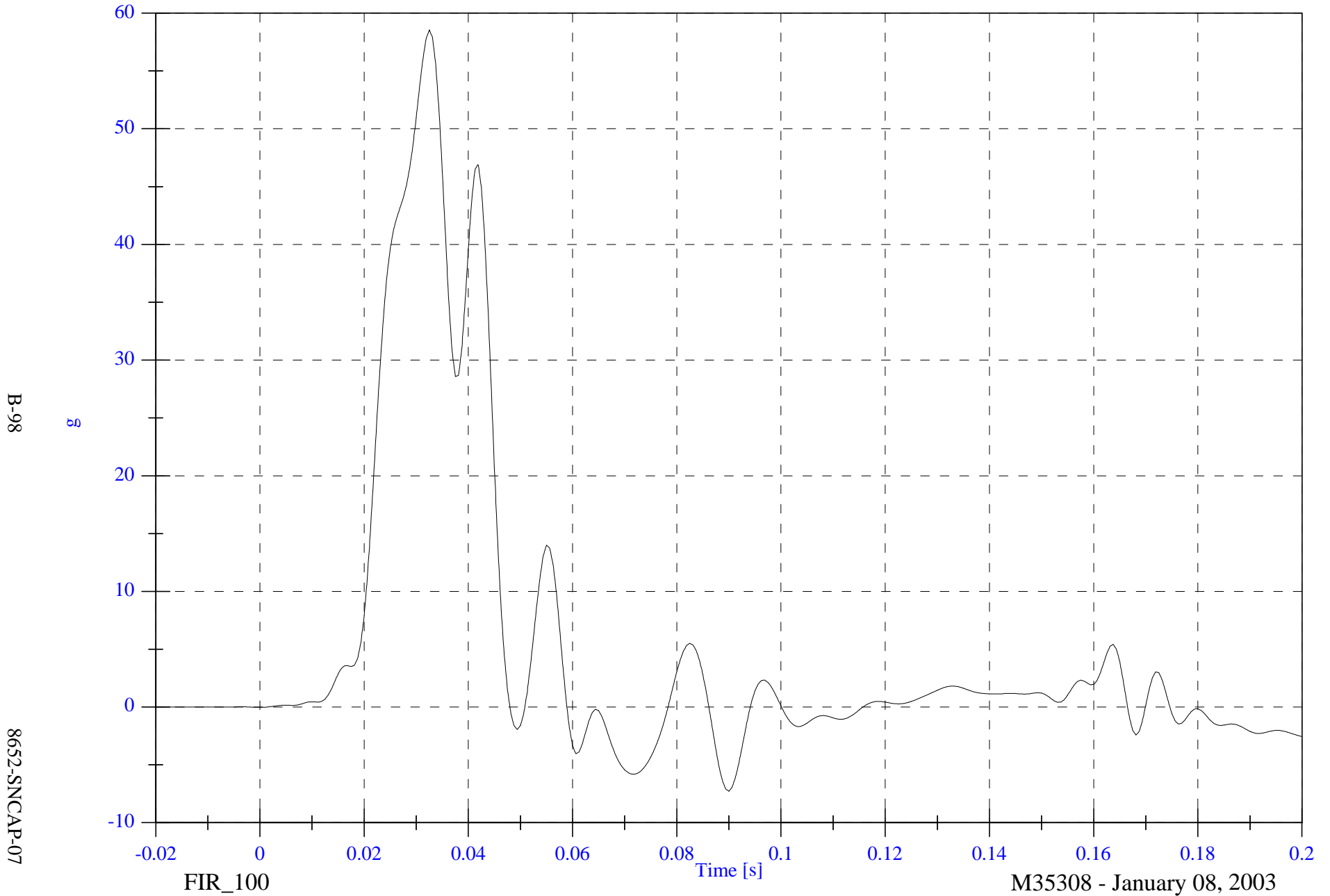
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Upper Rib Ry

Max: 58.5 [g] at 0.032 [s]

Min: -7.3 [g] at 0.090 [s]

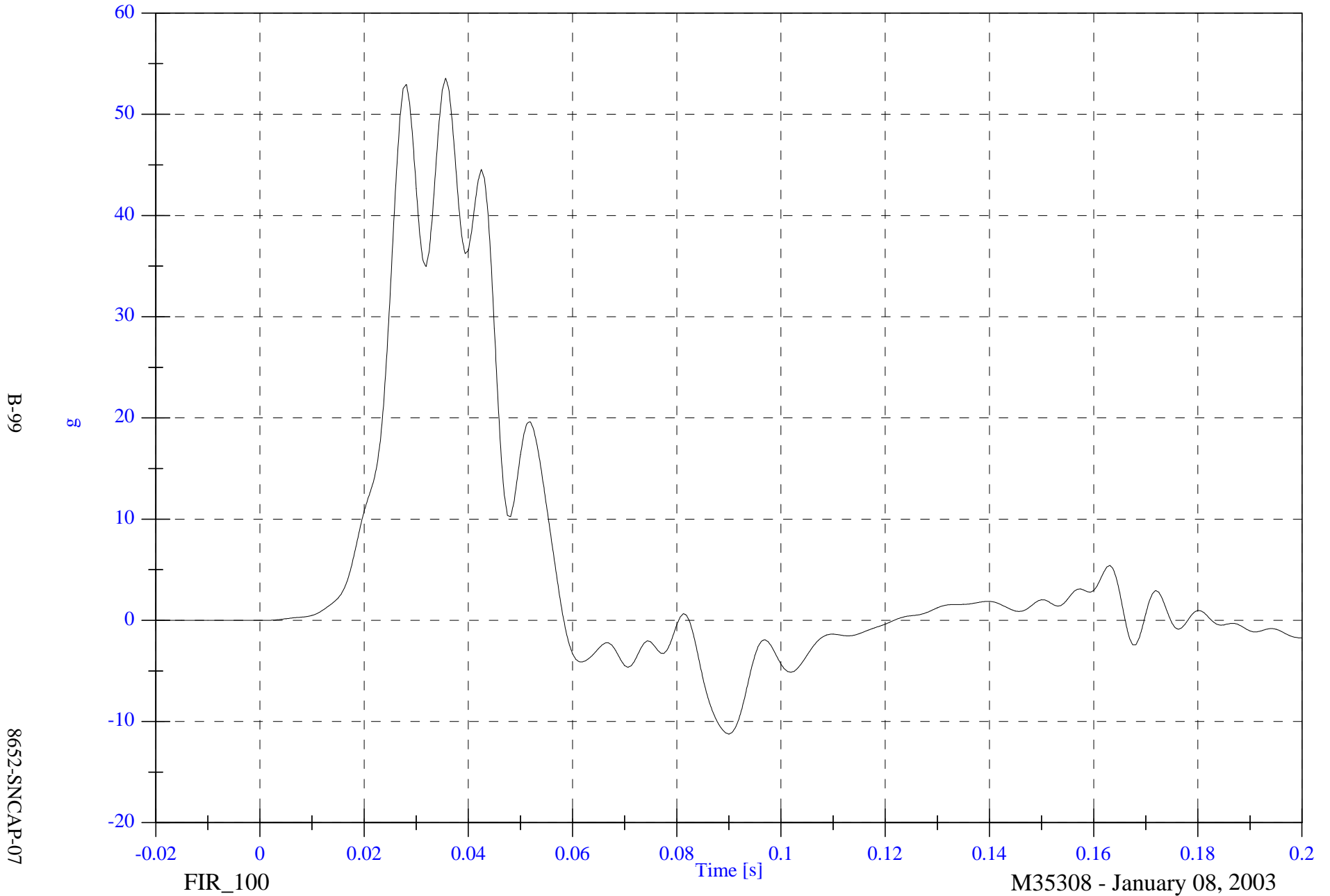


SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Lower Rib Ry

Max: 53.6 [g] at 0.036 [s]

Min: -11.2 [g] at 0.090 [s]



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8652-SNCAP-07

FIR_100

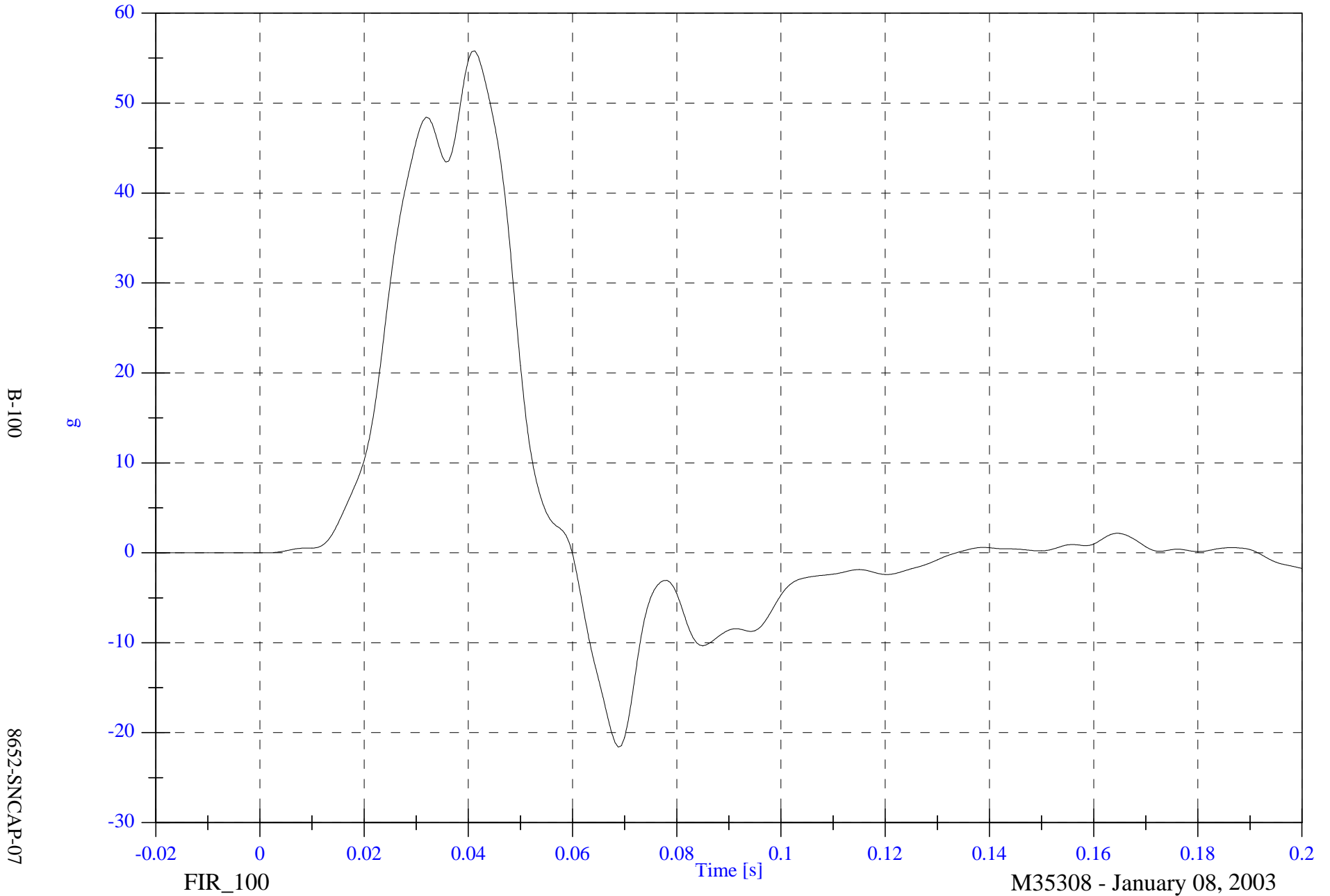
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Lower Spine Ry

Max: 55.8 [g] at 0.041 [s]

Min: -21.6 [g] at 0.069 [s]



B-100

8652-SNCAP-07

FIR_100

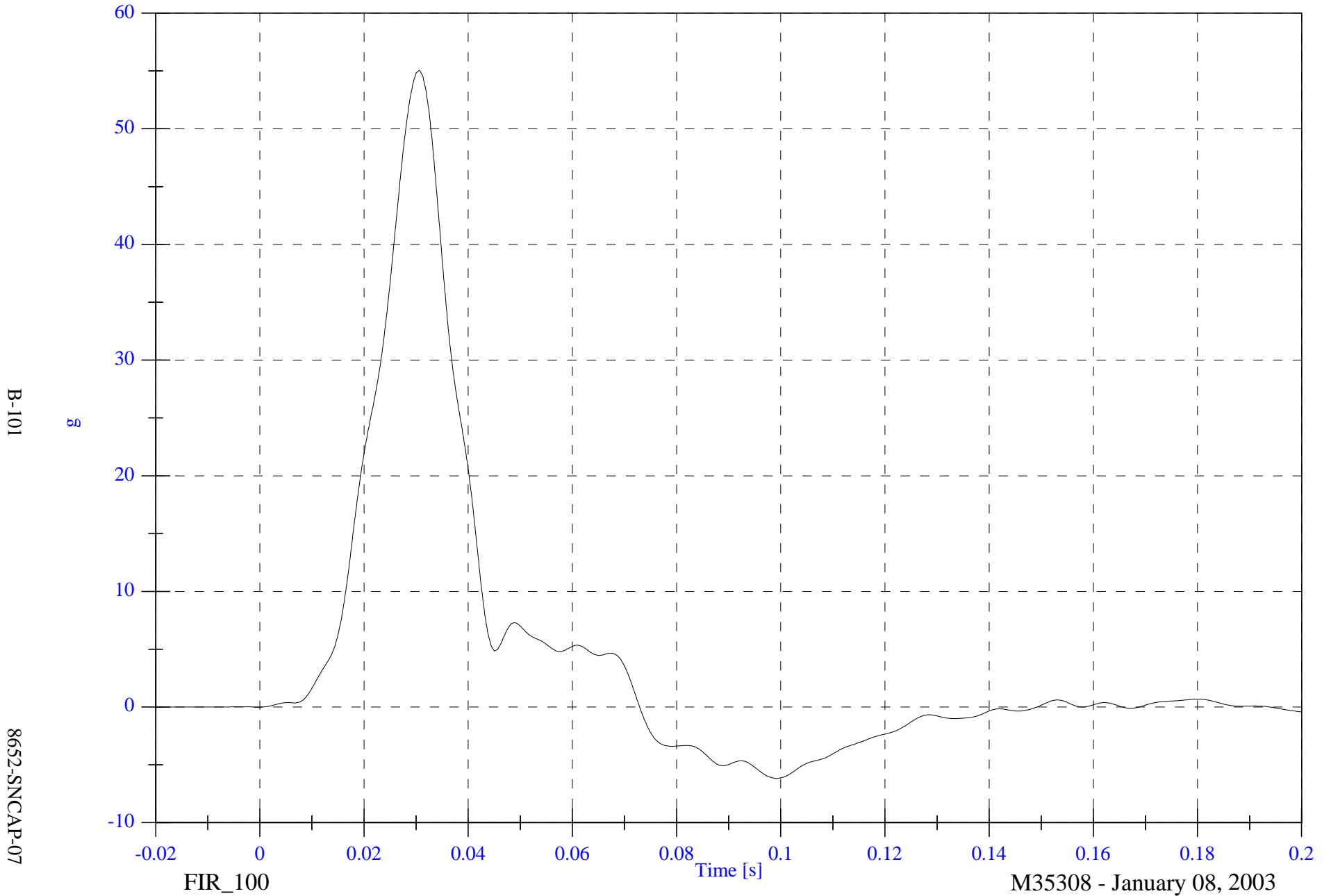
M35308 - January 08, 2003

SNCAP Test #2 - 2003 Honda S2000 Convertible

V2P1 Pelvic Ry

Max: 55.1 [g] at 0.031 [s]

Min: -6.2 [g] at 0.099 [s]



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8652-SNCAP-07

FIR_100

M35308 - January 08, 2003

APPENDIX C

SID HYBRID III CONFIGURATION AND PERFORMANCE VERIFICATION DATA

SUMMARY
SID H3 PRE & POST TEST CALIBRATION
CONFIGURED FOR LEFT SIDE IMPACT

Date: January 2, 2003

Sequential Test Number:

1.3

Laboratory Technician:

B. Swiecicki

TEST PARAMETER	SPECIFICATION	SID H3 015		SID H3 -	
		NO.:		NO.:	
		PRE TEST	POST TEST	PRE TEST	POST TEST
SH- Seated Height (mm)	889 - 909	902	902	-	-
RH- Rib Height (mm)	501 - 521	511	511	-	-
HP- Hip Pivot Height (mm)	99 ref.	99	99	-	-
RD- Rib from Back Line (mm)	229 - 241	236	236	-	-
KV- Knee Pivot from Back Line (mm)	511 - 526	521	521	-	-
SW- Knee Pivot to Floor (mm)	490 - 505	493	493	-	-
HW- Hip Width (mm)	356 - 391	373	376	-	-
THORAX IMPACTS					
TEMPERATURE (°C)	18.9 - 25.5	21.1	20.6	-	-
RELATIVE HUMIDITY (%)	10 - 70	30	39	-	-
PROBE SPEED (m/s)	4.27 - 4.33	4.32	4.28	-	-
UPPER RIB (g's)	37 - 46	39.83	39	-	-
LOWER RIB (g's)	37 - 46	38.85	39.25	-	-
LOWER SPINE (g's)	15 - 22	18.97	18.71	-	-
PELVIS IMPACT					
TEMPERATURE (°C)	18.9 - 25.5	21.1	20.6	-	-
RELATIVE HUMIDITY (%)	10 - 70	32	36	-	-
PROBE SPEED (m/s)	4.27 - 4.33	4.32	4.31	-	-
PELVIS (g's)	40 - 60	51.78	46.53	-	-

REMARKS: None

CALIBRATION TEST RESULTS

PRE-TEST

SID H3 NO.: 015

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 2, 2003 Laboratory Technician: B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
THORACIC SHOCK ABSORBER TEST	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
HEAD DROP TEST*	Passed all requirements.
LATERAL NECK BEND TEST*	Passed all requirements.
ABDOMINAL COMPRESSION TEST*	Passed all requirements.
LUMBAR FLEXION TEST*	Passed all requirements.

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 2, 2003 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 – 909	902
RH- Rib Height (mm)	502 – 520	511
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 – 241	236
KH- Knee Pivot from Back Line (mm)	511 – 526	521
KV- Knee Pivot to Floor (mm)	490 – 505	493
HW- Hip Width (mm)	356 - 391	373

REMARKS: None

**THORACIC SHOCK ABSORBER TESTS
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 3
 Date: May 13, 2002 Laboratory Technician: B. Swiecicki

DAMPER IDENTIFICATION: 015

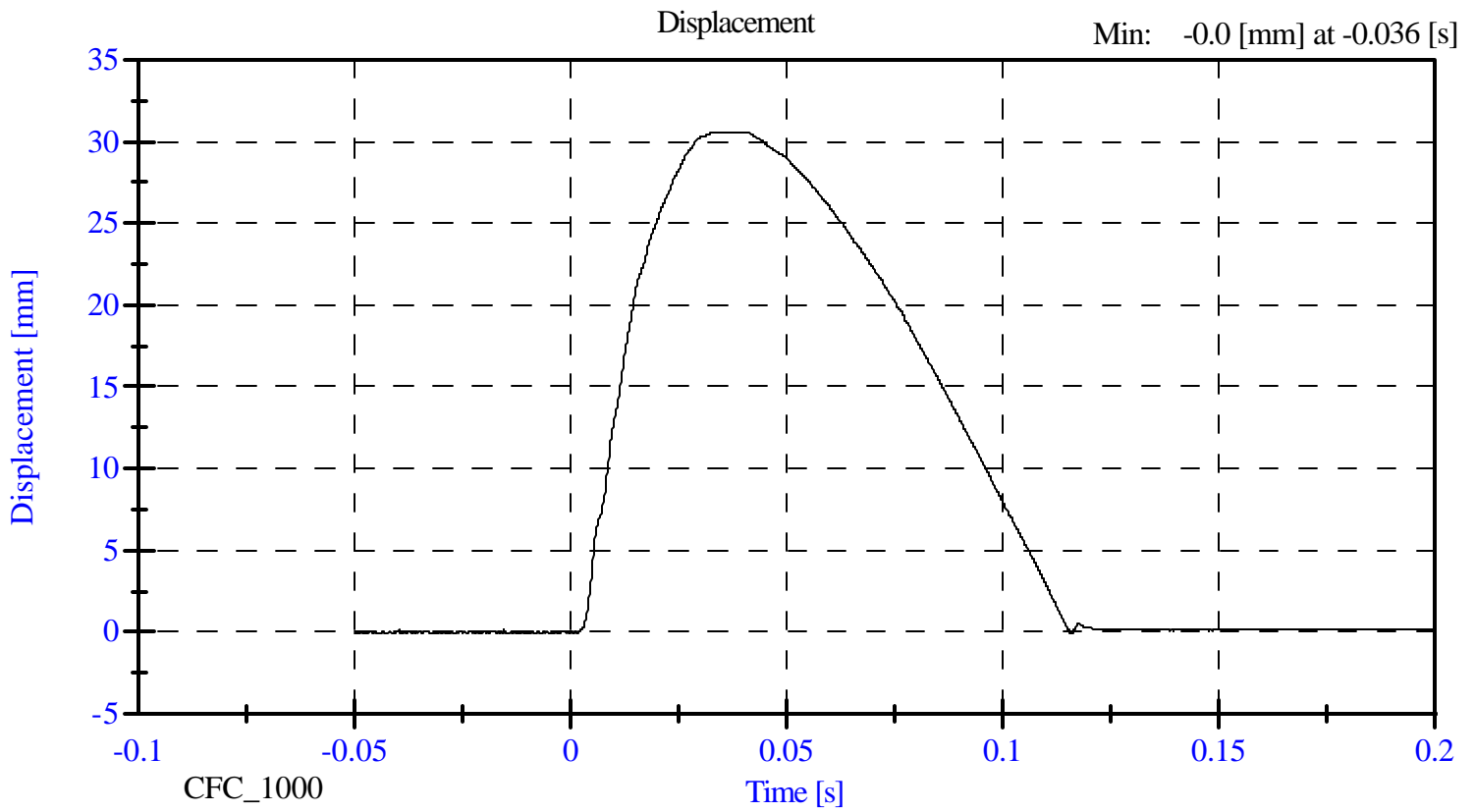
TEST PARAMETER		SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)		18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)		10 - 70	45.0
VELOCITY 3.05 m/s	FORCE (N)	836 - 1125	1051.94
	DISPLACEMENT (mm)	30 - 35	30.61
VELOCITY 4.27 m/s	FORCE (N)	1730 - 2099	2085.78
	DISPLACEMENT (mm)	32 - 37	33.36
VELOCITY 6.10 m/s	FORCE (N)	3741 - 4448	4295.41
	DISPLACEMENT (mm)	33 - 40	37.29

DAMPER SETTING: 5

REMARKS: None

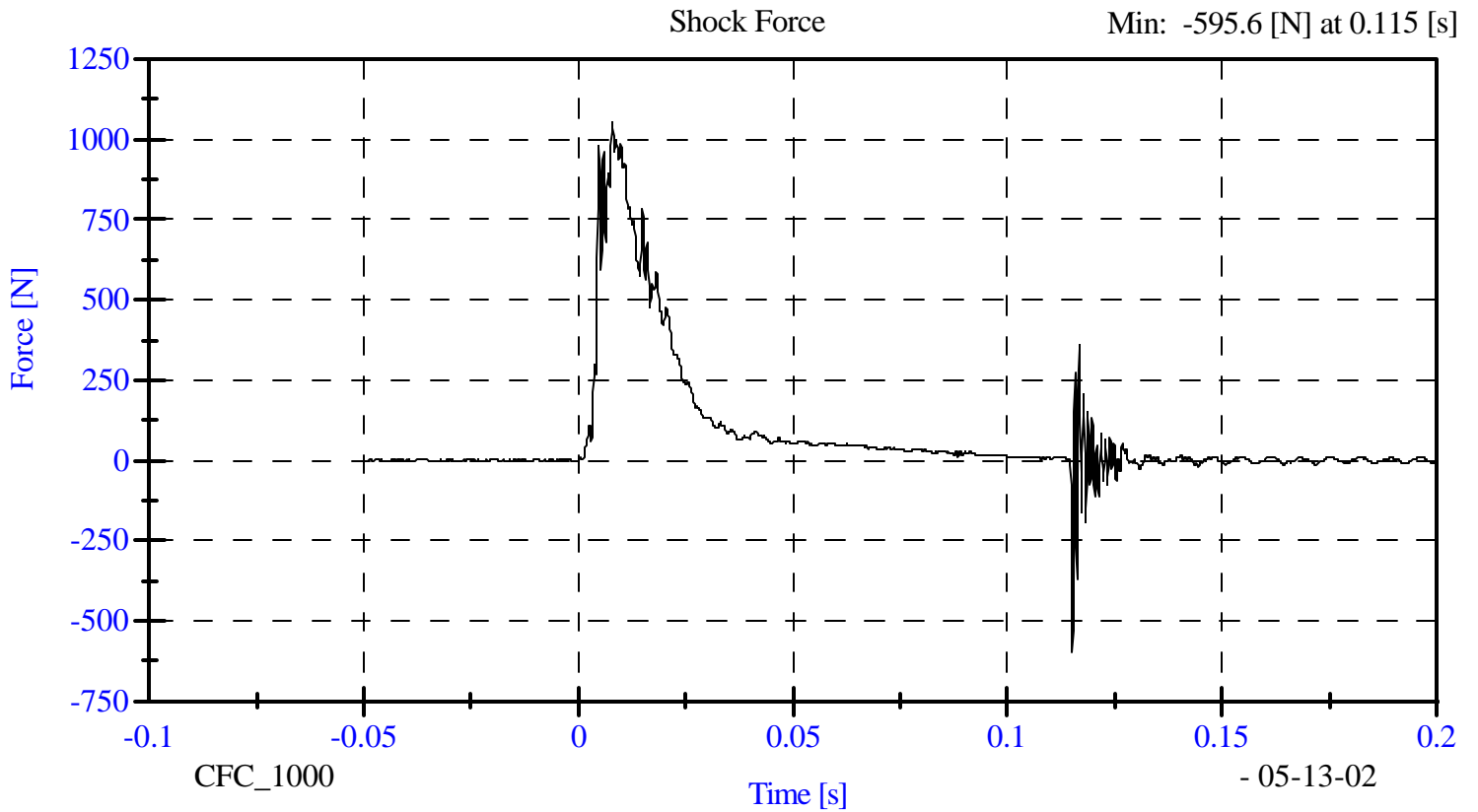
Max: 30.6 [mm] at 0.039 [s]

Min: -0.0 [mm] at -0.036 [s]



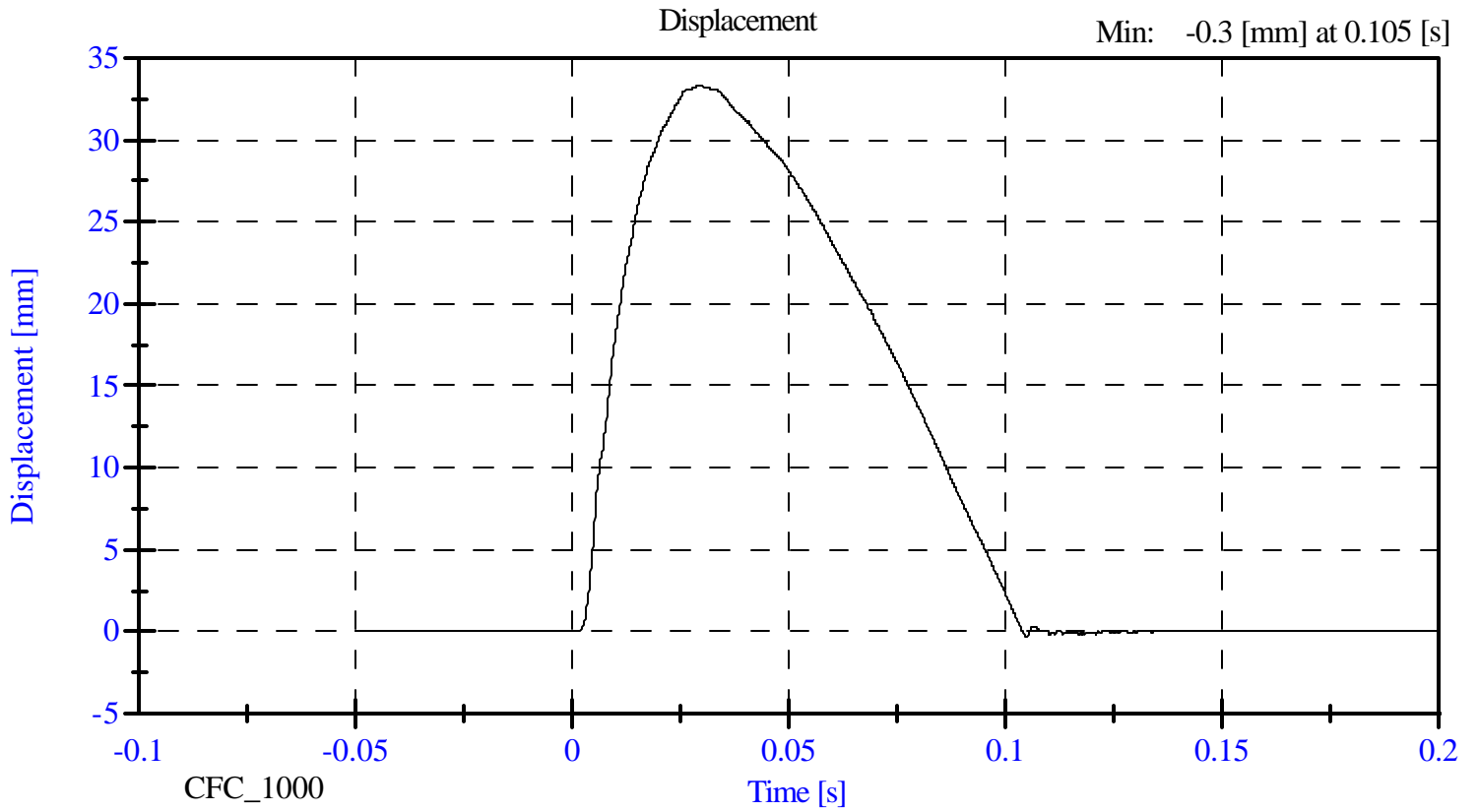
Max: 1051.9 [N] at 0.008 [s]

Min: -595.6 [N] at 0.115 [s]



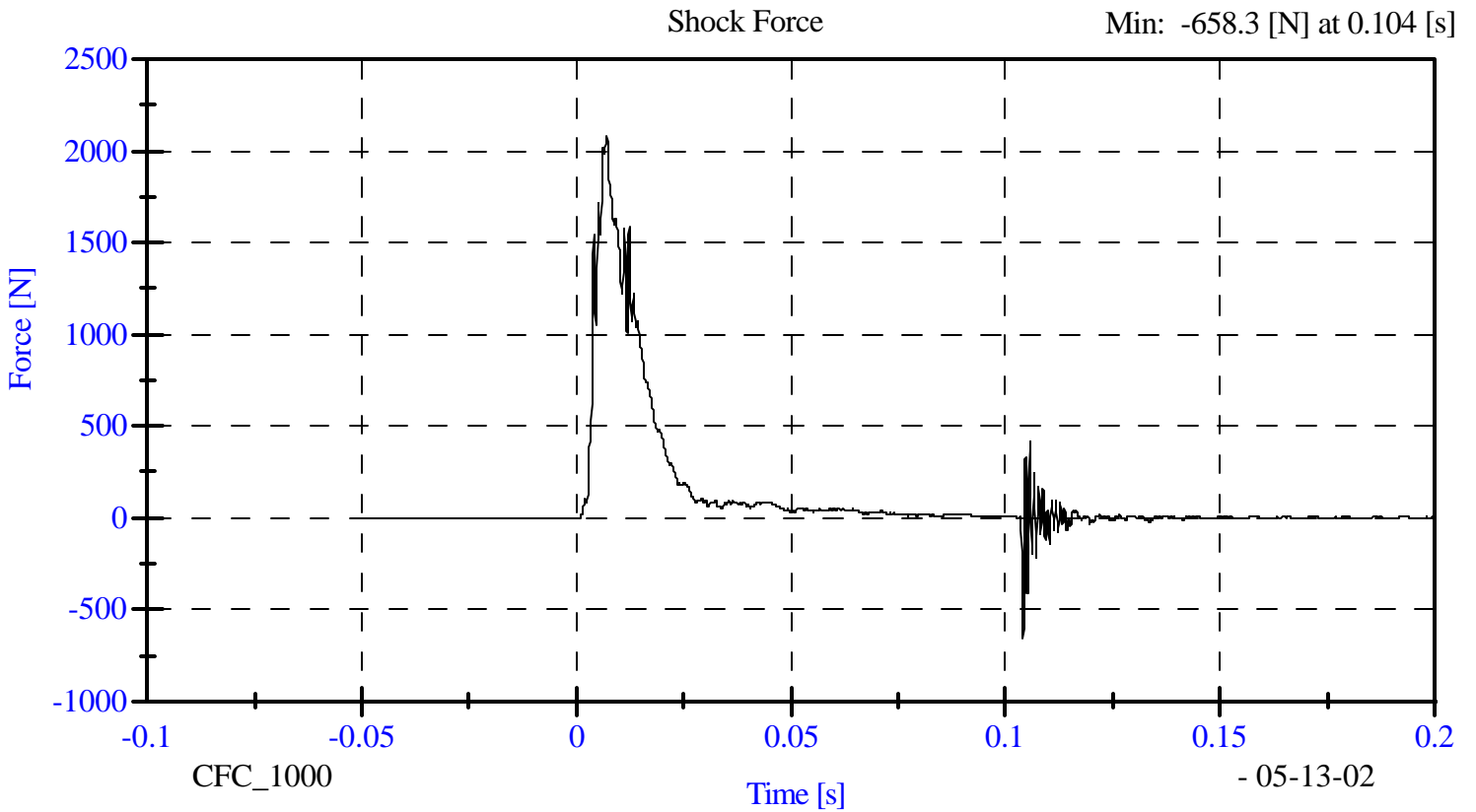
Max: 33.4 [mm] at 0.030 [s]

Min: -0.3 [mm] at 0.105 [s]



Max: 2085.8 [N] at 0.007 [s]

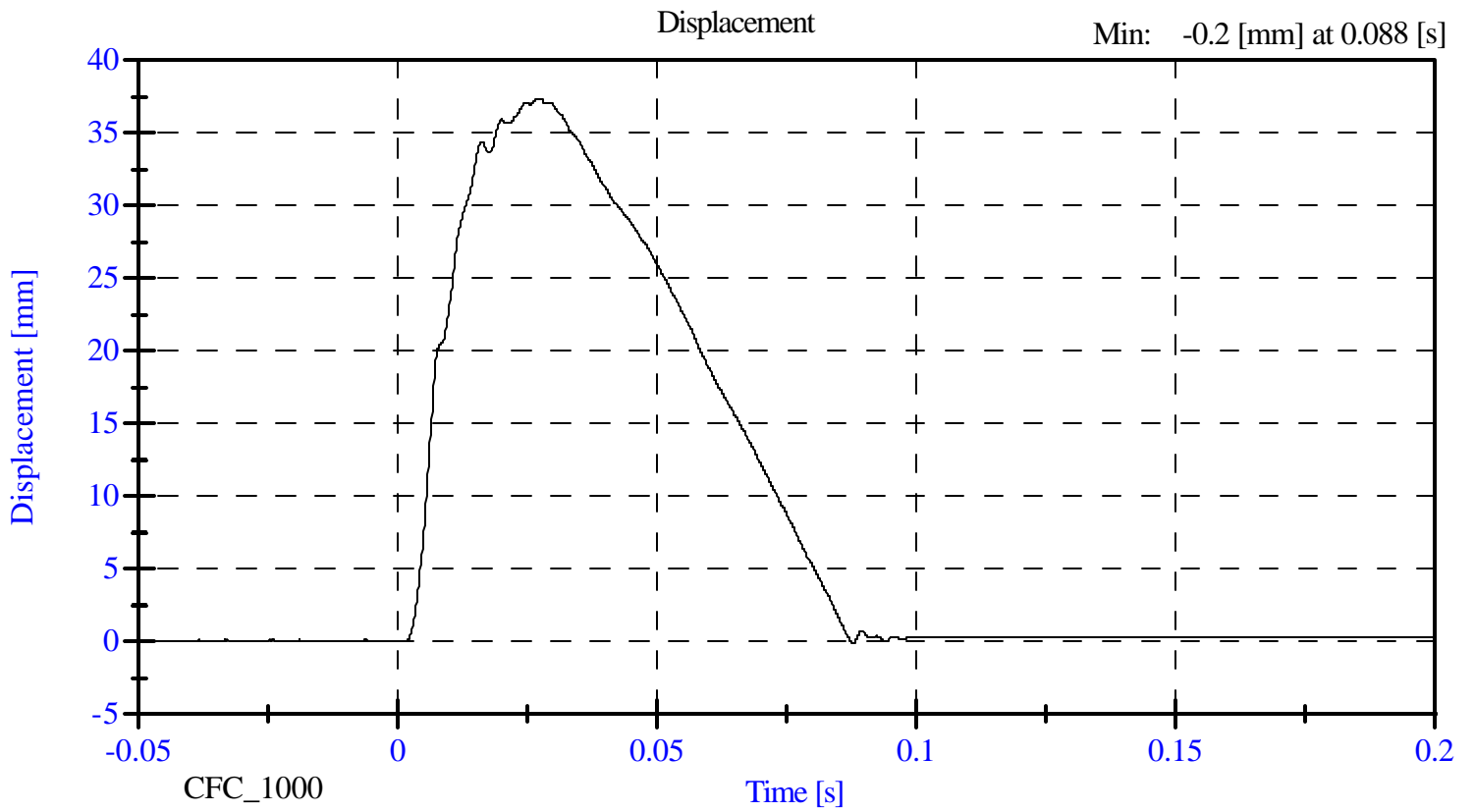
Min: -658.3 [N] at 0.104 [s]



- 05-13-02

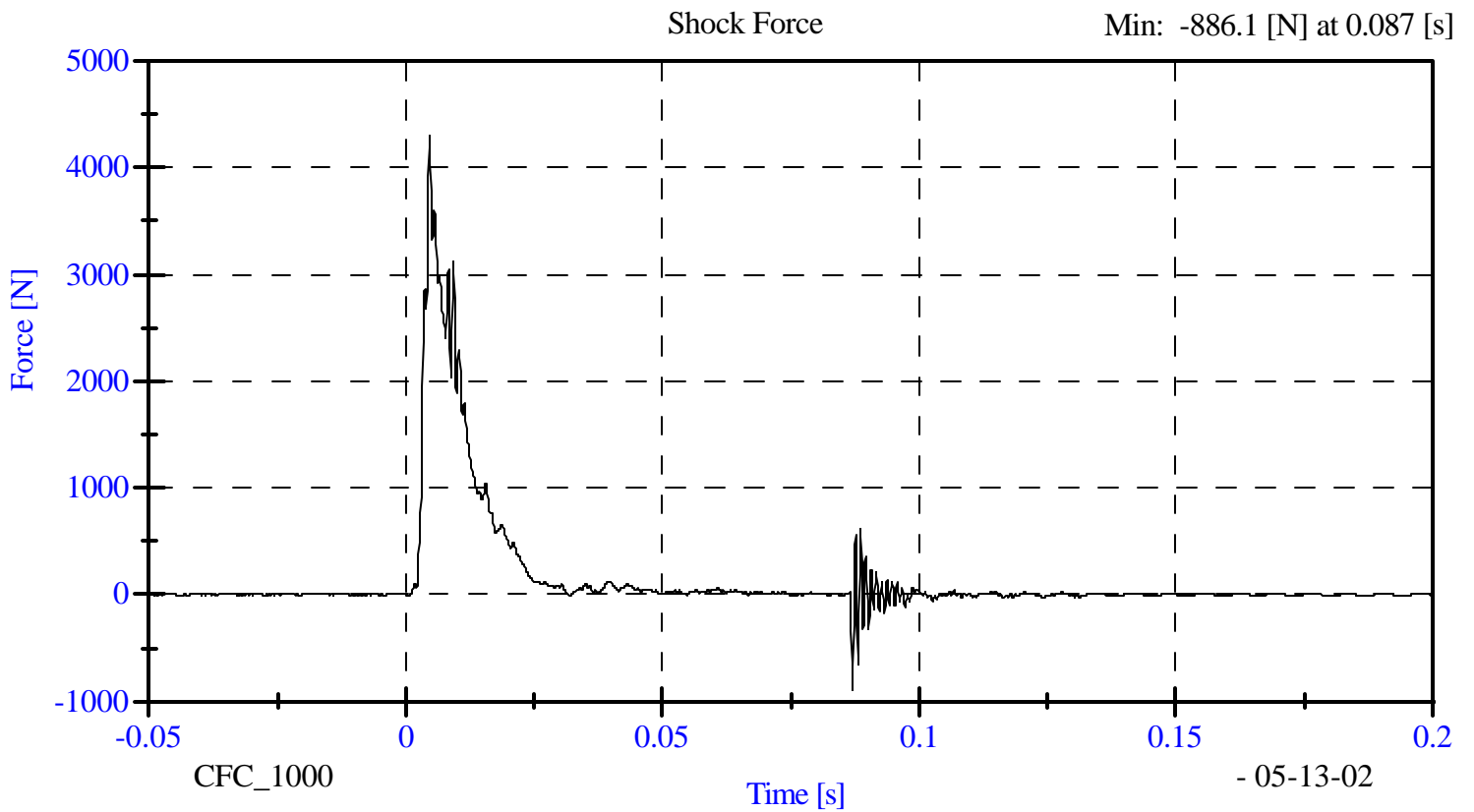
Max: 37.3 [mm] at 0.028 [s]

Min: -0.2 [mm] at 0.088 [s]



Max: 4295.4 [N] at 0.005 [s]

Min: -886.1 [N] at 0.087 [s]



- 05-13-02

**LATERAL THORAX IMPACT TEST
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 2, 2003 Laboratory Technician: B. Swiecicki

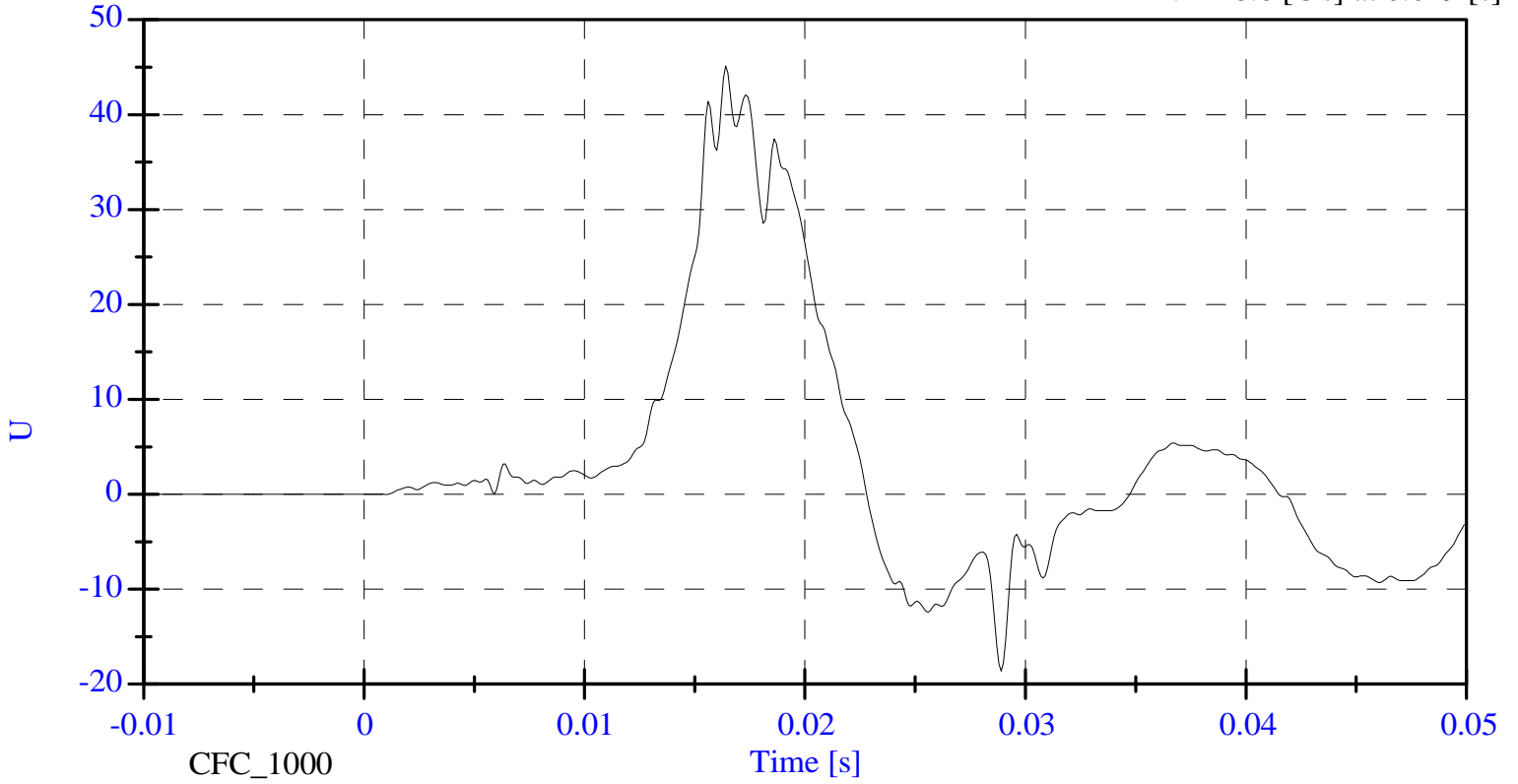
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	30.0
PROBE SPEED (m/s)	4.27 - 4.33	4.32
UPPER RIB (g's)	37 - 46	39.83
LOWER RIB (g's)	37 - 46	38.85
LOWER SPINE (g's)	15 - 22	18.97

REMARKS: None

Max: 45.1 [G's] at 0.016 [s]

Min: -18.6 [G's] at 0.029 [s]

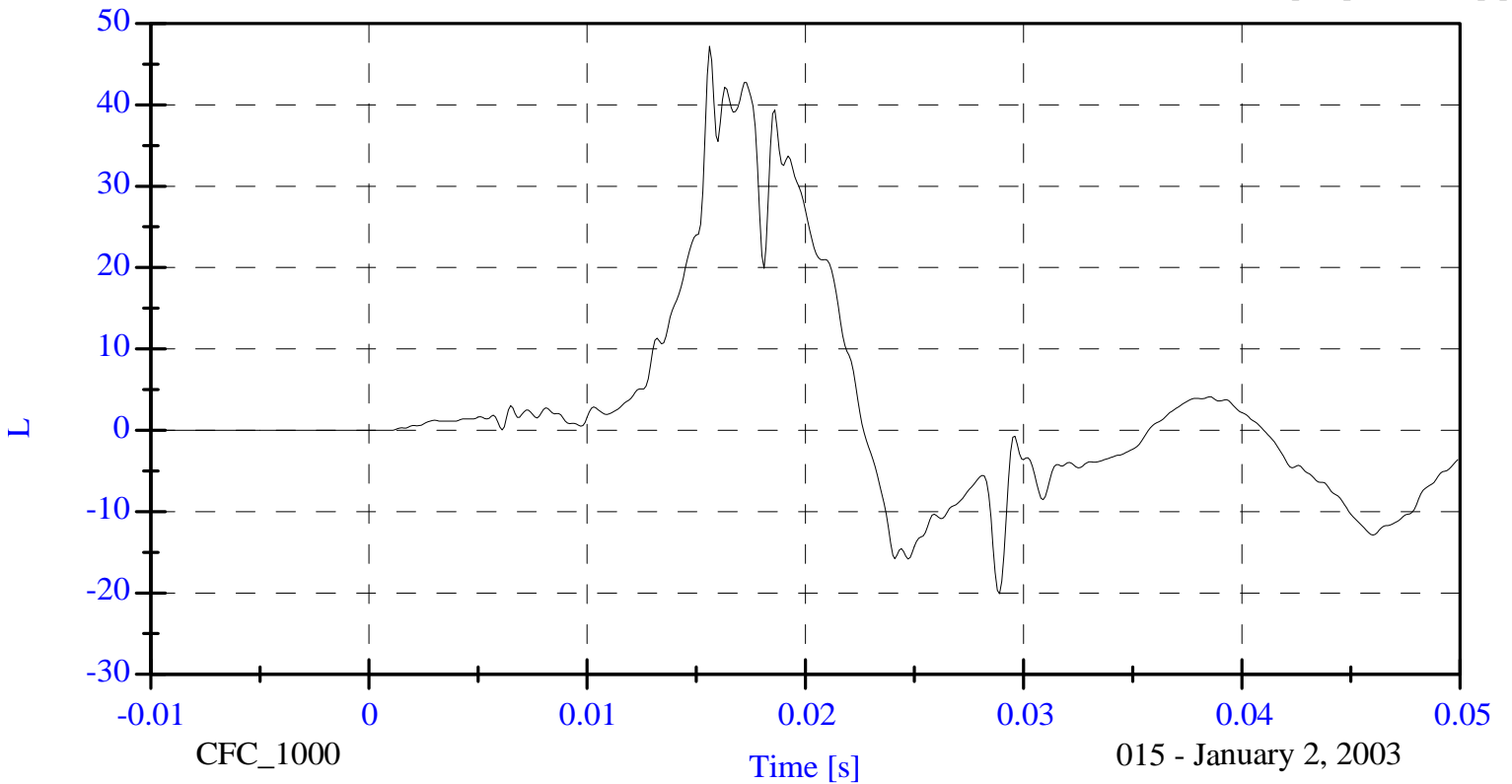
Upper Rib Y Acceleration



Max: 47.2 [G's] at 0.016 [s]

Min: -20.1 [G's] at 0.029 [s]

Lower Rib Y Acceleration

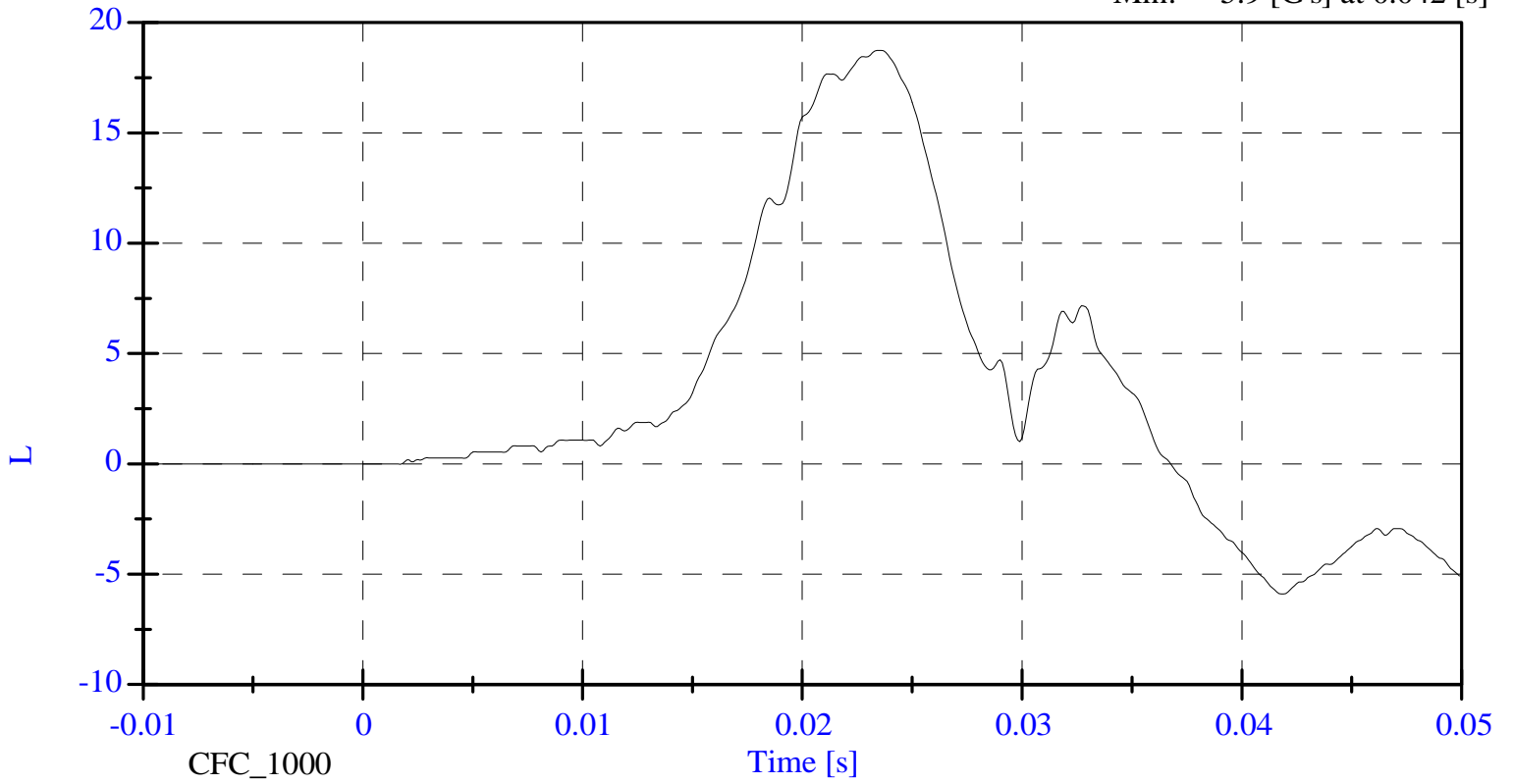


015 - January 2, 2003

Max: 18.7 [G's] at 0.023 [s]

Min: -5.9 [G's] at 0.042 [s]

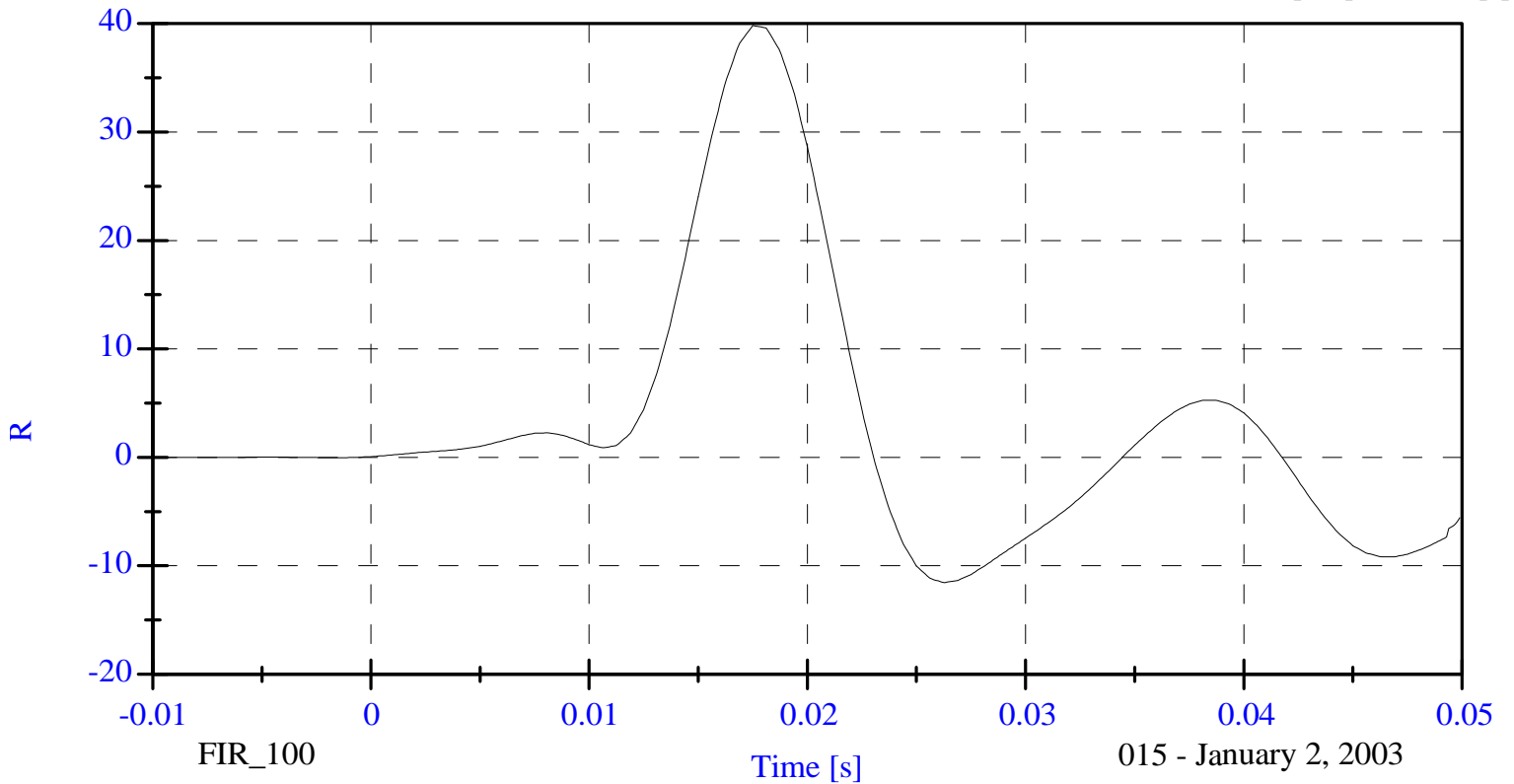
Lower Spine Y Acceleration



Max: 39.8 [G's] at 0.018 [s]

Min: -11.5 [G's] at 0.026 [s]

Upper Rib Y Acceleration

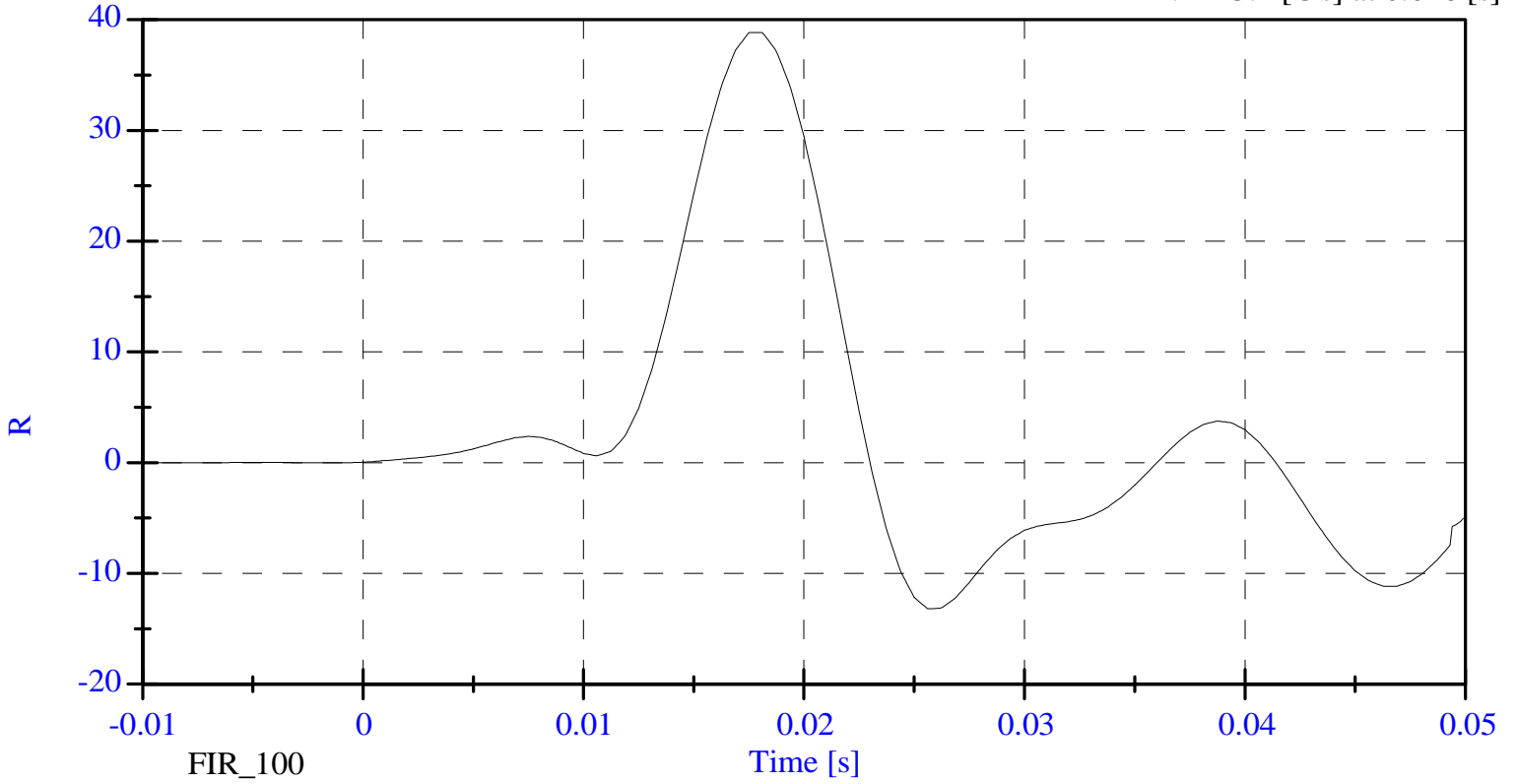


015 - January 2, 2003

Max: 38.9 [G's] at 0.018 [s]

Min: -13.2 [G's] at 0.026 [s]

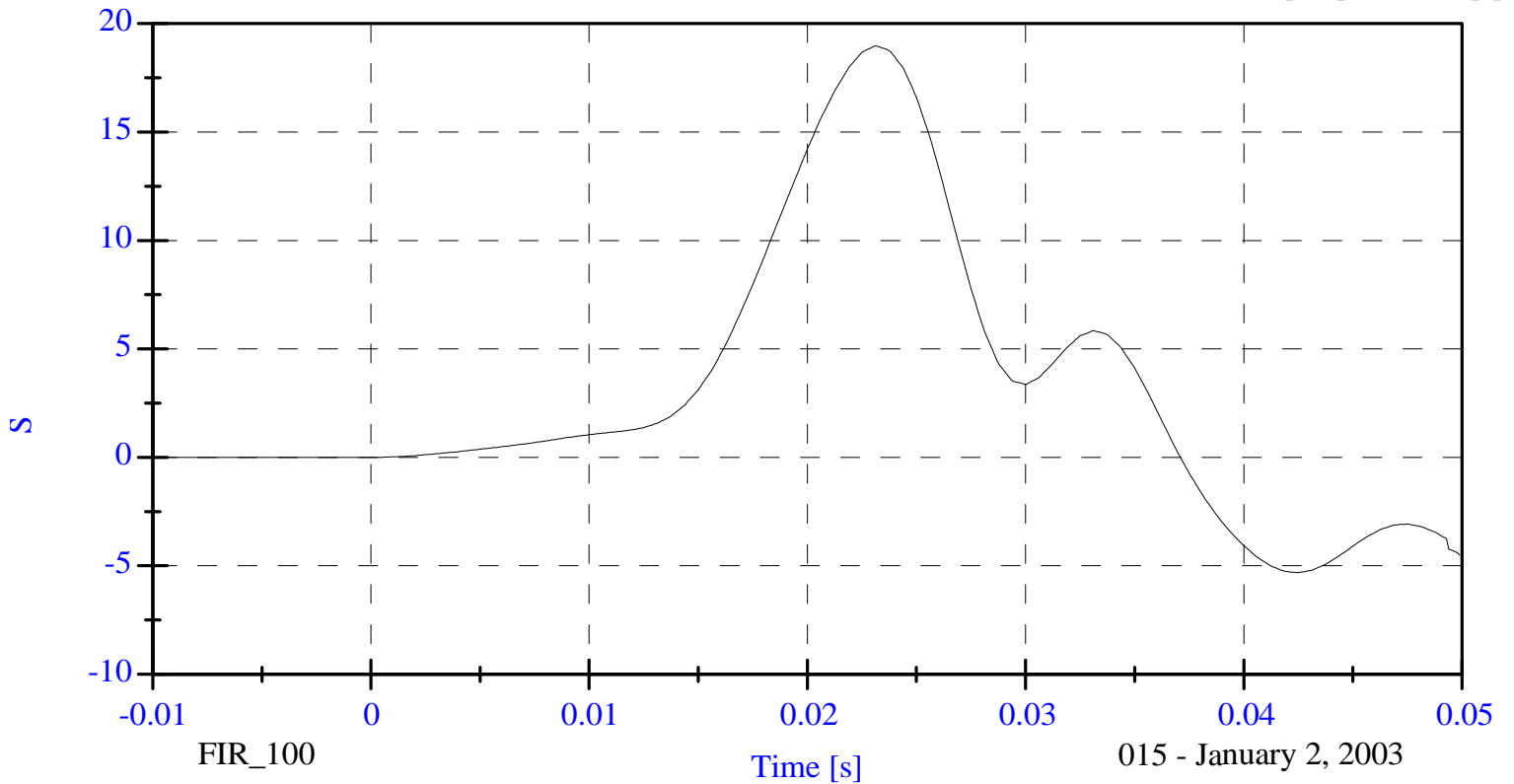
Lower Rib Y Acceleration



Max: 19.0 [G's] at 0.023 [s]

Min: -5.3 [G's] at 0.043 [s]

Lower Spine Y Acceleration



015 - January 2, 2003

**LATERAL PELVIS IMPACT TEST
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 2, 2003 Laboratory Technician: B. Swiecicki

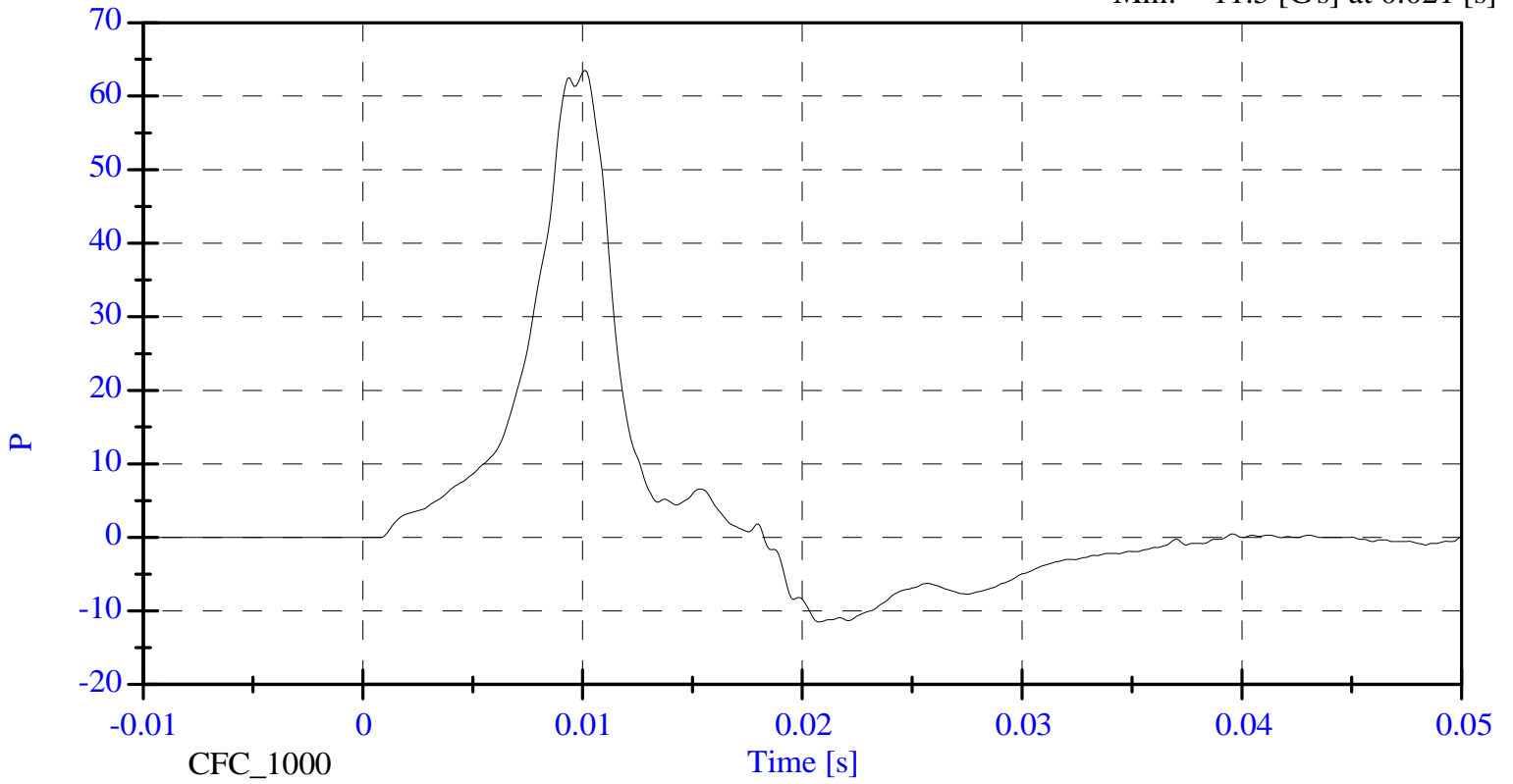
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	32.0
PROBE SPEED (m/s)	4.27 - 4.33	4.32
PELVIS ACCELERATION (g's)	40 - 60	51.78

REMARKS: None

Max: 63.5 [G's] at 0.010 [s]

Min: -11.5 [G's] at 0.021 [s]

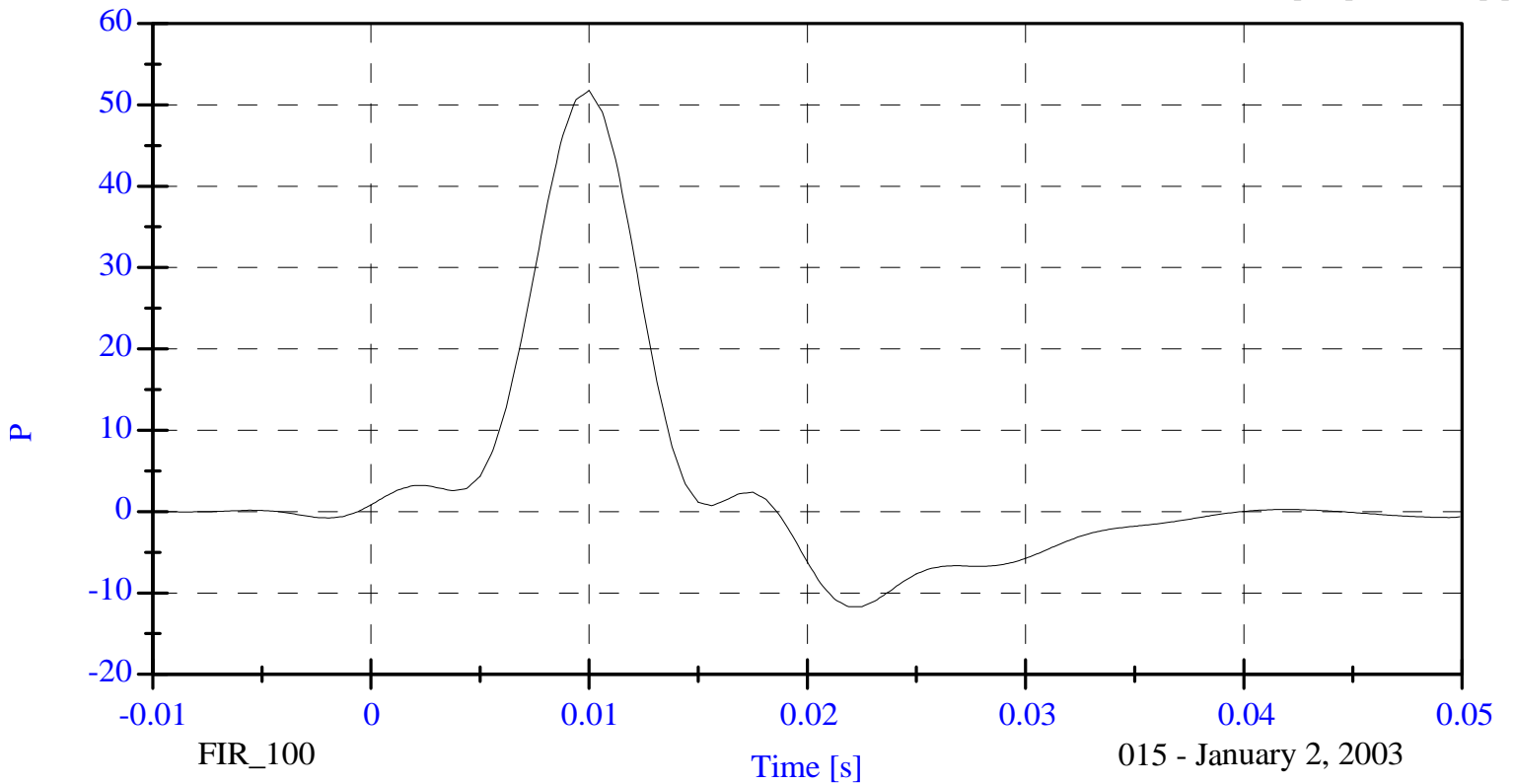
Pelvis Acceleration



Max: 51.8 [G's] at 0.010 [s]

Min: -11.7 [G's] at 0.022 [s]

Pelvis Y Acceleration



015 - January 2, 2003

**HEAD DROP TEST
PRE-TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

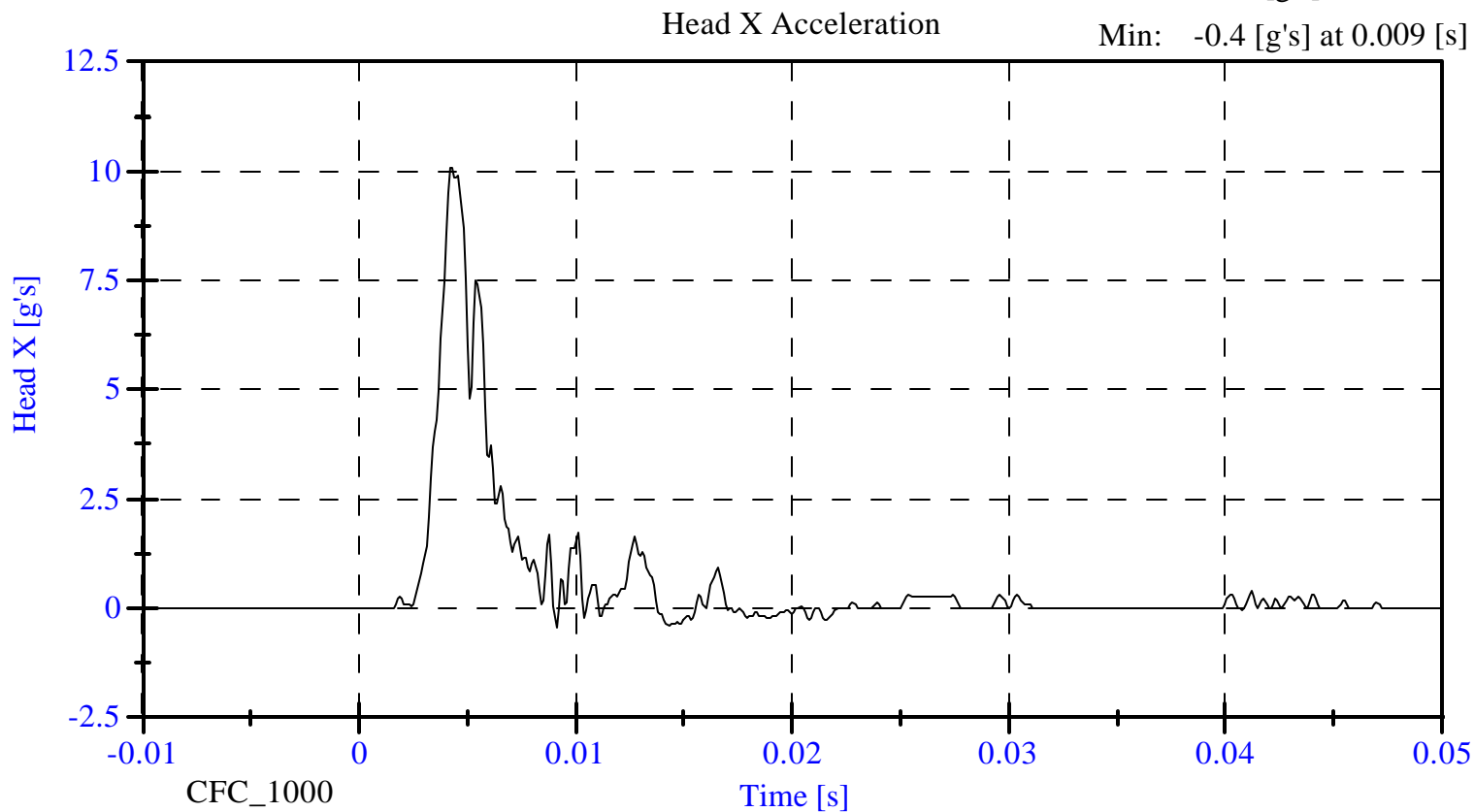
SID H3 Serial No.: 015 Sequential Test Number: 1
Date: December 12, 2002 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	20.6-22.2	21.1
RELATIVE HUMIDITY (%)	10 – 70	35.0
PEAK RESULTANT ACCELERATION (Gs)	120 - 150	132.42
PEAK LATERAL ACCELERATION (Gs)	Not to Exceed 15	10.08
CURVE PERCENT NONMODAL (%)	< 15	2.41

REMARKS: None

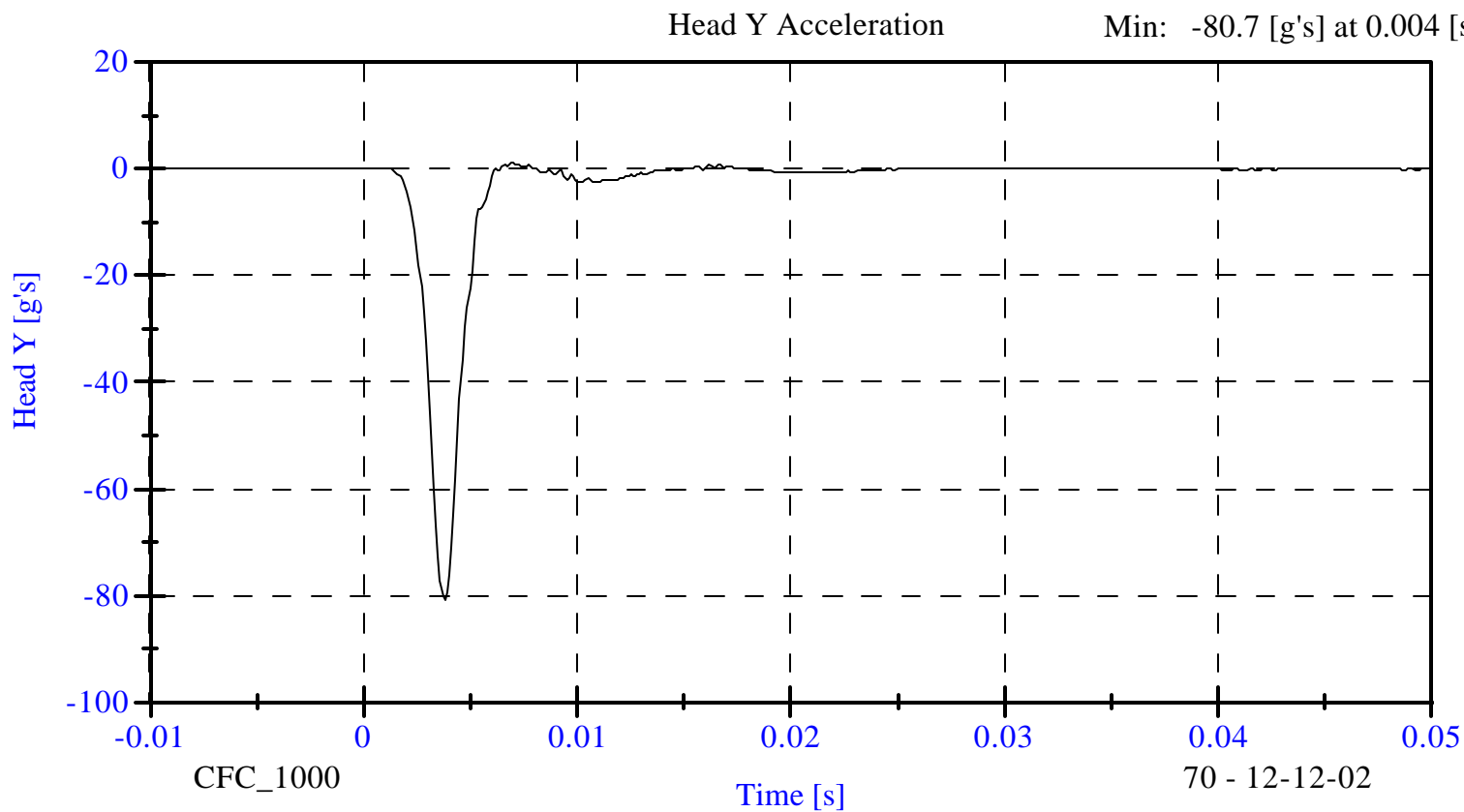
Max: 10.1 [g's] at 0.004 [s]

Min: -0.4 [g's] at 0.009 [s]



Max: 1.2 [g's] at 0.007 [s]

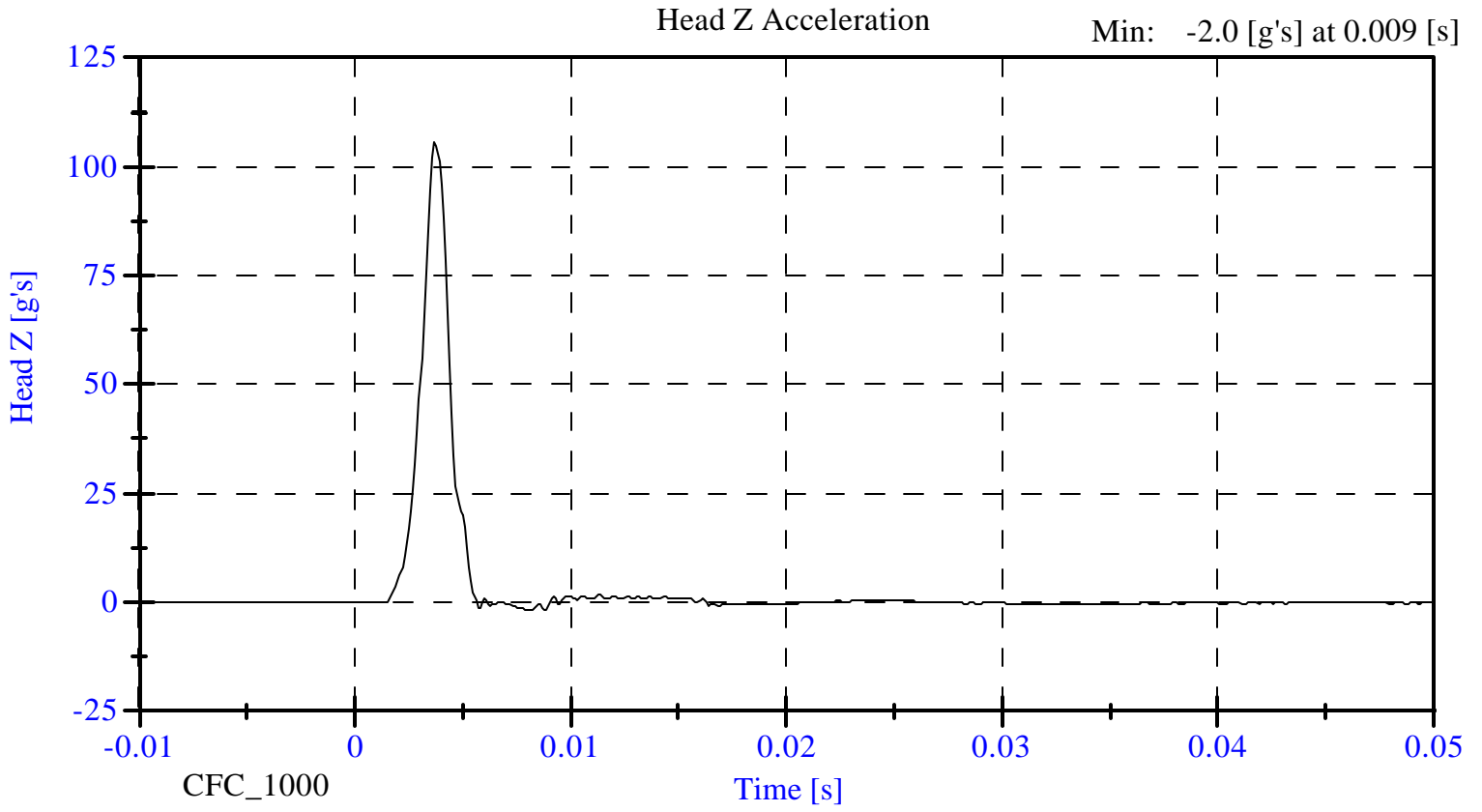
Min: -80.7 [g's] at 0.004 [s]



70 - 12-12-02

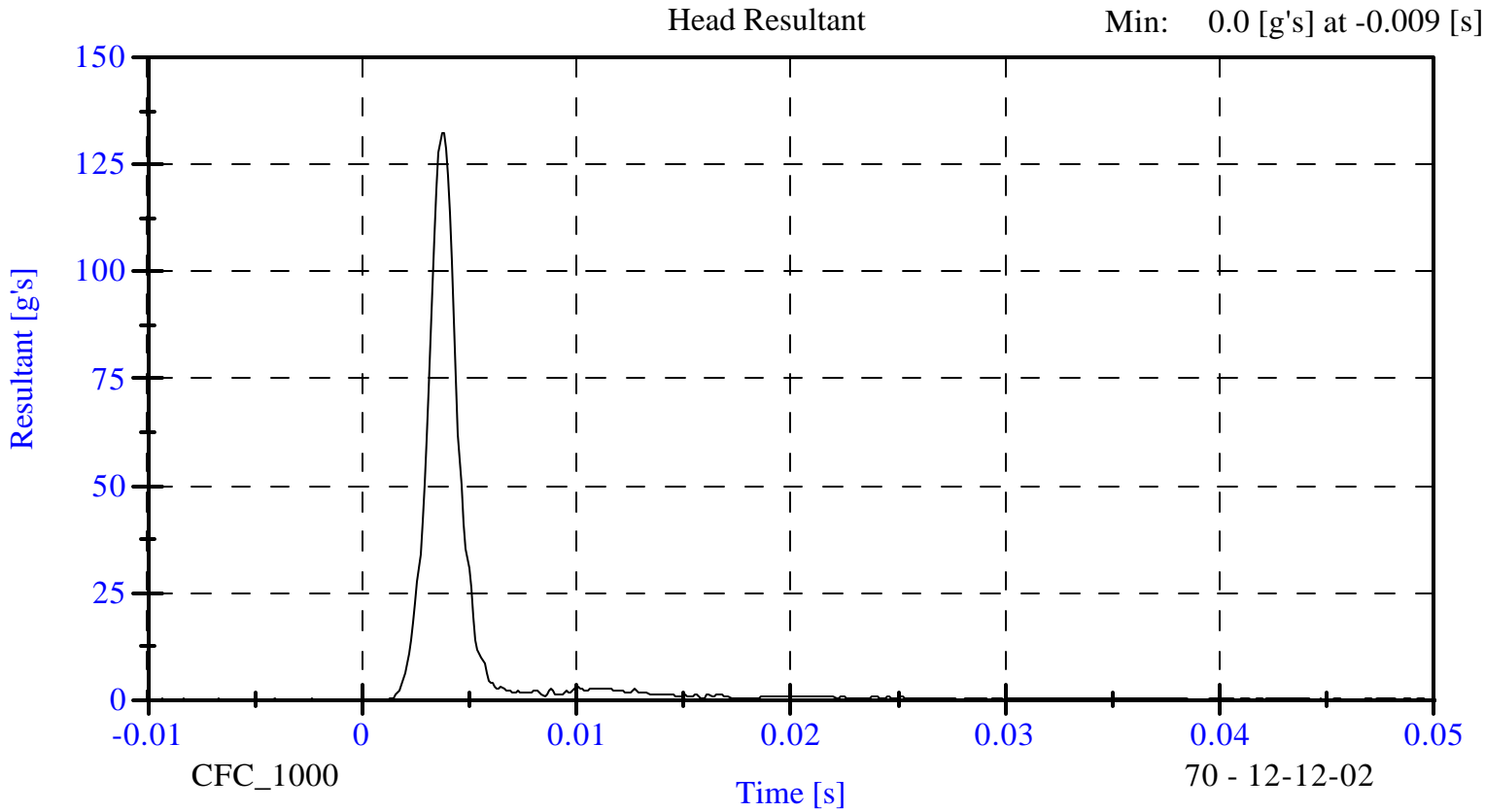
Max: 105.4 [g's] at 0.004 [s]

Min: -2.0 [g's] at 0.009 [s]



Max: 132.4 [g's] at 0.004 [s]

Min: 0.0 [g's] at -0.009 [s]



70 - 12-12-02

**LATERAL NECK BENDING TEST
PRE-TEST**
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

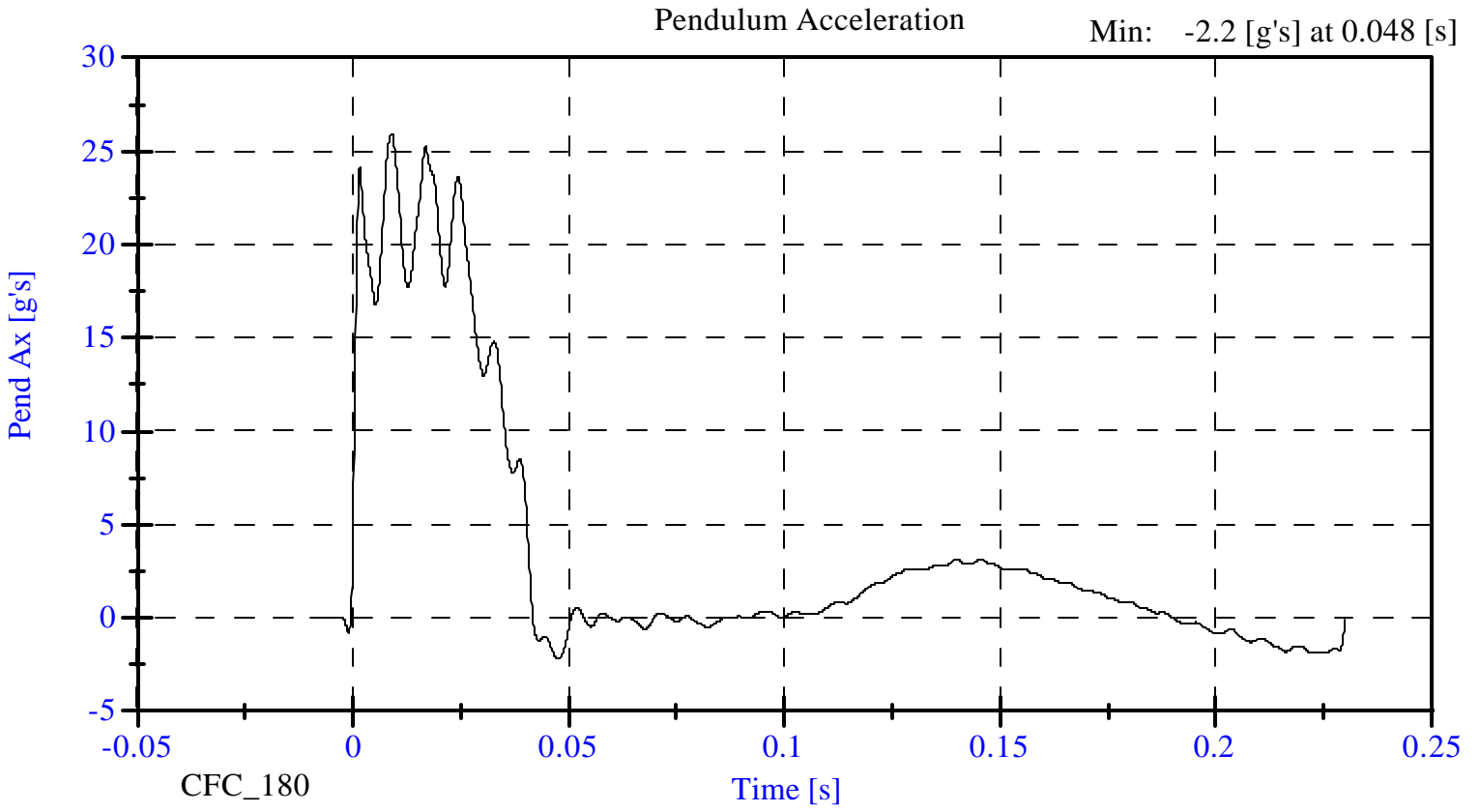
SID Serial No.: 015 Sequential Test Number: 1
 Date: December 13, 2002 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	20.6 - 22.2	21.1
RELATIVE HUMIDITY (%)	10 - 70	40
IMPACT VELOCITY (m/s)	6.89 - 7.13	6.95
PENDULUM DELTA V		
DELTA V @ 10 ms (m/s)	1.96 - 2.55	2.01
DELTA V @ 20 ms (m/s)	4.12 - 5.10	4.14
DELTA V @ 30 ms (m/s)	5.73 - 7.01	6.00
DELTA V @ 40-70 ms (m/s)	6.27 - 7.64	7.12
D PLANE ROTATION		
MAXIMUM ROTATION (deg)	64 - 78	71.33
ROT. ANGLE TIME to ZERO (ms)	50 - 70	58.60
MOMENT ABOUT THE OCCIPITAL CONDYLE		
MAX OCCIPITAL MOMENT (Nm)	88 - 108	89.10
OCCIPITAL MOMENT DECAY (ms)	40.0 - 60.0	46.50
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT		
ROTATION wrt MOMENT (ms)	0 - 20	5.90

REMARKS: None

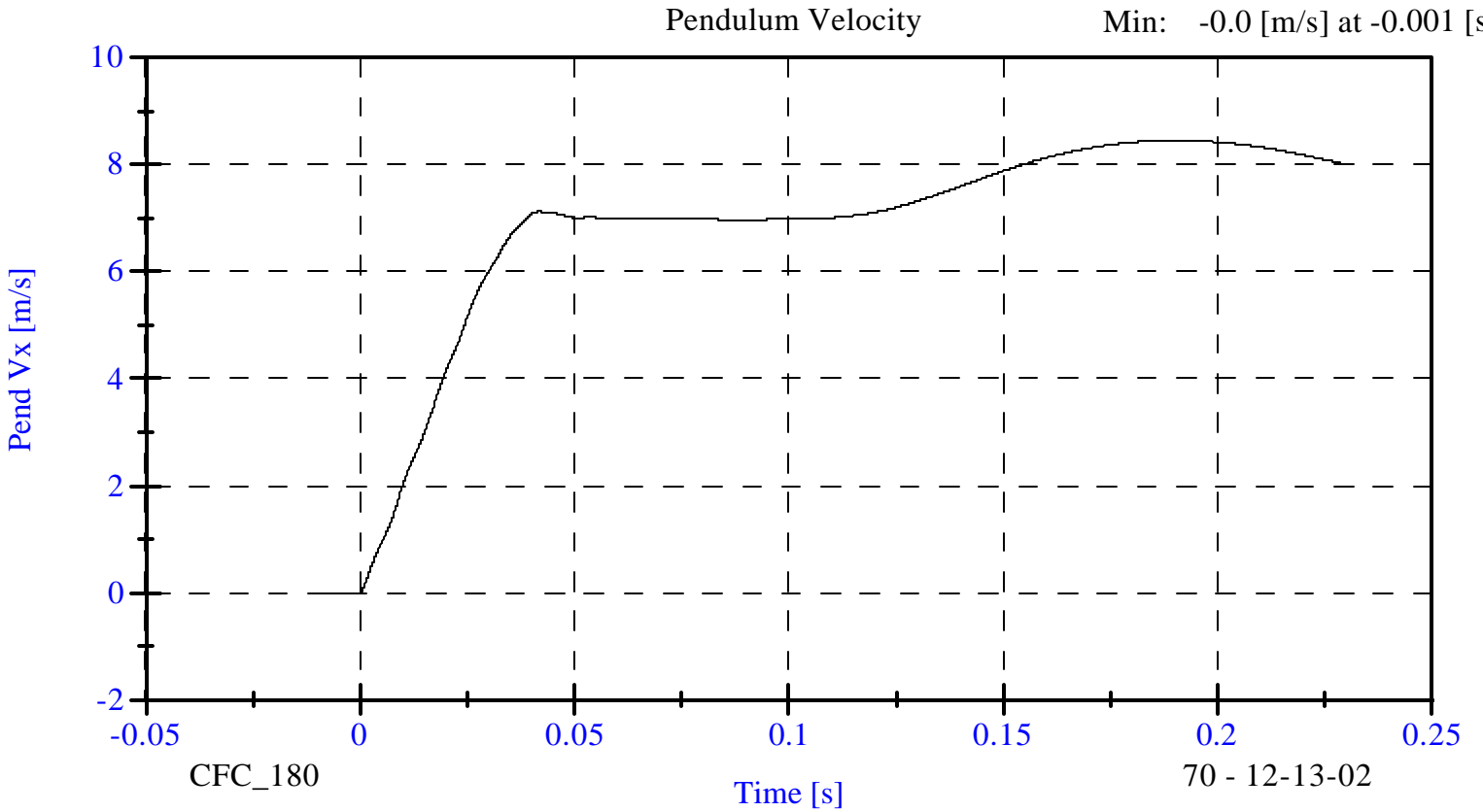
Max: 25.9 [g's] at 0.009 [s]

Min: -2.2 [g's] at 0.048 [s]



Max: 8.5 [m/s] at 0.190 [s]

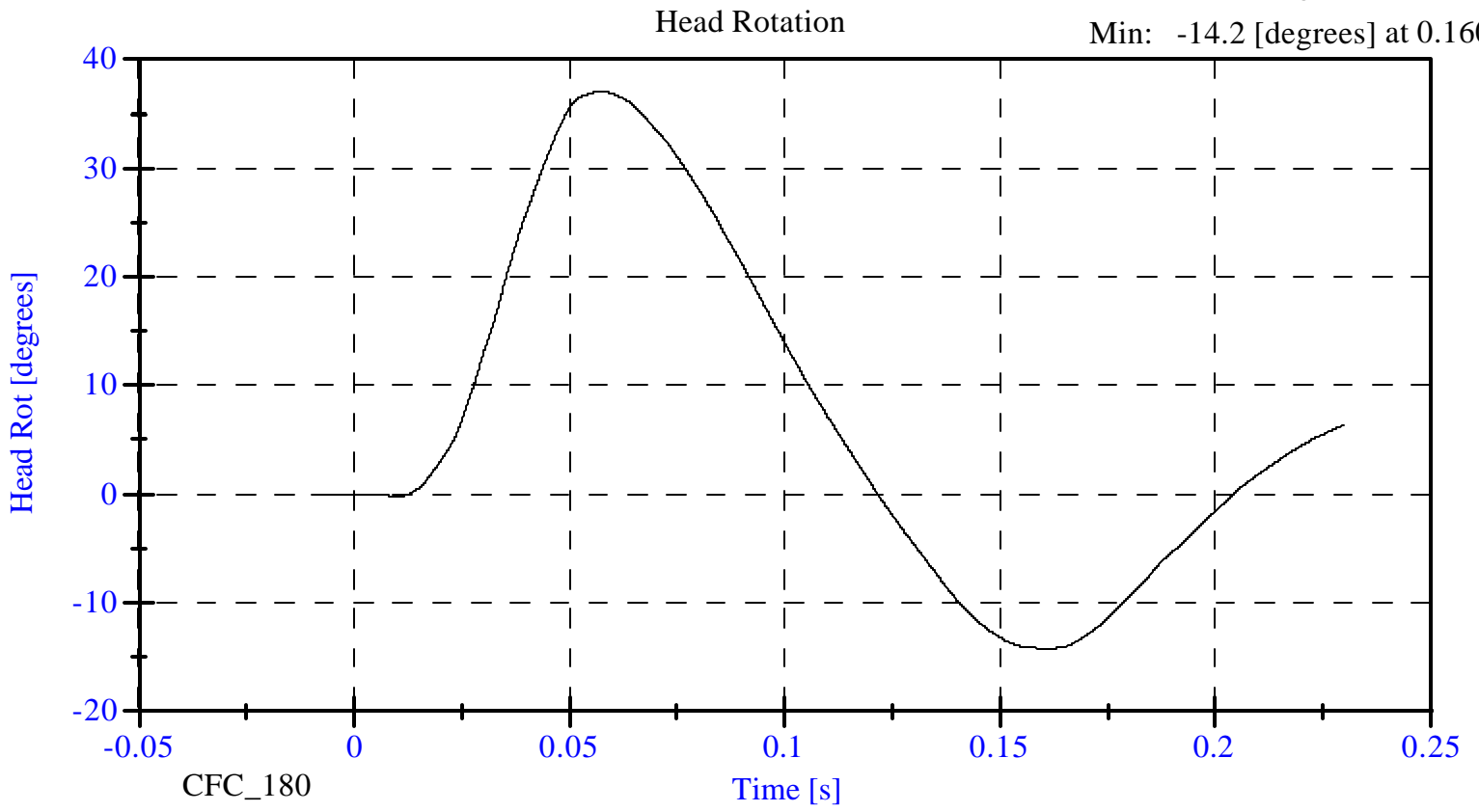
Min: -0.0 [m/s] at -0.001 [s]



70 - 12-13-02

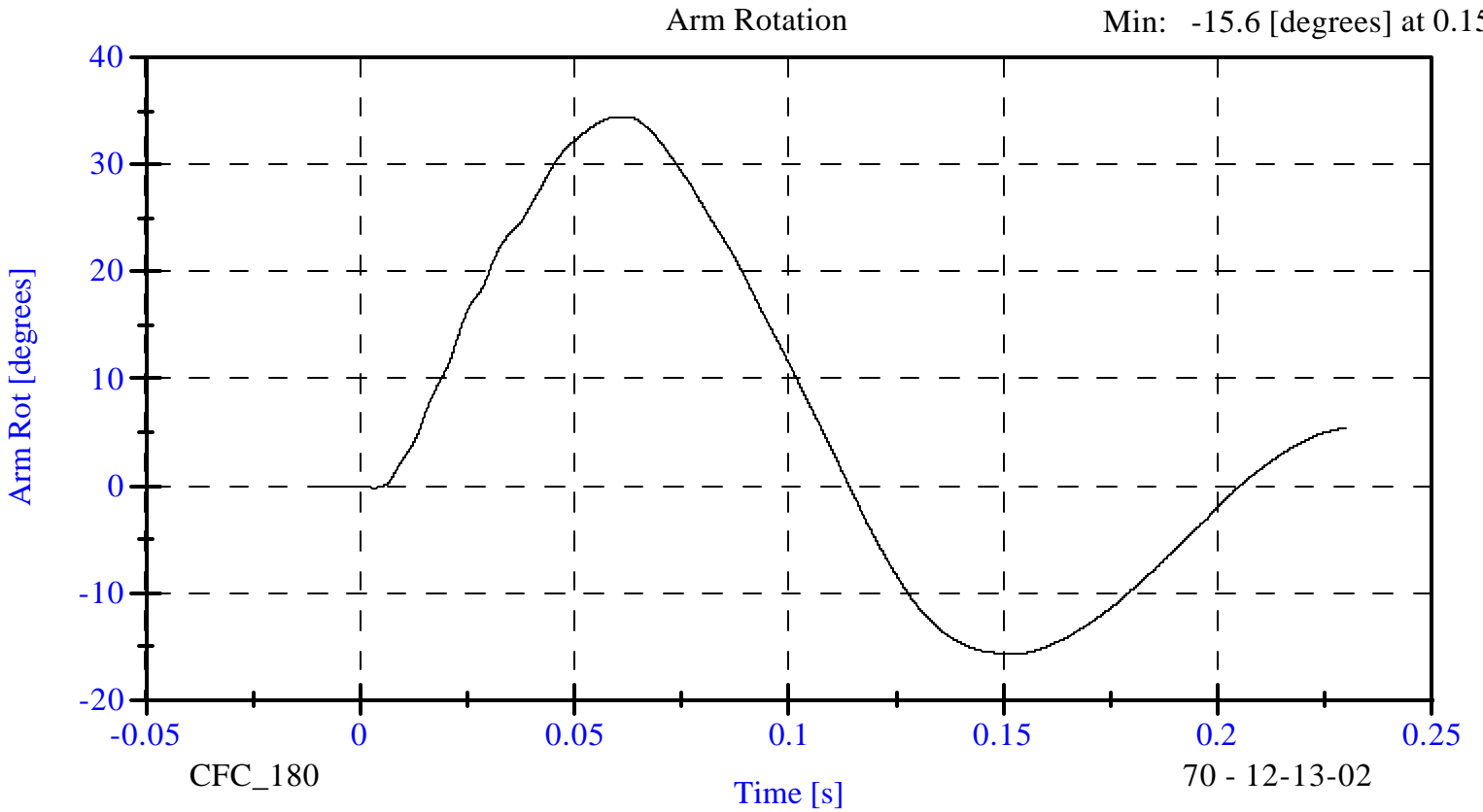
Max: 37.0 [degrees] at 0.055

Min: -14.2 [degrees] at 0.160



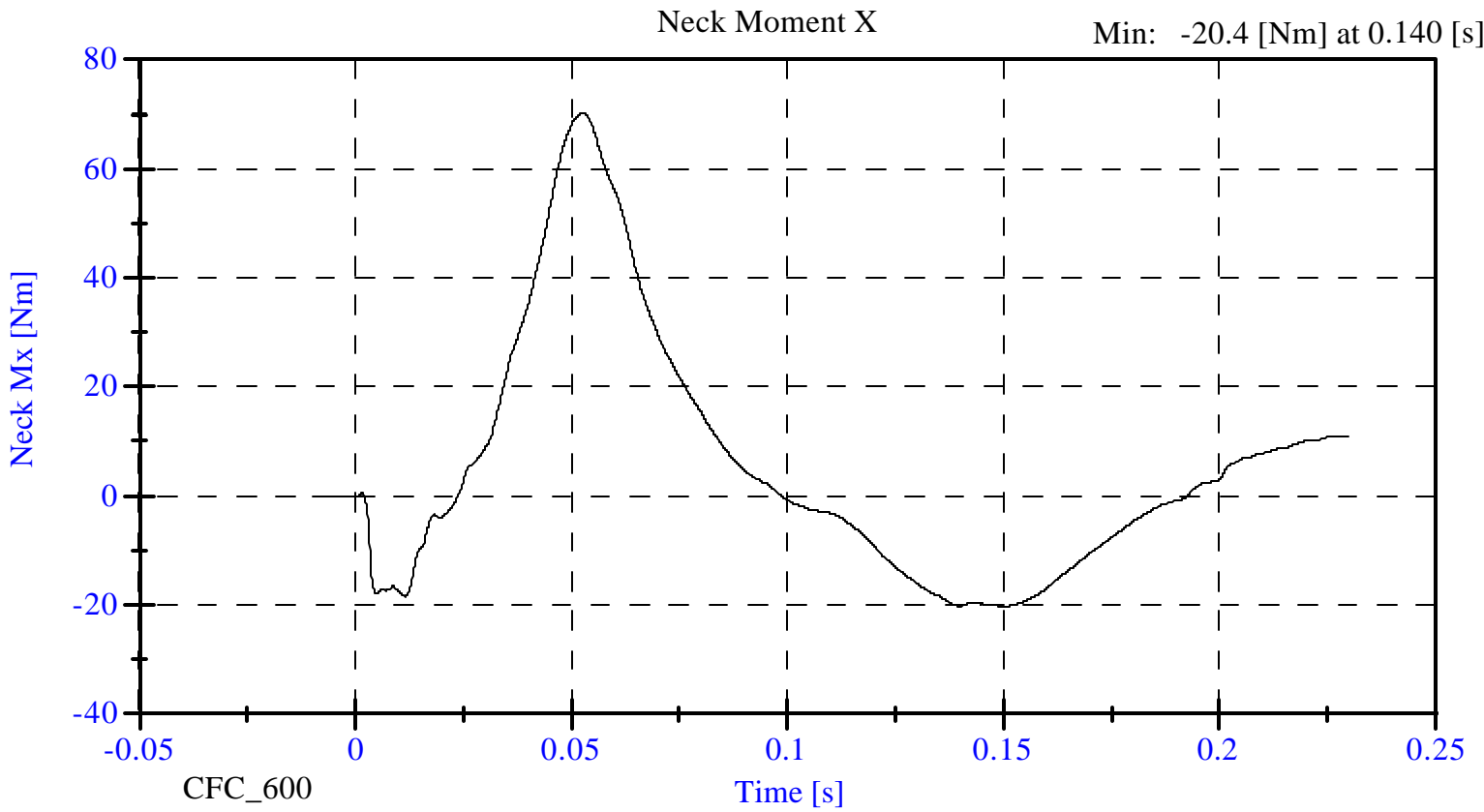
Max: 34.4 [degrees] at 0.060

Min: -15.6 [degrees] at 0.155



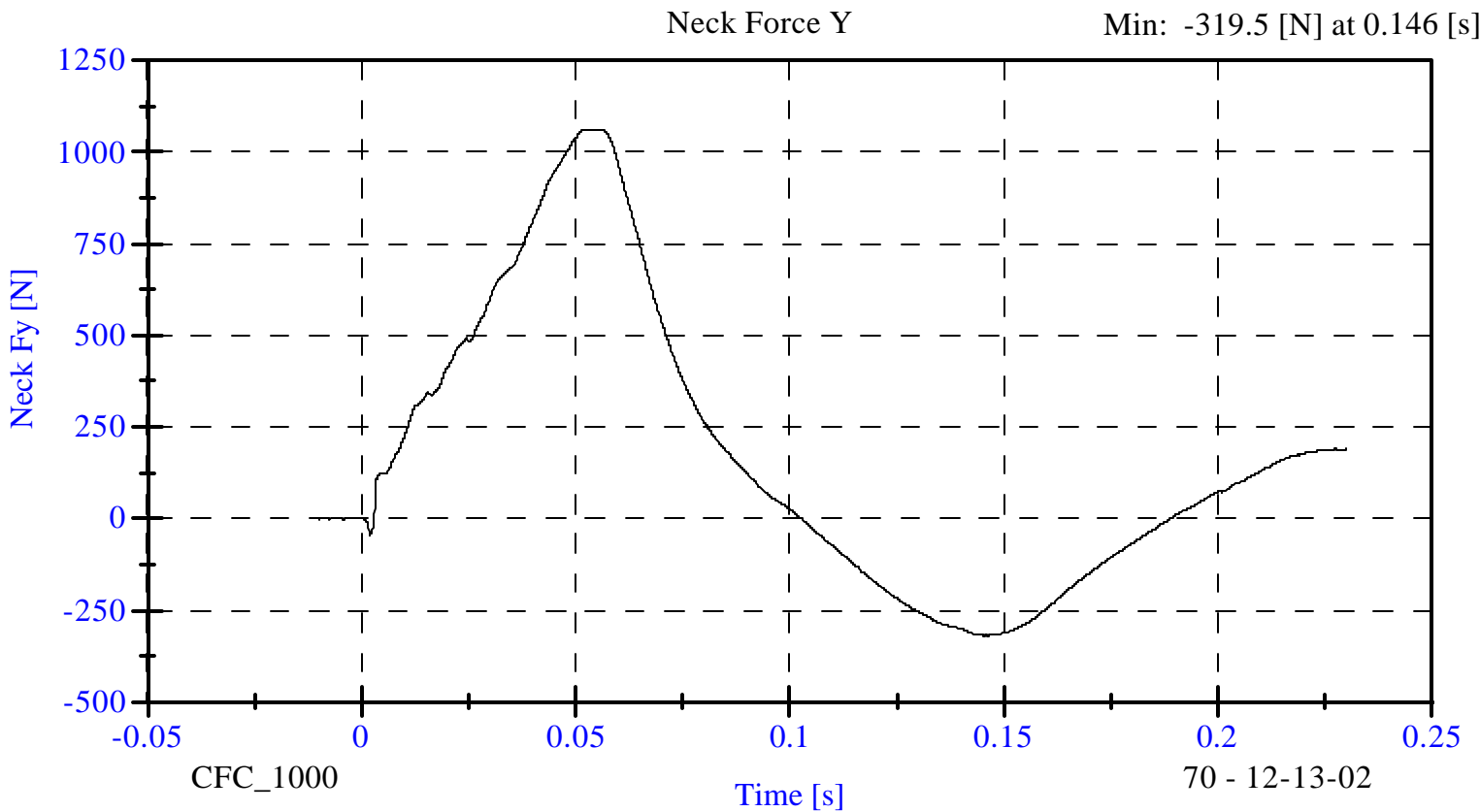
Max: 70.2 [Nm] at 0.053 [s]

Min: -20.4 [Nm] at 0.140 [s]



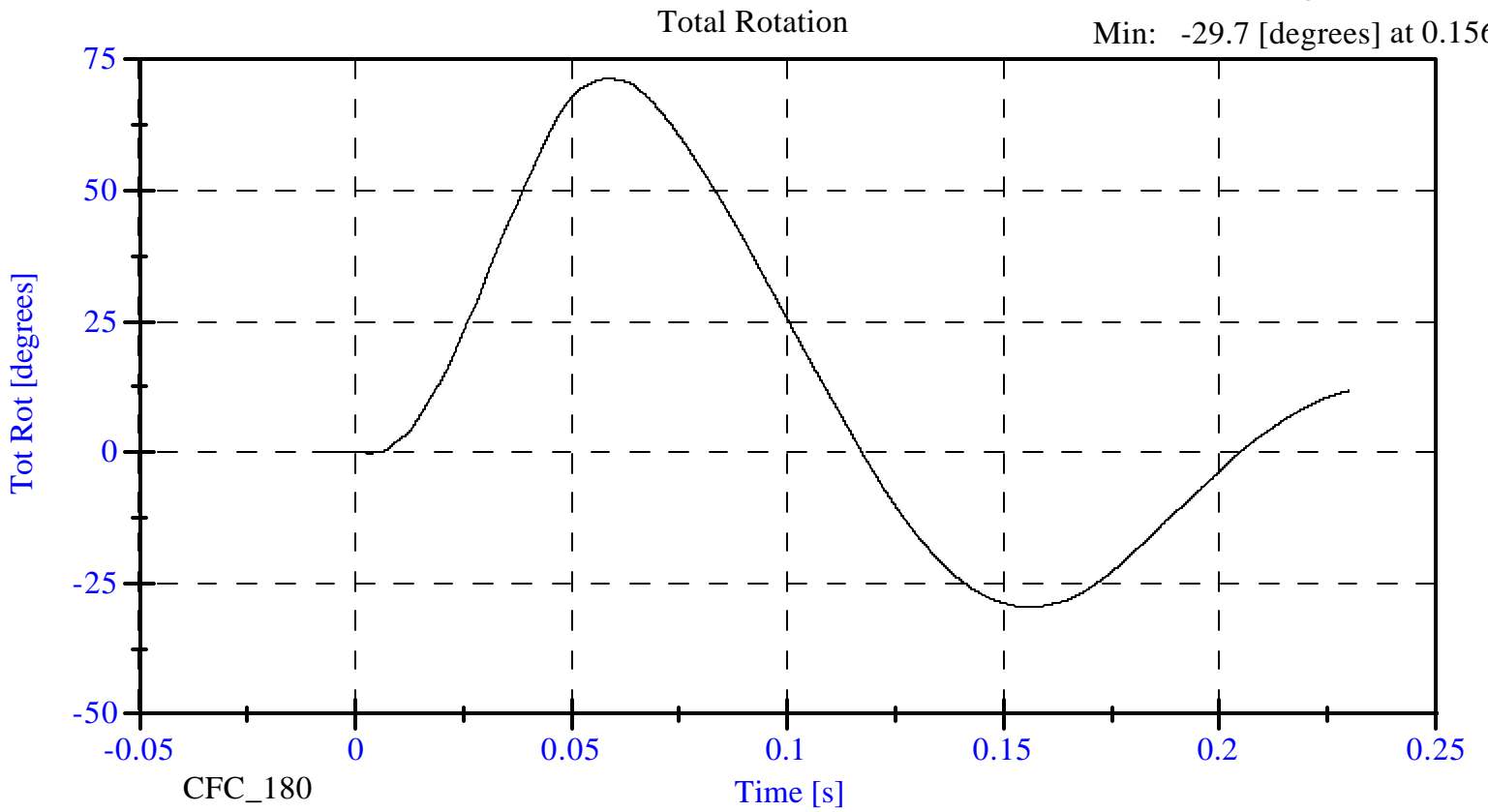
Max: 1062.7 [N] at 0.053 [s]

Min: -319.5 [N] at 0.146 [s]



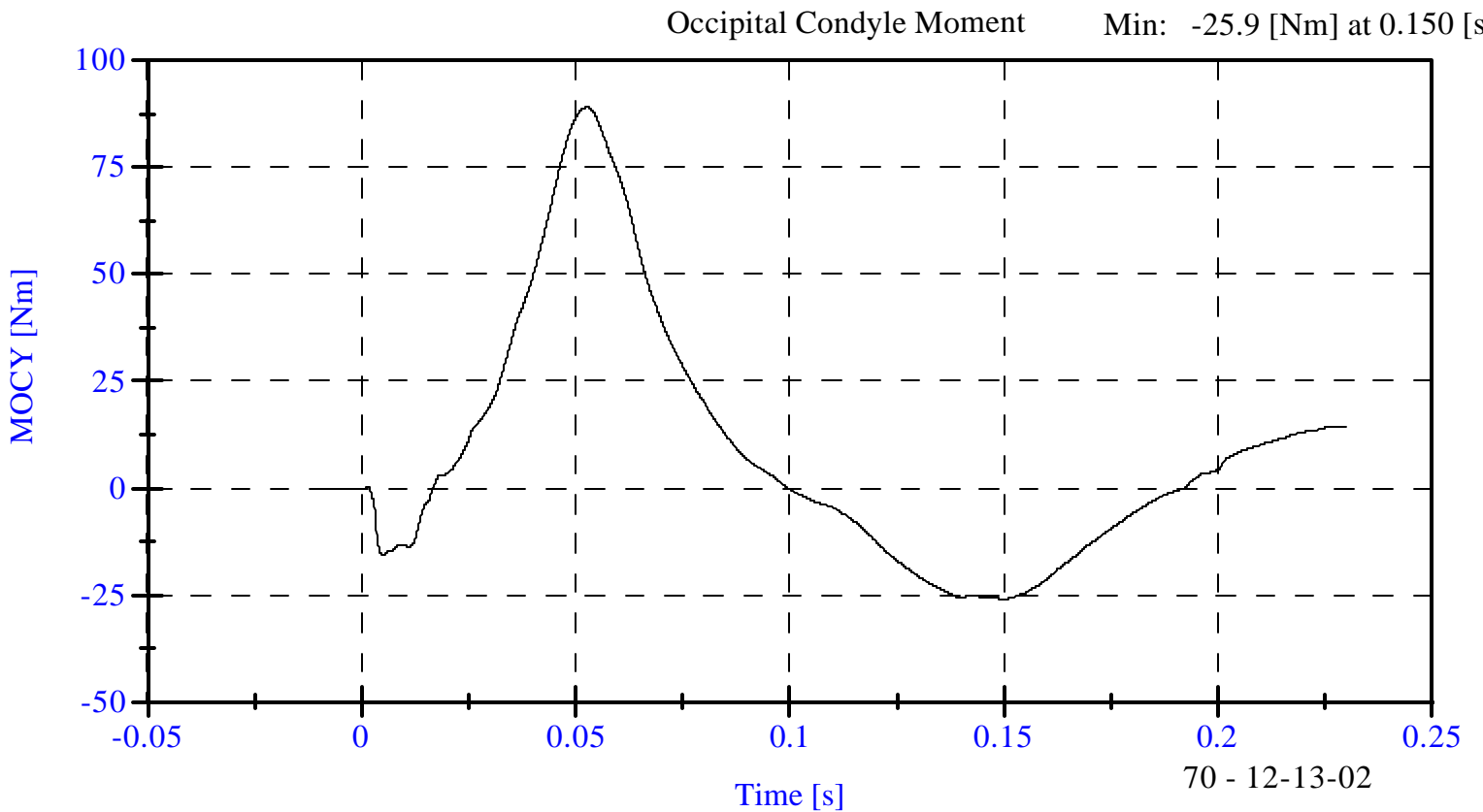
Max: 71.3 [degrees] at 0.059

Min: -29.7 [degrees] at 0.156



Max: 89.1 [Nm] at 0.053 [s]

Min: -25.9 [Nm] at 0.150 [s]



**ABDOMINAL COMPRESSION TEST
PRE-TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 2, 2003 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	32.0
FORCE @ 13 mm (N)	104 - 162	120.1
FORCE @ 19 mm (N)	163 - 221	173.5
FORCE @ 25 mm (N)	222 - 280	240.2
FORCE @ 33 mm (N)	325 - 391	330.1

REMARKS: None

ORIGINAL

Dummy S/N 015

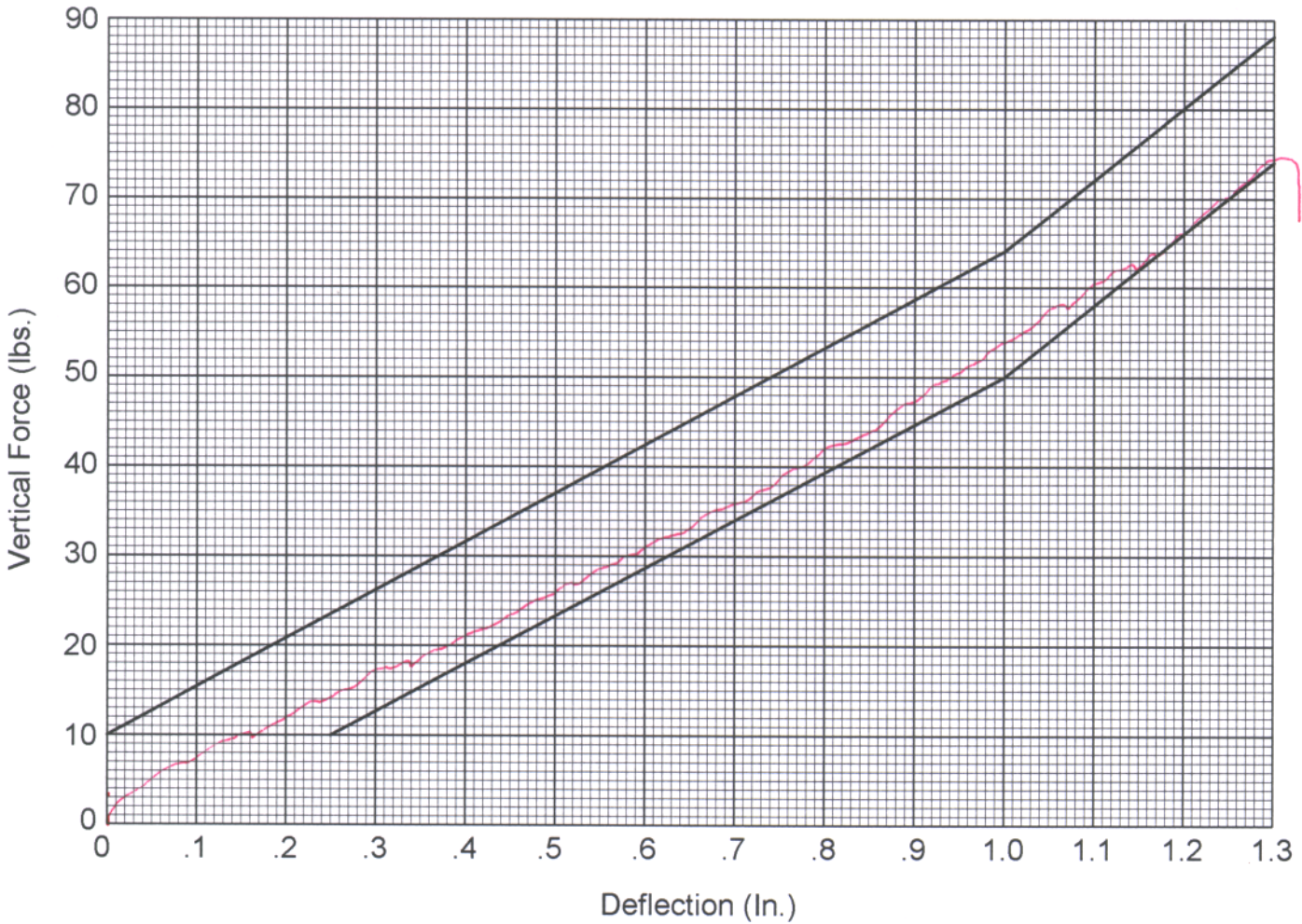
W/A _____

Date 1-02-03

Performed By RS

Temp. 70°

Humidity 32%



Hybrid II
Abdomen Static Press

LUMBAR FLEXION TEST
PRE-TEST
 (Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

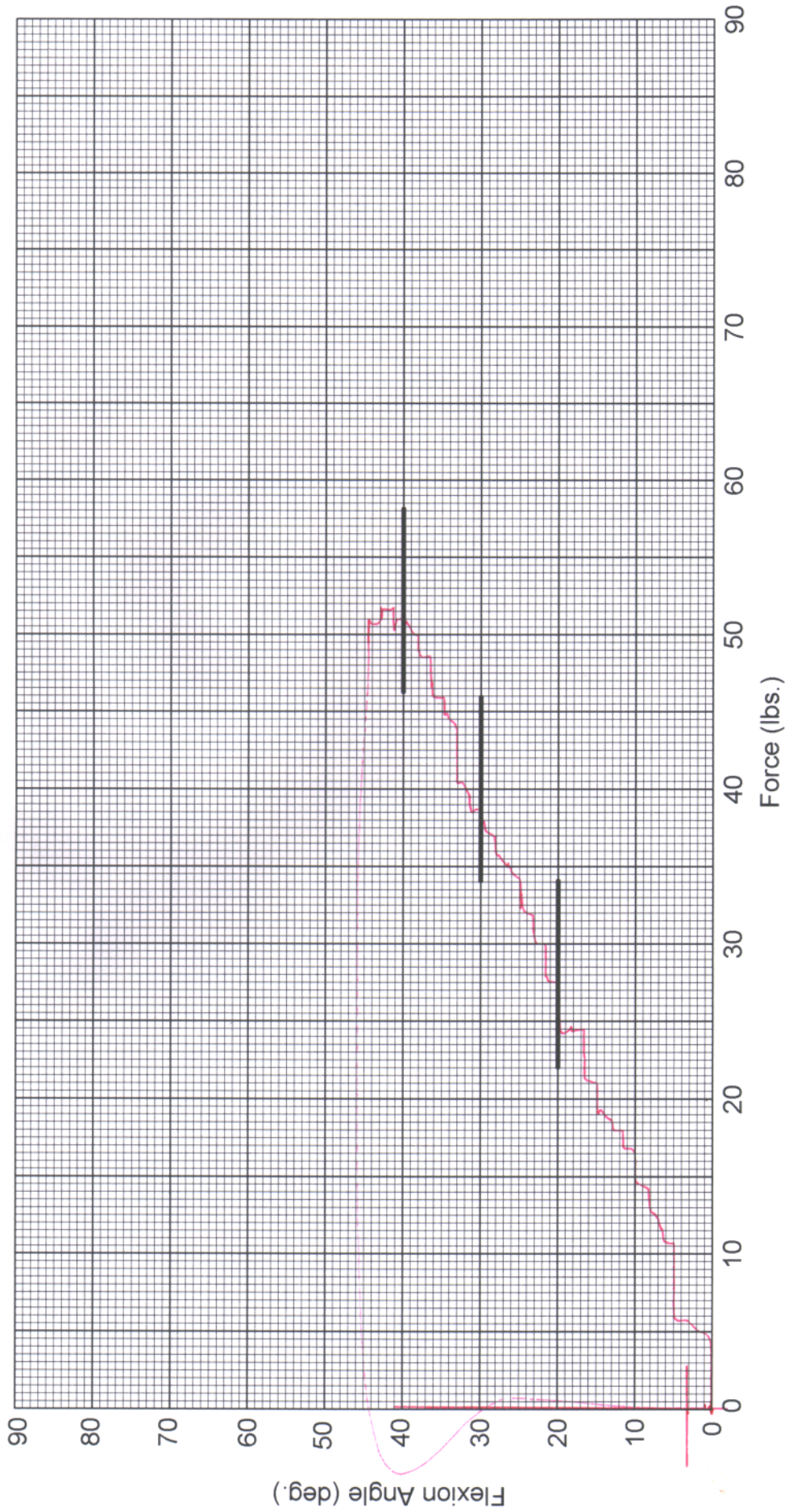
SID H3 Serial No.: 015 Sequential Test Number: 1
 Date: January 2, 2003 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	31.0
FORCE @ 0° (N)	0 - 26.7	0.0
FORCE @ 20° (N)	97.8 - 151.2	111.2
FORCE @ 30° (N)	151.2 - 204.6	172.4
FORCE @ 40° (N)	204.6 - 258	226.9
RETURN ANGLE	12° max.	3.1

REMARKS: None

ORIGINAL

Dummy S/N 015
W/A _____
Date 1-02-03
Performed By BEJ
Temp. 70°
Humidity 31%



Hybrid II Lumbar Spine Flexion Test

PRE-TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
 Date: January 2, 2003 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

CALIBRATION TEST RESULTS

POST TEST

SID H3 NO.: 015

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 13, 2003 Laboratory Technician: B. Swiecicki

TEST	COMMENTS
EXTERNAL DIMENSIONS	Passed all requirements.
LATERAL THORAX IMPACT TEST	Passed all requirements.
LATERAL PELVIS IMPACT TEST	Passed all requirements.
HEAD DROP TEST*	Passed all requirements.
LATERAL NECK BEND TEST*	Passed all requirements.
ABDOMINAL COMPRESSION TEST*	Passed all requirements.
LUMBAR FLEXION TEST*	Passed all requirements.

* Test not required for SID certification.

REMARKS: None

**EXTERNAL DIMENSIONS
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 13, 2003 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	511
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	236
KH- Knee Pivot from Back Line (mm)	511 - 526	521
KV- Knee Pivot to Floor (mm)	490 - 505	493
HW- Hip Width (mm)	356 - 391	376

REMARKS: None

**LATERAL THORAX IMPACT TEST
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 13, 2003 Laboratory Technician: B. Swiecicki

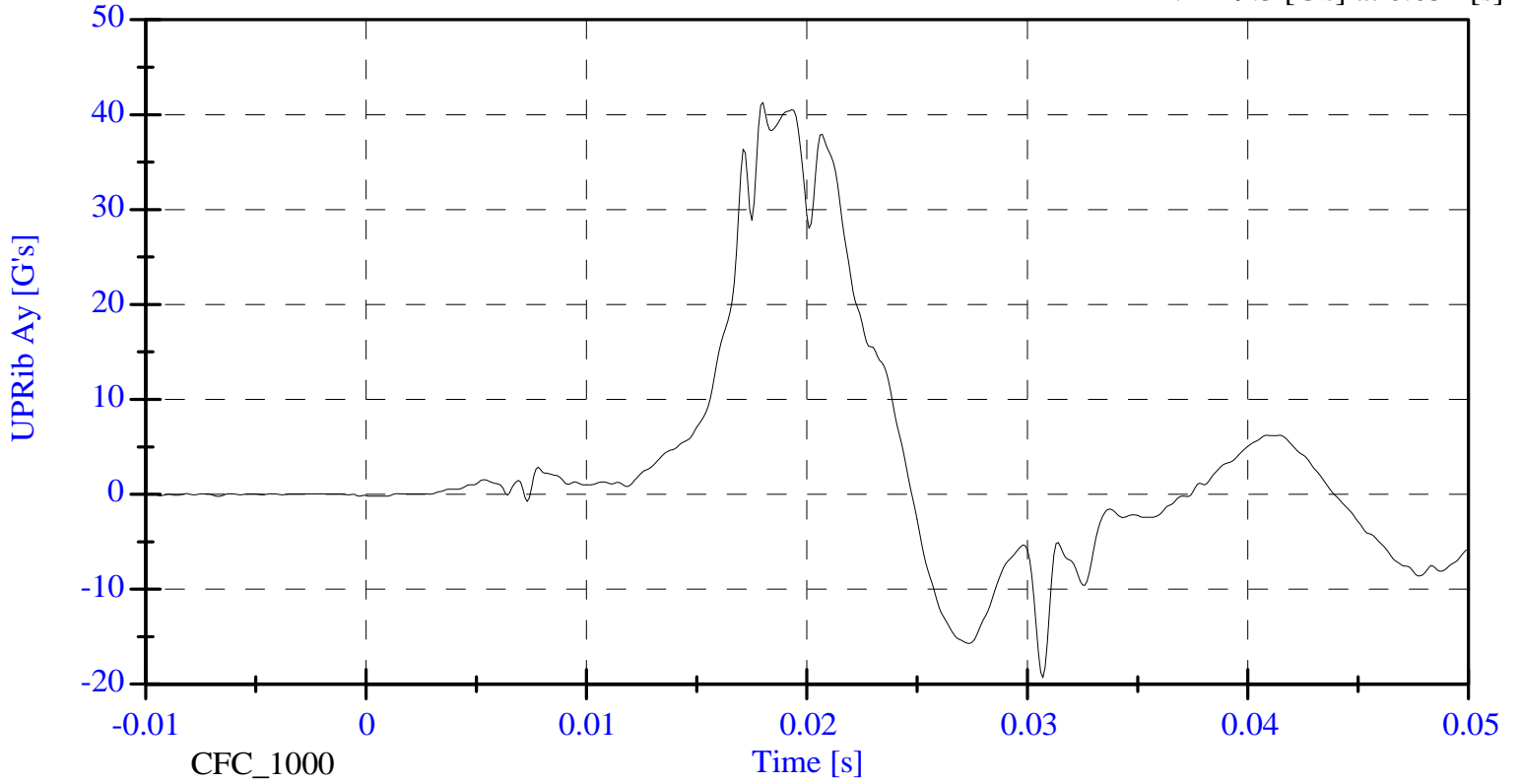
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	20.6
RELATIVE HUMIDITY (%)	10 - 70	39
PROBE SPEED (m/s)	4.27 - 4.33	4.28
UPPER RIB (g's)	37 - 46	39.00
LOWER RIB (g's)	37 - 46	39.25
LOWER SPINE (g's)	15 - 22	18.71

REMARKS: None

Upper Rib Y Acceleration

Max: 41.3 [G's] at 0.018 [s]

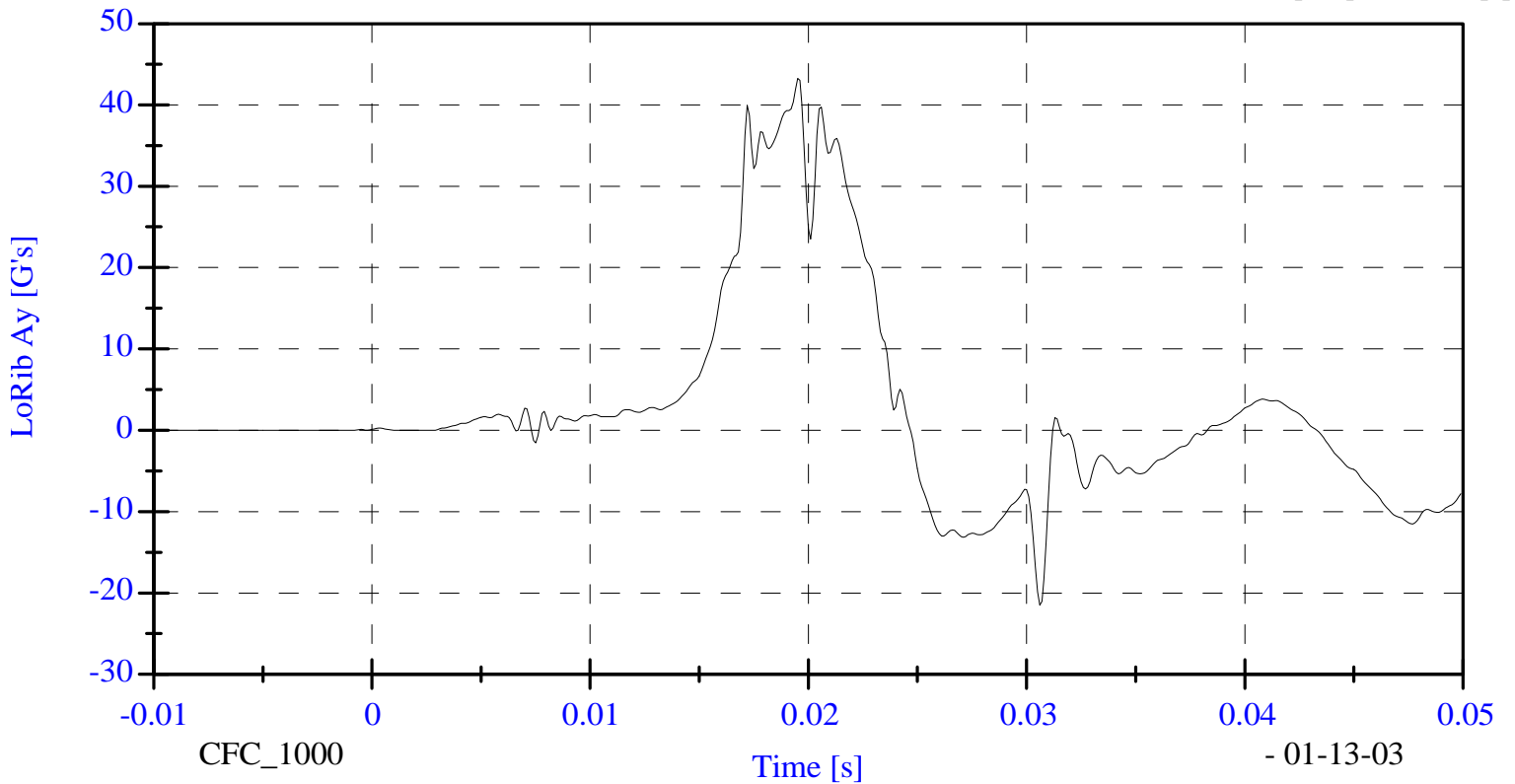
Min: -19.3 [G's] at 0.031 [s]



Lower Rib Y Acceleration

Max: 43.3 [G's] at 0.020 [s]

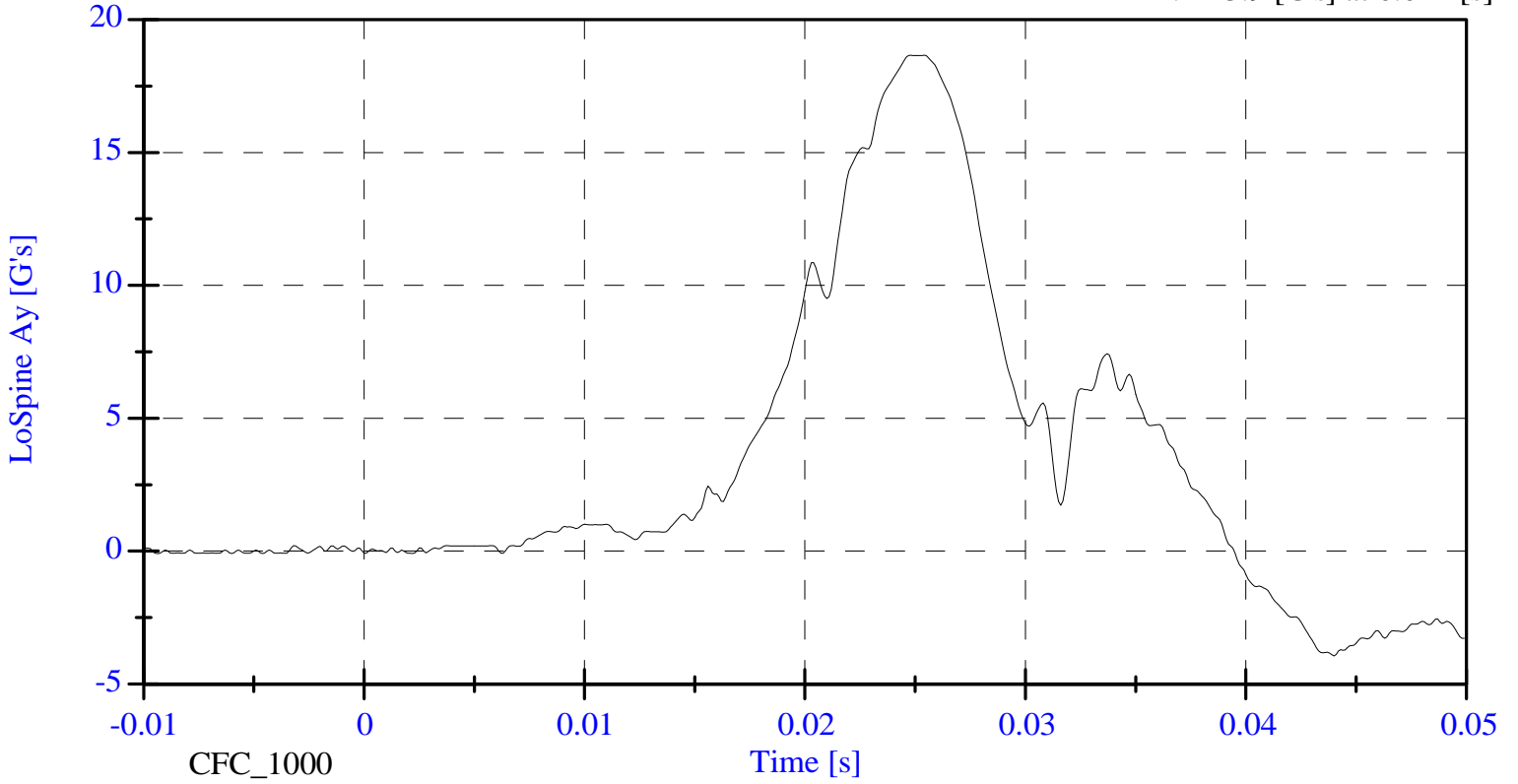
Min: -21.5 [G's] at 0.031 [s]



Lower Spine Y Acceleration

Max: 18.7 [G's] at 0.025 [s]

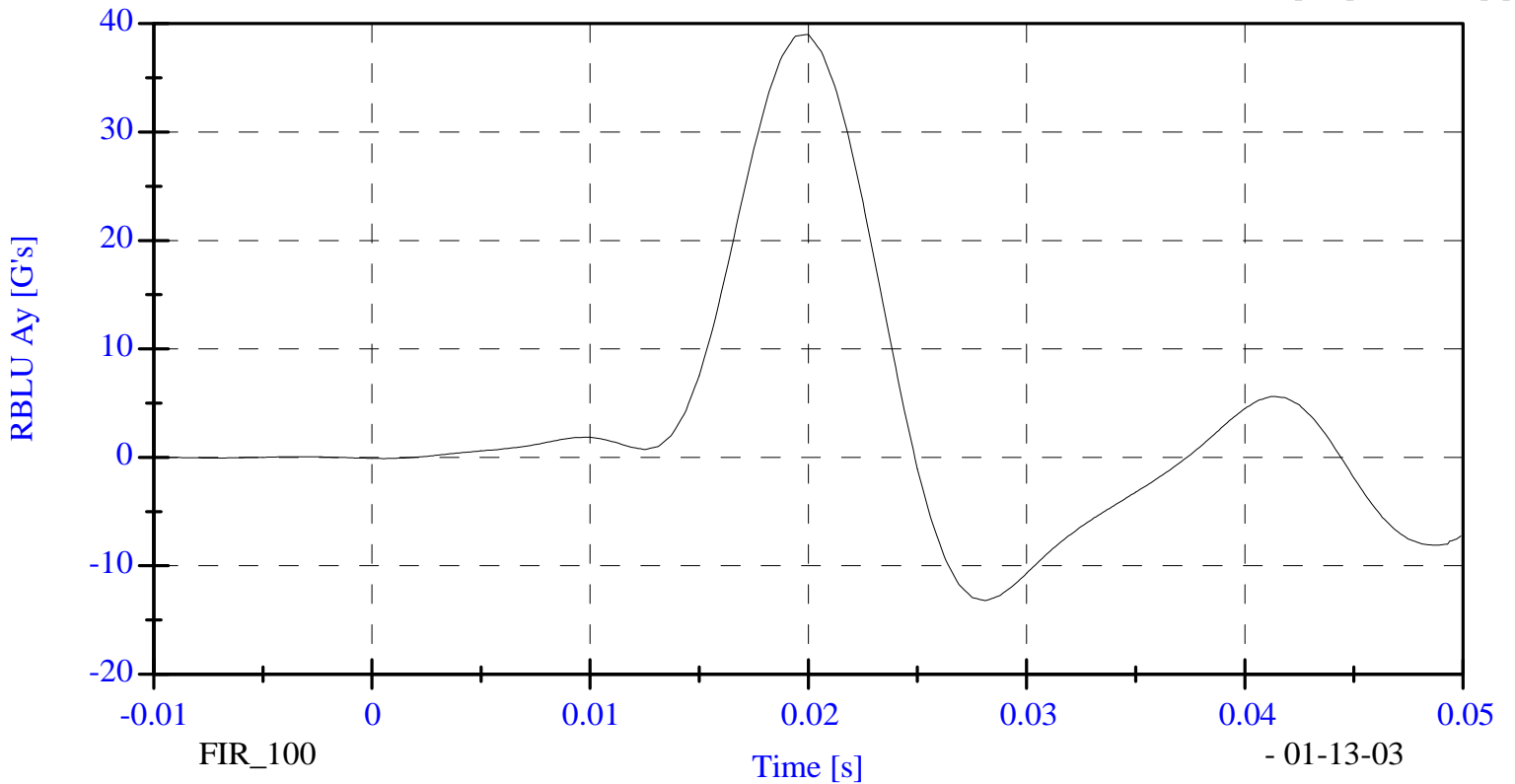
Min: -3.9 [G's] at 0.044 [s]



Upper Rib Y Acceleration

Max: 39.0 [G's] at 0.020 [s]

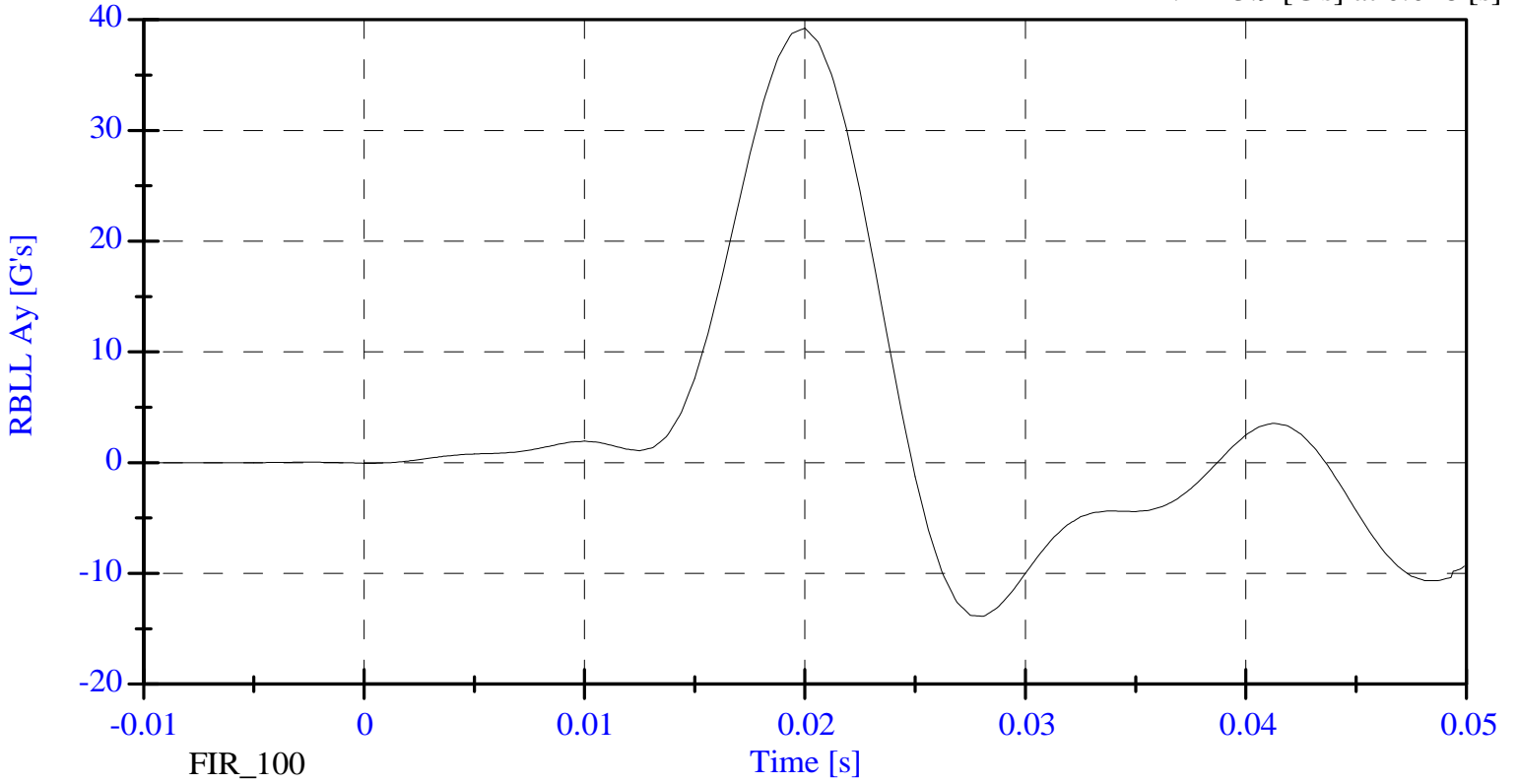
Min: -13.2 [G's] at 0.028 [s]



Max: 39.2 [G's] at 0.020 [s]

Min: -13.9 [G's] at 0.028 [s]

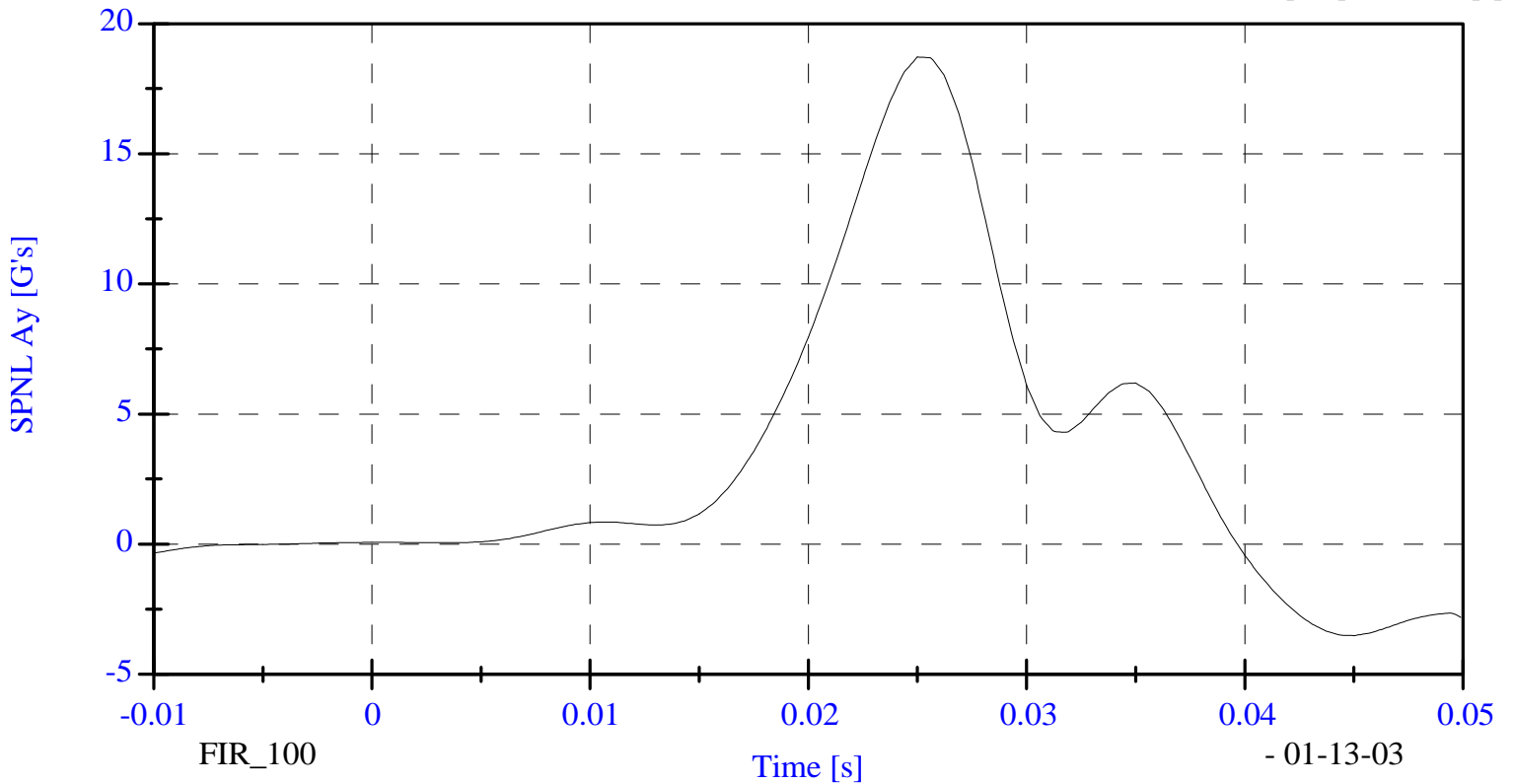
Lower Rib Y Acceleration



Max: 18.7 [G's] at 0.025 [s]

Min: -3.5 [G's] at 0.045 [s]

Lower Spine Y Acceleration



**LATERAL PELVIS IMPACT TEST
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 13, 2003 Laboratory Technician: B. Swiecicki

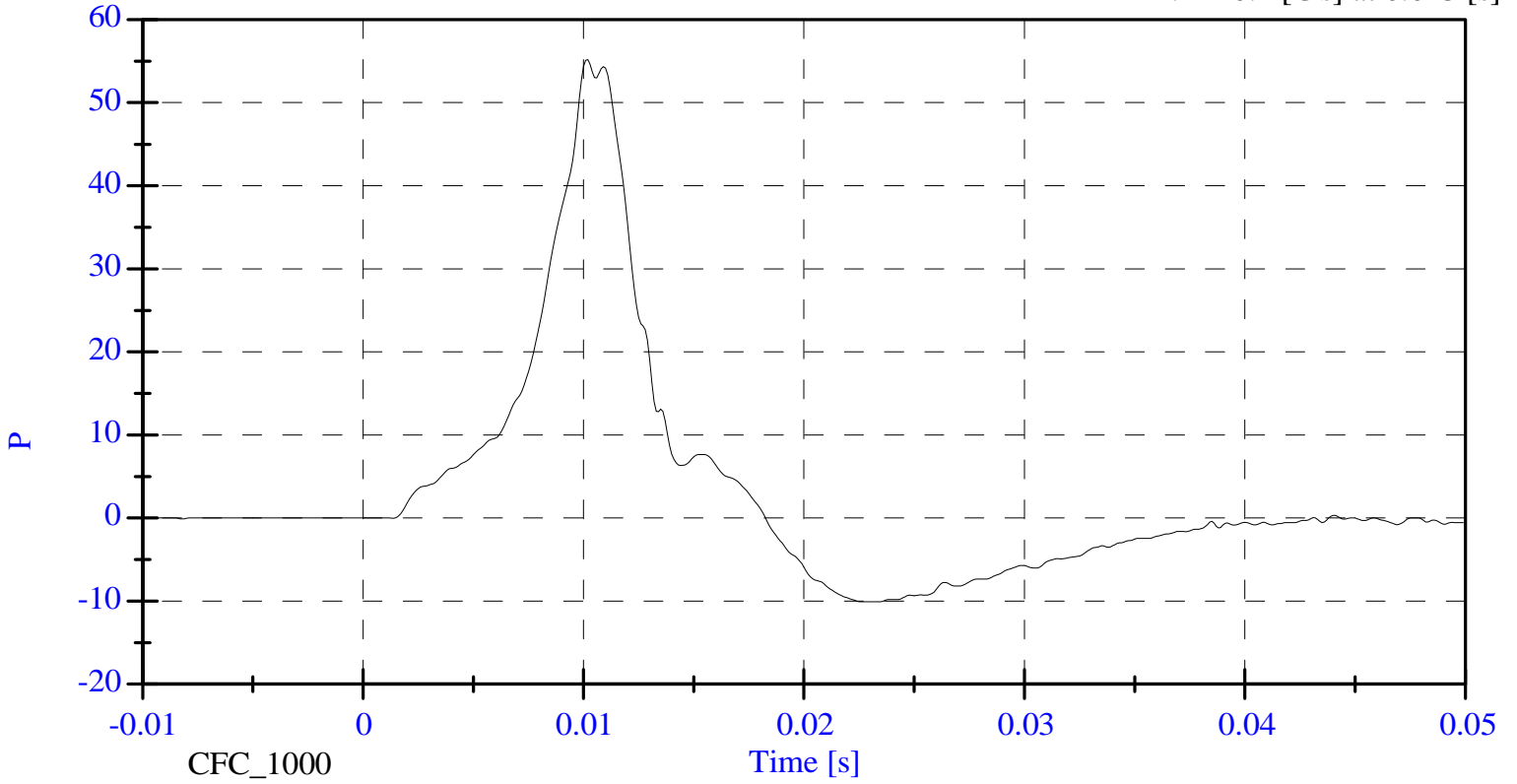
TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	20.6
RELATIVE HUMIDITY (%)	10 - 70	36.00
PROBE SPEED (m/s)	4.27 - 4.33	4.31
PELVIS ACCELERATION (g's)	40 - 60	46.53

REMARKS: None

Max: 55.2 [G's] at 0.010 [s]

Min: -10.1 [G's] at 0.023 [s]

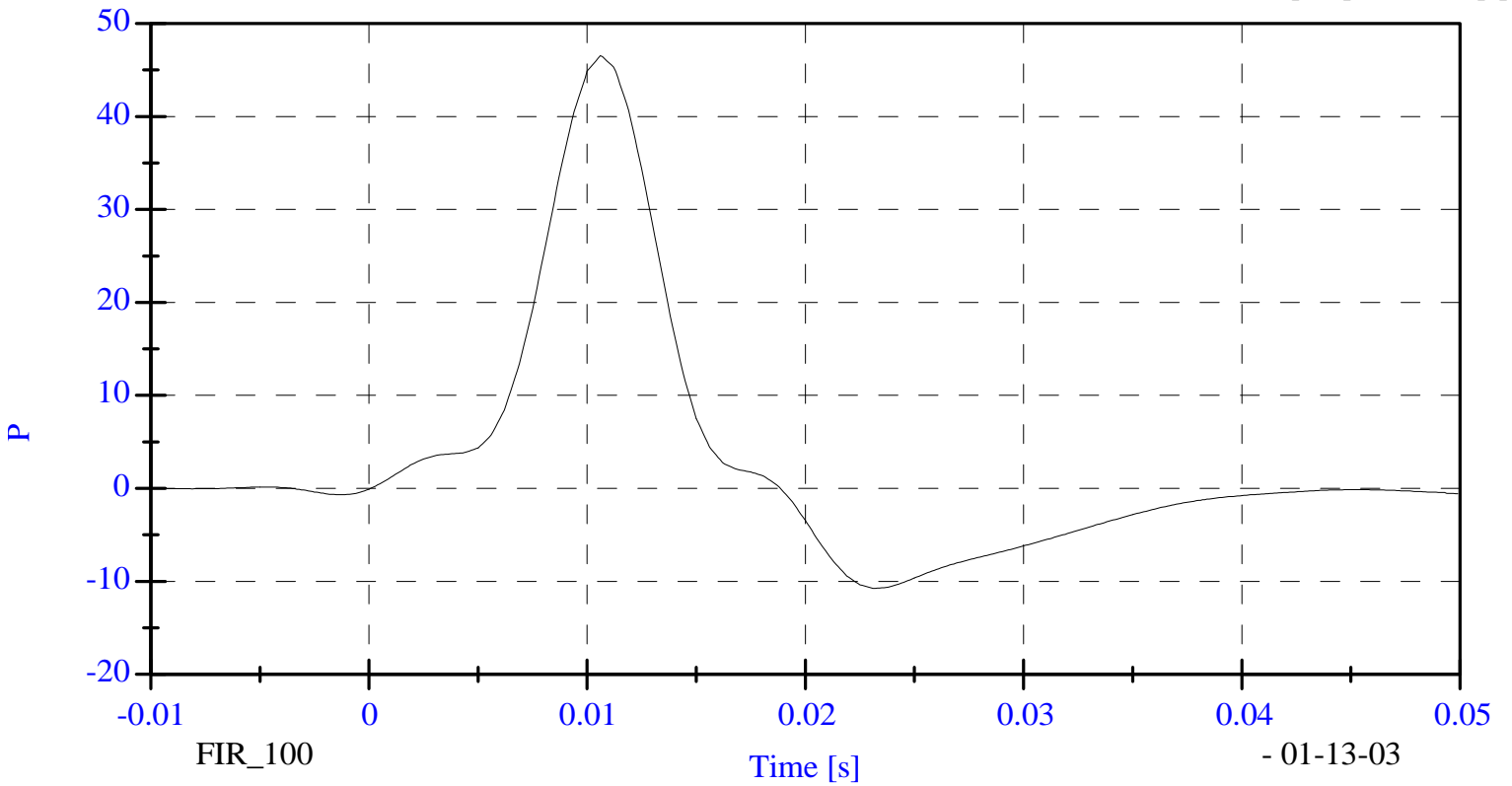
Pelvis Acceleration



Max: 46.5 [G's] at 0.011 [s]

Min: -10.8 [G's] at 0.023 [s]

Pelvis Y Acceleration



**HEAD DROP TEST
POST-TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

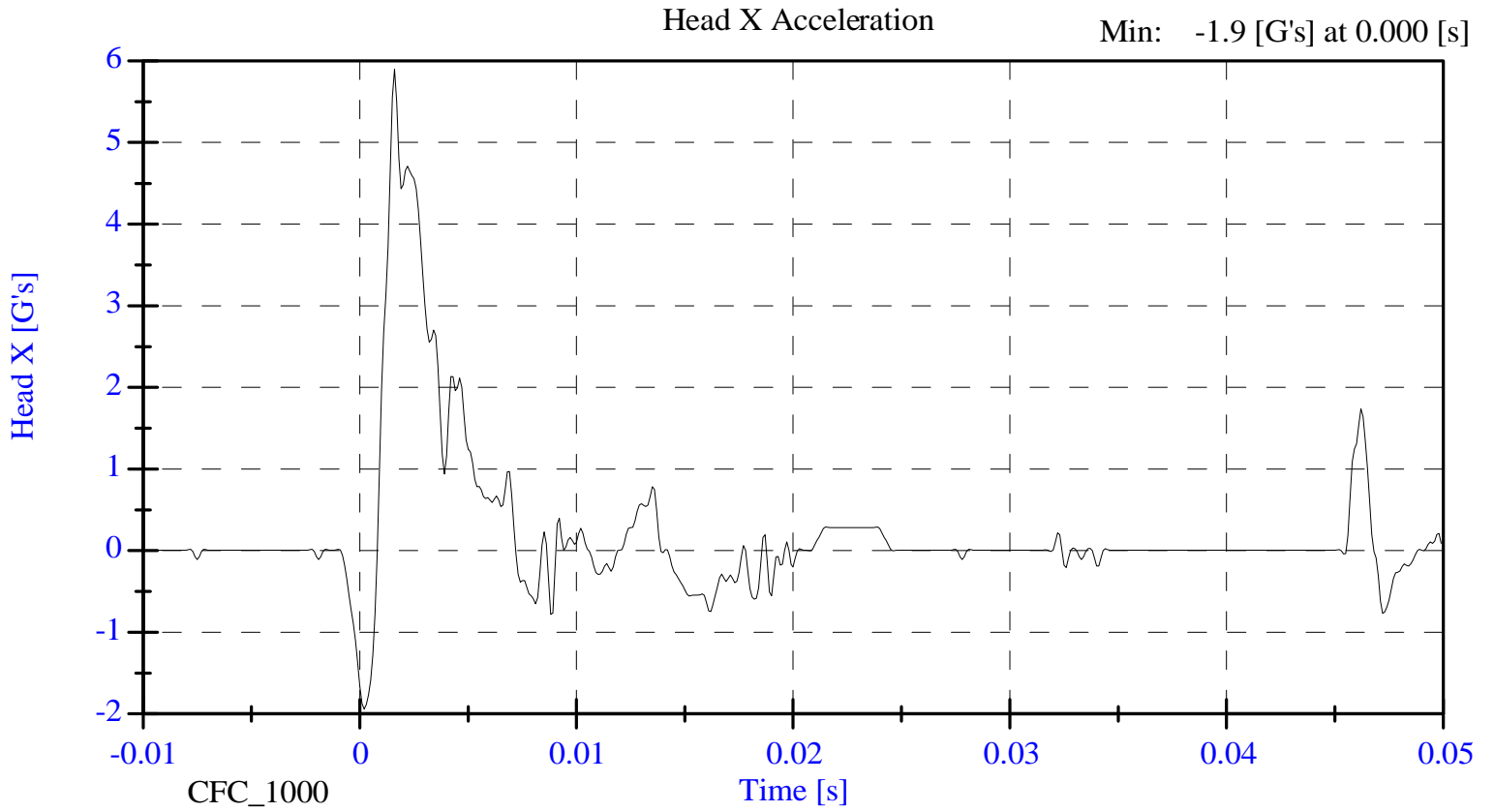
SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 10, 2003 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	20.6-22.2	20.6
RELATIVE HUMIDITY (%)	10 – 70	38
PEAK RESULTANT ACCELERATION (Gs)	120 - 150	142.90
PEAK LATERAL ACCELERATION (Gs)	Not to Exceed 15	5.90
CURVE PERCENT NONMODAL (%)	< 15	10.75

REMARKS: None

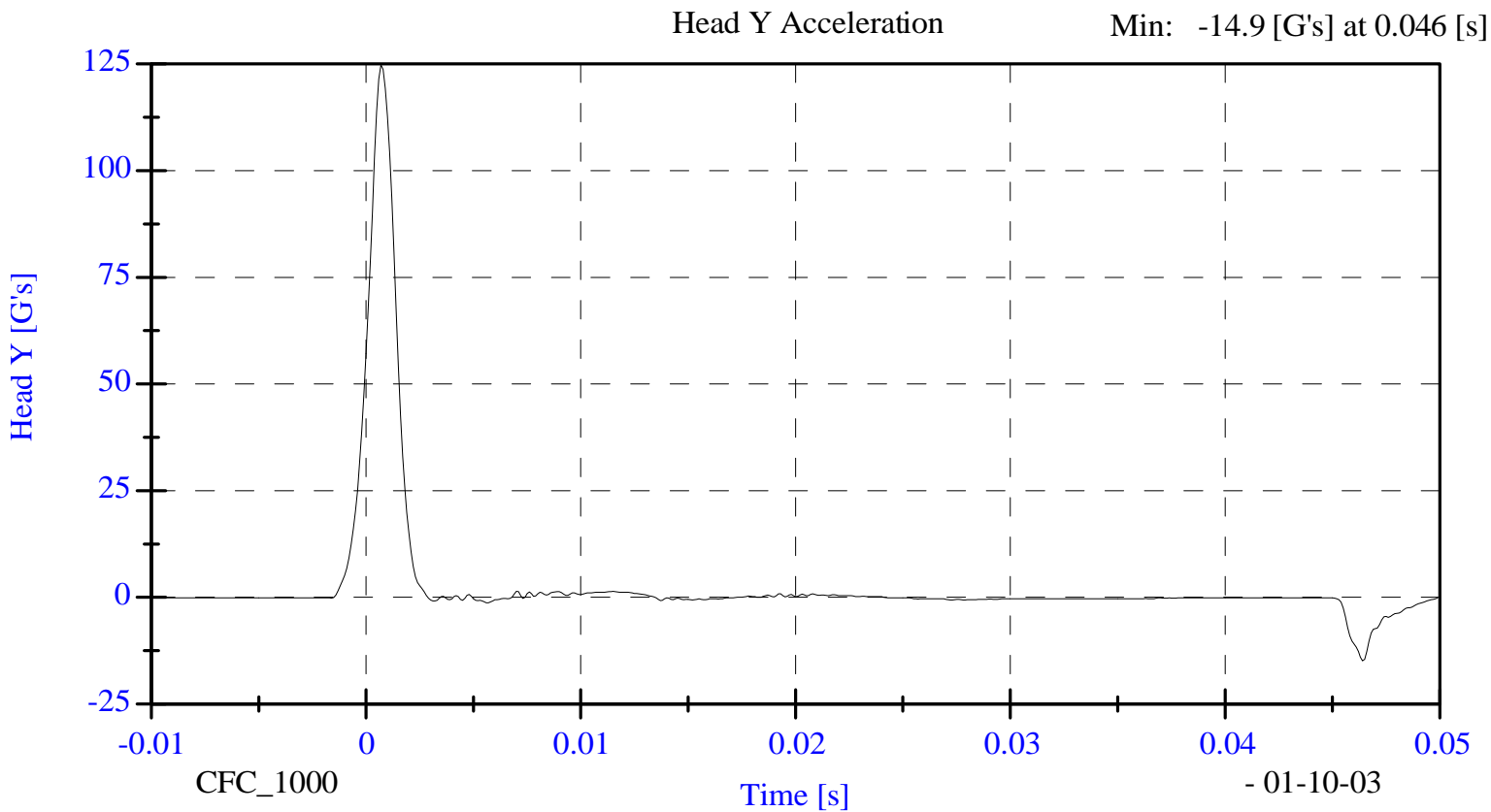
Max: 5.9 [G's] at 0.002 [s]

Min: -1.9 [G's] at 0.000 [s]



Max: 124.8 [G's] at 0.001 [s]

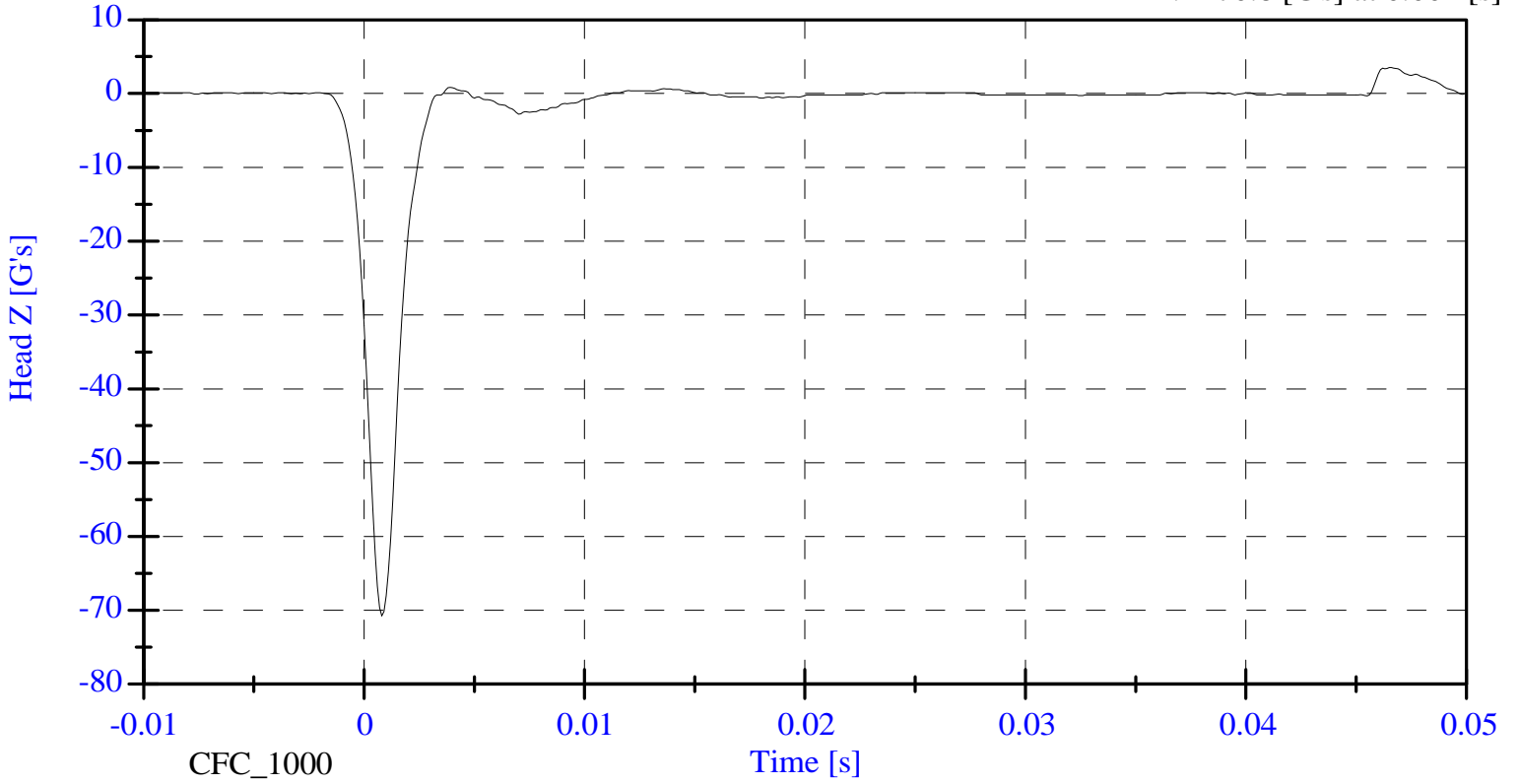
Min: -14.9 [G's] at 0.046 [s]



Max: 3.5 [G's] at 0.047 [s]

Min: -70.8 [G's] at 0.001 [s]

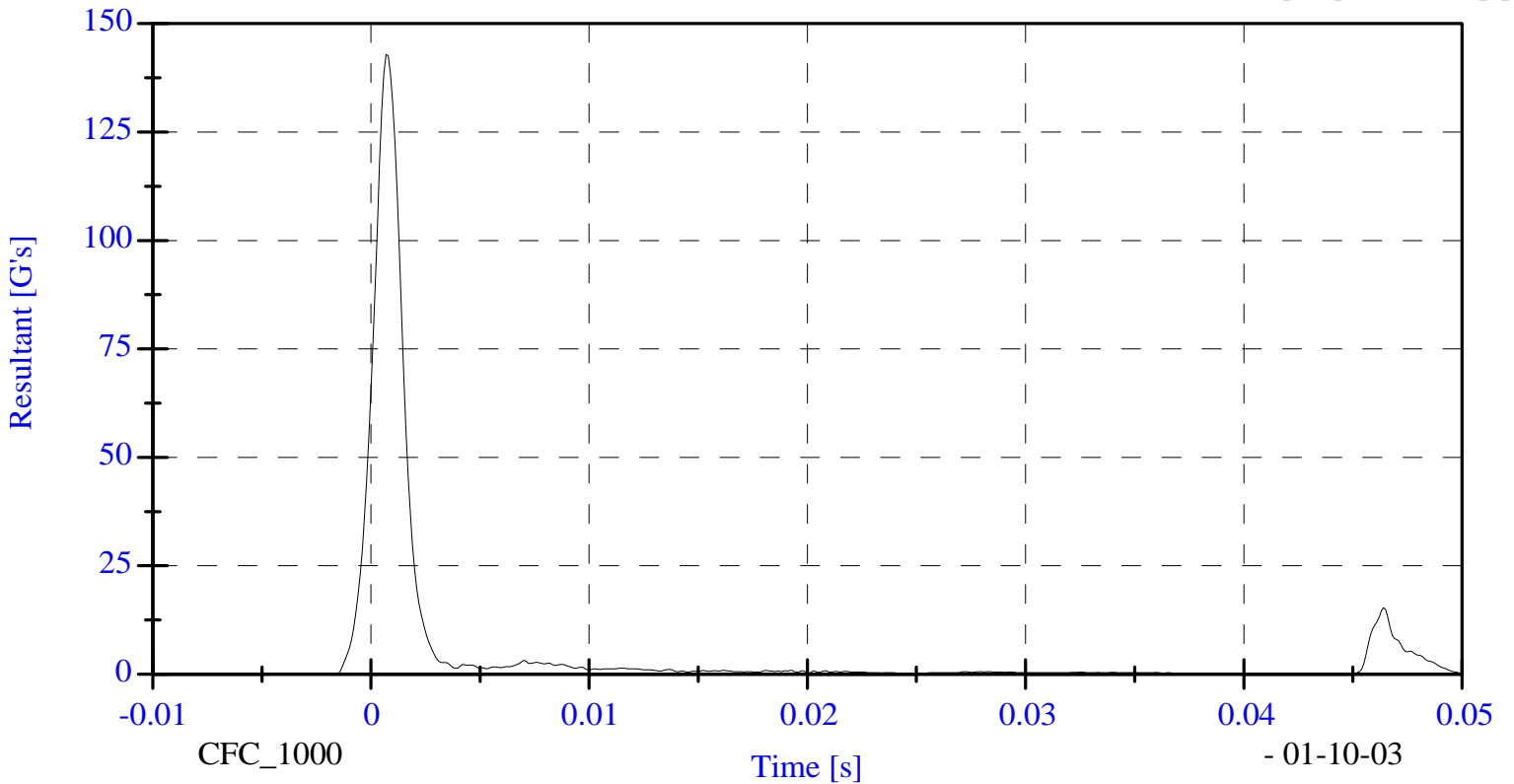
Head Z Acceleration



Max: 142.9 [G's] at 0.001 [s]

Min: 0.1 [G's] at -0.010 [s]

Head Resultant



**LATERAL NECK BENDING TEST
POST-TEST**
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID Serial No.: 015 Sequential Test Number: 1
Date: January 10, 2003 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	20.6 - 22.2	21.1
RELATIVE HUMIDITY (%)	10 - 70	38.0
IMPACT VELOCITY (m/s)	6.89 - 7.13	7.09
PENDULUM DELTA V		
DELTA V @ 10 ms (m/s)	1.96 - 2.55	2.11
DELTA V @ 20 ms (m/s)	4.12 - 5.10	4.41
DELTA V @ 30 ms (m/s)	5.73 - 7.01	6.32
DELTA V @ 40-70 ms (m/s)	6.27 - 7.64	7.07
D PLANE ROTATION		
MAXIMUM ROTATION (deg)	64 - 78	69.02
ROT. ANGLE TIME to ZERO (ms)	50 - 70	59.20
MOMENT ABOUT THE OCCIPITAL CONDYLE		
MAX OCCIPITAL MOMENT (Nm)	88 - 108	89.11
OCCIPITAL MOMENT DECAY (ms)	40.0 - 60.0	49.00
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT		
ROTATION wrt MOMENT (ms)	0 - 20	8.00

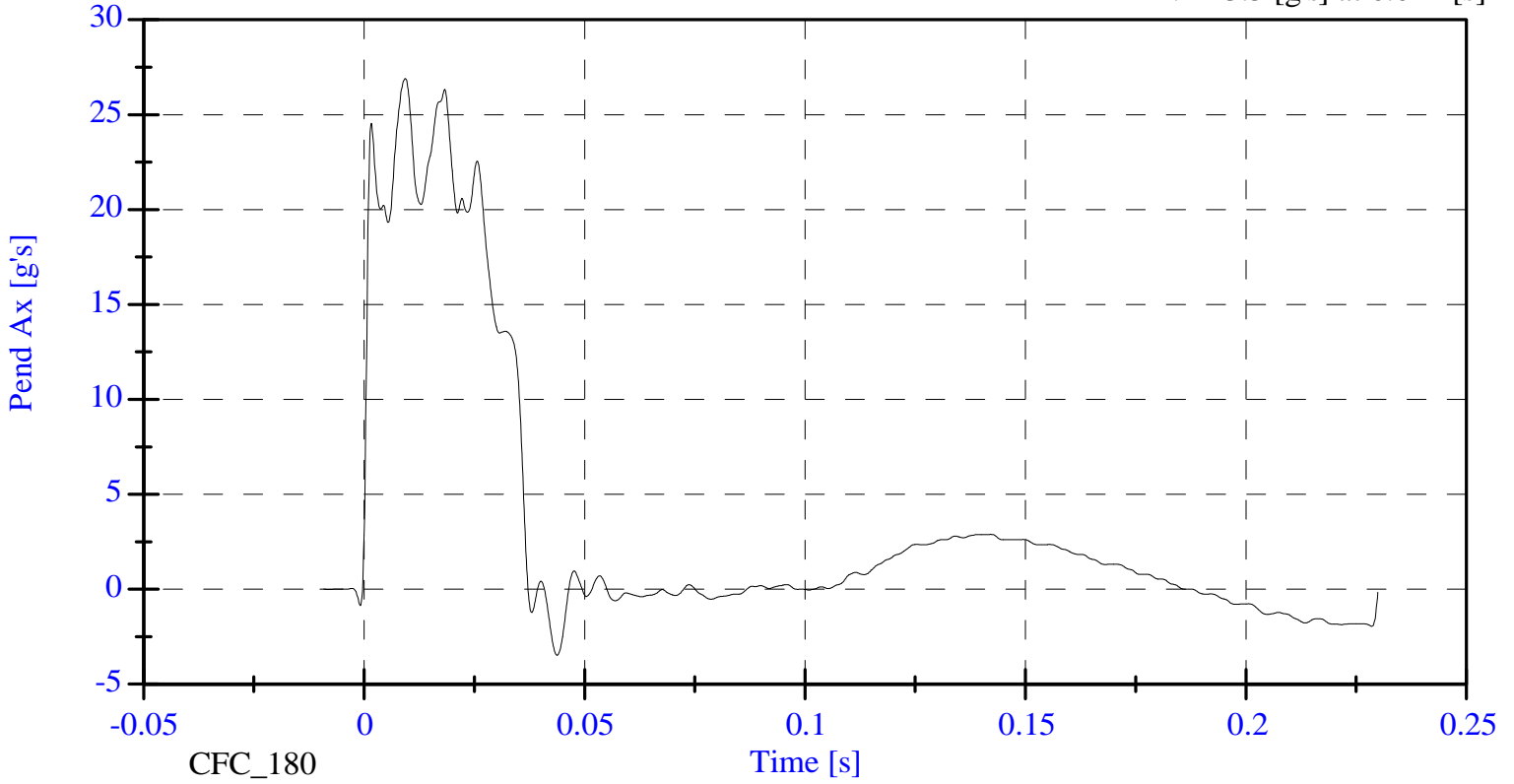
REMARKS: None

REMARKS: None

Max: 26.9 [g's] at 0.009 [s]

Min: -3.5 [g's] at 0.044 [s]

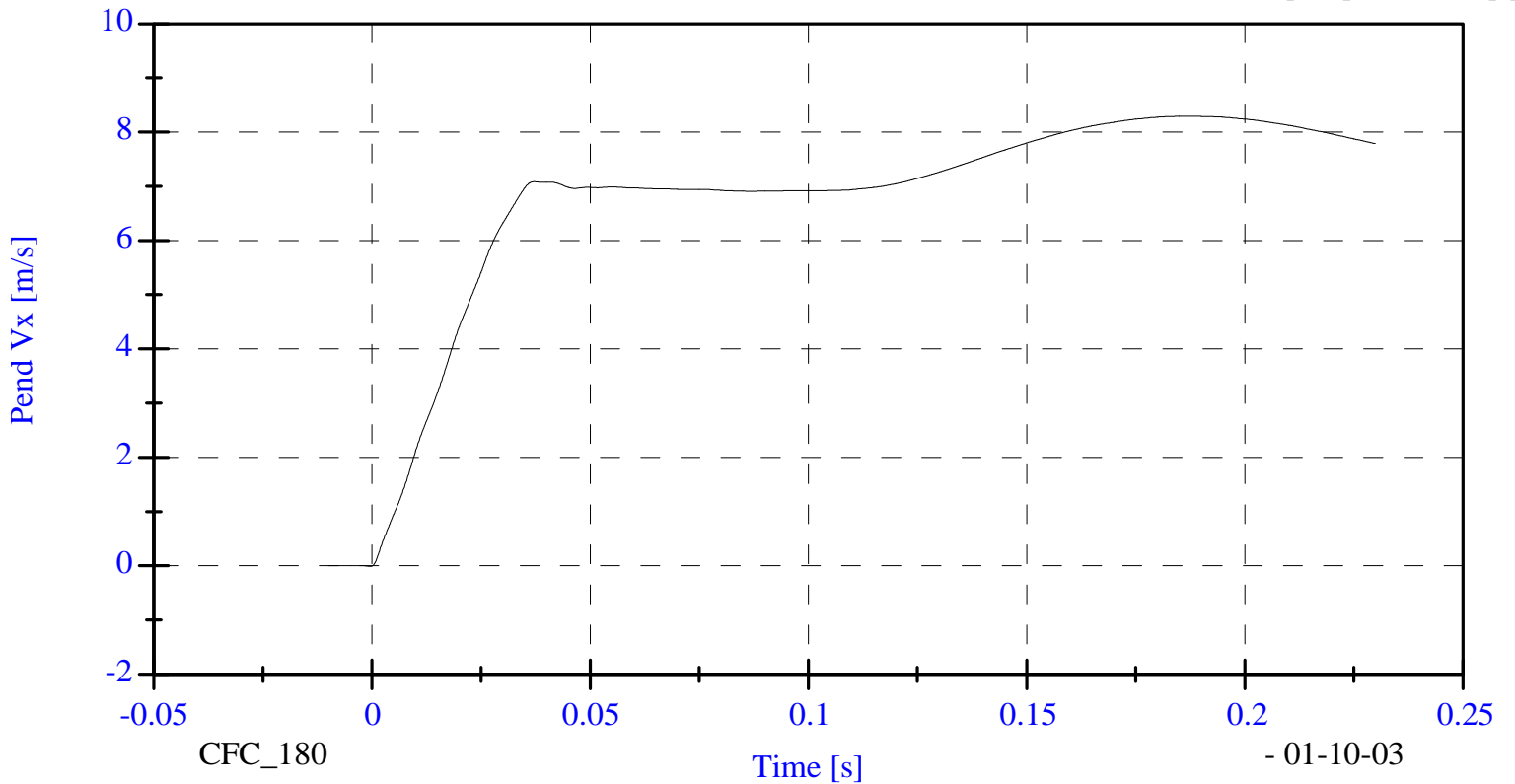
Pendulum Acceleration



Max: 8.3 [m/s] at 0.188 [s]

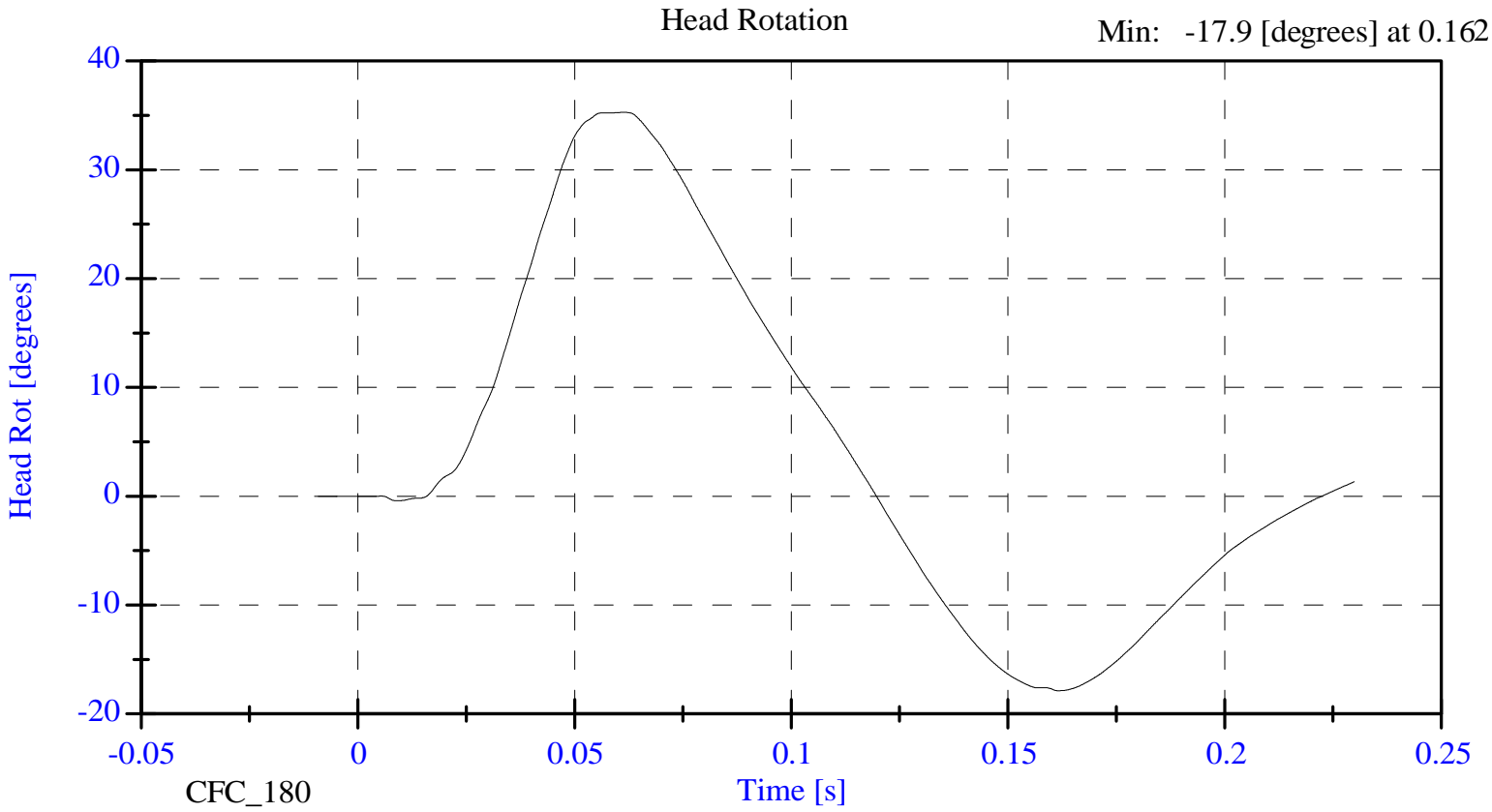
Min: -0.0 [m/s] at -0.000 [s]

Pendulum Velocity



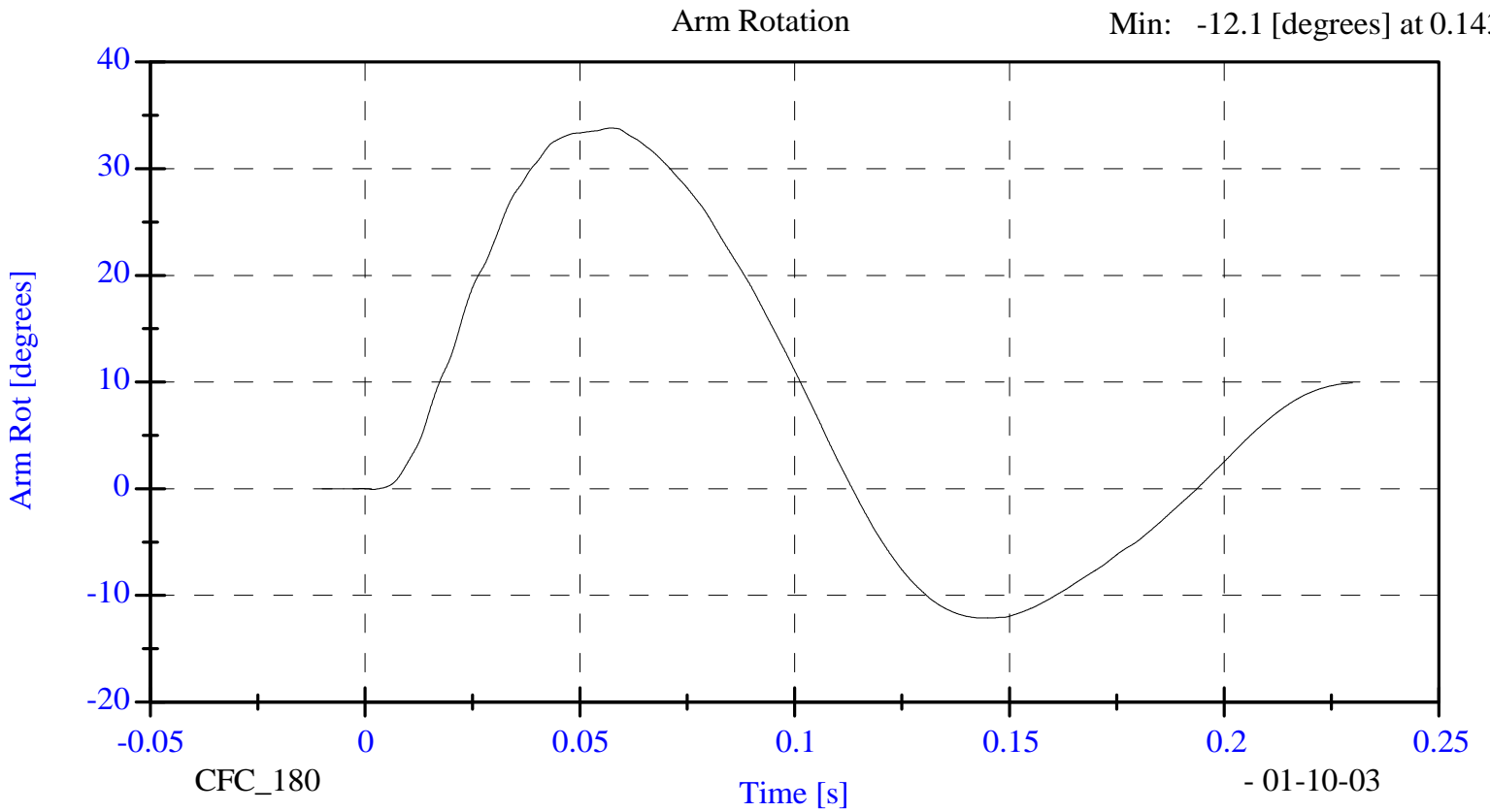
Max: 35.3 [degrees] at 0.061

Min: -17.9 [degrees] at 0.162



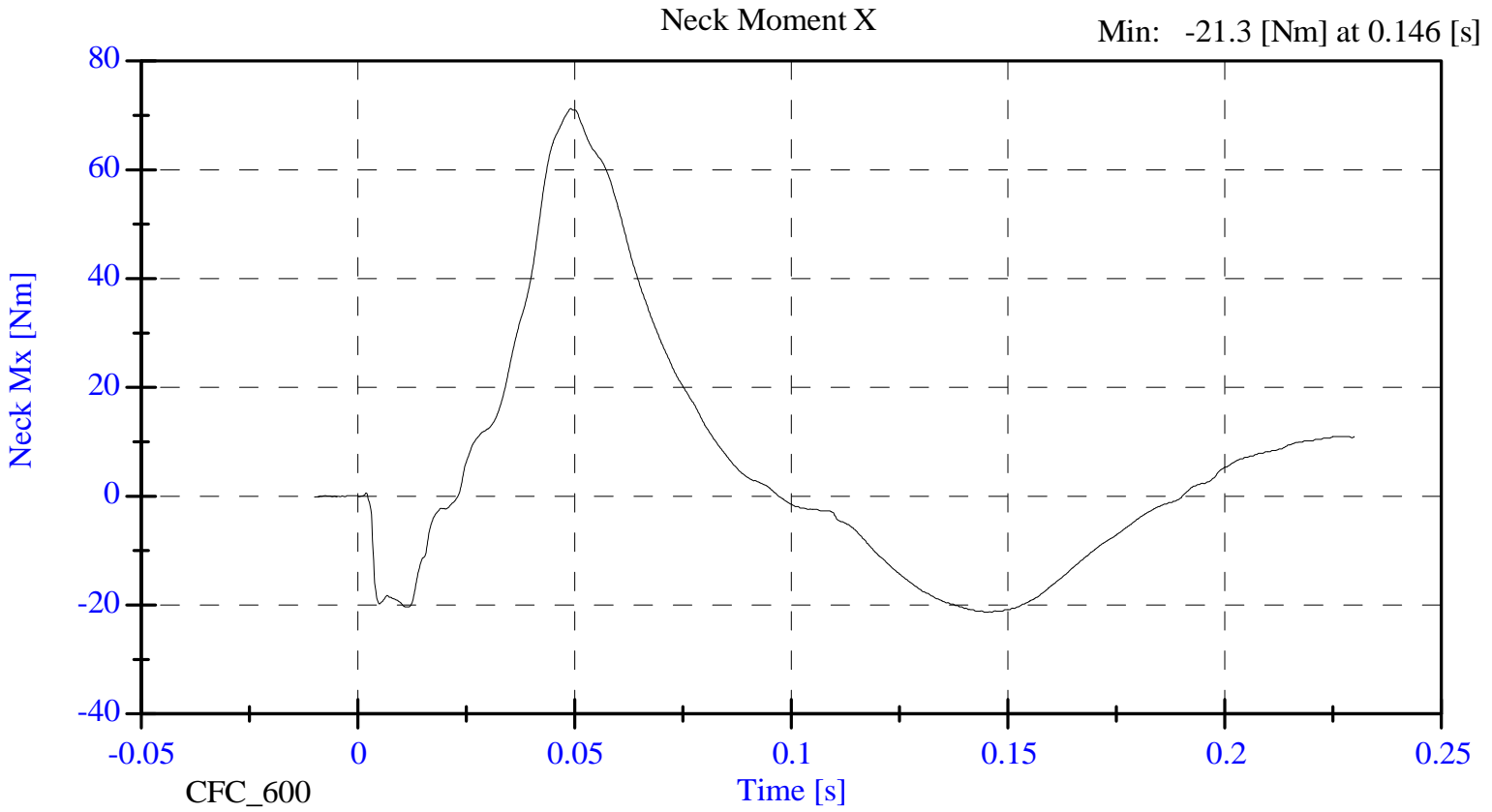
Max: 33.8 [degrees] at 0.057

Min: -12.1 [degrees] at 0.143



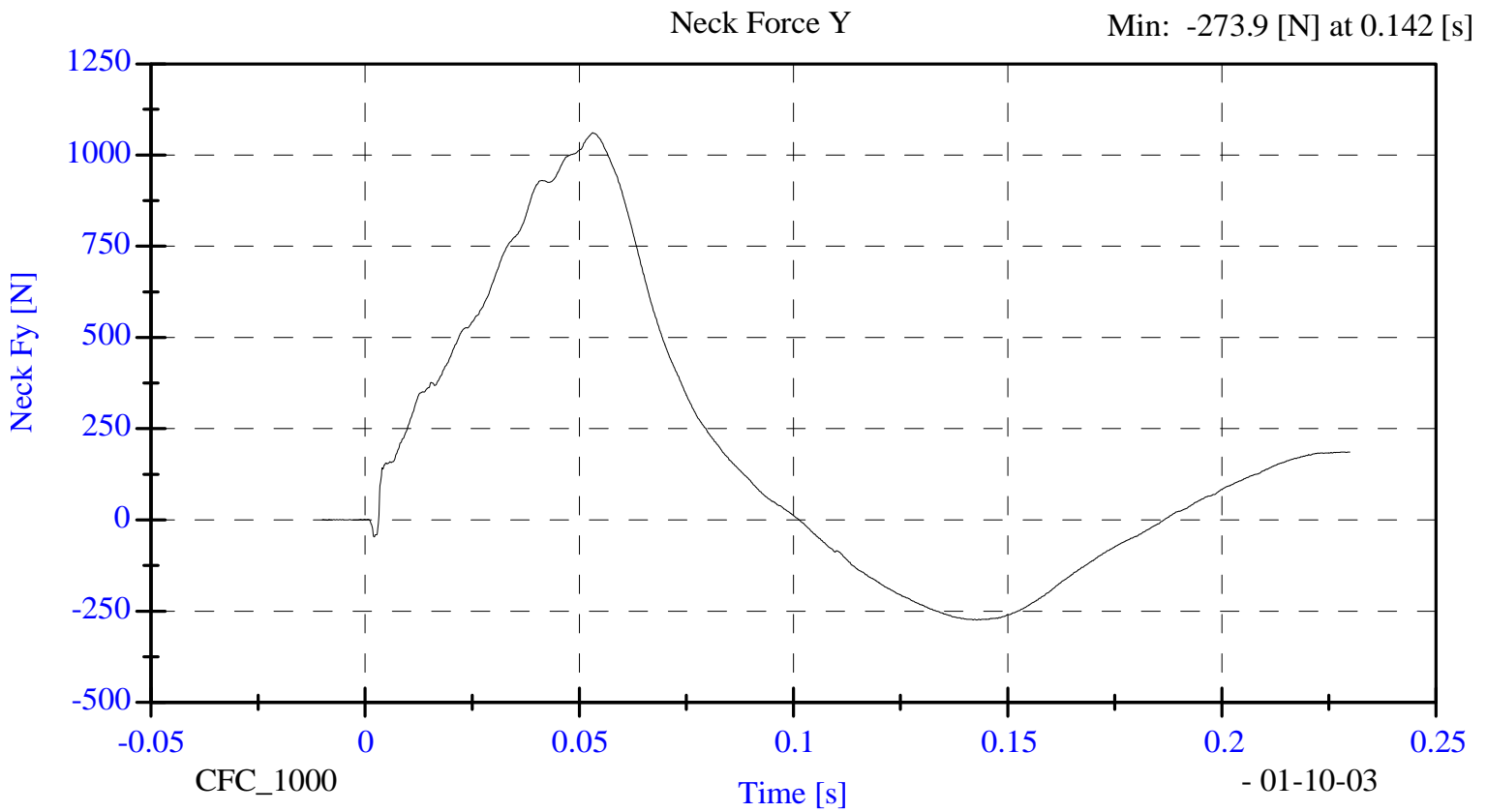
Max: 71.2 [Nm] at 0.049 [s]

Min: -21.3 [Nm] at 0.146 [s]



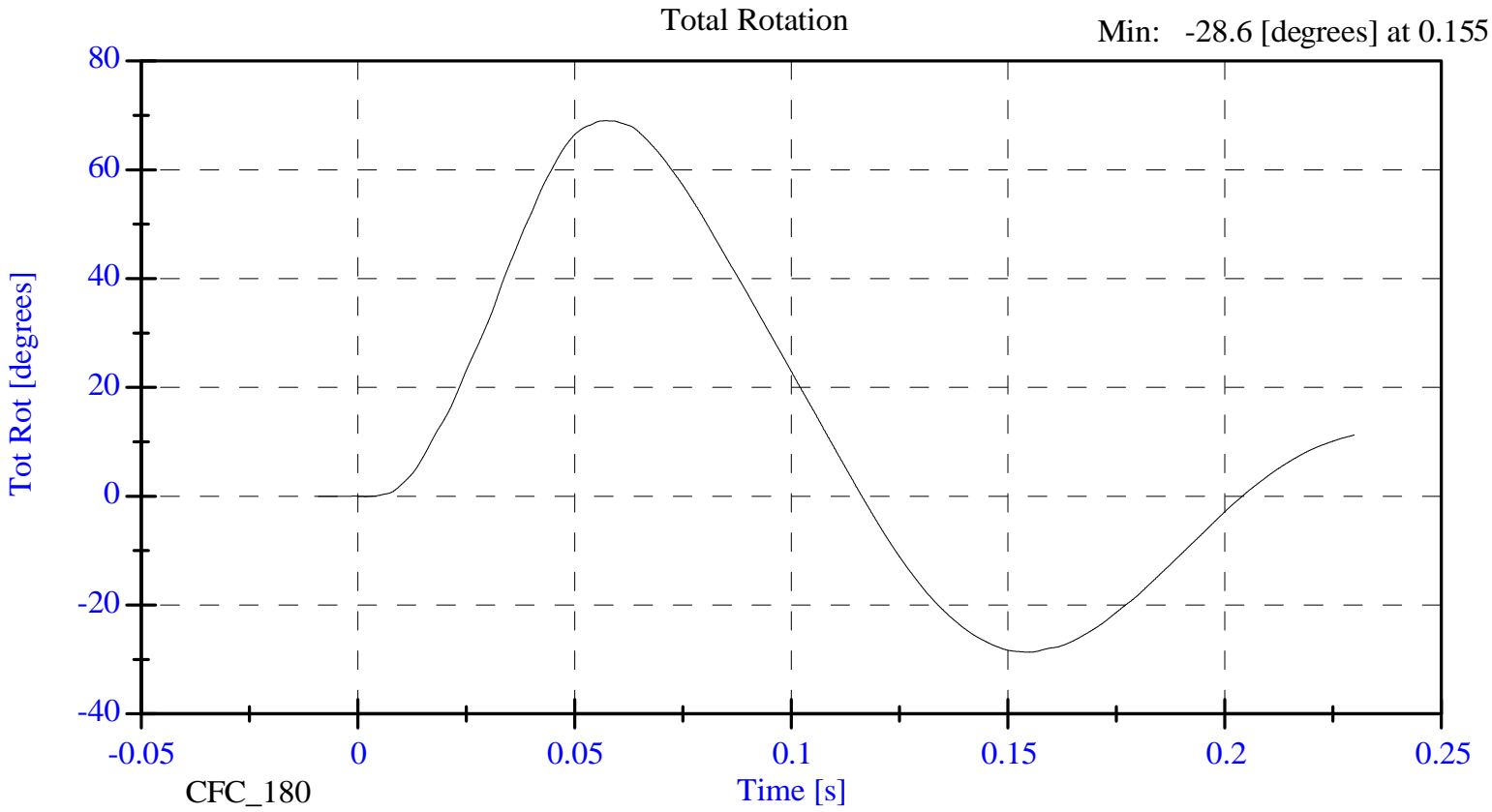
Max: 1060.6 [N] at 0.053 [s]

Min: -273.9 [N] at 0.142 [s]



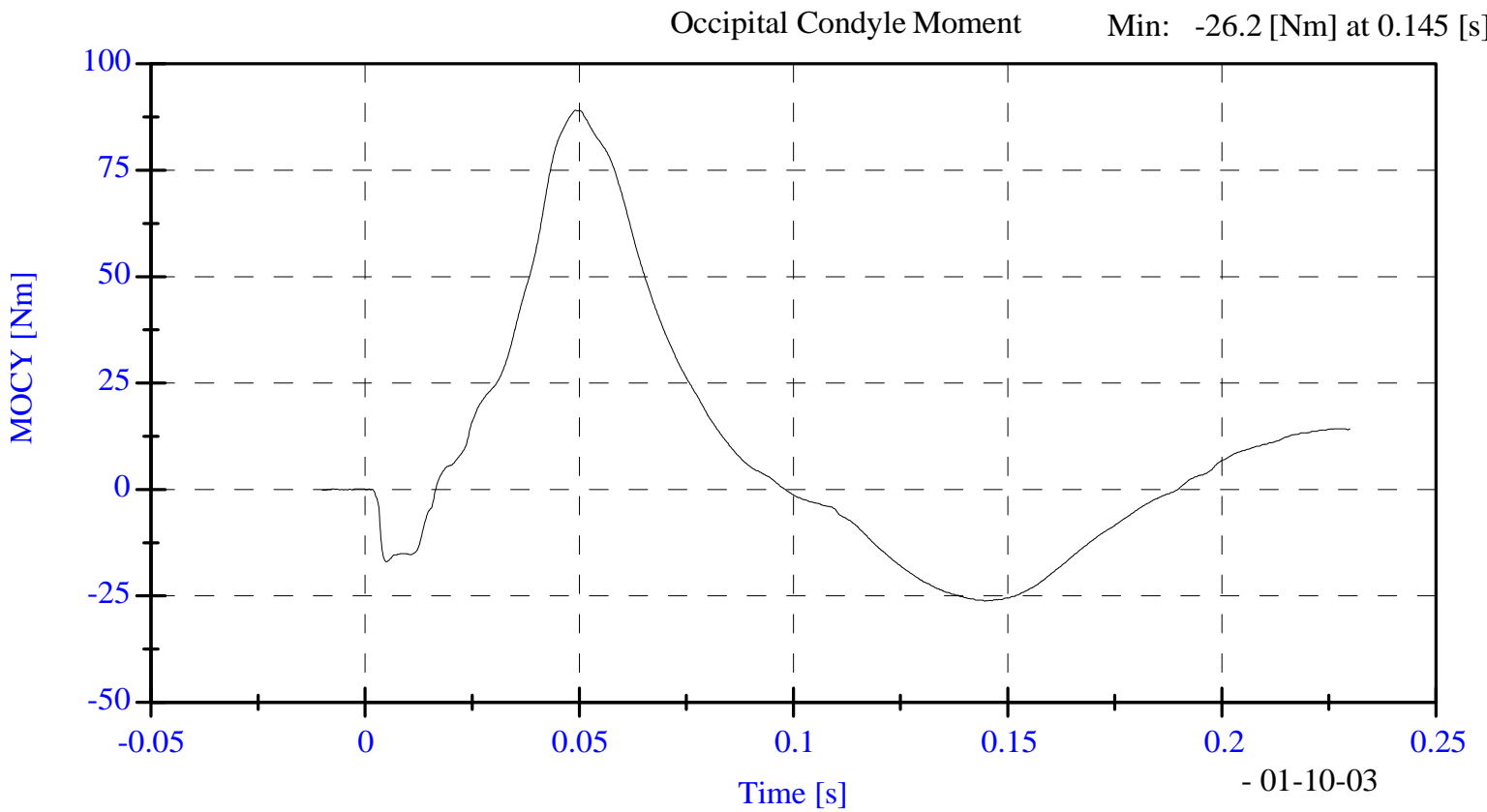
Max: 69.0 [degrees] at 0.057

Min: -28.6 [degrees] at 0.155



Max: 89.1 [Nm] at 0.049 [s]

Min: -26.2 [Nm] at 0.145 [s]



**ABDOMINAL COMPRESSION TEST
POST TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 13, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	39
FORCE @ 13 mm (N)	104 - 162	118.3
FORCE @ 19 mm (N)	163 - 221	186.8
FORCE @ 25 mm (N)	222 - 280	265.1
FORCE @ 33 mm (N)	325 - 391	379.9

REMARKS: None

Dummy S/N 015

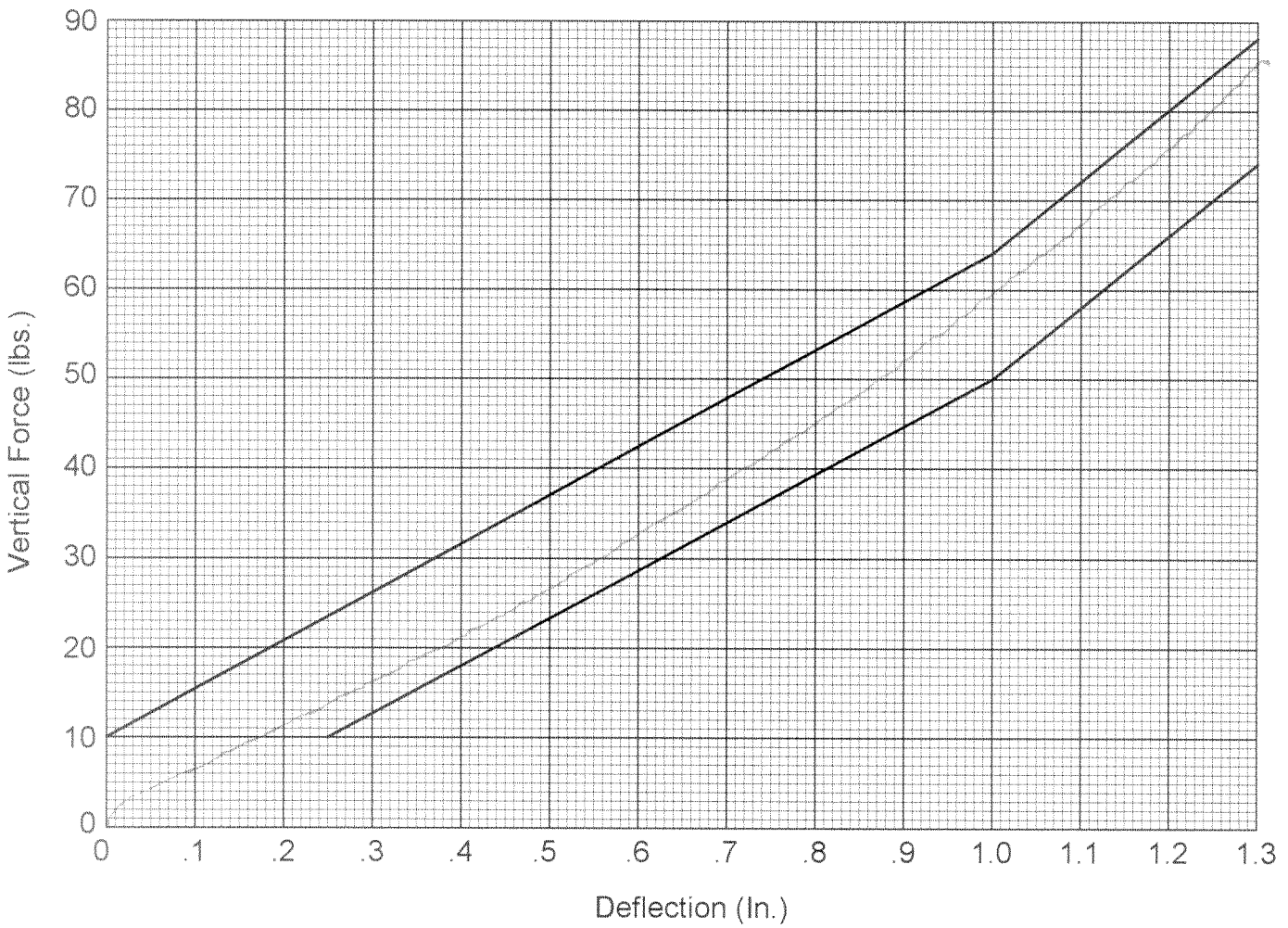
W/A _____

Date 1-13-03

Performed By BS

Temp. 71°

Humidity 39%



Hybrid II
Abdomen Static Press

**LUMBAR FLEXION TEST
POST TEST**
(Test not required for SID certification)

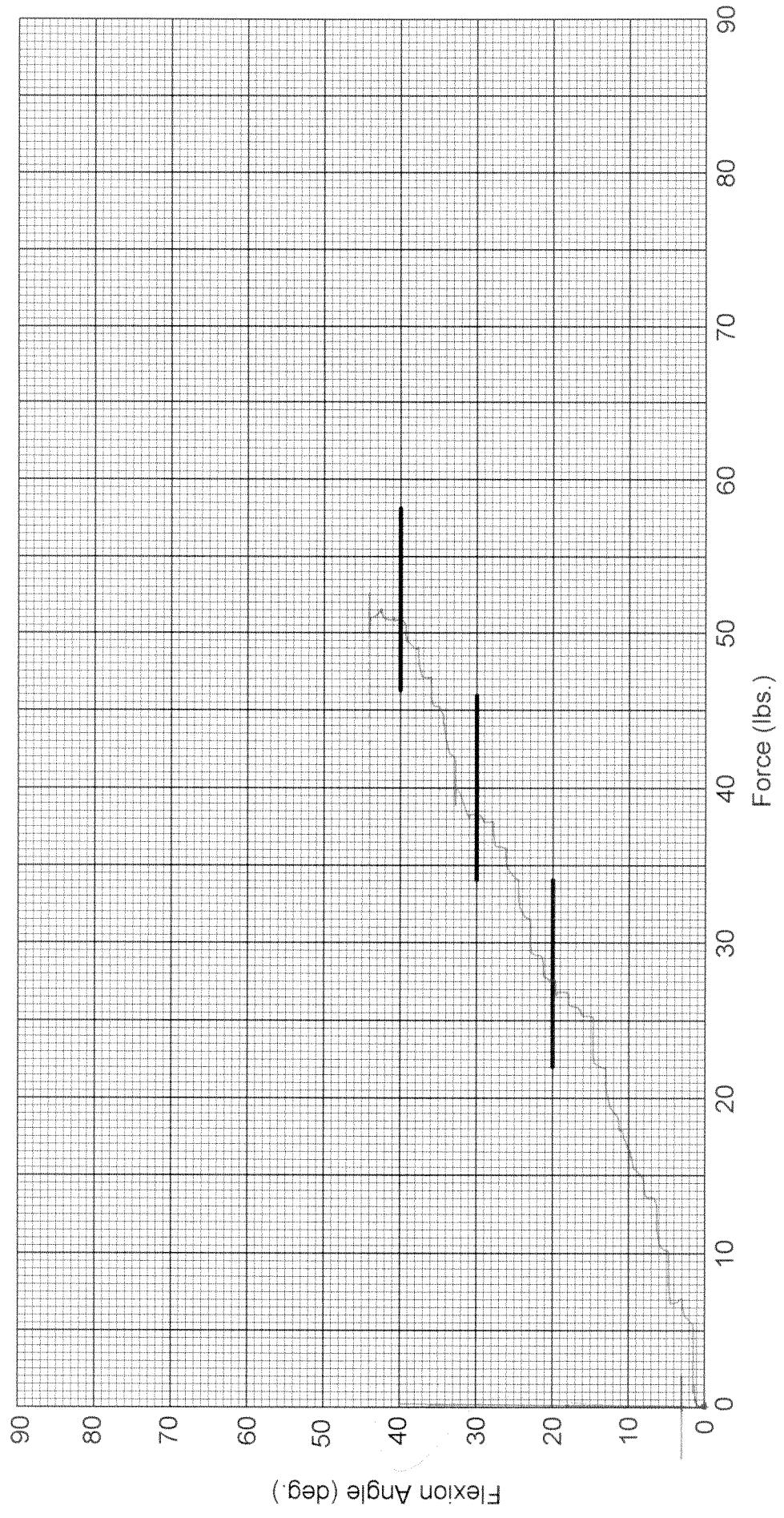
CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
Date: January 13, 2001 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.7
RELATIVE HUMIDITY (%)	10 - 70	39
FORCE @ 0° (N)	0 - 26.7	2.2
FORCE @ 20° (N)	97.8 - 151.2	124.6
FORCE @ 30° (N)	151.2 - 204.6	170.4
FORCE @ 40° (N)	204.6 - 258	226.0
RETURN ANGLE	12° max.	3.0°

REMARKS: None

Dummy S/N 015
 W/A _____
 Date 1-13-03
 Performed By [Signature]
 Temp. 71
 Humidity 39%



Hybrid II Lumbar Spine Flexion Test

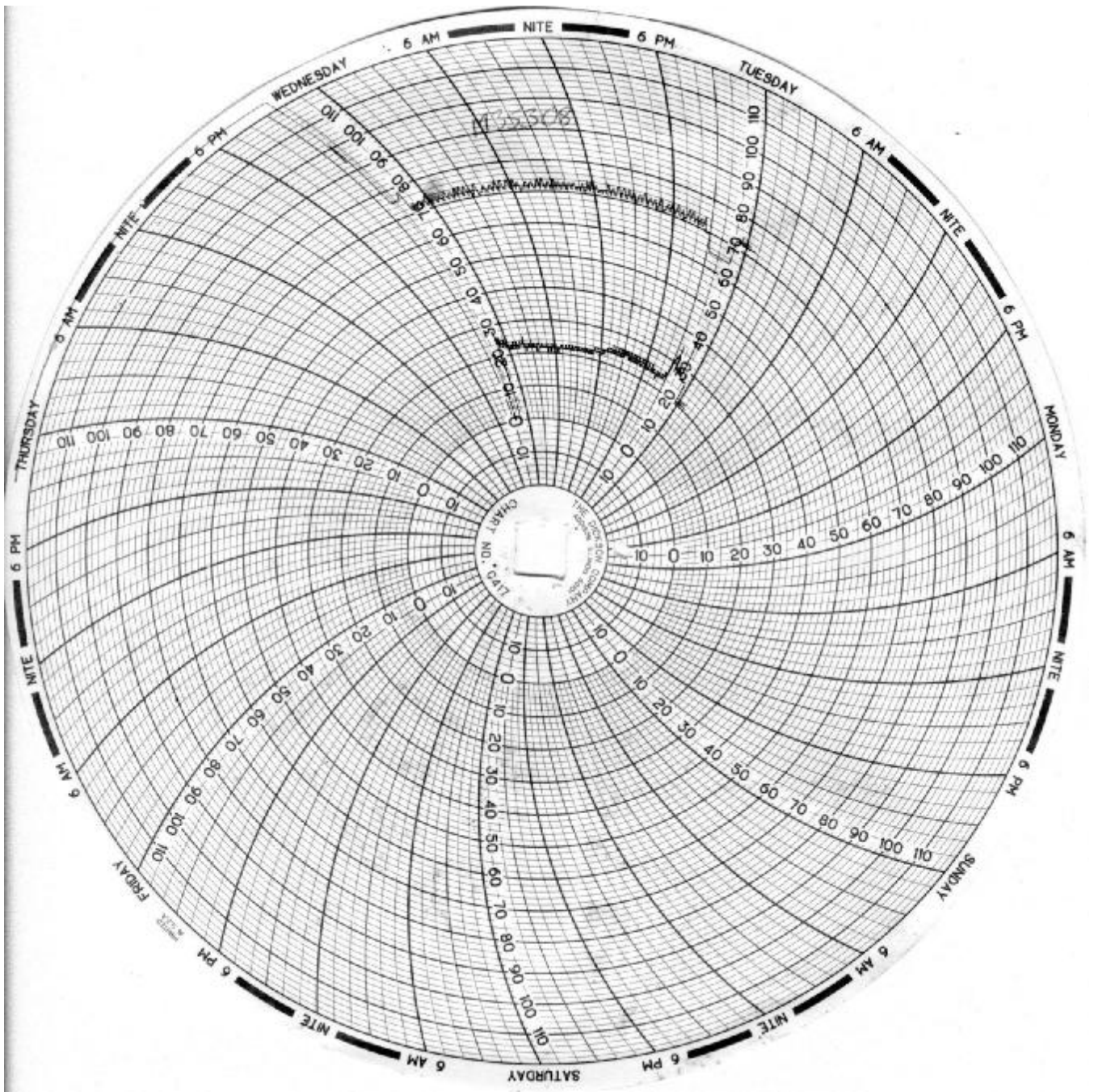
POST TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 015 Sequential Test Number: 1
 Date: January 13, 2001 Laboratory Technician: B. Swiecicki

PART	ITEMS CHECKED	COMMENTS
SKIN	VISUAL INSPECTION	OK
HEAD	VISUAL, BALLAST, ACCELEROMETER MOUNT	OK
NECK	VISUAL, CABLE TORQUE	OK
SPINE BOX	VISUAL, BALLAST, WELDMENT, ACCELEROMETER MOUNT	OK
RIB CAGE	VISUAL, MEASURE, STIFFENERS	OK
STERNUM	VISUAL	OK
LUMBAR SPINE	VISUAL	OK
ABDOMEN	VISUAL	OK
PELVIS	VISUAL, PALPATE, ACCELEROMETER MOUNT	OK
UPPER LEGS	VISUAL	OK
KNEES	VISUAL, STOPS, INSERTS	OK
LOWER LEGS	VISUAL, RANGE OF MOTION	OK
ANKLES	VISUAL, RANGE OF MOTION	OK
FEET	VISUAL, RANGE OF MOTION	OK
JOINTS	1 TO 2 g RANGE	OK
OTHER	NONE	-

REMARKS: None

TEMPERATURE TRACE



APPENDIX D

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

SID INSTRUMENTATION

	FRONT SID NO.: 015		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-P23993	ENDEVCO	10/04/02
HEAD AY	AC-P23939	ENDEVCO	10/04/02
HEAD AZ	AC-P23999	ENDEVCO	10/04/02
UPPER NECK FX	LC-260FX	DENTON	11/12/02
UPPER NECK FY	LC-260FY	DENTON	11/12/02
UPPER NECK FZ	LC-260FZ	DENTON	11/12/02
UPPER NECK MX	LC-260MX	DENTON	11/12/02
UPPER NECK MY	LC-260MY	DENTON	11/12/02
UPPER NECK MZ	LC-260MZ	DENTON	11/12/02
UPPER RIB	AC-P16862	ENDEVCO	08/16/02
LOWER RIB	AC-P16656	ENDEVCO	08/16/02
LOWER SPINE	AC-P16866	ENDEVCO	08/16/02
PELVIS	AC-P16676	ENDEVCO	08/16/02
UPPER RIB REDUNDANT	AC-P23156	ENDEVCO	08/16/02
LOWER RIB REDUNDANT	AC-P16645	ENDEVCO	08/15/02
LOWER SPINE REDUNDANT	AC-P16823	ENDEVCO	08/16/02
PELVIS REDUNDANT	AC-P16843	ENDEVCO	08/16/02

	REAR SID NO.: -		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	-	-	-
HEAD AY	-	-	-
HEAD AZ	-	-	-
UPPER NECK FX	-	-	-
UPPER NECK FY	-	-	-
UPPER NECK FZ	-	-	-
UPPER NECK MX	-	-	-
UPPER NECK MY	-	-	-
UPPER NECK MZ	-	-	-
UPPER RIB	-	-	-
LOWER RIB	-	-	-
LOWER SPINE	-	-	-
PELVIS	-	-	-
UPPER RIB REDUNDANT	-	-	-
LOWER RIB REDUNDANT	-	-	-
LOWER SPINE REDUNDANT	-	-	-
PELVIS REDUNDANT	-	-	-

REMARKS: None

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

VEHICLE AND MDB INSTRUMENTATION

	VEHICLE AND MDB INSTRUMENTS		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
RIGHT FRONT SILL (X)	AC-P23134	ENDEVCO	09/18/02
RIGHT FRONT SILL (Y)	AC-P18792	ENDEVCO	08/01/02
RIGHT FRONT SILL (Z)	AC-P18536	ENDEVCO	08/01/02
RIGHT REAR SILL (X)	AC-J29805	ENDEVCO	09/18/02
RIGHT REAR SILL (Y)	AC-J25745	ENDEVCO	08/27/02
RIGHT REAR SILL (Z)	AC-J32383	ENDEVCO	08/29/02
REAR FLOORPAN ABOVE AXLE (X)	AC-P21392	ENDEVCO	09/17/02
REAR FLOORPAN ABOVE AXLE (Y)	AC-P19253	ENDEVCO	09/17/02
REAR FLOORPAN ABOVE AXLE (Z)	AC-P23138	ENDEVCO	09/17/02
LEFT REAR SILL (Y)	AC-6917-024	ICS	11/21/02
LEFT FRONT SILL (Y)	AC-8083-037	ICS	11/21/02
LEFT FRONT DOOR CENTERLINE (Y)	AC-8086-048	ICS	11/20/02
RIGHT REAR SEAT OCCUPANT COMP. (Y)	-	-	-
MID REAR OF LEFT FRONT DOOR (Y)	-	-	-
LEFT FRONT DOOR UPPER C\L (Y)	AC-8086-044	ICS	11/21/02
MID REAR OF LEFT REAR DOOR (Y)	-	-	-
LEFT REAR DOOR UPPER C\L (Y)	-	-	-
LOWER LEFT B- PILLAR (Y)	AC-8084-002	ICS	11/21/02
MIDDLE LEFT B-PILLAR (Y)	AC-8084-036	ICS	11/20/02
LOWER LEFT A-PILLAR (Y)	AC-8084-048	ICS	11/21/02
UPPER LEFT A-PILLAR (Y)	AC-8083-032	ICS	11/20/02
FRONT SEAT TRACK (Y)	AC-6917-020	ICS	11/20/02
REAR SEAT TRACK (Y)	-	-	-
VEHICLE CG (X)	AC-P18731	ENDEVCO	08/15/02
VEHICLE CG (Y)	AC-P17299	ENDEVCO	08/15/02
VEHICLE CG (Z)	AC-P16662	ENDEVCO	08/15/02
MDB CG (X)	AC-C16682	ENDEVCO	09/05/02
MDB CG (Y)	AC-CJ54	ENDEVCO	09/05/02
MDB CG (Z)	AC-GK12	ENDEVCO	09/05/02
MDB REAR FRAME MEMBER (X)	AC-CX05	ENDEVCO	09/05/02
MDB REAR FRAME MEMBER (Y)	AC-C16685	ENDEVCO	09/05/02

REMARKS: None