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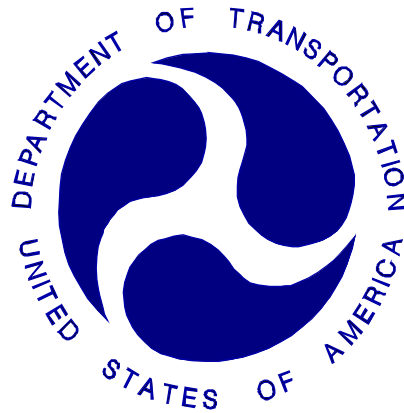
**NEW CAR ASSESSMENT PROGRAM
SIDE IMPACT TEST**

FORD MOTOR CO
2005 FORD FIVE HUNDRED
FOUR-DOOR SEDAN

NHTSA NUMBER: M50201

GENERAL DYNAMICS TEST NUMBER: 8675-SNCAP-06

ADVANCED INFORMATION ENGINEERING SERVICES
A GENERAL DYNAMICS COMPANY
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November 15, 2004

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

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Accepted By:

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16. Abstract A 55/28 kph 90° Impact Moving Deformable Barrier NCAP Side Impact Test was conducted on the subject 2005 Ford Five Hundred Four-Door Sedan 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 General Dynamics Advanced Information Engineering Services Crash Test Facility in Buffalo, New York, on November 15, 2004. The impact velocity of the Moving Deformable Barrier (MDB) was 62.28 kph, and the ambient temperature at the struck (driver's) side of the target vehicle at the time of impact was 21°C. The target vehicle post-test maximum crush was 243 mm at level 2. The test or target vehicle's performance is given below: <table border="0"> <thead> <tr> <th></th> <th><u>Front SID H3</u></th> <th></th> <th><u>Rear SID H3</u></th> </tr> </thead> <tbody> <tr> <td>Left Upper Rib Acceleration:</td> <td align="center">45</td> <td align="center">g's</td> <td align="center">49.7</td> </tr> <tr> <td>Left Lower Rib Acceleration:</td> <td align="center">46.7</td> <td align="center">g's</td> <td align="center">41.5</td> </tr> <tr> <td>Lower Spine Acceleration:</td> <td align="center">51.4</td> <td align="center">g's</td> <td align="center">61.7</td> </tr> <tr> <td>Thoracic Trauma Index (TTI):</td> <td align="center">49</td> <td align="center">g's</td> <td align="center">56</td> </tr> <tr> <td>Pelvis Acceleration (PEV):</td> <td align="center">48</td> <td align="center">g's</td> <td align="center">60</td> </tr> </tbody> </table> The two doors on the struck side of the vehicle did not separate from the body at the hinges or latches and the opposite doors did not open during the side impact event.					<u>Front SID H3</u>		<u>Rear SID H3</u>	Left Upper Rib Acceleration:	45	g's	49.7	Left Lower Rib Acceleration:	46.7	g's	41.5	Lower Spine Acceleration:	51.4	g's	61.7	Thoracic Trauma Index (TTI):	49	g's	56	Pelvis Acceleration (PEV):	48	g's	60
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SECTION 1

PURPOSE AND TEST PROCEDURE

This side impact test is part of the FY2004 New Car Assessment Program Side Impact Protection sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-03-D-22005. The purpose of this test was to generate comparative side impact performance in a 2005 Ford Five Hundred Four-Door Sedan. 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 2005 Ford Five Hundred Four-Door Sedan 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 62.28 kph (38.7 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 General Dynamics Advanced Information Engineering Services in Buffalo, New York on November 15, 2004. Pre- and post-test photographs of the test vehicle, the moving deformable barrier (MDB), and the Side Impact Hybrid III Dummies (SID H3s) are included in Appendix A.

Two restrained Side Impact Hybrid III Dummies (SID H3s) were placed in the driver (Pos. #1) and left rear (Pos. #4) designated seating positions 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 10 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 65 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)	49	56
PEV (g)	48	60

AIR BAG DEPLOYMENT STATUS

	DRIVER	FRONT PASSENGER	REAR PASSENGER
Front Air Bag	No	No	N/A
Knee Bolster Bag	N/A	N/A	N/A
Side Air Bag	N/A	N/A	N/A
Side Curtain Bag	N/A	N/A	N/A

AUTOMATIC DOOR LOCK SUMMARY

ADL Equipped Test Vehicle:	Yes
ADL Activation Status:	Deactivated
Struck Side Door Lock Condition:	Unlocked

SECTION 3

SUMMARY OF TEST RESULTS

DATA SHEET 1

GENERAL TEST AND VEHICLE PARAMETER DATA

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 2005 Ford Five Hundred Four-Door Sedan
 Vehicle Body Color: Red VIN: 1FAFP231X5G119135
 Vehicle NHTSA No.: M50201 Month & Year of Manufacture: 10/04
 Engine Data: 6 Cylinders; - CID; 3.0 Liters; - cc
 Engine Placement: - Longitudinal; or X Lateral
 Transmission: 6 Speed; - Manual; X Automatic; X Overdrive
 Final Drive: - Rear Wheel Drive; X Front Wheel Drive; - Four Wheel Drive
 Odometer Reading 50 km
 Supplemental Airbag Restraints:
 Front Occupant: X Frontal; - Knee; - Side; - Curtain
 Rear Occupant: X Frontal; - Knee; - Side; - Curtain
 Options:
X ADL; X A/C; X Power Steering; X Power Brakes; X Power Windows

DATA FROM TIRE PLACARD

Recommended Tire Size: P215/60R17
 *Recommended Cold Tire Pressure: 220 kPa FRONT; 220 kPa REAR

DATA FROM TIRE SIDEWALL:

Size of Tires on Test Vehicle: P215/60R17 95T; Manufacturer: Continental
 Tire Pressure with Maximum Capacity Vehicle Load: Front: 300 kPa; Rear: 300 kPa
 Treadwear: 360; Traction: A; Temperature: A

VEHICLE CAPACITY DATA:

Number of Occupants: 2 Front; 3 Rear; - 3rd Seat; 5 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 = 430 kg (A)
 No. of Occupants x 68.04 kg. = 340.2 kg (B)
 Vehicle Cargo Capacity = 89.8 kg (A-B)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

Left Front = 506.0 kg Left Rear = 330.0 kg
 Right Front = 505.0 kg Right Rear = 325.0 kg
 TOTAL FRONT = 1011.0 kg TOTAL REAR = 655.0 kg
 % of Total Weight = 60.7% % % of Total Weight = 39.3 %
 TOTAL WEIGHT = 1666.0 kg

* Tire pressure used in test.

DATA SHEET 1 (continued)**GENERAL TEST VEHICLE PARAMETER DATA**Vehicle: 2005 Ford Five Hundred Four-Door SedanNHTSA No. M50201CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight with Max. Fluids	=	<u>1666.0</u>	kg (A)
Maximum Cargo Carrying Capacity of Test Vehicle	=	<u>89.8</u>	kg (B)
Weight of instrumented SID H3 Dummies (2 X 81.2 kg)	=	<u>162.4</u>	kg (C)
TEST VEHICLE TARGET WEIGHT:	=	<u>1918.2</u>	kg (A+B+C)

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

Left Front	=	<u>559.0</u>	kg	Left Rear	=	<u>446.0</u>	kg
Right Front	=	<u>502.0</u>	kg	Right Rear	=	<u>415.0</u>	kg
TOTAL FRONT	=	<u>1061.0</u>	kg	TOTAL REAR	=	<u>861.0</u>	kg
% of Total Weight	=	<u>55.2%</u>	%	% of Total Weight	=	<u>44.8%</u>	%
TOTAL TEST WEIGHT =		<u>1922.0</u>	kg				

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

Left Front	=	<u>557.0</u>	kg	Left Rear	=	<u>438.0</u>	kg
Right Front	=	<u>507.0</u>	kg	Right Rear	=	<u>407.5</u>	kg
TOTAL FRONT	=	<u>1064.0</u>	kg	TOTAL REAR	=	<u>845.5</u>	kg
% of Total Weight	=	<u>55.7%</u>	%	% of Total Weight	=	<u>44.3%</u>	%
TOTAL TEST WEIGHT =		<u>1909.5</u>	kg				

TEST VEHICLE ATTITUDE (all dimensions in millimeters):AS DELIVERED:

Left Front	<u>760</u>	Right Front	<u>766</u>	Left Rear	<u>771</u>	Right Rear	<u>771</u>
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FULLY LOADED:

Left Front	<u>744</u>	Right Front	<u>760</u>	Left Rear	<u>711</u>	Right Rear	<u>726</u>
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READY FOR TEST:

Left Front	<u>746</u>	Right Front	<u>761</u>	Left Rear	<u>721</u>	Right Rear	<u>737</u>
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Test Vehicle Wheelbase: 2875 millimetersC.G. = 1273.01 millimeters rearward of front wheel centerlineTOTAL VEHICLE LENGTH:

Right Side =	<u>4990</u>	millimeters
Left Side =	<u>4990</u>	millimeters
Centerline =	<u>5090</u>	millimeters

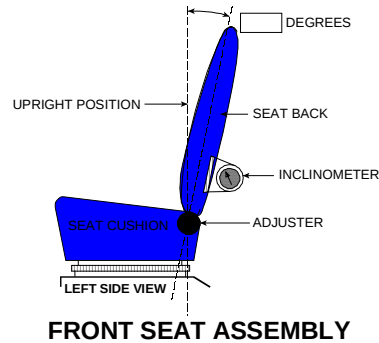
DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201

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: Set at mid position (123 mm of 246 mm travel)

Total Length of Adjustment Travel: 246 millimeters

Total Number of Adjustment Positions or Detents: Electronic

FRONT SEAT BACK ADJUSTMENT POSITION: Set by H-Pont machine to give 25° or 6.4° on the head restraint post from level sill

Seat Back Torso Angle: 25° degrees

SECOND POSITION SEAT:

Total Length of Fore/Aft Adjustment Travel: - millimeters

Seat Back Adjustment Position: N/A

ADJUSTABLE STEERING COLUMN POSITION: Mid tilt of 61.2 to 67.4° giving 64.3°

WINDOW POSITIONS: Left Front: Closed Left Rear: Closed
Right Front: Open Right Rear: Removed

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

AUTOMATIC DOOR LOCKS: Is test vehicle equipped with ADLs? X Yes - No

Does vehicle owner's manual describe how to deactivate ADLs? X Yes - No - N/A

Comments: None

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

71.92 liters (Fuel Tank Usable Capacity)

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

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

Wheelbase = 2875 millimeters

Impact Point is 497.5 millimeters rearward of front axle centerline

(which is 940 millimeters forward of the wheelbase midpoint)

Actual Impact Point is 492.5 millimeters rearward of front axle centerline

DATA SHEET 2

TEST VEHICLE SUMMARY OF RESULTS

VEHICLE IDENTIFICATION:

Vehicle Year/Make/Model: 2005 Ford Five Hundred

Body Style: Four-Door Sedan

VIN: 1FAFP231X5G119135

NHTSA No.: M50201

Test Date: November 15, 2004

Overall Length = 5090 millimeters; Overall Width = 1884 millimeters

VEHICLE TEST WEIGHT (Pre-Test):

Left Front = 557.0 kg Left Rear = 438.0 kg

Right Front = 507.0 kg Right Rear = 407.5 kg

TOTAL FRONT = 1064.0 kg TOTAL REAR = 845.5 kg

TOTAL VEHICLE WEIGHT 1909.5 kg

Wheelbase = 2875 millimeters

Longitudinal C.G. from Center of Front Axle = 1273.01 millimeters

Impact Angle with Respect to Impactor = 90 degrees

ACTUAL IMPACT POINT

Actual Impact Point is 5 mm forward of nominal impact ref. line (Lateral)

Actual Impact Point is 6 mm below nominal impact point (Vertical)

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (207 mm above ground) = 28 millimeters

2. LEVEL 2 (553 mm above ground) = 243 millimeters

3. LEVEL 3 (623 mm above ground) = 237 millimeters

4. LEVEL 4 (920 mm above ground) = 176 millimeters

5. LEVEL 5 (1469 mm above ground) = 12 millimeters

Maximum Post-Test Intrusion = 243 millimeters

OCCUPANTS:

Front Passenger:

Rear Passenger:

Dummy Identification SID H3/269

SID H3/270

Restraints Used Three point safety belt

Three point safety belt

INSTRUMENTATION:

Number of Vehicle Data Channels: = 26

Number of Cameras: Onboard = 3

Offboard = 8

TOTAL = 11

DATA SHEET 3

MOVING DEFORMABLE BARRIER (MDB) SUMMARY

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201

MDB FACE MANUFACTURER AND SERIAL NUMBER:

Plascore, Inc. 061B0604-1 047A0504

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>62.28</u>	kph				

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

1. Row A at Center of Bumper Level	=	<u>192</u>	millimeters
2. Row B at Top of Bumper Level	=	<u>143</u>	millimeters
3. Row C at Mid Level	=	<u>130</u>	millimeters
4. Row D at Top of Stack Level	=	<u>172</u>	millimeters

INSTRUMENTATION:

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

POST-TEST OBSERVATIONS

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201

TEST DUMMY INFORMATION AND CONTACT POINTS:

DESCRIPTION	FRONT SEAT	REAR SEAT
ATD Type/Serial No.	SID H3/269	SID H3/270
Head Contact:	The top and left side of the head to the side window glass	The left side and top of the head to the C-pillar
Upper Torso Contact:	Door trim panel	Door trim panel
Lower Torso Contact:	Door trim panel	Door trim panel
Left Knee Contact:	Door trim panel	Door trim panel
Right Knee Contact:	Left Knee	Left Knee

POST TEST DOOR OPENING AND SEAT TRACK INFORMATION

DESCRIPTION	FRONT	REAR
Left Side Doors	Closed, latched and inoperable	Closed, latched and inoperable
Right Side Doors	Closed, latched and operable without tools	Closed, latched and operable without tools
Hatch/Other Door	N/A	N/A
Seat Movement (mm)	0	0
Seat Back Failure	None	None

POST TEST STRUCTURAL OBSERVATIONS

CRITICAL AREAS OF PERFORMANCE	
Pillar Performance	Moved inboard during the event with no visible tears or separations
Sill Separation	Moved inboard during the event with no visible tears or separations
Windshield Damage	None
Window Damage	Left rear side window shattered during the event
Other Notable Effects	The secondary impact point showed 9 mm forward and 2 mm below

AIR BAG DEPLOYMENT STATUS:

	DRIVER	FRONT PASSENGER	REAR PASSENGER
Front Air Bag	No	No	N/A
Knee Bolster Bag	N/A	N/A	N/A
Side Air Bag	N/A	N/A	N/A
Side Curtain Bag	N/A	N/A	N/A

MDB LEFT EDGE IMPACT DATA

Measured Parameter	Units	Requirement	Value
Horizontal Offset	mm	± 50 mm	+5 mm (forward)
Vertical Offset	mm	± 20 mm	-6 mm (below

SECTION 4

OCCUPANT AND VEHICLE INFORMATION

DATA SHEET 5

SID H3 INSTRUMENTATION DATA

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201

		Front Dummy ID# 269				Rear Dummy ID# 270			
		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	1.2	36.5	-21.2	66.7	5.6	69.9	-15.5	51.4
Lateral	Y	93.6	66.6	-5.5	38.3	105.1	53.0	-4.4	75.3
Vertical	Z	62.8	66.2	-0.9	102.9	15.5	50.3	-31.4	62.3
Resultant	R	110.8	66.5	0.0	-4.1	106.1	53.0	0.0	-18.3
HIC		275.5				565.8			
NECK FORCES:									
Longitudinal	X	27.3	37.5	-416.0	81.3	788.8	61.7	-132.4	168.5
Lateral	Y	557.6	71.4	-239.3	39.8	171.1	154.9	-1110.9	61.7
Vertical	Z	1565.2	63.2	-1436.4	67.9	522.7	50.9	-2227.9	61.0
Resultant	R	1639.6	63.2	0.0	3.6	2601.5	61.1	0.1	-17.3
NECK MOMENTS:									
Longitudinal	X	34.5	78.8	-50.2	52.8	12.6	162.1	-89.2	53.8
Lateral	Y	32.5	98.0	-24.4	57.3	25.4	62.2	-10.2	51.4
Vertical	Z	18.3	92.4	-12.2	51.9	9.4	17.6	-19.6	59.1
Resultant	R	55.3	53.2	0.0	-2.4	90.8	53.8	0.0	-17.5
RIB ACCELERATIONS:									
Upper Rib Lateral	Y	45.0	39.4	-6.7	79.4	49.7	44.4	-8.6	114.3
Upper Rib Lateral	Y(R)	45.0	39.4	-7.0	79.4	48.6	44.4	-11.3	114.4
Lower Rib Lateral	Y	46.7	38.7	-7.4	79.3	41.5	45.6	-12.4	114.3
Lower Rib Lateral	Y(R)	46.6	38.2	-7.8	79.3	40.5	42.5	-12.1	113.7
SPINE ACCELERATIONS:									
Lower Lateral	Y	51.4	40.6	-10.2	76.8	61.7	47.5	-7.2	77.5
Lower Lateral	Y(R)	51.5	40.6	-10.1	76.8	61.4	47.5	-7.4	77.5
PELVIC ACCELERATIONS:									
Lateral	Y	48.4	32.5	-10.7	61.9	60.1	40.7	-4.3	121.2
Lateral	Y(R)	47.9	32.5	-10.3	61.9	61.8	40.6	-4.4	113.1

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.

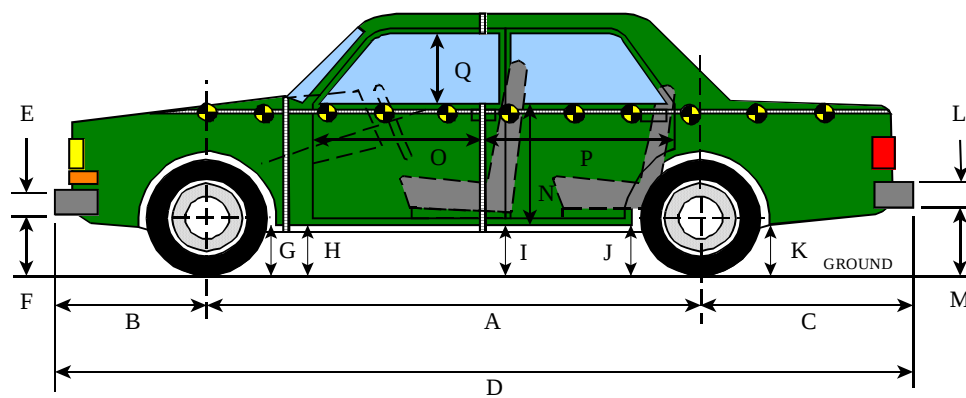
Head Accelerations and Neck Forces are filtered at SAE Class 1000, Neck Moments are filtered at SAE Class 600.

DATA SHEET 6

VEHICLE SIDE MEASUREMENTS

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201



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	2870	2875	2871	-4
B	1025	-	1022	-3
C	1195	-	1197	2
D	5090	-	5090	0
E	170	-	170	0
F	388	396	427	31
G	169	147	164	17
H	184	162	180	18
I	199	159	173	14
J1	196	146	157	11
J2	196	146	157	11
K	250	183	203	20
L	353	-	353	0
M	296	284	293	9
N	776	-	678	-98
O	803	-	756	-47
P	1153	-	1125	-28
Q	501	-	500	-1
R	4990	-	4493	-497
S	4990	-	4988	-2
T	1884	-	1688	-196

D = Length at Centerline

T = Width at B-Pillar

E&L = Bumper Thickness

J1 = To Pinch Weld

R = Right Side Length

J2 = To Sill

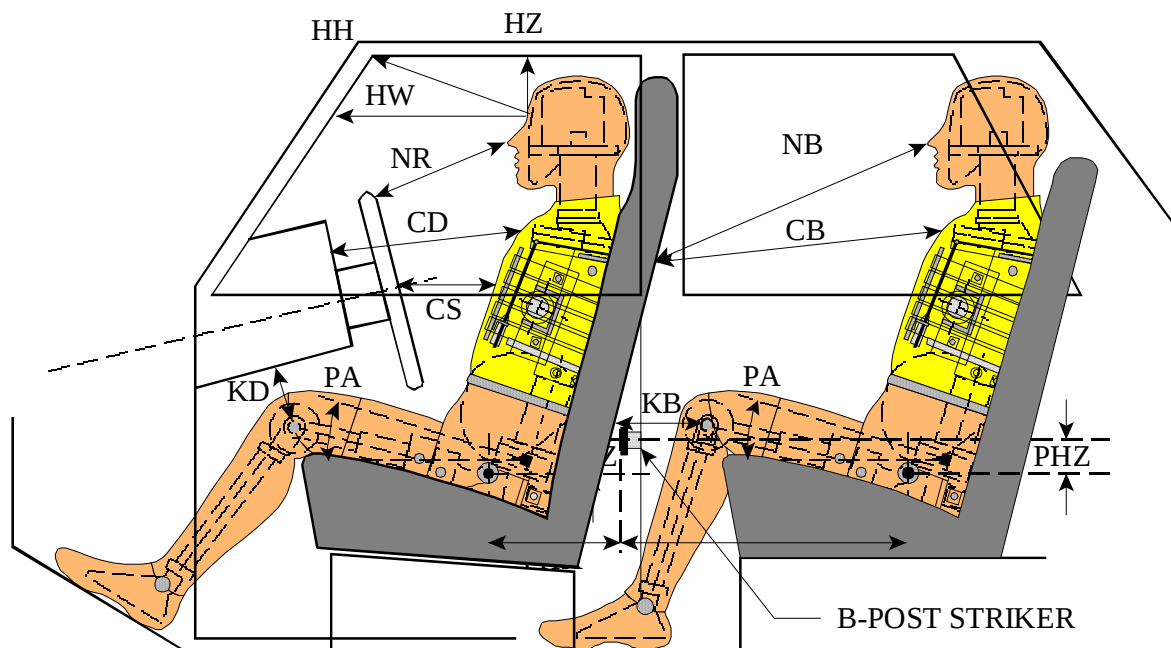
S = Left Side Length

DATA SHEET 7

SID H3 LONGITUDINAL CLEARANCE DIMENSIONS

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201



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# 269	LEFT REAR PASS. ID# 270
HH	344	N/A
HW	608	N/A
HZ	165	191
NR/NB	415	742
CD/CB	313	665
CS	293	N/A
KDL(KDA°)/KBL(KDA°)	160 / (46 °)	323 / (22 °)
KDR(KBA°)/KBR(KBA°)	167 / (44 °)	333 / (23 °)
PA°	24.1 °	23.0 °
PHX	222	226
PHZ	172	270

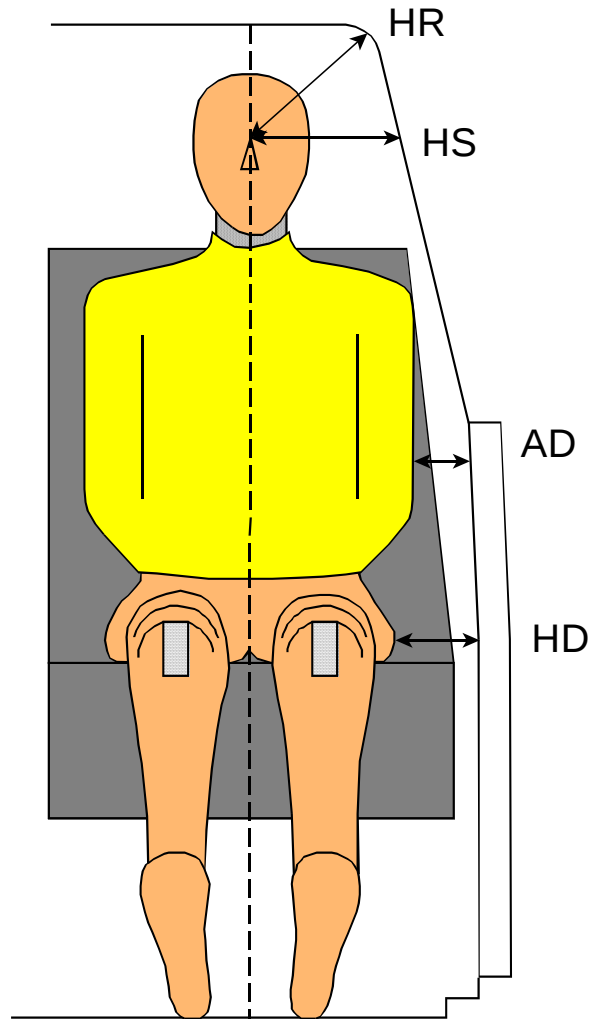
Note: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as a reference point.

DATA SHEET 8

SID H3 LATERAL CLEARANCE DIMENSIONS

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201



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

	DRIVER ID # 269				LEFT REAR PASS. ID # 270			
HR	227				197			
HS	360				246			
AD*	LOWER:	125	UPPER:	120	LOWER:	95	UPPER:	130
HD	130				140			

* 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.

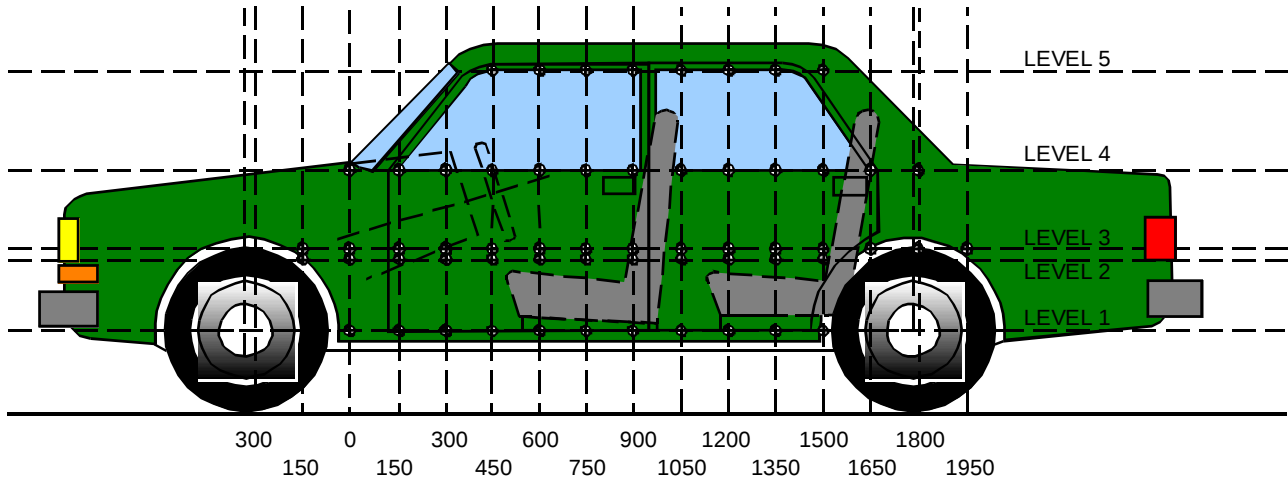
Upper measurement is taken laterally at the center of the upper rib accelerometer height from the SID H3 arm segment to the closest part of the vehicle side.

DATA SHEET 9

VEHICLE SIDE MEASUREMENTS

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201



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:

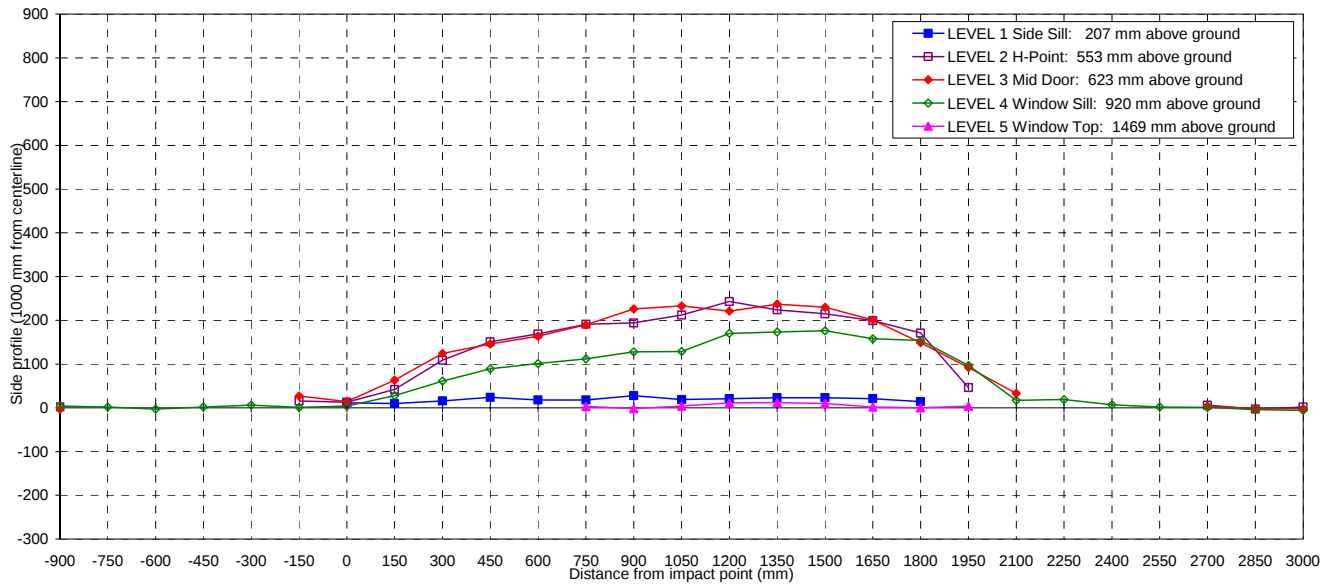
Level 5 @ Window Top	=	<u>1469</u>	millimeters
Level 4 @ Window Sill	=	<u>920</u>	millimeters
Level 3 @ Mid Door	=	<u>623</u>	millimeters
Level 2 @ Occupant H-Point	=	<u>553</u>	millimeters
Level 1 @ Axle Centerline Height (or Sill Top Height)	=	<u>207</u>	millimeters

DATA SHEET 10

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201



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

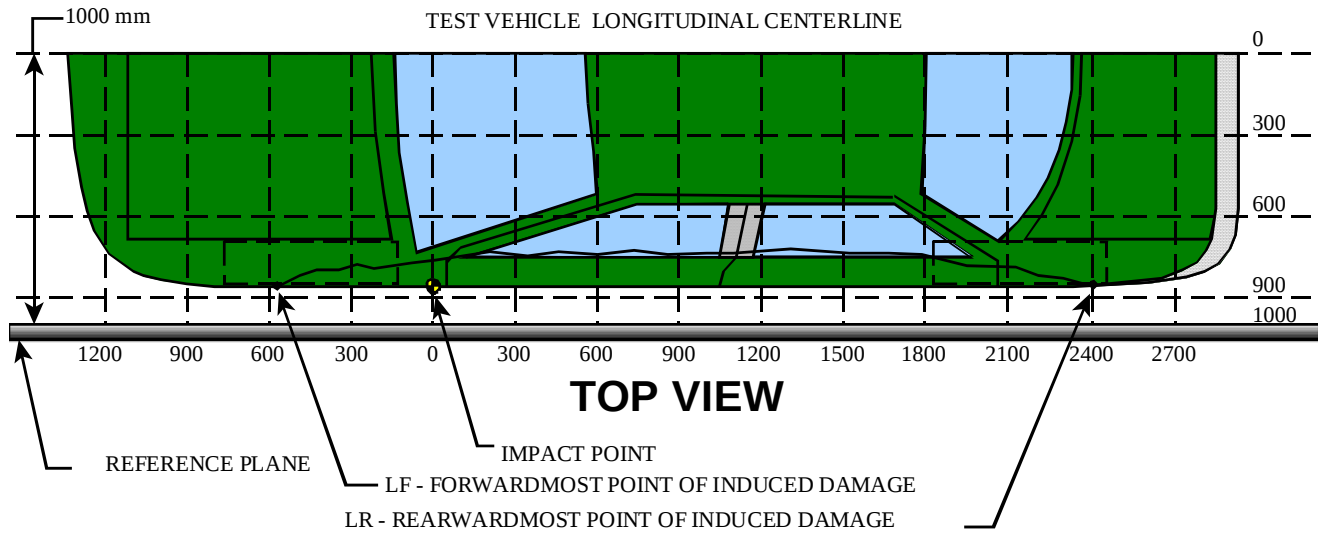
			DISTANCE IN MILLIMETERS (mm) FROM IMPACT POINT																											
LEVEL	HEIGHT (mm)		-900	-750	-600	-450	-300	-150	0	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000	
LEVEL 1 SIDE SILL	207	PRE	--	--	--	--	--	--	147	152	143	142	145	150	140	150	148	145	146	148	149	--	--	--	--	--	--	--	--	--
		POST	--	--	--	--	--	--	158	162	159	166	163	168	168	169	169	168	169	169	163	--	--	--	--	--	--	--	--	--
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	11	10	16	24	18	18	28	19	21	23	23	21	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEVEL 2 H POINT	553	PRE	96	--	--	--	--	72	80	82	77	71	73	72	73	72	70	70	70	72	77	76	--	--	--	--	--	70	98	115
		POST	98	--	--	--	--	88	93	124	186	222	242	263	267	284	313	294	285	271	248	122	--	--	--	--	--	76	95	117
		CRUSH	2	N/A	N/A	N/A	N/A	16	13	42	109	151	169	191	194	212	243	224	215	199	171	46	N/A	N/A	N/A	N/A	N/A	6	-3	2
LEVEL 3 MID DOOR	623	PRE	110	--	--	--	--	67	78	78	75	74	72	69	68	69	73	69	72	75	78	78	68	--	--	--	--	71	104	116
		POST	107	--	--	--	--	94	92	141	199	220	236	259	294	302	294	306	302	276	227	170	101	--	--	--	--	75	102	114
		CRUSH	-3	N/A	N/A	N/A	N/A	27	14	63	124	146	164	190	226	233	221	237	230	201	149	92	33	N/A	N/A	N/A	N/A	4	-2	-2
LEVEL 4 WINDOW SILL	920	PRE	414	297	215	174	158	149	139	128	122	115	112	109	105	103	103	102	103	104	108	112	114	122	131	133	140	149	164	
		POST	418	299	212	176	164	150	143	156	183	204	213	221	233	232	273	275	279	262	262	209	131	141	138	135	141	145	158	
		CRUSH	4	2	-3	2	6	1	4	28	61	89	101	112	128	129	170	173	176	158	154	97	17	19	7	2	1	-4	-6	
LEVEL 5 WINDOW TOP	1469	PRE	--	--	--	--	--	--	--	--	--	--	--	655	435	370	371	365	369	382	463	630	--	--	--	--	--	--	--	
		POST	--	--	--	--	--	--	--	--	--	--	--	658	433	374	382	377	379	384	463	634	--	--	--	--	--	--	--	
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3	-2	4	11	12	10	2	0	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

DATA SHEET 11

VEHICLE DAMAGE PROFILE DISTANCES

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201



MEASUREMENT CONVENTIONS:
 Forward of the impact point (towards front of vehicle) is considered negative (—).
 Rearward of the impact point (toward rearend of vehicle) is considered positive (+).

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

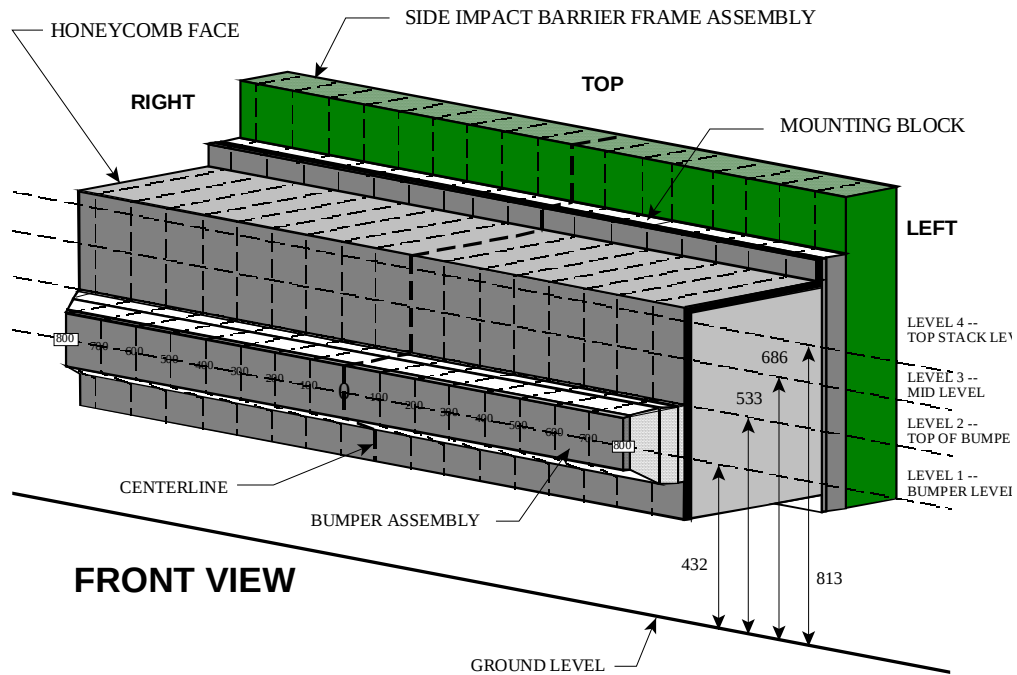
DPD MEASUREMENTS		POST TEST (mm)	PRETEST (mm)	STATIC CRUSH (mm)
1	(LR = <u>2800</u> mm)	93	93	0
2	2210	138	120	18
3	1620	281	74	207
4	1030	301	69	232
5	440	220	71	149
6	(LF = <u>-150</u> mm)	150	149	1

DATA SHEET 12

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201



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	672	655	649	640	652	685	708	680	686	683	663	667	681	694	720	758	791
		CRUSH	53	36	30	21	33	66	89	61	67	64	44	48	62	75	101	139	172
LEVEL 3 MID LEVEL	686	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	686	660	644	638	636	652	675	667	646	639	644	655	667	679	688	704	749
		CRUSH	67	41	25	19	17	33	56	48	27	20	25	36	48	60	69	85	130
LEVEL 2 TOP BUMPER	533	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619
		POST	732	721	712	708	701	698	698	697	692	697	698	700	700	703	713	732	762
		CRUSH	113	102	93	89	82	79	79	78	73	78	79	81	81	84	94	113	143
LEVEL 1 MID BUMPER	432	PRE	535	519	518	518	518	518	518	518	518	518	518	518	518	518	518	519	535
		POST	714	702	698	677	666	670	662	661	658	659	659	656	658	659	666	685	727
		CRUSH	179	183	180	159	148	152	144	143	140	141	141	138	140	141	148	166	192

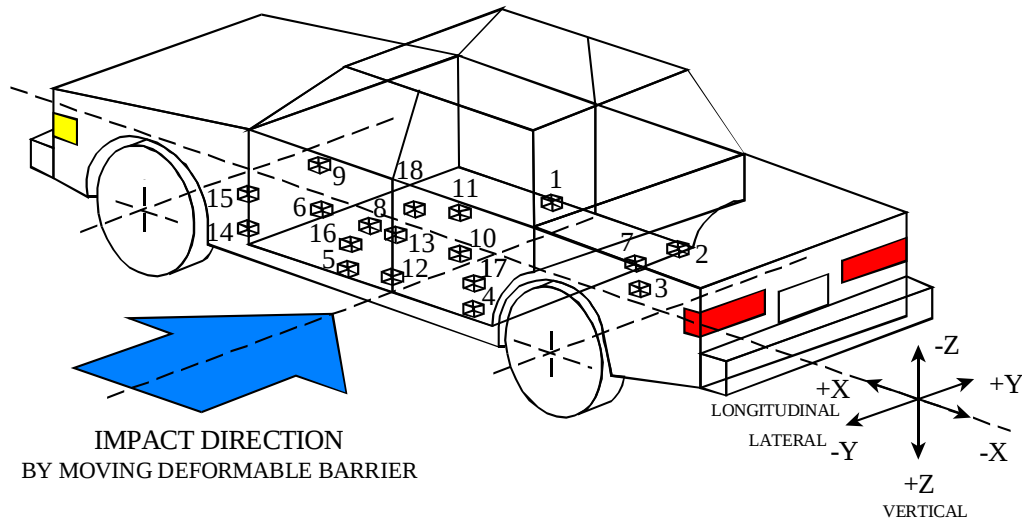
*Heights measured above ground level.

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201



- 1-Right Side Sill @ Front Seat
- 2-Right Side Sill @ Rear Seat
- 3-Rear Floorpan Above Axle
- 4-Left Side Sill @ Rear Seat
- 5-Left Side Sill @ Front Seat
- 6-Left Front Door on Centerline
- 7-Right Rear Occupant Compartment
- 8-Midrear of Left Front Door
- 9-Left Front Door Upper Centerline

- 10-Midrear of Left Rear Door
- 11-Left Rear Door Upper Centerline
- 12-Left Lower B-Pillar
- 13-Left Middle B-Pillar
- 14-Left Lower A-Pillar
- 15-Left Middle A-Pillar
- 16-Front Seat Track
- 17-Rear Seat Track
- 18-Vehicle CG

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201

Accel. No.	Location	Coordinates (mm)±3 mm				Long. (x)		Lat. (y)		Vert. (z)		Resultant	
						Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
		X*	Y*	Z*									
1	Right Side Sill at Front Seat	3293	720	-315	pos.	3.0	27.1	18.7	14.0	8.6	30.2	19.5	13.9
					neg.	-5.3	13.2	-5.5	57.6	-5.0	7.5	0.0	-17.1
2	Right Side Sill at Rear Seat	2359	690	-243	pos.	2.7	14.1	38.9	55.0	17.7	55.1	42.7	55.1
					neg.	-14.7	45.7	-11.2	75.5	-17.1	44.7	0.0	-18.9
3	Rear Floorpan Above Axle	1362	87	-520	pos.	4.6	59.5	23.8	42.7	15.7	17.6	24.3	13.1
					neg.	-7.0	21.2	-3.3	103.4	-9.7	12.8	0.0	-3.0
4	Left Side Sill at Rear Seat	2391	-655	-233	pos.	-	-	52.6	12.1	-	-	-	-
					neg.	-	-	-9.1	53.7	-	-	-	-
5	Left Side Sill at Front Seat	3277	-661	-310	pos.	-	-	39.0	11.3	-	-	-	-
					neg.	-	-	-10.7	63.6	-	-	-	-
6	Left Front Door on Centerline	2881	-674	-716	pos.	-	-	196.5	8.3	-	-	-	-
					neg.	-	-	-171.4	15.1	-	-	-	-
7	Right Rear Occupant Compartment	2326	409	-208	pos.	-	-	†	†	-	-	-	-
					neg.	-	-	†	†	-	-	-	-
8	Midrear of Left Front Door	2669	-675	-764	pos.	-	-	119.7	12.2	-	-	-	-
					neg.	-	-	-129.2	25.4	-	-	-	-
9	Left Front Door Upper Centerline	3000	-713	-944	pos.	-	-	125.5	14.6	-	-	-	-
					neg.	-	-	-81.1	24.3	-	-	-	-
10	Midrear of Left Rear Door	1767	-713	-782	Pos.	-	-	§	§	-	-	-	-
					neg.	-	-	§	§	-	-	-	-
11	Left Rear Door Upper Centerline	1964	-720	-1004	pos.	-	-	67.7	7.1	-	-	-	-
					neg.	-	-	-128.3	32.3	-	-	-	-

*Reference: X - Rear Bumper (+ Forward)

Y - Vehicle Centerline (+ To Right) Z - Ground Level (+ Down)

**Accelerometer was not requested by COTR.

† - Sensor Opened

§ - Sensor detached during the event

4-11

8675-SNCAP-06

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201

Accel. No.	Location	Coordinates (mm)±3 mm				Long. (x)		Lat. (y)		Vert. (z)		Resultant	
						Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
		X*	Y*	Z*									
12	Left Lower B-Pillar	2463	-689	-440	pos.	-	-	29.3	3.8	-	-	-	-
					neg.	-	-	-18.8	15.0	-	-	-	-
13	Left Middle B-Pillar	2396	-707	-1010	pos.	-	-	144.7	6.1	-	-	-	-
					neg.	-	-	-60.1	13.9	-	-	-	-
14	Left Lower A-Pillar	3489	-658	-299	pos.	-	-	68.5	4.3	-	-	-	-
					neg.	-	-	-33.0	19.6	-	-	-	-
15	Left Middle A-Pillar	3479	-677	-965	pos.	-	-	33.4	16.7	-	-	-	-
					neg.	-	-	-8.4	58.7	-	-	-	-
16	Front Seat Track	2636	-553	-322	pos.	-	-	71.6	10.7	-	-	-	-
					neg.	-	-	-9.7	53.5	-	-	-	-
17	Rear Seat Track	1371	-233	-527	pos.	-	-	24.3	42.5	-	-	-	-
					neg.	-	-	-3.5	102.8	-	-	-	-
18	Vehicle CG	2899	19	-583	pos.	8.7	55.6	33.3	14.3	13.6	35.9	34.7	14.5
					neg.	-14.3	16.6	-6.3	60.8	-19.0	18.9	0.0	-17.7

*Reference: X - Rear Bumper (+ Forward)

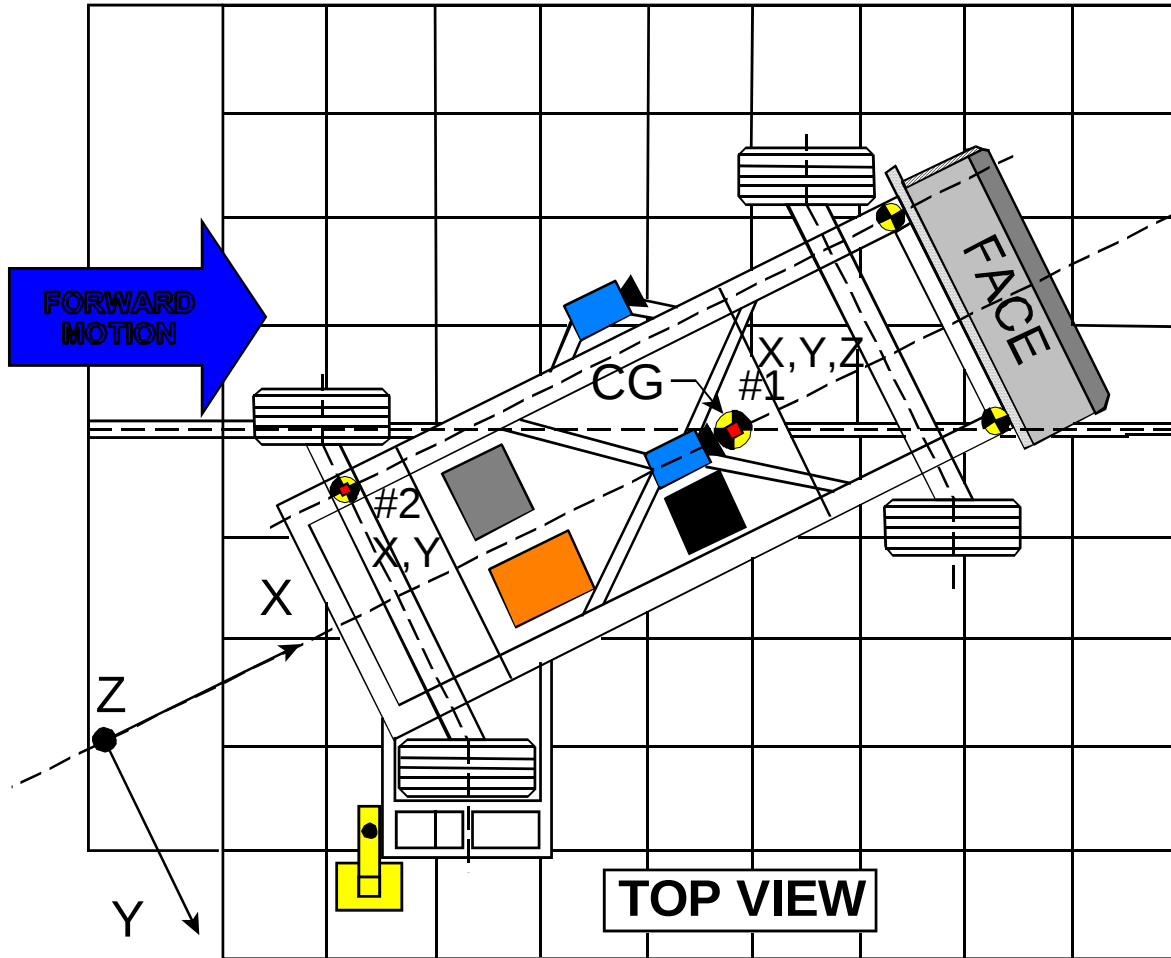
Y - Vehicle Centerline (+ To Right) Z - Ground Level (+ Down)

DATA SHEET 14

MDB ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201



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	1.7	97.9	-22.6	40.0
	Lateral..... Y				6.6	26.2	-1.5	64.3
	Vertical..... Z				13.8	13.6	-13.0	20.8
	Resultant..... R				23.3	40.1	0.1	-7.5
2	Rear Frame Member							
	Longitudinal... X	386	-660	-660	1.8	151.2	-24.3	43.7
	Lateral..... Y				2.9	21.6	-2.2	160.9

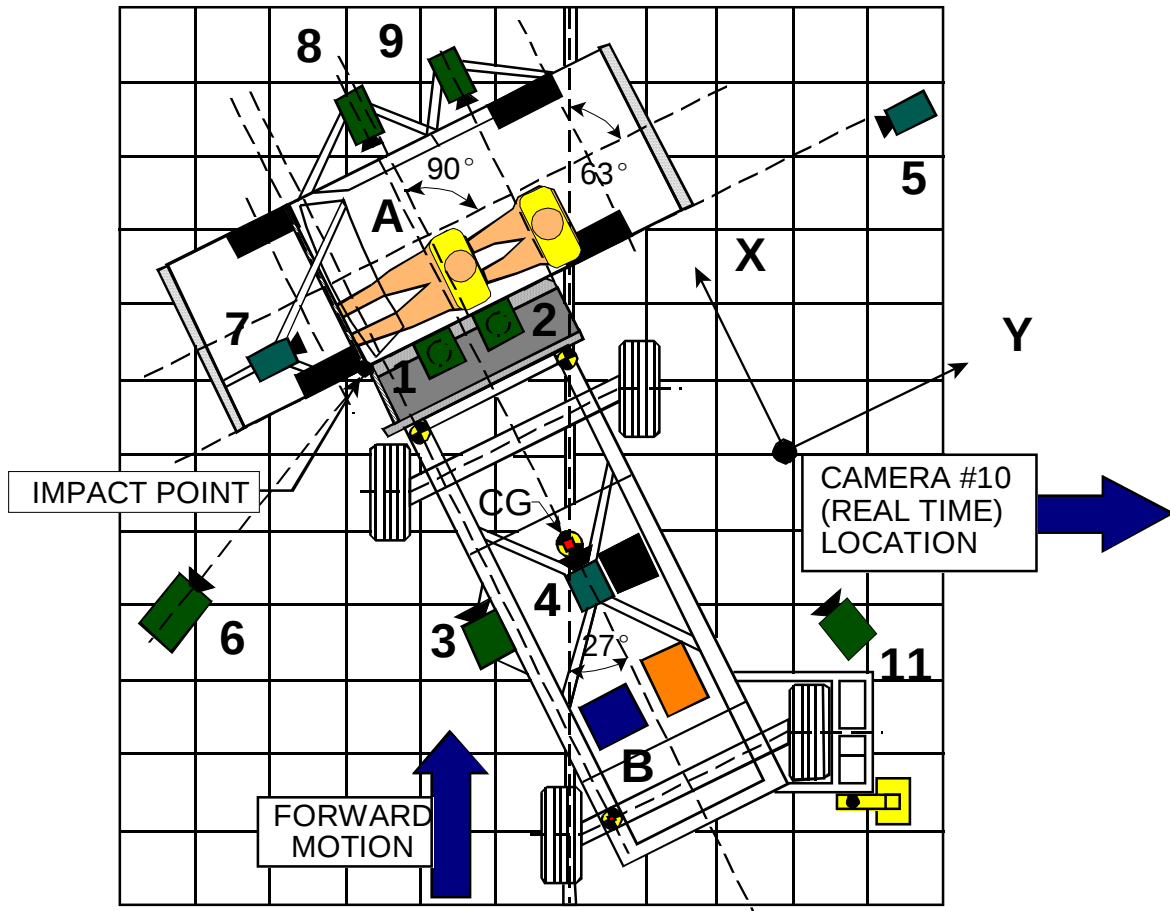
*Reference: X = Rear Bumper (+ Forward)
Y = Vehicle Centerline (+ To Right)
Z = Ground Level (+ Down)
All measurements accurate to within ± 3 mm.

DATA SHEET 15

HIGH SPEED CAMERA LOCATIONS AND DATA SUMMARY

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No. M50201



Camera No.	View	Coordinates (millimeters)			Angle (deg.)	Lens (mm)	Film Speed (fps)
		X*	Y*	Z*			
1	Overhead view of test vehicle	72	812	-4880	-90	8	500
2	Overhead closeup view of impact plane	195	855	-4880	-90	12.5	500
3	MDB onboard closeup view of impact point	-1470	0	-847	0	13	500
4	MDB onboard view of driver dummy	-1140	838	-1586	-17	7.5	500
5	Right side ground level overall view	195	9215	-1045	-3.1	25	500
6	Left side ground level overall view	-1725	-1622	-902	-3.6	28	500
7	Test vehicle onboard driver front view	498	-685	-1322	-6.0	28	1000
8	Test vehicle onboard driver side view	1815	758	-1115	-4.9	12.5	1000
9	Test vehicle onboard passenger side view	1865	1668	-1135	-4.6	12.5	1000
10	Real time film coverage of test	-	-	-	-	-	30
11	Secondary impact point view	4480	3355	-998	-2.9	25	500

* 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 16

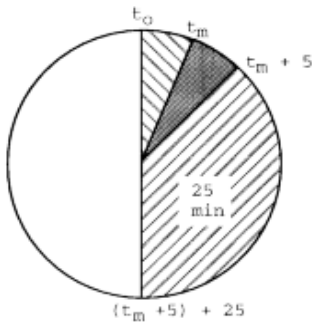
FMVSS 301 FUEL SYSTEM INTEGRITY DATA

NHTSA No.: M50201 TEST DATE: November 15, 2004
Vehicle Mfr./Make/Model: Ford Motor Co 2005 Ford Five Hundred Four-Door Sedan

TEST VEHICLE IMPACT TYPE:

- Frontal (48.28 kph)
- Oblique (48.28 kph) with _____ ° barrier face first
contacting the _____ side
(driver/passenger)
- Rear Moving Barrier (48.28 kph)
- Lateral Moving Barrier (32.19 kph)
- X Side Impact Moving Deformable Barrier (62.0 kph)
contacting the _____ driver side _____ side
(driver/passenger)

FUEL SPILLAGE MEASUREMENT:



1. From impact until vehicle motion ceases
2. For five minute period after vehicle motion ceases
3. For next 25 minutes

ACTUAL	MAX ALLOWED
0 g	28 g
0 g	142 g
0 g	28 g/1 min.

SOLVENT SPILLAGE DETAILS:

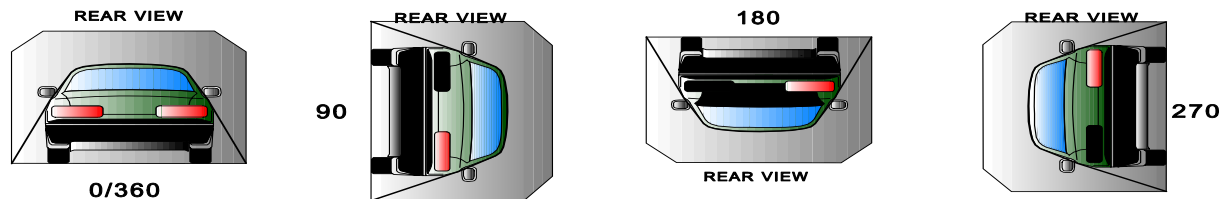
None

DATA SHEET 17

ROLLOVER DATA

Vehicle: 2005 Ford Five Hundred Four-Door Sedan

NHTSA No.: M50201



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	
0° - 90°	1	minutes	11	seconds	5	minutes	6	minutes	11	seconds	7	minutes
90° - 180°	1	minutes	08	seconds	5	minutes	6	minutes	8	seconds	7	minutes
180°-270°	1	minutes	03	seconds	5	minutes	6	minutes	3	seconds	7	minutes
270°-360°	1	minutes	09	seconds	5	minutes	6	minutes	9	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°	None
90° - 180°	None
180°-270°	None
270°-360°	None

APPENDIX A

PHOTOGRAPHS

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Figure A- 16	POST-TEST FRONTAL VIEW OF IMPACTOR FACE	A- 18
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Figure A- 18	POST-TEST LEFT SIDE VIEW OF IMPACTOR FACE	A- 20
Figure A- 19	PRE-TEST RIGHT SIDE VIEW OF IMPACTOR FACE	A- 21
Figure A- 20	POST-TEST RIGHT SIDE VIEW OF IMPACTOR FACE	A- 22
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Figure A- 27	PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID H3	A- 29
Figure A- 28	POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF REAR SID H3	A- 30
Figure A- 29	PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID H3	A- 31
Figure A- 30	POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF FRONT SID H3	A- 32
Figure A- 31	PRE-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID H3	A- 33
Figure A- 32	POST-TEST LEFT OCCUPANT COMPARTMENT VIEW OF REAR SID H3	A- 34
Figure A- 33	PRE-TEST INTERIOR OF FRONT DOOR	A- 35
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Figure A- 37	PRE-TEST LEFT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION	A- 39
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Figure A- 44	ROLLOVER 180 DEGREES	A- 46
Figure A- 45	ROLLOVER 270 DEGREES	A- 47
Figure A- 46	ROLLOVER 360 DEGREES	A- 48

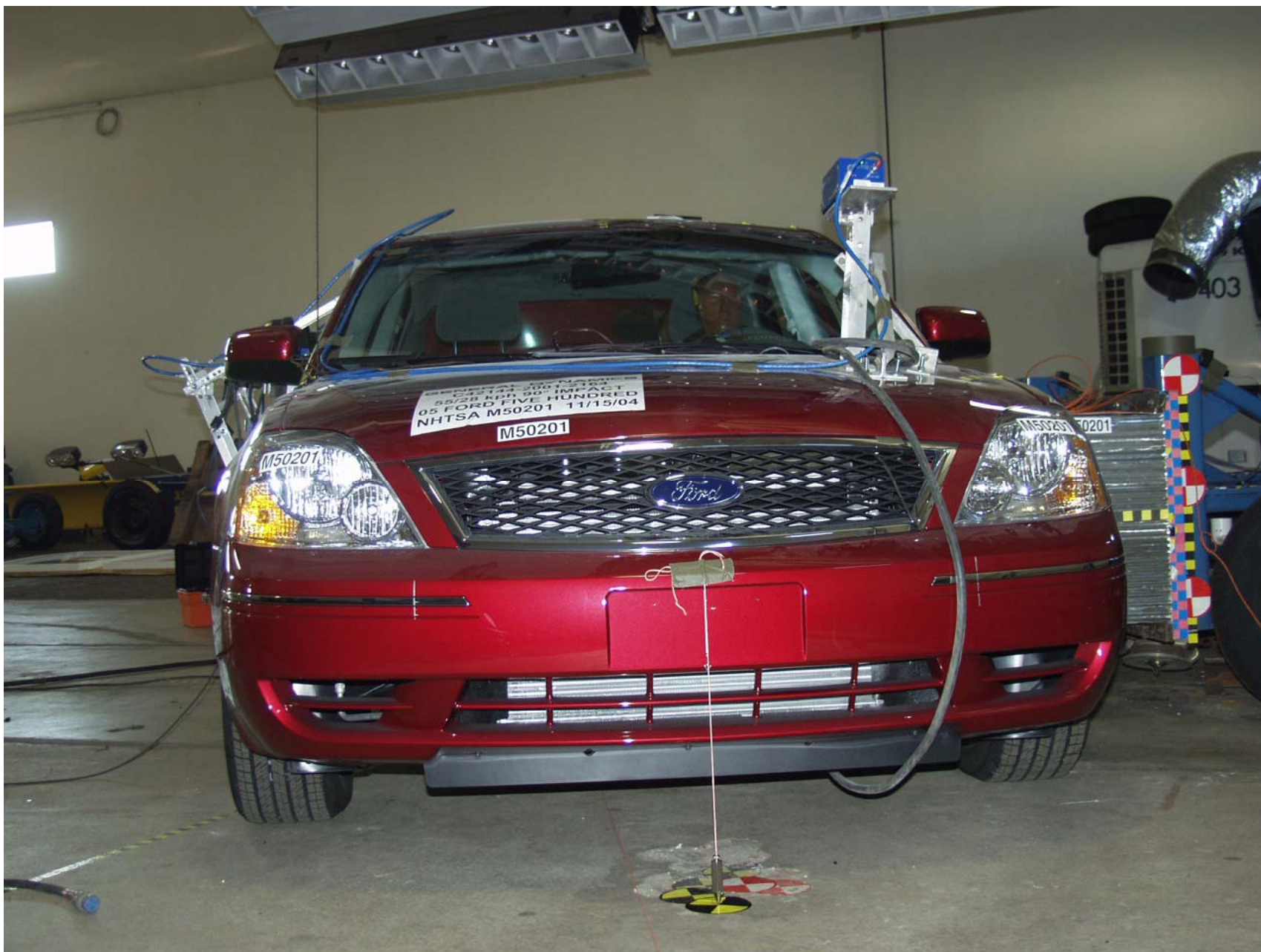


Figure A-1 PRE-TEST FRONTAL VIEW OF TEST VEHICLE



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



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



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



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



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

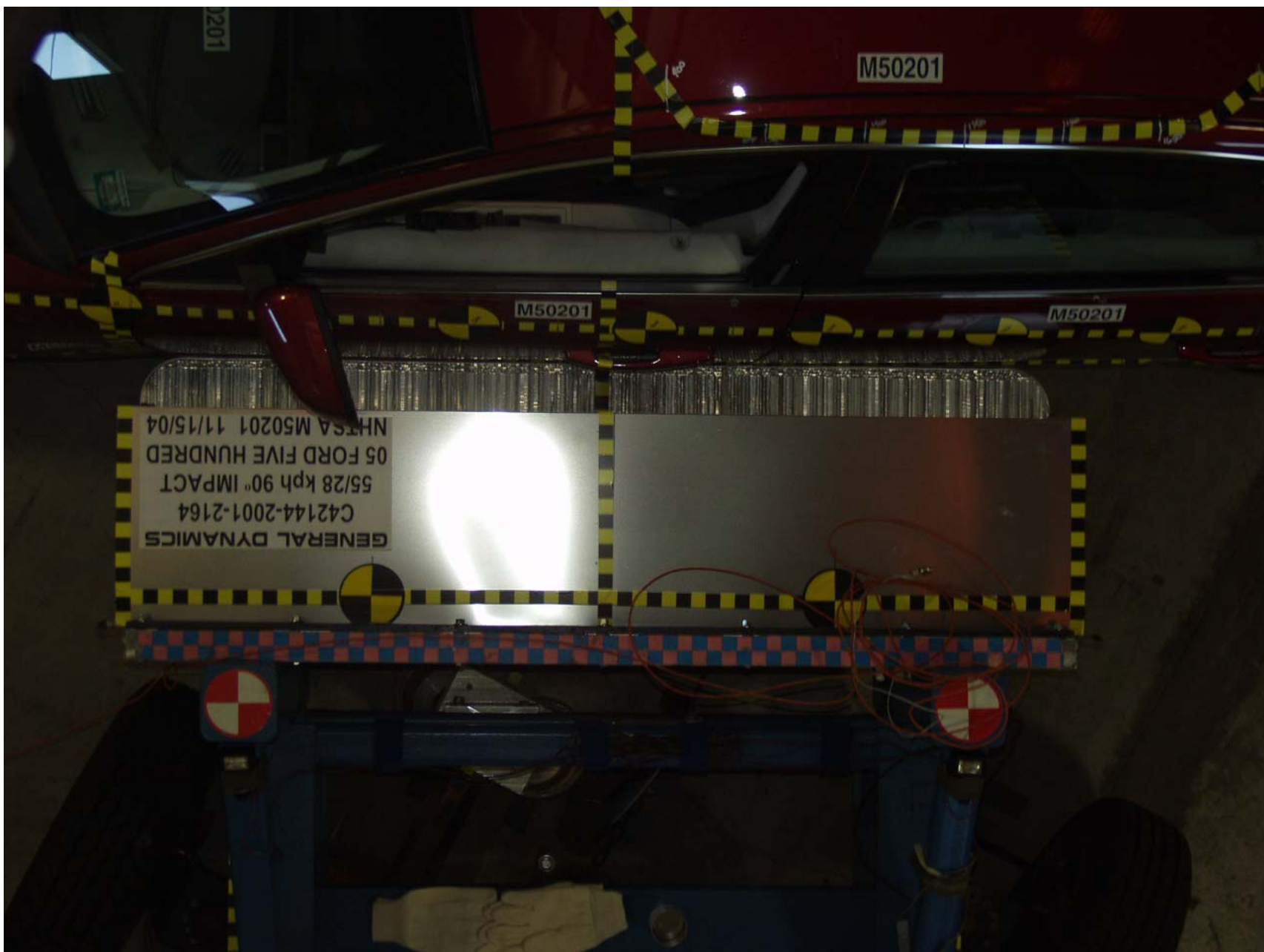


Figure A-21 PRE-TEST TOP VIEW OF IMPACTOR FACE



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

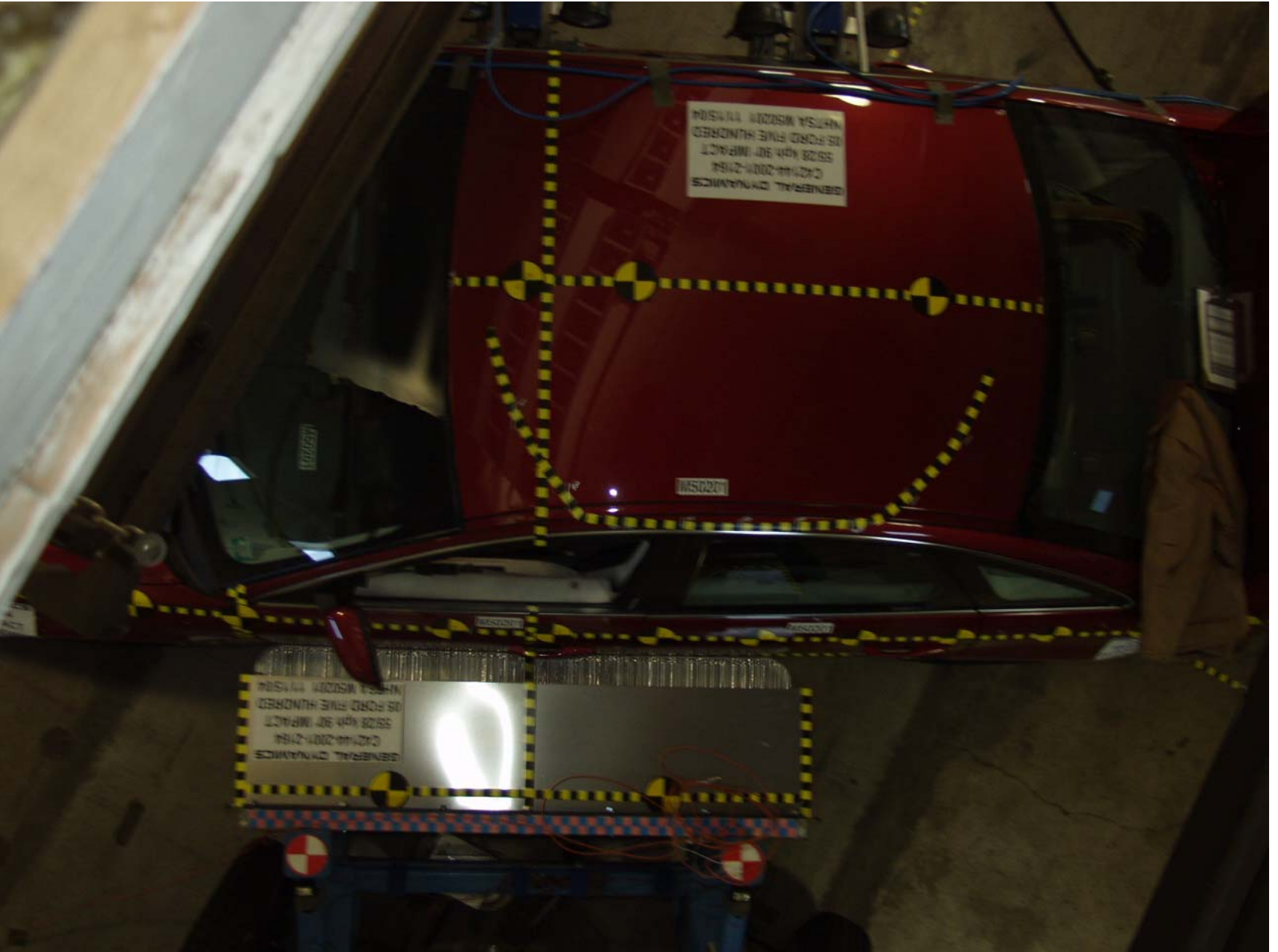


Figure A-23 PRE-TEST OVERHEAD VIEW OF ALIGNED MDB AND VEHICLE



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



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



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



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



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



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



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



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



Figure A-33 PRE-TEST INTERIOR OF FRONT DOOR



Figure A-34 POST-TEST INTERIOR OF FRONT DOOR SHOWING SID H3 IMPACT LOCATIONS

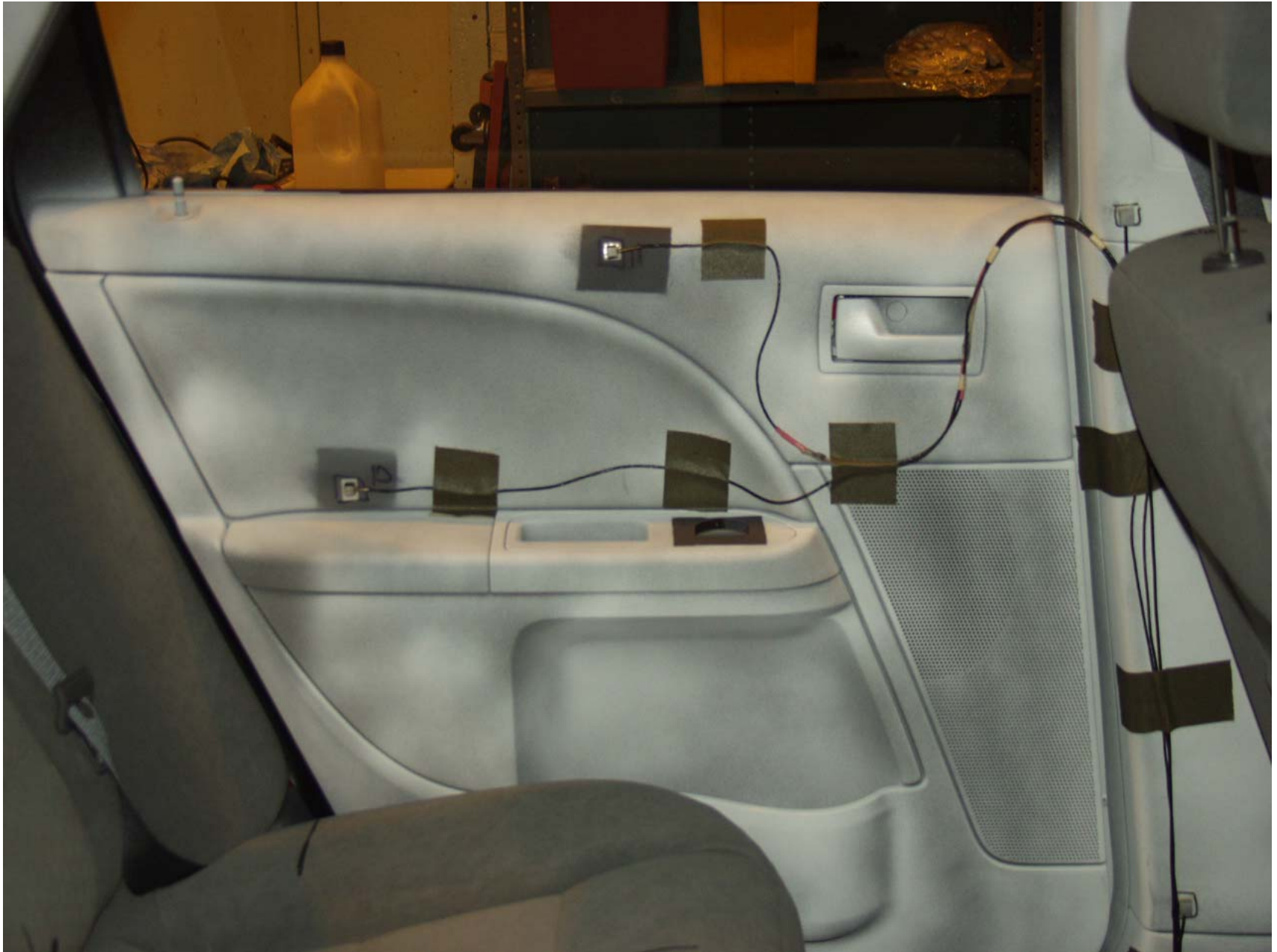


Figure A-35 PRE-TEST INTERIOR OF REAR DOOR



Figure A-36 POST-TEST INTERIOR OF REAR DOOR SHOWING SID H3 IMPACT LOCATIONS



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



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



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



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



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

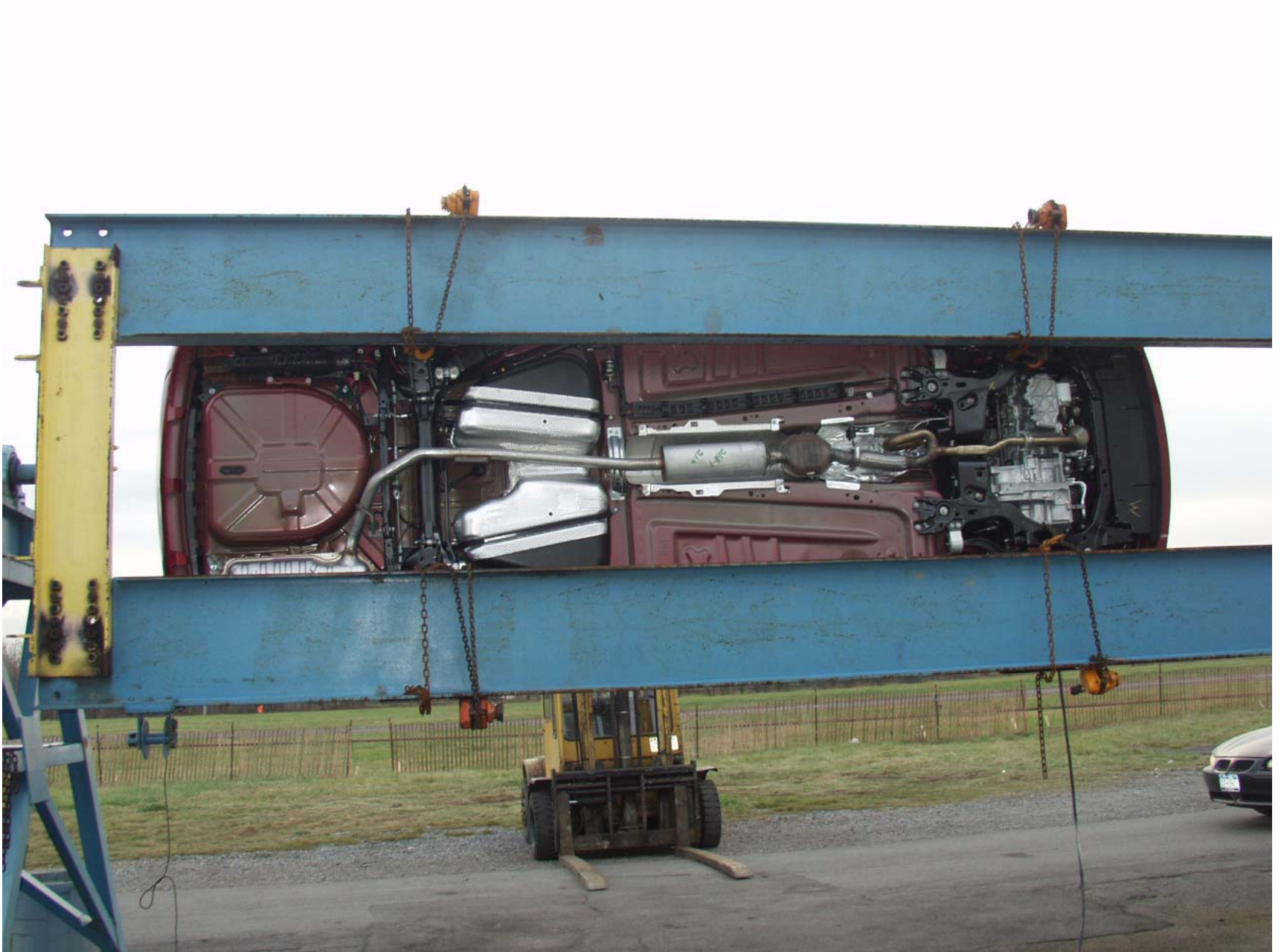


Figure A-45 ROLLOVER 270 DEGREES



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
24	PASSENGER HEAD (X) ACCELERATION VS TIME	B- 29
25	PASSENGER HEAD (X) VELOCITY VS TIME	B- 30
26	PASSENGER HEAD (Y) ACCELERATION VS TIME	B- 31
27	PASSENGER HEAD (Y) VELOCITY VS TIME	B- 32
28	PASSENGER HEAD (Z) ACCELERATION VS TIME	B- 33
29	PASSENGER HEAD (Z) VELOCITY VS TIME	B- 34
30	PASSENGER HEAD RESULTANT ACCELERATION VS TIME	B- 35
31	PASSENGER UPPER NECK (X) FORCE VS TIME	B- 36
32	PASSENGER UPPER NECK (Y) FORCE VS TIME	B- 37
33	PASSENGER UPPER NECK (Z) FORCE VS TIME	B- 38
34	PASSENGER UPPER NECK RESULTANT FORCE VS TIME	B- 39
35	PASSENGER UPPER NECK (X) MOMENT VS TIME	B- 40
36	PASSENGER UPPER NECK (Y) MOMENT VS TIME	B- 41
37	PASSENGER UPPER NECK (Z) MOMENT VS TIME	B- 42
38	PASSENGER UPPER NECK RESULTANT MOMENT VS TIME	B- 43
39	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 44
40	PASSENGER UPPER RIB (Y) VELOCITY VS TIME	B- 45
41	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 46
42	PASSENGER LOWER RIB (Y) VELOCITY VS TIME	B- 47
43	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 48
44	PASSENGER LOWER SPINE (Y) VELOCITY VS TIME	B- 49
45	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 50
46	PASSENGER PELVIC (Y) VELOCITY VS TIME	B- 51

DRIVER & PASSENGER DUMMY INSTRUMENTATION PLOTS

ACCELERATION DATA - FIR FILTERED

<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
47	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 52
48	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 53
49	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 54
50	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 55
51	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 56
52	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 57
53	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 58
54	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 59

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>
55	RIGHT SIDE SILL AT FRONT SEAT (X) ACCELERATION VS TIME	B- 60
56	RIGHT SIDE SILL AT FRONT SEAT (X) VELOCITY VS TIME	B- 61
57	RIGHT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 62
58	RIGHT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 63
59	RIGHT SIDE SILL AT FRONT SEAT (Z) ACCELERATION VS TIME	B- 64
60	RIGHT SIDE SILL AT FRONT SEAT (Z) VELOCITY VS TIME	B- 65
61	RIGHT SIDE SILL AT FRONT SEAT RESULTANT ACCELERATION VS TIME	B- 66
62	RIGHT SIDE SILL AT REAR SEAT (X) ACCELERATION VS TIME	B- 67
63	RIGHT SIDE SILL AT REAR SEAT (X) VELOCITY VS TIME	B- 68
64	RIGHT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 69
65	RIGHT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 70
66	RIGHT SIDE SILL AT REAR SEAT (Z) ACCELERATION VS TIME	B- 71
67	RIGHT SIDE SILL AT REAR SEAT (Z) VELOCITY VS TIME	B- 72
68	RIGHT SIDE SILL AT REAR SEAT RESULTANT ACCELERATION VS TIME	B- 73
69	REAR FLOORPAN ABOVE AXLE (X) ACCELERATION VS TIME	B- 74
70	REAR FLOORPAN ABOVE AXLE (X) VELOCITY VS TIME	B- 75
71	REAR FLOORPAN ABOVE AXLE (Y) ACCELERATION VS TIME	B- 76
72	REAR FLOORPAN ABOVE AXLE (Y) VELOCITY VS TIME	B- 77
73	REAR FLOORPAN ABOVE AXLE (Z) ACCELERATION VS TIME	B- 78
74	REAR FLOORPAN ABOVE AXLE (Z) VELOCITY VS TIME	B- 79
75	REAR FLOORPAN ABOVE AXLE RESULTANT ACCELERATION VS TIME	B- 80
76	LEFT SIDE SILL AT REAR SEAT (Y) ACCELERATION VS TIME	B- 81
77	LEFT SIDE SILL AT REAR SEAT (Y) VELOCITY VS TIME	B- 82
78	LEFT SIDE SILL AT FRONT SEAT (Y) ACCELERATION VS TIME	B- 83
79	LEFT SIDE SILL AT FRONT SEAT (Y) VELOCITY VS TIME	B- 84
80	LEFT FRONT DOOR ON CENTERLINE (Y) ACCELERATION VS TIME	B- 85
81	LEFT FRONT DOOR ON CENTERLINE (Y) VELOCITY VS TIME	B- 86
82	RIGHT REAR OCCUPANT COMPARTMENT (Y) ACCELERATION VS TIME	B- 87
83	RIGHT REAR OCCUPANT COMPARTMENT (Y) VELOCITY VS TIME	B- 88
84	MID REAR OF LEFT FRONT DOOR (Y) ACCELERATION VS TIME	B- 89
85	MID REAR OF LEFT FRONT DOOR (Y) VELOCITY VS TIME	B- 90
86	LEFT FRONT DOOR UPPER CENTERLINE (Y) ACCELERATION VS TIME	B- 91
87	LEFT FRONT DOOR UPPER CENTERLINE (Y) VELOCITY VS TIME	B- 92
88	MID REAR OF LEFT REAR DOOR (Y) ACCELERATION VS TIME	B- 93
89	MID REAR OF LEFT REAR DOOR (Y) VELOCITY VS TIME	B- 94
90	LEFT REAR DOOR UPPER CENTERLINE (Y) ACCELERATION VS TIME	B- 95
91	LEFT REAR DOOR UPPER CENTERLINE (Y) VELOCITY VS TIME	B- 96
92	LOWER B-POST (Y) ACCELERATION VS TIME	B- 97
93	LOWER B-POST (Y) VELOCITY VS TIME	B- 98
94	UPPER B-POST (Y) ACCELERATION VS TIME	B- 99
95	UPPER B-POST (Y) VELOCITY VS TIME	B- 100
96	LOWER A-POST (Y) ACCELERATION VS TIME	B- 101

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>
97	LOWER A-POST (Y) VELOCITY VS TIME	B- 102
98	UPPER A-POST (Y) ACCELERATION VS TIME	B- 103
99	UPPER A-POST (Y) VELOCITY VS TIME	B- 104
100	FRONT SEAT TRACK (Y) ACCELERATION VS TIME	B- 105
101	FRONT SEAT TRACK (Y) VELOCITY VS TIME	B- 106
102	REAR SEAT TRACK (Y) ACCELERATION VS TIME	B- 107
103	REAR SEAT TRACK (Y) VELOCITY VS TIME	B- 108
104	VEHICLE CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 109
105	VEHICLE CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 110
106	VEHICLE CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 111
107	VEHICLE CENTER OF GRAVITY (Y) VELOCITY ACCELERATION VS TIME	B- 112
108	VEHICLE CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 113
109	VEHICLE CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 114
110	VEHICLE CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 115

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>
111	MDB CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 116
112	MDB CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 117
113	MDB CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 118
114	MDB CENTER OF GRAVITY (Y) VELOCITY VS TIME	B- 119
115	MDB CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 120
116	MDB CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 121
117	MDB CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 122
118	MDB REAR (X) ACCELERATION VS TIME	B- 123
119	MDB REAR (X) VELOCITY VS TIME	B- 124
120	MDB REAR (Y) ACCELERATION VS TIME	B- 125
121	MDB REAR (Y) VELOCITY VS TIME	B- 126

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>
122	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 127
123	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 128
124	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 129
125	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 130
126	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 131
127	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 132
128	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 133
129	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 134
130	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 135
131	PASSENGER UPPER RIB (Y) VELOCITY VS TIME	B- 136
132	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 137
133	PASSENGER LOWER RIB (Y) VELOCITY VS TIME	B- 138
134	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 139
135	PASSENGER LOWER SPINE (Y) VELOCITY VS TIME	B- 140
136	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 141
137	PASSENGER PELVIC (Y) VELOCITY VS TIME	B- 142

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

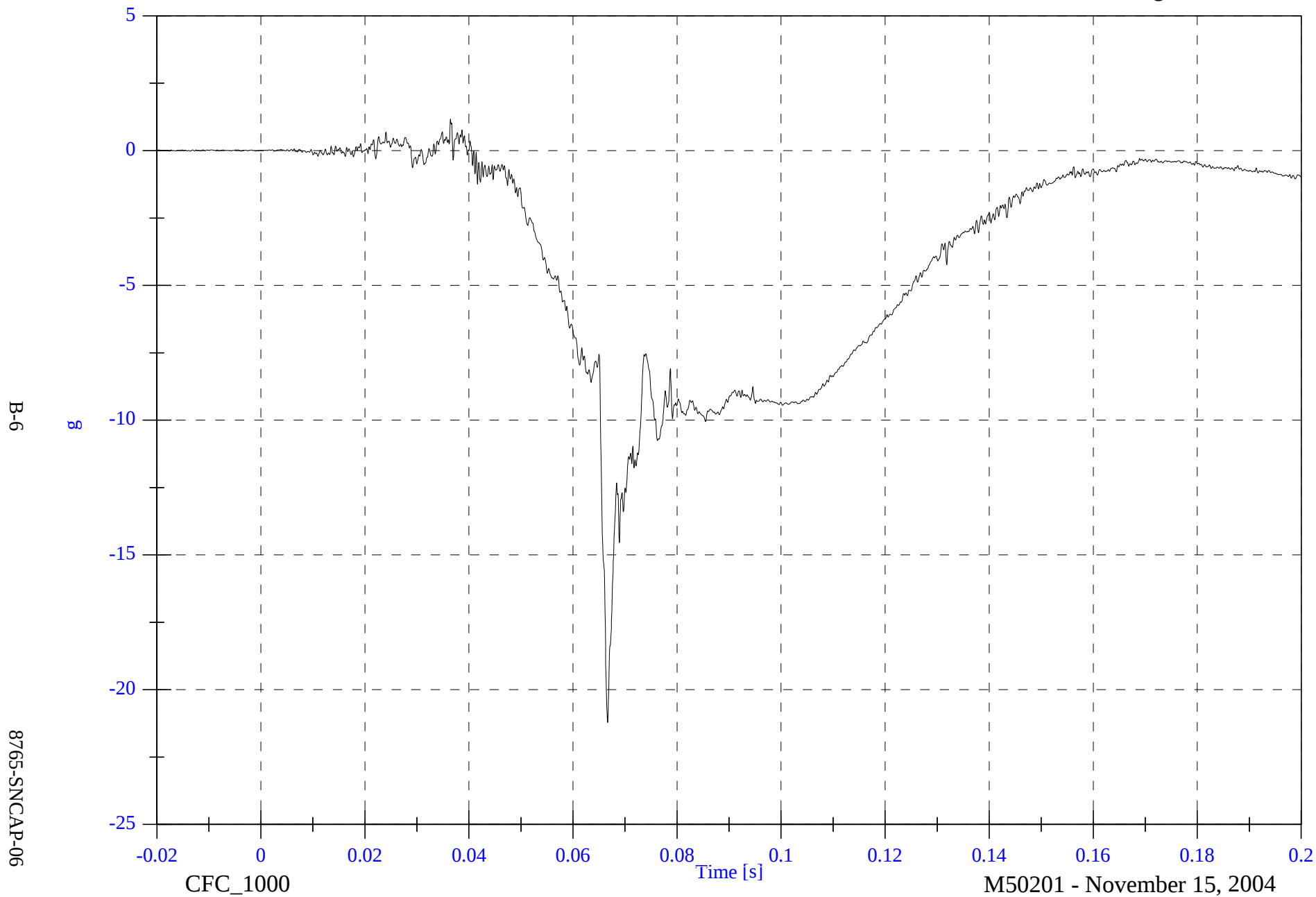
<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
138	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 143
139	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 144
140	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 145
141	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 146
142	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 147
143	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 148
144	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 149
145	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 150

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Head x

Max: 1.2 [g] at 0.036 [s]

Min: -21.2 [g] at 0.067 [s]

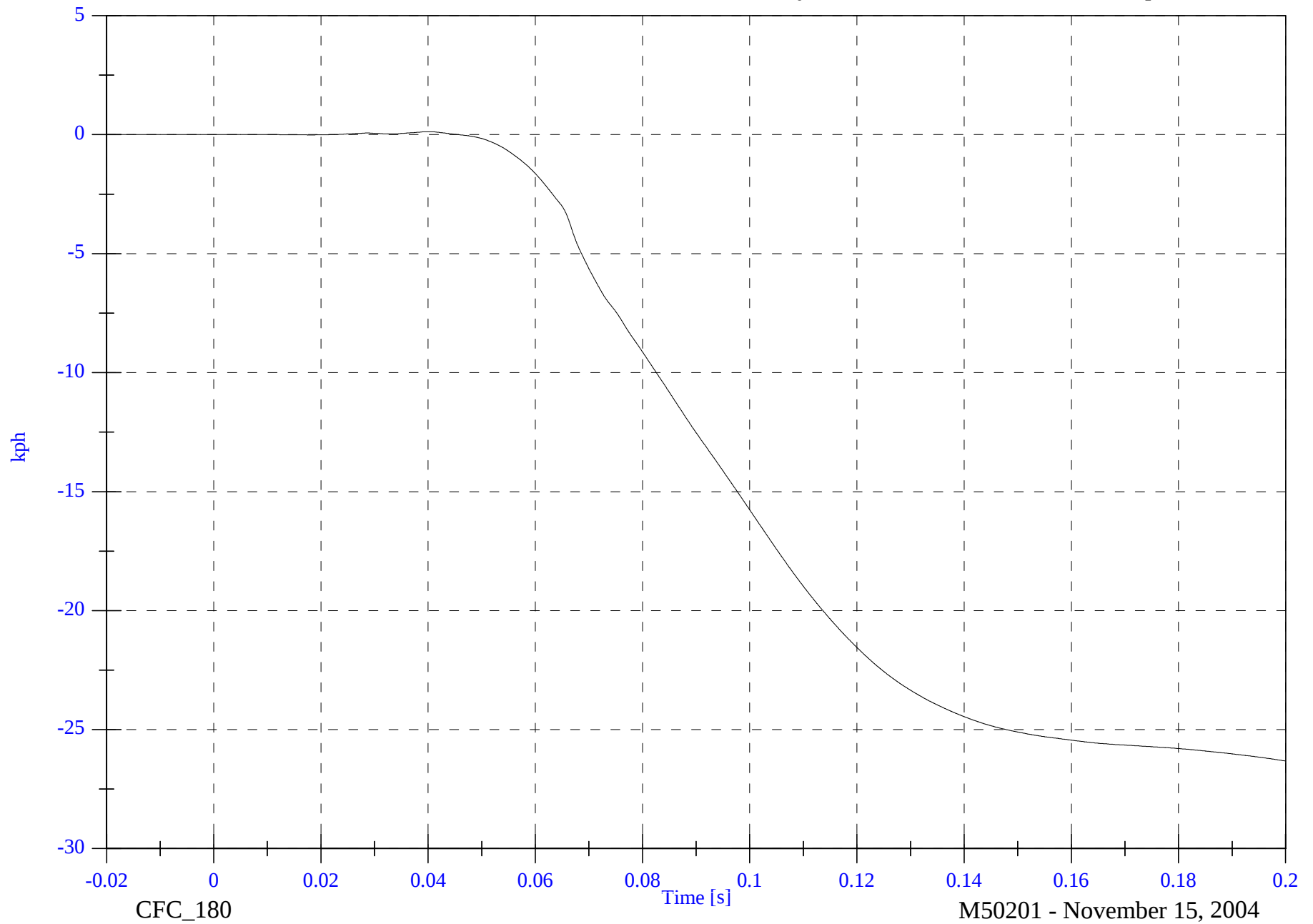


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Head x Velocity

Max: 0.1 [kph] at 0.040 [s]

Min: -26.3 [kph] at 0.200 [s]



B-7

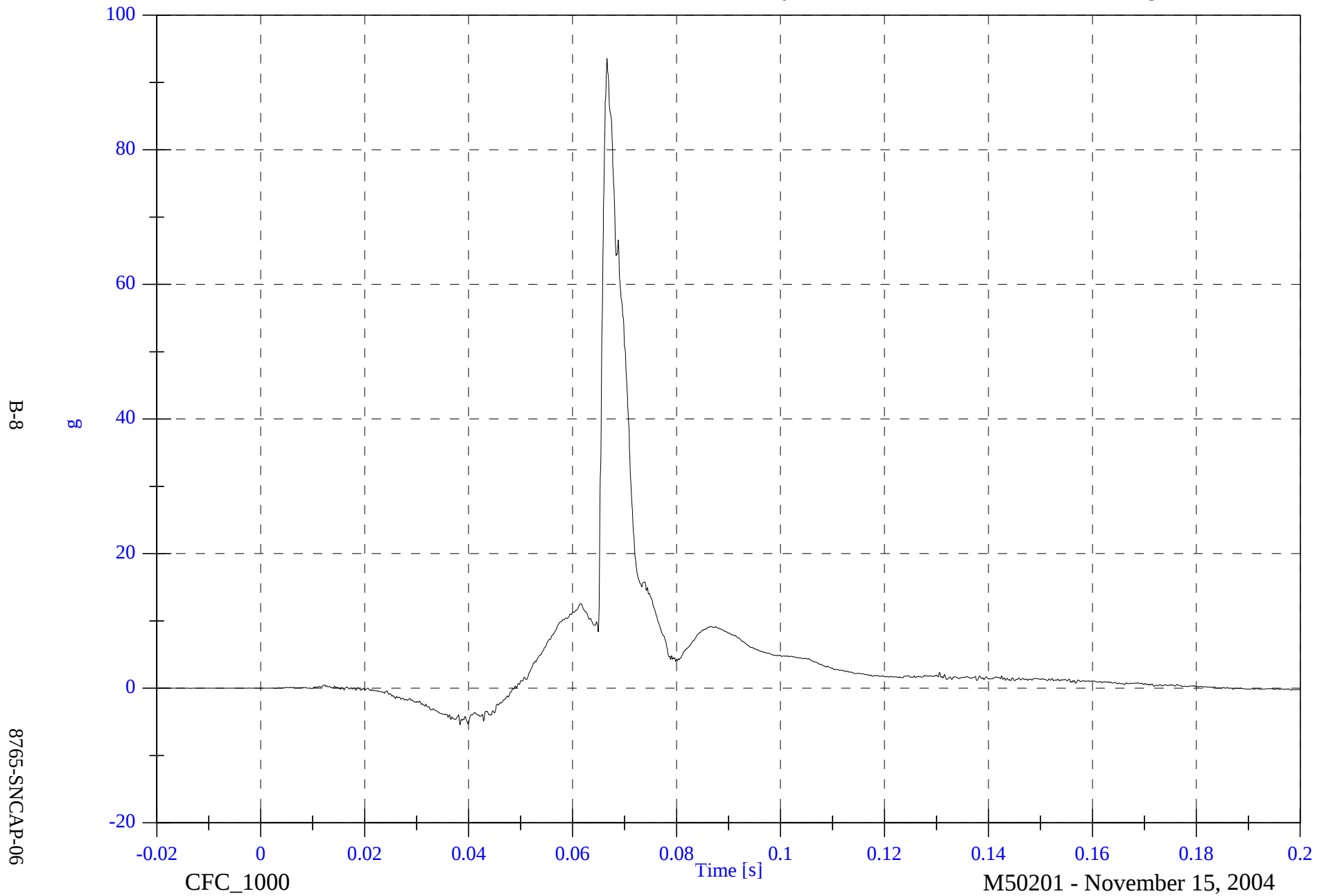
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Head y

Max: 93.6 [g] at 0.067 [s]

Min: -5.5 [g] at 0.038 [s]

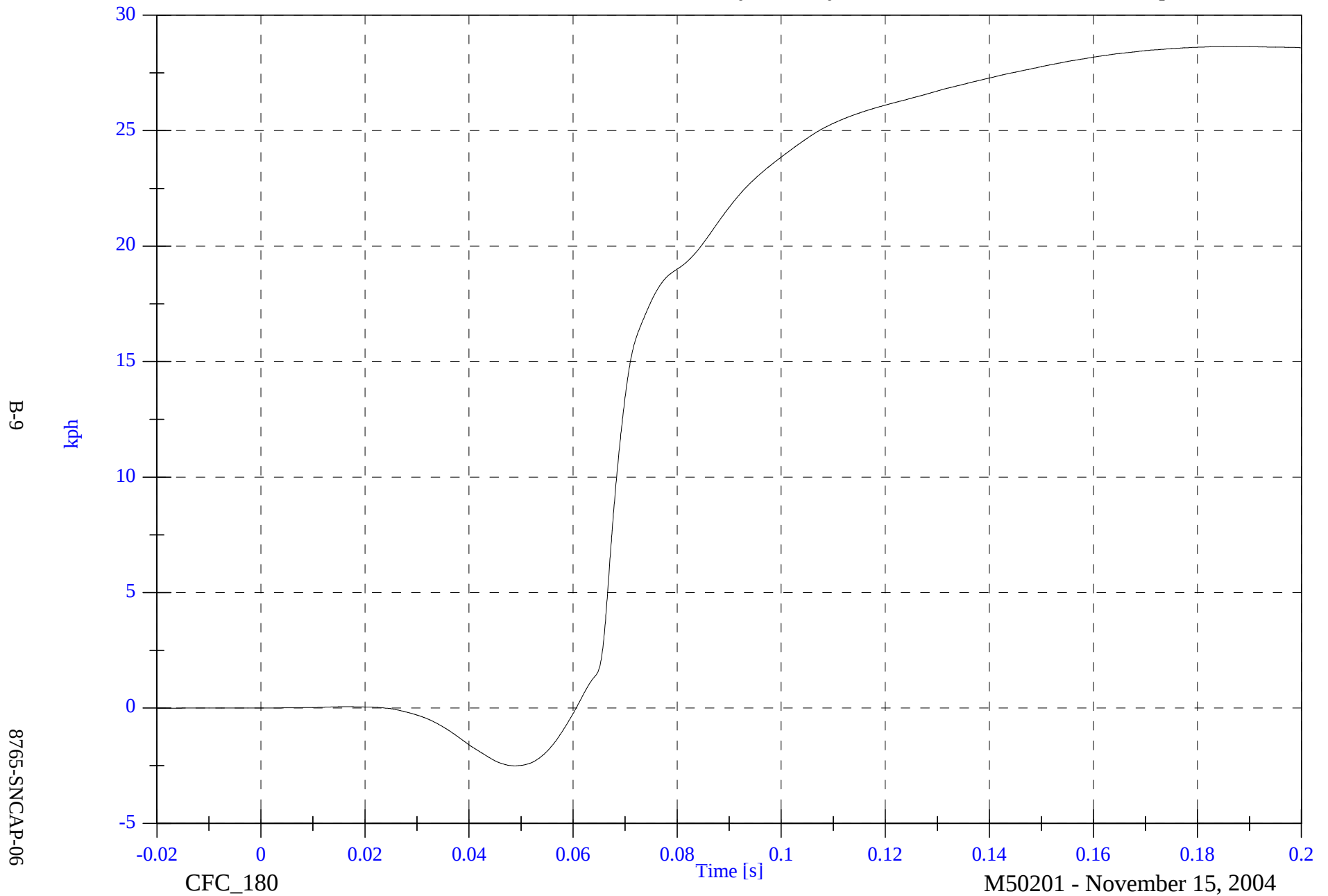


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Head y Velocity

Max: 28.6 [kph] at 0.186 [s]

Min: -2.5 [kph] at 0.049 [s]

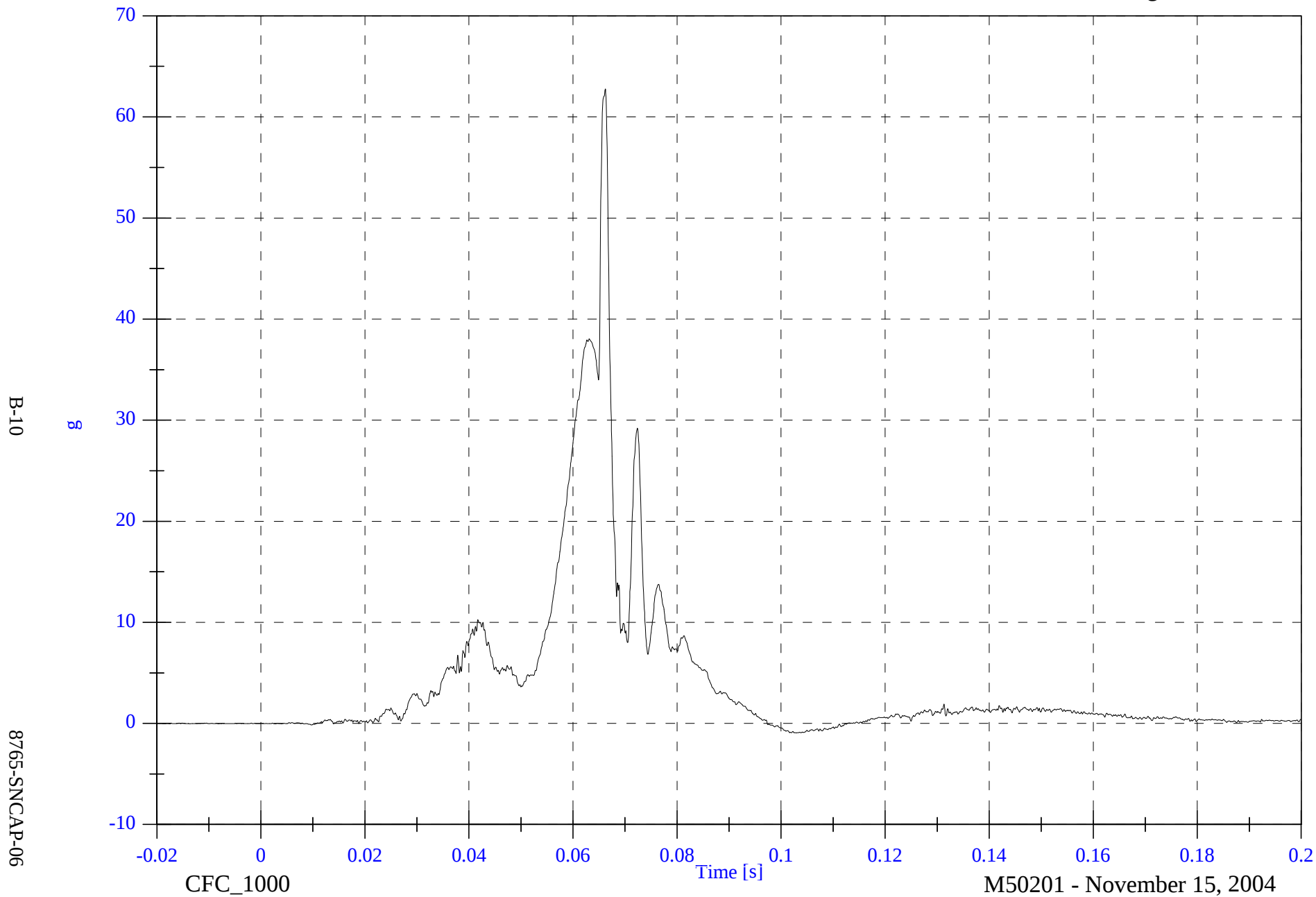


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Head z

Max: 62.8 [g] at 0.066 [s]

Min: -0.9 [g] at 0.103 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

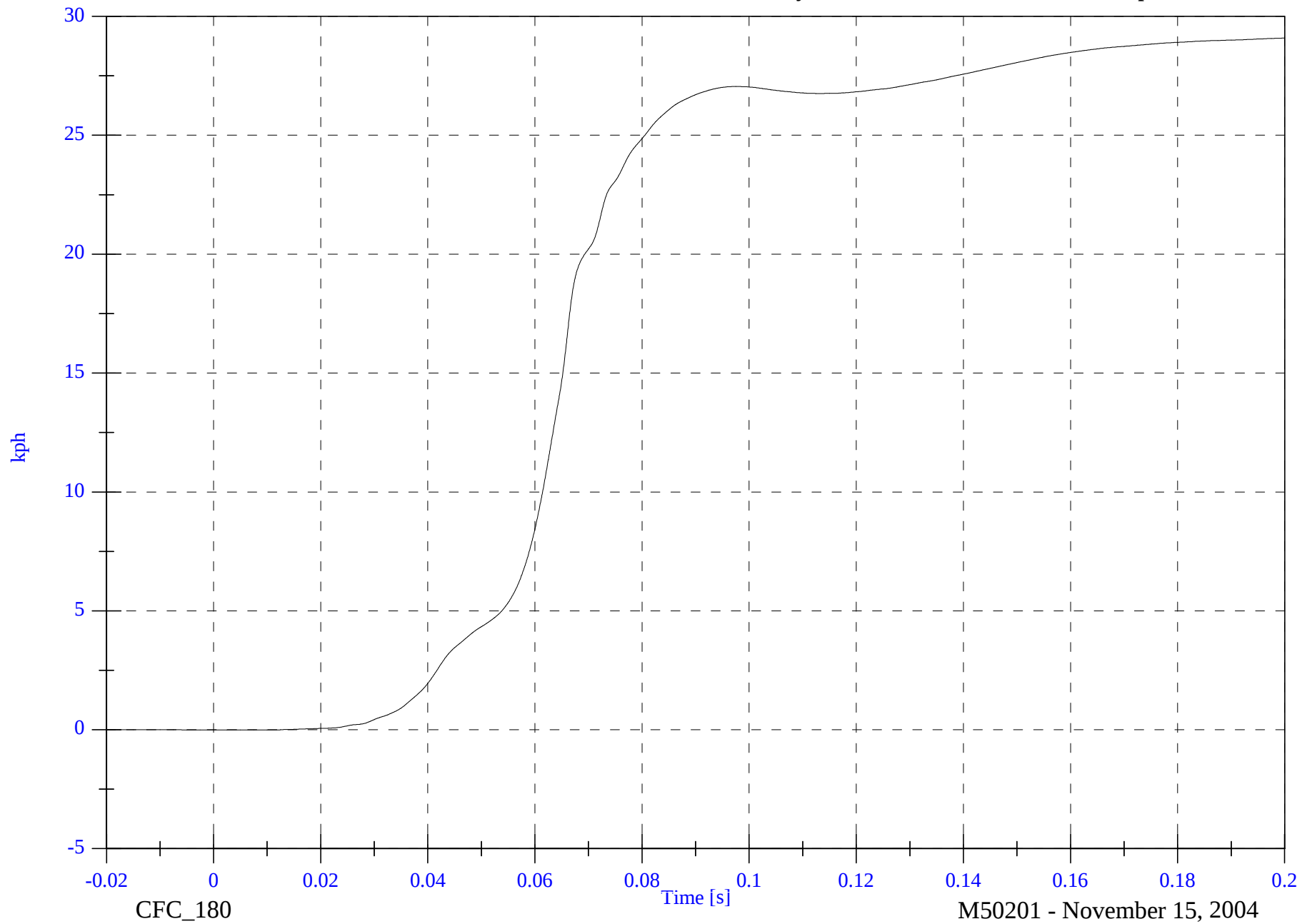
V2P1 Head z Velocity

Max: 29.1 [kph] at 0.200 [s]

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

B-11

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

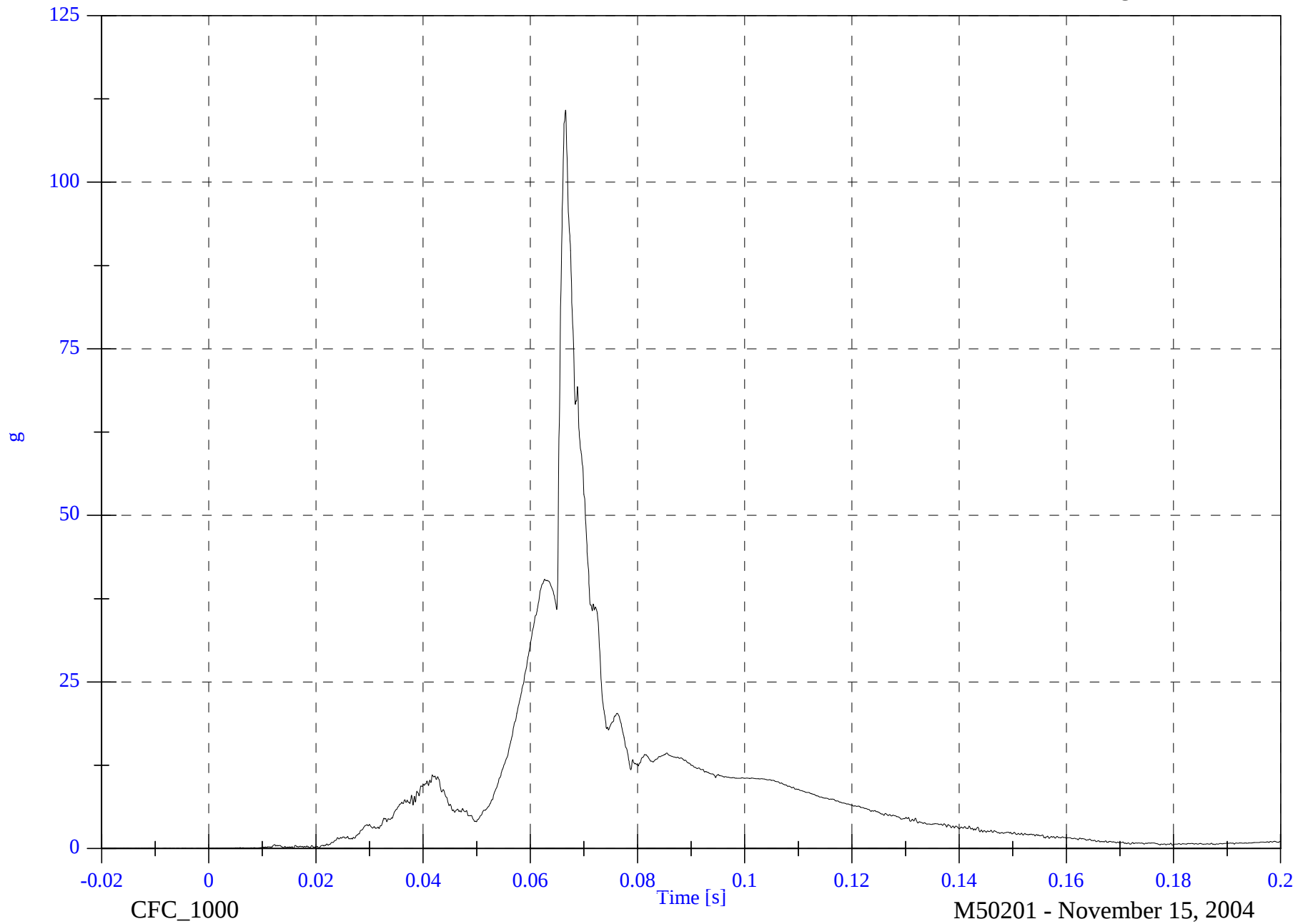
V2P1 Head Resultant

Max: 110.8 [g] at 0.067 [s]

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

B-12

8765-SNCAP-06

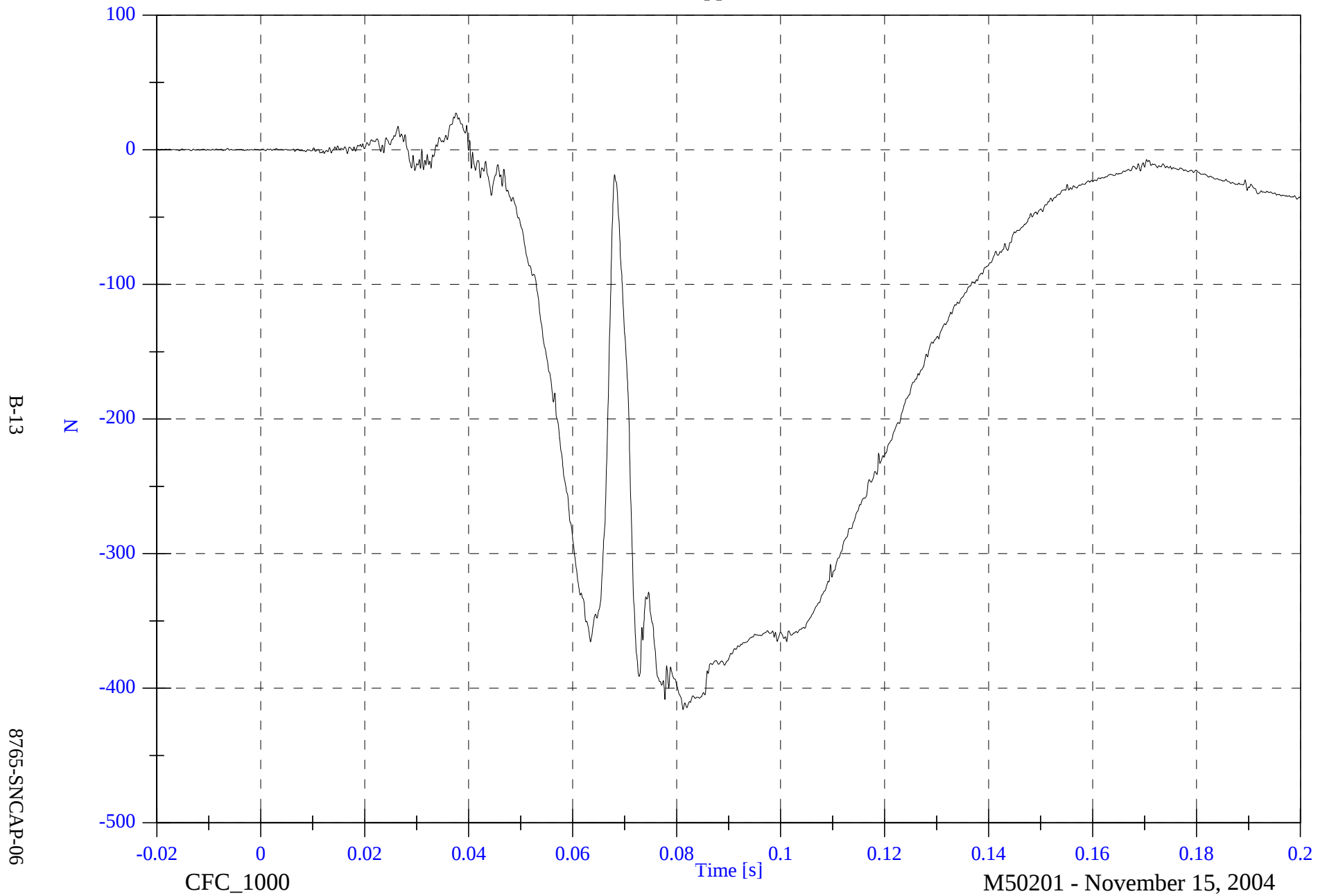


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Upper Neck Fx

Max: 27.3 [N] at 0.038 [s]

Min: -416.0 [N] at 0.081 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

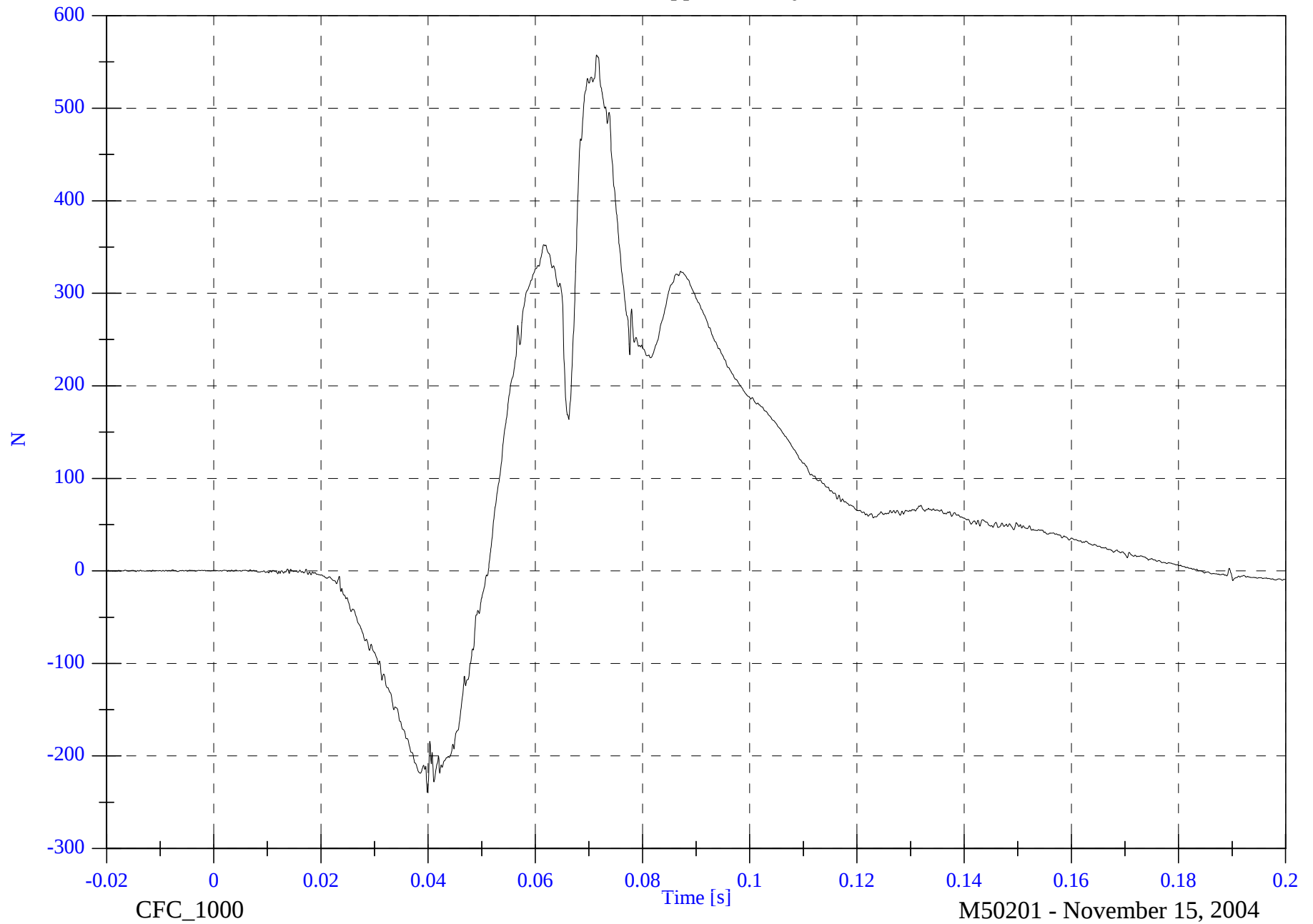
V2P1 Upper Neck Fy

Max: 557.6 [N] at 0.071 [s]

Min: -239.3 [N] at 0.040 [s]

B-14

8765-SNCAP-06

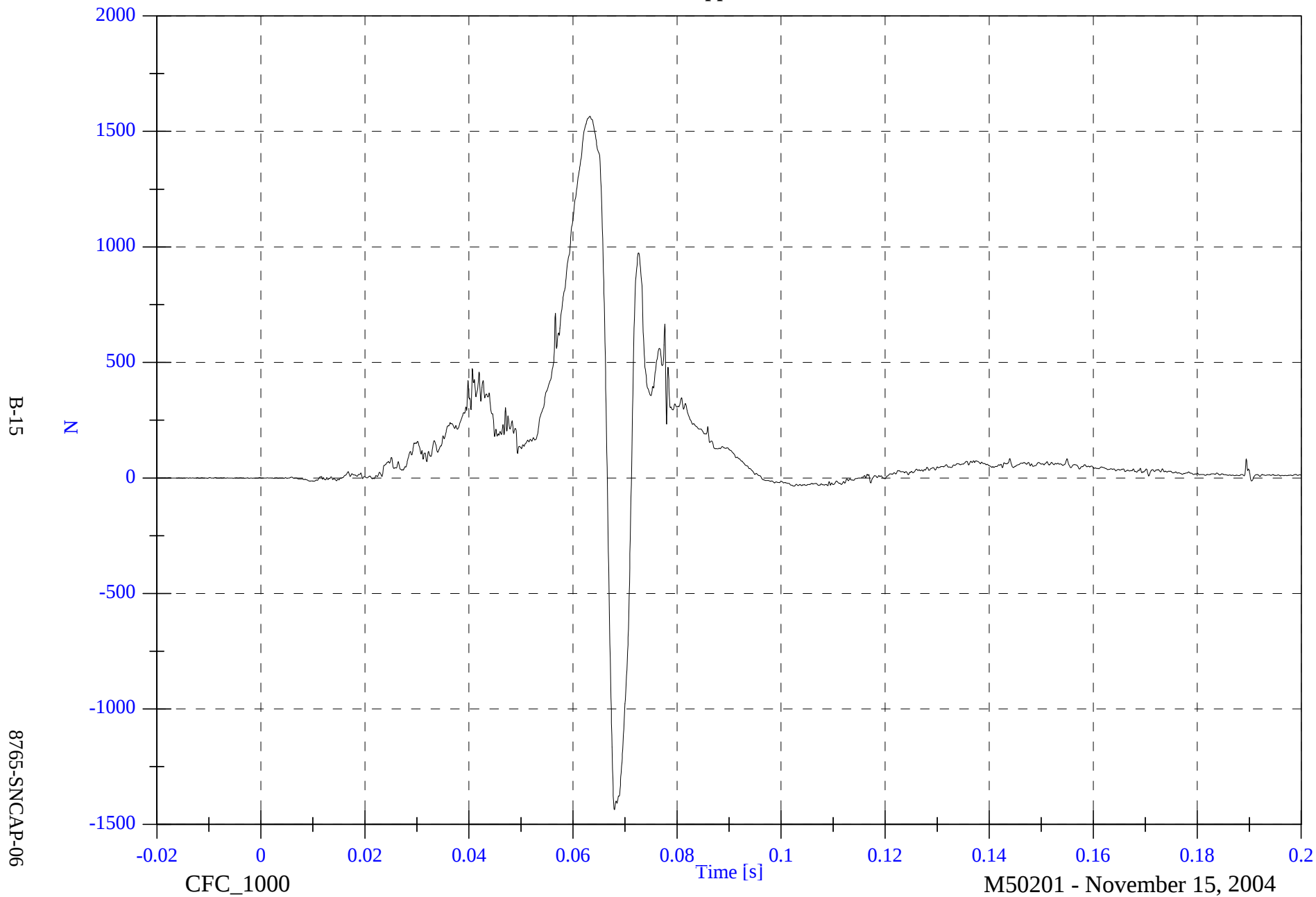


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Upper Neck Fz

Max: 1565.2 [N] at 0.063 [s]

Min: -1436.4 [N] at 0.068 [s]

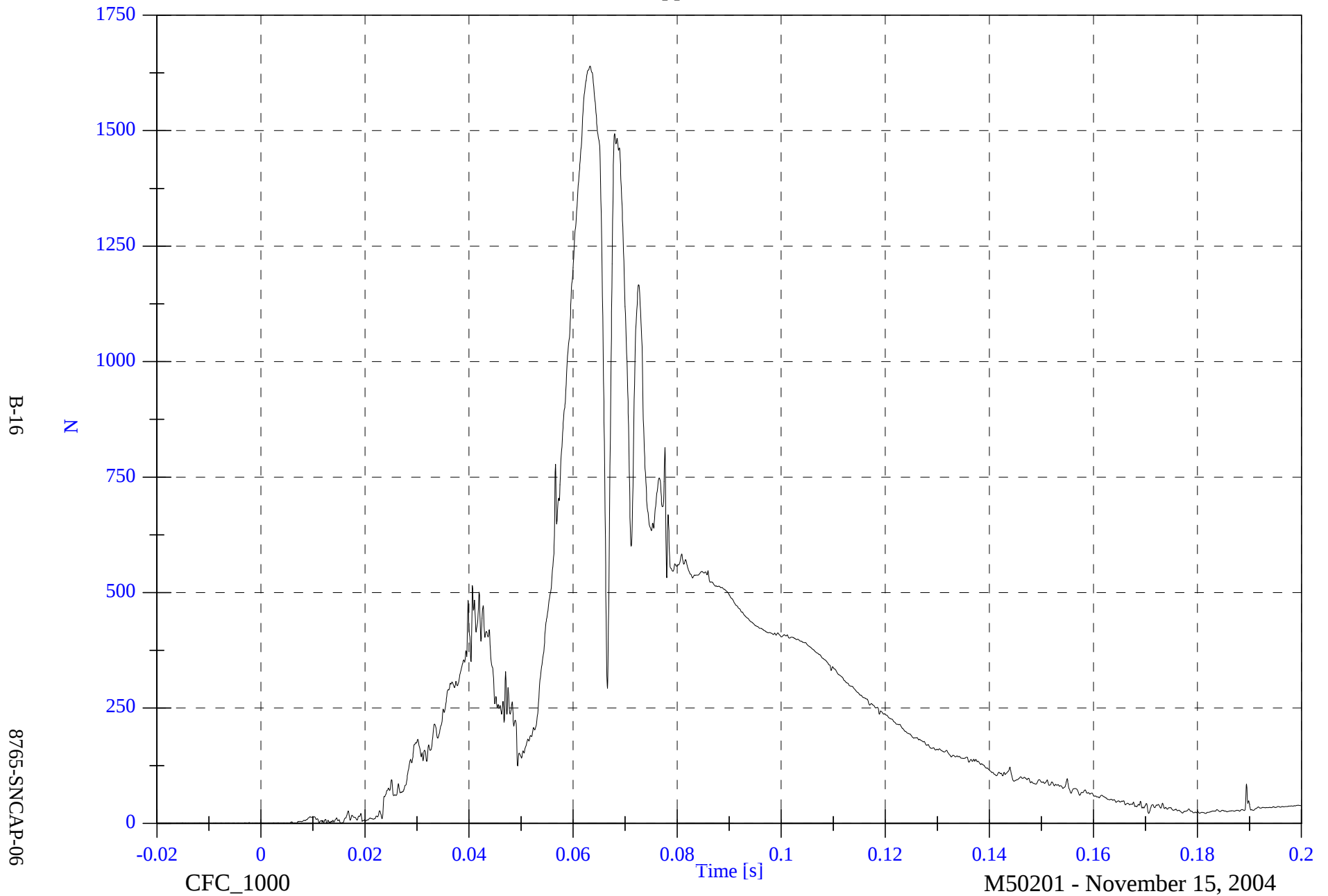


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Upper Neck F Resultant

Max: 1639.6 [N] at 0.063 [s]

Min: 0.0 [N] at 0.004 [s]

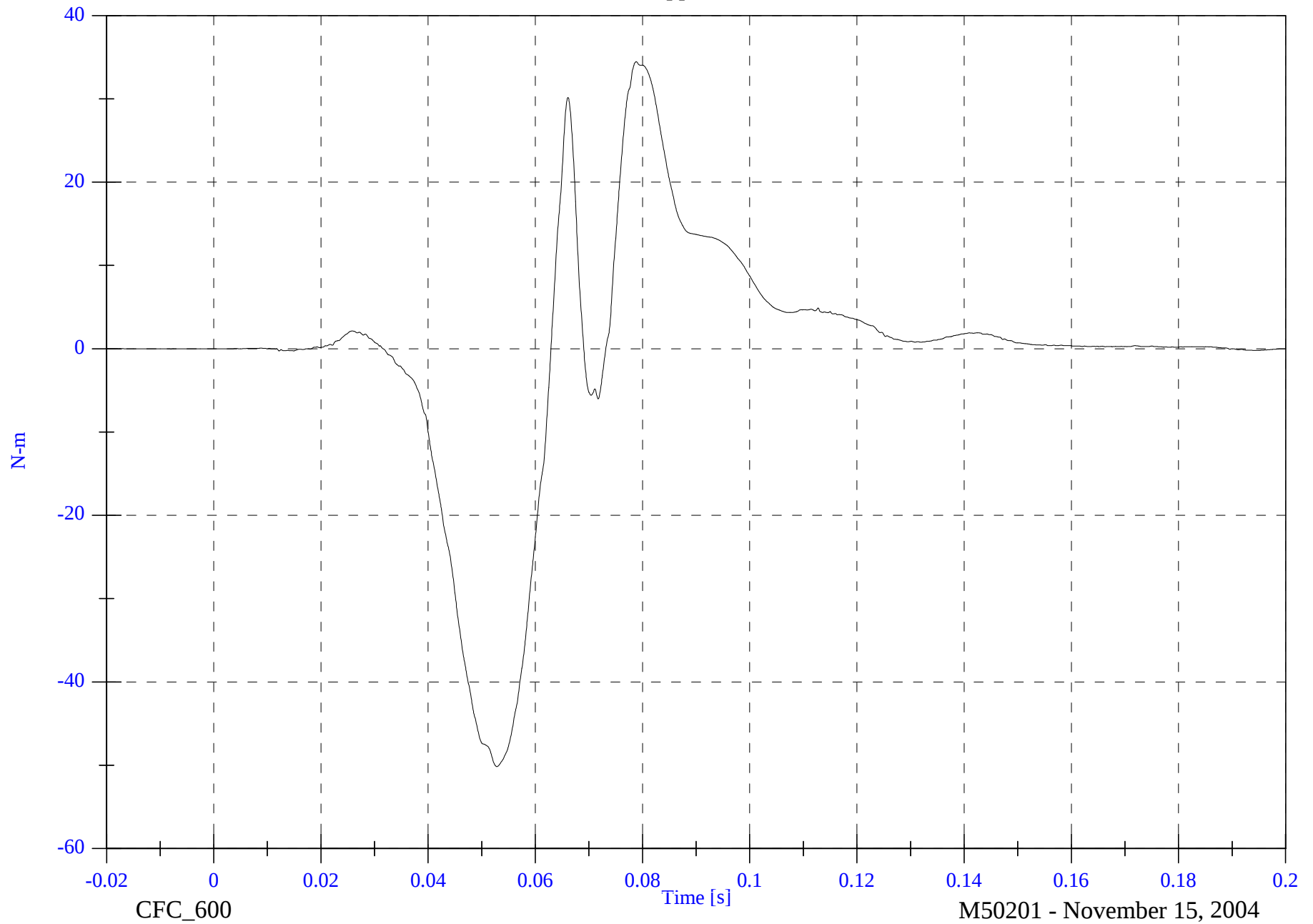


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Upper Neck Mx

Max: 34.5 [N-m] at 0.079 [s]

Min: -50.2 [N-m] at 0.053 [s]



B-17

8765-SNCAP-06

M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

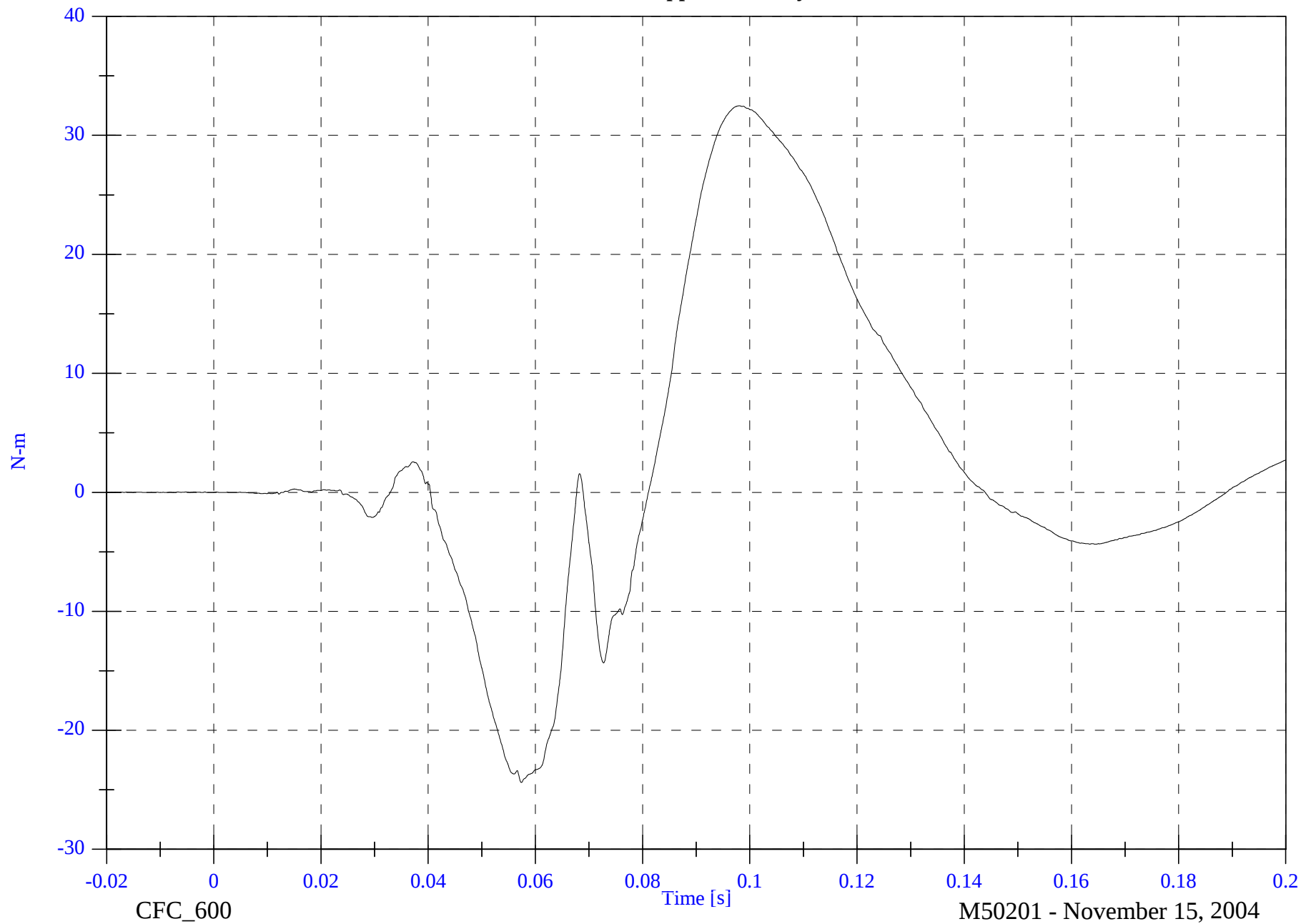
V2P1 Upper Neck My

Max: 32.5 [N-m] at 0.098 [s]

Min: -24.4 [N-m] at 0.057 [s]

B-18

8765-SNCAP-06

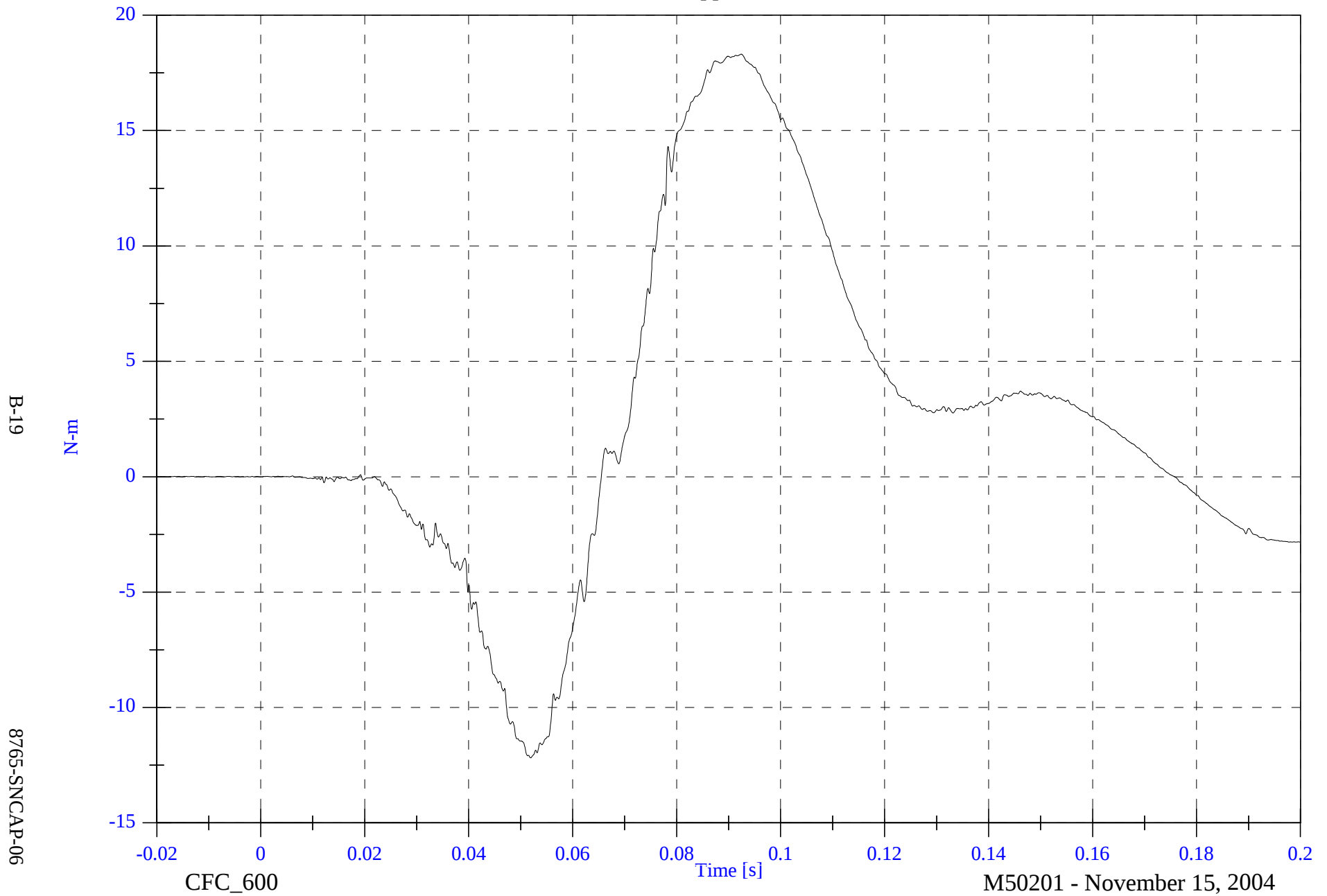


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Upper Neck Mz

Max: 18.3 [N-m] at 0.092 [s]

Min: -12.2 [N-m] at 0.052 [s]

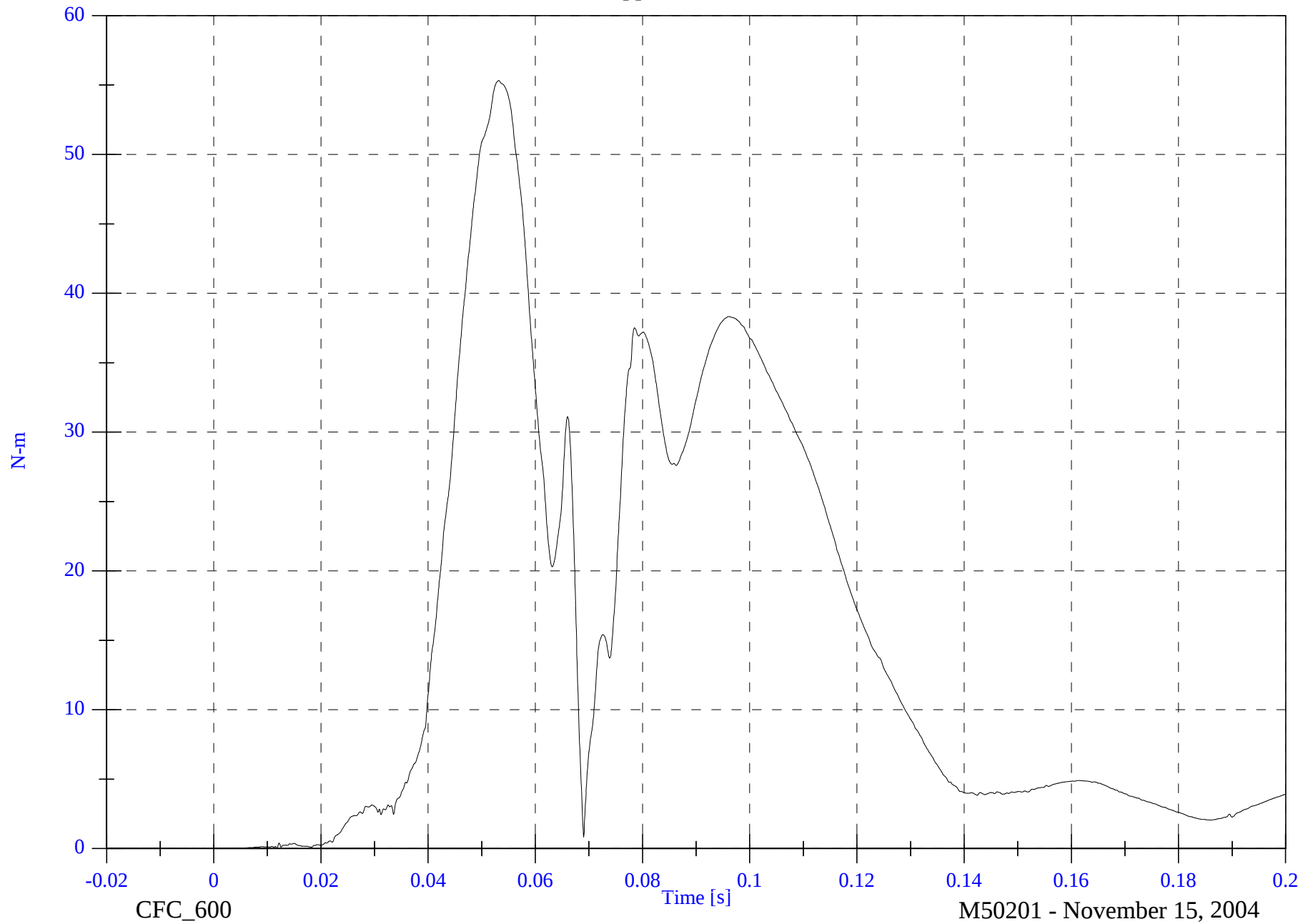


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Upper Neck M Resultant

Max: 55.3 [N-m] at 0.053 [s]

Min: 0.0 [N-m] at -0.002 [s]



B-20

8765-SNCAP-06

M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

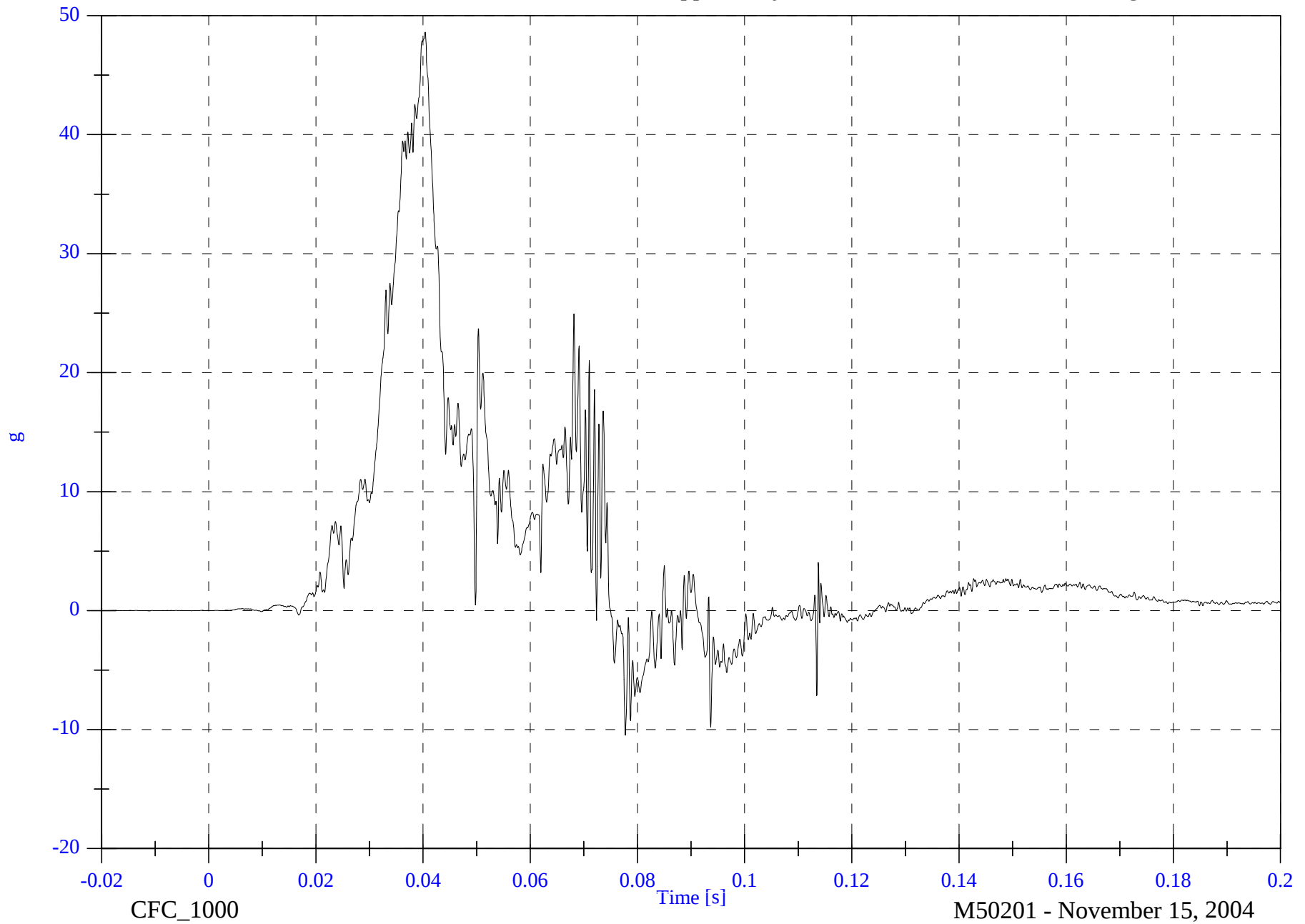
V2P1 Upper Rib y

Max: 48.6 [g] at 0.040 [s]

Min: -10.5 [g] at 0.078 [s]

B-21

8765-SNCAP-06

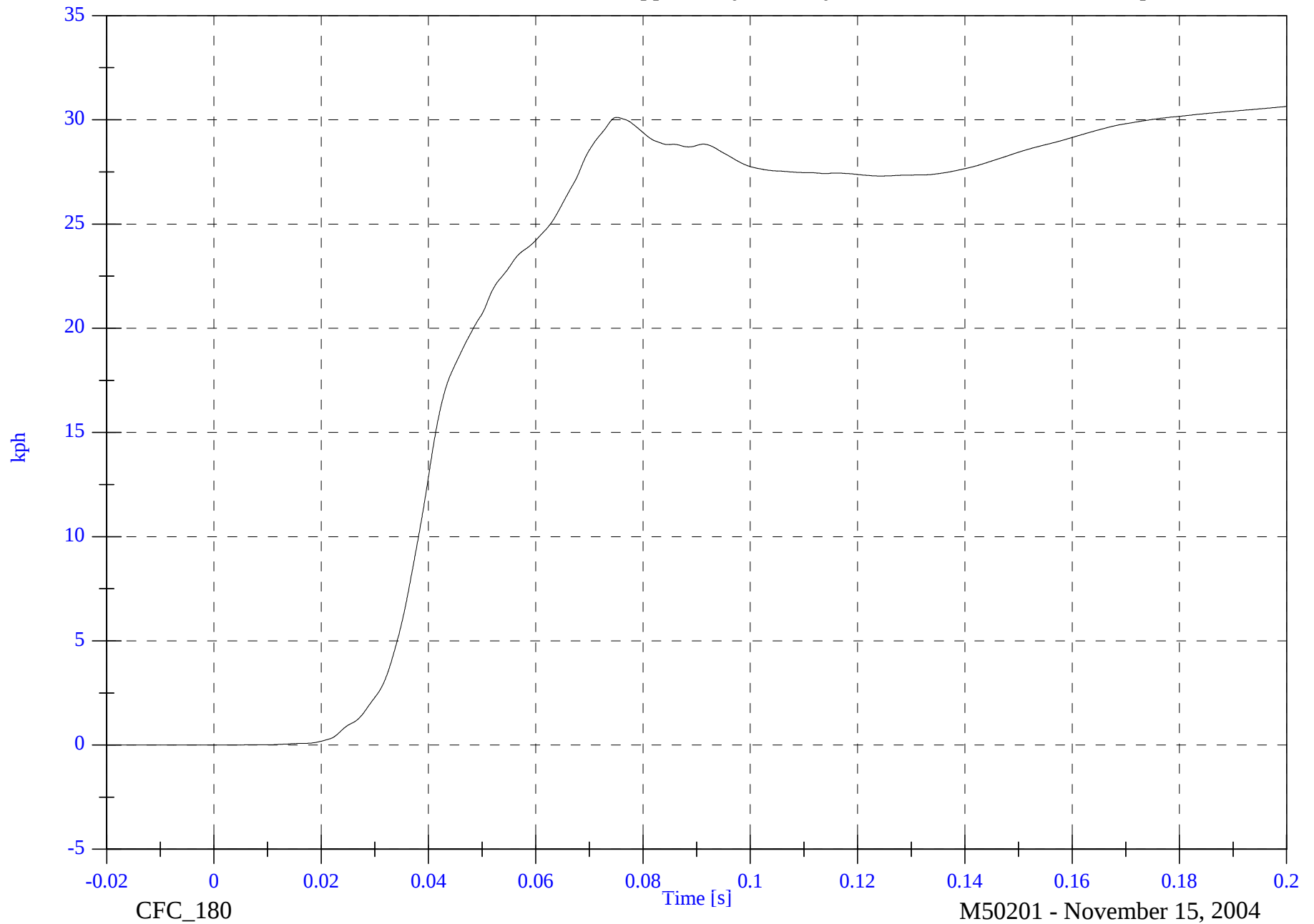


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Upper Rib y Velocity

Max: 30.6 [kph] at 0.200 [s]

Min: -0.0 [kph] at -0.002 [s]



B-22

8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

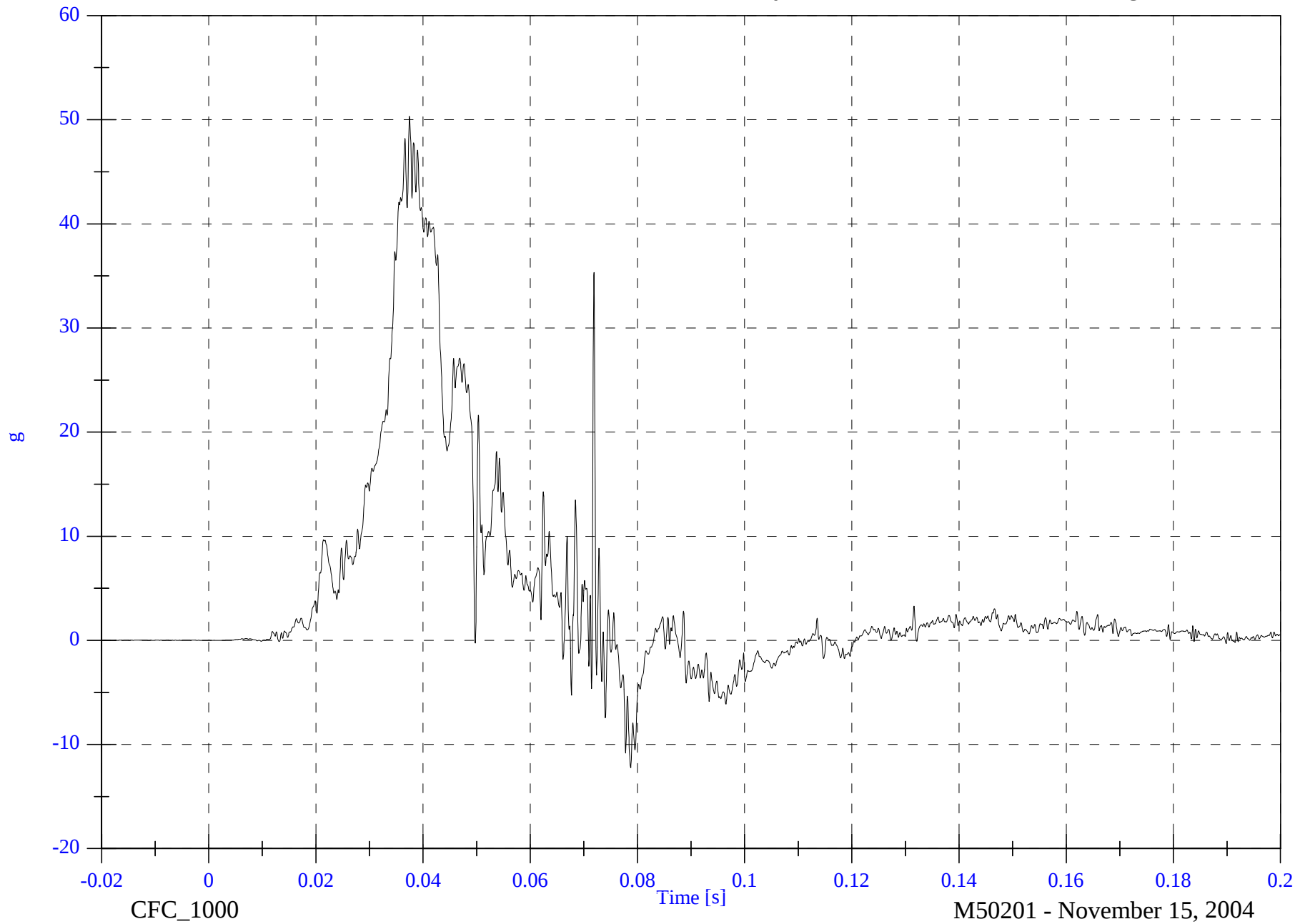
V2P1 Lower Rib y

Max: 50.3 [g] at 0.037 [s]

Min: -12.2 [g] at 0.079 [s]

B-23

8765-SNCAP-06

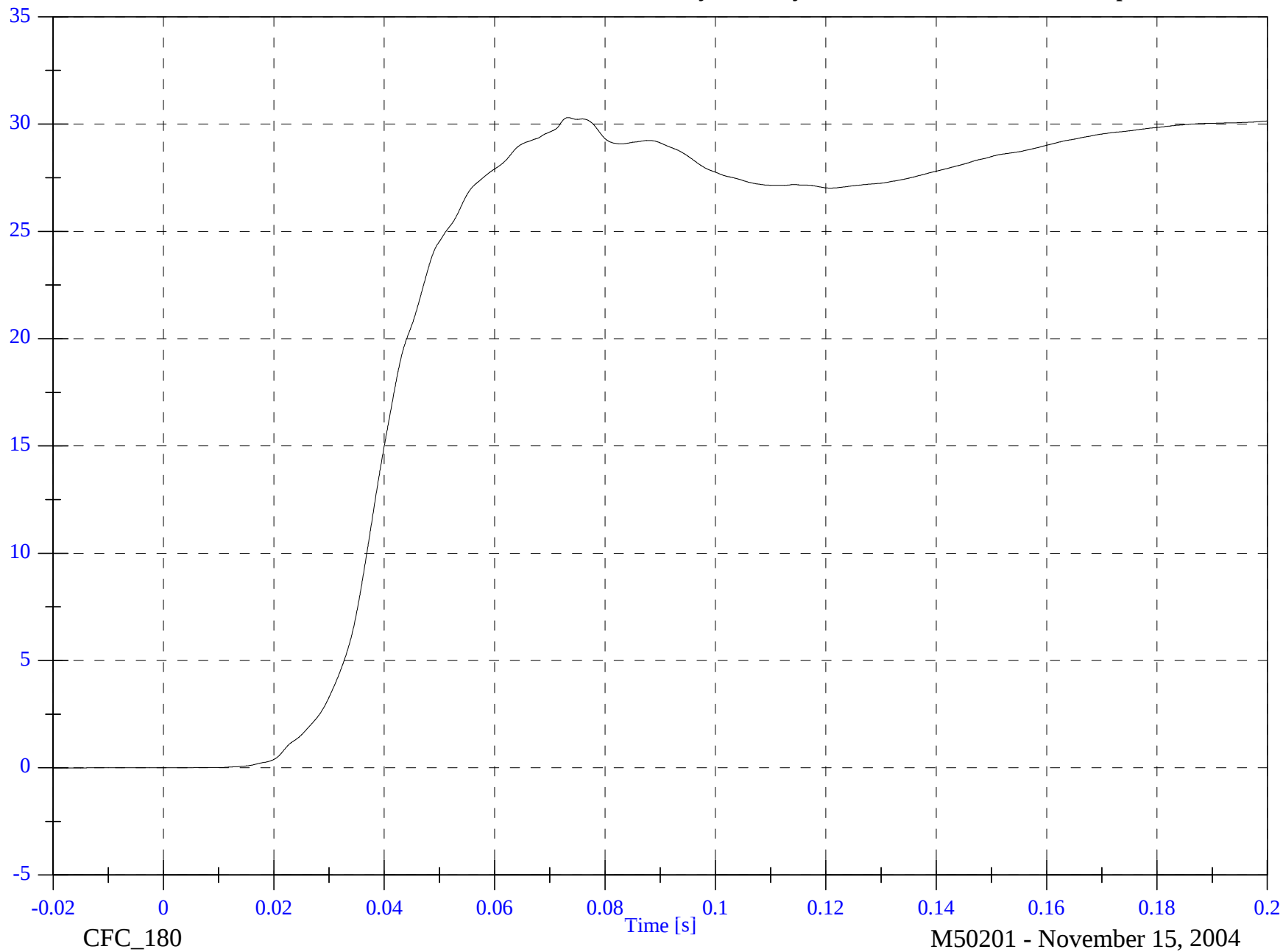


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Lower Rib y Velocity

Max: 30.3 [kph] at 0.073 [s]

Min: -0.0 [kph] at -0.017 [s]



B-24

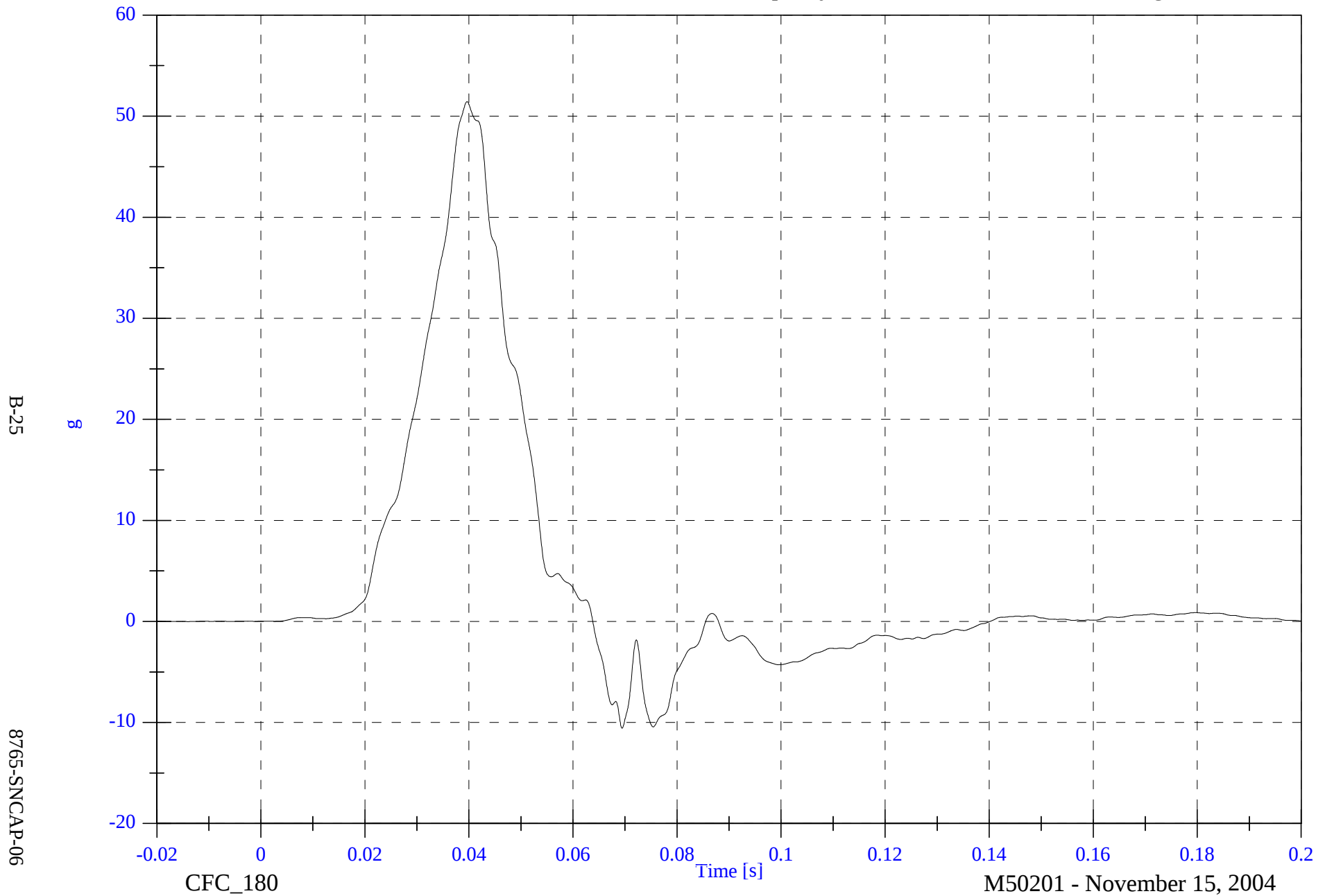
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Lower Spine y

Max: 51.4 [g] at 0.040 [s]

Min: -10.6 [g] at 0.069 [s]

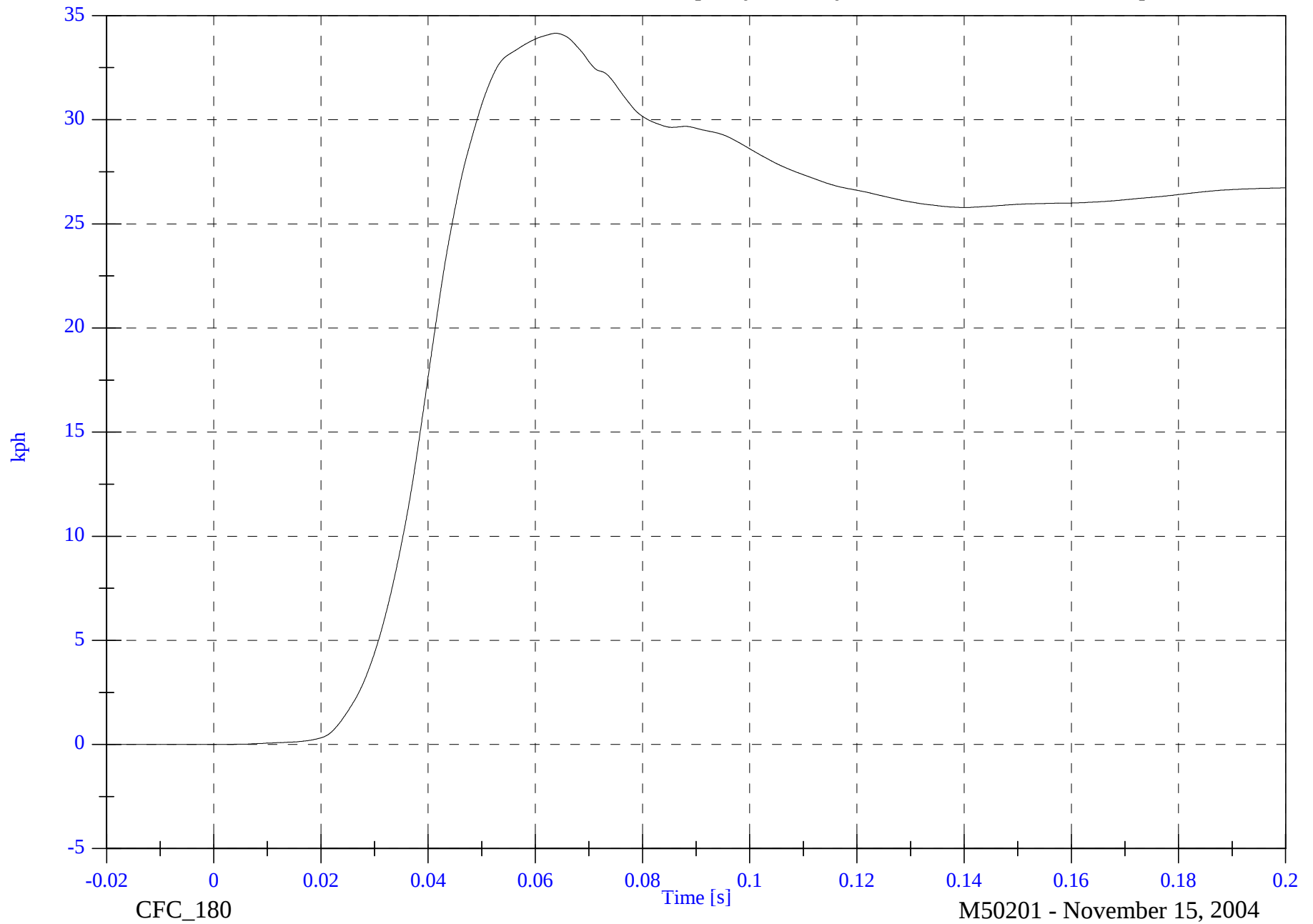


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Lower Spine y Velocity

Max: 34.2 [kph] at 0.064 [s]

Min: -0.0 [kph] at -0.012 [s]



B-26

8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

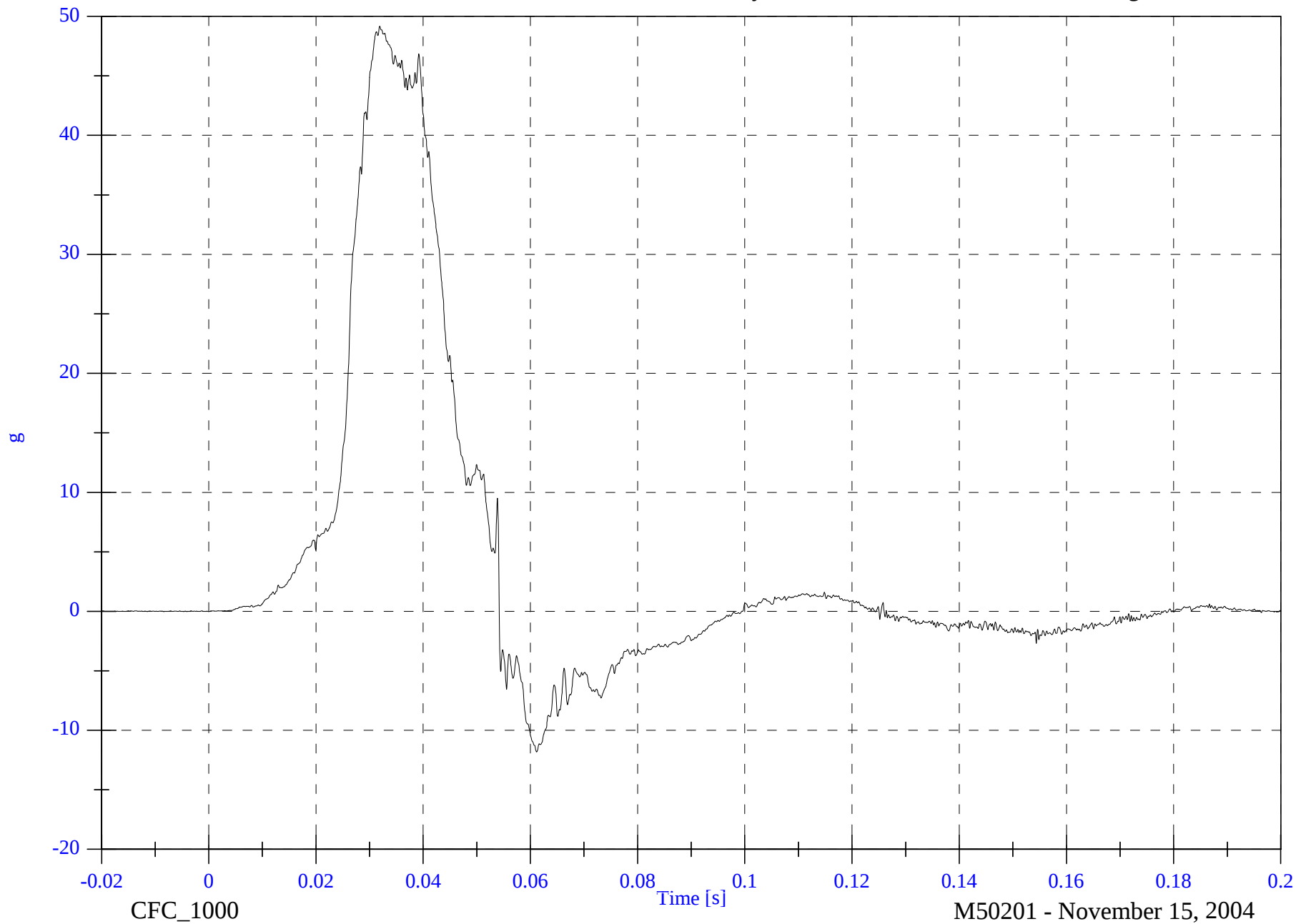
V2P1 Pelvic y

Max: 49.2 [g] at 0.032 [s]

Min: -11.8 [g] at 0.061 [s]

B-27

8765-SNCAP-06

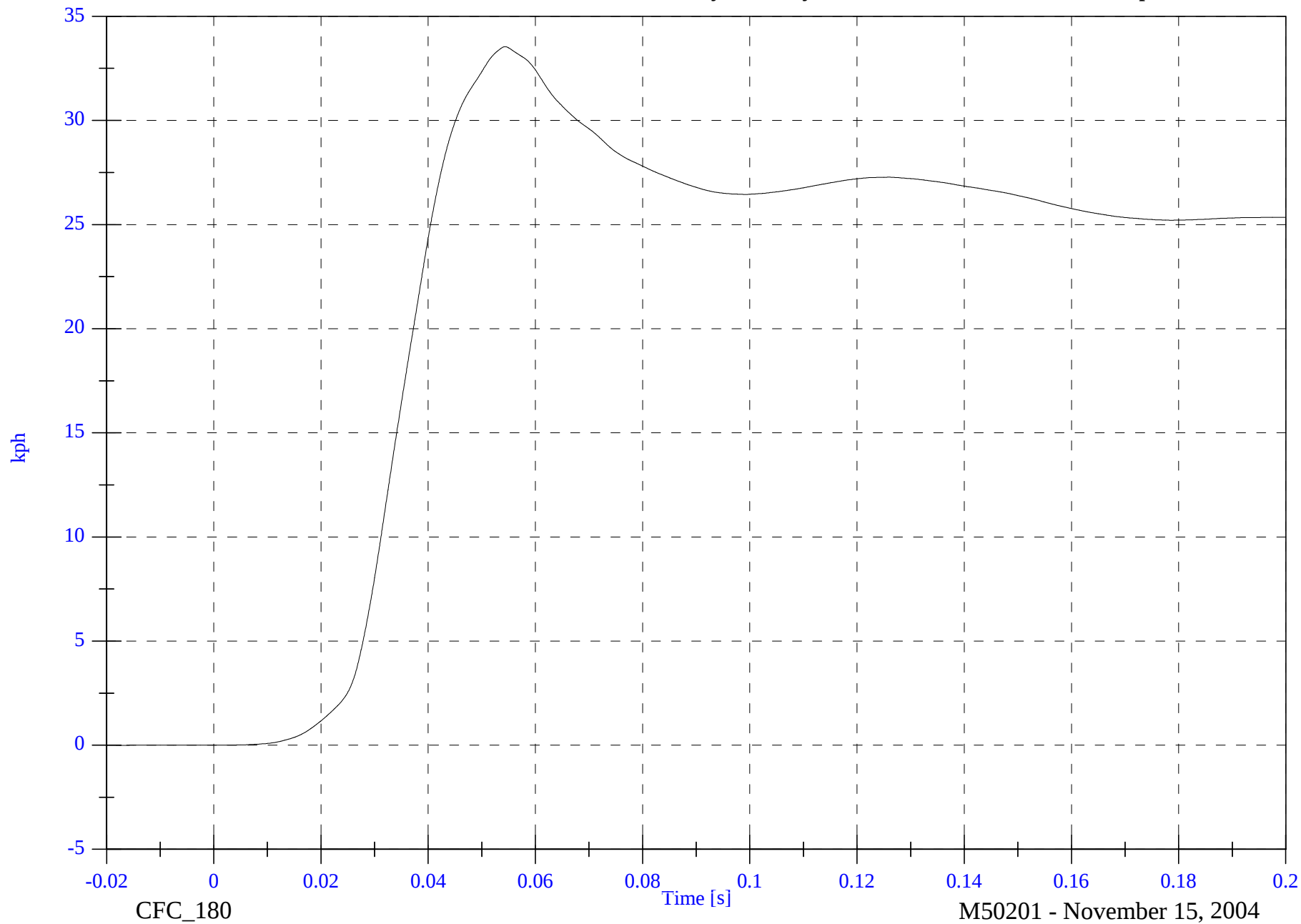


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Pelvic y Velocity

Max: 33.5 [kph] at 0.054 [s]

Min: -0.0 [kph] at -0.017 [s]



B-28

8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

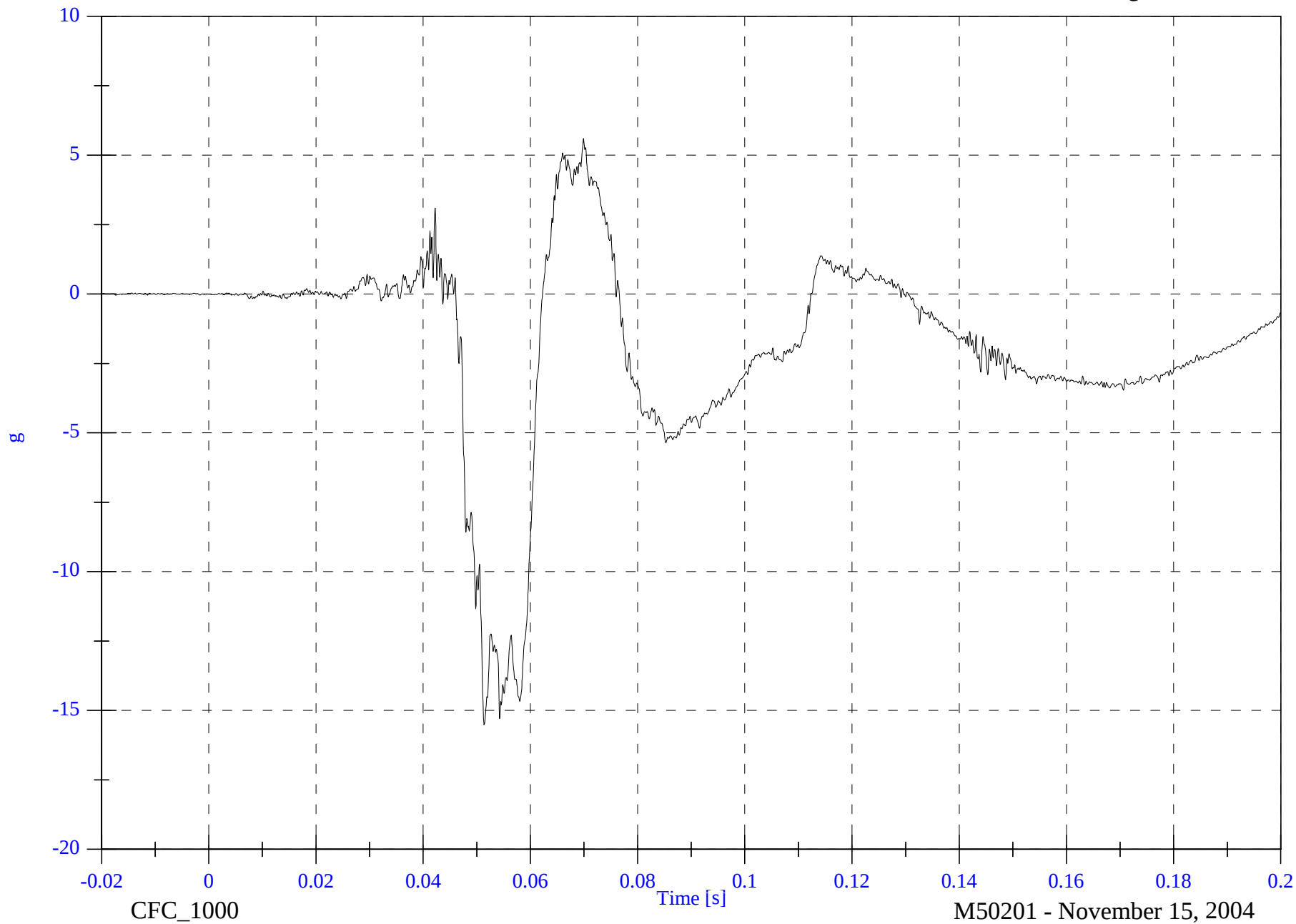
V2P4 Head x

Max: 5.6 [g] at 0.070 [s]

Min: -15.5 [g] at 0.051 [s]

B-29

8765-SNCAP-06

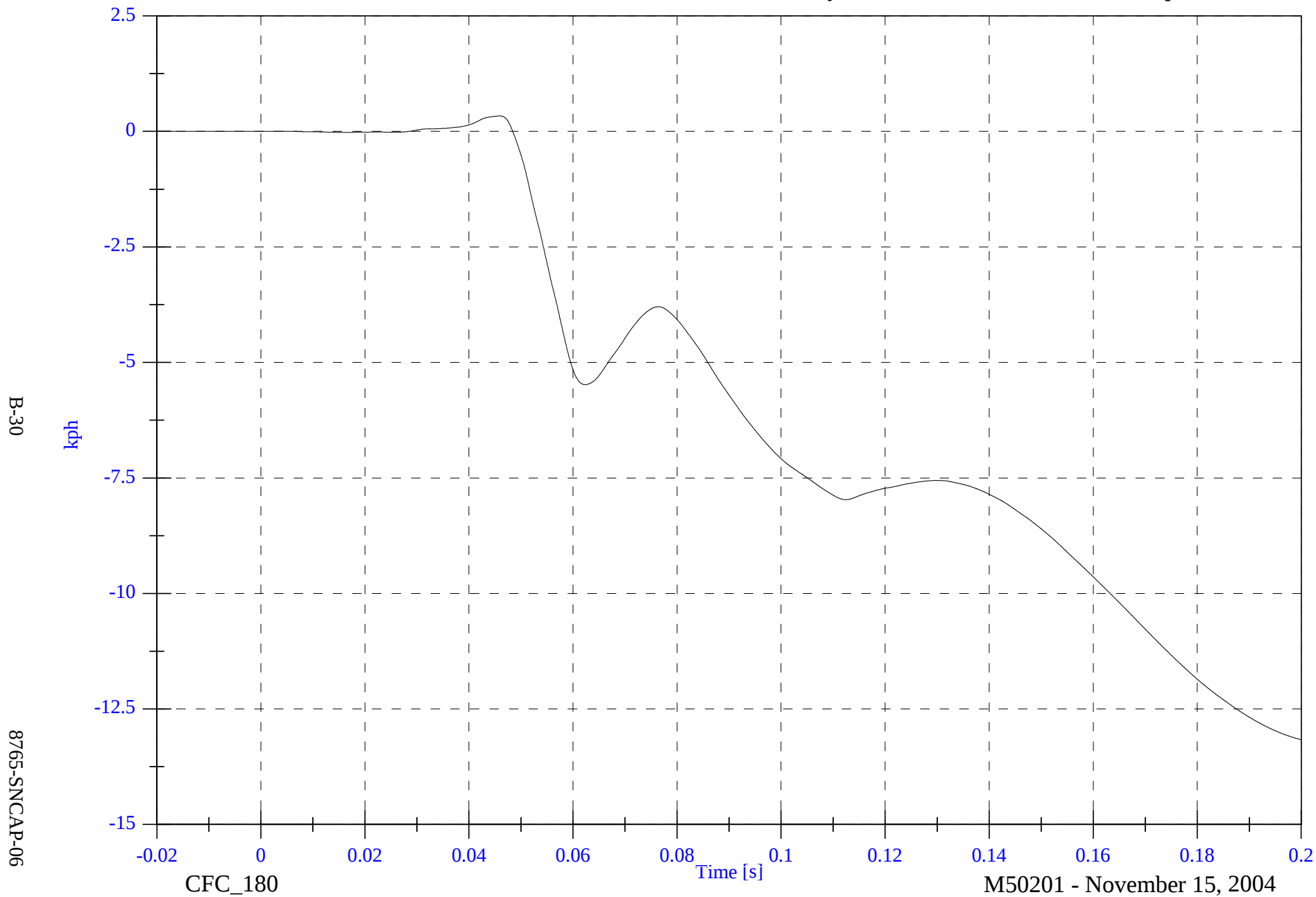


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Head x Velocity

Max: 0.3 [kph] at 0.046 [s]

Min: -13.2 [kph] at 0.200 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

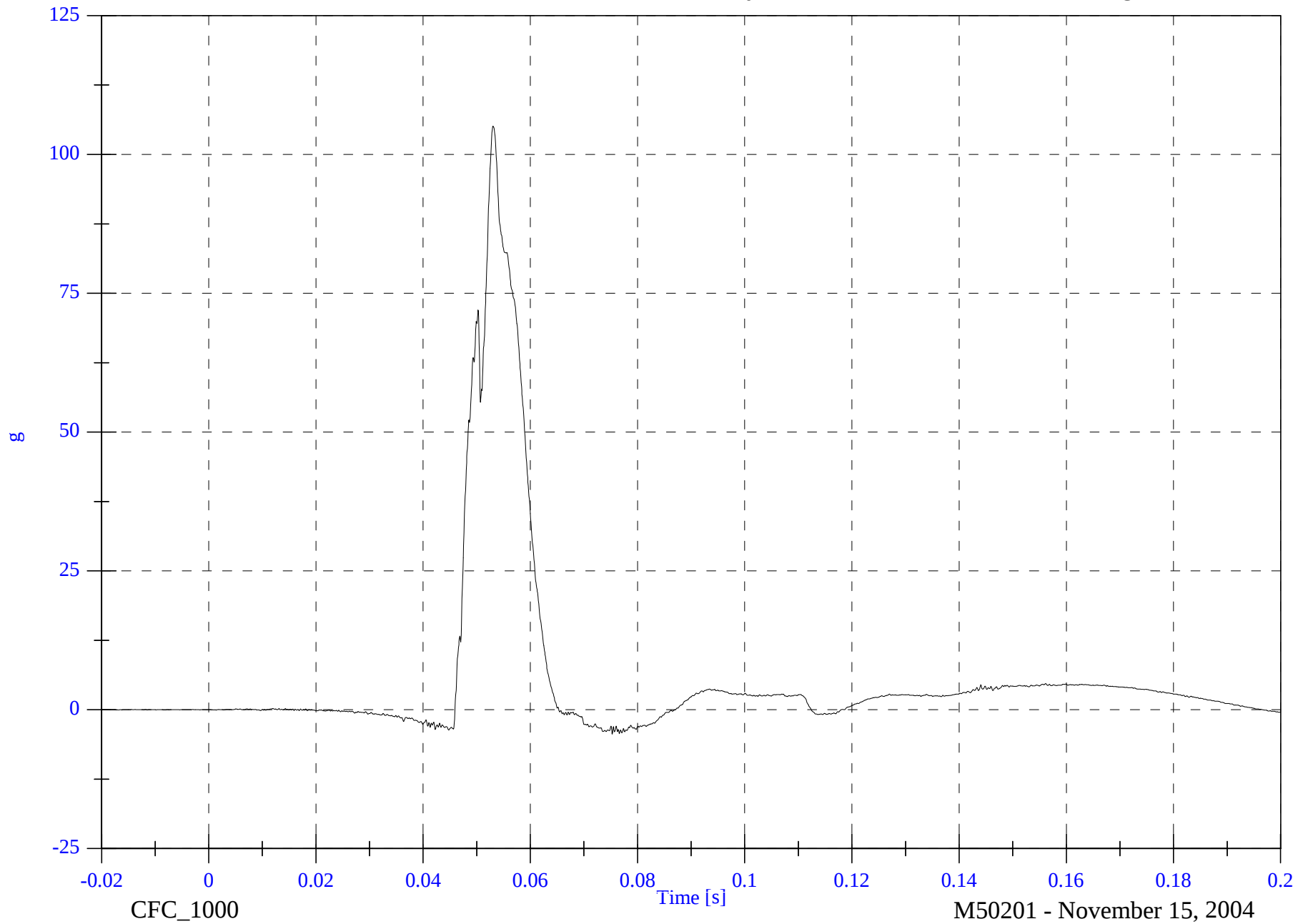
V2P4 Head y

Max: 105.1 [g] at 0.053 [s]

Min: -4.4 [g] at 0.075 [s]

B-31

8765-SNCAP-06

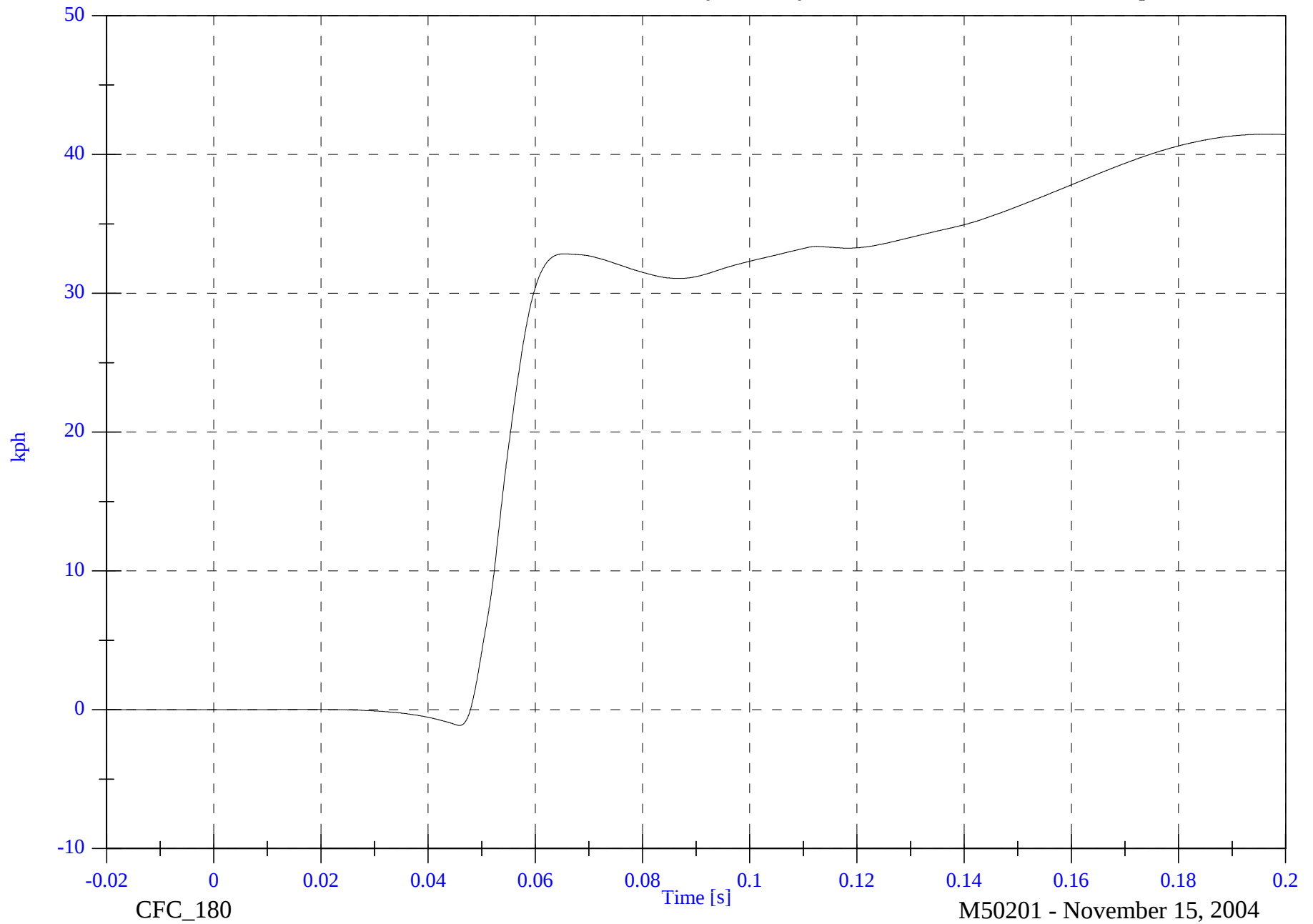


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Head y Velocity

Max: 41.5 [kph] at 0.197 [s]

Min: -1.1 [kph] at 0.046 [s]



B-32

8765-SNCAP-06

CFC_180

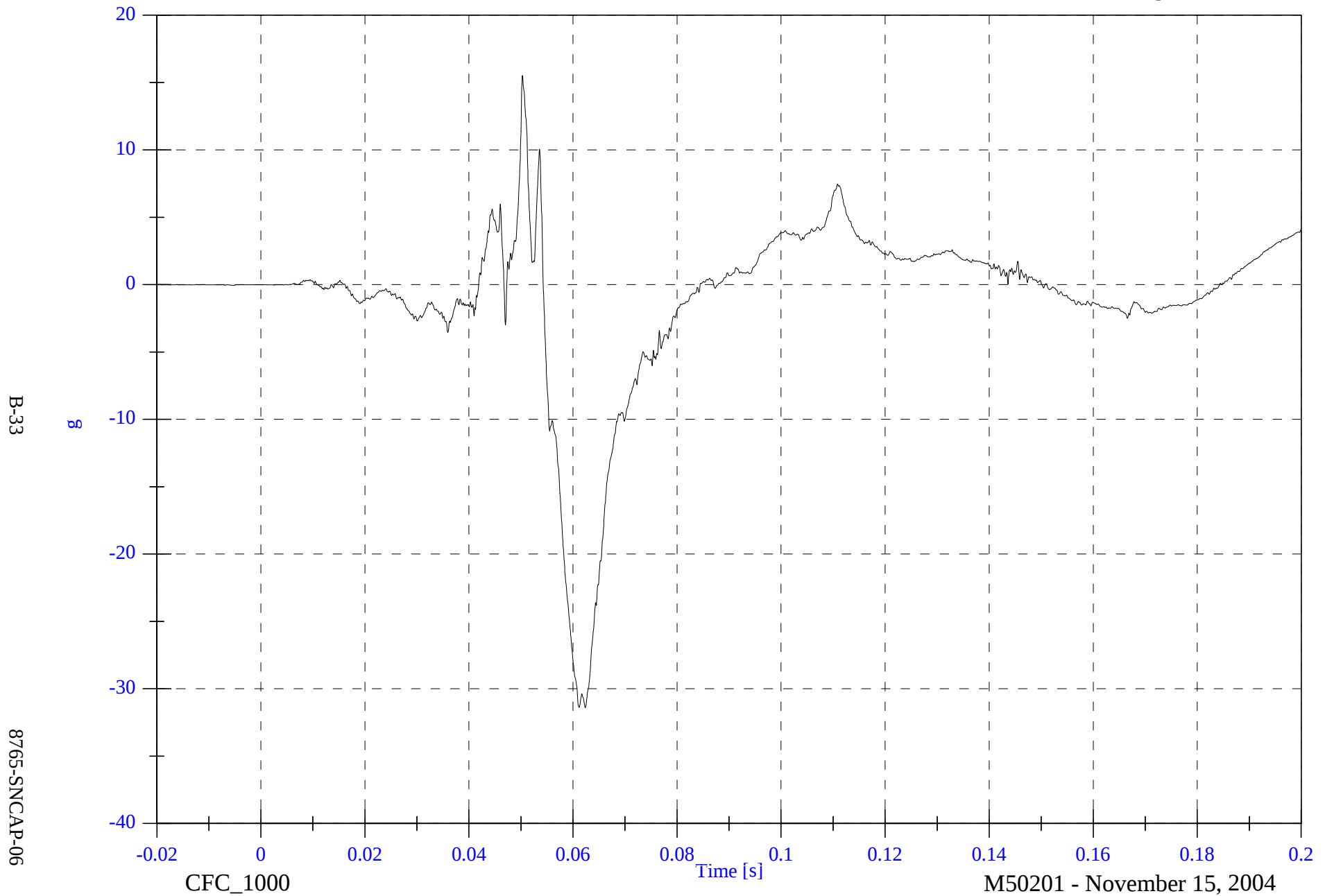
M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Head z

Max: 15.5 [g] at 0.050 [s]

Min: -31.4 [g] at 0.062 [s]

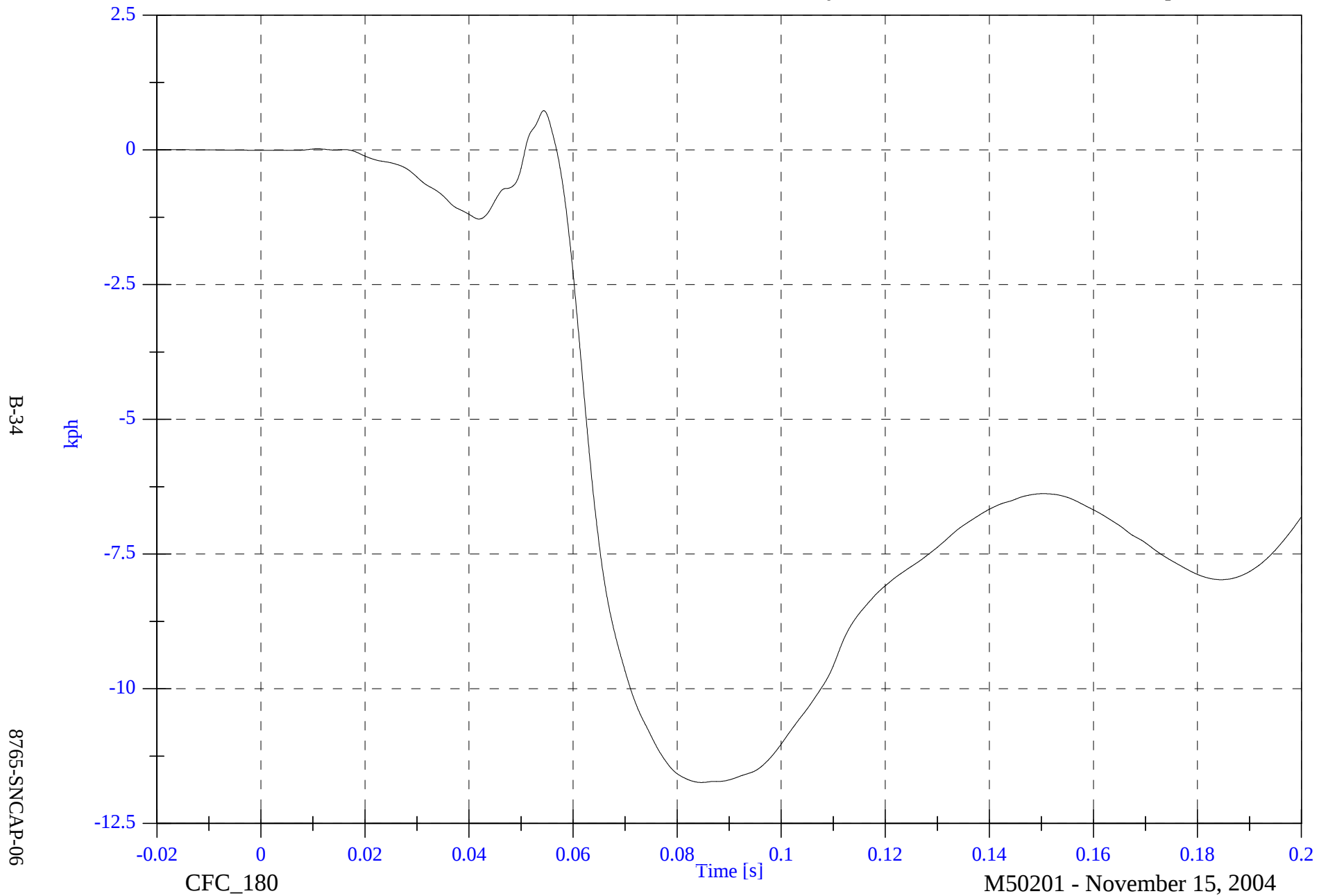


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Head z Velocity

Max: 0.7 [kph] at 0.054 [s]

Min: -11.7 [kph] at 0.085 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

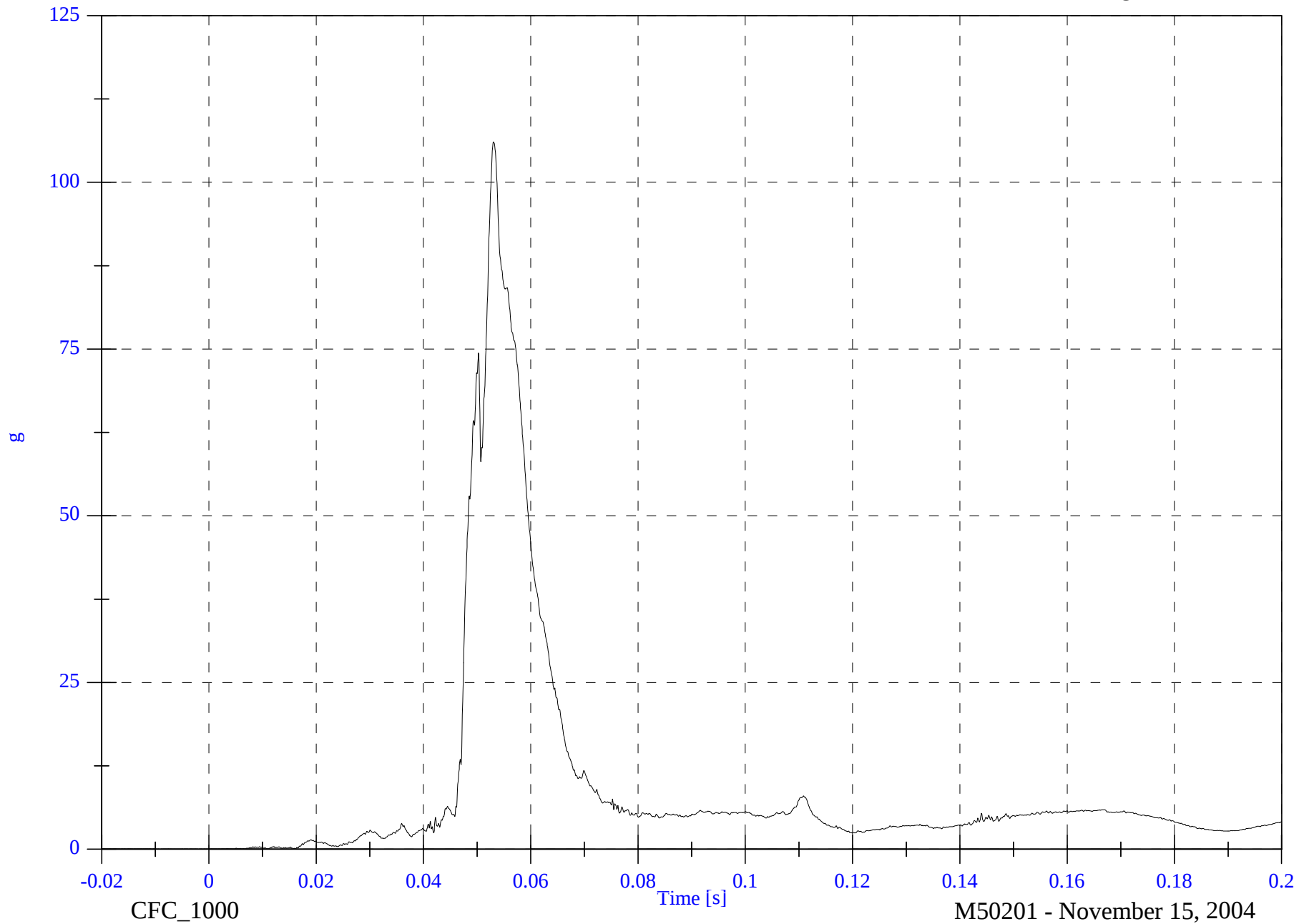
V2P4 Head Resultant

Max: 106.1 [g] at 0.053 [s]

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

B-35

8765-SNCAP-06

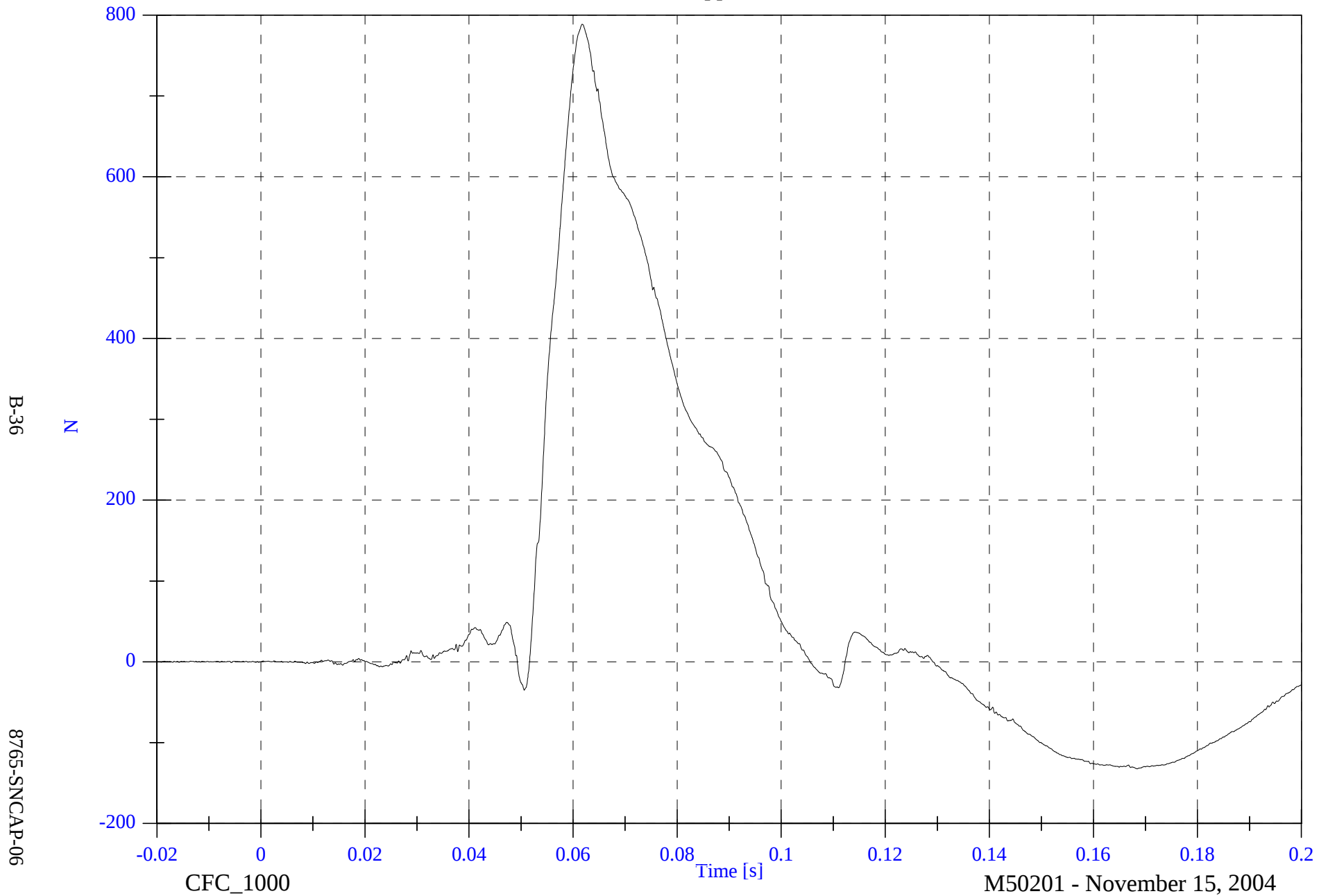


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Neck Fx

Max: 788.8 [N] at 0.062 [s]

Min: -132.4 [N] at 0.168 [s]

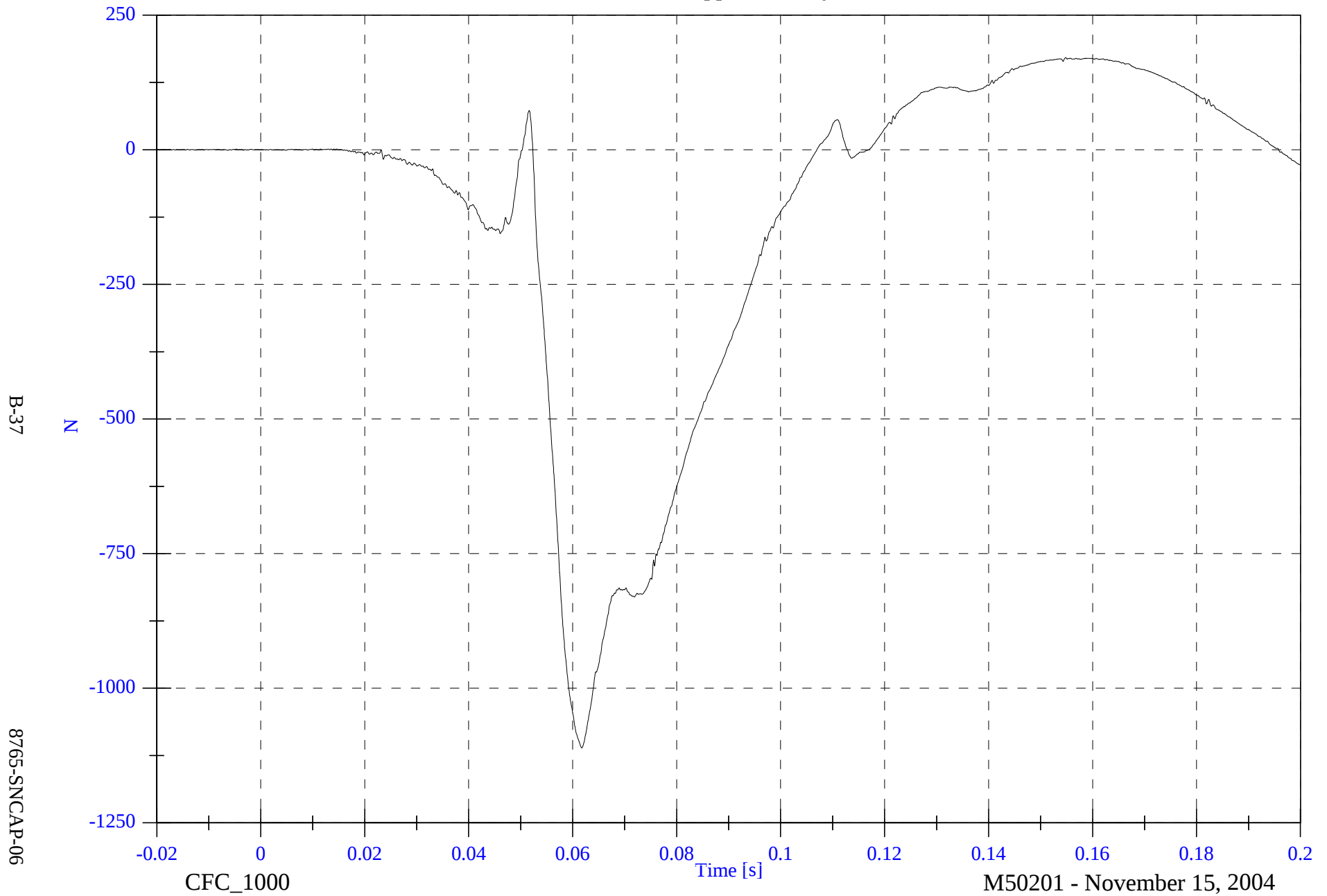


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Neck Fy

Max: 171.1 [N] at 0.155 [s]

Min: -1110.9 [N] at 0.062 [s]

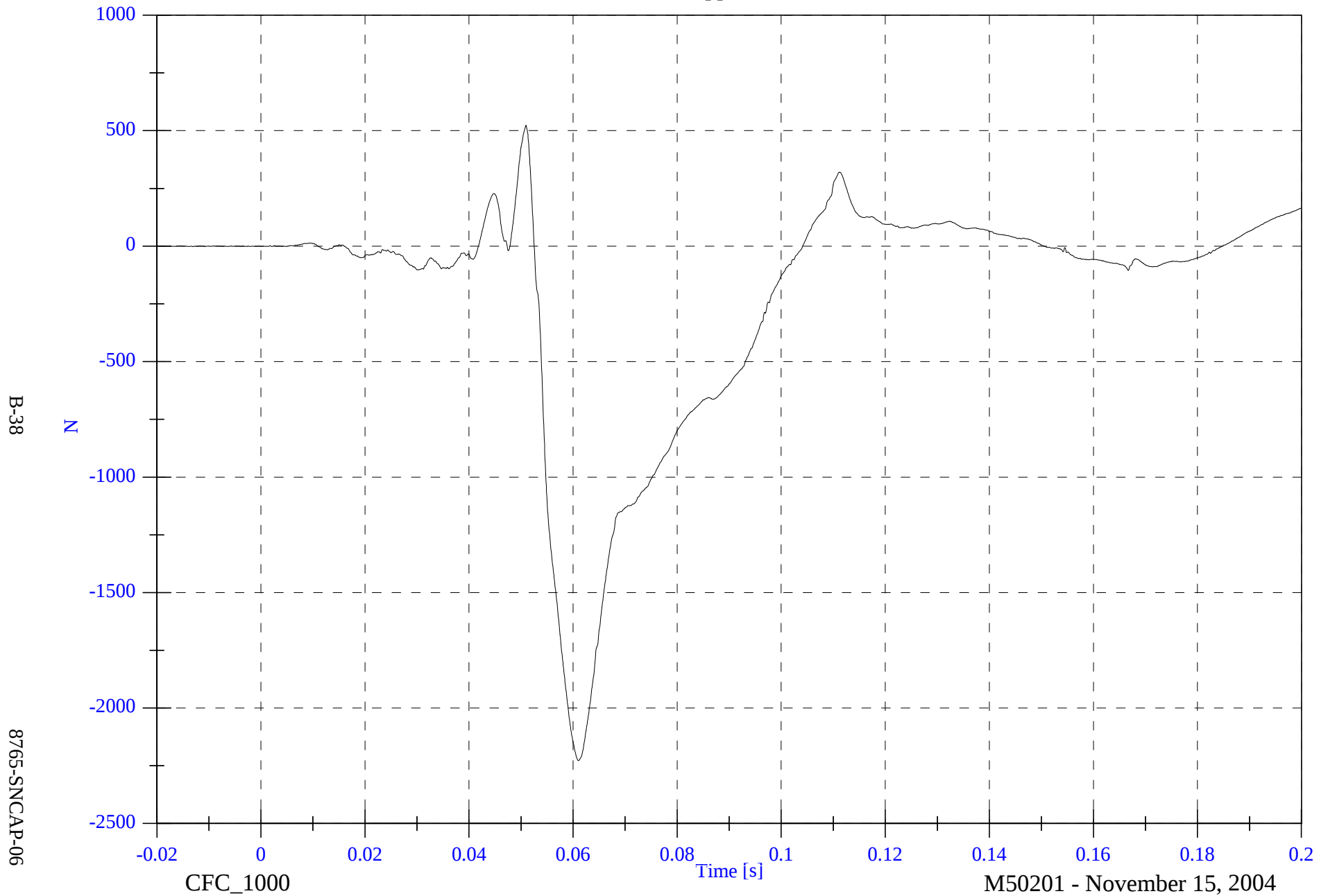


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Neck Fz

Max: 522.7 [N] at 0.051 [s]

Min: -2227.9 [N] at 0.061 [s]

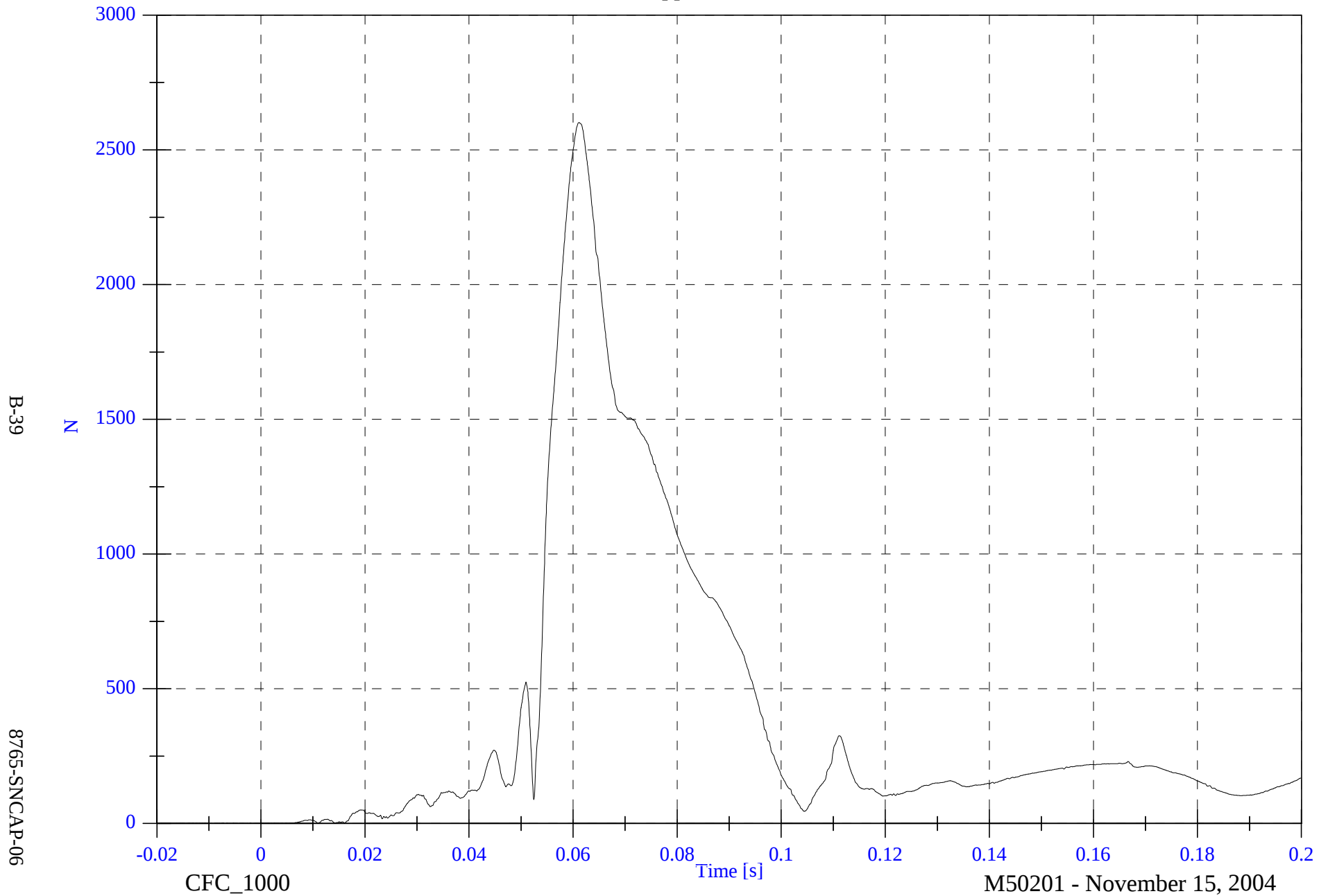


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Neck F Resultant

Max: 2601.5 [N] at 0.061 [s]

Min: 0.1 [N] at -0.017 [s]

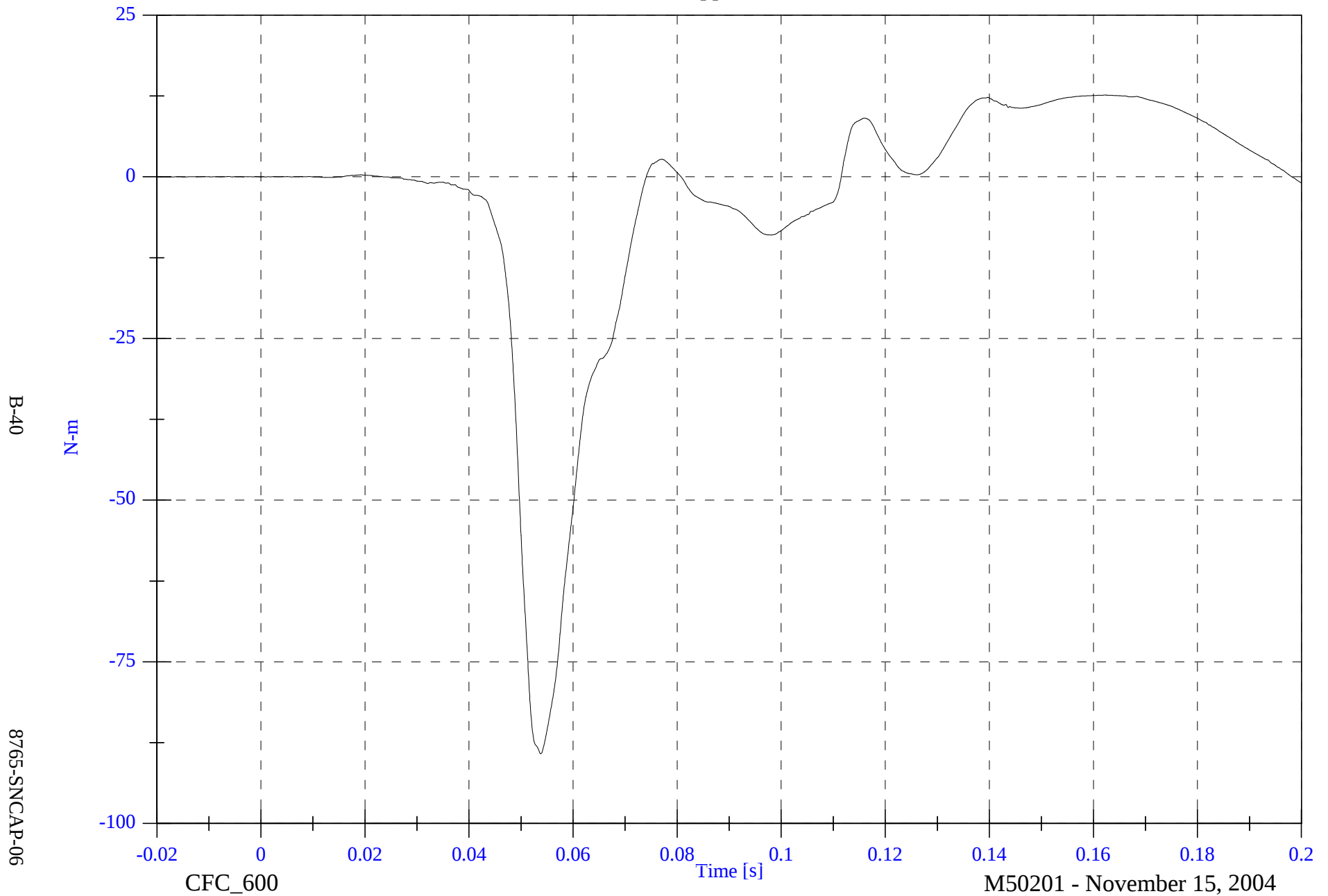


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Neck Mx

Max: 12.6 [N-m] at 0.162 [s]

Min: -89.2 [N-m] at 0.054 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

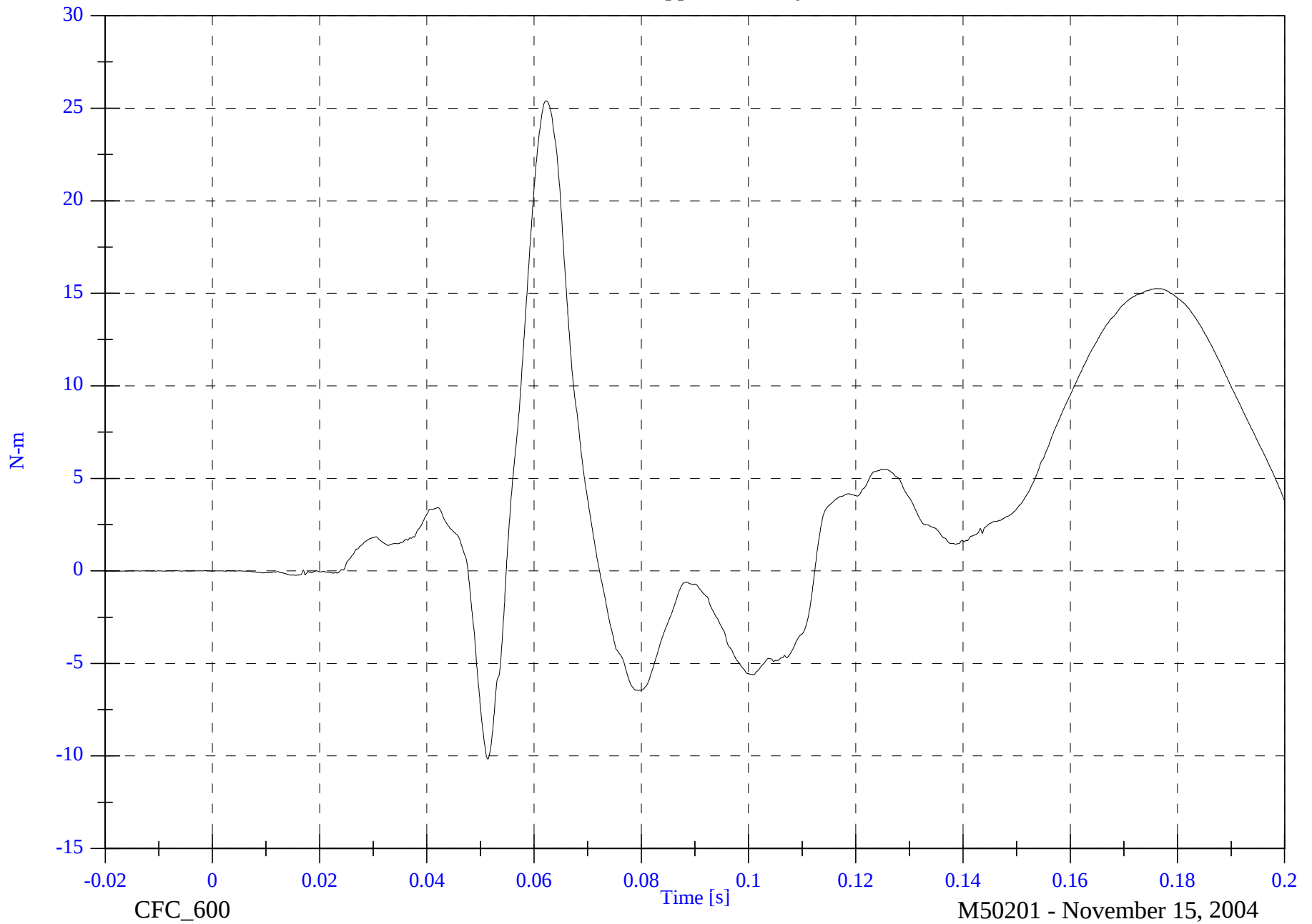
V2P4 Upper Neck My

Max: 25.4 [N-m] at 0.062 [s]

Min: -10.2 [N-m] at 0.051 [s]

B-41

8765-SNCAP-06

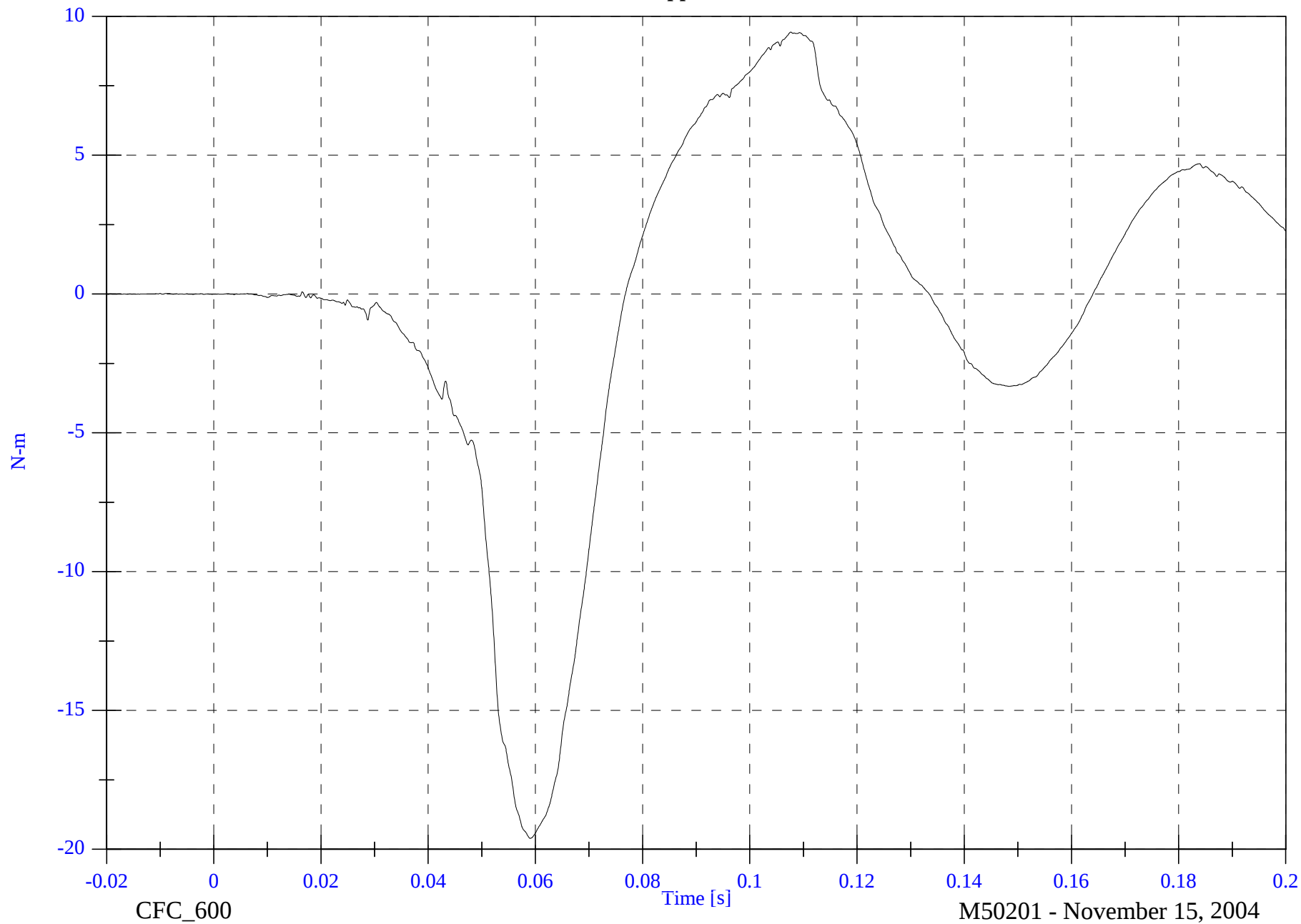


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Neck Mz

Max: 9.4 [N-m] at 0.108 [s]

Min: -19.6 [N-m] at 0.059 [s]



B-42

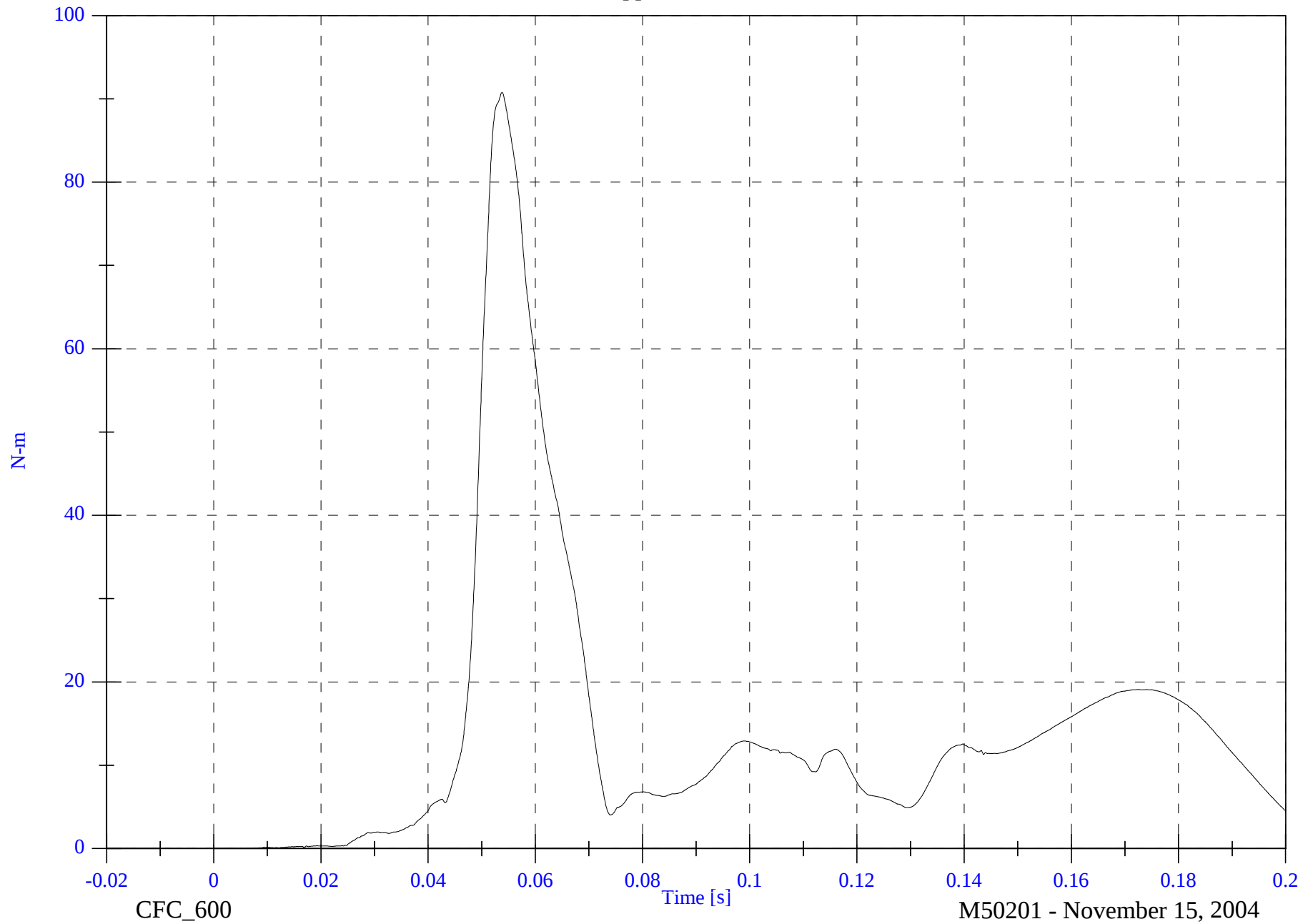
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Neck M Resultant

Max: 90.8 [N-m] at 0.054 [s]

Min: 0.0 [N-m] at -0.017 [s]



B-43

8765-SNCAP-06

CFC_600

M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

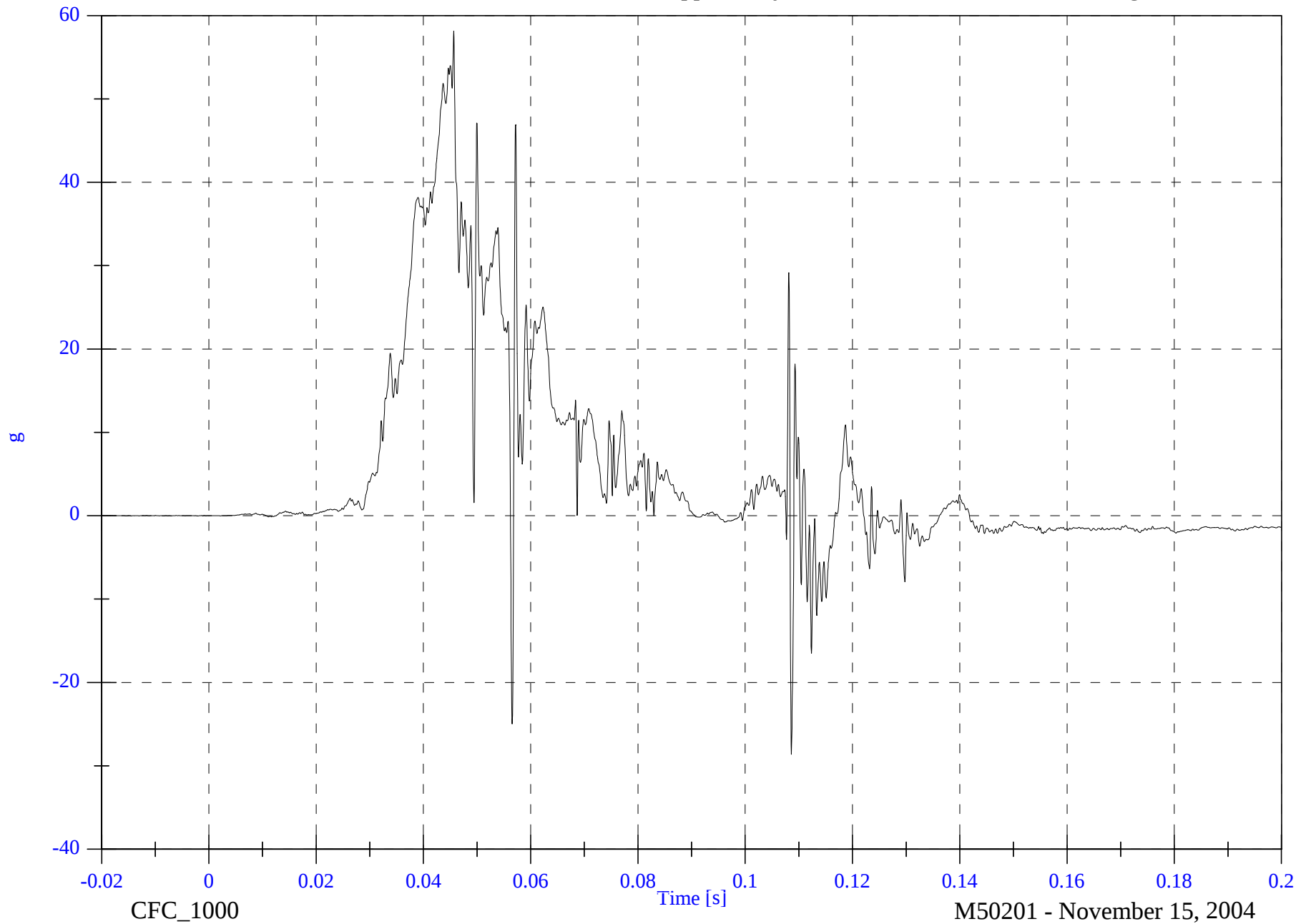
V2P4 Upper Rib y

Max: 58.2 [g] at 0.046 [s]

Min: -28.6 [g] at 0.109 [s]

B-44

8765-SNCAP-06

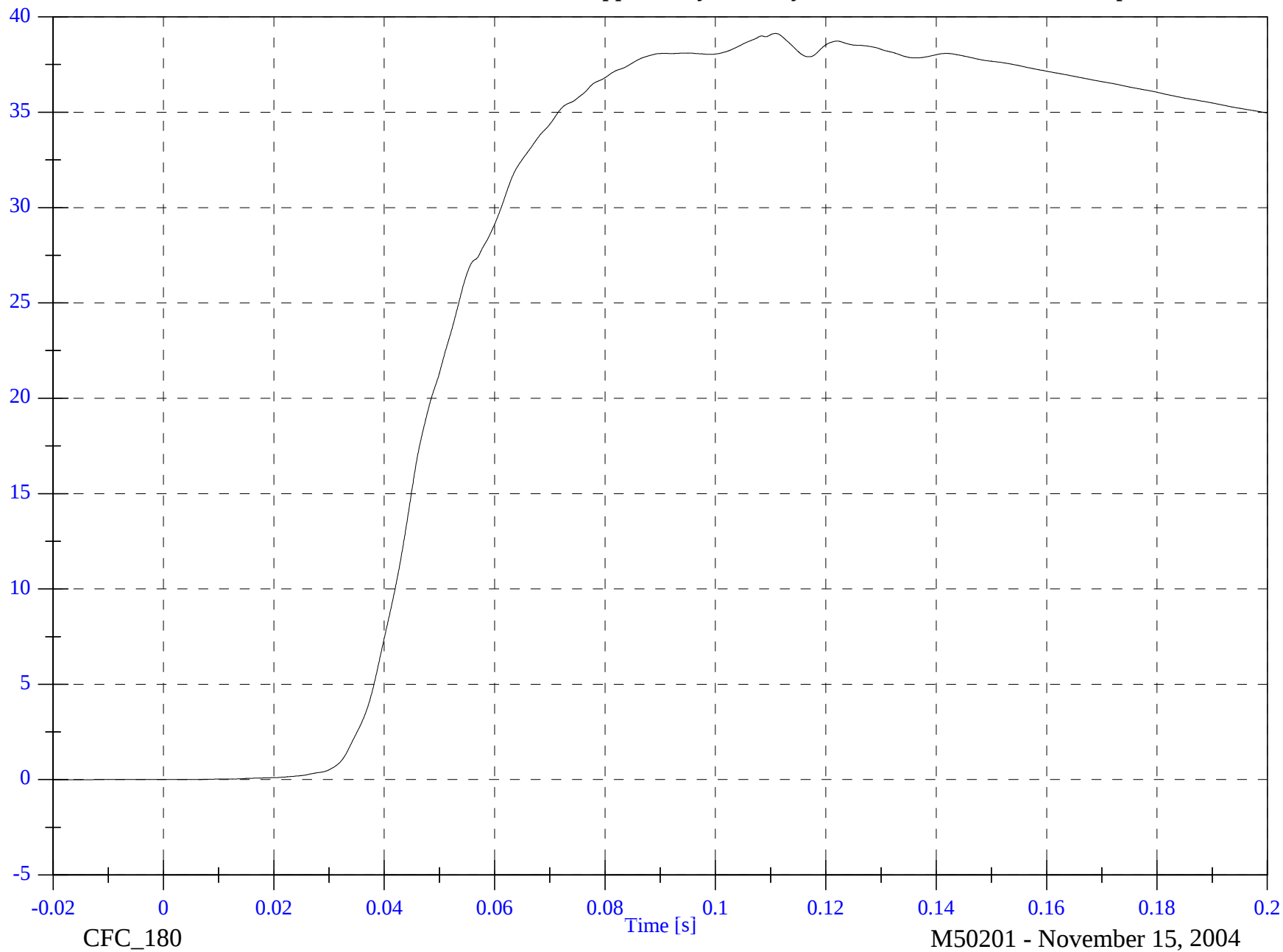


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Rib y Velocity

Max: 39.1 [kph] at 0.111 [s]

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



B-45

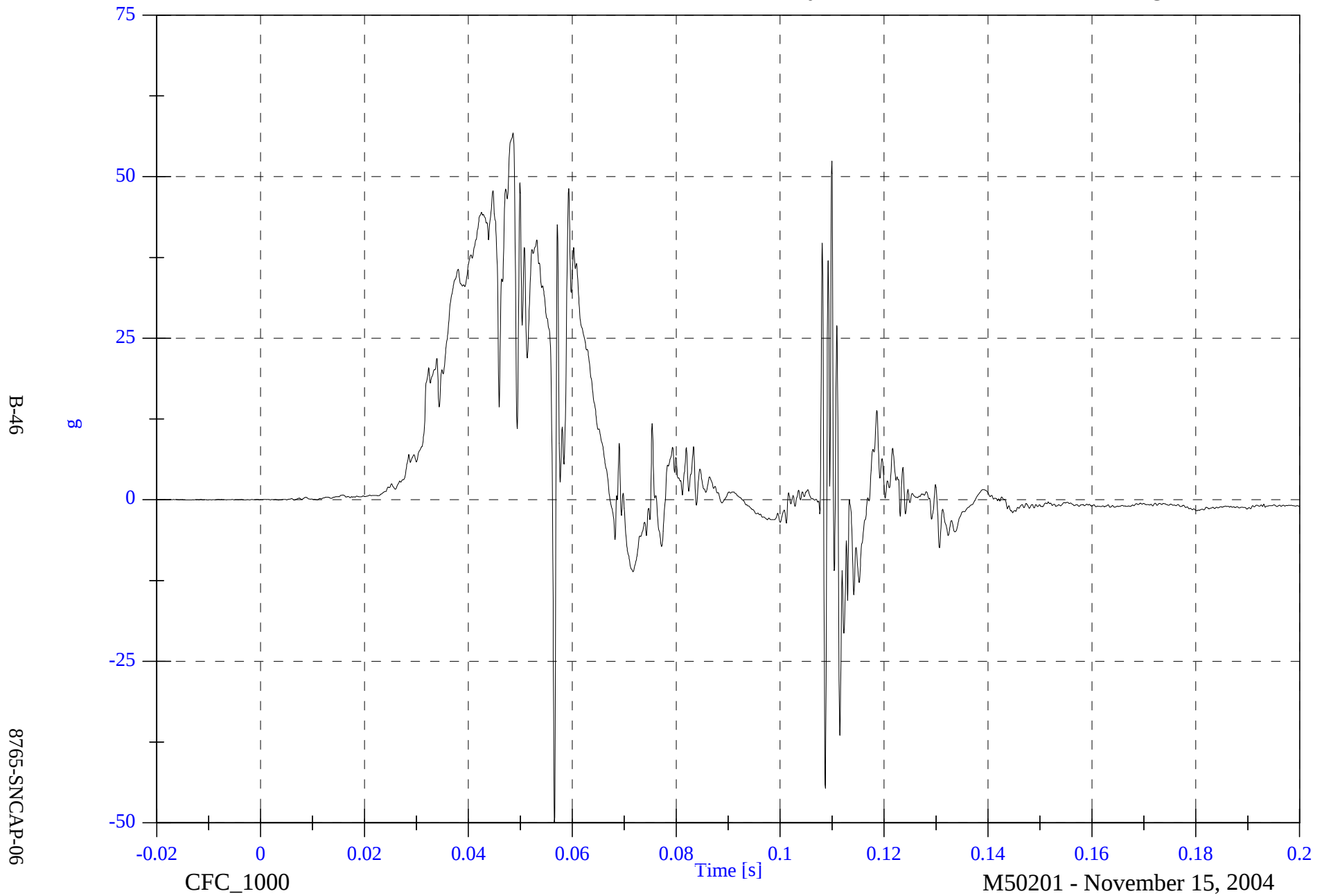
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Lower Rib y

Max: 56.8 [g] at 0.049 [s]

Min: -50.0 [g] at 0.057 [s]

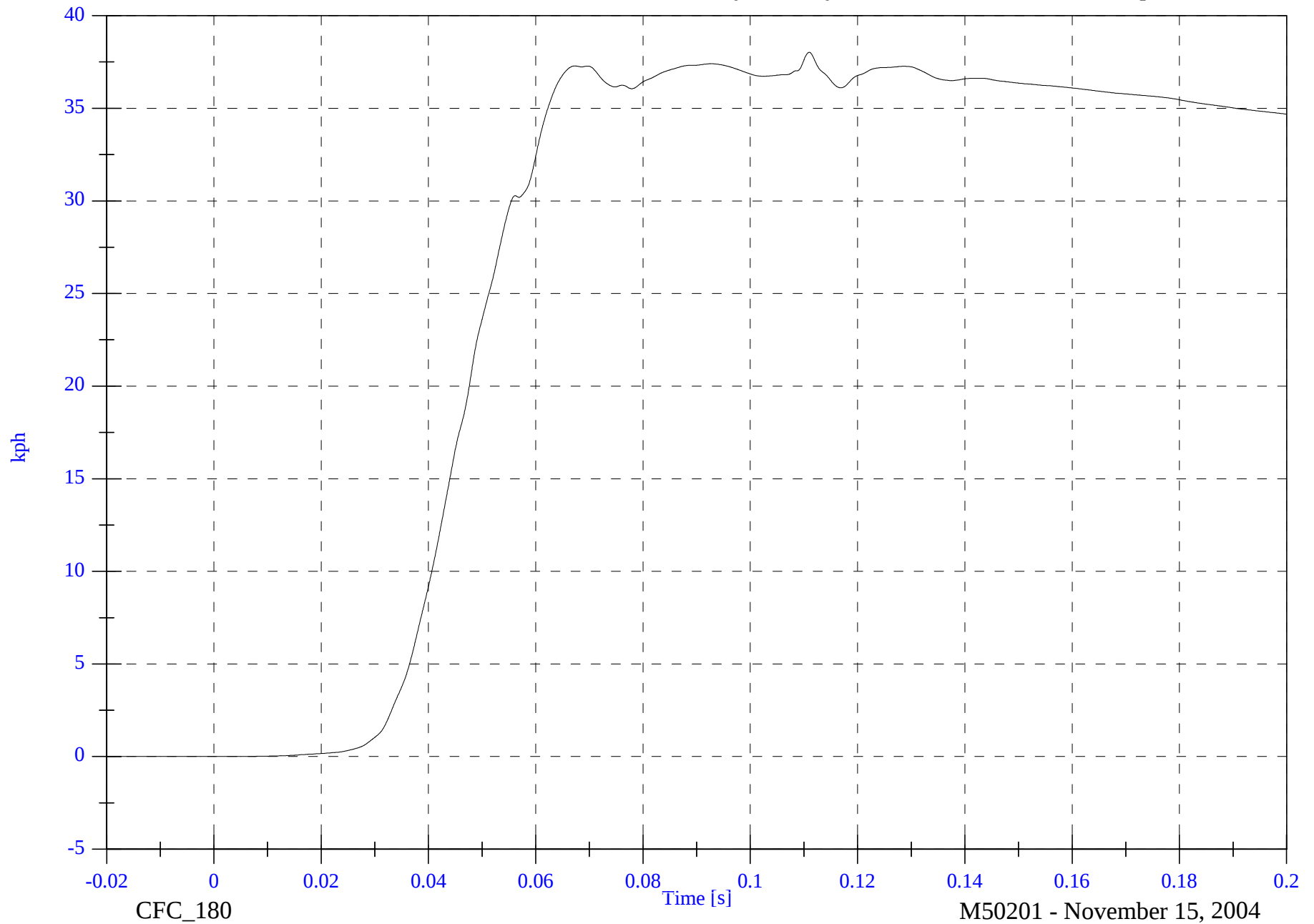


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Lower Rib y Velocity

Max: 38.0 [kph] at 0.111 [s]

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



B-47

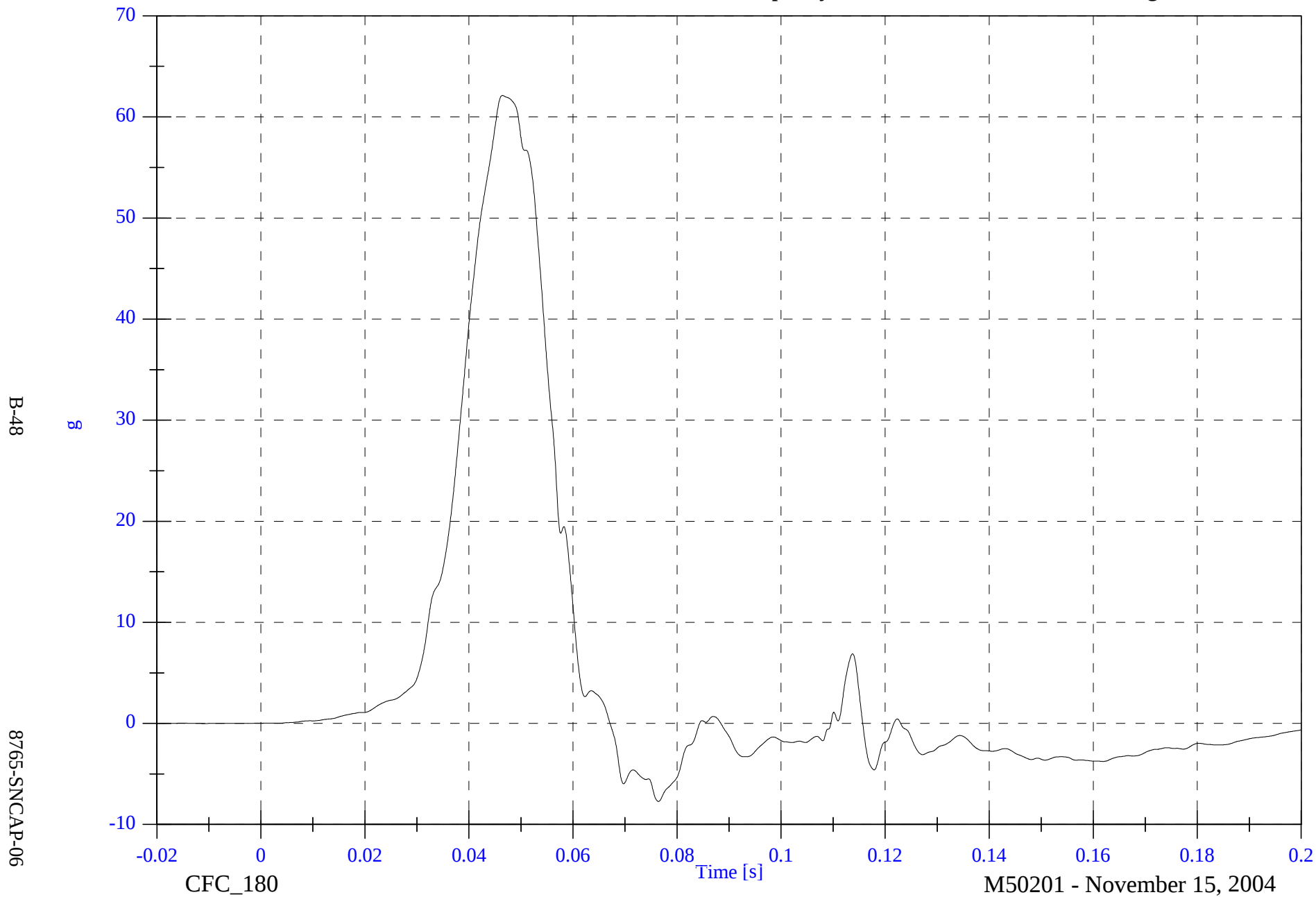
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Lower Spine y

Max: 62.1 [g] at 0.046 [s]

Min: -7.7 [g] at 0.076 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

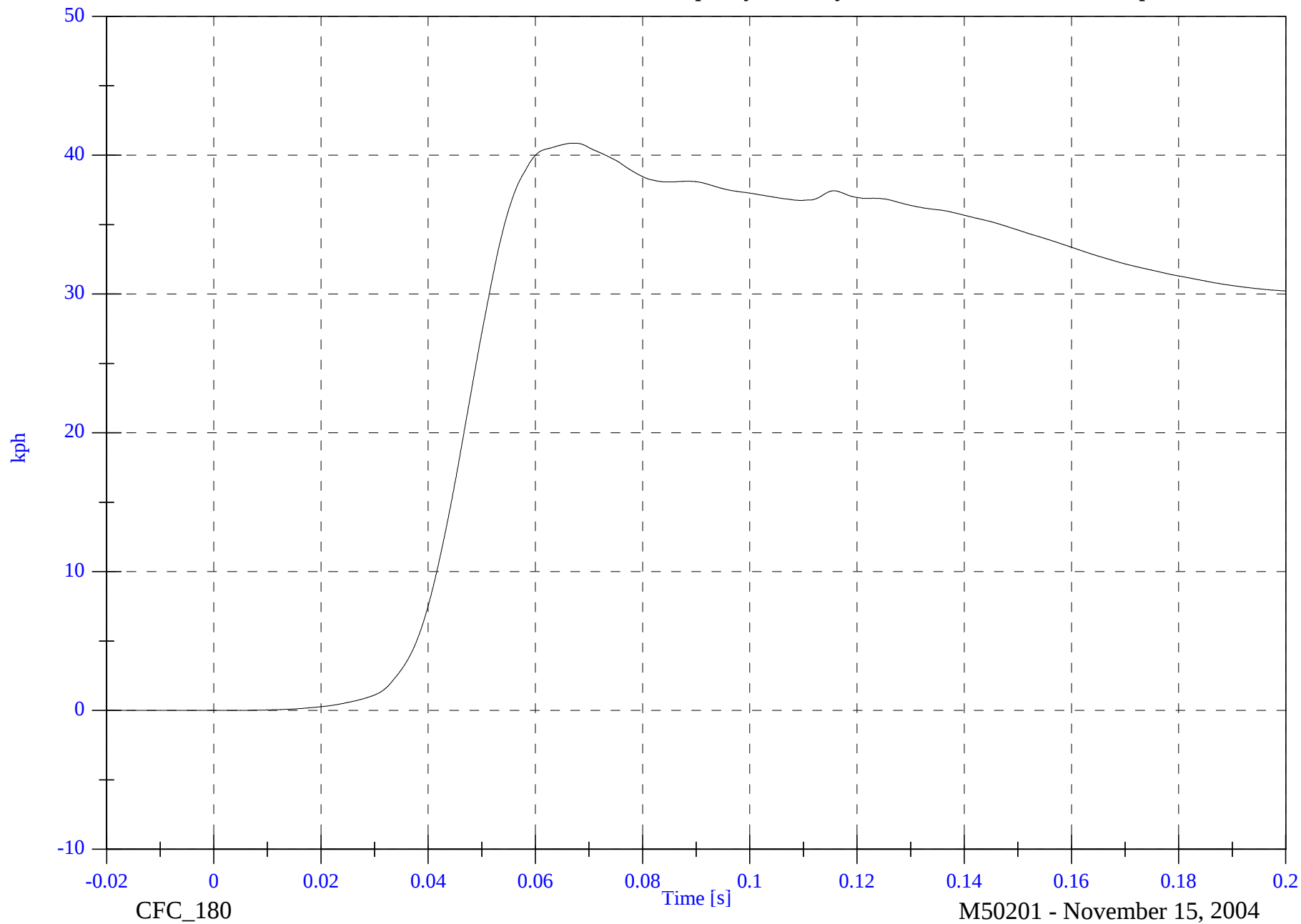
V2P4 Lower Spine y Velocity

Max: 40.9 [kph] at 0.067 [s]

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

B-49

8765-SNCAP-06

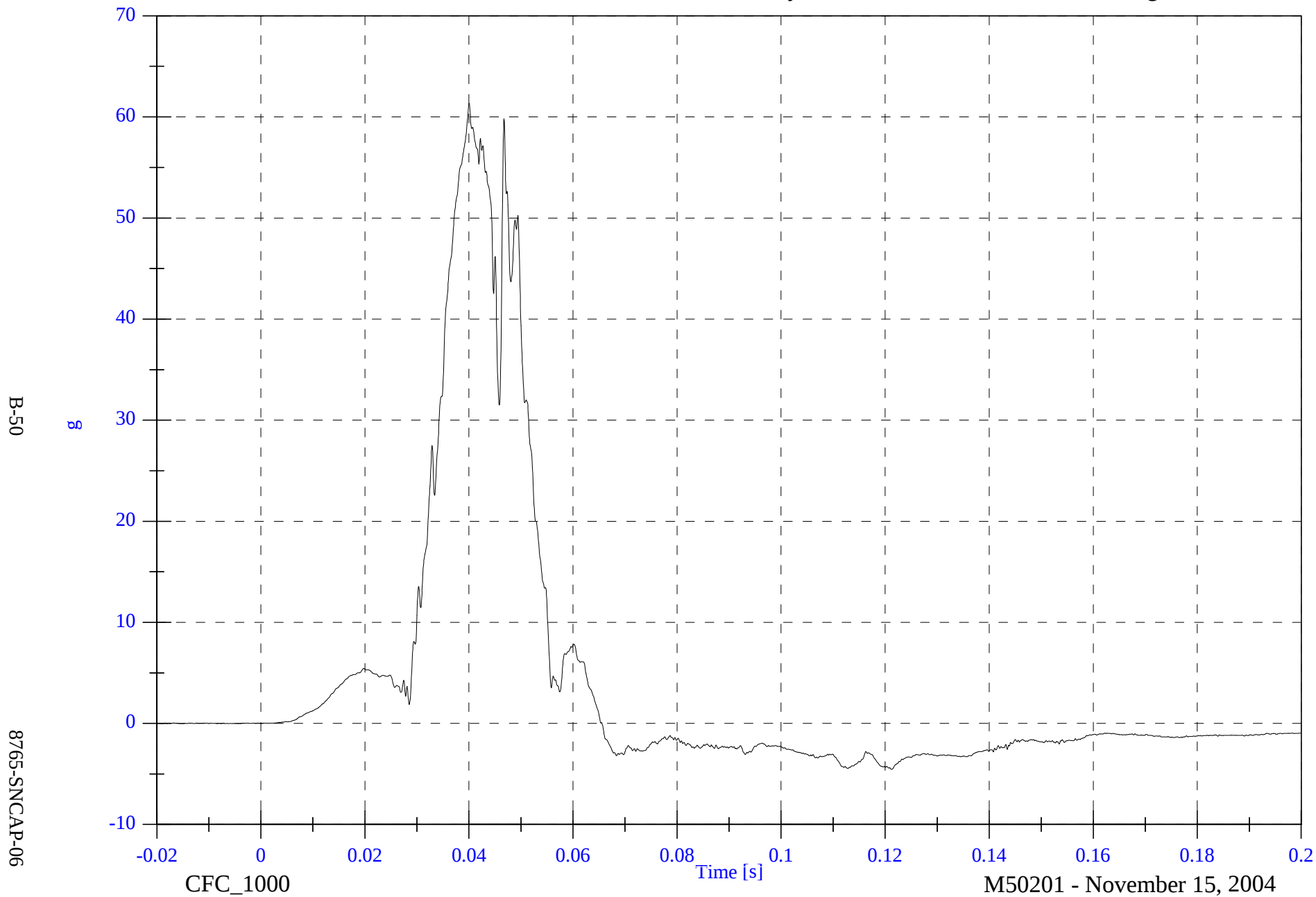


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Pelvic y

Max: 61.3 [g] at 0.040 [s]

Min: -4.5 [g] at 0.121 [s]

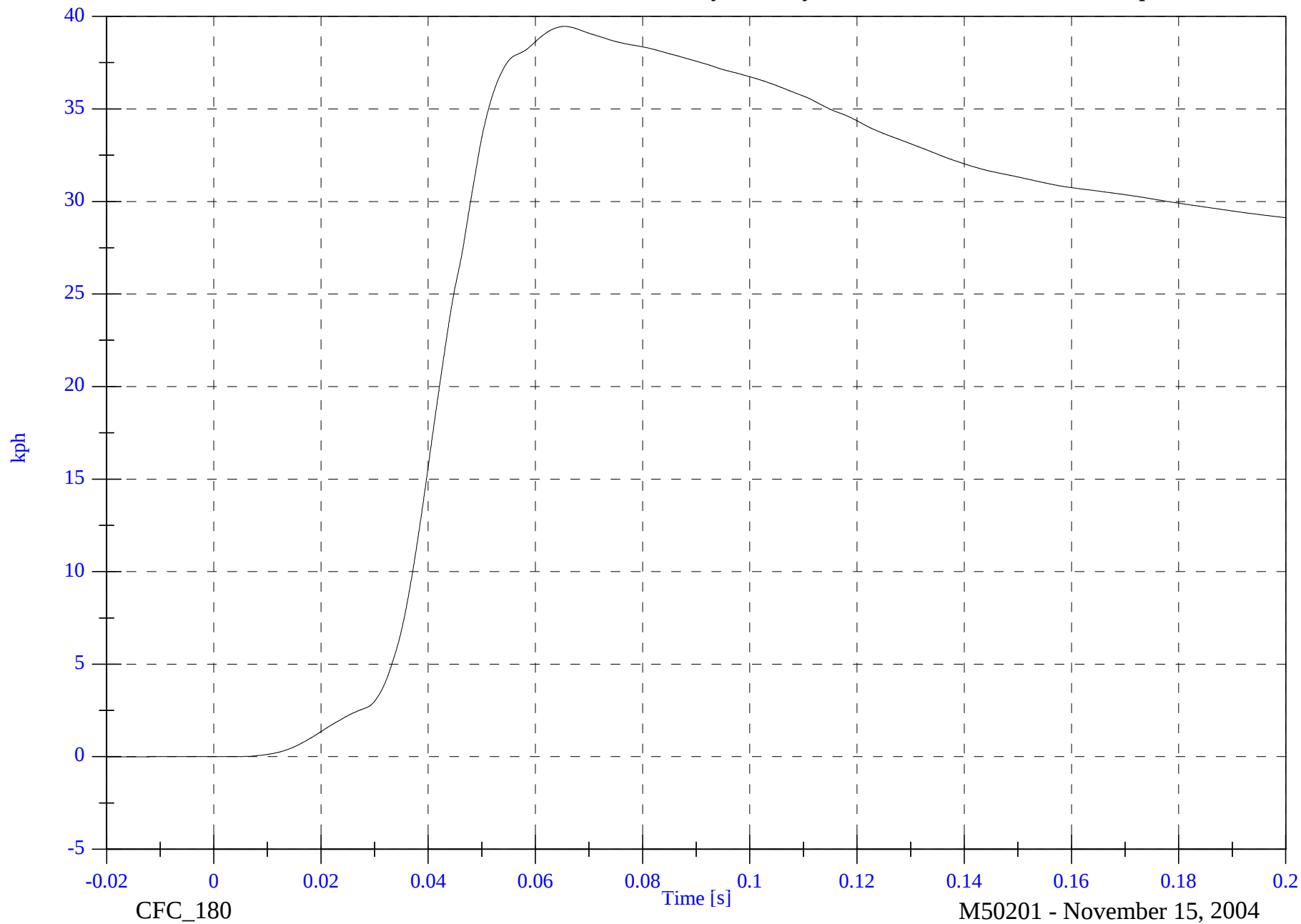


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Pelvic y Velocity

Max: 39.5 [kph] at 0.065 [s]

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



B-51

8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

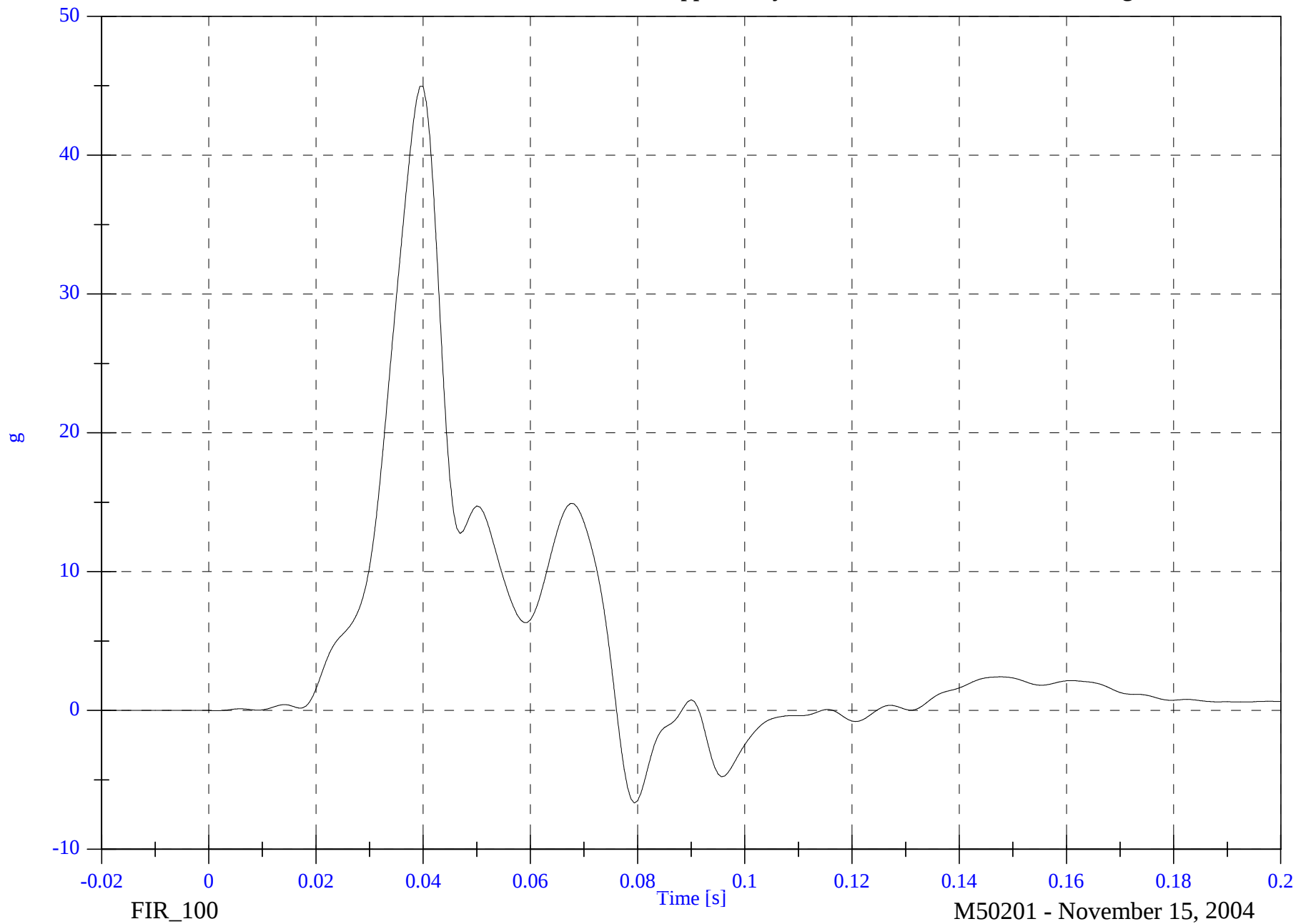
V2P1 Upper Rib y

Max: 45.0 [g] at 0.039 [s]

Min: -6.7 [g] at 0.079 [s]

B-52

8765-SNCAP-06

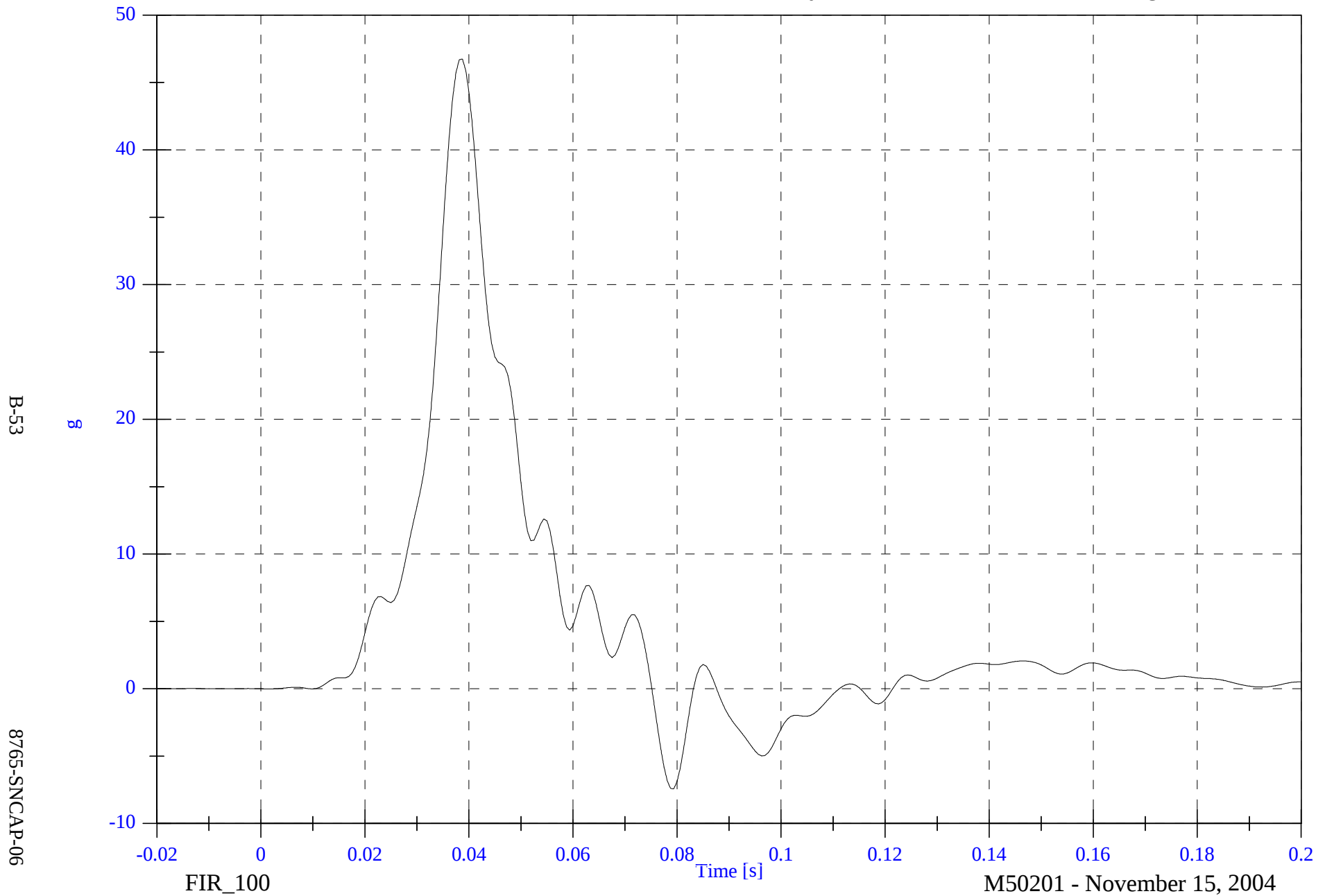


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Lower Rib y

Max: 46.7 [g] at 0.039 [s]

Min: -7.4 [g] at 0.079 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

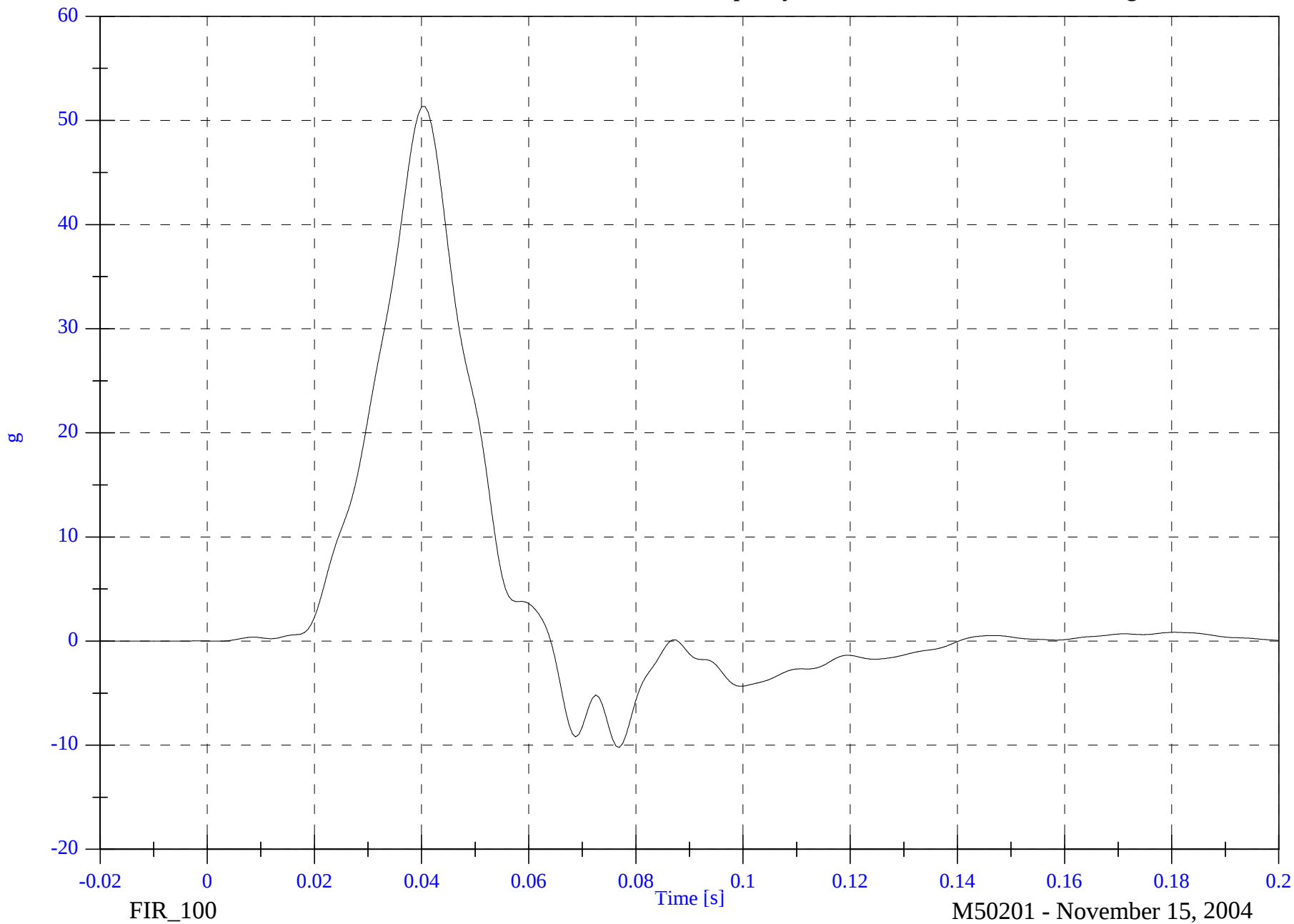
V2P1 Lower Spine y

Max: 51.4 [g] at 0.041 [s]

Min: -10.2 [g] at 0.077 [s]

B-54

8765-SNCAP-06

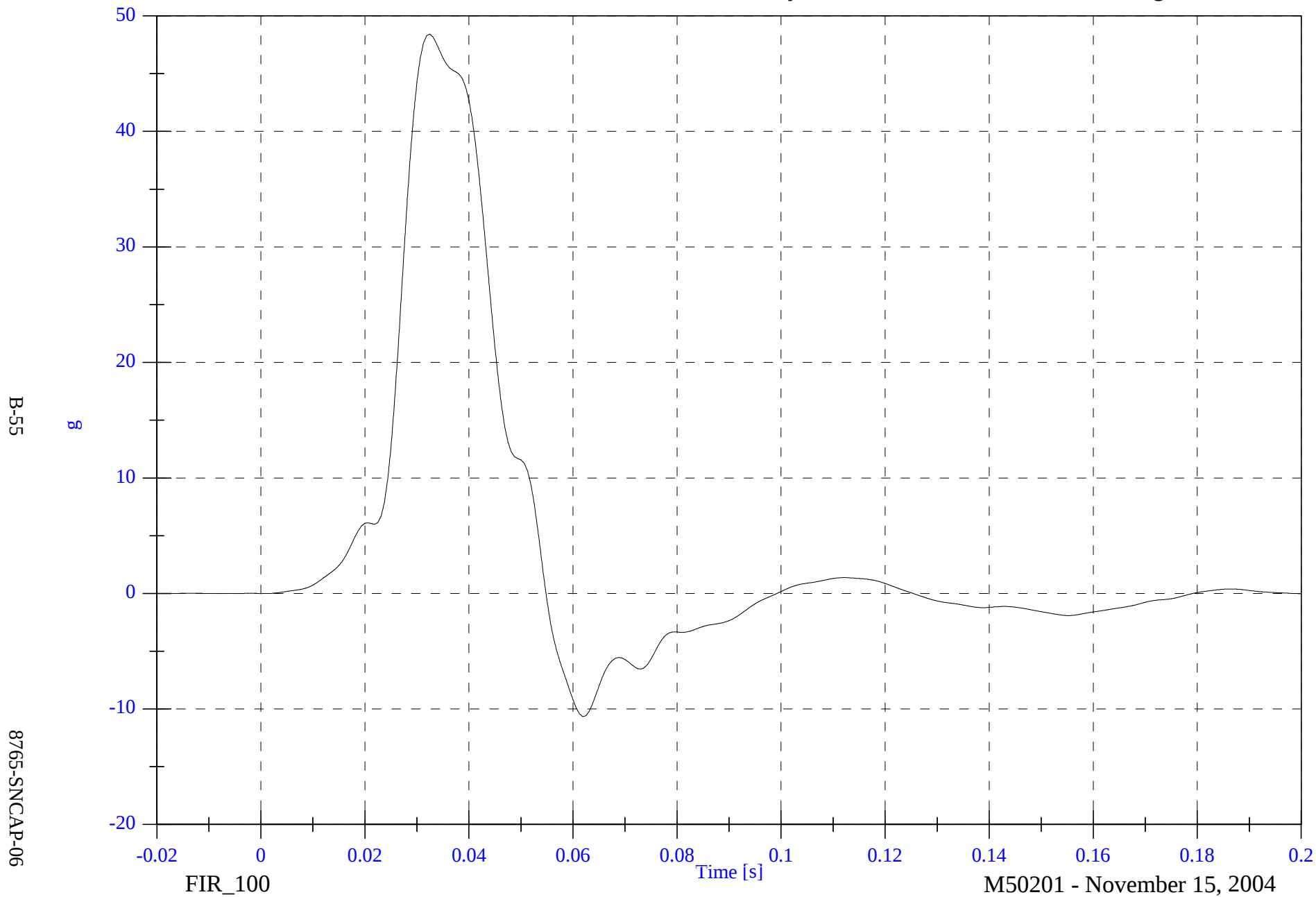


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Pelvic y

Max: 48.4 [g] at 0.032 [s]

Min: -10.7 [g] at 0.062 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

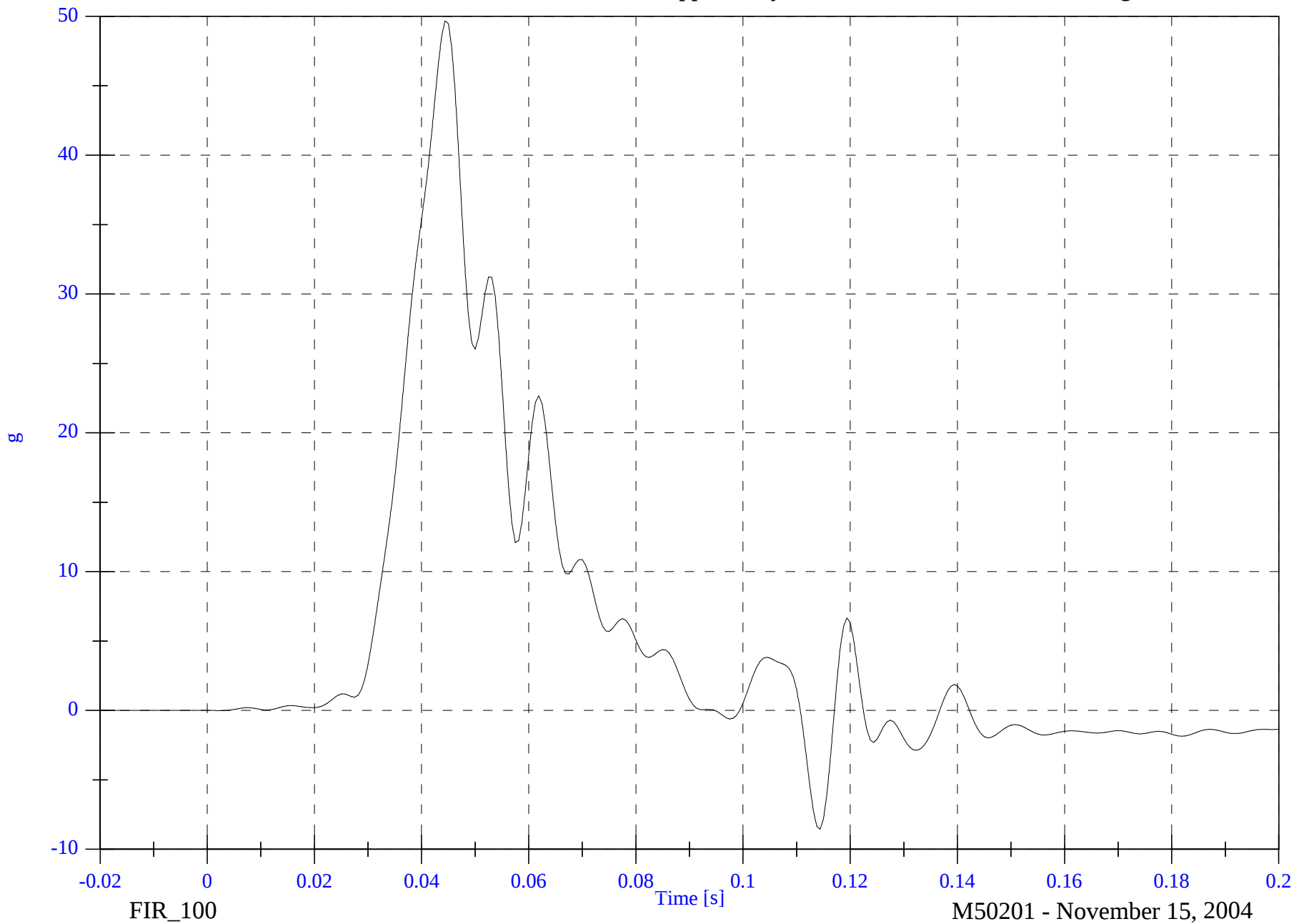
V2P4 Upper Rib y

Max: 49.7 [g] at 0.044 [s]

Min: -8.6 [g] at 0.114 [s]

B-56

8765-SNCAP-06

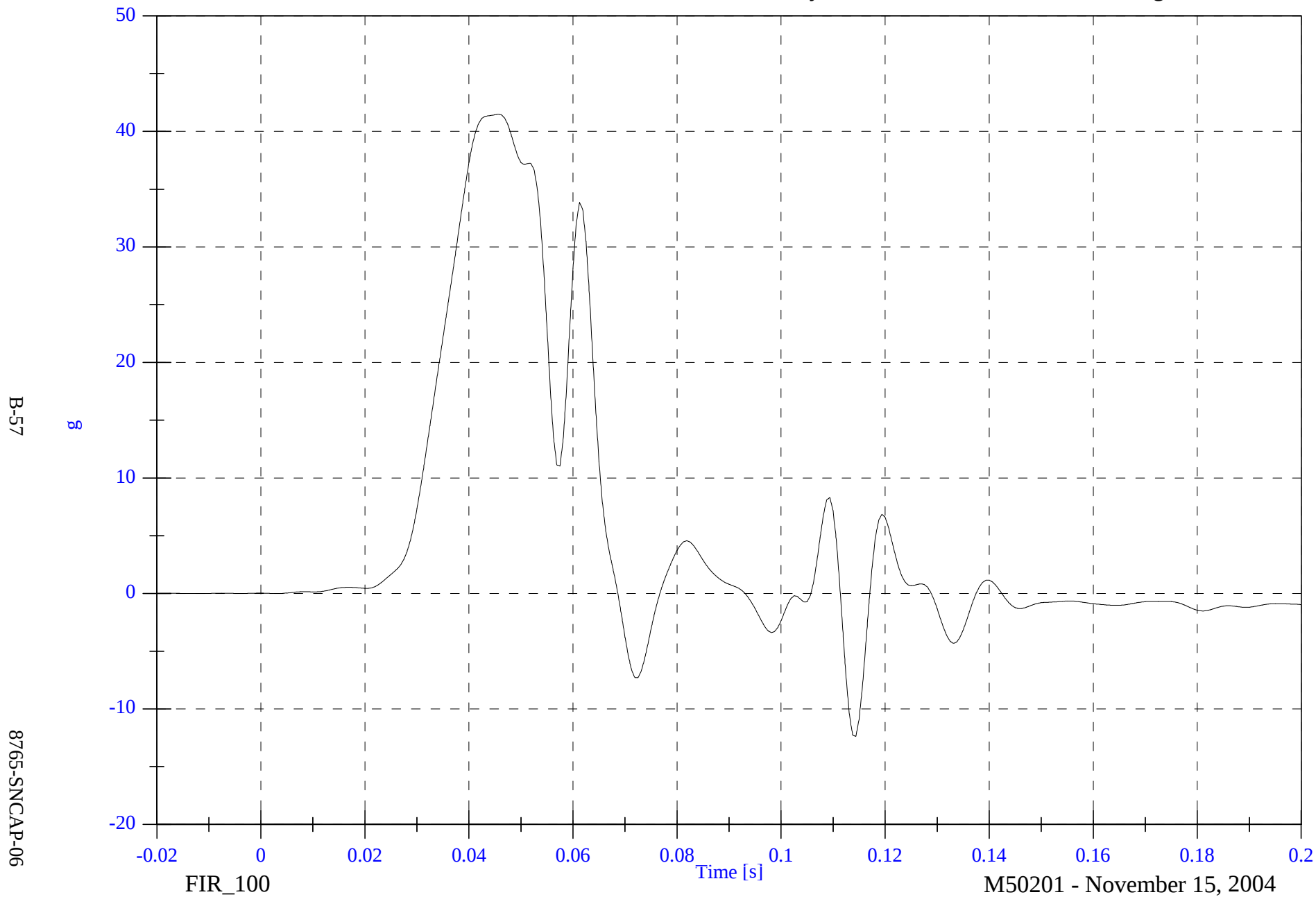


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Lower Rib y

Max: 41.5 [g] at 0.046 [s]

Min: -12.4 [g] at 0.114 [s]

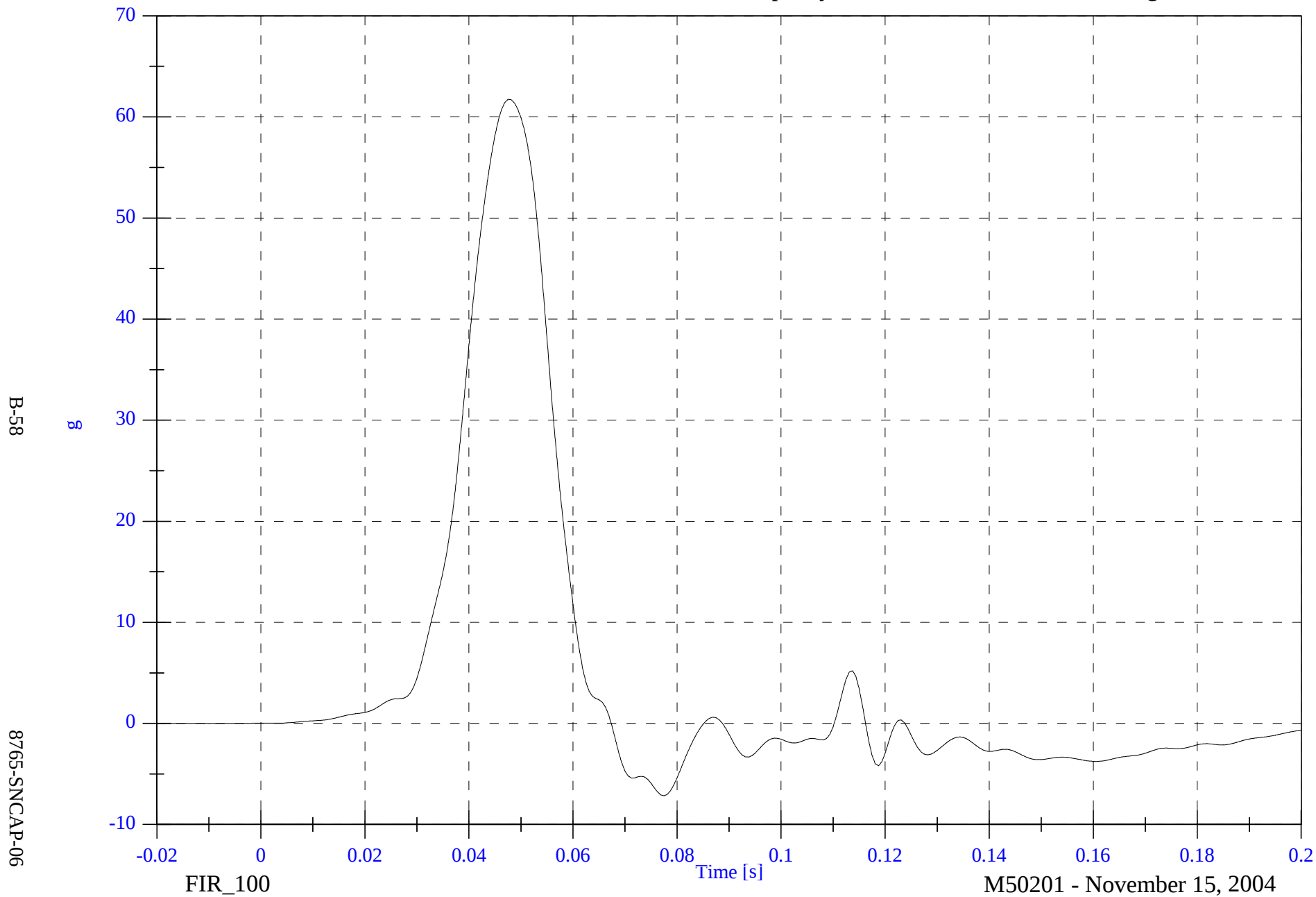


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Lower Spine y

Max: 61.7 [g] at 0.047 [s]

Min: -7.2 [g] at 0.077 [s]

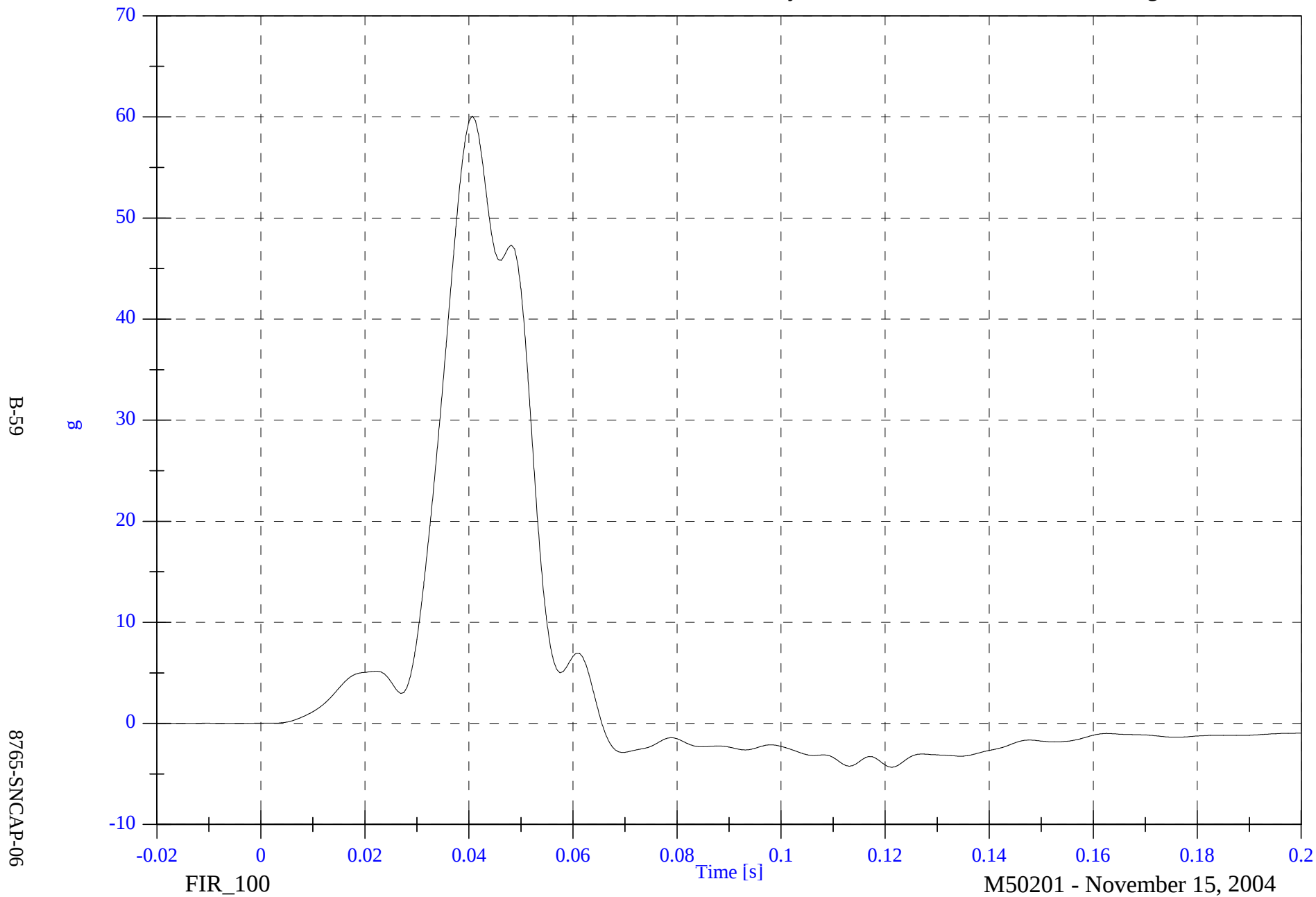


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Pelvic y

Max: 60.1 [g] at 0.041 [s]

Min: -4.3 [g] at 0.121 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

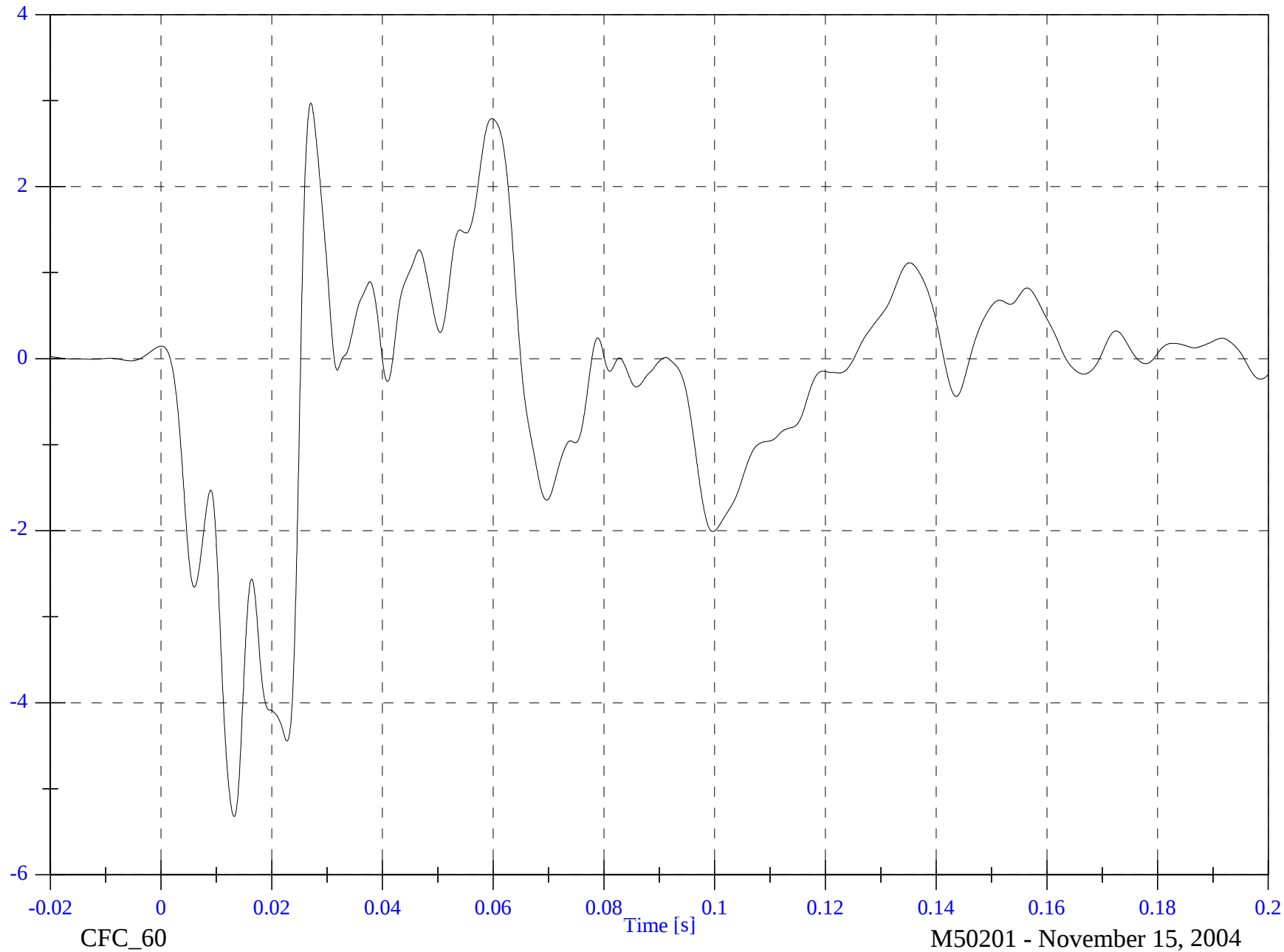
V2A1 Right Front Sill X

Max: 3.0 [g] at 0.027 [s]

Min: -5.3 [g] at 0.013 [s]

B-60

8765-SNCAP-06

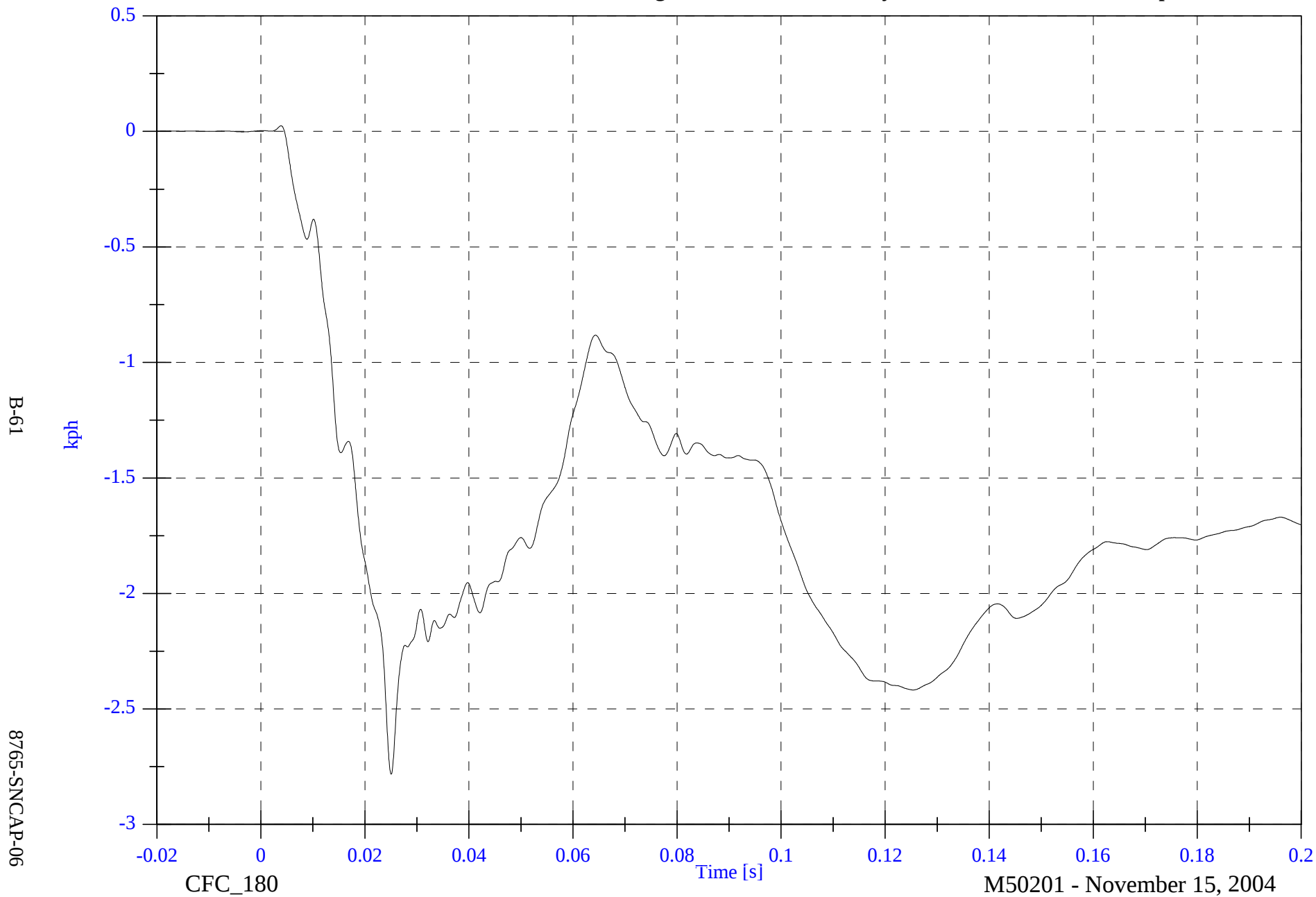


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A1 Right Front Sill X Velocity

Max: 0.0 [kph] at 0.004 [s]

Min: -2.8 [kph] at 0.025 [s]

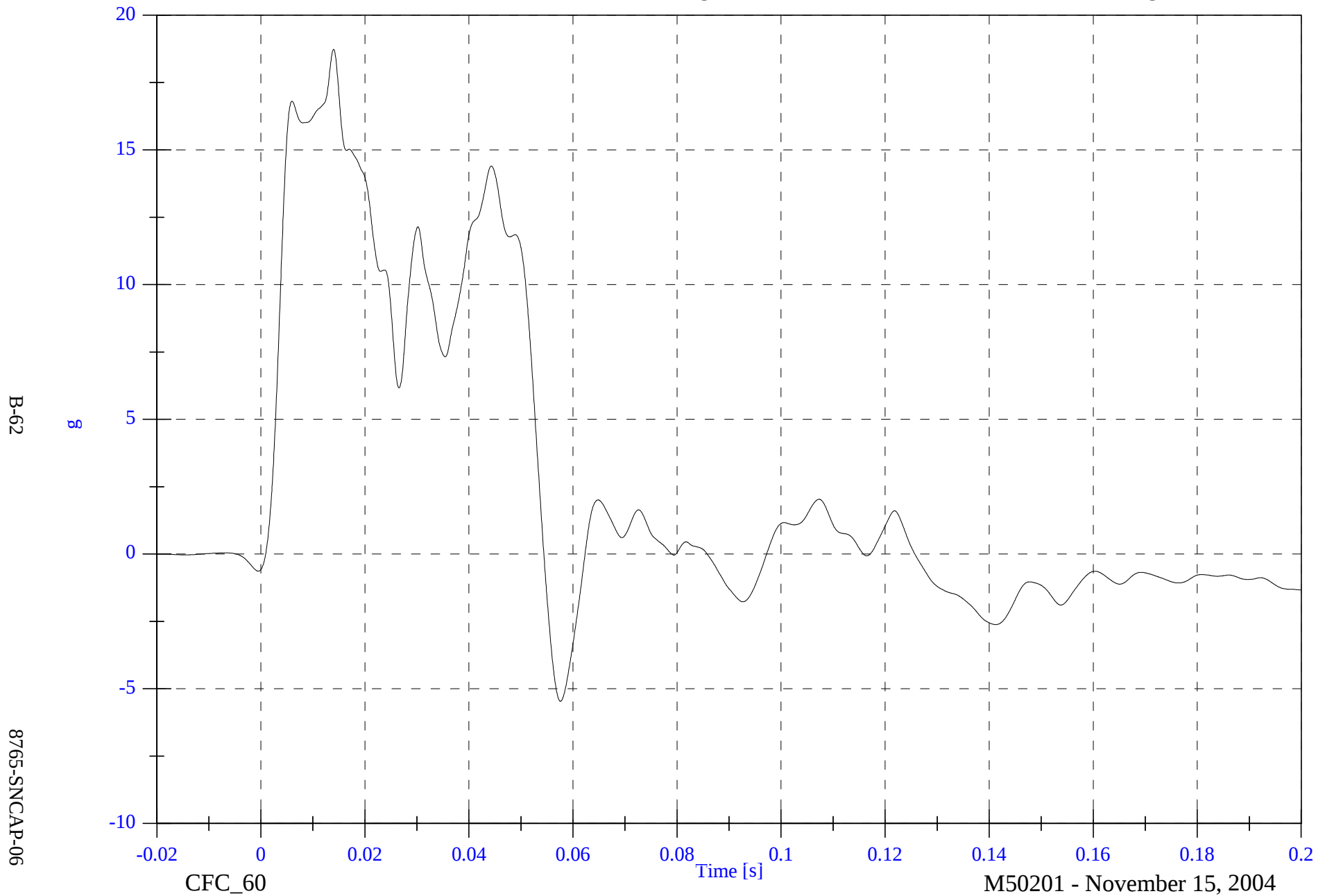


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A1 Right Front Sill Y

Max: 18.7 [g] at 0.014 [s]

Min: -5.5 [g] at 0.058 [s]

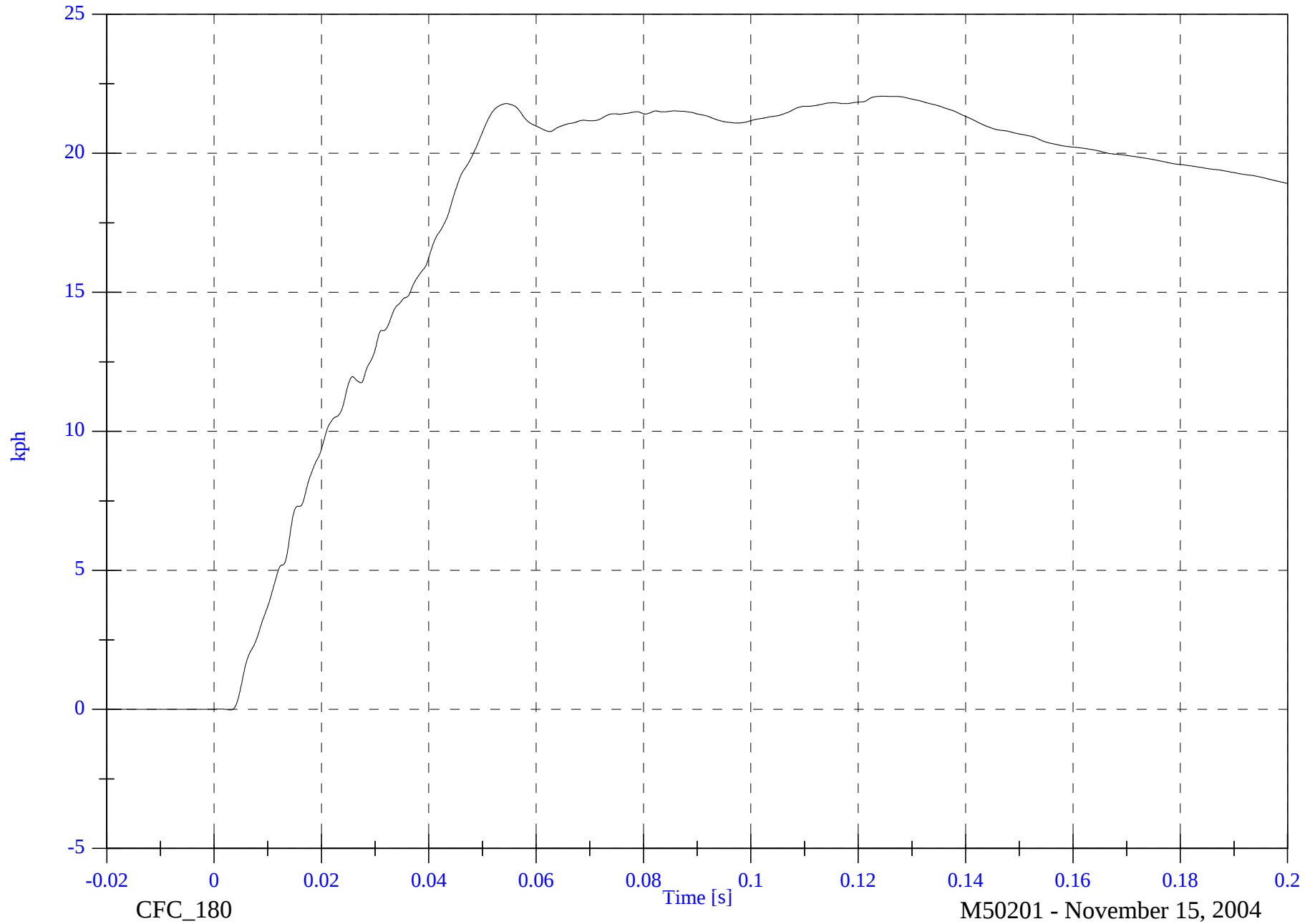


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A1 Right Front Sill Y Velocity

Max: 22.0 [kph] at 0.125 [s]

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



B-63

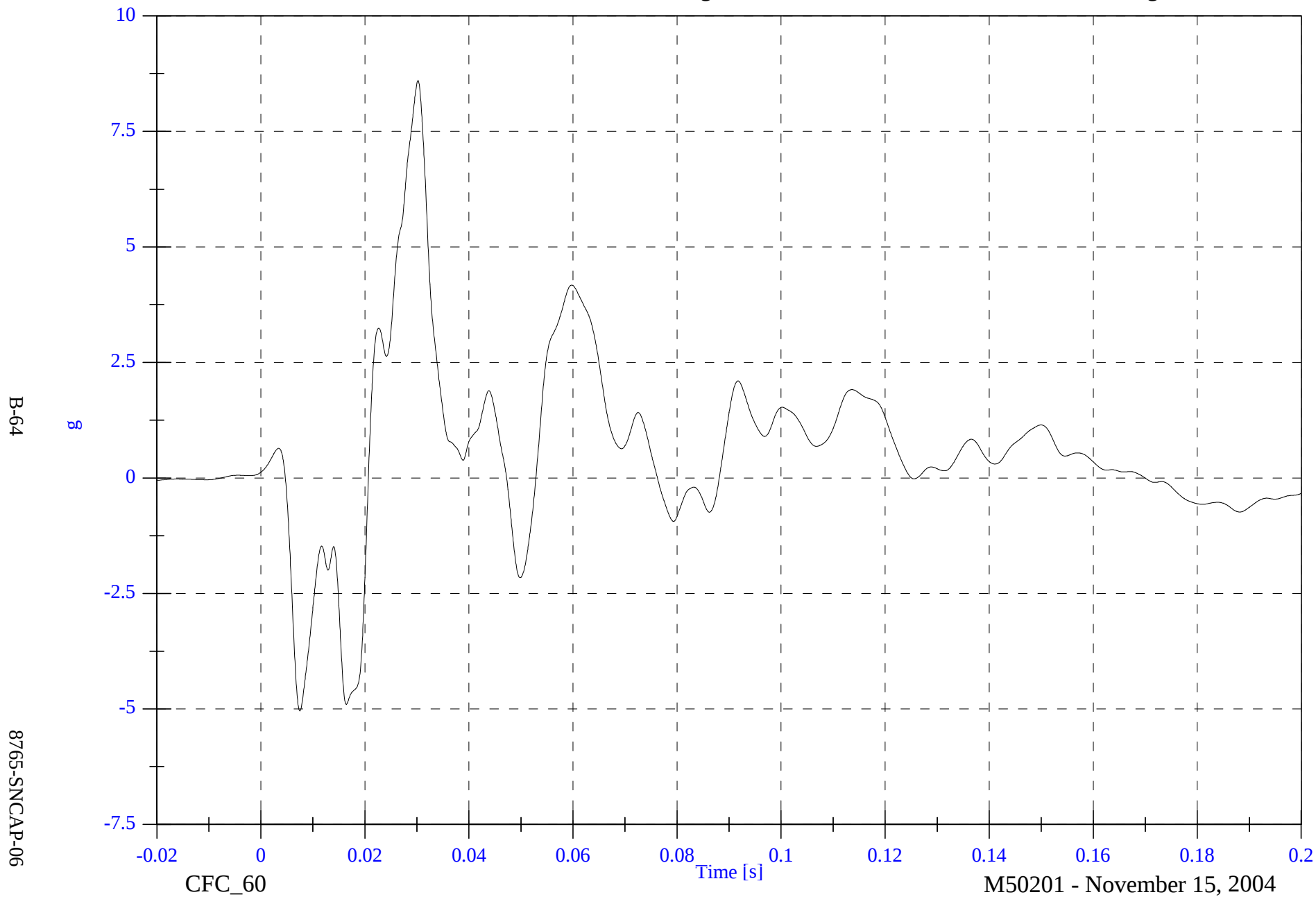
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A1 Right Front Sill Z

Max: 8.6 [g] at 0.030 [s]

Min: -5.0 [g] at 0.007 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

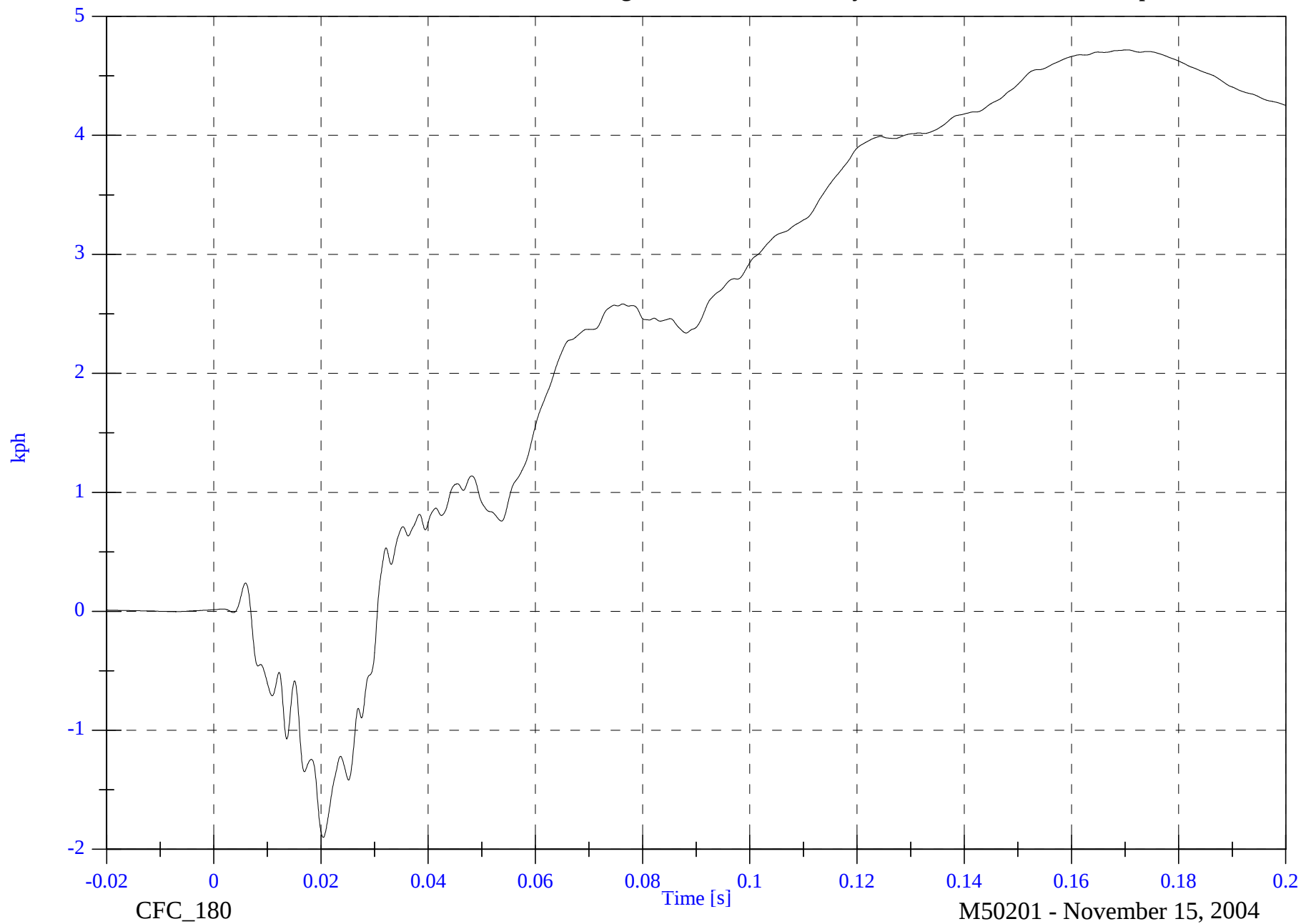
V2A1 Right Front Sill Z Velocity

Max: 4.7 [kph] at 0.170 [s]

Min: -1.9 [kph] at 0.020 [s]

B-65

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

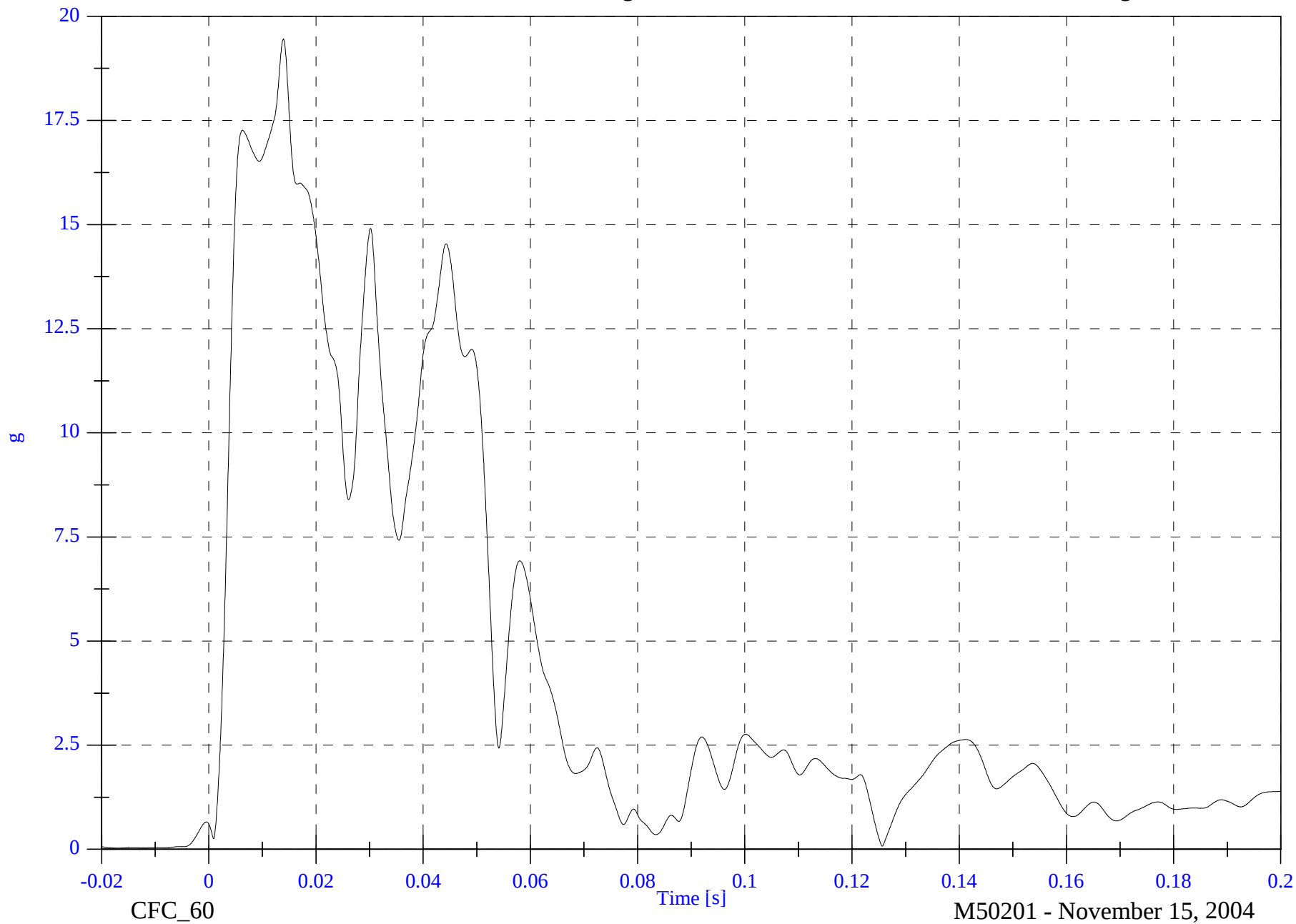
V2A1 Right Front Sill Resultant

Max: 19.5 [g] at 0.014 [s]

Min: 0.0 [g] at -0.017 [s]

B-66

8765-SNCAP-06

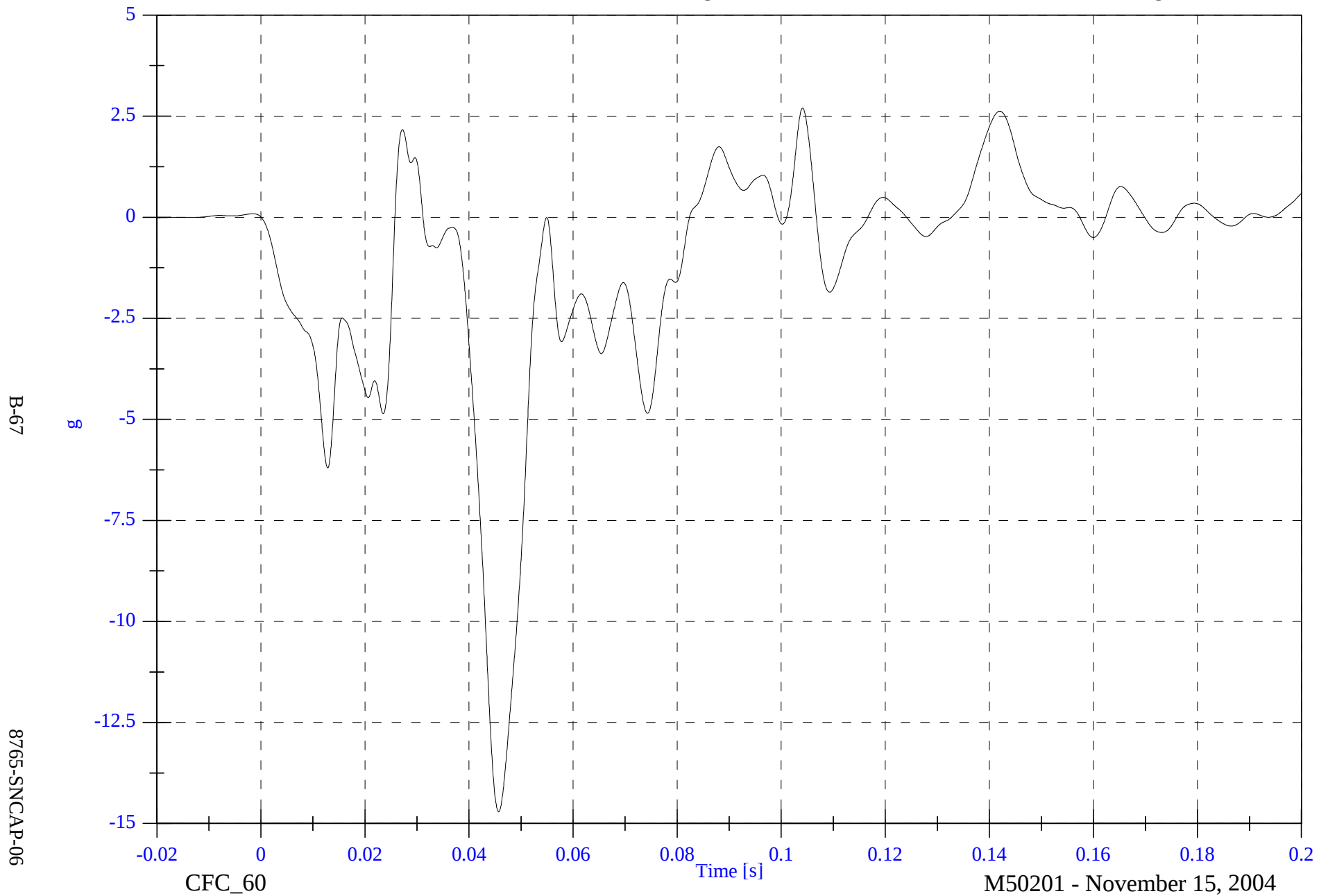


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A2 Right Rear Sill X

Max: 2.7 [g] at 0.104 [s]

Min: -14.7 [g] at 0.046 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A2 Right Rear Sill X Velocity

Max: 0.0 [kph] at 0.001 [s]

Min: -9.4 [kph] at 0.081 [s]

B-68

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

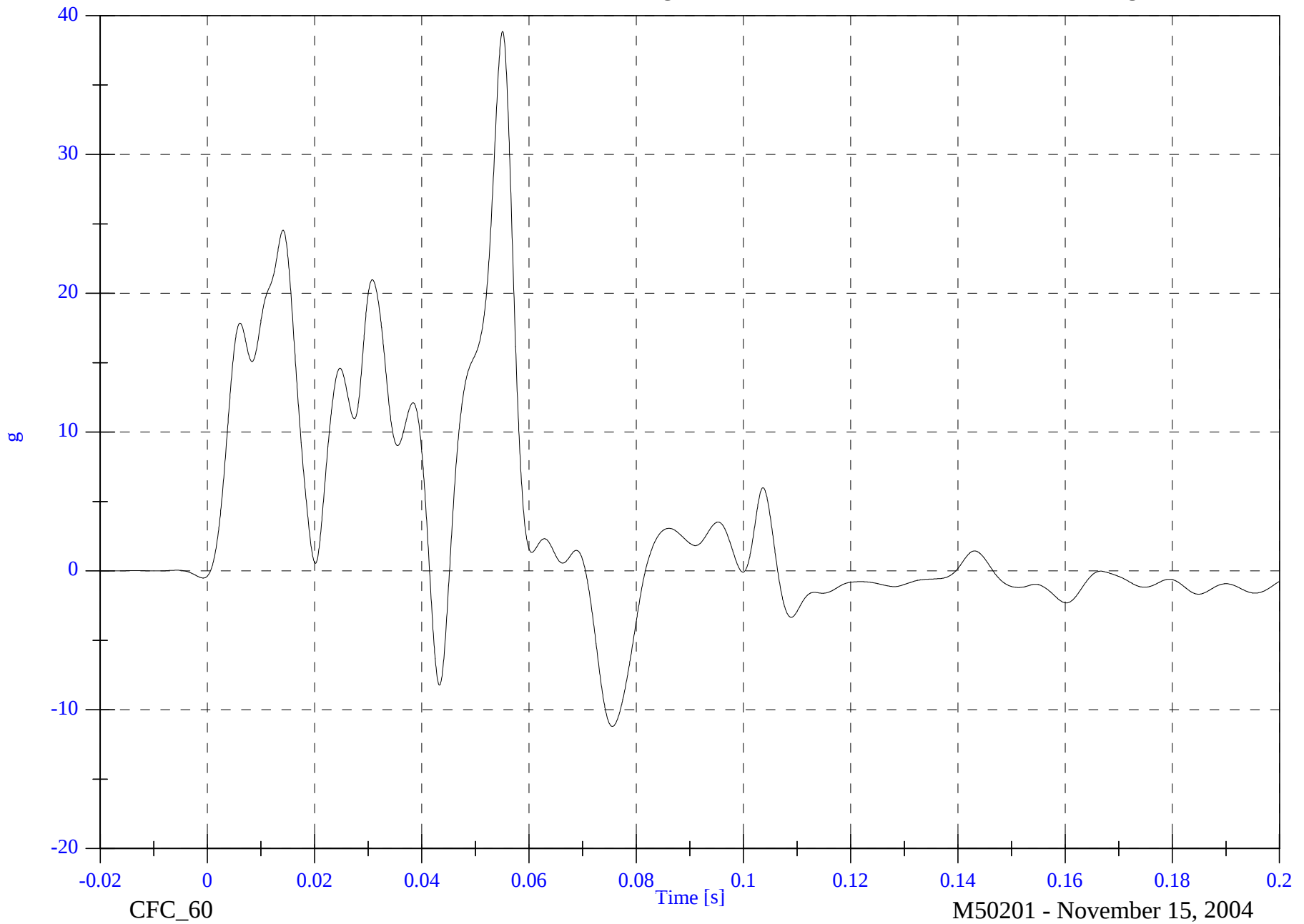
V2A2 Right Rear Sill Y

Max: 38.9 [g] at 0.055 [s]

Min: -11.2 [g] at 0.076 [s]

B-69

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

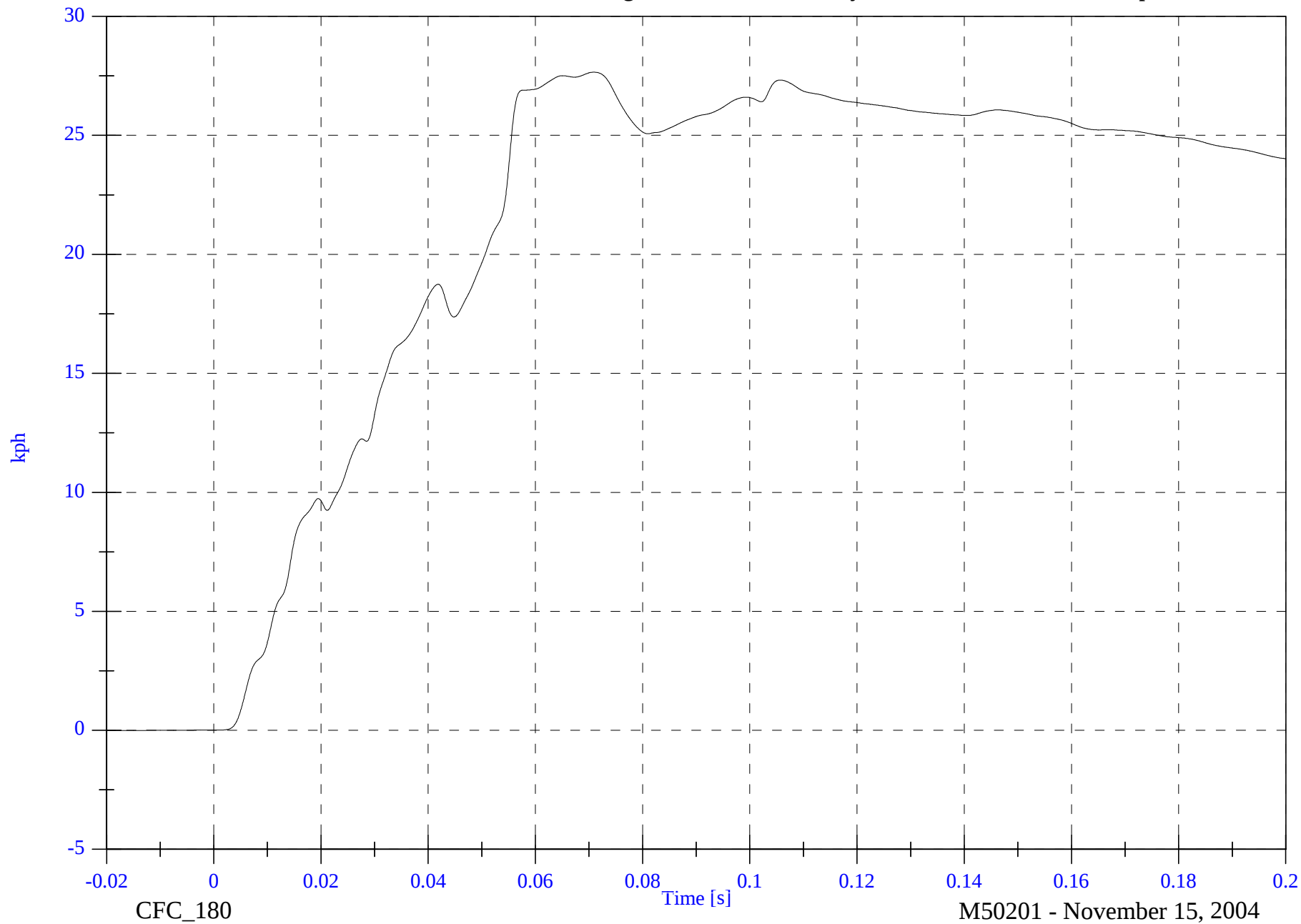
V2A2 Right Rear Sill Y Velocity

Max: 27.7 [kph] at 0.071 [s]

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

B-70

8765-SNCAP-06

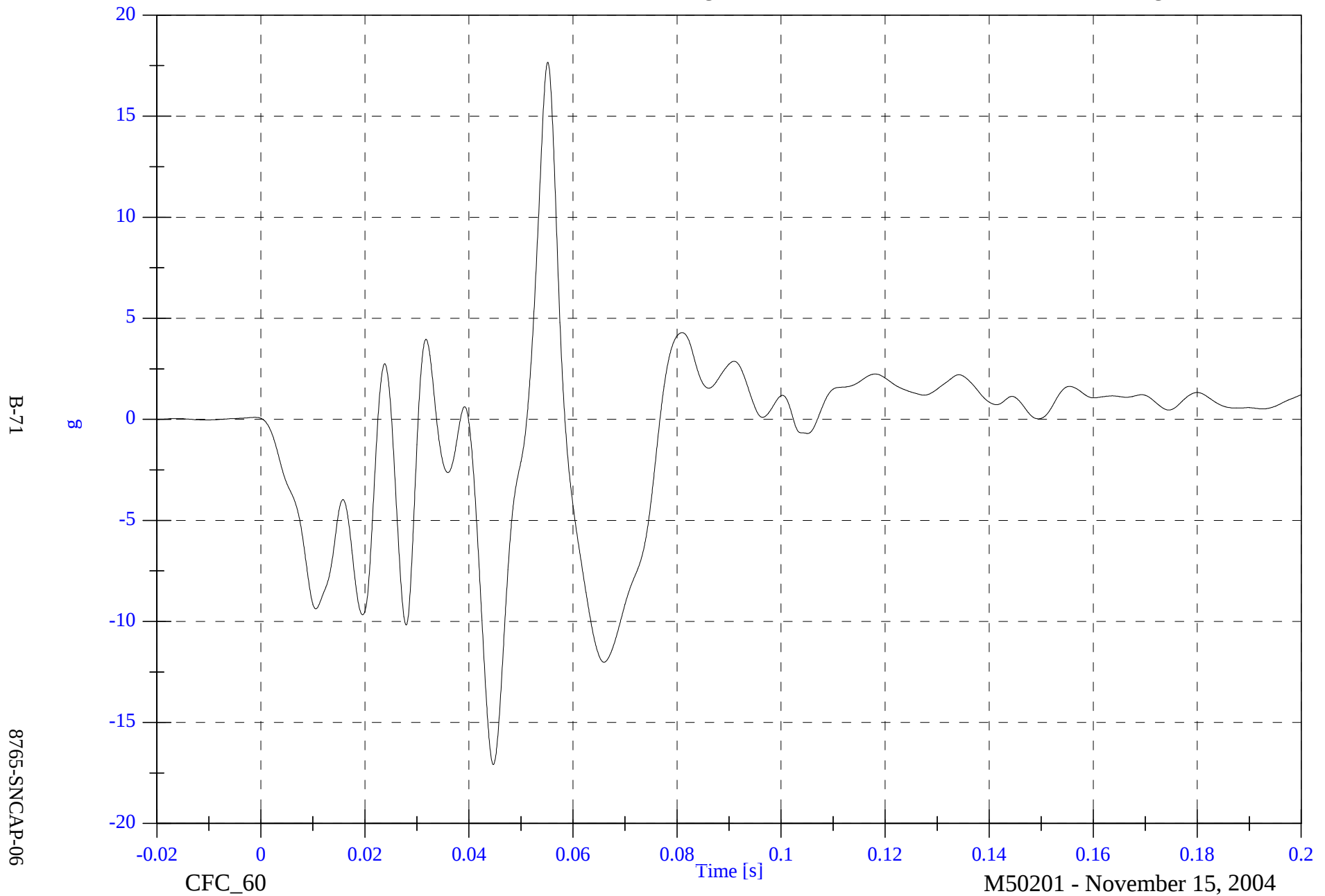


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A2 Right Rear Sill Z

Max: 17.7 [g] at 0.055 [s]

Min: -17.1 [g] at 0.045 [s]

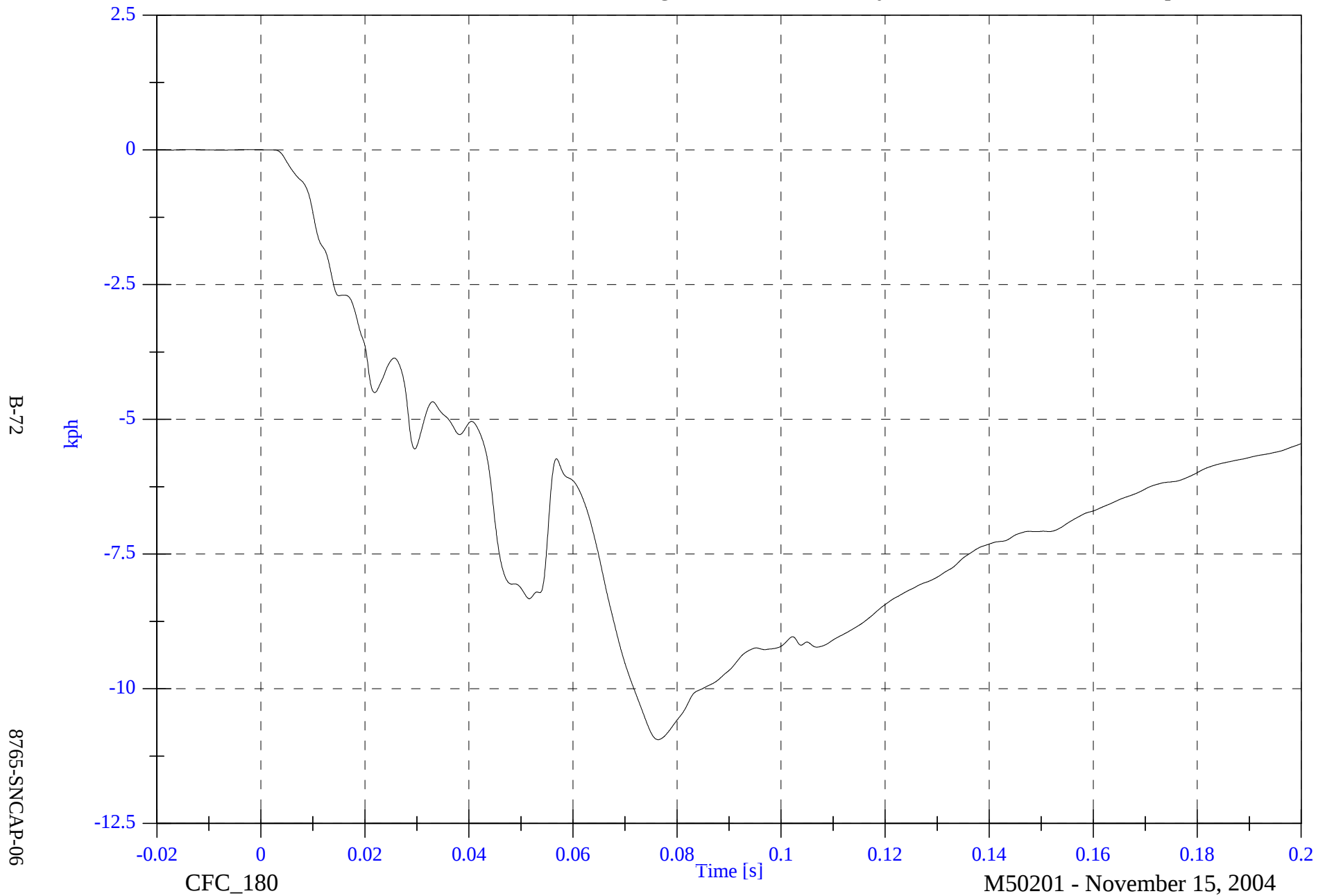


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A2 Right Rear Sill Z Velocity

Max: 0.0 [kph] at -0.002 [s]

Min: -10.9 [kph] at 0.076 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

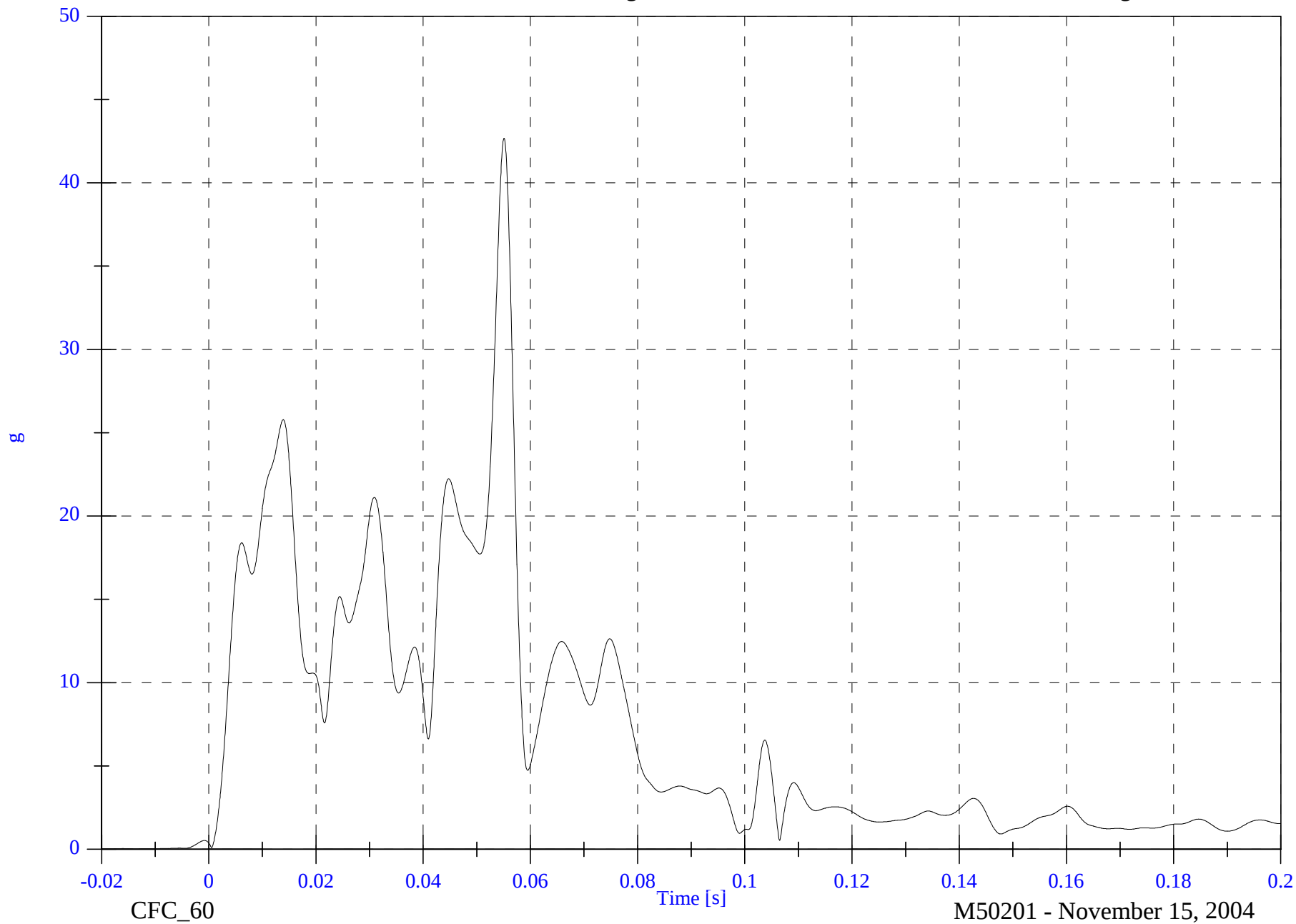
V2A2 Right Rear Sill Resultant

Max: 42.7 [g] at 0.055 [s]

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

B-73

8765-SNCAP-06

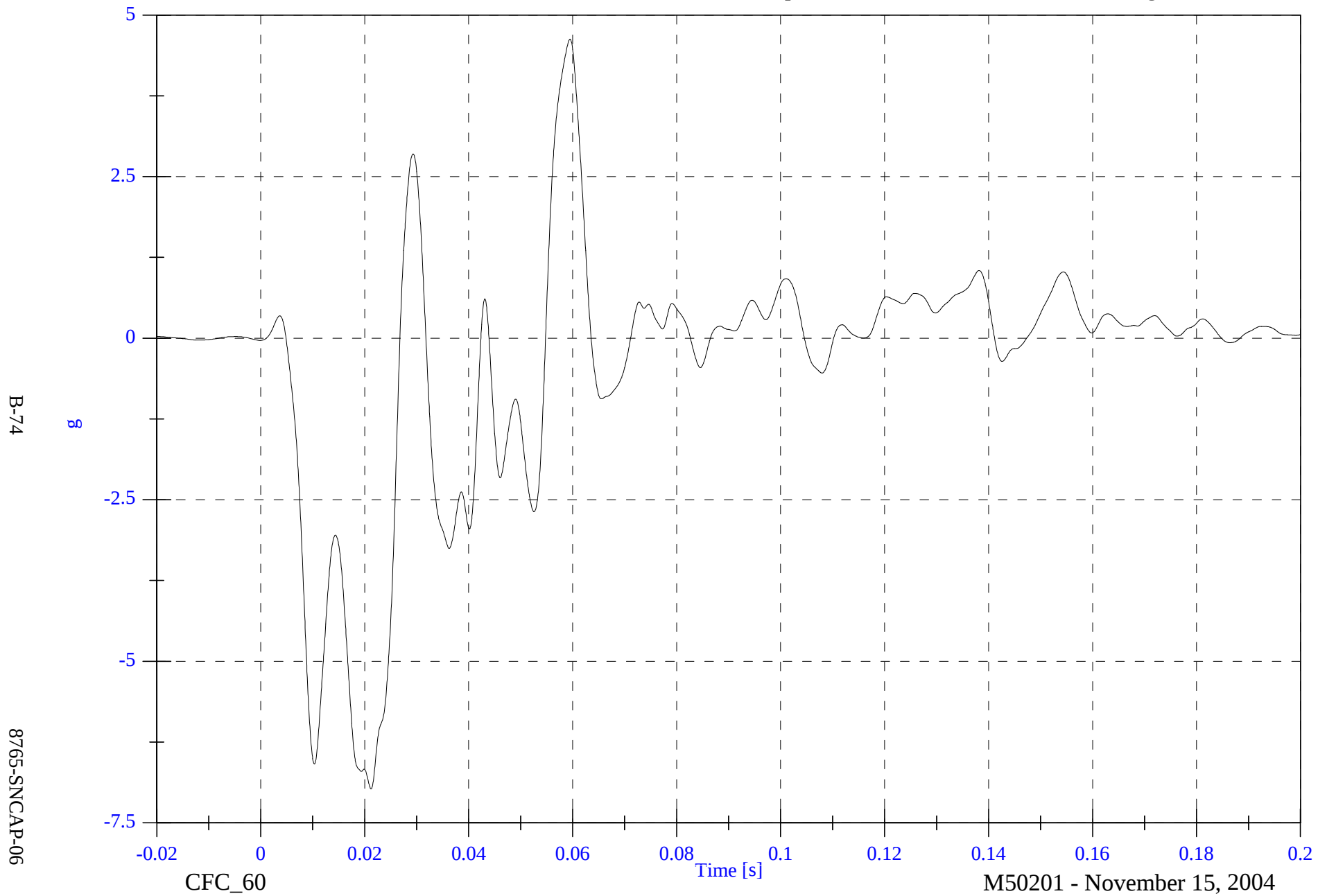


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A3 Rear Floorpan X

Max: 4.6 [g] at 0.059 [s]

Min: -7.0 [g] at 0.021 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A3 Rear Floorpan X Velocity

Max: 0.1 [kph] at 0.005 [s]

Min: -4.8 [kph] at 0.055 [s]

B-75

8765-SNCAP-06

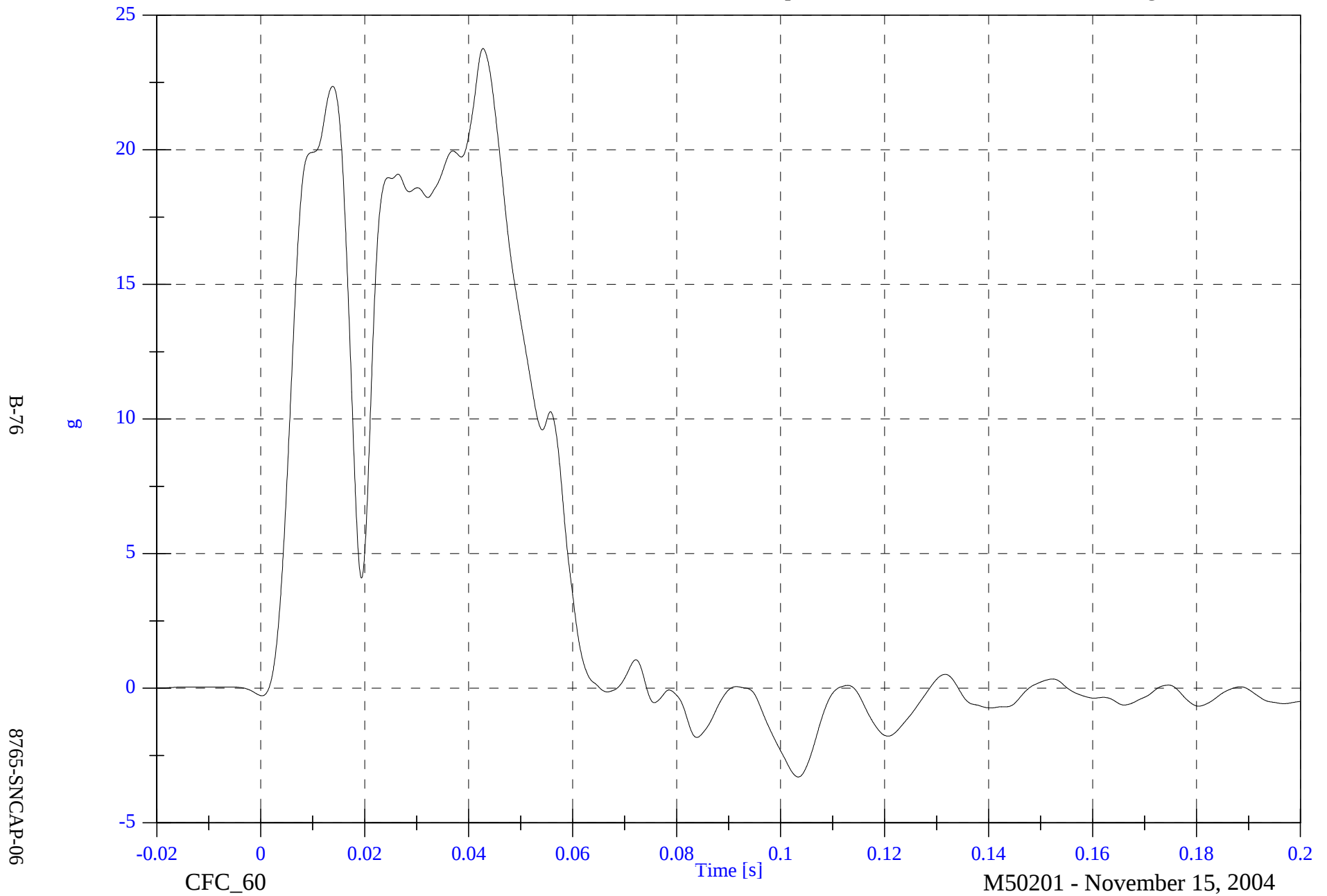


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A3 Rear Floorpan Y

Max: 23.8 [g] at 0.043 [s]

Min: -3.3 [g] at 0.103 [s]

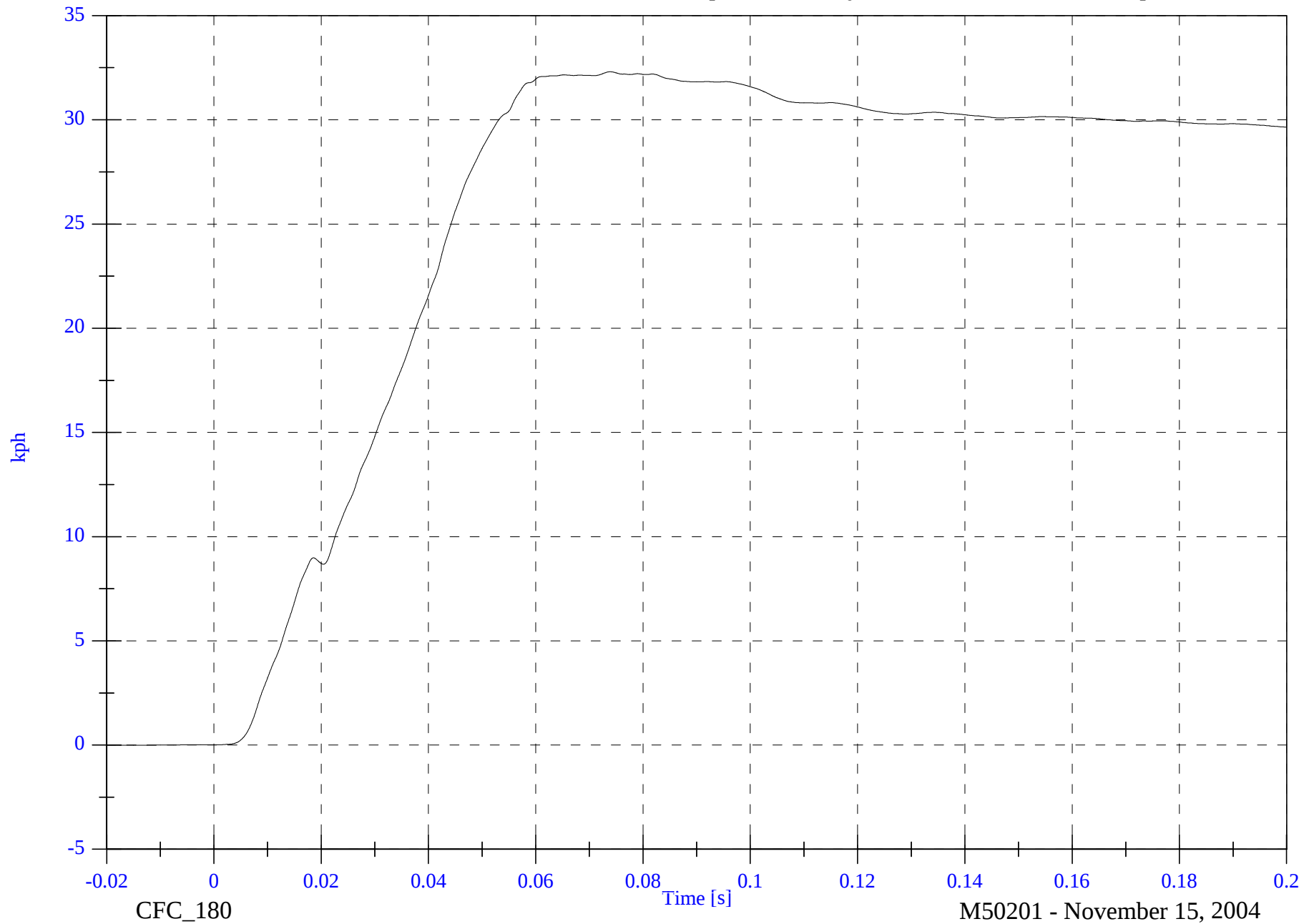


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A3 Rear Floorpan Y Velocity

Max: 32.3 [kph] at 0.074 [s]

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



B-77

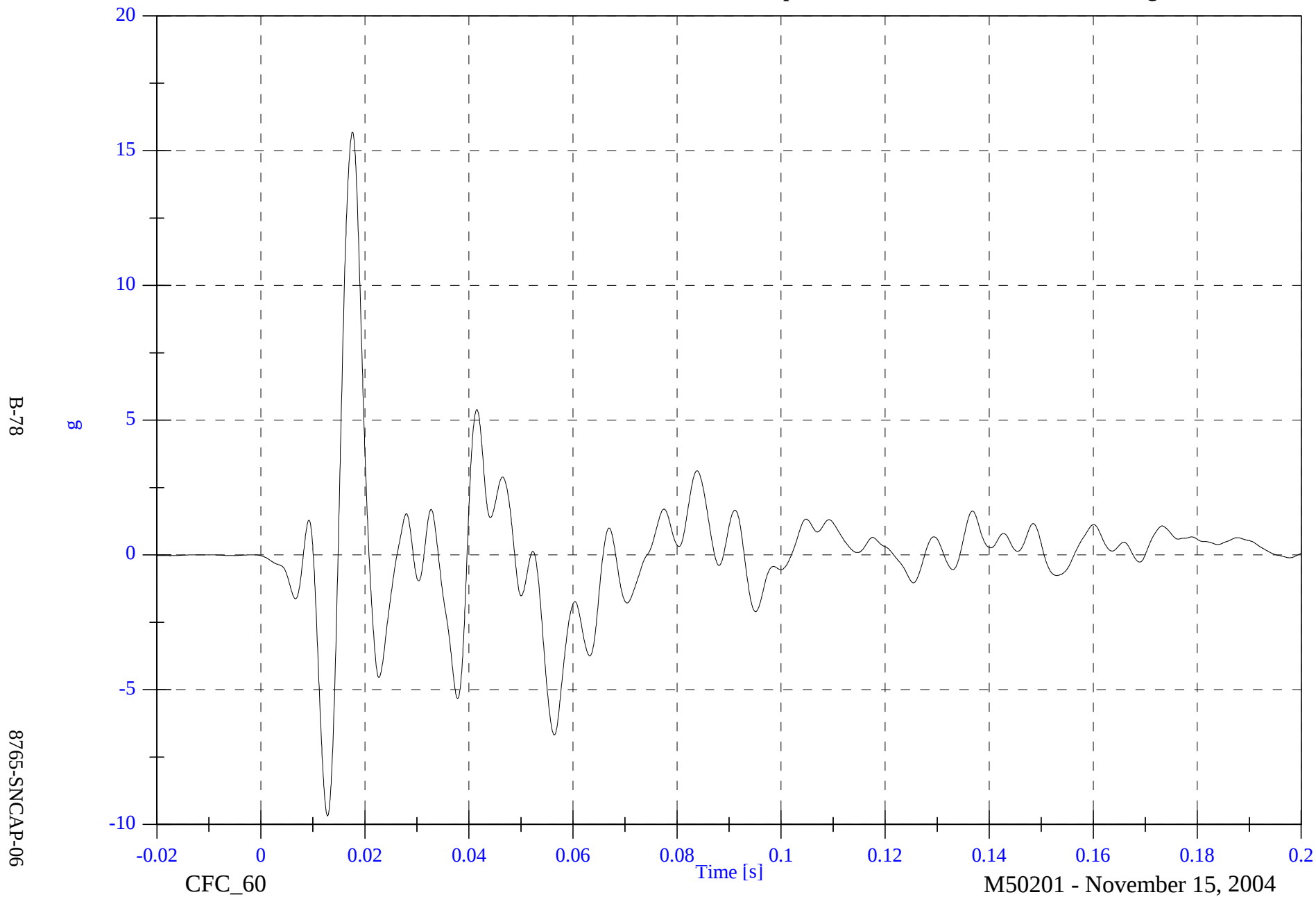
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A3 Rear Floorplan Z

Max: 15.7 [g] at 0.018 [s]

Min: -9.7 [g] at 0.013 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A3 Rear Floorplan Z Velocity

Max: 1.0 [kph] at 0.019 [s]

Min: -1.5 [kph] at 0.015 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

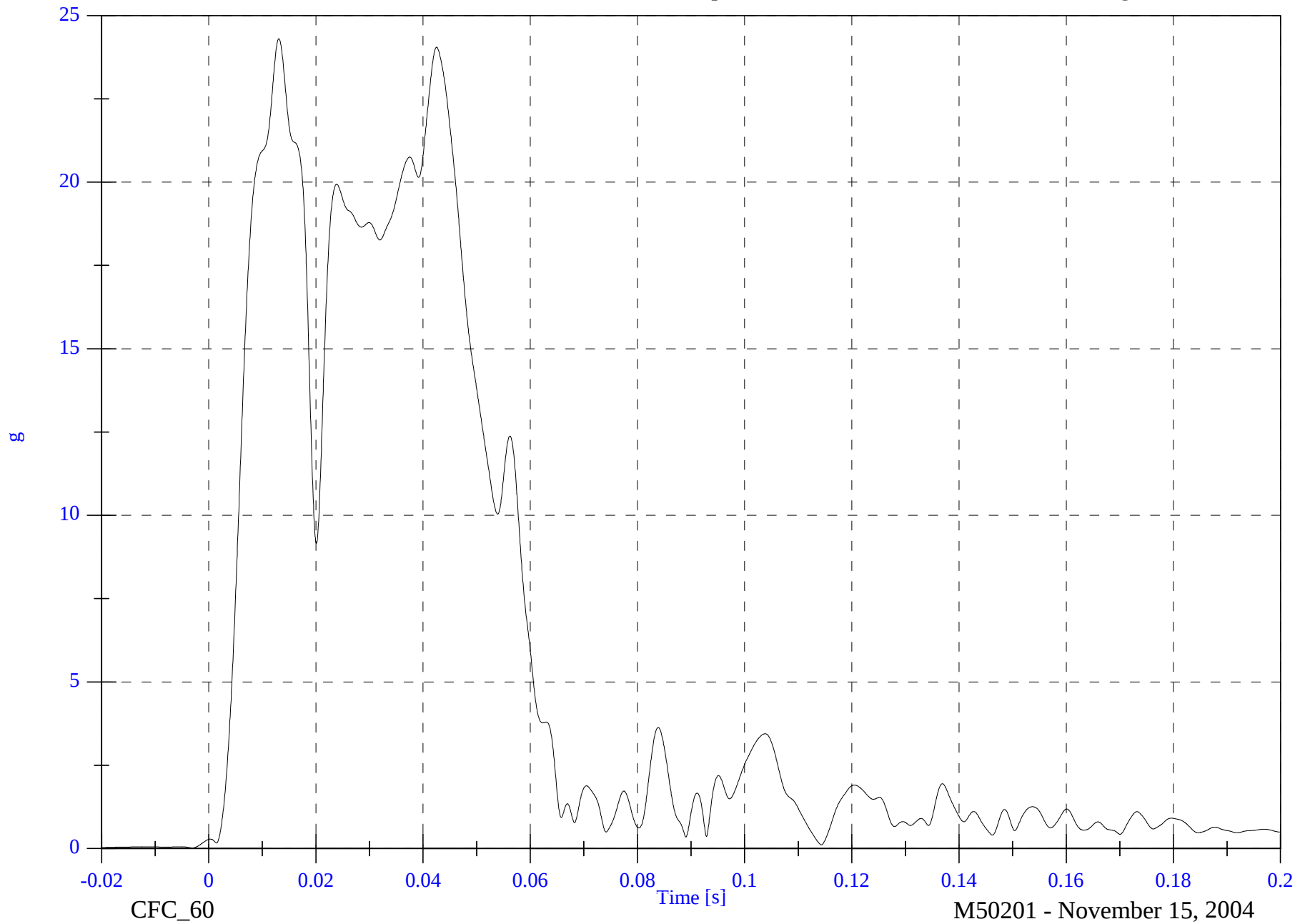
V2A3 Rear Floorpan Resultant

Max: 24.3 [g] at 0.013 [s]

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

B-80

8765-SNCAP-06

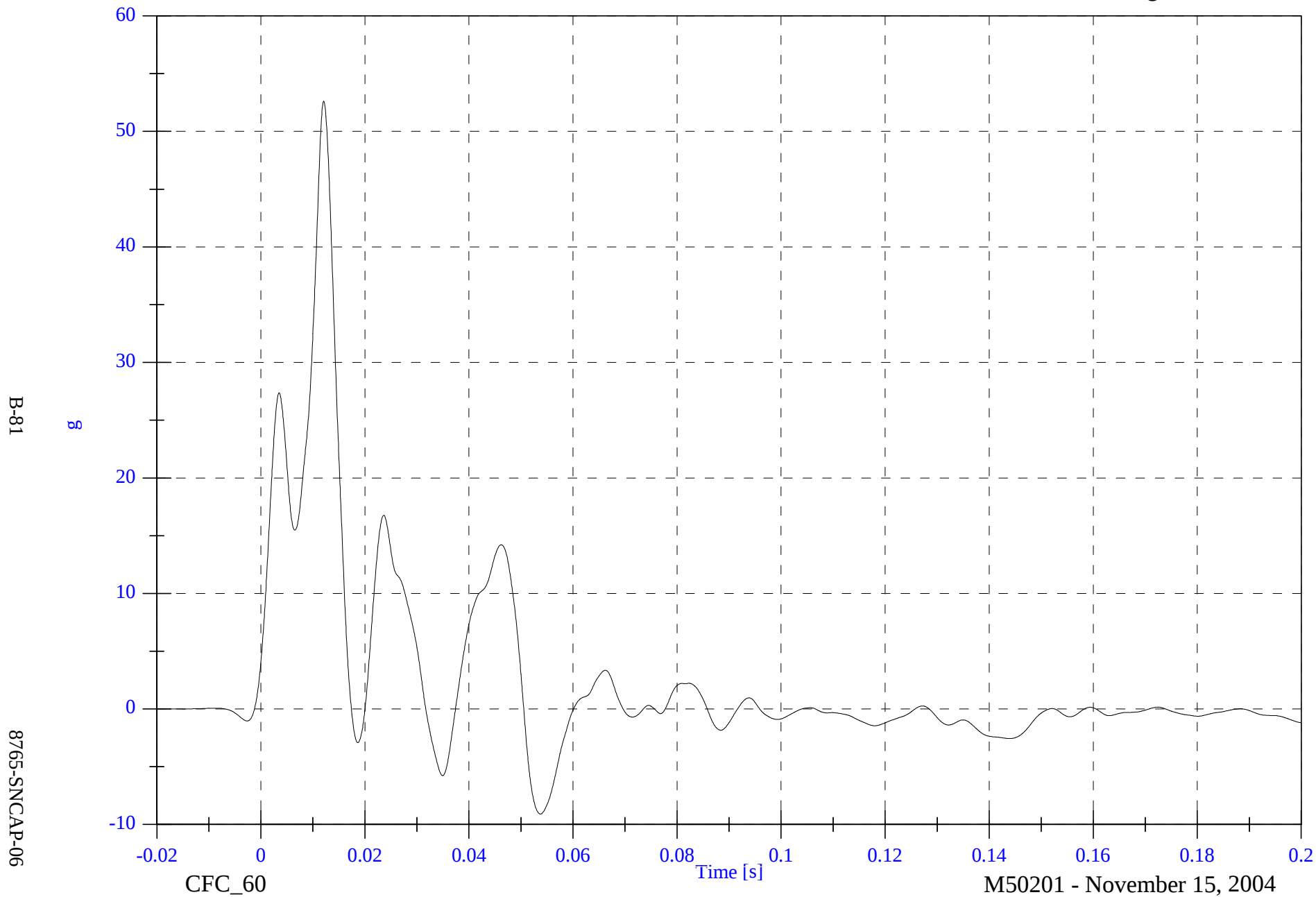


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A4 Left Rear Sill Y

Max: 52.6 [g] at 0.012 [s]

Min: -9.1 [g] at 0.054 [s]

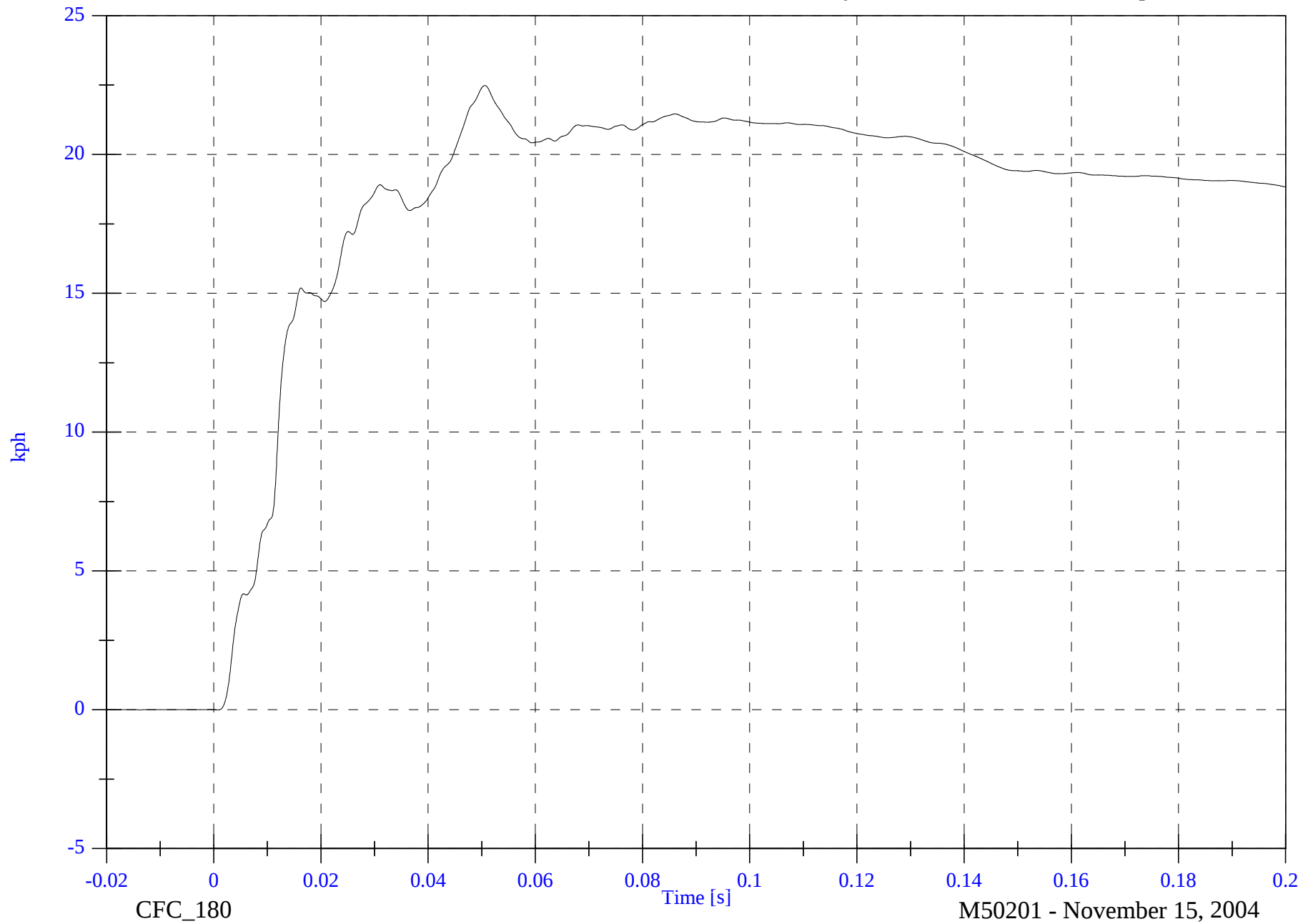


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A4 Left Rear Sill Y Velocity

Max: 22.5 [kph] at 0.051 [s]

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



B-82

8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

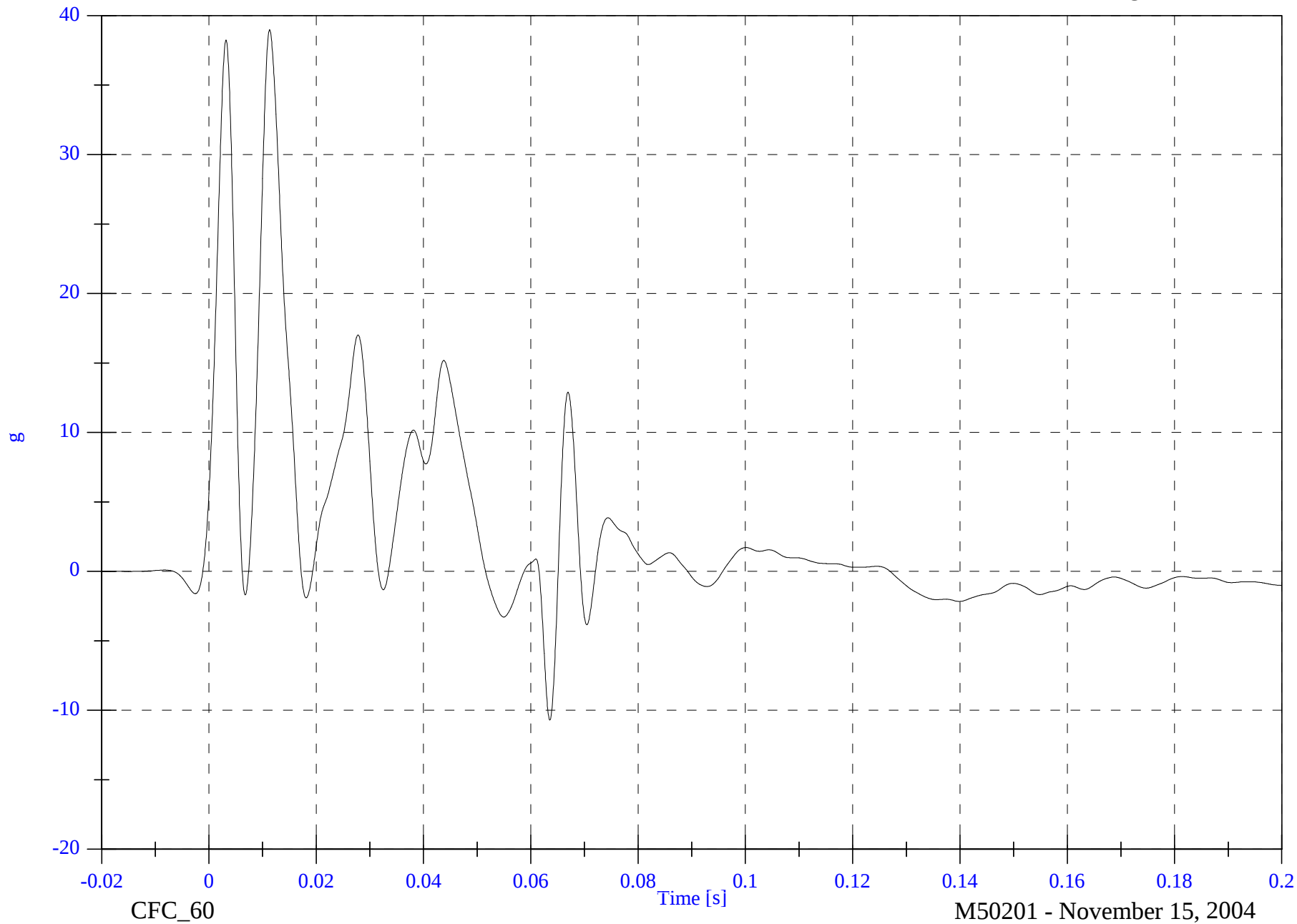
V2A5 Left Front Sill Y

Max: 39.0 [g] at 0.011 [s]

Min: -10.7 [g] at 0.064 [s]

B-83

8765-SNCAP-06

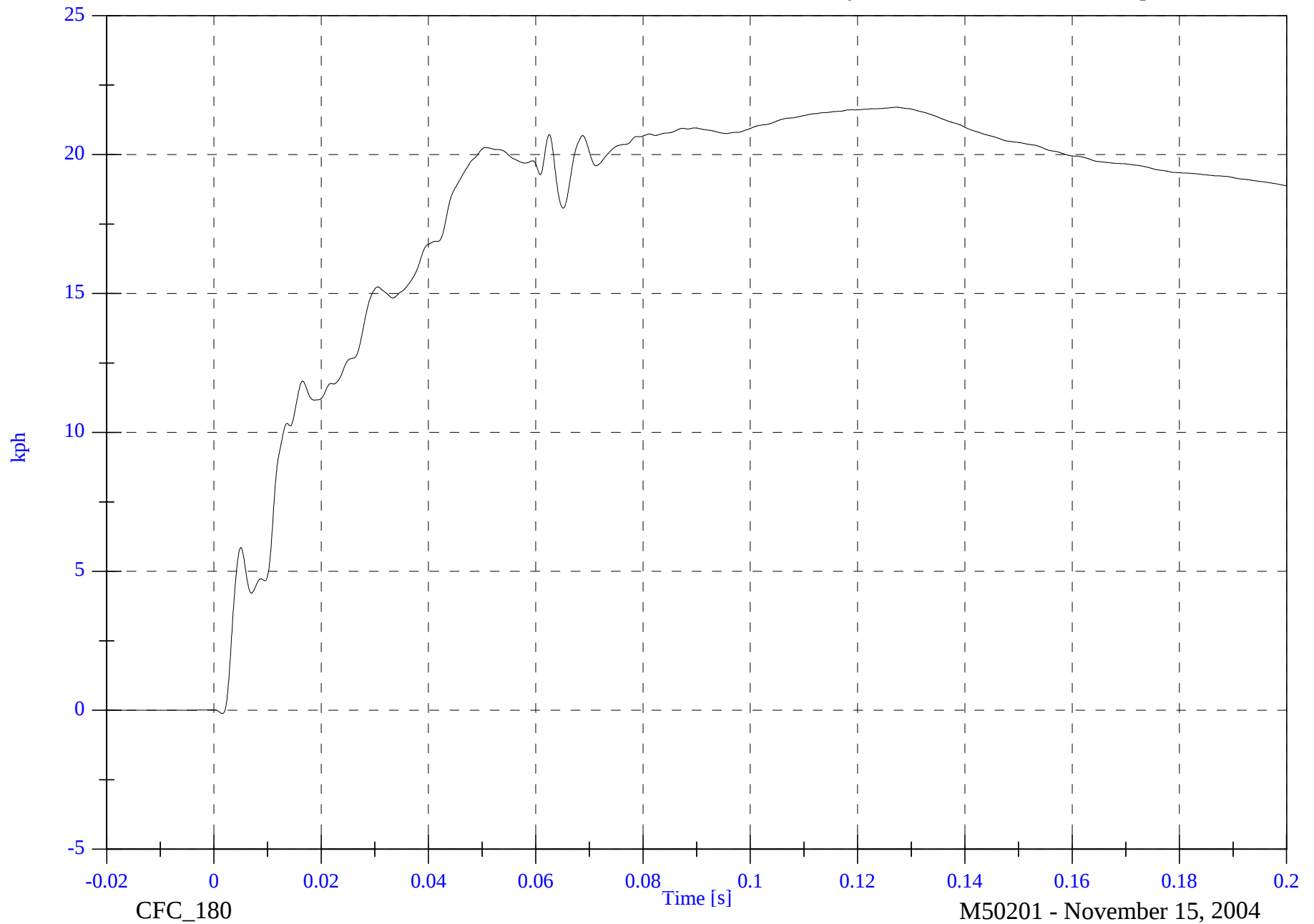


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A5 Left Front Sill Y Velocity

Max: 21.7 [kph] at 0.127 [s]

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



B-84

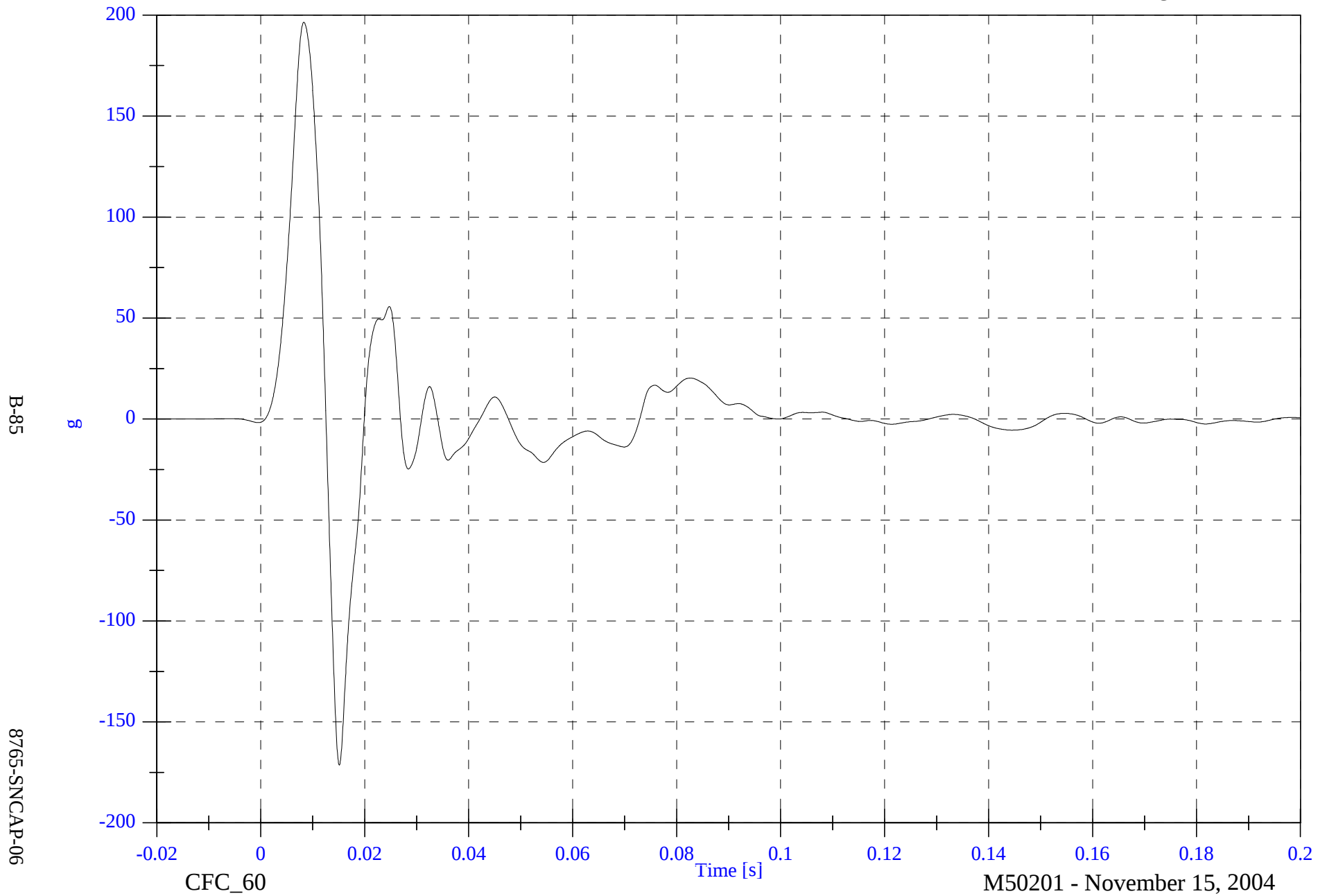
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A6 Left Front Door C/L Y

Max: 196.5 [g] at 0.008 [s]

Min: -171.4 [g] at 0.015 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

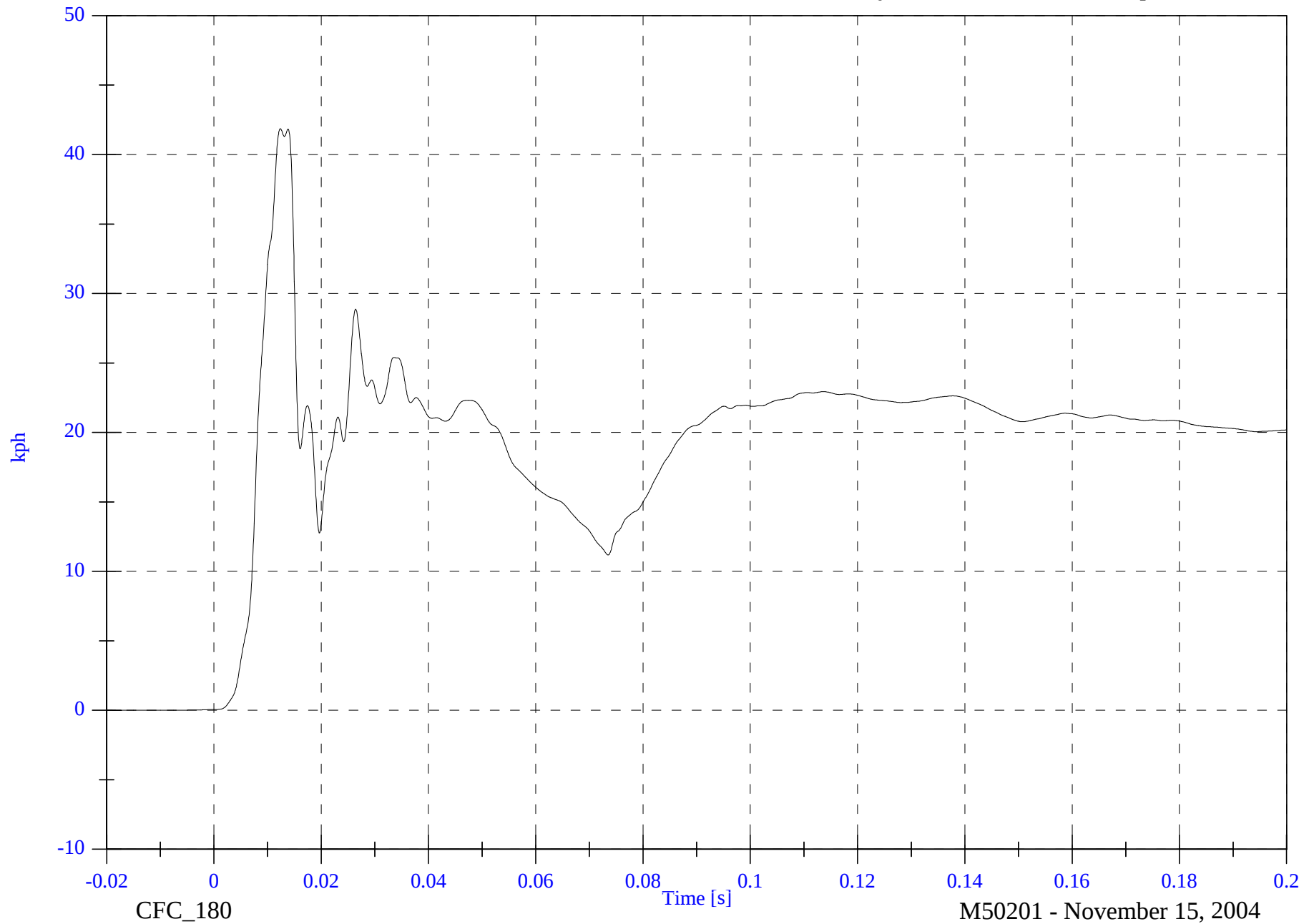
V2A6 Left Front Door C/L Y Velocity

Max: 41.9 [kph] at 0.012 [s]

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

B-86

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

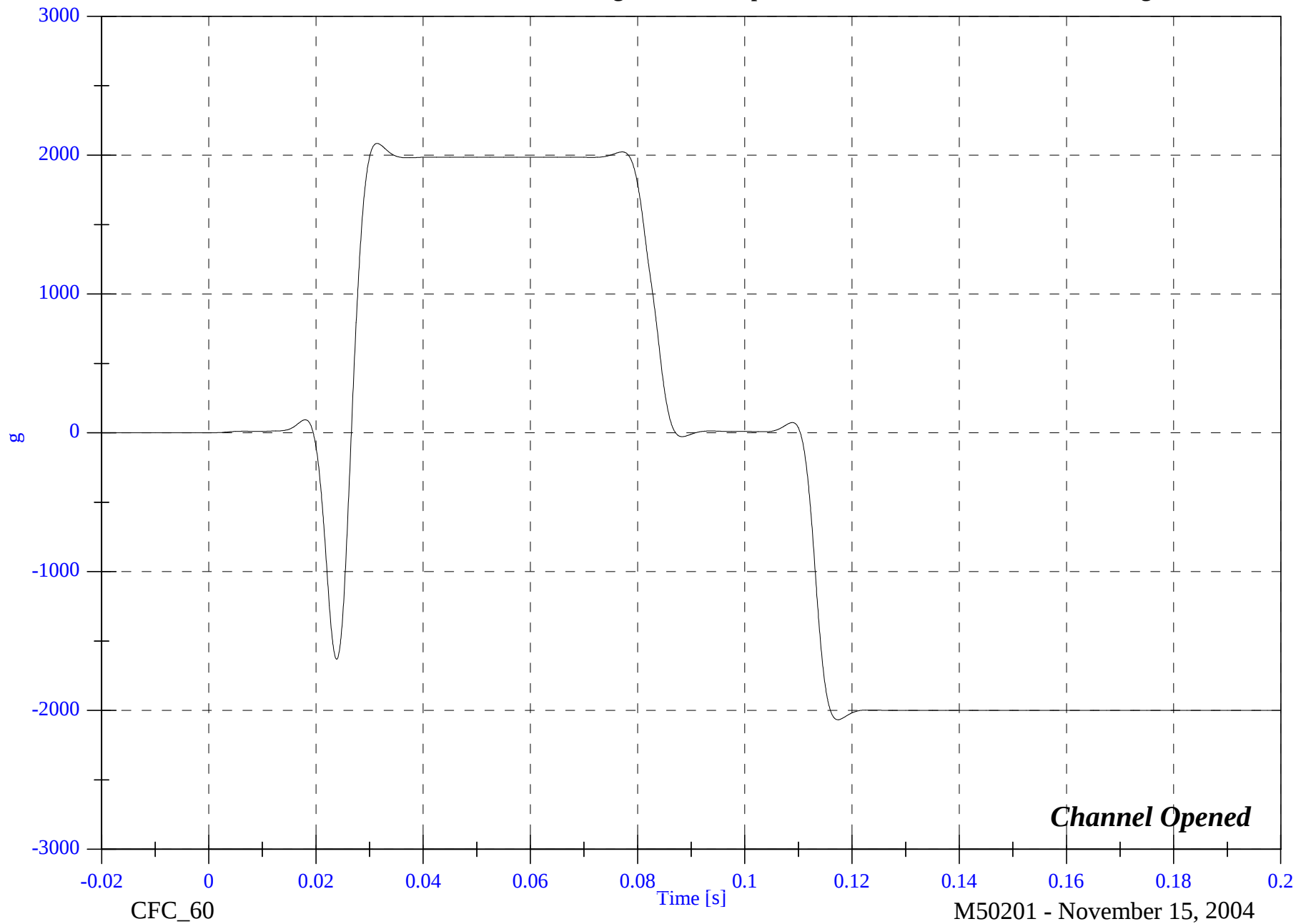
V2A7 Right Rear Compartment Y

Max: 2084.5 [g] at 0.031 [s]

Min: -2066.8 [g] at 0.117 [s]

B-87

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

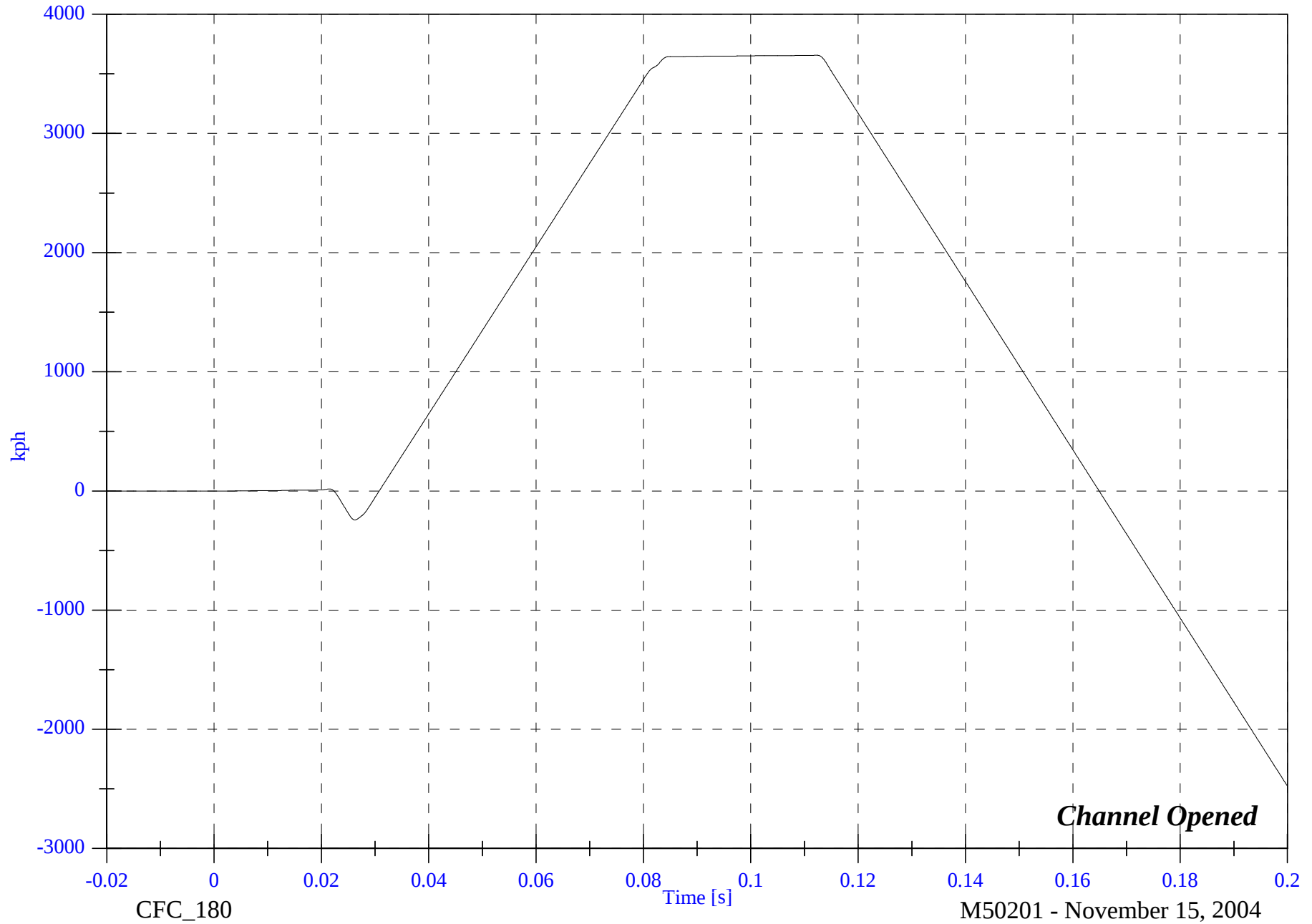
V2A7 Right Rear Compartment Y Velocity

Max: 3656.3 [kph] at 0.112 [s]

Min: -2474.6 [kph] at 0.200 [s]

B-88

8765-SNCAP-06

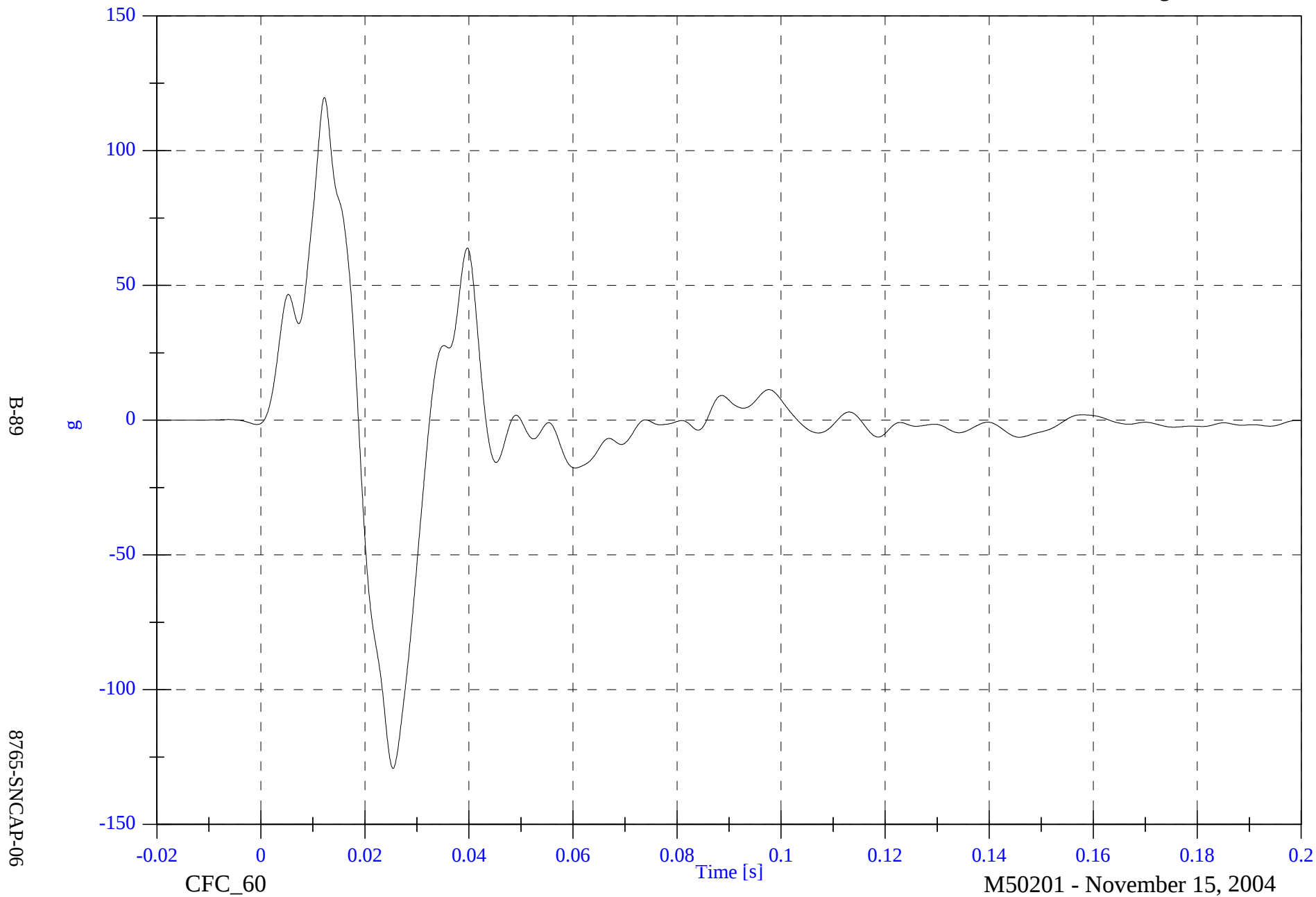


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A8 Left Front Door Midrear Y

Max: 119.7 [g] at 0.012 [s]

Min: -129.2 [g] at 0.025 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A8 Left Front Door Midrear Y Velocity

Max: 36.9 [kph] at 0.019 [s]

Min: -1.1 [kph] at 0.032 [s]

B-90

8765-SNCAP-06

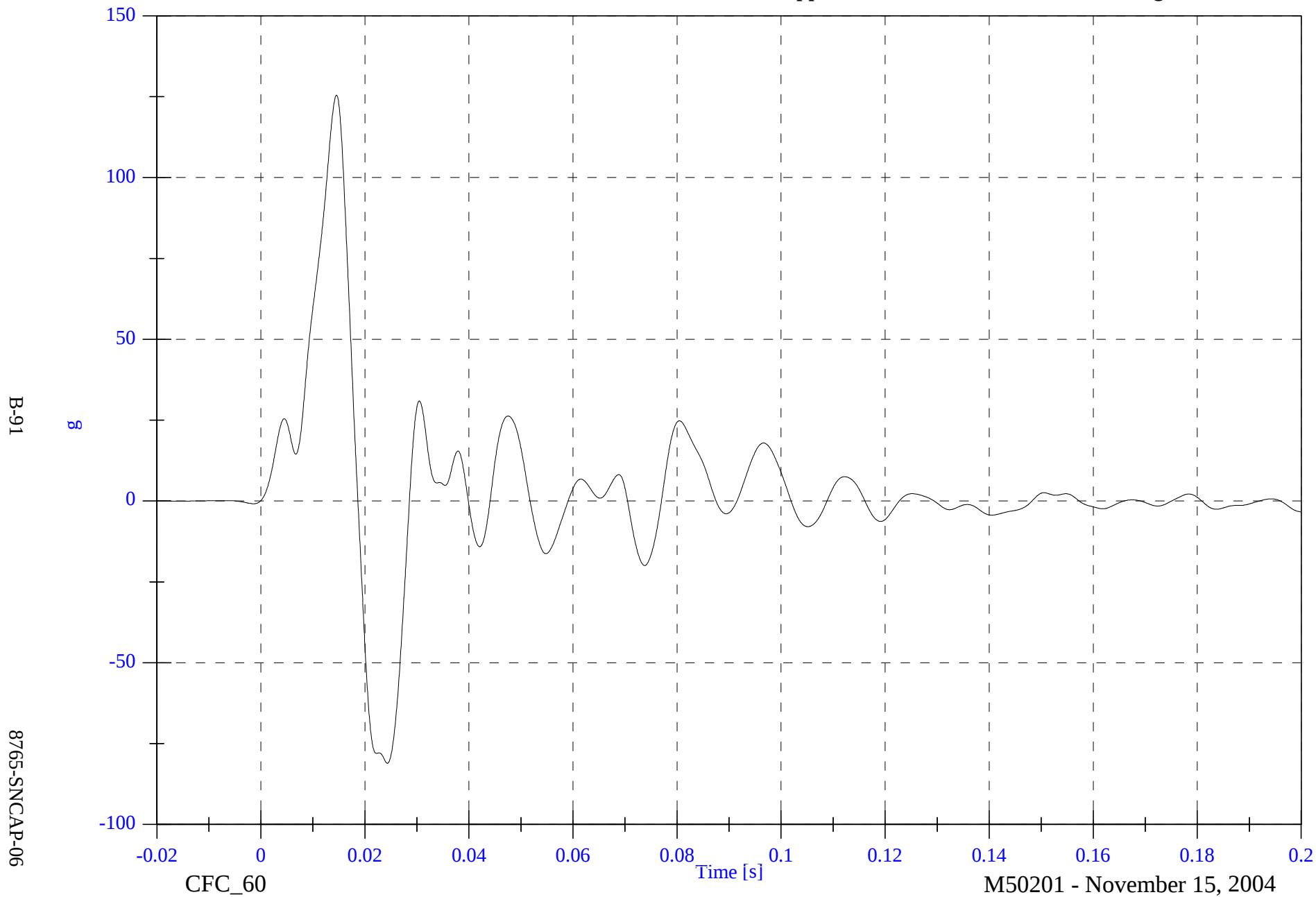


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A9 Left Front Door Upper C/L Y

Max: 125.5 [g] at 0.015 [s]

Min: -81.1 [g] at 0.024 [s]

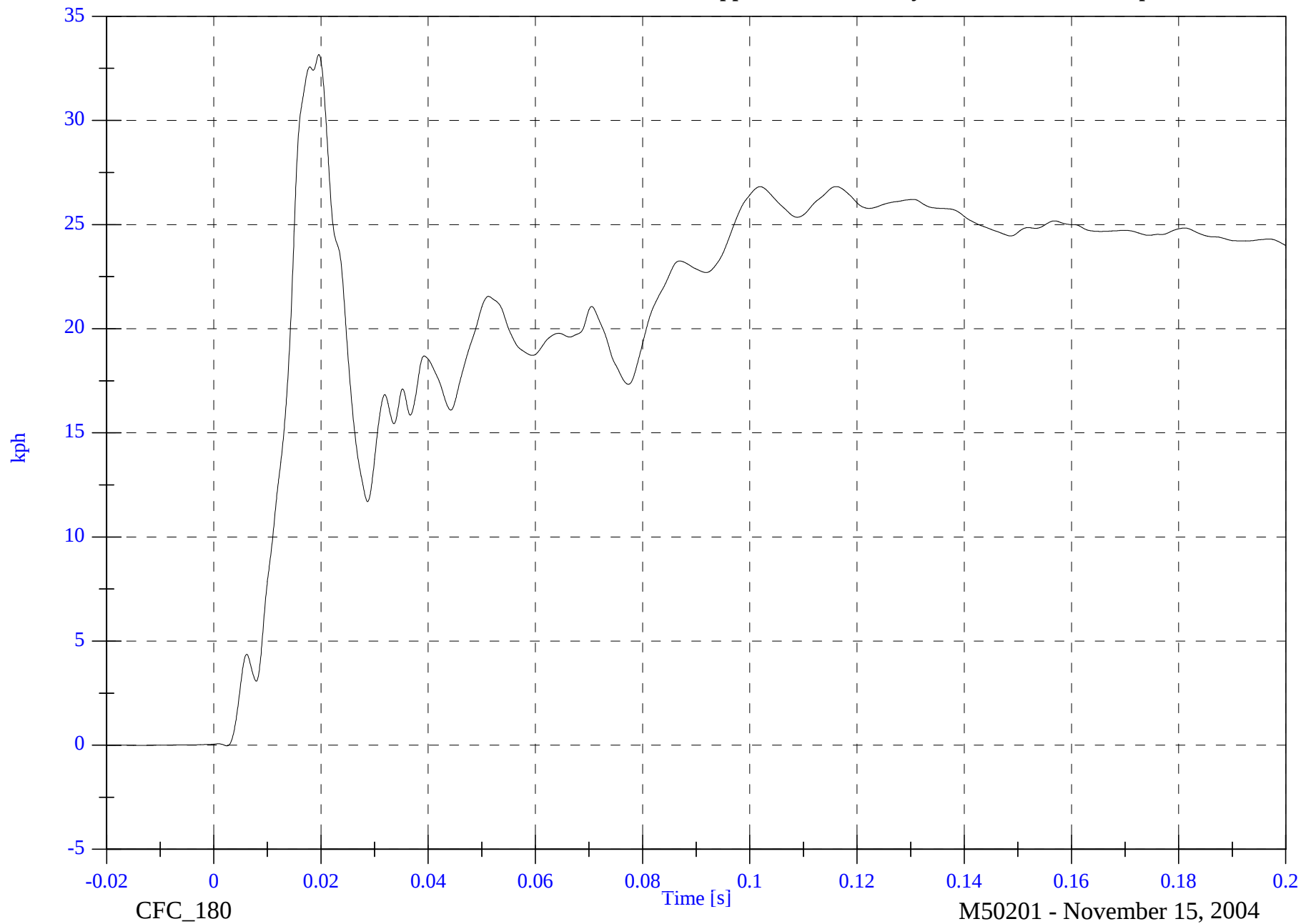


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A9 Left Front Door Upper C/L Y Velocity

Max: 33.2 [kph] at 0.020 [s]

Min: -0.0 [kph] at 0.002 [s]



B-92

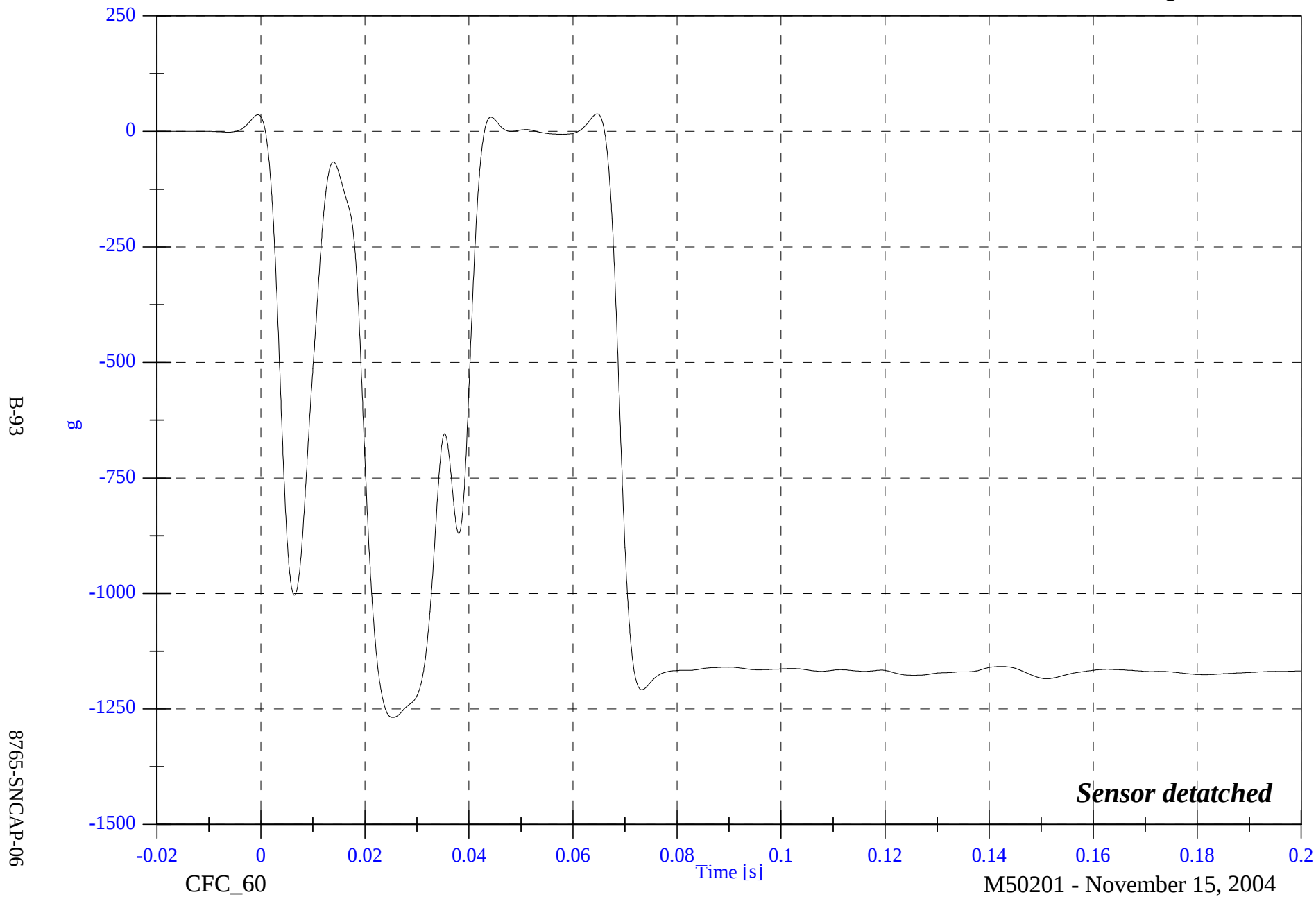
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A10 Left Rear Door Midrear Y

Max: 37.9 [g] at 0.065 [s]

Min: -1268.6 [g] at 0.025 [s]

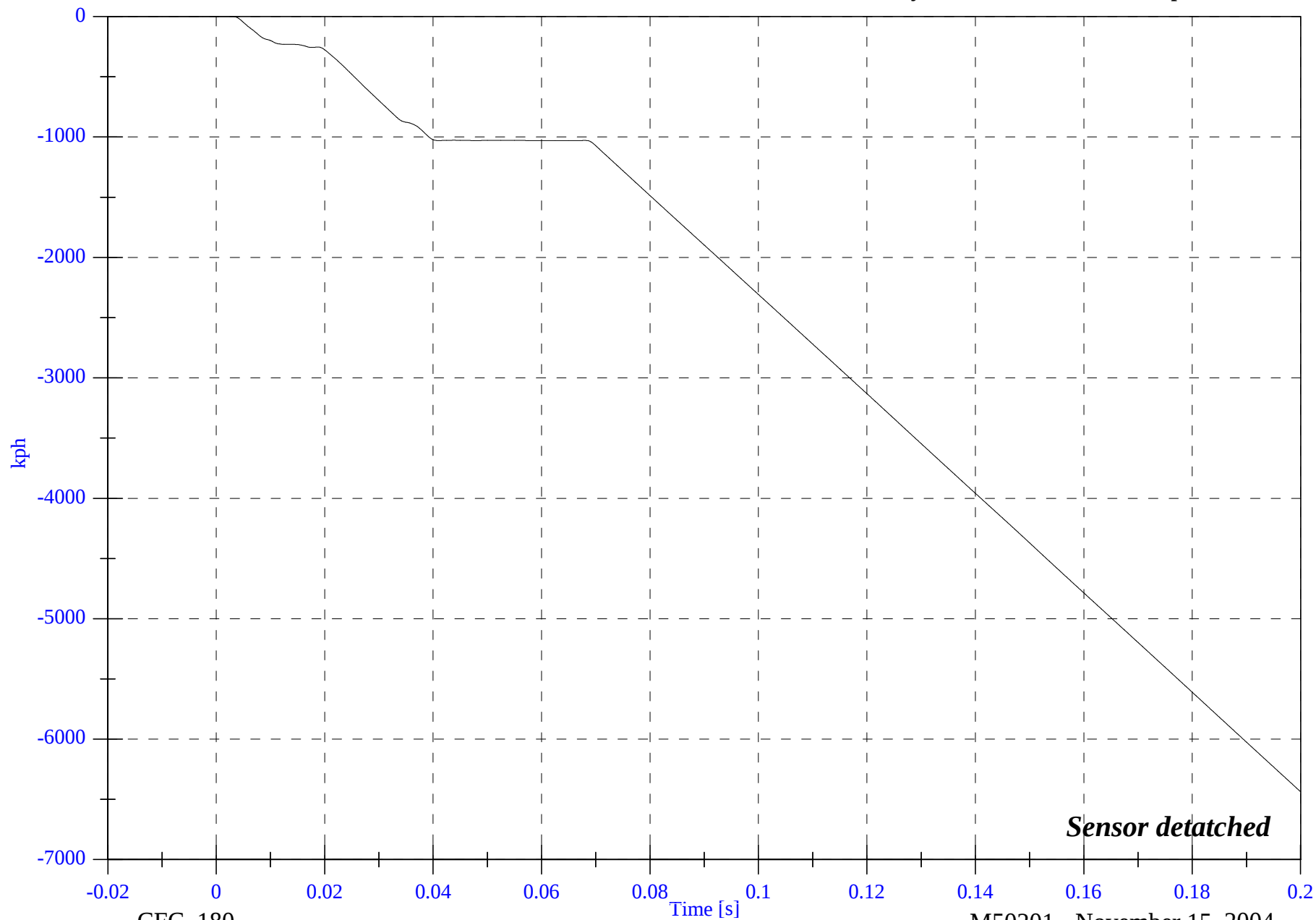


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A10 Left Rear Door Midrear Y Velocity

Max: 1.0 [kph] at 0.003 [s]

Min: -6435.2 [kph] at 0.200 [s]



B-94

8765-SNCAP-06

CFC_180

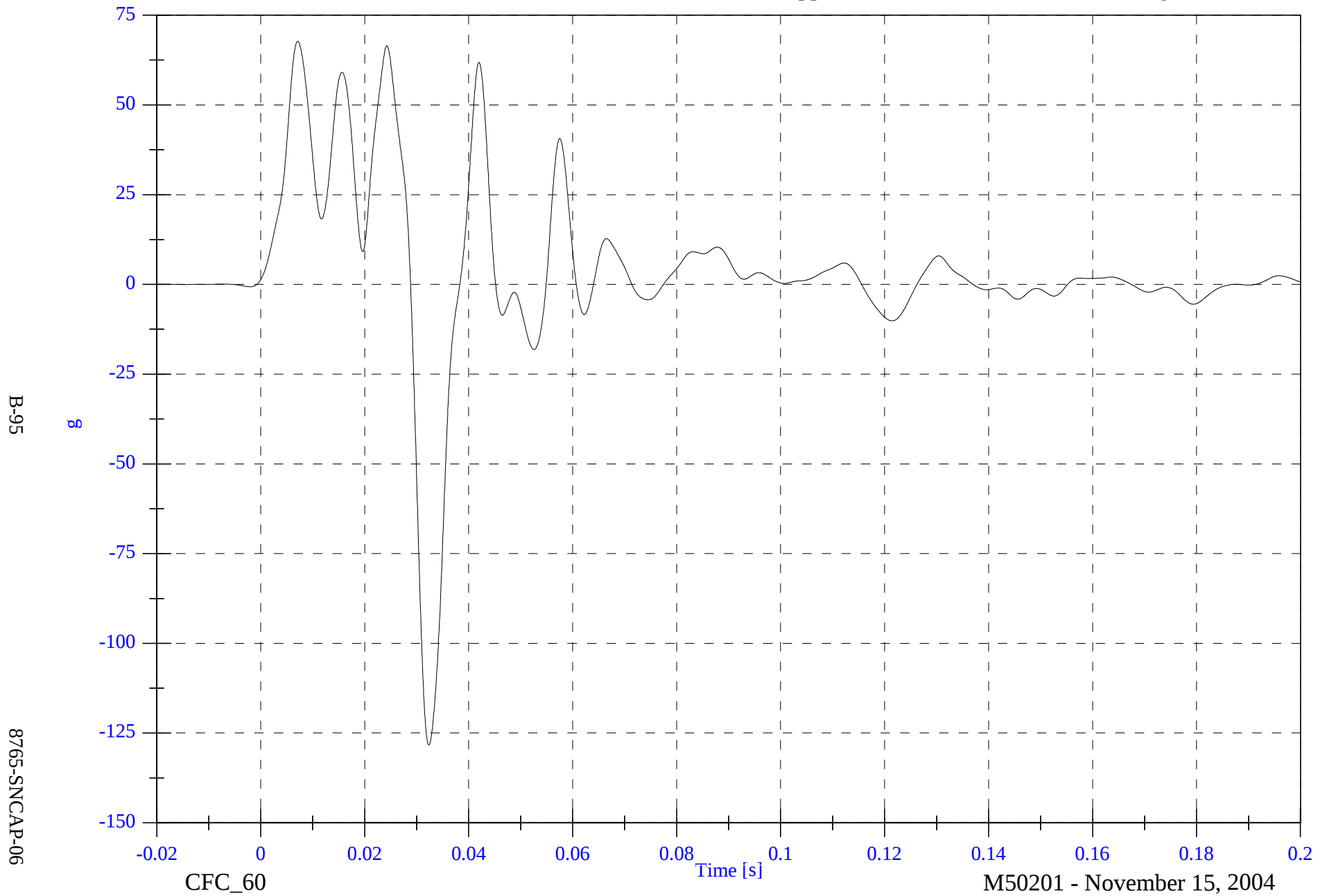
M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A11 Left Rear Door Upper C/L Y

Max: 67.7 [g] at 0.007 [s]

Min: -128.3 [g] at 0.032 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A11 Left Rear Door Upper C/L Y Velocity

Max: 39.1 [kph] at 0.029 [s]

Min: -0.0 [kph] at -0.013 [s]



B-96

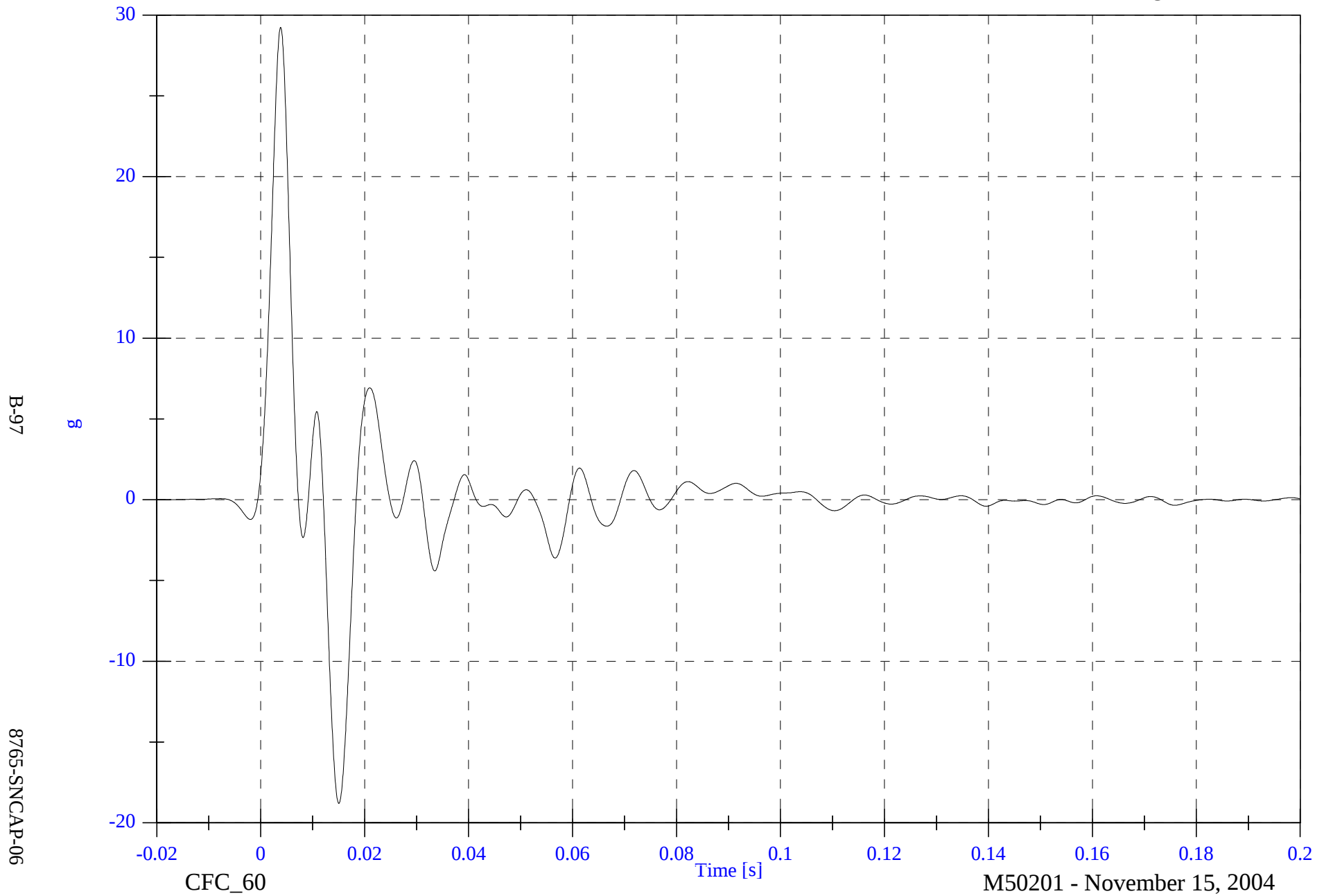
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A12 Left Lower B Post Y

Max: 29.3 [g] at 0.004 [s]

Min: -18.8 [g] at 0.015 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

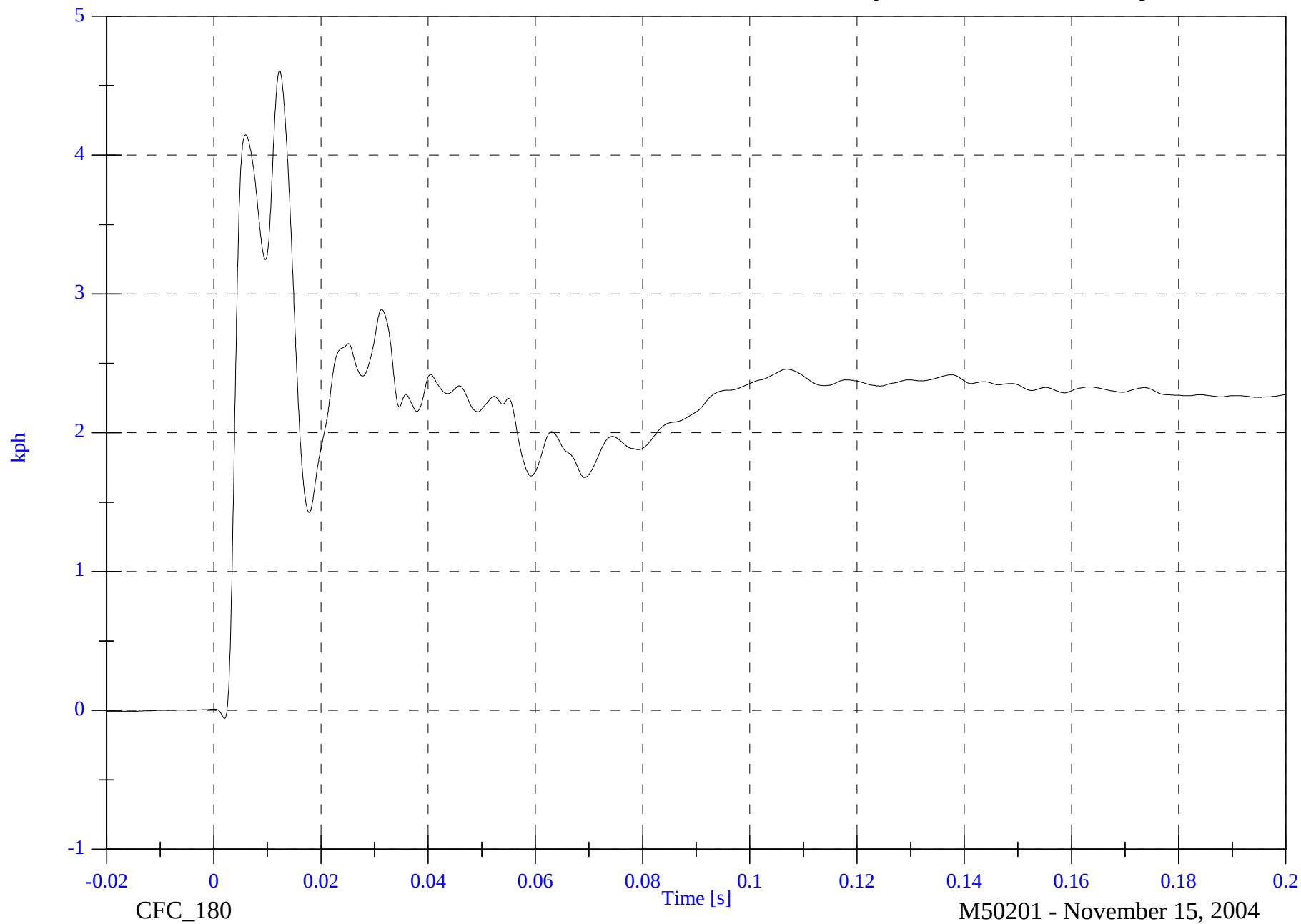
V2A12 Left Lower B Post Y Velocity

Max: 4.6 [kph] at 0.012 [s]

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

B-98

8765-SNCAP-06

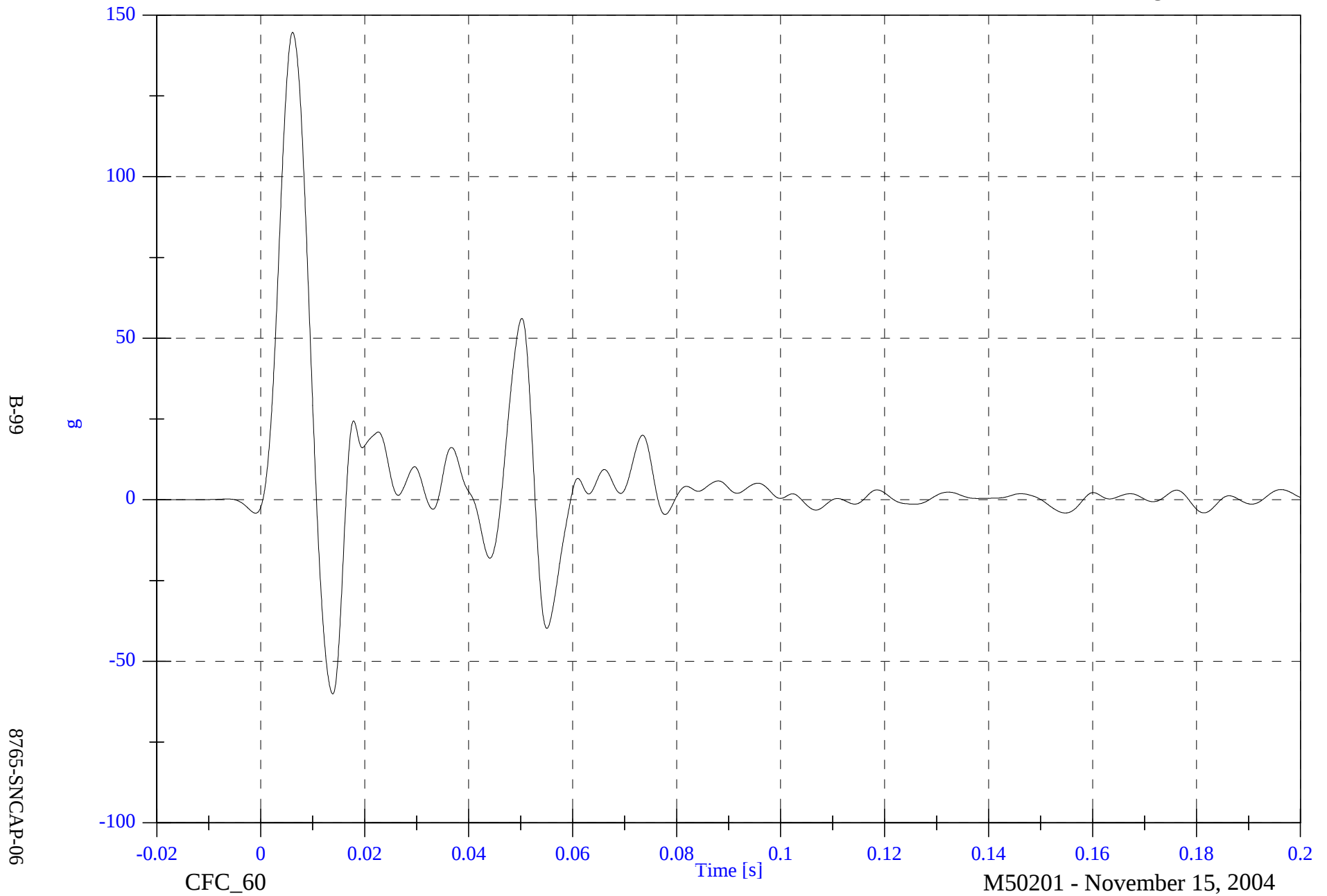


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A13 Left Mid B Post Y

Max: 144.7 [g] at 0.006 [s]

Min: -60.1 [g] at 0.014 [s]

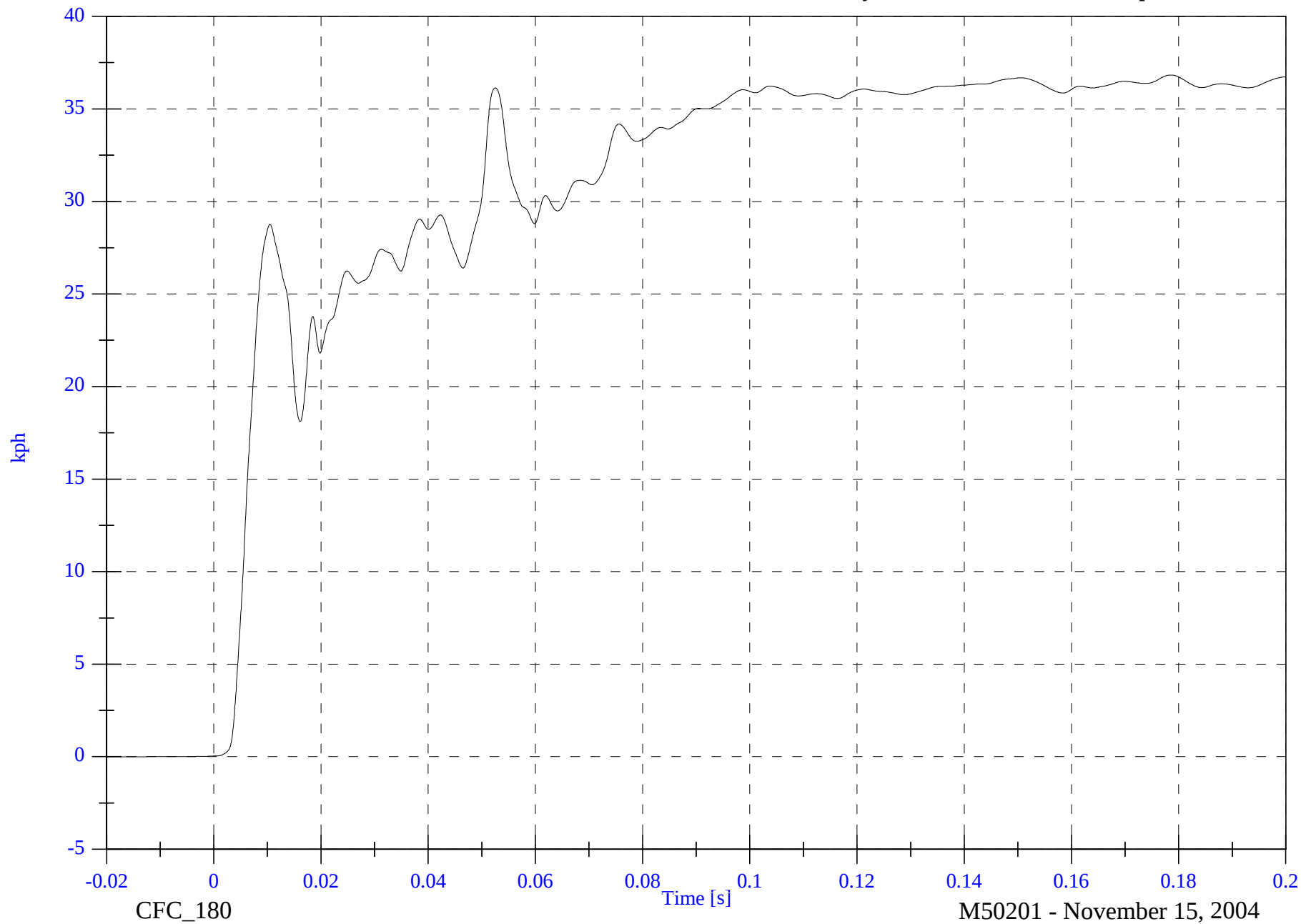


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A13 Left Mid B Post Y Velocity

Max: 36.8 [kph] at 0.179 [s]

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



B-100

8765-SNCAP-06

CFC_180

Time [s]

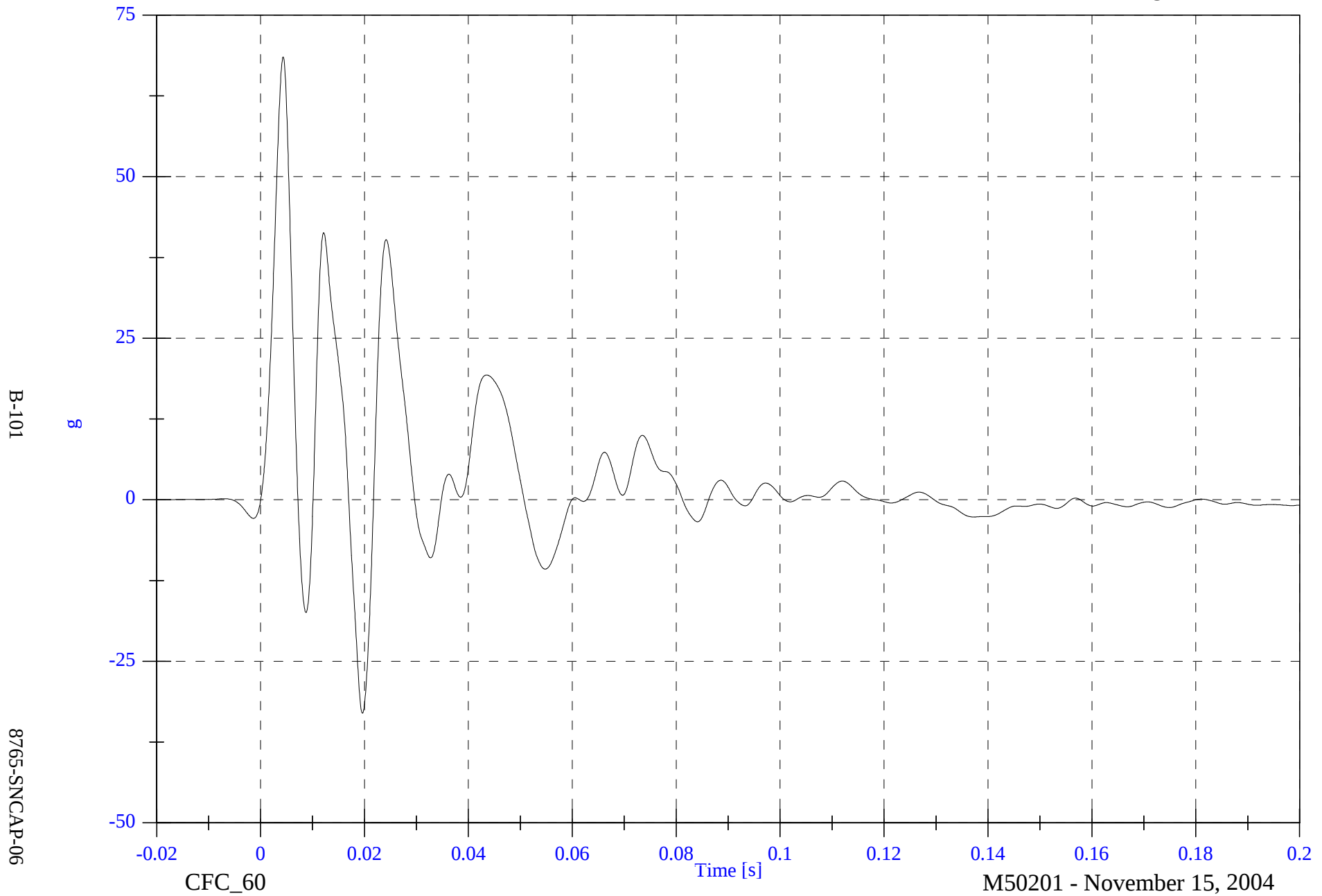
M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A14 Left Lower A Post Y

Max: 68.5 [g] at 0.004 [s]

Min: -33.0 [g] at 0.020 [s]

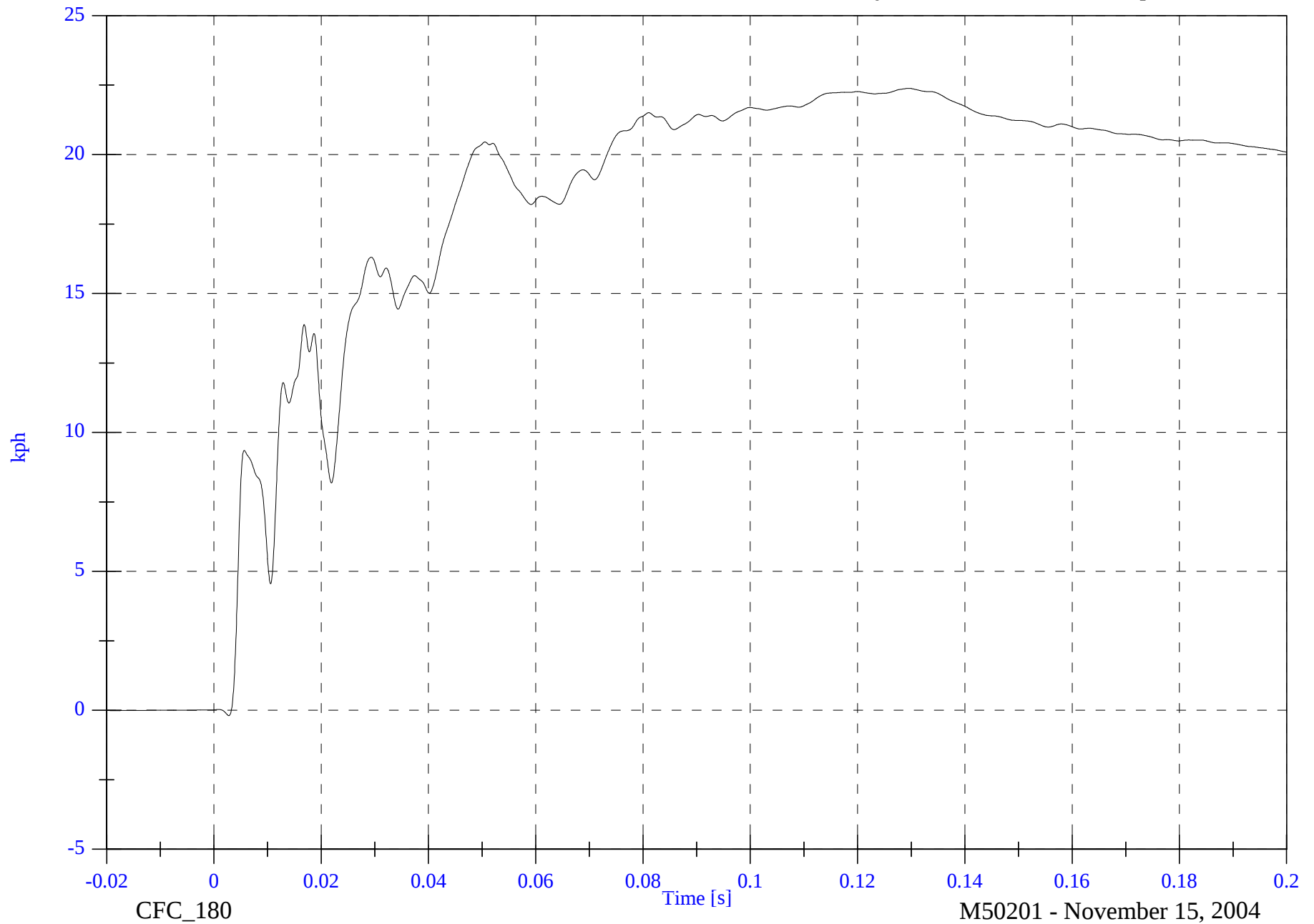


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A14 Left Lower A Post Y Velocity

Max: 22.4 [kph] at 0.130 [s]

Min: -0.2 [kph] at 0.003 [s]



B-102

8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

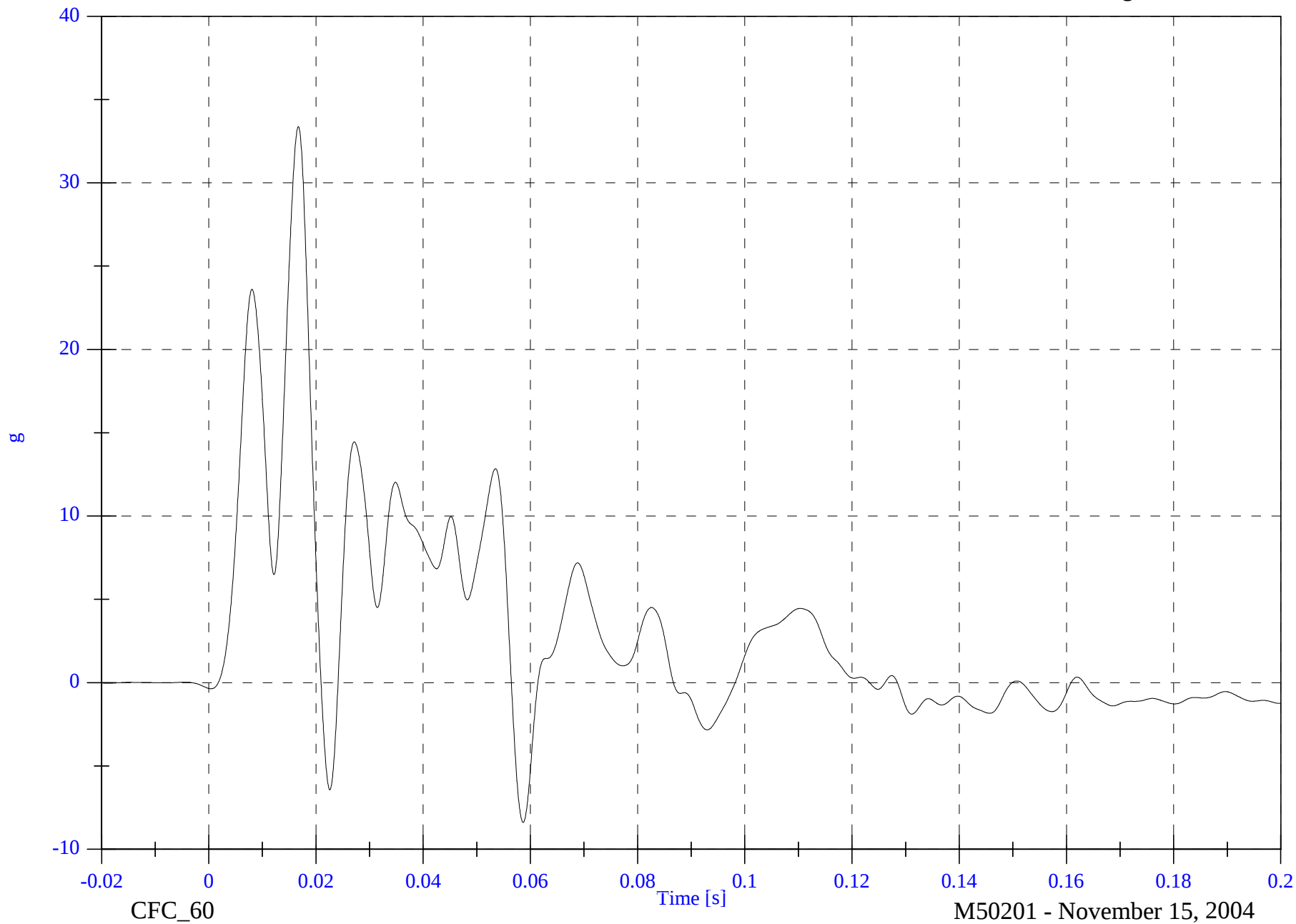
V2A15 Left Mid A Post Y

Max: 33.4 [g] at 0.017 [s]

Min: -8.4 [g] at 0.059 [s]

B-103

8765-SNCAP-06

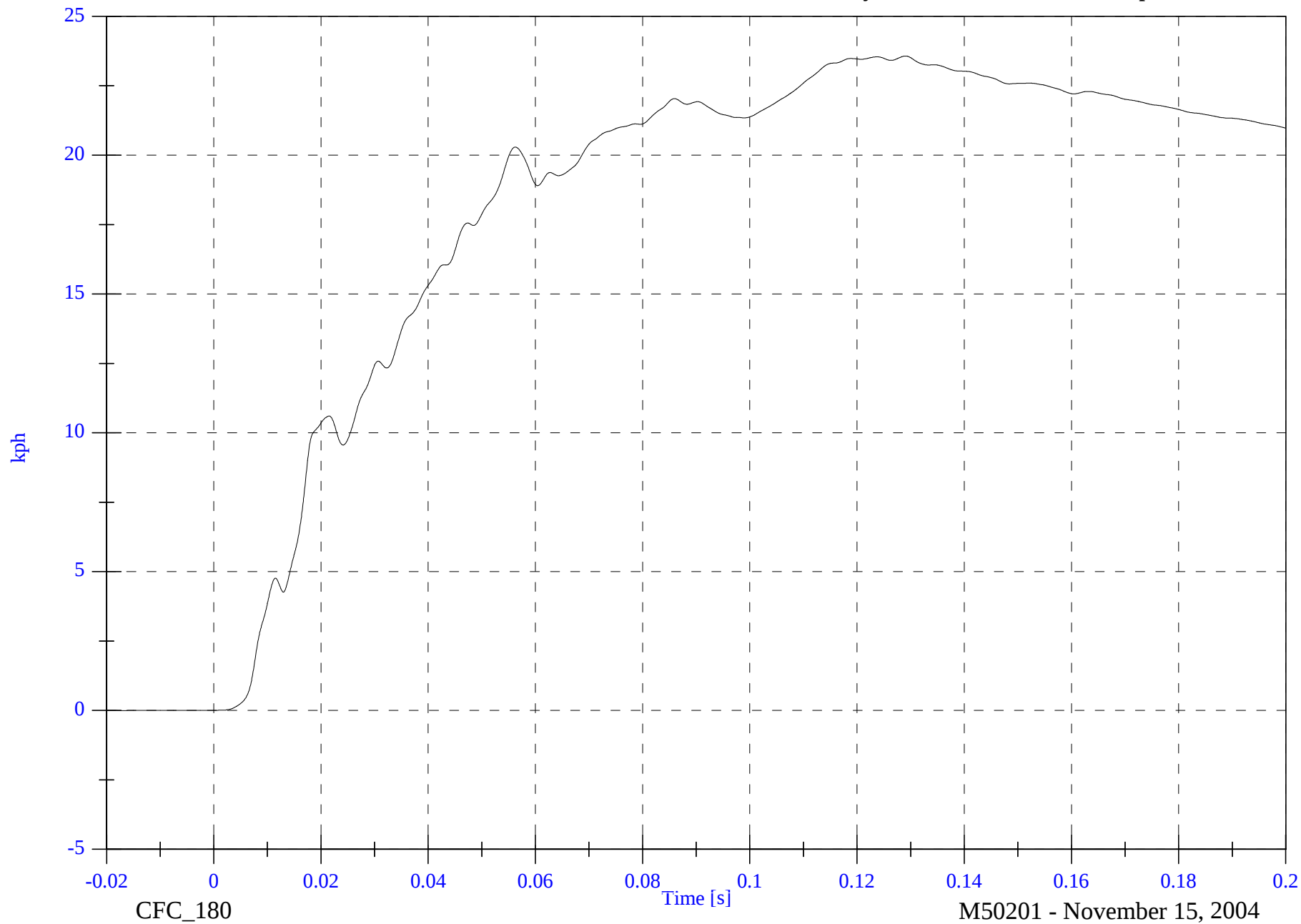


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A15 Left Mid A Post Y Velocity

Max: 23.6 [kph] at 0.129 [s]

Min: -0.0 [kph] at -0.017 [s]



B-104

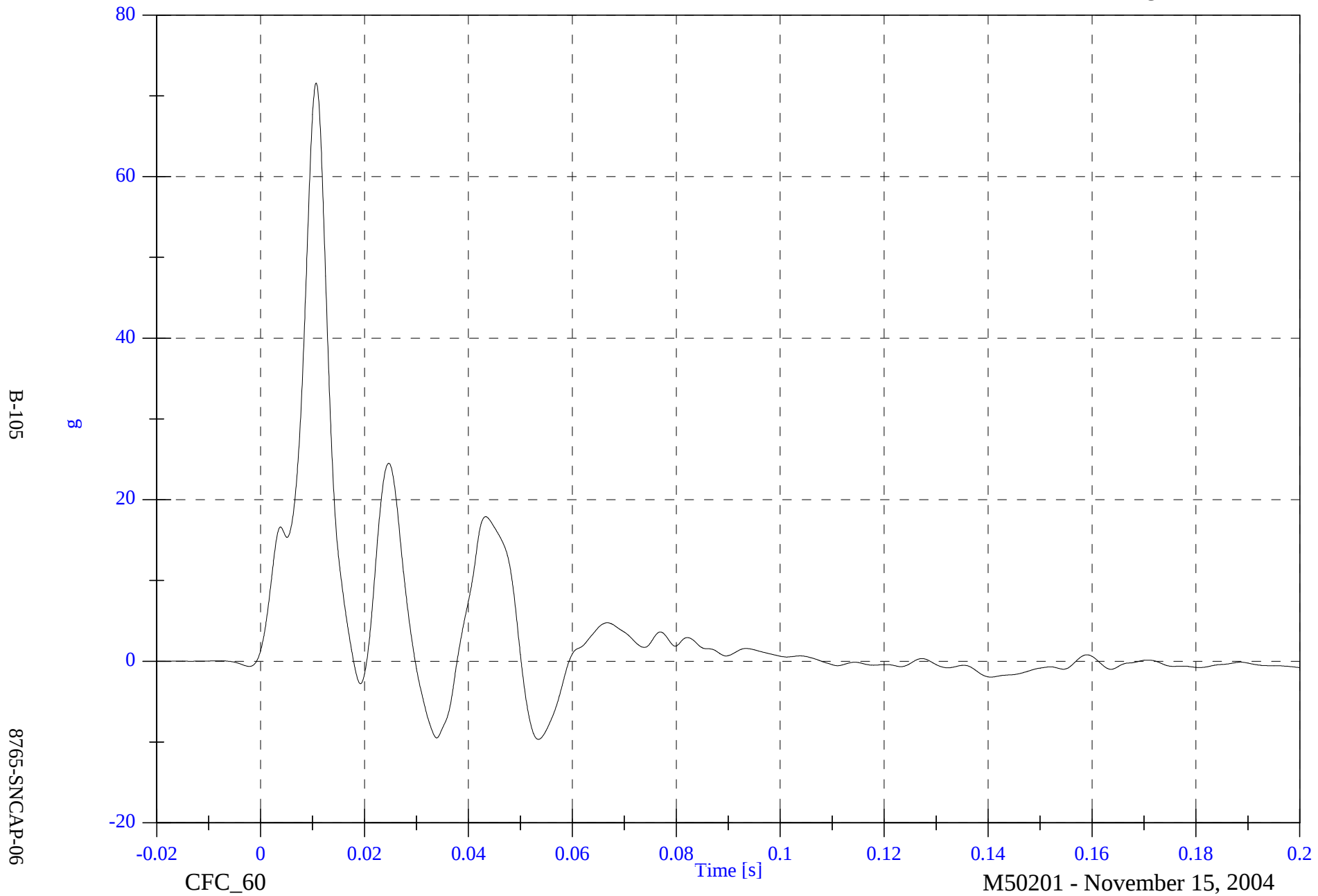
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A16 Front Seat Track Y

Max: 71.6 [g] at 0.011 [s]

Min: -9.7 [g] at 0.053 [s]

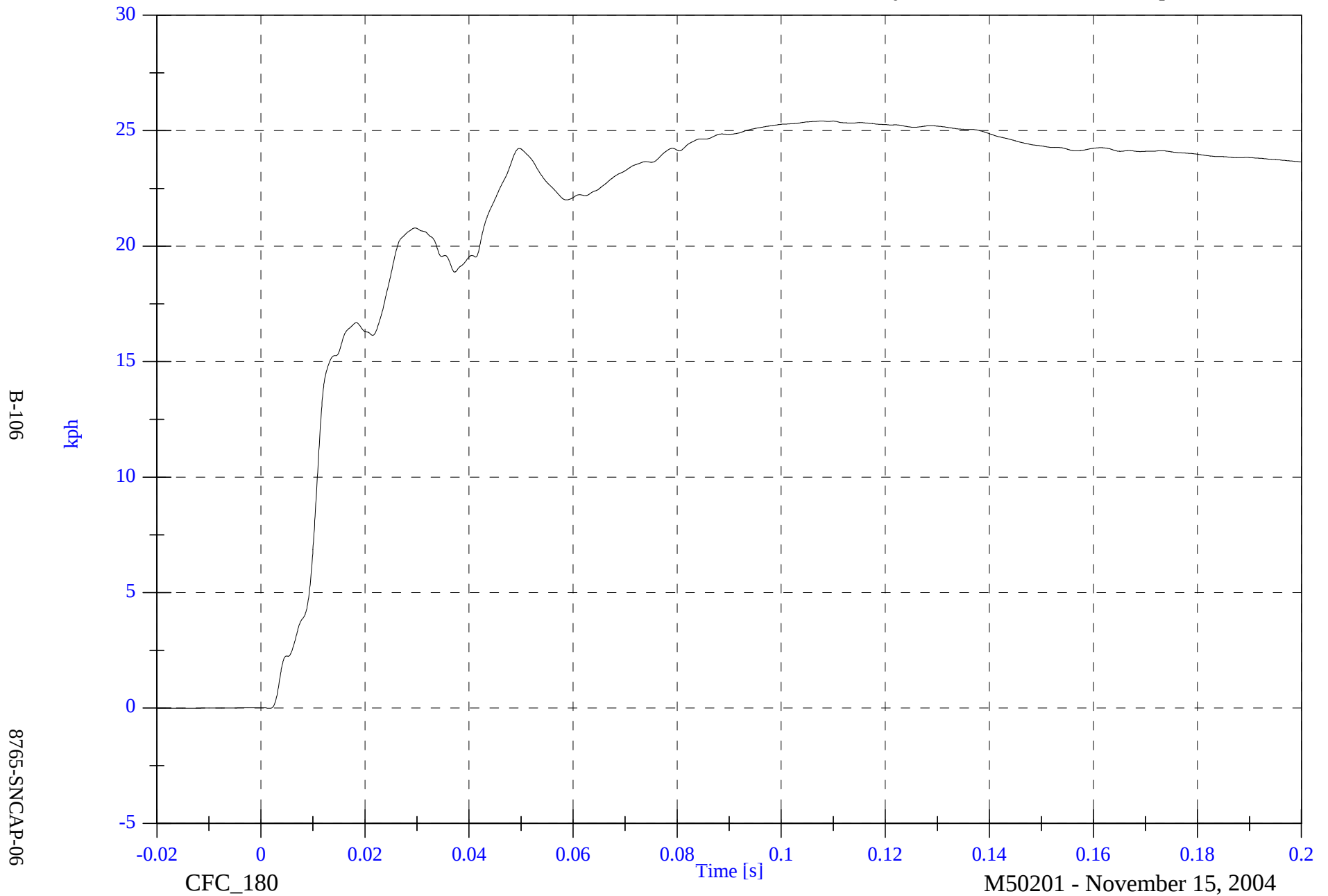


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A16 Front Seat Track Y Velocity

Max: 25.4 [kph] at 0.108 [s]

Min: -0.0 [kph] at 0.002 [s]

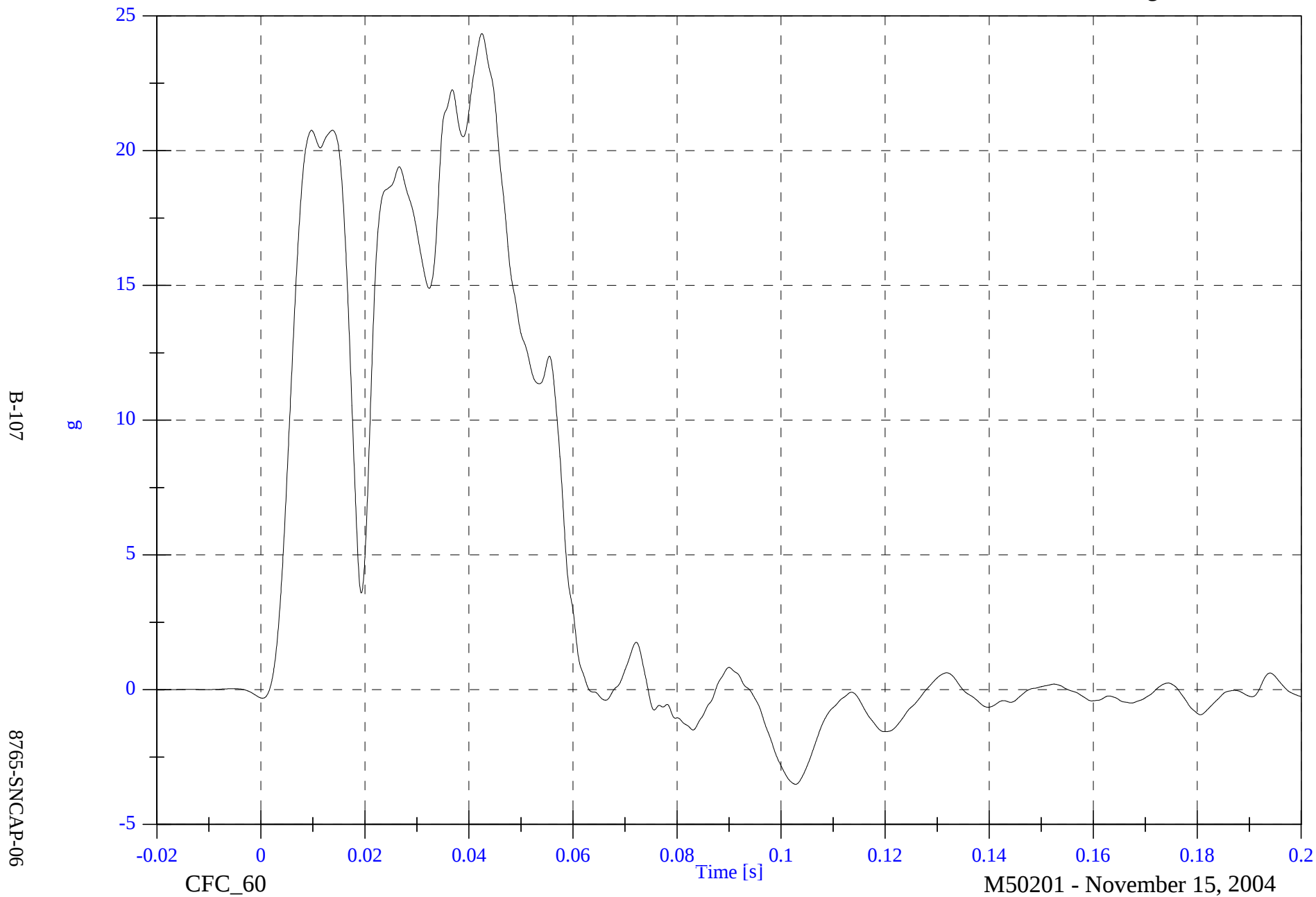


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A17 Rear Seat Track Y

Max: 24.3 [g] at 0.043 [s]

Min: -3.5 [g] at 0.103 [s]

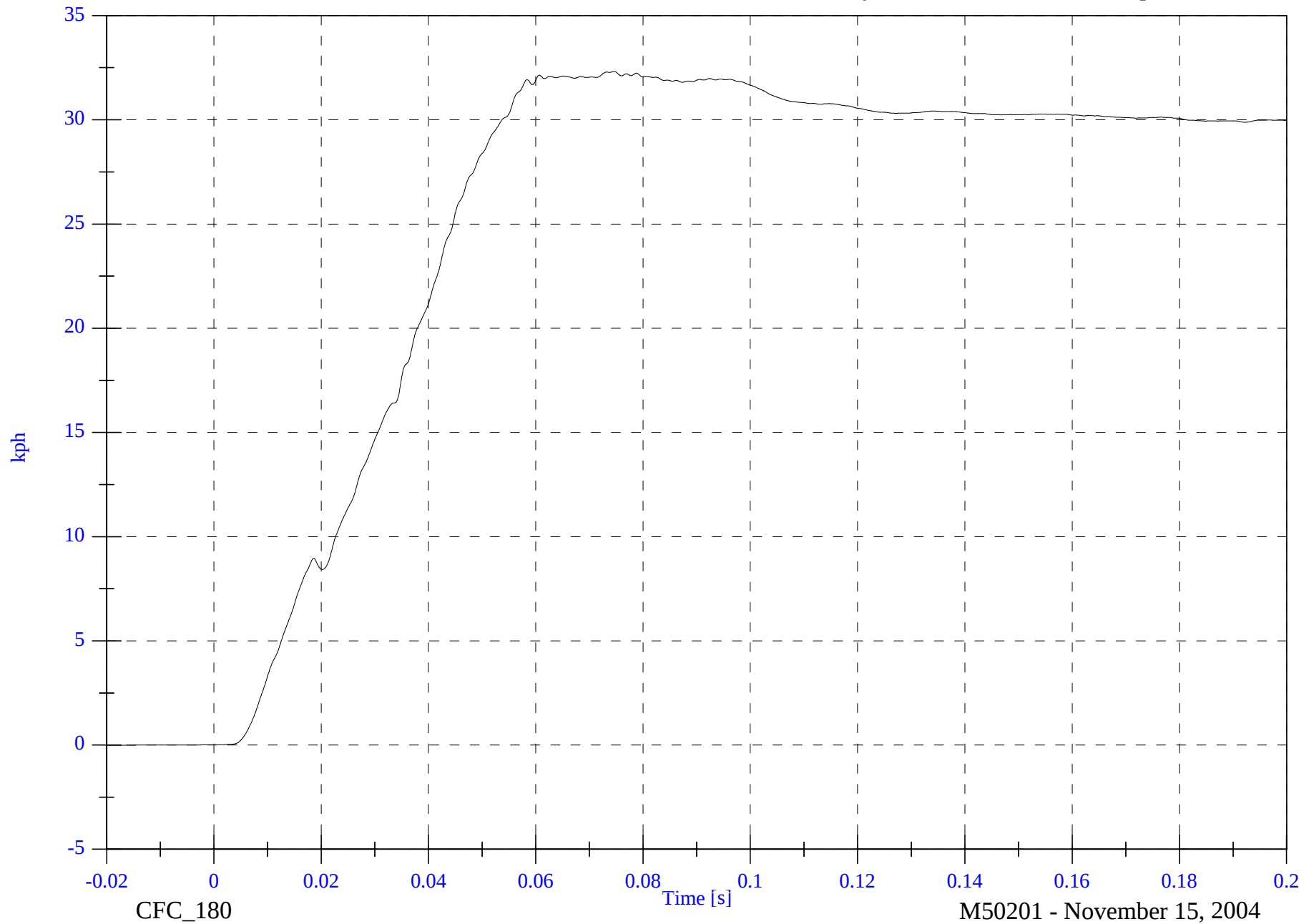


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A17 Rear Seat Track Y Velocity

Max: 32.3 [kph] at 0.075 [s]

Min: -0.0 [kph] at -0.017 [s]



B-108

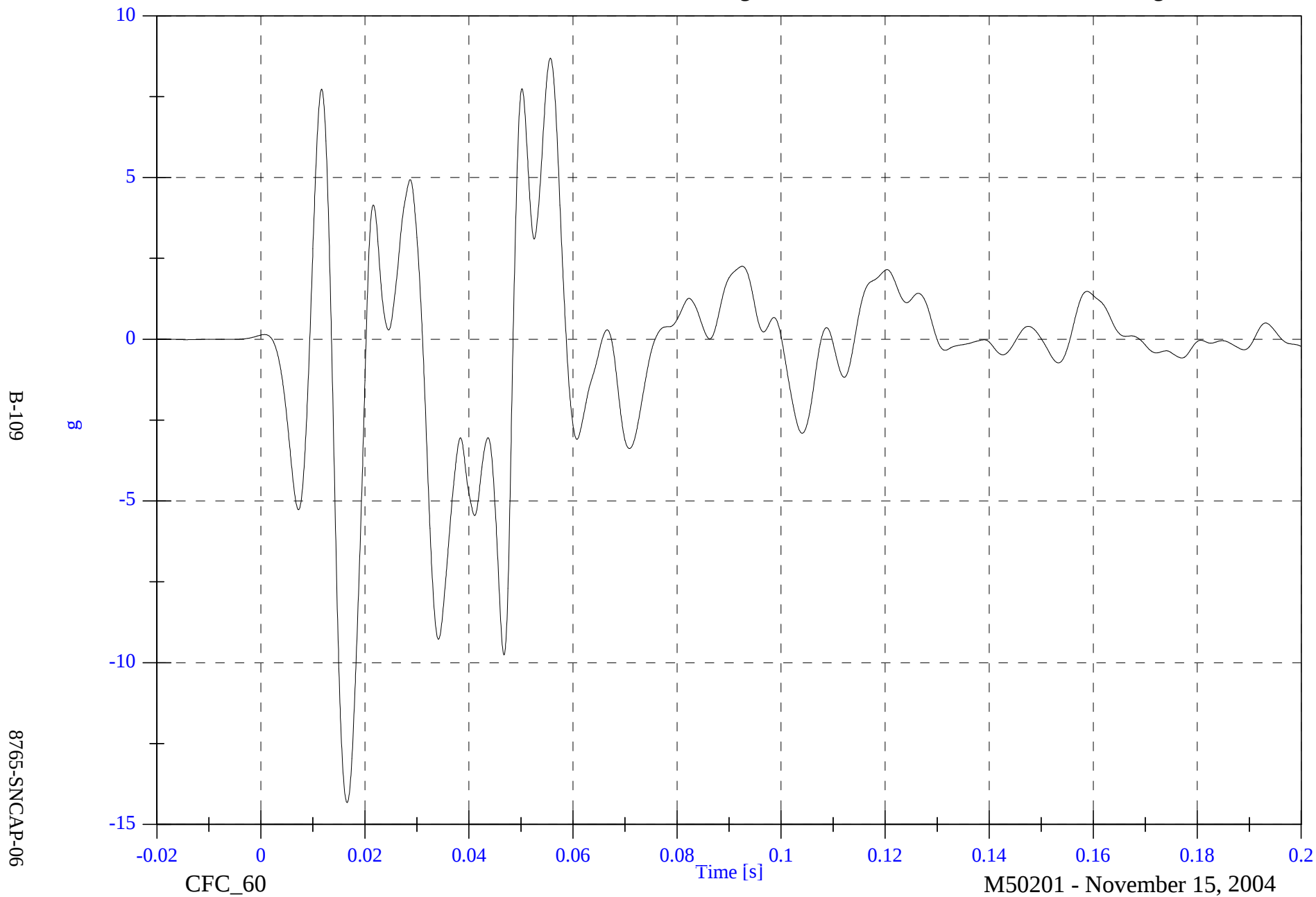
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A18 Target CG X

Max: 8.7 [g] at 0.056 [s]

Min: -14.3 [g] at 0.017 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

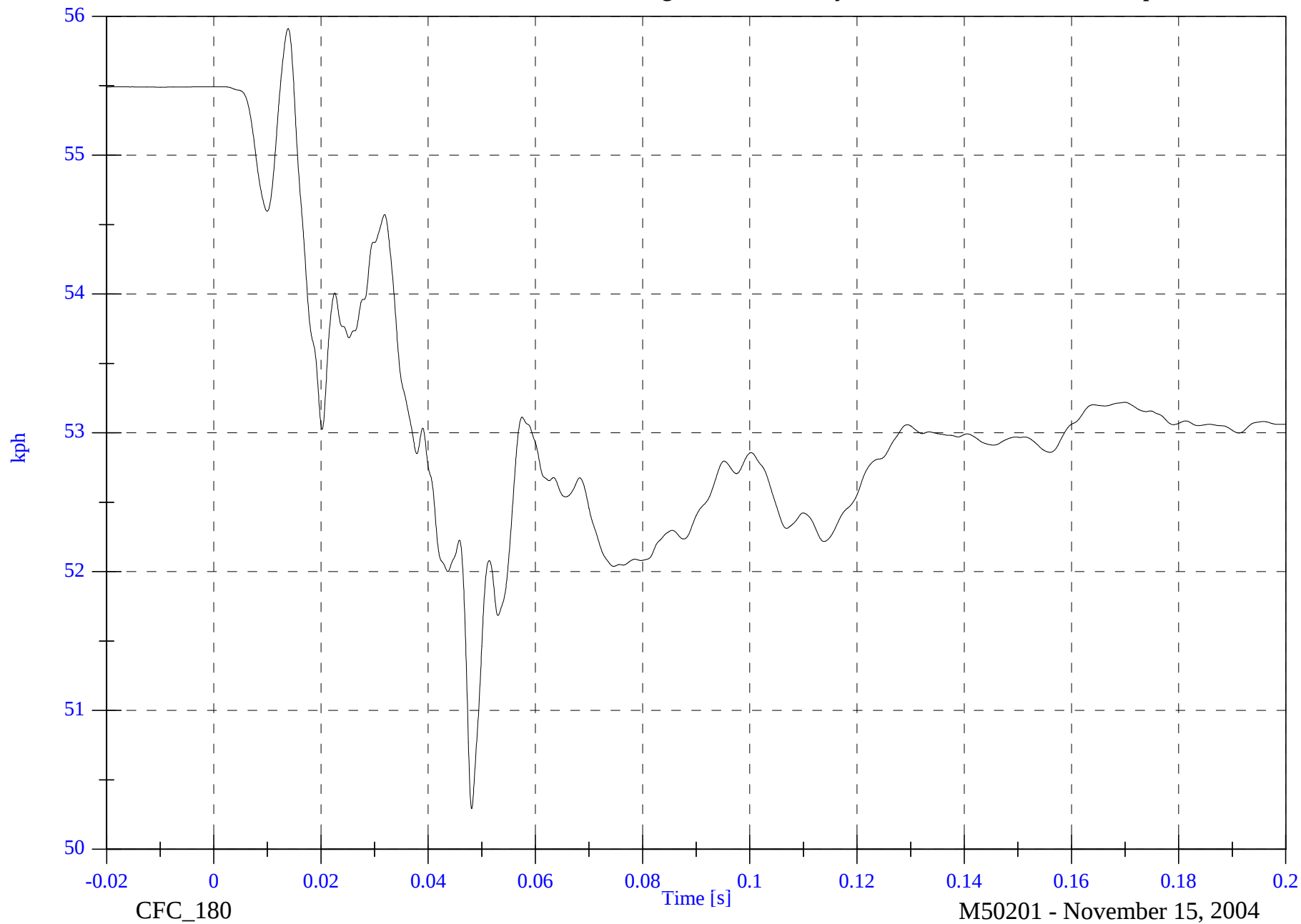
V2A18 Target CG X Velocity

Max: 55.9 [kph] at 0.014 [s]

Min: 50.3 [kph] at 0.048 [s]

B-110

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

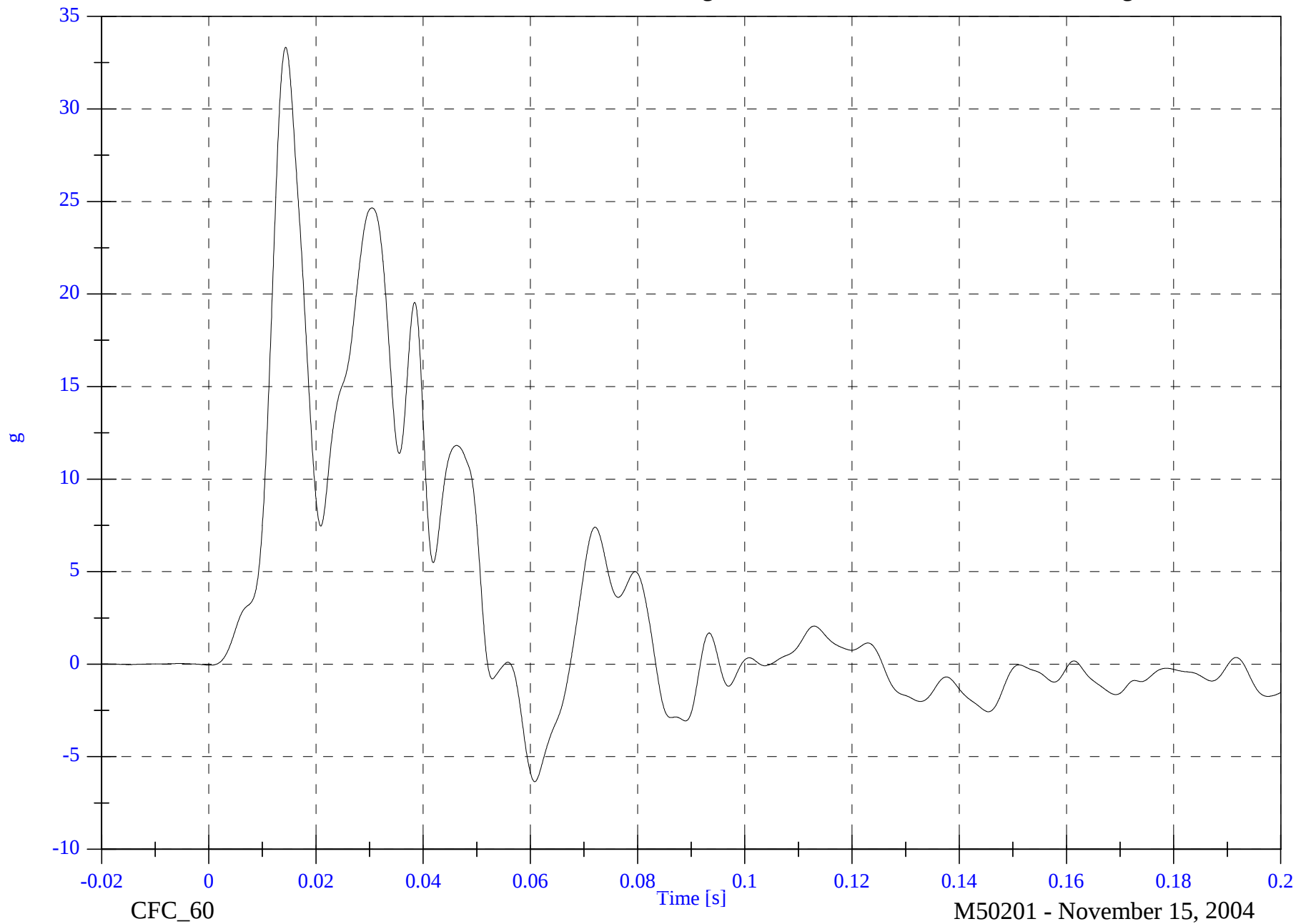
V2A18 Target CG Y

Max: 33.3 [g] at 0.014 [s]

Min: -6.3 [g] at 0.061 [s]

B-111

8765-SNCAP-06

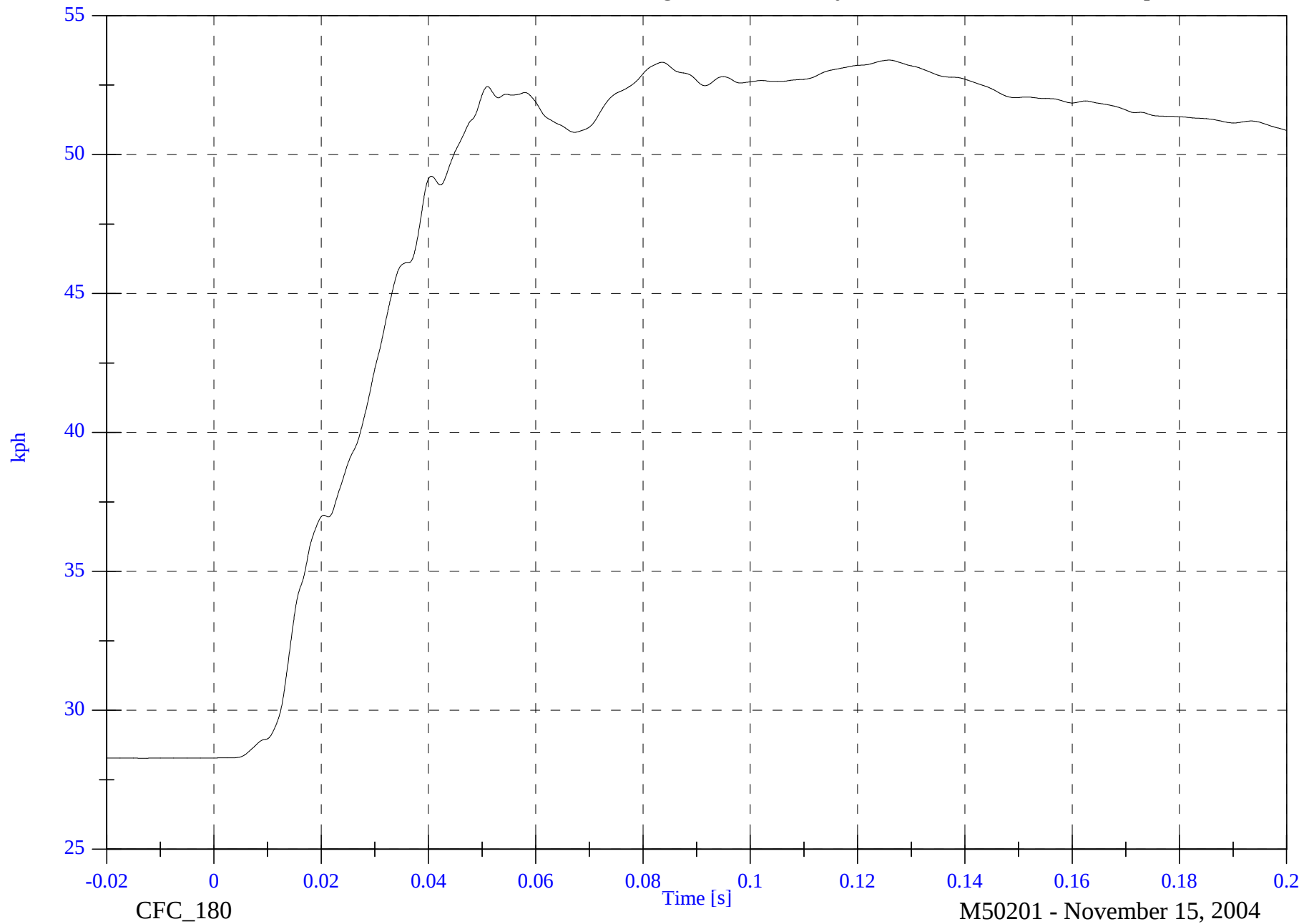


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A18 Target CG Y Velocity

Max: 53.4 [kph] at 0.126 [s]

Min: 28.3 [kph] at -0.013 [s]



B-112

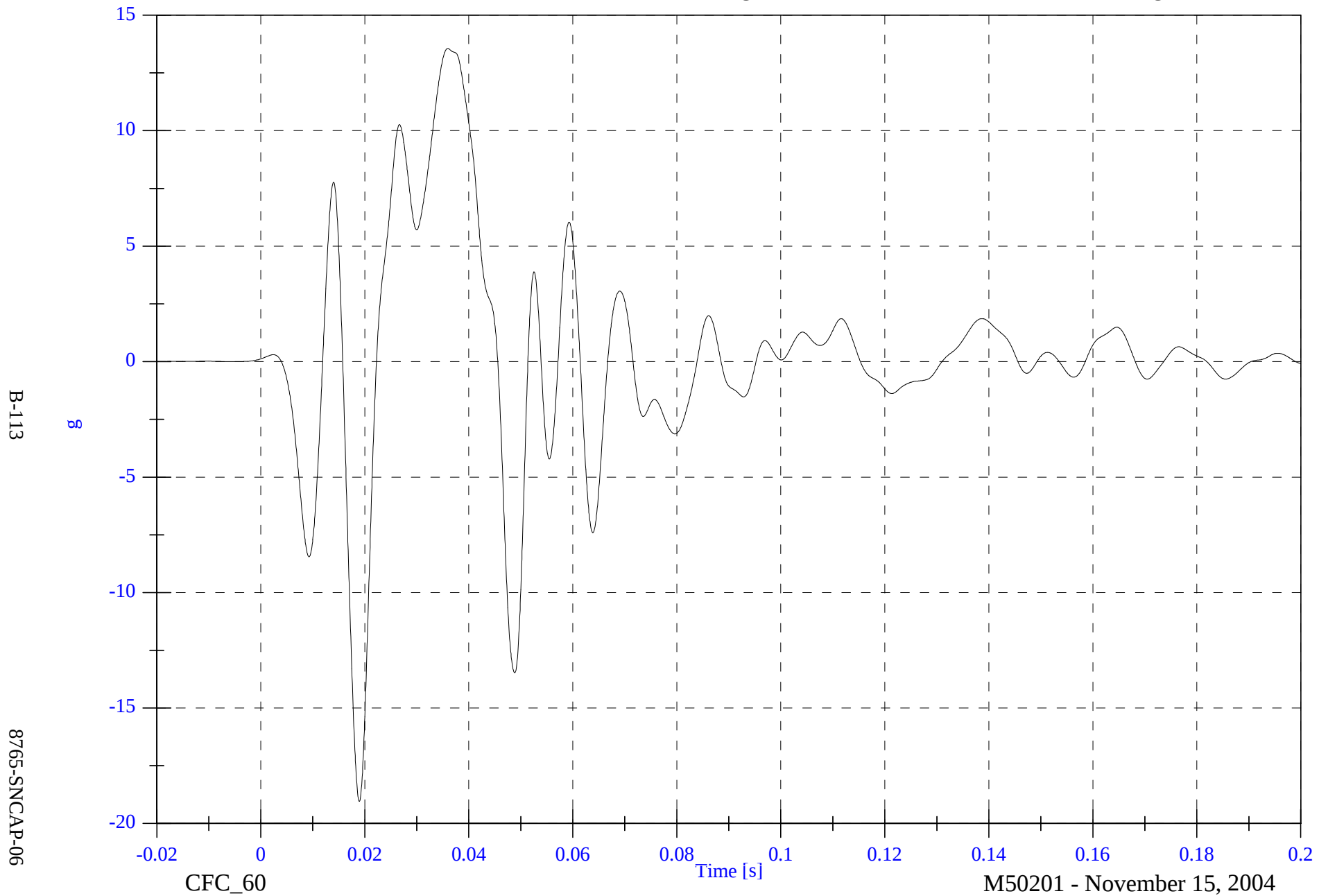
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A18 Target CG Z

Max: 13.6 [g] at 0.036 [s]

Min: -19.0 [g] at 0.019 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

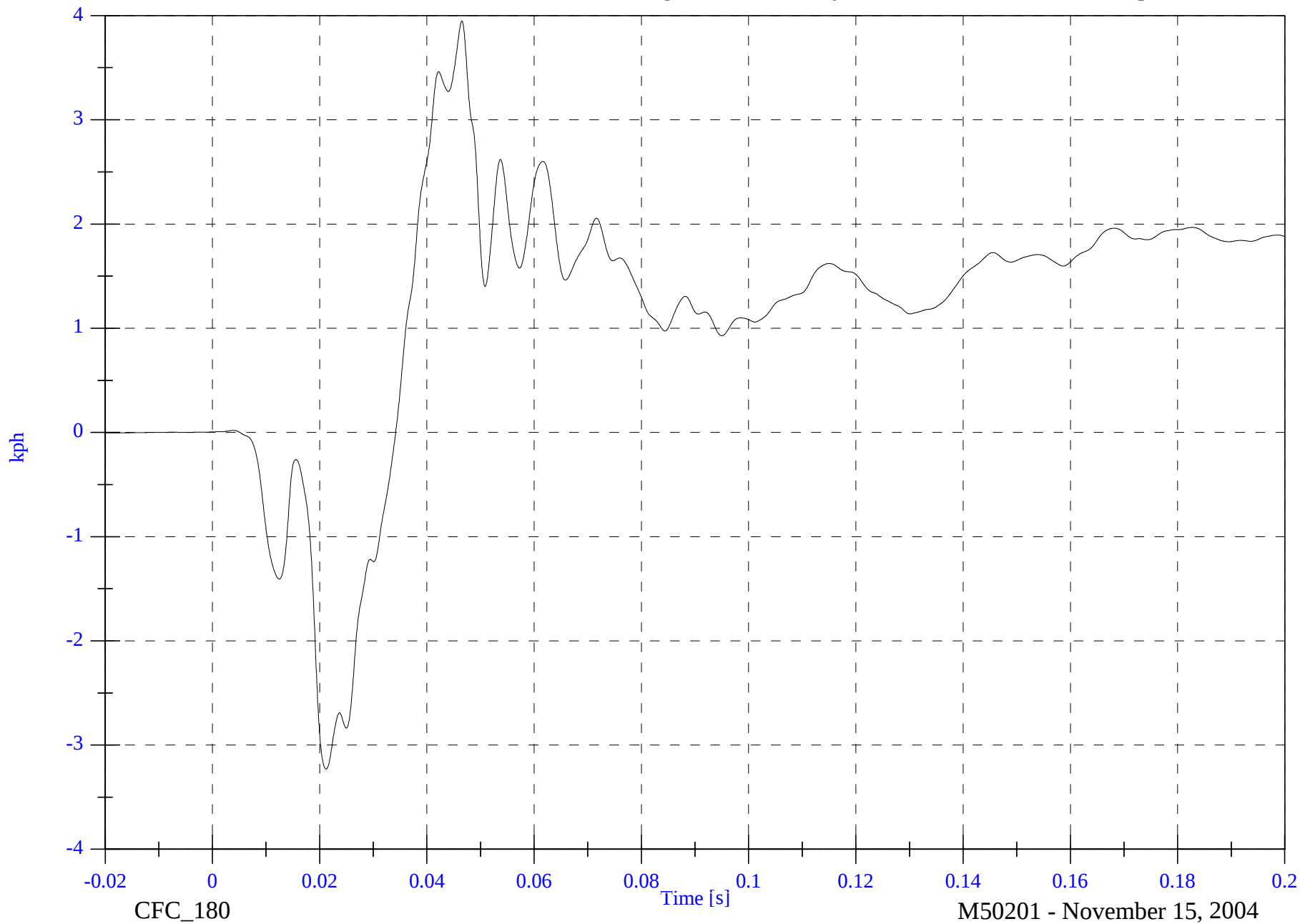
V2A18 Target CG Z Velocity

Max: 3.9 [kph] at 0.047 [s]

Min: -3.2 [kph] at 0.021 [s]

B-114

8765-SNCAP-06

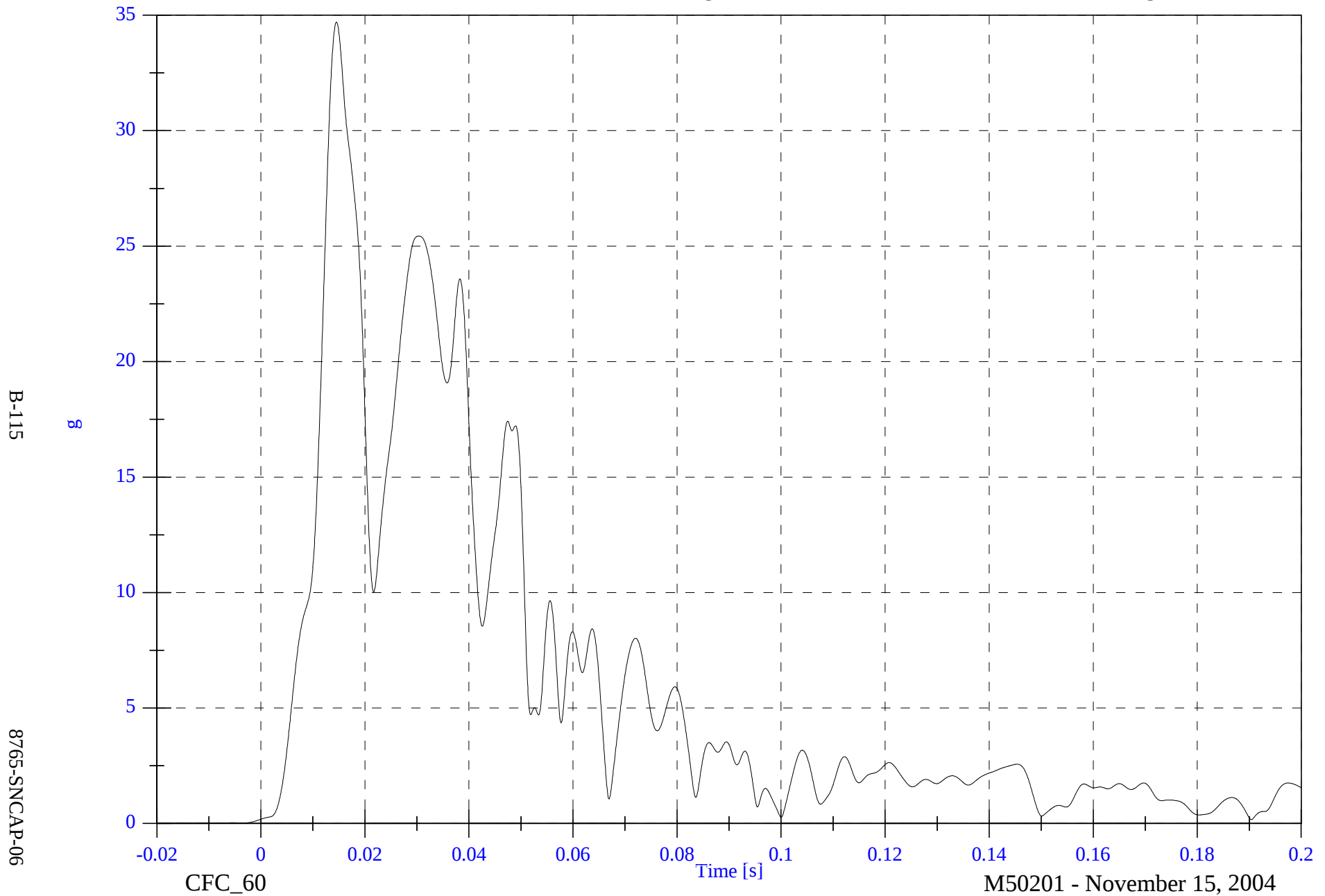


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2A18 Target CG Resultant

Max: 34.7 [g] at 0.014 [s]

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

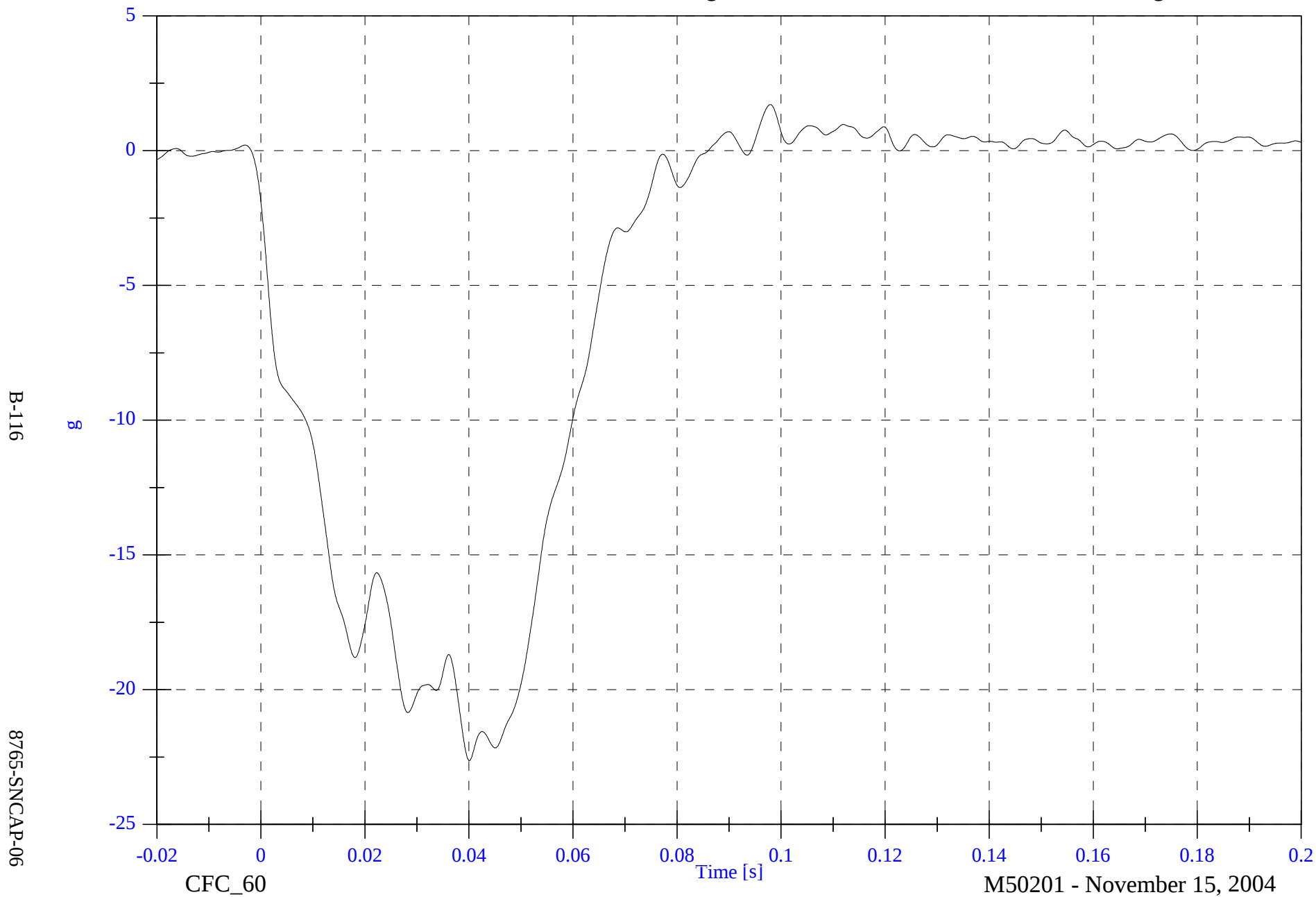


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V1 Moving Barrier CG X

Max: 1.7 [g] at 0.098 [s]

Min: -22.6 [g] at 0.040 [s]

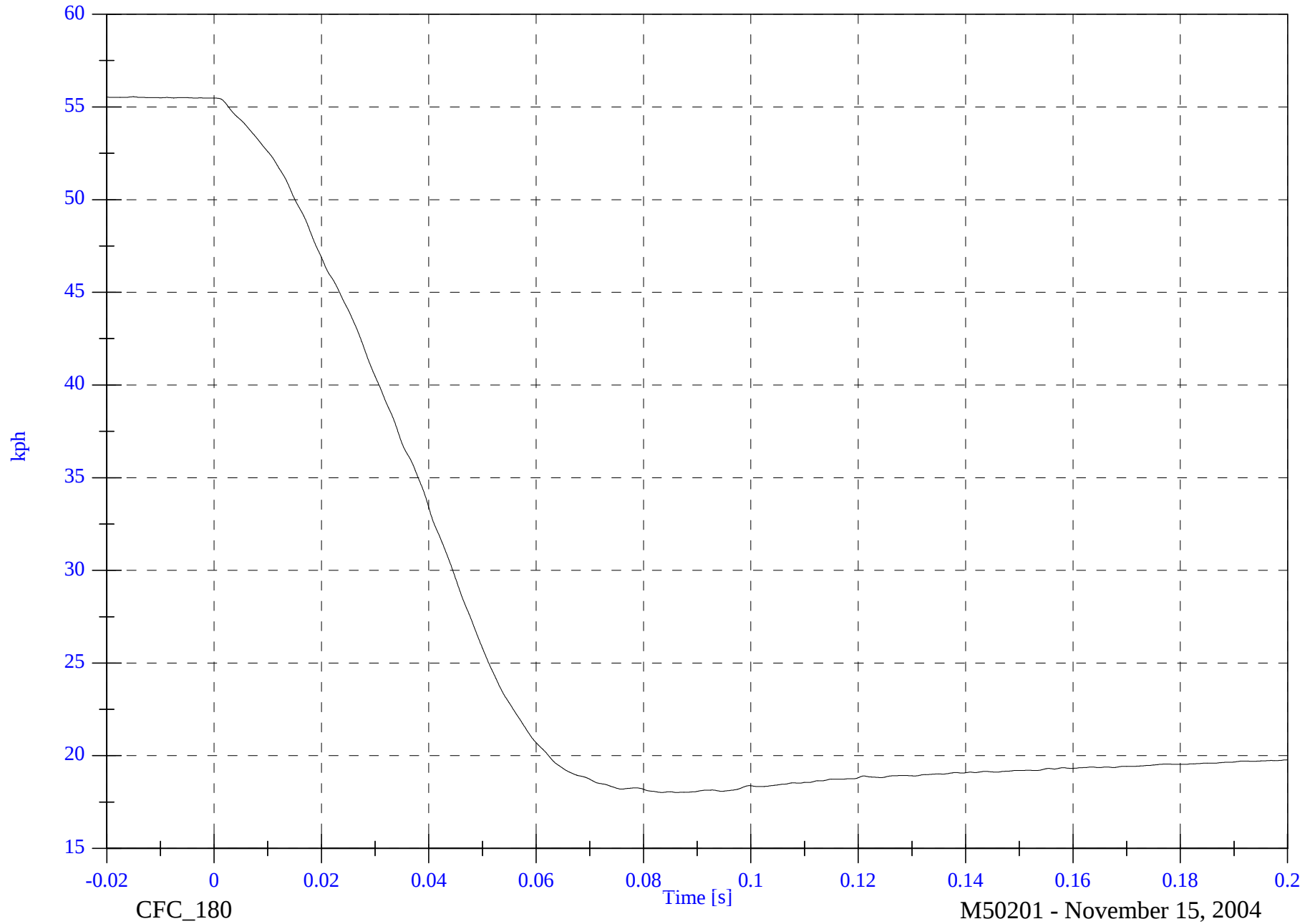


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V1 Moving Barrier CG X Velocity

Max: 55.5 [kph] at -0.015 [s]

Min: 18.0 [kph] at 0.086 [s]



B-117

8765-SNCAP-06

CFC_180

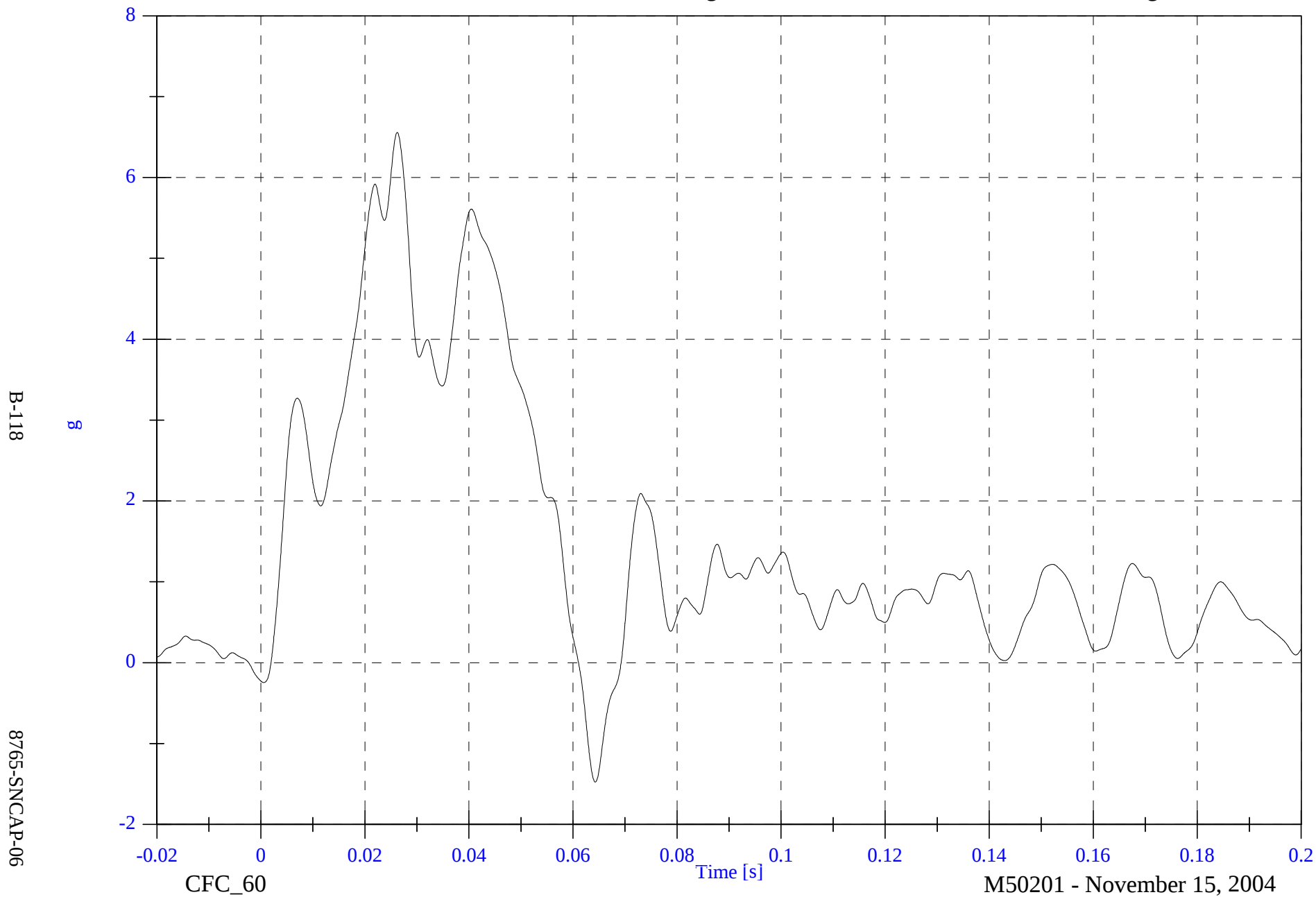
M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V1 Moving Barrier CG Y

Max: 6.6 [g] at 0.026 [s]

Min: -1.5 [g] at 0.064 [s]

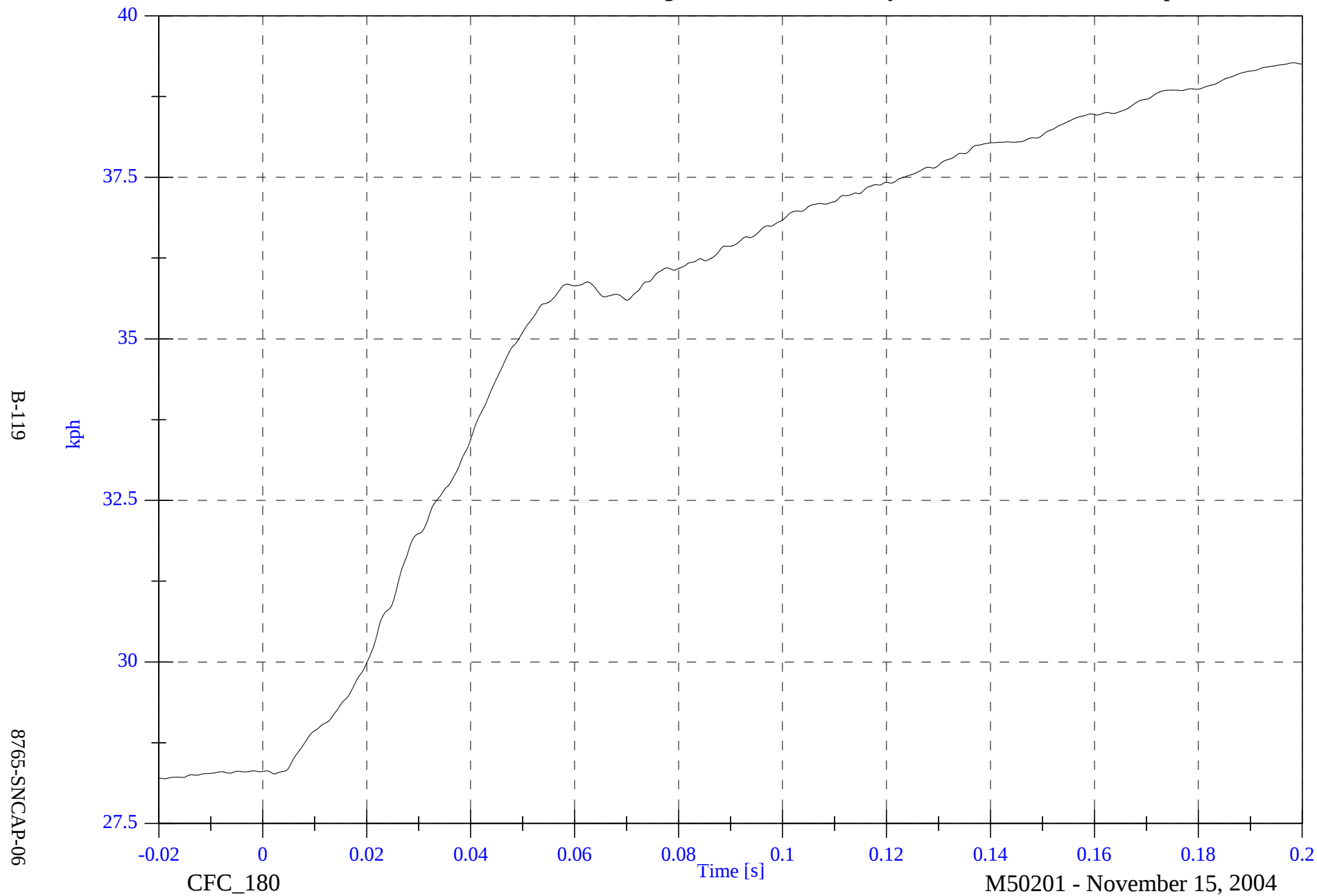


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V1 Moving Barrier CG Y Velocity

Max: 39.3 [kph] at 0.198 [s]

Min: 28.2 [kph] at -0.019 [s]

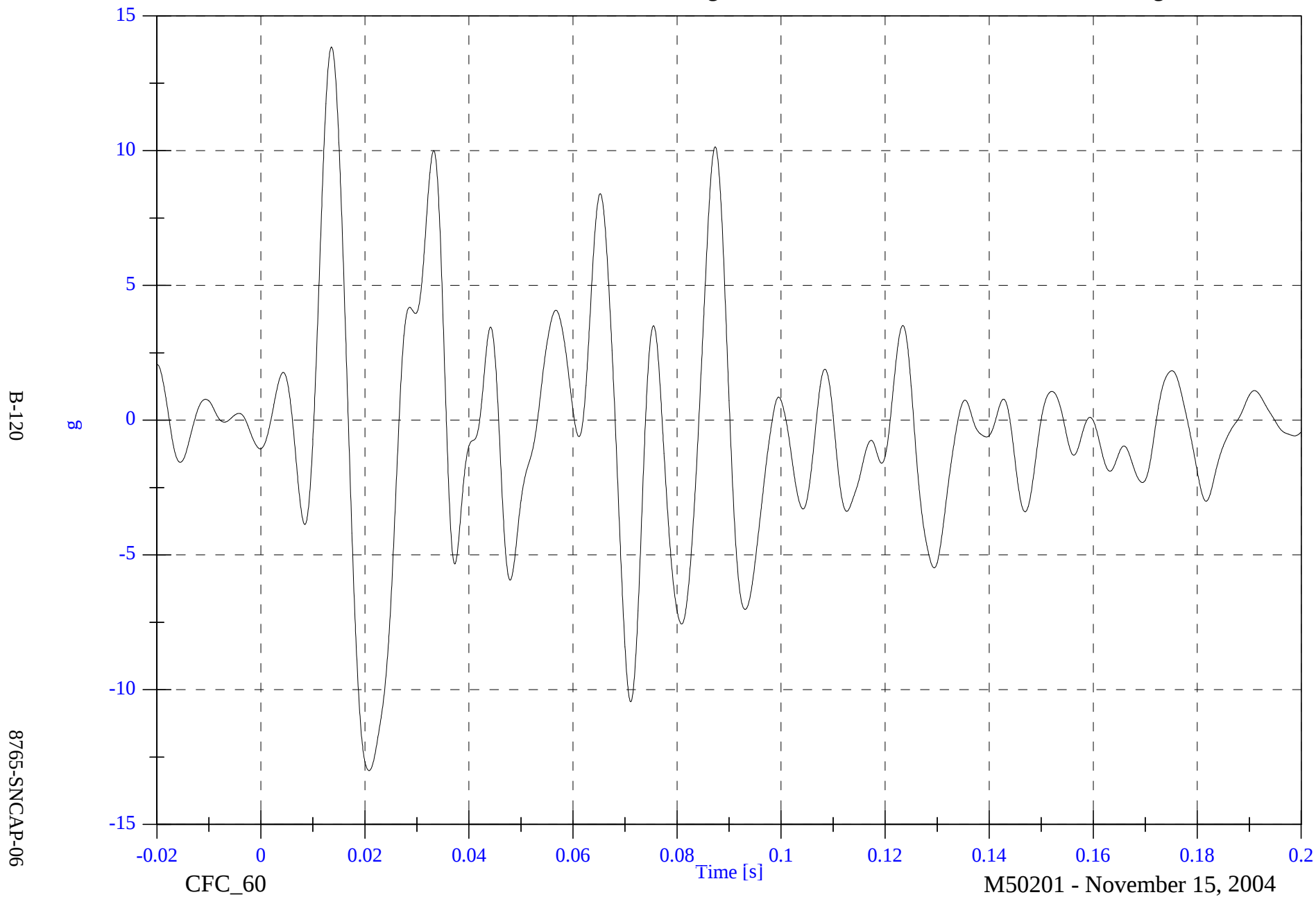


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V1 Moving Barrier CG Z

Max: 13.8 [g] at 0.014 [s]

Min: -13.0 [g] at 0.021 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V1 Moving Barrier CG Z Velocity

Max: 1.8 [kph] at 0.017 [s]

Min: -4.1 [kph] at 0.189 [s]



B-121

8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

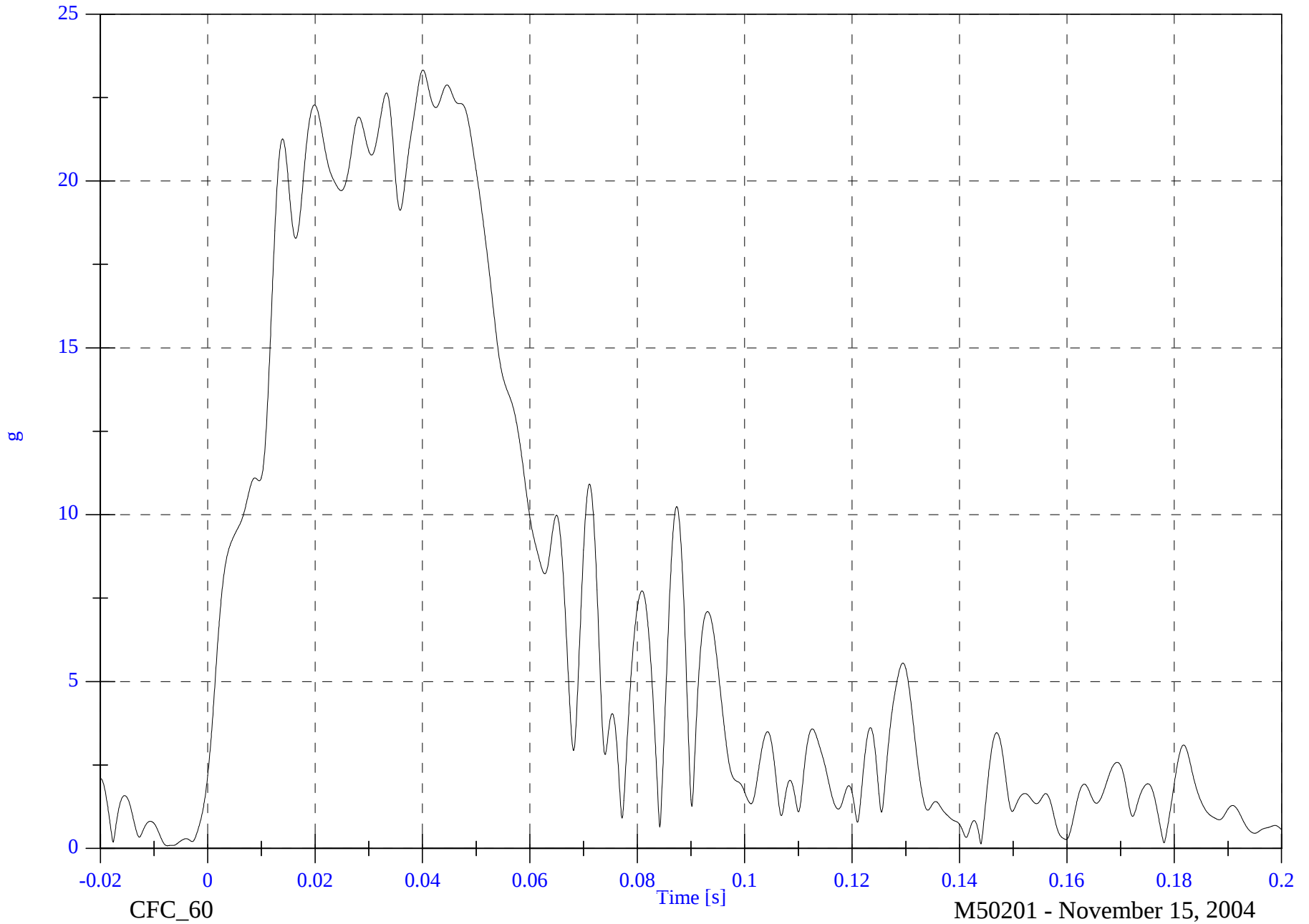
V1 Moving Barrier CG Resultant

Max: 23.3 [g] at 0.040 [s]

Min: 0.1 [g] at -0.007 [s]

B-122

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

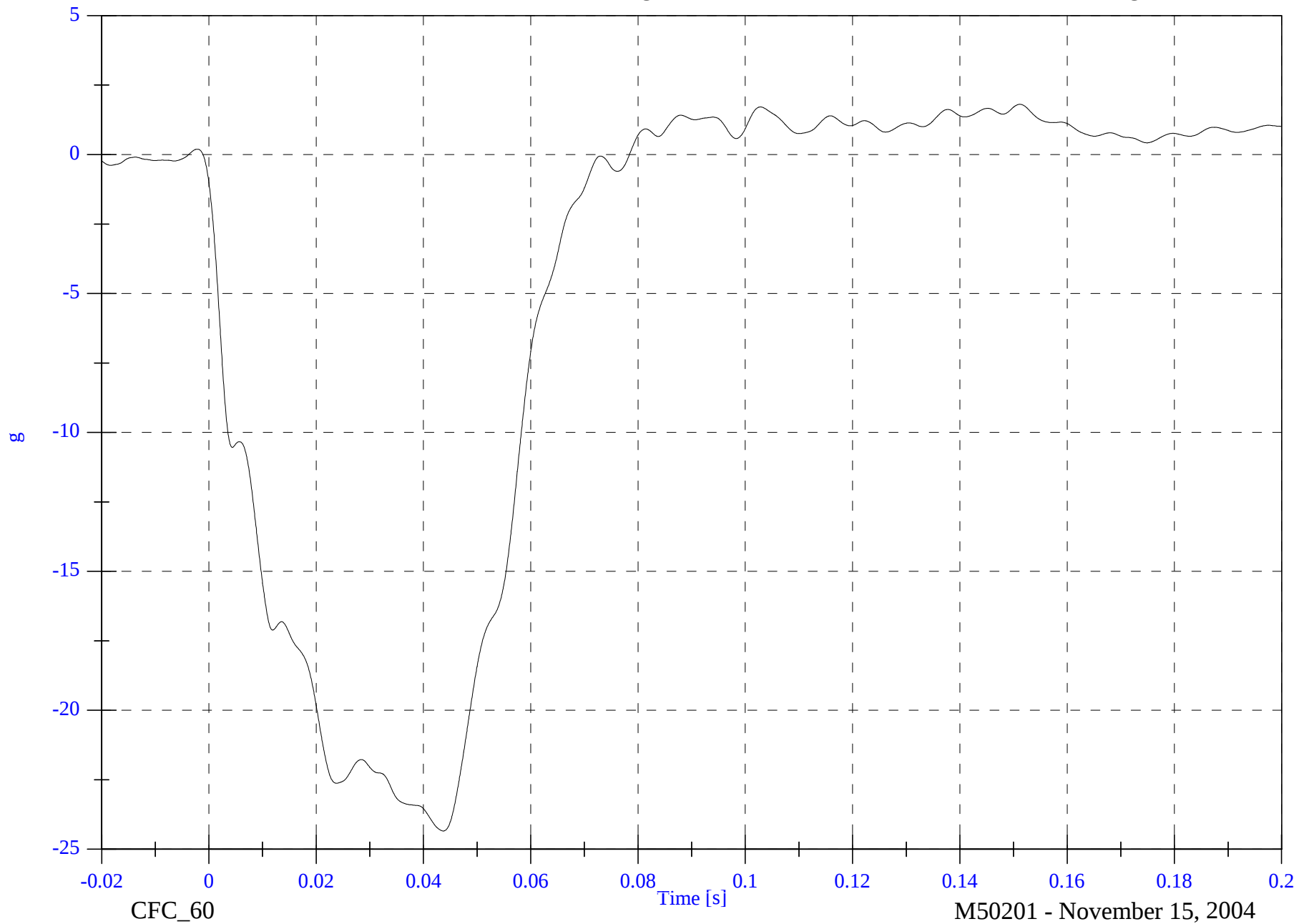
V1 Moving Barrier Left Rail X

Max: 1.8 [g] at 0.151 [s]

Min: -24.3 [g] at 0.044 [s]

B-123

8765-SNCAP-06

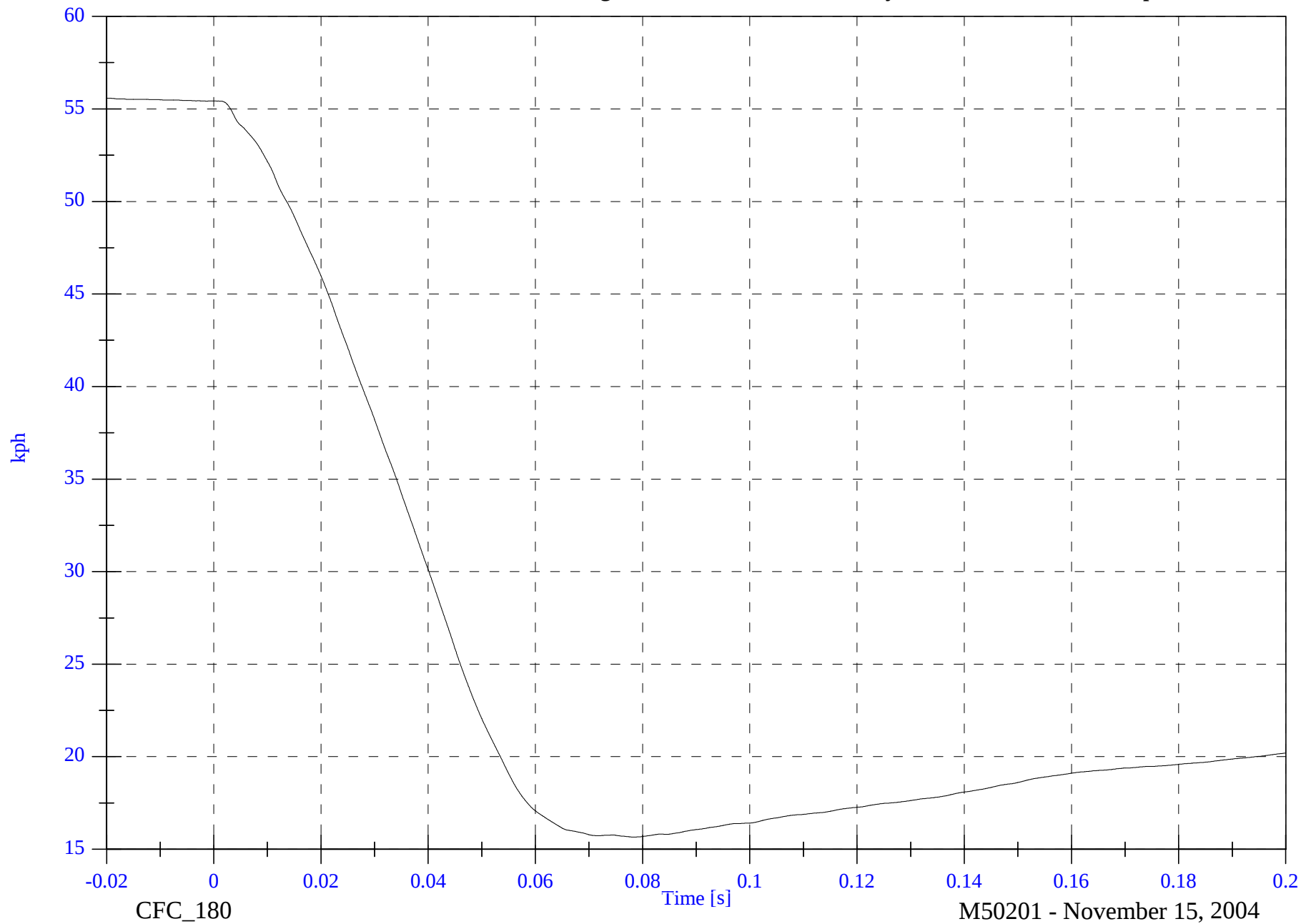


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V1 Moving Barrier Left Rail X Velocity

Max: 55.6 [kph] at -0.020 [s]

Min: 15.7 [kph] at 0.078 [s]



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8765-SNCAP-06

CFC_180

M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

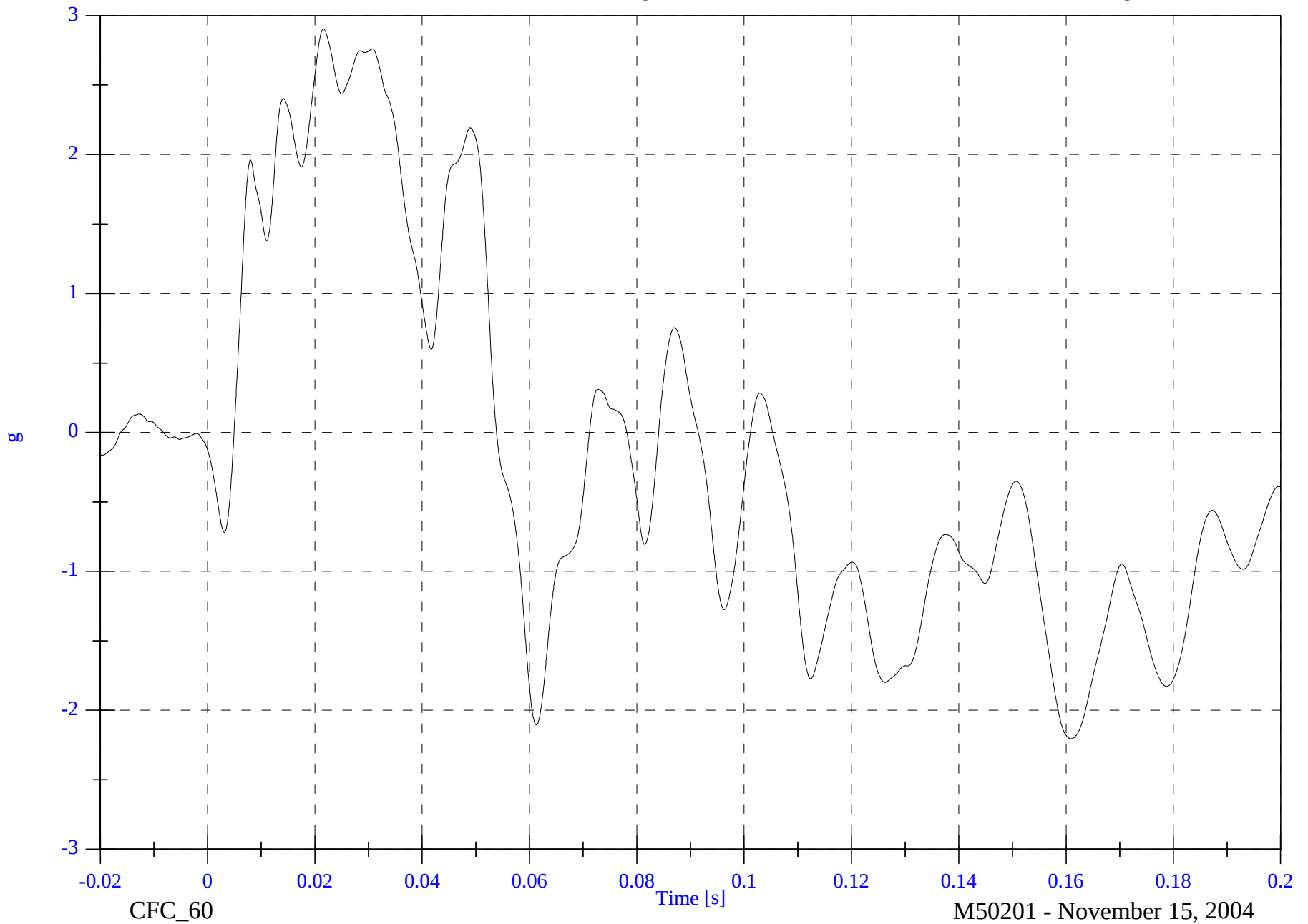
V1 Moving Barrier Left Rail Y

Max: 2.9 [g] at 0.022 [s]

Min: -2.2 [g] at 0.161 [s]

B-125

8765-SNCAP-06

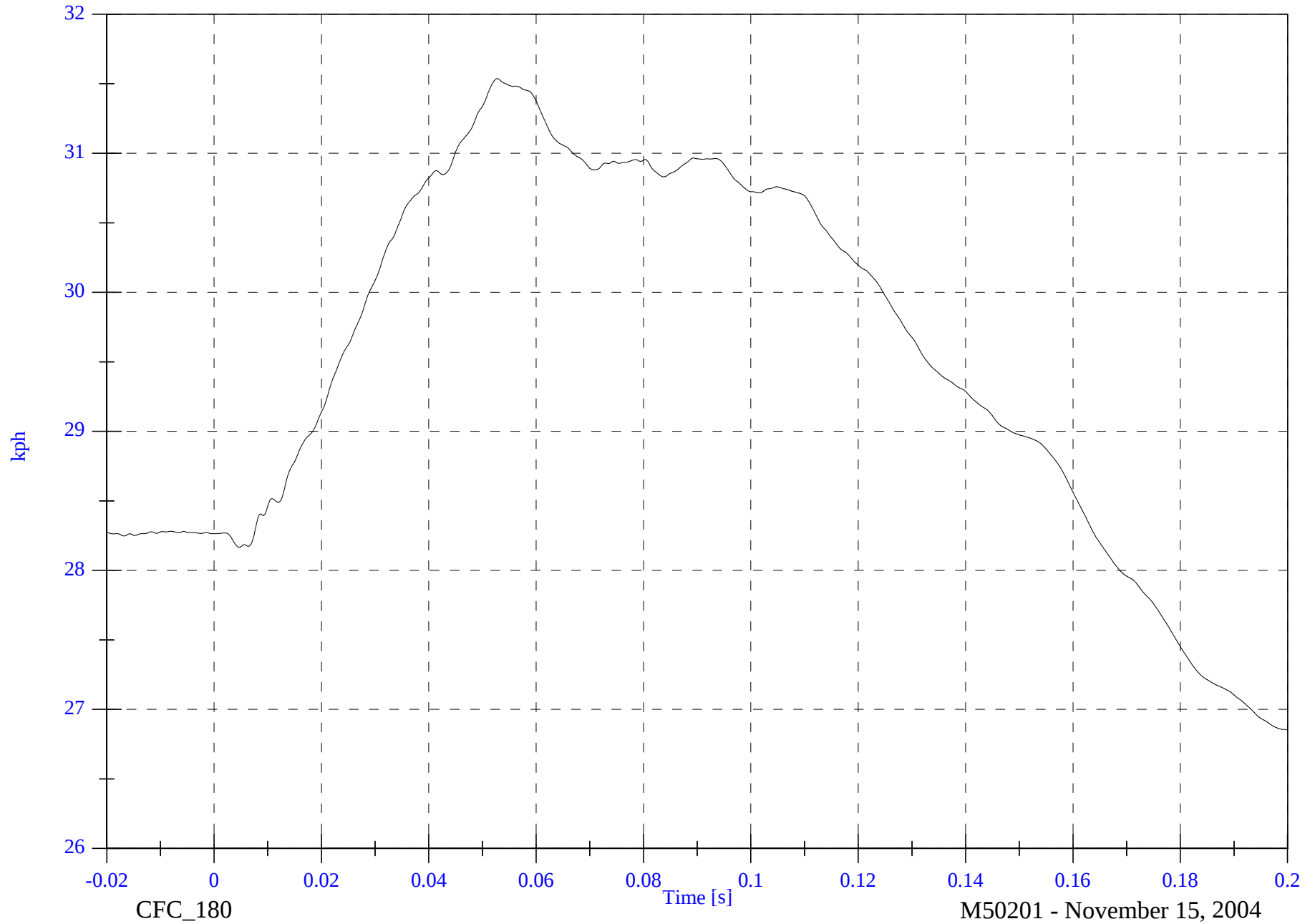


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V1 Moving Barrier Left Rail Y Velocity

Max: 31.5 [kph] at 0.053 [s]

Min: 26.9 [kph] at 0.200 [s]



B-126

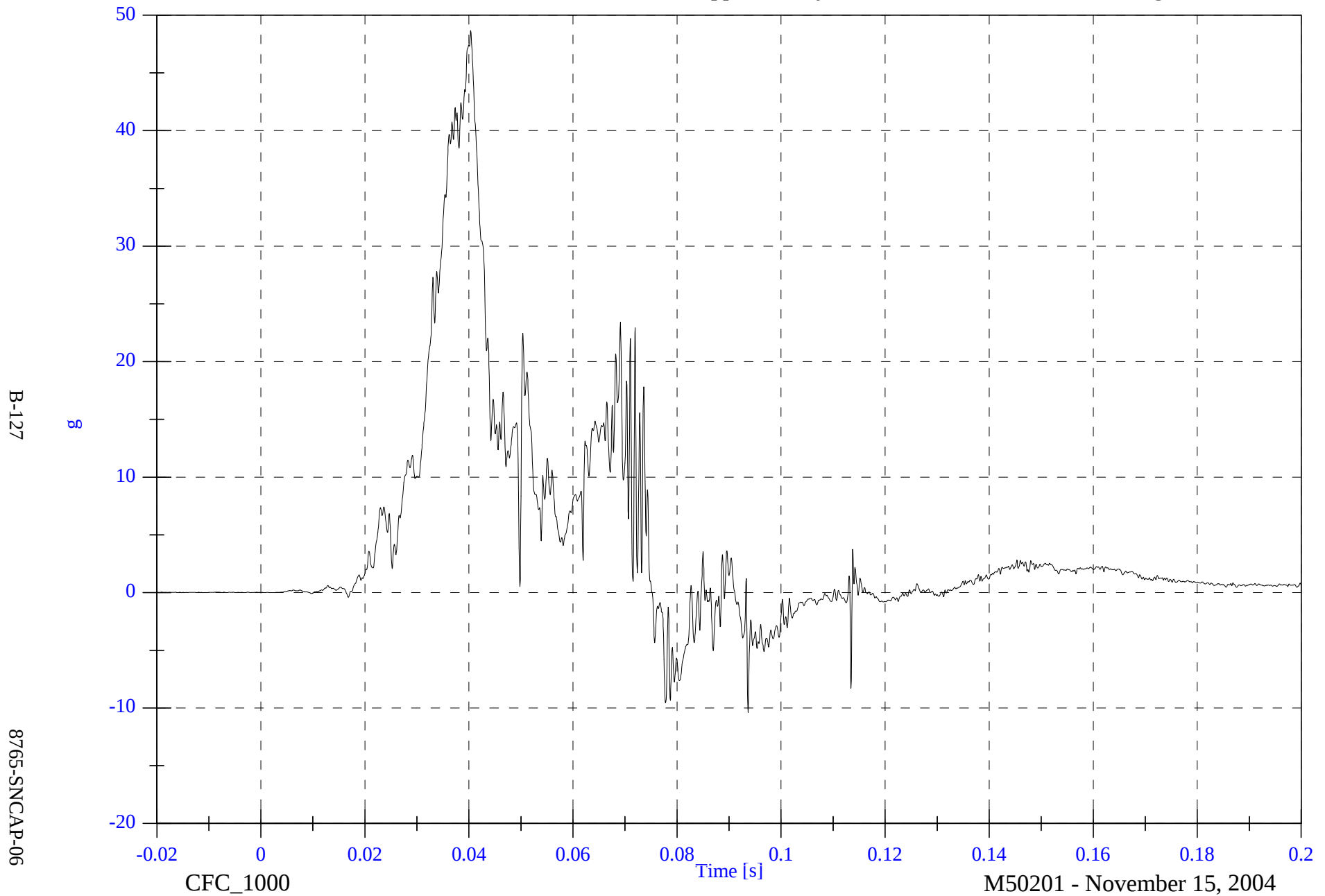
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Upper Rib Ry

Max: 48.7 [g] at 0.040 [s]

Min: -10.4 [g] at 0.094 [s]

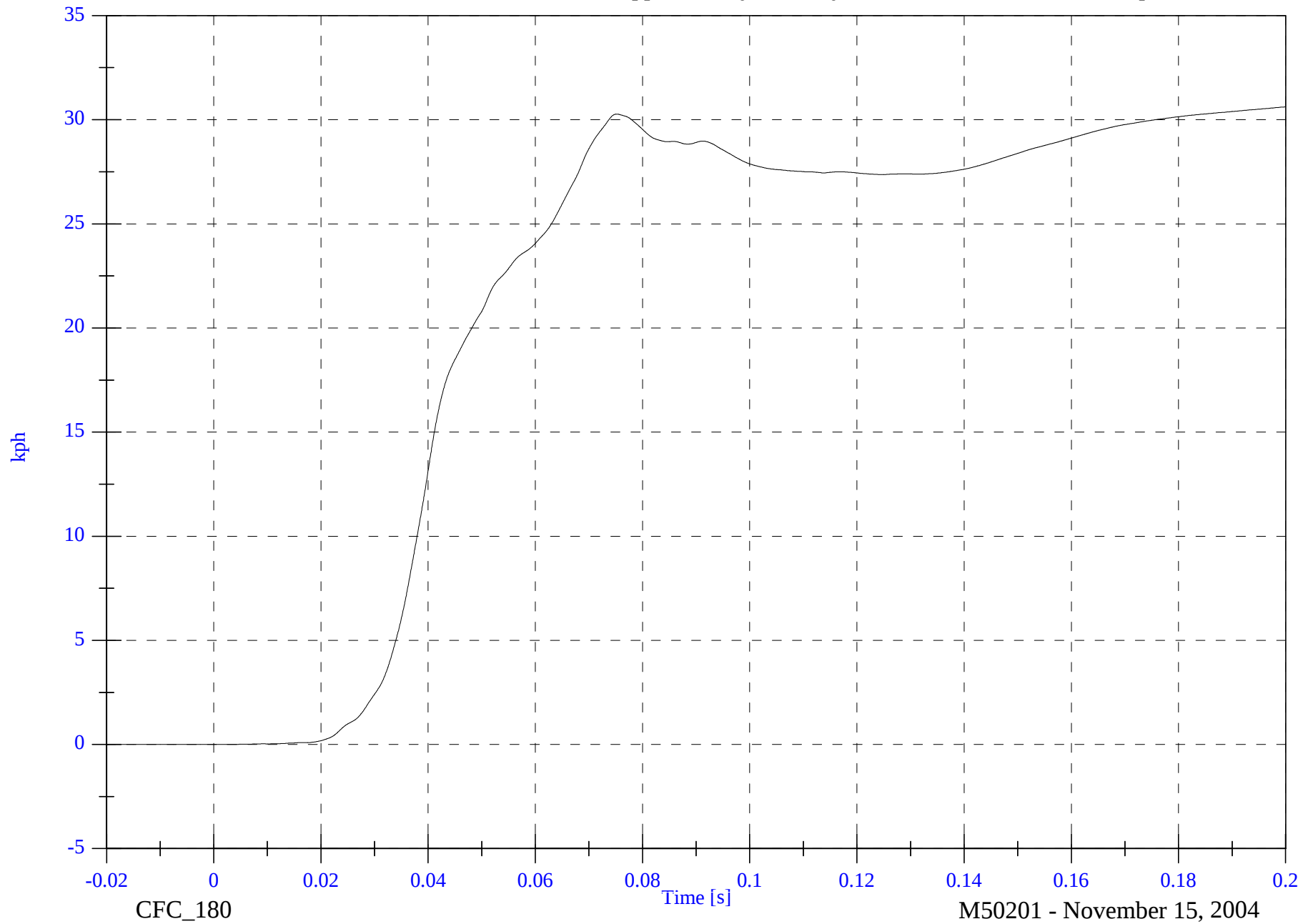


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Upper Rib Ry Velocity

Max: 30.6 [kph] at 0.200 [s]

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



B-128

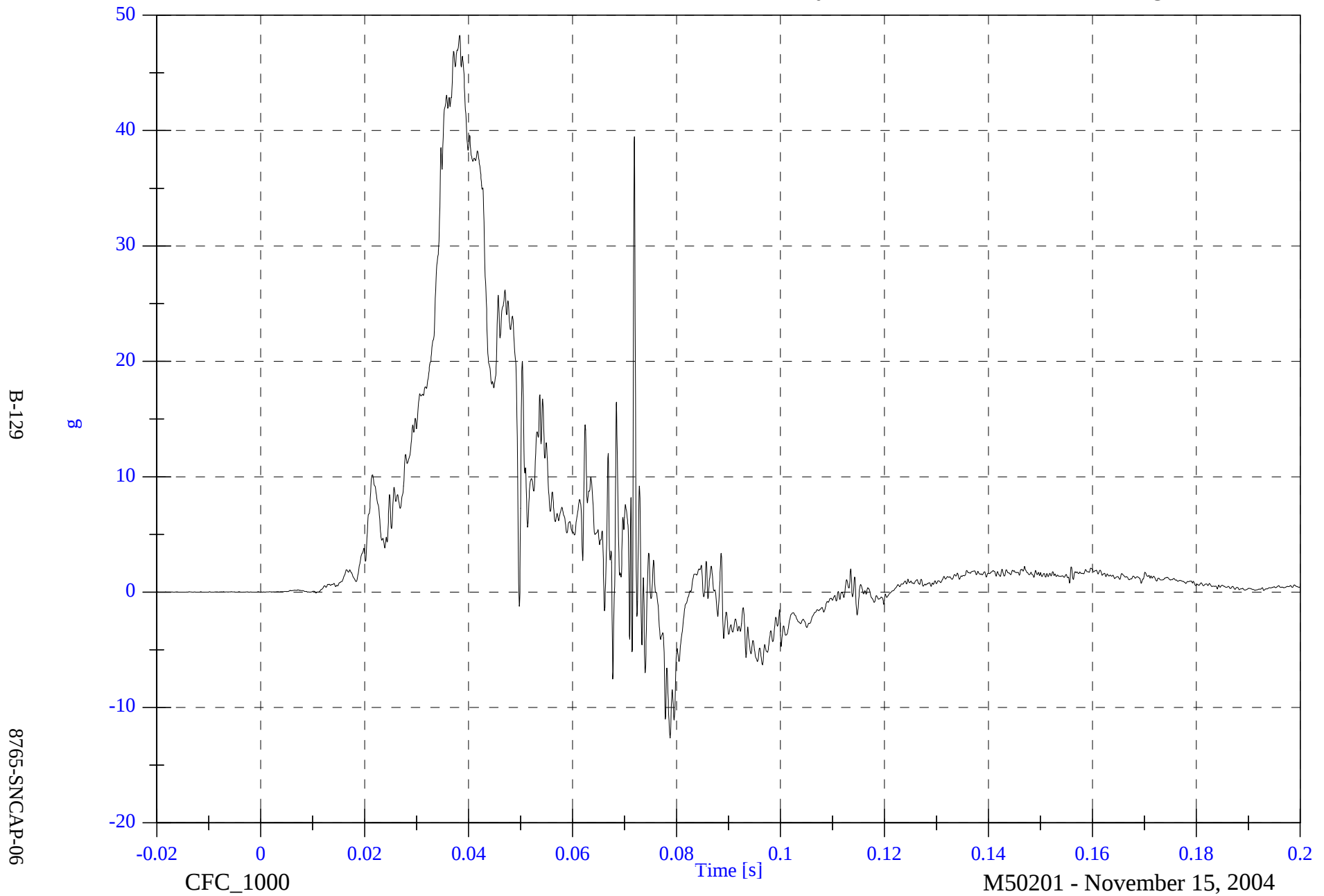
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Lower Rib Ry

Max: 48.3 [g] at 0.038 [s]

Min: -12.7 [g] at 0.079 [s]

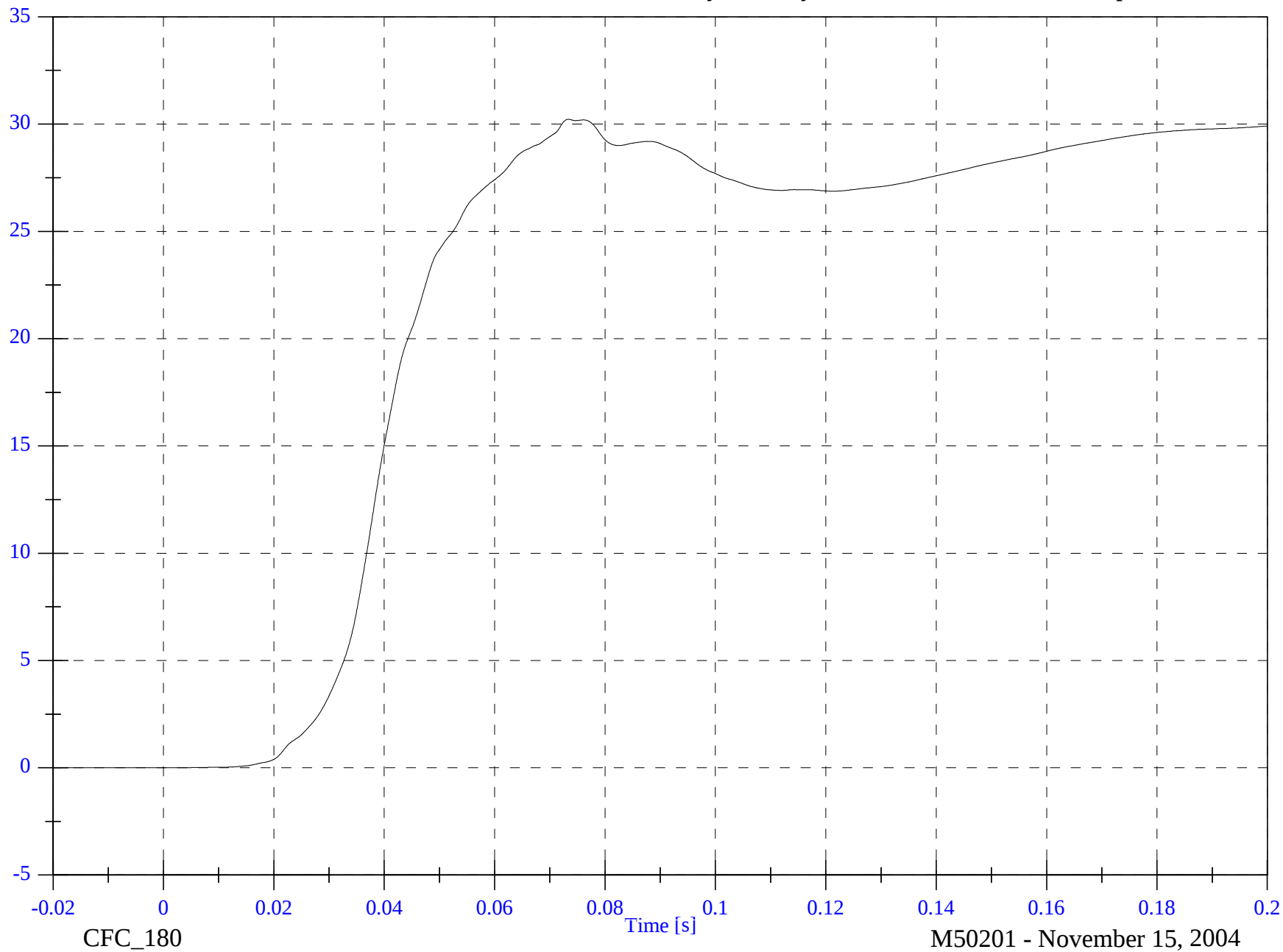


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Lower Rib Ry Velocity

Max: 30.2 [kph] at 0.073 [s]

Min: -0.0 [kph] at -0.014 [s]



B-130

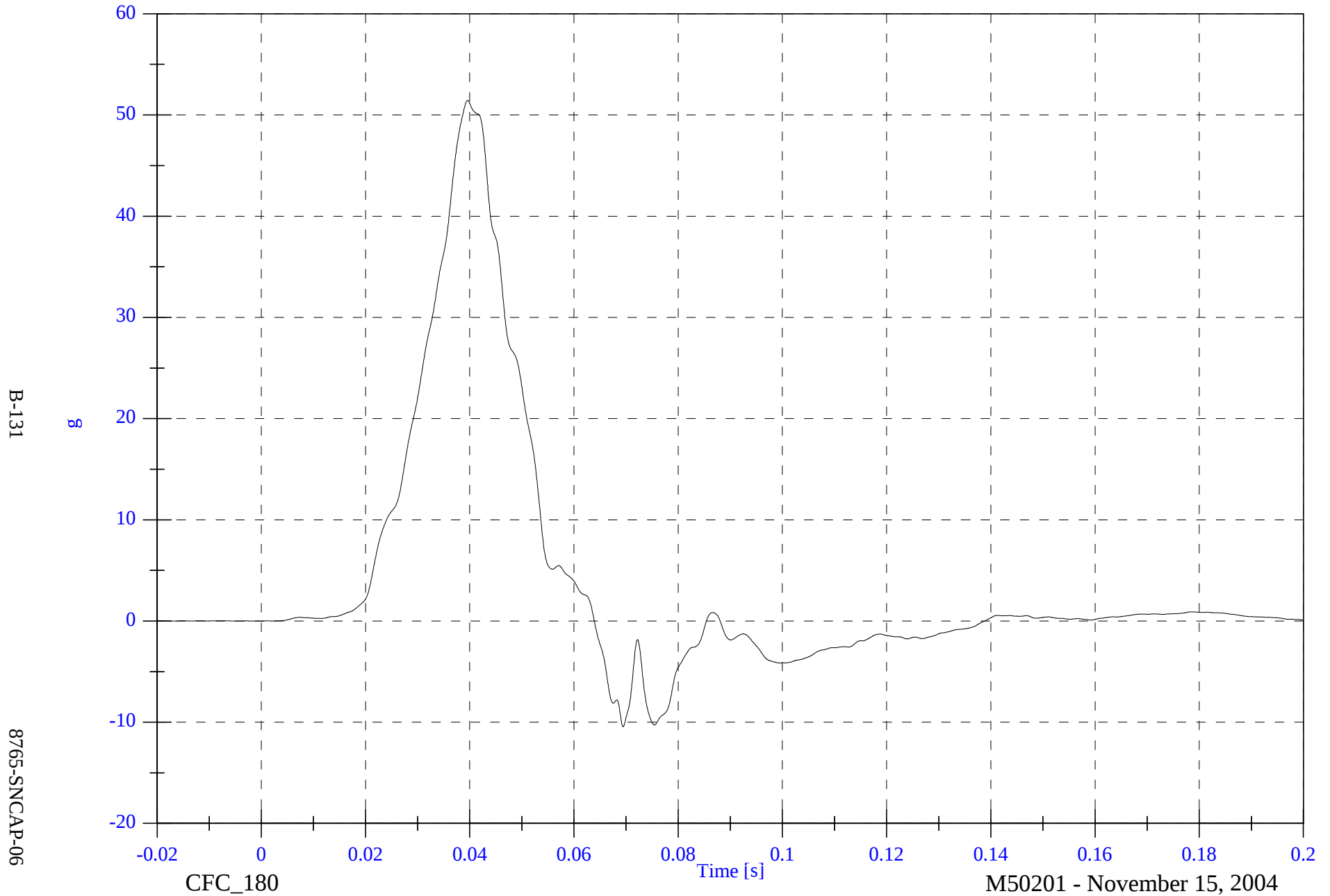
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Lower Spine Ry

Max: 51.4 [g] at 0.040 [s]

Min: -10.5 [g] at 0.069 [s]

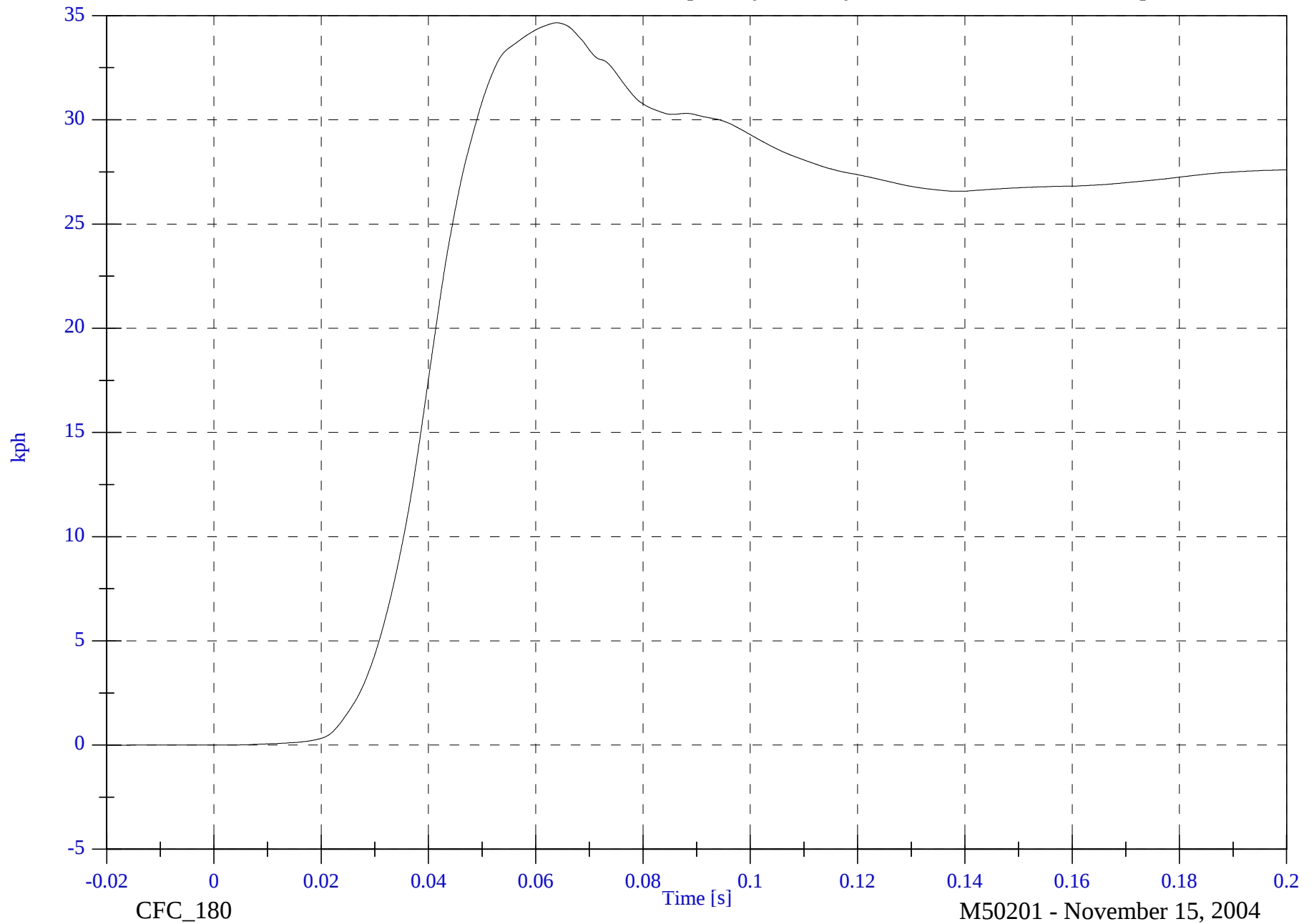


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Lower Spine Ry Velocity

Max: 34.7 [kph] at 0.064 [s]

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



B-132

8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

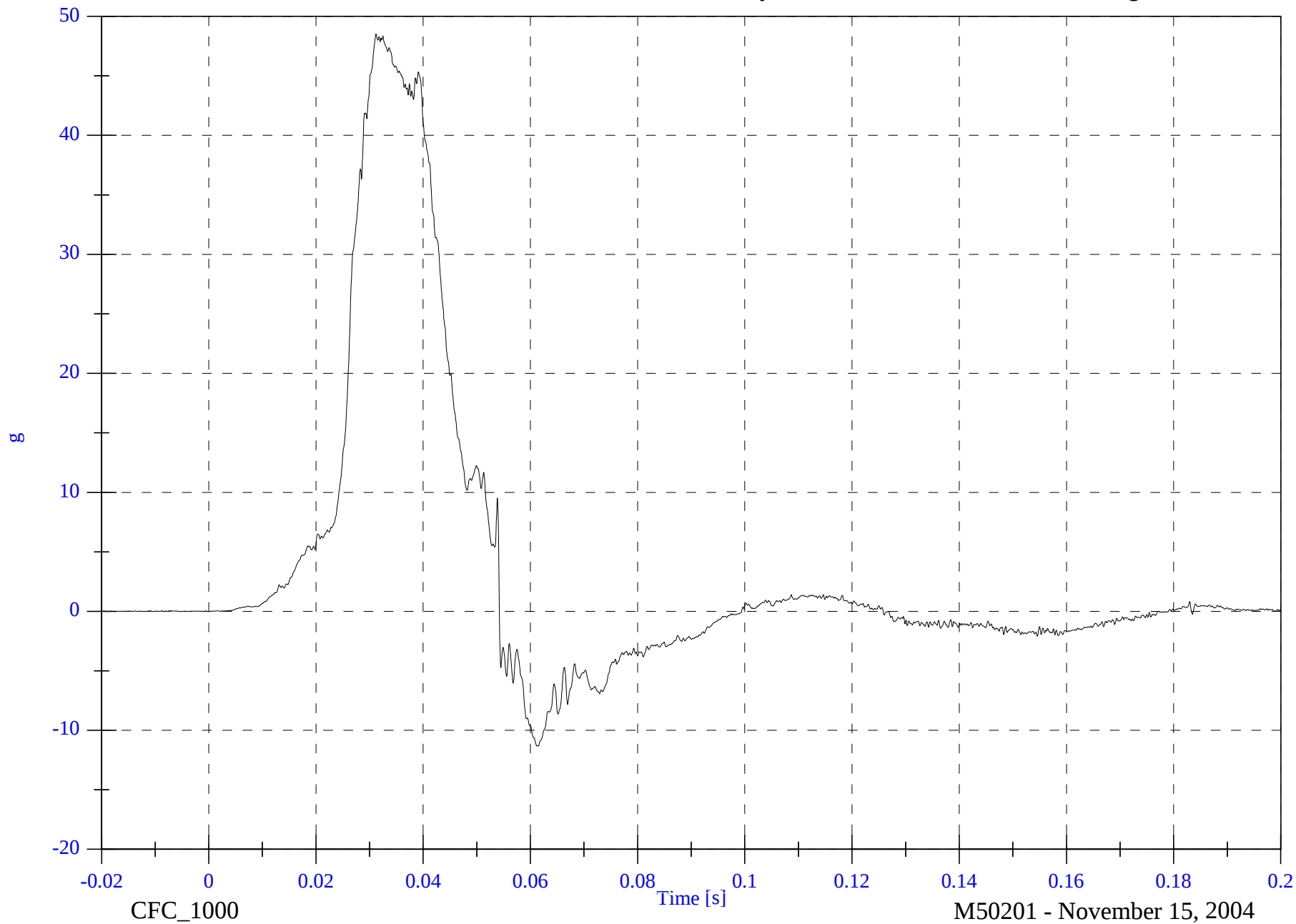
V2P1 Pelvic Ry

Max: 48.5 [g] at 0.031 [s]

Min: -11.3 [g] at 0.061 [s]

B-133

8765-SNCAP-06

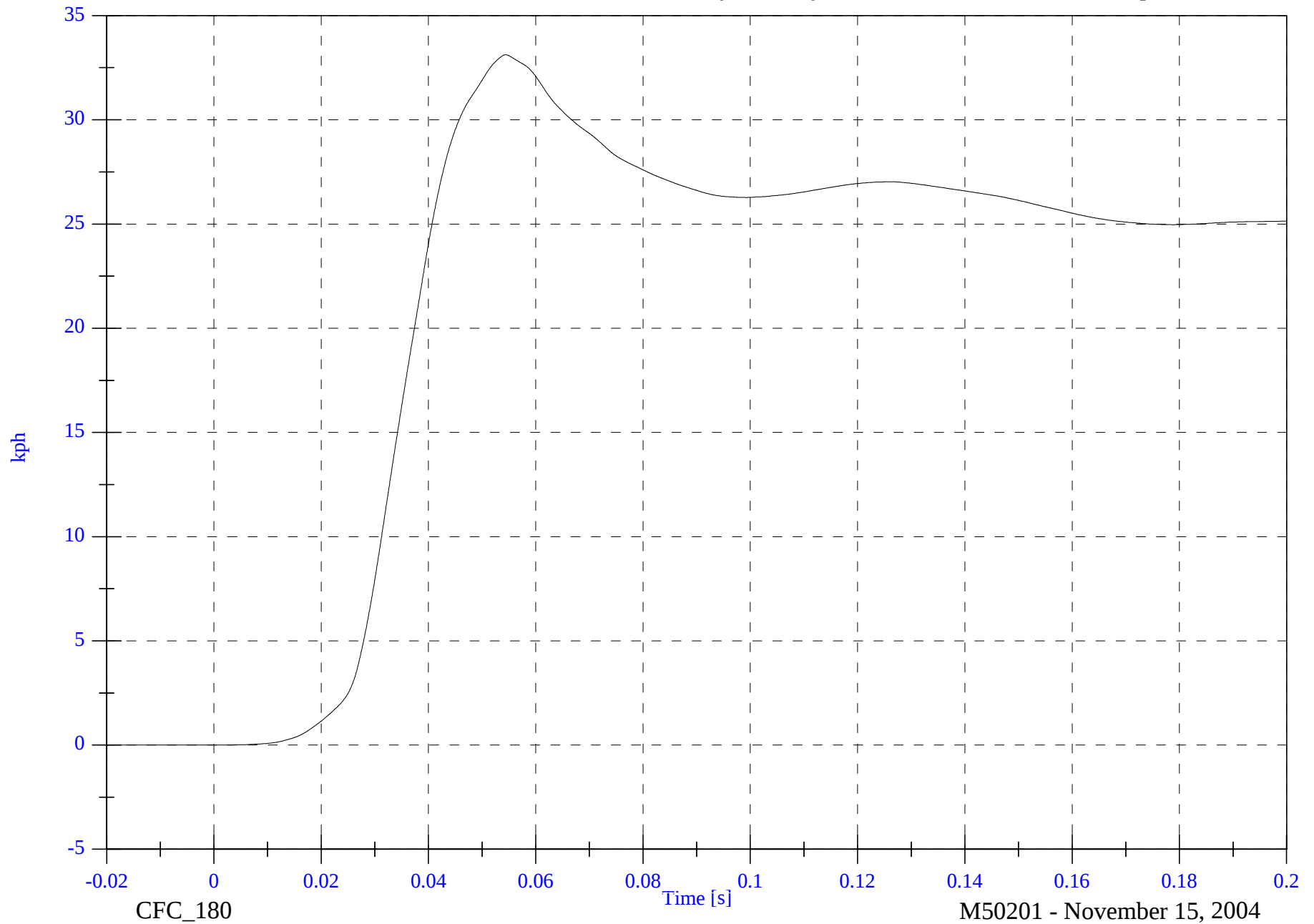


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Pelvic Ry Velocity

Max: 33.1 [kph] at 0.054 [s]

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



B-134

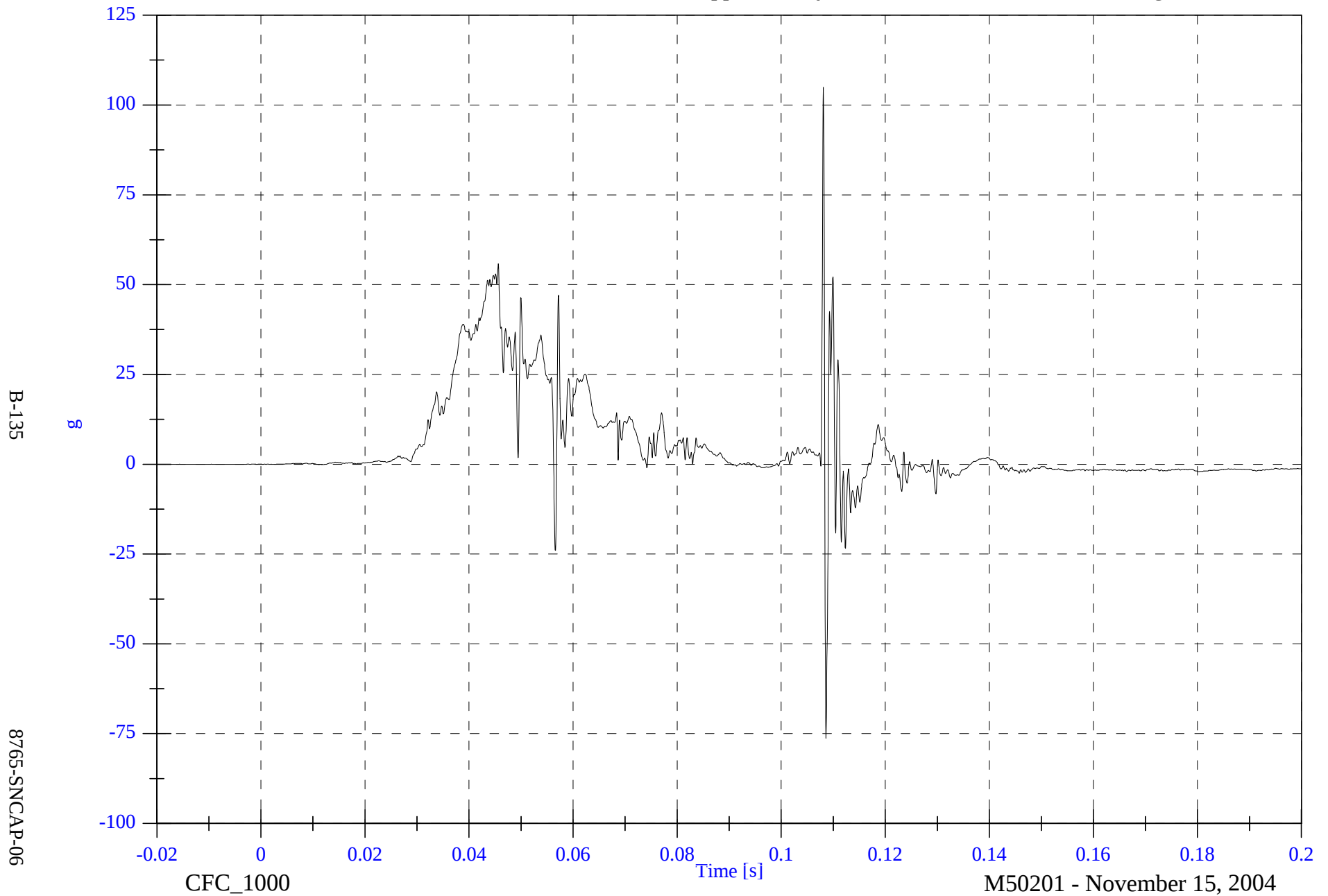
8765-SNCAP-06

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Rib Ry

Max: 104.9 [g] at 0.108 [s]

Min: -76.3 [g] at 0.109 [s]

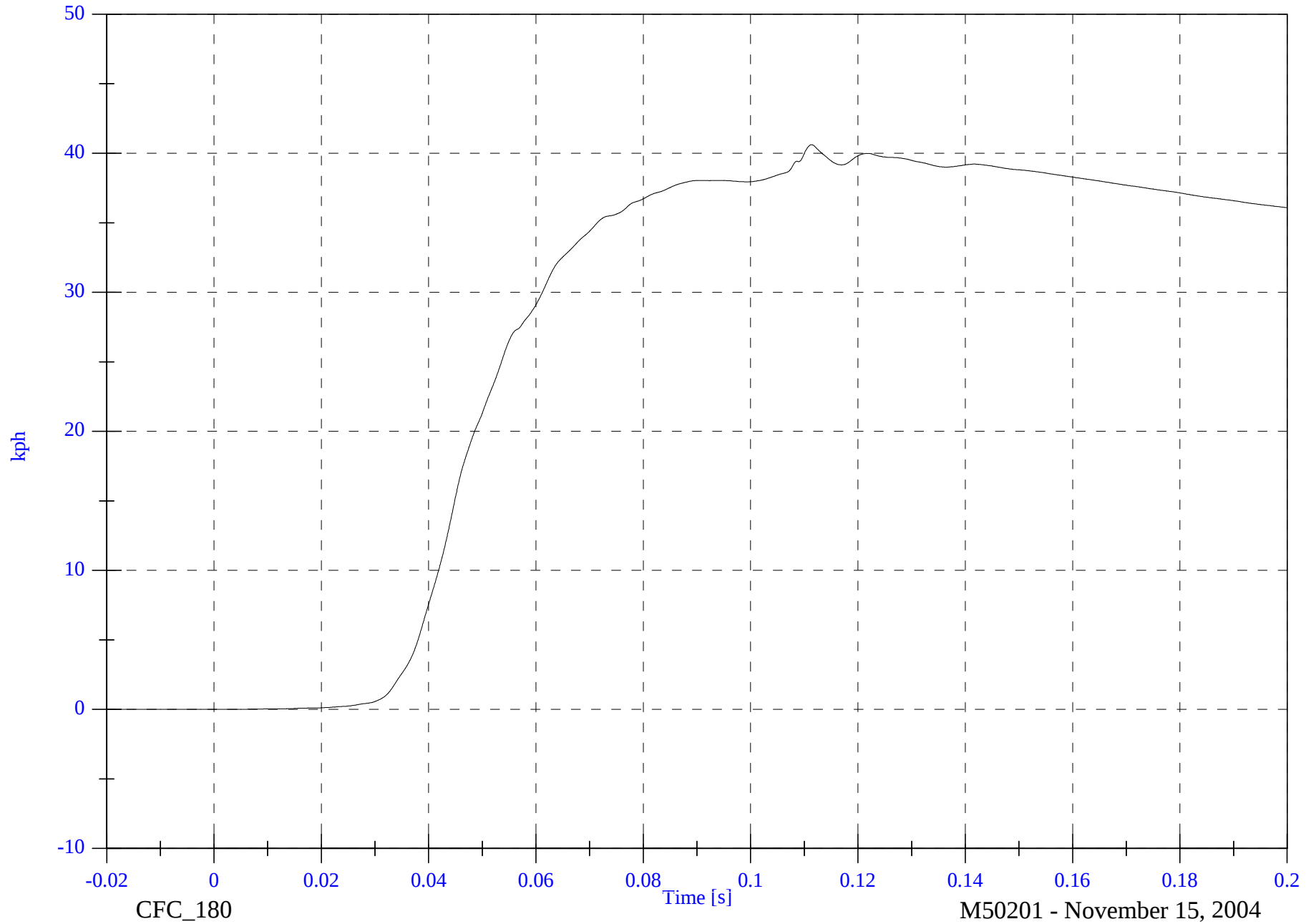


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Rib Ry Velocity

Max: 40.6 [kph] at 0.111 [s]

Min: -0.0 [kph] at -0.017 [s]



B-136

8765-SNCAP-06

CFC_180

M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

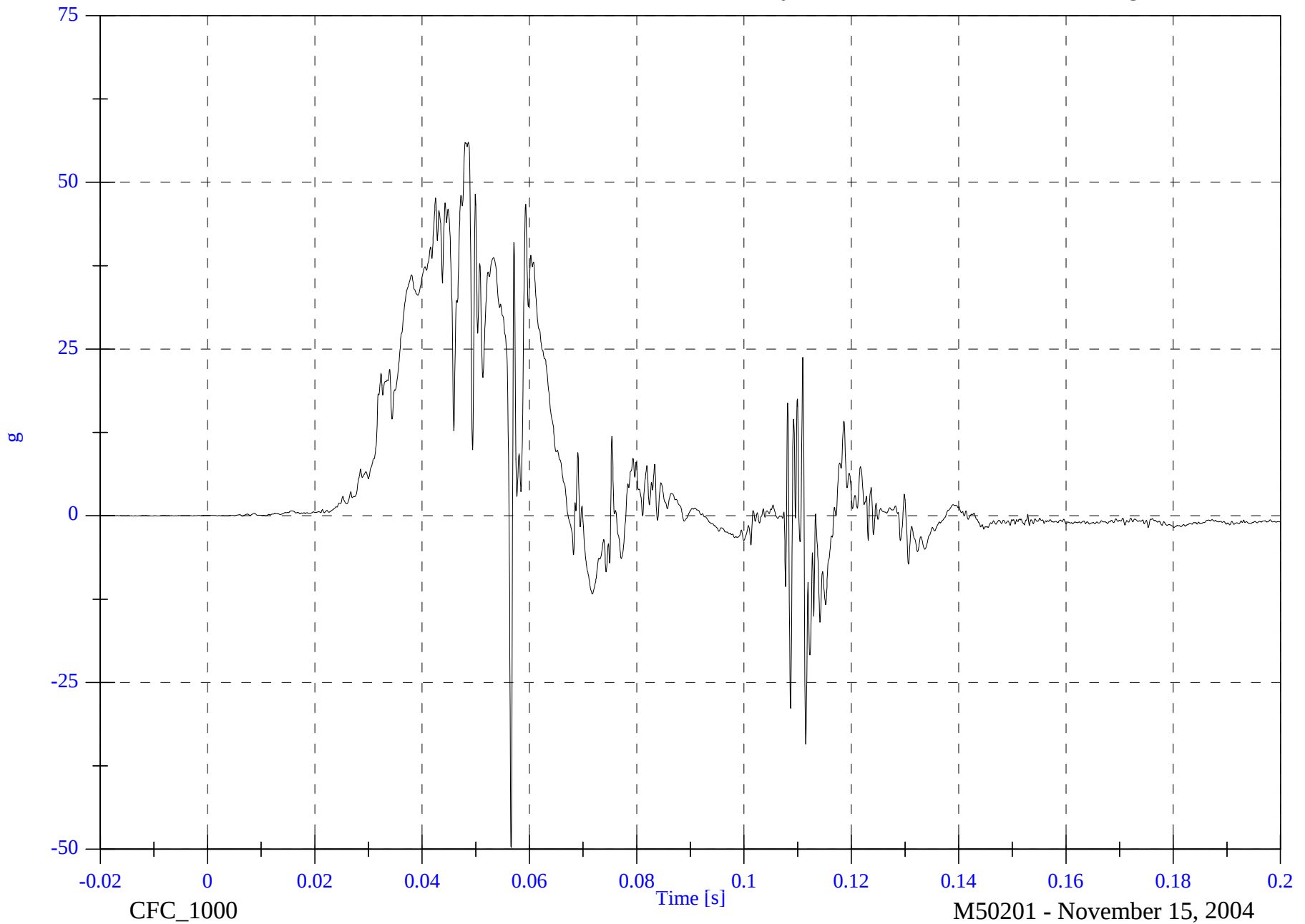
V2P4 Lower Rib Ry

Max: 56.0 [g] at 0.049 [s]

Min: -49.8 [g] at 0.057 [s]

B-137

8765-SNCAP-06

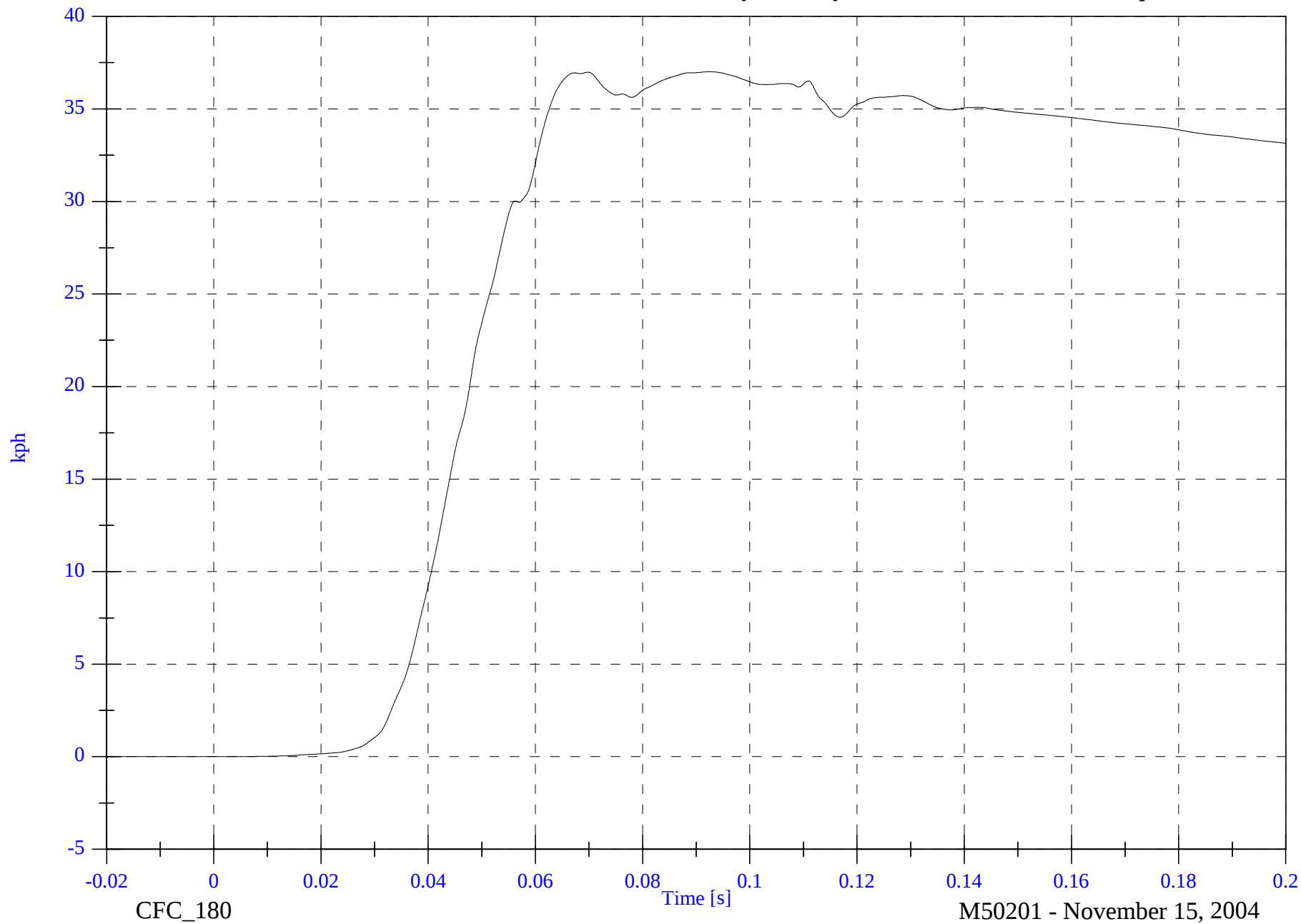


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Lower Rib Ry Velocity

Max: 37.0 [kph] at 0.093 [s]

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



B-138

8765-SNCAP-06

CFC_180

M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

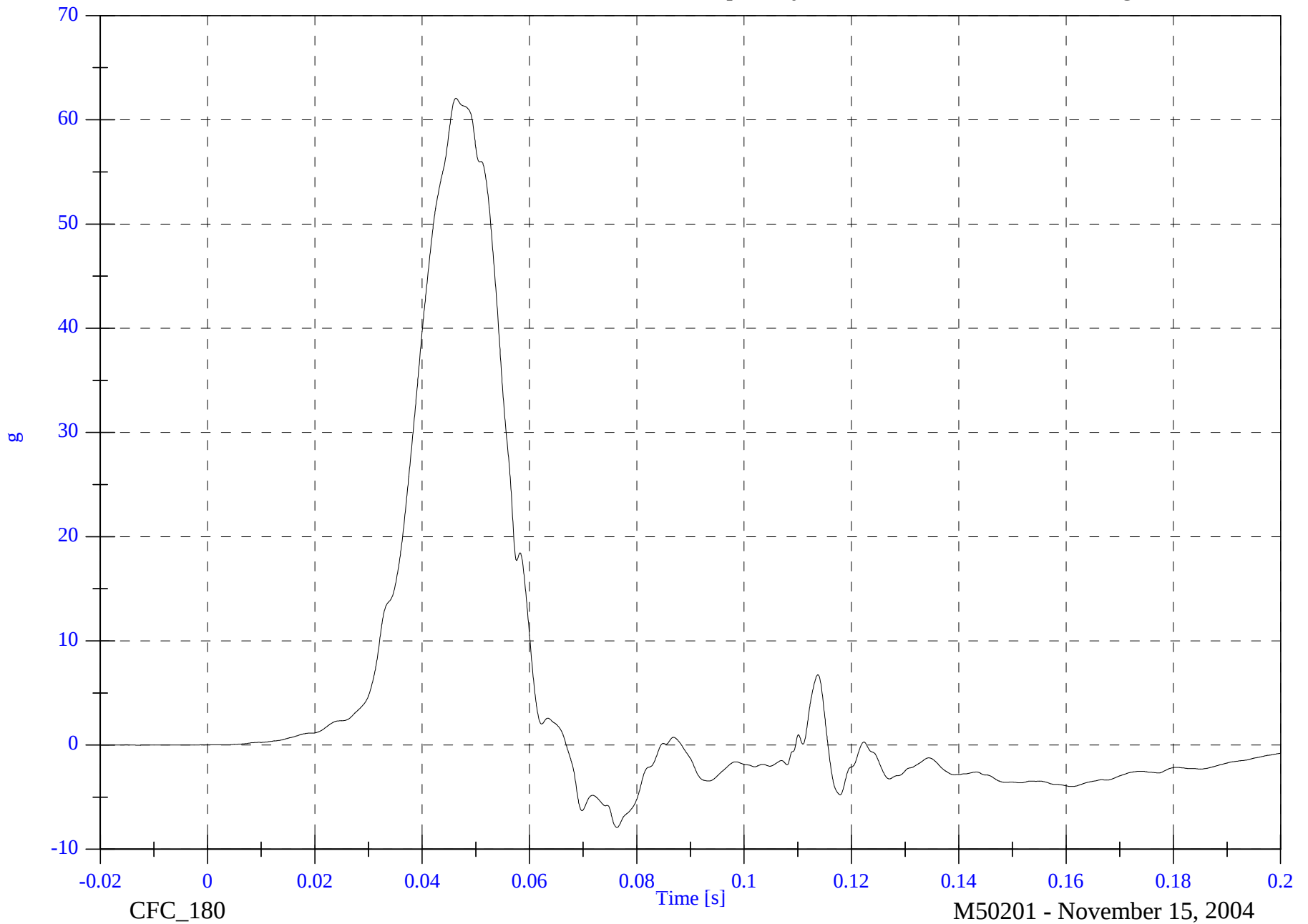
V2P4 Lower Spine Ry

Max: 62.1 [g] at 0.046 [s]

Min: -7.9 [g] at 0.076 [s]

B-139

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

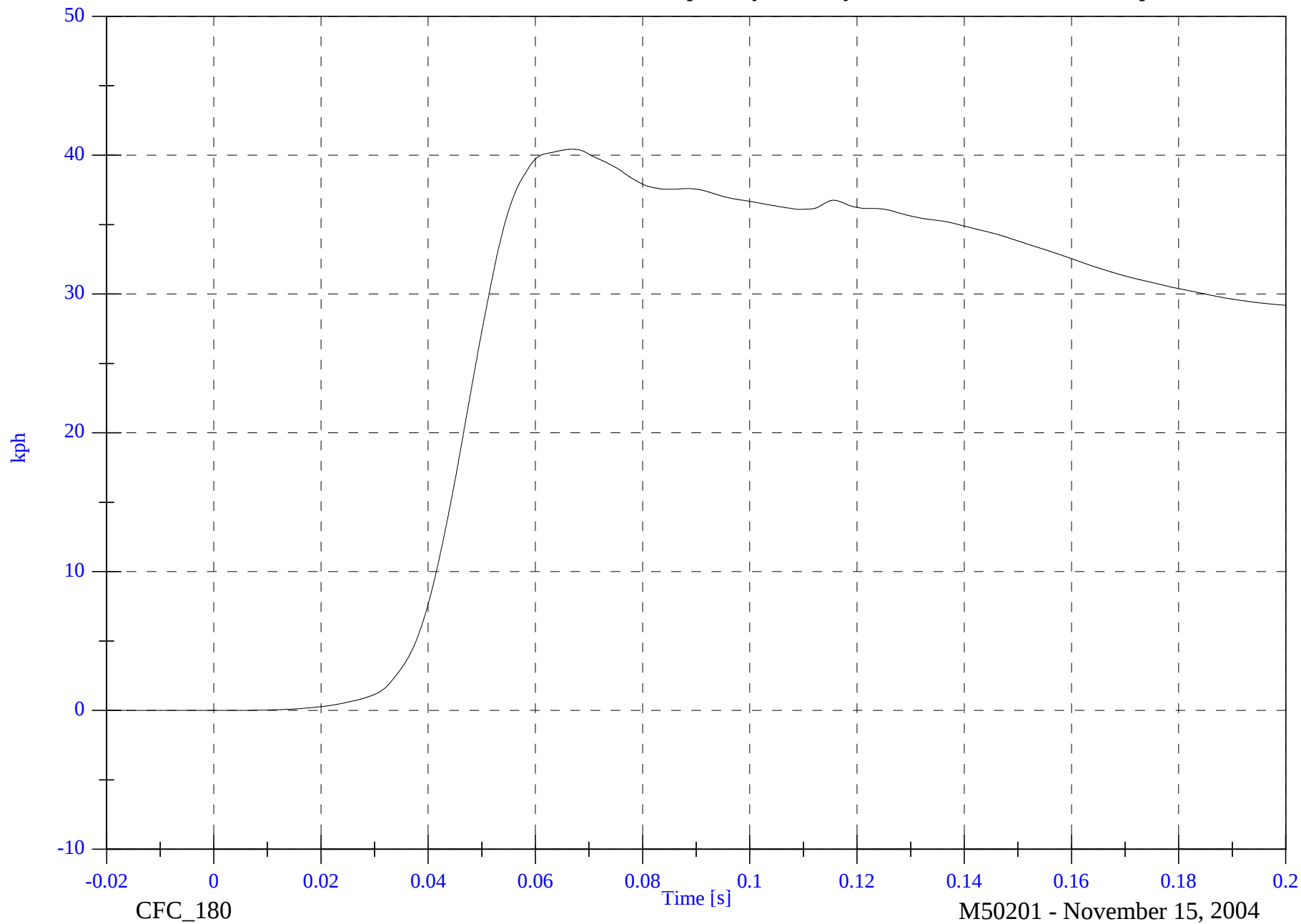
V2P4 Lower Spine Ry Velocity

Max: 40.4 [kph] at 0.067 [s]

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

B-140

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

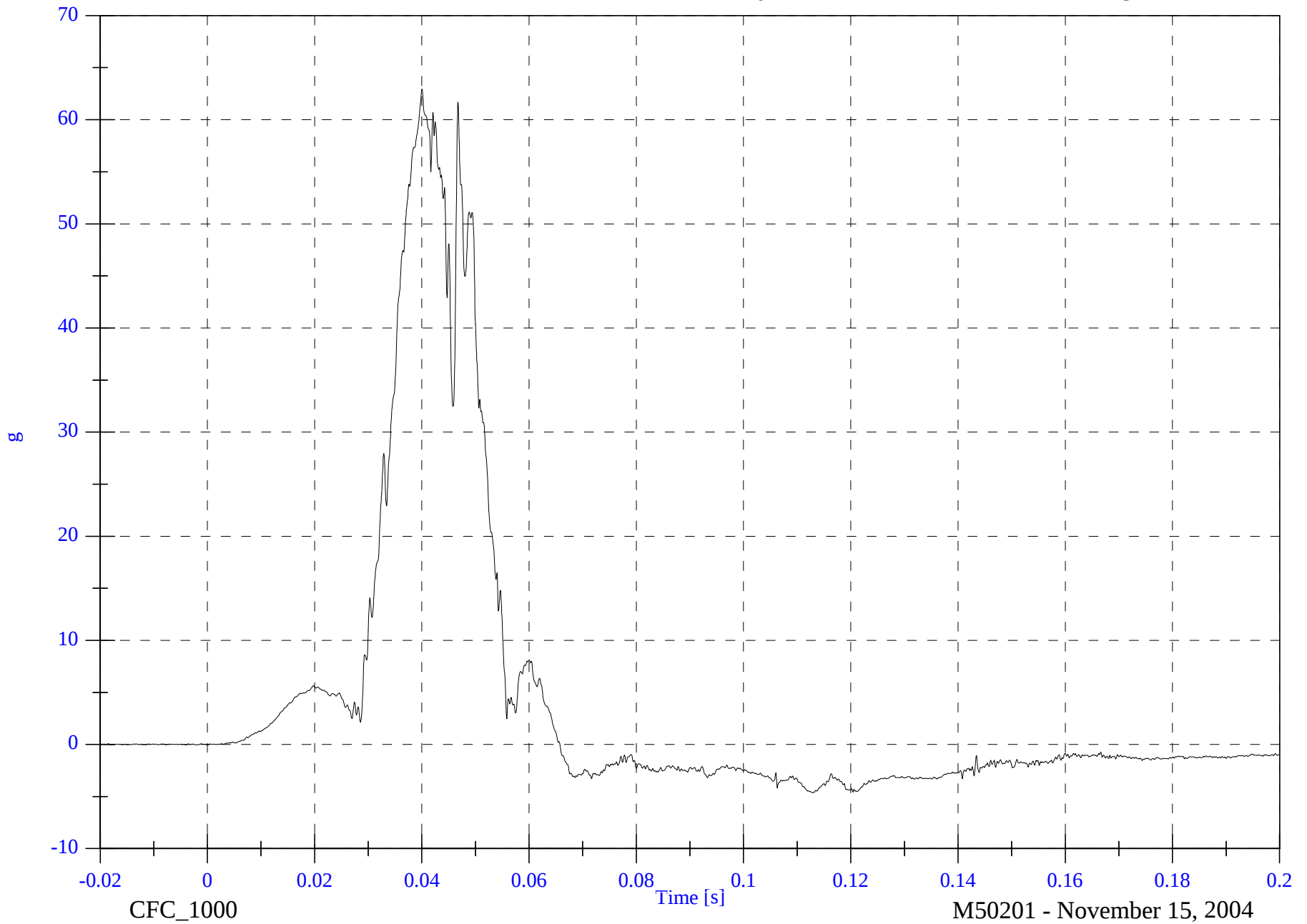
V2P4 Pelvic Ry

Max: 62.9 [g] at 0.040 [s]

Min: -4.6 [g] at 0.113 [s]

B-141

8765-SNCAP-06

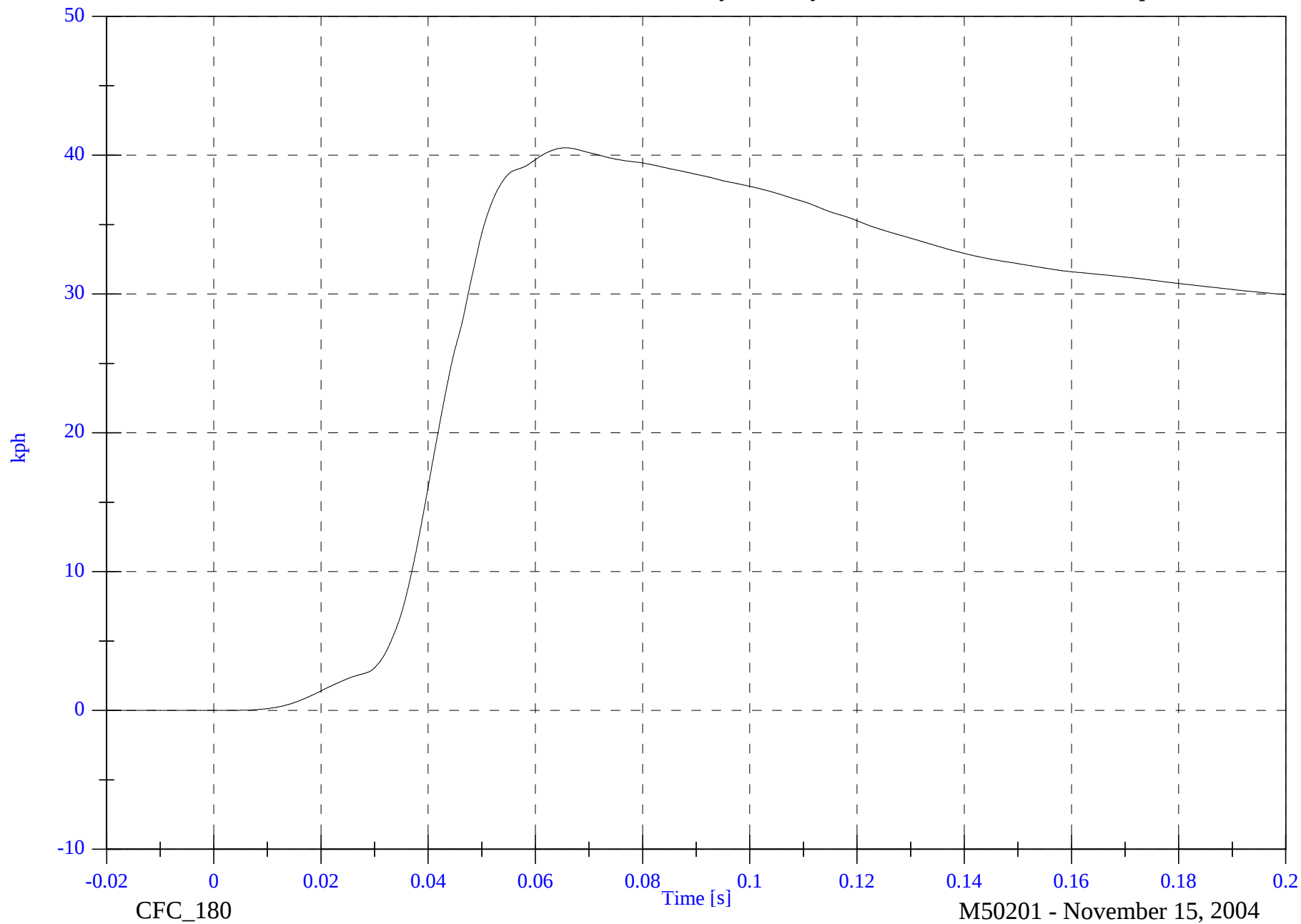


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Pelvic Ry Velocity

Max: 40.5 [kph] at 0.066 [s]

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



B-142

8765-SNCAP-06

CFC_180

M50201 - November 15, 2004

MY05 SNCAP Test #1 - 2005 Ford Five Hundred

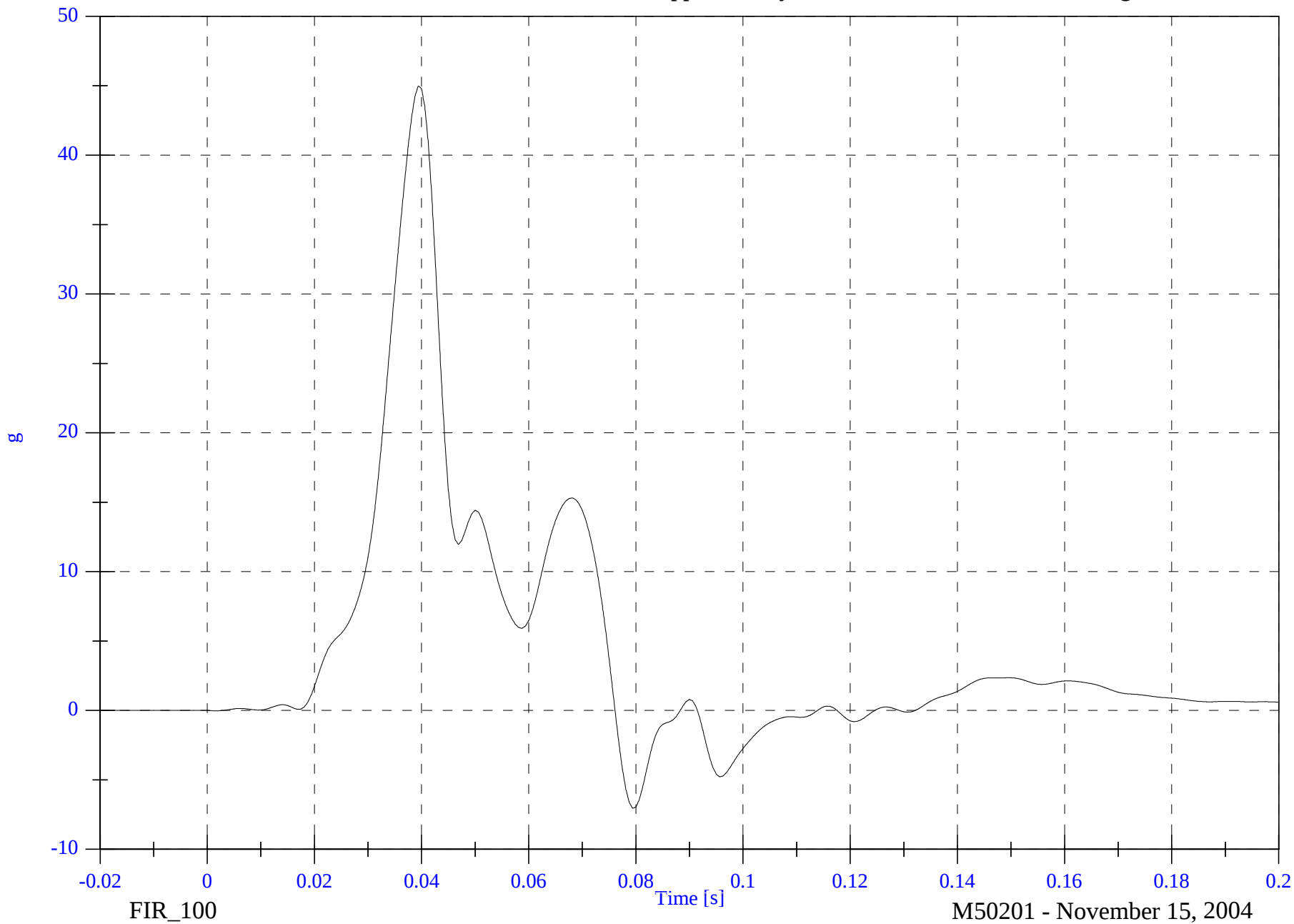
V2P1 Upper Rib Ry

Max: 45.0 [g] at 0.039 [s]

Min: -7.0 [g] at 0.079 [s]

B-143

8765-SNCAP-06

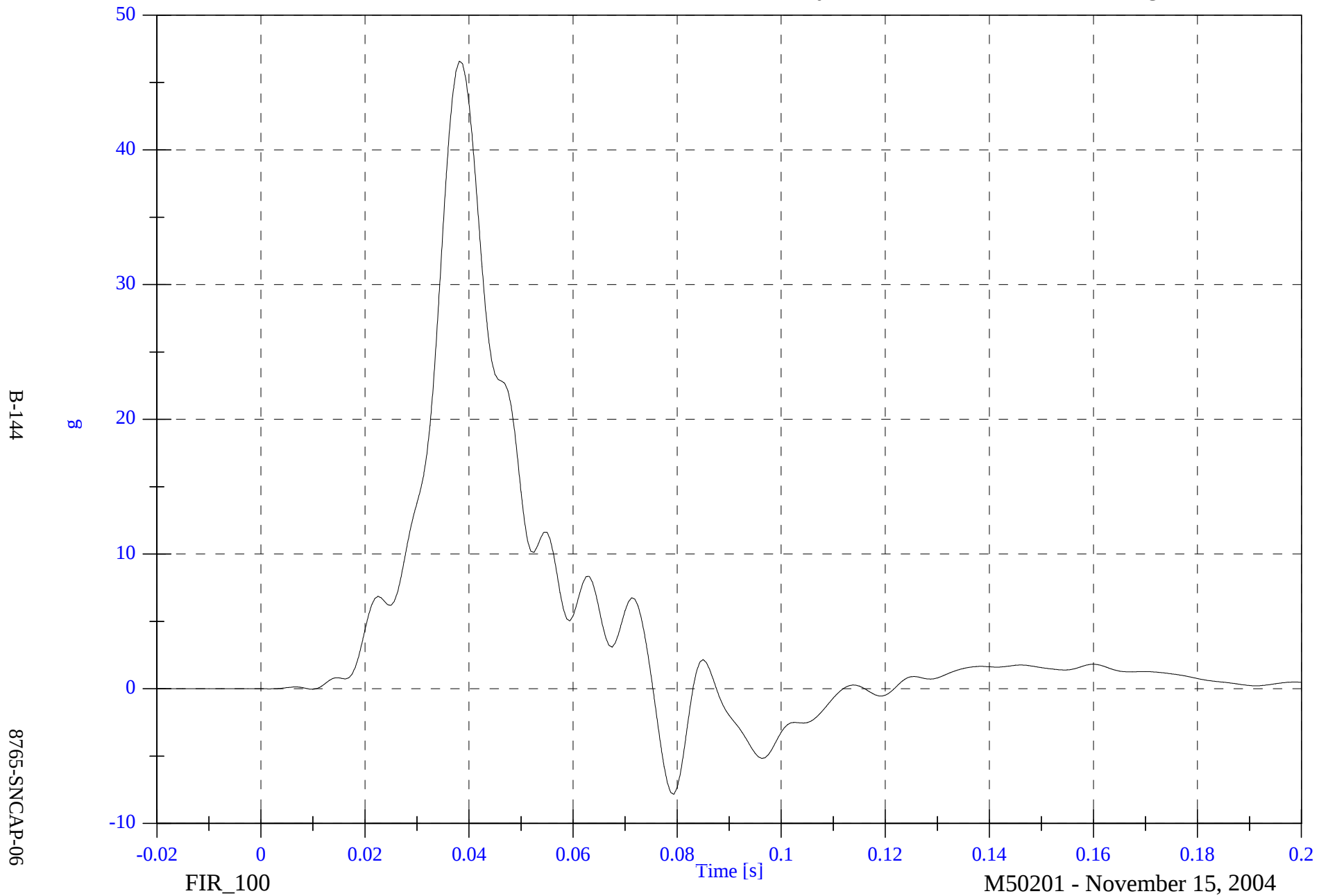


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P1 Lower Rib Ry

Max: 46.6 [g] at 0.038 [s]

Min: -7.8 [g] at 0.079 [s]



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

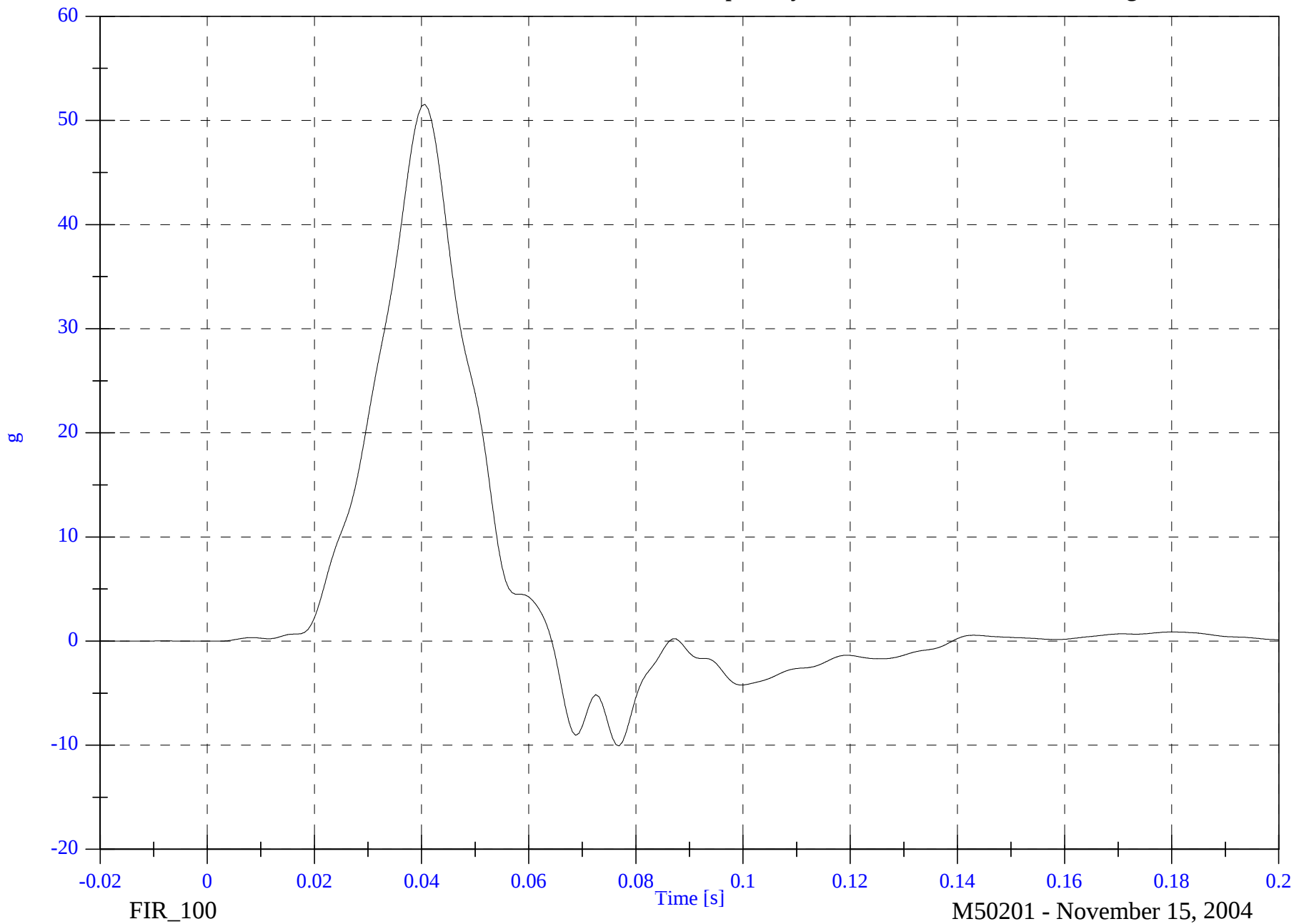
V2P1 Lower Spine Ry

Max: 51.5 [g] at 0.041 [s]

Min: -10.1 [g] at 0.077 [s]

B-145

8765-SNCAP-06



MY05 SNCAP Test #1 - 2005 Ford Five Hundred

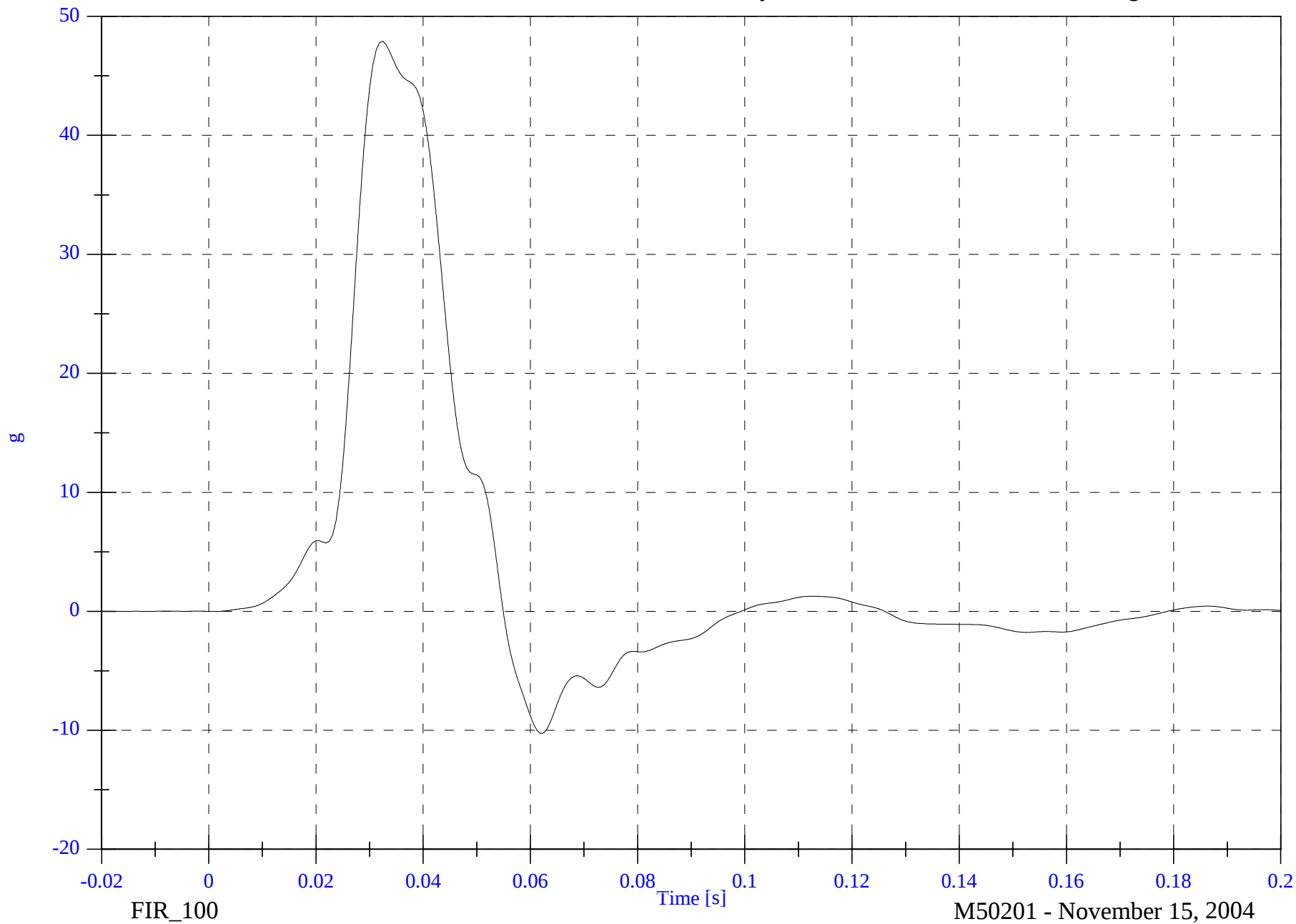
V2P1 Pelvic Ry

Max: 47.9 [g] at 0.032 [s]

Min: -10.3 [g] at 0.062 [s]

B-146

8765-SNCAP-06

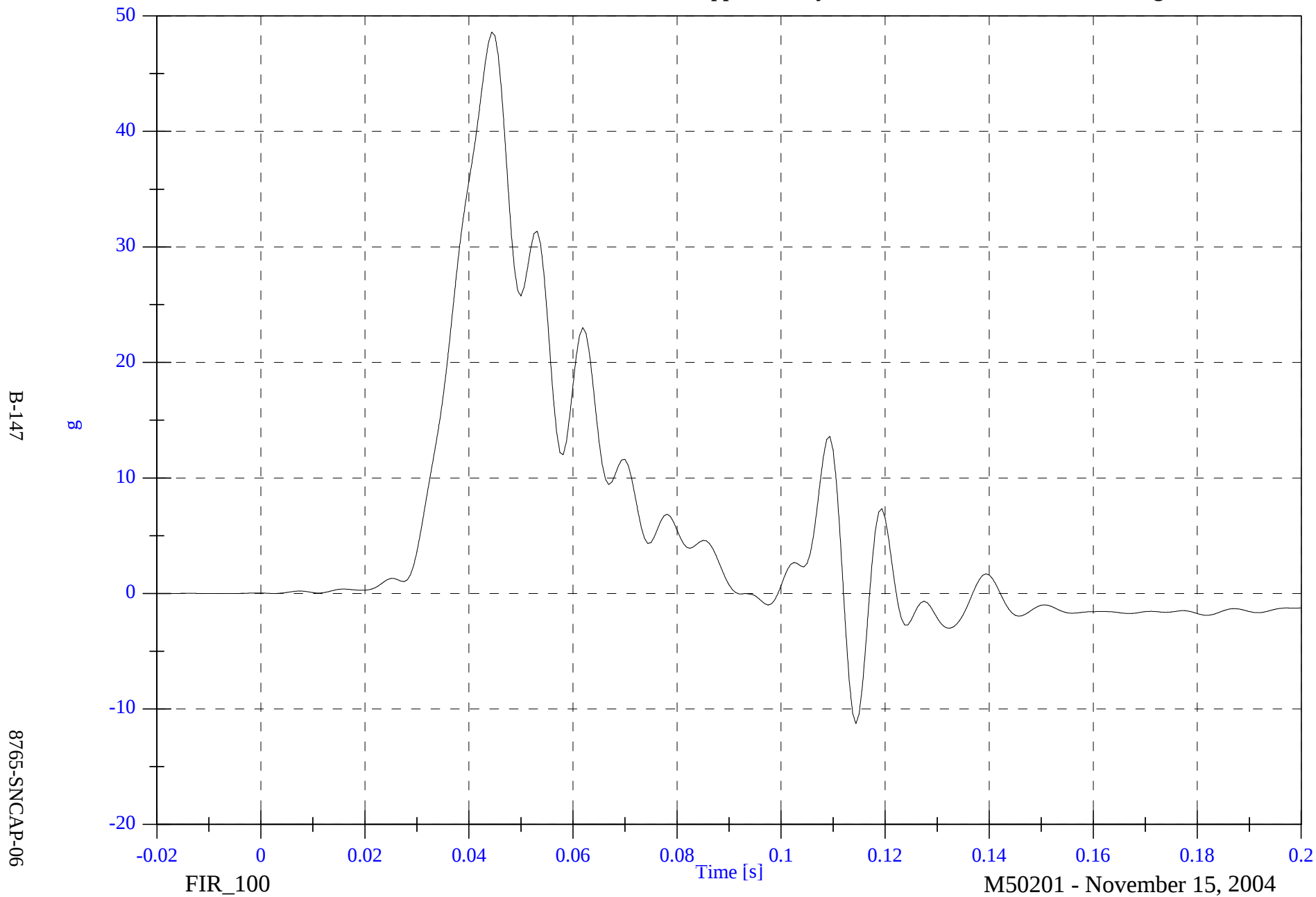


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Upper Rib Ry

Max: 48.6 [g] at 0.044 [s]

Min: -11.3 [g] at 0.114 [s]

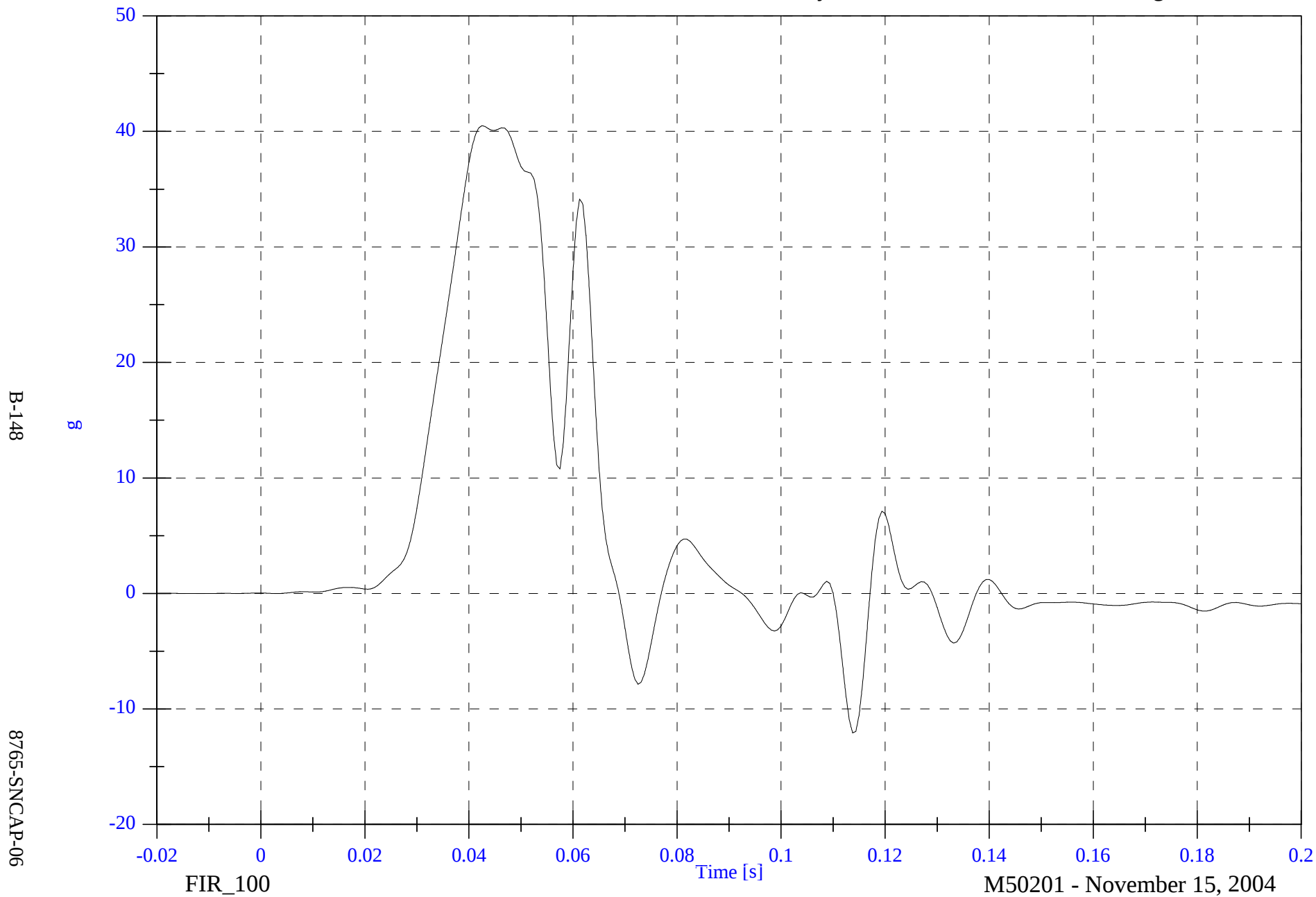


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Lower Rib Ry

Max: 40.5 [g] at 0.043 [s]

Min: -12.1 [g] at 0.114 [s]

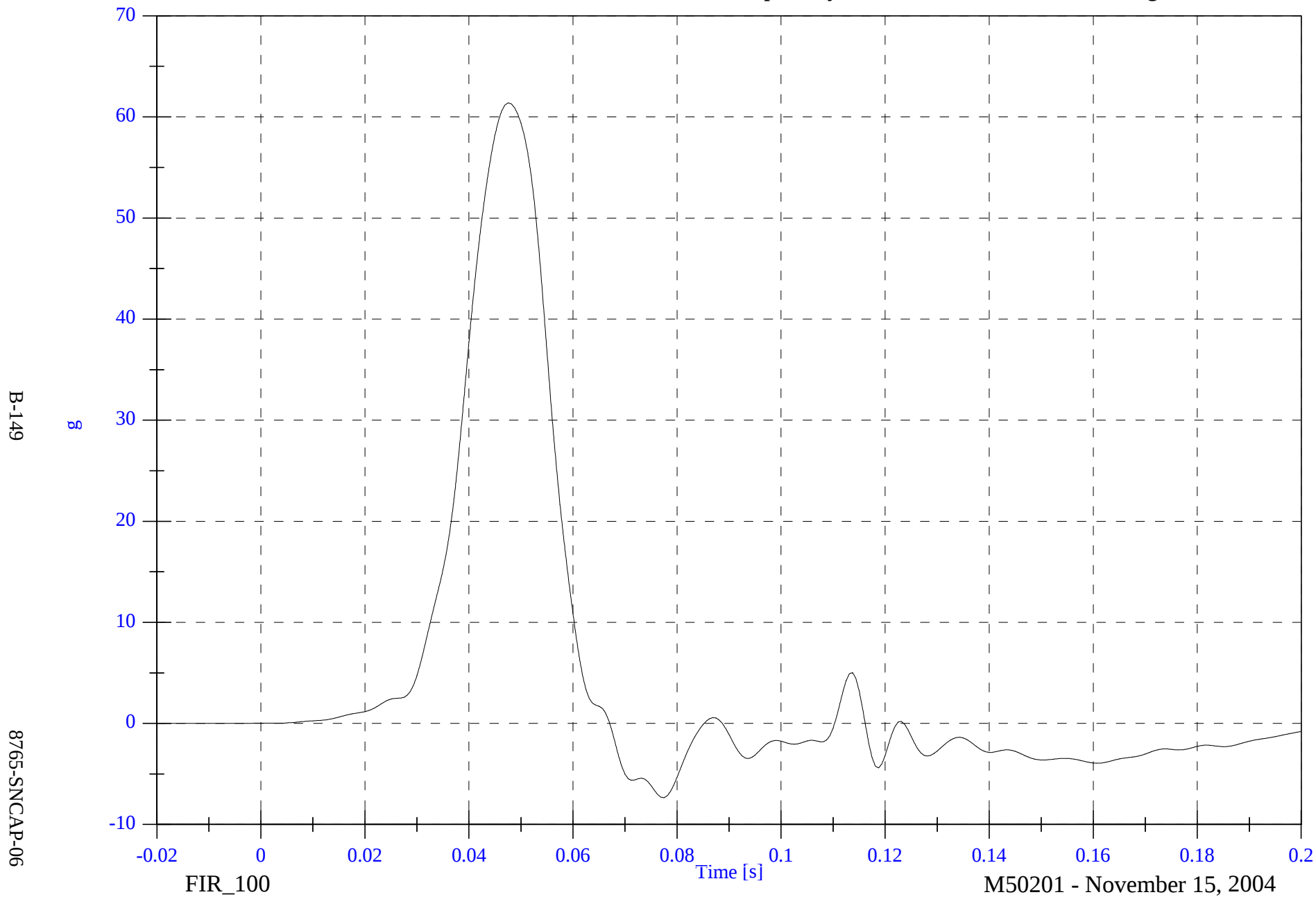


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Lower Spine Ry

Max: 61.4 [g] at 0.047 [s]

Min: -7.4 [g] at 0.077 [s]

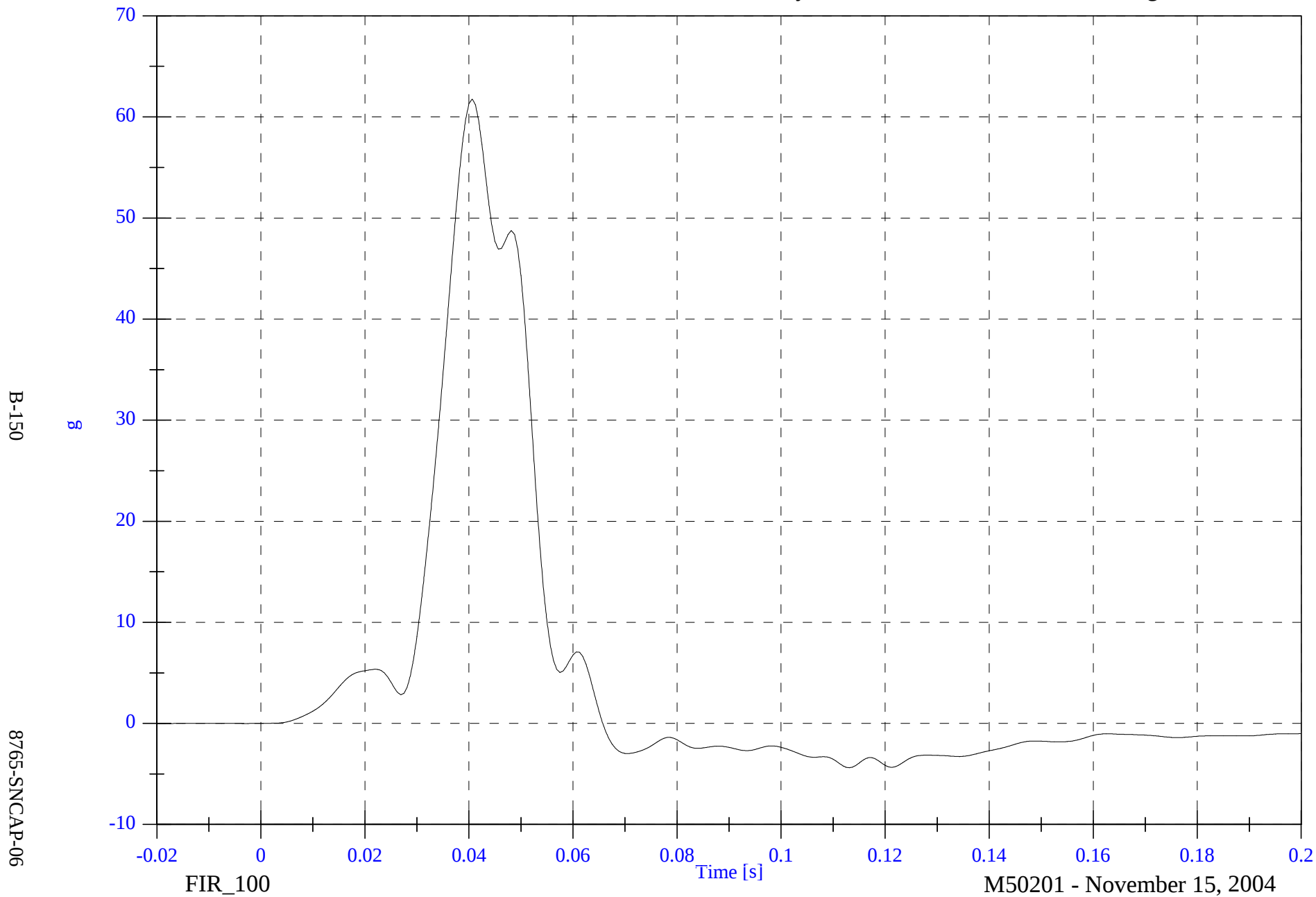


MY05 SNCAP Test #1 - 2005 Ford Five Hundred

V2P4 Pelvic Ry

Max: 61.8 [g] at 0.041 [s]

Min: -4.4 [g] at 0.113 [s]



APPENDIX C

SID HYBRID III CONFIGURATION AND PERFORMANCE VERIFICATION DATA

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

Date: November 11, 2004; November 19, 2004 Sequential Test Number: 2;3
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	SID H3 269 NO.:		SID H3 270 NO.:	
		PRE TEST	POST TEST	PRE TEST	POST TEST
SH- Seated Height (mm)	889 - 909	902	902	902	902
RH- Rib Height (mm)	501 - 521	503	503	503	503
HP- Hip Pivot Height (mm)	99 ref.	99	99	99	99
RD- Rib from Back Line (mm)	229 - 241	234	234	234	234
KV- Knee Pivot from Back Line (mm)	511 - 526	518	518	513	513
SW- Knee Pivot to Floor (mm)	490 - 505	495	495	495	495
HW- Hip Width (mm)	356 - 391	379	379	384	384
THORAX IMPACTS					
TEMPERATURE (°C)	18.9 - 25.5	21.1	21.1	21.1	21.1
RELATIVE HUMIDITY (%)	10 -70	33.00	37.00	32.00	37.00
PROBE SPEED (m/s)	4.27 - 4.33	4.29	4.28	4.32	4.28
UPPER RIB (g's)	37 - 46	37.45	38.41	37.97	41.02
LOWER RIB (g's)	37 - 46	40.52	38.14	37.32	39.88
LOWER SPINE (g's)	15 -22	18.22	19.18	17.70	20.70
PELVIS IMPACT					
TEMPERATURE (°C)	18.9 - 25.5	21.1	21.1	21.1	21.1
RELATIVE HUMIDITY (%)	10 - 70	33.00	37.00	32.00	37.00
PROBE SPEED (m/s)	4.27 - 4.33	4.29	4.28	4.30	4.28
PELVIS (g's)	40 -60	51.68	46.23	44.24	50.94

REMARKS: None

CALIBRATION TEST RESULTS

PRE-TEST

SID H3 NO.: 269

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269 Sequential Test Number: 2
Date: November 11, 2004 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.: 269 Sequential Test Number: 2
Date: November 11, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 – 909	902
RH- Rib Height (mm)	502 – 520	503
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 – 241	234
KH- Knee Pivot from Back Line (mm)	511 – 526	518
KV- Knee Pivot to Floor (mm)	490 – 505	495
HW- Hip Width (mm)	356 - 391	379

REMARKS: None

Shock Impact - Low (3.05 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

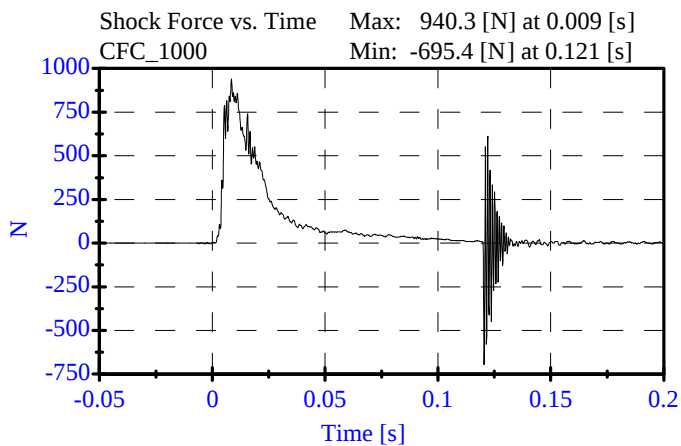
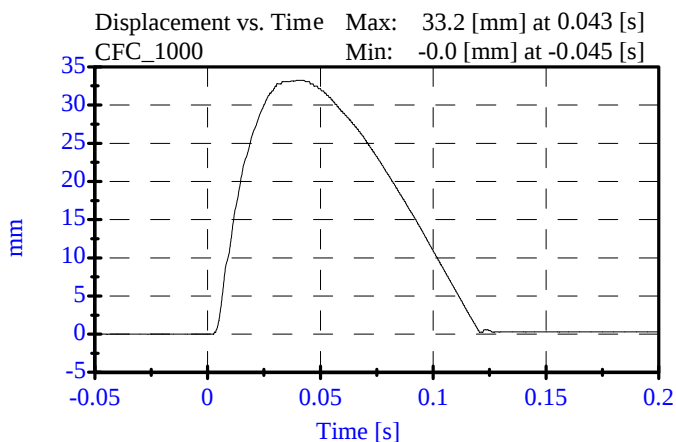
ATD Serial No: 269

Date: 07-23-04

Sequential Test Number: 1 File: 269SL 07-23-04

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	40.00 %	Passed
Displacement:	30.00-35.00 mm	33.24 mm	Passed
Maximum Force:	836.00-1125.00 N	940.32 N	Passed
Impact Test Velocity:	3.05 m/s		
Damper Identification:	269		
Damper Setting:	5		



Shock Impact - Med (4.27 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

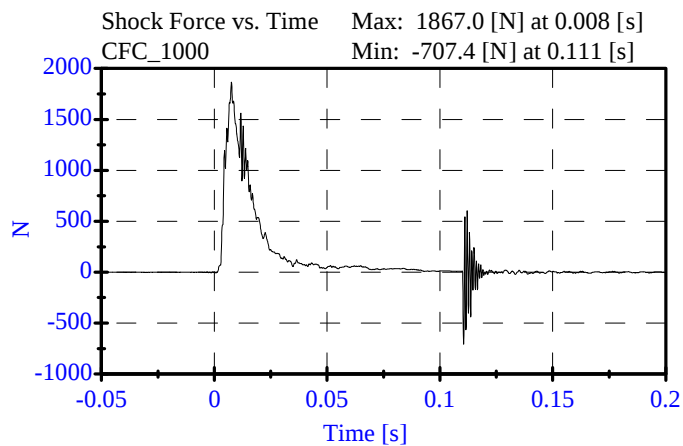
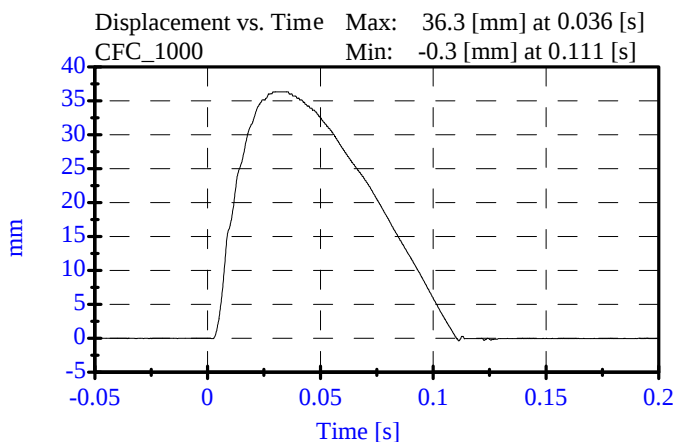
ATD Serial No: 269

Date: 07-23-04

Sequential Test Number: 1 File: 269SM 07-23-04

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	40.00 %	Passed
Displacement:	32.00-37.00 mm	36.33 mm	Passed
Maximum Force:	1730.00-2099.00 N	1866.97 N	Passed
Impact Test Velocity:	4.27 m/s		
Damper Identification:	269		
Damper Setting:	5		



Shock Impact - High (6.10 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

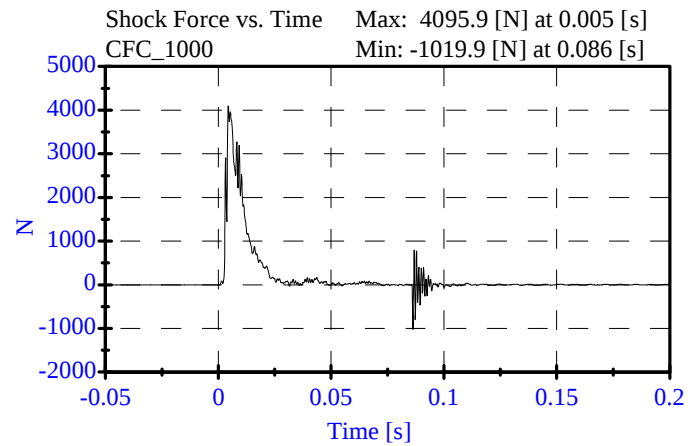
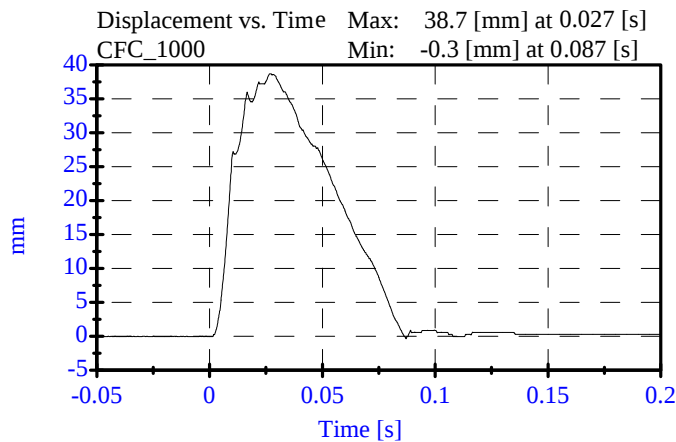
ATD Serial No: 269

Date: 07-23-04

Sequential Test Number: 1 File: 269SH6 07-23-04

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	40.00 %	Passed
Displacement:	33.00-40.00 mm	38.71 mm	Passed
Maximum Force:	3741.00-4448.00 N	4095.92 N	Passed
Impact Test Velocity:	6.10 m/s		
Damper Identification:	269		
Damper Setting:	5		

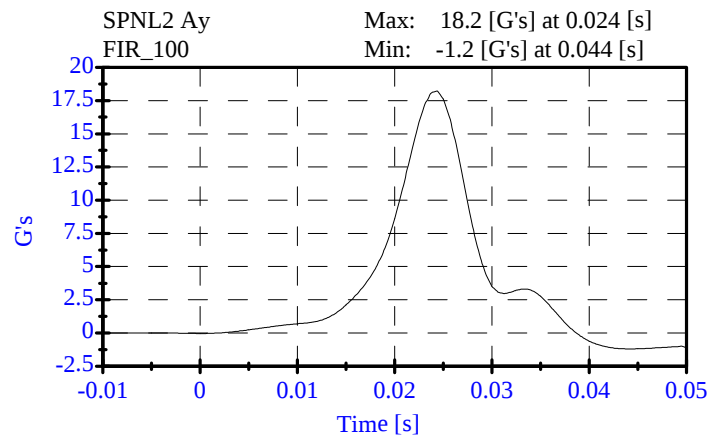
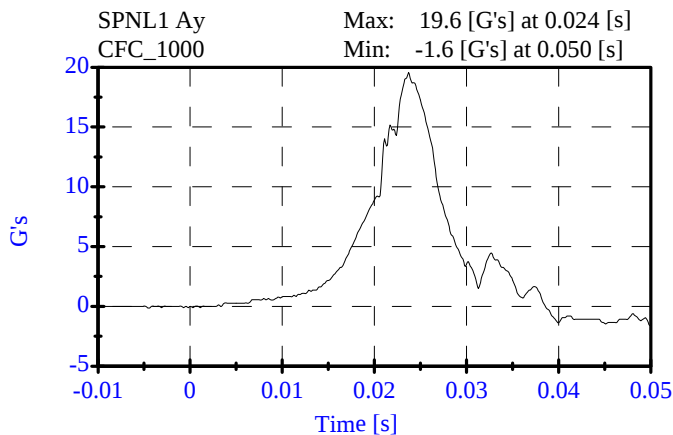
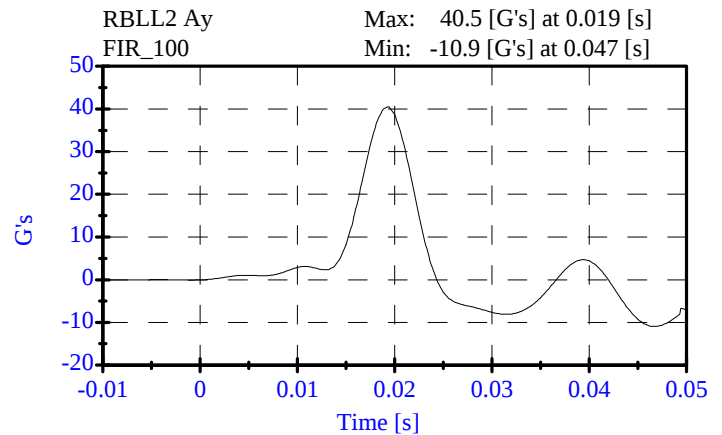
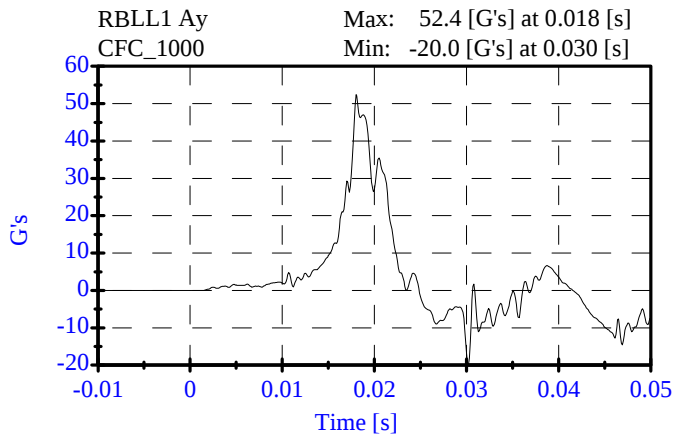
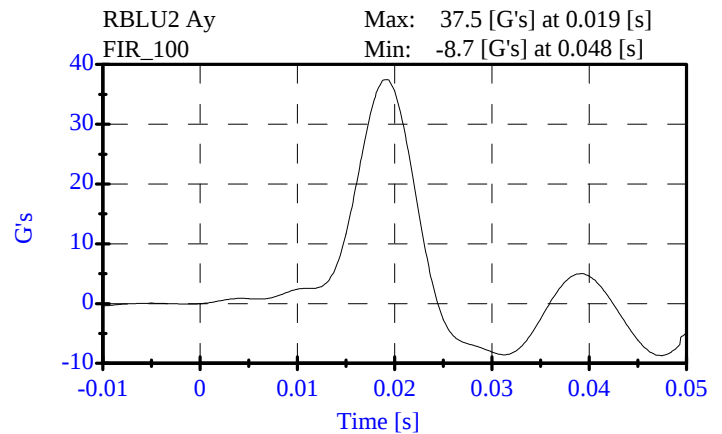
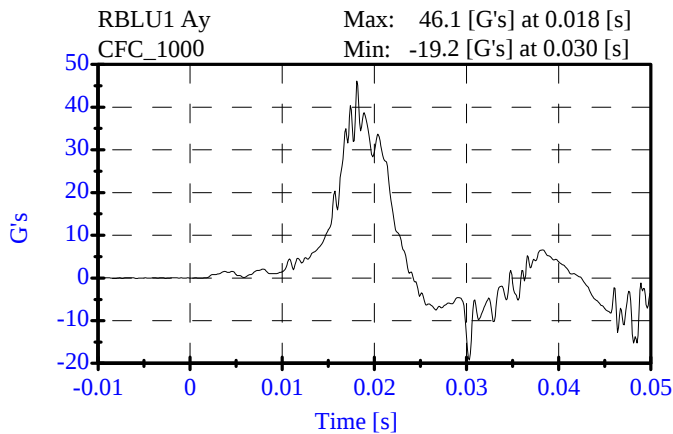


Thorax Impact
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: November 10, 2004

Sequential Test Number: 1 File: 269T2 11-10-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.29 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	37.45 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	40.52 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	18.22 G's	Passed



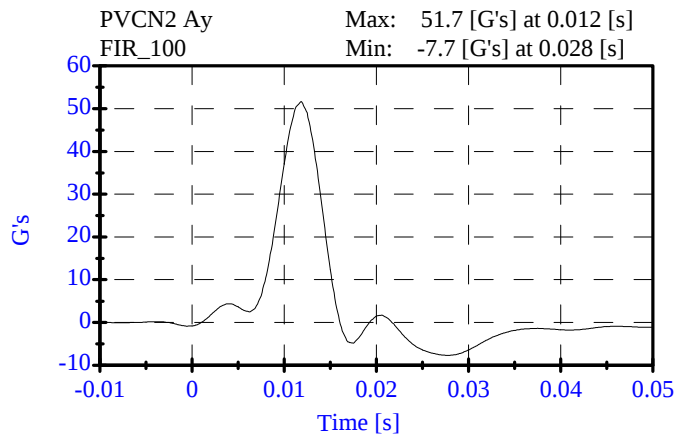
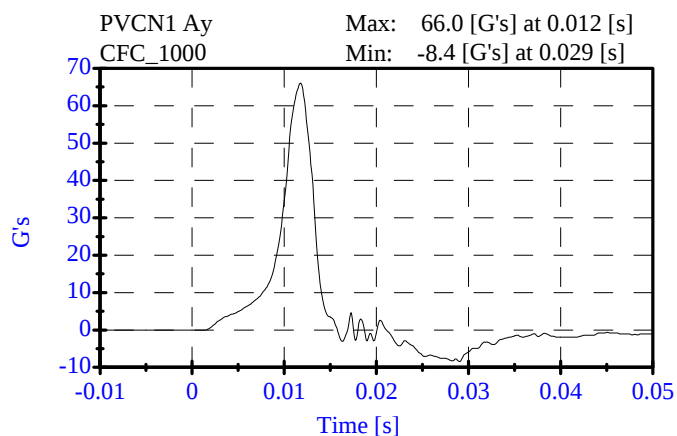
Pelvis Impact **Pre-Test**

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: November 10, 2004

Sequential Test Number: 1 File: 269P 11-10-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.29 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	51.68 G's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.7 ms	Passed

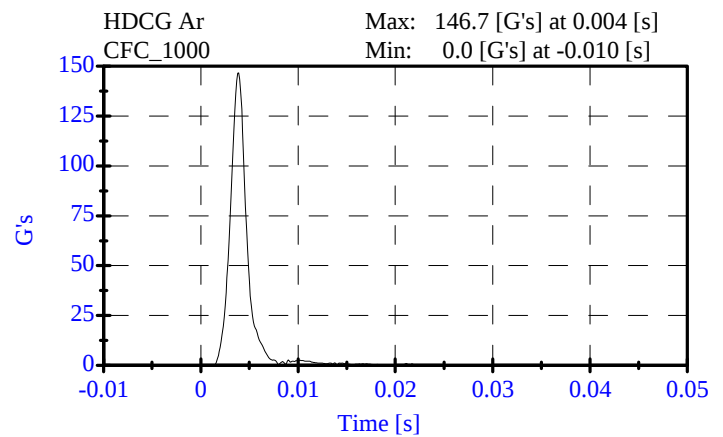
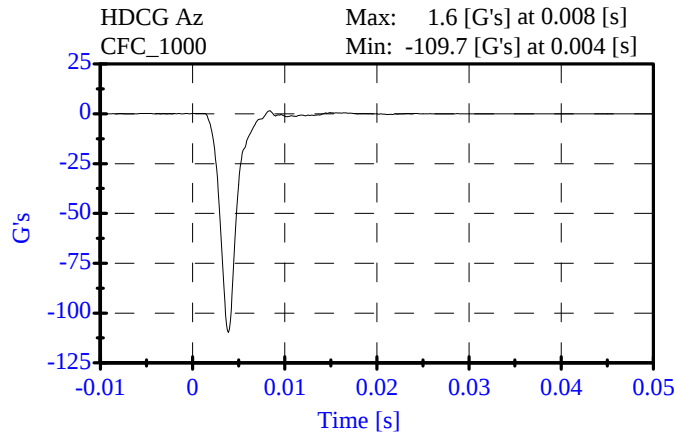
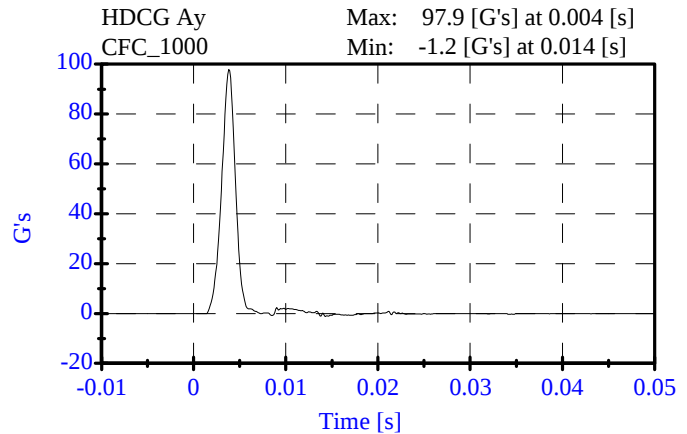
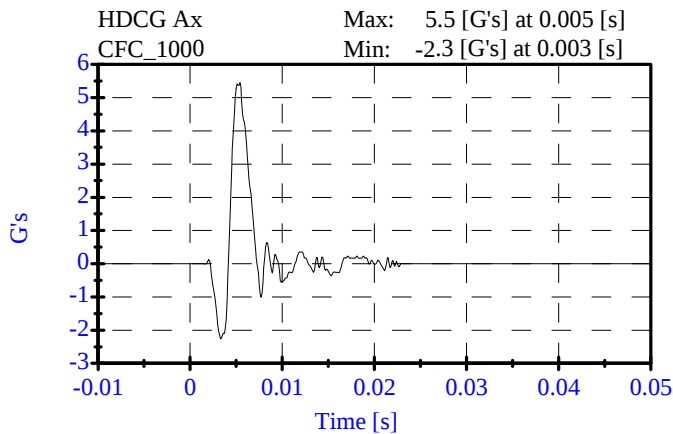


Head Drop **Pre-Test** **CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 269
Date: November 8, 2004

Sequential Test Number: 1 File: 269h 11-08-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Peak Resultant Accel.:	120-150 Gs	146.68 Gs	Passed
Peak Lateral Accel.:	15 Gs Max	5.45 Gs	Passed
Curve PerCent NonModal:	< 15%	1.87 %	Passed



Neck Test**Pre-Test****CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 269
Date: November 9, 2004

Sequential Test Number: 1 File: 269N 11-09-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	31.00 %	Passed
Impact Velocity:	6.89- 7.13 m/s	6.90 m/s	Passed
PENDULUM DELTA V			
Delta V at 10 ms:	1.96- 2.55 m/s	2.18 m/s	Passed
Delta V at 20 ms:	4.12- 5.10 m/s	4.50 m/s	Passed
Delta V at 30 ms:	5.73- 7.01 m/s	6.40 m/s	Passed
Delta V between 40-70 ms:	6.27- 7.64 m/s	7.04 m/s	Passed
D PLANE ROTATION			
Maximum Rotation:	66.0-82.0 Deg	70.17 Deg	Passed
Rotation Angle Decay:	58.0-67.0 ms	59.30 ms	Passed
MOMENT ABOUT THE OCCIPITAL CONDYLE			
Max Occipital Moment:	73.00- 88.00 N-m	87.89 N-m	Passed
Occipital Moment Decay:	49.0-64.0 ms	52.30 ms	Passed
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT			
Moment to Rotation Peak:	2.0-16.0 ms	12.40 ms	Passed

Neck Test

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

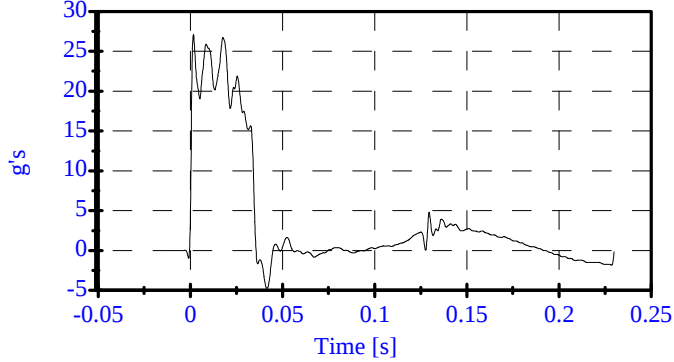
ATD Serial No: 269

Date: November 9, 2004

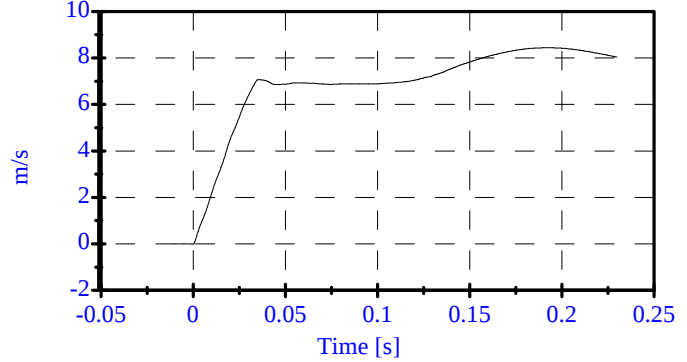
Sequential Test Number: 1 File: 269N 11-09-04

Laboratory Technician: B. Swiecicki

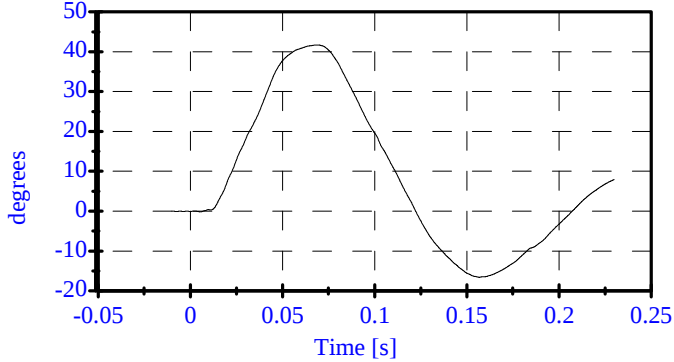
Pend Ax
CFC_180
Max: 27.1 [g's] at 0.002 [s]
Min: -4.7 [g's] at 0.041 [s]



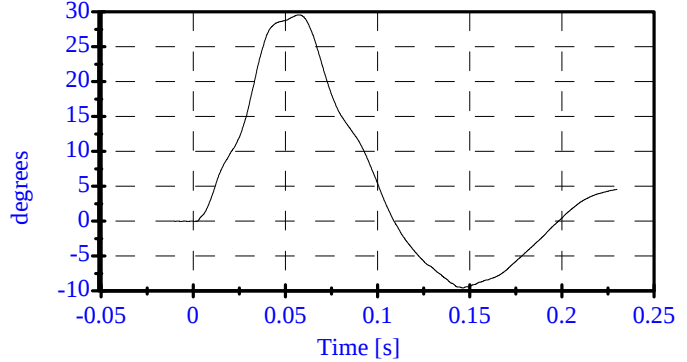
Pend Vx
CFC_180
Max: 8.4 [m/s] at 0.193 [s]
Min: -0.0 [m/s] at -0.000 [s]



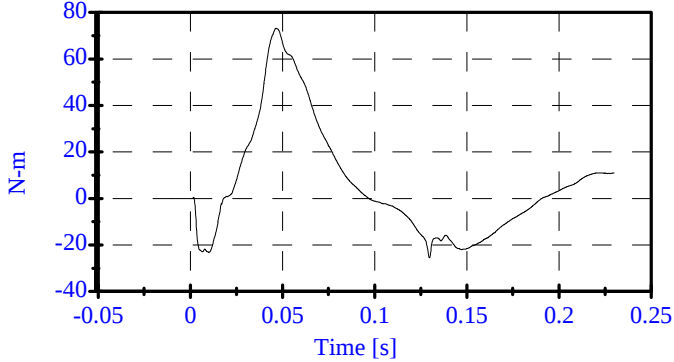
Head Rot
CFC_180
Max: 41.7 [degrees] at 0.069 [s]
Min: -16.6 [degrees] at 0.157 [s]



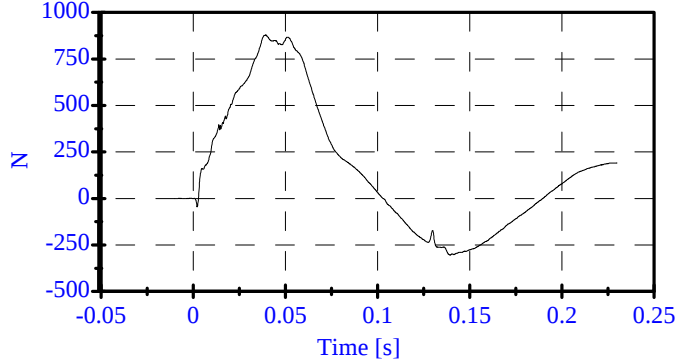
Arm Rot
CFC_180
Max: 29.6 [degrees] at 0.057 [s]
Min: -9.6 [degrees] at 0.146 [s]



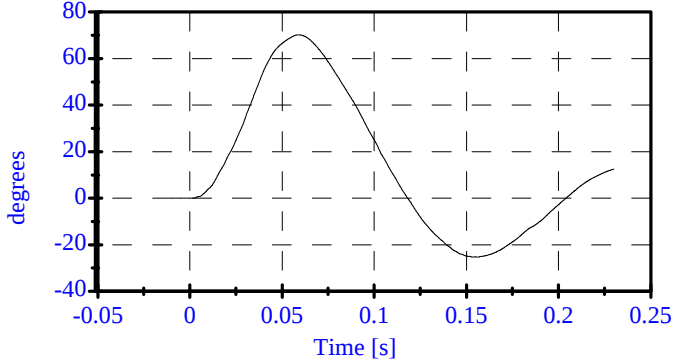
Neck Mx
CFC_600
Max: 73.1 [N-m] at 0.046 [s]
Min: -25.5 [N-m] at 0.130 [s]



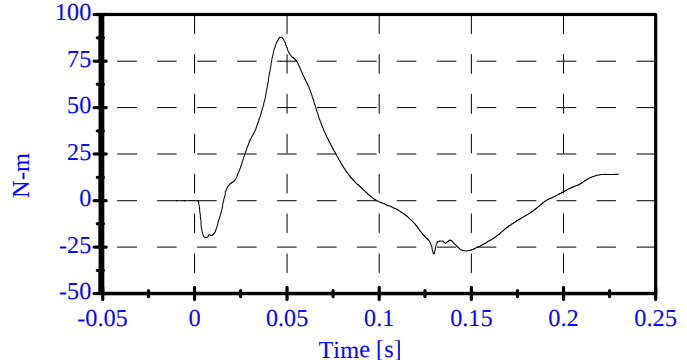
Neck Fy
CFC_1000
Max: 879.2 [N] at 0.039 [s]
Min: -305.6 [N] at 0.139 [s]



Tot Rot
CFC_180
Max: 70.2 [degrees] at 0.059 [s]
Min: -25.2 [degrees] at 0.156 [s]



MOCX
Max: 87.9 [N-m] at 0.046 [s]
Min: -28.6 [N-m] at 0.130 [s]



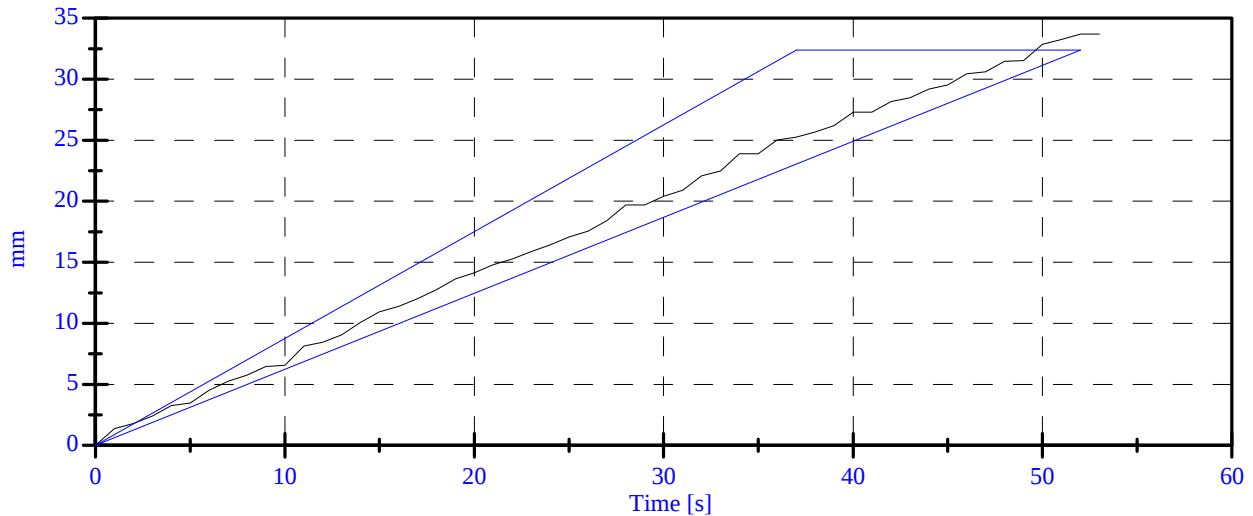
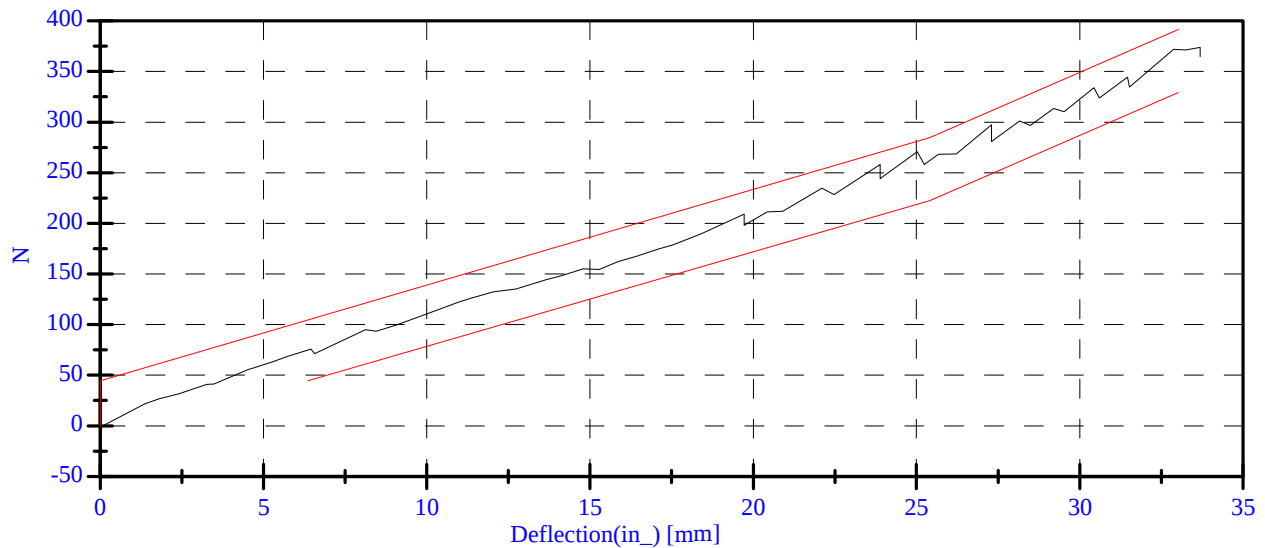
Abdominal Compression Test
PRE TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: November 11, 2004

Sequential Test Number: 1 File: 269AB 11-11-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	31.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	135.32 N	Passed
Force at 19.05 mm :	162.98-220.99 N	189.78 N	Passed
Force at 25.40 mm :	221.97-280.02 N	258.14 N	Passed
Force at 33.02 mm :	324.99-391.00 N	371.82 N	Passed

ABDOMINAL COMPRESSION TEST



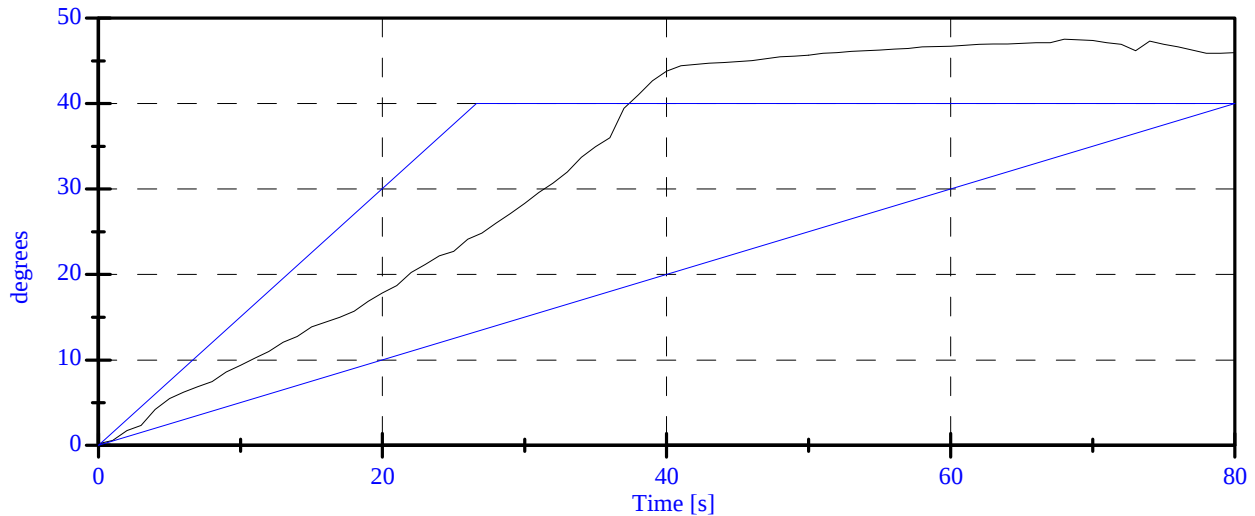
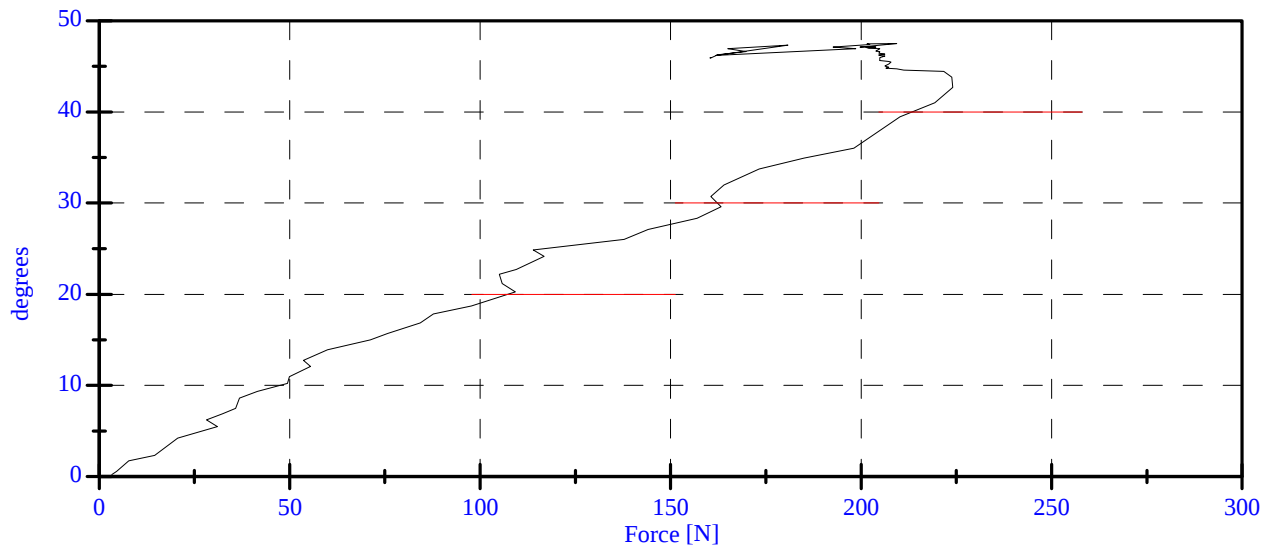
Lumbar Flexion Test
PRE TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: November 11, 2004

Sequential Test Number: 1 File: 269S 11-11-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	36.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	3.28 N	Passed
Force at 20 Deg:	97.86-151.24 N	109.22 N	Passed
Force at 30 Deg	151.24-204.62 N	163.23 N	Passed
Force at 40 Deg	204.62-258.00 N	210.17 N	Passed
Return Angle	12 Deg Max	5.26 deg	Passed

LUMBAR SPINE FLEXION TEST



PRE-TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269 Sequential Test Number: 2
Date: November 11, 2004 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

PRE-TEST

SID H3 NO.: 270

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
PRE-TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 270 Sequential Test Number: 2
Date: November 11, 2004 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.: 270 Sequential Test Number: 2
Date: November 11, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	503
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	234
KH- Knee Pivot from Back Line (mm)	511 - 526	513
KV- Knee Pivot to Floor (mm)	490 - 505	495
HW- Hip Width (mm)	356 - 391	384

REMARKS: None

Shock Impact - Low (3.05 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

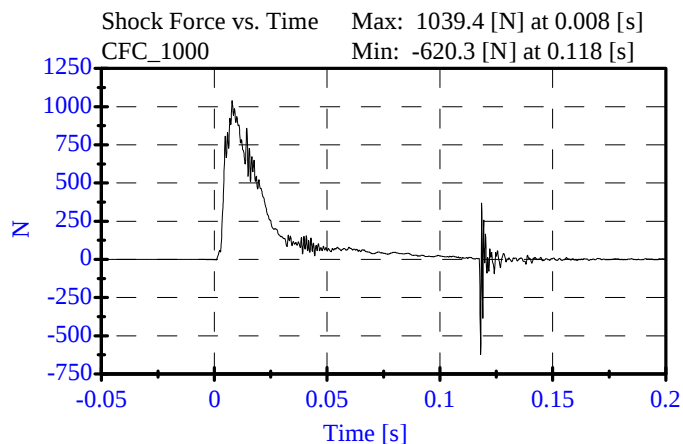
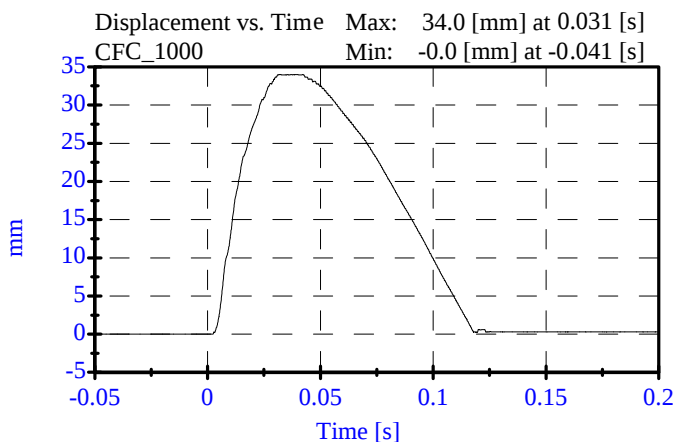
ATD Serial No: 270

Date: 07-23-04

Sequential Test Number: 1 File: 270SL 07-23-04

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	40.00 %	Passed
Displacement:	30.00-35.00 mm	34.00 mm	Passed
Maximum Force:	836.00-1125.00 N	1039.45 N	Passed
Impact Test Velocity:	3.05 m/s		
Damper Identification:	270		
Damper Setting:	5		



Shock Impact - Med (4.27 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

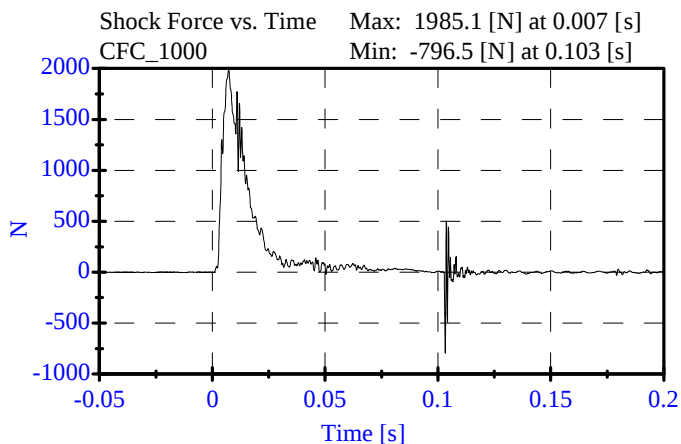
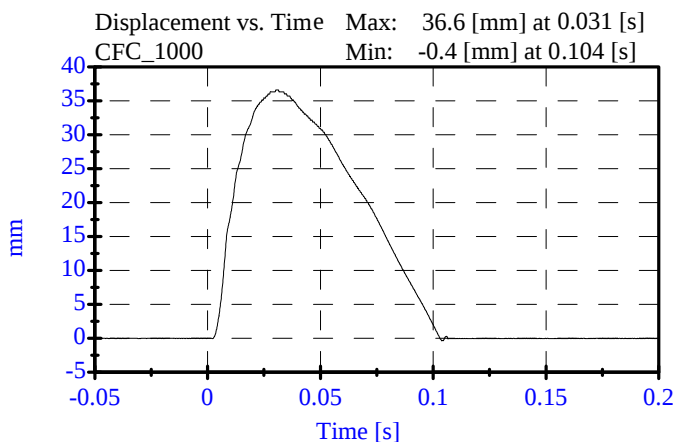
ATD Serial No: 270

Date: 07-23-04

Sequential Test Number: 1 File: 270SM 07-23-04

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	40.00 %	Passed
Displacement:	32.00-37.00 mm	36.64 mm	Passed
Maximum Force:	1730.00-2099.00 N	1985.06 N	Passed
Impact Test Velocity:	4.27 m/s		
Damper Identification:	270		
Damper Setting:	5		



Shock Impact - High (6.10 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

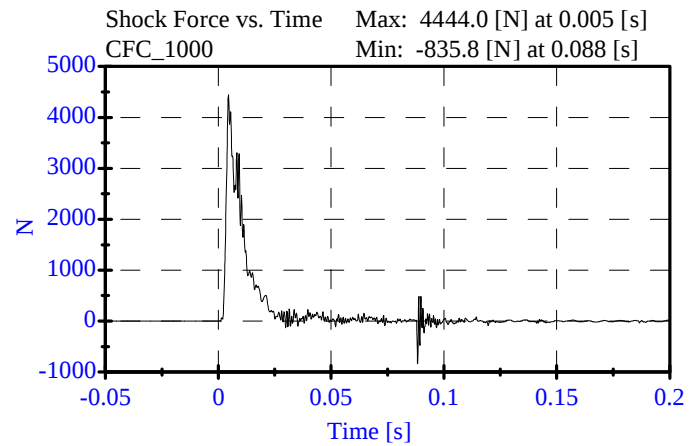
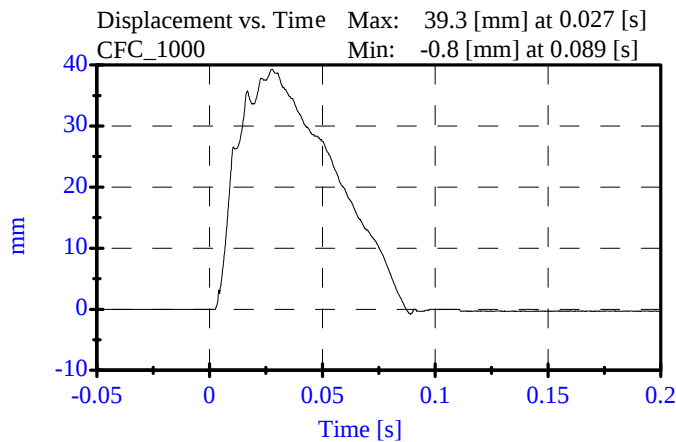
ATD Serial No: 270

Date: 07-23-04

Sequential Test Number: 1 File: 270SH 07-23-04

Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	40.00 %	Passed
Displacement:	33.00-40.00 mm	39.29 mm	Passed
Maximum Force:	3741.00-4448.00 N	4444.01 N	Passed
Impact Test Velocity:	6.10 m/s		
Damper Identification:	270		
Damper Setting:	5		

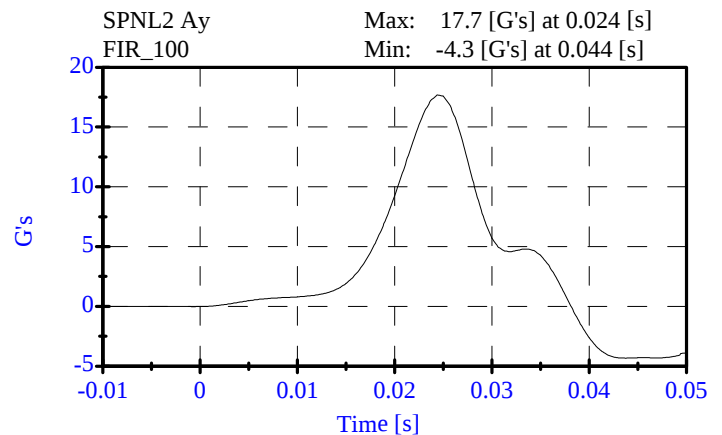
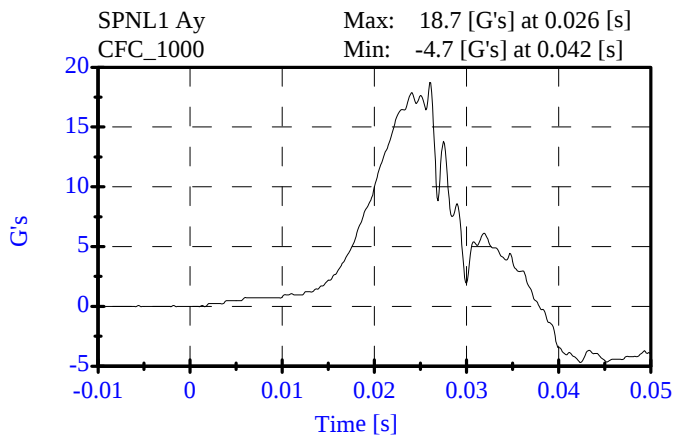
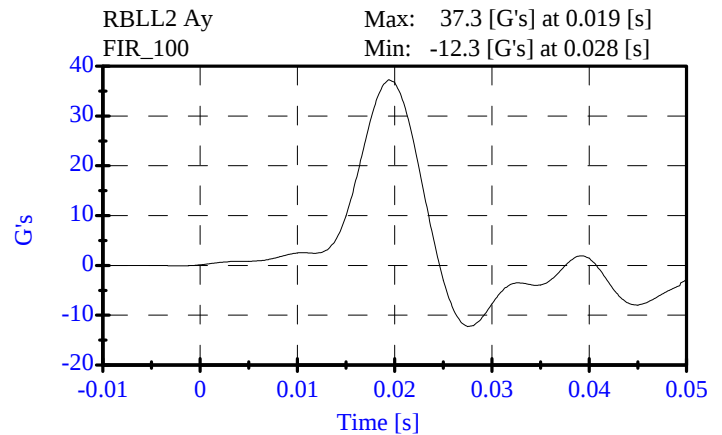
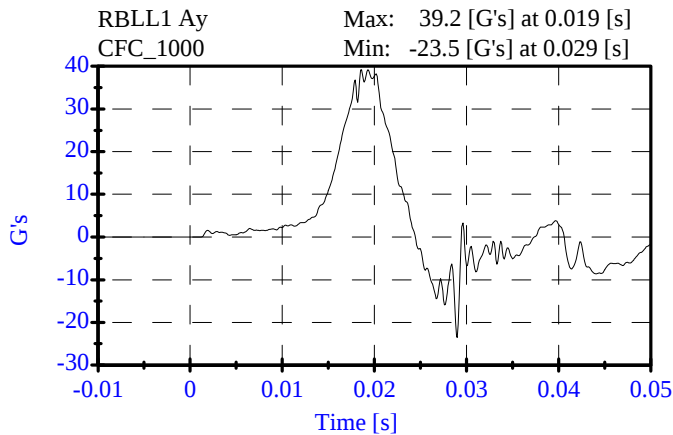
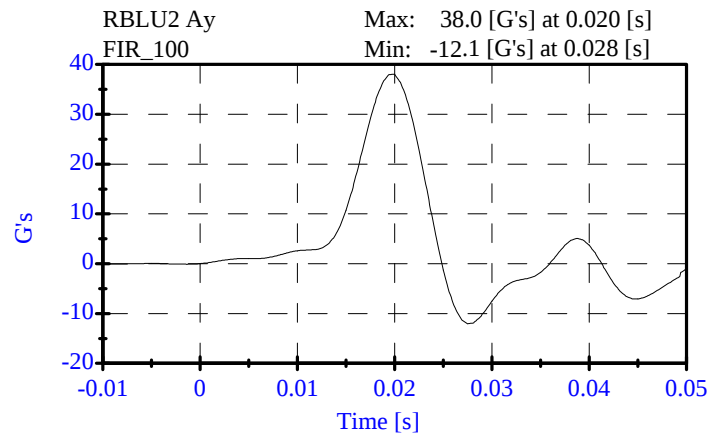
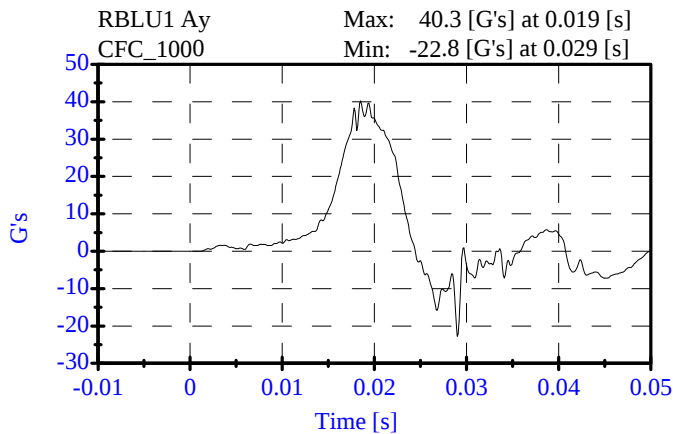


Thorax Impact
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 270
Date: November 10, 2004

Sequential Test Number: 1 File: 270T 11-10-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	32.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.32 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	37.97 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	37.32 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	17.70 G's	Passed



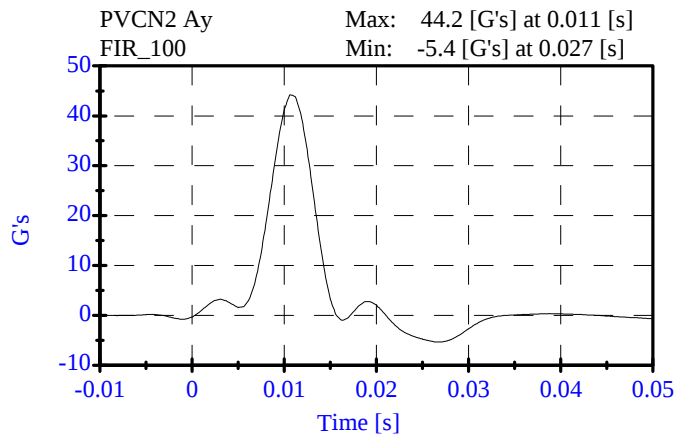
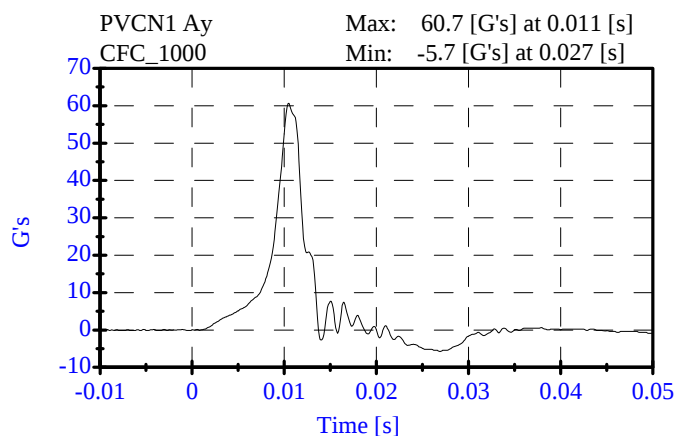
Pelvis Impact **Pre-Test**

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 270
Date: November 10, 2004

Sequential Test Number: 1 File: 270P1 11-10-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	32.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.30 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	44.24 G's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.3 ms	Passed



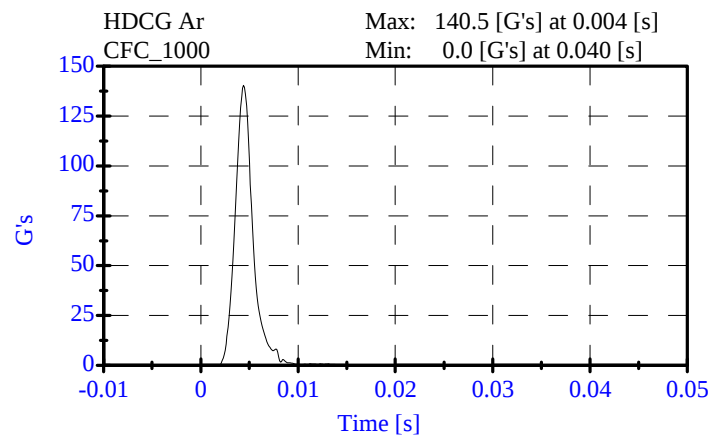
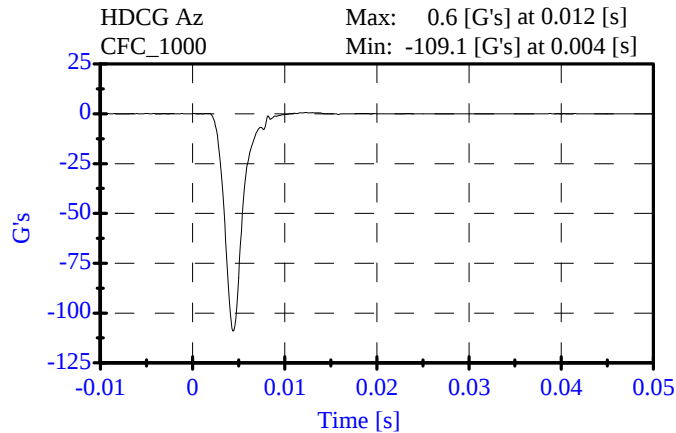
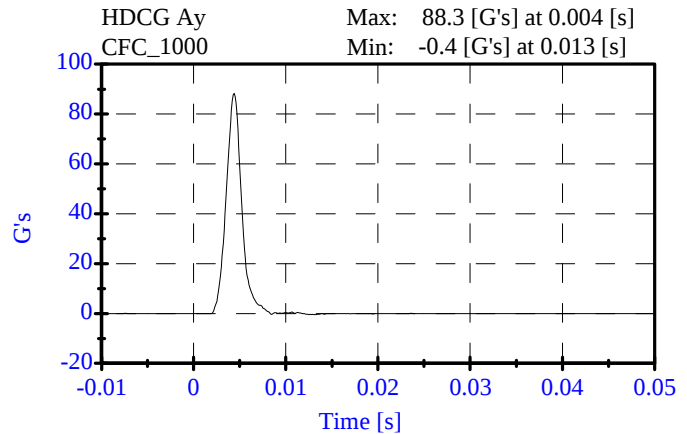
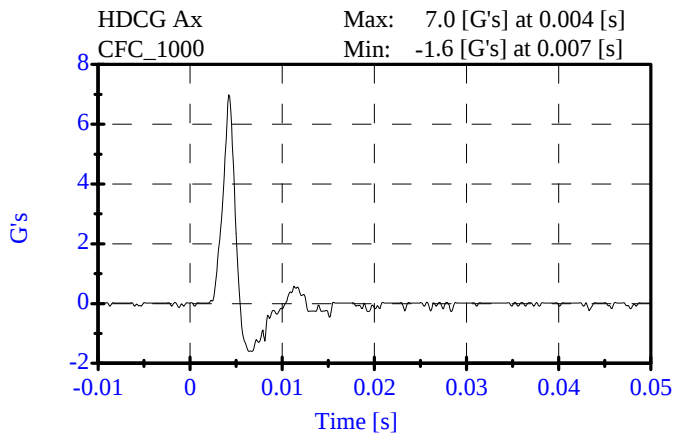
Head Drop Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 270
Date: November 5, 2004

Sequential Test Number: 1 File: 270h 11-05-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	35.00 %	Passed
Peak Resultant Accel.:	120-150 Gs	140.46 Gs	Passed
Peak Lateral Accel.:	15 Gs Max	6.98 Gs	Passed
Curve PerCent NonModal:	< 15%	5.85 %	Passed



Neck Test**Pre-Test****CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 270
Date: November 9, 2004

Sequential Test Number: 1 File: 270N3 11-09-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	31.00 %	Passed
Impact Velocity:	6.89- 7.13 m/s	6.90 m/s	Passed
PENDULUM DELTA V			
Delta V at 10 ms:	1.96- 2.55 m/s	2.08 m/s	Passed
Delta V at 20 ms:	4.12- 5.10 m/s	4.23 m/s	Passed
Delta V at 30 ms:	5.73- 7.01 m/s	6.13 m/s	Passed
Delta V between 40-70 ms:	6.27- 7.64 m/s	7.13 m/s	Passed
D PLANE ROTATION			
Maximum Rotation:	66.0-82.0 Deg	70.84 Deg	Passed
Rotation Angle Decay:	58.0-67.0 ms	59.10 ms	Passed
MOMENT ABOUT THE OCCIPITAL CONDYLE			
Max Occipital Moment:	73.00- 88.00 N-m	86.50 N-m	Passed
Occipital Moment Decay:	49.0-64.0 ms	50.60 ms	Passed
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT			
Moment to Rotation Peak:	2.0-16.0 ms	10.90 ms	Passed

Neck Test

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

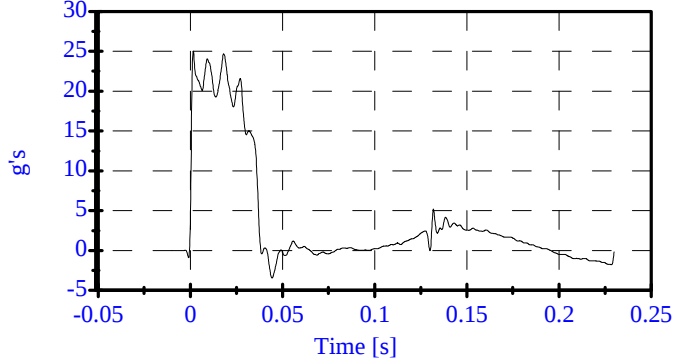
ATD Serial No: 270

Date: November 9, 2004

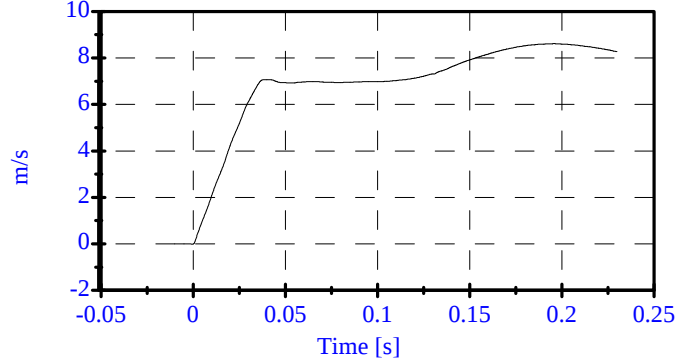
Sequential Test Number: 1 File: 270N3 11-09-04

Laboratory Technician: B. Swiecicki

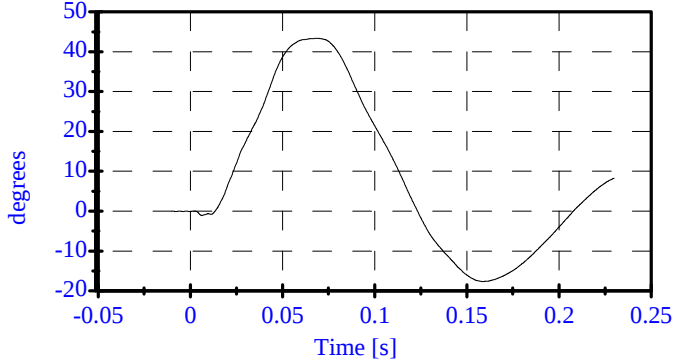
Pend Ax
CFC_180
Max: 25.0 [g's] at 0.002 [s]
Min: -3.4 [g's] at 0.044 [s]



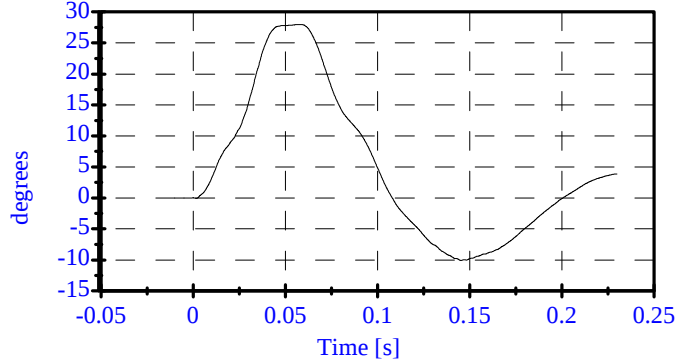
Pend Vx
CFC_180
Max: 8.6 [m/s] at 0.196 [s]
Min: -0.0 [m/s] at -0.000 [s]



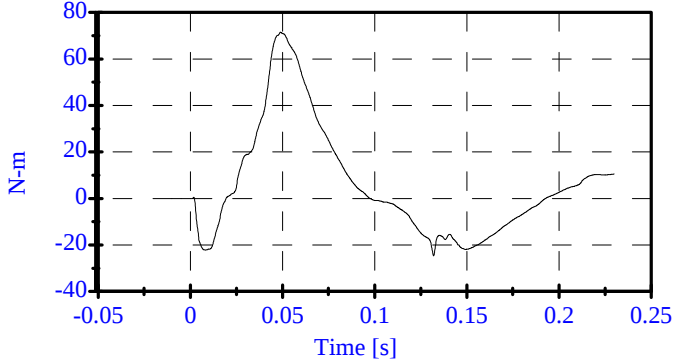
Head Rot
CFC_180
Max: 43.4 [degrees] at 0.069 [s]
Min: -17.7 [degrees] at 0.159 [s]



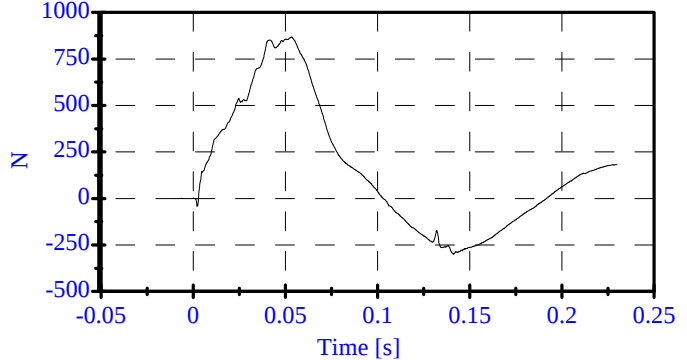
Arm Rot
CFC_180
Max: 28.0 [degrees] at 0.057 [s]
Min: -10.1 [degrees] at 0.145 [s]



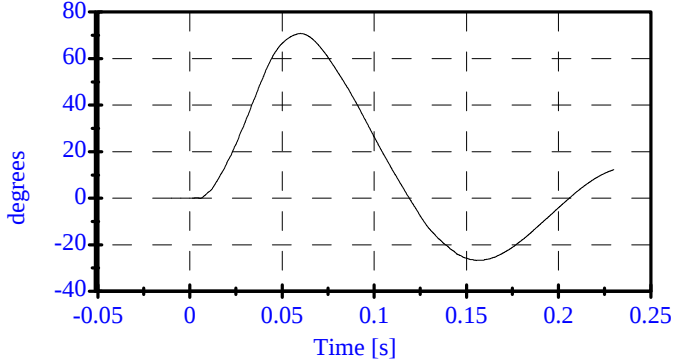
Neck Mx
CFC_600
Max: 71.5 [N-m] at 0.049 [s]
Min: -24.7 [N-m] at 0.132 [s]



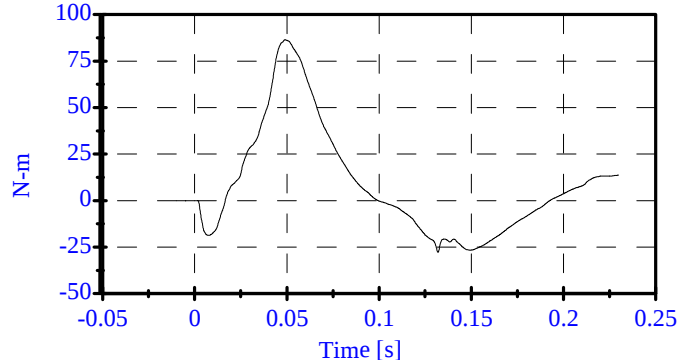
Neck Fy
CFC_1000
Max: 867.7 [N] at 0.053 [s]
Min: -300.5 [N] at 0.141 [s]



Tot Rot
CFC_180
Max: 70.8 [degrees] at 0.060 [s]
Min: -26.7 [degrees] at 0.155 [s]



MOCX
Max: 86.5 [N-m] at 0.049 [s]
Min: -27.8 [N-m] at 0.132 [s]



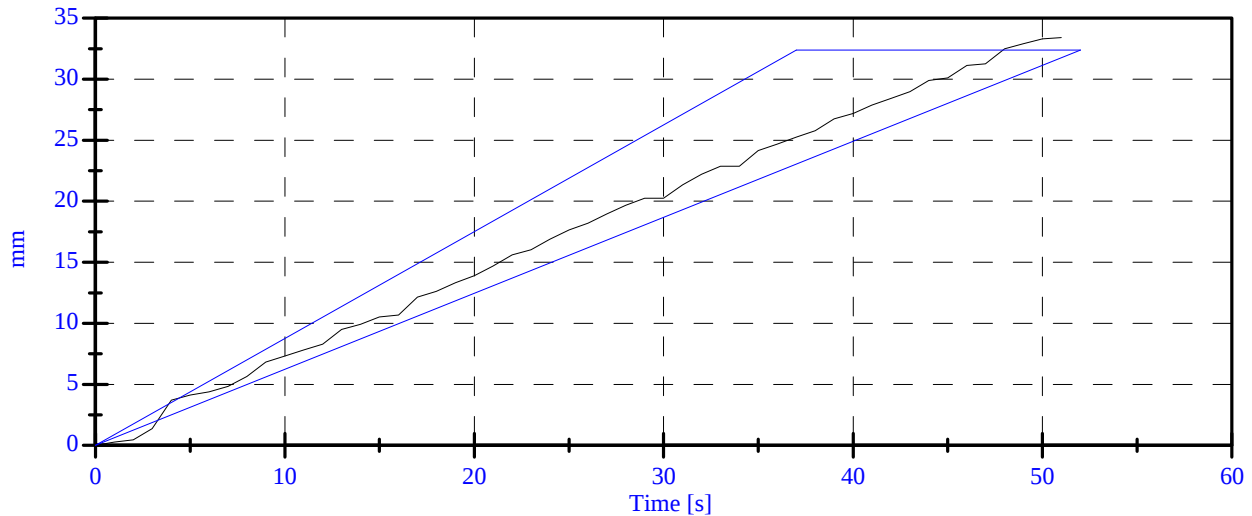
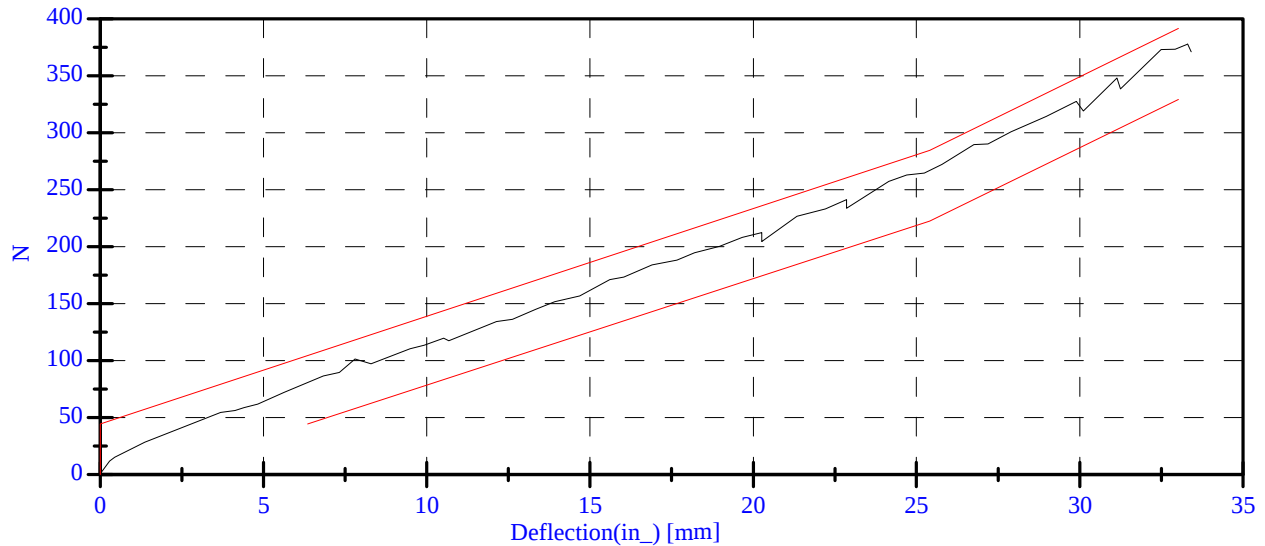
Abdominal Compression Test
PRE TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 270
Date: November 11, 2004

Sequential Test Number: 1 File: 270AB 11-11-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	31.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	136.42 N	Passed
Force at 19.05 mm :	162.98-220.99 N	200.38 N	Passed
Force at 25.40 mm :	221.97-280.02 N	264.72 N	Passed
Force at 33.02 mm :	324.99-391.00 N	373.28 N	Passed

ABDOMINAL COMPRESSION TEST



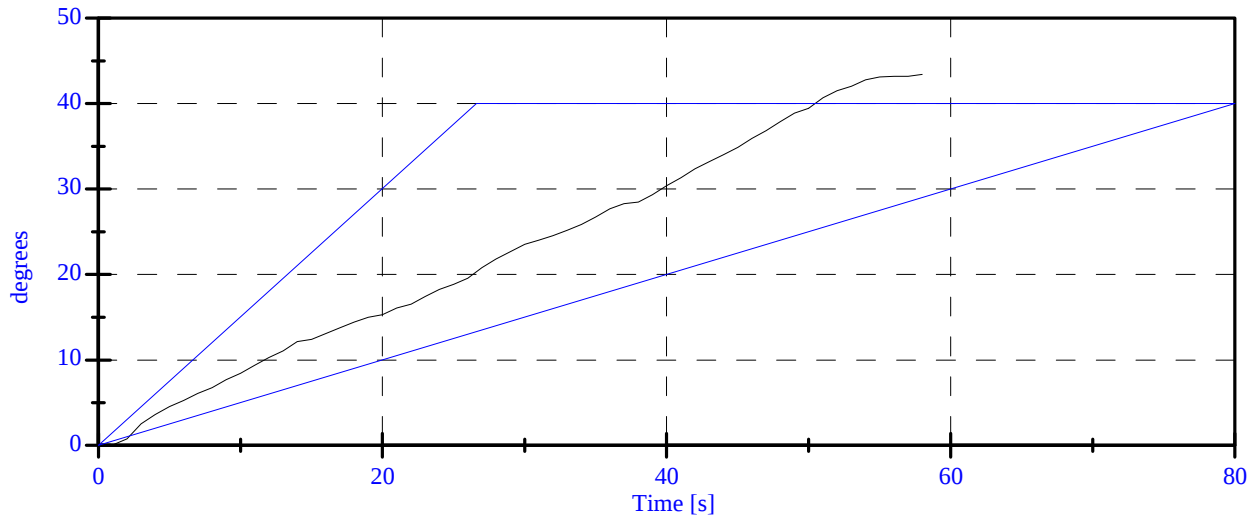
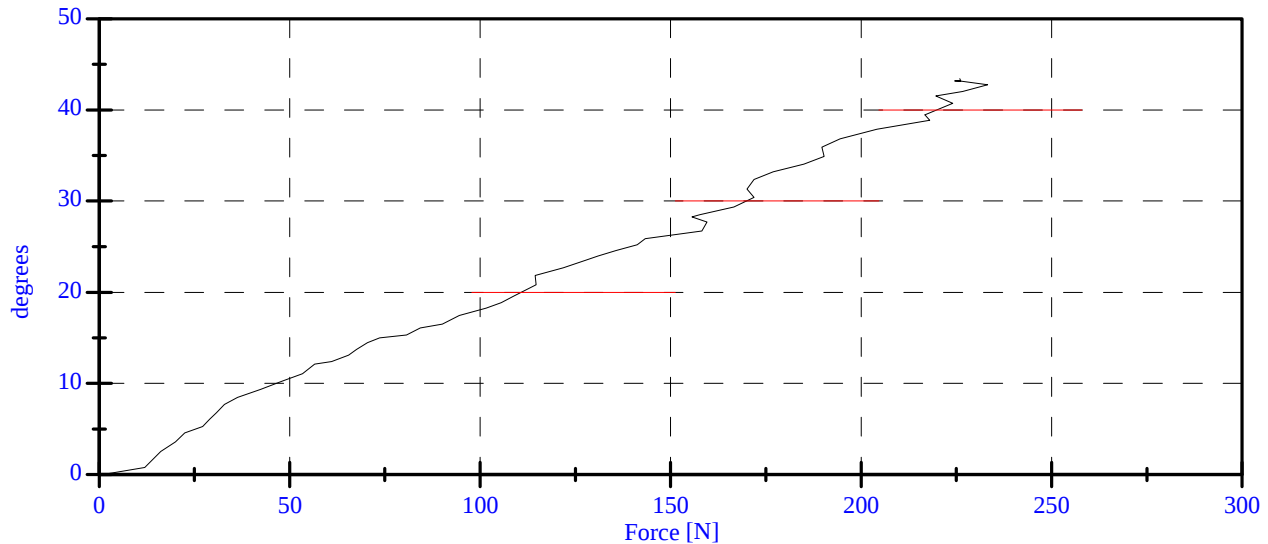
**Lumbar Spine Flexion
PRE TEST
CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 270
Date: November 11, 2004

Sequential Test Number: 1 File: 270S 11-11-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	36.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	1.18 N	Passed
Force at 20 Deg:	97.86-151.24 N	108.69 N	Passed
Force at 30 Deg:	151.24-204.62 N	171.89 N	Passed
Force at 40 Deg:	204.62-258.00 N	216.72 N	Passed
Return Angle	12 Deg Max	3.80 deg	Passed

LUMBAR SPINE FLEXION TEST



PRE-TEST DUMMY INSPECTION LIST

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 270 Sequential Test Number: 2
Date: November 11, 2004 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.: 269

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269 Sequential Test Number: 3
Date: November 18, 2004 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.: 269 Sequential Test Number: 3
Date: November 18, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	503
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	234
KH- Knee Pivot from Back Line (mm)	511 - 526	518
KV- Knee Pivot to Floor (mm)	490 - 505	495
HW- Hip Width (mm)	356 - 391	379

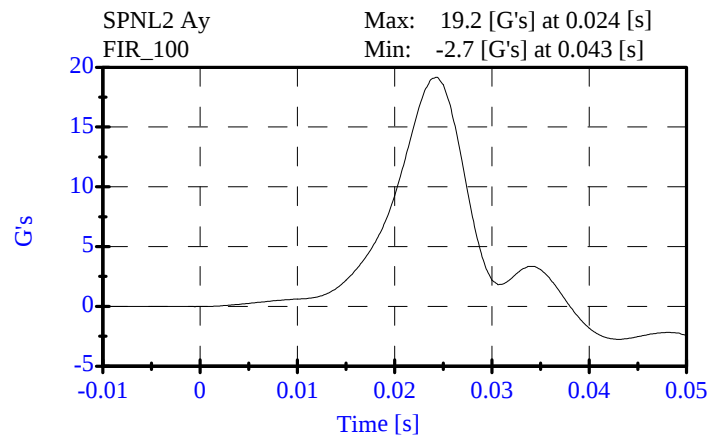
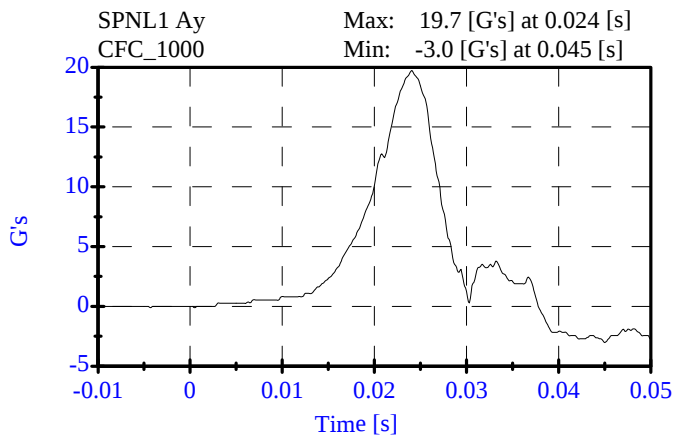
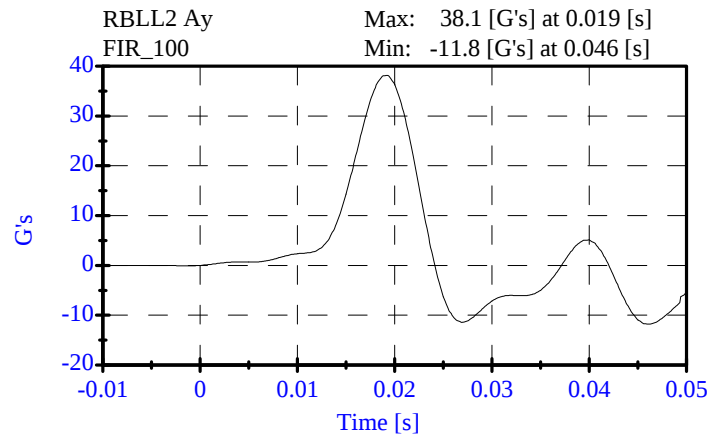
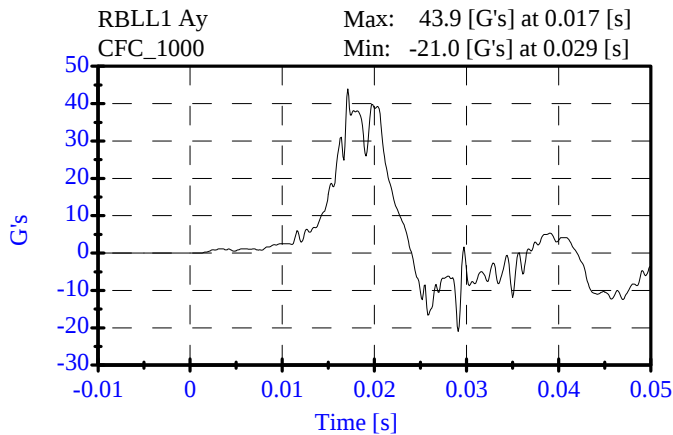
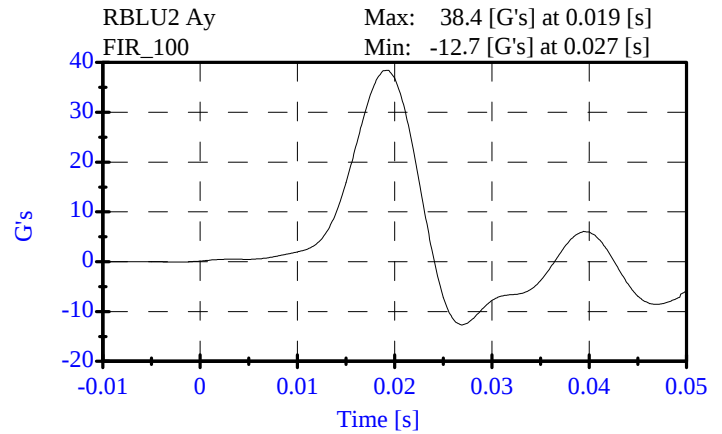
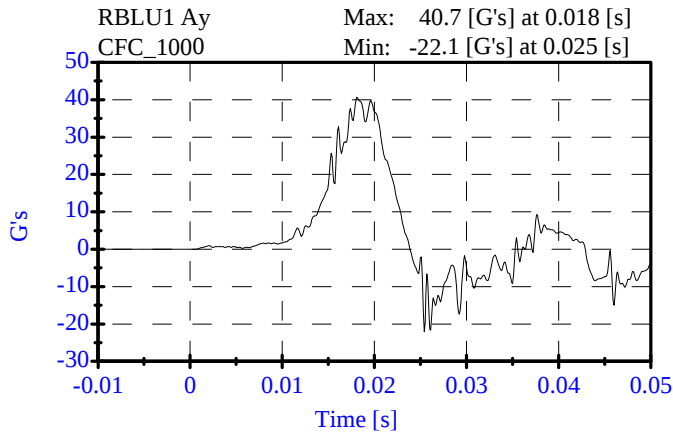
REMARKS: None

Thorax Impact
Post-Test
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: November 18, 2004

Sequential Test Number: 1 File: 269T 11-18-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.28 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	38.41 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	38.14 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	19.18 G's	Passed



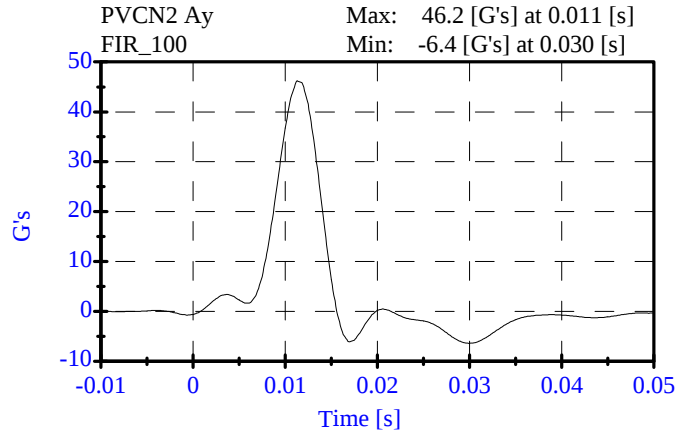
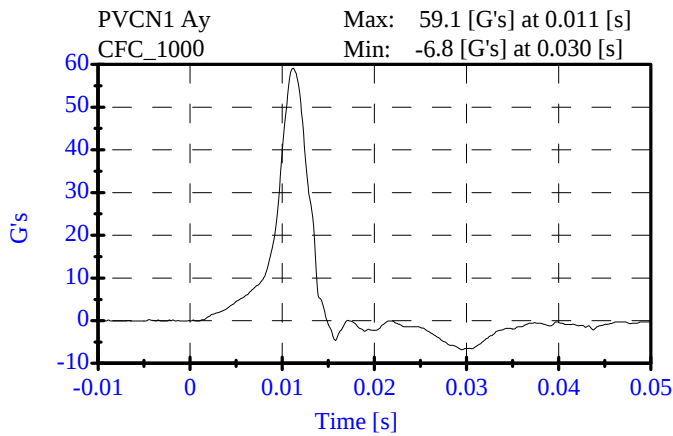
**Pelvic Impact
Post-Test**

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: November 18, 2004

Sequential Test Number: 1 File: 269P 11-18-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.28 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	46.23 G's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.3 ms	Passed



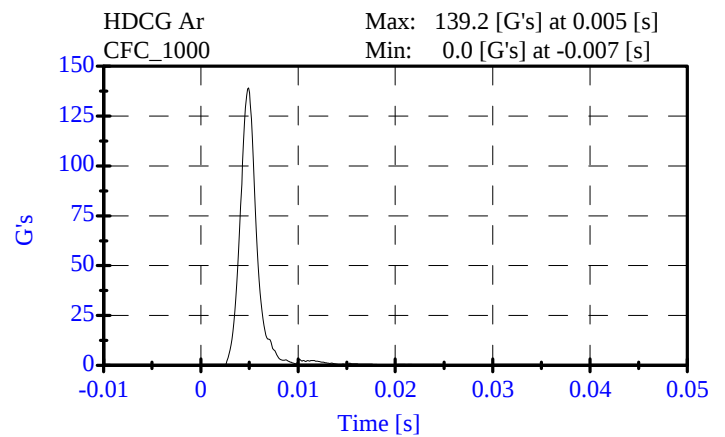
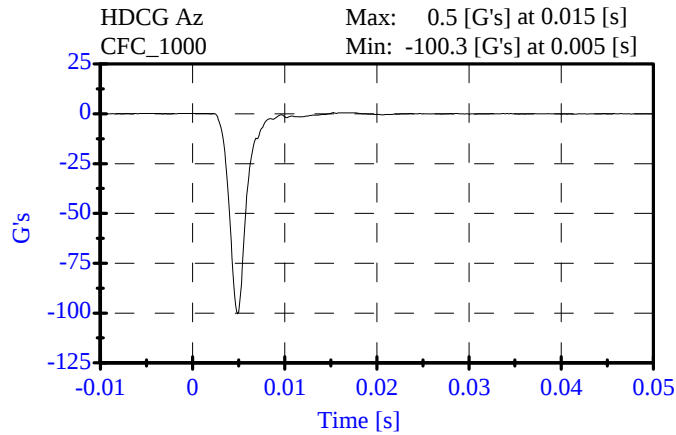
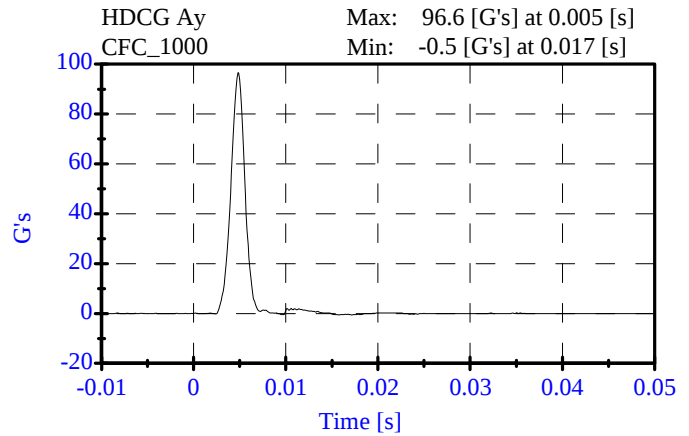
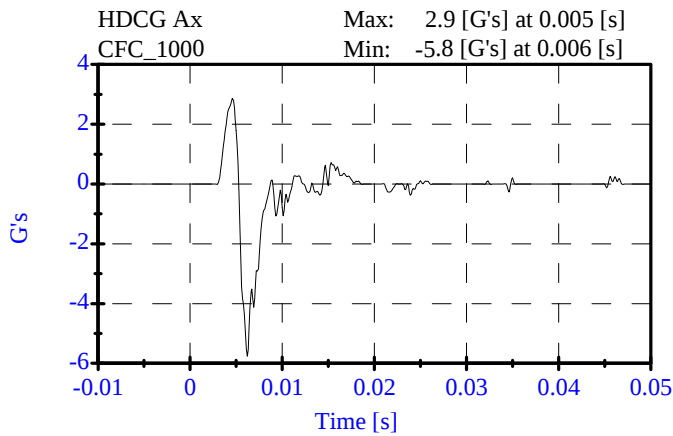
Head Drop Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: November 17, 2004

Sequential Test Number: 1 File: 269H 11-17-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Peak Resultant Accel.:	120-150 Gs	139.21 Gs	Passed
Peak Lateral Accel.:	15 Gs Max	2.86 Gs	Passed
Curve PerCent NonModal:	< 15%	2.14 %	Passed



Neck Test**Post-Test****CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 269
Date: November 17, 2004

Sequential Test Number: 1 File: 269N 11-17-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Impact Velocity:	6.89- 7.13 m/s	7.01 m/s	Passed
PENDULUM DELTA V			
Delta V at 10 ms:	1.96- 2.55 m/s	1.96 m/s	Passed
Delta V at 20 ms:	4.12- 5.10 m/s	4.15 m/s	Passed
Delta V at 30 ms:	5.73- 7.01 m/s	6.03 m/s	Passed
Delta V between 40-70 ms:	6.27- 7.64 m/s	7.12 m/s	Passed
D PLANE ROTATION			
Maximum Rotation:	66.0-82.0 Deg	69.39 Deg	Passed
Rotation Angle Decay:	58.0-67.0 ms	58.00 ms	Passed
MOMENT ABOUT THE OCCIPITAL CONDYLE			
Max Occipital Moment:	73.00- 88.00 N-m	86.56 N-m	Passed
Occipital Moment Decay:	49.0-64.0 ms	51.00 ms	Passed
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT			
Moment to Rotation Peak:	2.0-16.0 ms	9.90 ms	Passed

Neck Test

Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

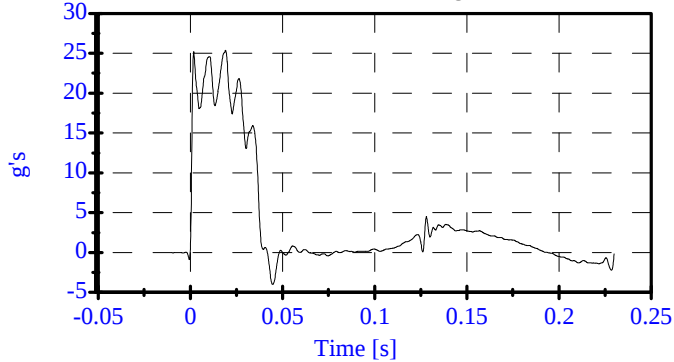
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Date: November 17, 2004

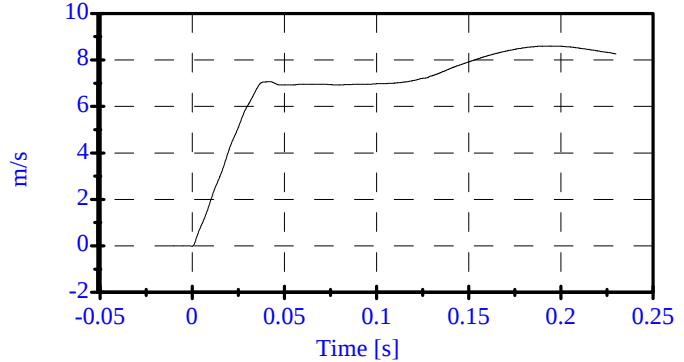
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Laboratory Technician: B. Swiecicki

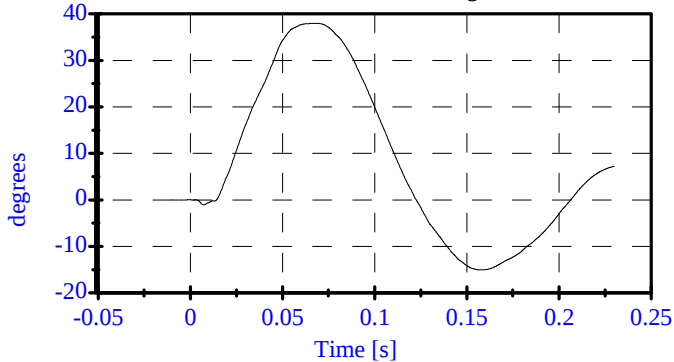
Pend Ax
CFC_180
Max: 25.4 [g's] at 0.019 [s]
Min: -4.0 [g's] at 0.045 [s]



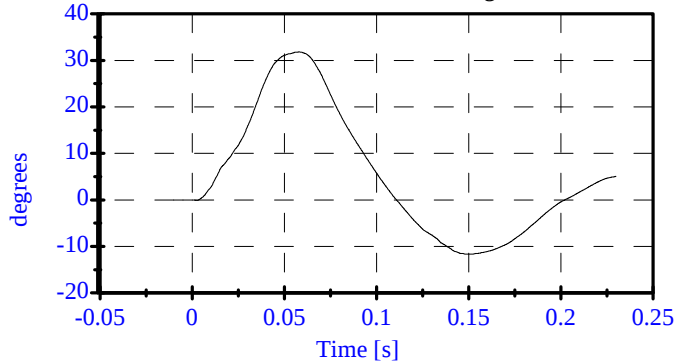
Pend Vx
CFC_180
Max: 8.6 [m/s] at 0.194 [s]
Min: -0.0 [m/s] at -0.000 [s]



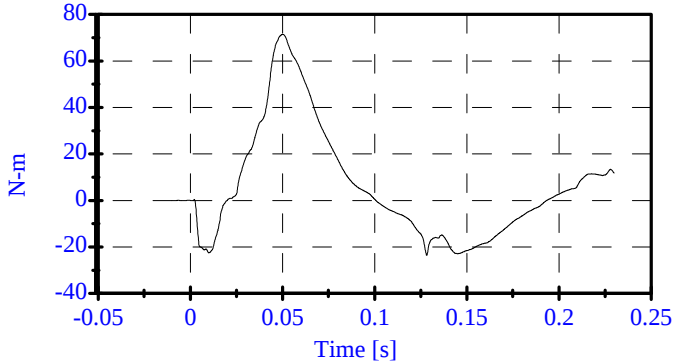
Head Rot
CFC_180
Max: 38.0 [degrees] at 0.067 [s]
Min: -15.0 [degrees] at 0.158 [s]



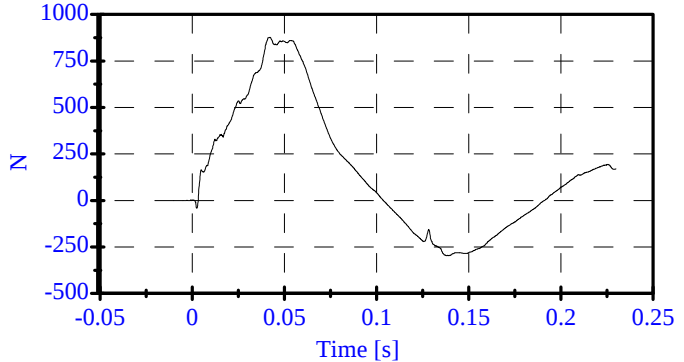
Arm Rot
CFC_180
Max: 31.8 [degrees] at 0.058 [s]
Min: -11.7 [degrees] at 0.149 [s]



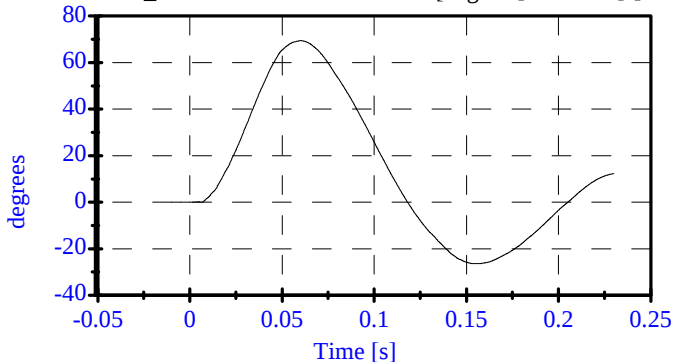
Neck Mx
CFC_600
Max: 71.4 [N-m] at 0.050 [s]
Min: -23.7 [N-m] at 0.128 [s]



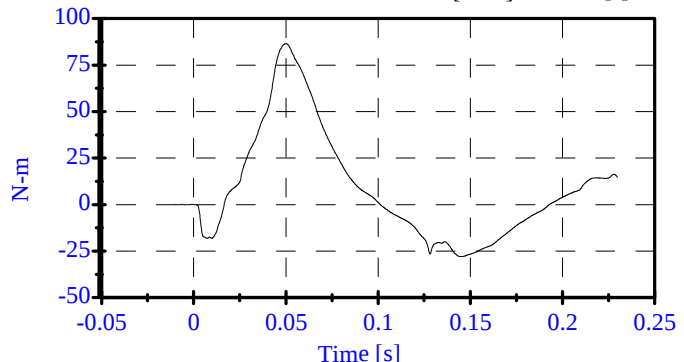
Neck Fy
CFC_1000
Max: 876.8 [N] at 0.042 [s]
Min: -297.0 [N] at 0.138 [s]



Tot Rot
CFC_180
Max: 69.4 [degrees] at 0.060 [s]
Min: -26.4 [degrees] at 0.156 [s]



MOCX
Max: 86.6 [N-m] at 0.050 [s]
Min: -27.9 [N-m] at 0.145 [s]



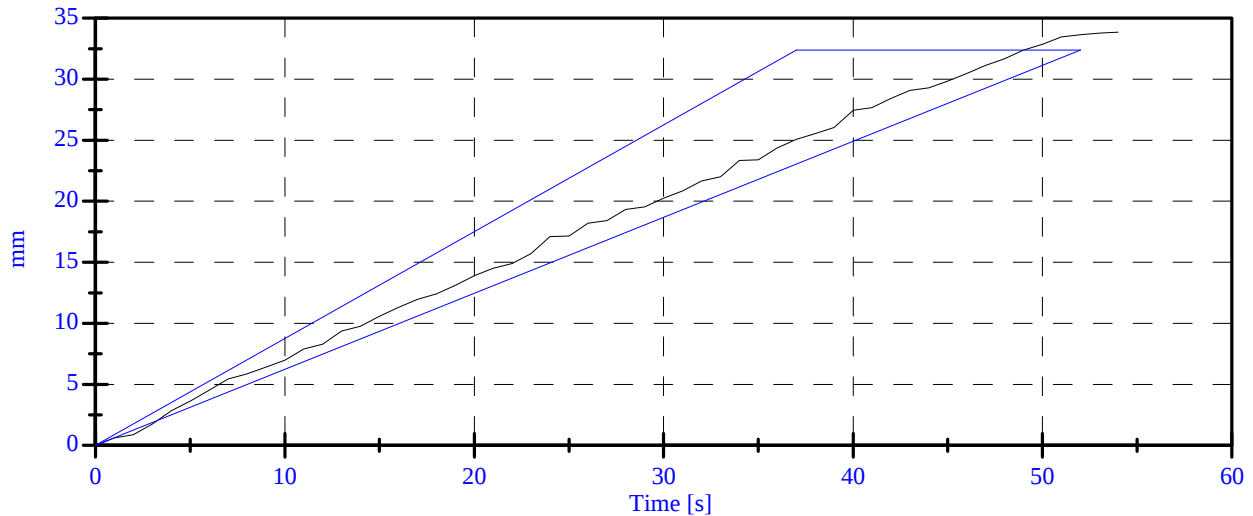
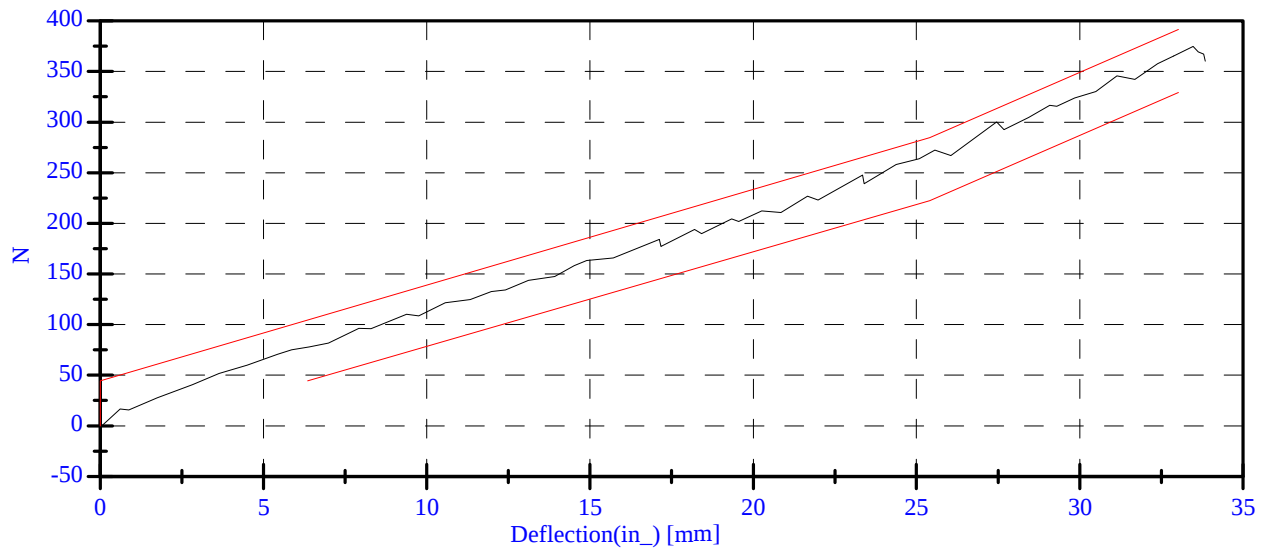
Abdomen CompressionTest
POST TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: November 18, 2004

Sequential Test Number: 1 File: 269A-2T 11-18-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	143.73 N	Passed
Force at 19.05 mm :	162.98-220.99 N	204.40 N	Passed
Force at 25.40 mm :	221.97-280.02 N	272.39 N	Passed
Force at 33.02 mm :	324.99-391.00 N	365.24 N	Passed

ABDOMINAL COMPRESSION TEST



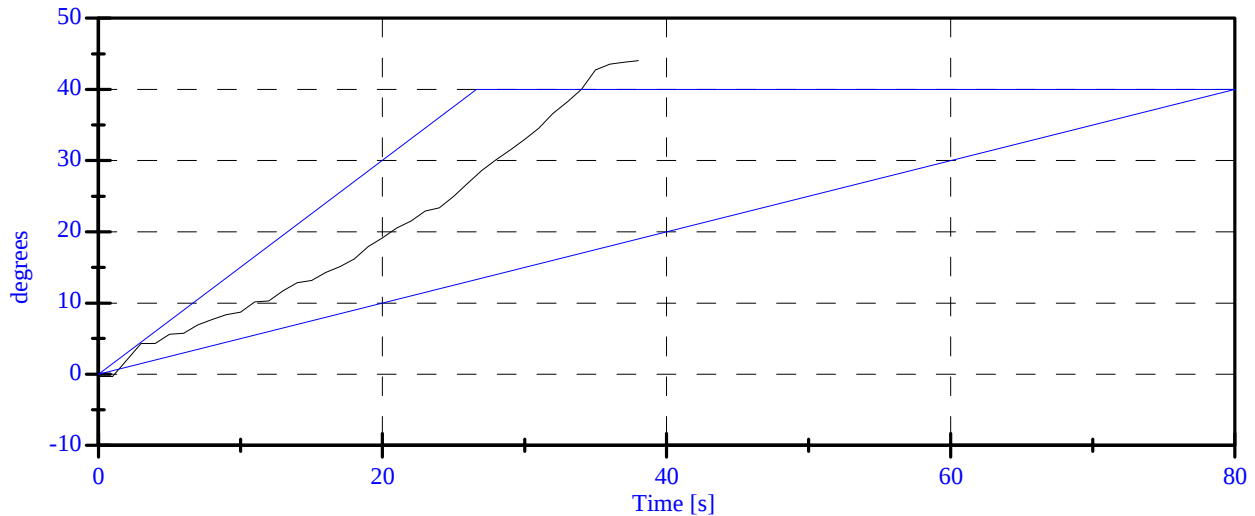
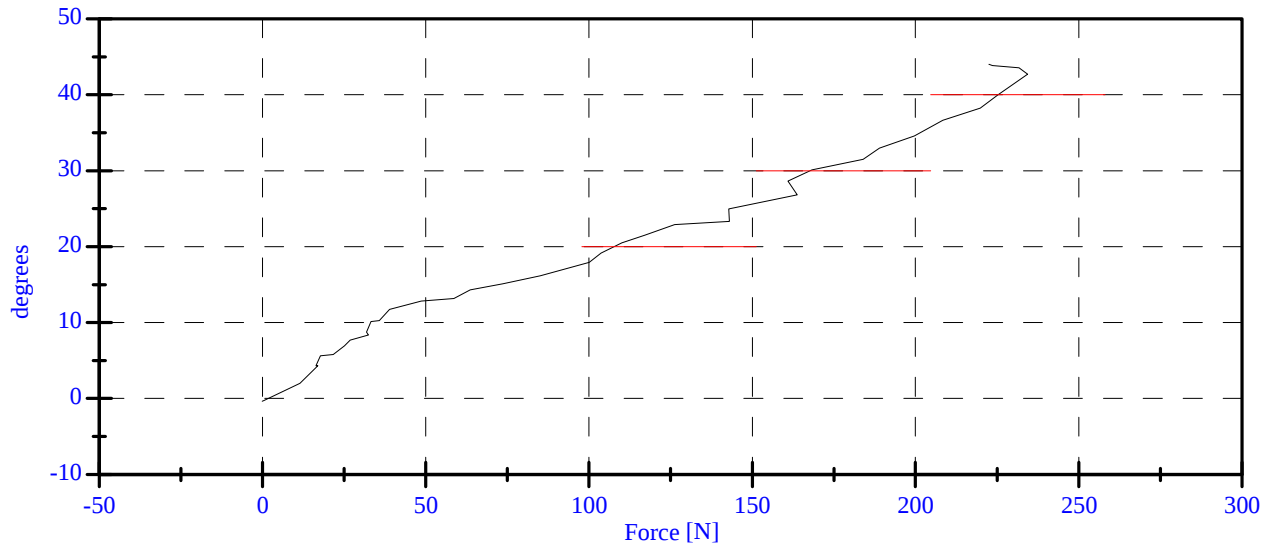
Lumbar Spine Test
POST TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 269
Date: November 18, 2004

Sequential Test Number: 1 File: 269S1 11-18-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	0.40 N	Passed
Force at 20 Deg:	97.86-151.24 N	110.00 N	Passed
Force at 30 Deg	151.24-204.62 N	168.21 N	Passed
Force at 40 Deg	204.62-258.00 N	225.38 N	Passed
Return Angle	12 Deg Max	3.14 deg	Passed

LUMBAR SPINE FLEXION TEST



POST TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269 Sequential Test Number: 3
Date: November 18, 2004 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.: 270

CONFIGURED FOR LEFT SIDE IMPACT

**CALIBRATION TEST RESULTS SUMMARY
POST TEST**

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 270 Sequential Test Number: 3
Date: November 18, 2004 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.: 270 Sequential Test Number: 3
Date: November 18, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	503
HP- Hip Pivot Height (mm)	99 ref.	99
RD- Rib from Back Line (mm)	229 - 241	234
KH- Knee Pivot from Back Line (mm)	511 - 526	513
KV- Knee Pivot to Floor (mm)	490 - 505	495
HW- Hip Width (mm)	356 - 391	384

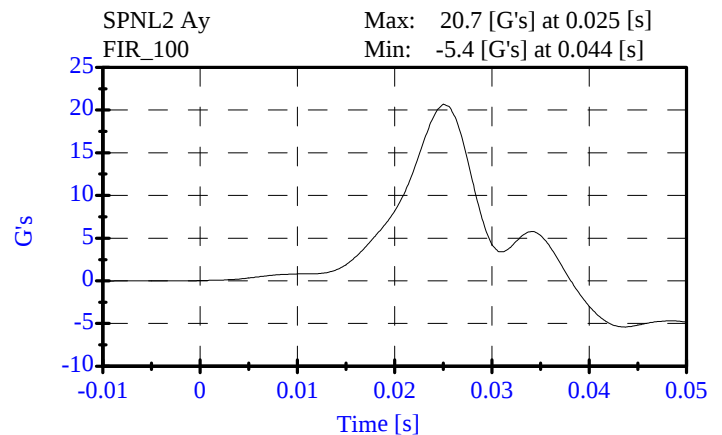
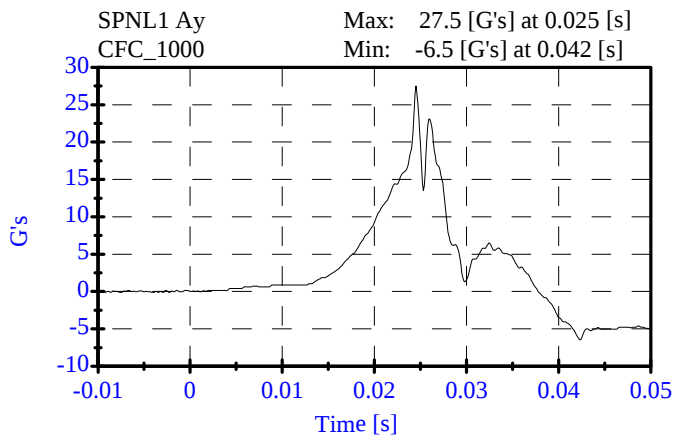
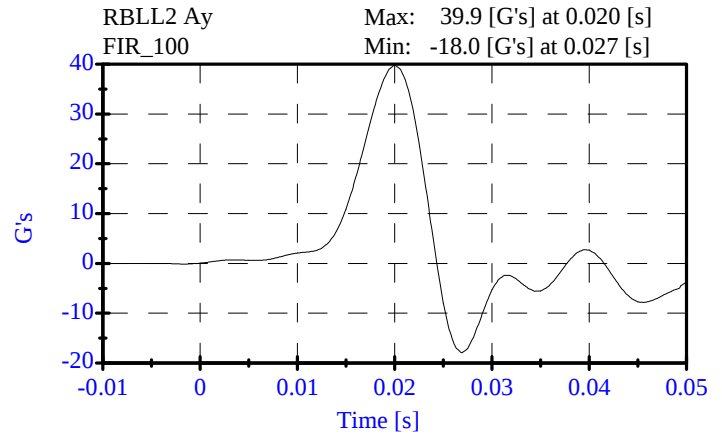
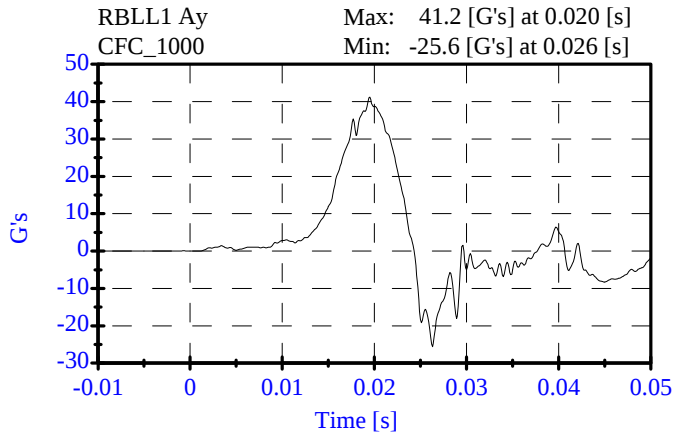
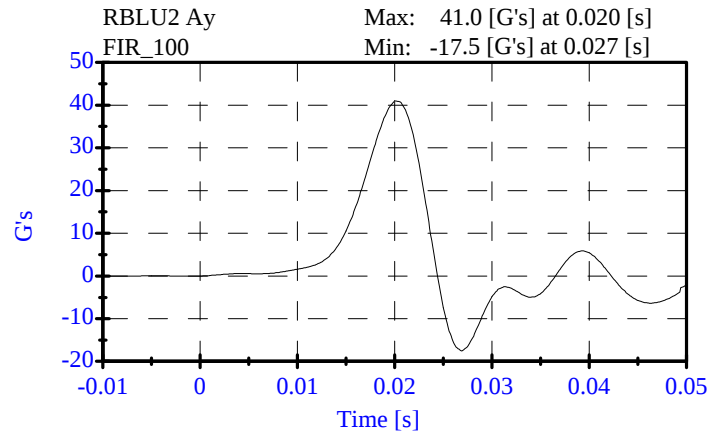
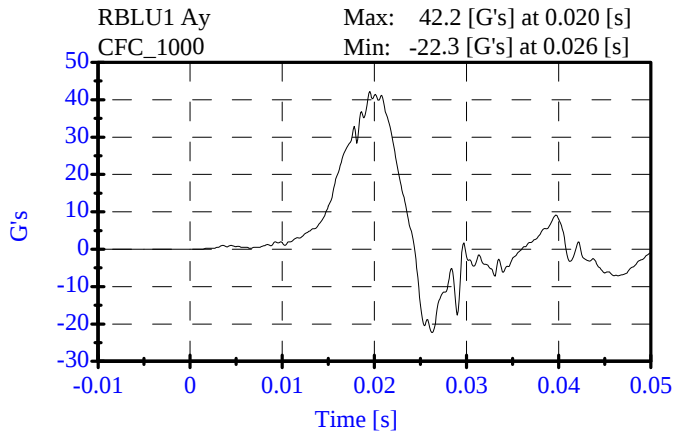
REMARKS: None

Thorax Impact
Post-Test
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 270
Date: November 18, 2004

Sequential Test Number: 1 File: 270T 11-18-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.28 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	41.02 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	39.88 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	20.70 G's	Passed



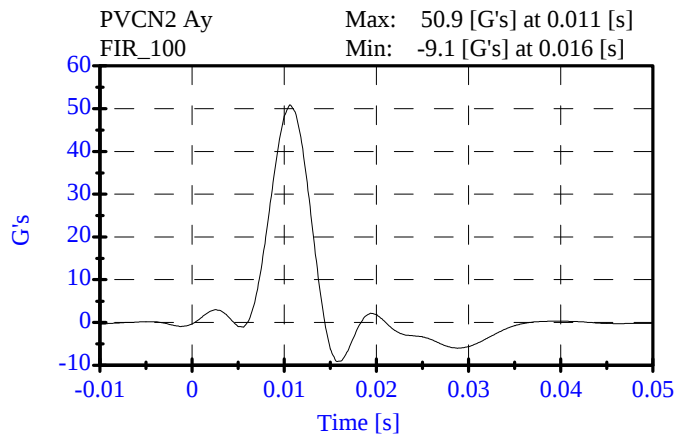
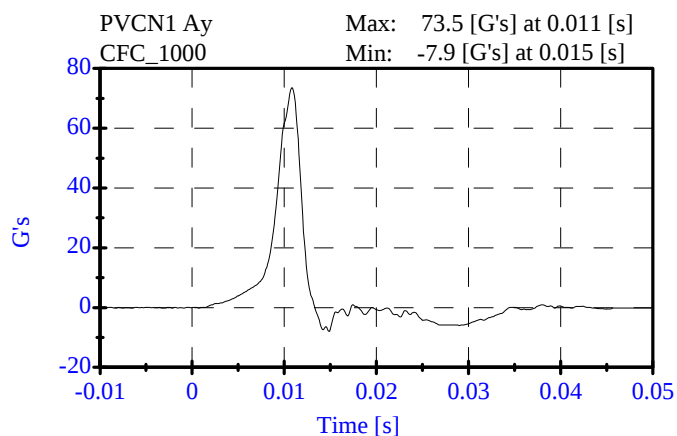
Pelvis Impact Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 270
Date: November 18, 2004

Sequential Test Number: 1 File: 270P 11-18-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.28 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	50.94 G's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.2 ms	Passed



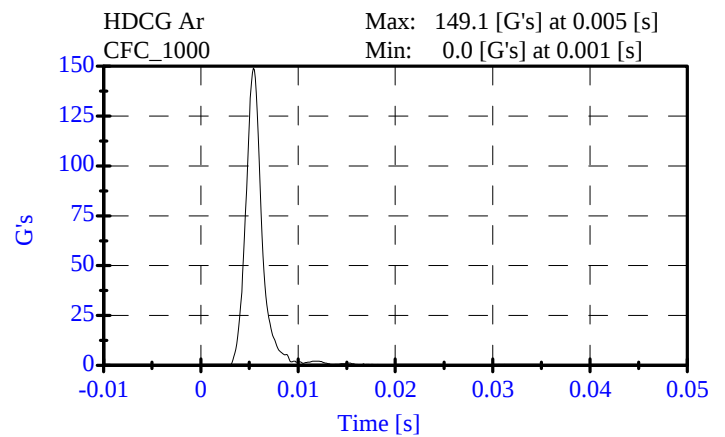
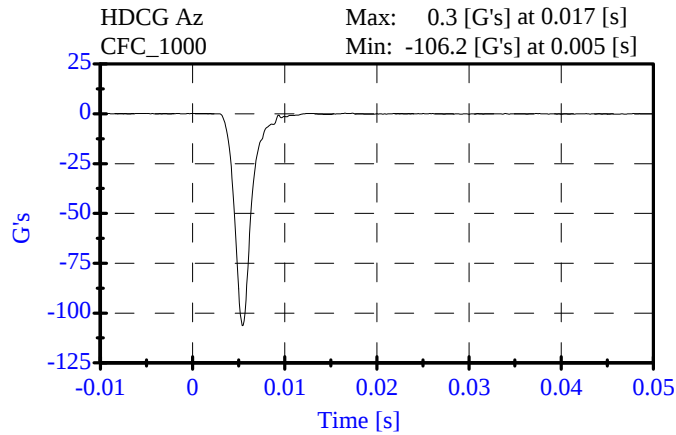
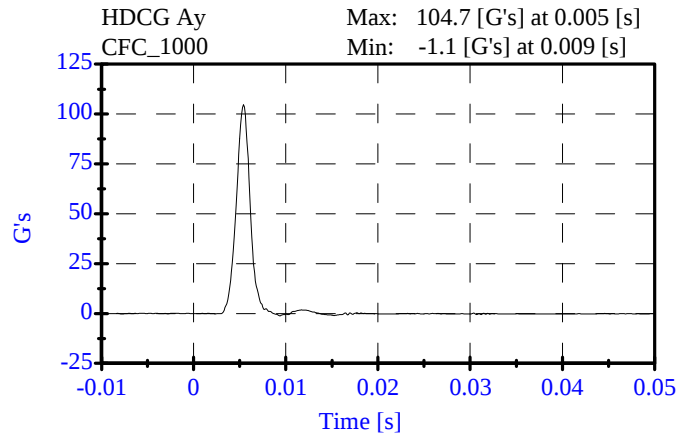
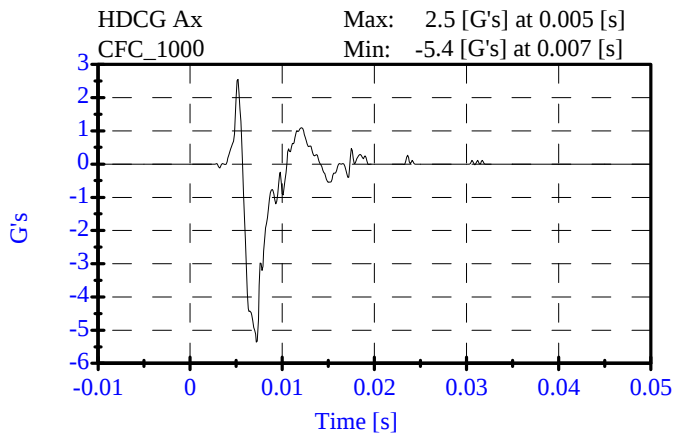
Head Drop **Post-Test**

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 270
Date: November 17, 2004

Sequential Test Number: 1 File: 270H 11-17-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Peak Resultant Accel.:	120-150 Gs	149.15 Gs	Passed
Peak Lateral Accel.:	15 Gs Max	2.55 Gs	Passed
Curve PerCent NonModal:	< 15%	3.64 %	Passed



Neck Test**Post-Test****CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 270
Date: November 17, 2004

Sequential Test Number: 1 File: 270N1 11-17-04
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Impact Velocity:	6.89- 7.13 m/s	7.01 m/s	Passed
PENDULUM DELTA V			
Delta V at 10 ms:	1.96- 2.55 m/s	2.18 m/s	Passed
Delta V at 20 ms:	4.12- 5.10 m/s	4.43 m/s	Passed
Delta V at 30 ms:	5.73- 7.01 m/s	6.38 m/s	Passed
Delta V between 40-70 ms:	6.27- 7.64 m/s	7.10 m/s	Passed
D PLANE ROTATION			
Maximum Rotation:	66.0-82.0 Deg	71.87 Deg	Passed
Rotation Angle Decay:	58.0-67.0 ms	59.80 ms	Passed
MOMENT ABOUT THE OCCIPITAL CONDYLE			
Max Occipital Moment:	73.00- 88.00 N-m	86.72 N-m	Passed
Occipital Moment Decay:	49.0-64.0 ms	52.20 ms	Passed
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT			
Moment to Rotation Peak:	2.0-16.0 ms	10.90 ms	Passed

Neck Test
Post-Test

CONFIGURED FOR LEFT SIDE IMPACT

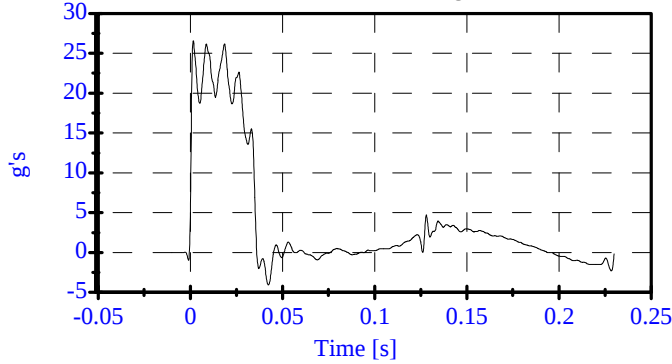
ATD Serial No: 270

Date: November 17, 2004

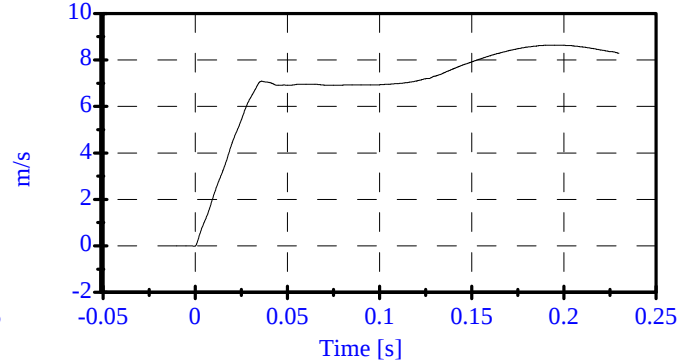
Sequential Test Number: 1 File: 270N1 11-17-04

Laboratory Technician: B. Swiecicki

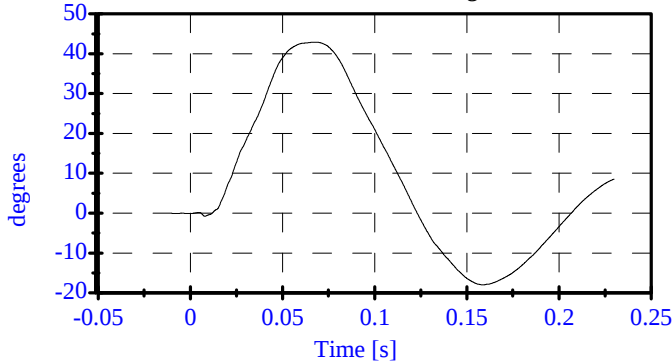
Pend Ax
CFC_180
Max: 26.6 [g's] at 0.002 [s]
Min: -4.1 [g's] at 0.042 [s]



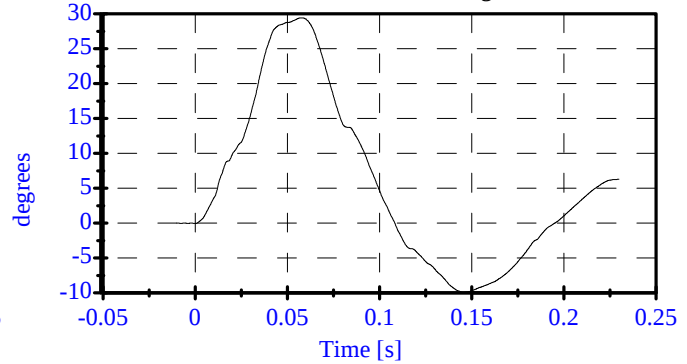
Pend Vx
CFC_180
Max: 8.6 [m/s] at 0.194 [s]
Min: -0.0 [m/s] at -0.001 [s]



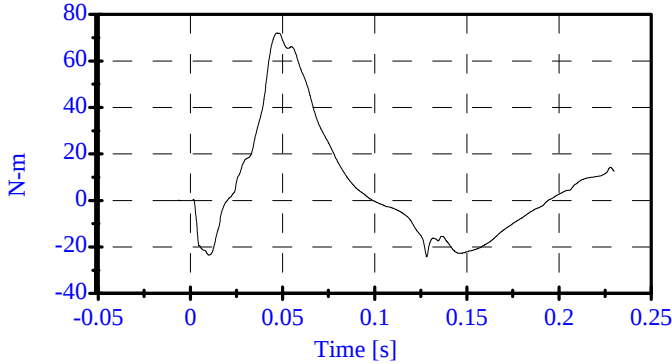
Head Rot
CFC_180
Max: 42.9 [degrees] at 0.067 [s]
Min: -18.0 [degrees] at 0.159 [s]



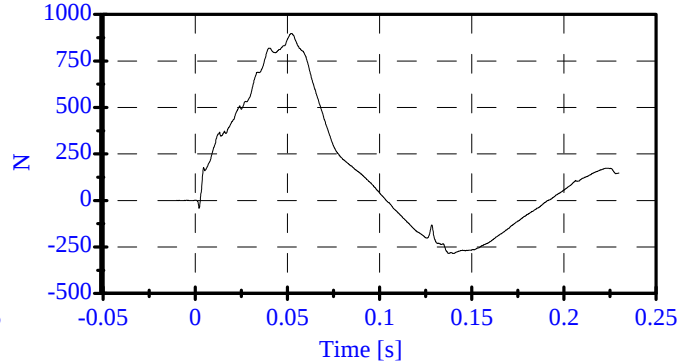
Arm Rot
CFC_180
Max: 29.5 [degrees] at 0.058 [s]
Min: -9.9 [degrees] at 0.145 [s]



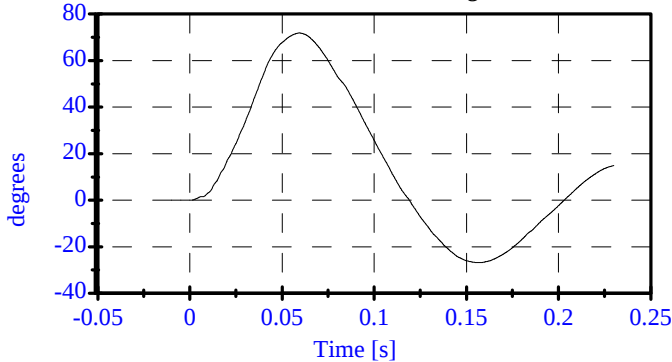
Neck Mx
CFC_600
Max: 72.0 [N-m] at 0.047 [s]
Min: -24.3 [N-m] at 0.128 [s]



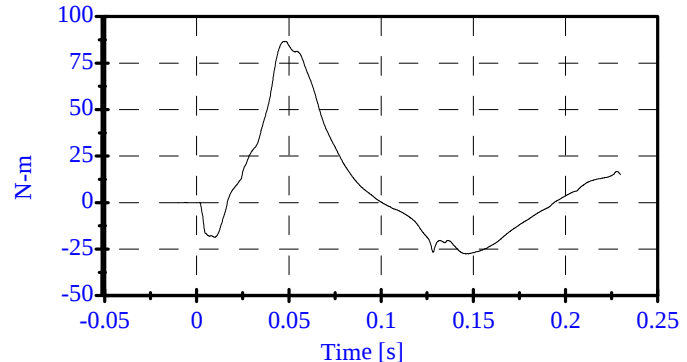
Neck Fy
CFC_1000
Max: 897.2 [N] at 0.052 [s]
Min: -284.5 [N] at 0.137 [s]



Tot Rot
CFC_180
Max: 71.9 [degrees] at 0.059 [s]
Min: -26.8 [degrees] at 0.156 [s]



MOCX
Max: 86.7 [N-m] at 0.048 [s]
Min: -27.5 [N-m] at 0.147 [s]



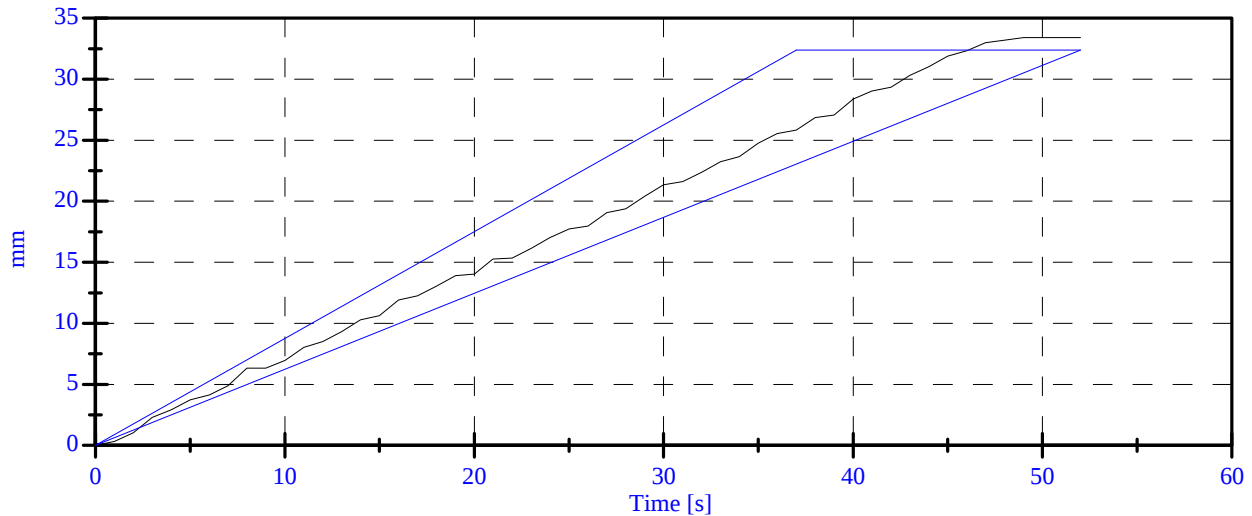
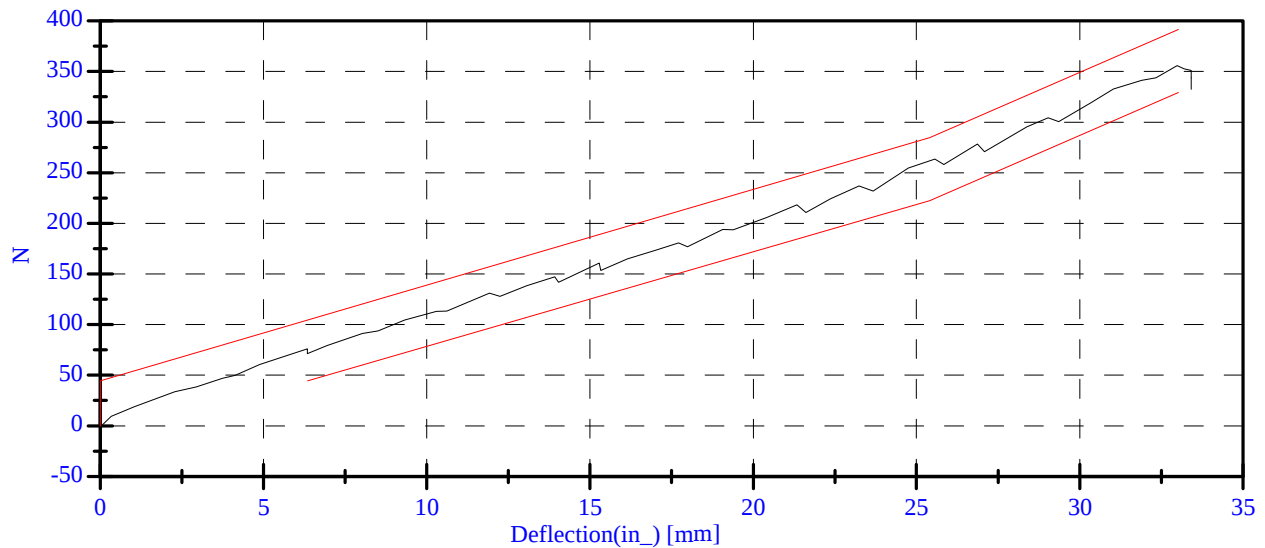
Abdomen Test
POST TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 270
Date: November 18, 2004

Sequential Test Number: 1 File: 270A-2T 11-18-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	138.24 N	Passed
Force at 19.05 mm :	162.98-220.99 N	193.80 N	Passed
Force at 25.40 mm :	221.97-280.02 N	263.62 N	Passed
Force at 33.02 mm :	324.99-391.00 N	355.73 N	Passed

ABDOMINAL COMPRESSION TEST



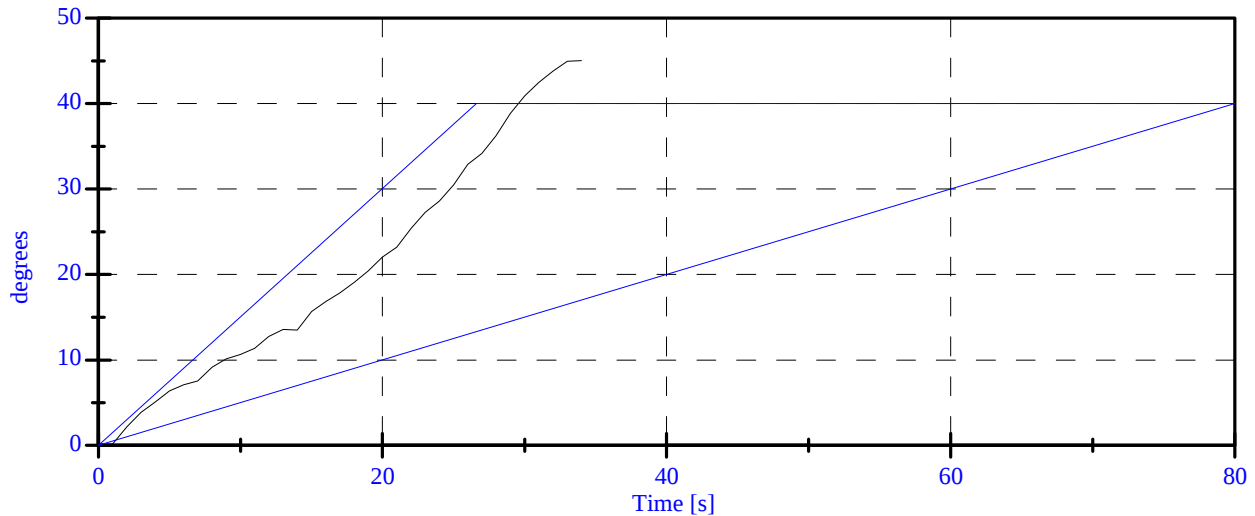
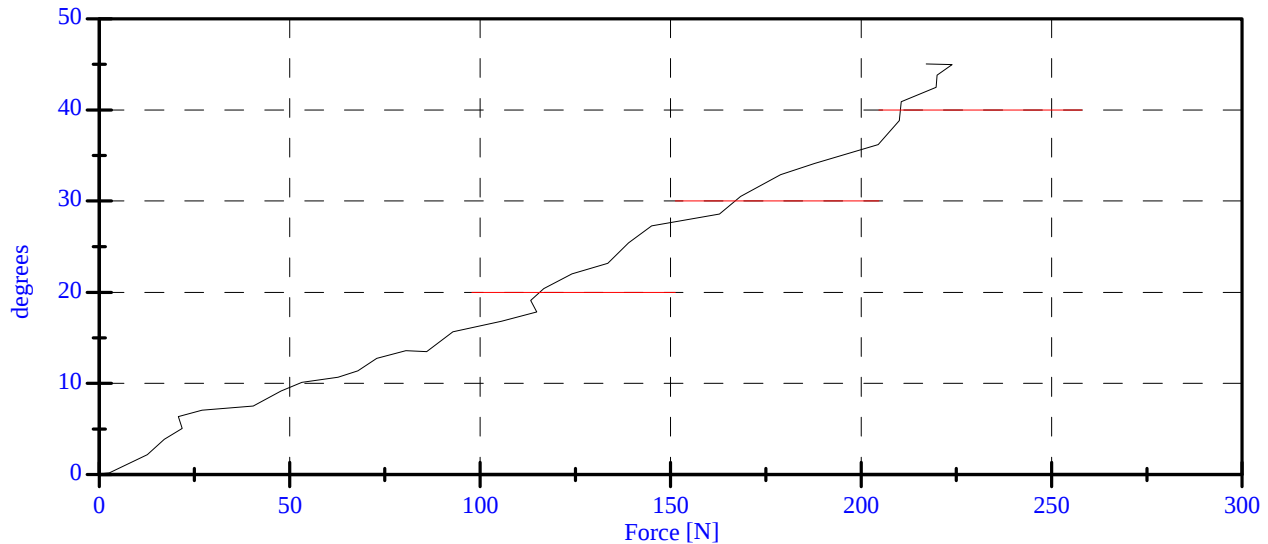
Lumbar Spine Test
PRE TEST
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 270
Date: November 18, 2004

Sequential Test Number: 1 File: 270S1 11-18-04
Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS	STATUS
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	0.00 N	Passed
Force at 20 Deg:	97.86-151.24 N	116.69 N	Passed
Force at 30 Deg	151.24-204.62 N	168.34 N	Passed
Force at 40 Deg	204.62-258.00 N	210.56 N	Passed
Return Angle	12 Deg Max	7.69 deg	Passed

LUMBAR SPINE FLEXION TEST



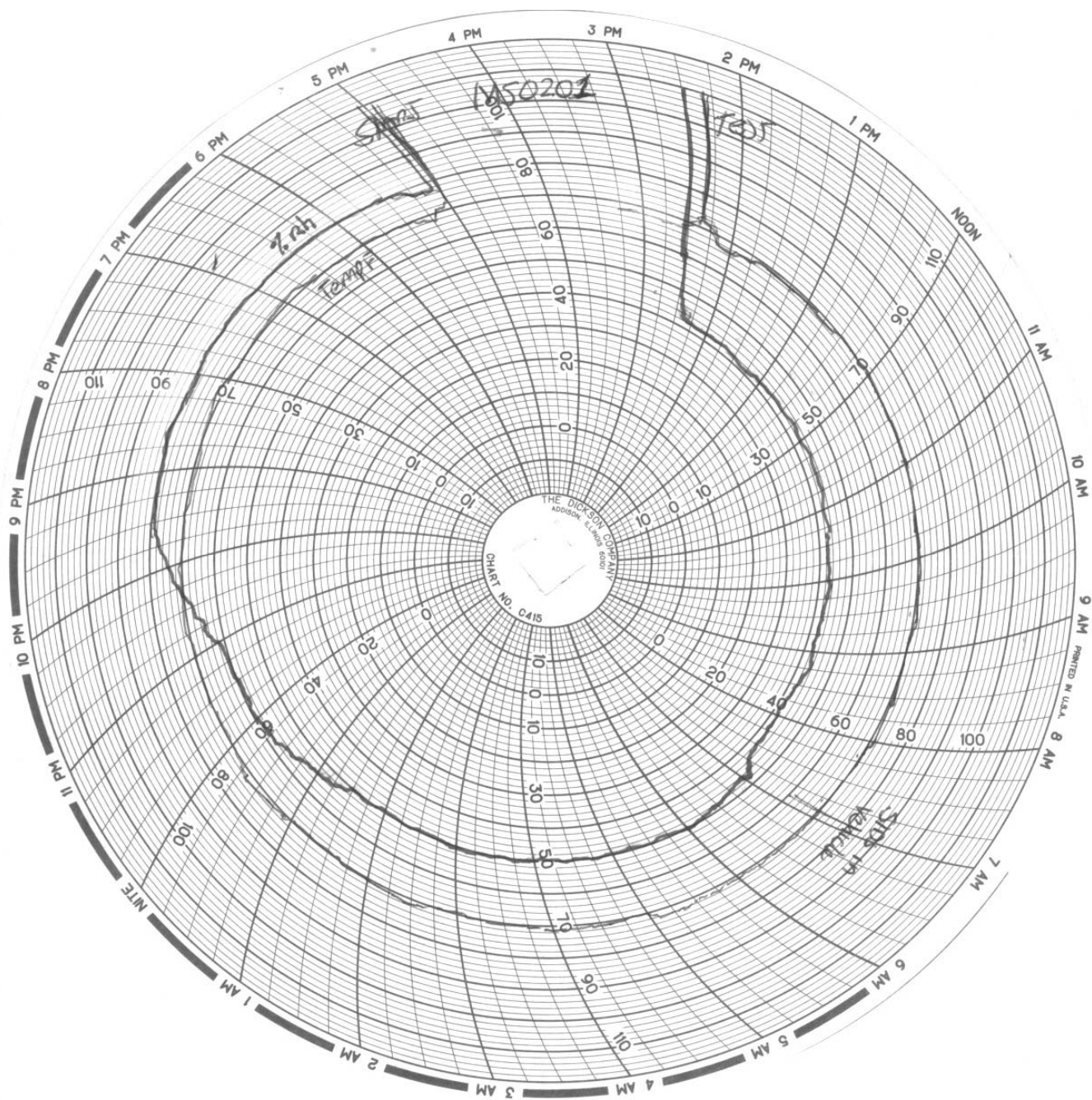
POST TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 270 Sequential Test Number: 3
Date: November 18, 2004 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.: 269		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-P18738	ENDEVCO	13-Jul-04
HEAD AY	AC-P18739	ENDEVCO	13-Jul-04
HEAD AZ	AC-P19212	ENDEVCO	13-Jul-04
UPPER NECK FX	LC-440Fx	DENTON	06-Nov-04
UPPER NECK FY	LC-440Fy	DENTON	06-Nov-04
UPPER NECK FZ	LC-440Fz	DENTON	06-Nov-04
UPPER NECK MX	LC-440Mx	DENTON	06-Nov-04
UPPER NECK MY	LC-440My	DENTON	06-Nov-04
UPPER NECK MZ	LC-440Mz	DENTON	06-Nov-04
UPPER RIB	AC-P16862	ENDEVCO	07-Oct-04
LOWER RIB	AC-P23156	ENDEVCO	07-Oct-04
LOWER SPINE	AC-P16645	ENDEVCO	07-Oct-04
PELVIS	AC-P16843	ENDEVCO	07-Oct-04
UPPER RIB REDUNDANT	AC-P16866	ENDEVCO	07-Oct-04
LOWER RIB REDUNDANT	AC-P16656	ENDEVCO	07-Oct-04
LOWER SPINE REDUNDANT	AC-P19343	ENDEVCO	07-Oct-04
PELVIS REDUNDANT	AC-P16676	ENDEVCO	07-Oct-04

	REAR SID NO.: 270		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	AC-P16845	ENDEVCO	18-Aug-04
HEAD AY	AC-P23788	ENDEVCO	18-Aug-04
HEAD AZ	AC-P21393	ENDEVCO	18-Aug-04
UPPER NECK FX	LC-205Fx	DENTON	06-Nov-04
UPPER NECK FY	LC-205Fy	DENTON	06-Nov-04
UPPER NECK FZ	LC-205Fz	DENTON	06-Nov-04
UPPER NECK MX	LC-205Mx	DENTON	06-Nov-04
UPPER NECK MY	LC-205My	DENTON	06-Nov-04
UPPER NECK MZ	LC-205Mz	DENTON	06-Nov-04
UPPER RIB	AC-P15736	ENDEVCO	12-Jul-04
LOWER RIB	AC-P16289	ENDEVCO	12-Jul-04
LOWER SPINE	AC-P16761	ENDEVCO	13-Jul-04
PELVIS	AC-P32221	ENDEVCO	12-Jul-04
UPPER RIB REDUNDANT	AC-P16593	ENDEVCO	12-Jul-04
LOWER RIB REDUNDANT	AC-P23142	ENDEVCO	12-Jul-04
LOWER SPINE REDUNDANT	AC-P21516	ENDEVCO	12-Nov-04
PELVIS REDUNDANT	AC-P23960	ENDEVCO	12-Jul-04

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-J31101	ENDEVCO	04-Nov-04
RIGHT FRONT SILL (Y)	AC-J31020	ENDEVCO	04-Nov-04
RIGHT FRONT SILL (Z)	AC-J31059	ENDEVCO	04-Nov-04
RIGHT REAR SILL (X)	AC-J30041	ENDEVCO	29-May-04
RIGHT REAR SILL (Y)	AC-J32185	ENDEVCO	04-Nov-04
RIGHT REAR SILL (Z)	AC-J33843	ENDEVCO	08-Sep-04
REAR FLOORPAN ABOVE AXLE (X)	AC-J31011	ENDEVCO	04-Nov-04
REAR FLOORPAN ABOVE AXLE (Y)	AC-J30491	ENDEVCO	20-Jul-04
REAR FLOORPAN ABOVE AXLE (Z)	AC-J33071	ENDEVCO	29-May-04
LEFT REAR SILL (Y)	AC-FGP36	ICS	20-Aug-04
LEFT FRONT SILL (Y)	AC-FGP33	ICS	20-Aug-04
LEFT FRONT DOOR CENTERLINE (Y)	AC-9440-045	GS SENSORS	09-Jun-04
RIGHT REAR SEAT OCCUPANT COMP. (Y)	AC-9440-024	GS SENSORS	09-Jun-04
MID REAR OF LEFT FRONT DOOR (Y)	AC-9444-038	GS SENSORS	09-Jun-04
LEFT FRONT DOOR UPPER C/L (Y)	AC-9450-039	GS SENSORS	09-Jun-04
MID REAR OF LEFT REAR DOOR (Y)	AC-9440-011	GS SENSORS	09-Jun-04
LEFT REAR DOOR UPPER C/L (Y)	AC-9440-029	GS SENSORS	09-Jun-04
LOWER LEFT B- PILLAR (Y)	AC-FGP38	ICS	20-Aug-04
MIDDLE LEFT B-PILLAR (Y)	AC-FGP47	ICS	20-Aug-04
LOWER LEFT A-PILLAR (Y)	AC-FGP39	ICS	27-Aug-04
UPPER LEFT A-PILLAR (Y)	AC-FGP45	ICS	24-Aug-04
FRONT SEAT TRACK (Y)	AC-FGP42	ICS	20-Aug-04
REAR SEAT TRACK (Y)	AC-8062-003	ICS	19-Aug-04
VEHICLE CG (X)	AC-P23873	ENDEVCO	28-Jul-04
VEHICLE CG (Y)	AC-P19246	ENDEVCO	28-Jul-04
VEHICLE CG (Z)	AC-J31034	ENDEVCO	28-Jul-04
MDB CG (X)	AC-C16433	ENDEVCO	31-Aug-04
MDB CG (Y)	AC-C16416	ENDEVCO	31-Aug-04
MDB CG (Z)	AC-C16499	ENDEVCO	31-Aug-04
MDB REAR FRAME MEMBER (X)	AC-C14948	ENDEVCO	31-Aug-04
MDB REAR FRAME MEMBER (Y)	AC-C16680	ENDEVCO	31-Aug-04

REMARKS: None