

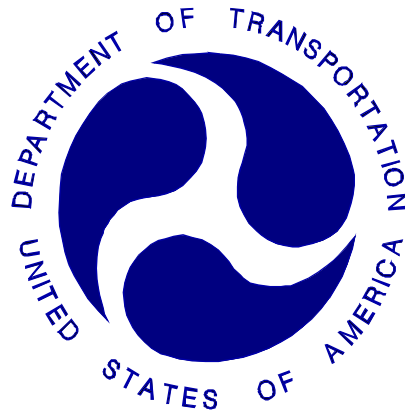
REPORT NUMBER: 214-CAL-04-06

**SAFETY COMPLIANCE TESTING FOR FMVSS 214
SIDE IMPACT PROTECTION
INDICANT**

**HONDA OF AMERICA MFG., INC.
2004 ACURA TL
4-DOOR SEDAN**

NHTSA NUMBER: C45301

**GENERAL DYNAMICS
ADVANCED INFORMATION ENGINEERING SERVICES
TRANSPORTATION SCIENCES CENTER
P.O. BOX 400
BUFFALO, NEW YORK 14225**



March 31, 2004

FINAL REPORT

**U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Enforcement
Office of Vehicle Safety Compliance
400 Seventh Street, SW
Room 6111 (NVS-220)
Washington, DC 20590**

This Final Test Report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, under Contract No. DTNH22-02-D-01114. This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufactures' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

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16. Abstract A 55/28 kph 90° Side Impact (Moving Deformable Barrier) Indicant Test was conducted on the subject Acura TL 4-Door Sedan. This test was performed at the New Car Assessment Program (NCAP) target test velocity of 62.0 kph, which is 8 kph faster than the target velocity required by the Office of Vehicle Safety Compliance's Laboratory Test Procedure (TP-214D-06, dated July 26, 2001). This test was conducted at the Advanced Information Engineering Services Crash Test Facility in Buffalo, New York, on March 31, 2004. The impact velocity of the Moving Deformable Barrier (MDB) was 62.12 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 344 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> <th></th> </tr> </thead> <tbody> <tr> <td>Left Upper Rib Acceleration:</td> <td>63.5</td> <td>g's</td> <td>51.0</td> <td>g's</td> </tr> <tr> <td>Left Lower Rib Acceleration:</td> <td>51.6</td> <td>g's</td> <td>53.0</td> <td>g's</td> </tr> <tr> <td>Lower Spine Acceleration:</td> <td>55.5</td> <td>g's</td> <td>62.0</td> <td>g's</td> </tr> <tr> <td>Thoracic Trauma Index (TTI):</td> <td>60</td> <td>g's</td> <td>58</td> <td>g's</td> </tr> <tr> <td>Pelvis Acceleration (PEV):</td> <td>90</td> <td>g's</td> <td>56</td> <td>g's</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:	63.5	g's	51.0	g's	Left Lower Rib Acceleration:	51.6	g's	53.0	g's	Lower Spine Acceleration:	55.5	g's	62.0	g's	Thoracic Trauma Index (TTI):	60	g's	58	g's	Pelvis Acceleration (PEV):	90	g's	56	g's
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17. Key Words Compliance Testing Side Impact Protection FMVSS 214 Side Impact Dummy (SID)		18. Distribution Statement <u>Copies of this report are available from:</u> National Highway Traffic Safety Administration Technical Reference Division (TIS) Room 5108 (NPO-230) 400 Seventh St., S.W. Washington, D.C. 20590 Telephone No. (202) 366-4946																															
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TABLE OF CONTENTS

<u>Section</u>		<u>Page No.</u>
1	PURPOSE AND TEST PROCEDURE	1-1
2	SUMMARY OF SIDE IMPACT TEST	2-1
3	SUMMARY OF TEST RESULTS	3-1
	Data Sheet 1 - General Vehicle Test Parameter Data	3-2
	Data Sheet 2 - Test Vehicle Summary of Results	3-5
	Data Sheet 3 - Moving Deformable Barrier (MDB) Summary	3-6
	Data Sheet 4 - Post Test Observations	3-7
4	OCCUPANT AND VEHICLE INFORMATION	4-1
	Data Sheet 5 – SID HYBRID III Instrumentation Data	4-2
	Data Sheet 6 - Vehicle Pre- And Post Test Measurements	4-3
	Data Sheet 7 - SID HYBRID III Longitudinal Clearance Dimensions	4-4
	Data Sheet 8 - SID HYBRID III Lateral Clearance Dimensions	4-5
	Data Sheet 9 - Vehicle Side Measurements	4-6
	Data Sheet 10 - Vehicle Exterior Crush Profiles - All Levels	4-7
	Data Sheet 11 - Vehicle Damage Profile Distances	4-8
	Data Sheet 12 - Exterior Static Crush For Impactor Face	4-9
	Data Sheet 13 - Test Vehicle Accelerometer Locations And Data Summary	4-10
	Data Sheet 14 - MDB Accelerometer Locations and Data Summary	4-13
	Data Sheet 15 - High Speed Camera Locations and Data	4-14
5	VEHICLE FUEL SYSTEM INTEGRITY	5-1
	Data Sheet 16 - FMVSS 301 Fuel System Integrity Data	5-2
	Data Sheet 17 - FMVSS 301 Rollover Data	5-3
APPENDIX A	PHOTOGRAPHS	A-1
APPENDIX B	VEHICLE, MDB AND SID HYBRID III RESPONSE DATA	B-1
APPENDIX C	SID HYBRID III CONFIGURATION AND PERFORMANCE VERIFICATION DATA	C-1
APPENDIX D	TEST EQUIPMENT LIST AND CALIBRATION INFORMATION	D -1

SECTION 1

PURPOSE AND TEST PROCEDURE

This side impact test is part of the FMVSS 214 Side Impact Protection Compliance Test Program sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-02-D-01114. The purpose of this indicant test was to evaluate side impact protection in a 2004 Acura TL 4-Door Sedan when tested at the New Car Assessment Program (NCAP) target test velocity of 62.0 kph, which is 8 kph faster than the target velocity required by the Office of Vehicle Safety Compliance's Laboratory Test Procedure (TP-214D-06, dated July 26, 2001).

SECTION 2

SUMMARY OF SIDE IMPACT TEST

This Side Impact Protection Indicant Test was performed at the New Car Assessment Program (NCAP) target test velocity of 62.0 kph, which is 8 kph faster than the target velocity required by the Office of Vehicle Safety Compliance's Laboratory Test Procedure (TP-214D-06, dated July 26, 2001).

A 2004 Acura TL 4-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 62.12 kph (38.6 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 Advanced Information Engineering Services Transportation Sciences Center in Buffalo, New York on March 31, 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 9 high-speed cameras. Camera locations and other pertinent camera information are included in this report.

The SID H3s were instrumented with the following accelerometers:

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

A summary of the Side Impact Hybrid III Dummy (SID H3) configuration and verification test data can be found in Appendix C. A total of 60 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)	60	58
PEV (g)	90	56

AIR BAG DEPLOYMENT STATUS

	DRIVER	FRONT PASSENGER	REAR PASSENGER
Front Air Bag	No	No	None
Knee Bolster Bag	None	None	None
Side Air Bag	Yes	No	None
Side Curtain Bag	Yes	No	Yes

SECTION 3

SUMMARY OF TEST RESULTS

DATA SHEET 1

GENERAL TEST AND VEHICLE PARAMETER DATA

TEST VEHICLE INFORMATION:

Year/Make/Model/Body Style: 2004 Acura TL 4-Door Sedan

Vehicle Body Color: White VIN: 19UUA66204A008014

Vehicle NHTSA No.: C45301 Month & Year of Manufacture: 10/03

Engine Data: 6 Cylinders; - CID; 3.2 Liters; - cc

Engine Placement: x Longitudinal; or - Lateral

Transmission: 5 Speed; - Manual; x Automatic; - Overdrive

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

Odometer Reading 16 km

Supplemental Airbag Restraints:

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

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

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

DATA FROM TIRE PLACARD

Recommended Tire Size: P235/45R17

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

DATA FROM TIRE SIDEWALL:

Size of Tires on Test Vehicle: P235/45R17; Manufacturer: Bridgestone

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

Treadwear: 260; Traction: A; Temperature: A

VEHICLE CAPACITY DATA:

Number of Occupants: 2 Front; 3 Rear; 0 3rd Seat; 5 Total

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

Type of Rear Seats: - Bucket; - Bench; - Split Bench; x Contoured

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

Type of Rear Seat Back: x Fixed; - Adjustable with - Lever or - Knob

Vehicle Max Capacity Loading = 395 kg (A)

No. of Occupants x 68.04 kg. = 340.2 kg (B)

Vehicle Cargo Capacity = 54.8 kg (A-B)

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

Left Front = 498 kg Left Rear = 318 kg

Right Front = 496 kg Right Rear = 303 kg

TOTAL FRONT = 994.0 kg TOTAL REAR = 621.0 kg

% of Total Weight = 61.5% % % of Total Weight = 38.5 %

TOTAL WEIGHT = 1615.0 kg

* Tire pressure used in test.

DATA SHEET 1 (continued)**GENERAL TEST VEHICLE PARAMETER DATA**Vehicle: 2004 Acura TL 4-Door SedanNHTSA No. C45301CALCULATION OF VEHICLE'S TARGET TEST WEIGHT:

Total Test Vehicle Delivered Weight with Max. Fluids	=	<u>1615.0</u>	kg (A)
Maximum Cargo Carrying Capacity of Test Vehicle	=	<u>54.8</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>1832.2</u>	kg (A+B+C)

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

Left Front	=	<u>546</u>	kg	Left Rear	=	<u>418</u>	kg
Right Front	=	<u>501</u>	kg	Right Rear	=	<u>370</u>	kg
TOTAL FRONT	=	<u>1047.0</u>	kg	TOTAL REAR	=	<u>788.0</u>	kg
% of Total Weight	=	<u>57.1%</u>	%	% of Total Weight	=	<u>42.9%</u>	%
TOTAL TEST WEIGHT =		<u>1835.0</u>	kg				

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

Left Front	=	<u>545</u>	kg	Left Rear	=	<u>408</u>	kg
Right Front	=	<u>511</u>	kg	Right Rear	=	<u>361</u>	kg
TOTAL FRONT	=	<u>1056.0</u>	kg	TOTAL REAR	=	<u>769.0</u>	kg
% of Total Weight	=	<u>57.9%</u>	%	% of Total Weight	=	<u>42.1%</u>	%
TOTAL TEST WEIGHT =		<u>1825</u>	kg				

TEST VEHICLE ATTITUDE (all dimensions in millimeters):

AS DELIVERED:

Left Front	<u>686</u>	Right Front	<u>693</u>	Left Rear	<u>687</u>	Right Rear	<u>693</u>
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FULLY LOADED:

Left Front	<u>675</u>	Right Front	<u>685</u>	Left Rear	<u>656</u>	Right Rear	<u>674</u>
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READY FOR TEST:

Left Front	<u>675</u>	Right Front	<u>688</u>	Left Rear	<u>656</u>	Right Rear	<u>674</u>
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Test Vehicle Wheelbase: 2746 millimetersC.G. = 1157.08 millimeters rearward of front wheel centerlineTOTAL VEHICLE LENGTH:

Right Side =	<u>4566</u>	millimeters
Left Side =	<u>4566</u>	millimeters
Centerline =	<u>4817</u>	millimeters

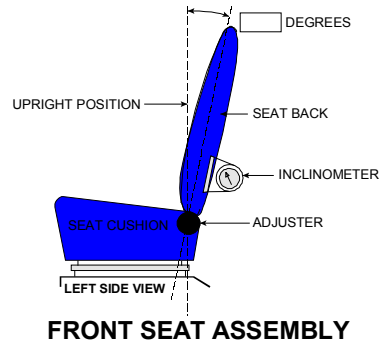
DATA SHEET 1 (continued)

GENERAL TEST VEHICLE PARAMETER DATA

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301

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: The seat was placed in mid-position (120 mm)

Total Length of Adjustment Travel: 240 millimeters

Total Number of Adjustment Positions or Detents: 120 mm rearward from forward-most position

FRONT SEAT BACK ADJUSTMENT POSITION: Degrees detents from full up

Seat Back Torso Angle: 9 degrees

SECOND POSITION SEAT:

Total Length of Fore/Aft Adjustment Travel: Fixed millimeters

Seat Back Adjustment Position: Fixed

ADJUSTABLE STEERING COLUMN POSITION: Placed in mid-tilt and mid-extension

WINDOW POSITIONS: Left Front: Closed Left Rear: Closed

Right Front: Open Right Rear: Open

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

AMOUNT OF STODDARD SOLVENT IN FUEL TANK:

64.7 liters (Fuel Tank Usable Capacity)

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

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

Wheelbase = 2746 millimeters

Impact Point is 433 millimeters rearward of front axle centerline
(which is 940 millimeters forward of the wheelbase midpoint)

Actual Impact Point is 431 millimeters rearward of front axle centerline

DATA SHEET 2

TEST VEHICLE SUMMARY OF RESULTS

VEHICLE IDENTIFICATION:

Vehicle Year/Make/Model: 2004 Acura TL

Body Style: 4-Door Sedan

VIN: 19UUA66204A008014

NHTSA No.: C45301

Test Date: March 31, 2004

Overall Length = 4817 millimeters; Overall Width = 1840 millimeters

VEHICLE TEST WEIGHT (Pre-Test):

Left Front = 545 kg Left Rear = 408 kg

Right Front = 511 kg Right Rear = 361 kg

TOTAL FRONT = 1056.0 kg TOTAL REAR = 769.0 kg

TOTAL VEHICLE WEIGHT 1825.0 kg

Wheelbase = 2746 millimeters

Longitudinal C.G. from Center of Front Axle = 1157.08 millimeters

Impact Angle with Respect to Impactor = 90 degrees

ACTUAL IMPACT POINT

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

Actual Impact Point is 5 mm below nominal impact point (Vertical)

MAXIMUM EXTERIOR STATIC CRUSH:

1. LEVEL 1 (216 mm above ground) = 59 millimeters

2. LEVEL 2 (461 mm above ground) = 344 millimeters

3. LEVEL 3 (599 mm above ground) = 321 millimeters

4. LEVEL 4 (851 mm above ground) = 291 millimeters

5. LEVEL 5 (1341 mm above ground) = 47 millimeters

Maximum Post-Test Intrusion = 344 millimeters

OCCUPANTS:

Front Passenger:

Rear Passenger:

Dummy Identification SID H3/269

SID H3/270

Restraints Used Three-point safety belt, Side torso airbag with Side curtain airbag

Three-point safety belt with Side curtain airbag

INSTRUMENTATION:

Number of Vehicle Data Channels: = 21

Number of Cameras: Onboard = 3

Offboard = 6

TOTAL = 9

DATA SHEET 3

MOVING DEFORMABLE BARRIER (MDB) SUMMARY

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301

MDB FACE MANUFACTURER AND SERIAL NUMBER:

034A0703-4 003B0703

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>62.12</u>	kph				

MAXIMUM STATIC CRUSH OF HONEYCOMB IMPACT FACE:

1. Row A at Center of Bumper Level	=	<u>114</u>	millimeters
2. Row B at Top of Bumper Level	=	<u>57</u>	millimeters
3. Row C at Mid Level	=	<u>84</u>	millimeters
4. Row D at Top of Stack Level	=	<u>122</u>	millimeters

INSTRUMENTATION:

Number of MDB Data Channels	=	<u>5</u>
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DATA SHEET 4**POST-TEST OBSERVATIONS**Vehicle: 2004 Acura TL 4-Door SedanNHTSA No. C45301TEST DUMMY INFORMATION AND CONTACT POINTS:

DESCRIPTION	FRONT SEAT	REAR SEAT
ATD Type/Serial No.	SID H3/269	SID H3/270
Head Contact:	The side of the face to the curtain airbag and the back of the head to the headrest.	The side of the face to the curtain airbag and side rail with the back of the head to the headrest.
Upper Torso Contact:	Seat Airbag	Door Trim Panel
Lower Torso Contact:	Door Trim Panel / Arm Rest	Door Trim Panel / Arm Rest
Left Knee Contact:	Door Trim Panel	Door Trim Panel / Arm Rest
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	The A- and B-Pillars were moved inboard during the event with no visible tears or separations.
Sill Separation	No visible tears or separations
Windshield Damage	Cracking in front of driver
Window Damage	Front left side window glass shattered during the event.
Other Notable Effects	None

AIR BAG DEPLOYMENT STATUS:

	DRIVER	FRONT PASSENGER	REAR PASSENGER
Front Air Bag	Not activated	Not activated	None
Knee Bolster Bag	None	None	None
Side Air Bag	Deployed	Not activated	None
Side Curtain Bag	Deployed	Not activated	Deployed

MDB LEFT EDGE IMPACT DATA

Measured Parameter	Units	Requirement	Value
Horizontal Offset	mm	± 50 mm	2
Vertical Offset	mm	± 20 mm	-5

SECTION 4

OCCUPANT AND VEHICLE INFORMATION

DATA SHEET 5

SID H3 INSTRUMENTATION DATA

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301

		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	6.4	166.4	-22.4	57.4	8.1	150.2	-12.6	69.5
Lateral	Y	29.2	47.3	-8.3	179.9	81.8	50.3	-7.1	155.1
Vertical	Z	17.7	29.5	-7.9	45.4	15.8	43.9	-47.0	57.1
Resultant	R	34.9	53.0	0.0	-17.2	82.8	50.3	0.0	-17.4
HIC		132.9				451.2			
NECK FORCES:									
Longitudinal	X	19.2	171.6	-648.0	58.1	29.6	49.9	-27.2	43.5
Lateral	Y	257.9	51.9	-301.6	30.1	129.8	148.7	-540.0	64.0
Vertical	Z	717.5	152.1	-363.9	45.5	755.4	44.3	-1273.4	57.3
Resultant	R	743.6	152.1	0.1	-5.1	1348.0	57.5	0.2	-7.8
NECK MOMENTS:									
X		11.3	110.8	-60.7	45.5	15.2	116.0	-127.2	53.1
Y		45.3	75.5	-60.2	50.7	22.2	103.2	-26.7	68.1
Z		40.0	67.1	-20.6	189.5	9.9	81.5	-26.0	176.8
Resultant	R	80.9	49.4	0.0	-14.5	128.7	53.8	0.0	-46.2
RIB ACCELERATIONS:									
Upper Rib Lateral	Y	63.7	41.8	-6.6	87.5	51.1	33.7	-6.7	72.5
Upper Rib Lateral	Y(R)	65.0	41.8	-6.7	87.5	50.2	33.7	-6.1	72.5
Lower Rib Lateral	Y	51.6	30.0	-8.7	155.0	53.0	30.6	-15.5	73.1
Lower Rib Lateral	Y(R)	52.1	30.6	-8.6	155.0	52.2	30.6	-15.6	73.7
SPINE ACCELERATIONS:									
Lower Lateral	Y	55.5	26.2	-10.3	75.0	62.0	38.7	-18.2	66.9
Lower Lateral	Y(R)	55.4	26.2	-9.8	75.0	61.4	38.7	-17.6	66.9
PELVIC ACCELERATIONS:									
Lateral	Y	89.7	22.5	-16.1	48.7	55.8	26.2	-11.7	74.3
Lateral	Y(R)	91.2	22.5	-16.6	49.3	54.9	26.2	-11.3	73.7

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.

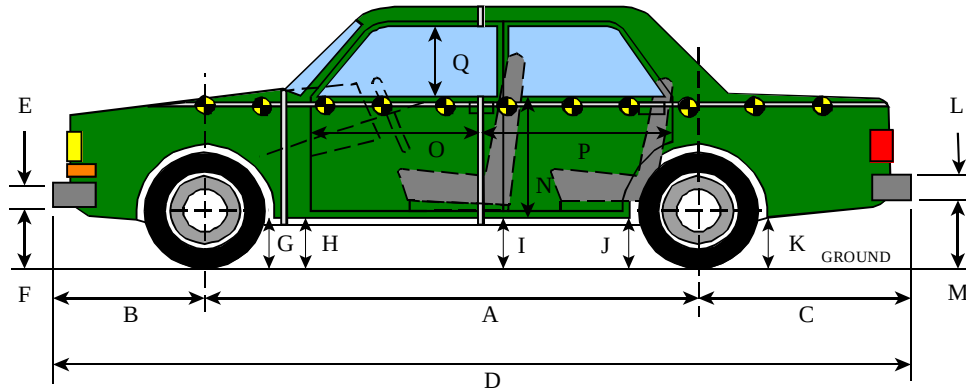
Head Accelerations and Neck Forces are filtered at SAE Class 1000, Neck Moments are filtered at SAE Class 600.

DATA SHEET 6

VEHICLE SIDE MEASUREMENTS

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301



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	2746	2746	2726	-20
B	970	-	997	27
C	1101	-	1081	-20
D	4817	-	4804	-13
E	269	-	269	0
F	248	245	257	12
G	182	166	192	26
H	179	166	186	20
I	179	161	154	-7
J1	179	156	171	15
J2	194	161	148	-13
K	224	184	202	18
L	309	-	309	0
M	326	284	295	11
N	682	-	592	-90
O	814	-	764	-50
P	1032	-	965	-67
Q	447	-	416	-31
R	4566	-	4571	5
S	4566	-	4546	-20
T	1840	-	1811	-29

D = Length at Centerline
T = Width at B-Pillar

E&L = Bumper Thickness
J1 = To Pinch Weld

R = Right Side Length
J2 = To Sill

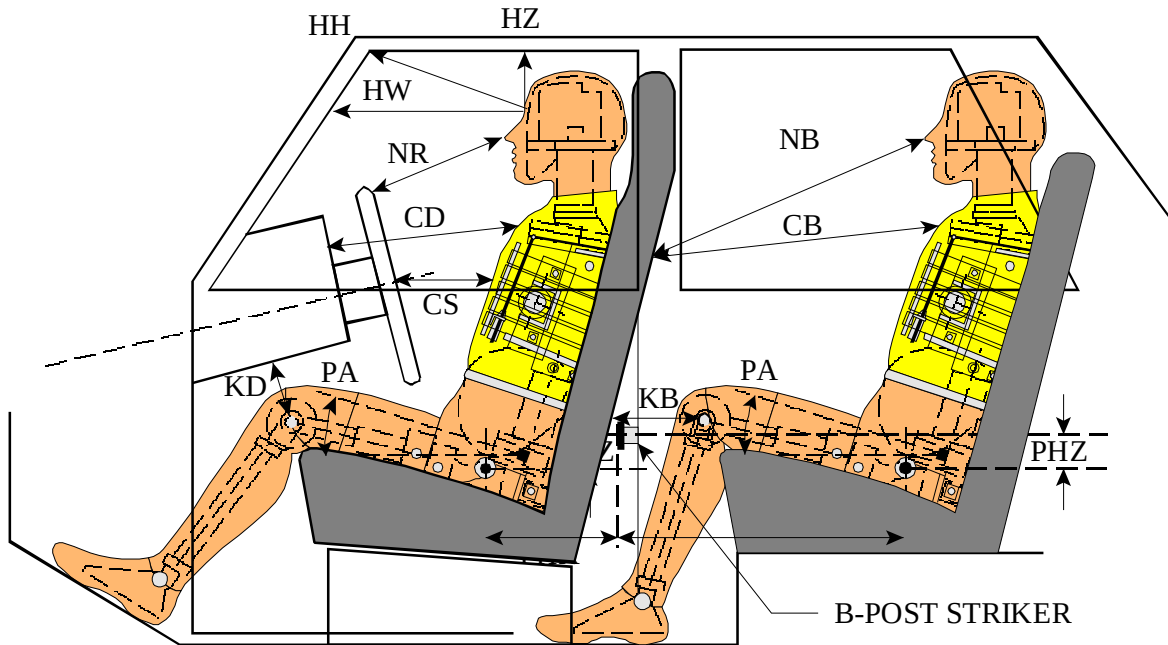
S = Left Side Length

DATA SHEET 7

SID H3 LONGITUDINAL CLEARANCE DIMENSIONS

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301



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	348	N/A
HW	599	N/A
HZ	201 (to sunroof)	149
NR/NB	416	596
CD/CB	521	545
CS	292	N/A
KDL(KDA°)/KBL(KDA°)	206 / (28 °)	224 / (22 °)
KDR(KBA°)/KBR(KBA°)	178 / (34 °)	226 / (22 °)
PA°	23.5 °	24.1 °
PHX	188	188
PHZ	164	260

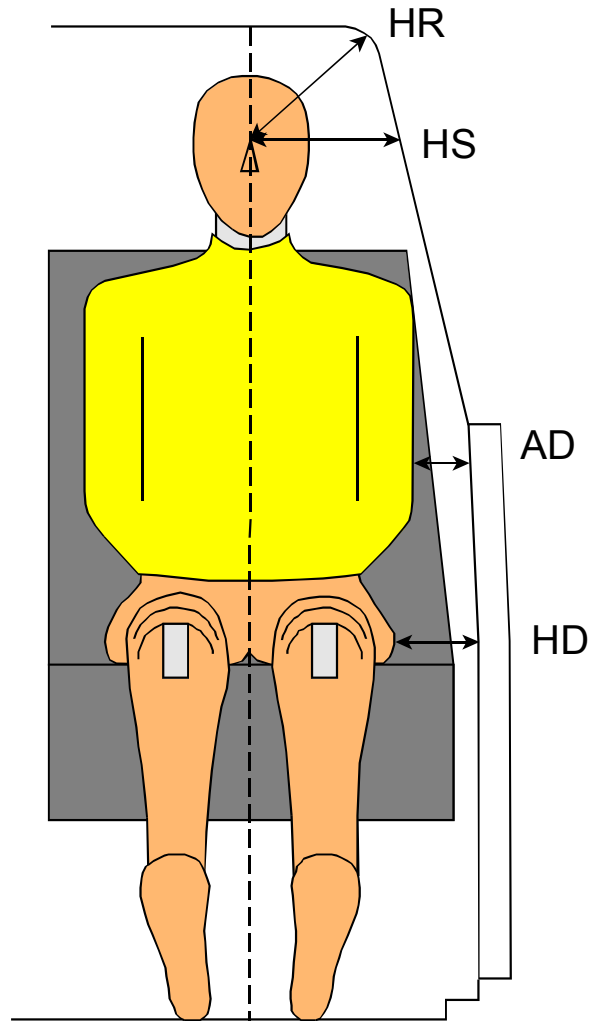
Note: 2-door vehicle shown. Rear dummy PHX & PHZ measurements for 4-door vehicle would use the C-post striker as a reference point.

DATA SHEET 8

SID H3 LATERAL CLEARANCE DIMENSIONS

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301



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

	DRIVER ID # 269				LEFT REAR PASS. ID # 270			
HR	190				170			
HS	324				312 (to side window)			
AD*	LOWER:	156	UPPER:	135	LOWER:	104	UPPER:	85
HD	159				136			

* 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.

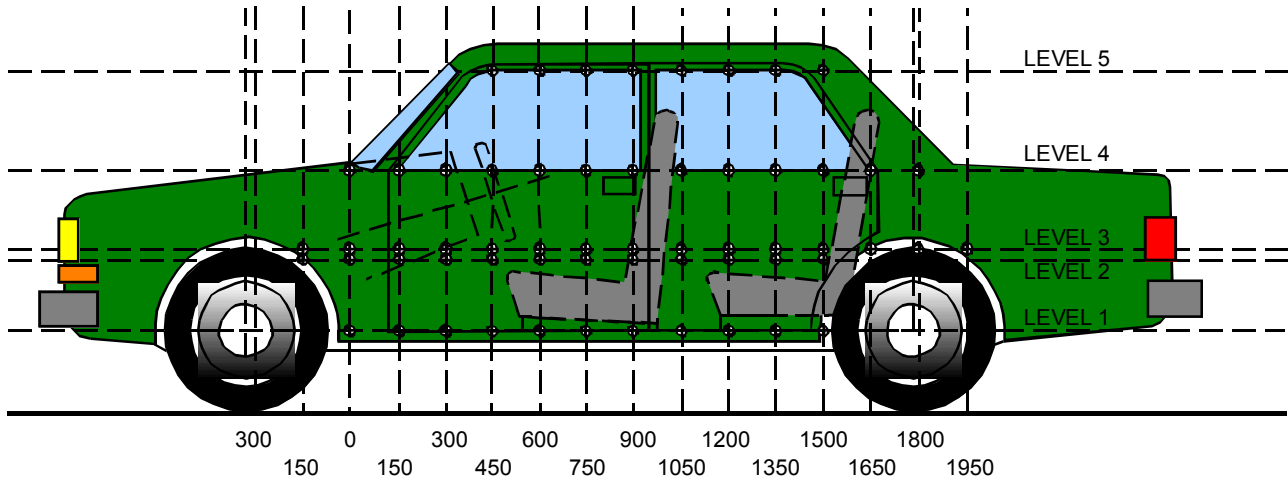
Upper measurement is taken laterally at the center of the upper rib accelerometer height from the SID H3 arm segment to the closest part of the vehicle side.

DATA SHEET 9

VEHICLE SIDE MEASUREMENTS

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301



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:

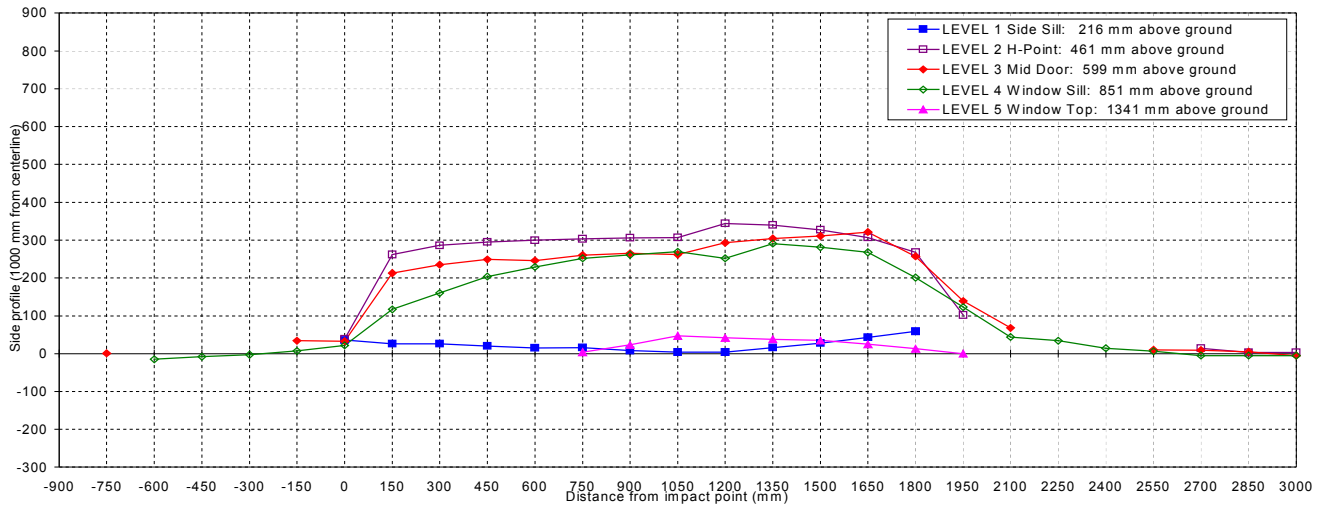
Level 5 @ Window Top	=	<u>47</u>	millimeters
Level 4 @ Window Sill	=	<u>291</u>	millimeters
Level 3 @ Mid Door	=	<u>321</u>	millimeters
Level 2 @ Occupant H-Point	=	<u>344</u>	millimeters
Level 1 @ Axle Centerline Height (or Sill Top Height)	=	<u>59</u>	millimeters

DATA SHEET 10

VEHICLE EXTERIOR CRUSH PROFILES - ALL LEVELS

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301



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

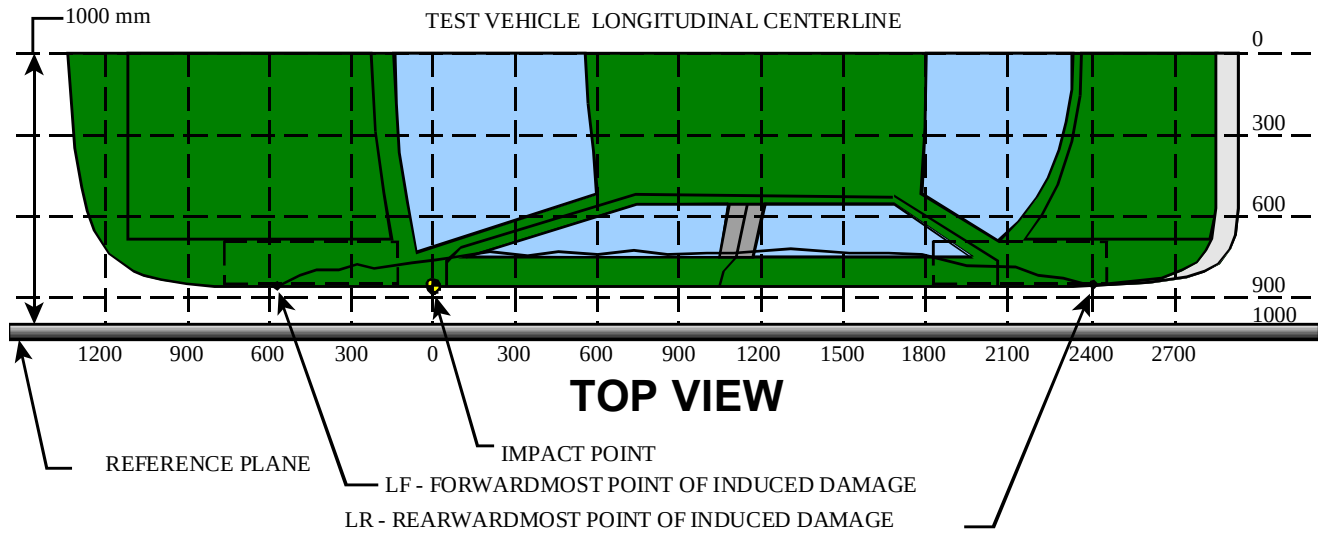
			DISTANCE IN MILLIMETERS (mm) FROM IMPACT POINT																											
LEVEL	HEIGHT (mm)		-900	-750	-600	-450	-300	-150	0	150	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000	
LEVEL 1 SIDE SILL	216	PRE	--	--	--	--	--	--	135	146	139	136	135	130	134	134	136	135	138	134	129	--	--	--	--	--	--	--	--	--
		POST	--	--	--	--	--	--	171	172	165	156	150	146	142	138	140	151	166	177	188	--	--	--	--	--	--	--	--	--
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	36	26	26	20	15	16	8	4	4	16	28	43	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEVEL 2 H POINT	461	PRE	--	--	--	--	--	--	104	105	103	102	99	99	97	100	99	102	105	107	109	93	--	--	--	--	--	149	178	206
		POST	--	--	--	--	--	--	143	367	389	397	399	402	403	407	443	442	432	414	377	195	--	--	--	--	--	163	181	209
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	39	262	286	295	300	303	306	307	344	340	327	307	268	102	N/A	N/A	N/A	N/A	N/A	14	3	3
LEVEL 3 MID DOOR	599	PRE	--	124	--	--	--	91	103	101	95	93	99	91	91	90	91	91	95	100	105	103	95	--	--	114	156	169	204	
		POST	--	125	--	--	--	125	136	314	330	342	345	351	356	352	384	395	406	421	362	242	163	--	--	124	165	174	199	
		CRUSH	N/A	1	N/A	N/A	N/A	34	33	213	235	249	246	260	265	262	293	304	311	321	257	139	68	N/A	N/A	10	9	5	-5	
LEVEL 4 WINDOW SILL	851	PRE	--	--	248	205	182	166	158	148	141	135	132	127	126	124	124	124	128	130	133	148	147	156	167	183	198	211	241	
		POST	--	--	233	197	179	173	180	265	301	339	361	379	387	393	376	415	409	398	334	271	191	190	181	189	193	206	236	
		CRUSH	N/A	N/A	-15	-8	-3	7	22	117	160	204	229	252	261	269	252	291	281	268	201	123	44	34	14	6	-5	-5	-5	
LEVEL 5 WINDOW TOP	1341	PRE	--	--	--	--	--	--	--	--	--	--	--	466	409	407	410	413	415	418	426	448	--	--	--	--	--	--	--	
		POST	--	--	--	--	--	--	--	--	--	--	--	470	432	454	452	451	450	443	439	448	--	--	--	--	--	--	--	
		CRUSH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4	23	47	42	38	35	25	13	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

DATA SHEET 11

VEHICLE DAMAGE PROFILE DISTANCES

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301



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.

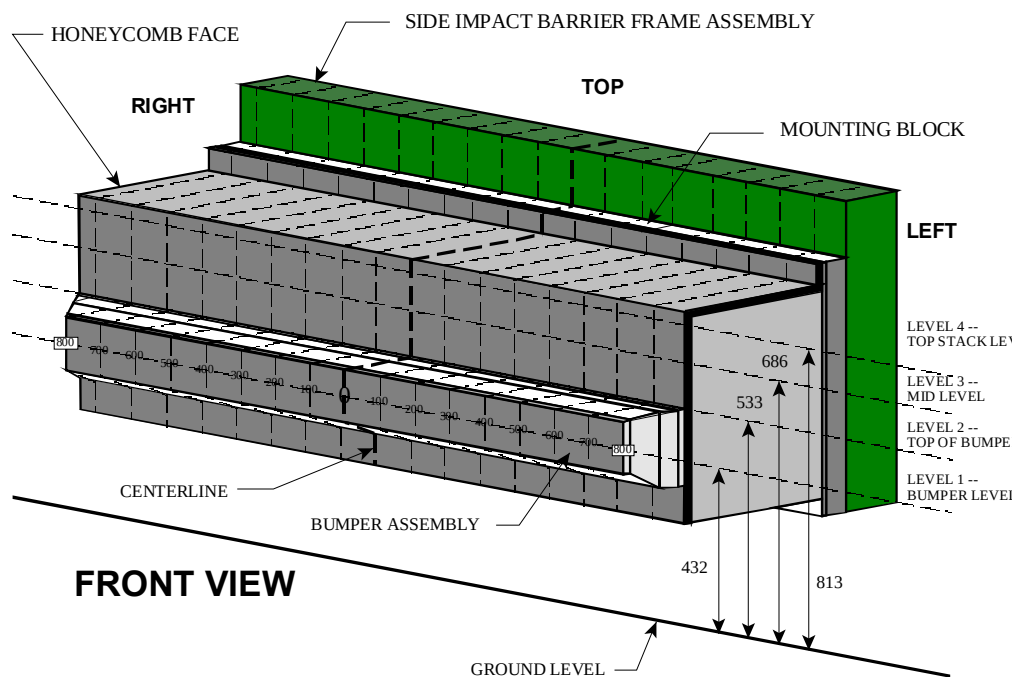
DPD MEASUREMENTS		POST TEST (mm)	PRETEST (mm)	STATIC CRUSH (mm)
1	(LR = <u>2625</u> mm)	145	135	10
2	2040	195	98	97
3	1455	435	104	331
4	870	403	97	306
5	285	387	103	284
6	(LF = <u>-300</u> mm)	179	182	-3

DATA SHEET 12

EXTERIOR STATIC CRUSH FOR IMPACTOR FACE

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301



NOTE: Dimensions are shown in millimeters, mm

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

			NOTE: All dimensions are in millimeters with a tolerance of ±5 mm																	
			DISTANCE RIGHT OF CENTER (mm)										DISTANCE LEFT OF CENTER (mm)							
LEVEL	HEIGHT AT CL (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	665	622	609	609	617	638	645	620	619	622	627	634	642	654	676	702	741	
		CRUSH	46	3	-10	-10	-2	19	26	1	0	3	8	15	23	35	57	83	122	
LEVEL 3 MID LEVEL	686	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	
		POST	634	606	609	614	619	645	643	626	617	616	620	624	630	637	646	665	703	
		CRUSH	15	-13	-10	-5	0	26	24	7	-2	-3	1	5	11	18	27	46	84	
LEVEL 2 TOP BUMPER	533	PRE	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	
		POST	659	656	652	650	648	650	649	646	650	646	651	653	650	655	658	662	676	
		CRUSH	40	37	33	31	29	31	30	27	31	27	32	34	31	36	39	43	57	
LEVEL 1 MID BUMPER	432	PRE	535	519	518	518	518	518	518	518	518	518	518	518	518	518	518	519	535	
		POST	649	618	605	598	600	603	598	597	597	596	594	596	596	598	603	610	630	
		CRUSH	114	99	87	80	82	85	80	79	79	78	76	78	78	80	85	91	95	

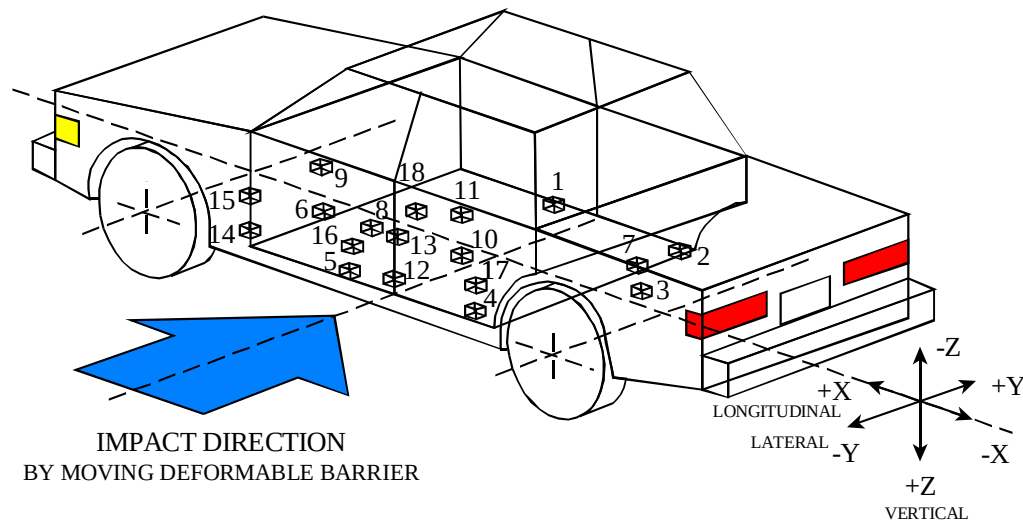
*Heights measured above ground level.

DATA SHEET 13

TEST VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301



- 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: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301

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*		Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)	Max (g)	Time (msec)
1	Right Side Sill at Front Seat	2927	640	-223	pos.	4.0	30.6	19.3	7.7	4.2	64.9	19.4	7.8
					neg.	-5.7	13.4	-1.9	166.3	-5.1	10.3	0.0	-14.7
2	Right Side Sill at Rear Seat	2037	607	-196	pos.	4.5	30.8	17.2	25.4	7.0	38.8	18.0	25.2
					neg.	-6.6	23.8	-1.7	181.0	-8.3	20.5	0.0	-19.8
3	Rear Floorpan Above Axle	1100	19	-494	pos.	11.3	12.3	19.6	24.1	6.6	7.0	24.7	22.5
					neg.	-17.1	22.0	-2.1	102.0	-9.3	12.2	0.0	-17.2
4	Left Side Sill at Rear Seat	2016	-629	-174	pos.	-	-	66.9	3.3	-	-	-	-
					neg.	-	-	-31.6	52.6	-	-	-	-
5	Left Side Sill at Front Seat	2987	-612	-222	pos.	-	-	67.9	5.0	-	-	-	-
					neg.	-	-	-23.4	18.5	-	-	-	-
6	Left Front Door on Centerline	2699	-768	-660	pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
7	Right Rear Occupant Compartment	2083	413	-212	pos.	-	-	18.3	7.6	-	-	-	-
					neg.	-	-	-1.9	101.6	-	-	-	-
8	Midrear of Left Front Door	2324	-754	-663	pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
9	Left Front Door Upper Centerline	2674	-741	-856	pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
10	Midrear of Left Rear Door	1555	-702	-703	Pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-
11	Left Rear Door Upper Centerline	1726	-713	-897	pos.	-	-	-	-	-	-	-	-
					neg.	-	-	-	-	-	-	-	-

*Reference: X - Rear Bumper (+ Forward)

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

**Accelerometer was not requested by COTR.

4-11

8675-F214-16

DATA SHEET 13 (continued)

VEHICLE ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301

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	2155	-674	-294	pos.	-	-	175.5	4.2	-	-	-	-
					neg.	-	-	-374.5	20.9	-	-	-	-
13	Left Middle B-Pillar	2154	-698	-828	pos.	-	-	137.9	9.4	-	-	-	-
					neg.	-	-	-248.3	13.8	-	-	-	-
14	Left Lower A-Pillar	3275	-645	-348	pos.	-	-	94.3	14.3	-	-	-	-
					neg.	-	-	-86.2	18.6	-	-	-	-
15	Left Middle A-Pillar	3239	-703	-941	pos.	-	-	17.3	26.8	-	-	-	-
					neg.	-	-	-7.6	13.6	-	-	-	-
16	Front Seat Track	2294	-565	-205	pos.	-	-	53.7	14.9	-	-	-	-
					neg.	-	-	-18.8	20.5	-	-	-	-
17	Rear Seat Track	1100	-469	-584	pos.	-	-	24.7	24.0	-	-	-	-
					neg.	-	-	-3.1	104.6	-	-	-	-
18	Vehicle CG	2590	79	-471	pos.	20.3	59.4	79.7	22.1	30.2	55.6	115.0	27.3
					neg.	-25.1	25.8	-111.8	27.3	-33.5	22.4	0.0	-4.1

*Reference: X - Rear Bumper (+ Forward)

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

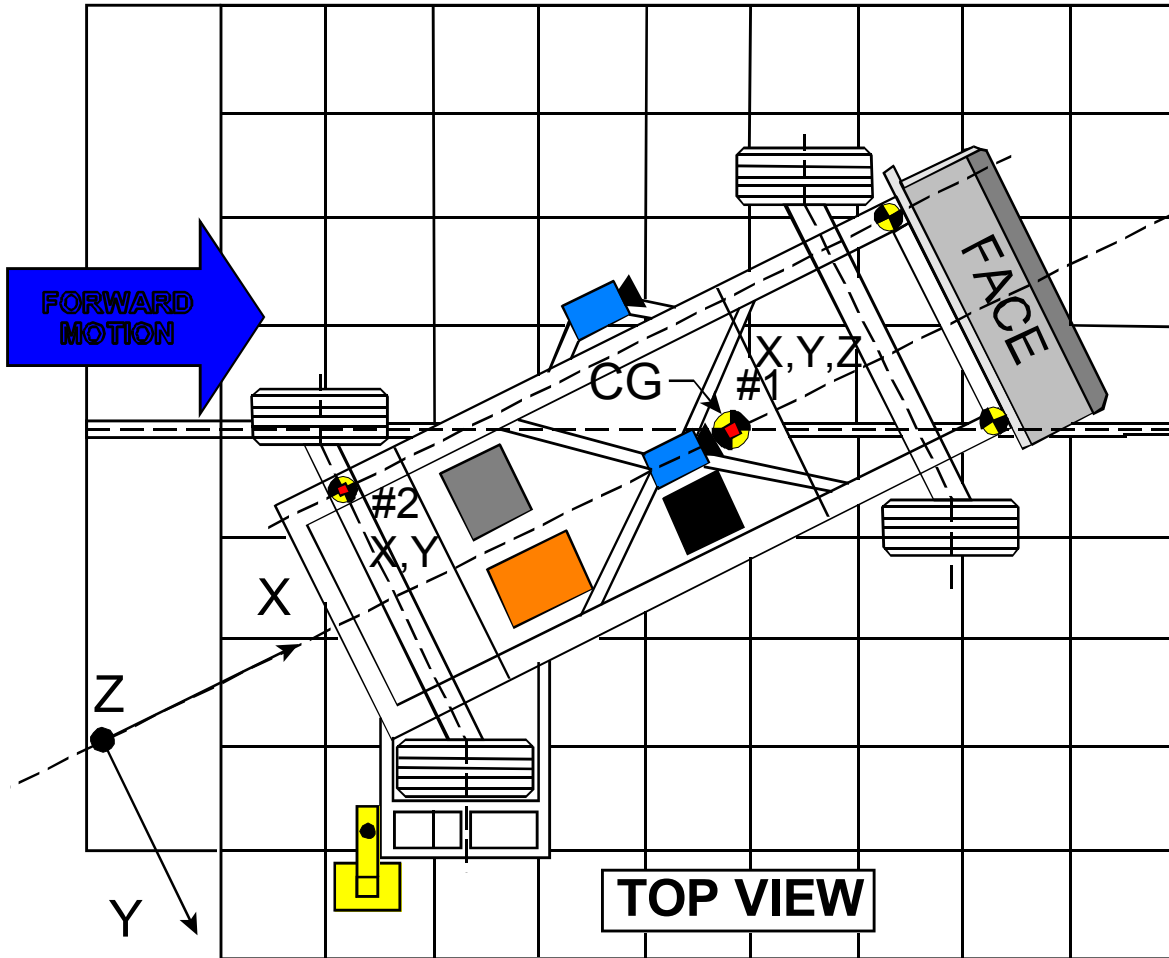
** Data invalid after 19 ms

DATA SHEET 14

MDB ACCELEROMETER LOCATIONS AND DATA SUMMARY

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301



Accel. No.	Location	Coordinates (millimeters)			Pos. Direct.		Neg. Direct.	
					Max (g)	Time (msec)	Max (g)	Time (msec)
		X*	Y*	Z*				
1	MDB Center of Gravity							
	Longitudinal... X	1859	0	-330	1.4	107.2	-21.3	36.8
	Lateral..... Y				2.2	58.4	-7.9	20.3
	Vertical..... Z				11.7	66.7	-16.5	20.9
	Resultant..... R				23.2	20.9	0.2	-20.0
2	Rear Frame Member							
	Longitudinal... X	386	-660	-660	1.9	100.0	-23.1	32.8
	Lateral..... Y				5.8	25.5	-1.8	62.9

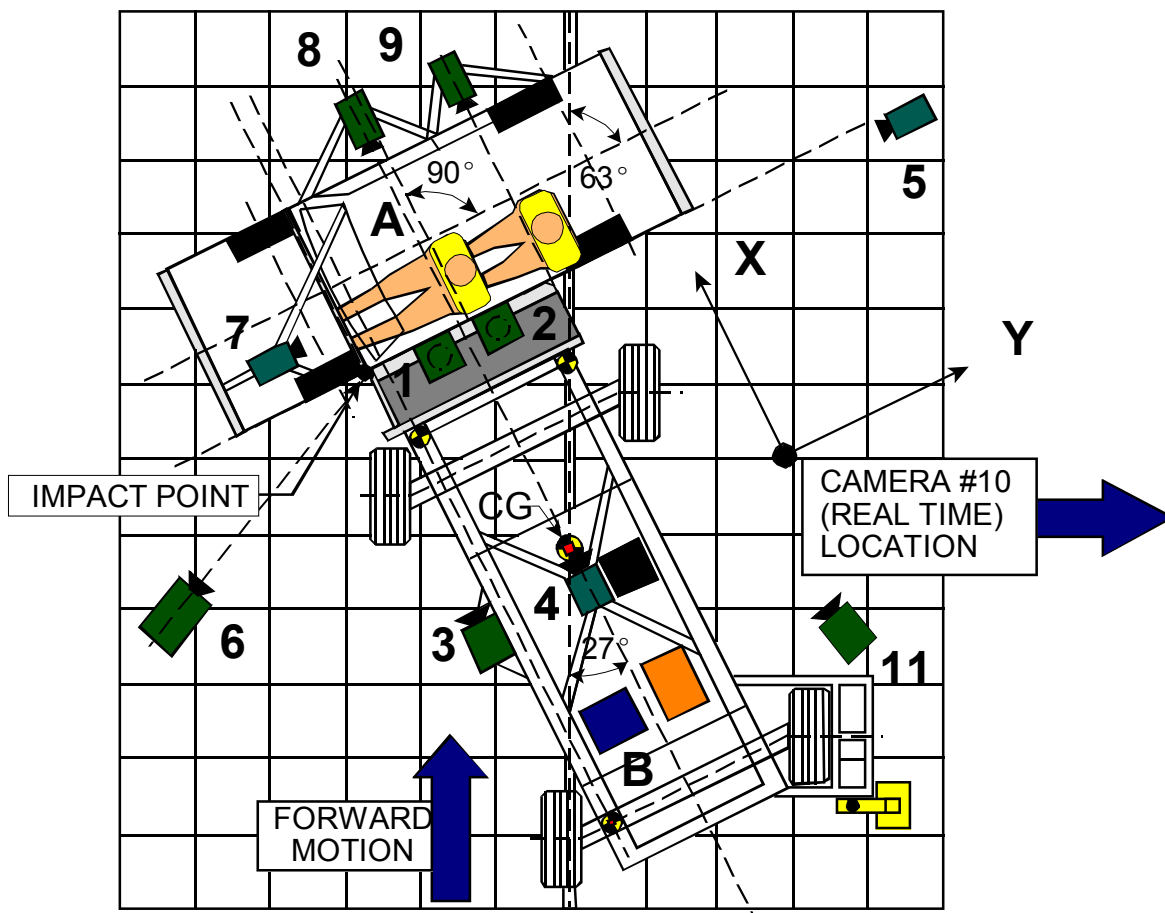
*Reference: X = Rear Bumper (+ Forward)
Y = Vehicle Centerline (+ To Right)
Z = Ground Level (+ Down)
All measurements accurate to within ± 3 mm.

DATA SHEET 15

HIGH SPEED CAMERA LOCATIONS AND DATA SUMMARY

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No. C45301



Camera No.	View	Coordinates (millimeters)			Angle (deg.)	Lens (mm)	Film Speed (fps)
		X*	Y*	Z*			
1	Overhead view of test vehicle	219	822	-4880	-90	8	1000
2	Overhead closeup view of impact plane	341	844	-4880	-90	12.5	1000
3	MDB onboard closeup view of impact point	-1470	0	-847	0	13	1000
4	MDB onboard view of driver dummy	-1140	838	-1586	-17	7.5	1000
5	Right side ground level overall view	0	9636	1092	-2.3	25	1000
6	Left side ground level overall view	1781	1797	1071	-6.0	13	1000
7	Test vehicle onboard driver front view	535	600	1156	-13.0	13	1000
8	Test vehicle onboard driver side view	815	1826	1062	-13.7	8	1000
9	Test vehicle onboard passenger side view	1685	1826	1114	-14.1	8	1000
10	Real time film coverage of test	-	-	-	-	-	24

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

X = (Impact Point) + Forward

Y = (Impact Point) + To Right

Z = (Ground Level) + Down

SECTION 5

FUEL SYSTEM INTEGRITY

DATA SHEET 16

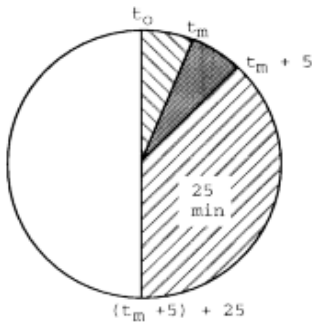
FMVSS 301 FUEL SYSTEM INTEGRITY DATA

NHTSA No.: C45301 TEST DATE: March 31, 2004
 Vehicle Mfgr./Make/Model: Honda of America MFG., Inc. 2004 Acura TL 4-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:

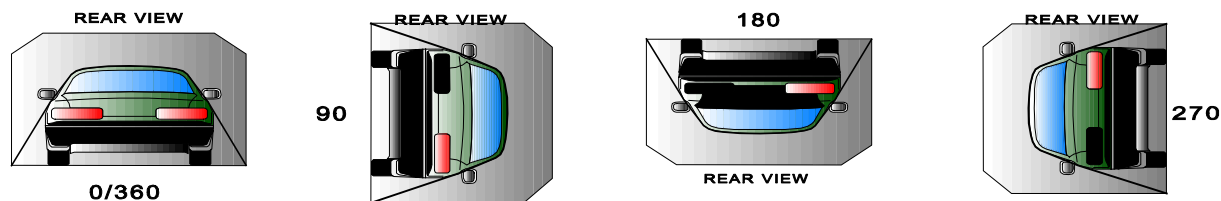
None

DATA SHEET 17

ROLLOVER DATA

Vehicle: 2004 Acura TL 4-Door Sedan

NHTSA No.: C45301



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	3	seconds	5	minutes	6	minutes	3	seconds	7	minutes
90° - 180°	1	minutes	5	seconds	5	minutes	6	minutes	5	seconds	7	minutes
180°-270°	1	minutes	5	seconds	5	minutes	6	minutes	5	seconds	7	minutes
270°-360°	1	minutes	4	seconds	5	minutes	6	minutes	4	seconds	7	minutes

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

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

III. ACTUAL TEST VEHICLE SOLVENT SPILLAGE:

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

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

IV. SOLVENT SPILLAGE LOCATION(S):

Rollover Stage	Spillage Location
0° - 90°	None
90° - 180°	None
180°-270°	None
270°-360°	None

APPENDIX A

PHOTOGRAPHS

TABLE OF PHOTOGRAPHS

<u>Figure</u>	<u>Photograph Title</u>	<u>Page</u>
Figure A- 1	PRE-TEST FRONTAL VIEW OF TEST VEHICLE	A- 3
Figure A- 2	POST-TEST FRONTAL VIEW OF TEST VEHICLE	A- 4
Figure A- 3	PRE-TEST REAR VIEW OF TEST VEHICLE	A- 5
Figure A- 4	POST-TEST REAR VIEW OF TEST VEHICLE	A- 6
Figure A- 5	PRE-TEST IMPACTED SIDE VIEW OF TEST VEHICLE	A- 7
Figure A- 6	POST-TEST IMPACTED SIDE VIEW OF TEST VEHICLE	A- 8
Figure A- 7	PRE-TEST LEFT FRONT VIEW OF TEST VEHICLE	A- 9
Figure A- 8	POST-TEST LEFT FRONT VIEW OF TEST VEHICLE	A- 10
Figure A- 9	PRE-TEST LEFT REAR VIEW OF TEST VEHICLE	A- 11
Figure A- 10	POST-TEST LEFT REAR VIEW OF TEST VEHICLE	A- 12
Figure A- 11	PRE-TEST RIGHT FRONT VIEW OF TEST VEHICLE	A- 13
Figure A- 12	POST-TEST RIGHT FRONT VIEW OF TEST VEHICLE	A- 14
Figure A- 13	PRE-TEST RIGHT REAR VIEW OF TEST VEHICLE	A- 15
Figure A- 14	POST-TEST RIGHT REAR VIEW OF TEST VEHICLE	A- 16
Figure A- 15	PRE-TEST FRONTAL VIEW OF IMPACTOR FACE	A- 17
Figure A- 16	POST-TEST FRONTAL VIEW OF IMPACTOR FACE	A- 18
Figure A- 17	PRE-TEST LEFT SIDE VIEW OF IMPACTOR FACE	A- 19
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
Figure A- 21	PRE-TEST TOP VIEW OF IMPACTOR FACE	A- 23
Figure A- 22	POST-TEST TOP VIEW OF IMPACTOR FACE	A- 24
Figure A- 23	PRE-TEST OVERHEAD VIEW OF ALIGNED MDB AND VEHICLE	A- 25
Figure A- 24	POST-TEST OVERHEAD VIEW OF MDB AND VEHICLE	A- 26
Figure A- 25	PRE-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID H3	A- 27
Figure A- 26	POST-TEST RIGHT OCCUPANT COMPARTMENT VIEW OF FRONT SID H3	A- 28
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
Figure A- 34	POST-TEST INTERIOR OF FRONT DOOR SHOWING SID H3 IMPACT LOCATIONS	A- 36
Figure A- 35	PRE-TEST INTERIOR OF REAR DOOR	A- 37
Figure A- 36	POST-TEST INTERIOR OF REAR DOOR SHOWING SID H3 IMPACT LOCATIONS	A- 38
Figure A- 37	PRE-TEST LEFT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION	A- 39
Figure A- 38	PRE-TEST RIGHT SIDE VIEW OF MDB WITH IMPACTOR FACE IN POSITION	A- 40
Figure A- 39	POST-TEST CLOSE-UP VIEW OF IMPACT POINT TARGET	A- 41
Figure A- 40	CLOSE-UP VIEW OF VEHICLE'S CERTIFICATION LABEL	A- 42
Figure A- 41	CLOSE-UP VIEW OF VEHICLE'S TIRE PLACARD LABEL	A- 43
Figure A- 42	IMPACT PHOTO	A- 44
Figure A- 43	ROLLOVER 90 DEGREES	A- 45
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

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



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

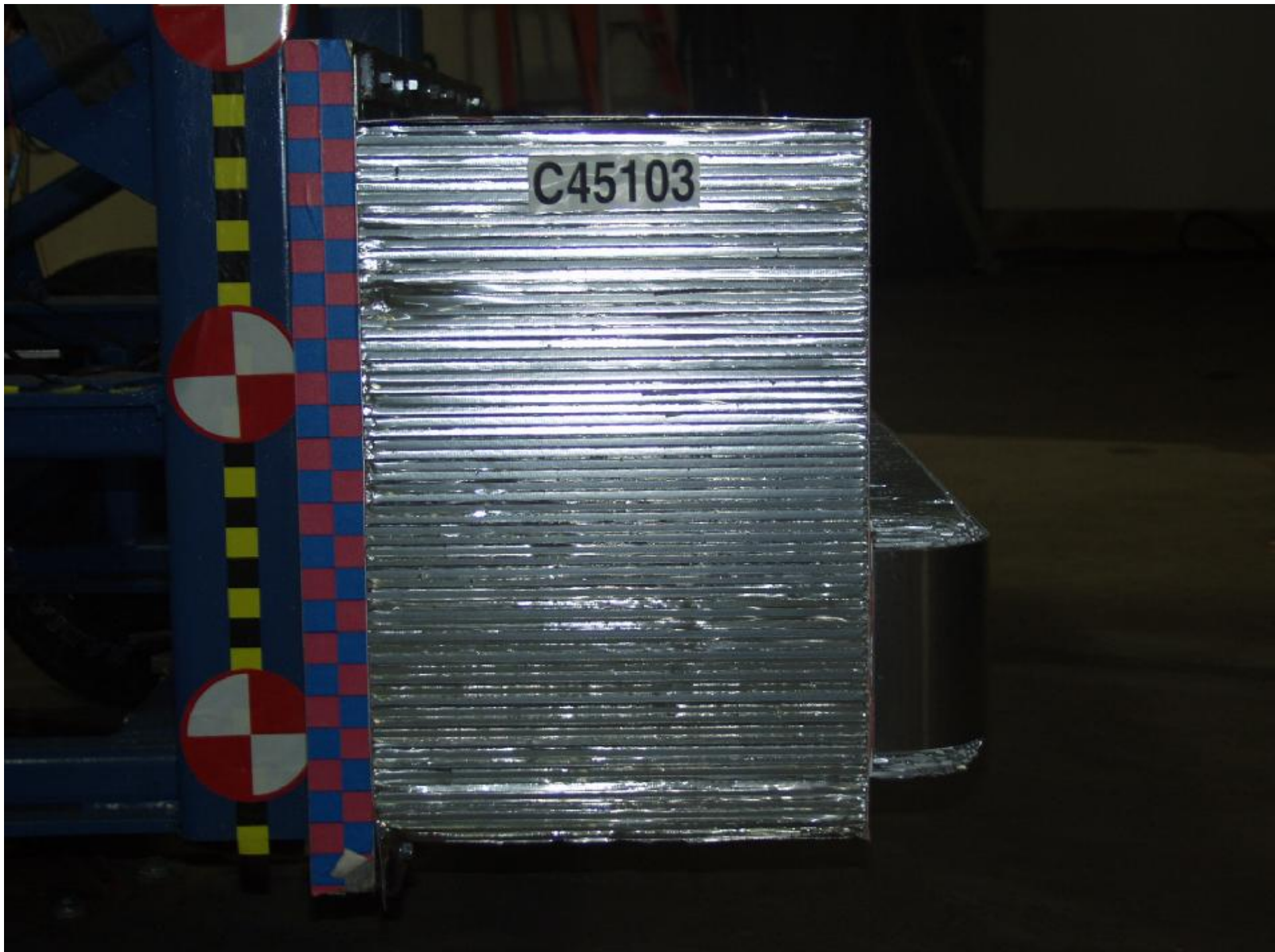


Figure A-19 PRE-TEST RIGHT SIDE VIEW OF IMPACTOR FACE



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

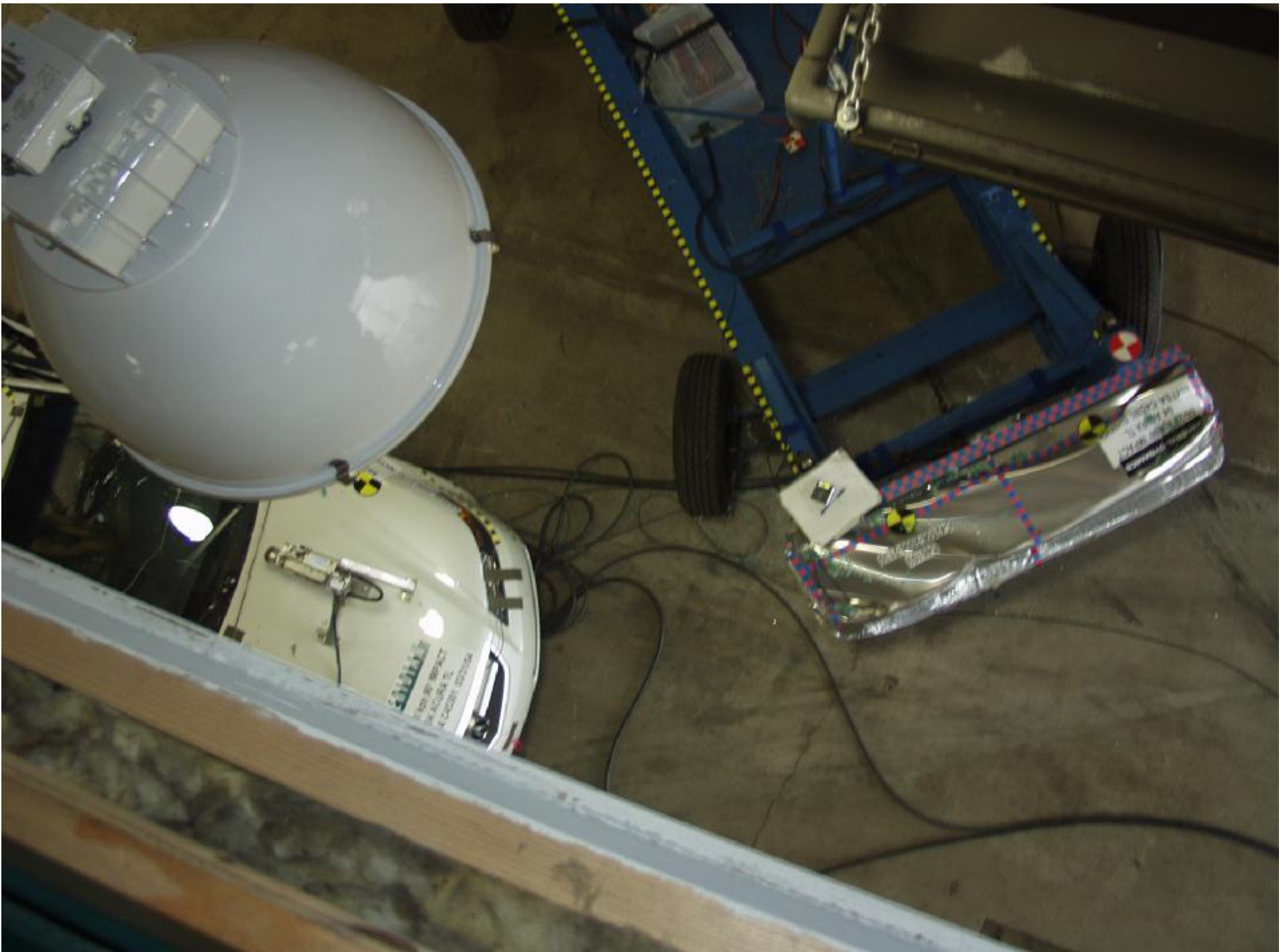


Figure A-24 POST-TEST OVERHEAD VIEW OF MDB AND VEHICLE



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



A-35

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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

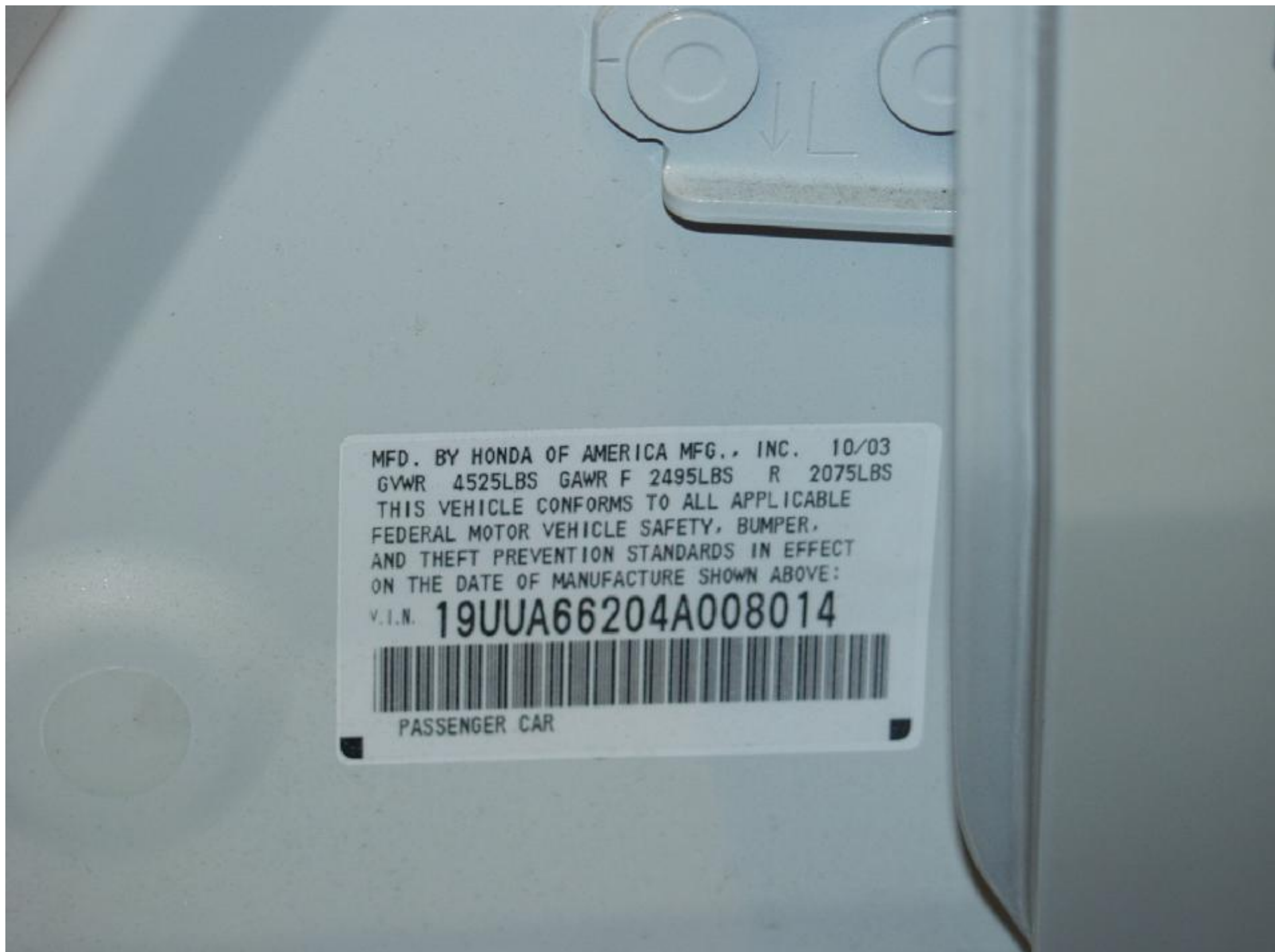


Figure A-40 CLOSE-UP VIEW OF VEHICLE'S CERTIFICATION LABEL



TIRE AND LOADING INFORMATION

SEATING CAPACITY : TOTAL 5 : FRONT 2 : REAR 3

The combined weight of occupants and cargo should never exceed 395kg or 850lbs

ORIGINAL TIRE SIZE	COLD TIRE INFLATION PRESSURE	
P235/45R17 93W	FRONT	220kPa, 32PSI
	REAR	220kPa, 32PSI
COMPACT SPARE TIRE	COLD TIRE INFLATION PRESSURE	
T135/80R16 101M	420kPa, 60PSI	

SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION

42762-SEP-A040

SIDE AIRBAG (A9)

- This car is equipped with side airbags in the front seats and side curtain airbags.
- Do not lean against the door.
- See owner's manual for more information.

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	RIGHT REAR OCCUPANT COMPARTMENT (Y) ACCELERATION VS TIME	B- 85
81	RIGHT REAR OCCUPANT COMPARTMENT (Y) VELOCITY VS TIME	B- 86
82	LOWER B-POST (Y) ACCELERATION VS TIME	B- 87
83	LOWER B-POST (Y) VELOCITY VS TIME	B- 88
84	UPPER B-POST (Y) ACCELERATION VS TIME	B- 89
85	UPPER B-POST (Y) VELOCITY VS TIME	B- 90
86	LOWER A-POST (Y) ACCELERATION VS TIME	B- 91
87	LOWER A-POST (Y) VELOCITY VS TIME	B- 92
88	UPPER A-POST (Y) ACCELERATION VS TIME	B- 93
89	UPPER A-POST (Y) VELOCITY VS TIME	B- 94
90	FRONT SEAT TRACK (Y) ACCELERATION VS TIME	B- 95
91	FRONT SEAT TRACK (Y) VELOCITY VS TIME	B- 96
92	REAR SEAT TRACK (Y) ACCELERATION VS TIME	B- 97
93	REAR SEAT TRACK (Y) VELOCITY VS TIME	B- 98

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>
94	VEHICLE CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 99
95	VEHICLE CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 100
96	VEHICLE CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 101
97	VEHICLE CENTER OF GRAVITY (Y) VELOCITY ACCELERATION VS TIME	B- 102
98	VEHICLE CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 103
99	VEHICLE CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 104
100	VEHICLE CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 105

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>
101	MDB CENTER OF GRAVITY (X) ACCELERATION VS TIME	B- 106
102	MDB CENTER OF GRAVITY (X) VELOCITY VS TIME	B- 107
103	MDB CENTER OF GRAVITY (Y) ACCELERATION VS TIME	B- 108
104	MDB CENTER OF GRAVITY (Y) VELOCITY VS TIME	B- 109
105	MDB CENTER OF GRAVITY (Z) ACCELERATION VS TIME	B- 110
106	MDB CENTER OF GRAVITY (Z) VELOCITY VS TIME	B- 111
107	MDB CENTER OF GRAVITY RESULTANT ACCELERATION VS TIME	B- 112
108	MDB REAR (X) ACCELERATION VS TIME	B- 113
109	MDB REAR (X) VELOCITY VS TIME	B- 114
110	MDB REAR (Y) ACCELERATION VS TIME	B- 115
111	MDB REAR (Y) VELOCITY VS TIME	B- 116

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>
112	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 117
113	DRIVER UPPER RIB (Y) VELOCITY VS TIME	B- 118
114	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 119
115	DRIVER LOWER RIB (Y) VELOCITY VS TIME	B- 120
116	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 121
117	DRIVER LOWER SPINE (Y) VELOCITY VS TIME	B- 122
118	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 123
119	DRIVER PELVIC (Y) VELOCITY VS TIME	B- 124
120	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 125
121	PASSENGER UPPER RIB (Y) VELOCITY VS TIME	B- 126
122	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 127
123	PASSENGER LOWER RIB (Y) VELOCITY VS TIME	B- 128
124	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 129
125	PASSENGER LOWER SPINE (Y) VELOCITY VS TIME	B- 130
126	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 131
127	PASSENGER PELVIC (Y) VELOCITY VS TIME	B- 132

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

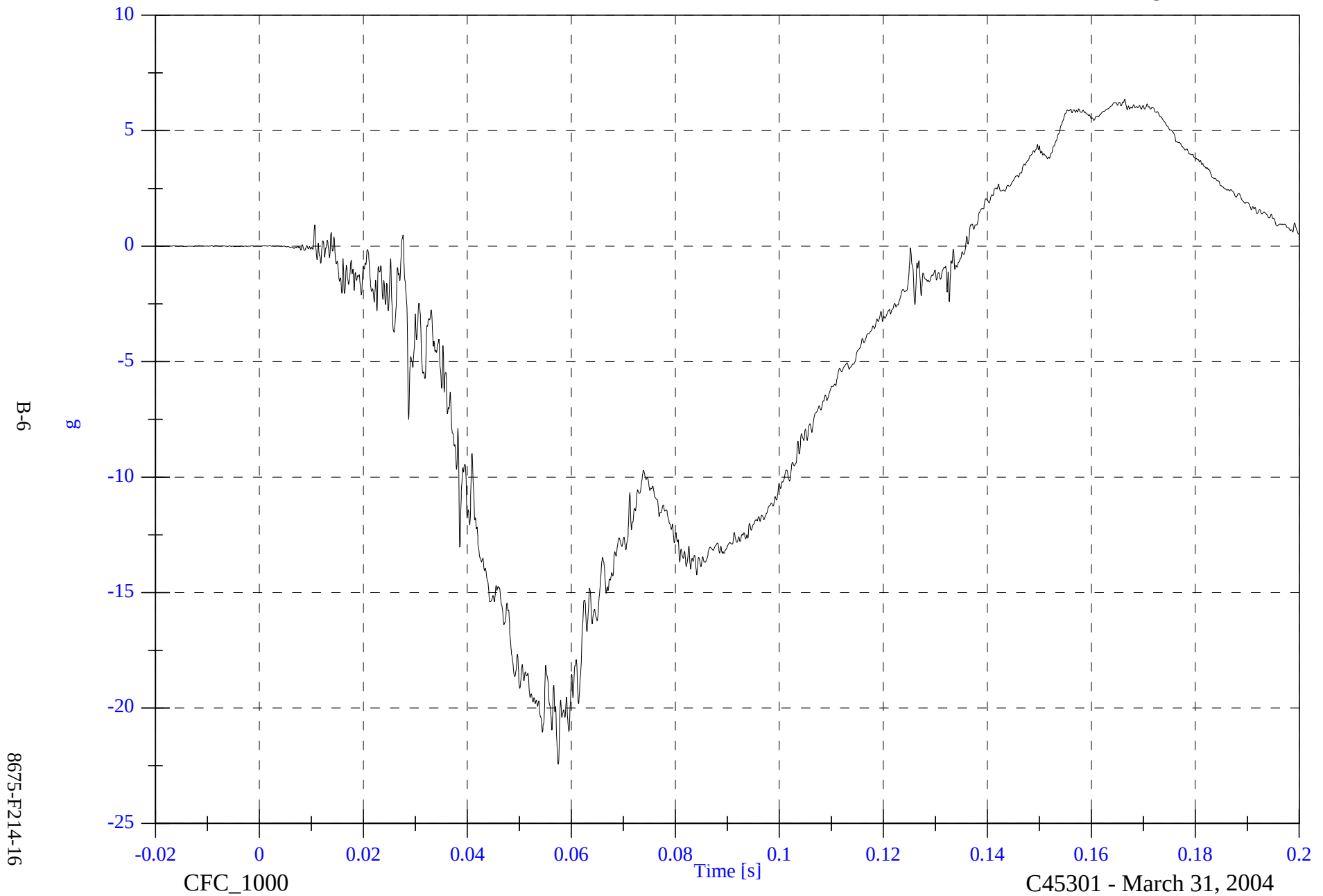
<u>Plot No.</u>	<u>Data Plot Title</u>	<u>Page</u>
128	DRIVER UPPER RIB (Y) ACCELERATION VS TIME	B- 133
129	DRIVER LOWER RIB (Y) ACCELERATION VS TIME	B- 134
130	DRIVER LOWER SPINE (Y) ACCELERATION VS TIME	B- 135
131	DRIVER PELVIC (Y) ACCELERATION VS TIME	B- 136
132	PASSENGER UPPER RIB (Y) ACCELERATION VS TIME	B- 137
133	PASSENGER LOWER RIB (Y) ACCELERATION VS TIME	B- 138
134	PASSENGER LOWER SPINE (Y) ACCELERATION VS TIME	B- 139
135	PASSENGER PELVIC (Y) ACCELERATION VS TIME	B- 140

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 6.4 [g] at 0.166 [s]

Min: -22.4 [g] at 0.057 [s]

V2P1 Head x

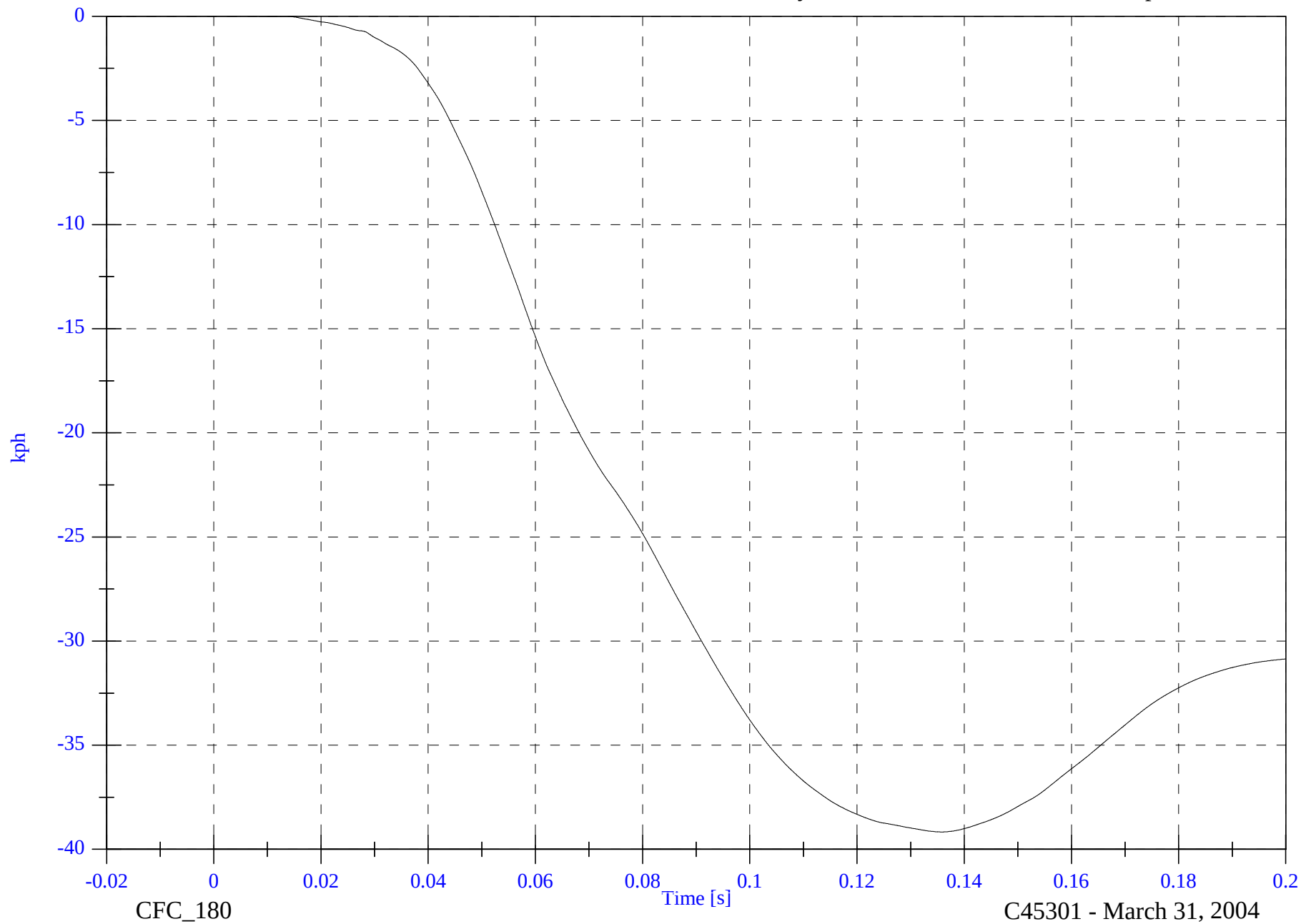


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Head x Velocity

Max: 0.0 [kph] at -0.007 [s]

Min: -39.2 [kph] at 0.136 [s]



B-7

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CFC_180

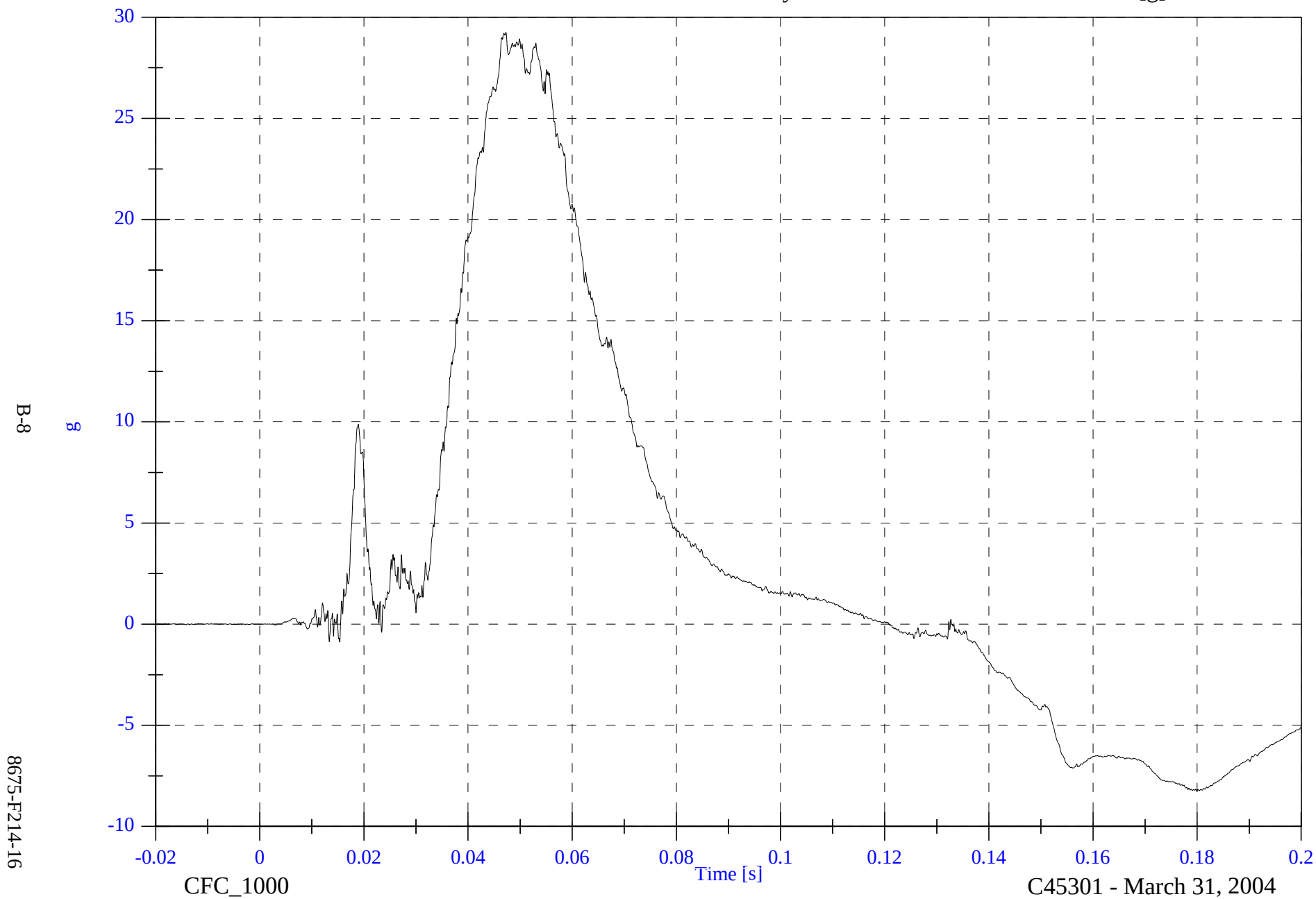
C45301 - March 31, 2004

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 29.2 [g] at 0.047 [s]

Min: -8.3 [g] at 0.180 [s]

V2P1 Head y

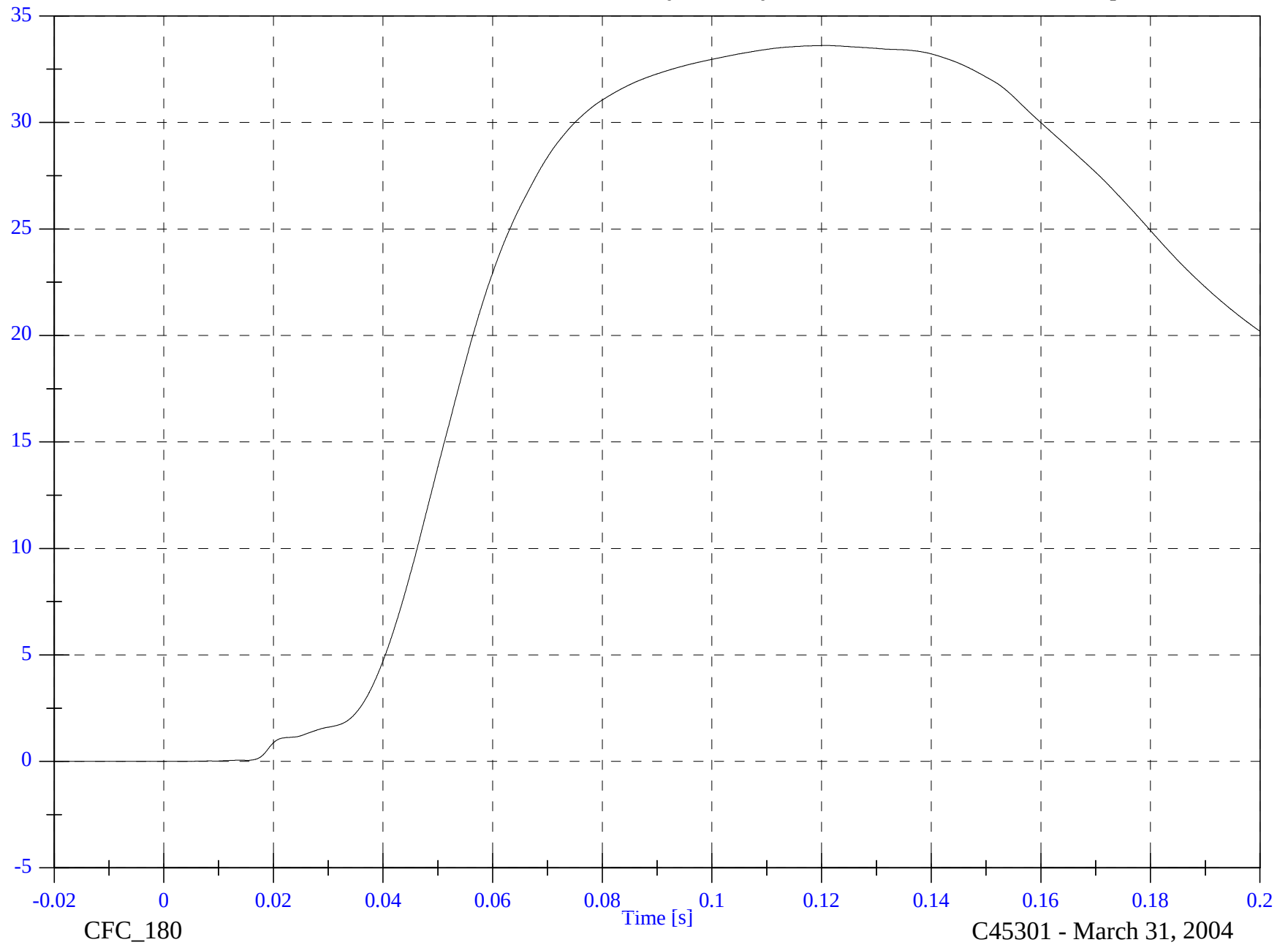


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Head y Velocity

Max: 33.6 [kph] at 0.121 [s]

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



B-9

8675-F214-16

CFC_180

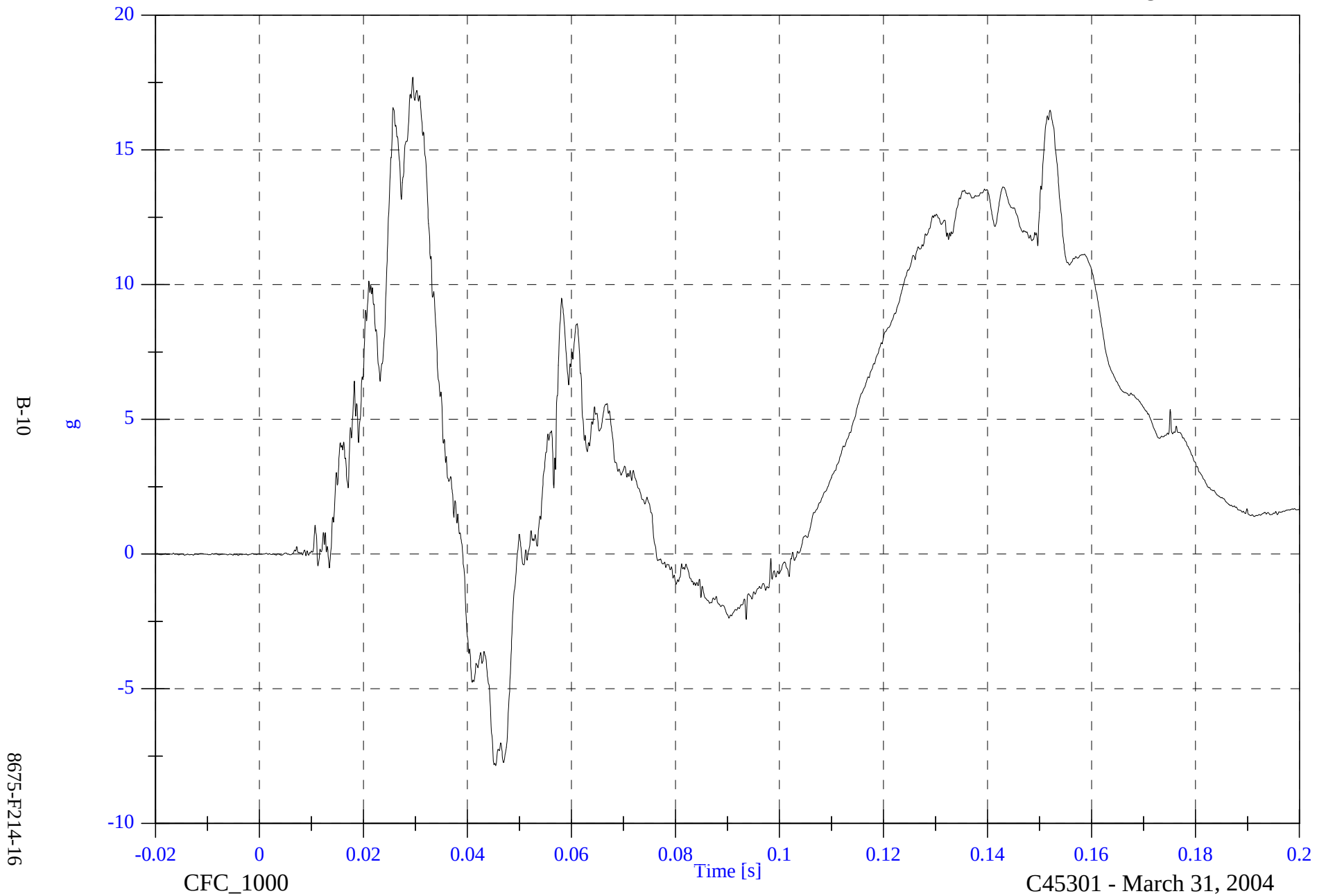
C45301 - March 31, 2004

2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Head z

Max: 17.7 [g] at 0.029 [s]

Min: -7.9 [g] at 0.045 [s]

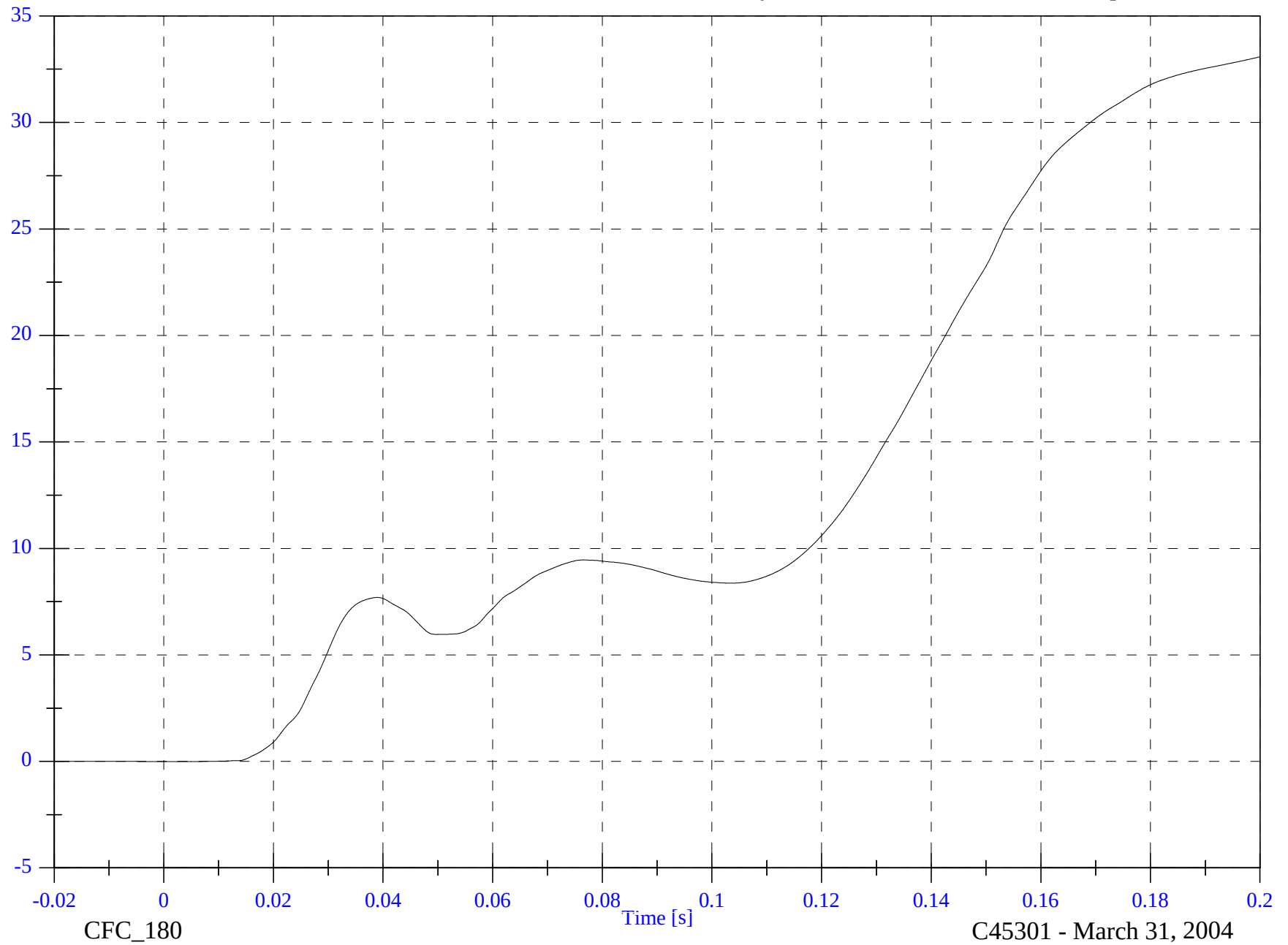


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 33.1 [kph] at 0.200 [s]

V2P1 Head z Velocity

Min: -0.0 [kph] at 0.005 [s]



B-11

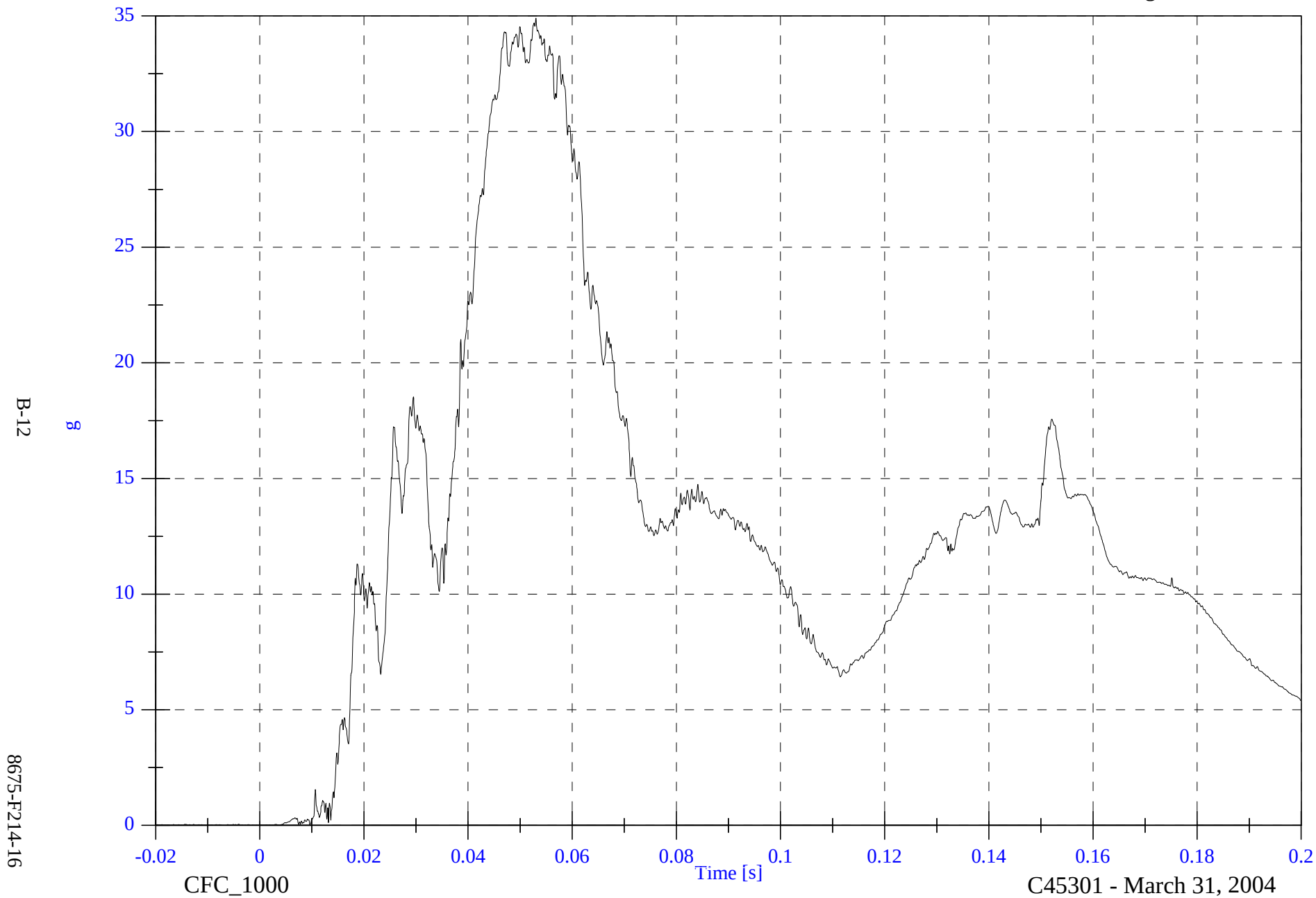
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Head Resultant

Max: 34.9 [g] at 0.053 [s]

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



2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Upper Neck Fx

Max: 19.2 [N] at 0.172 [s]

Min: -648.0 [N] at 0.058 [s]

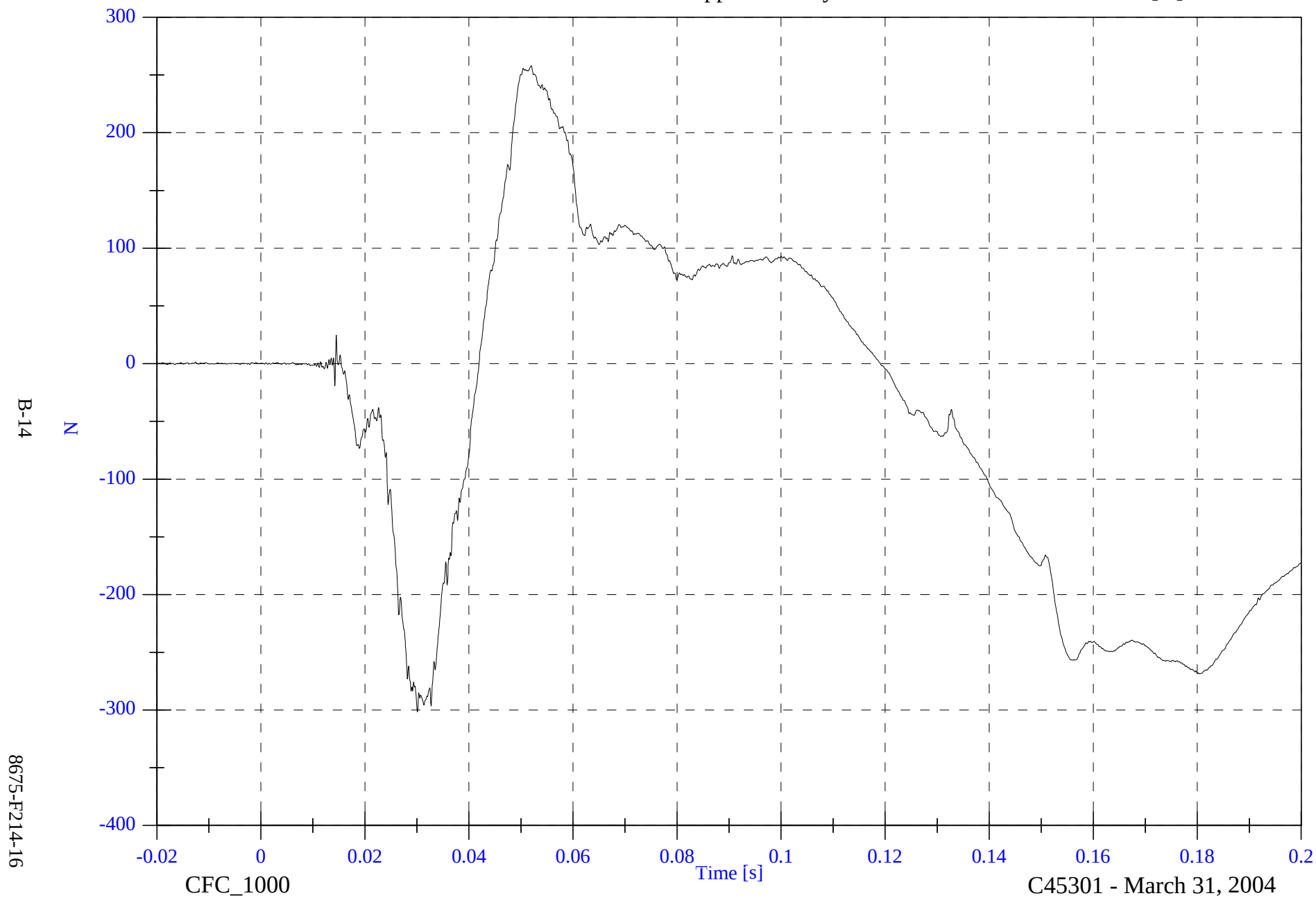


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 257.9 [N] at 0.052 [s]

Min: -301.6 [N] at 0.030 [s]

V2P1 Upper Neck Fy

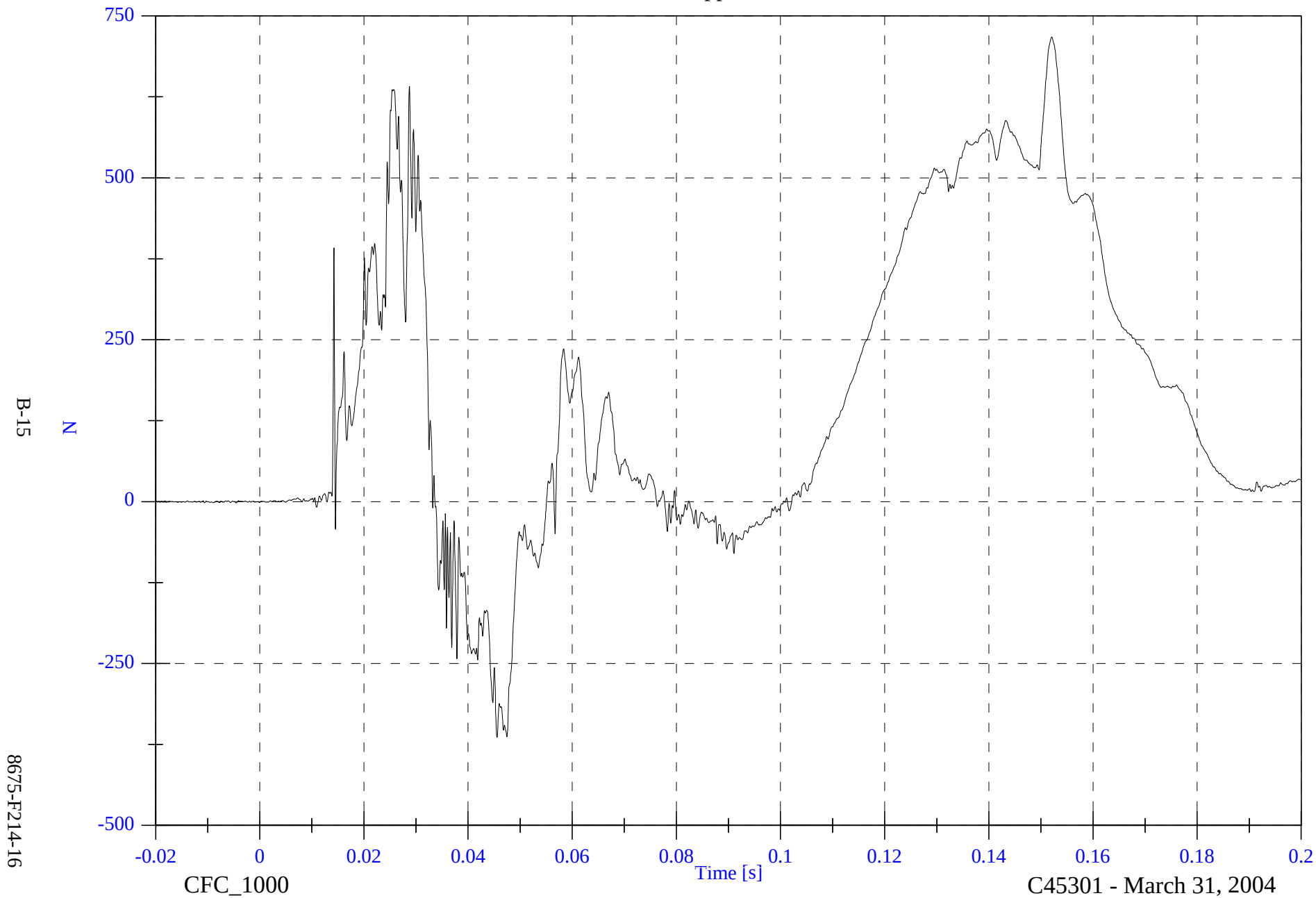


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Upper Neck Fz

Max: 717.5 [N] at 0.152 [s]

Min: -363.9 [N] at 0.046 [s]

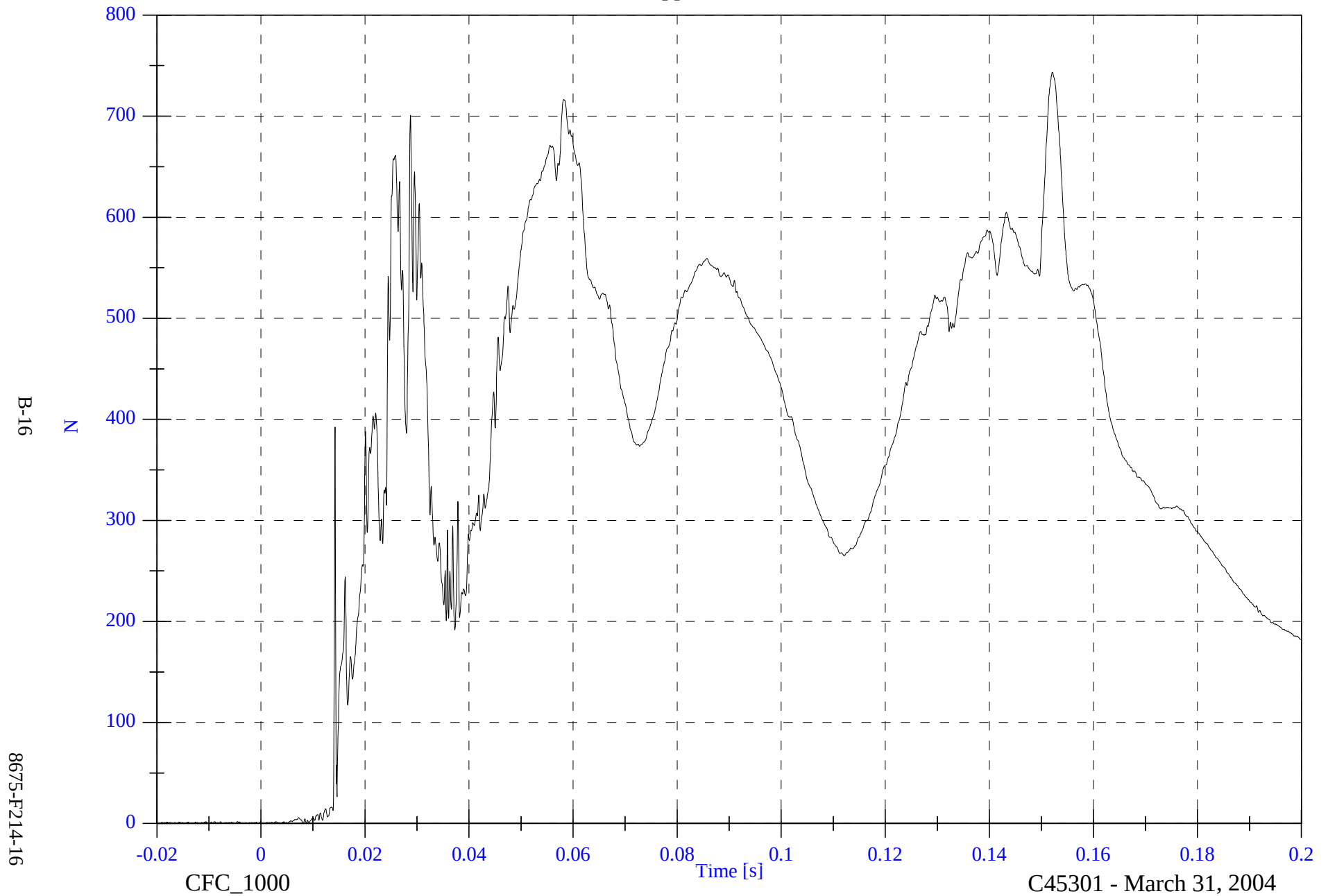


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Upper Neck F Resultant

Max: 743.6 [N] at 0.152 [s]

Min: 0.1 [N] at -0.005 [s]

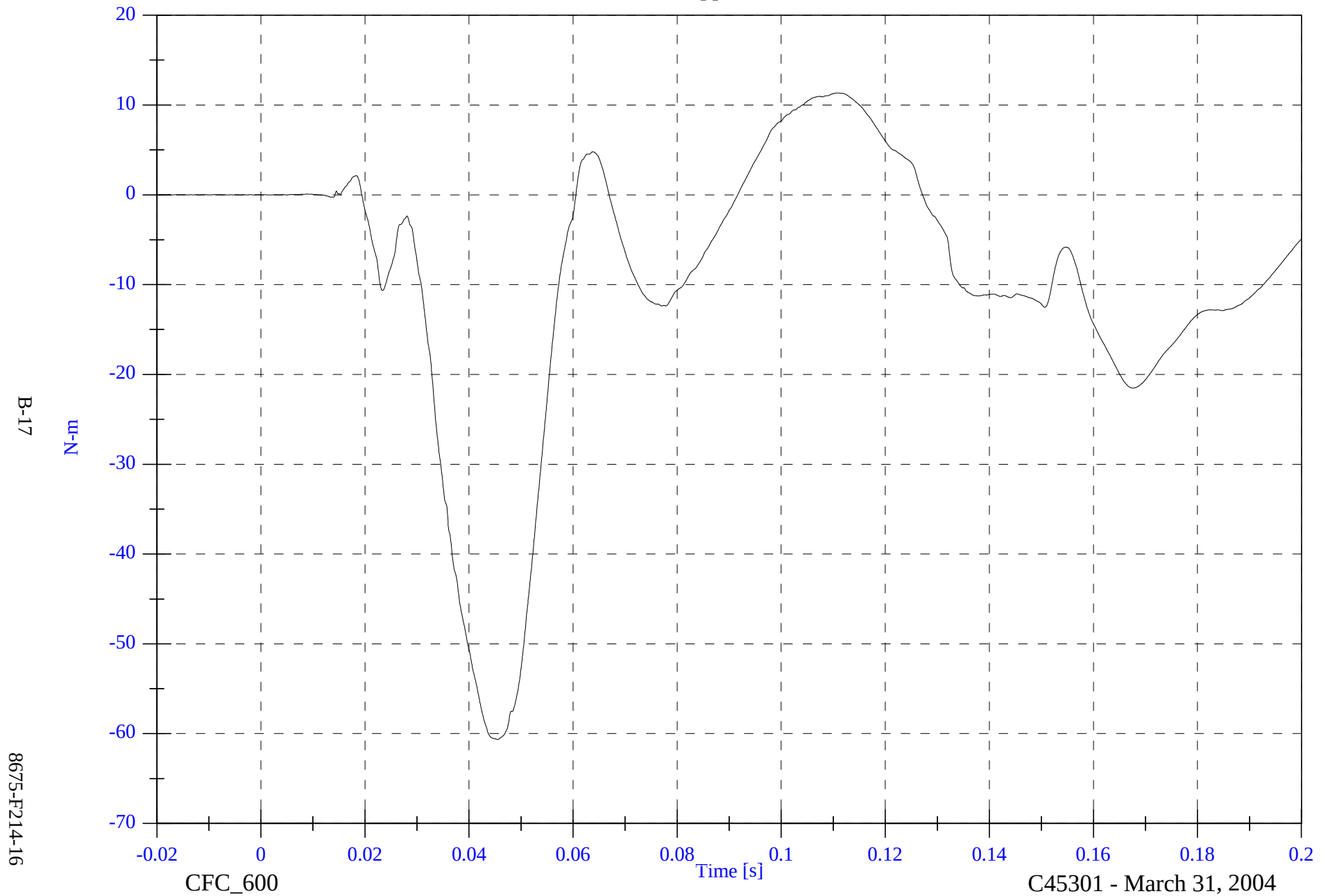


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Upper Neck Mx

Max: 11.3 [N-m] at 0.111 [s]

Min: -60.7 [N-m] at 0.045 [s]

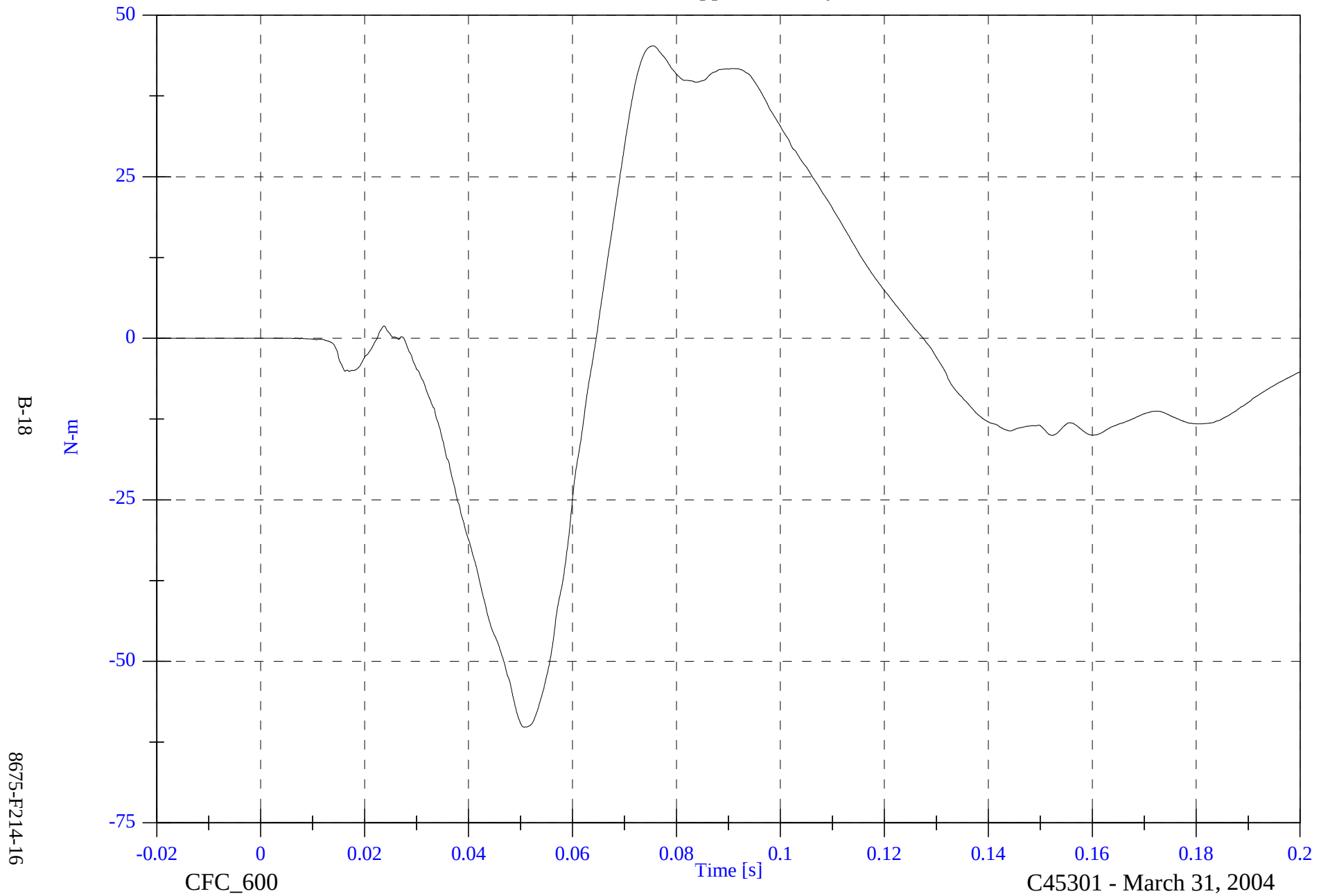


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 45.3 [N-m] at 0.076 [s]

Min: -60.2 [N-m] at 0.051 [s]

V2P1 Upper Neck My

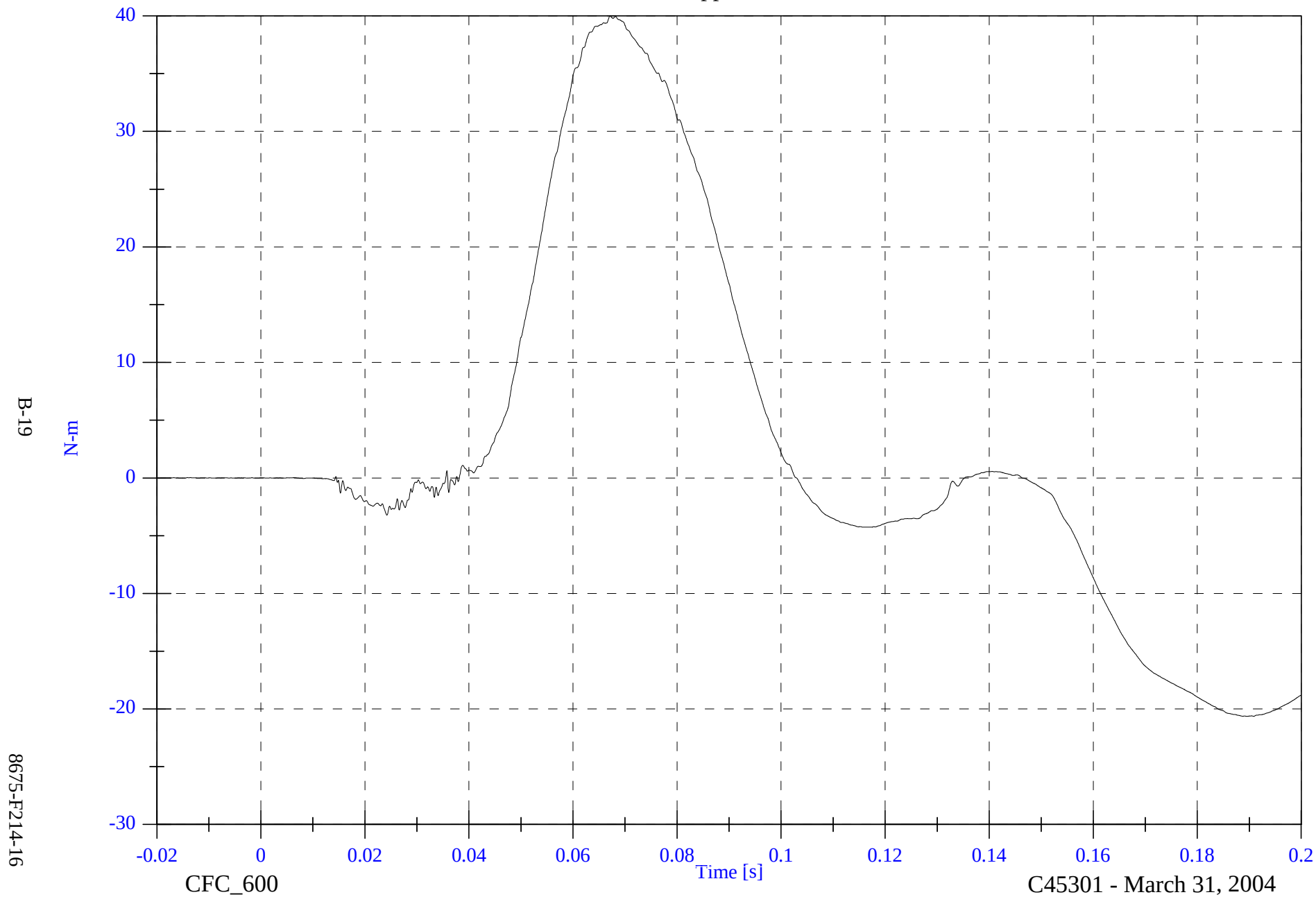


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 40.0 [N-m] at 0.067 [s]

Min: -20.6 [N-m] at 0.190 [s]

V2P1 Upper Neck Mz



B-19

8675-F214-16

CFC_600

C45301 - March 31, 2004

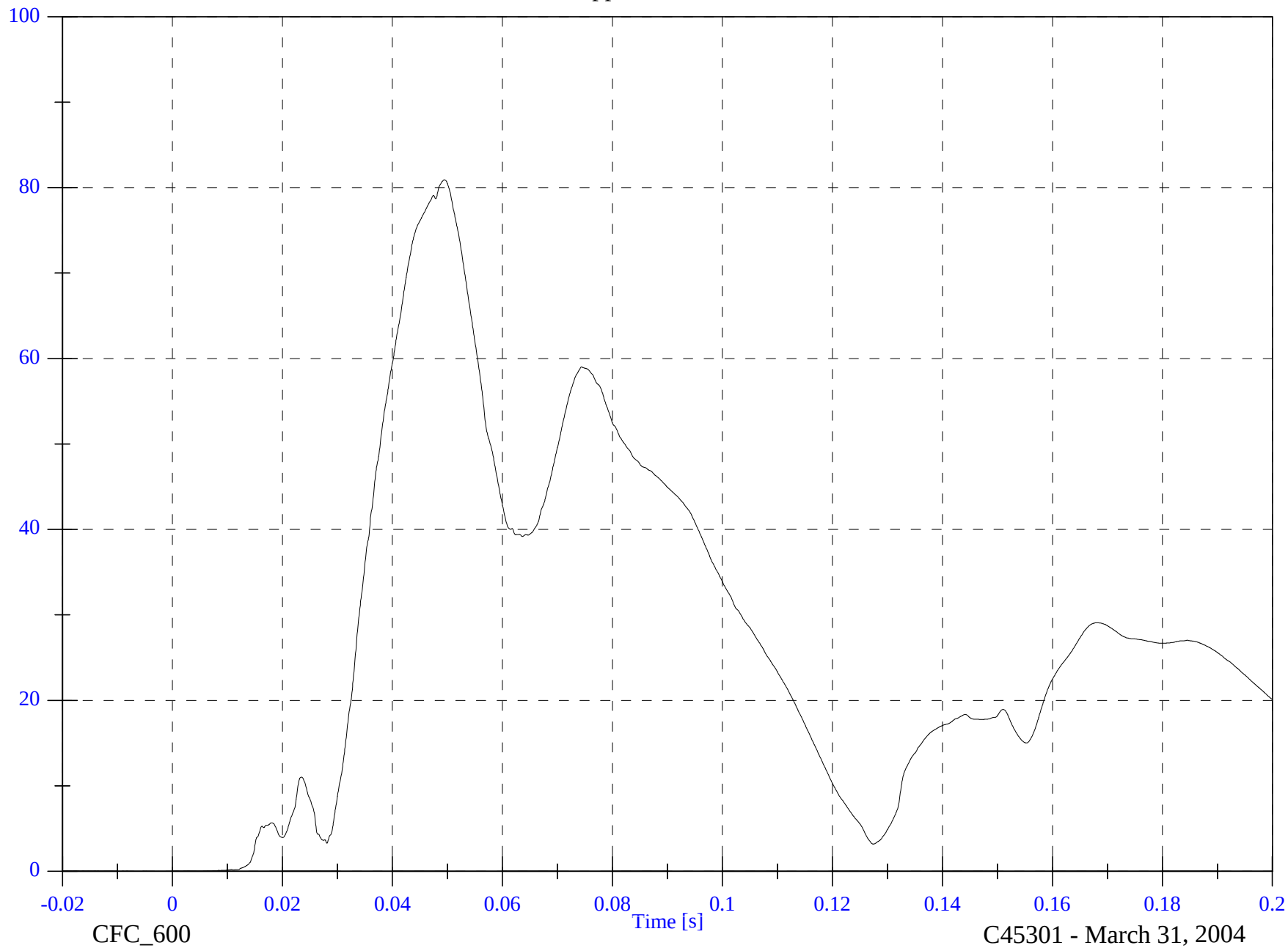
2004 FMVSS 214D Test 6

2004 Acura TL

V2P1 Upper Neck M Resultant

Max: 80.9 [N-m] at 0.049 [s]

Min: 0.0 [N-m] at -0.014 [s]



B-20

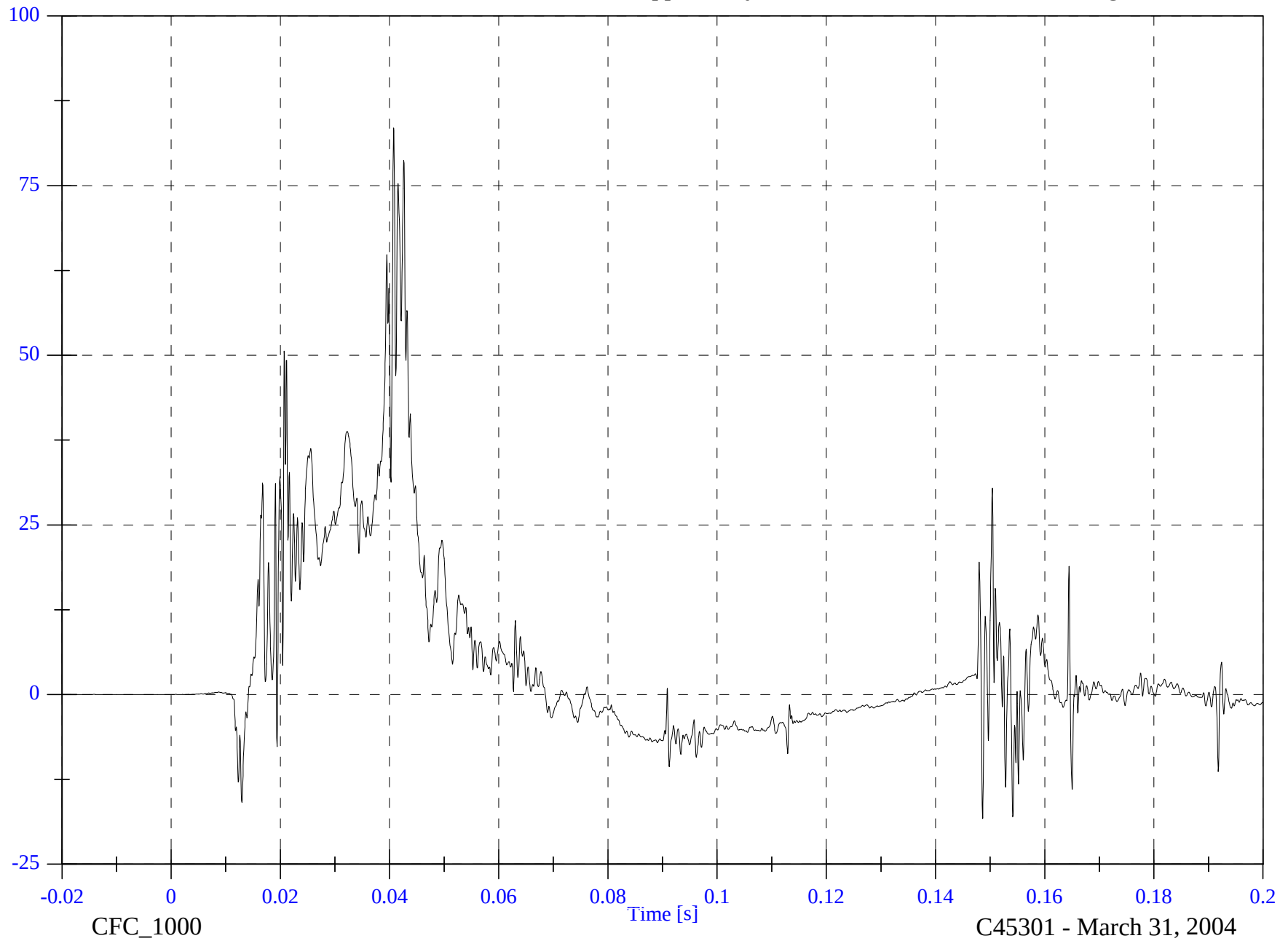
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Upper Rib y

Max: 83.5 [g] at 0.041 [s]

Min: -18.3 [g] at 0.149 [s]



B-21

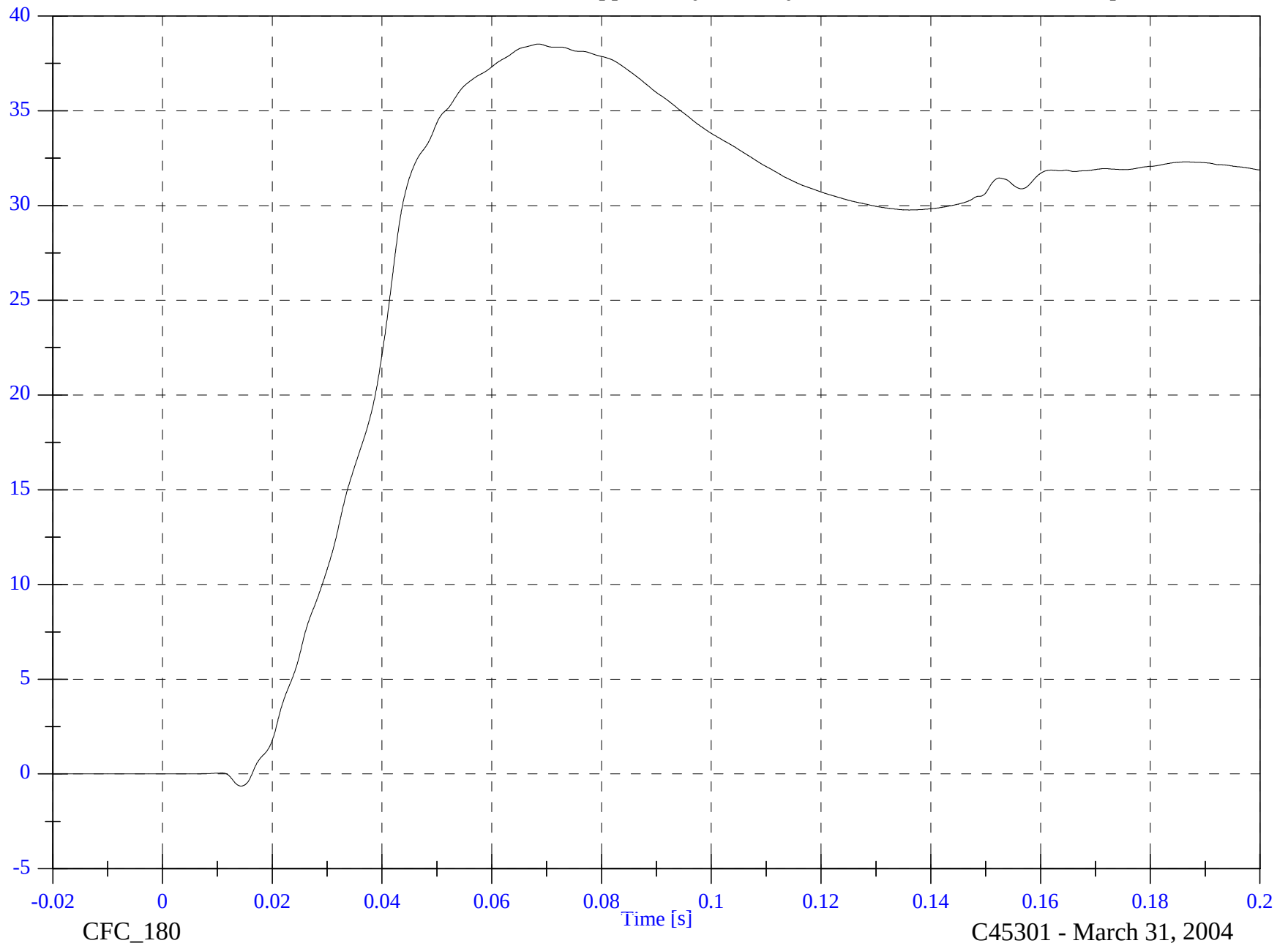
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Upper Rib y Velocity

Max: 38.5 [kph] at 0.068 [s]

Min: -0.6 [kph] at 0.014 [s]



B-22

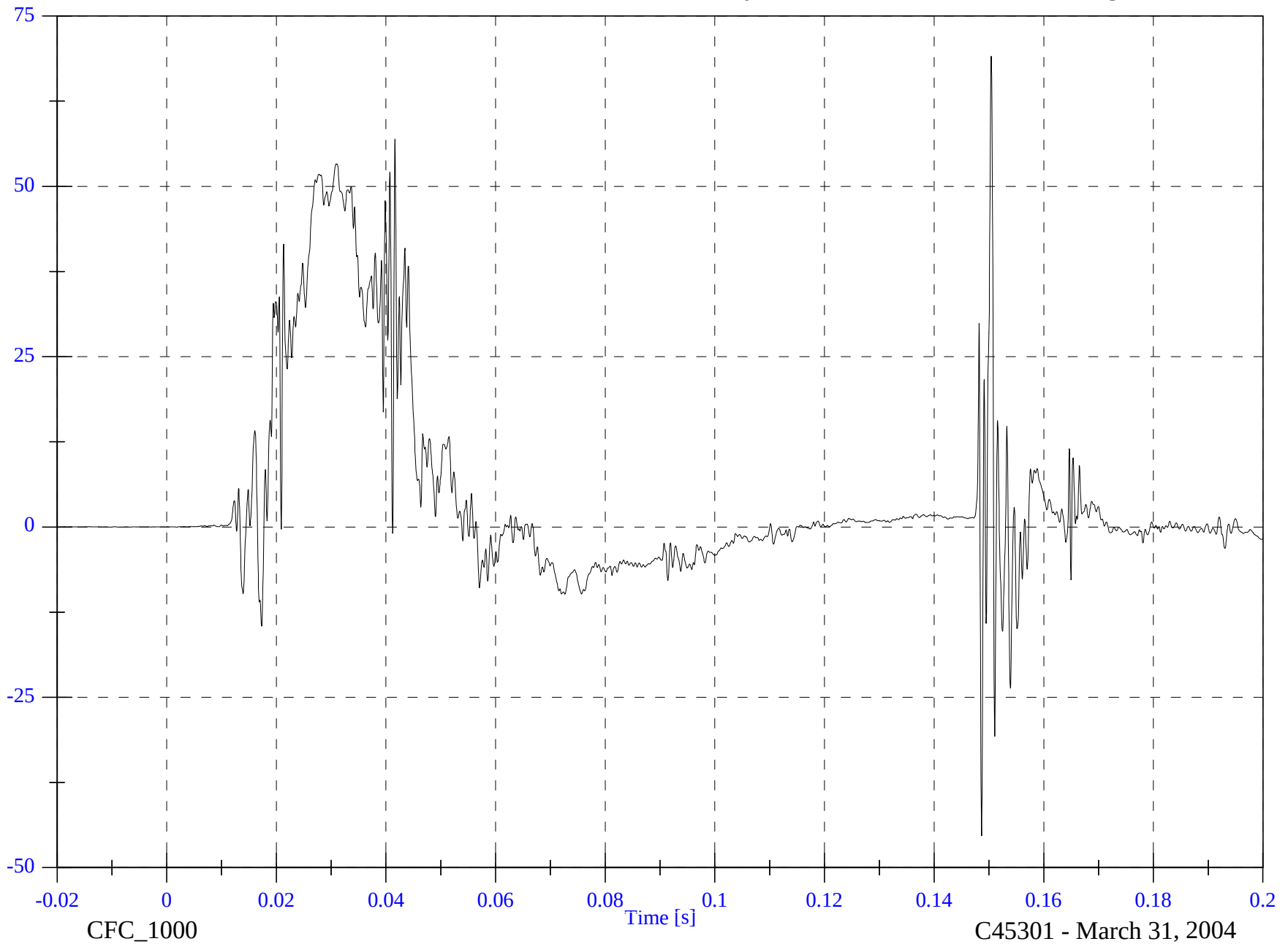
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Lower Rib y

Max: 69.1 [g] at 0.150 [s]

Min: -45.3 [g] at 0.149 [s]



B-23

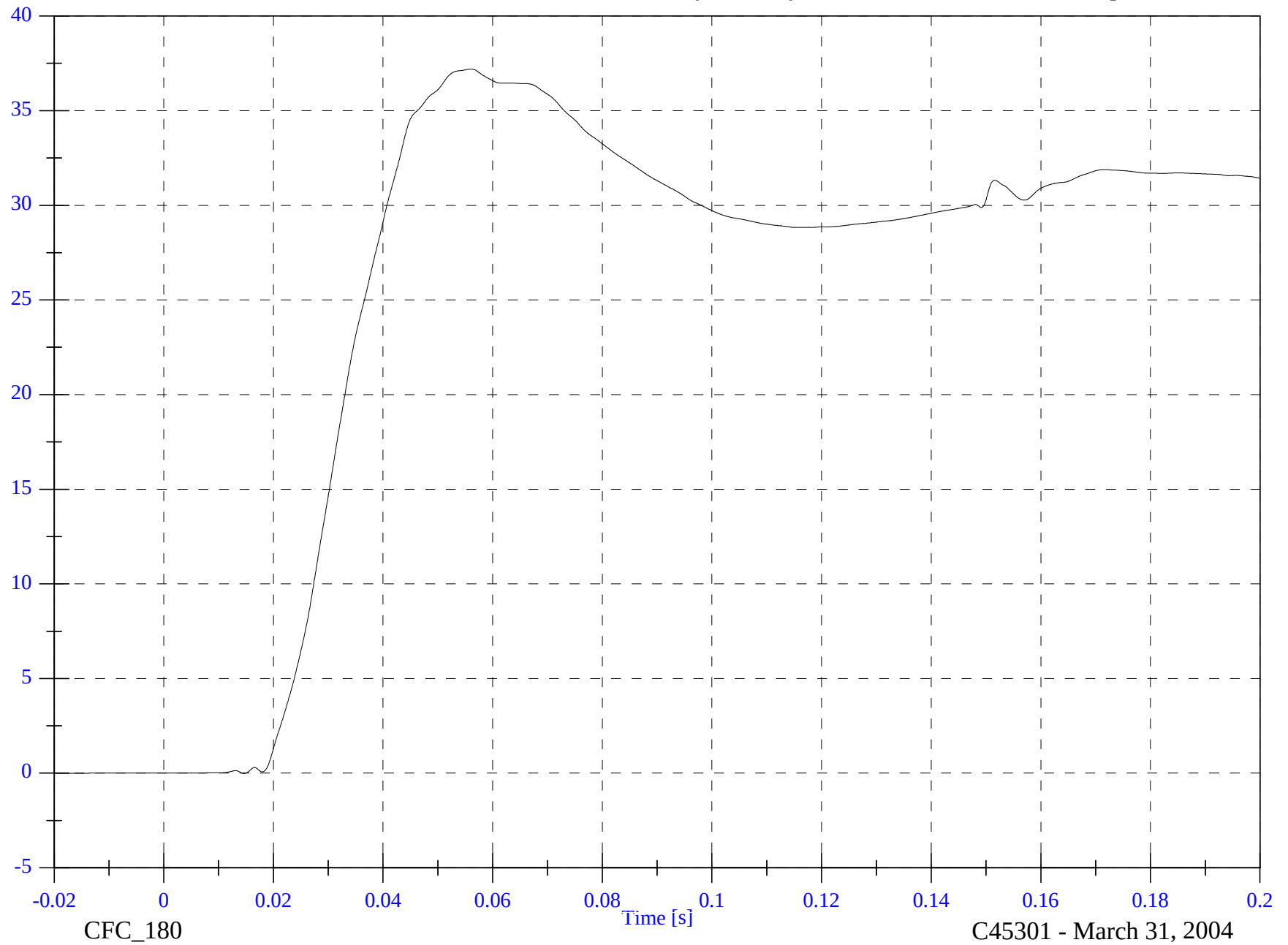
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 37.2 [kph] at 0.056 [s]

V2P1 Lower Rib y Velocity

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



B-24

8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Lower Spine y

Max: 55.1 [g] at 0.026 [s]

Min: -10.5 [g] at 0.074 [s]

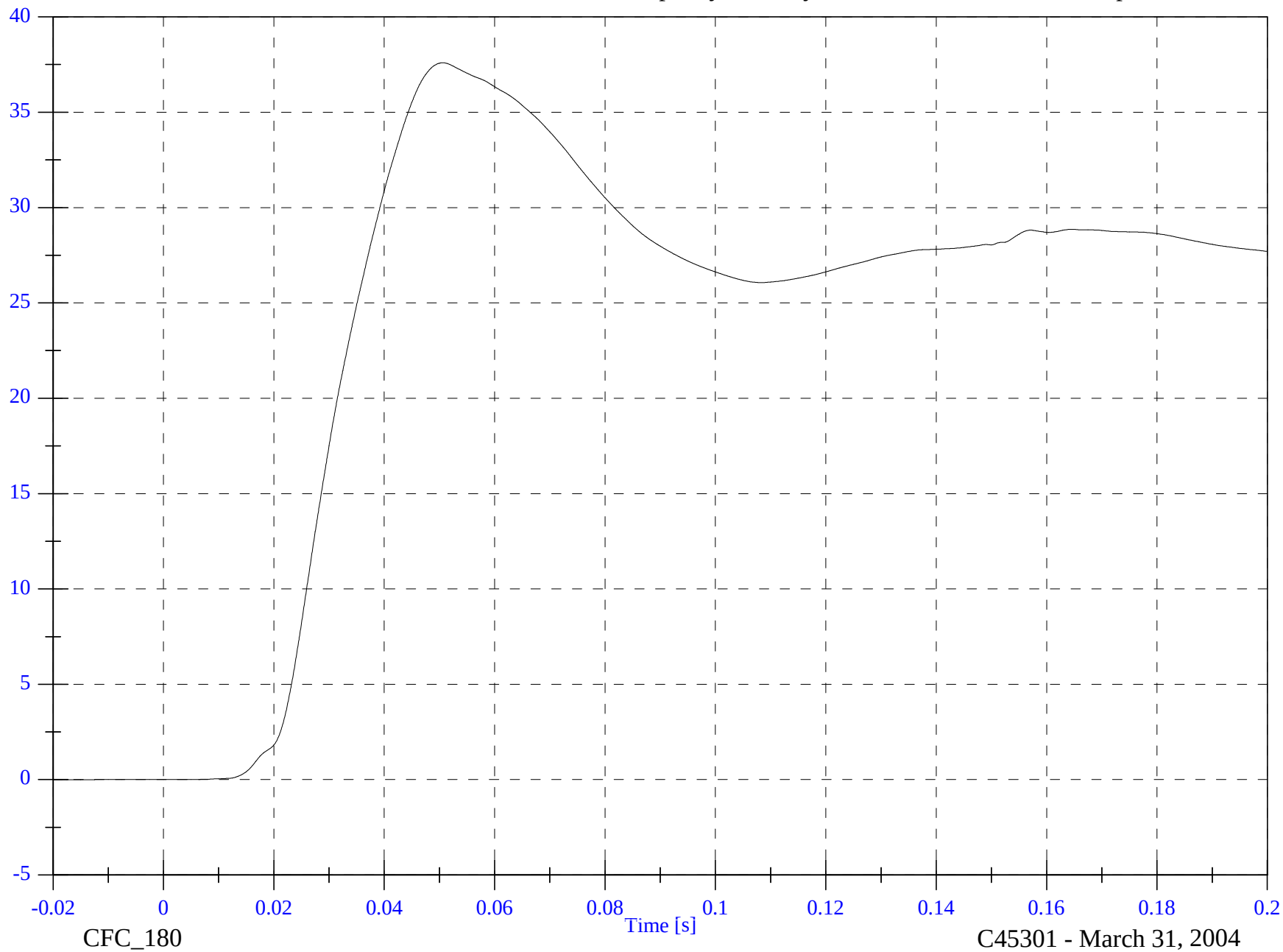


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Lower Spine y Velocity

Max: 37.6 [kph] at 0.051 [s]

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



B-26

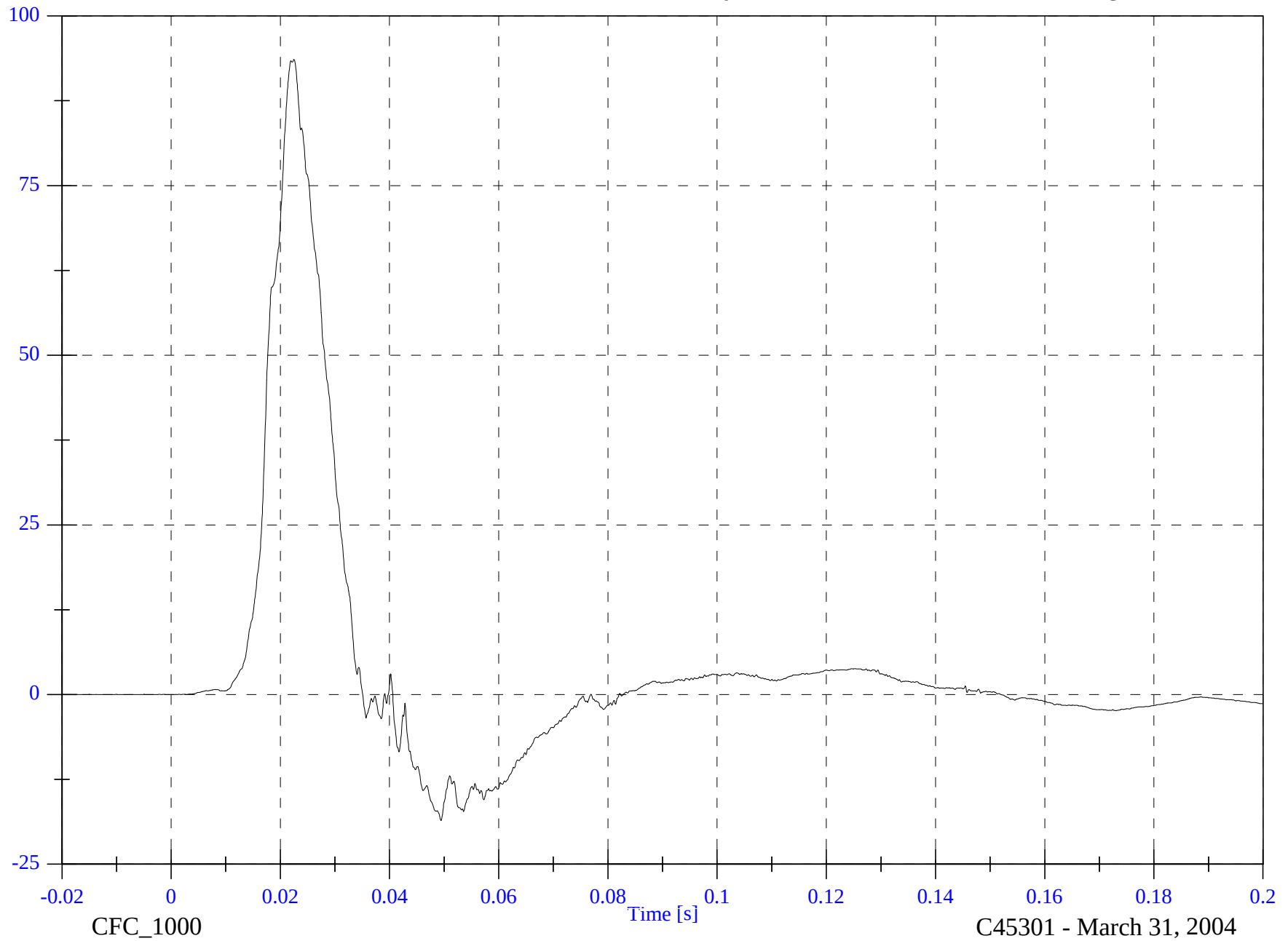
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Pelvic y

Max: 93.6 [g] at 0.022 [s]

Min: -18.6 [g] at 0.049 [s]



B-27

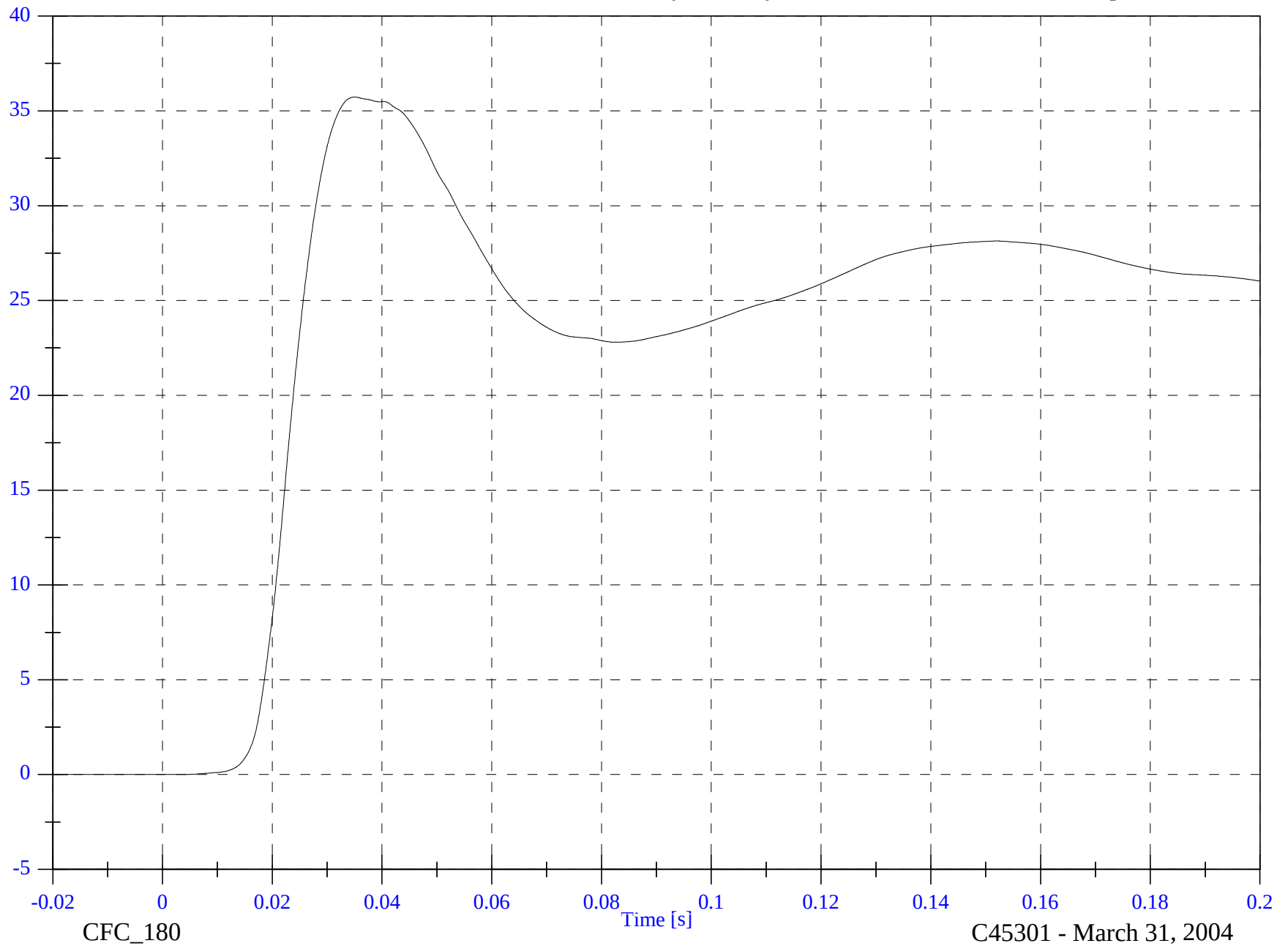
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 35.7 [kph] at 0.035 [s]

Min: -0.0 [kph] at -0.016 [s]

V2P1 Pelvic y Velocity



B-28

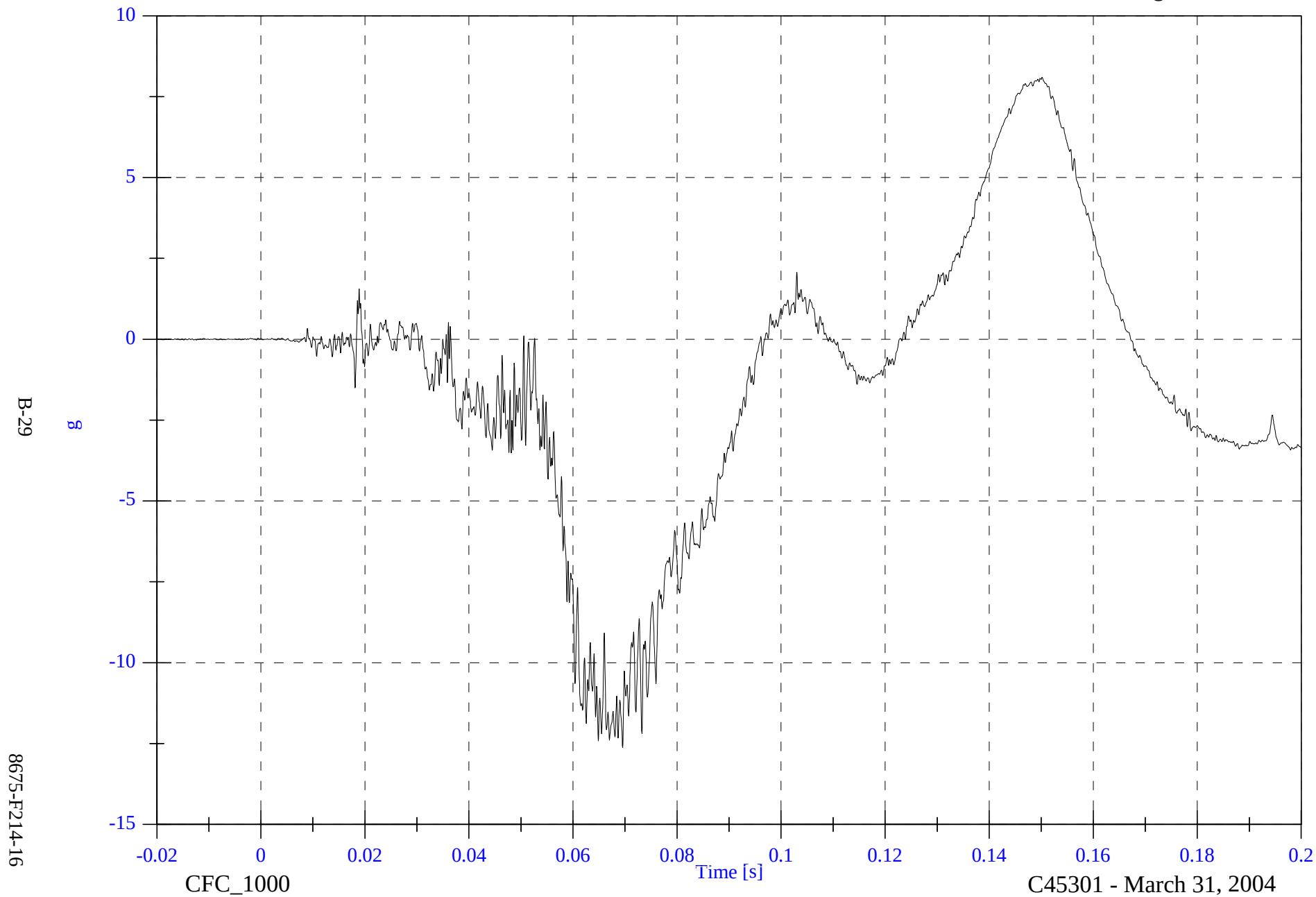
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 8.1 [g] at 0.150 [s]

Min: -12.6 [g] at 0.070 [s]

V2P4 Head x

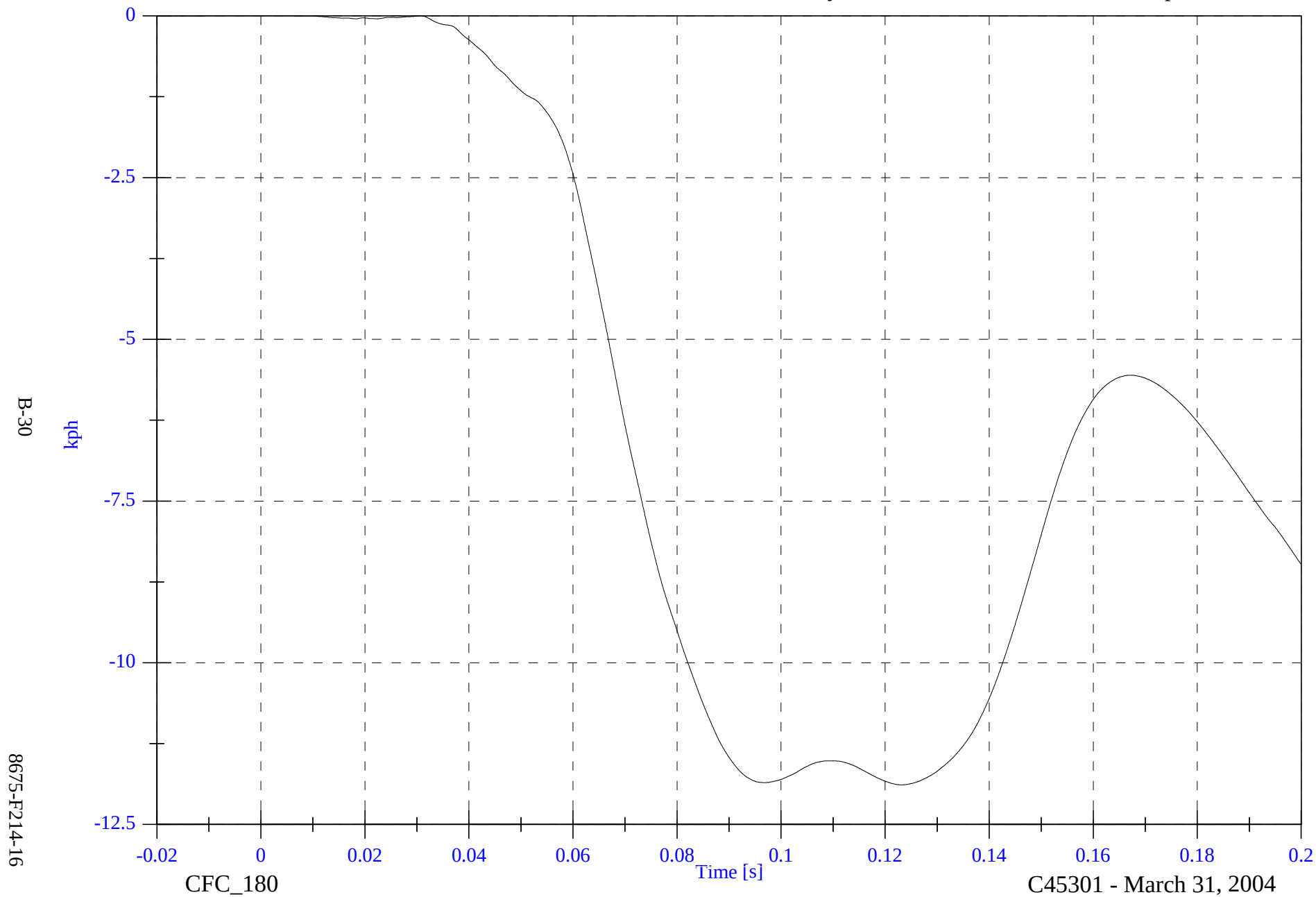


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Head x Velocity

Max: 0.0 [kph] at 0.031 [s]

Min: -11.9 [kph] at 0.123 [s]

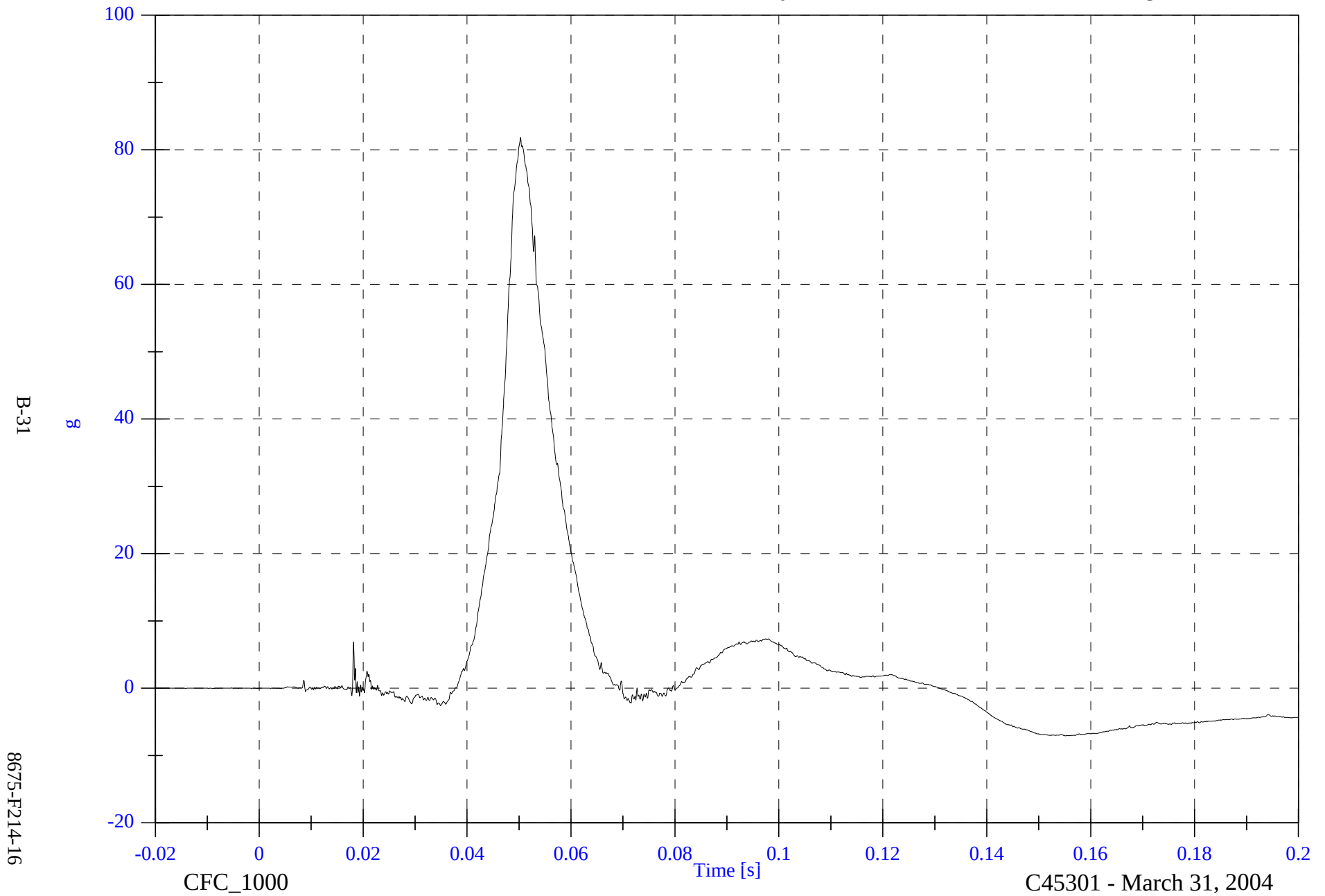


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Head y

Max: 81.8 [g] at 0.050 [s]

Min: -7.1 [g] at 0.155 [s]

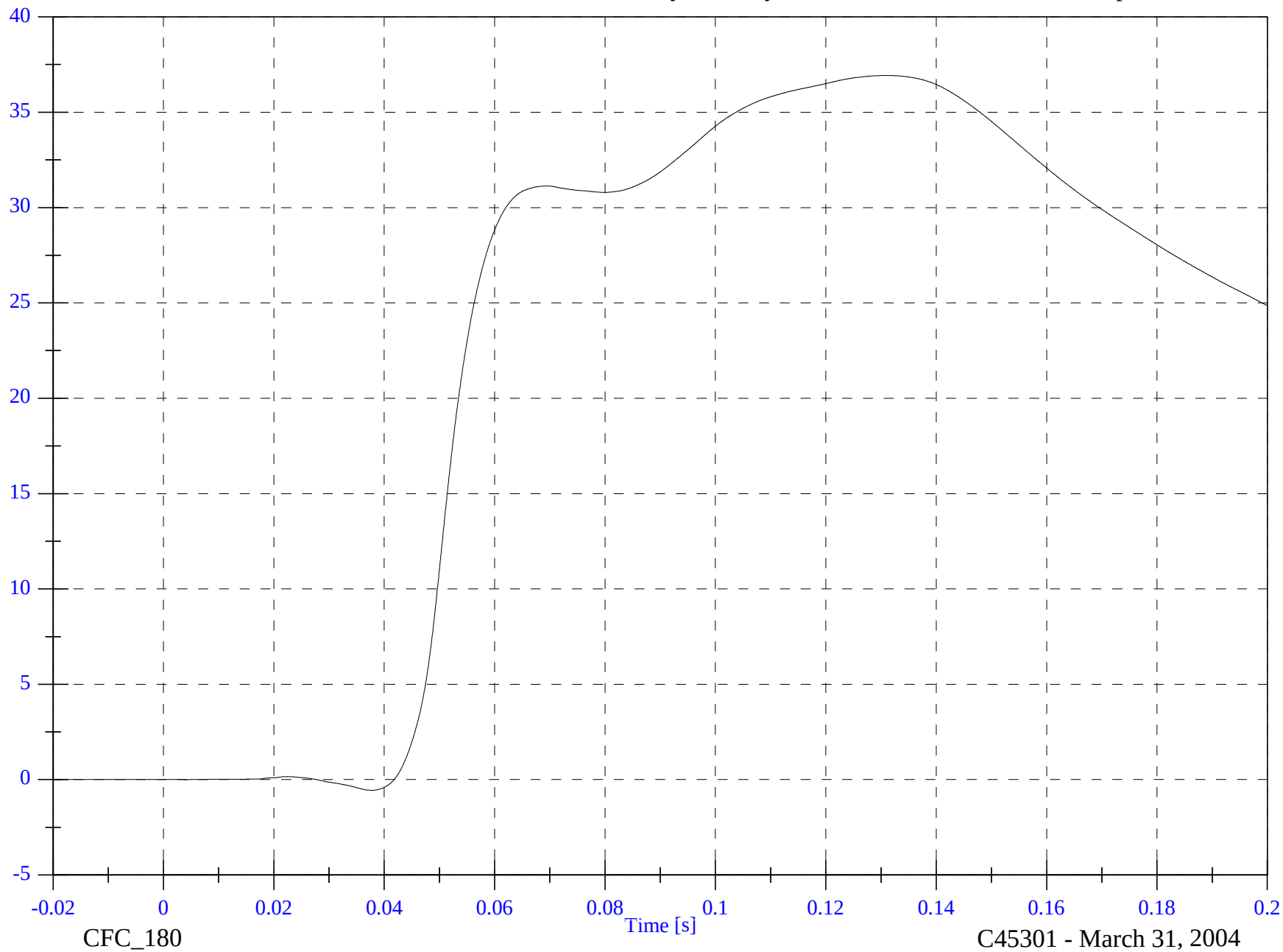


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 36.9 [kph] at 0.131 [s]

V2P4 Head y Velocity

Min: -0.6 [kph] at 0.038 [s]



B-32

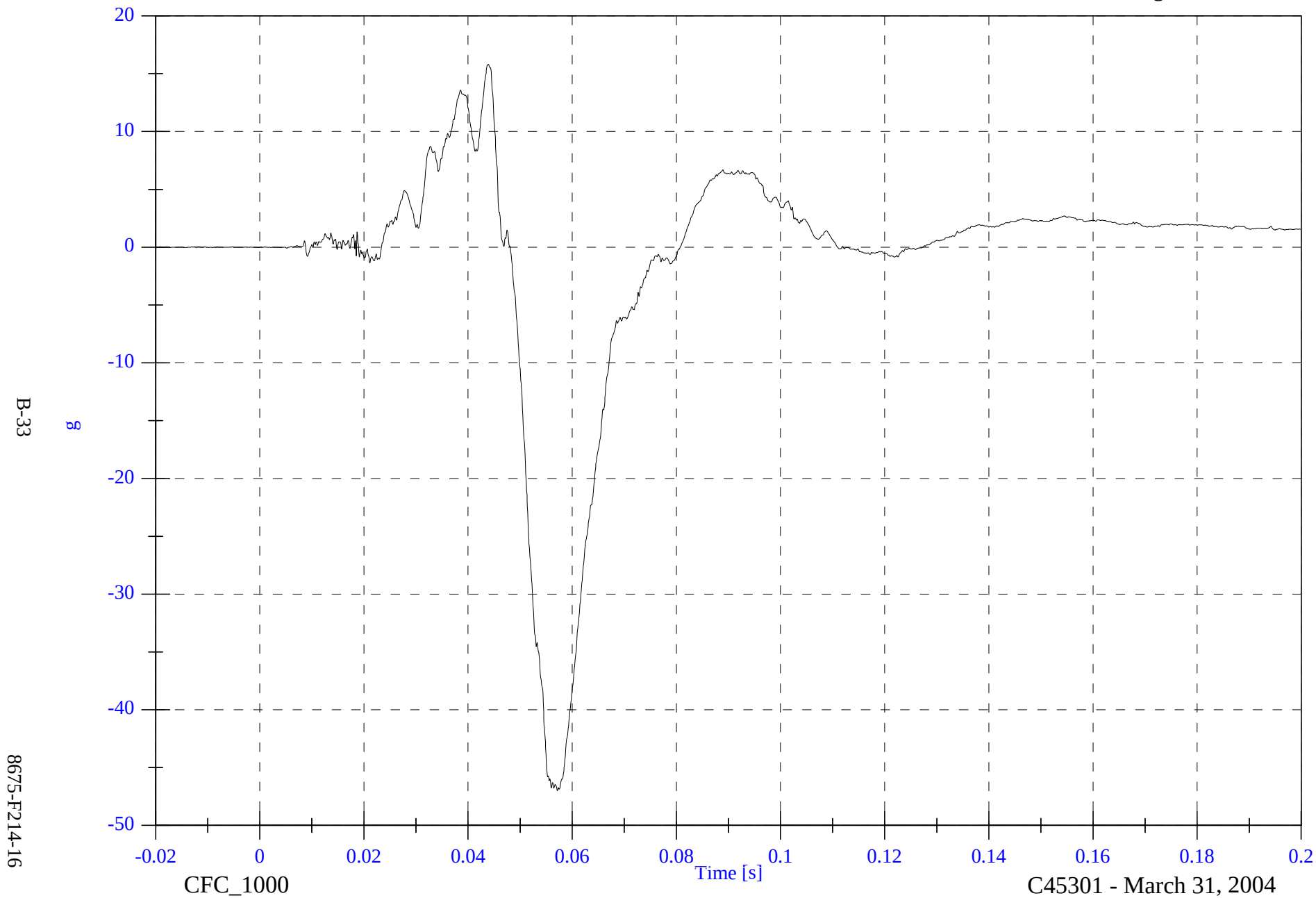
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Head z

Max: 15.8 [g] at 0.044 [s]

Min: -47.0 [g] at 0.057 [s]

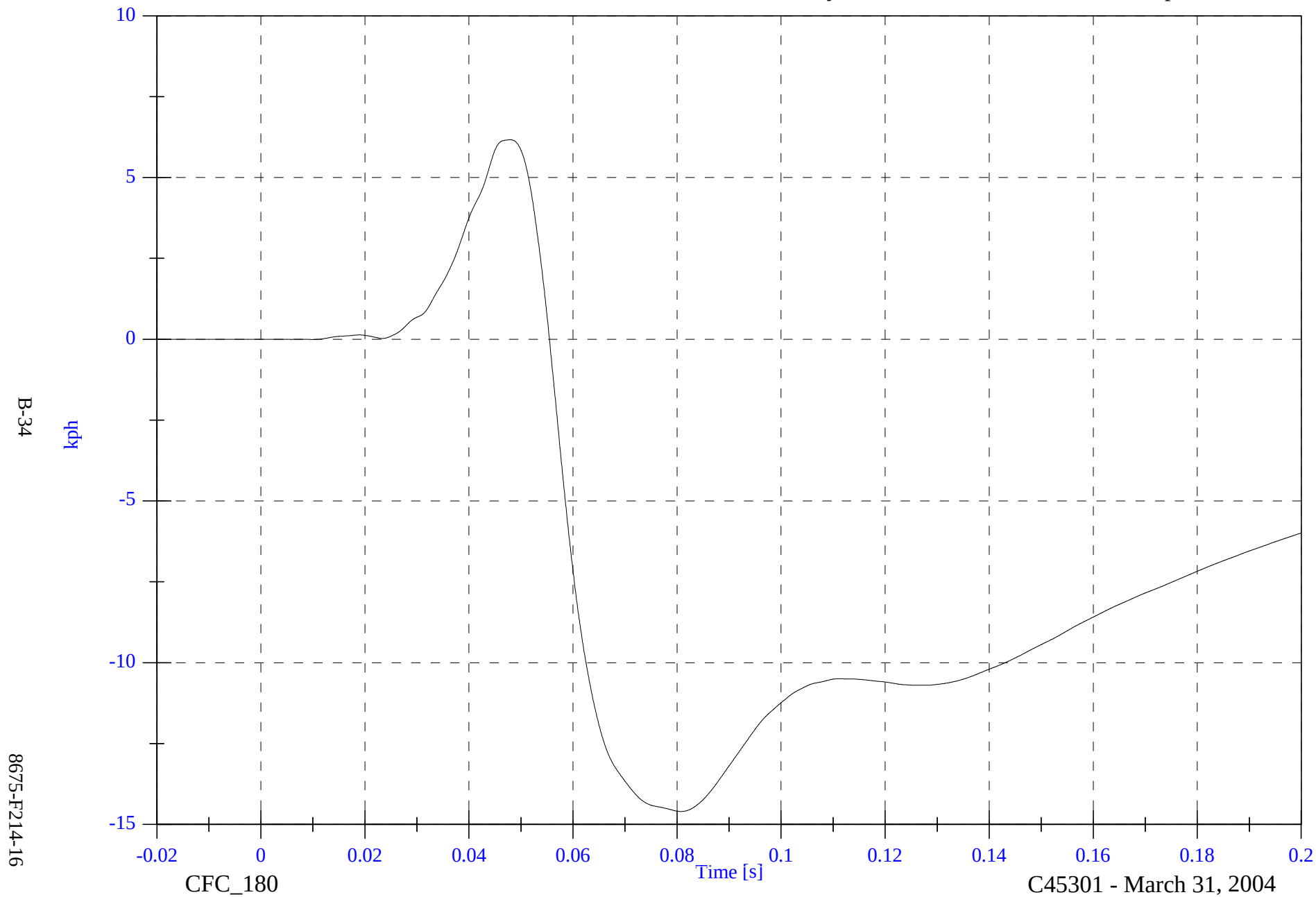


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Head z Velocity

Max: 6.2 [kph] at 0.048 [s]

Min: -14.6 [kph] at 0.081 [s]

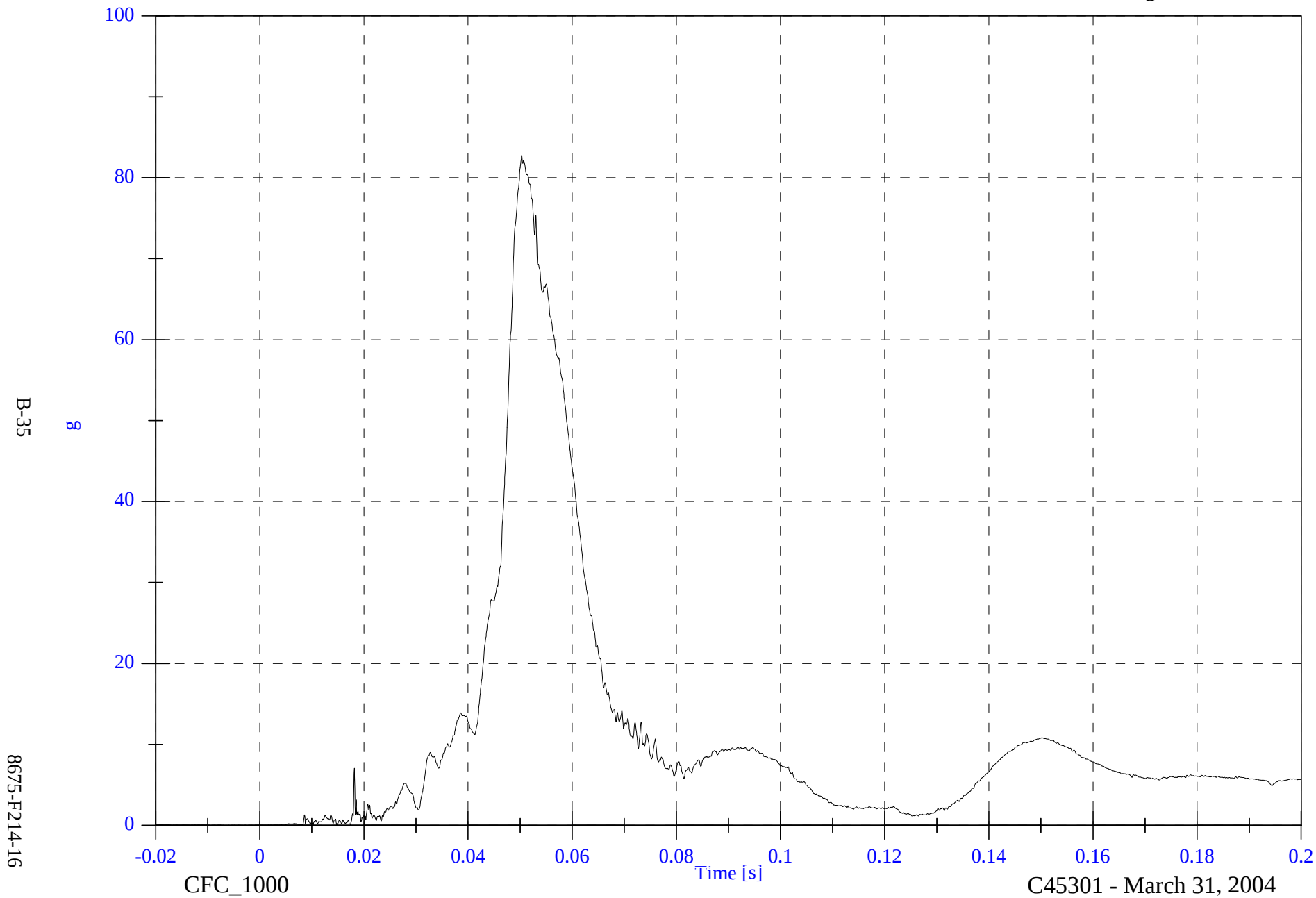


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Head Resultant

Max: 82.8 [g] at 0.050 [s]

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



2004 FMVSS 214D Test 6 2004 Acura TL

Max: 29.6 [N] at 0.050 [s]

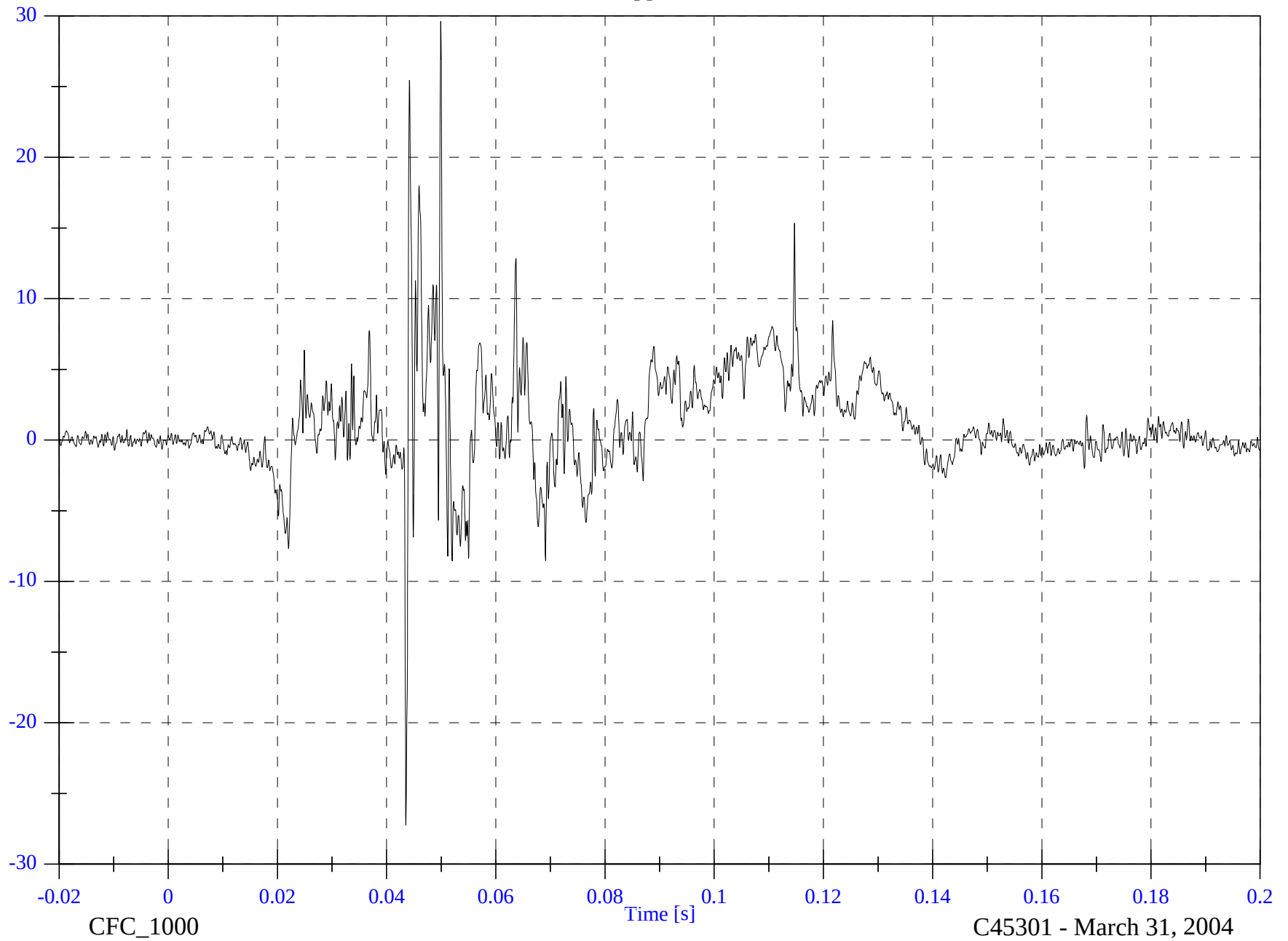
Min: -27.2 [N] at 0.044 [s]

V2P4 Upper Neck Fx

B-36

N

8675-F214-16

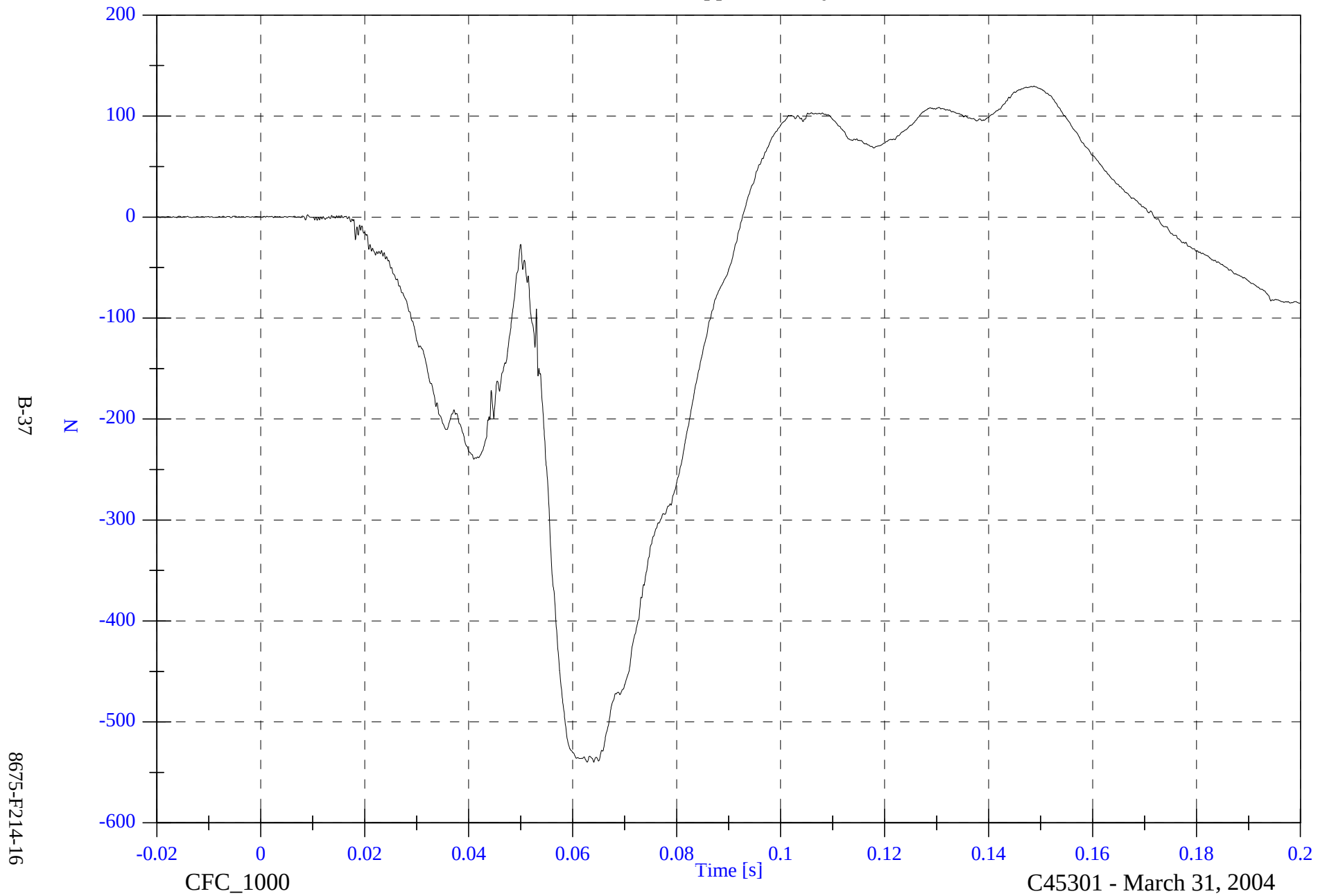


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Upper Neck Fy

Max: 129.8 [N] at 0.149 [s]

Min: -540.0 [N] at 0.064 [s]



2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Upper Neck Fz

Max: 755.4 [N] at 0.044 [s]

Min: -1273.4 [N] at 0.057 [s]



2004 FMVSS 214D Test 6

2004 Acura TL

V2P4 Upper Neck F Resultant

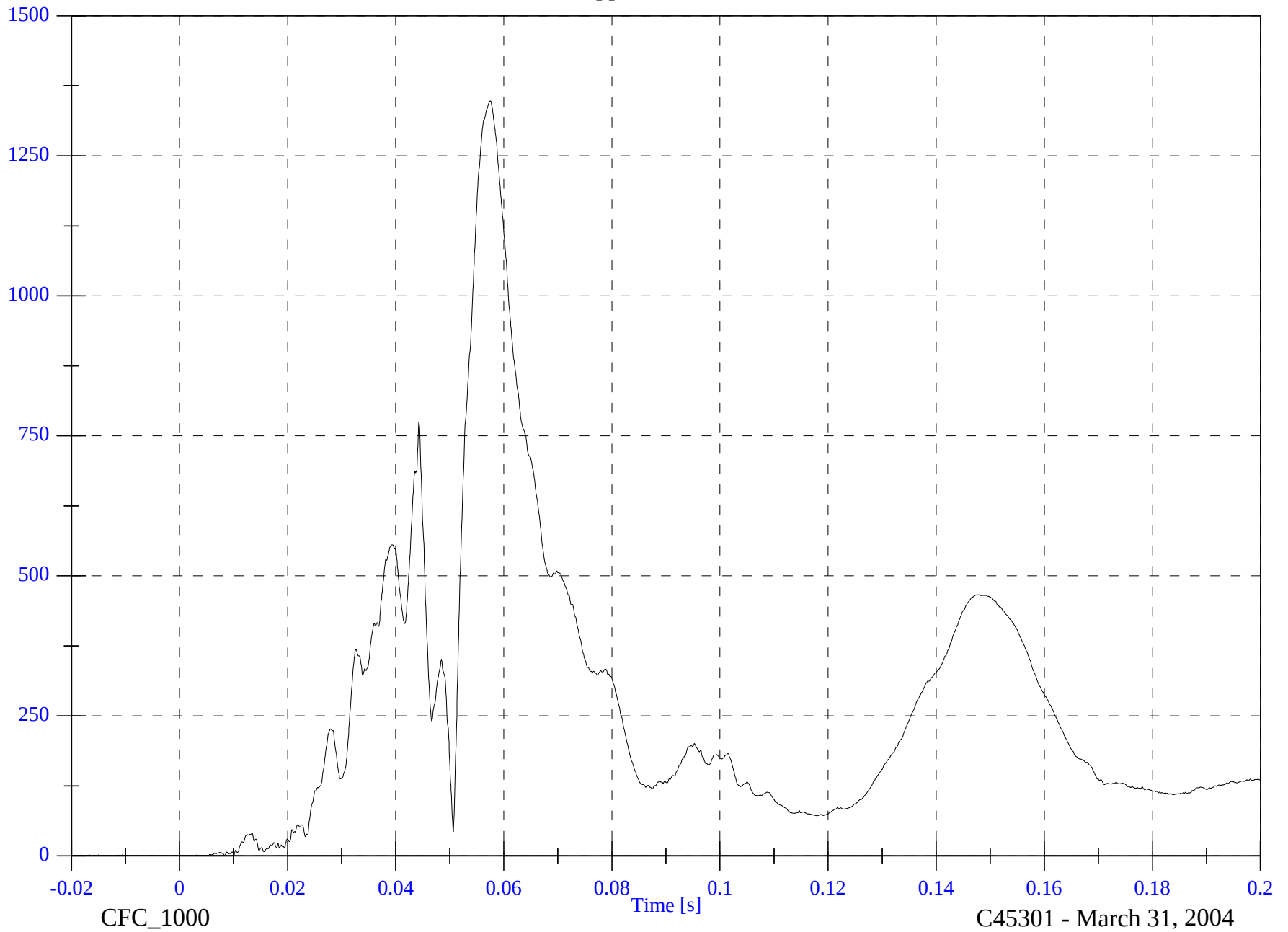
Max: 1348.0 [N] at 0.058 [s]

Min: 0.2 [N] at -0.008 [s]

B-39

N

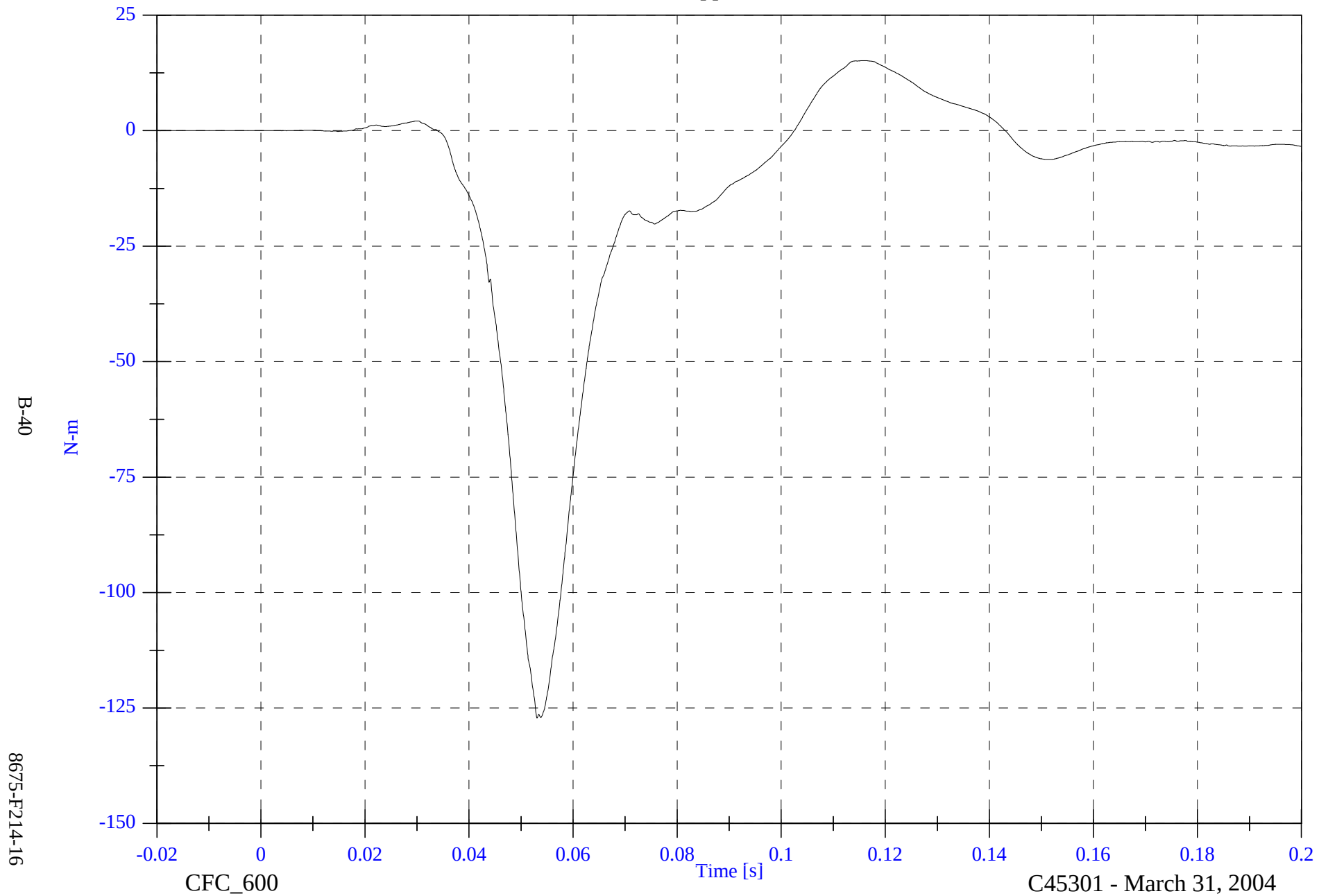
8675-F214-16



2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Upper Neck Mx

Max: 15.2 [N-m] at 0.116 [s]
Min: -127.2 [N-m] at 0.053 [s]



2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Upper Neck My

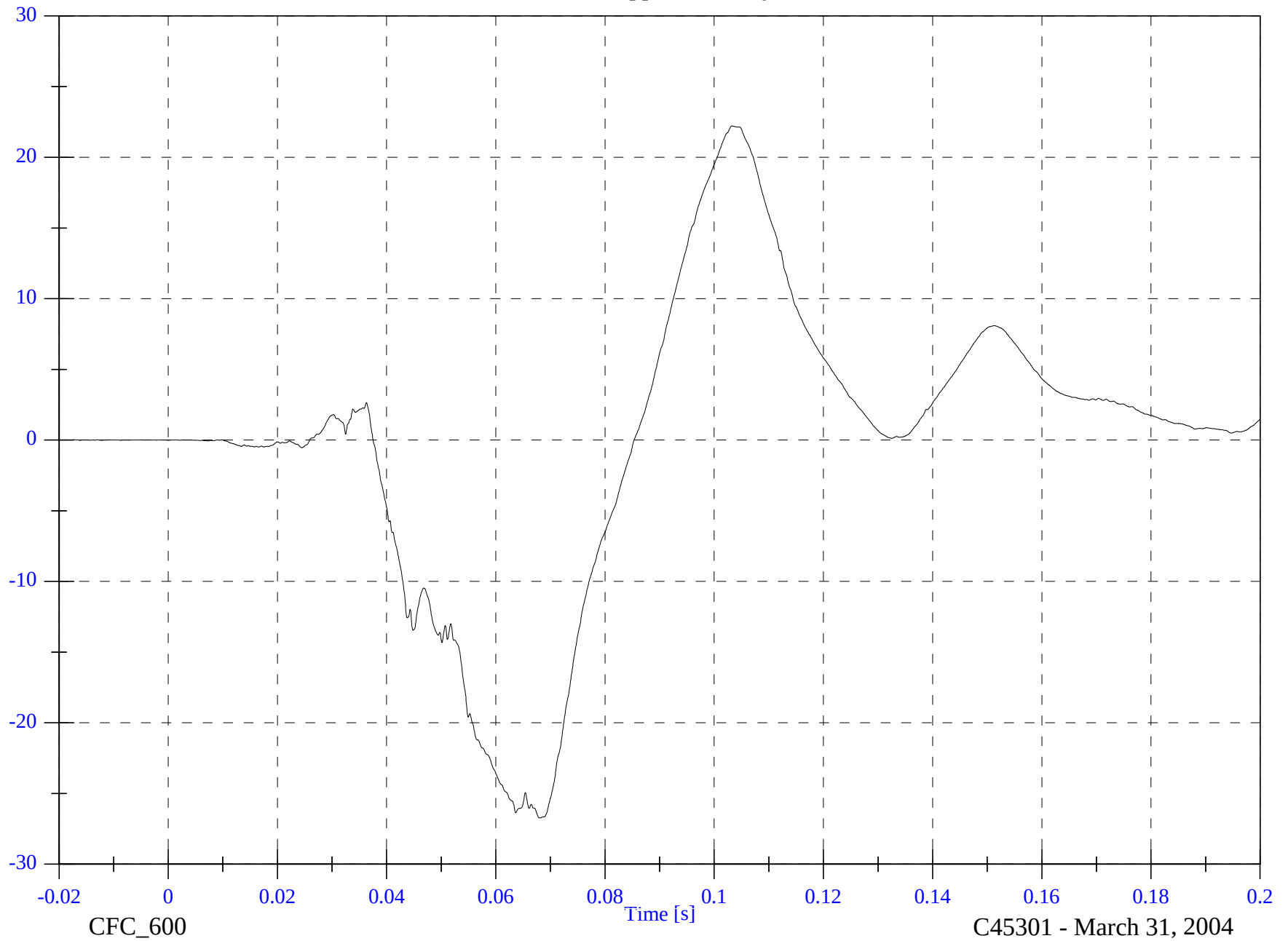
Max: 22.2 [N-m] at 0.103 [s]

Min: -26.7 [N-m] at 0.068 [s]

B-41

N-m

8675-F214-16

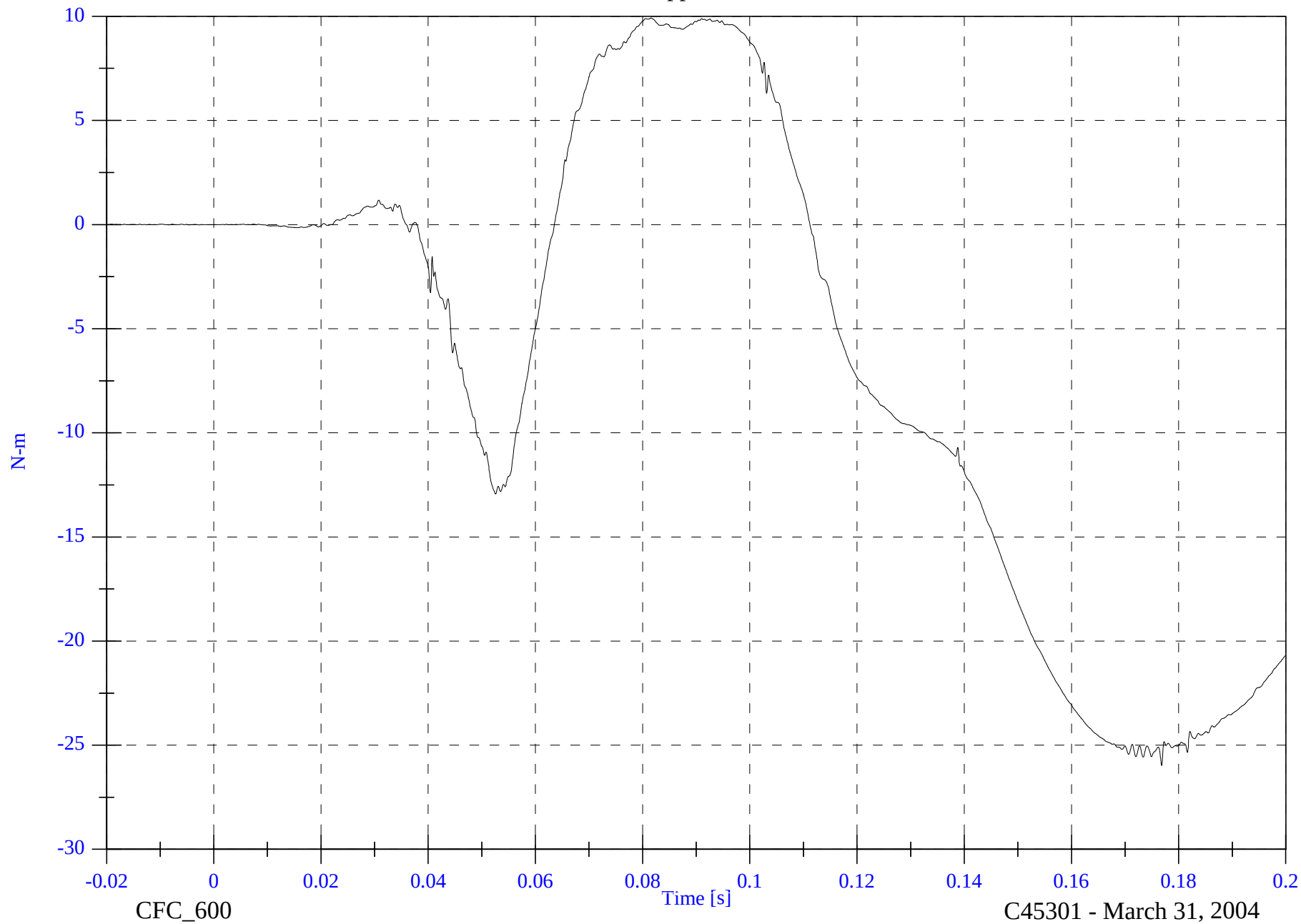


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 9.9 [N-m] at 0.082 [s]

Min: -26.0 [N-m] at 0.177 [s]

V2P4 Upper Neck Mz



B-42

8675-F214-16

CFC_600

C45301 - March 31, 2004

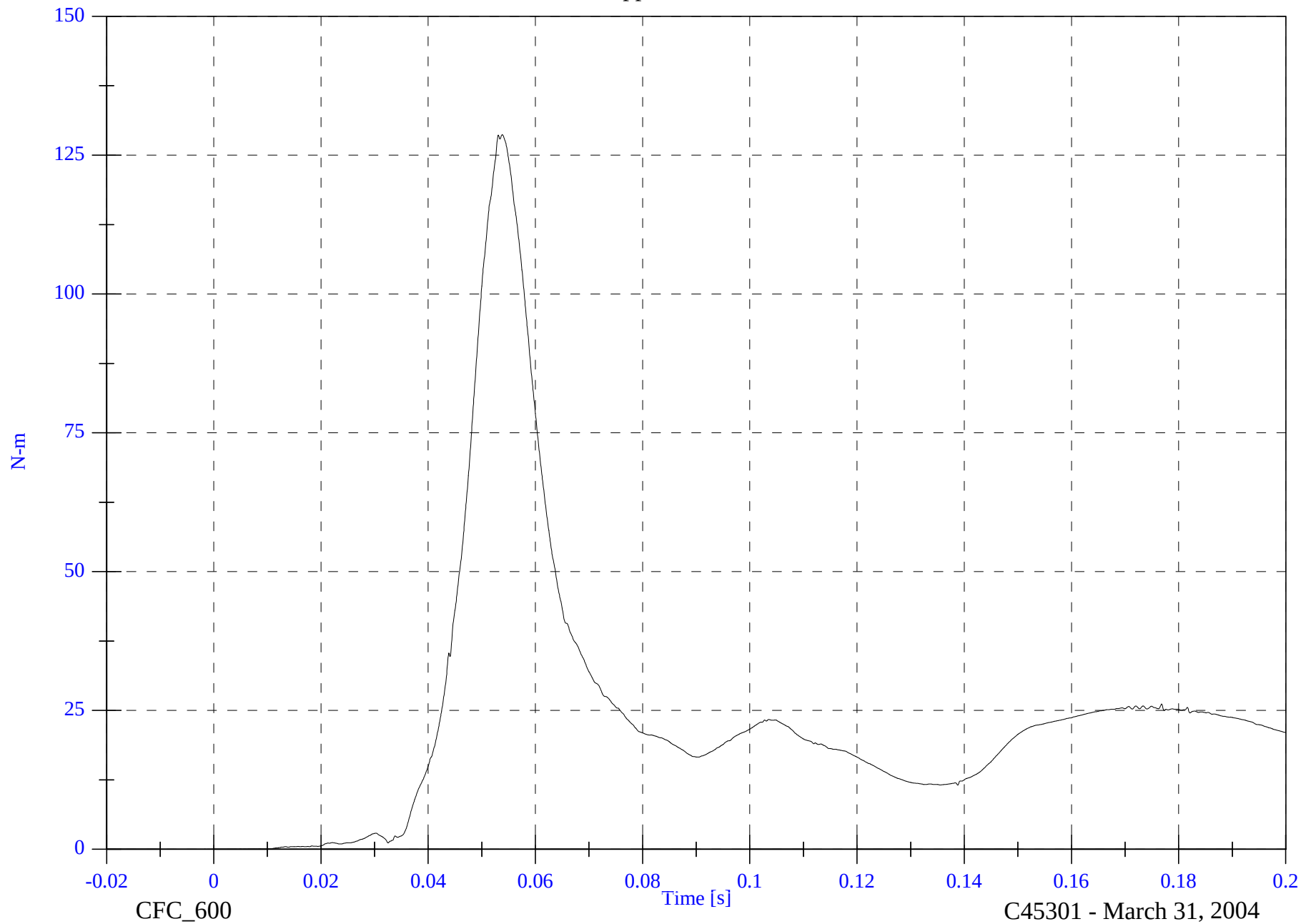
2004 FMVSS 214D Test 6

2004 Acura TL

V2P4 Upper Neck M Resultant

Max: 128.7 [N-m] at 0.054 [s]

Min: 0.0 [N-m] at 0.003 [s]



B-43

8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Upper Rib y

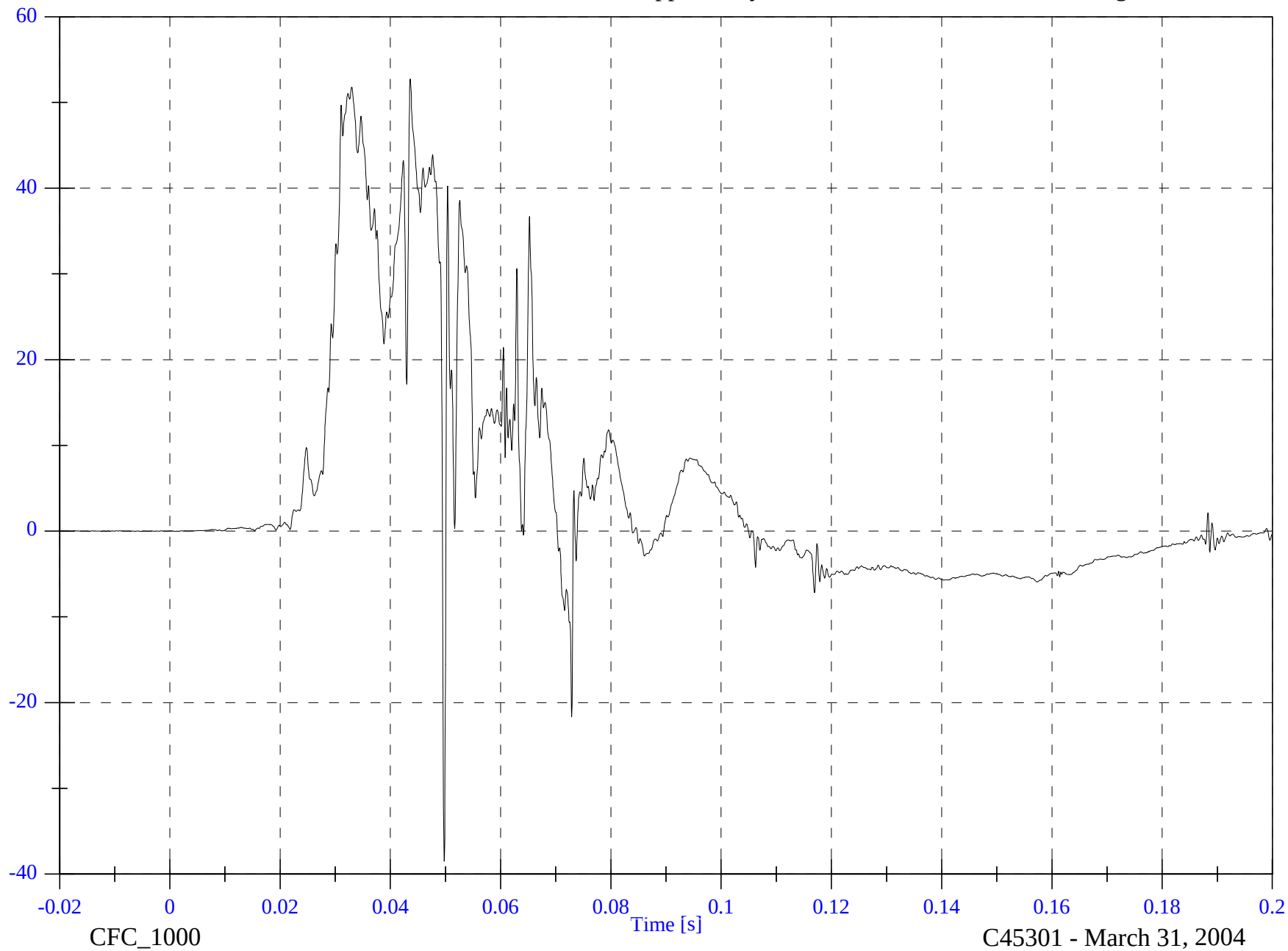
Max: 52.7 [g] at 0.044 [s]

Min: -38.5 [g] at 0.050 [s]

B-44

g

8675-F214-16

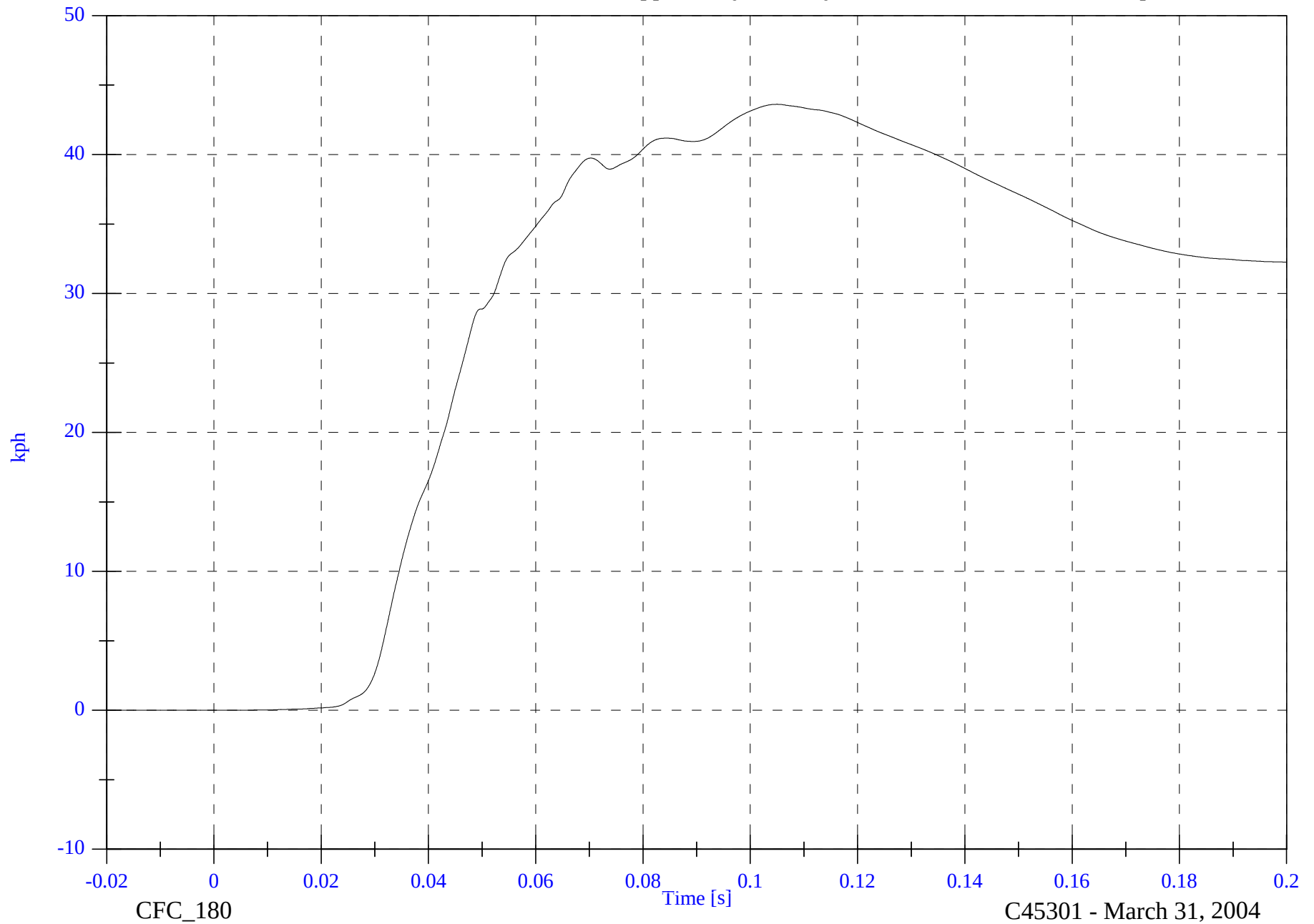


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Upper Rib y Velocity

Max: 43.6 [kph] at 0.105 [s]

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



B-45

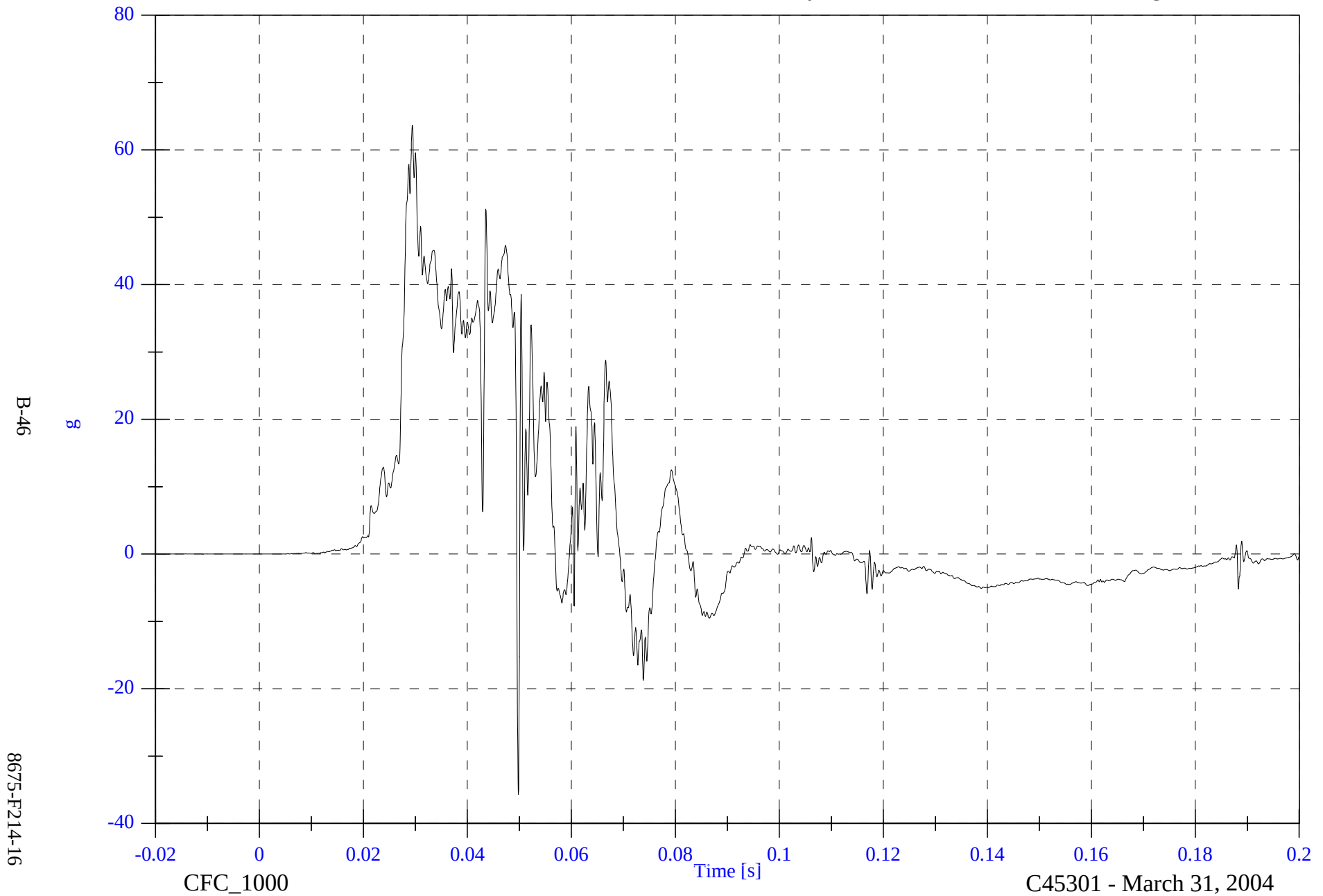
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Rib y

Max: 63.7 [g] at 0.029 [s]

Min: -35.7 [g] at 0.050 [s]

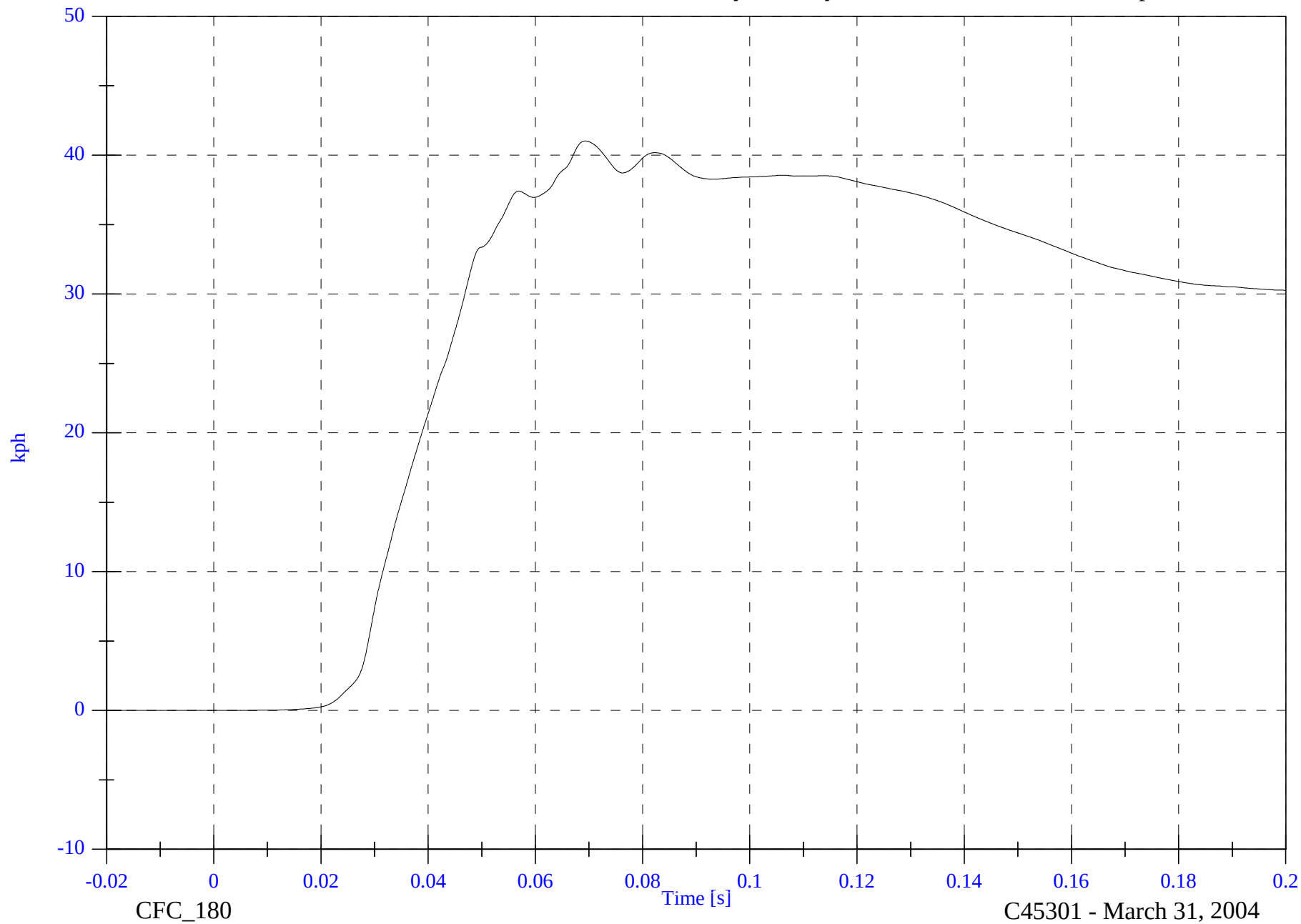


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Rib y Velocity

Max: 41.0 [kph] at 0.069 [s]

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



B-47

8675-F214-16

CFC_180

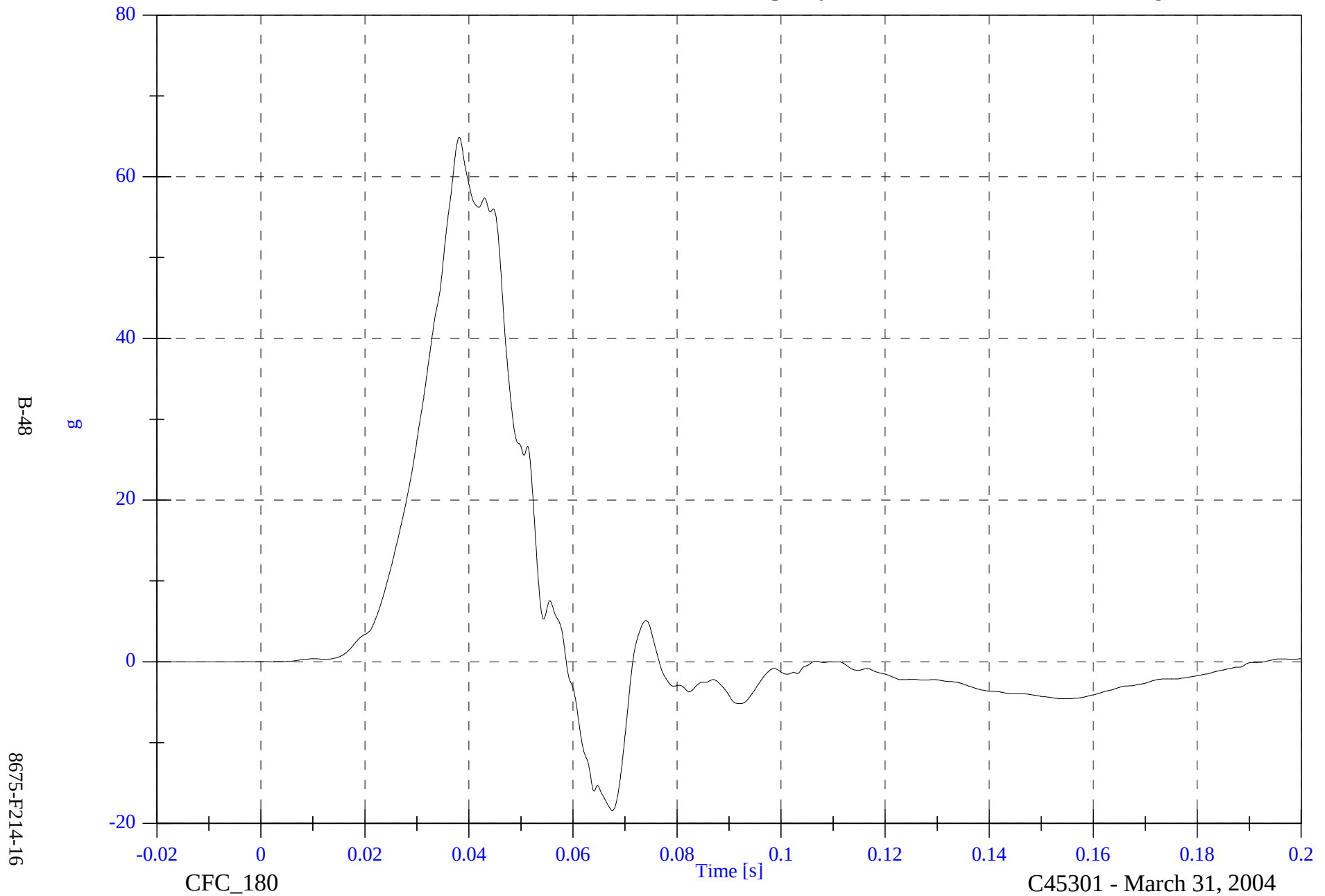
C45301 - March 31, 2004

2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Spine y

Max: 64.9 [g] at 0.038 [s]

Min: -18.4 [g] at 0.068 [s]

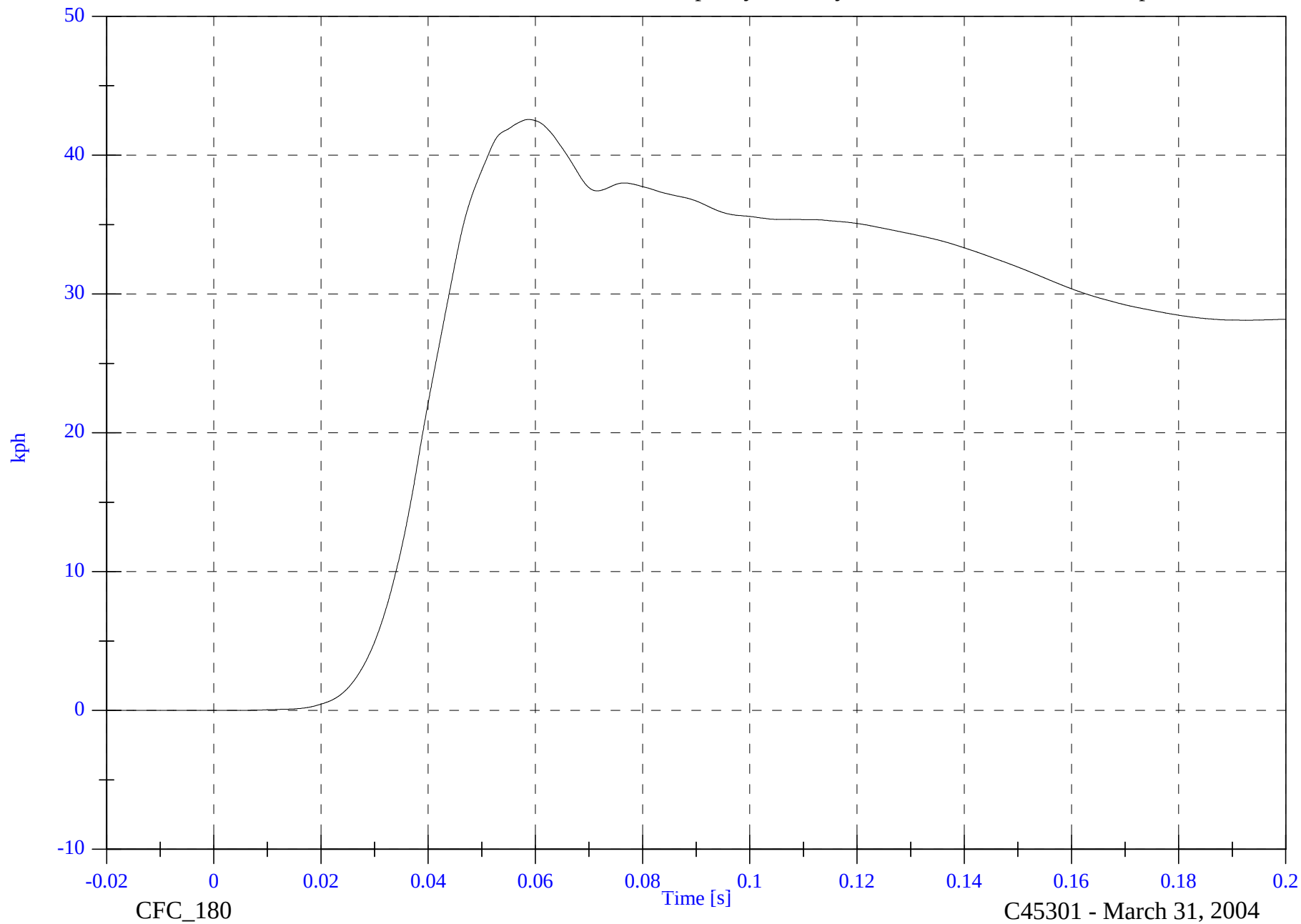


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Spine y Velocity

Max: 42.6 [kph] at 0.059 [s]

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



B-49

8675-F214-16

CFC_180

C45301 - March 31, 2004

2004 FMVSS 214D Test 6 2004 Acura TL

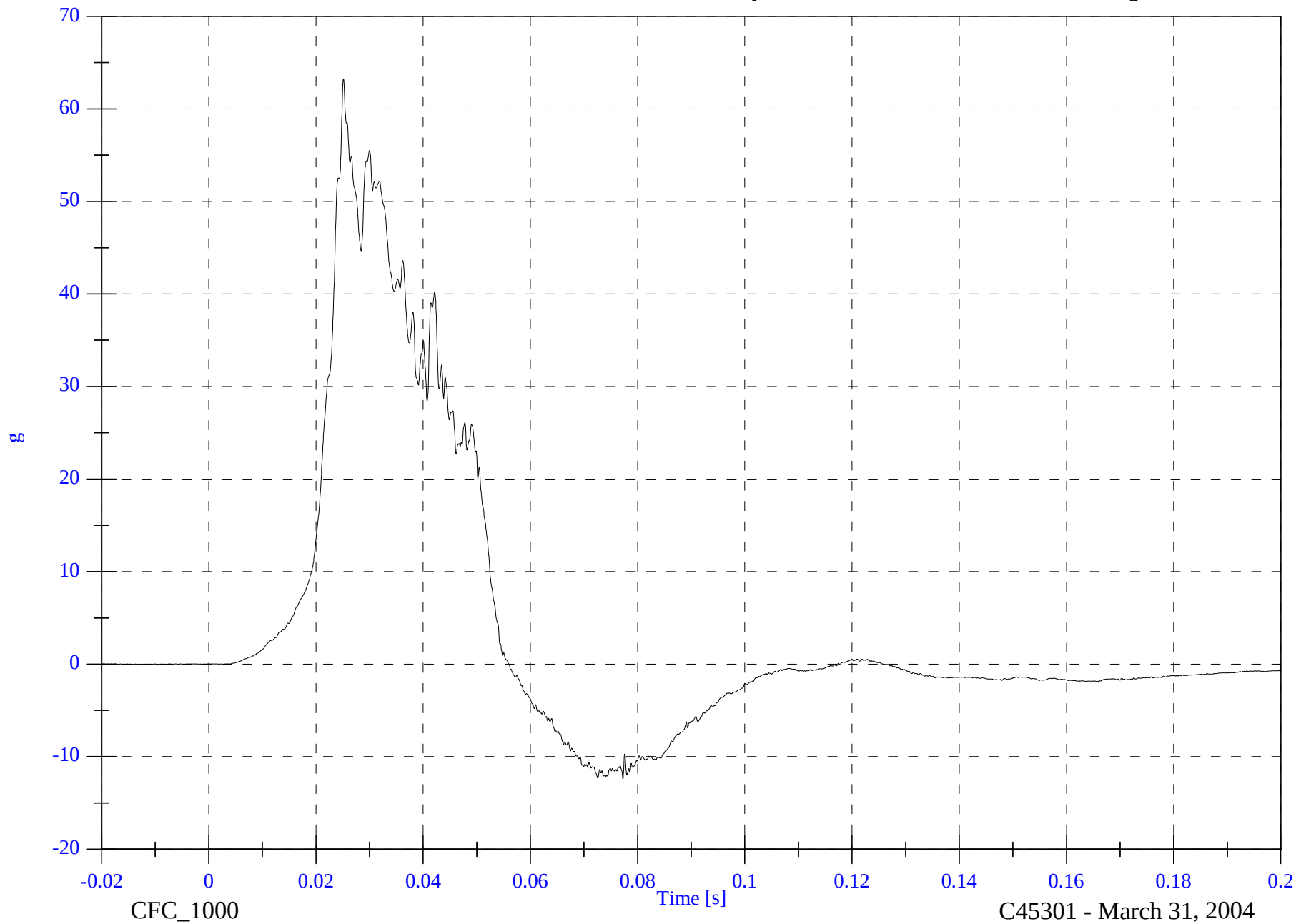
V2P4 Pelvic y

Max: 63.2 [g] at 0.025 [s]

Min: -12.4 [g] at 0.077 [s]

B-50

8675-F214-16

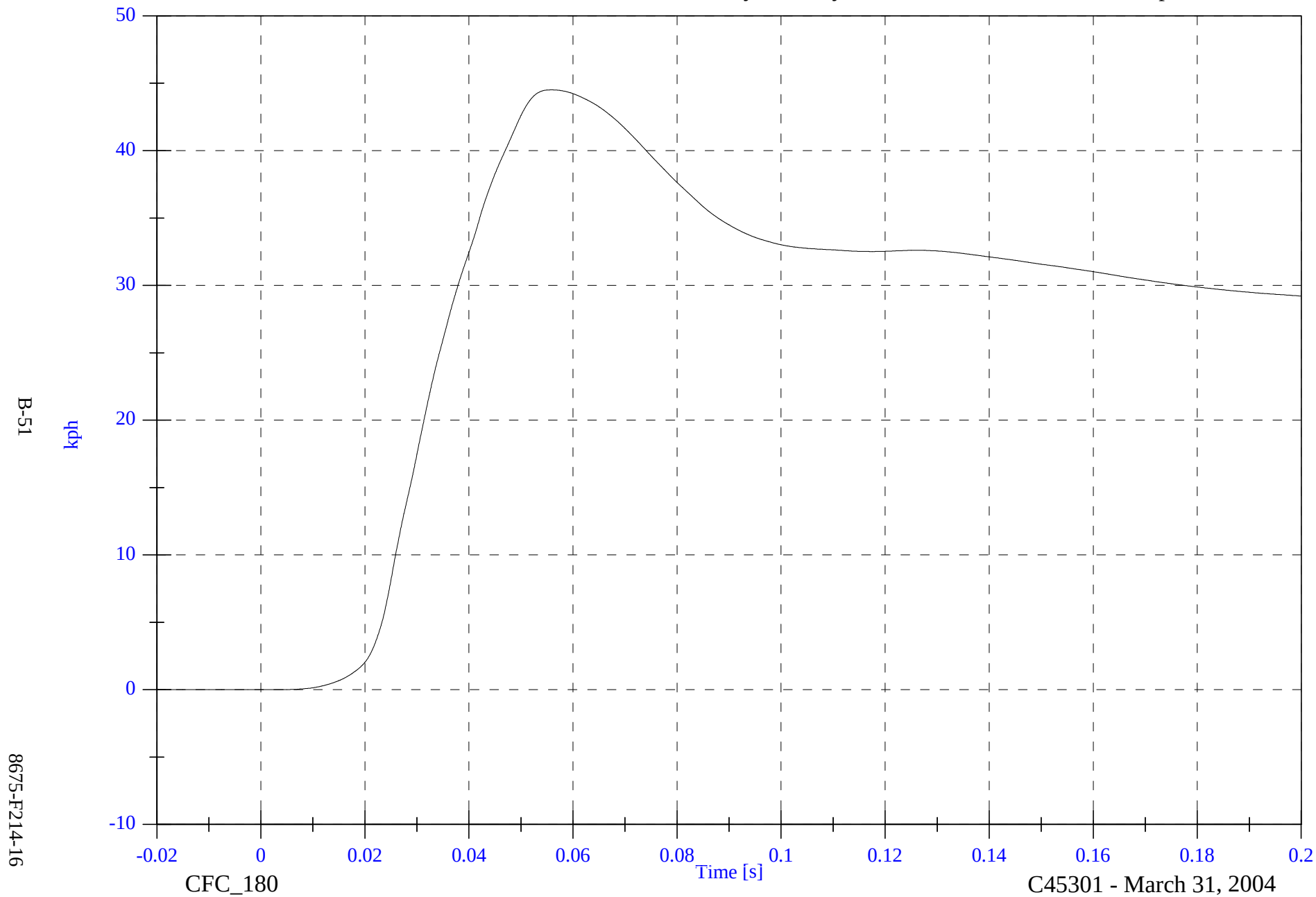


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Pelvic y Velocity

Max: 44.5 [kph] at 0.056 [s]

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



2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Upper Rib y

Max: 63.7 [g] at 0.042 [s]

Min: -6.6 [g] at 0.087 [s]

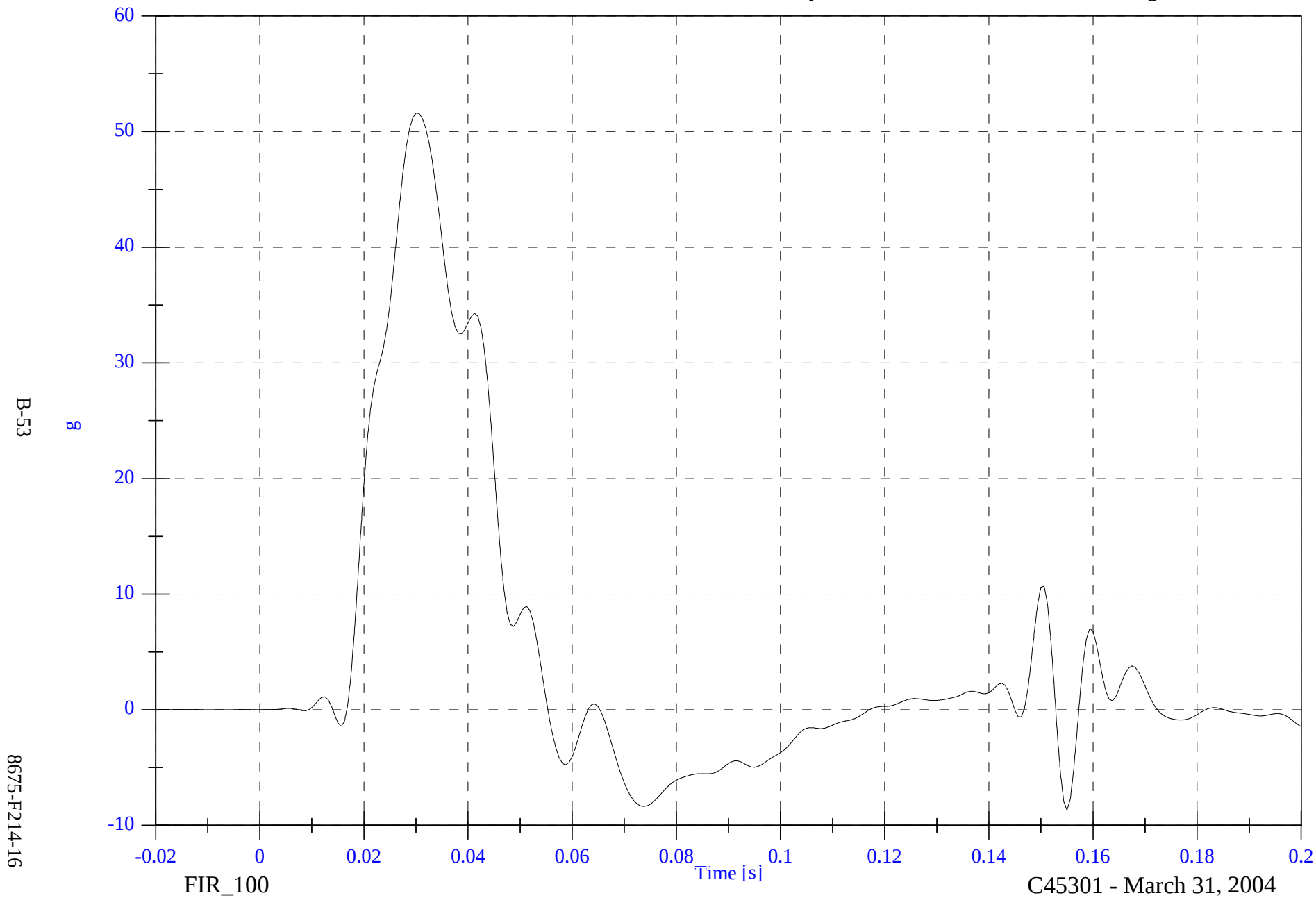


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Lower Rib y

Max: 51.6 [g] at 0.030 [s]

Min: -8.7 [g] at 0.155 [s]



2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Lower Spine y

Max: 55.5 [g] at 0.026 [s]

Min: -10.3 [g] at 0.075 [s]

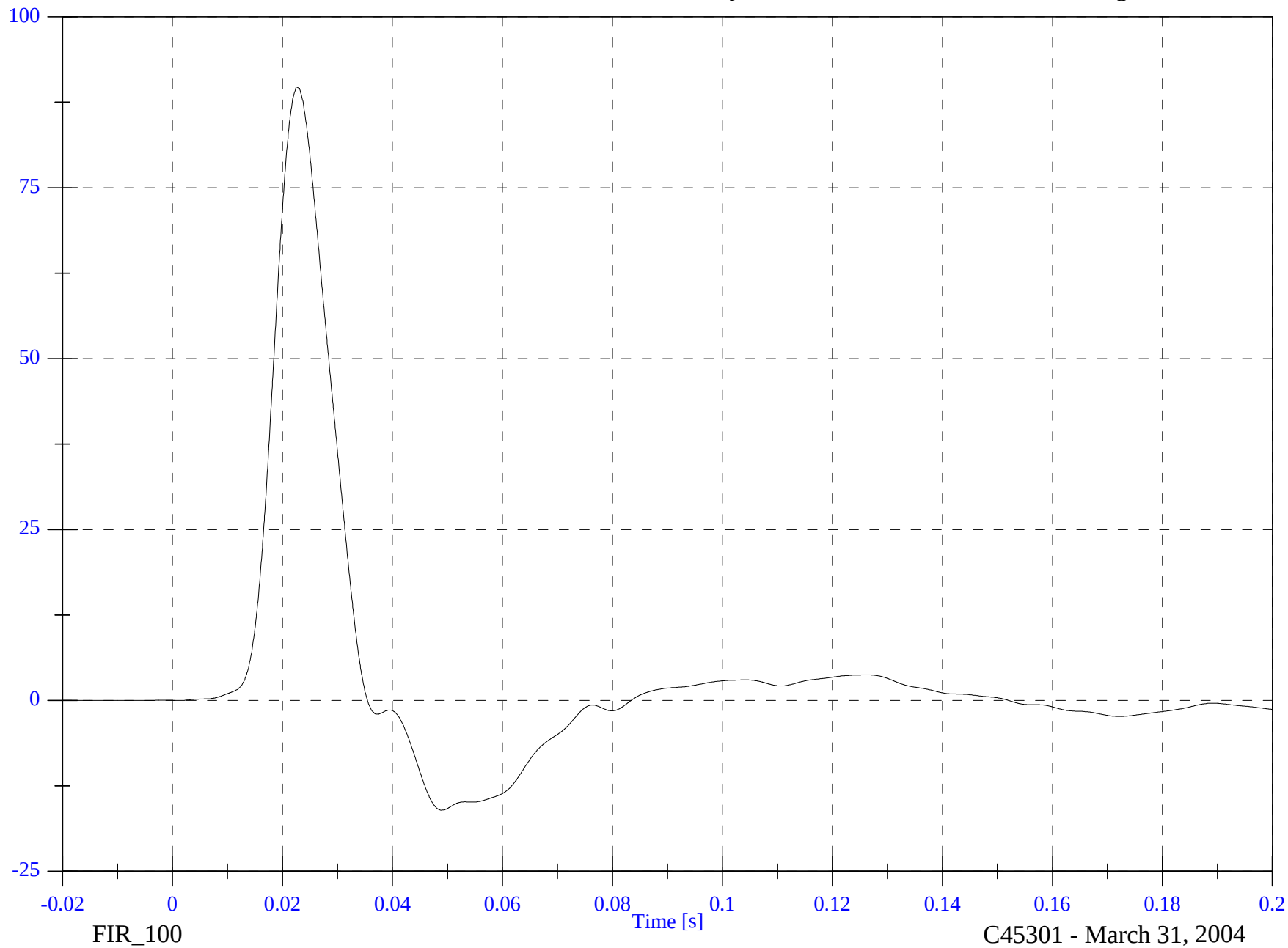


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Pelvic y

Max: 89.7 [g] at 0.022 [s]

Min: -16.1 [g] at 0.049 [s]

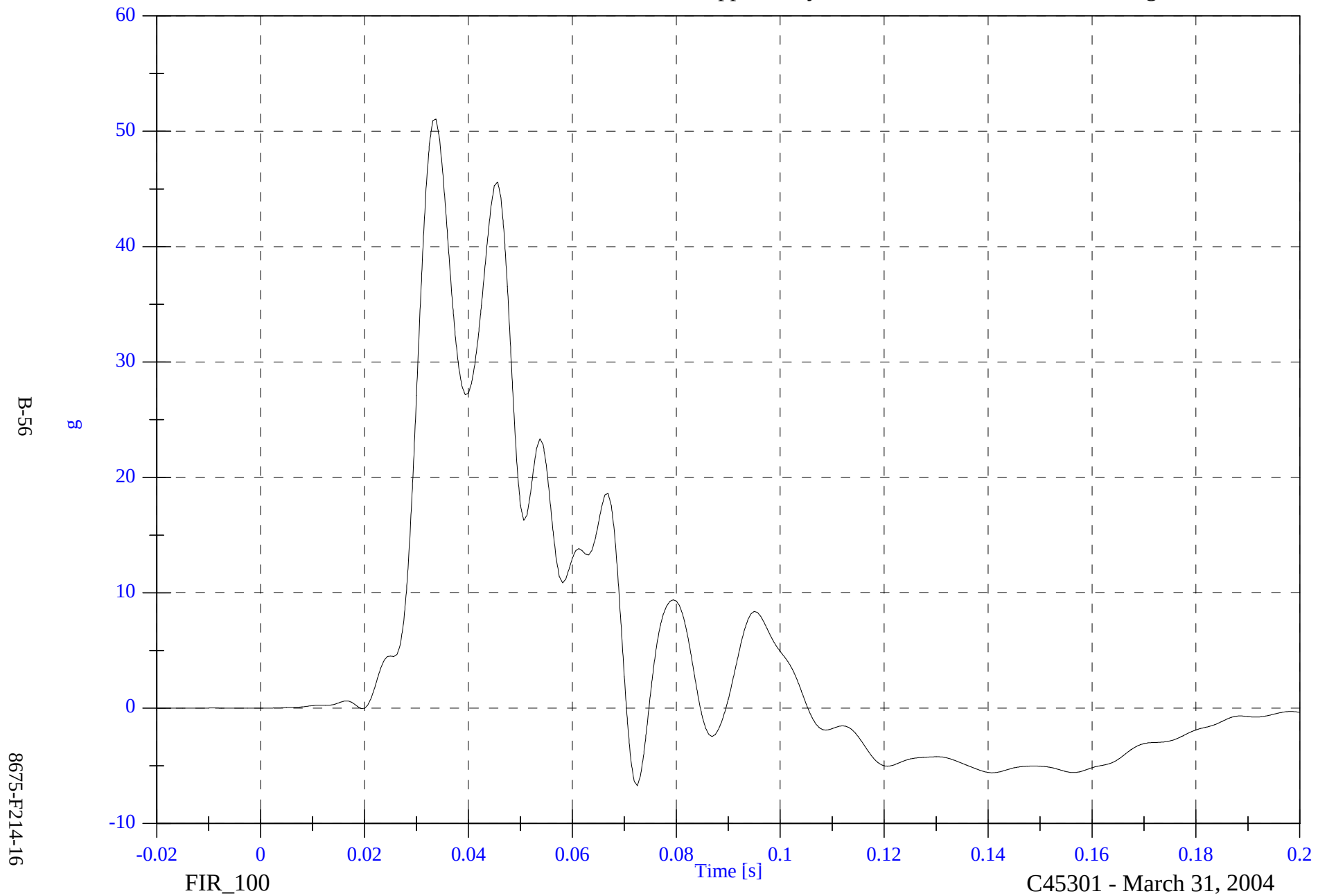


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Upper Rib y

Max: 51.1 [g] at 0.034 [s]

Min: -6.7 [g] at 0.072 [s]



2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Rib y

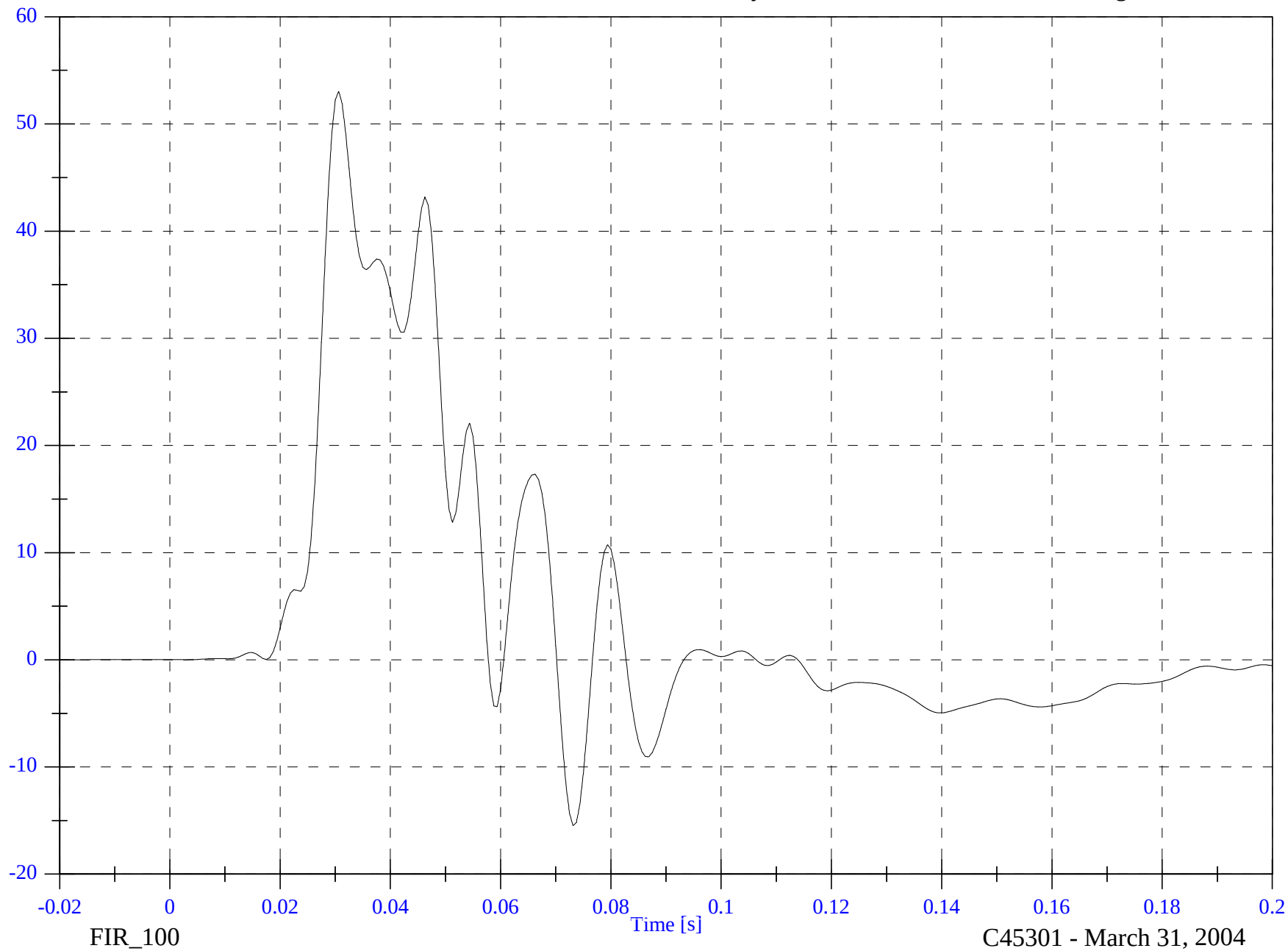
Max: 53.0 [g] at 0.031 [s]

Min: -15.5 [g] at 0.073 [s]

B-57

g

8675-F214-16

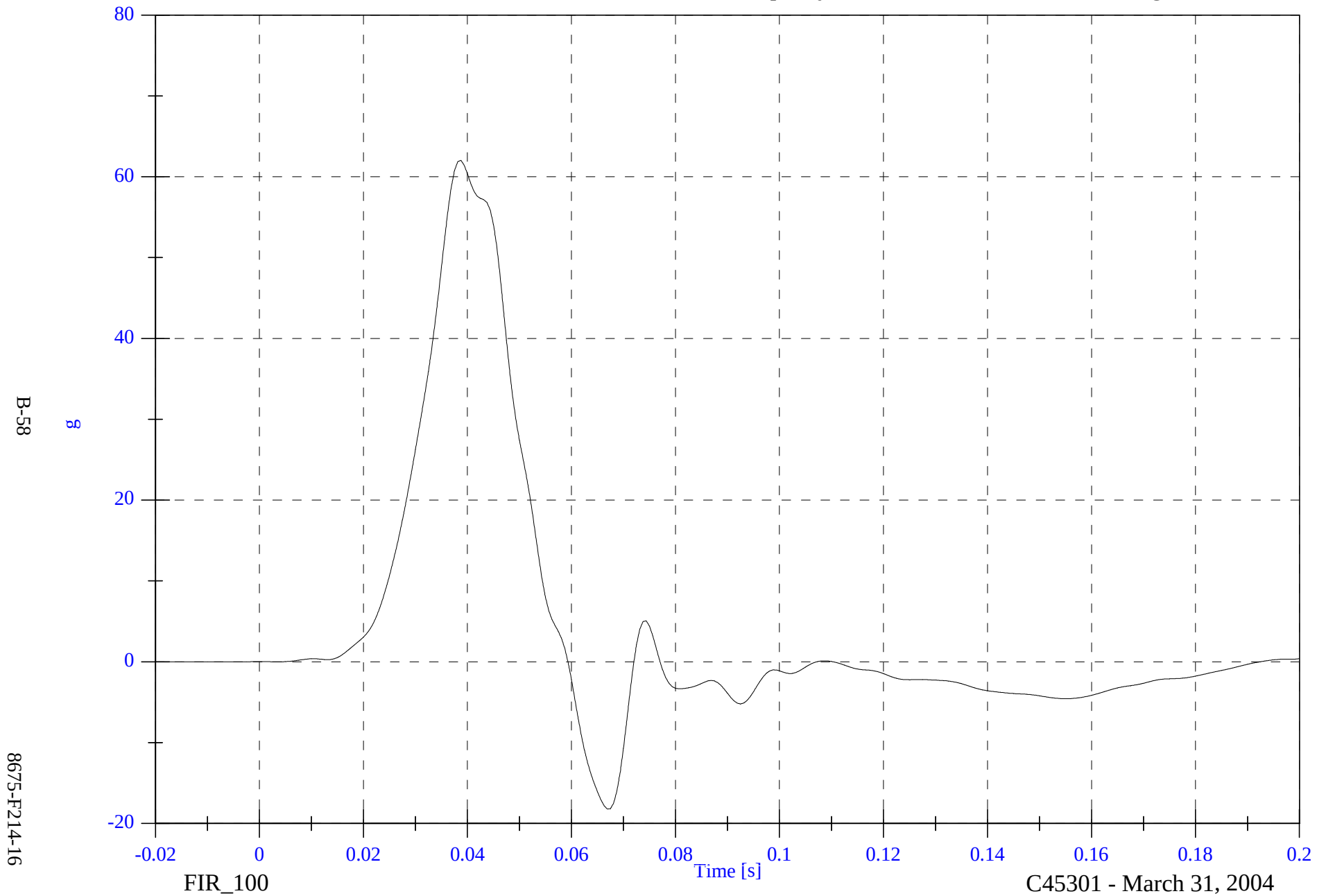


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Spine y

Max: 62.0 [g] at 0.039 [s]

Min: -18.2 [g] at 0.067 [s]

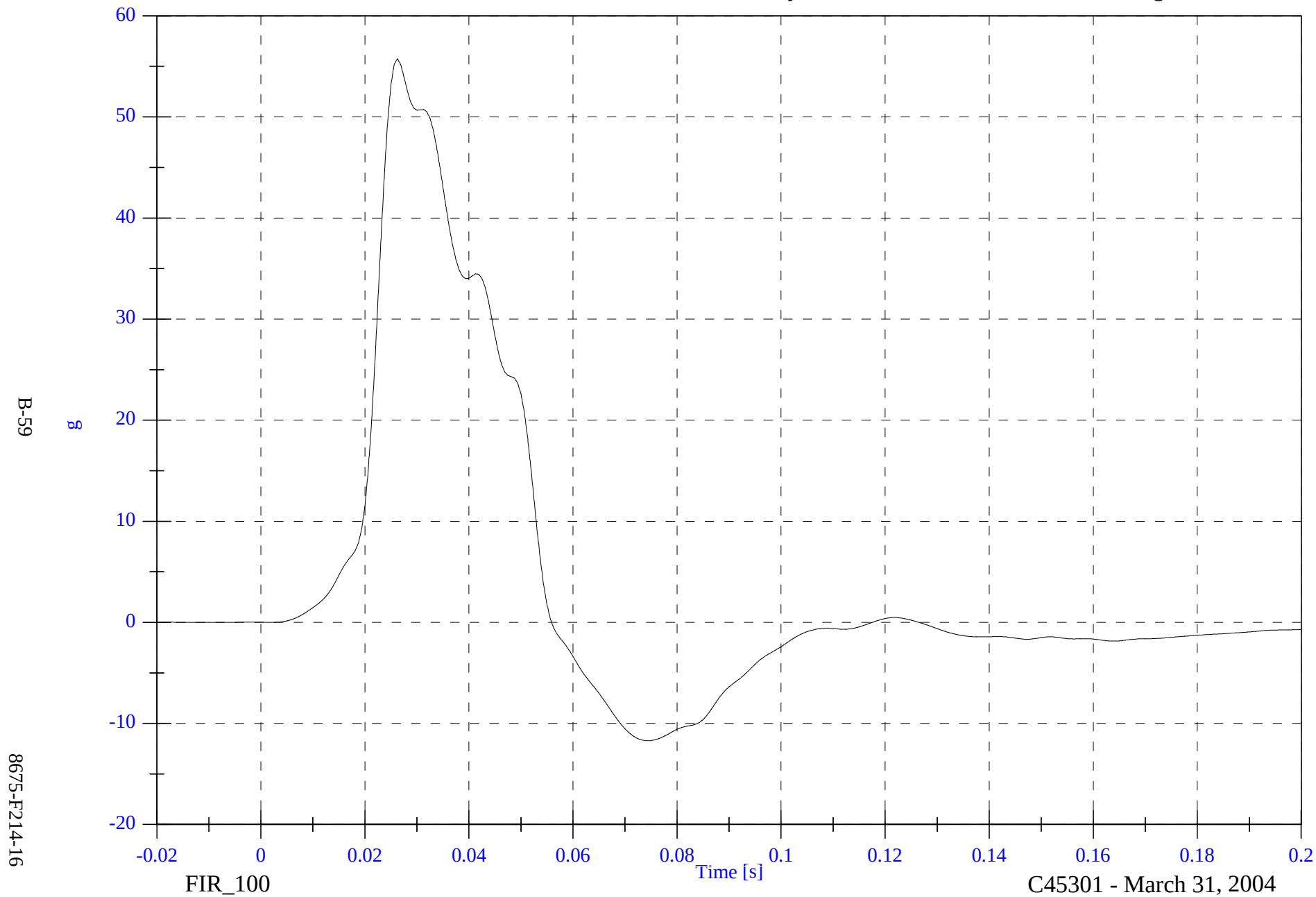


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Pelvic y

Max: 55.8 [g] at 0.026 [s]

Min: -11.7 [g] at 0.074 [s]



2004 FMVSS 214D Test 6 2004 Acura TL

Max: 4.0 [g] at 0.031 [s]

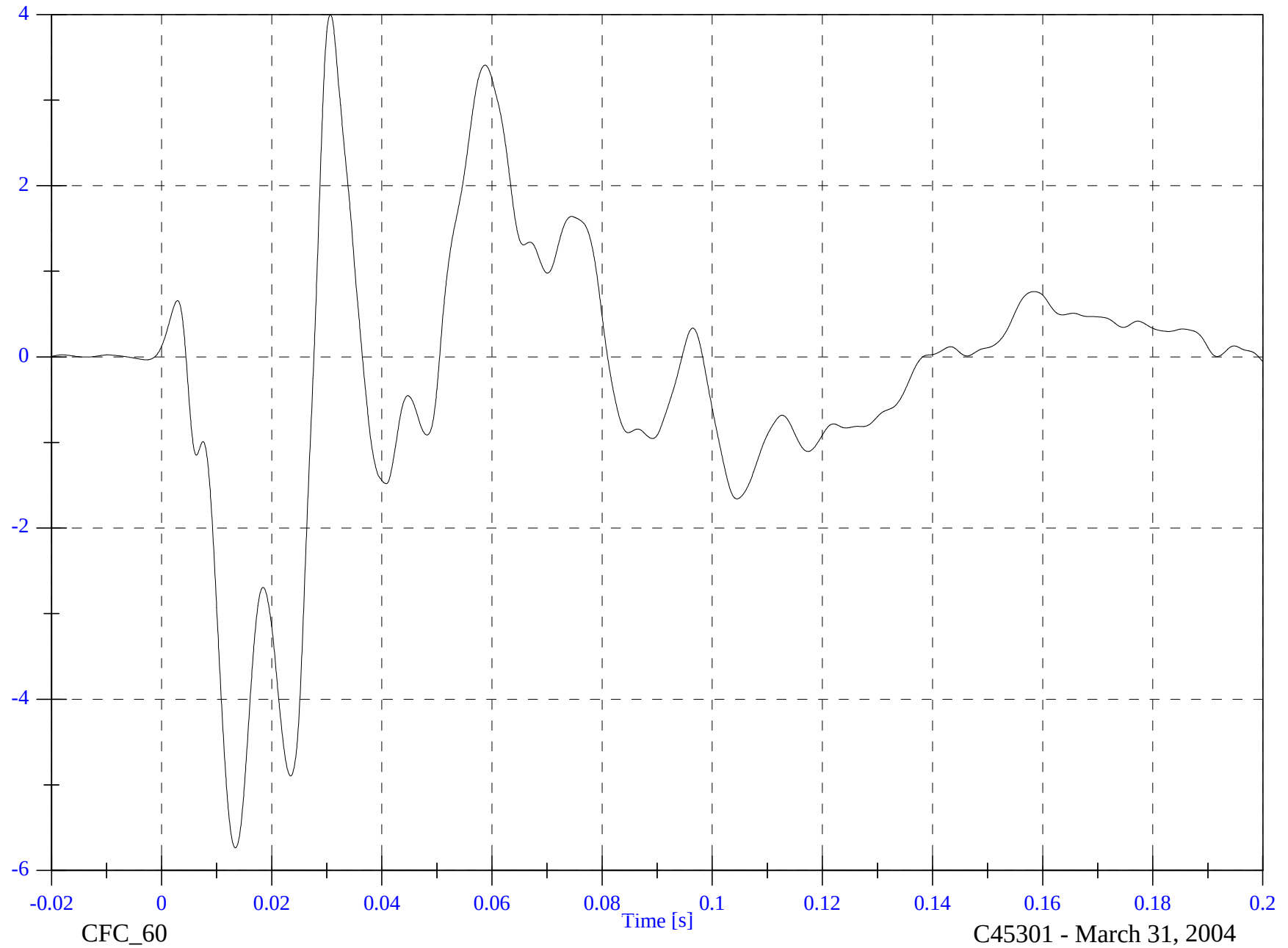
Min: -5.7 [g] at 0.013 [s]

V2 A1 Right Front Sill x

B-60

g

8675-F214-16

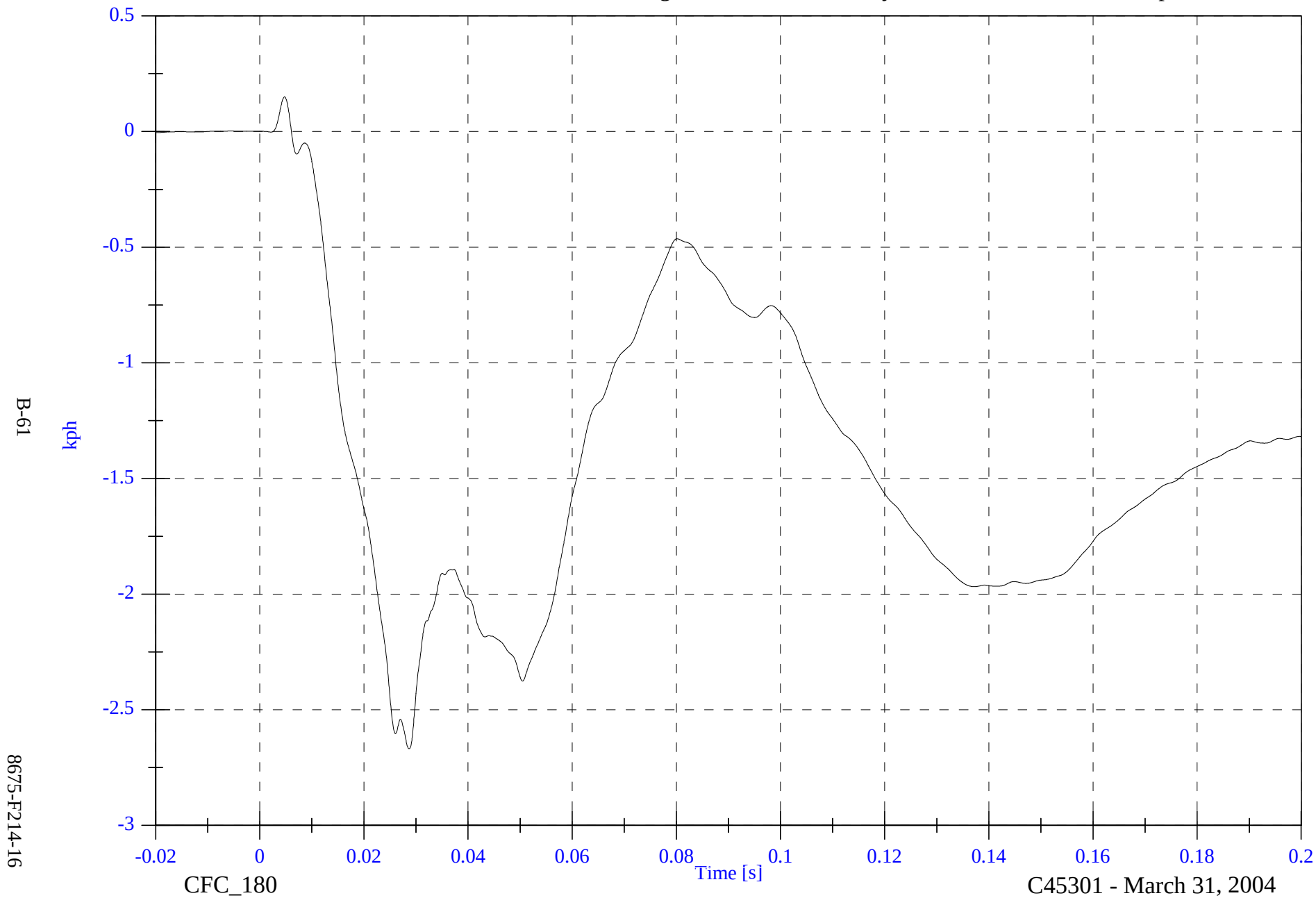


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A1 Right Front Sill x Velocity

Max: 0.1 [kph] at 0.005 [s]

Min: -2.7 [kph] at 0.029 [s]

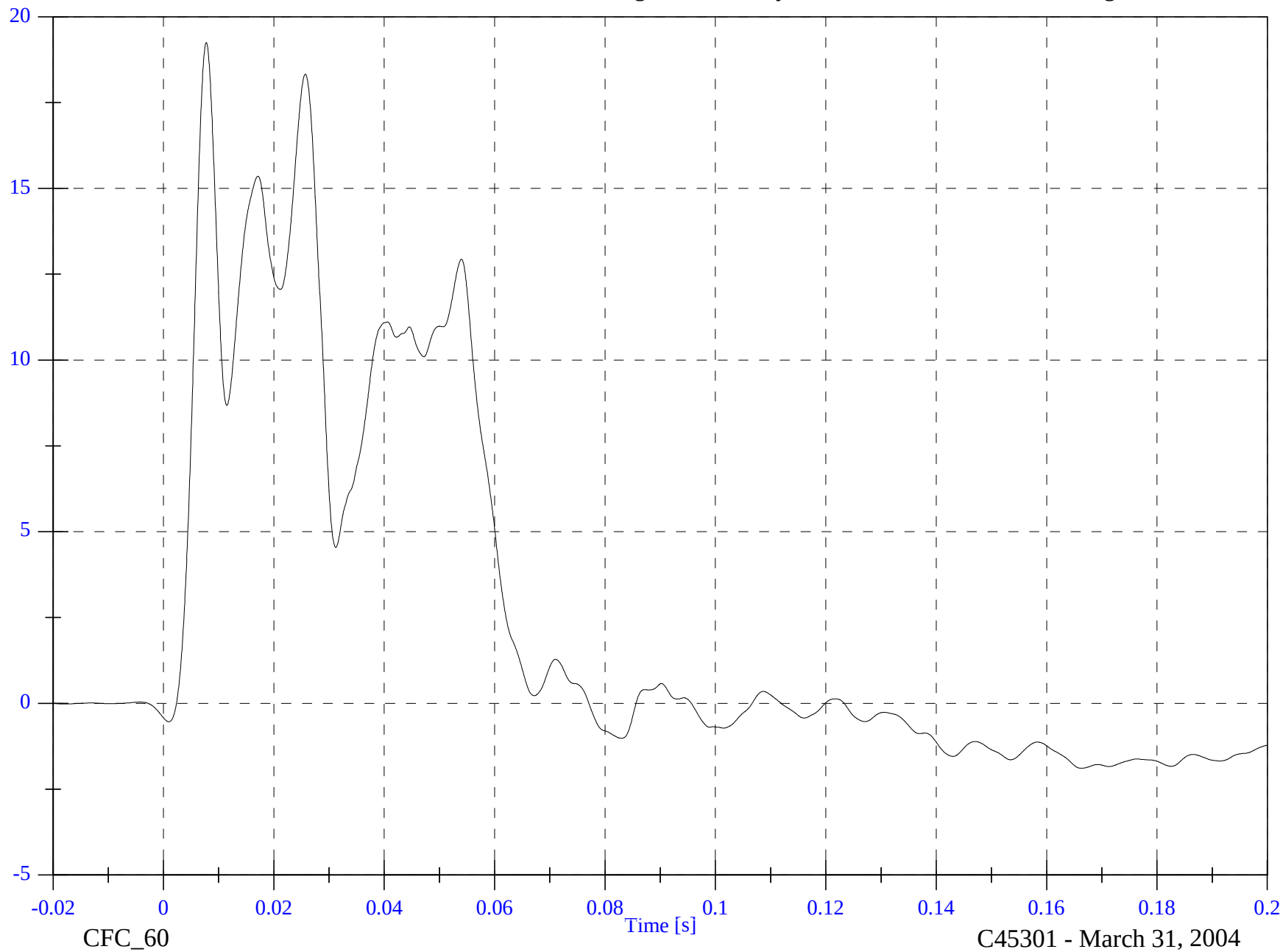


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A1 Right Front Sill y

Max: 19.3 [g] at 0.008 [s]

Min: -1.9 [g] at 0.166 [s]



B-62

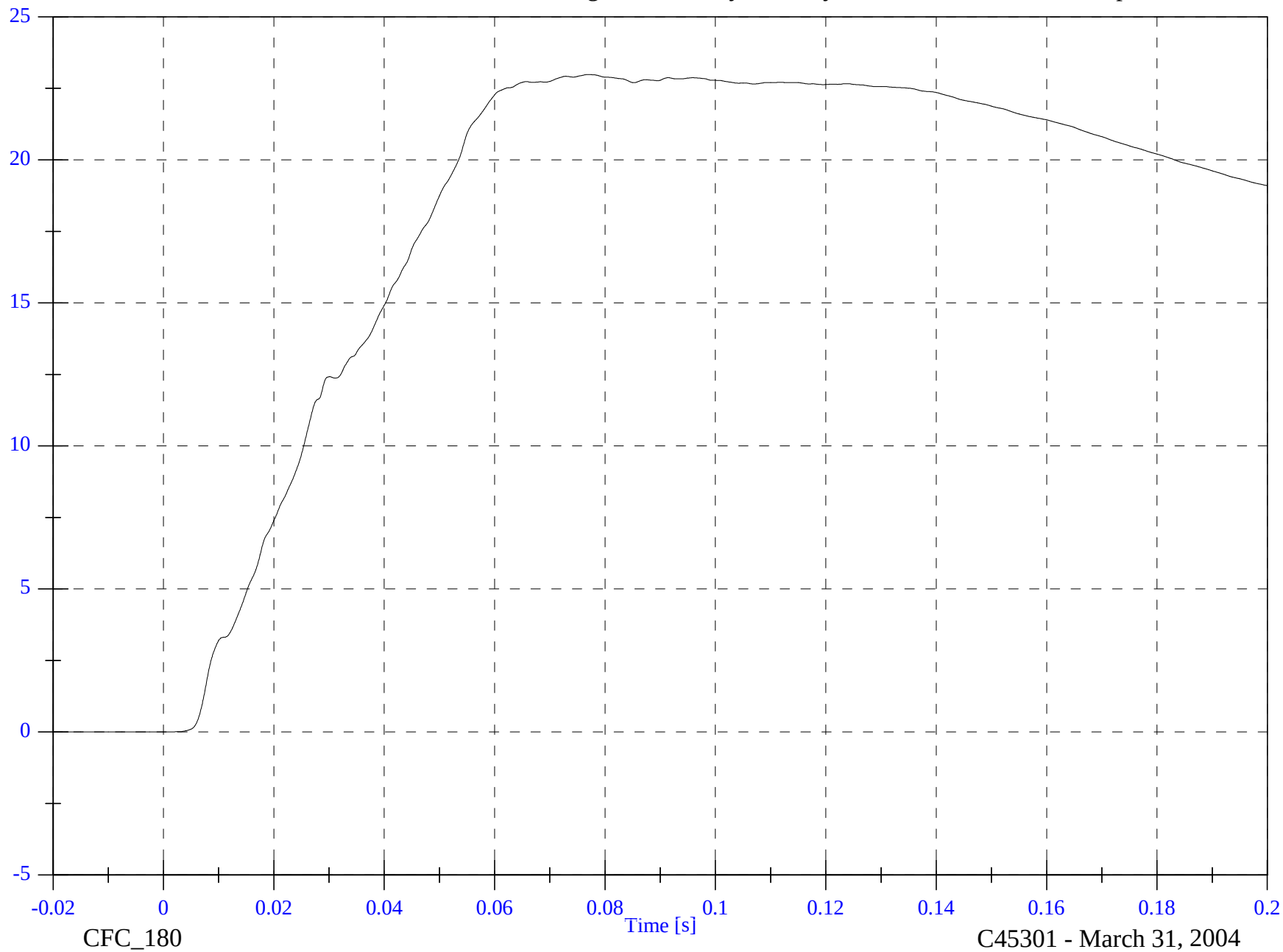
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 23.0 [kph] at 0.077 [s]

V2 A1 Right Front Sill y Velocity

Min: -0.0 [kph] at -0.016 [s]



B-63

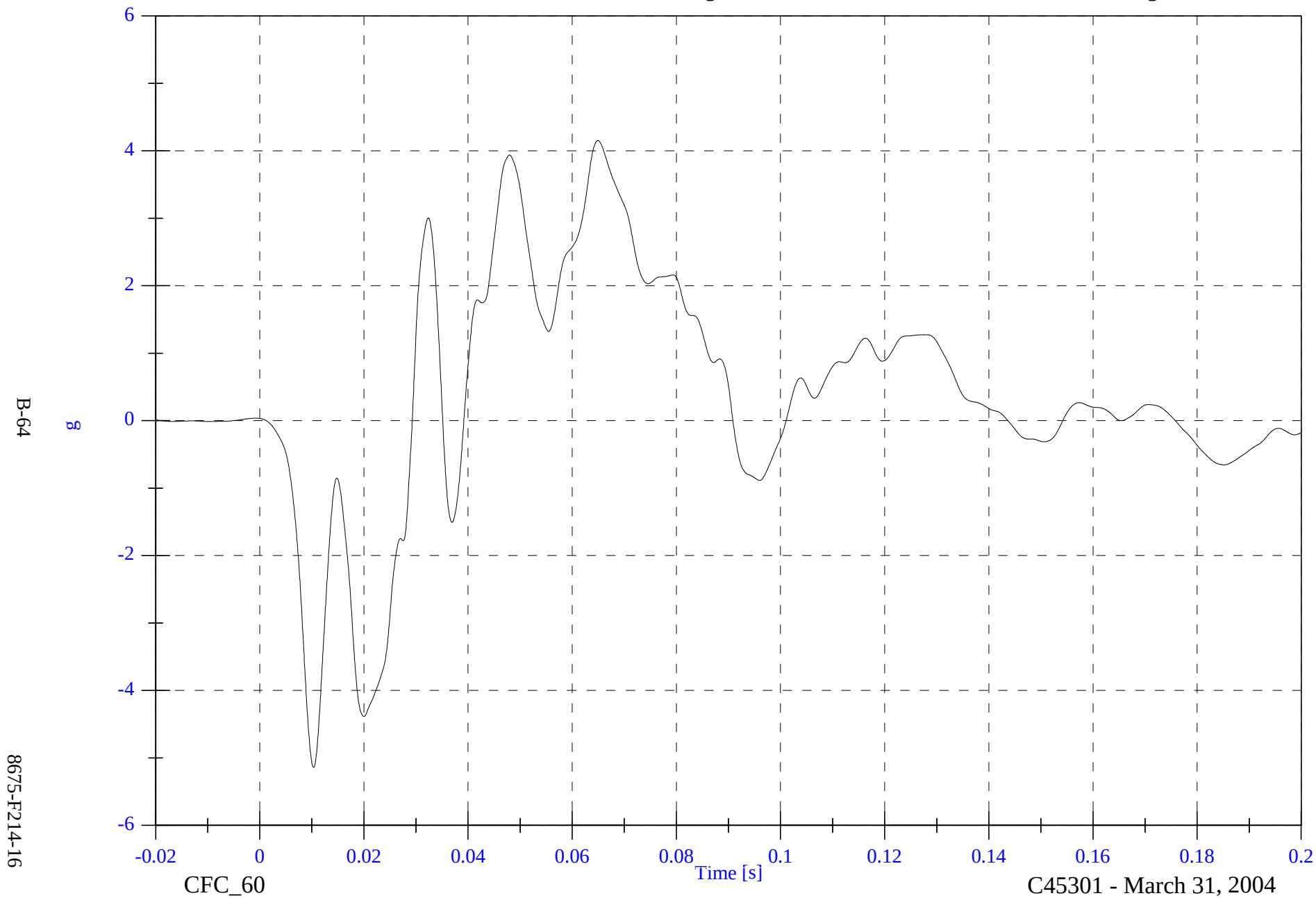
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 4.2 [g] at 0.065 [s]

Min: -5.1 [g] at 0.010 [s]

V2 A1 Right Front Sill z

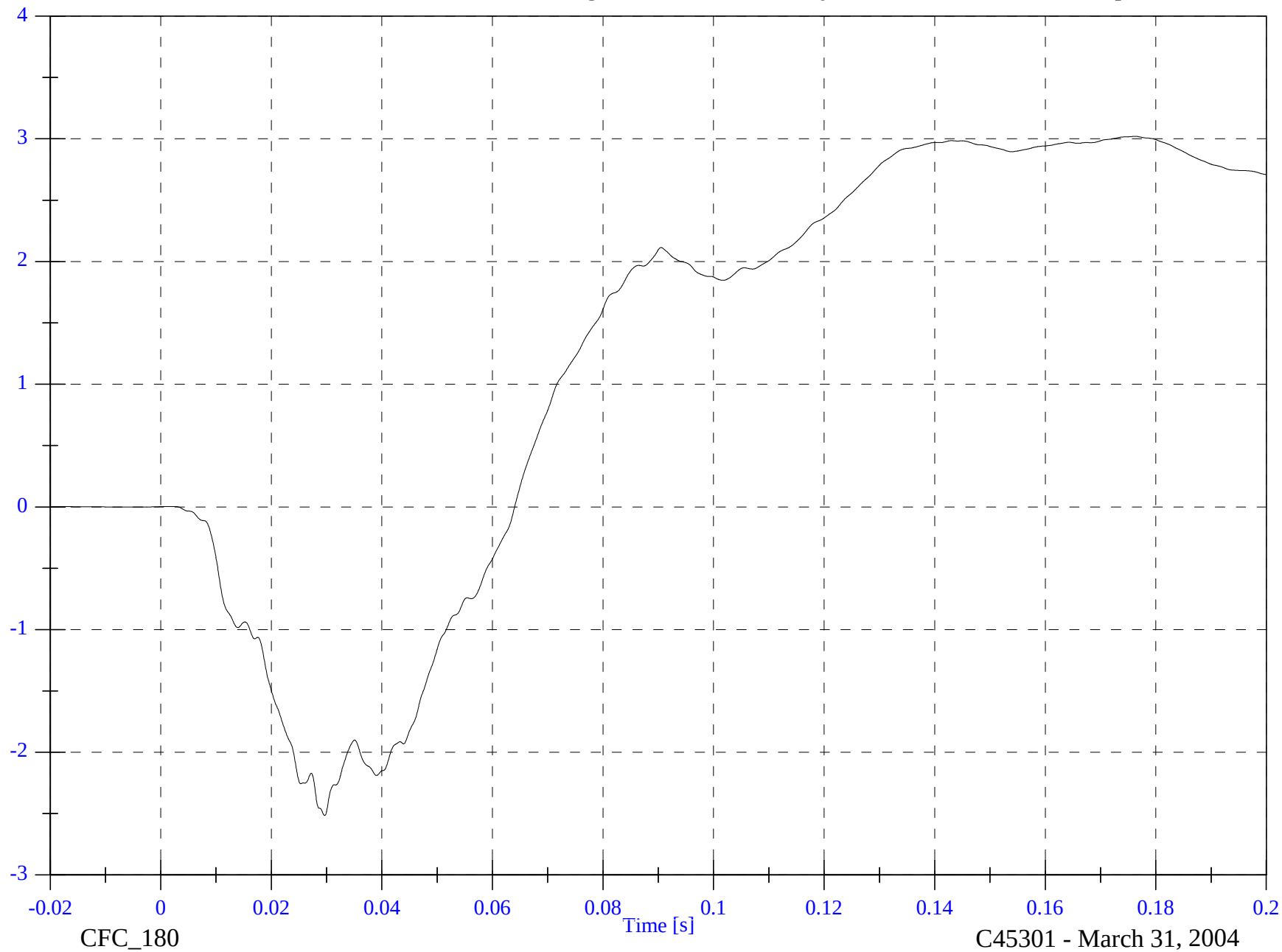


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A1 Right Front Sill z Velocity

Max: 3.0 [kph] at 0.176 [s]

Min: -2.5 [kph] at 0.030 [s]



B-65

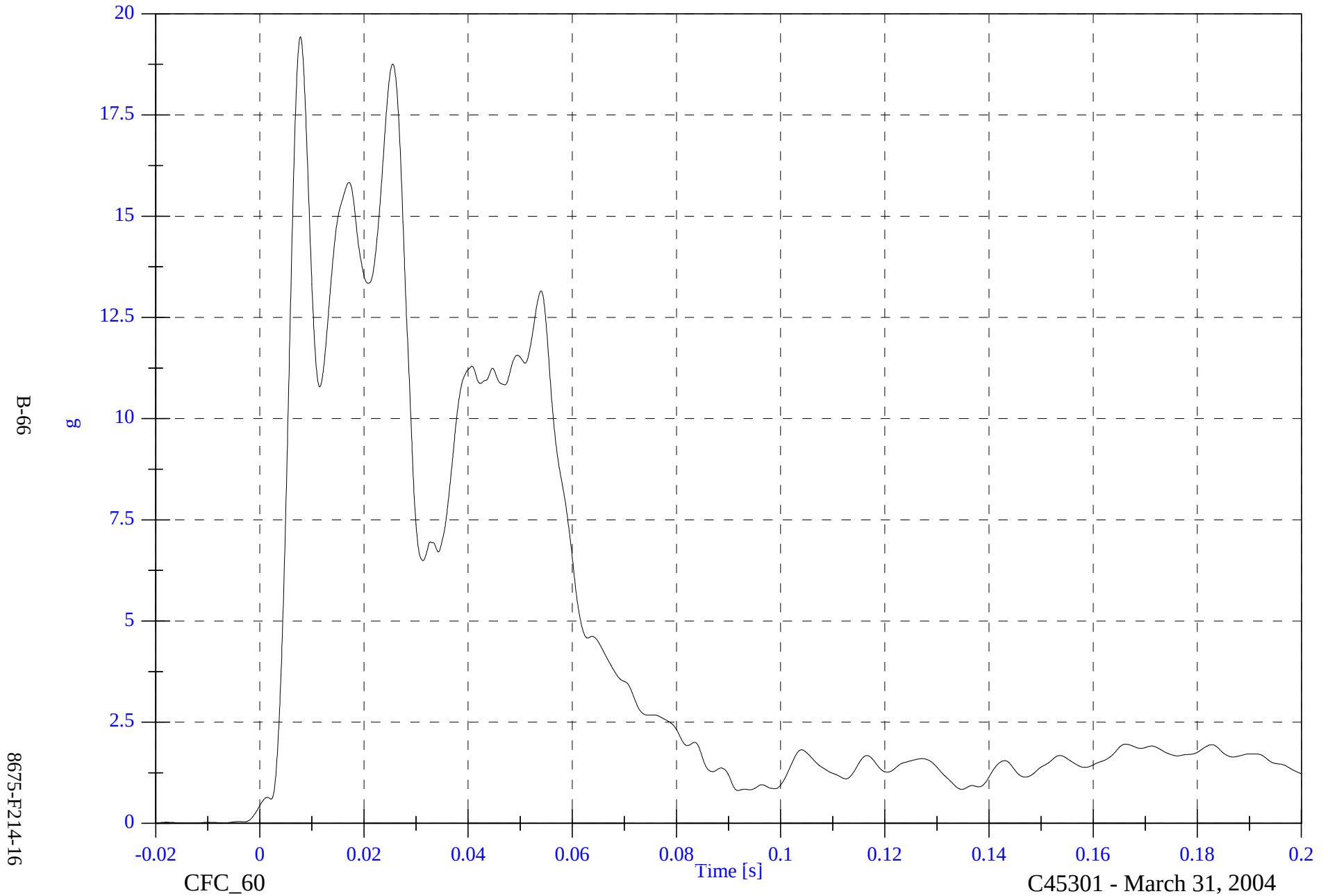
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2 A1 Right Front Sill Resultant

Max: 19.4 [g] at 0.008 [s]

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

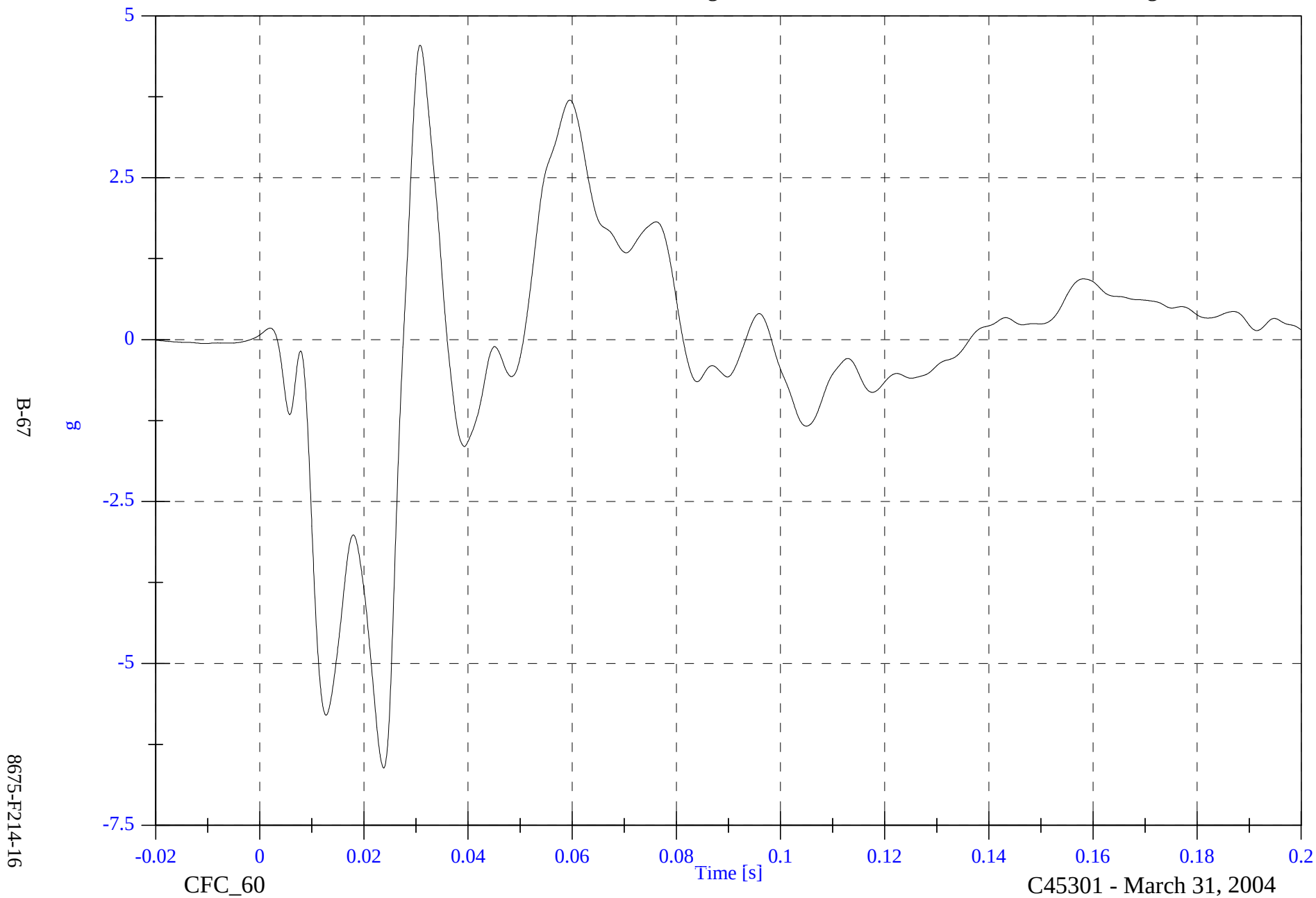


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 4.5 [g] at 0.031 [s]

Min: -6.6 [g] at 0.024 [s]

V2 A2 Right Rear Sill x

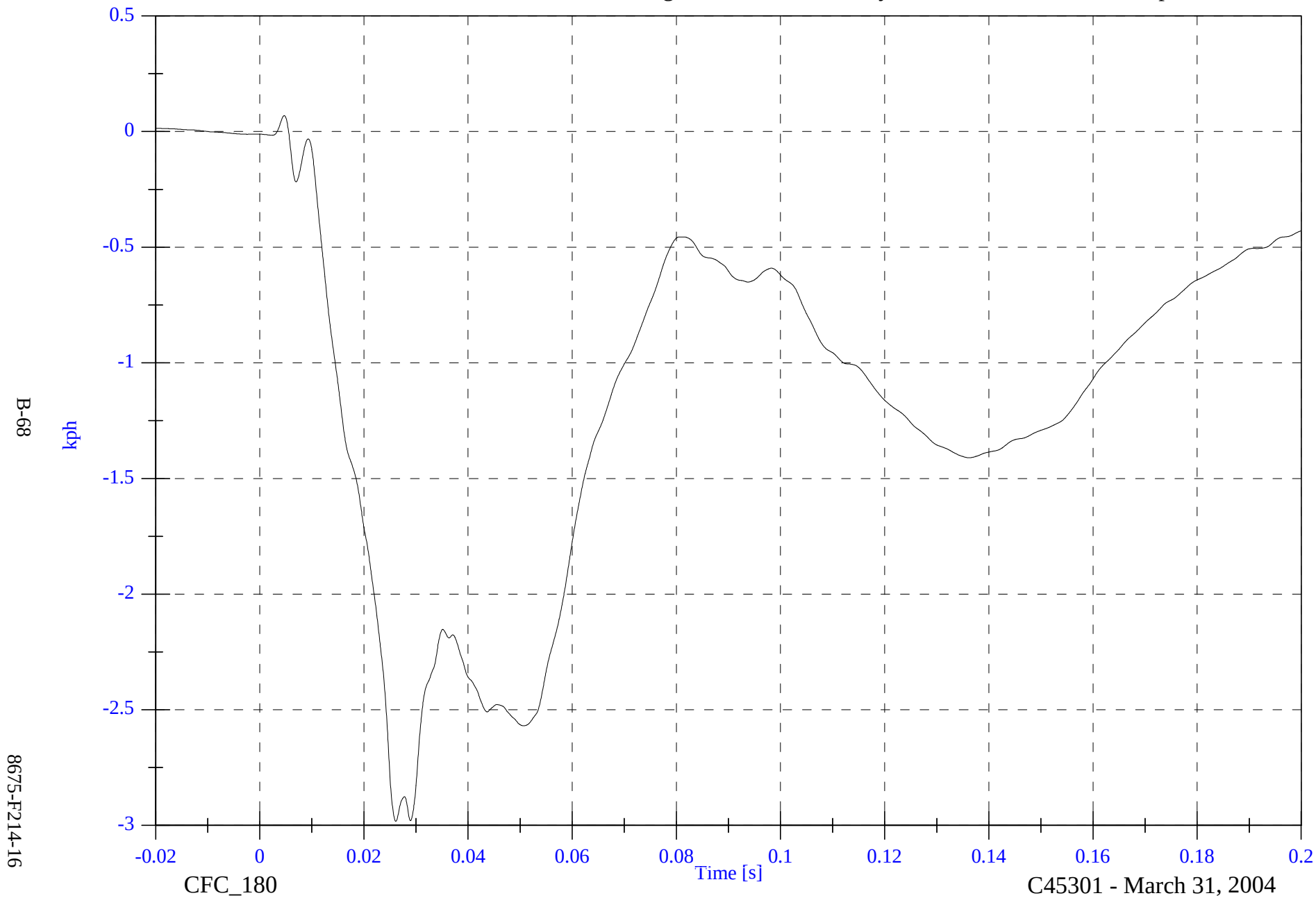


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A2 Right Rear Sill x Velocity

Max: 0.1 [kph] at 0.005 [s]

Min: -3.0 [kph] at 0.026 [s]

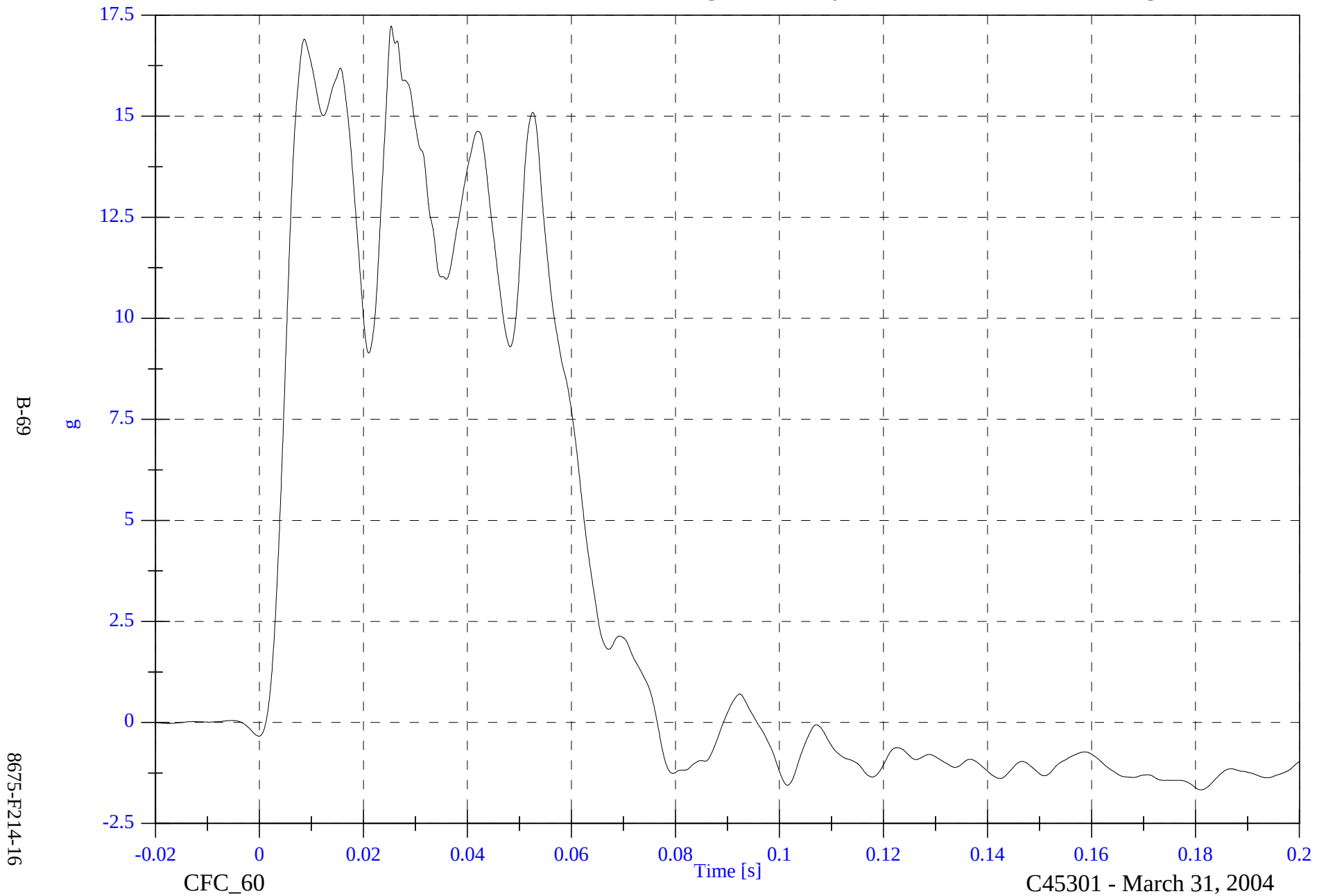


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A2 Right Rear Sill y

Max: 17.2 [g] at 0.025 [s]

Min: -1.7 [g] at 0.181 [s]

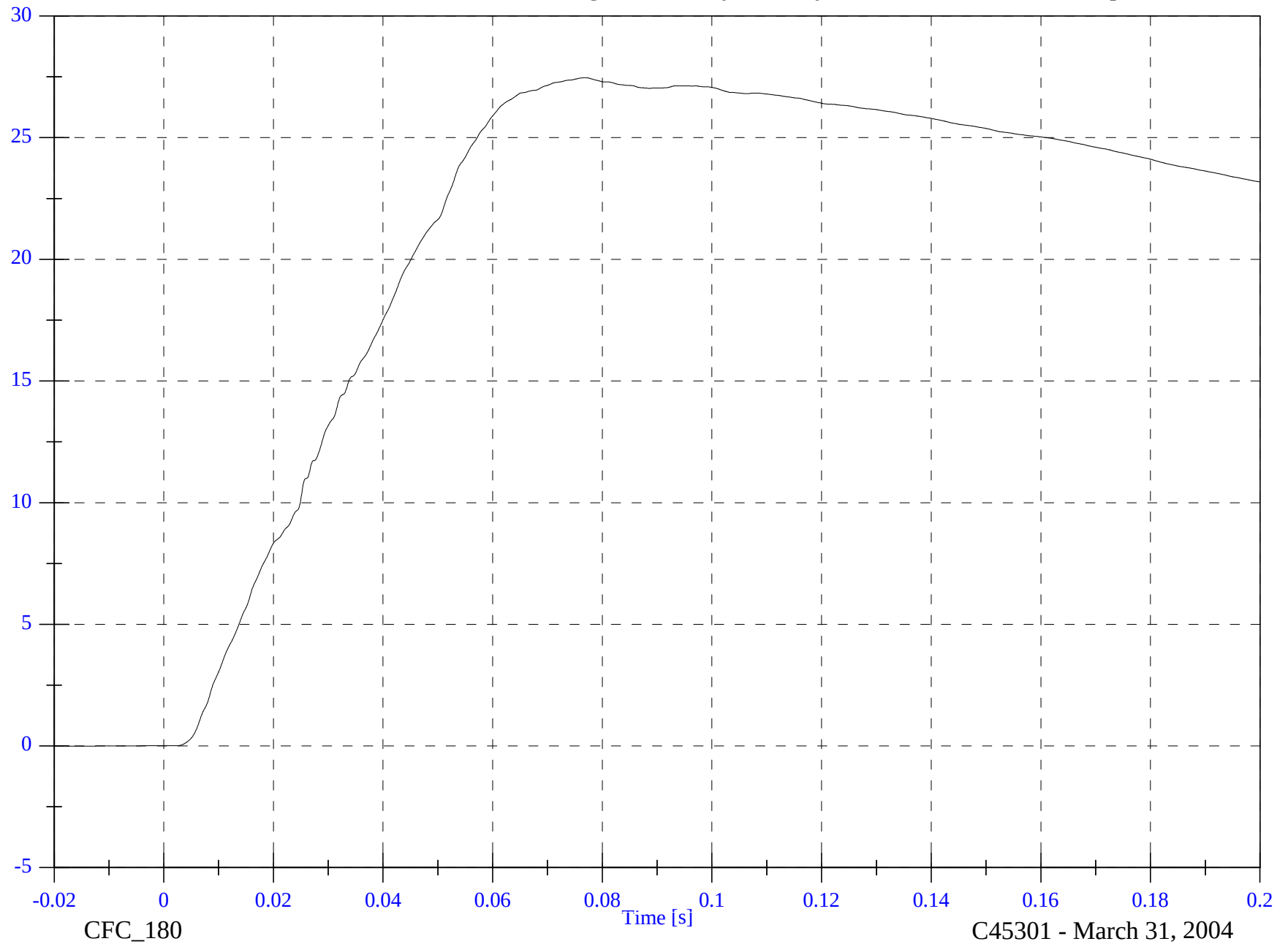


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 27.5 [kph] at 0.077 [s]

V2 A2 Right Rear Sill y Velocity

Min: -0.0 [kph] at -0.016 [s]



B-70

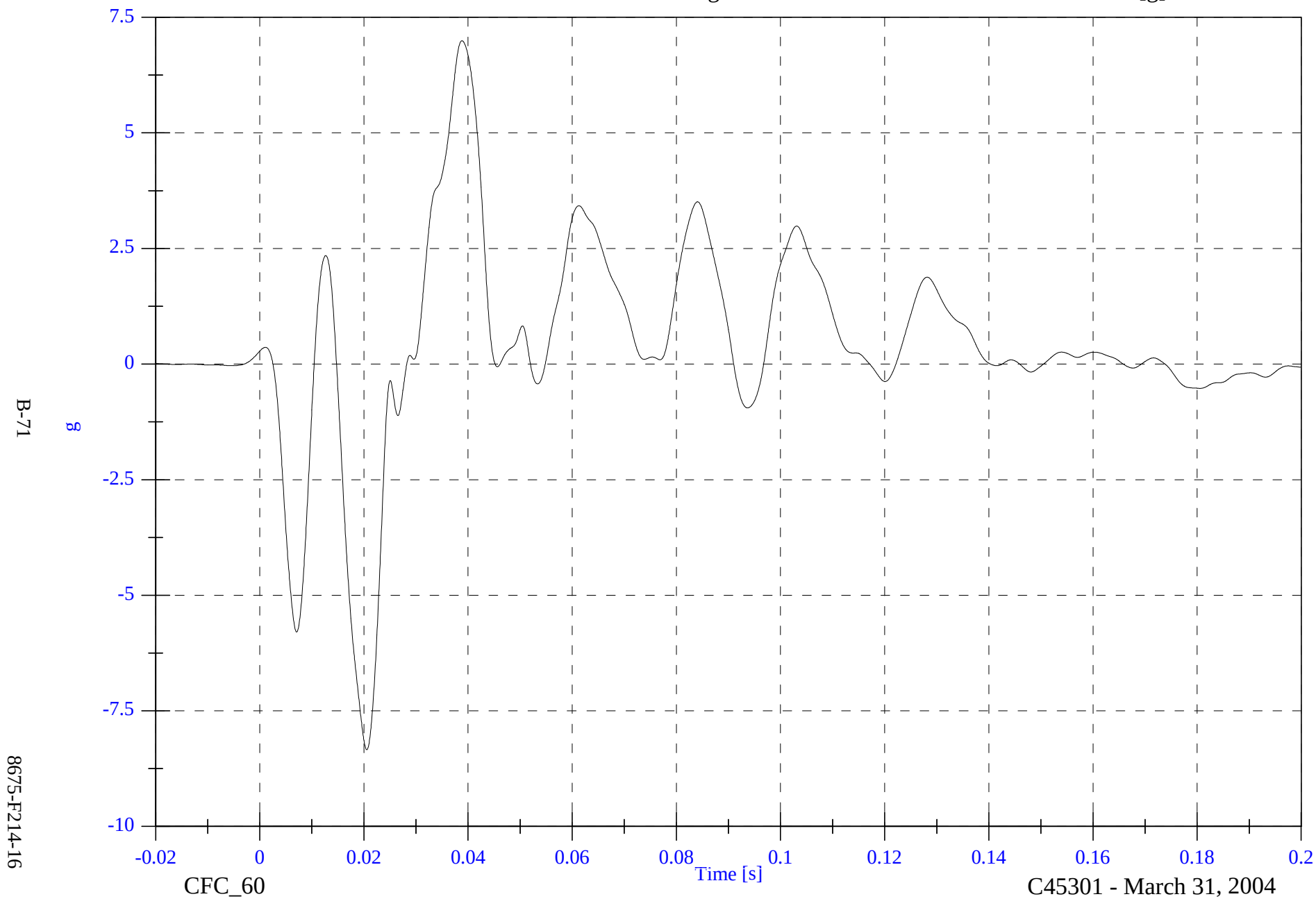
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 7.0 [g] at 0.039 [s]

Min: -8.3 [g] at 0.021 [s]

V2 A2 Right Rear Sill z

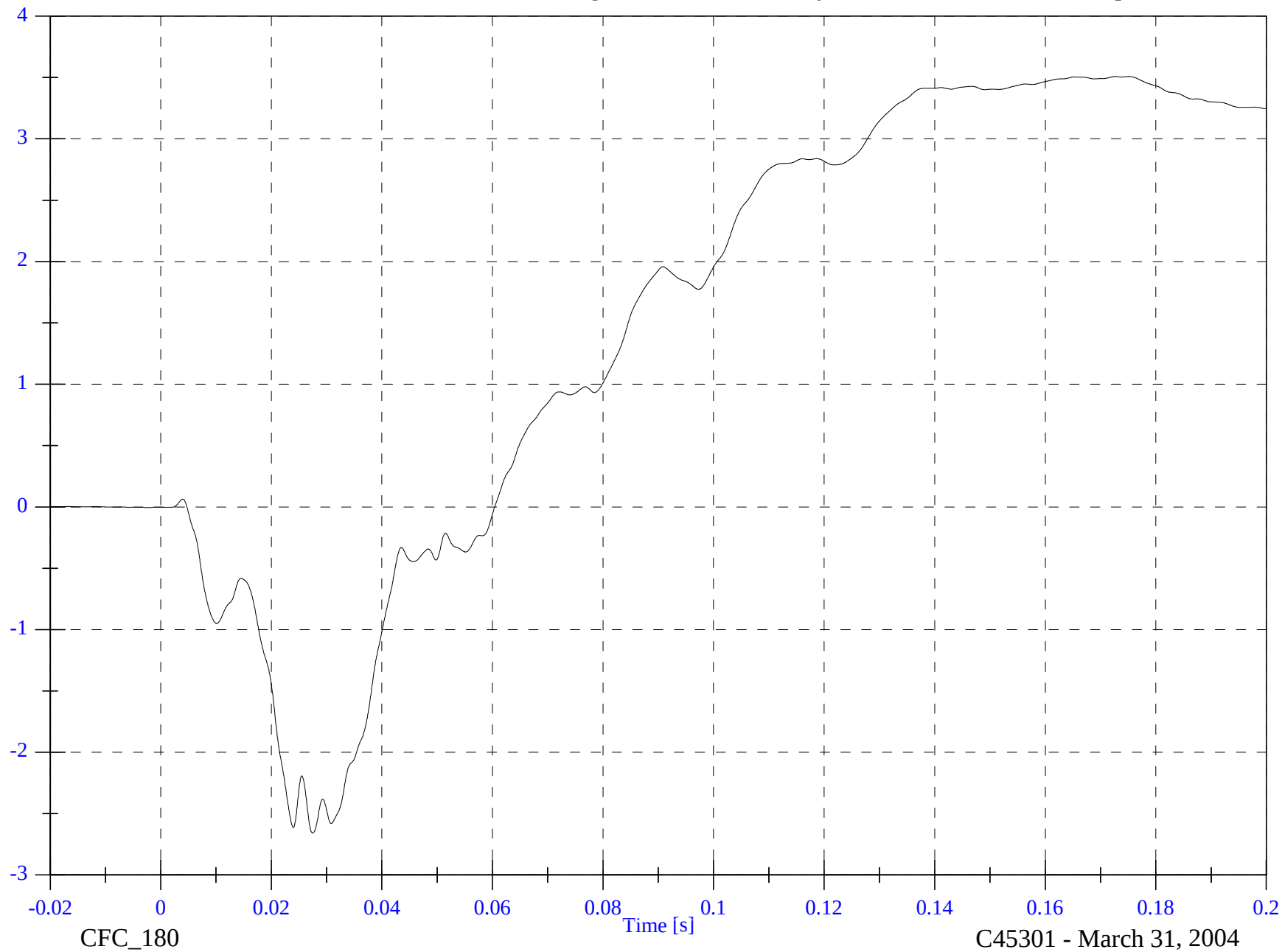


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A2 Right Rear Sill z Velocity

Max: 3.5 [kph] at 0.173 [s]

Min: -2.7 [kph] at 0.027 [s]



B-72

8675-F214-16

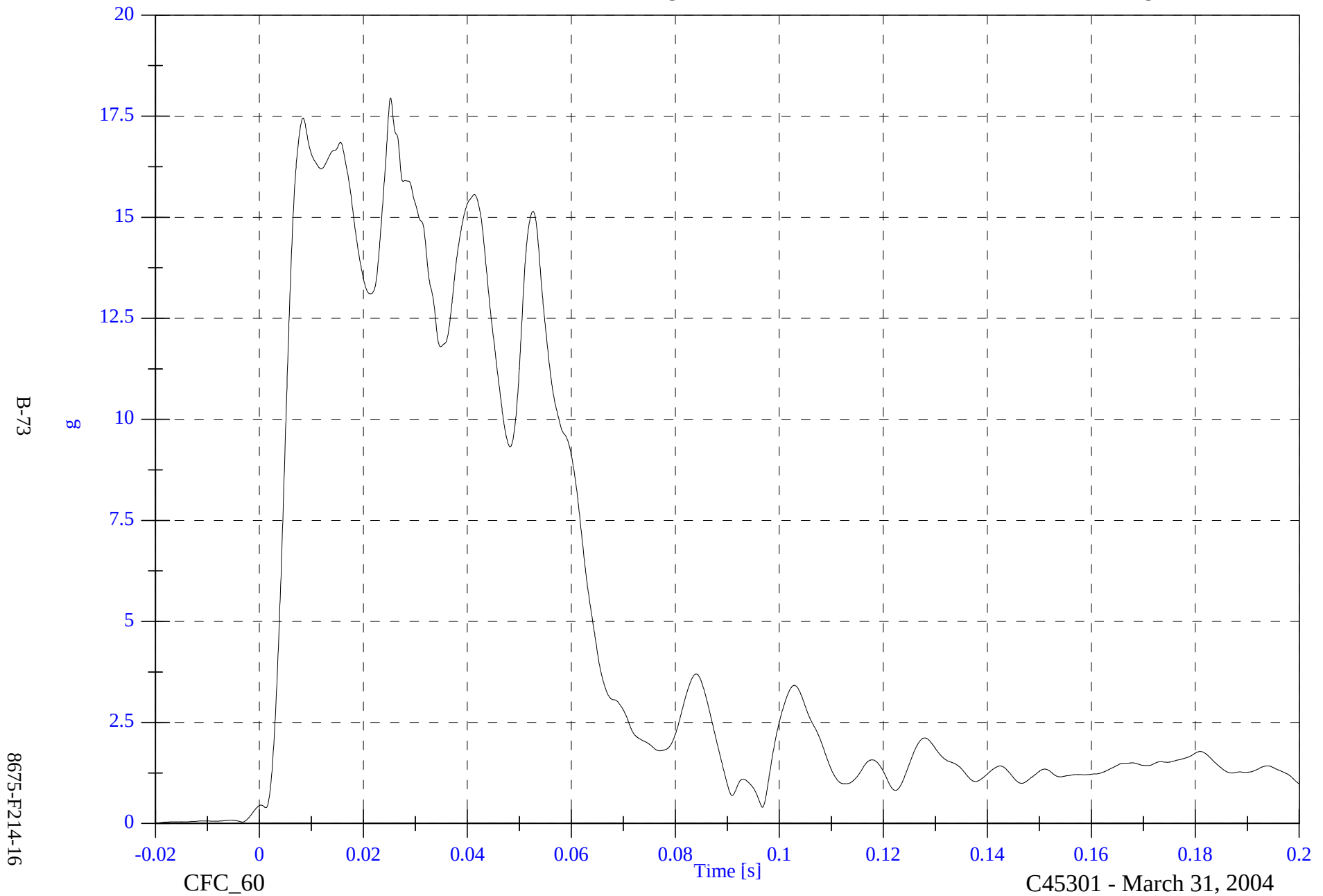
2004 FMVSS 214D Test 6

2004 Acura TL

V2 A2 Right Rear Sill Resultant

Max: 18.0 [g] at 0.025 [s]

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

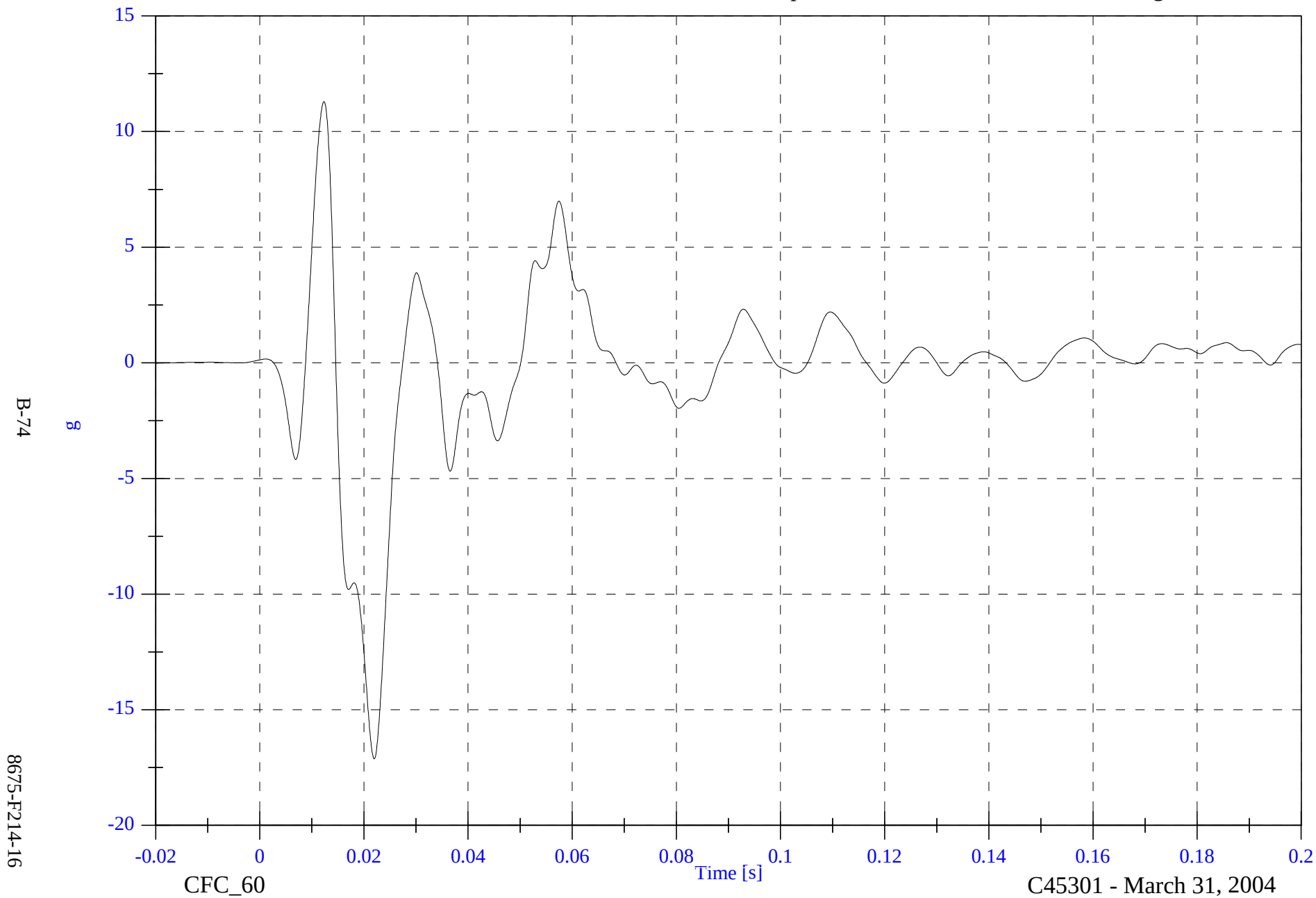


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 11.3 [g] at 0.012 [s]

Min: -17.1 [g] at 0.022 [s]

V2 A3 Rear Floorpan x



2004 FMVSS 214D Test 6 2004 Acura TL

V2 A3 Rear Floorpan x Velocity

Max: 1.5 [kph] at 0.014 [s]

Min: -4.2 [kph] at 0.051 [s]



2004 FMVSS 214D Test 6 2004 Acura TL

V2 A3 Rear Floorpan y

Max: 19.6 [g] at 0.024 [s]

Min: -2.1 [g] at 0.102 [s]



B-76

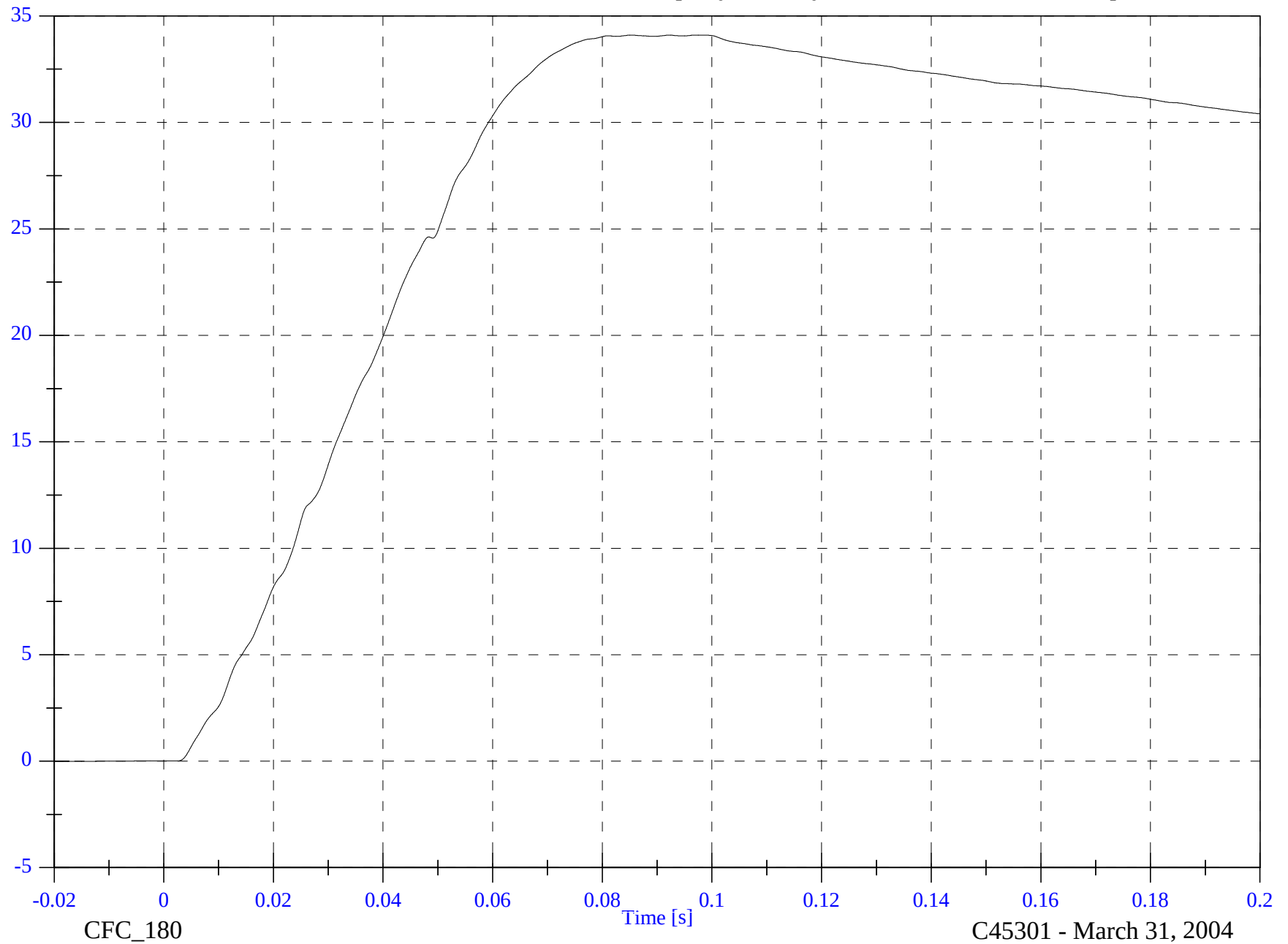
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 34.1 [kph] at 0.097 [s]

V2 A3 Rear Floorpan y Velocity

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



B-77

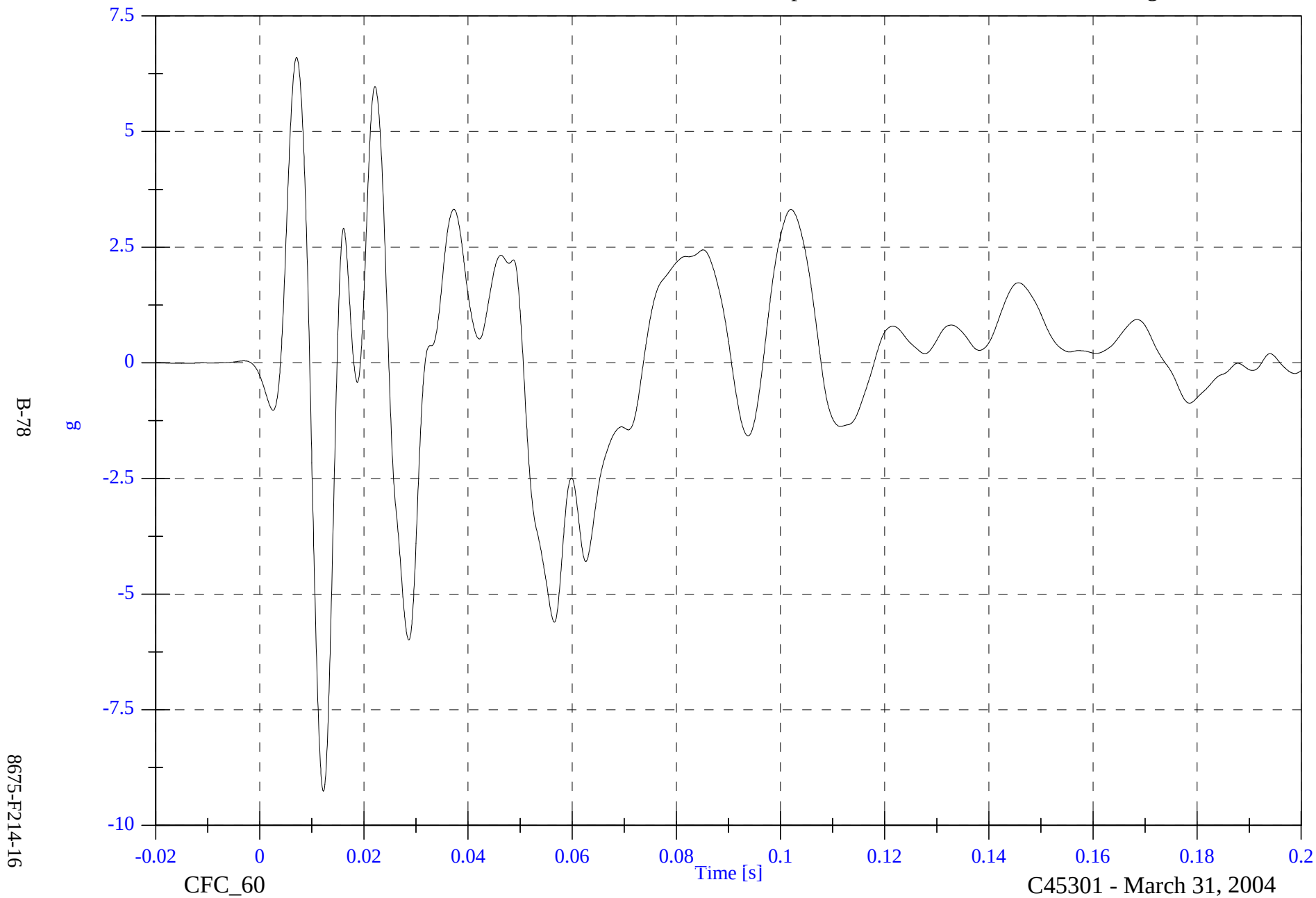
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 6.6 [g] at 0.007 [s]

Min: -9.3 [g] at 0.012 [s]

V2 A3 Rear Floorpan z

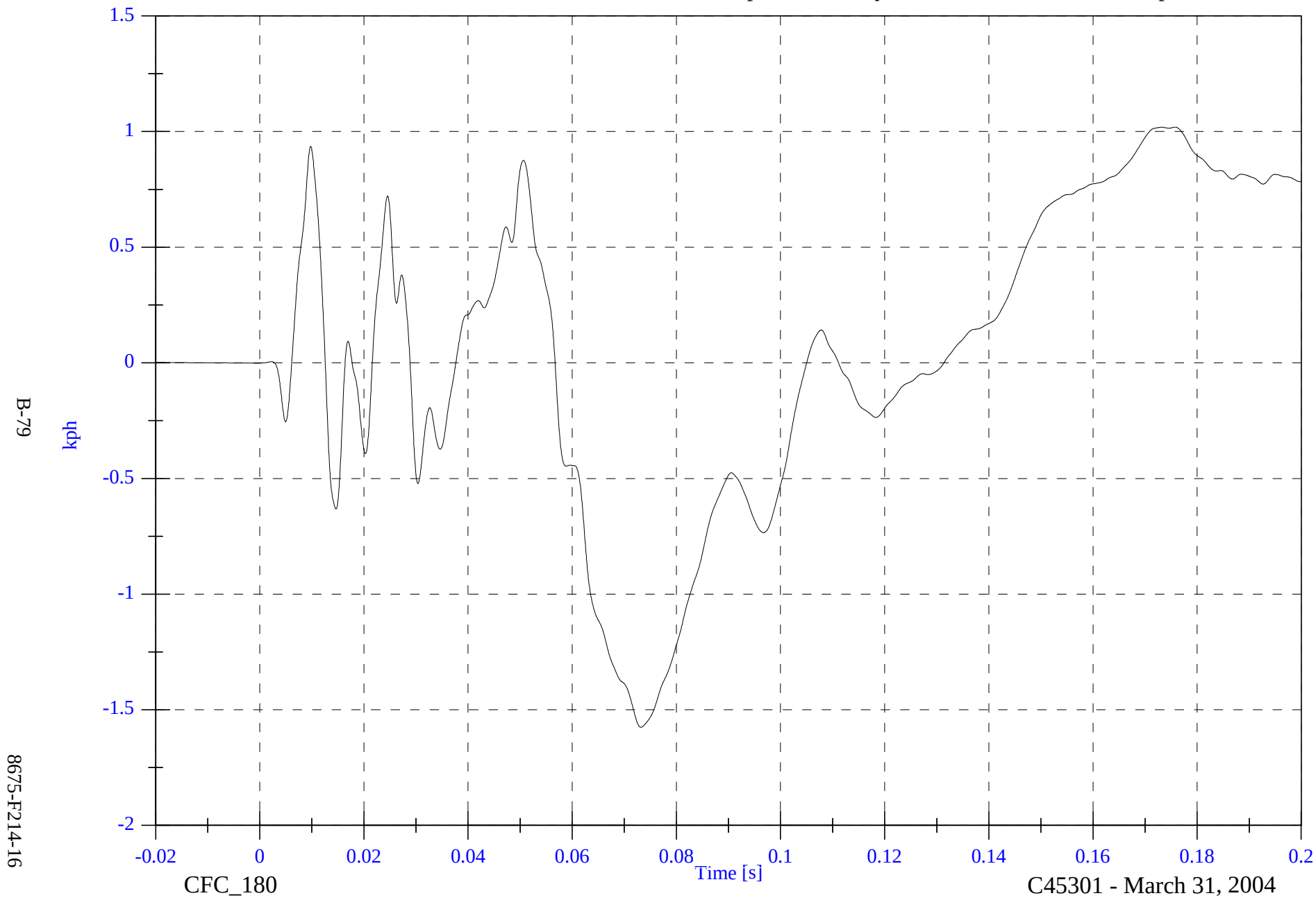


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A3 Rear Floorpan z Velocity

Max: 1.0 [kph] at 0.176 [s]

Min: -1.6 [kph] at 0.073 [s]



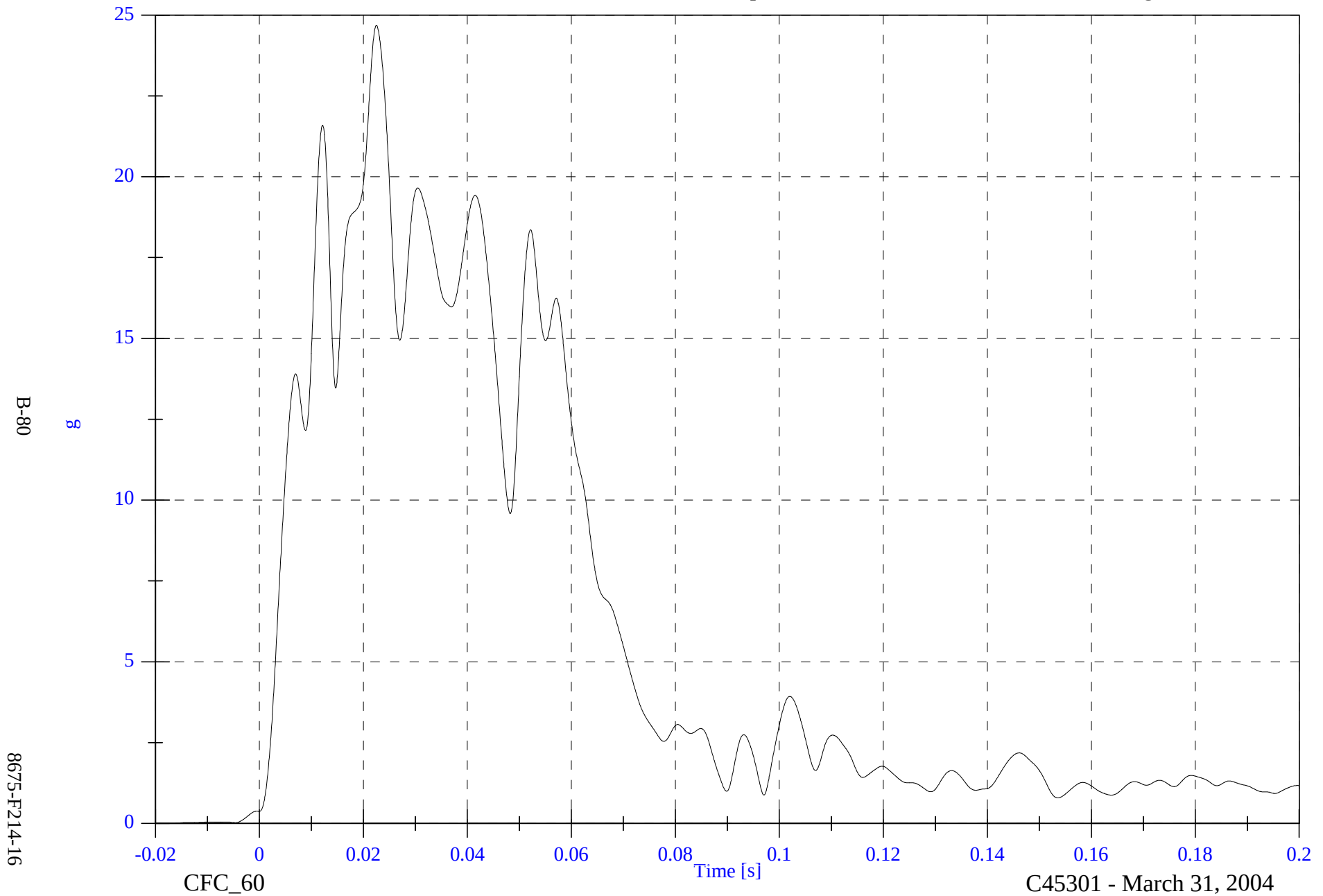
2004 FMVSS 214D Test 6

2004 Acura TL

V2 A3 Rear Floorpan Resultant

Max: 24.7 [g] at 0.022 [s]

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



2004 FMVSS 214D Test 6 2004 Acura TL

V2 A4 Left Rear Sill y

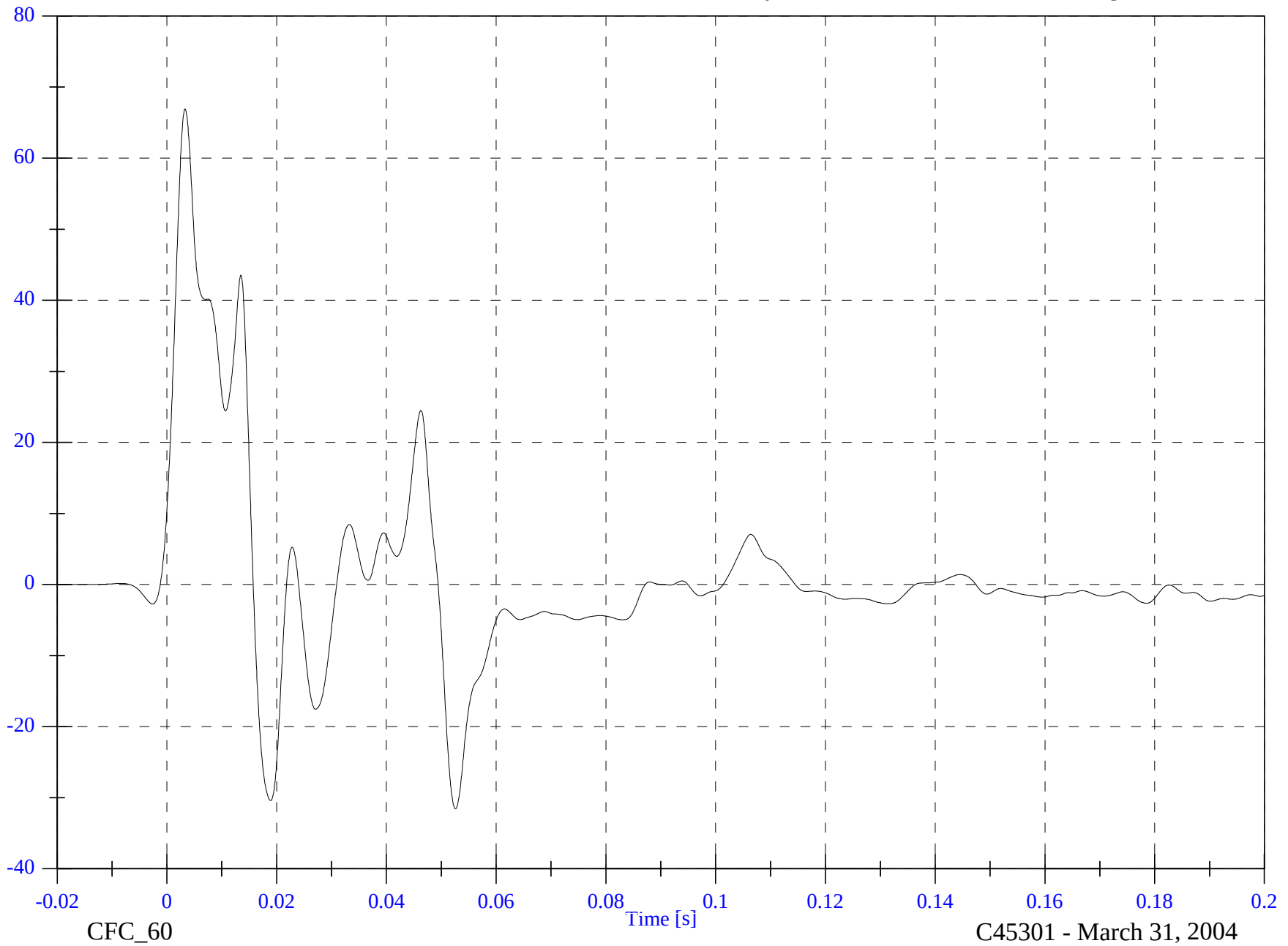
Max: 66.9 [g] at 0.003 [s]

Min: -31.6 [g] at 0.053 [s]

B-81

g

8675-F214-16

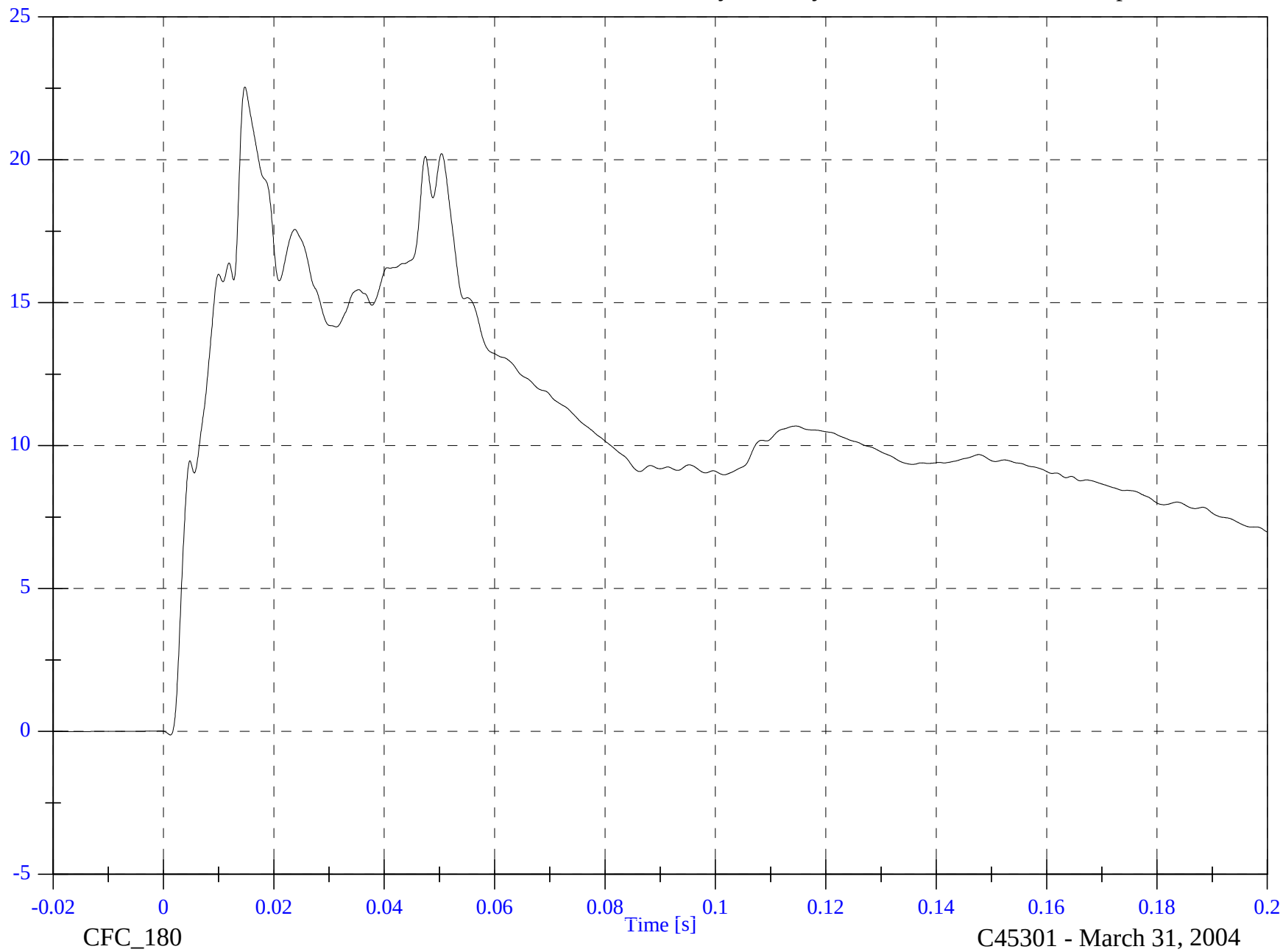


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A4 Left Rear Sill y Velocity

Max: 22.5 [kph] at 0.015 [s]

Min: -0.1 [kph] at 0.001 [s]



B-82

8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2 A5 Left Front Sill y

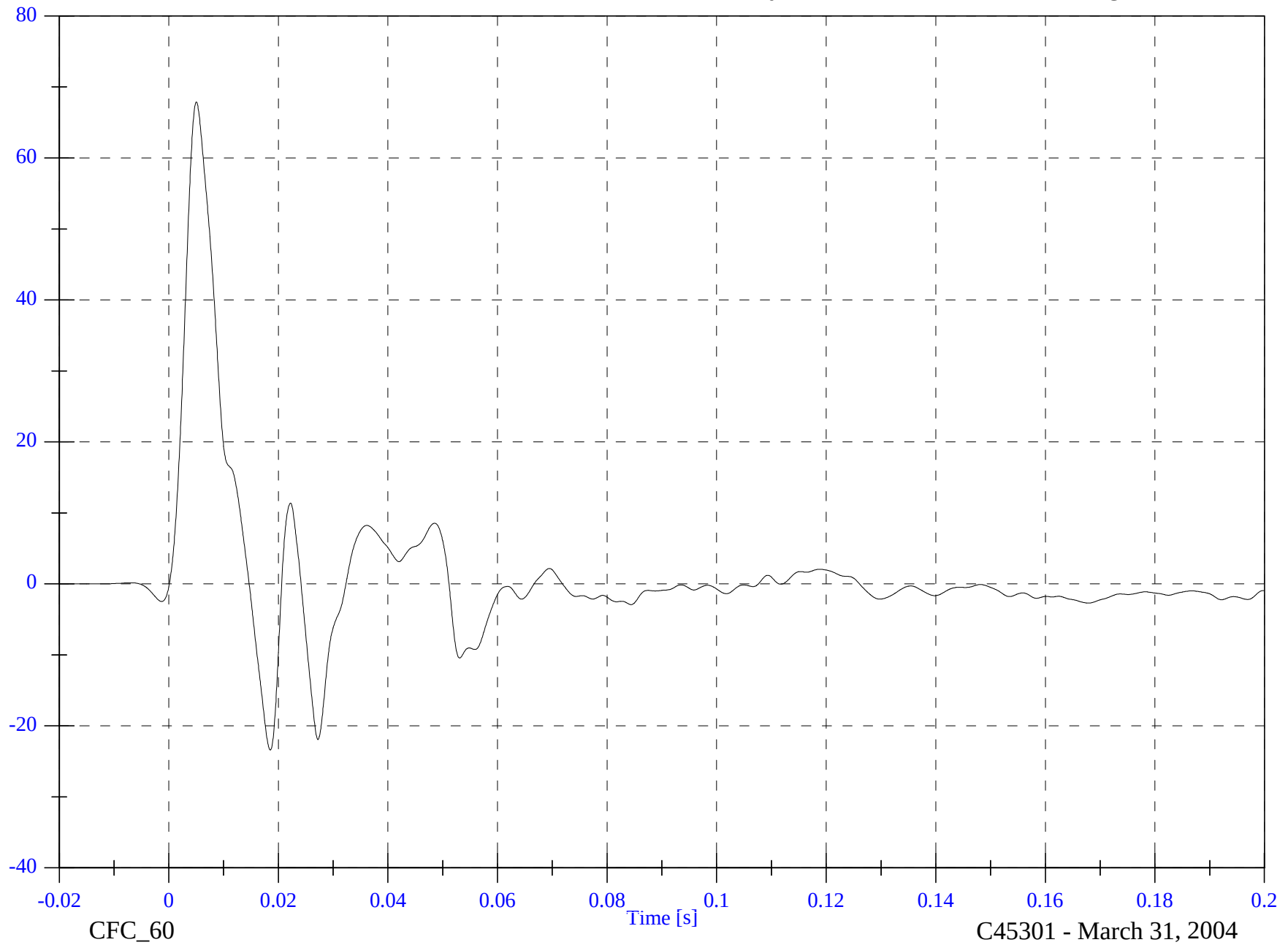
Max: 67.9 [g] at 0.005 [s]

Min: -23.4 [g] at 0.018 [s]

B-83

g

8675-F214-16

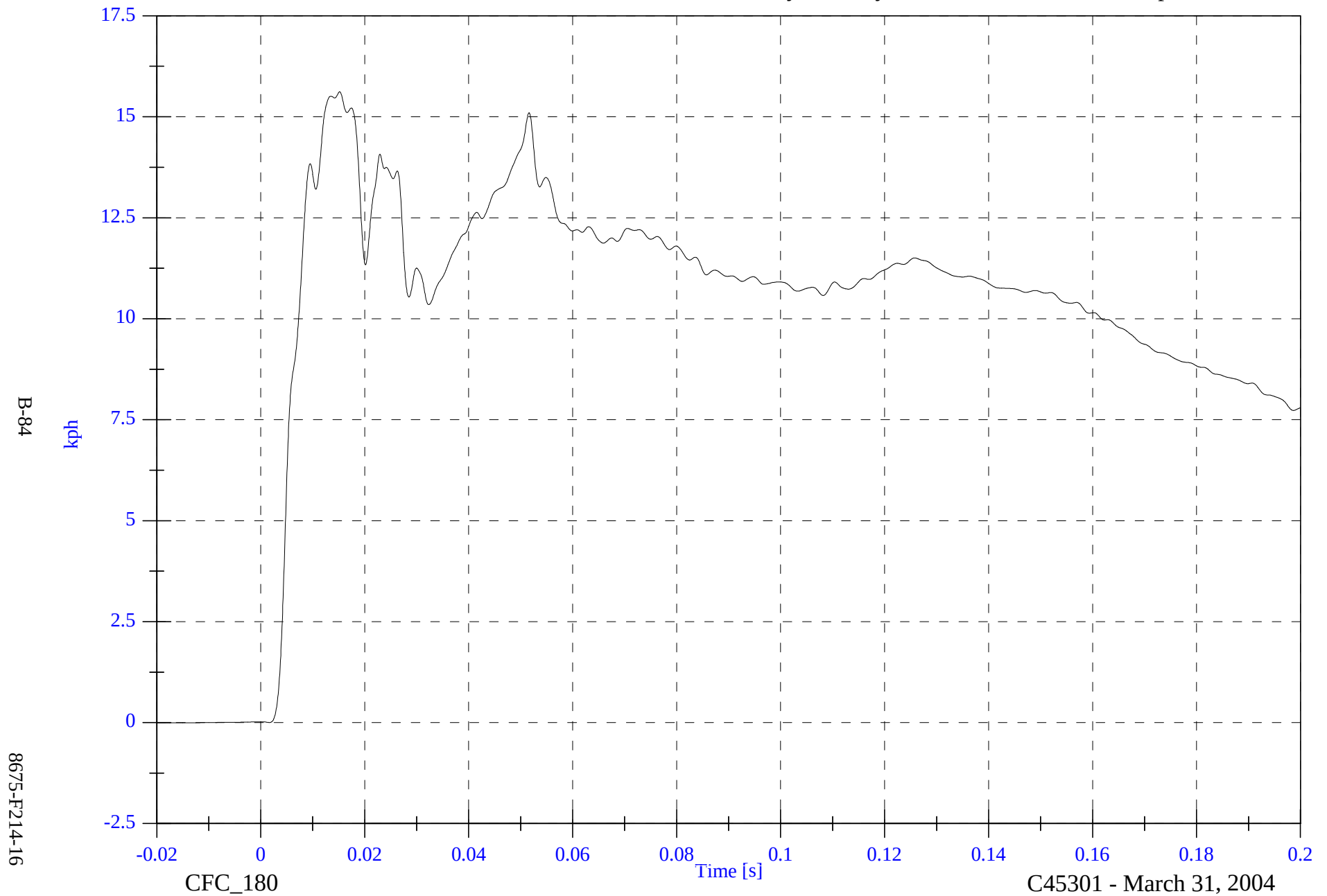


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A5 Left Front Sill y Velocity

Max: 15.6 [kph] at 0.015 [s]

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



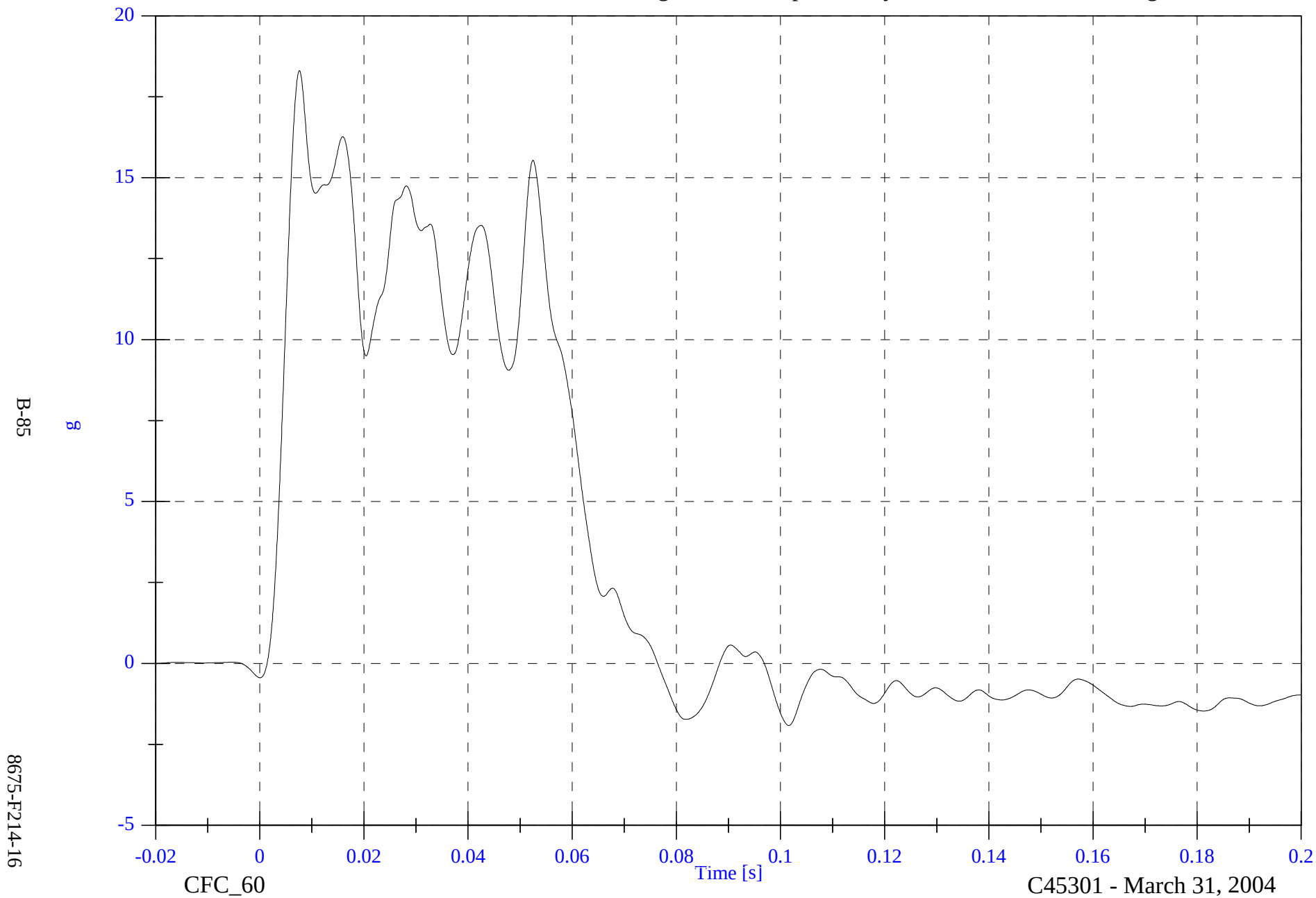
2004 FMVSS 214D Test 6

2004 Acura TL

Max: 18.3 [g] at 0.008 [s]

Min: -1.9 [g] at 0.102 [s]

V2 A7 Right Rear Compartment y



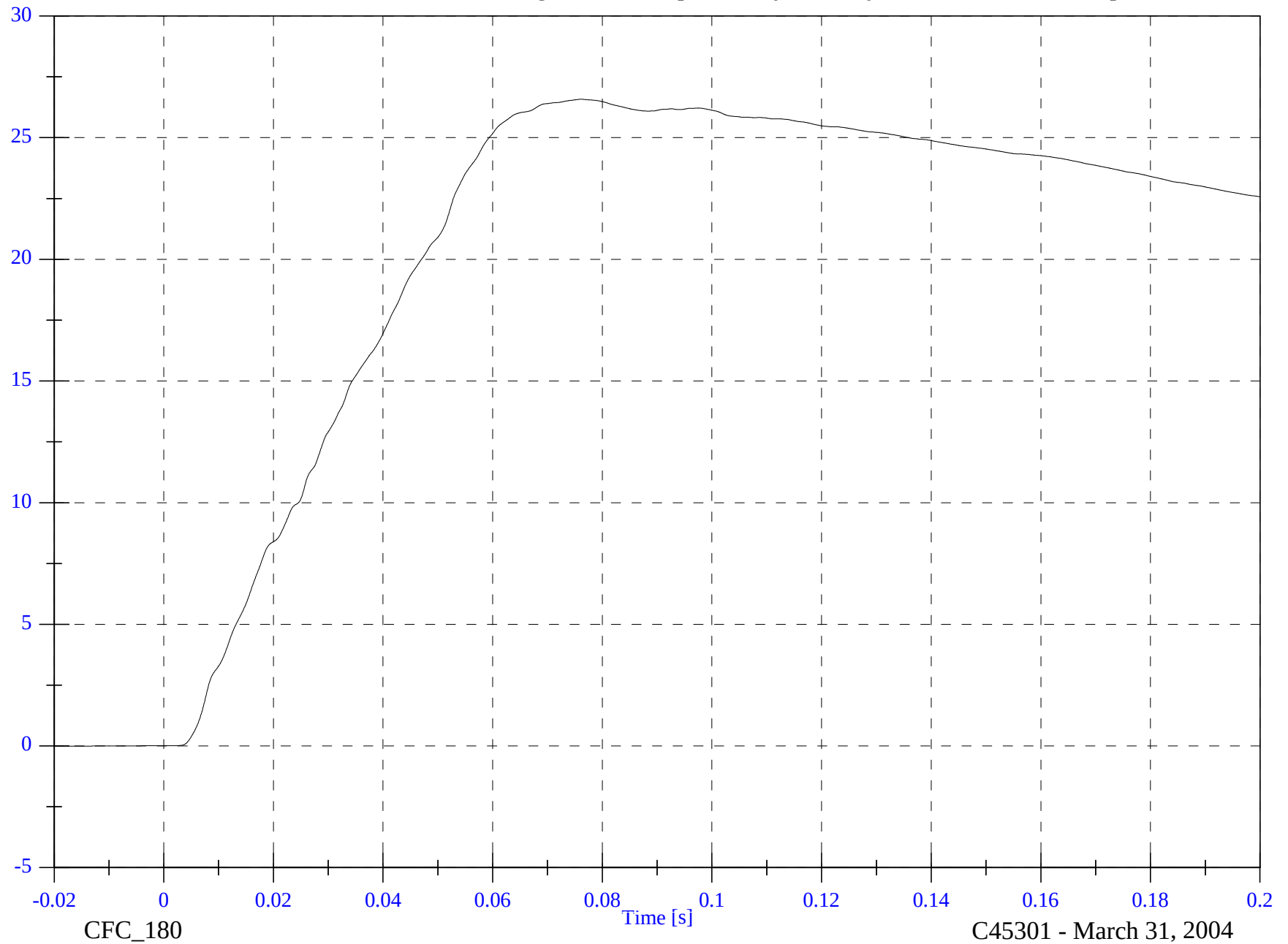
2004 FMVSS 214D Test 6

2004 Acura TL

Max: 26.6 [kph] at 0.076 [s]

V2 A7 Right Rear Compartment y Velocity

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



B-86

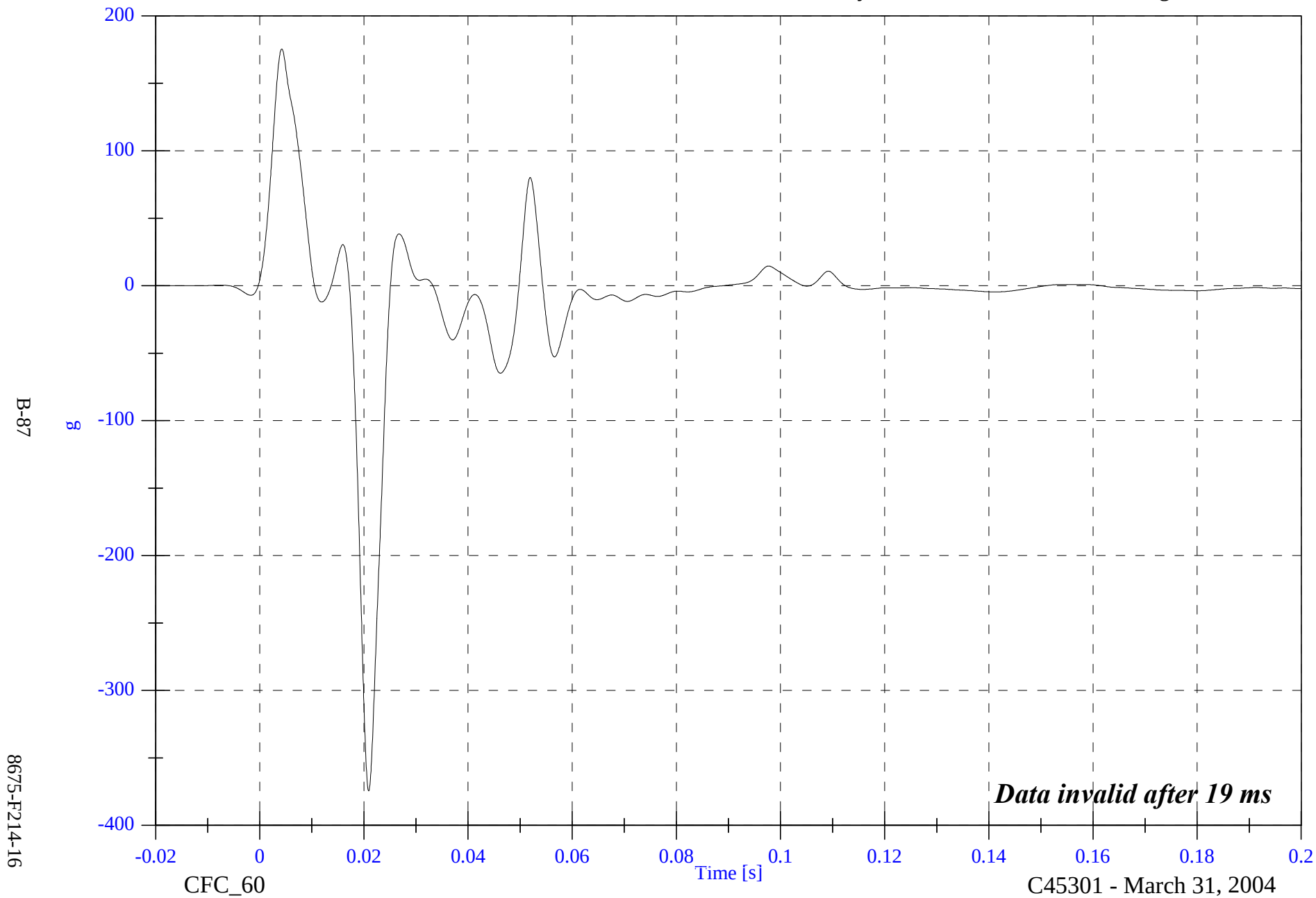
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2 A12 Left Lower B Post y

Max: 175.5 [g] at 0.004 [s]

Min: -374.5 [g] at 0.021 [s]



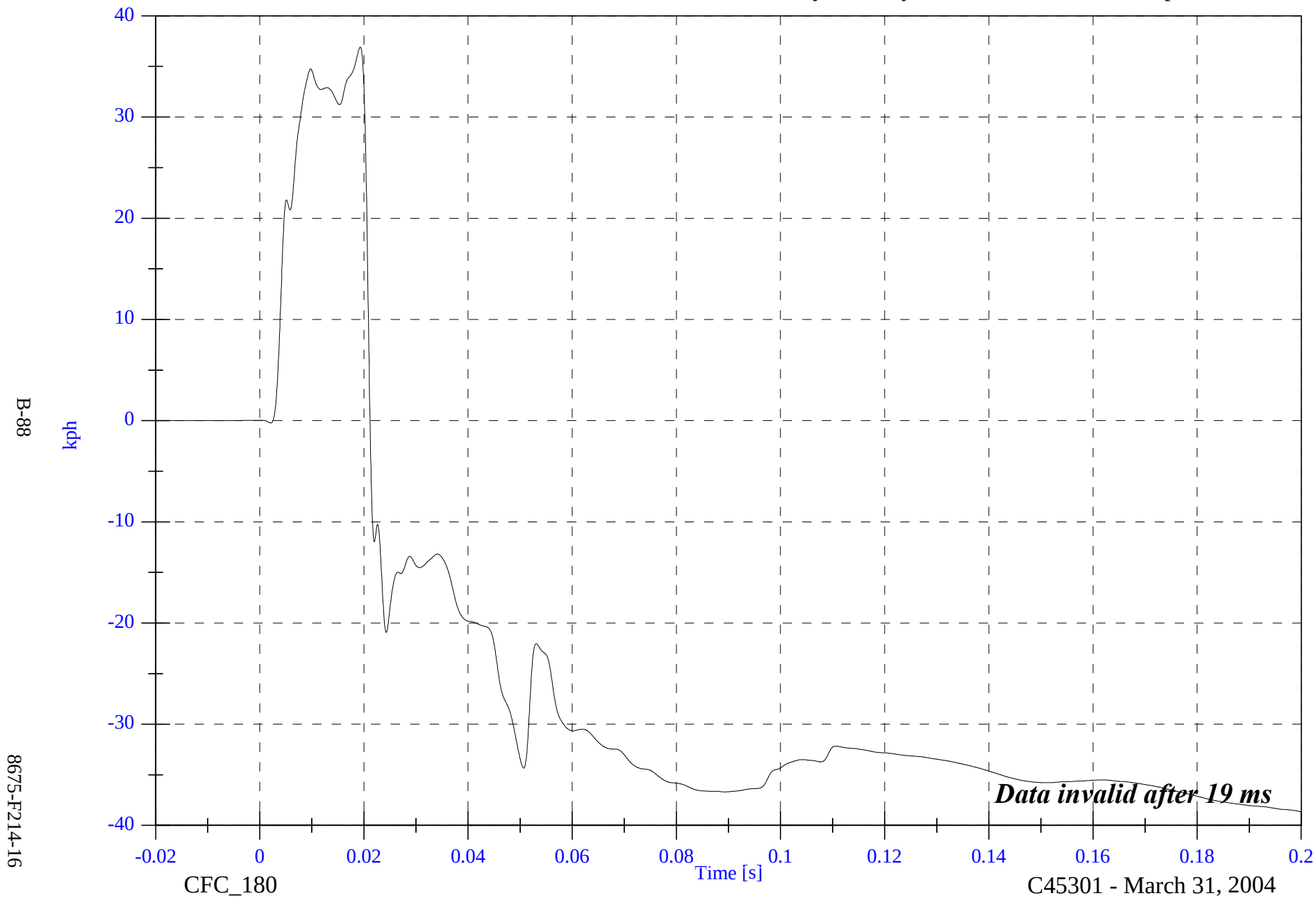
2004 FMVSS 214D Test 6

2004 Acura TL

Max: 36.9 [kph] at 0.019 [s]

Min: -38.6 [kph] at 0.200 [s]

V2 A12 Left Lower B Post y Velocity

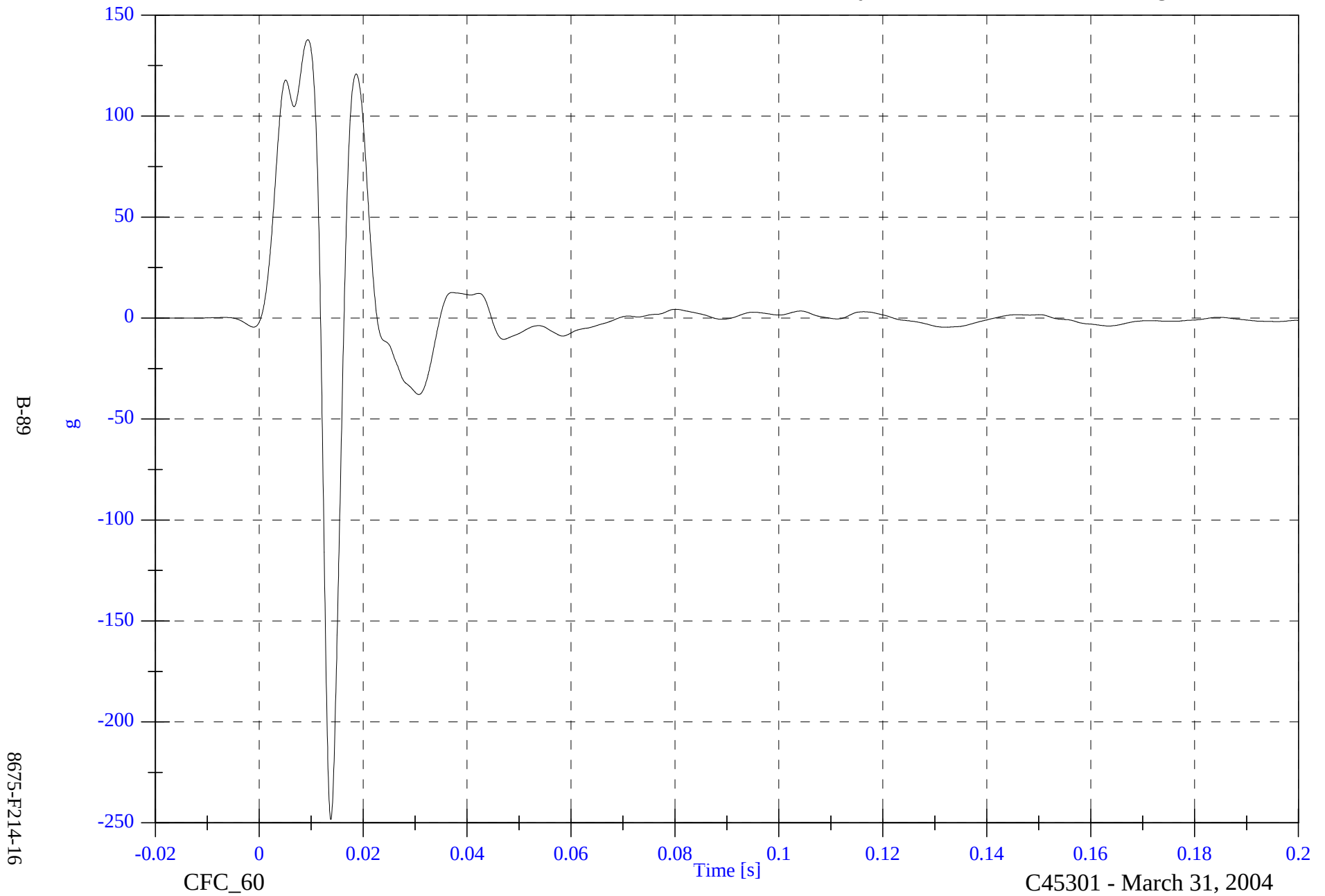


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A13 Left Middle B Post y

Max: 137.9 [g] at 0.009 [s]

Min: -248.3 [g] at 0.014 [s]



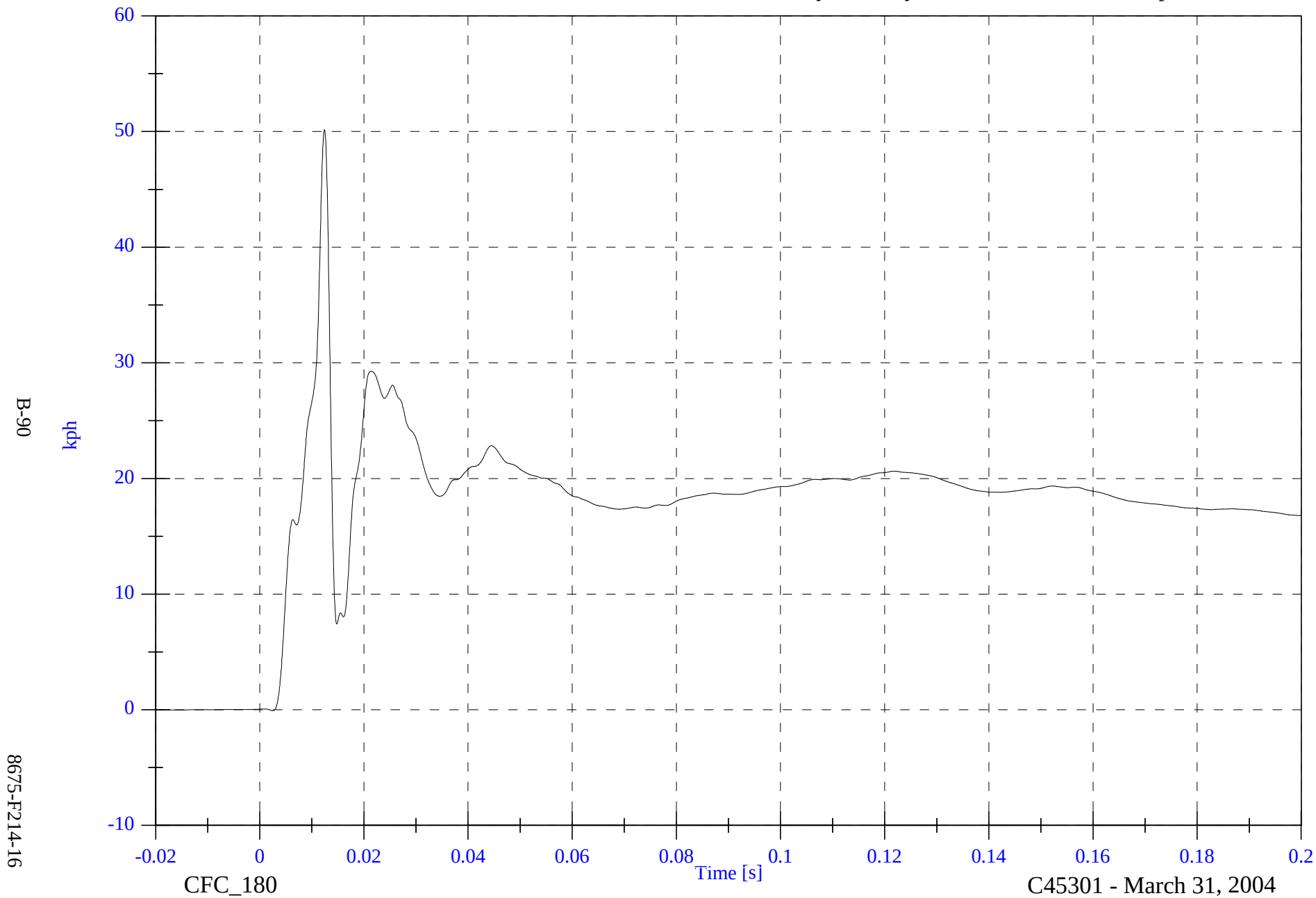
2004 FMVSS 214D Test 6

2004 Acura TL

Max: 50.2 [kph] at 0.012 [s]

V2 A13 Left Middle B Post y Velocity

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

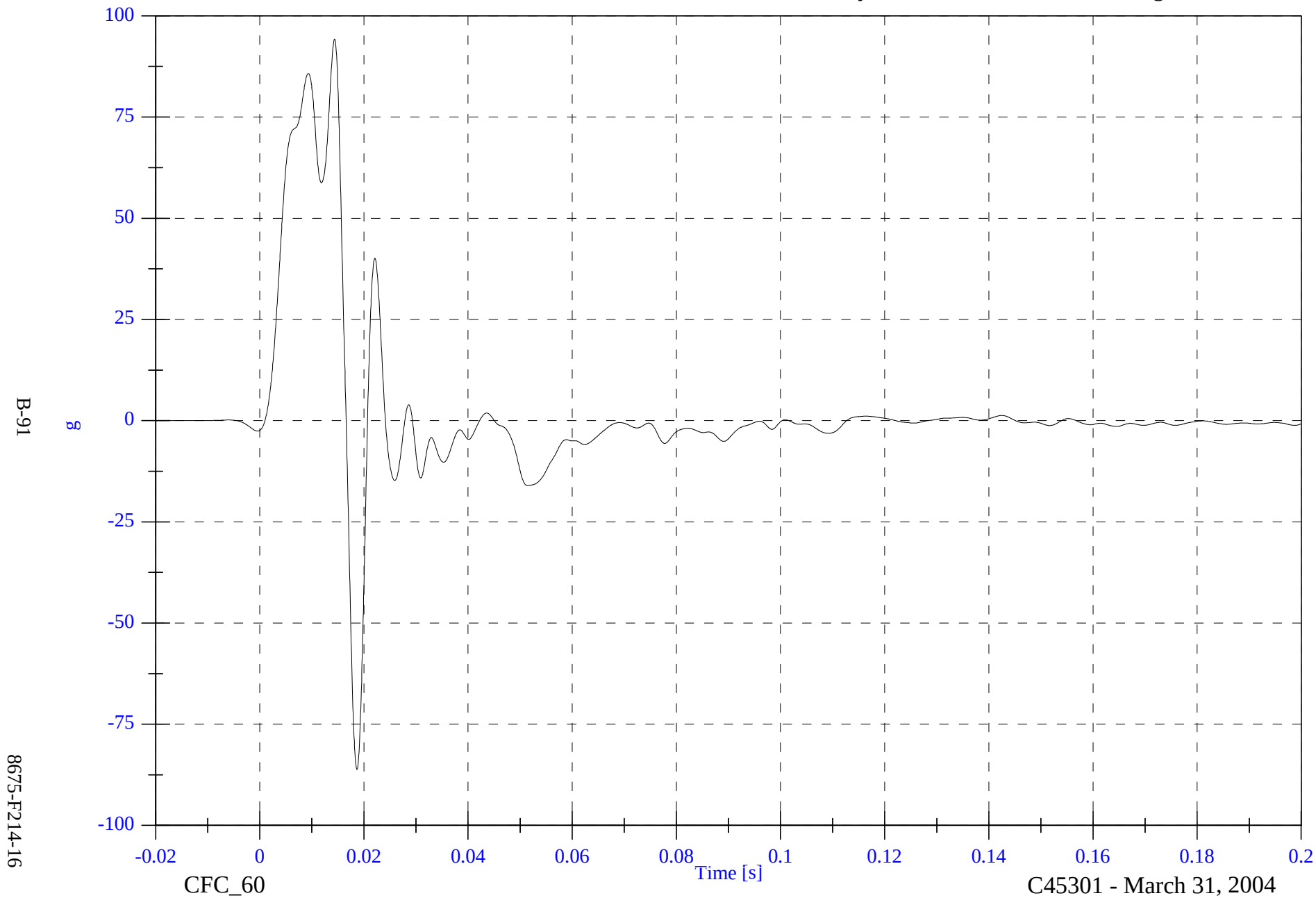


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A14 Left Lower A Post y

Max: 94.3 [g] at 0.014 [s]

Min: -86.2 [g] at 0.019 [s]



2004 FMVSS 214D Test 6

2004 Acura TL

Max: 35.7 [kph] at 0.017 [s]

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

V2 A14 Left Lower A Post y Velocity



2004 FMVSS 214D Test 6 2004 Acura TL

V2 A15 Left Mid A Post y

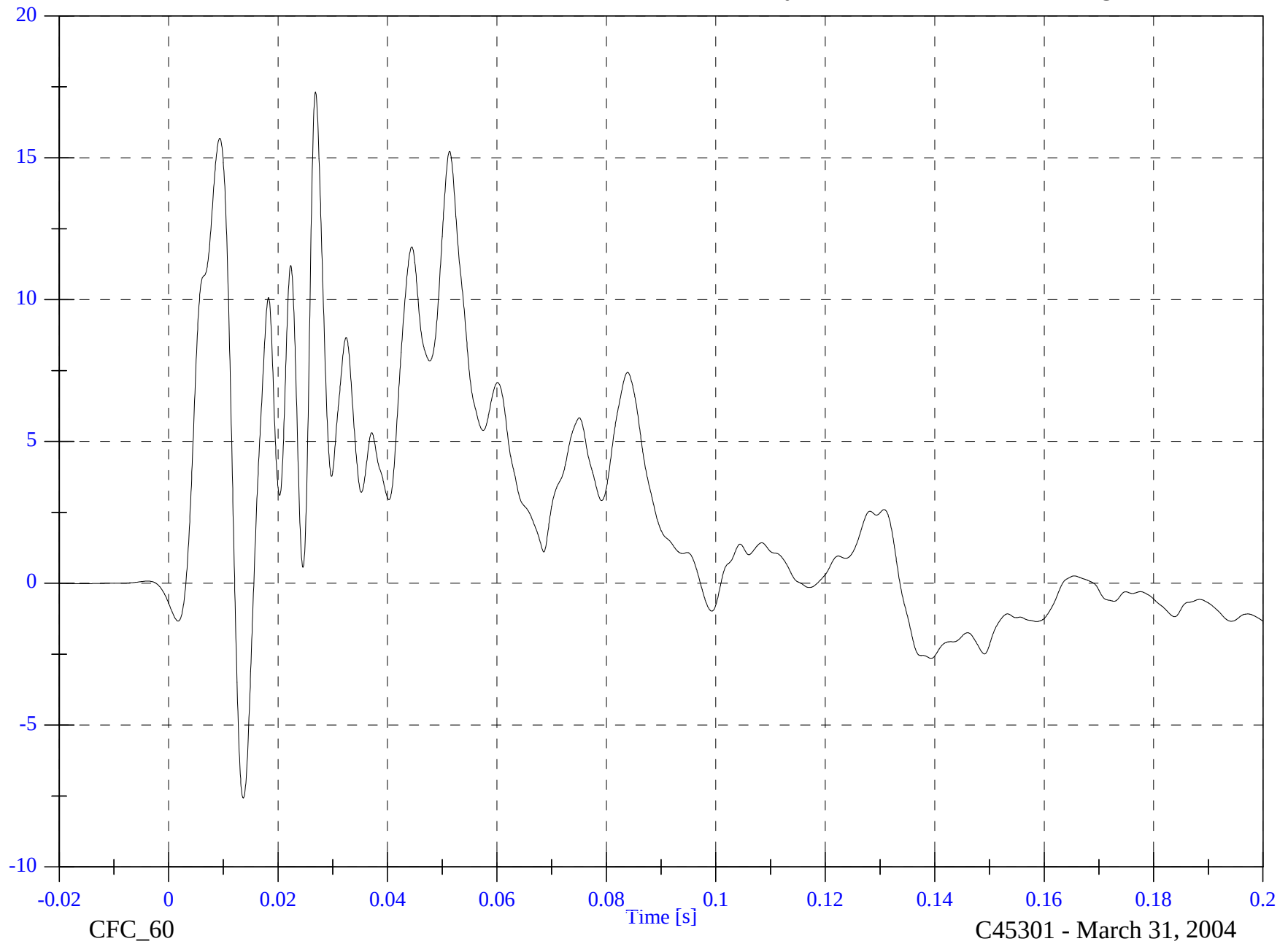
Max: 17.3 [g] at 0.027 [s]

Min: -7.6 [g] at 0.014 [s]

B-93

g

8675-F214-16



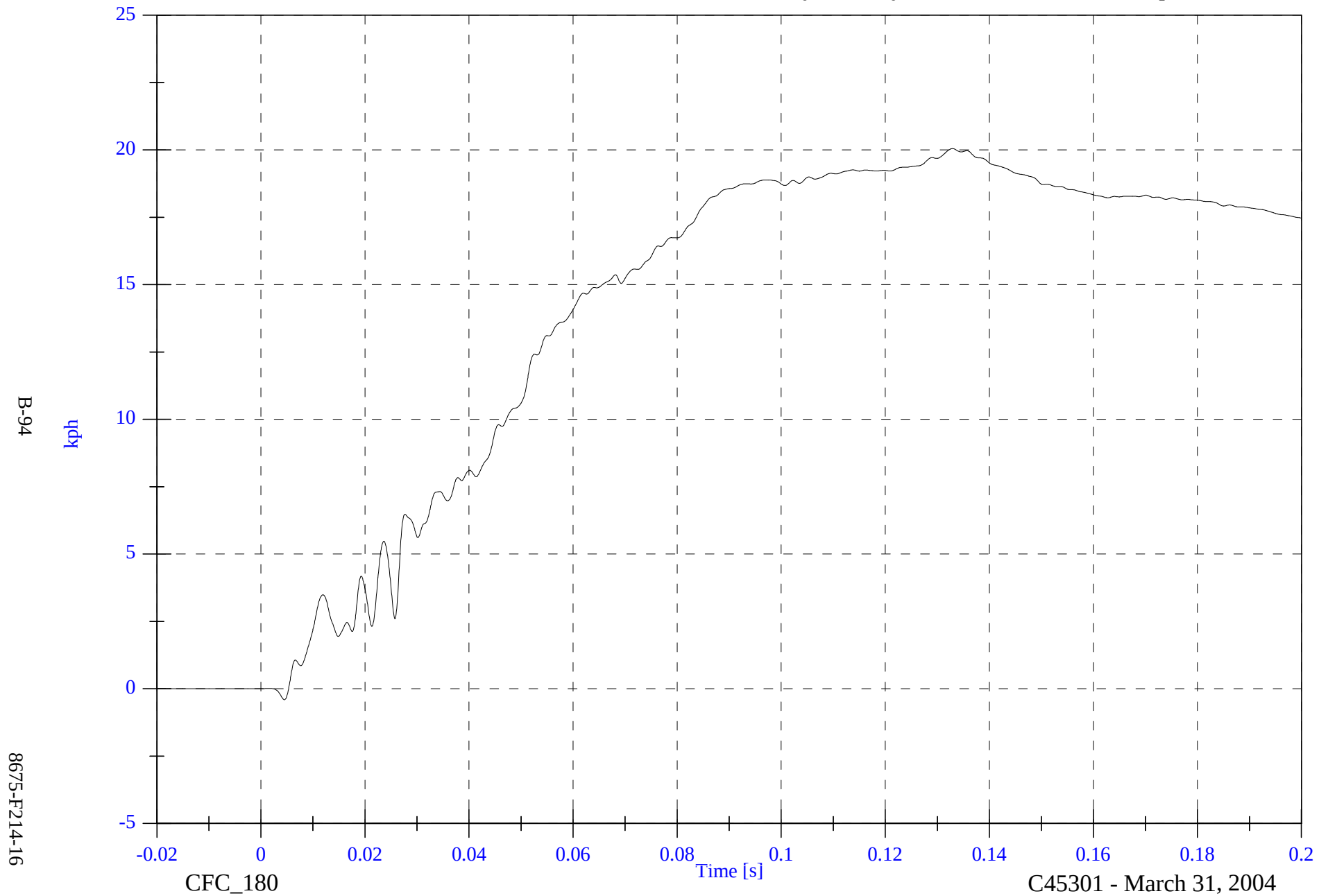
2004 FMVSS 214D Test 6

2004 Acura TL

Max: 20.0 [kph] at 0.133 [s]

Min: -0.4 [kph] at 0.004 [s]

V2 A15 Left Mid A Post y Velocity



B-94

8675-F214-16

CFC_180

Time [s]

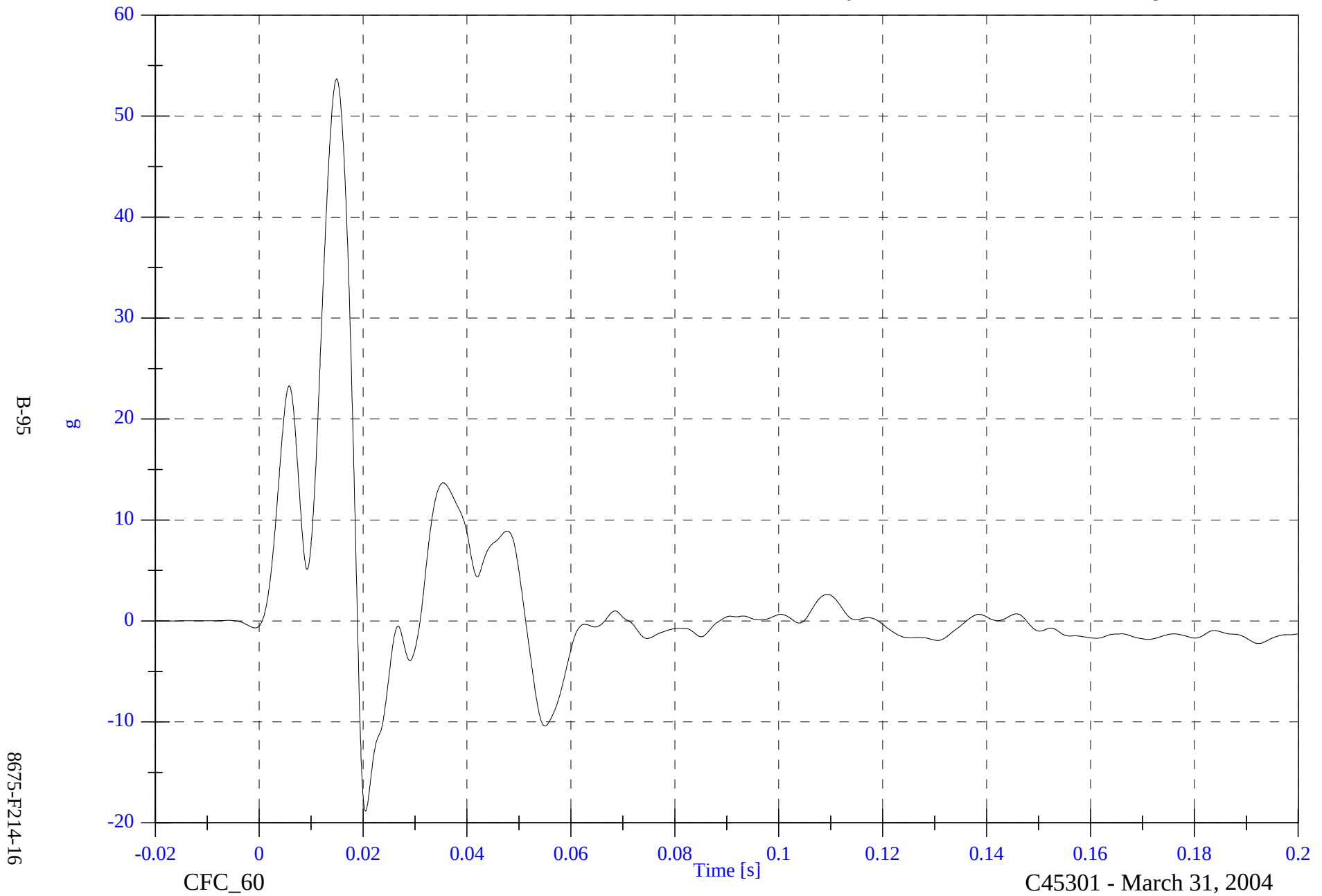
C45301 - March 31, 2004

2004 FMVSS 214D Test 6 2004 Acura TL

V2 A16 Front Seat Track y

Max: 53.7 [g] at 0.015 [s]

Min: -18.8 [g] at 0.020 [s]



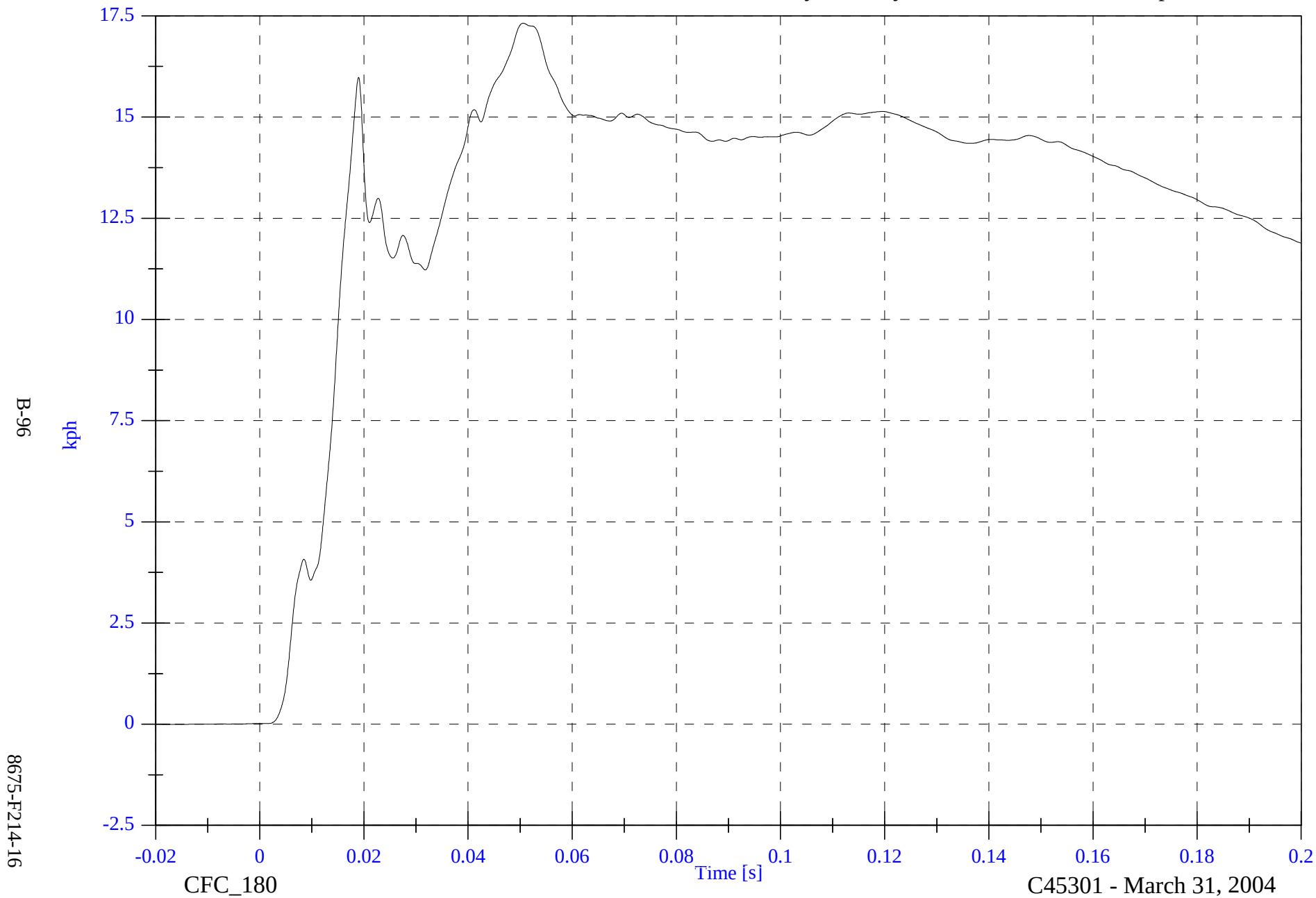
2004 FMVSS 214D Test 6

2004 Acura TL

Max: 17.3 [kph] at 0.051 [s]

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

V2 A16 Front Seat Track y Velocity



2004 FMVSS 214D Test 6 2004 Acura TL

V2 A17 Rear Seat Track y

Max: 24.7 [g] at 0.024 [s]

Min: -3.1 [g] at 0.105 [s]

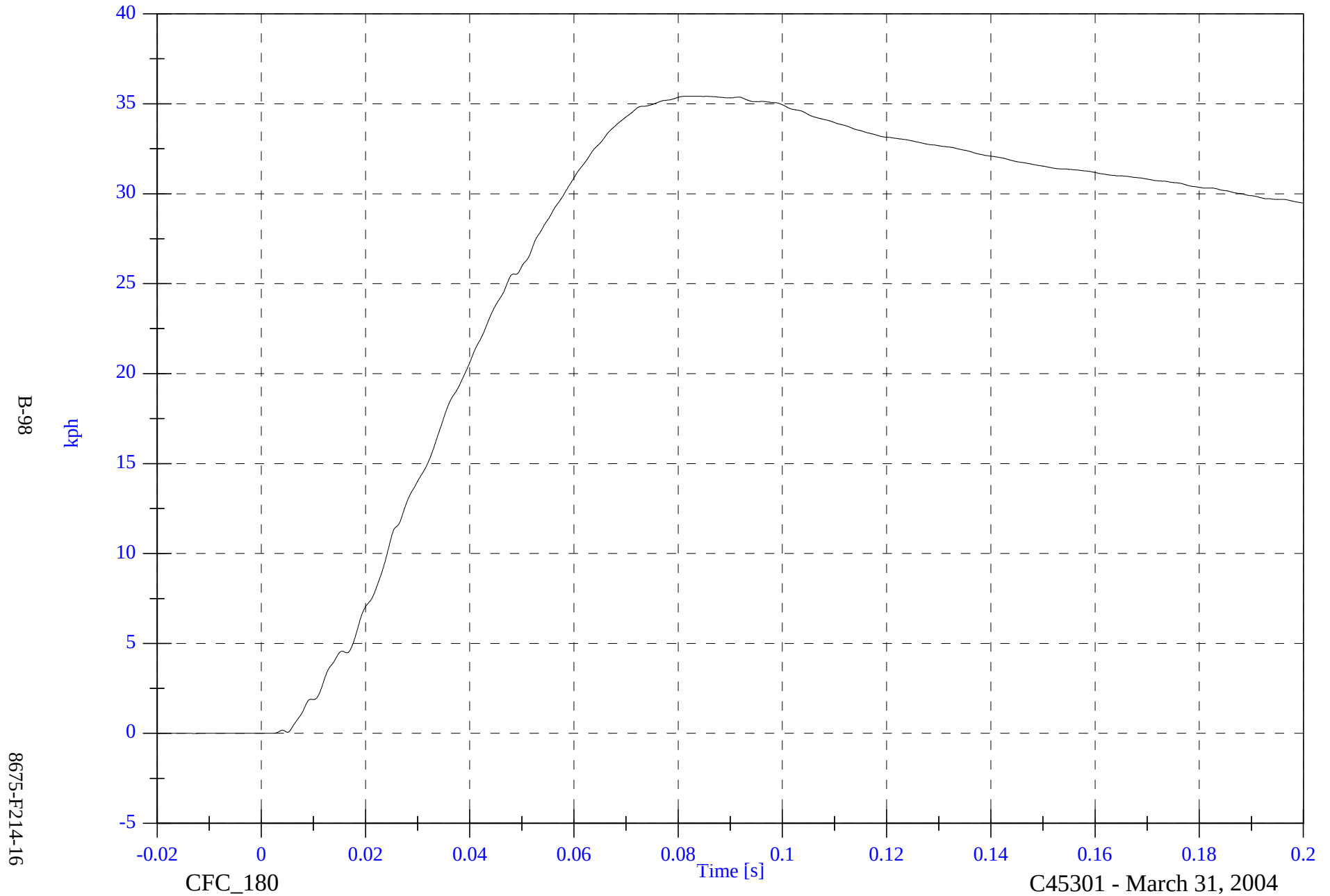


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A17 Rear Seat Track y Velocity

Max: 35.4 [kph] at 0.083 [s]

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



2004 FMVSS 214D Test 6 2004 Acura TL

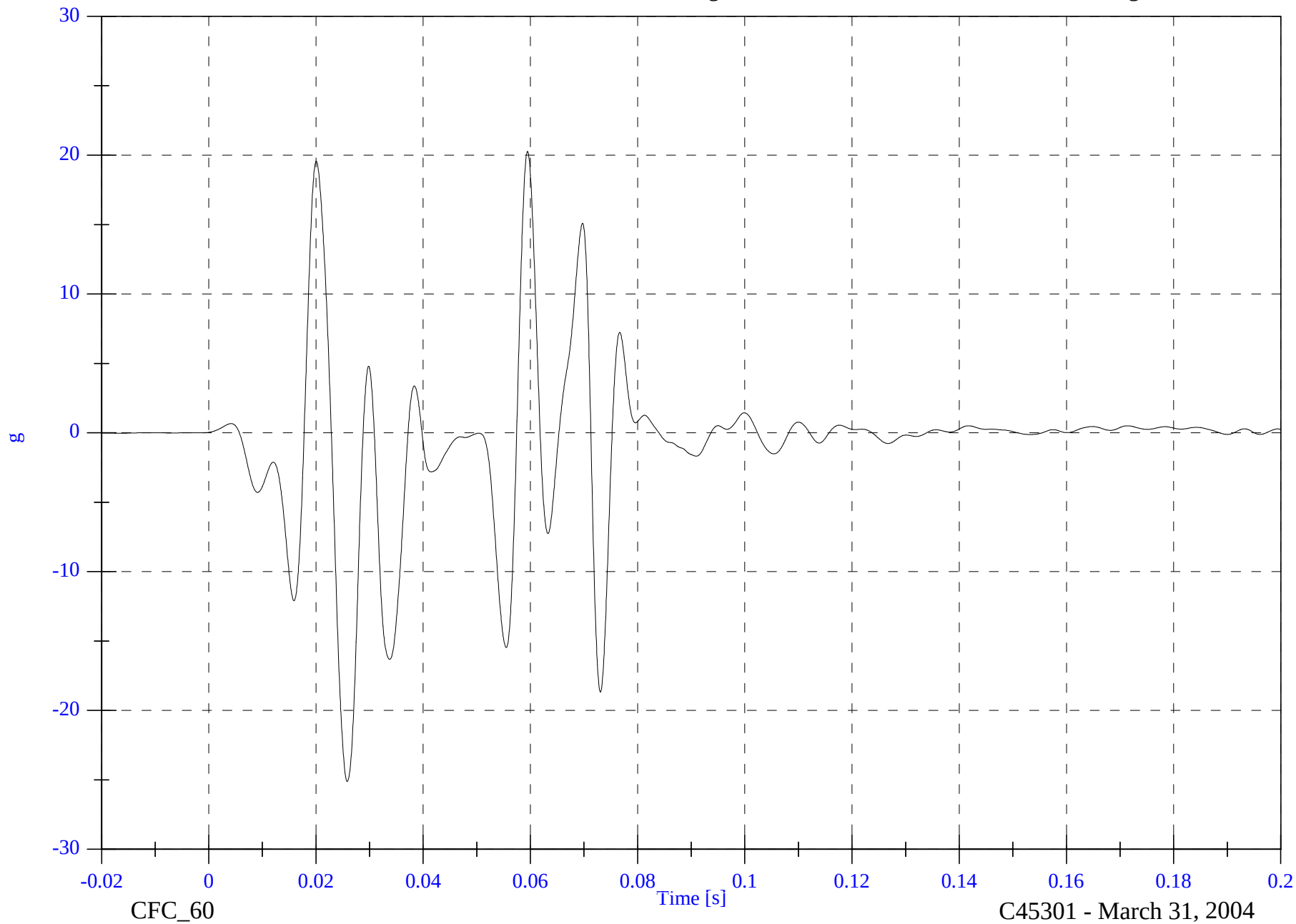
V2 A18 Target CG x

Max: 20.3 [g] at 0.059 [s]

Min: -25.1 [g] at 0.026 [s]

B-99

8675-F214-16

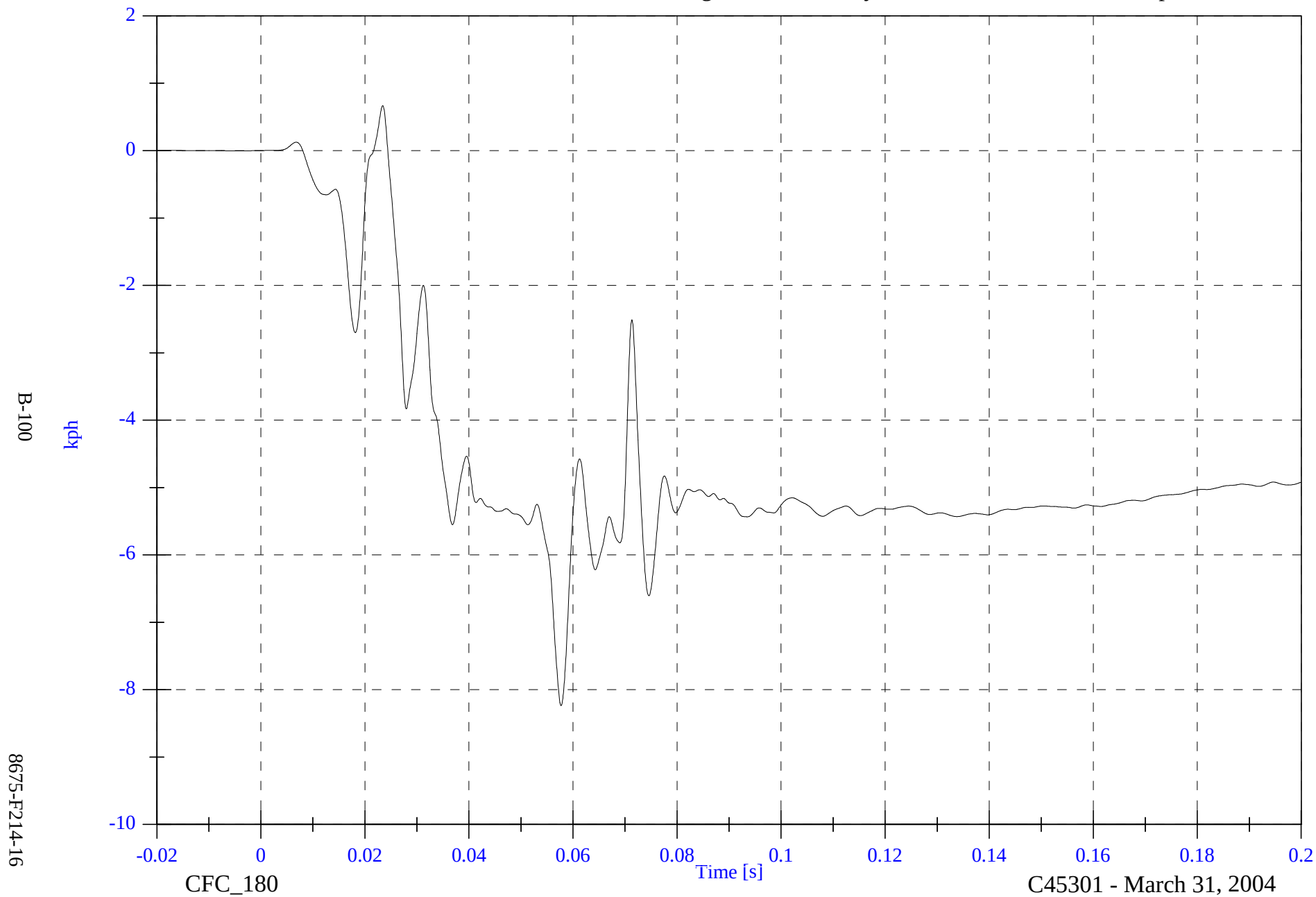


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A18 Target CG x Velocity

Max: 0.7 [kph] at 0.023 [s]

Min: -8.2 [kph] at 0.058 [s]

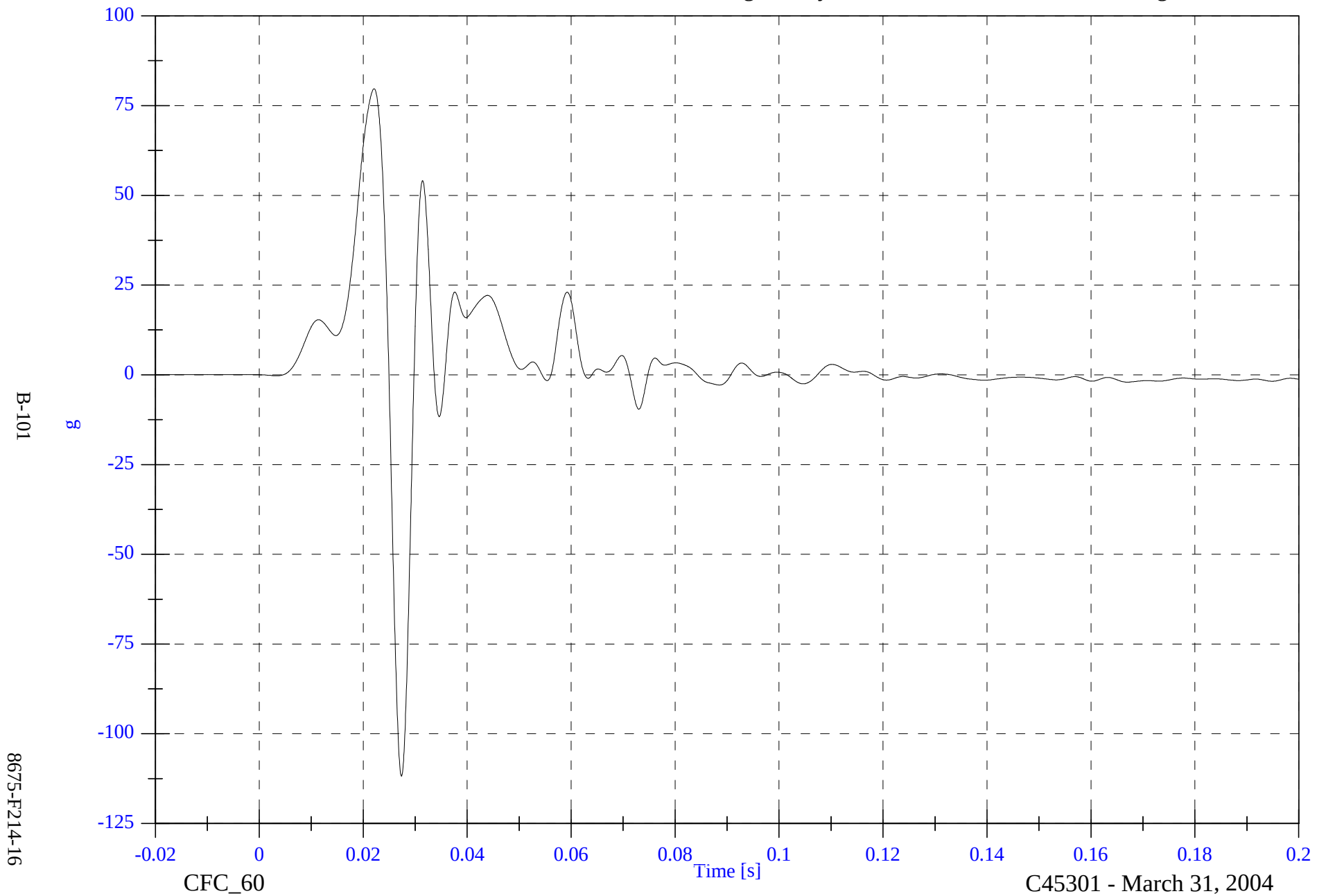


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A18 Target CG y

Max: 79.7 [g] at 0.022 [s]

Min: -111.8 [g] at 0.027 [s]

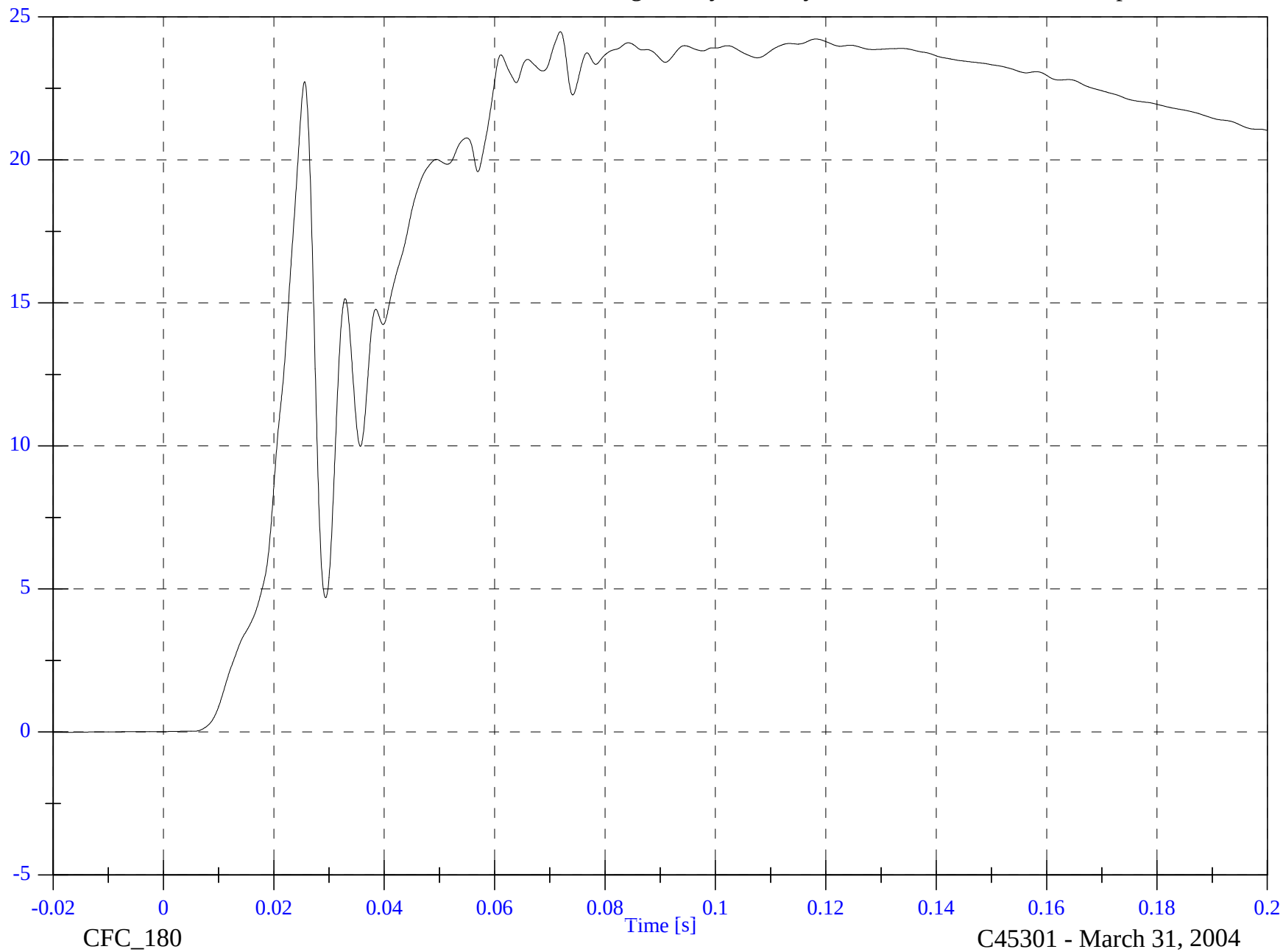


2004 FMVSS 214D Test 6 2004 Acura TL

V2 A18 Target CG y Velocity

Max: 24.5 [kph] at 0.072 [s]

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



B-102

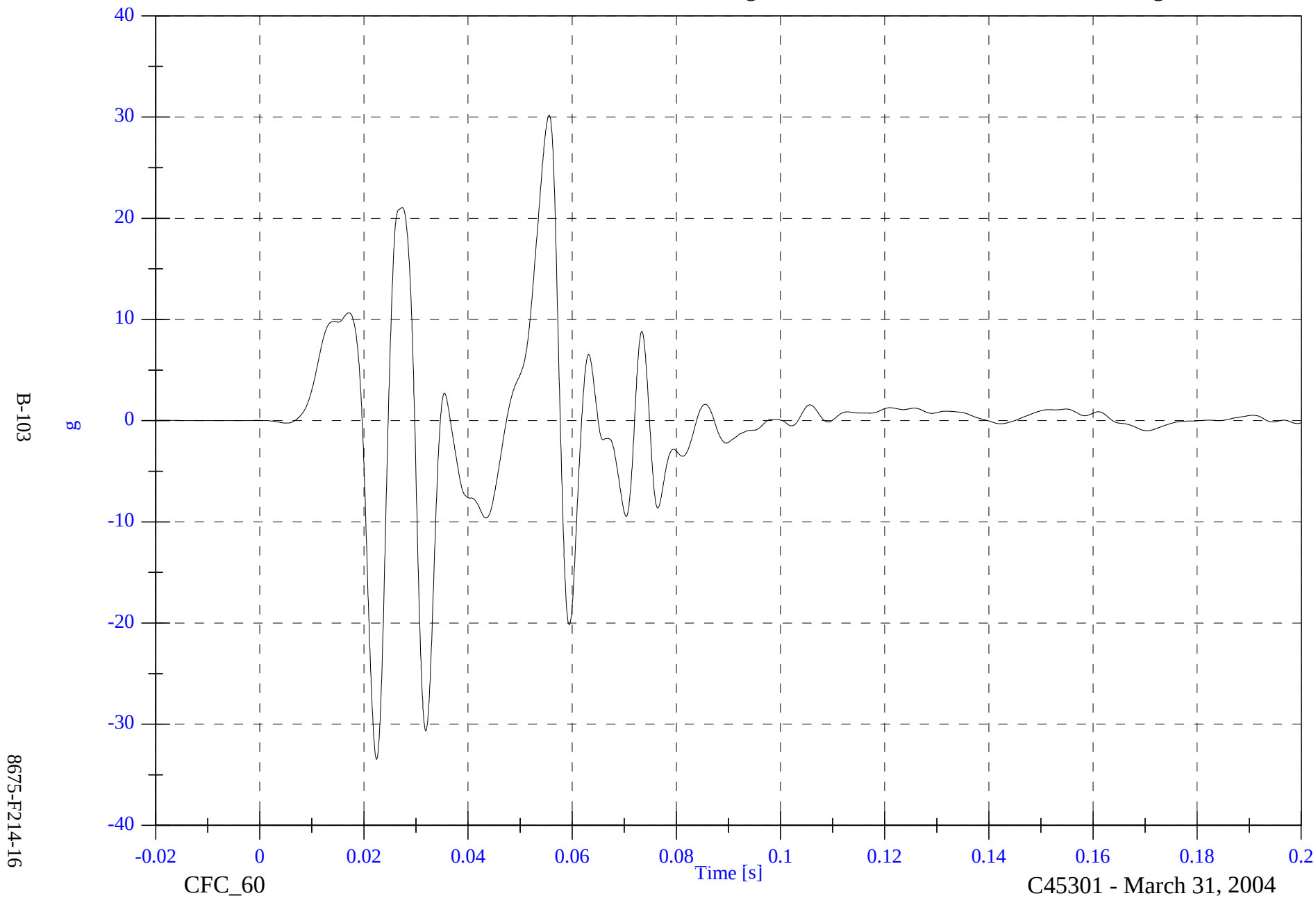
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2 A18 Target CG z

Max: 30.2 [g] at 0.056 [s]

Min: -33.5 [g] at 0.022 [s]



2004 FMVSS 214D Test 6 2004 Acura TL

V2 A18 Target CG z Velocity

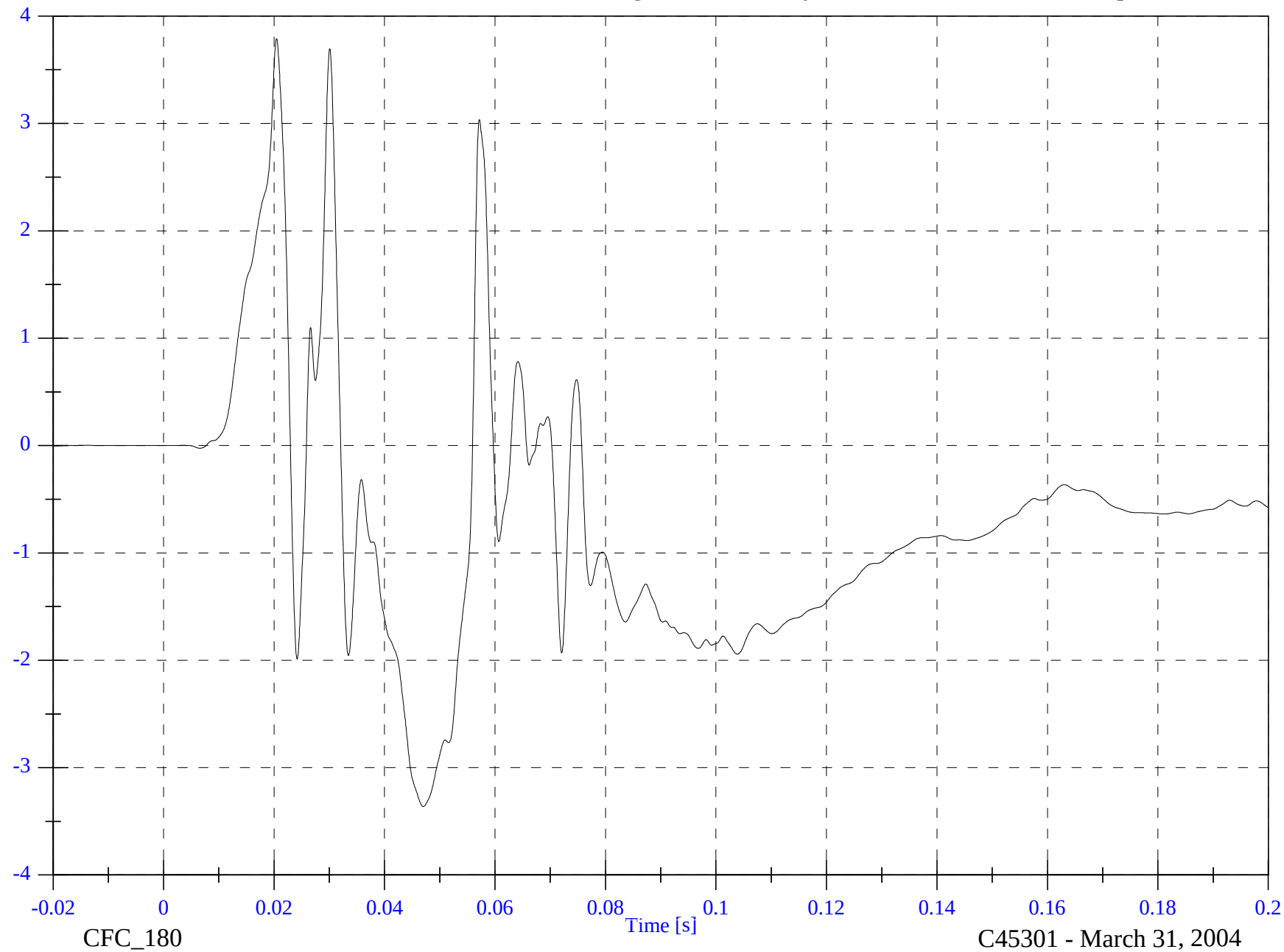
Max: 3.8 [kph] at 0.020 [s]

Min: -3.4 [kph] at 0.047 [s]

B-104

kph

8675-F214-16



CFC_180

C45301 - March 31, 2004

2004 FMVSS 214D Test 6

2004 Acura TL

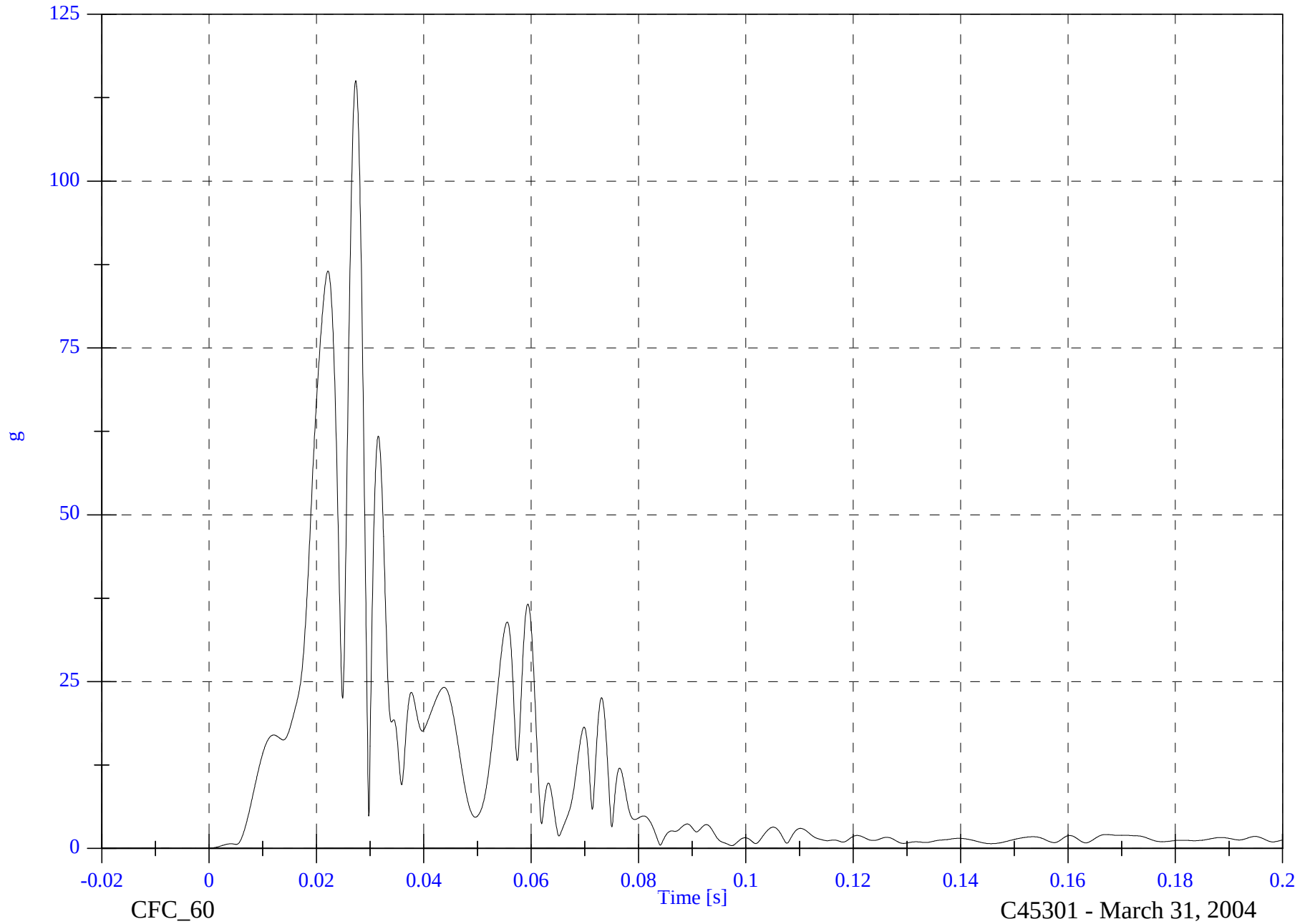
V2 A18 Target CG Resultant

Max: 115.0 [g] at 0.027 [s]

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

B-105

8675-F214-16



2004 FMVSS 214D Test 6 2004 Acura TL

V1 Moving Barrier CG X

Max: 1.4 [g] at 0.107 [s]

Min: -21.3 [g] at 0.037 [s]



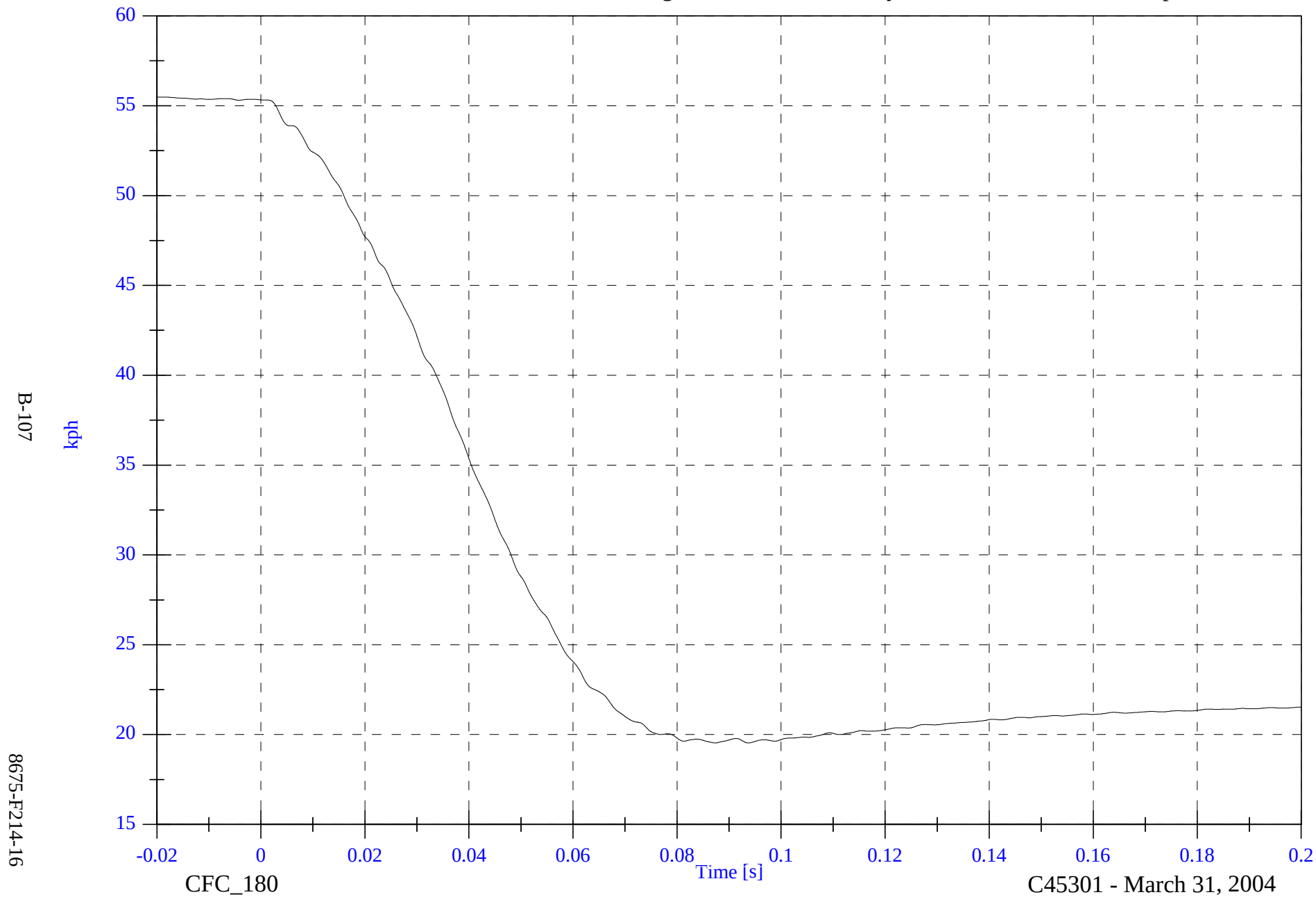
2004 FMVSS 214D Test 6

2004 Acura TL

Max: 55.5 [kph] at -0.020 [s]

Min: 19.5 [kph] at 0.087 [s]

V1 Moving Barrier CG X Velocity

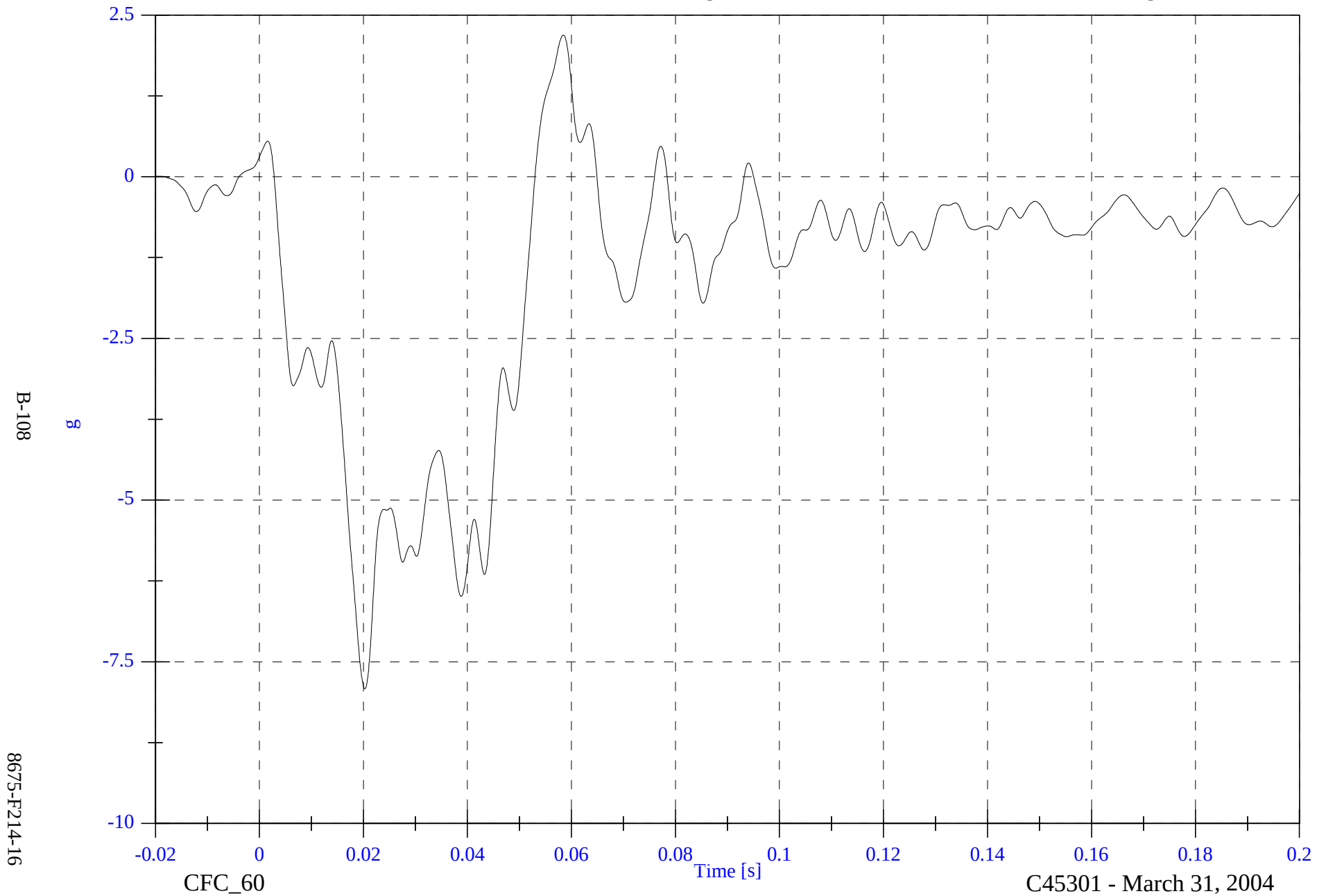


2004 FMVSS 214D Test 6 2004 Acura TL

V1 Moving Barrier CG Y

Max: 2.2 [g] at 0.058 [s]

Min: -7.9 [g] at 0.020 [s]



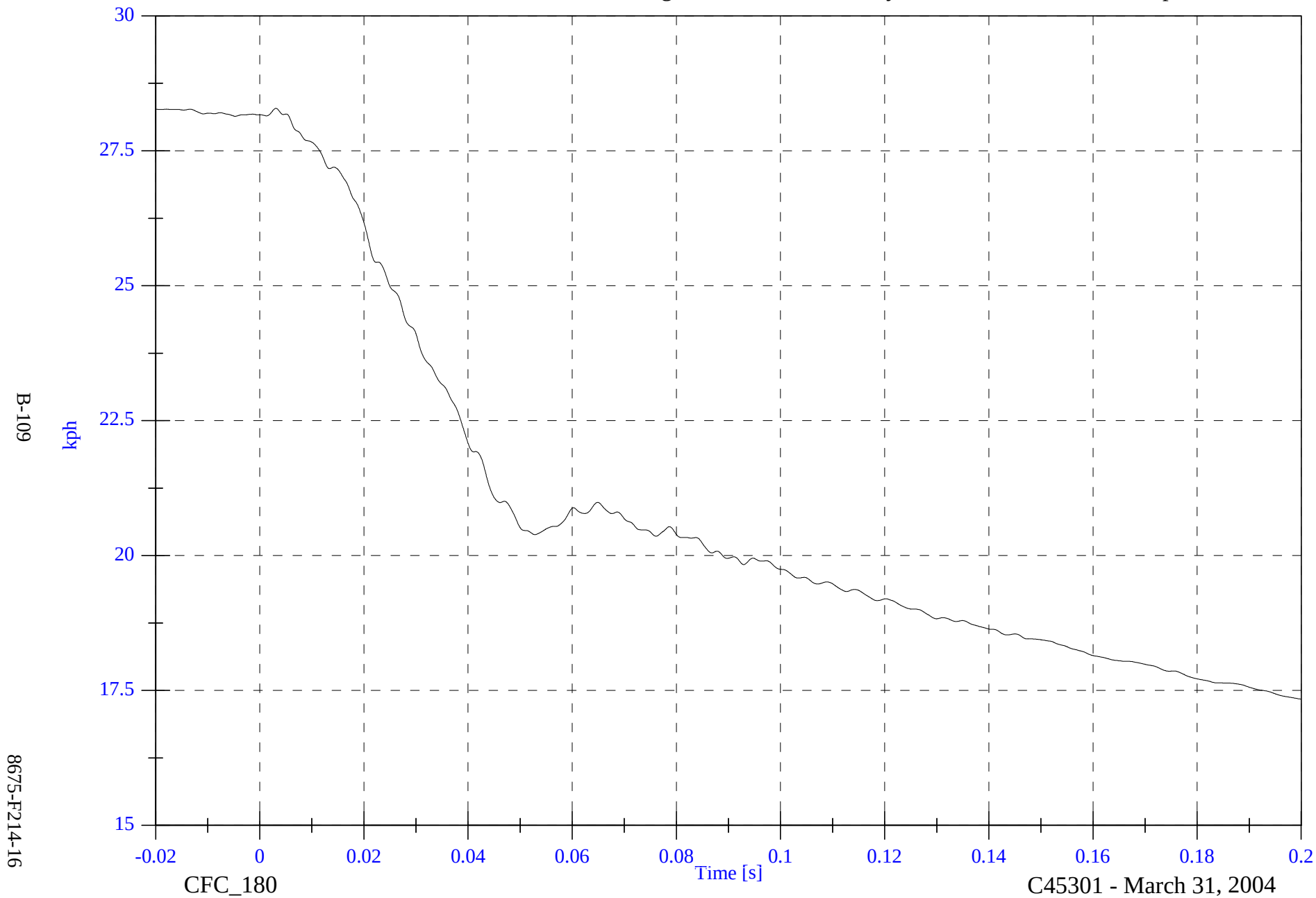
2004 FMVSS 214D Test 6

2004 Acura TL

Max: 28.3 [kph] at 0.003 [s]

Min: 17.3 [kph] at 0.200 [s]

V1 Moving Barrier CG Y Velocity

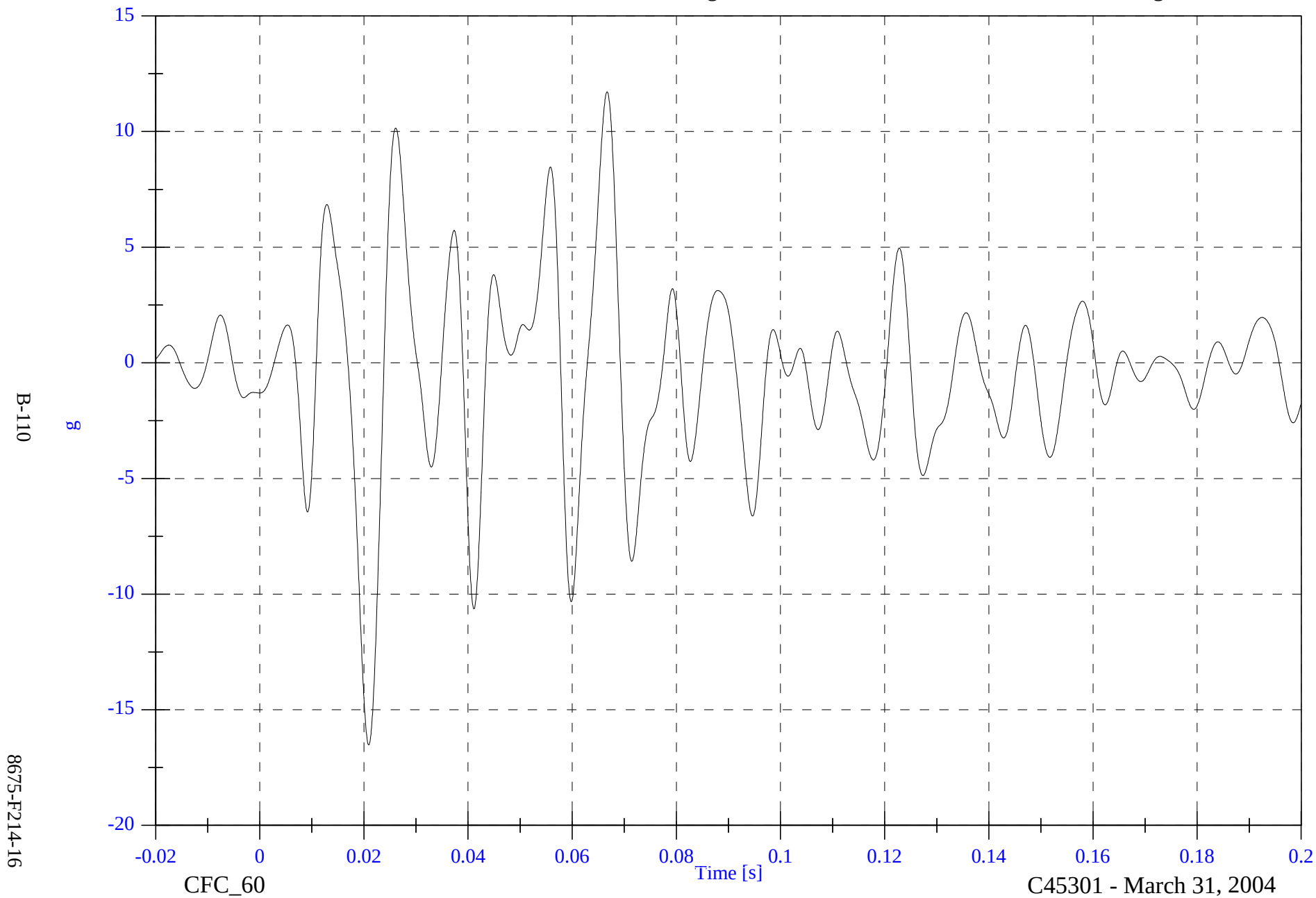


2004 FMVSS 214D Test 6 2004 Acura TL

V1 Moving Barrier CG Z

Max: 11.7 [g] at 0.067 [s]

Min: -16.5 [g] at 0.021 [s]



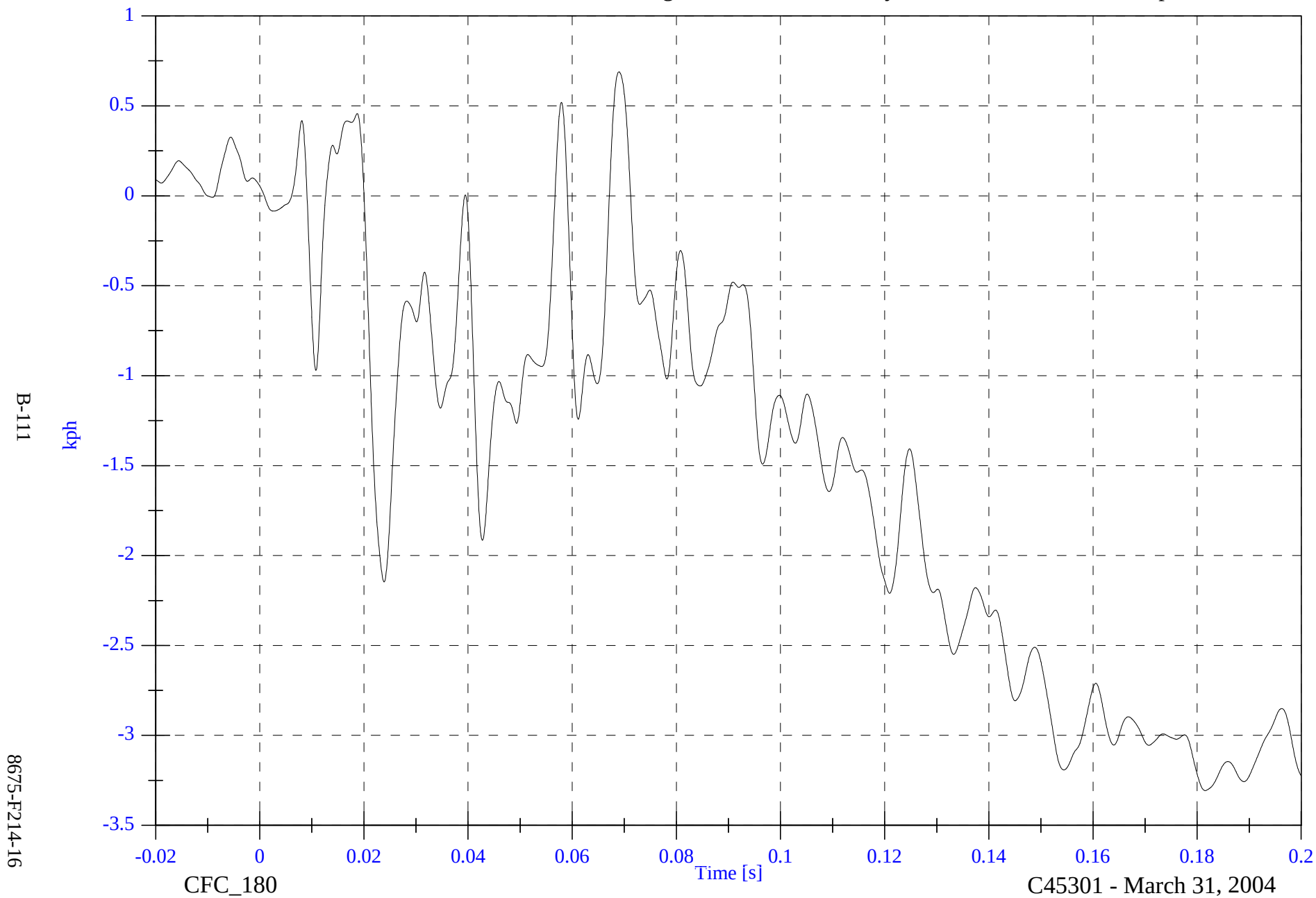
2004 FMVSS 214D Test 6

2004 Acura TL

Max: 0.7 [kph] at 0.069 [s]

Min: -3.3 [kph] at 0.182 [s]

V1 Moving Barrier CG Z Velocity



2004 FMVSS 214D Test 6

2004 Acura TL

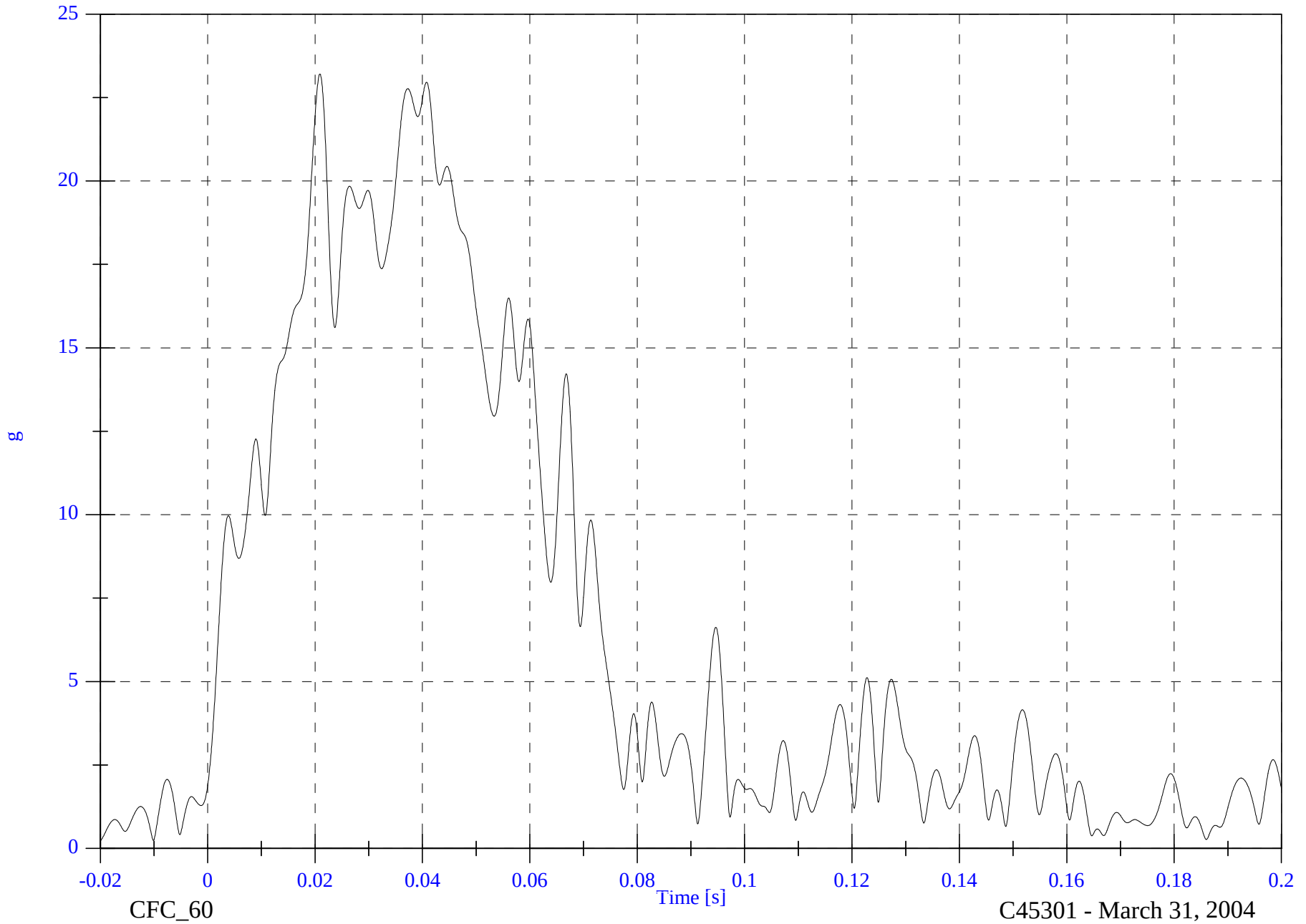
V1 Moving Barrier CG Resultant

Max: 23.2 [g] at 0.021 [s]

Min: 0.2 [g] at -0.020 [s]

B-112

8675-F214-16



2004 FMVSS 214D Test 6 2004 Acura TL

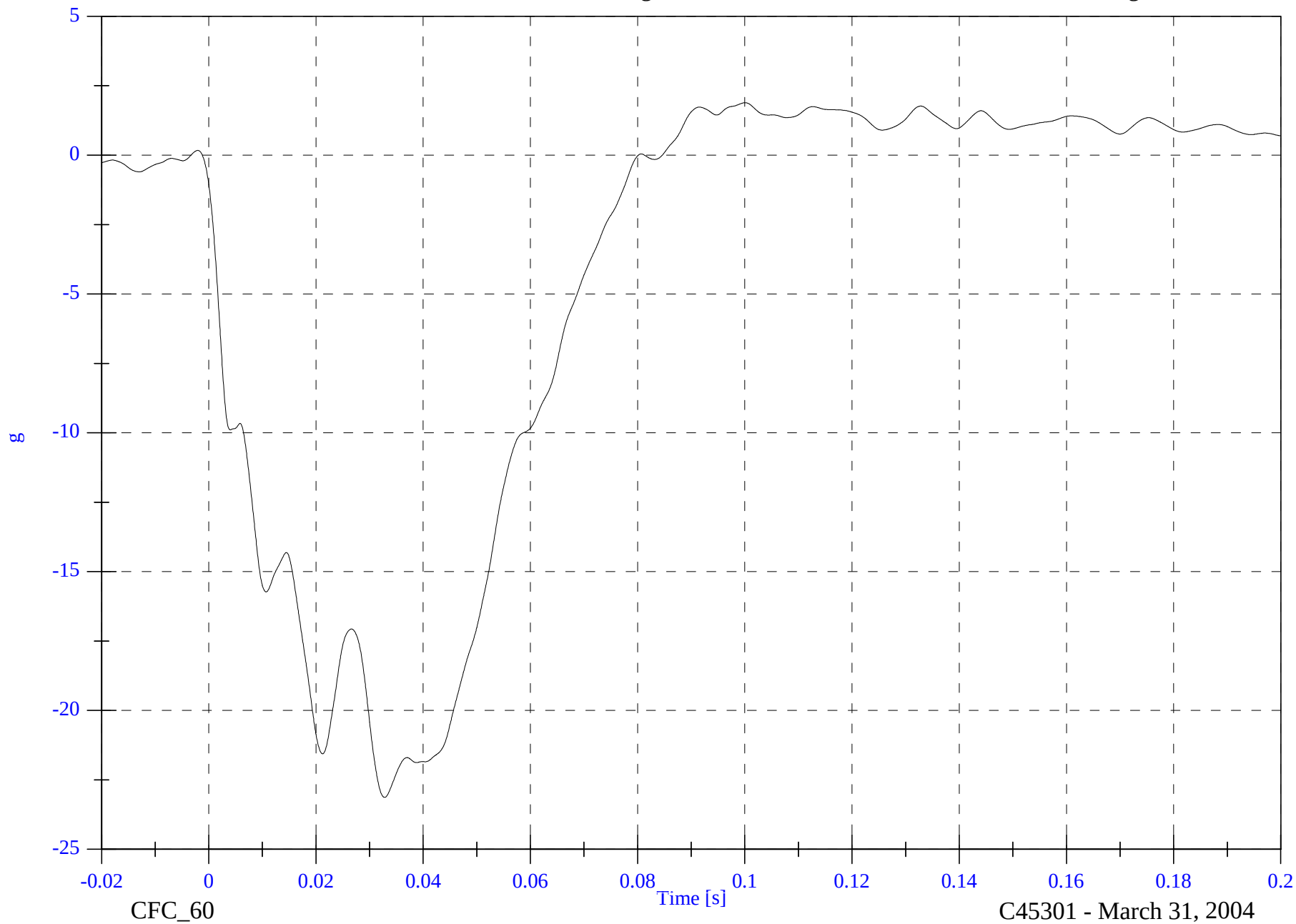
V1 Moving Barrier Left Rail X

Max: 1.9 [g] at 0.100 [s]

Min: -23.1 [g] at 0.033 [s]

B-113

8675-F214-16



2004 FMVSS 214D Test 6

2004 Acura TL

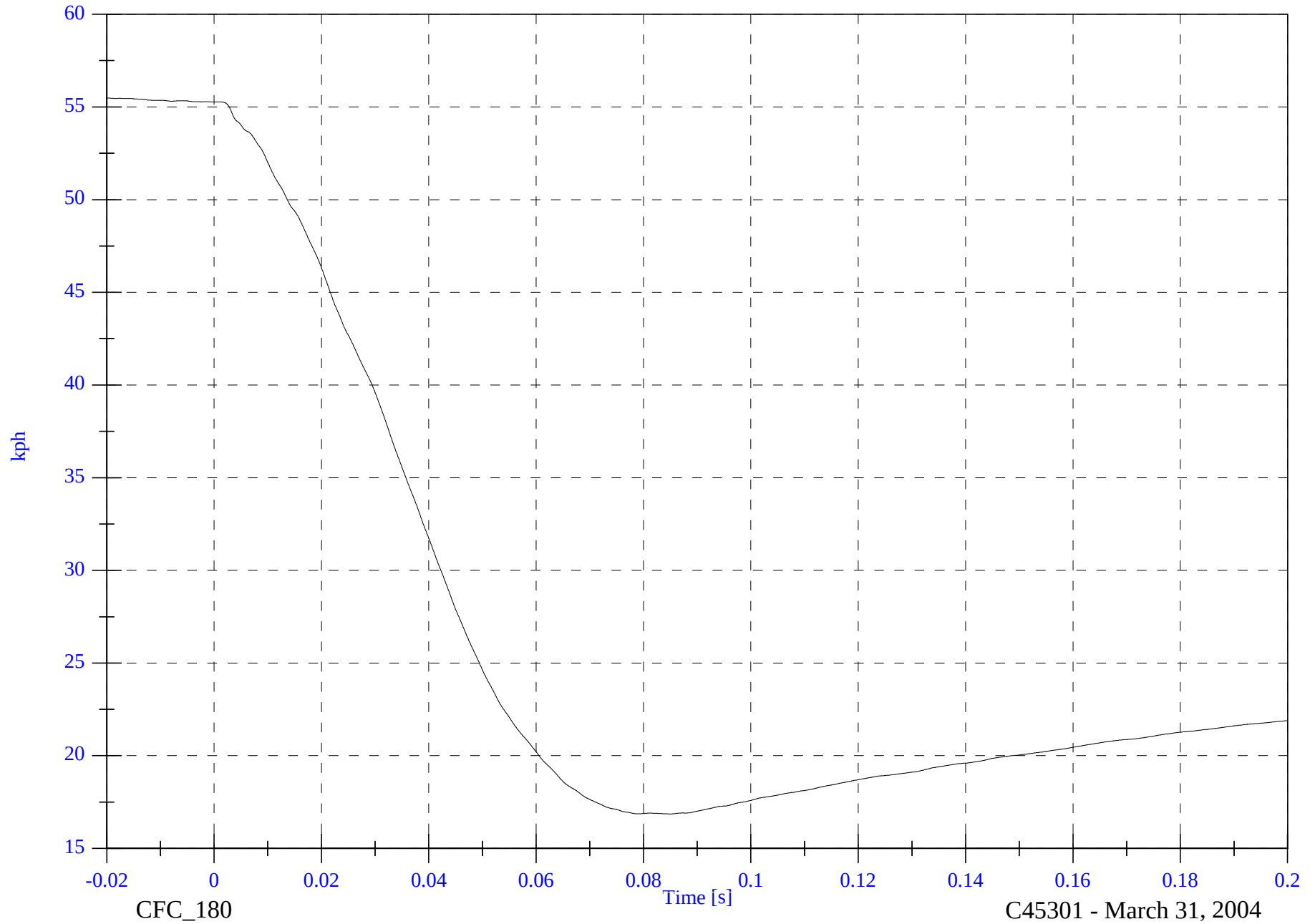
Max: 55.5 [kph] at -0.020 [s]

Min: 16.9 [kph] at 0.085 [s]

V1 Moving Barrier Left Rail X Velocity

B-114

8675-F214-16



2004 FMVSS 214D Test 6

2004 Acura TL

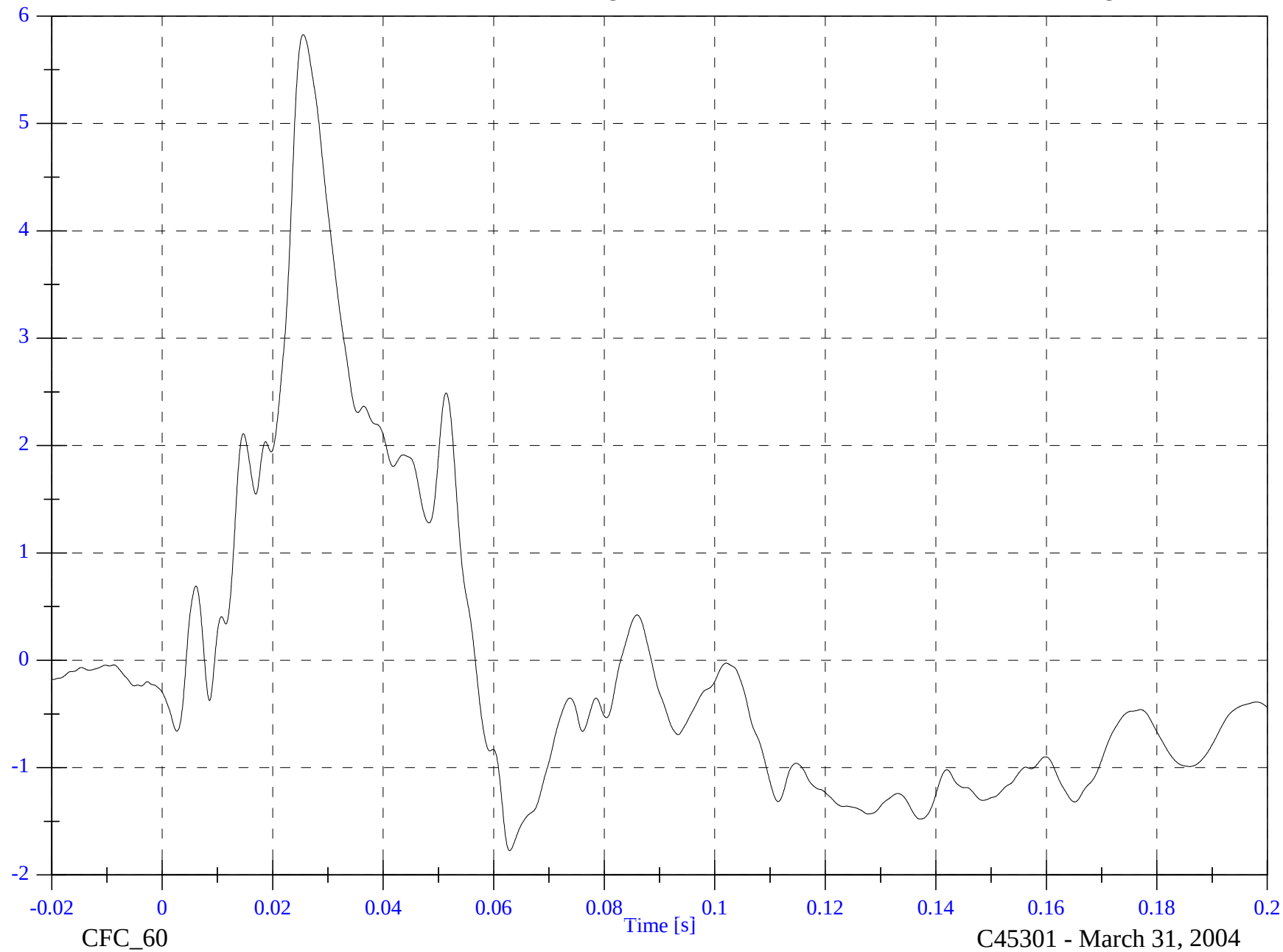
V1 Moving Barrier Left Rail Y

Max: 5.8 [g] at 0.026 [s]

Min: -1.8 [g] at 0.063 [s]

B-115

8675-F214-16



2004 FMVSS 214D Test 6

2004 Acura TL

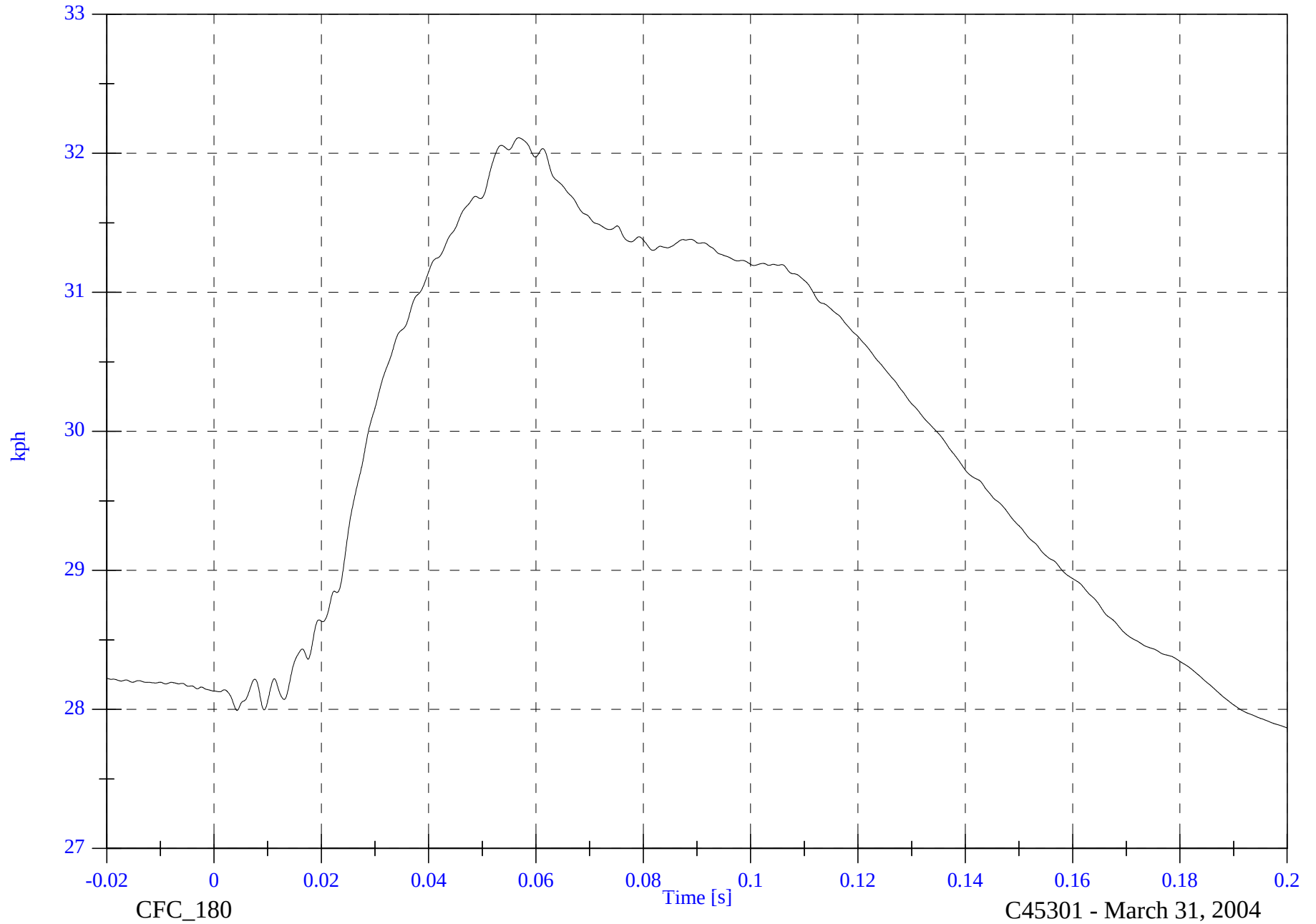
Max: 32.1 [kph] at 0.057 [s]

Min: 27.9 [kph] at 0.200 [s]

V1 Moving Barrier Left Rail Y Velocity

B-116

8675-F214-16

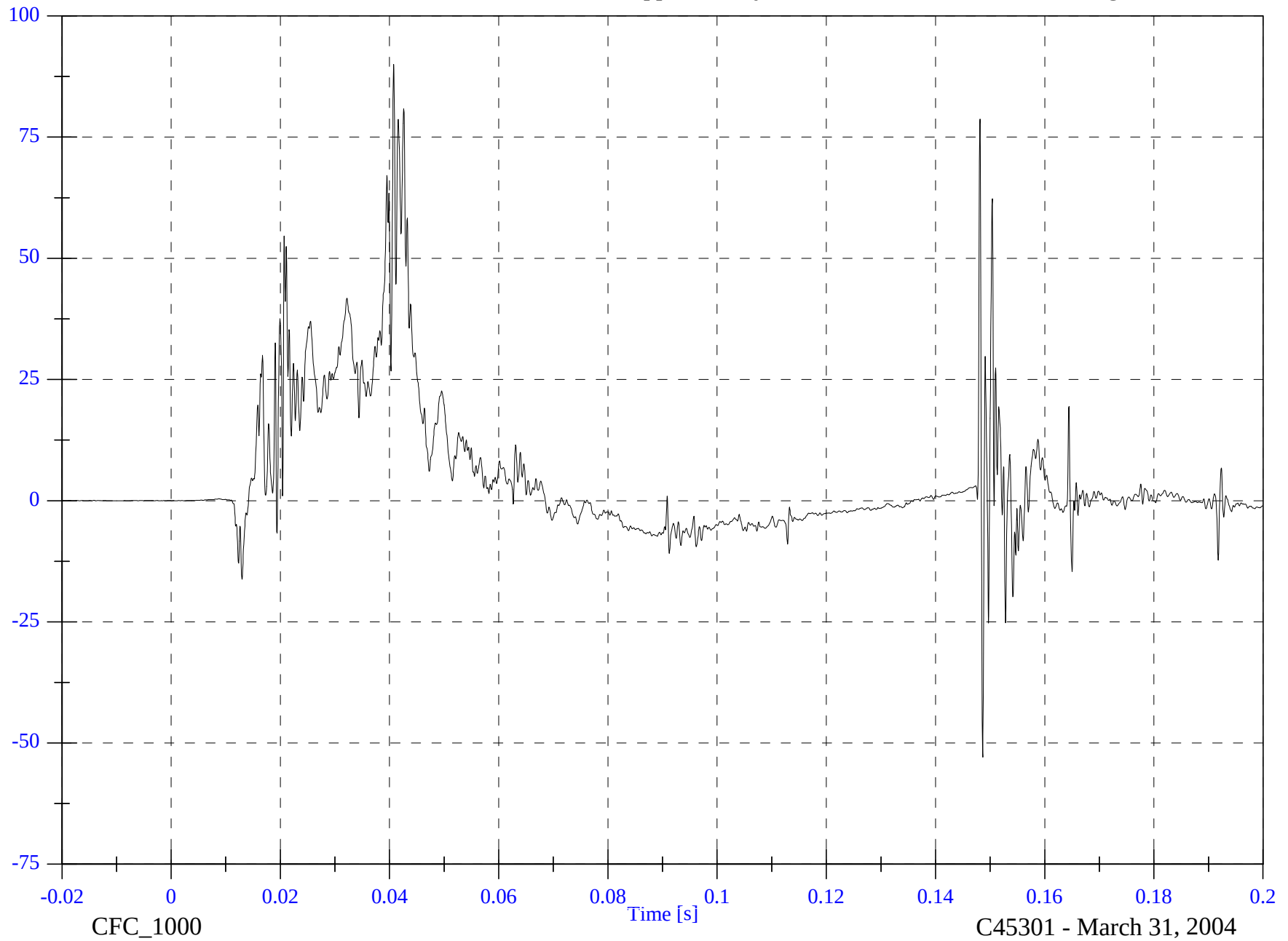


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Upper Rib Ry

Max: 90.0 [g] at 0.041 [s]

Min: -52.9 [g] at 0.149 [s]



B-117

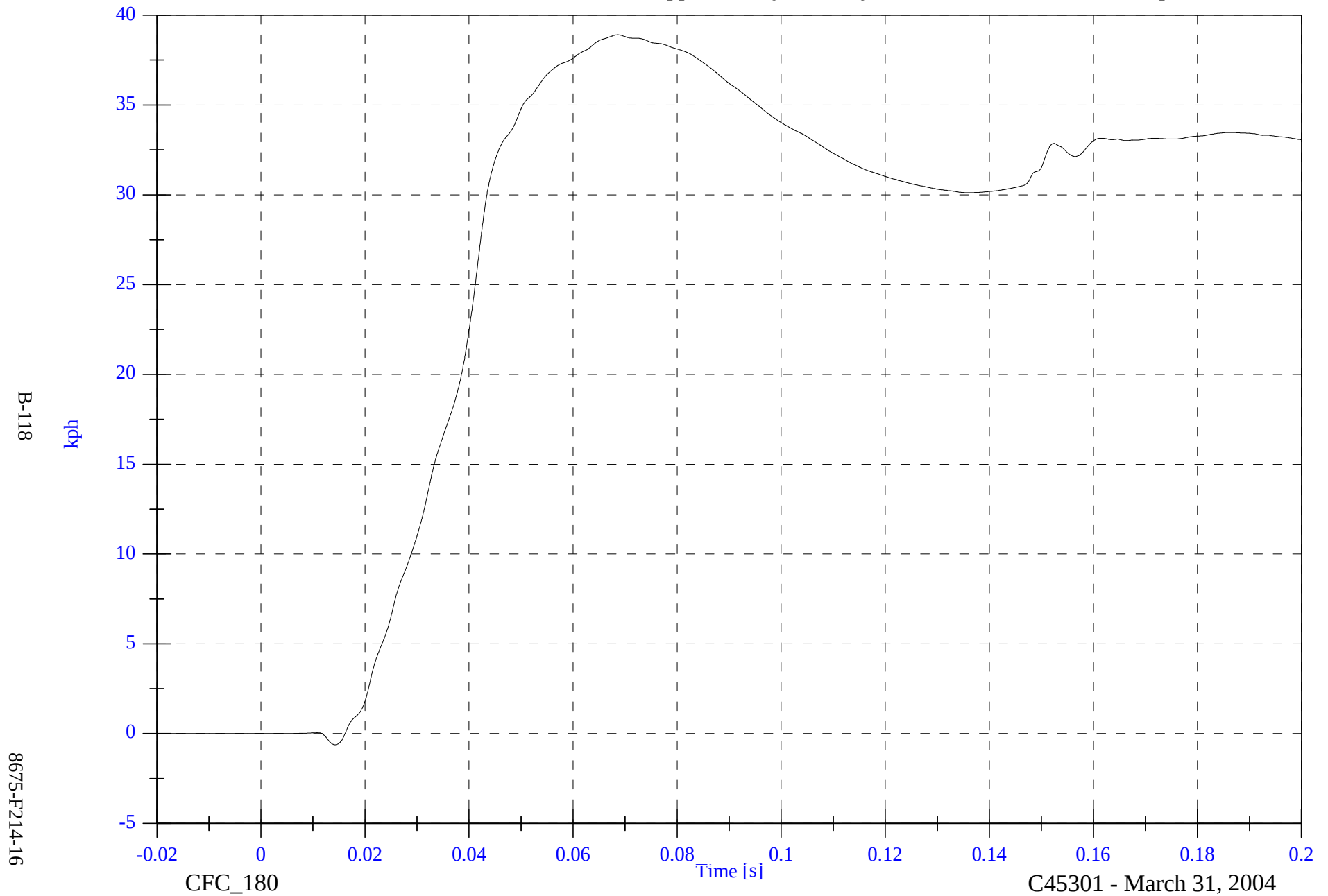
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

Max: 38.9 [kph] at 0.069 [s]

Min: -0.6 [kph] at 0.014 [s]

V2P1 Upper Rib Ry Velocity

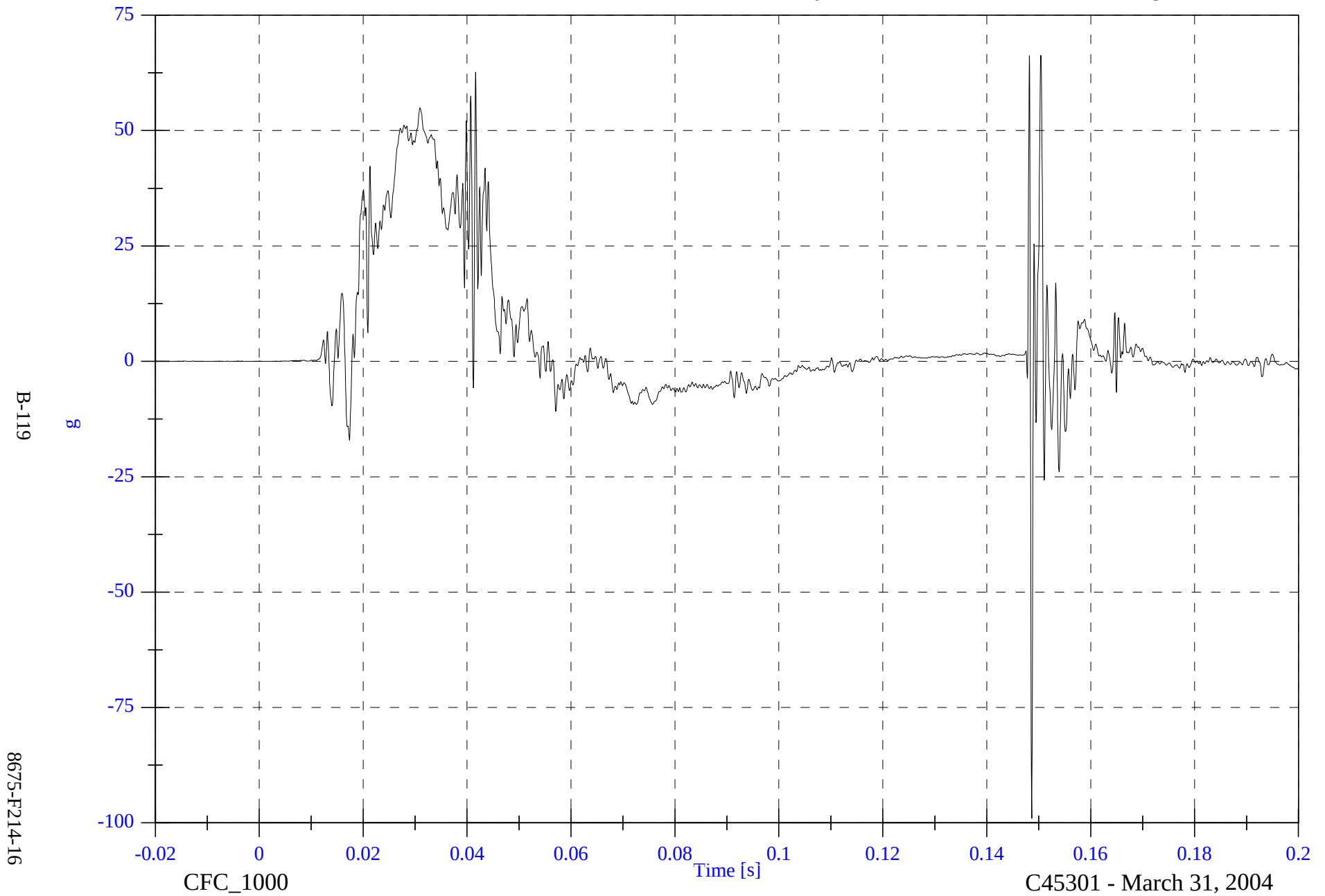


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Lower Rib Ry

Max: 66.3 [g] at 0.150 [s]

Min: -99.0 [g] at 0.149 [s]

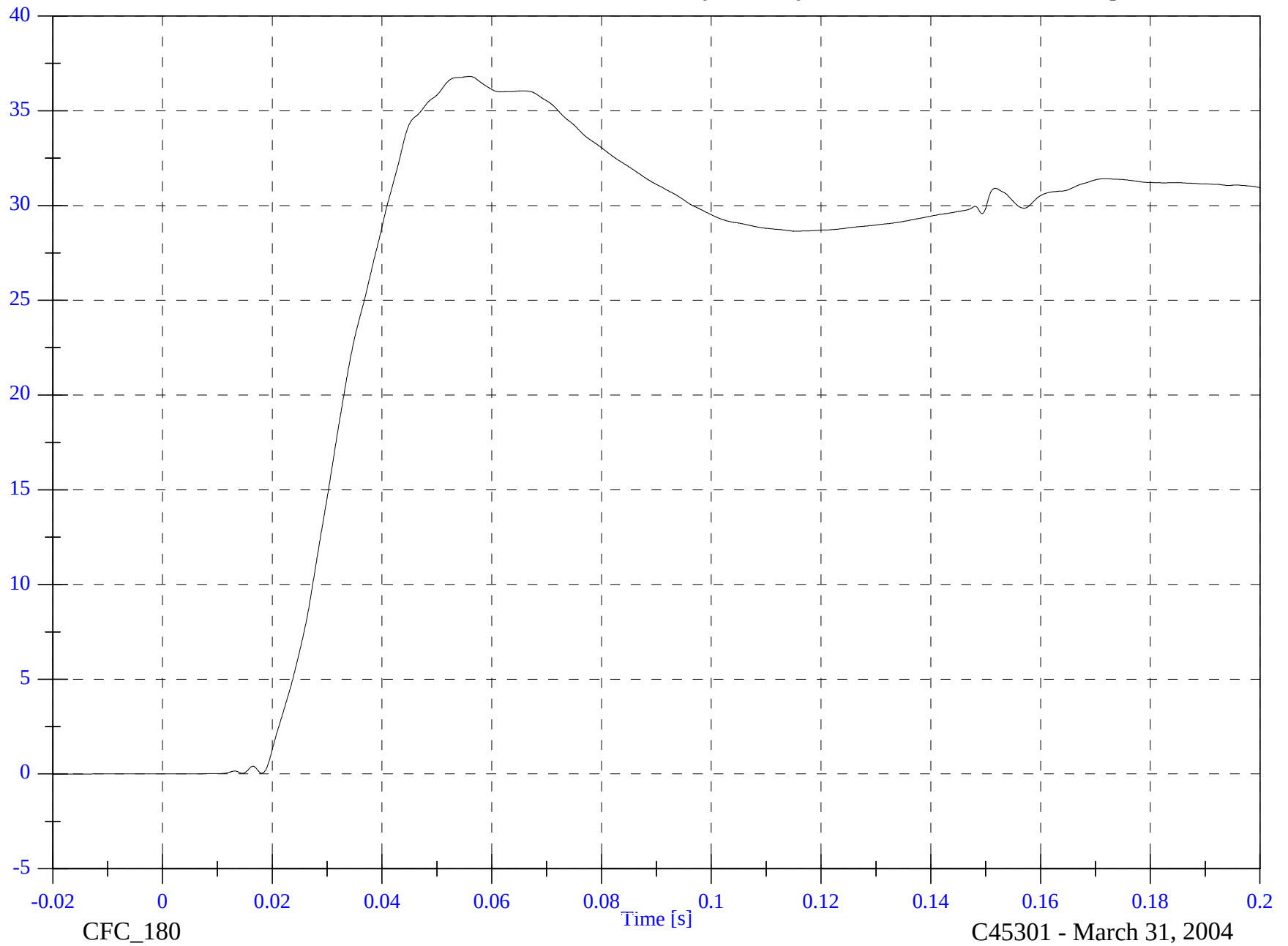


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Lower Rib Ry Velocity

Max: 36.8 [kph] at 0.056 [s]

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



B-120

8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Lower Spine Ry

Max: 55.0 [g] at 0.026 [s]

Min: -10.1 [g] at 0.074 [s]



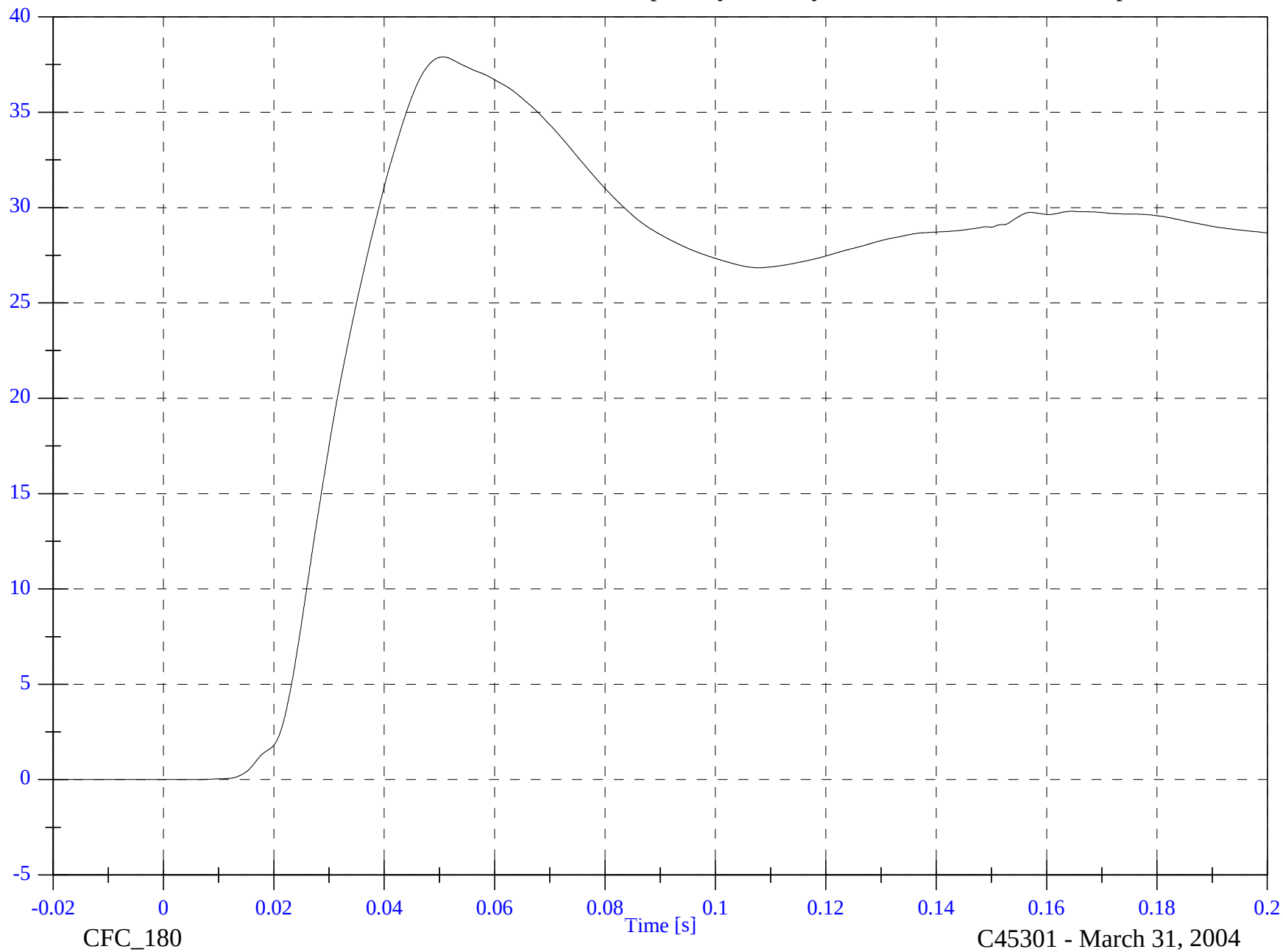
2004 FMVSS 214D Test 6

2004 Acura TL

V2P1 Lower Spine Ry Velocity

Max: 37.9 [kph] at 0.051 [s]

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



B-122

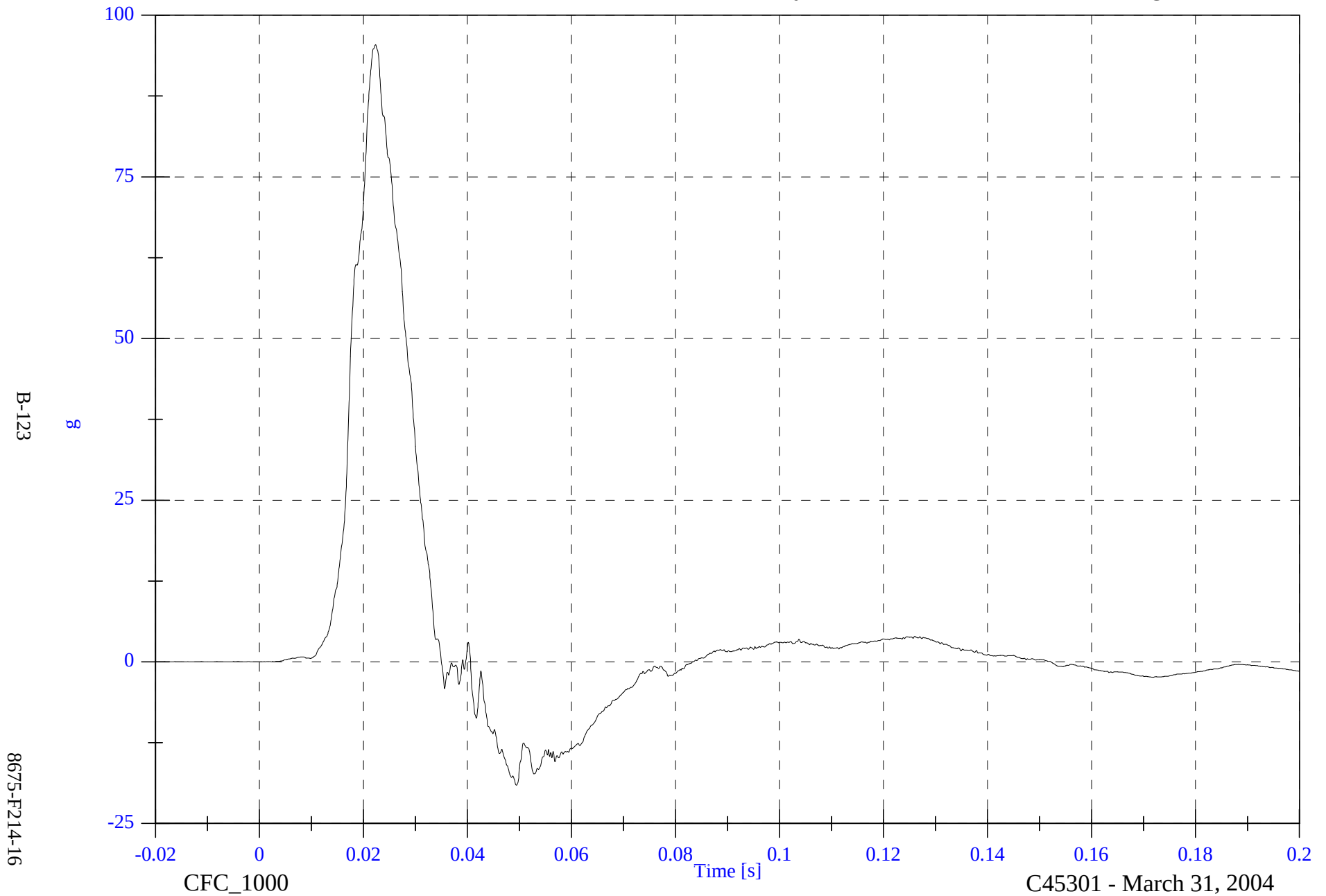
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Pelvic Ry

Max: 95.4 [g] at 0.022 [s]

Min: -19.1 [g] at 0.049 [s]

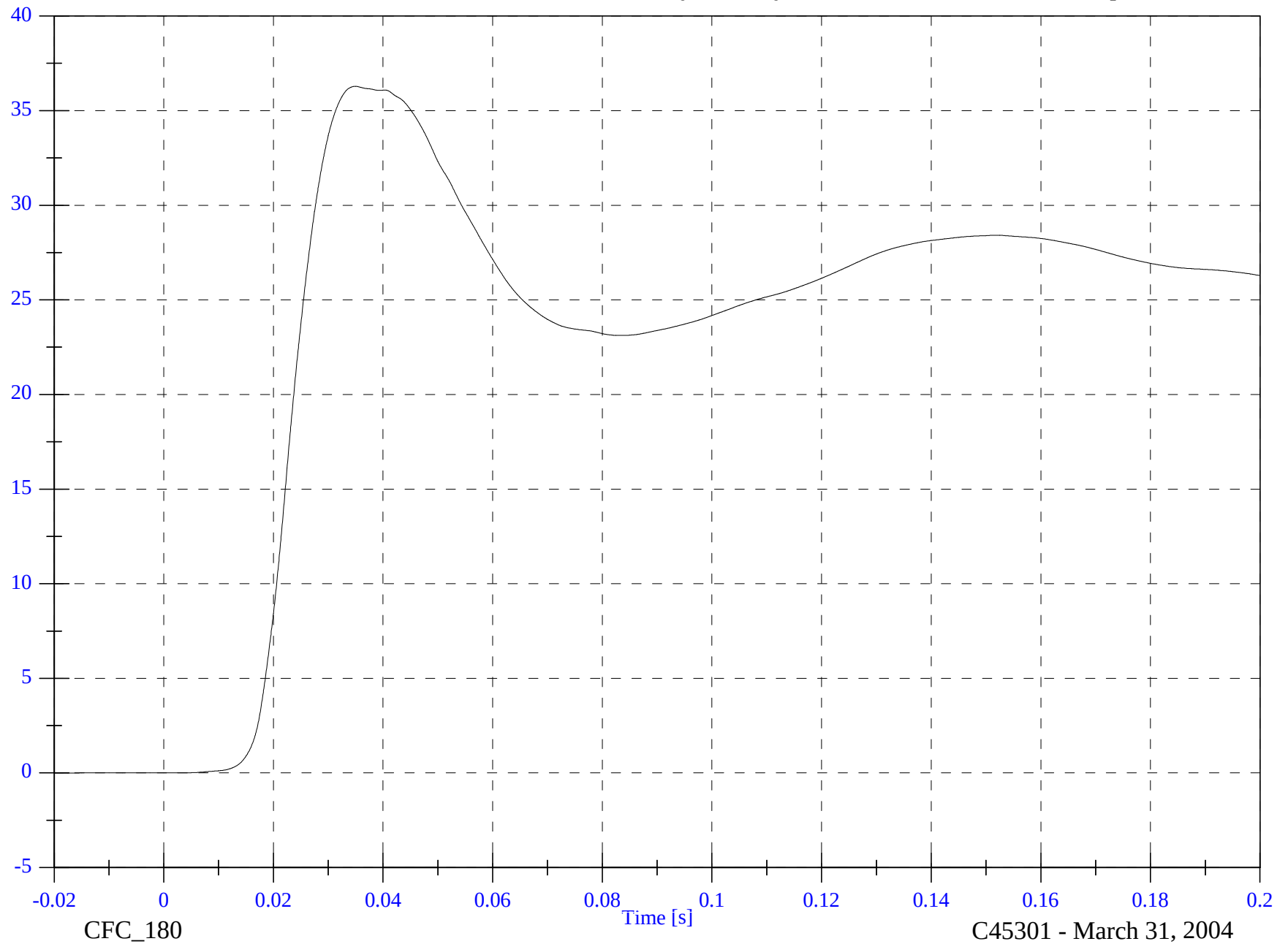


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 36.3 [kph] at 0.035 [s]

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

V2P1 Pelvic Ry Velocity



B-124

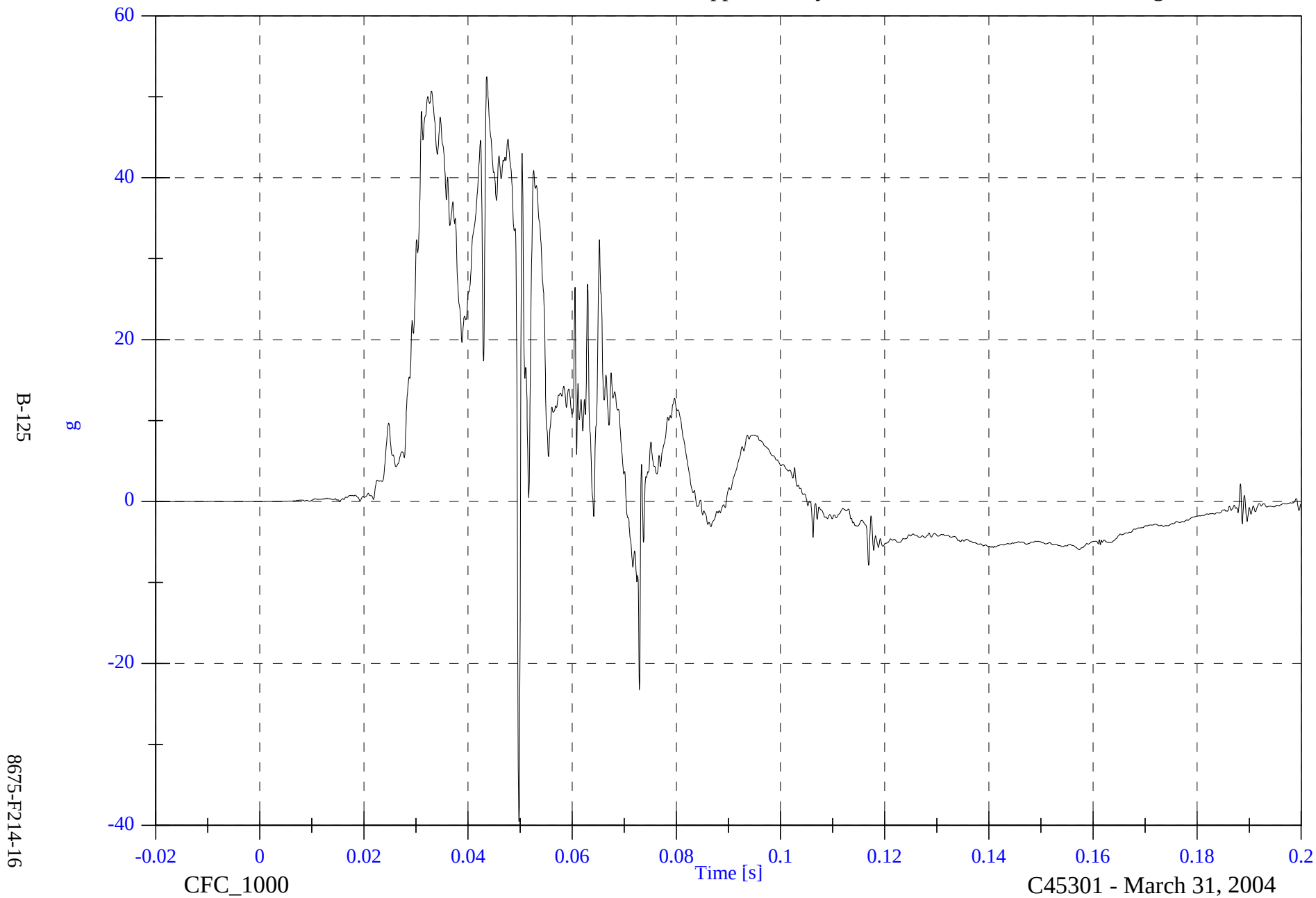
8675-F214-16

2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Upper Rib Ry

Max: 52.5 [g] at 0.044 [s]

Min: -39.5 [g] at 0.050 [s]

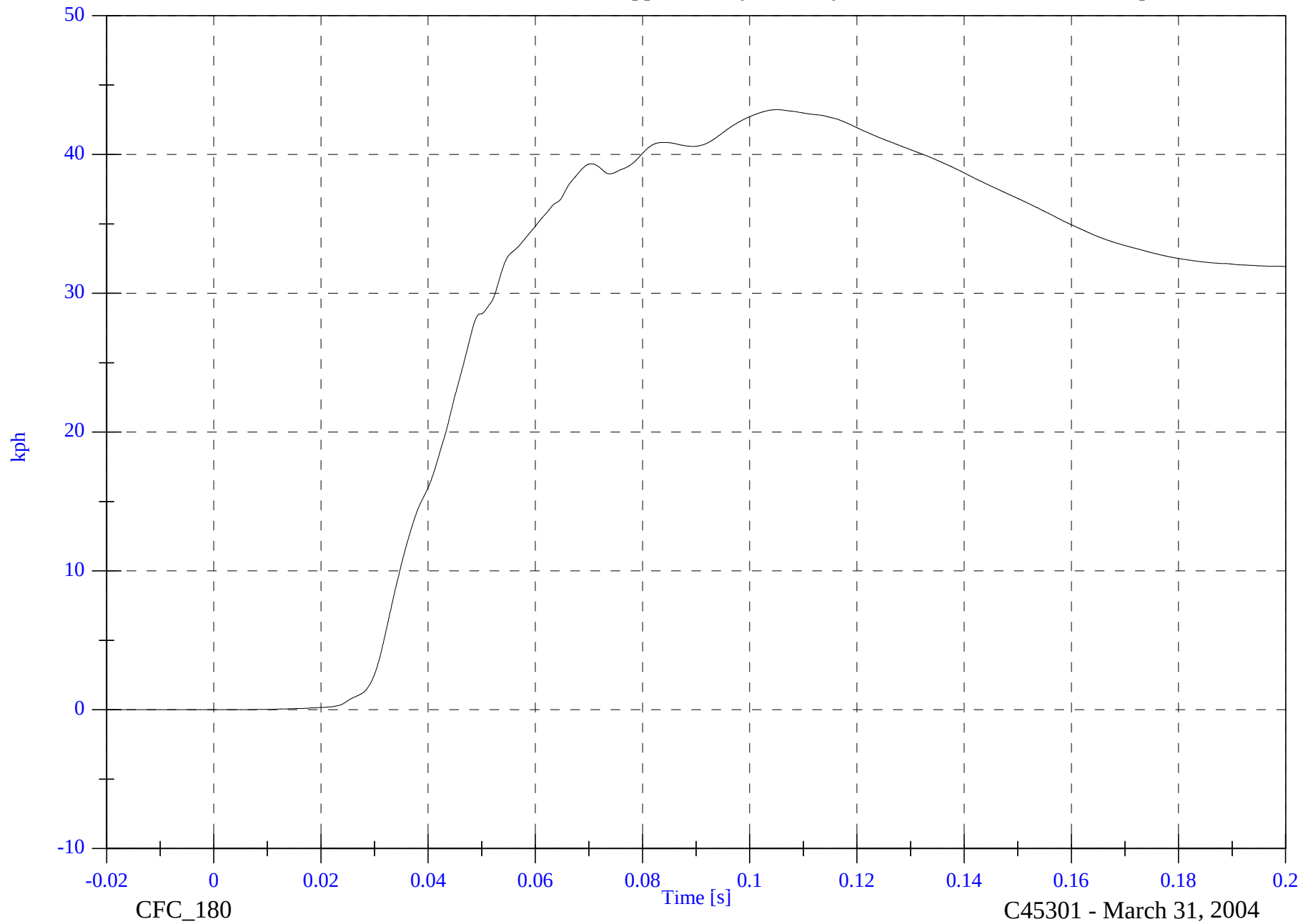


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 43.2 [kph] at 0.105 [s]

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

V2P4 Upper Rib Ry Velocity



B-126

8675-F214-16

CFC_180

C45301 - March 31, 2004

2004 FMVSS 214D Test 6 2004 Acura TL

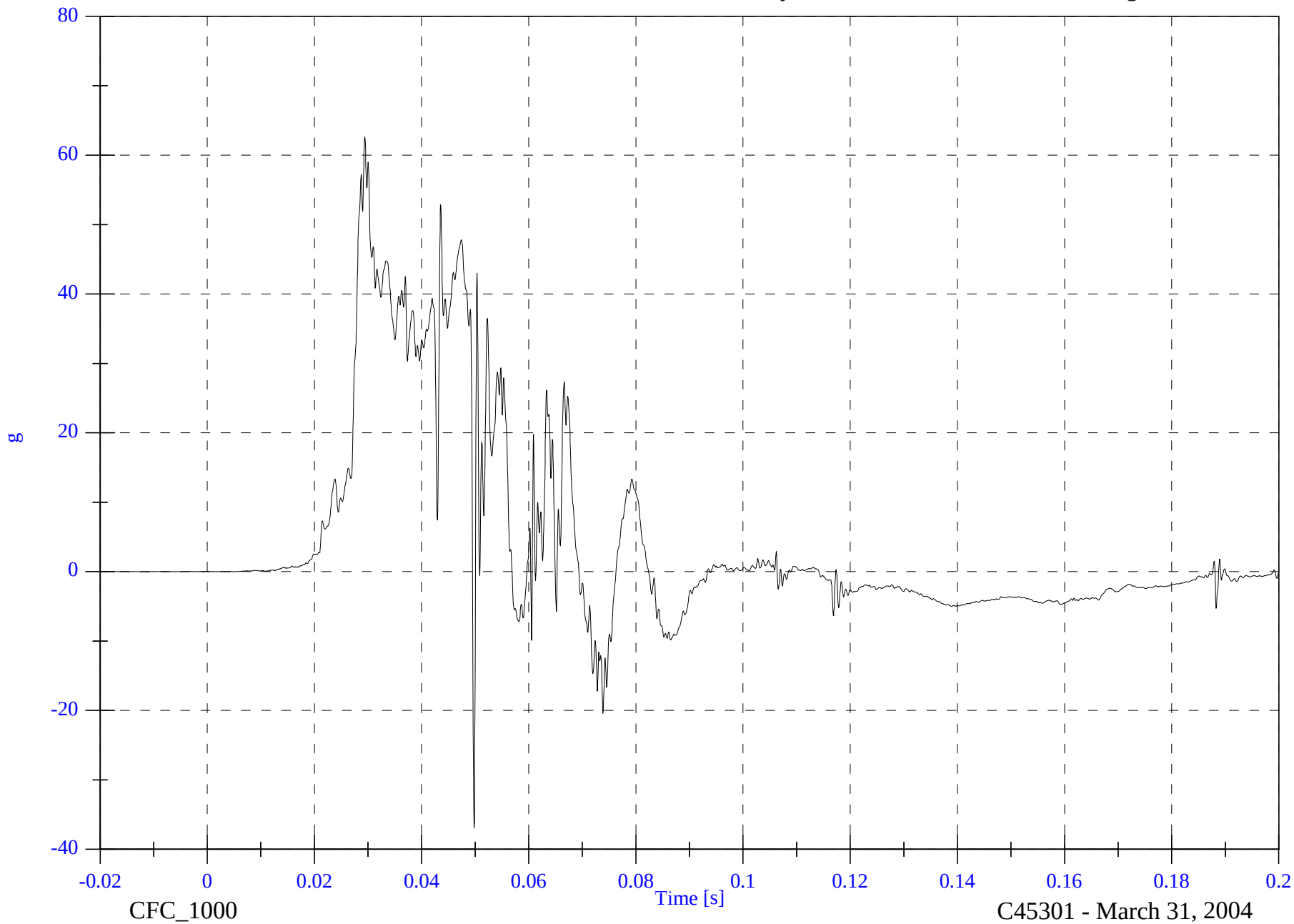
V2P4 Lower Rib Ry

Max: 62.6 [g] at 0.029 [s]

Min: -36.9 [g] at 0.050 [s]

B-127

8675-F214-16

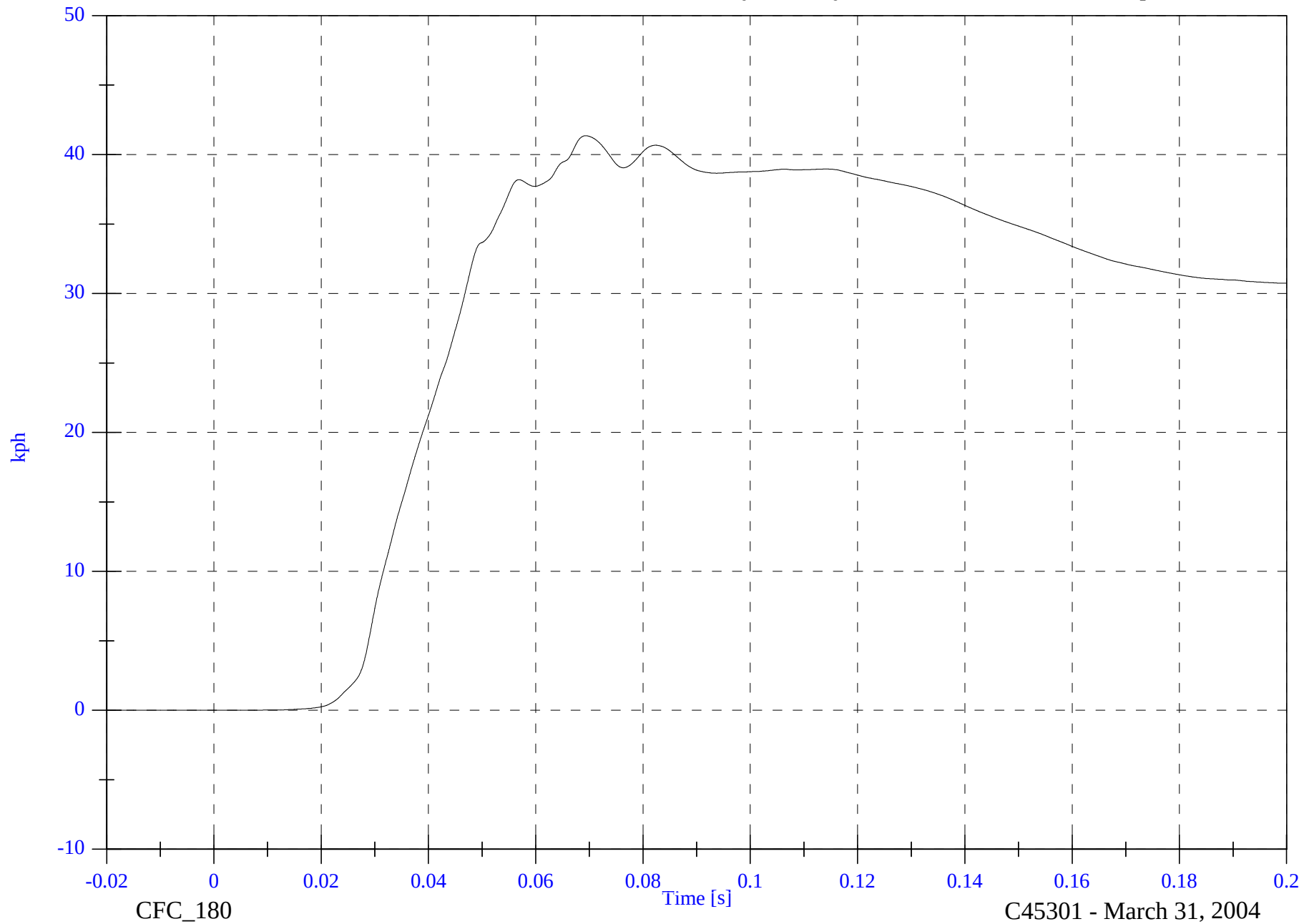


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Rib Ry Velocity

Max: 41.4 [kph] at 0.069 [s]

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



B-128

8675-F214-16

CFC_180

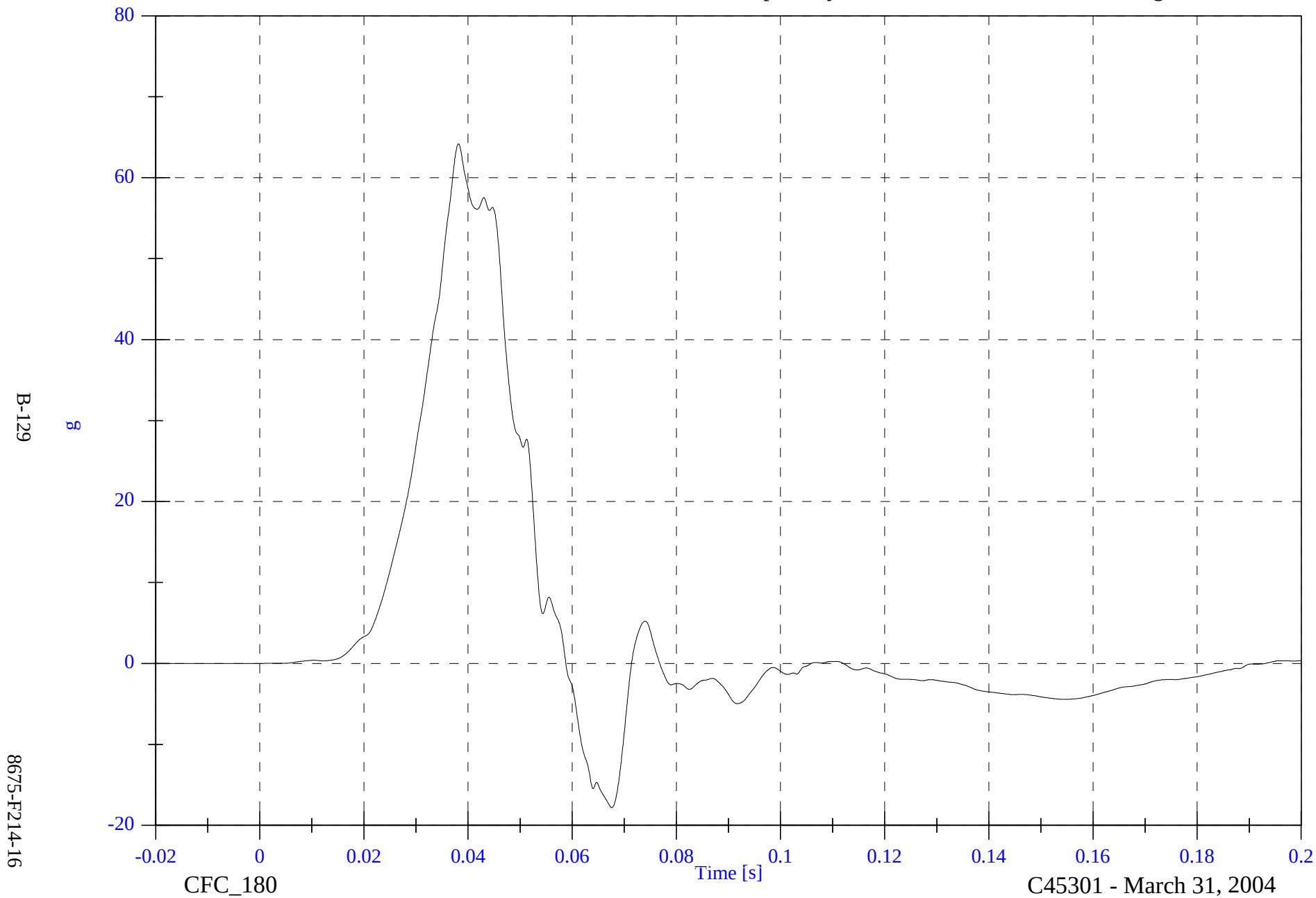
C45301 - March 31, 2004

2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Spine Ry

Max: 64.2 [g] at 0.038 [s]

Min: -17.8 [g] at 0.068 [s]

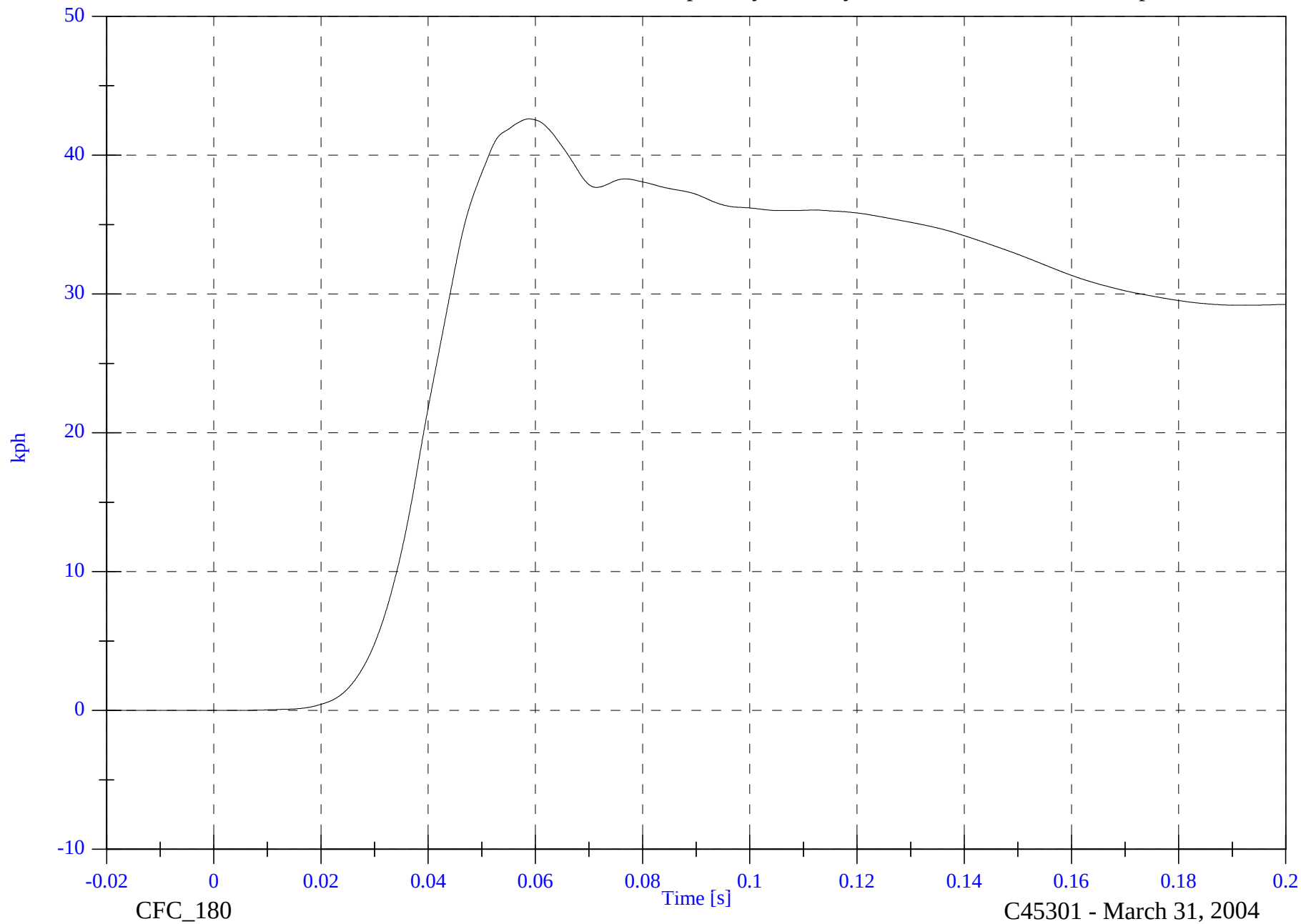


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Spine Ry Velocity

Max: 42.6 [kph] at 0.059 [s]

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



B-130

8675-F214-16

CFC_180

Time [s]

C45301 - March 31, 2004

2004 FMVSS 214D Test 6 2004 Acura TL

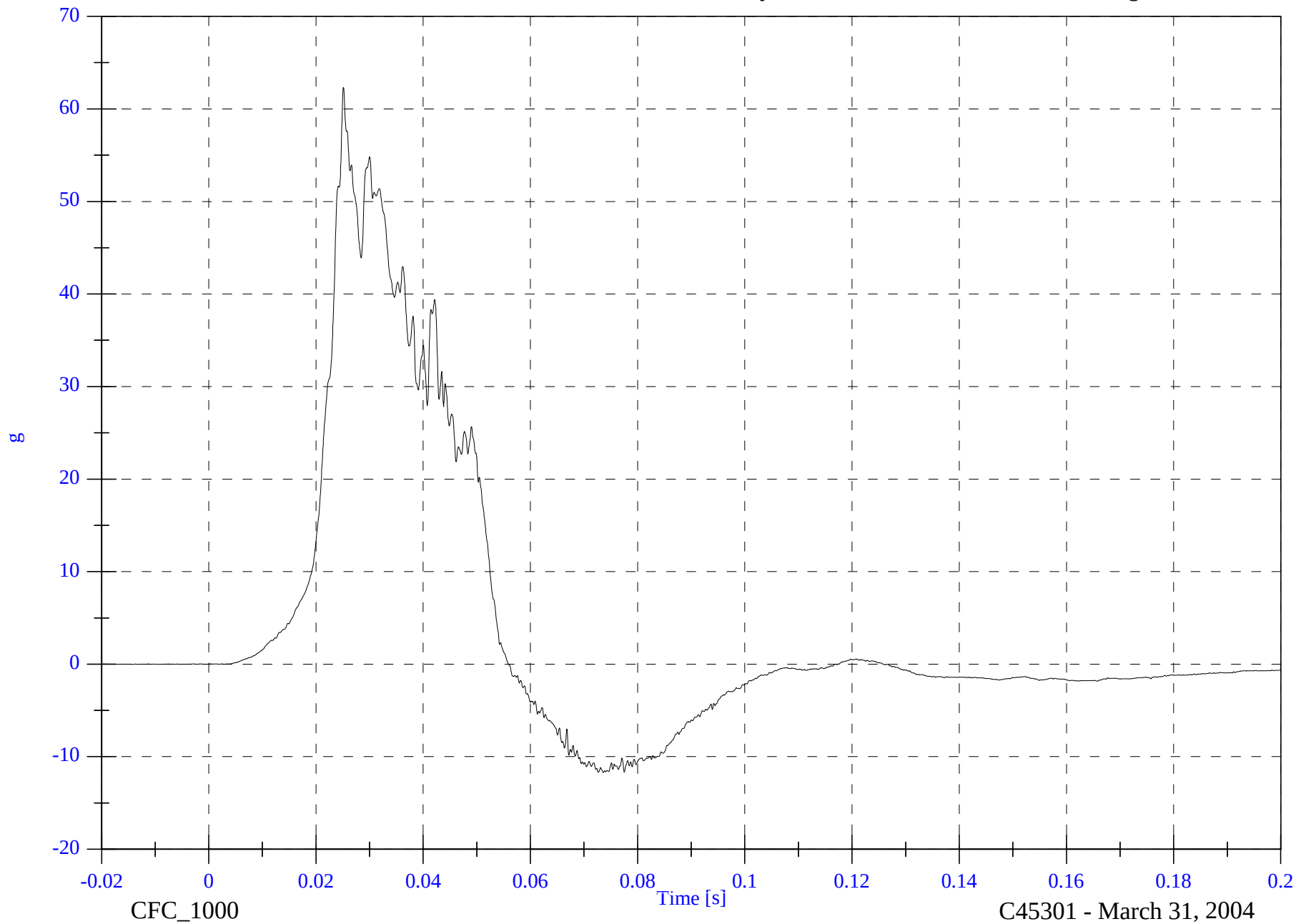
V2P4 Pelvic Ry

Max: 62.3 [g] at 0.025 [s]

Min: -11.7 [g] at 0.074 [s]

B-131

8675-F214-16

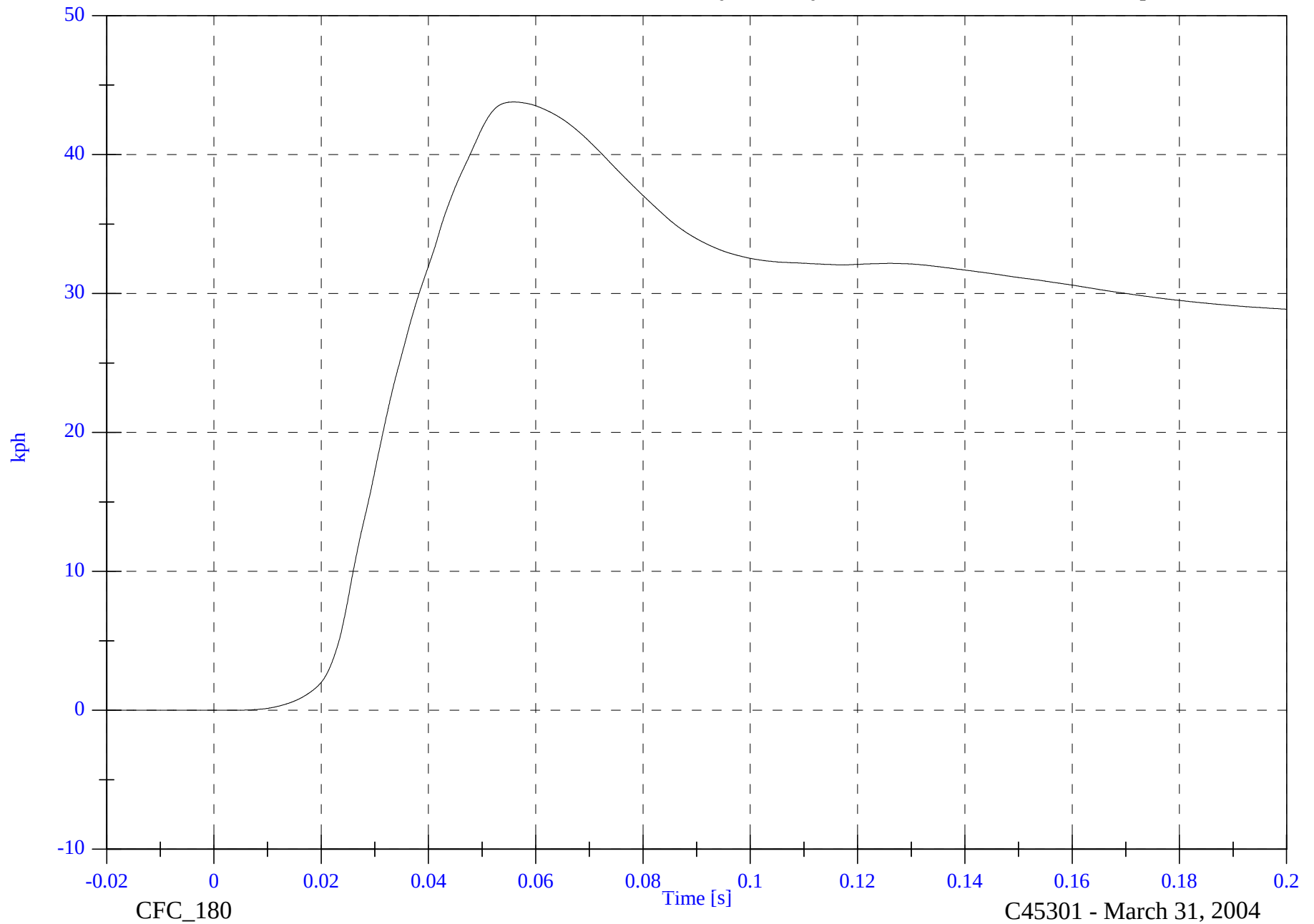


2004 FMVSS 214D Test 6 2004 Acura TL

Max: 43.8 [kph] at 0.056 [s]

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

V2P4 Pelvic Ry Velocity



B-132

8675-F214-16

CFC_180

C45301 - March 31, 2004

2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Upper Rib Ry

Max: 65.0 [g] at 0.042 [s]

Min: -6.7 [g] at 0.087 [s]



2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Lower Rib Ry

Max: 52.1 [g] at 0.031 [s]

Min: -8.6 [g] at 0.155 [s]

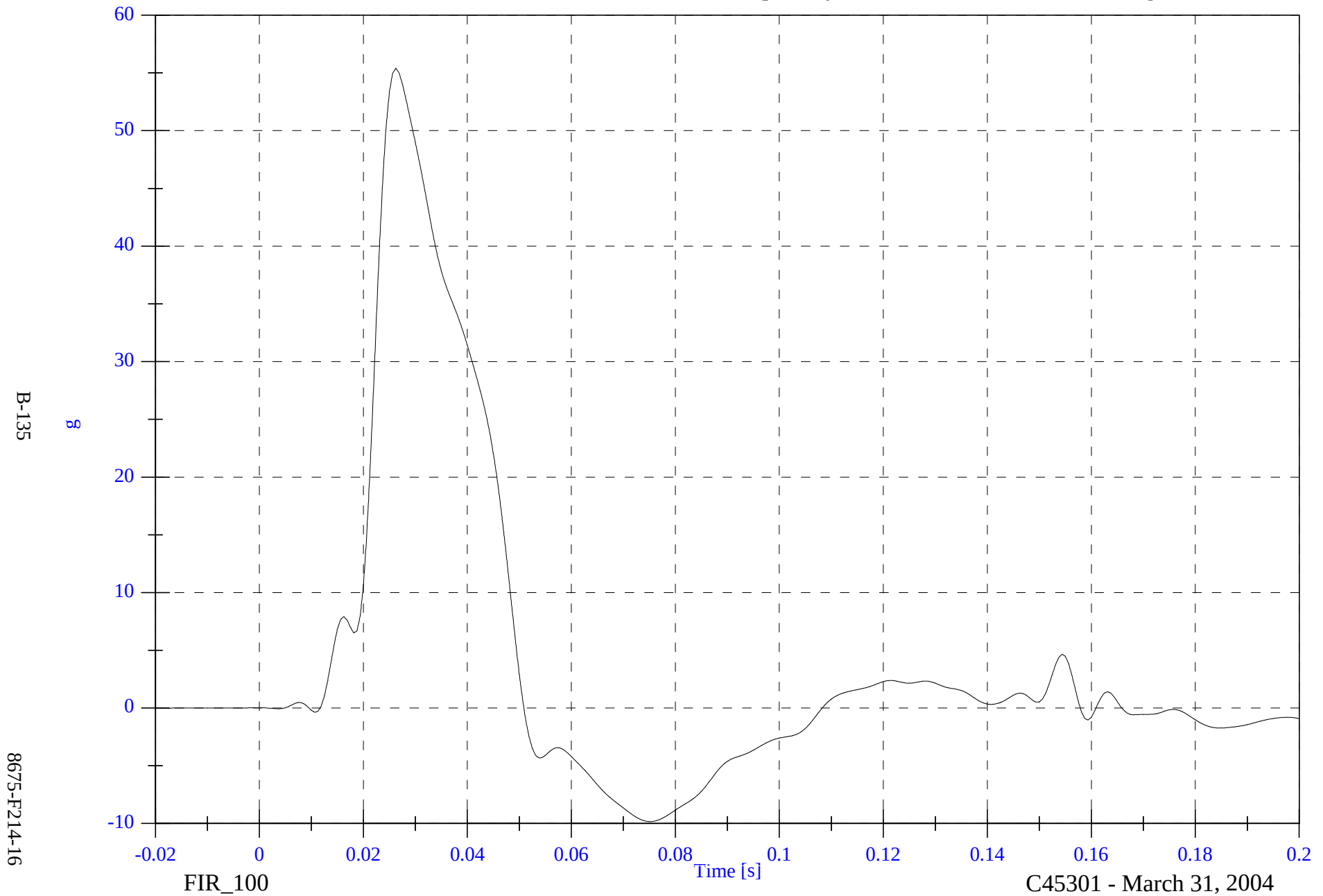


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Lower Spine Ry

Max: 55.4 [g] at 0.026 [s]

Min: -9.8 [g] at 0.075 [s]

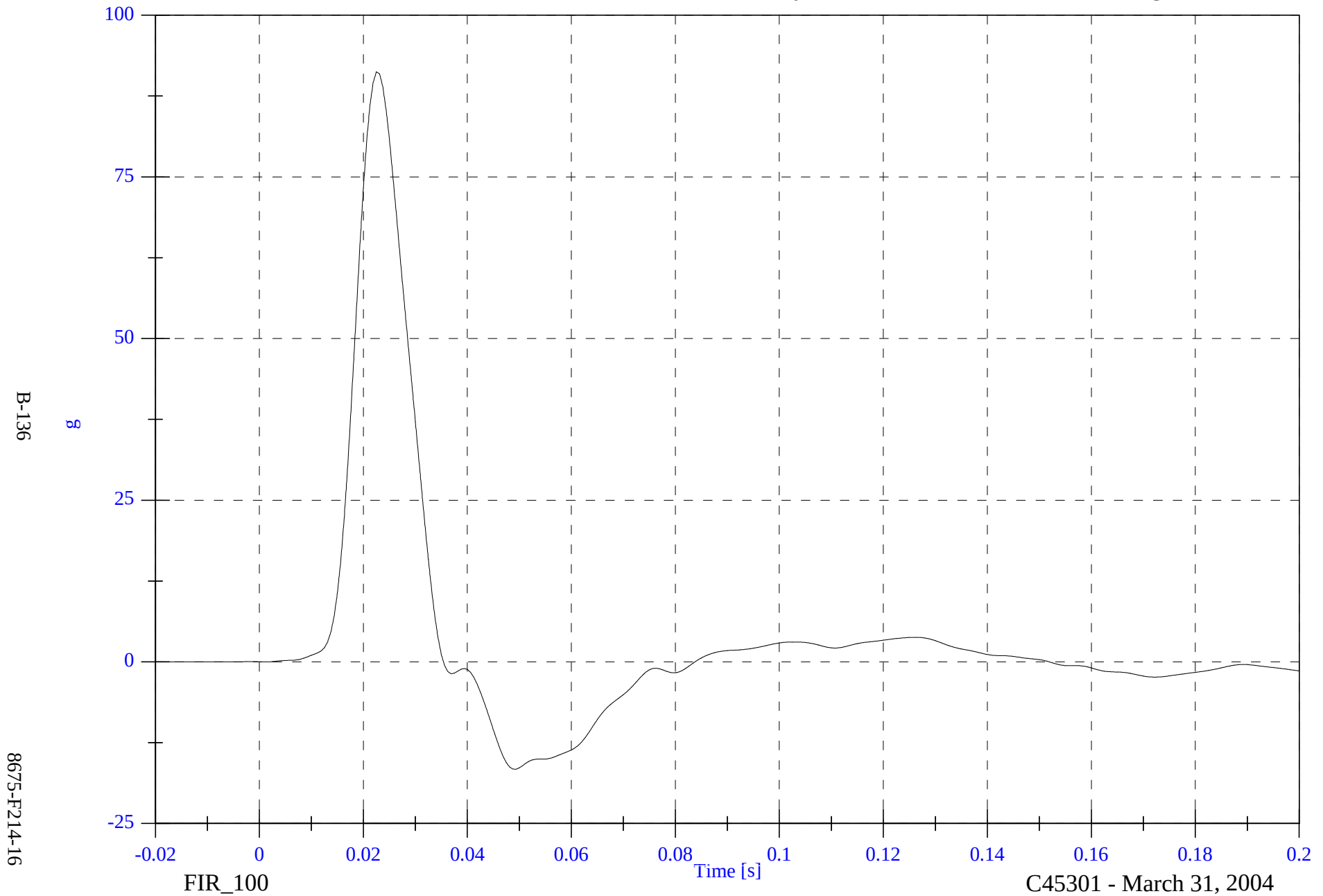


2004 FMVSS 214D Test 6 2004 Acura TL

V2P1 Pelvic Ry

Max: 91.2 [g] at 0.022 [s]

Min: -16.6 [g] at 0.049 [s]



2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Upper Rib Ry

Max: 50.2 [g] at 0.034 [s]

Min: -6.1 [g] at 0.072 [s]



2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Rib Ry

Max: 52.2 [g] at 0.031 [s]

Min: -15.6 [g] at 0.074 [s]

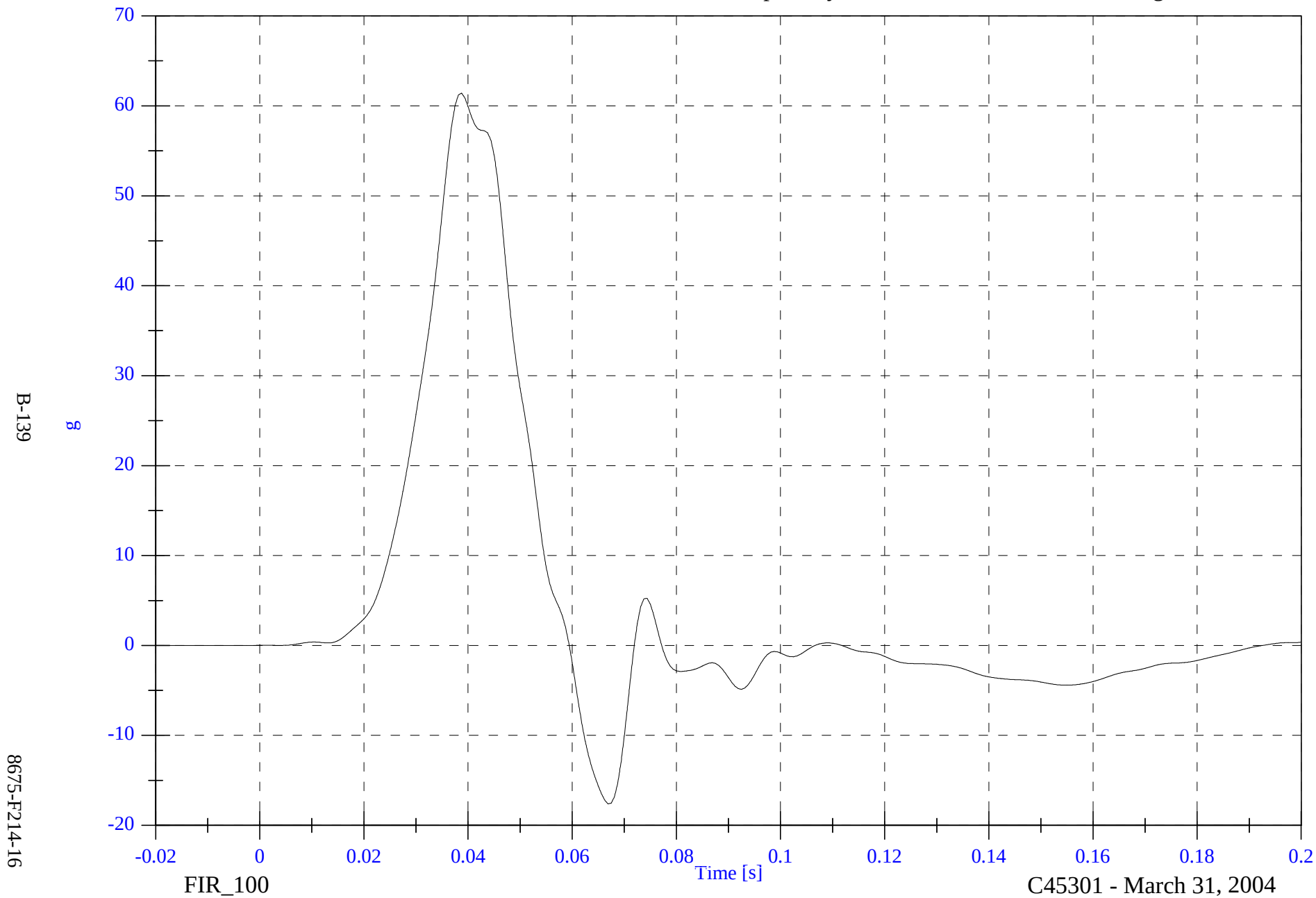


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Lower Spine Ry

Max: 61.4 [g] at 0.039 [s]

Min: -17.6 [g] at 0.067 [s]

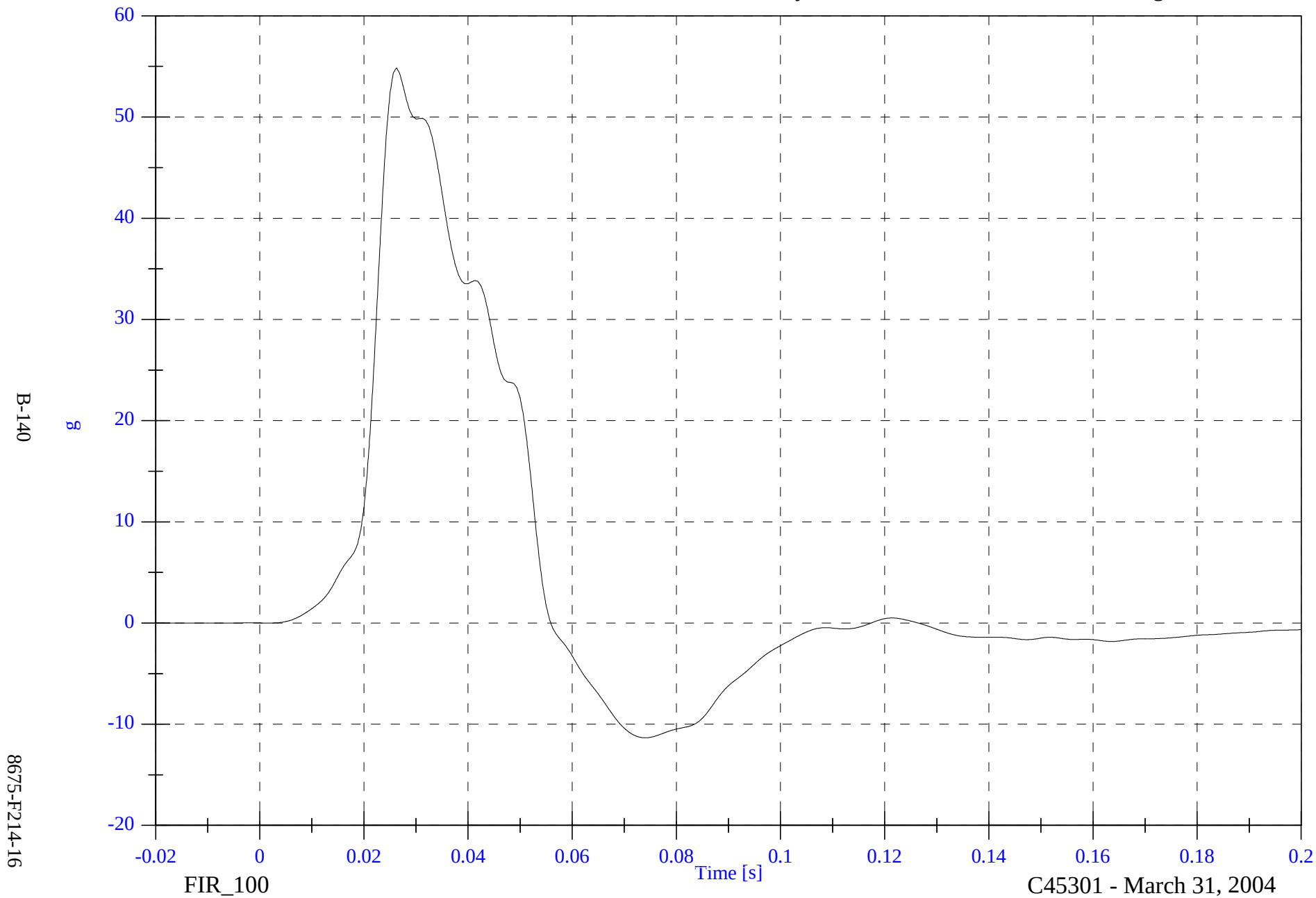


2004 FMVSS 214D Test 6 2004 Acura TL

V2P4 Pelvic Ry

Max: 54.9 [g] at 0.026 [s]

Min: -11.3 [g] at 0.074 [s]



APPENDIX C

SID HYBRID III CONFIGURATION AND PERFORMANCE VERIFICATION DATA

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

Date: March 22, 2004; March 30, 2004

Sequential Test Number:

1;2

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	904	904	902	902
RH- Rib Height (mm)	501 - 521	505	505	506	506
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	516	516
SW- Knee Pivot to Floor (mm)	490 - 505	495	495	495	495
HW- Hip Width (mm)	356 - 391	371	371	376	376
THORAX IMPACTS					
TEMPERATURE (°C)	18.9 - 25.5	21.1	21.1	21.1	21.1
RELATIVE HUMIDITY (%)	10 -70	31.0	33.0	31.0	37.0
PROBE SPEED (m/s)	4.27 - 4.33	4.29	4.27	4.29	4.32
UPPER RIB (g's)	37 - 46	37.57	38.93	44.50	41.84
LOWER RIB (g's)	37 - 46	37.50	37.95	42.18	40.57
LOWER SPINE (g's)	15 -22	19.09	19.30	21.68	21.86
PELVIS IMPACT					
TEMPERATURE (°C)	18.9 - 25.5	21.1	21.1	21.1	21.1
RELATIVE HUMIDITY (%)	10 - 70	31.0	37.0	31.0	37.0
PROBE SPEED (m/s)	4.27 - 4.33	4.31	4.33	4.30	4.32
PELVIS (g's)	40 -60	53.37	50.95	50.33	52.55

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: 1
Date: March 22, 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: 1
Date: March 22, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 – 909	904
RH- Rib Height (mm)	502 – 520	505
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	371

REMARKS: None

ABDOMINAL COMPRESSION TEST

PRE-TEST

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269

Date: March 22, 2004

Sequential Test Number:

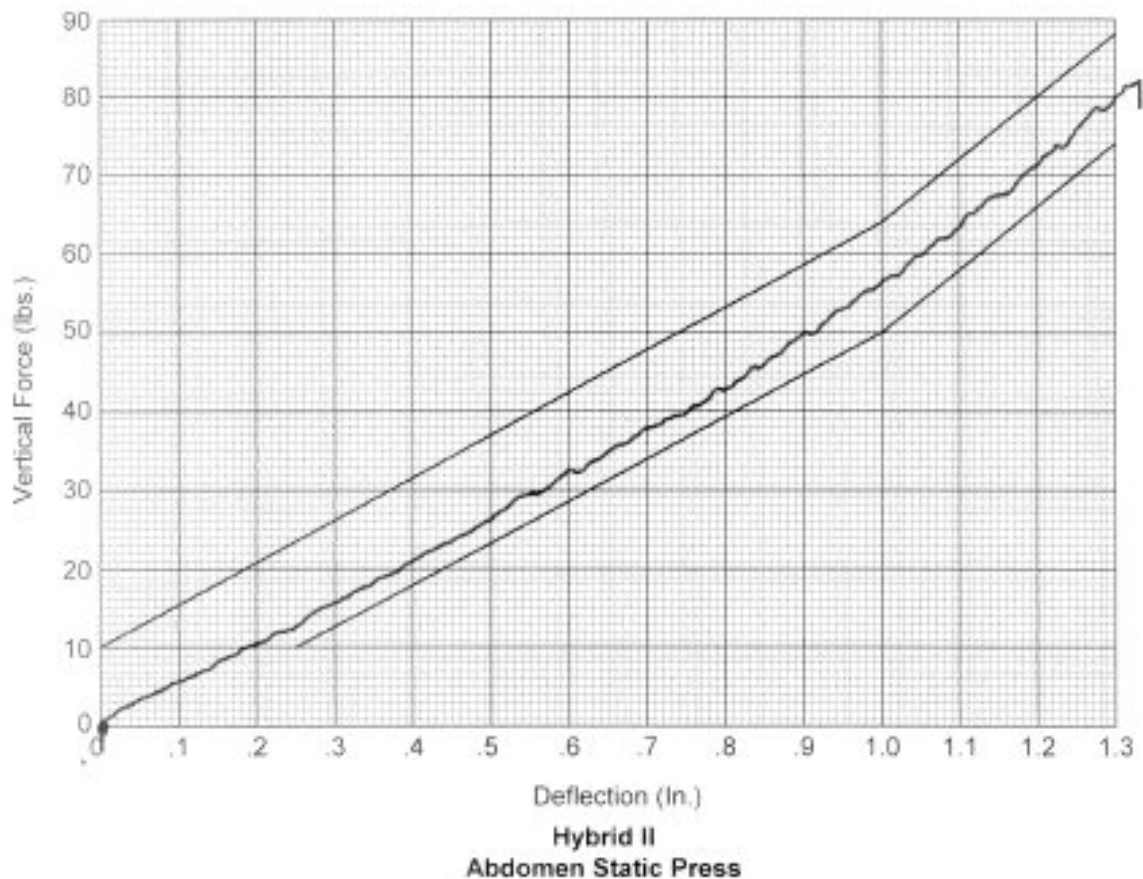
1

Laboratory Technician:

B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	28
FORCE @ 13 mm (N)	104 - 162	120.1
FORCE @ 19 mm (N)	163 - 221	177.9
FORCE @ 25 mm (N)	222 - 280	253.5
FORCE @ 33 mm (N)	325 - 391	351.4

REMARKS: None



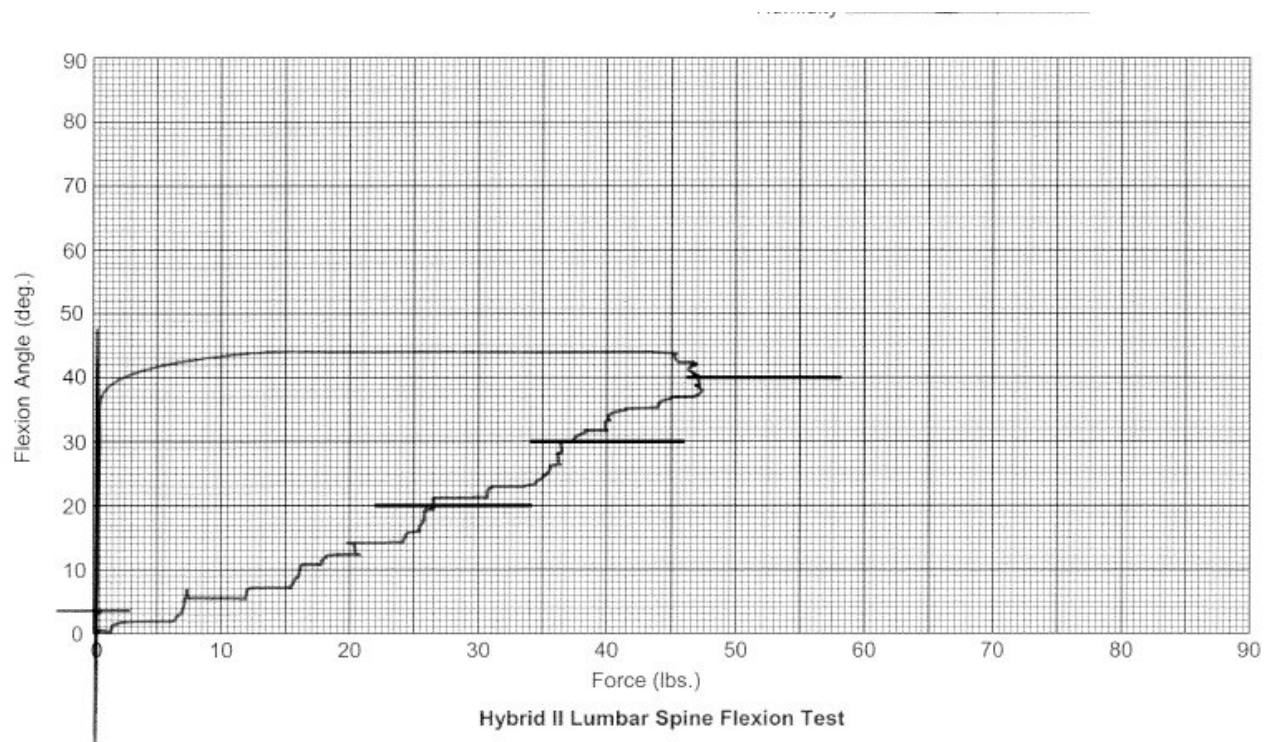
LUMBAR FLEXION TEST
PRE-TEST
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.:	269	Sequential Test Number:	1
Date:	March 22, 2004	Laboratory Technician:	B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	28
FORCE @ 0° (N)	0 - 26.7	0
FORCE @ 20° (N)	97.8 - 151.2	115.7
FORCE @ 30° (N)	151.2 - 204.6	164.6
FORCE @ 40° (N)	204.6 - 258	209.1
RETURN ANGLE	12° max.	4

REMARKS: None



PRE-TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269 Sequential Test Number: 1
Date: March 22, 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: 1
Date: March 22, 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: 1
Date: March 22, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	506
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	516
KV- Knee Pivot to Floor (mm)	490 - 505	495
HW- Hip Width (mm)	356 - 391	376

REMARKS: None

**ABDOMINAL COMPRESSION TEST
PRE-TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 270

Date: March 22, 2004

Sequential Test Number:

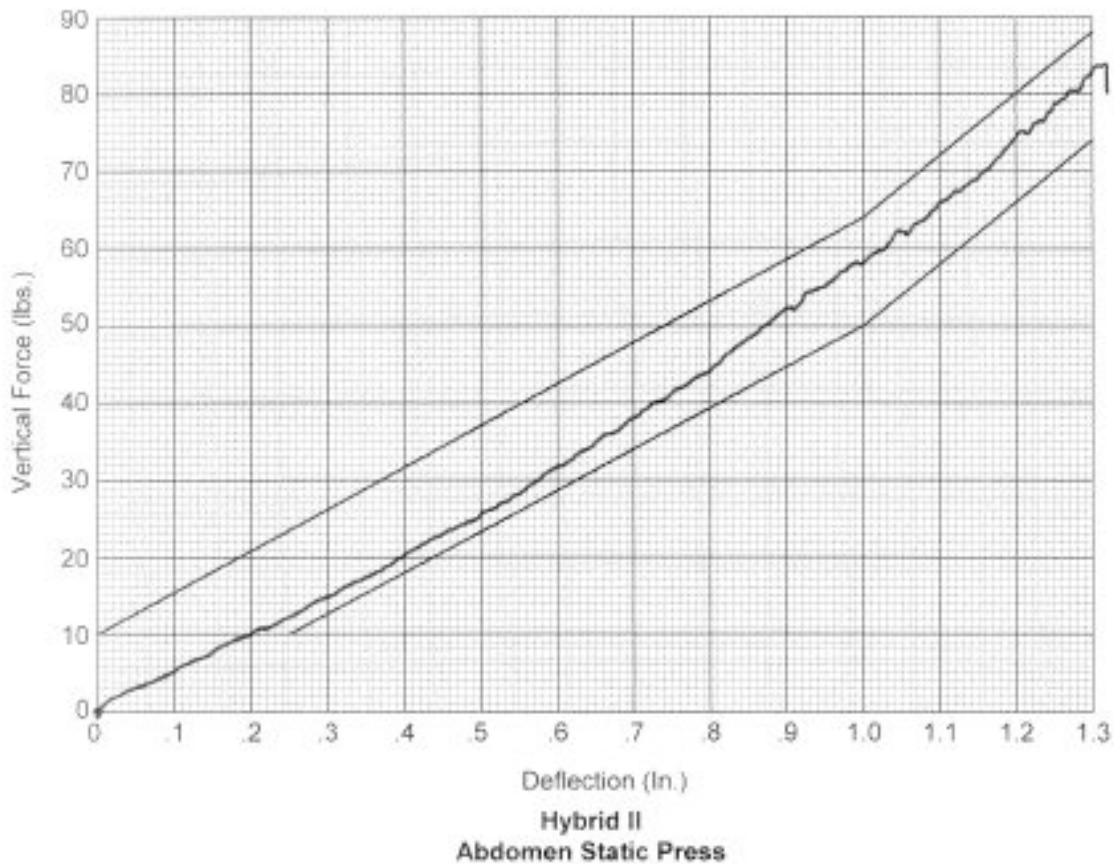
Laboratory Technician:

1

B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	28
FORCE @ 13 mm (N)	104 - 162	115.7
FORCE @ 19 mm (N)	163 - 221	182.4
FORCE @ 25 mm (N)	222 - 280	258.0
FORCE @ 33 mm (N)	325 - 391	369.2

REMARKS: None



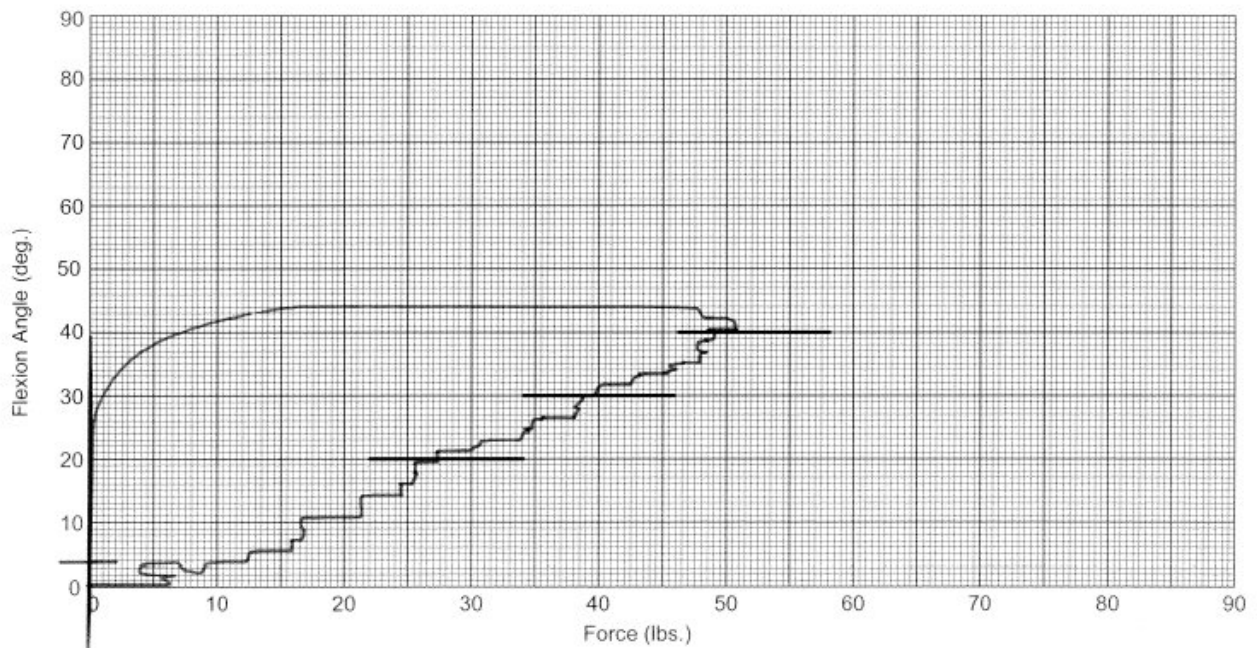
LUMBAR FLEXION TEST
PRE-TEST
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 270 Sequential Test Number: 1
Date: March 22, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	28.0
FORCE @ 0° (N)	0 - 26.7	0
FORCE @ 20° (N)	97.8 - 151.2	120.1
FORCE @ 30° (N)	151.2 - 204.6	169.0
FORCE @ 40° (N)	204.6 - 258	213.5
RETURN ANGLE	12° max.	4

REMARKS: None



Hybrid II Lumbar Spine Flexion Test

PRE-TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 270 Sequential Test Number: 1
Date: March 22, 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: 2
Date: March 30, 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: 2
Date: March 30, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	904
RH- Rib Height (mm)	502 - 520	505
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	371

REMARKS: None

**ABDOMINAL COMPRESSION TEST
POST TEST**

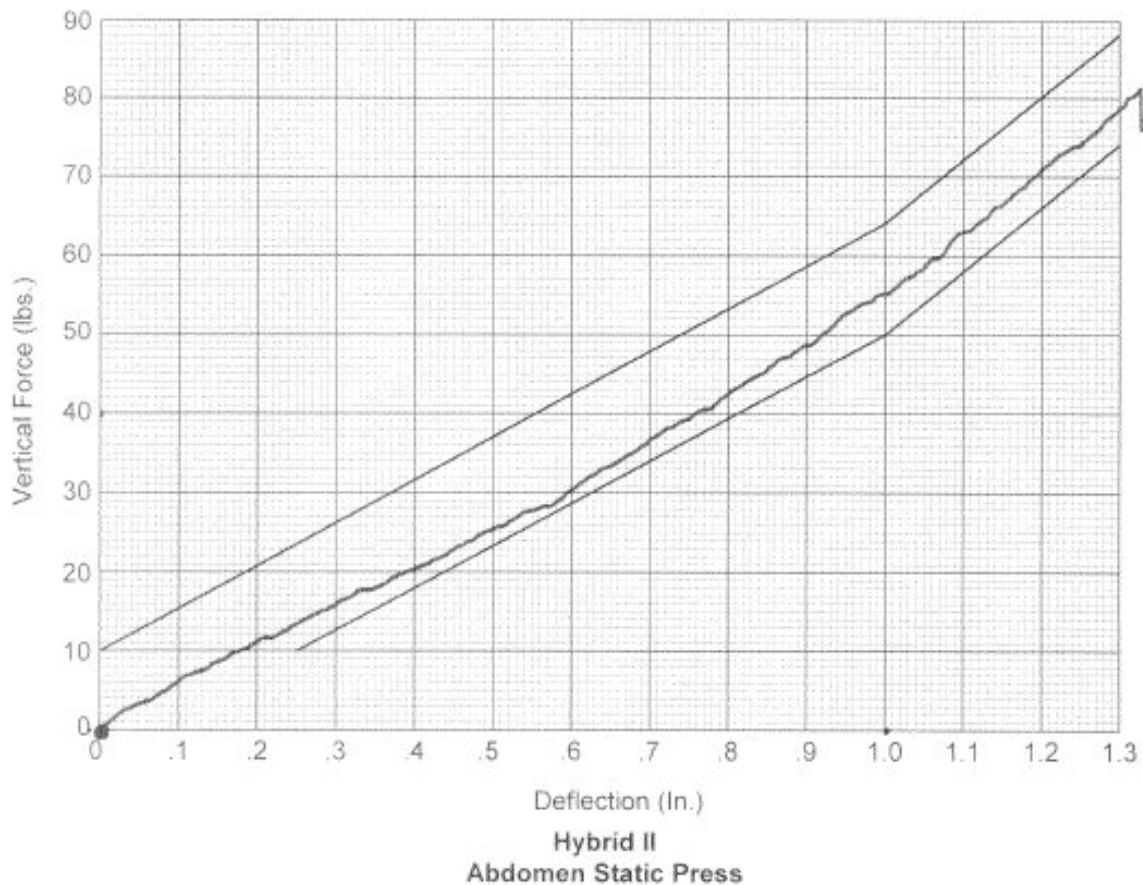
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269	Sequential Test Number: 2	
Date: March 30, 2004	Laboratory Technician: B. Swiecicki	

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	31.0
FORCE @ 13 mm (N)	104 - 162	115.7
FORCE @ 19 mm (N)	163 - 221	175.7
FORCE @ 25 mm (N)	222 - 280	246.9
FORCE @ 33 mm (N)	325 - 391	349.2

REMARKS: None



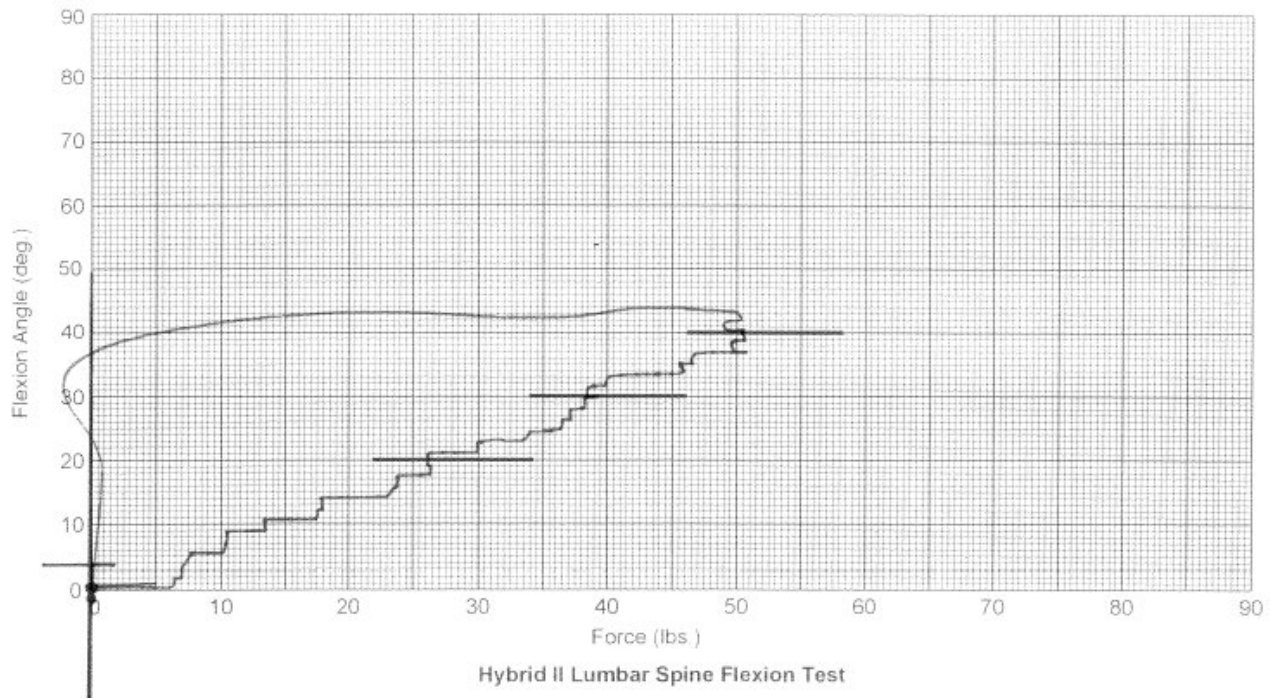
LUMBAR FLEXION TEST
POST TEST
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.:	269	Sequential Test Number:	2
Date:	March 30, 2004	Laboratory Technician:	B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	31.0
FORCE @ 0° (N)	0 - 26.7	0.0
FORCE @ 20° (N)	97.8 - 151.2	115.7
FORCE @ 30° (N)	151.2 - 204.6	169.0
FORCE @ 40° (N)	204.6 - 258	224.6
RETURN ANGLE	12° max.	4°

REMARKS: None



POST TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 269 Sequential Test Number: 2
Date: March 30, 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: 2
Date: March 30, 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: 2
Date: March 30, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
SH- Seated Height (mm)	889 - 909	902
RH- Rib Height (mm)	502 - 520	506
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	516
KV- Knee Pivot to Floor (mm)	490 - 505	495
HW- Hip Width (mm)	356 - 391	376

REMARKS: None

**ABDOMINAL COMPRESSION TEST
POST TEST**

(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 270

Date: March 30, 2004

Sequential Test Number:

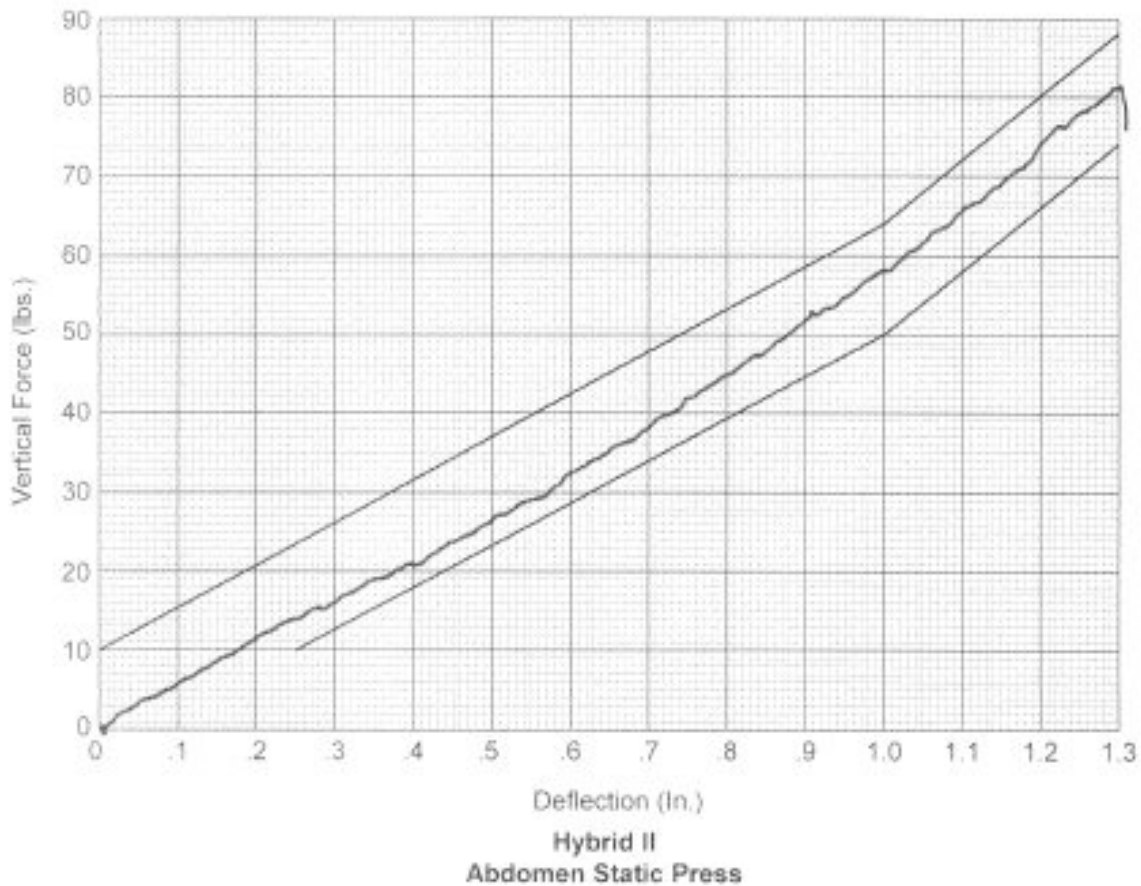
Laboratory Technician:

2

B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	31.0
FORCE @ 13 mm (N)	104 - 162	120.1
FORCE @ 19 mm (N)	163 - 221	191.3
FORCE @ 25 mm (N)	222 - 280	258.0
FORCE @ 33 mm (N)	325 - 391	360.3

REMARKS: None



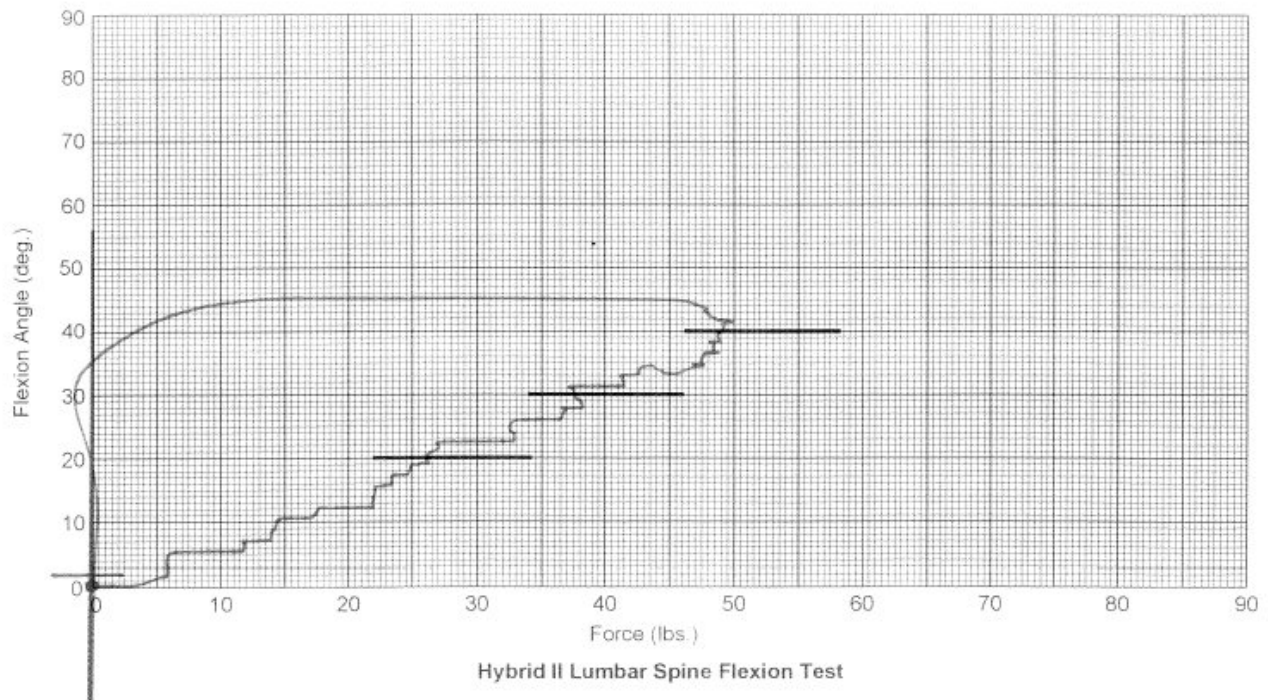
LUMBAR FLEXION TEST
POST TEST
(Test not required for SID certification)

CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 270 Sequential Test Number: 2
Date: March 30, 2004 Laboratory Technician: B. Swiecicki

TEST PARAMETER	SPECIFICATION	TEST RESULTS
TEMPERATURE (°C)	18.9 - 25.5	21.1
RELATIVE HUMIDITY (%)	10 - 70	31.0
FORCE @ 0° (N)	0 - 26.7	0.0
FORCE @ 20° (N)	97.8 - 151.2	115.7
FORCE @ 30° (N)	151.2 - 204.6	169.0
FORCE @ 40° (N)	204.6 - 258	218.0
RETURN ANGLE	12° max.	2.0°

REMARKS: None



POST TEST DUMMY INSPECTION LIST
CONFIGURED FOR LEFT SIDE IMPACT

SID H3 Serial No.: 270 Sequential Test Number: 2
Date: March 30, 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

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	ENDEVCO	AC- P23161	30-Sep-03
HEAD AY	ENDEVCO	AC- P24011	18-Oct-03
HEAD AZ	ENDEVCO	AC-P19111	30-Sep-03
UPPER NECK FX	DENTON	LC-440Fx	18-Jun-03
UPPER NECK FY	DENTON	LC-440Fy	18-Jun-03
UPPER NECK FZ	DENTON	LC-440Fz	18-Jun-03
UPPER NECK MX	DENTON	LC-440Mx	18-Jun-03
UPPER NECK MY	DENTON	LC-440My	18-Jun-03
UPPER NECK MZ	DENTON	LC-440Mz	18-Jun-03
UPPER RIB	ENDEVCO	AC-P16862	16-Oct-03
LOWER RIB	ENDEVCO	AC-P16656	16-Oct-03
LOWER SPINE	ENDEVCO	AC-P16866	16-Oct-03
PELVIS	ENDEVCO	AC-P16676	16-Oct-03
UPPER RIB REDUNDANT	ENDEVCO	AC-P23156	16-Oct-03
LOWER RIB REDUNDANT	ENDEVCO	AC-P16645	16-Oct-03
LOWER SPINE REDUNDANT	ENDEVCO	AC-P19343	16-Oct-03
PELVIS REDUNDANT	ENDEVCO	AC-P16843	16-Oct-03

	REAR SID NO.: 270		
	SERIAL NUMBER	MANUFACTURER	CALIBRATION DATE
HEAD AX	ENDEVCO	AC-P23139	30-Sep-03
HEAD AY	ENDEVCO	AC-P13323	30-Sep-03
HEAD AZ	ENDEVCO	AC-P22943	30-Sep-03
UPPER NECK FX	DENTON	LC-205Fx	18-Jun-03
UPPER NECK FY	DENTON	LC-205Fy	18-Jun-03
UPPER NECK FZ	DENTON	LC-205Fz	18-Jun-03
UPPER NECK MX	DENTON	LC-205Mx	18-Jun-03
UPPER NECK MY	DENTON	LC-205My	18-Jun-03
UPPER NECK MZ	DENTON	LC-205Mz	18-Jun-03
UPPER RIB	ENDEVCO	AC-P18524	17-Oct-03
LOWER RIB	ENDEVCO	AC-P18533	17-Oct-03
LOWER SPINE	ENDEVCO	AC-P18514	17-Oct-03
PELVIS	ENDEVCO	AC-P18519	17-Oct-03
UPPER RIB REDUNDANT	ENDEVCO	AC-P18528	17-Oct-03
LOWER RIB REDUNDANT	ENDEVCO	AC-P18518	17-Oct-03
LOWER SPINE REDUNDANT	ENDEVCO	AC-P18688	17-Oct-03
PELVIS REDUNDANT	ENDEVCO	AC-P18531	17-Oct-03

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)	ENDEVCO	P23993	3/22/2004
RIGHT FRONT SILL (Y)	ENDEVCO	P23999	3/22/2004
RIGHT FRONT SILL (Z)	ENDEVCO	P23939	3/22/2004
RIGHT REAR SILL (X)	ENDEVCO	P19246	1/16/2004
RIGHT REAR SILL (Y)	ENDEVCO	J31034	1/22/2004
RIGHT REAR SILL (Z)	ENDEVCO	P23873	1/16/2004
REAR FLOORPAN ABOVE AXLE (X)	ENDEVCO	P21135	3/18/2004
REAR FLOORPAN ABOVE AXLE (Y)	ENDEVCO	P16575	3/17/2004
REAR FLOORPAN ABOVE AXLE (Z)	ENDEVCO	P14388	3/18/2004
LEFT REAR SILL (Y)	ENDEVCO	J33843	3/22/2004
LEFT FRONT SILL (Y)	GS	9440-034	12/3/2003
LEFT FRONT DOOR CENTERLINE (Y)	-	-	-
RIGHT REAR SEAT OCCUPANT COMP. (Y)	ICS	F53	12/1/2003
MID REAR OF LEFT FRONT DOOR (Y)	-	-	-
LEFT FRONT DOOR UPPER C/L (Y)	-	-	-
MID REAR OF LEFT REAR DOOR (Y)	-	-	-
LEFT REAR DOOR UPPER C/L (Y)	-	-	-
LOWER LEFT B- PILLAR (Y)	GS	9440-032	1/19/2004
MIDDLE LEFT B-PILLAR (Y)	GS	9440-045	12/16/2003
LOWER LEFT A-PILLAR (Y)	ENDEVCO	P23960	3/22/2004
UPPER LEFT A-PILLAR (Y)	ENDEVCO	P16616	3/17/2004
FRONT SEAT TRACK (Y)	ENDEVCO	J33198	3/22/2004
REAR SEAT TRACK (Y)	ENDEVCO	P32269	2/17/2004
VEHICLE CG (X)	ENDEVCO	J37980	3/22/2004
VEHICLE CG (Y)	ENDEVCO	J37854	3/22/2004
VEHICLE CG (Z)	ENDEVCO	J38127	3/22/2004
MDB CG (X)	ENDEVCO	AC-C16433	12-Feb-04
MDB CG (Y)	ENDEVCO	AC-C16416	12-Feb-04
MDB CG (Z)	ENDEVCO	AC-C16499	12-Feb-04
MDB REAR FRAME MEMBER (X)	ENDEVCO	AC-C14948	12-Feb-04
MDB REAR FRAME MEMBER (Y)	ENDEVCO	AC-C16680	12-Feb-04

REMARKS: None