Vehicle Research and Test Center

Oblique Side Pole Impact

SID-IIs - (Build Level D)

2007 Ford Escape XLT

TRC Inc. Test Number: 070521

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Final Report

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Prepared For

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Section 1.0

Purpose and Test Procedure

Purpose

This side impact test is part of the proposed FMVSS 214 Side Impact Protection. It was conducted for the National Highway Traffic Safety Administration (NHTSA) and Vehicle Research and Test Center (VRTC) by Transportation research Center Inc. (TRC Inc.). The purpose of this test was to evaluate side impact protection of a 2007 Ford Escape XLT MPV with the rigid pole. The test was conducted in accordance with the National Highway Traffic Safety Administration's Notice of Proposed Rulemaking (Docket No. NHTSA-2004-17694, May 17, 2004).

Section 2.0

Side Impact Test

Summary of Side Impact Test

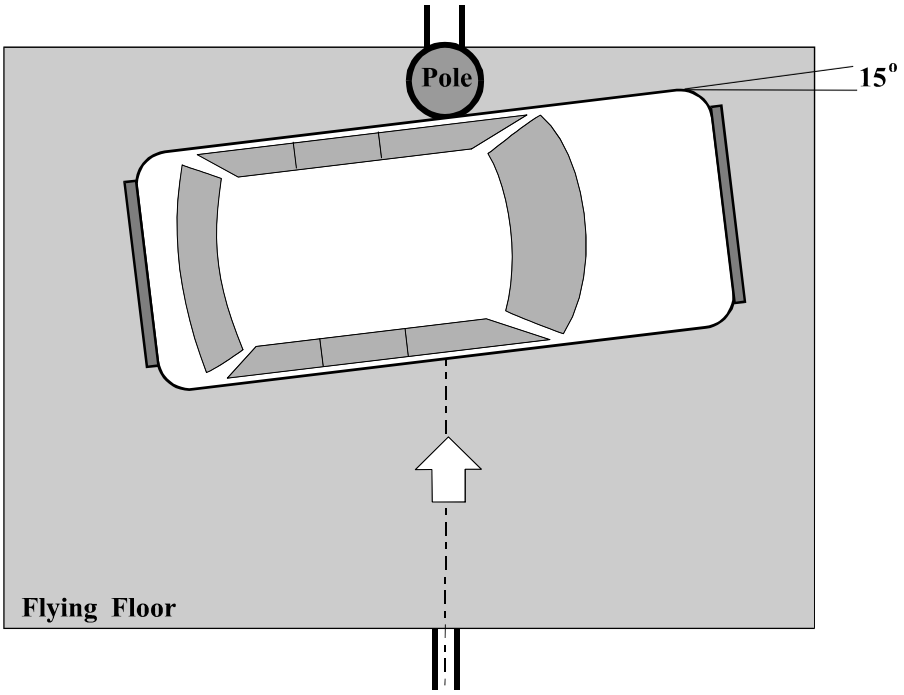
A 2007 Ford Escape XLT MPV impacted an oblique rigid pole barrier at an angle of 285°, at a velocity of 32.0 km/h (19.9 mph). The pole was aligned with the dummy's head center of gravity. The side impact test was conducted by Transportation Research Center Inc. in East Liberty, Ohio on May 21, 2007. Pre-test and post-test photographs of the test vehicle, the rigid pole barrier, and the side impact dummy (SID-IIs Build Level D) are included in Appendix A.

One restrained Side Impact Dummy (SID-IIs Build Level D) was placed in the driver (Pos. #1) designated seating position according to the instructions specified in the NHTSA Draft Side Impact Laboratory Test Procedure (TP-214P-00, dated May 2004). The side impact test was documented by one (1) real-time camera and nine (9) high-speed digital cameras. Camera locations and other pertinent camera information are included in this report.

The SID-IIs Build Level D was instrumented with triaxial head, shoulder, upper spine, lower spine and pelvis oriented to measure longitudinal, lateral, and vertical accelerations. The dummy was also instrumented with 6-axis channel upper neck moment and force load cells, shoulder, iliac, and acetabulum load cells, five rib lateral accelerometers, and rib and shoulder displacement potentiometers.

A summary of the side impact dummy (SID-IIs Build Level D) configuration and verification test data can be found in Appendix C. A total of 79 channels of data were recorded. Appendix B contains the vehicle, barrier, and dummy response data traces.

TEST RESULT SUMMARY



The following table summarizes the results of the test.

	Front SID-IIs (#056)
HIC36 (g) CFC 1000	407
Upper Rib Deflection (mm) CFC 180	
Rib 1	65 mm
Rib 2	39 mm
Rib 3	33 mm
Lower Rib Deflection (mm) CFC 180	
Rib 1	28 mm
Rib 2	36 mm
Lower Spine Resultant (g) CFC 180	65 g
Combined Iliac/Acetabulum Force (N) CFC 600	6515 N

	2007 Ford Escape XLT
Vehicle Test Weight	1806.6 kg (3983 lbs)
Impact Point (Horizontal - from Front Axle)	1110 mm
Maximum Crush	521 mm Level 2
Impact Speed	19.9 mph

Data Acquisition Explanations

The driver dummy's left thorax rib 1 displacement Y-axis data channel, 11TRRI01LES2DSYA, recorded questionable data throughout the event.

The vehicle's left side sill at front seat Y-axis acceleration data channel, 14SILBFR0000ACYA, recorded questionable data after throughout. This affected the velocity and displacement calculations.

Section 3

Summary of Test Results

Table 1 General Test Vehicle Parameter Data

Test Vehicle: 2007 Ford Escape XLT Test Date: 05/21/07

TEST VEHICLE INFORMATION

Make	Ford
Model	Escape XLT
Body Style	MPV
VIN	1FMCU93107KB79371
Color	White
Odometer Reading	111 miles
Transmission	3-Speed Automatic
Final Drive	Four wheel drive
Number of Cylinders	6
Engine Displacement	3.0 L
Engine Placement	Lateral
Air Conditioning	Yes
Power Windows	Yes
Power Seats	Yes
Cruise Control	Yes
Tinted Glass	Yes
Keyless Entry	Yes

TEST VEHICLE OPTIONS

Driver Front Airbag	Yes
Driver Side Curtain Airbag	Yes
Driver Side Torso Airbag	Yes
Rear Passenger Side/Curtain Airbag	Yes
Rear Passenger Side Torso Airbag	Yes
Power Steering	Yes
Power Door Locks	Yes
Tilt Wheel	Yes
Anti-lock Brakes	Yes
Traction Control	No
Bucket Seats	Yes
Rear Defroster	Yes
2-Door/4-Door	4
AM/FM Radio	Yes
CD Player	Yes
Sun Roof	Yes
Telescoping Steering Wheel/Column	No

DATA FROM CERTIFICATION LABEL

Manufactured By	Ford Motor Company
Date of Manufacture	11/06

GVWR (kg)	2105
GAWR Front (kg)	1107
GAWR Rear (kg)	1057

Measured Parameter	Front	Mid	Rear	Total
Type of Seats	Bucket	Split Bench	Split Bench	
Number Of Occupants	2	N/A	3	5
Capacity Wt. (VCW)				472
Cargo Wt. (RCLW) (kg)				132

Table 1 General Test Vehicle Parameter Data, Continued

Test Vehicle: 2007 Ford Escape XLT Test Date 05/21/07

TEST VEHICLE WEIGHTS

	Units	As Delivered (UVW) (Axle)			As Tested (ATW) (Axle)		
		Front	Rear	Total	Front	Rear	Total
Left	kg	487.4	336.8		500.8	404.4	
Right	kg	462.8	326.6		491.8	409.6	
Ratio	%	58.9	41.1		54.9	45.1	
Totals	kg	950.2	663.4	1613.6	992.6	814.0	1806.6

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UVW)	kg	1613.6
Weight of SIDIIs ATD	kg	61.0
Rated Cargo/Luggage Weight (RCLW)	kg	132.0
Calculated Vehicle Target Weight (TVTW)	kg	1806.6

TEST VEHICLE ATTITUDES AND CG

	Units	LF	RF	LR	RR	CG(aft of front axle)
As Delivered	mm	813	824	836	849	1077
As Tested	mm	805	806	810	818	1180
Fully Loaded	mm	812	822	808	818	

GENERAL TEST VEHICLE DATA

Measurement Description	Units	Value
Test Vehicle Wheelbase	mm	2620
Total Vehicle Length at Left Side	mm	4250
Total Vehicle Length at Centerline	mm	4430
Total Vehicle Length at Right Side	mm	4250
Weight of Ballast Behind Passenger Seat	kg	72.1
Amount of Stoddard Solvent in Fuel Tank	liters	57.9

TEST VEHICLE VERTICAL IMPACT LINE DATA

Measurement Description	Units	Value
Impact Reference Line From Front Axle	mm	1110
Impact Point	mm	1110
Impact Point Difference	mm	0

Table 1 General Test Vehicle Parameter Data, Continued

Test Vehicle: 2007 Ford Escape XLT Test Date 05/21/07

SID IIs RIDING POSITION

The driver and passenger seat back is positioned to the manufacturer's designated angle.

Driver: Total Number of detents: N/A

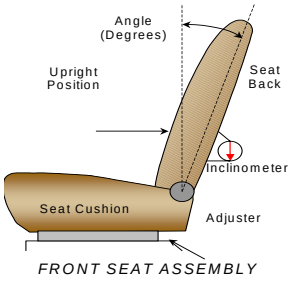
Test detent (with the forward-most detent defined as 0): 0

Passenger: Total Number of detents: Fixed

Test detent (with the forward-most detent defined as 0): N/A

Driver seat back angle: The back was adjusted to 6.6° forward of 0 measured at the head restraint.

Passenger seat back angle: Fixed

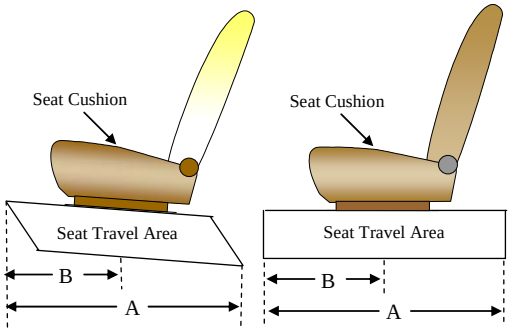


SEAT FORE/AFT POSITIONS

The total seat travel was measured from forward most position to rearmost position, irrespective of vertical seat height in those positions. The seat was set at the longitudinal mid position with vertical adjustment at the lowest position obtainable for both the driver and passenger.

SEAT FORE/AFT POSITIONING

	Total Fore/Aft Travel	Placed in Position No.
Driver Seat	245 mm	Full forward
Rear Seat	N/A	N/A



SEAT BELT UPPER ANCHORAGE

	Total No. of Positions	Placed in Position No.
Driver Seat	4	4
Rear Seat	N/A	N/A

Position number one is the uppermost adjustment position.

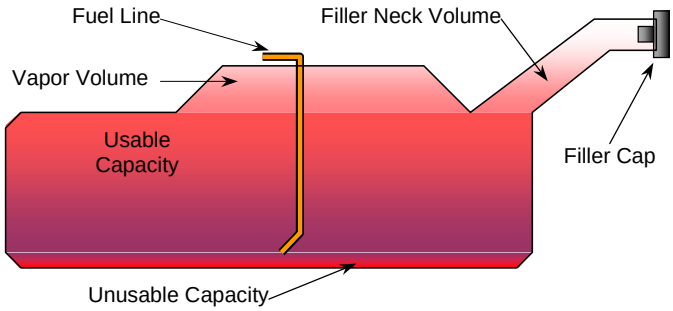
Table 1 General Test Vehicle Parameter Data, Continued

Test Vehicle: 2007 Ford Escape XLT Test Date 05/21/07

FUEL TANK CAPACITY

	Liters
Usable Capacity of "Standard Tank"	62.5
Usable Capacity used for FMVSS301	62.5
Actual Amount of Solvent used	57.9

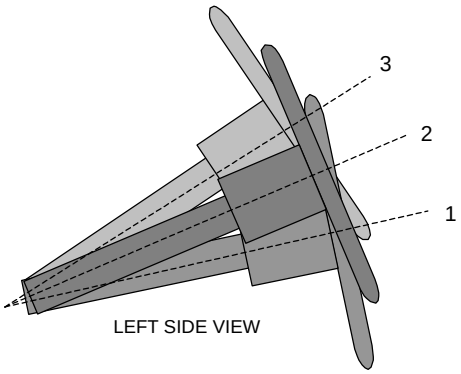
The test vehicle is equipped with an electric fuel pump. The fuel pump operates for approximately two seconds after the ignition is placed in the "ON" position, after which the fuel pump automatically shuts off. The fuel filler door is located on the left rear fender. The standard fuel tank occupies the area under the rear seat.



VEHICLE FUEL TANK ASSEMBLY

STEERING COLUMN ADJUSTMENT

Steering wheel and column adjustments are made so that the steering wheel hub is at the geometric center of the locus it describes when moved through its full range of motion. An aluminum plate is placed across the rim of the steering wheel, an inclinometer is placed on the plate and the angle is measured.



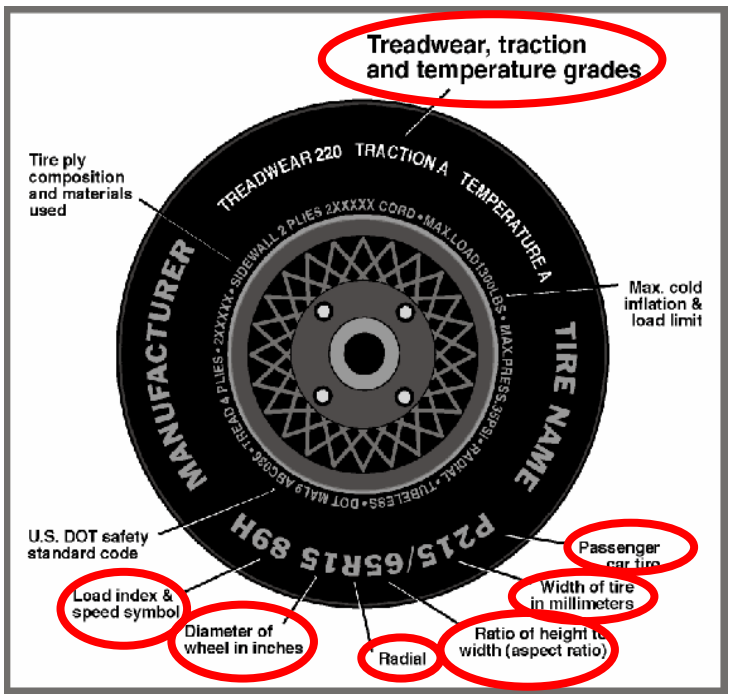
STEERING COLUMN ASSEMBLY

STEERING WHEEL/COLUMN POSITIONS

	Degrees	Fore/Aft Position, mm
Lowermost Position	27.3°	Fixed
Geometric Center Position	29.3°	Fixed
Uppermost Position	31.2°	Fixed

Table 2 Test Vehicle Tire Information

Test Vehicle: 2007 Ford Escape XLT Test Date 05/21/07



DATA FROM TIRE PLACARD

Measured Parameter	Front	Rear
Maximum Tire Pressure (kPa)	300	300
Cold / Test Pressure (kPa)	205	205
Recommended Tire Size	P235/70R16	P235/70R16
Tire Size on Vehicle	P235/70R16	P235/70R16
Tire Manufacturer	Continental	Continental
Tire Name	ContiTrac	ContiTrac
Radial	R	R
Wheel Diameter	16	16
Load Index & Speed Symbol	104T	104T
Treadwear	520	520
Traction Grade	A	A
Temperature Grade	B	B

Table 3 Post-Test Observations

Test Vehicle: 2007 Ford Escape XLT Test Date 05/21/07

TEST DUMMY INFORMATION AND CONTACT POINTS

Description	Front Seat SID IIs
Dummy Type / Serial No.	SID IIs / 056
Head Contact	Side curtain airbag
Upper Torso Contact	Torso airbag
Lower Torso Contact	Torso airbag
Left Knee Contact	Door panel
Right Knee Contact	None

POST TEST DOOR OPENING AND SEAT TRACK INFORMATION

Description	Front	Rear
Locked/Unlocked Doors	Unlocked	Unlocked
Left Side Door Opening	Jammed & Latched	Jammed & Latched
Right Side Door Opening	Close & Latched	Closed & Latched
Seat Movement	None	None
Seat Back Failure	None	None

POST TEST STRUCTURAL OBSERVATIONS

Critical Areas of Performance	Observations and Conclusions
Pillar Performance	Did not separate from vehicle
Sill Separation	Did not separate from vehicle
Windshield Damage	Broken
Window Damage	Left front window shattered
Other Notable Effects	None

SUPPLEMENTAL RESTRAINT SYSTEM INFORMATION

Restraint Type	Left Front (Driver) Occupant Location 01	
	Installed	Operation
Front Airbag	Yes	No
Side Airbag	Yes	Yes
Head Airbag	Yes	Yes
Curtain Airbag	Yes	Yes
Seat Belt Pretensioner	Yes	Unknown
Seat Belt Load Limiter	No	N/A

Section 4

Occupant and Vehicle Information

Table 4 SID-IIs Instrumentation Data

Vehicle: 2007 Ford Escape XLT MPV

Test Number: 070521 Driver Dummy Serial Number: 056

		Positive Direction		Negative Direction	
		Max.	Time	Max.	Time
Location		(g)	(ms)	(g)	(ms)
Head Acceleration	X	62.8	57.8	3.6	180.8
	Y	139.7	57.8	9.2	169.4
	Z	18.3	59.1	28.3	123.5
	R	154.5	57.8		
Neck Force	X	1815.5	289.7	459.4	205.9
	Y	1654.2	53.0	755.1	126.5
	Z	999.2	123.4	977.8	58.6
Neck Moment	X	16.5	106.0	47.9	59.8
	Y	22.9	82.1	25.5	134.9
	Z	13.2	74.6	9.5	171.7
Shoulder Acceleration	X	90.7	28.0	303.7	20.6
	Y	526.6	21.2	135.9	79.0
	Z	329.3	77.1	210.3	100.4
	R	530.9	21.2		
Shoulder Force	X	550.2	21.7	574.5	45.3
	Y	1345.3	38.6	248.8	75.8
	Z	374.8	109.1	350.8	85.8
Shoulder Displacement	Y	42.9	50.6	1.7	78.2
Upper Spine Acceleration	X	19.7	44.2	6.6	78.4
	Y	37.2	50.0	14.6	101.6
	Z	11.5	98.1	7.7	79.8
	R	37.8	50.1		
Left Thorax Rib 1 Displacement[1]	Y	64.7	32.3	1.2	19.9
Left Thorax Rib 2 Displacement	Y	39.3	48.4	0.1	19.8
Left Thorax Rib 3 Displacement	Y	33.2	48.0	0.3	20.5
Left Abdomen Rib 1 Displacement	Y	28.4	47.1	1.6	22.2

[1] See Data Acquisition Explanations.

Table 4 SID-IIs Instrumentation Data, Continued

Vehicle: 2007 Ford Escape XLT MPV

Test Number: 070521 Driver Dummy Serial Number: 056

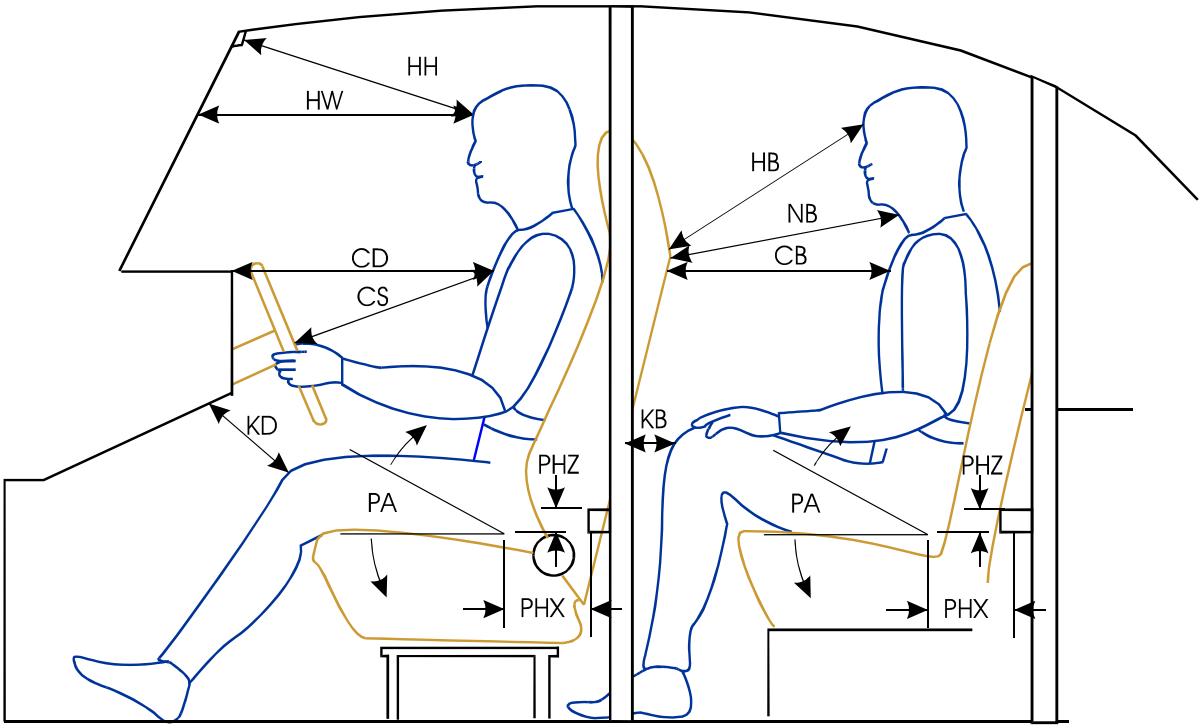
		Positive Direction		Negative Direction	
		Max.	Time	Max.	Time
Location		(g)	(ms)	(g)	(ms)
Left Abdomen Rib 2 Displacement	Y	36.2	65.0	0.5	23.0
Left Thorax Rib 1 Acceleration	Y	174.3	20.9	33.4	18.2
Left Thorax Rib 2 Acceleration	Y	193.6	21.0	33.2	22.2
Left Thorax Rib 3 Acceleration	Y	149.1	31.7	48.2	36.2
Left Abdomen Rib 1 Acceleration	Y	117.3	33.2	43.7	19.2
Left Abdomen Rib 2 Acceleration	Y	131.6	34.2	30.3	78.6
Lower Spine Acceleration	X	17.3	43.5	12.8	81.3
	Y	59.5	42.8	21.4	89.9
	Z	13.0	58.6	21.5	42.6
	R	65.4	42.8		
Left Iliac Wing Force	Y	3043.4	43.4	135.5	92.6
Left Acetabulum Force	Y	3488.9	42.2	5.8	17.6
Pelvis Acceleration	X	7.1	22.6	11.2	56.8
	Y	75.6	42.9	27.9	78.4
	Z	13.9	77.7	6.9	112.5
	R	76.1	42.9		

Positive Direction
Longitudinal: Forward
Lateral: Rightward
Vertical: Downward

Negative Direction
Longitudinal: Rearward
Lateral: Leftward
Vertical: Upward

Figure 1 SID-IIs Longitudinal Clearance Dimensions

Vehicle: 2007 Ford Escape XLT MPV



Left Side View

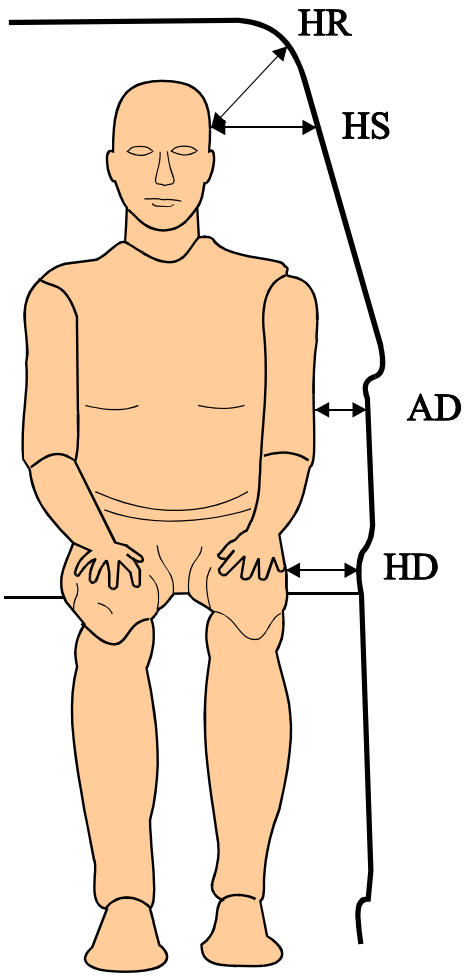
Note: All measurements are in millimeters with tolerance of ±0.1 mm

Measurement	Driver SID-IIs # 056
HH	287
HW	522
HZ	210
NR	259
CD	411
CS	164
KDL(KDA°)	83/(26.9°)
KDR(KDA°)	77/(21.2°)
PA°	N/A
PHX	345
PHZ	89

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

Figure 2 SID-IIs Lateral Clearance Dimensions

Vehicle: 2007 Ford Escape XLT MPV

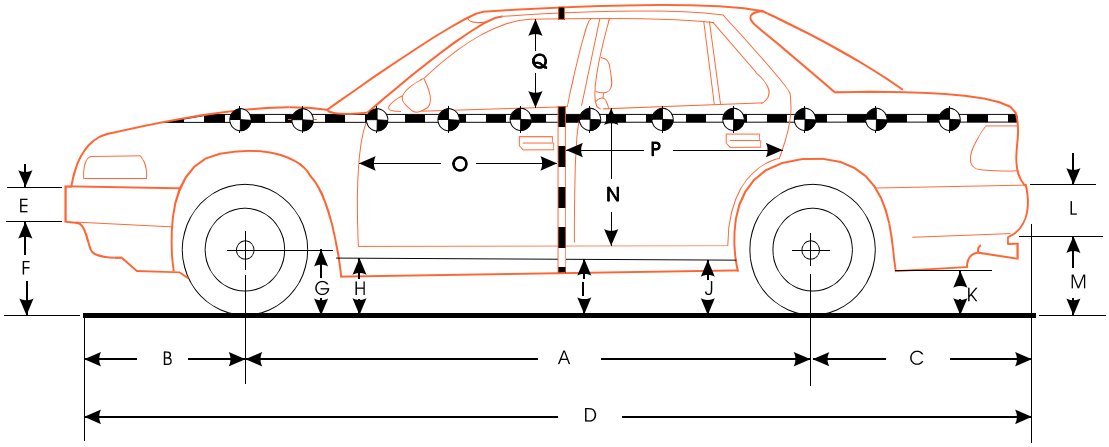


Note: All measurements are in millimeters with tolerance of ±0.1 mm

Measurement	Driver SID-IIs # 056
HR	253
HS	328
AD	Lower: 131 Upper: 125
HD	27

Figure 3 Vehicle Pre-Test And Post-Test Measurements

Vehicle: 2007 Ford Escape XLT MPV



Left Side View

Note: All dimensions are in millimeters with tolerance of ±0.1 mm

	Pre-Test (as delivered)	Pre-Test (as tested)	Post-Test (as tested)	Change
A	2620	2620	2430	190
B	835	835	882	-47
C	975	975	910	65
D	4430	4430	4334	96
E	205	205	205	0
F	505	500	561	-61
G	350	340	340	0
H	327	316	300	16
I	365	345	368	-23
J1	320	300	321	-21
J2	355	335	369	-34
K	430	402	423	-21
L	143	143	143	0
M	555	520	540	-20
N	700	700	664	36
O	497	497	316	181
P	1485	1485	1199	286
Q	470	470	444	26
R	4250	4250	4230	20
S	4250	4250	4055	195
T	1340	1340	1095	245

D = Length at centerline E and L = Bumper Thickness R = Right Side Length
S = Left Side Length T = Width at B-pillar J1 = To Pinch Weld J2 = To Sill

Table 5 Vehicle Structural Measurements[1,2]

	Elements	Pre-Test
1	Total Length	4430
2	Total Width	1730
3	Bumper Top Height	590
4	Bumper Bottom Height	520
5	Longitudinal Member Top Height	582
6	Longitudinal Member Bottom Height	485
7	Distance Between Longitudinal Members	1125
7´	Longitudinal Member Width	195
8	Engine Top Height	941
9	Engine Bottom Height	233
10	Engine and Gearbox Width	680
11	Front Bumper - Engine Distance	315
12	Front Shock Absorber Fixing Height	1000
13	Bonnet Leading Edge Height	865
14	Front Shock Absorber Fixing Width	1160
15	Front Bumper - Front Axle Distance	835
16	Front Axle - A Pillar Distance	547
17	A Pillar - B Pillar Distance	990
18	B Pillar - Rear Axle Distance	1075
19	B Pillar - C Pillar Distance	920
20	Roof Sill Bottom Height	1520
21	Roof Sill Top Height	1578
22	Floor Sill Bottom Height	472
23	Floor Sill Top Height	503

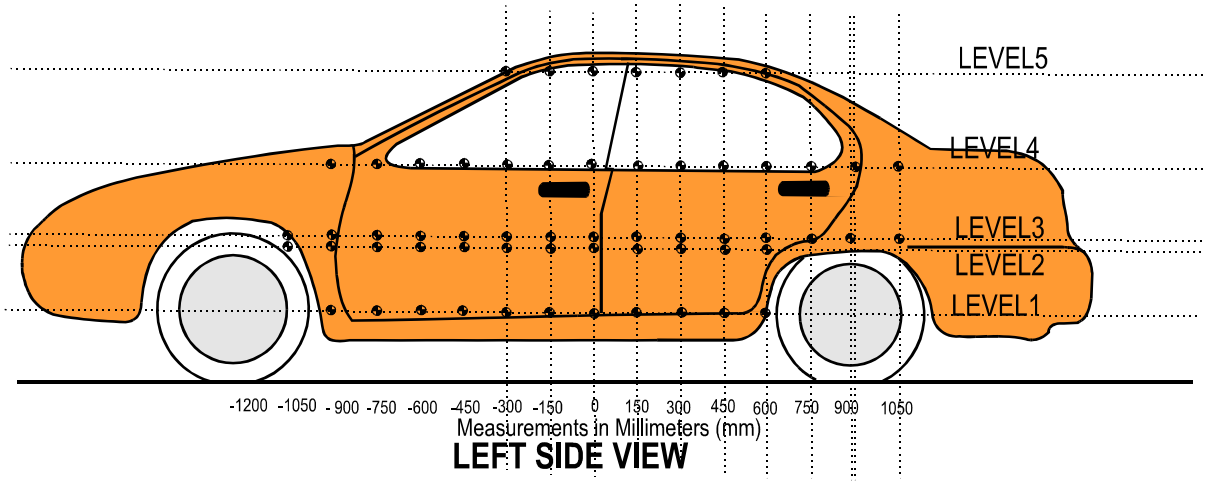
All distance measurements are in millimeters.

[1] Taken from INSIA report, “Structural Survey of Cars, Methodology of the Main Resistant Elements in the Car Body”, March 1999. This report is included in Appendix E.

[2] The vertical measurements from the ground are adjusted based on the test vehicle’s pre-test attitude measurements.

Figure 4 Vehicle Side Measurements

Vehicle: 2007 Ford Escape XLT MPV



Measurements are taken when the vehicle is in the "As Tested" configuration.

Measurements along the vertical 750 mm line shown above.

Measurements vehicle forward of the impact line are negative.

All measurements below in mm.

Level	Measurement Description	Height Above Ground
5	Window	1600
4	Window Sill	1065
3	Mid Door	780
2	Occupant H-Point	745
1	Sill Top	380

Table 6 Vehicle Exterior Crush Profiles - All Levels

Vehicle: 2007 Ford Escape XLT MPV

Location	Height		(mm) From Impact Point													
			-1286	-1136	-986	-836	-686	-536	-386	-236	-86	64	214	364	514	664
Level 1 Side Sill	380	Pre						803	782	780	781	780	781	780	781	782
		Post						750	641	544	443	356	428	548	623	680
		Crush						53	141	236	338	424	353	232	158	102
Level 2 H-Point	745	Pre					877	865	869	872	874	875	875	874	874	873
		Post					880	816	702	583	451	354	408	546	654	707
		Crush					-3	49	167	289	423	521	467	328	220	166
Level 3 Mid-Door	780	Pre				887	872	857	859	861	863	865	867	868	869	869
		Post				908	880	814	701	581	449	356	407	542	642	693
		Crush				-21	-8	43	158	280	414	509	460	326	227	176
Level 4 Window Sill	1065	Pre			779	795	807	814	821	828	834	839	844	848	851	851
		Post			869	857	840	821	713	594	468	369	403	532	634	673
		Crush			-90	-62	-33	-7	108	234	366	470	441	316	217	178
Level 5 Window Top	1600	Pre						770	731	690	647	627	624	621	620	619
		Post						772	680	572	463	348	367	412	459	504
		Crush						-2	51	118	184	279	257	209	161	115

All measurements were recorded using TRC Inc.'s FARO Arm with a tolerance of ± 0.1 mm.

Note: Negative measurements are vehicle forward of the impact point.
The crush profile grid is established prior to test day based on an estimated impact point. The final distance to impact is determined after final dummy positioning. The pole is aligned with the center of gravity of the head.

Table 6 Vehicle Exterior Crush Profiles - All Levels, Continued

Vehicle: 2007 Ford Escape XLT MPV

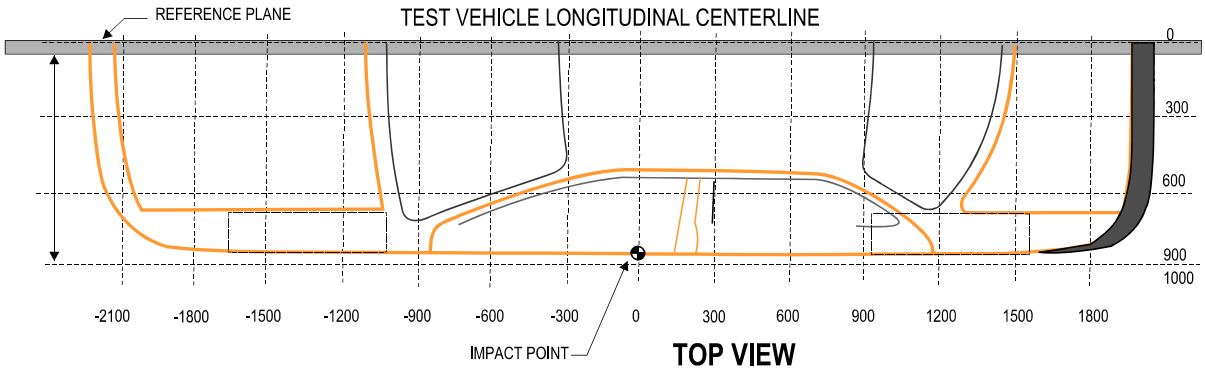
Location	Height		(mm) From Impact Point												
			814	964	1114	1264	1414	1564	1714	1864	2014	2164	2314	2464	2614
Level 1 Side Sill	380	Pre	780	794	842										
		Post	731	796	884										
		Crush	49	-2	-42										
Level 2 H-Point	745	Pre	871	869	874										
		Post	758	810	869										
		Crush	113	59	5										
Level 3 Mid-Door	780	Pre	869	869	872										
		Post	744	798	853										
		Crush	125	71	19										
Level 4 Window Sill	1065	Pre	853	853	852										
		Post	714	753	791										
		Crush	139	100	61										
Level 5 Window Top	1600	Pre	617	617	616										
		Post	538	563	583										
		Crush	79	54	33										

All measurements were recorded using TRC Inc.'s FARO Arm with a tolerance of ± 0.1 mm.

Figure 5 Vehicle Damage Profile Distances

Test Vehicle: 2007 Ford Escape XLT Test Date: 05/21/07

NOTE: All measurements were recorded using TRC Inc.'s FARO Arm with a tolerance of plus or minus 0.1 mm.



MEASUREMENT CONVENTIONS:
Forward of the impact point (towards front of vehicle) is considered negative (-)
Rearward of the impact point (towards rear end of vehicle) is considered positive (+)

DAMAGE PROFILE DISTANCES

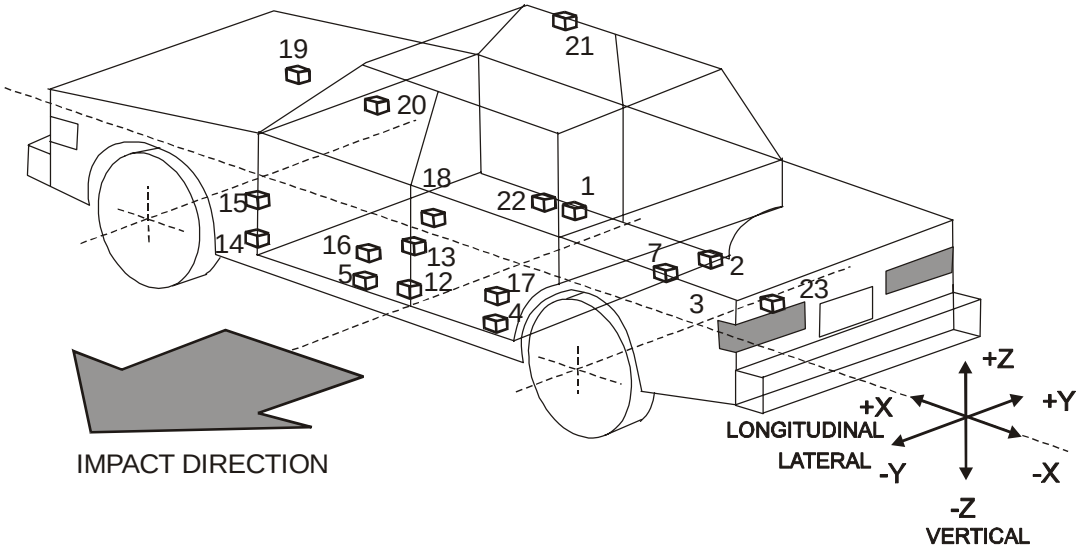
DPD	Distance from Impact Point in mm	Level	Pre-Test (mm)	Post-Test (mm)	Max. Static Crush (mm)
1	1114 mm	4	852	791	61
2	664 mm	3	869	693	176
3	364 mm	2	874	546	328
4	64 mm	2	875	354	521
5	-236 mm	2	872	583	289
6	-536 mm	1	803	750	53

Reference plane is parallel to test vehicle longitudinal centerline.

Given dimensions = Reference plane to car body.

Figure 6 Test Vehicle Accelerometer Locations and Data Summary

Vehicle: 2007 Ford Escape XLT MPV



1-Right Front Side Sill
2-Right Side Sill at Rear Seat
3-Rear Floorpan above Axle
4-Left Side Sill at Rear Seat
5-Left Front Side Sill
6-Left Front Door on Centerline
7-Right Rear Occupant Compartment
8-Left Front Door Mid Rear
9-Left Front Door Upper Centerline
10-Left Rear Door Mid Rear
11-Left Rear Door Upper Centerline
12-Left Side Lower B-pillar
13-Left Side Middle B-pillar
14-Left Side Lower A-pillar
15-Left Side Middle A-pillar
16-Left Side Front Seat Track at H-point
17-Left Rear Seat Track at H-point
18-Vehicle Center of Gravity
19-Top of Engine
20-Firewall
21-Right Side Roof Rail
22-Right Side Sill In-Line with Impact Location
23-Rear Deck Behind Rear Axle

Table 7 Test Vehicle Accelerometer Locations and Data Summary

Vehicle: 2007 Ford Escape XLT MPV

Location	Coordinates (millimeters)			Positive Direction		Negative Direction	
	X	Y	Z	Max. (g)	Time (ms)	Max. (g)	Time (ms)
1 Right Side Sill at Front Seat	3140	670	425				
Longitudinal				3.0	36.5	0.2	212.3
Lateral				11.1	42.6	0.6	296.4
Vertical				3.0	18.6	3.8	59.2
Resultant				11.3	42.7		
2 Right Side Sill at Rear Seat	2305	673	453				
Longitudinal				3.7	36.7	0.2	212.6
Lateral				10.9	37.5	0.4	295.3
Vertical				2.5	45.4	2.4	58.9
Resultant				11.5	37.4		
3 Rear Floorpan Above Axle	1618	20	625				
Longitudinal				3.8	96.4	1.6	27.1
Lateral				8.8	48.5	0.8	266.0
Vertical				2.1	53.3	3.5	93.9
4 Left Side Sill at Rear Seat	2075	673	420				
Longitudinal							
Lateral				13.5	41.8	1.2	229.4
Vertical							
Resultant							
5 Left Side Sill at Front Seat	2875	670	430				
Longitudinal							
Lateral[1]				94.1	25.5	24.0	31.8
Vertical							
Resultant							

[1] See Data Acquisition Explanations.

Table 7 Test Vehicle Accelerometer Locations and Data Summary, Continued

Vehicle: 2007 Ford Escape XLT MPV

Location	Coordinates (millimeters)			Positive Direction		Negative Direction	
	X	Y	Z	Max. (g)	Time (ms)	Max. (g)	Time (ms)
6 Left Front Door on Centerline	3095	746	854				
Longitudinal							
Lateral				114.8	21.1	100.0	16.6
Vertical							
Resultant							
7 Right Rear Occupant Compartment	2223	483	510				
Longitudinal							
Lateral				11.2	38.0	0.5	290.2
Vertical							
Resultant							
8 Left Front Door Mid-Rear	2710	746	854				
Longitudinal							
Lateral				80.3	13.0	70.3	17.2
Vertical							
Resultant							
9 Left Front Door Upper Centerline	3095	740	1045				
Longitudinal							
Lateral				159.8	9.1	68.5	19.9
Vertical							
Resultant							
10 Left Rear Door Mid Rear	1895	720	800				
Longitudinal							
Lateral				27.0	32.3	18.9	27.2
Vertical							
Resultant							

Table 7 Test Vehicle Accelerometer Locations and Data Summary, Continued

Vehicle: 2007 Ford Escape XLT MPV

Location	Coordinates (millimeters)			Positive Direction		Negative Direction	
	X	Y	Z	Max. (g)	Time (ms)	Max. (g)	Time (ms)
11 Left Rear Door Upper Centerline	2110	723	1083				
Longitudinal							
Lateral				21.7	33.2	8.7	58.8
Vertical							
Resultant							
12 Left Lower B-Pillar	2600	790	680				
Longitudinal							
Lateral				33.9	13.4	0.9	90.2
Vertical							
Resultant							
13 Left Middle B-Pillar	2570	800	1010				
Longitudinal							
Lateral				37.9	37.8	1.1	92.1
Vertical							
Resultant							
14 Left Lower A-Pillar	3600	790	635				
Longitudinal							
Lateral				15.5	15.3	3.1	9.0
Vertical							
Resultant							
15 Left Middle A-Pillar	4070	780	995				
Longitudinal							
Lateral				12.8	45.8	14.2	38.6
Vertical							
Resultant							

Table 7 Test Vehicle Accelerometer Locations and Data Summary, Continued

Vehicle: 2007 Ford Escape XLT MPV

Location	Coordinates (millimeters)			Positive Direction		Negative Direction	
	X	Y	Z	Max. (g)	Time (ms)	Max. (g)	Time (ms)
16 Left Front Seat Track	2800	570	405				
Longitudinal							
Lateral				64.9	30.2	13.2	58.8
Vertical							
Resultant							
17 Left Rear Seat Track	1872	583	525				
Longitudinal							
Lateral				10.8	37.3	0.6	289.5
Vertical							
Resultant							
18 Vehicle CG	2958	0	650				
Longitudinal				10.8	37.3	0.6	289.5
Lateral				34.1	41.6	28.3	90.5
Vertical				118.6	35.2	49.4	56.9
Resultant				48.6	90.1	45.7	42.5
19 Top of Engine	3665	130	930				
Longitudinal				17.2	43.8	2.2	124.1
Lateral				11.2	43.9	2.2	248.3
Vertical							
Resultant							
20 Firewall	3437	60	1045				
Longitudinal				11.2	34.4	2.7	60.0
Lateral				11.5	34.2	0.8	3.7
Vertical							
Resultant							

Table 7 Test Vehicle Accelerometer Locations and Data Summary, Continued

Vehicle: 2007 Ford Escape XLT MPV

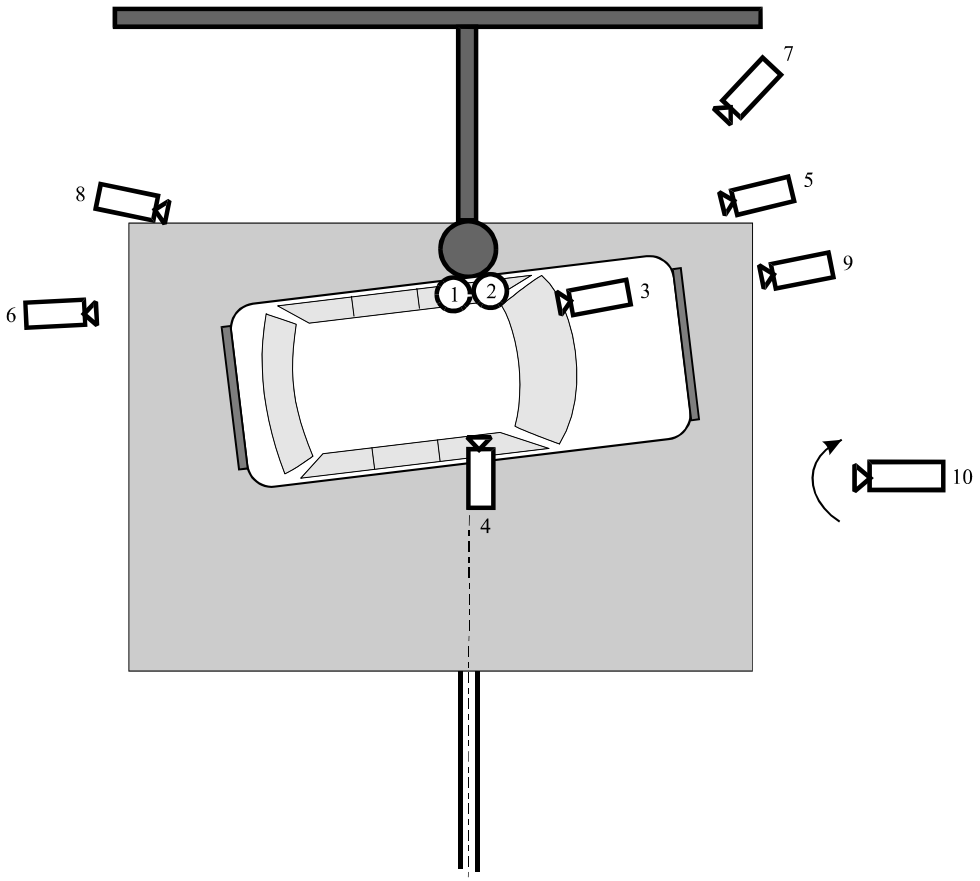
Location	Coordinates (millimeters)			Positive Direction		Negative Direction	
	X	Y	Z	Max. (g)	Time (ms)	Max. (g)	Time (ms)
21 Right Side Roof Rail	2965	610	1505				
Longitudinal				5.8	64.2	1.7	35.6
Lateral				17.8	66.0	2.1	57.4
Vertical							
Resultant							
22 Right Side Sill In-Line with Impact Location	3330	708	300				
Longitudinal							
Lateral				11.2	43.0	0.7	55.6
Vertical							
23 Rear Deck Behind Rear Axle	800	0	640				
Longitudinal				1.7	25.8	3.1	97.1
Lateral				10.9	47.0	2.2	259.4
Vertical				4.0	51.0	2.4	67.4

Reference: X: + Forward from rear bumper
Y: + Rightward from vehicle centerline
Z: + Downward from ground level

For acceleration data sign convention see Report Sign Convention in Appendix D.

Figure 7 High-Speed Camera Locations and Data Summary

Vehicle: 2007 Ford Escape XLT MPV



No.	Camera View	Location (mm)			Angle (deg.)	Lens (mm)	Speed (fps)
		X	Y	Z			
1	Overhead Wide	350	0	-5350	90.0	12.5	1000
2	Overhead Tight	0	0	-5350	90.0	25	1000
3	Onboard Front - Driver	0	1350	-1420	1.2	12.5	1000
4	Onboard Side Front	700	0	-1360	1.9	6.5	1000
5	Front Vehicle to Pole	800	6300	-1350	3.1	12.5	1000
6	Rear Vehicle to Pole	0	8250	-1350	0.1	12.5	1000
7	Left Front Angled	1120	5250	-1400	2.2	25	1000
8	Left Rear Angled	2450	5100	-1360	0.7	25	1000
9	Vehicle Front on Driver	0	5150	-2300	6.1	50	1000
10	Panning					Zoom	30

+X: Forward (referenced to Pole) from impact point
+Y: Rightward (referenced to Pole) from impact point
+Z: Downward from ground level
Vehicle was at a 15° angle to the rigid pole.

Appendix A

Photographs

Figure A-1 Pre-Test Front View

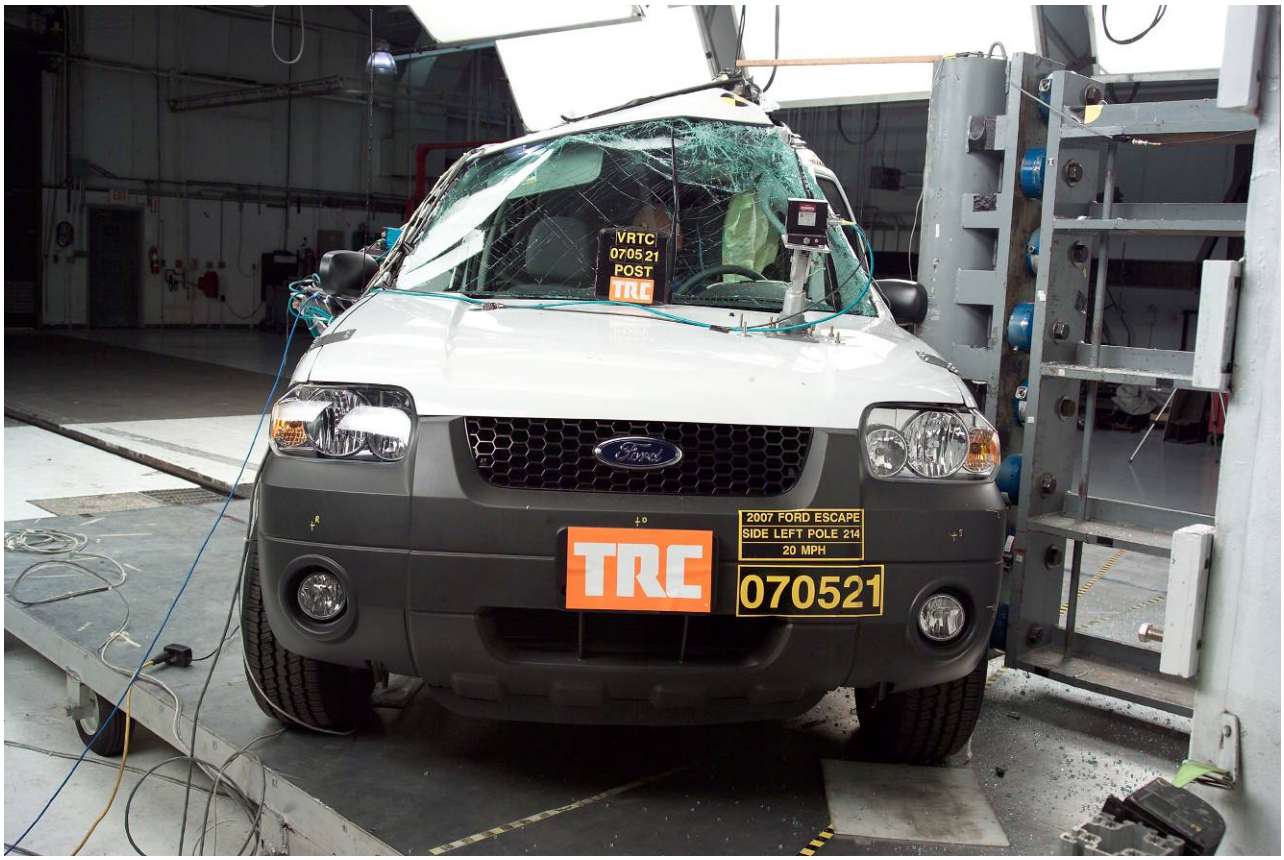


Figure A-2 Post-Test Front View

Figure A-3 Pre-Test Left Front View

Figure A-4 Post-Test Left Front View

Figure A-5 Pre-Test Left Side View

Figure A-6 Post-Test Left Side View

Figure A-7 Pre-Test Left Rear View

Figure A-8 Post-Test Left Rear View

Figure A-9 Pre-Test Rear View

Figure A-10 Post-Test Rear View

Figure A-11 Pre-Test Right Rear View

Figure A-12 Post-Test Right Rear View

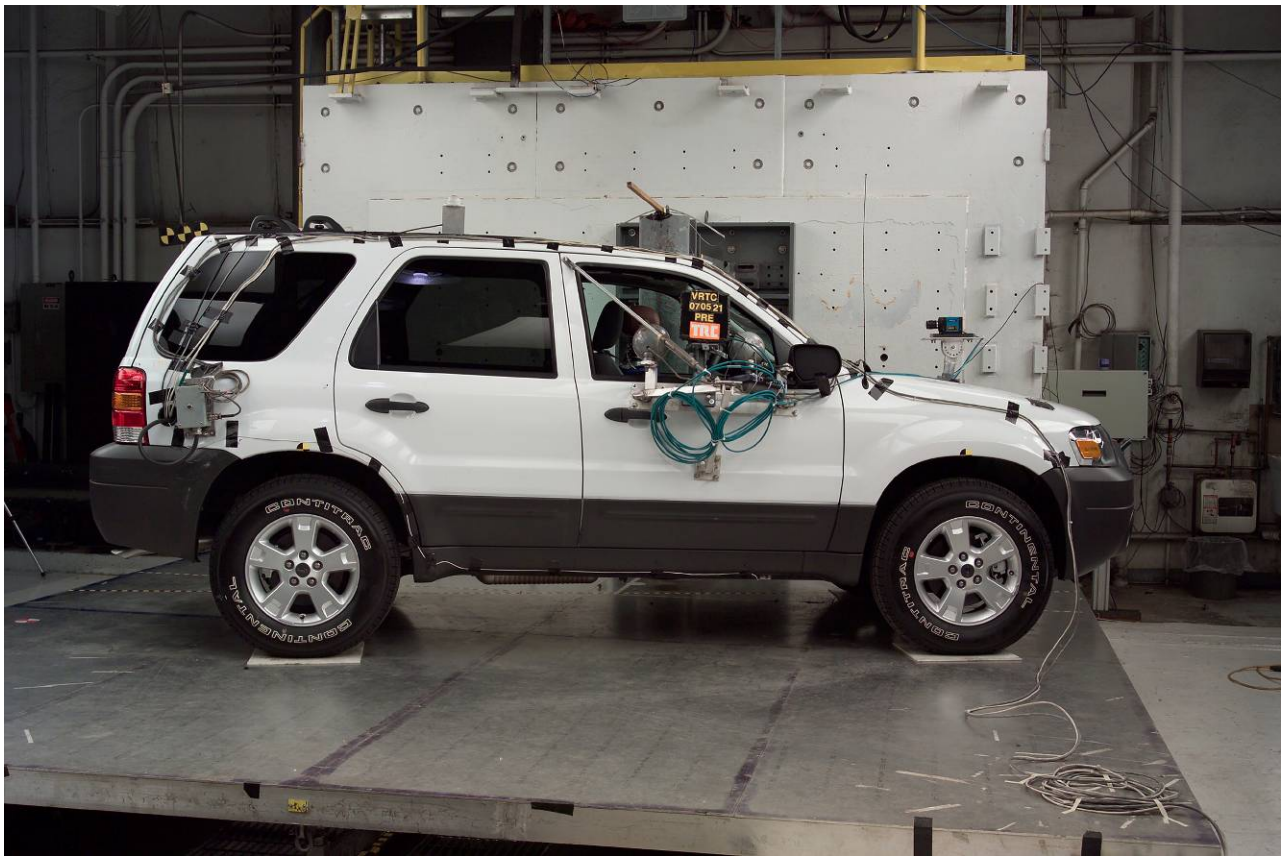


Figure A-13 Pre-Test Right Side View

Figure A-14 Post-Test Right Side View

Figure A-15 Pre-Test Right Front View

Figure A-16 Post-Test Right Front View

Figure A-17 Pre-Test Overhead View

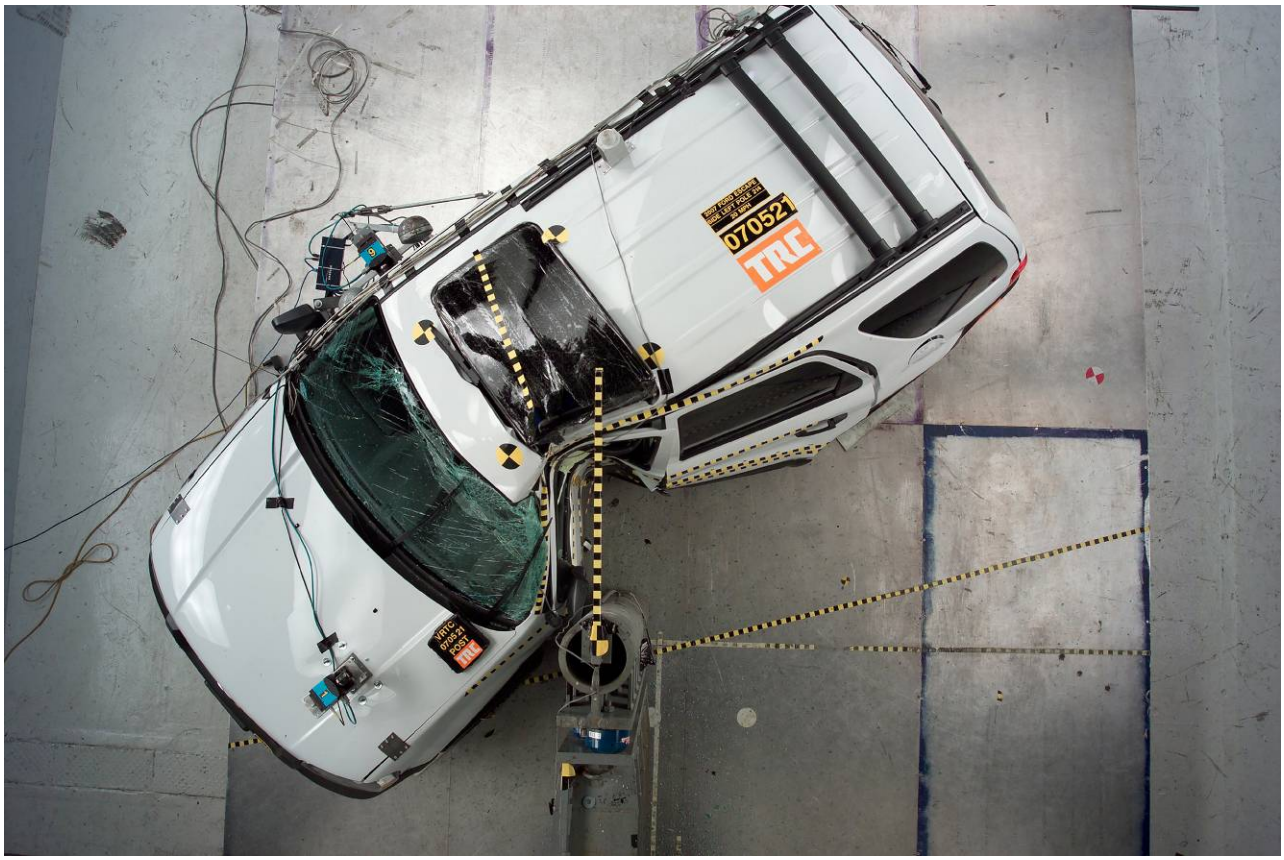


Figure A-18 Post-Test Overhead View

Figure A-19 Pre-Test Impact Point View

Figure A-20 Post-Test Impact Point View

Figure A-21 Pre-Test Fuel Filler Cap View

Figure A-22 Post-Test Fuel Filler Cap View

Figure A-23 Pre-Test Pole Barrier Front View

Figure A-24 Post-Test Pole Barrier Front View

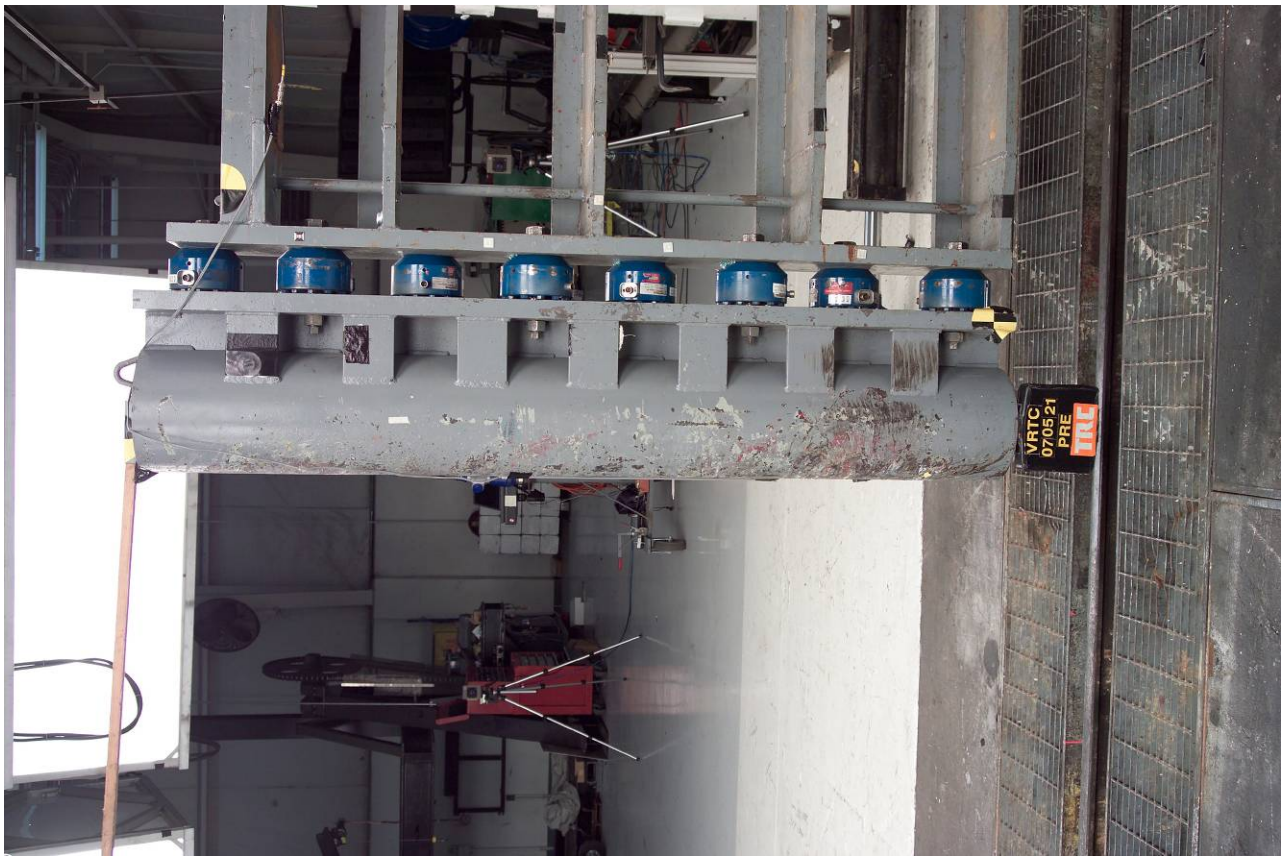


Figure A-25 Pre-Test Pole Barrier Side View

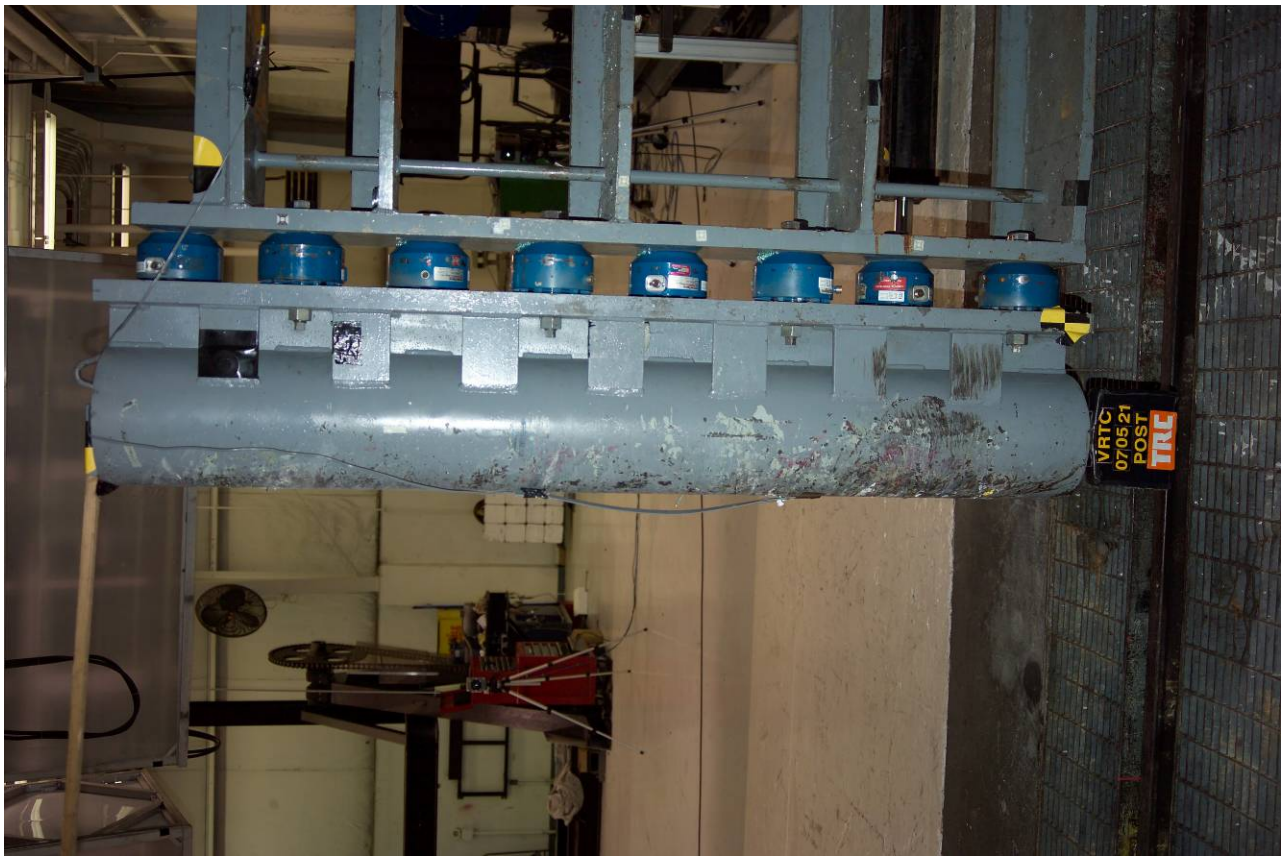


Figure A-26 Post-Test Pole Barrier Side View

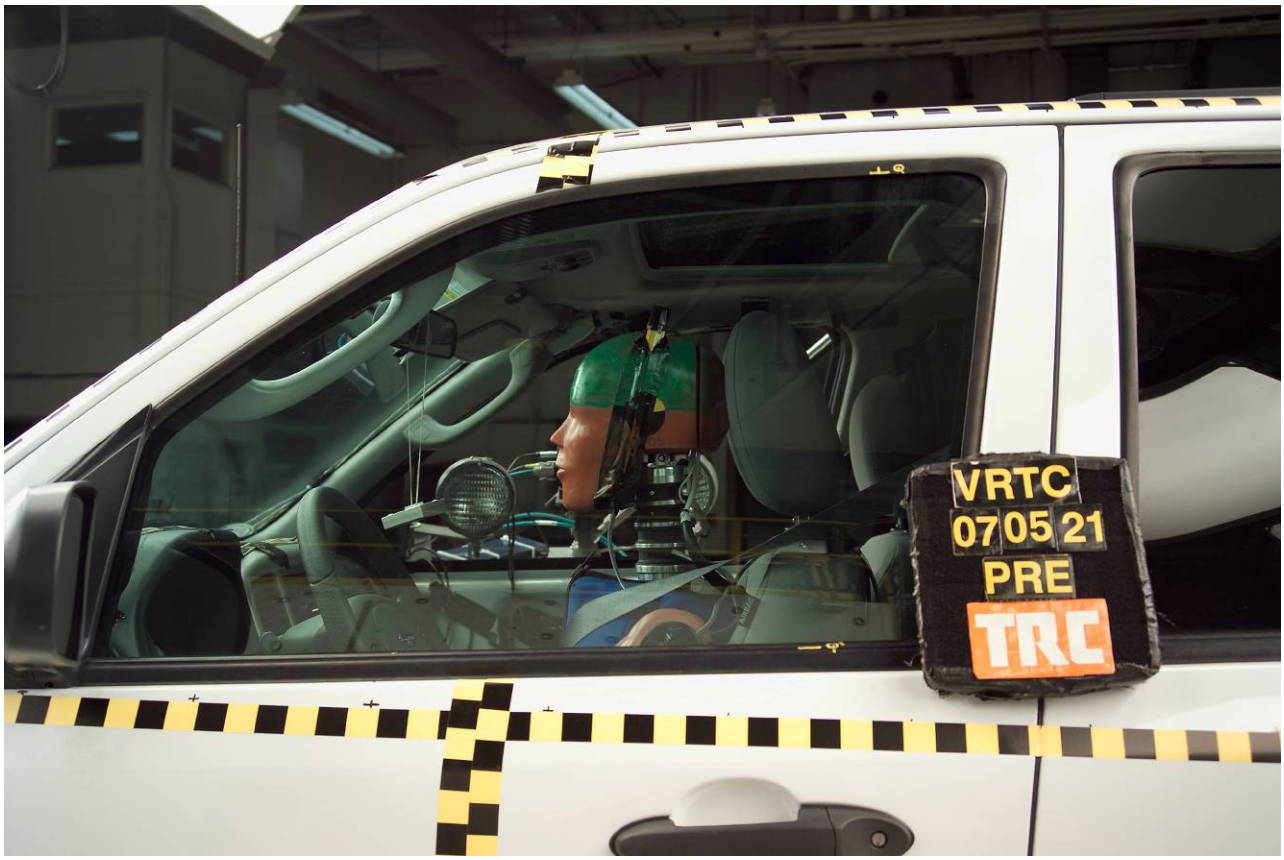


Figure A-27 Pre-Test Driver Dummy Side View

Figure A-28 Post-Test Driver Dummy Side View

Figure A-29 Pre-Test Right Side Dummy Occupant Compartment View

Figure A-30 Post-Test Right Side Dummy Occupant Compartment View

Figure A-31 Pre-Test Driver Dummy and Door Clearance View

Figure A-32 Post-Test Driver Dummy and Door Clearance View

Figure A-33 Pre-Test Driver Dummy Showing Belts, Chalking, and Contact Switches

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Figure A-34 Pre-Test Driver Door Panel View

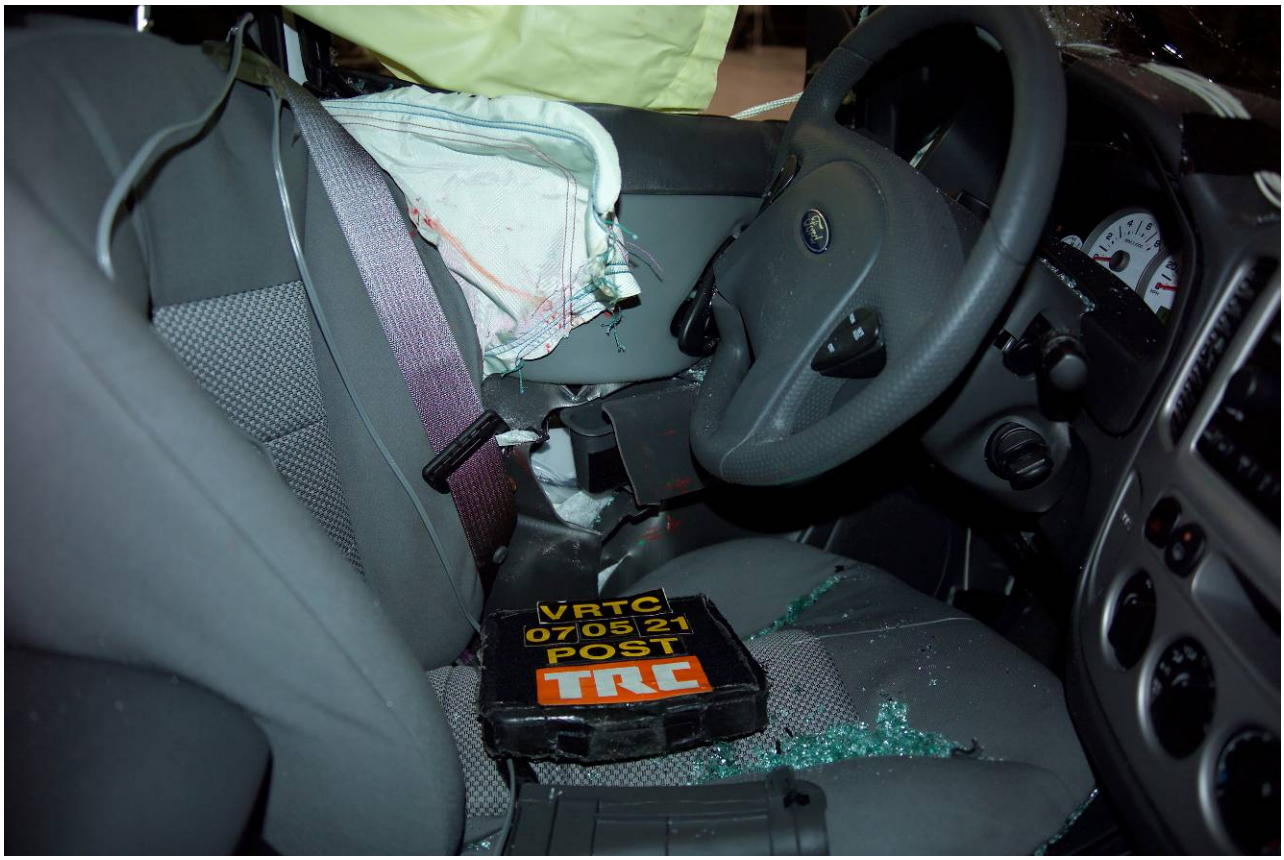


Figure A-35 Post-Test Driver Door Panel View

Figure A-36 Post-Test Driver Dummy Head Contact View

Figure A-37 Post-Test Driver Dummy Door Contact View

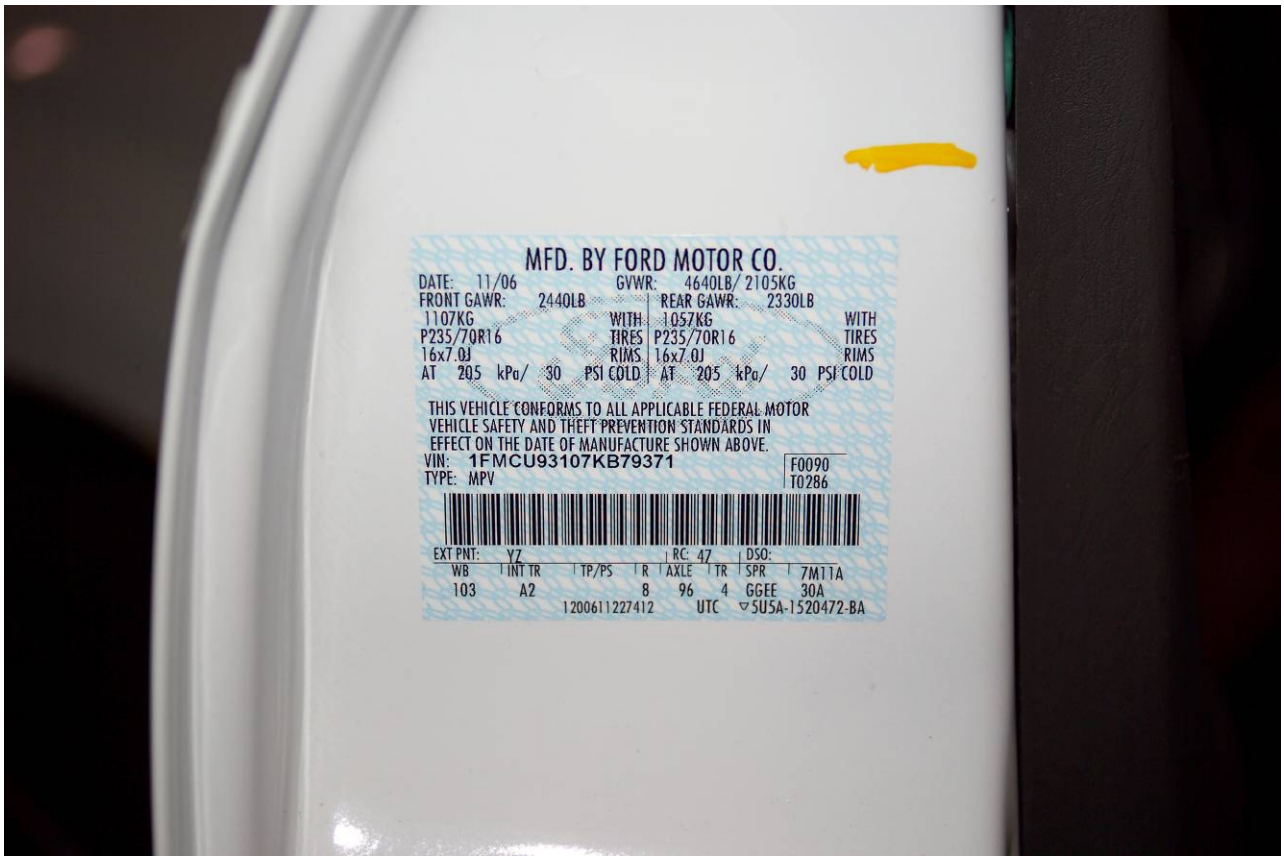


Figure A-38 Certification Label View

Figure A-39 Recommended Tire Pressure Label View

Figure A-40 Pre-Test Ballast View

Intentionally Left Blank

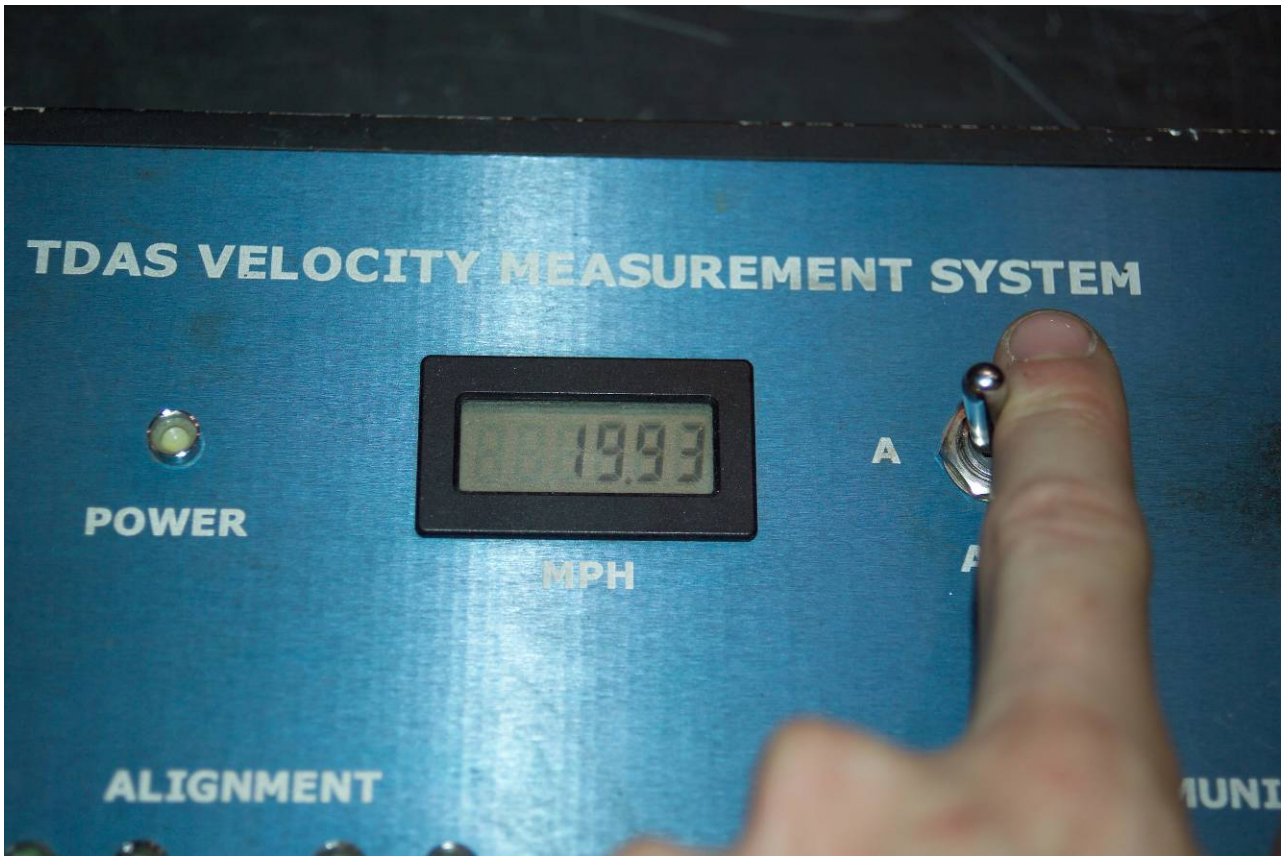


Figure A-41 Post-Test Digital Light Trap Read-Out - View 1

Figure A-42 Post-Test Digital Light Trap Read-Out - View 2

Appendix B

Data Plots

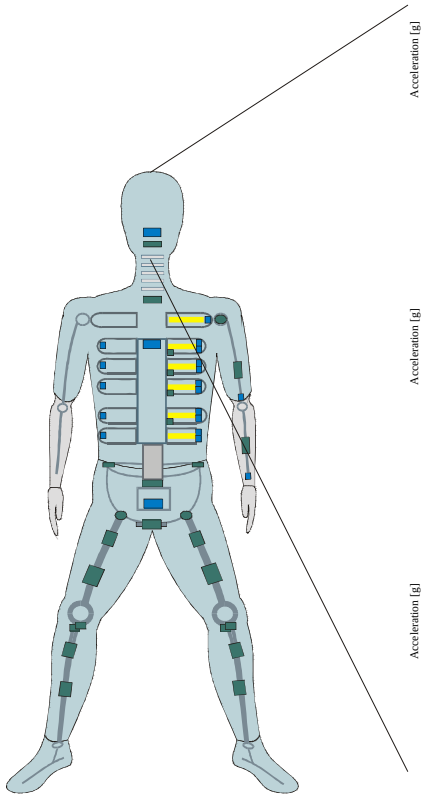
2007 Ford Escape Left Side FMVSS 214 Pole Impact at 52 kph

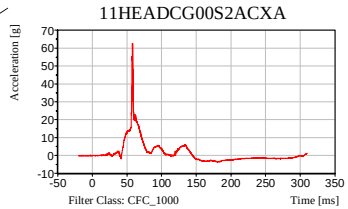
Head Injury Criterion (HIC)

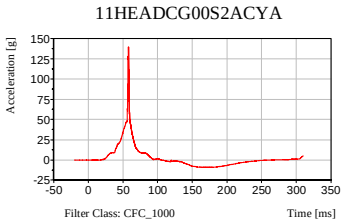
Date: 05/21/2007
Time: 13:38

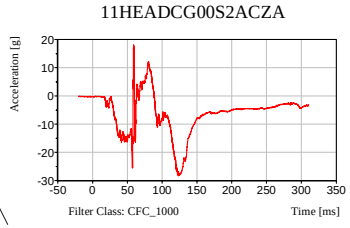
Customer: VRTC

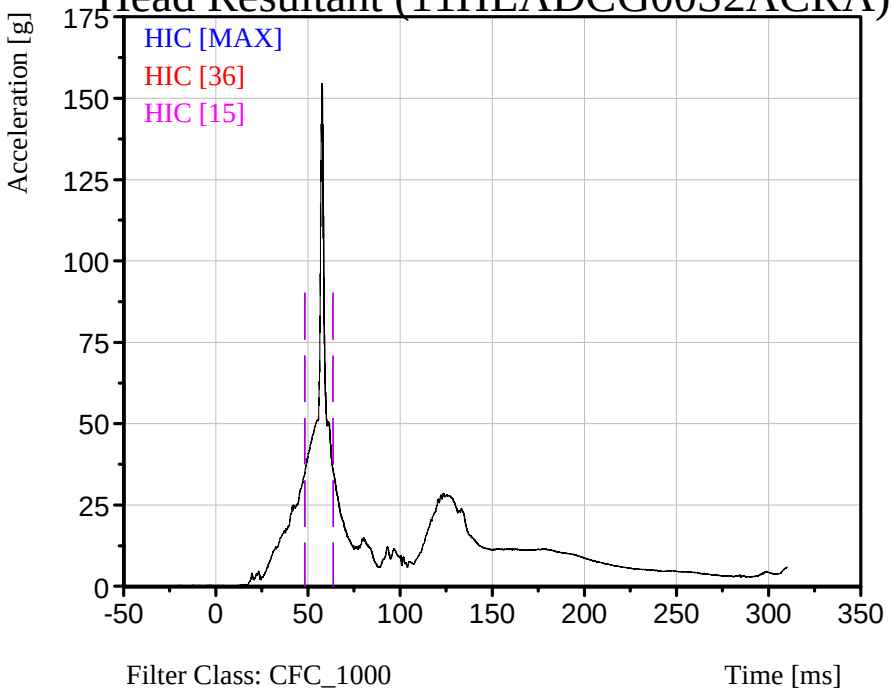
TRC Inc. Test Lab: CTF
Test Number: 070521











	T1 (Begin)	T2 (End)	Avg. g T1 to T2
HIC [Max.] = 406.77	48.48 ms	63.84 ms	58.65 g
HIC [36] = 406.77	48.48 ms	63.84 ms	58.65 g
HIC [15] = 406.67	48.64 ms	63.68 ms	59.14 g

Dummy:SID IIs
Seating Position:
Driver

HIC Source Code: SAE J2052 ISO/TC22/SC12/WG3 N 282 (Issued 1990-03-16)

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 52 kph

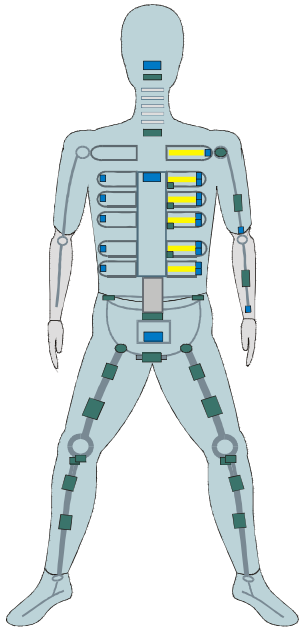
Resultant (Spine)

Date: 05/21/2007
Time: 13:38

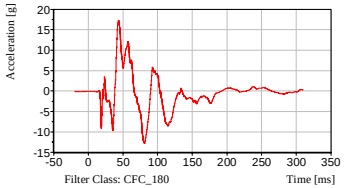
Customer: VRTC

TRC Inc. Test Lab: CTF

Test Number: 070521



11SPIN1200S2ACXC



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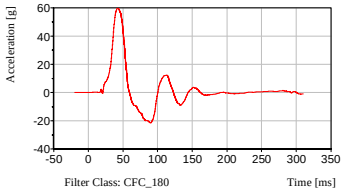
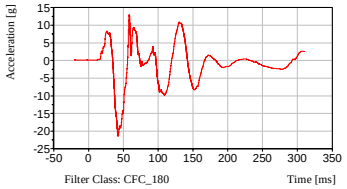
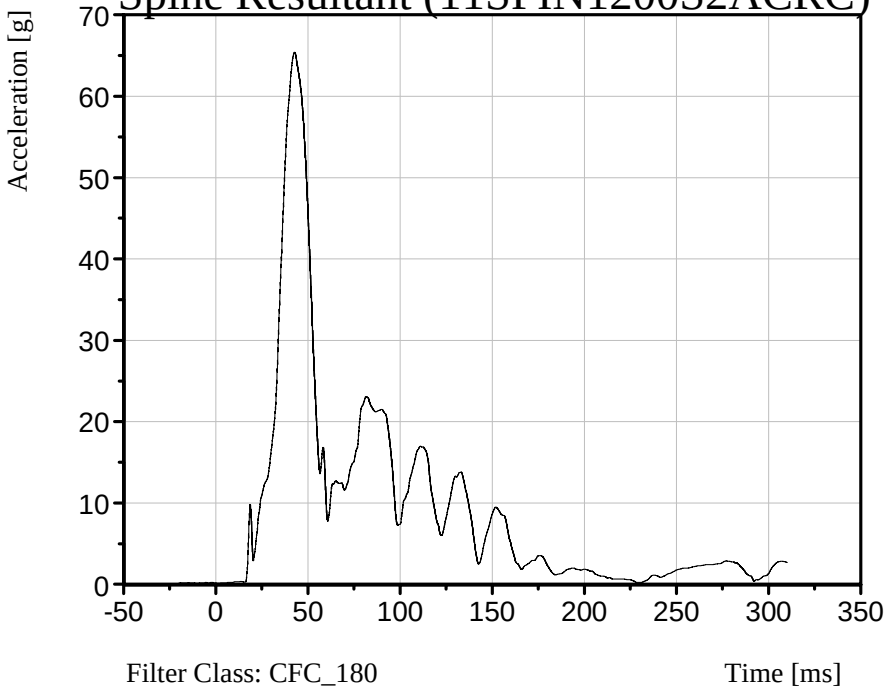


11SPIN1200S2ACZC



Spine Resultant (11SPIN1200S2ACRC)



Dummy:SID IIs
Seating Position:
Driver

[Max.] 65.42 g at 42.80 ms
[Min.] 0.16 g at -9.44 ms

Resultant Source Code : Sqrt(11SPIN1200S2ACXC^2 + 11SPIN1200S2ACYC^2 + 11SPIN1200S2ACZC^2)

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 52 kph

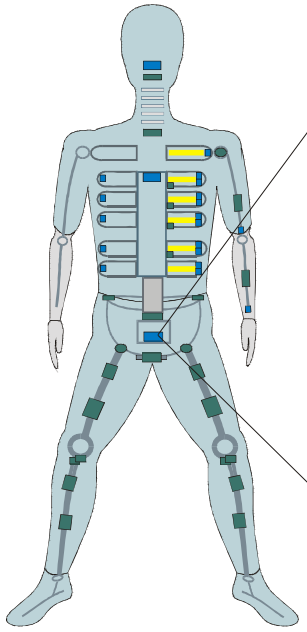
Pelvis(LE) Summation

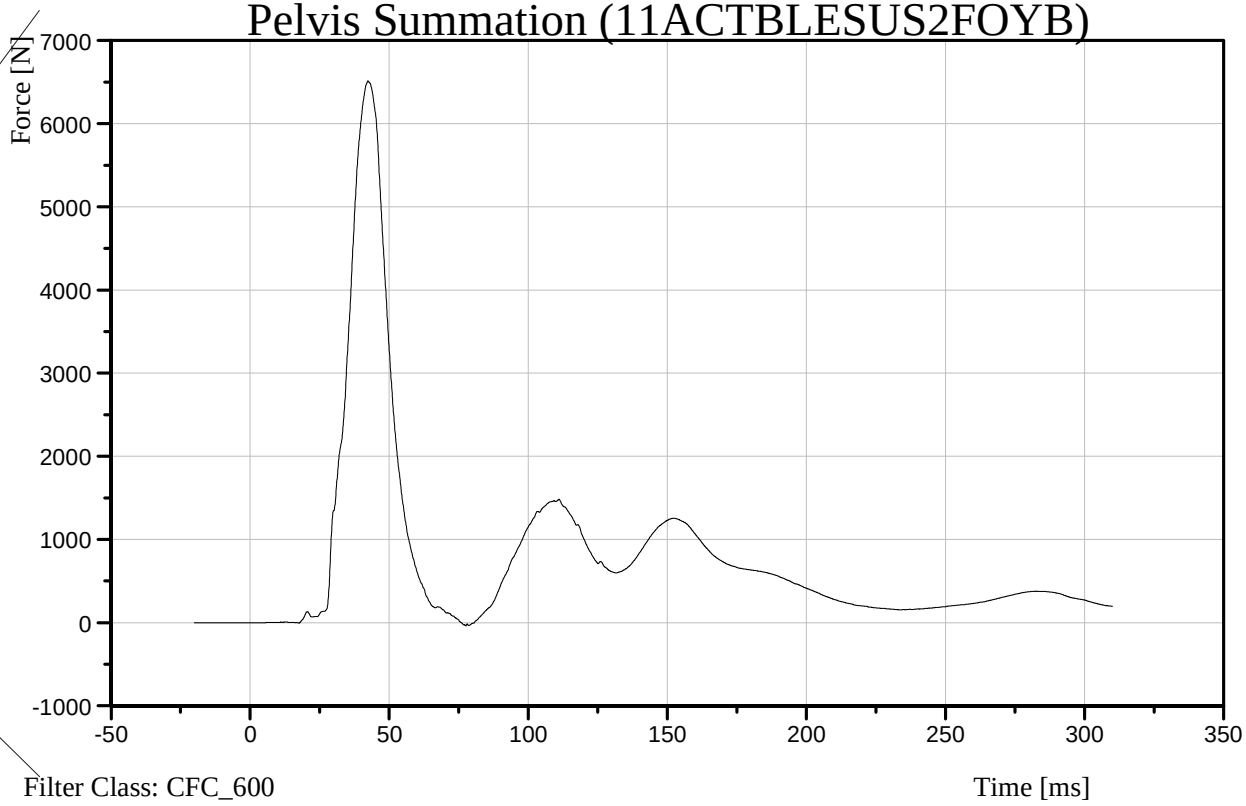
Date: 05/21/2007
Time: 13:38

Customer: VRTC

TRC Inc. Test Lab: CTF
Test Number: 070521

Test Orientation = Side





Filter Class: CFC_600

Dummy:SID IIs
Seating Position:
Driver

[Max.] 6,515.39 N at 42.40 ms
[Min.] -40.20 N at 77.52 ms

Pelvis Summation Source Code : Summation of Channels 11ILACLE00S2FOYB,11ACTBLE00S2FOYB

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

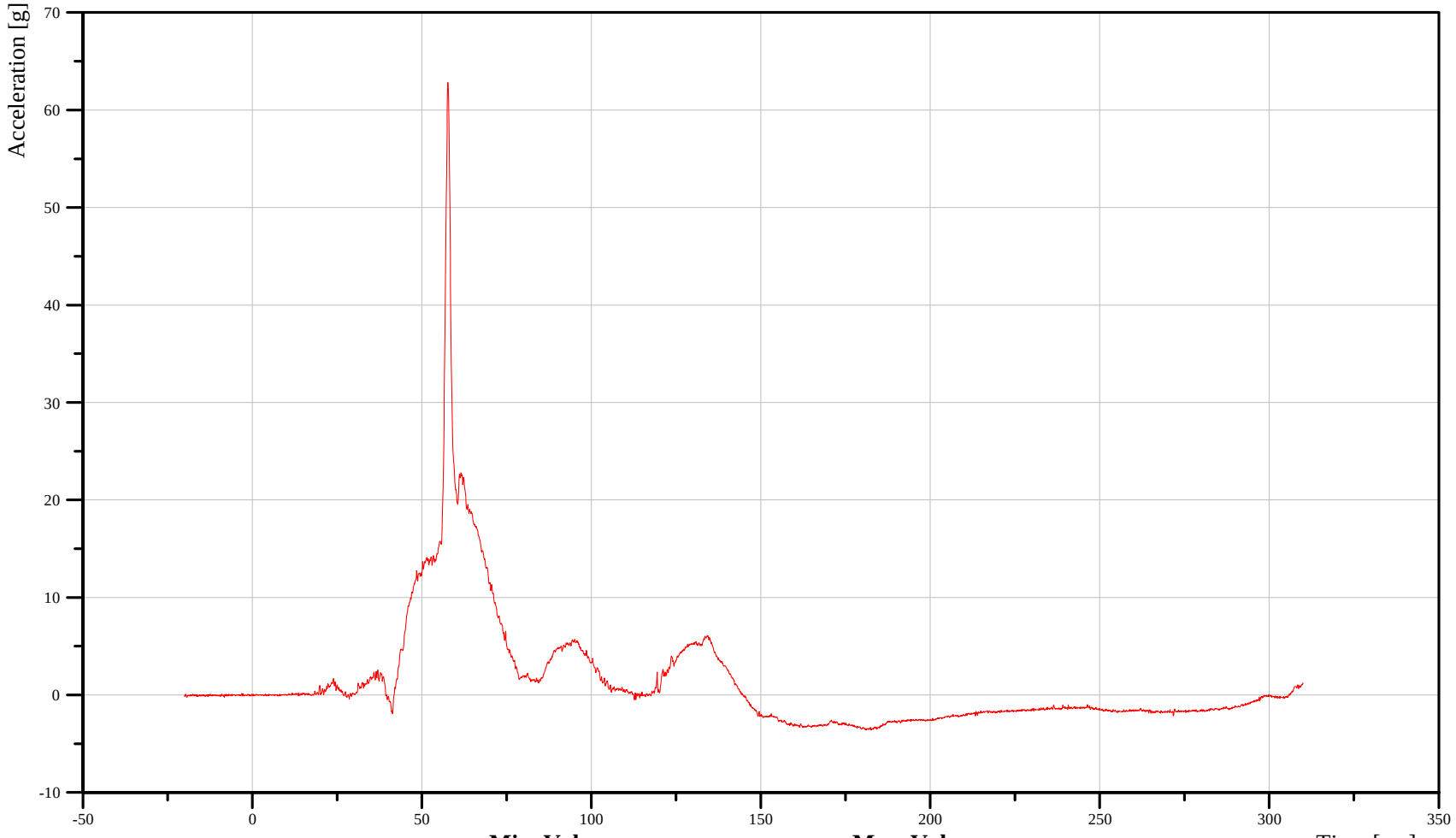
Head X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11HEADCG00S2ACXA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-3.58 g at 180.80 ms

Max. Value
62.80 g at 57.76 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

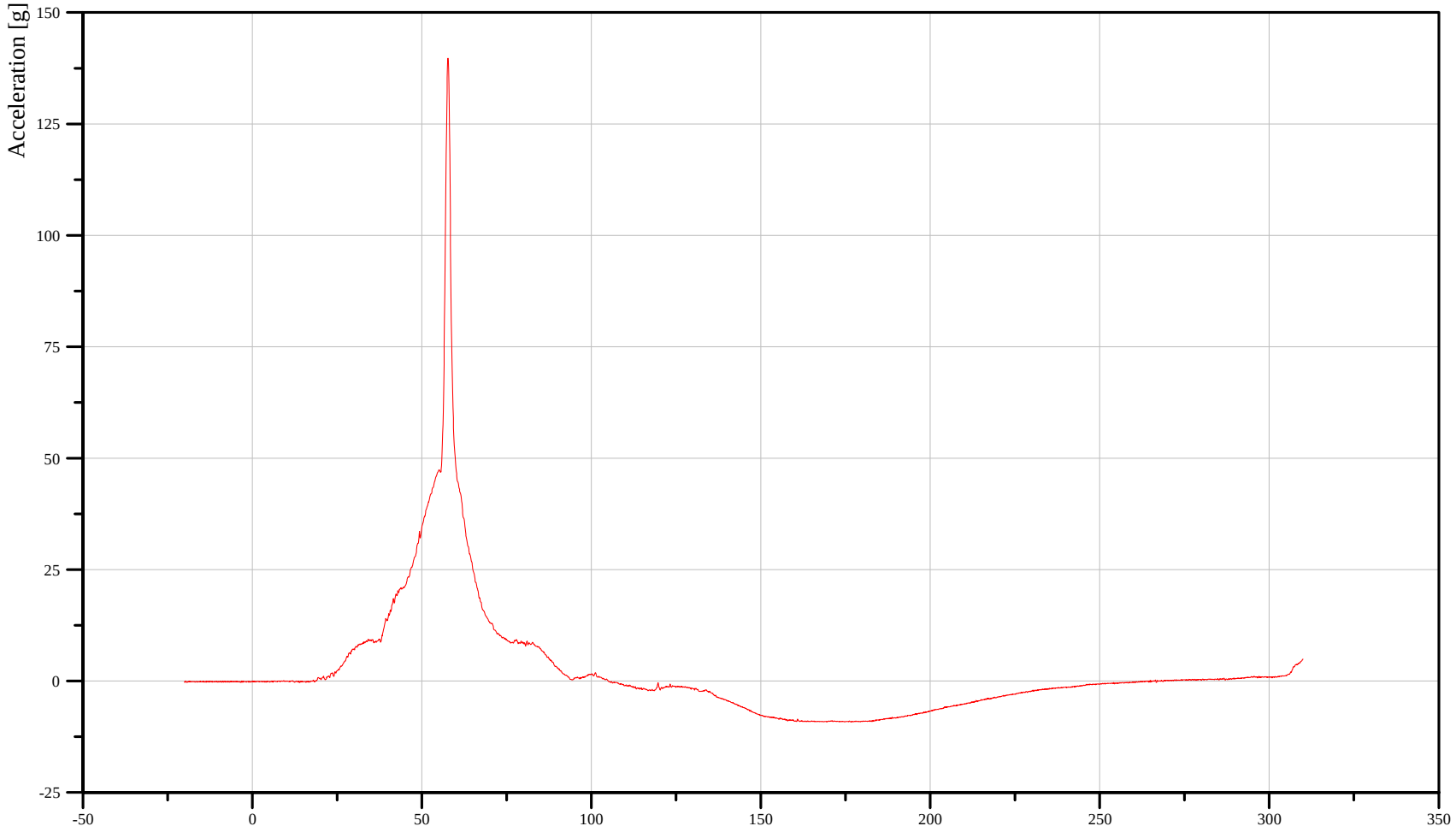
Head Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11HEADCG00S2ACYA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-9.23 g at 169.44 ms

Max. Value
139.73 g at 57.76 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

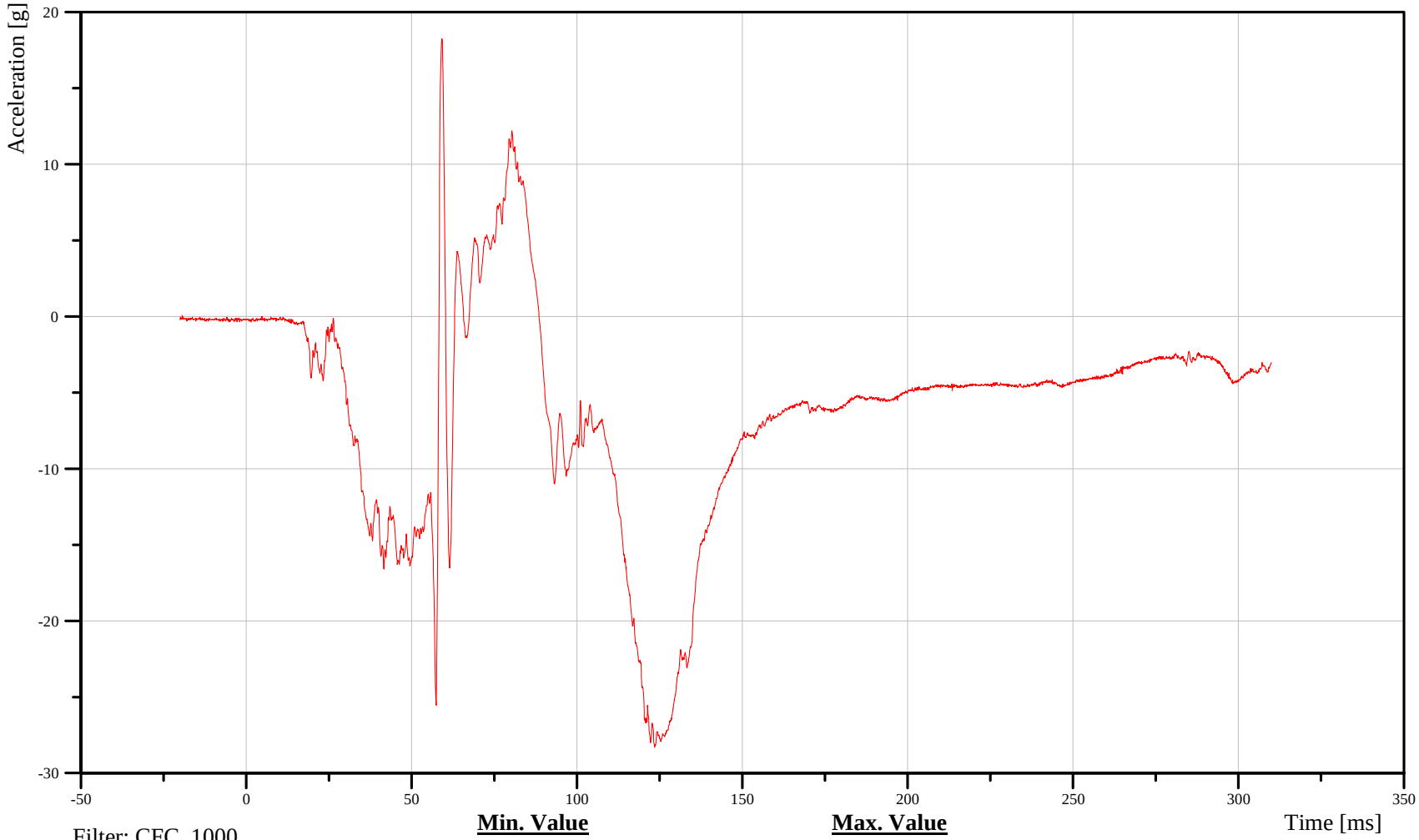
Head Z-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11HEADCG00S2ACZA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-28.32 g at 123.52 ms

Max. Value
18.25 g at 59.12 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

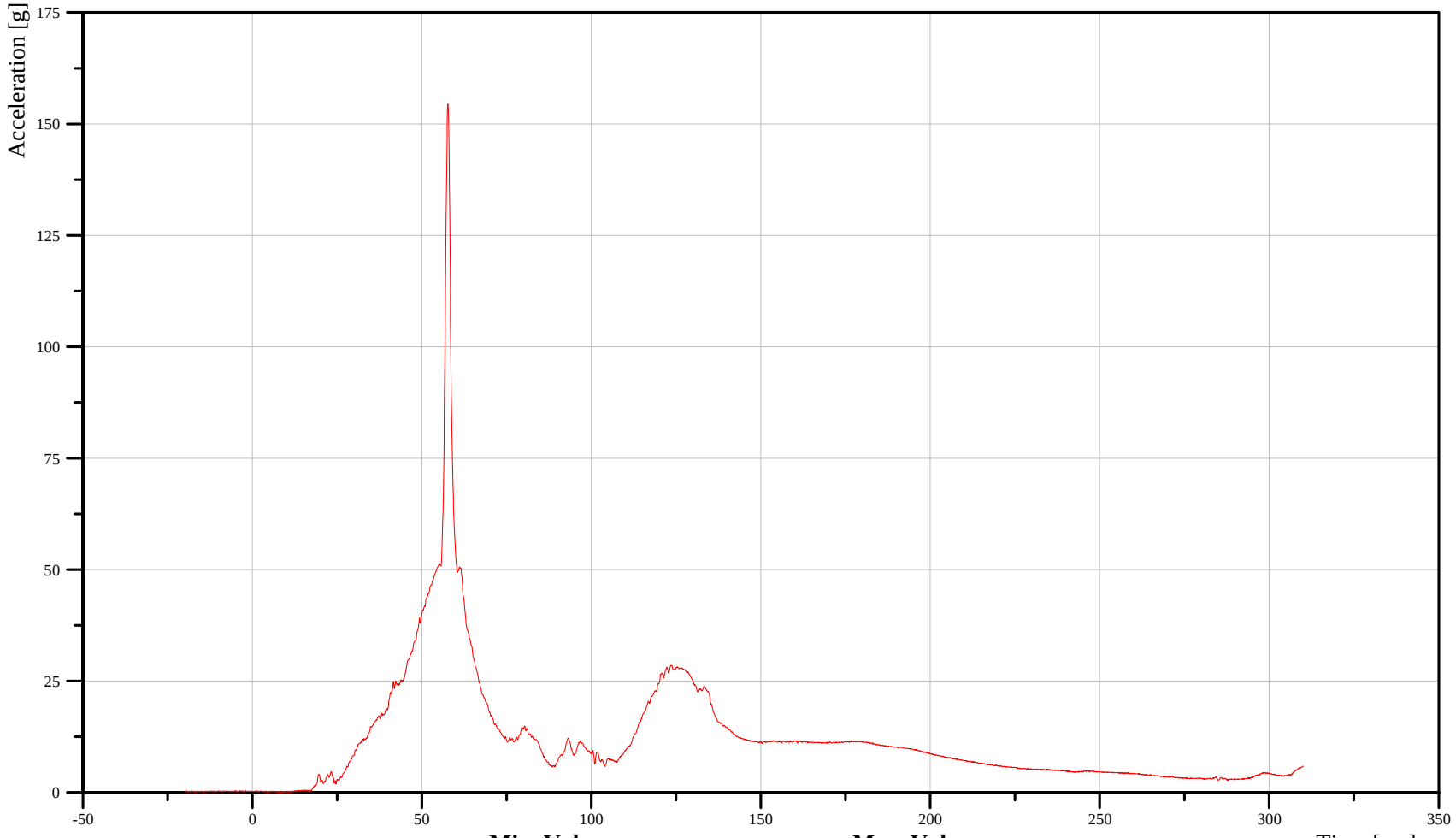
Head Resultant Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11HEADCG00S2ACRA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
0.07 g at 4.64 ms

Max. Value
154.47 g at 57.76 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

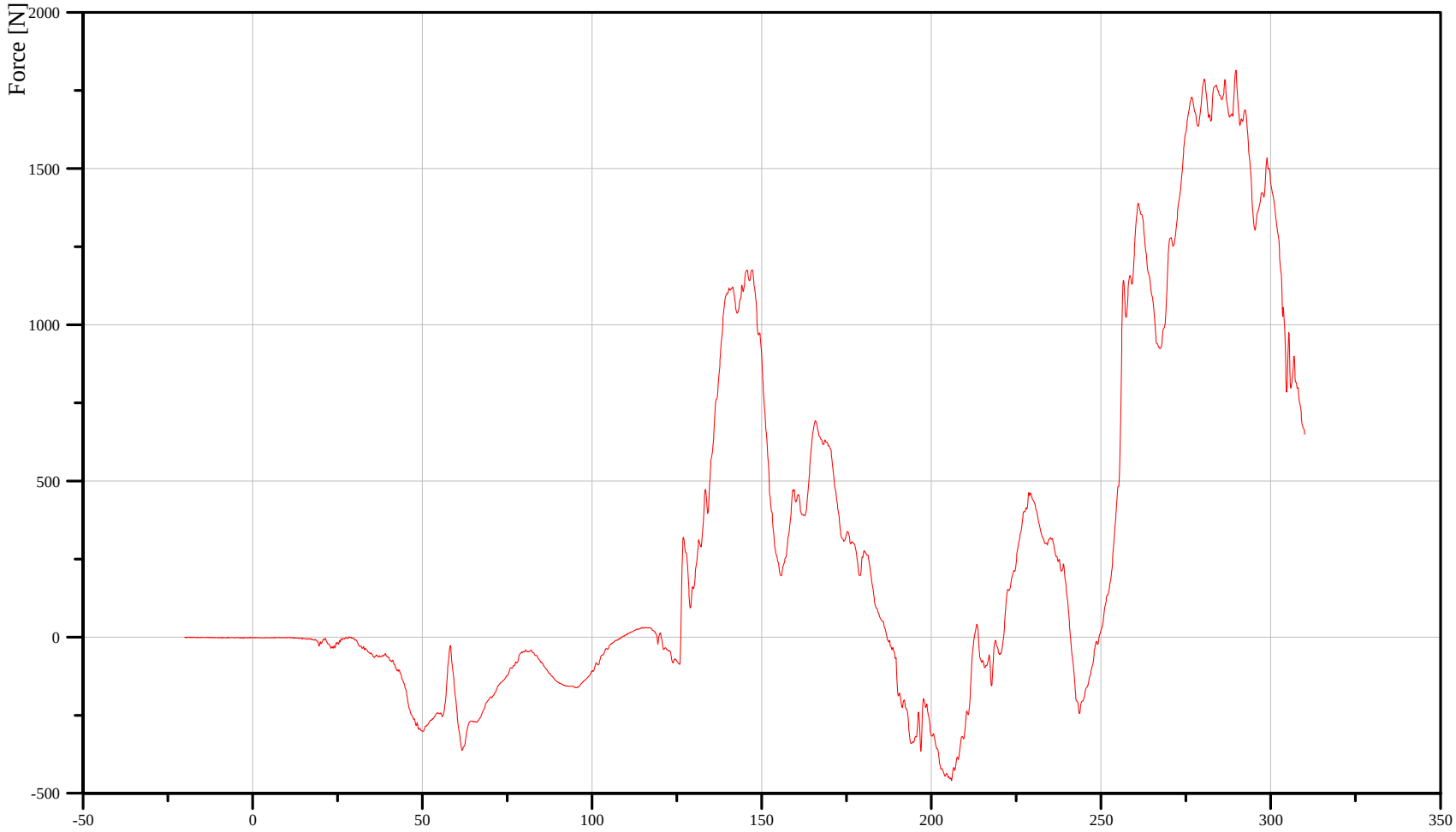
Upper Neck X-Axis Force

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11NECKUP00S2FOXA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-459.44 N at 205.92 ms

Max. Value
1,815.55 N at 289.68 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

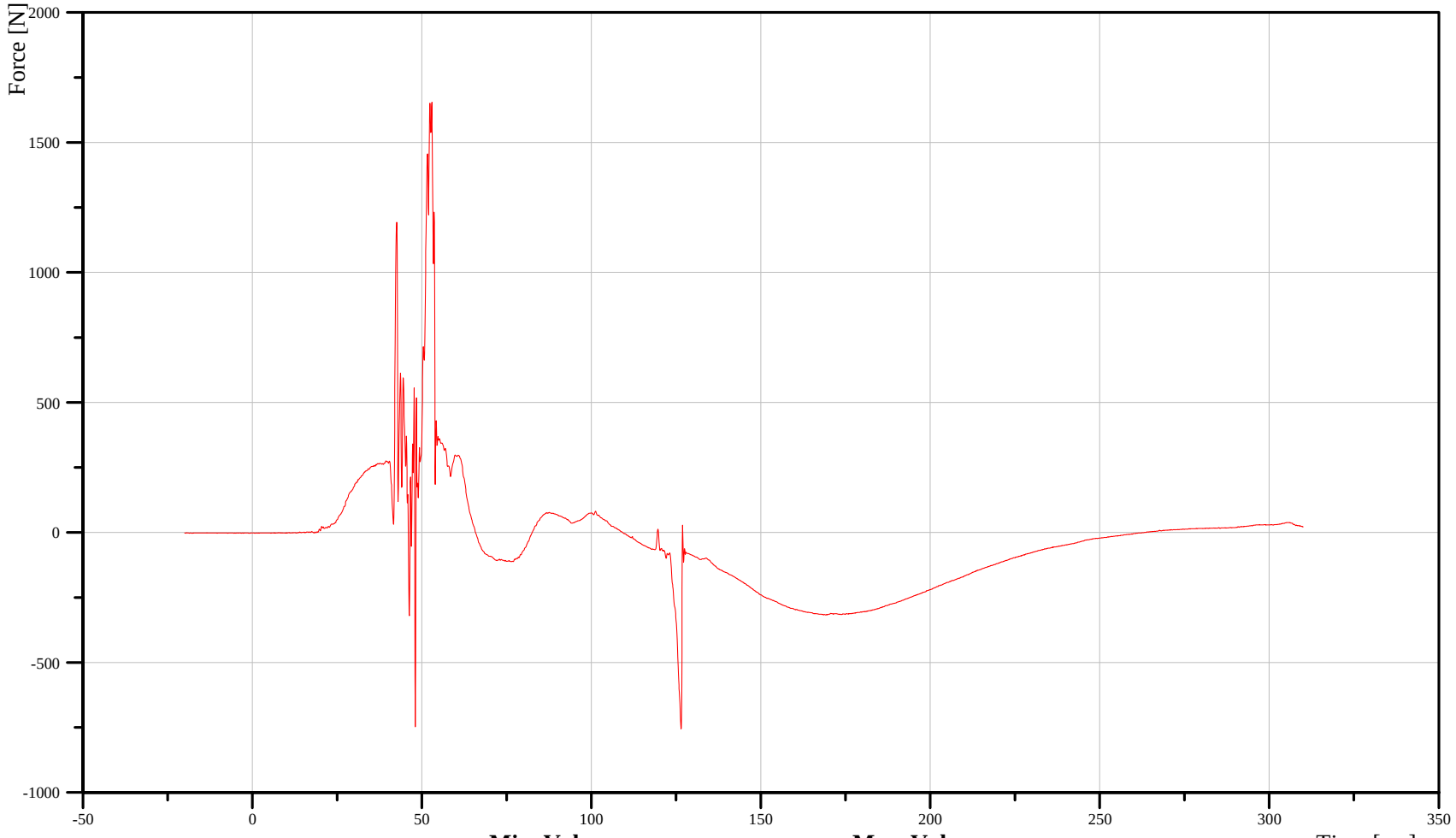
Upper Neck Y-Axis Force

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11NECKUP00S2FOYA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value	Max. Value
-755.12 N at 126.48 ms	1,654.15 N at 52.96 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

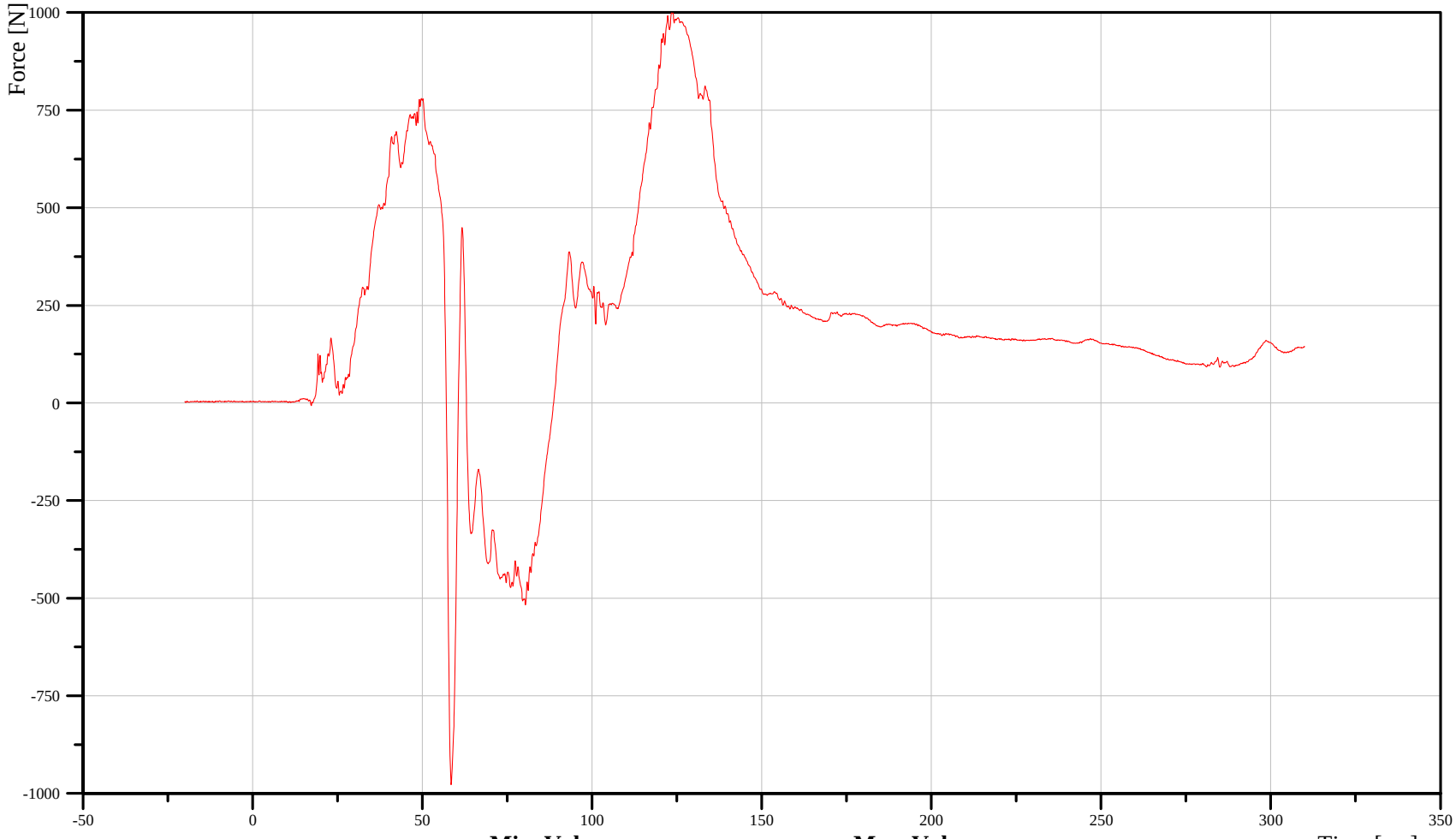
Upper Neck Z-Axis Force

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11NECKUP00S2FOZA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-977.79 N at 58.56 ms

Max. Value
999.23 N at 123.44 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

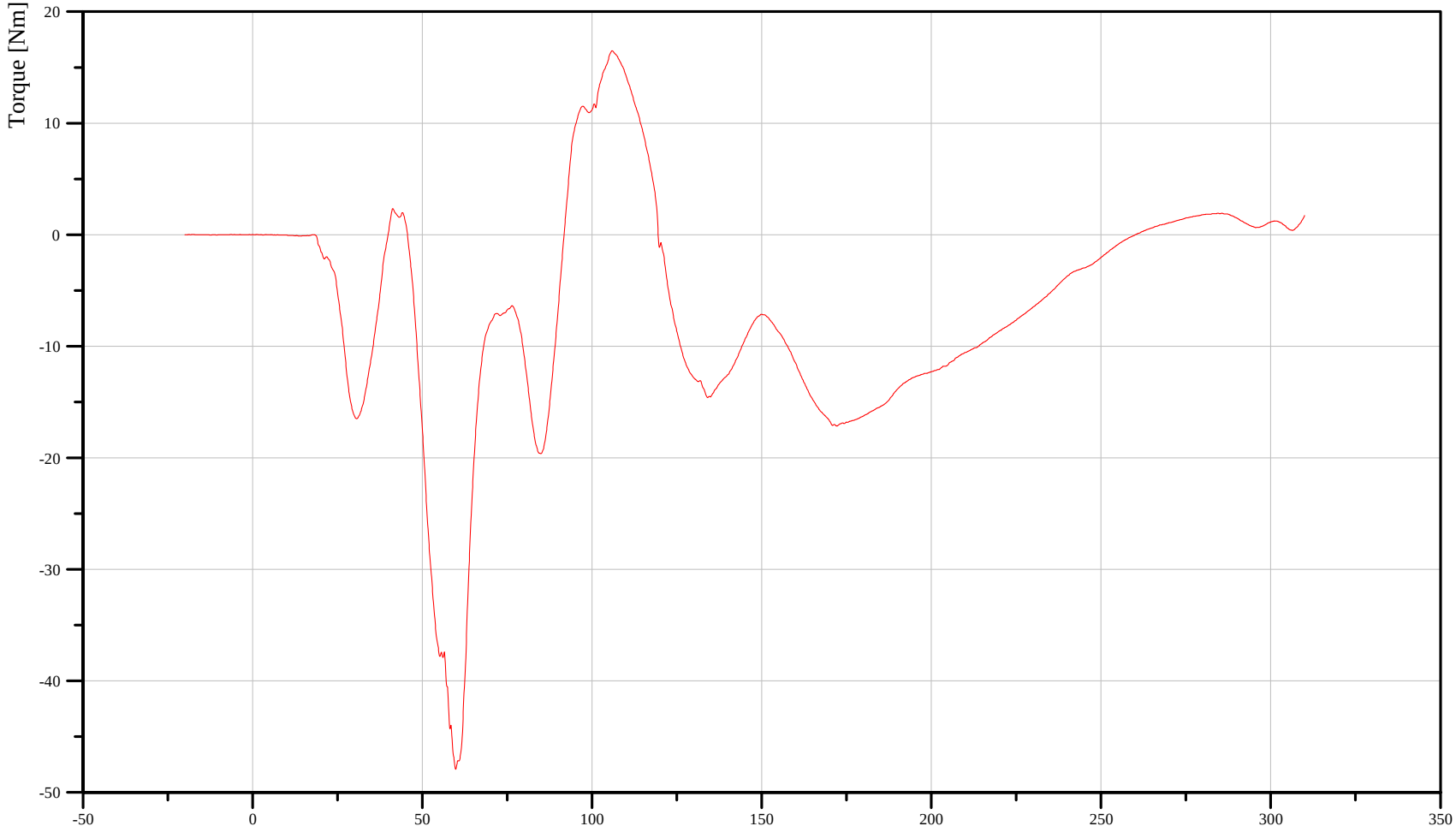
Upper Neck Moment About X Axis

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11NECKUP00S2MOXB

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_600

Min. Value
-47.93 Nm at 59.84 ms

Max. Value
16.48 Nm at 106.00 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

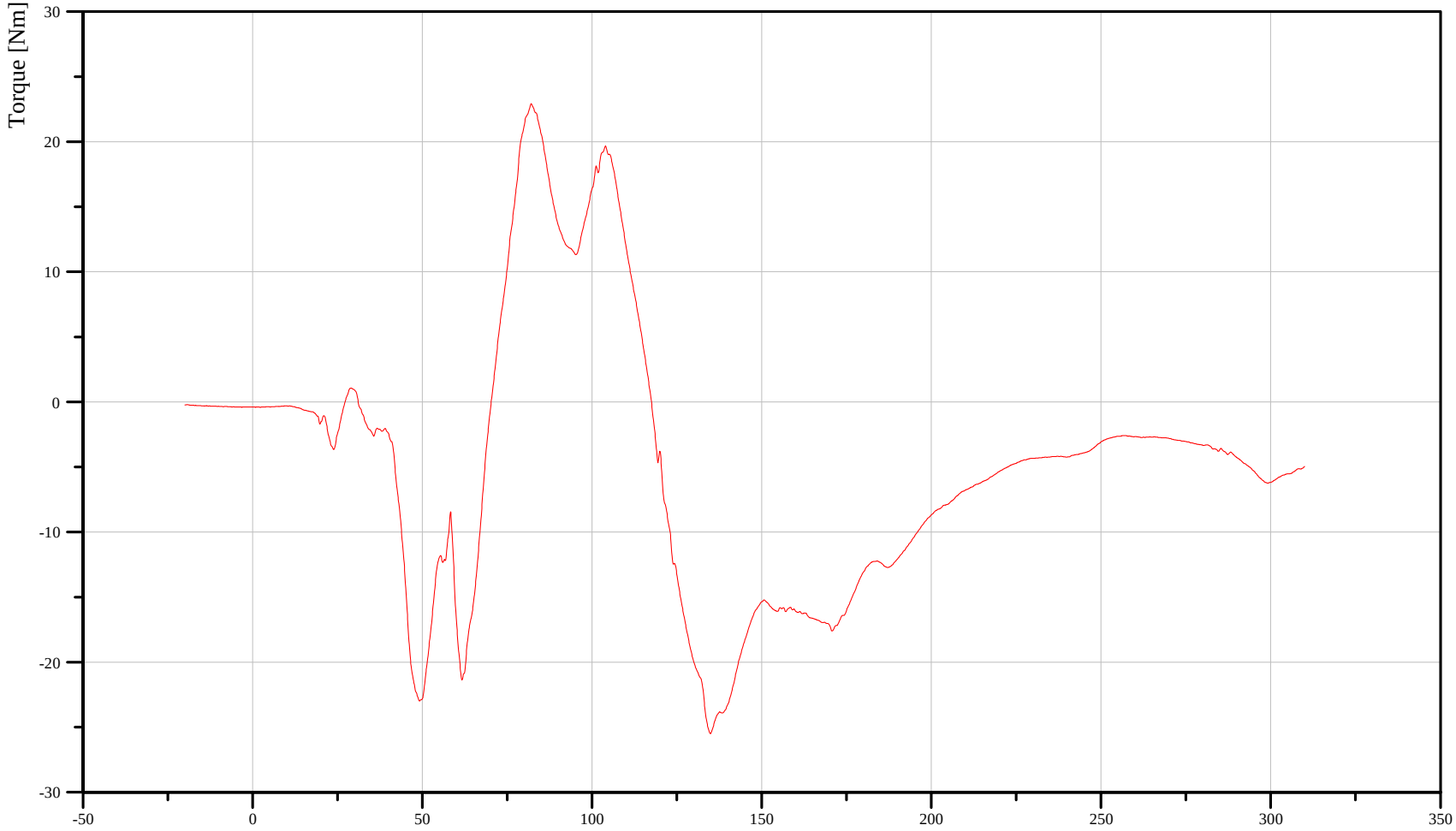
Upper Neck Moment About Y Axis

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11NECKUP00S2MOYB

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_600

Min. Value
-25.50 Nm at 134.88 ms

Max. Value
22.92 Nm at 82.08 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

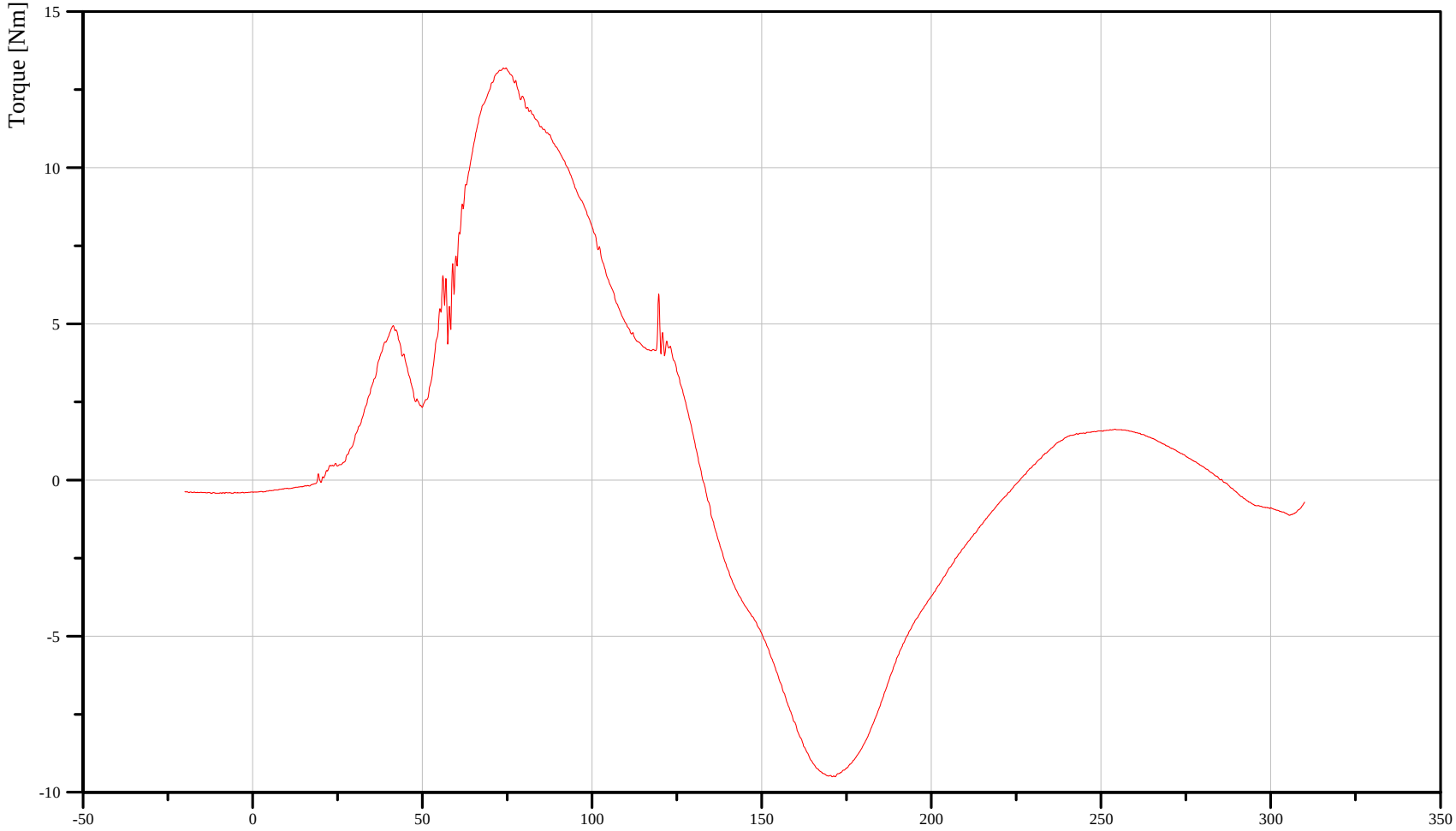
Upper Neck Moment About Z Axis

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11NECKUP00S2MOZB

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_600

Min. Value
-9.50 Nm at 171.68 ms

Max. Value
13.20 Nm at 74.64 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

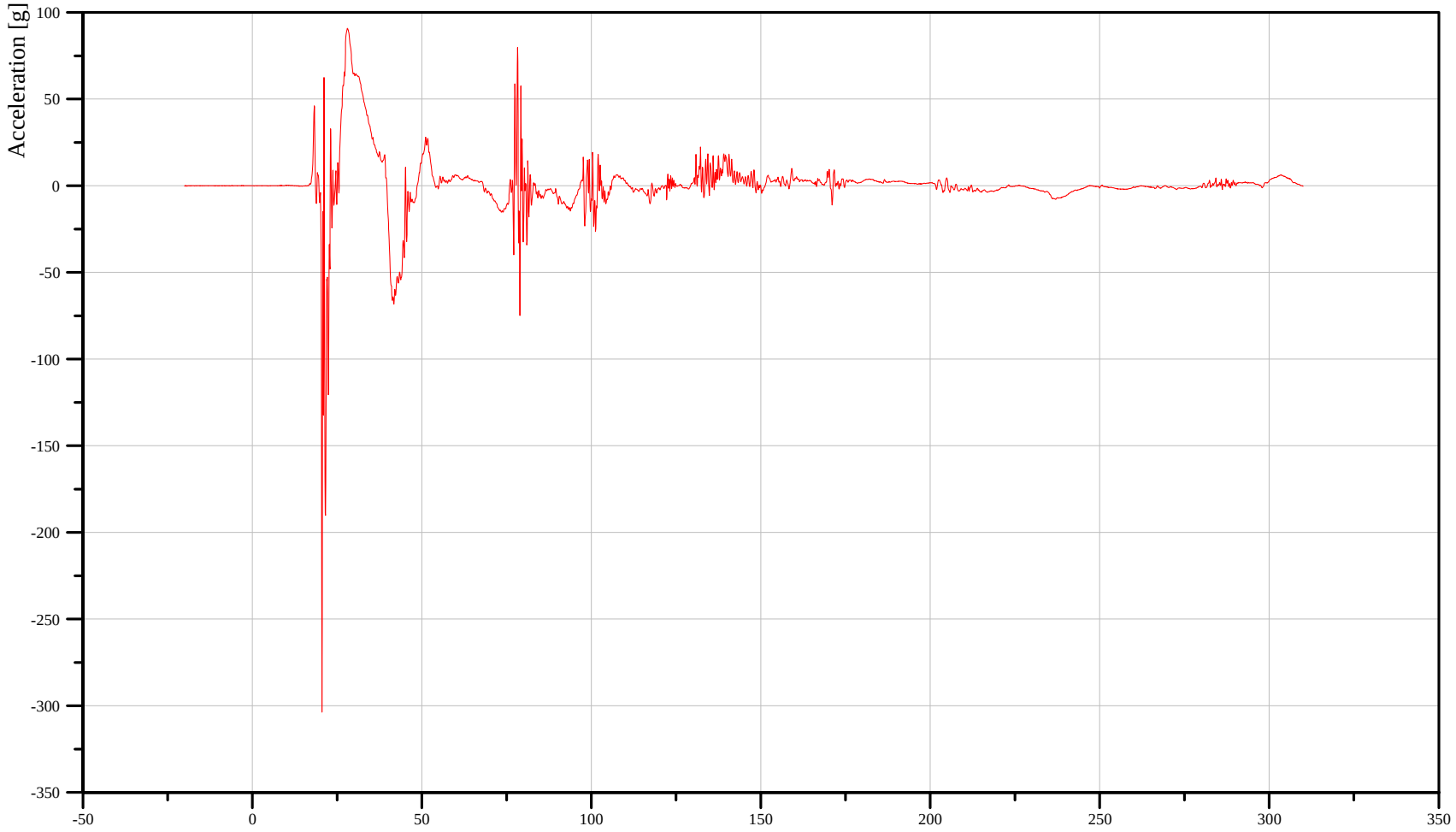
Shoulder X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SHLDLE00S2ACXA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-303.68 g at 20.56 ms

Max. Value
90.73 g at 28.00 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

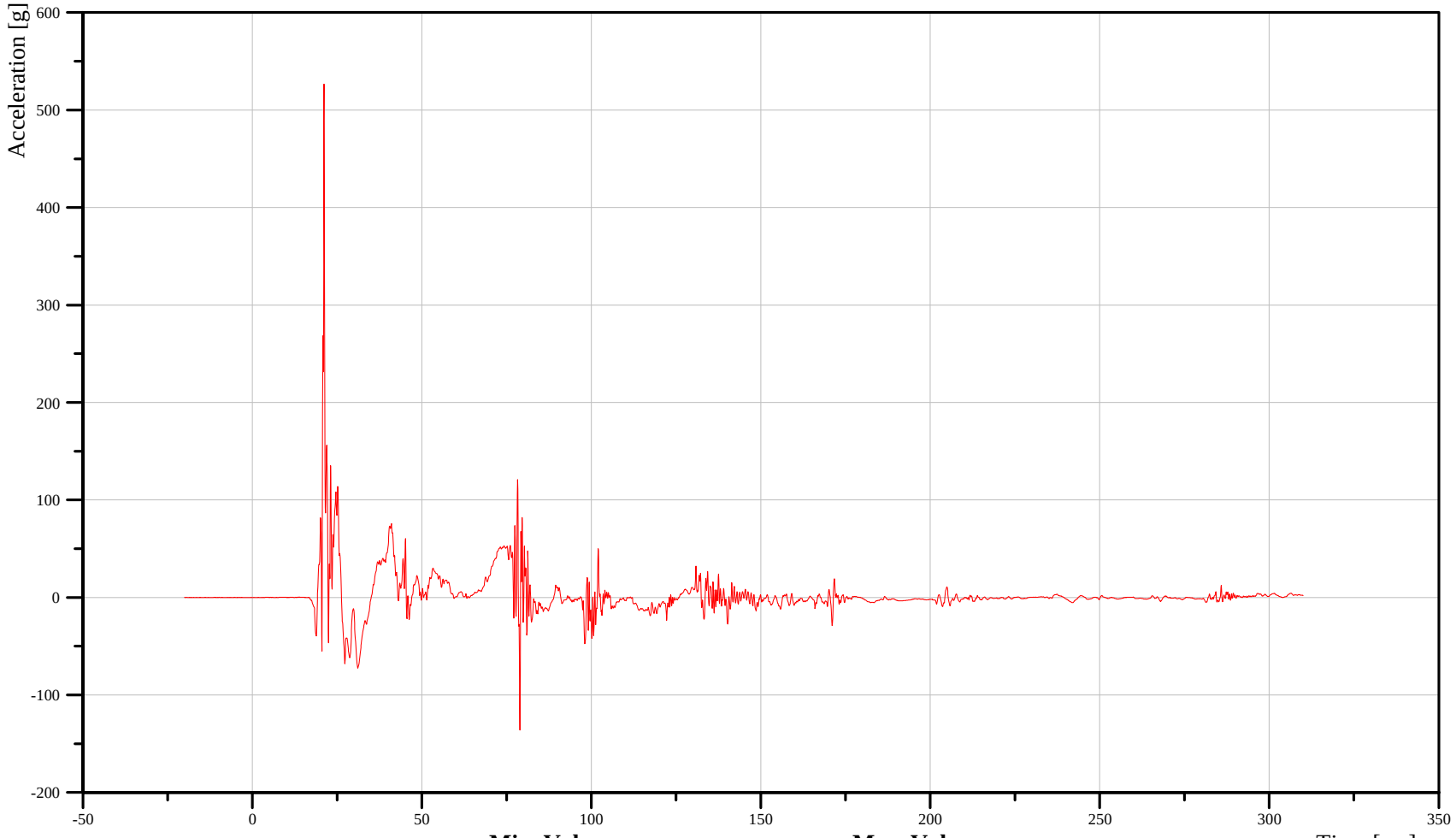
Shoulder Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SHLDLE00S2ACYA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-135.94 g at 78.96 ms

Max. Value
526.56 g at 21.20 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

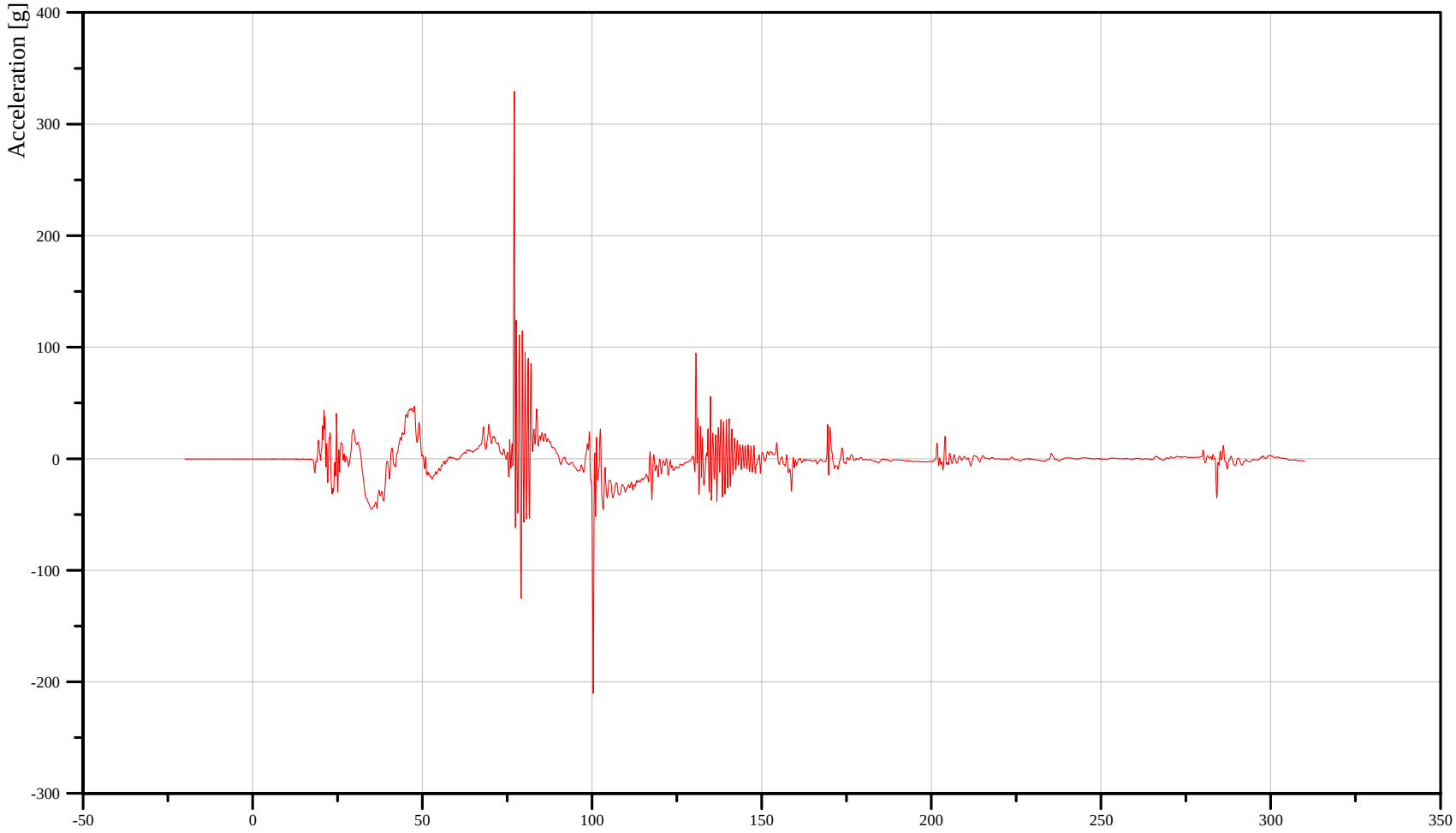
Shoulder Z-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SHLDLE00S2ACZA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-210.28 g at 100.40 ms

Max. Value
329.34 g at 77.12 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

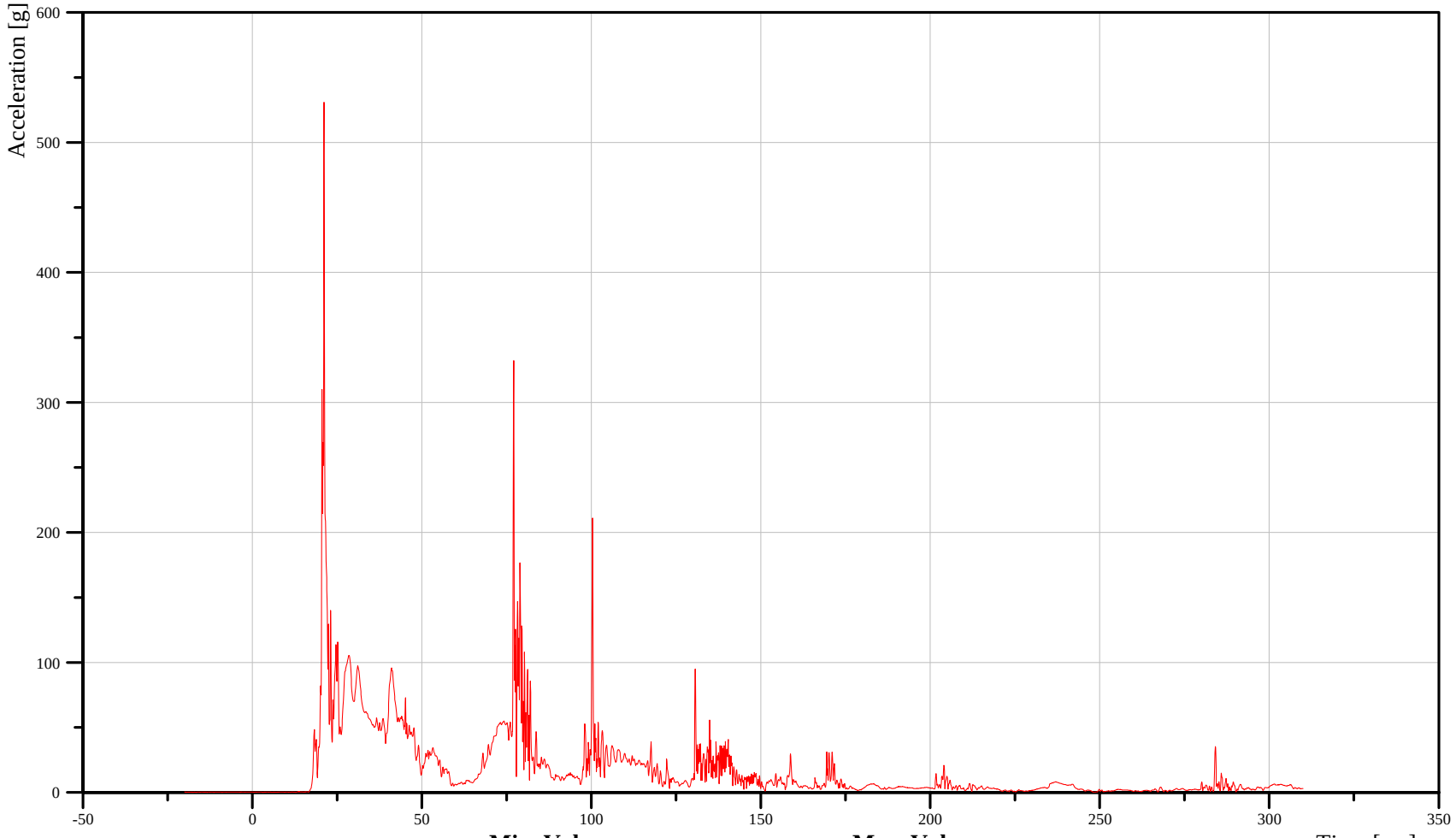
Shoulder Resultant Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SHLDLE00S2ACRA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
0.11 g at -18.88 ms

Max. Value
530.95 g at 21.20 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

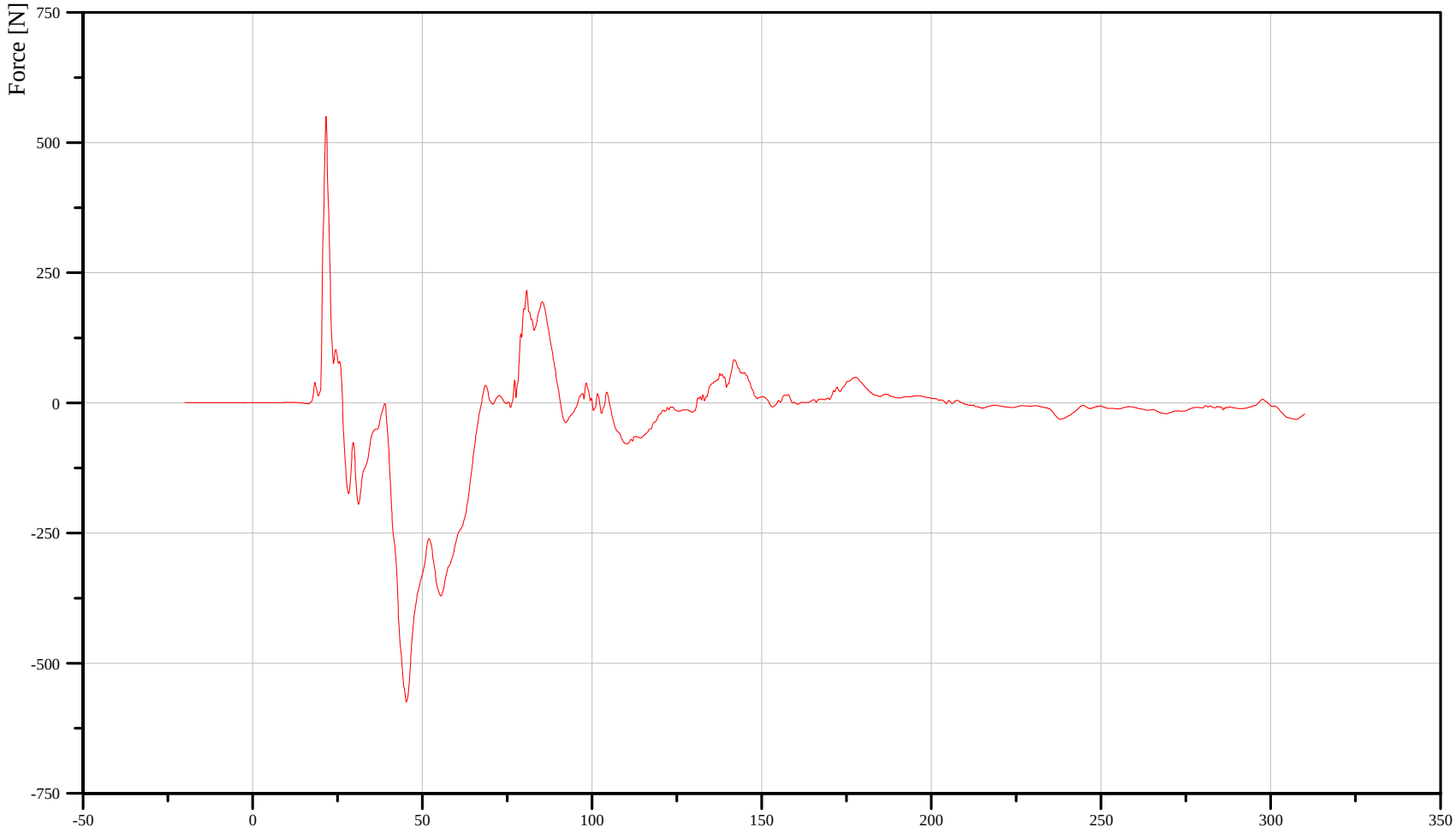
Shoulder X-Axis Force

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SHLDLE00S2FOXB

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_600

Min. Value
-574.52 N at 45.28 ms

Max. Value
550.19 N at 21.68 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

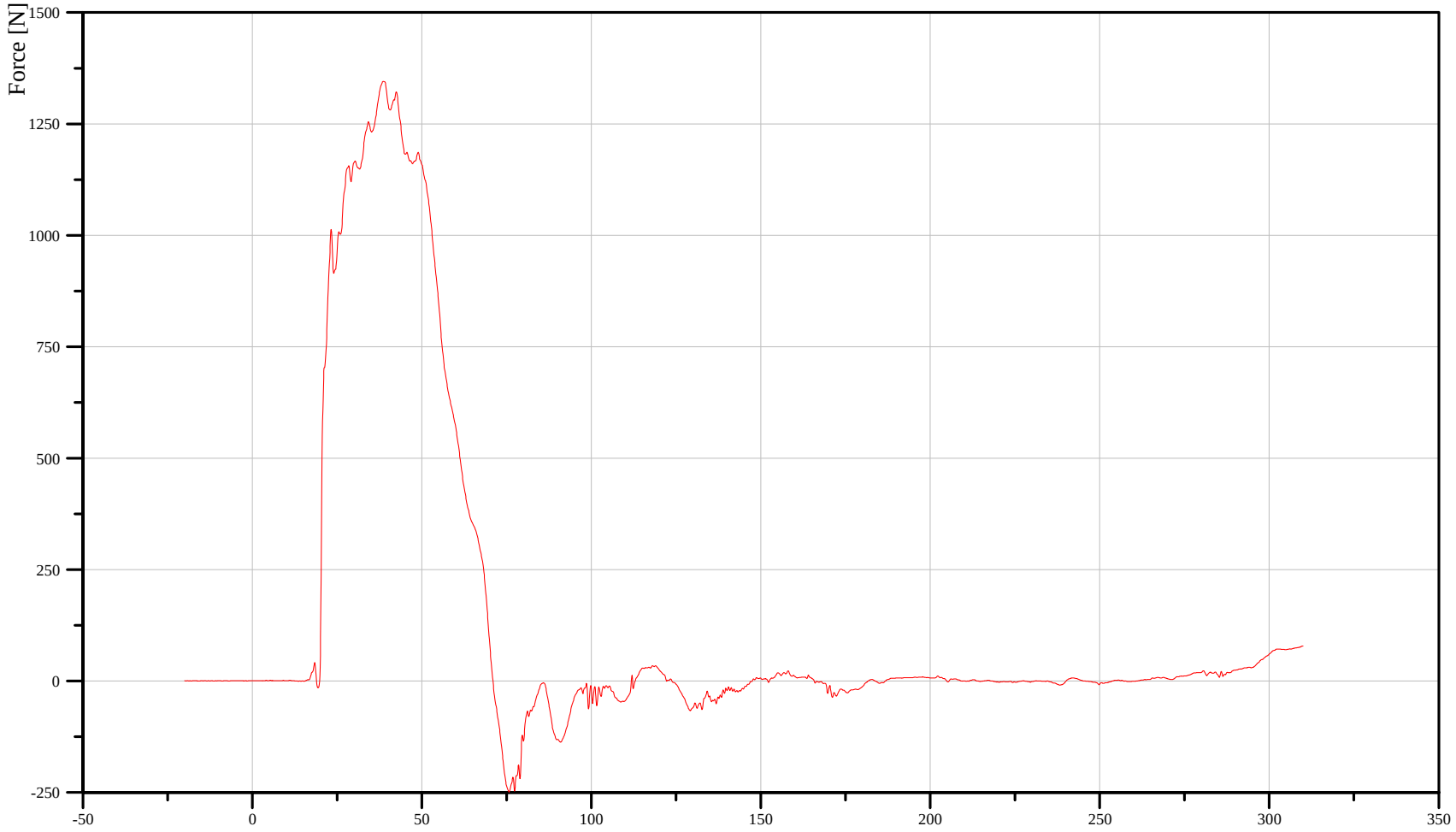
Shoulder Y-Axis Force

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SHLDLE00S2FOYB

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_600

Min. Value
-248.80 N at 75.76 ms

Max. Value
1,345.34 N at 38.64 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

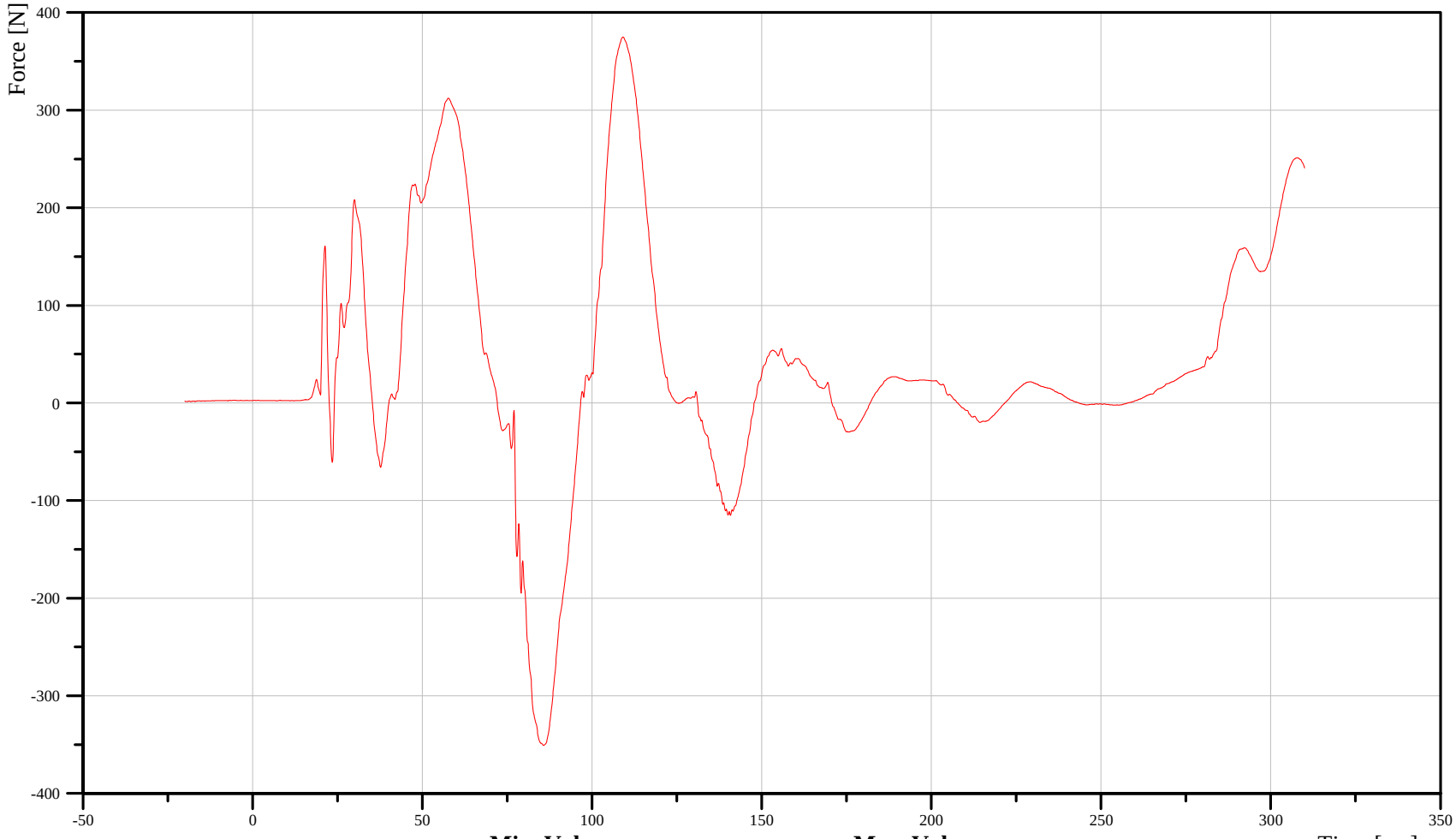
Shoulder Z-Axis Force

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SHLDLE00S2FOZB

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_600

Min. Value
-350.79 N at 85.76 ms

Max. Value
374.77 N at 109.12 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

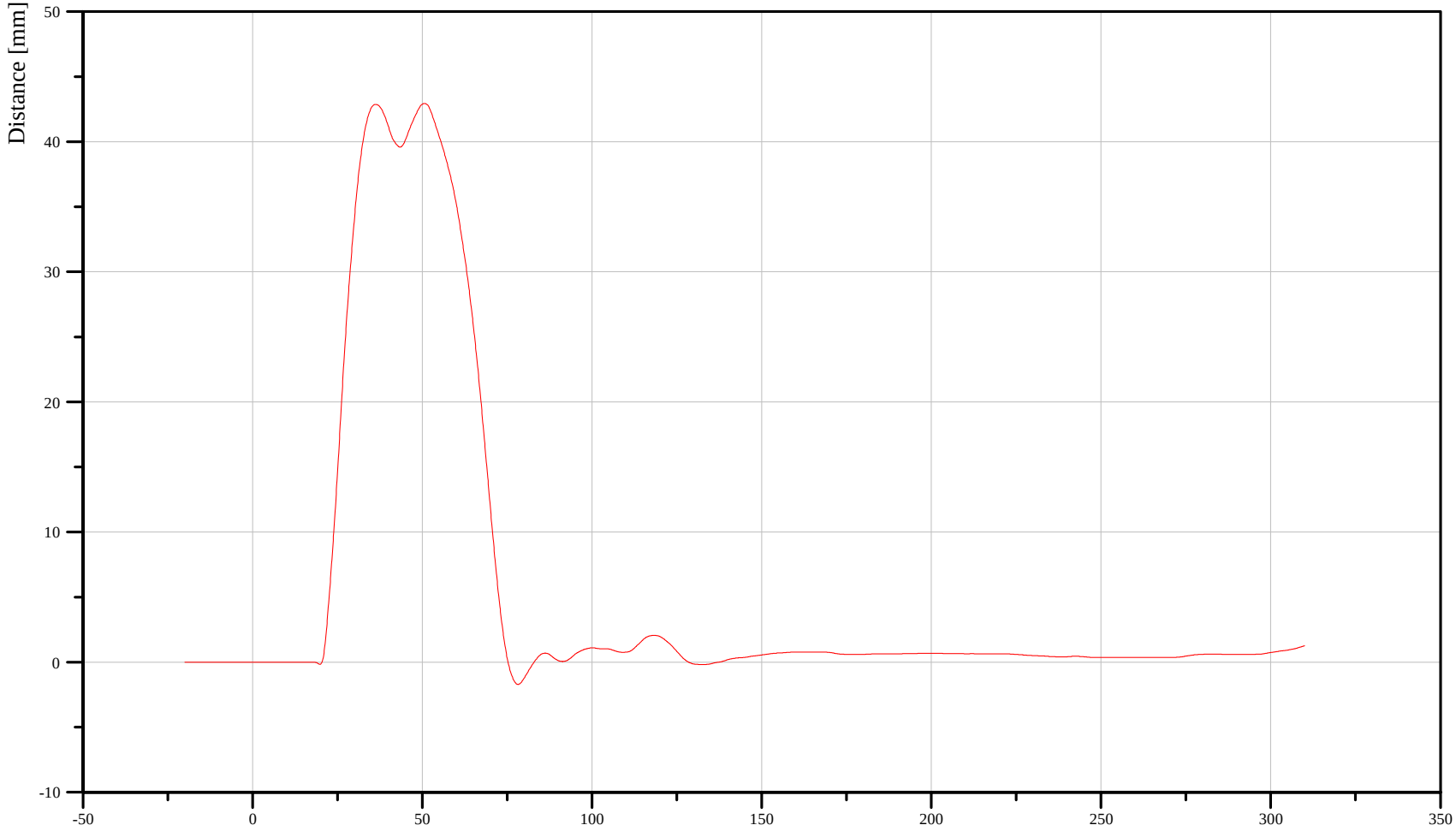
Shoulder Y-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SHRILE00S2DSYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-1.71 mm at 78.24 ms

Max. Value
42.94 mm at 50.64 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

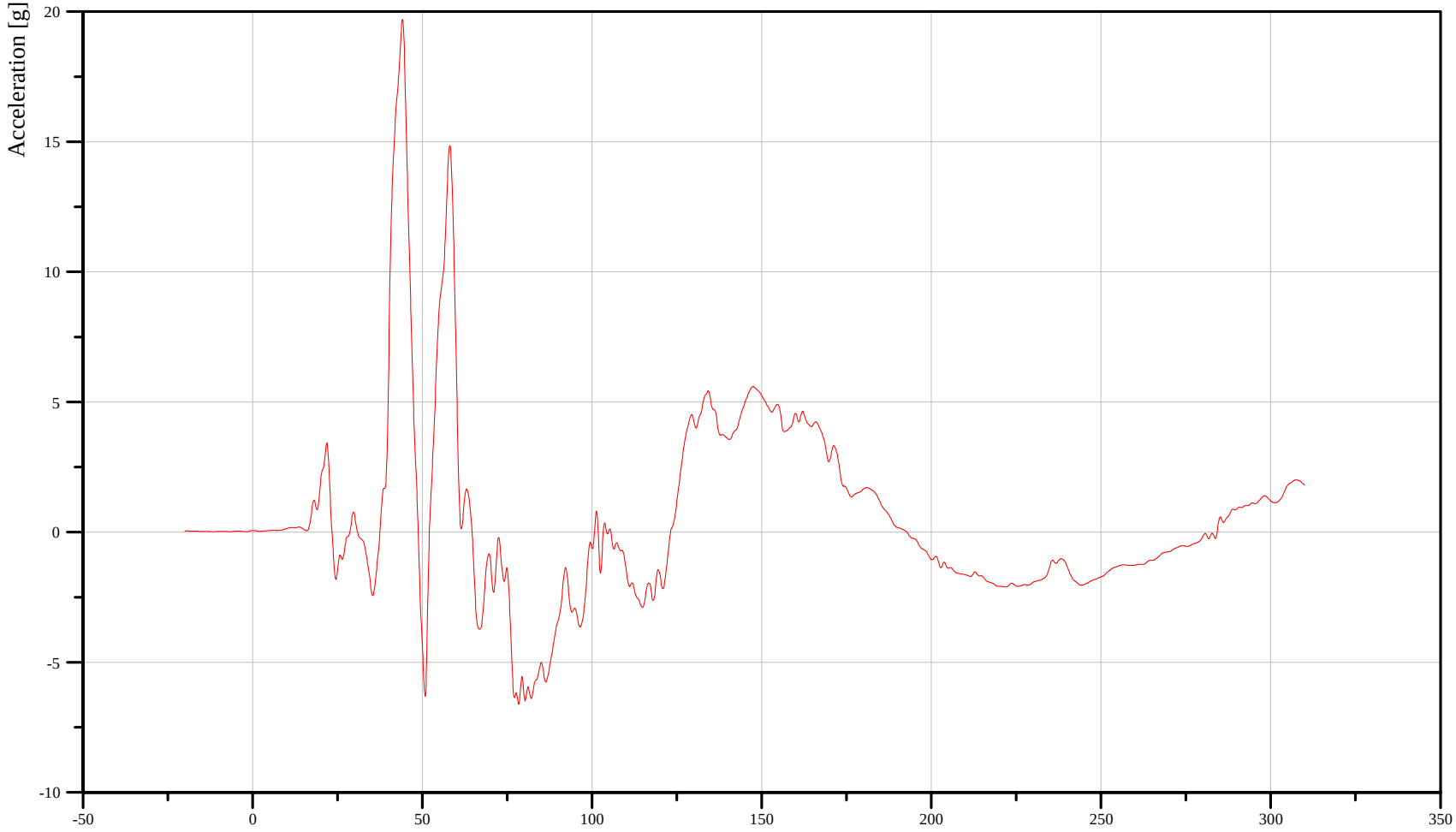
Upper Spine X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SPIN0100S2ACXC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-6.61 g at 78.40 ms

Max. Value
19.70 g at 44.16 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

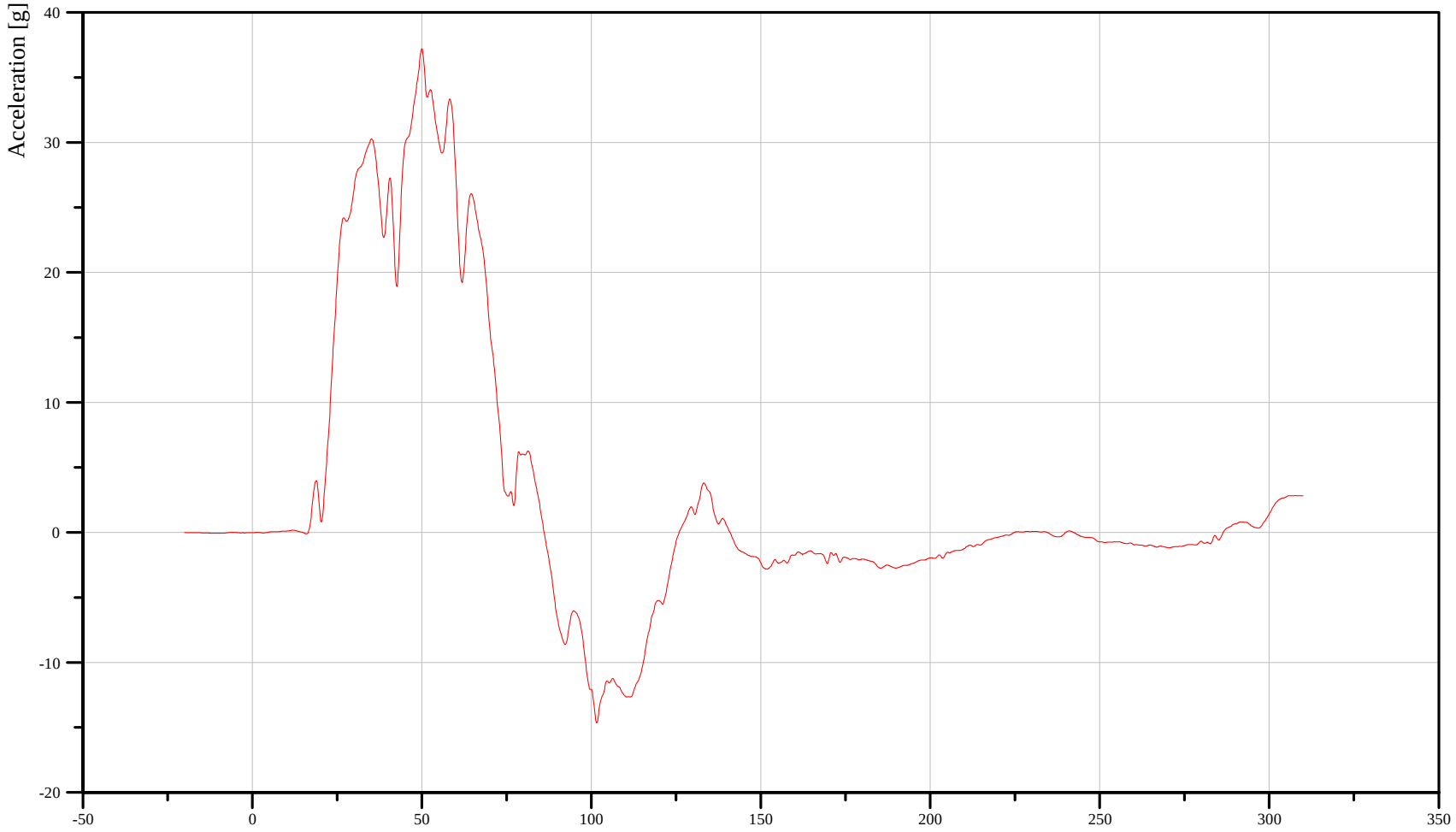
Upper Spine Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SPIN0100S2ACYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-14.65 g at 101.60 ms

Max. Value
37.21 g at 50.00 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

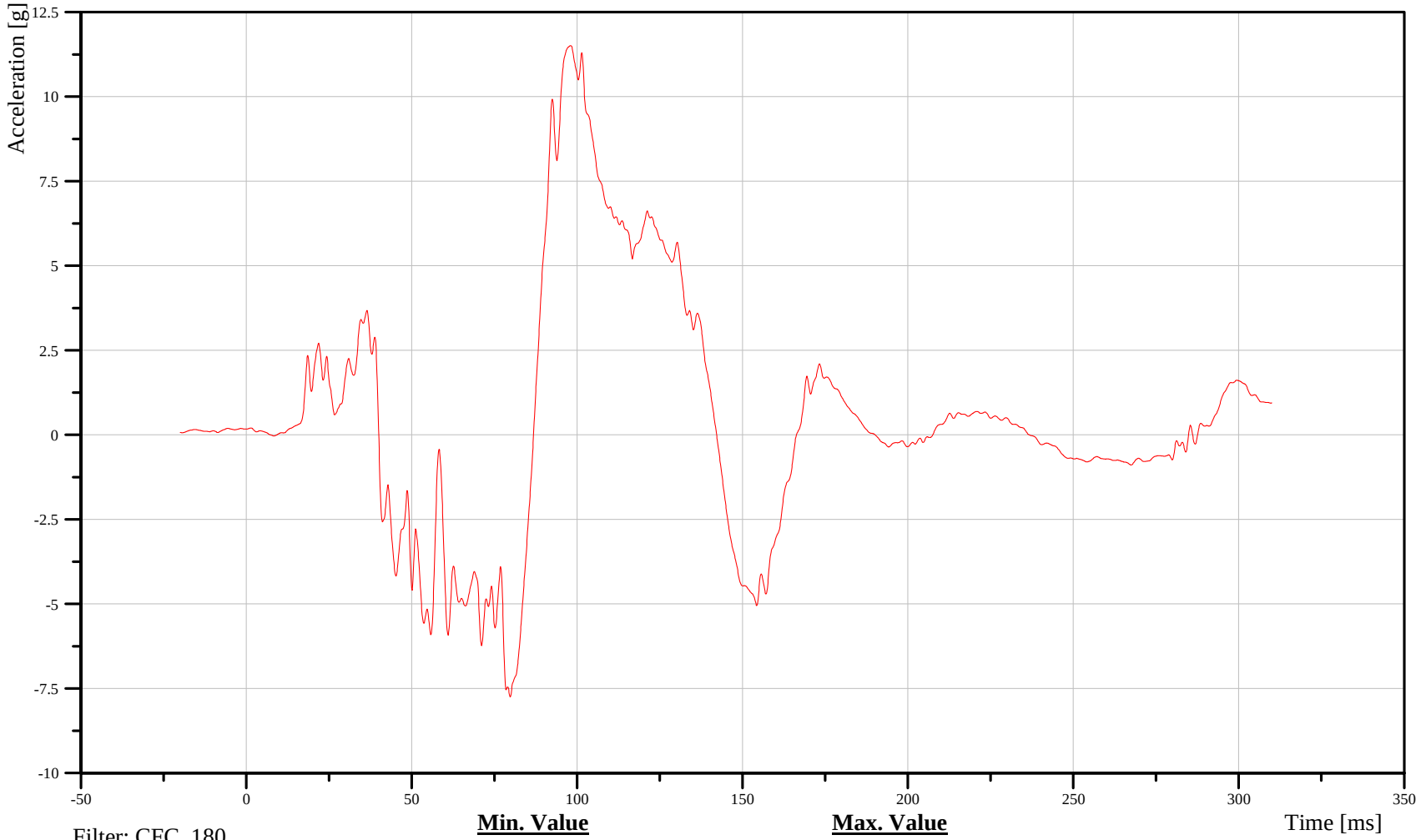
Upper Spine Z-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SPIN0100S2ACZC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-7.75 g at 79.84 ms

Max. Value
11.51 g at 98.08 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

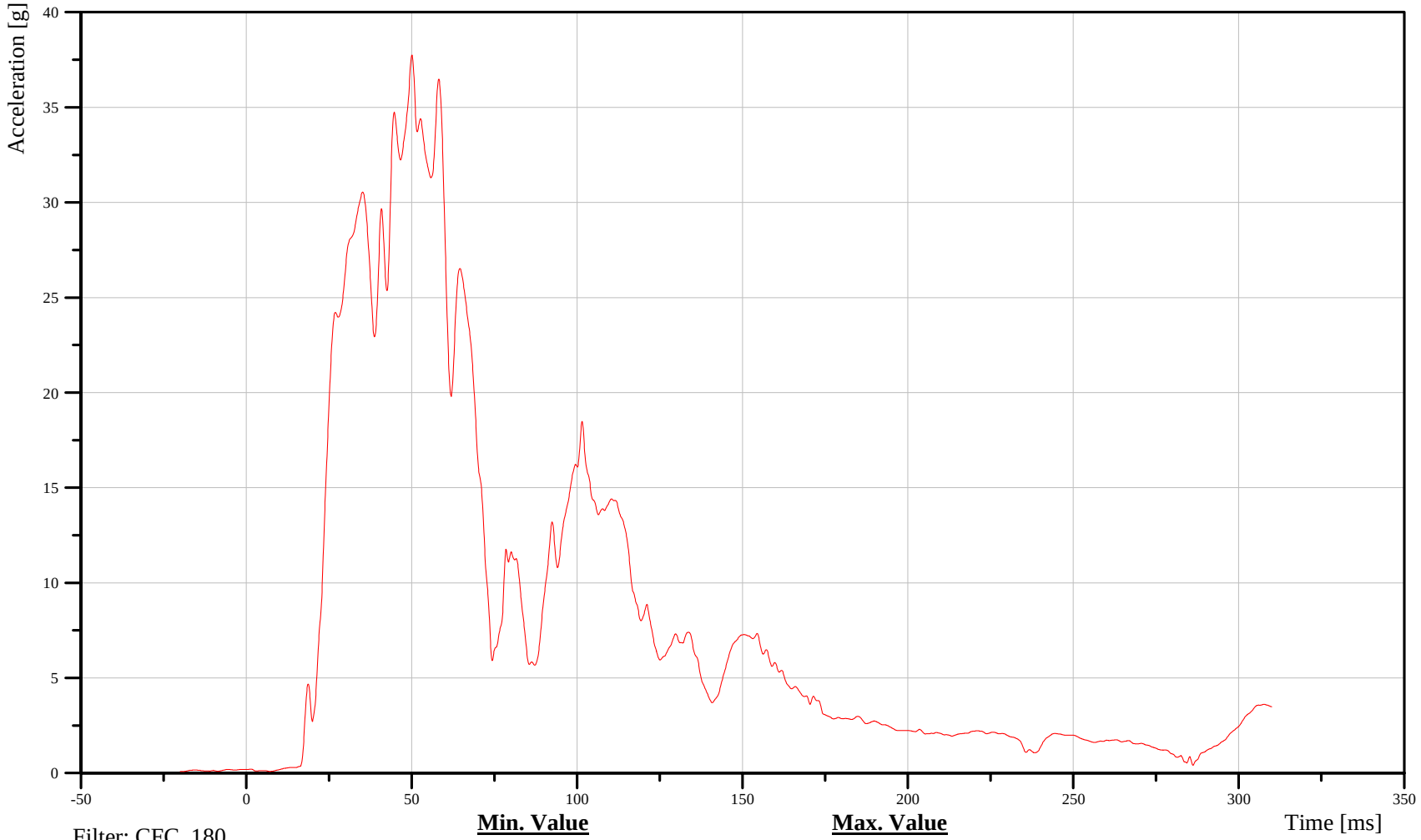
Upper Spine Resultant Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SPIN0100S2ACRC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
0.08 g at -19.52 ms

Max. Value
37.75 g at 50.08 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

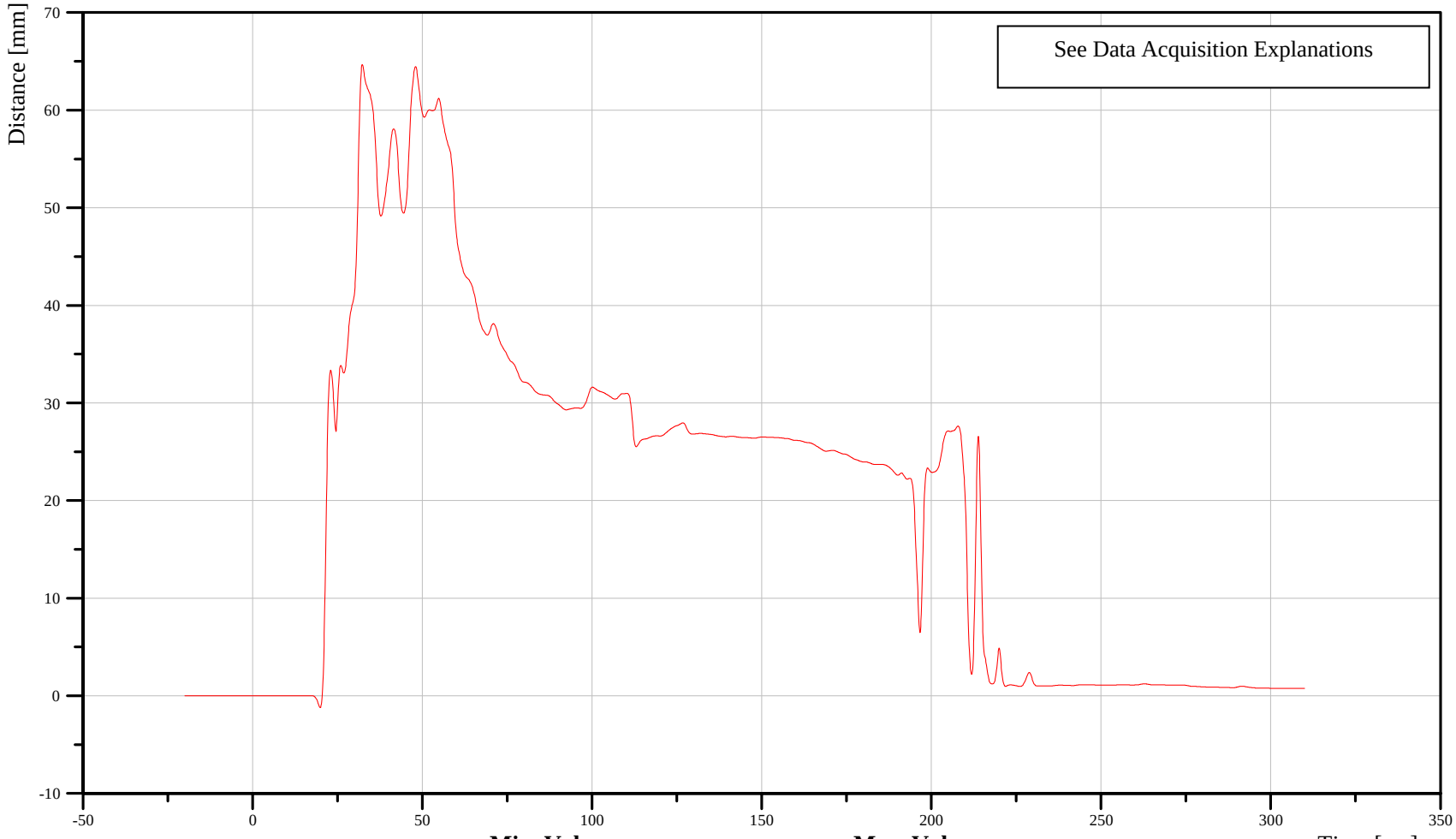
Left Thorax Rib 1 Y-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11TRRI01LES2DSYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-1.21 mm at 19.92 ms

Max. Value
64.68 mm at 32.32 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

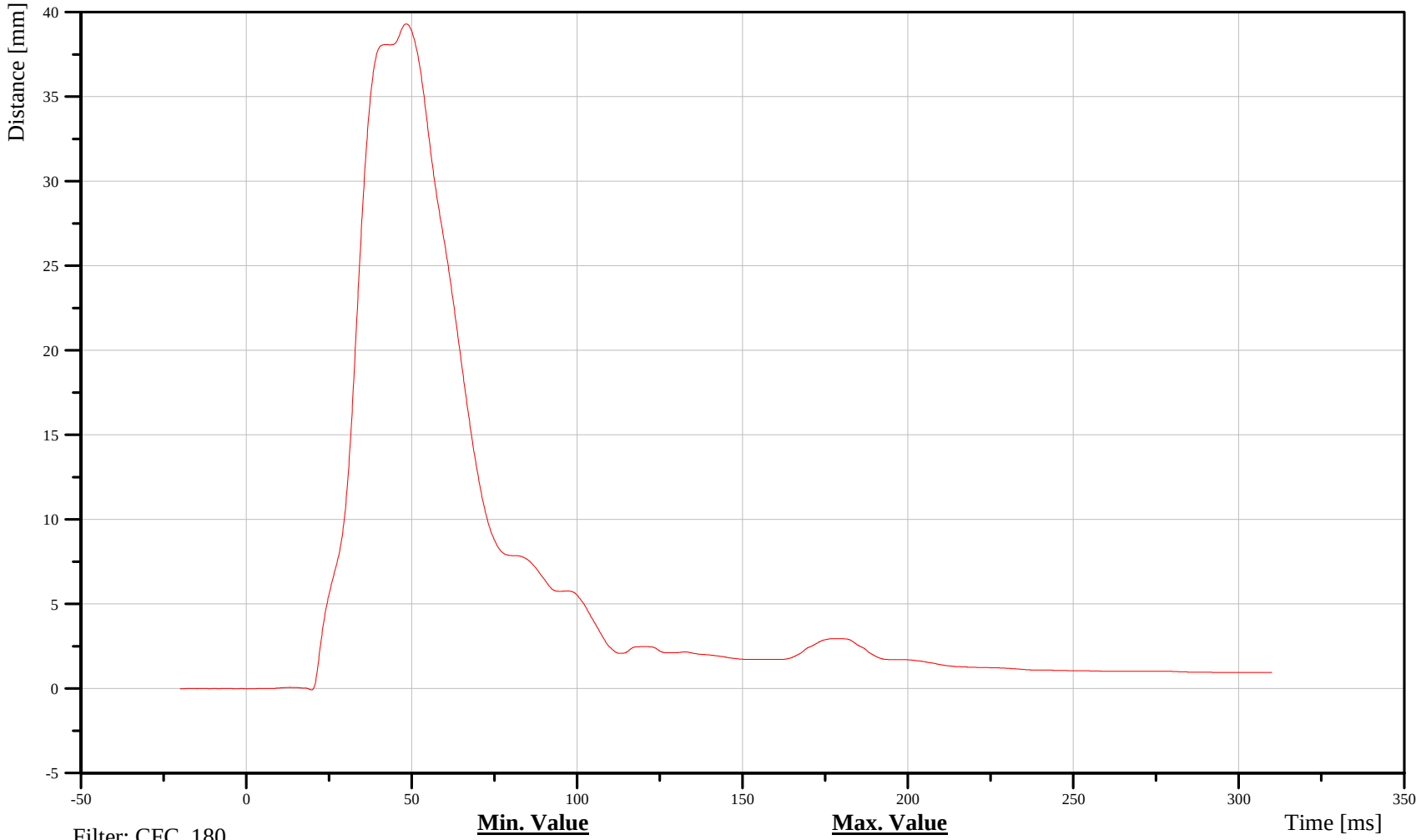
Left Thorax Rib 2 Y-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11TRRI02LES2DSYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-0.09 mm at 19.76 ms

Max. Value
39.31 mm at 48.40 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

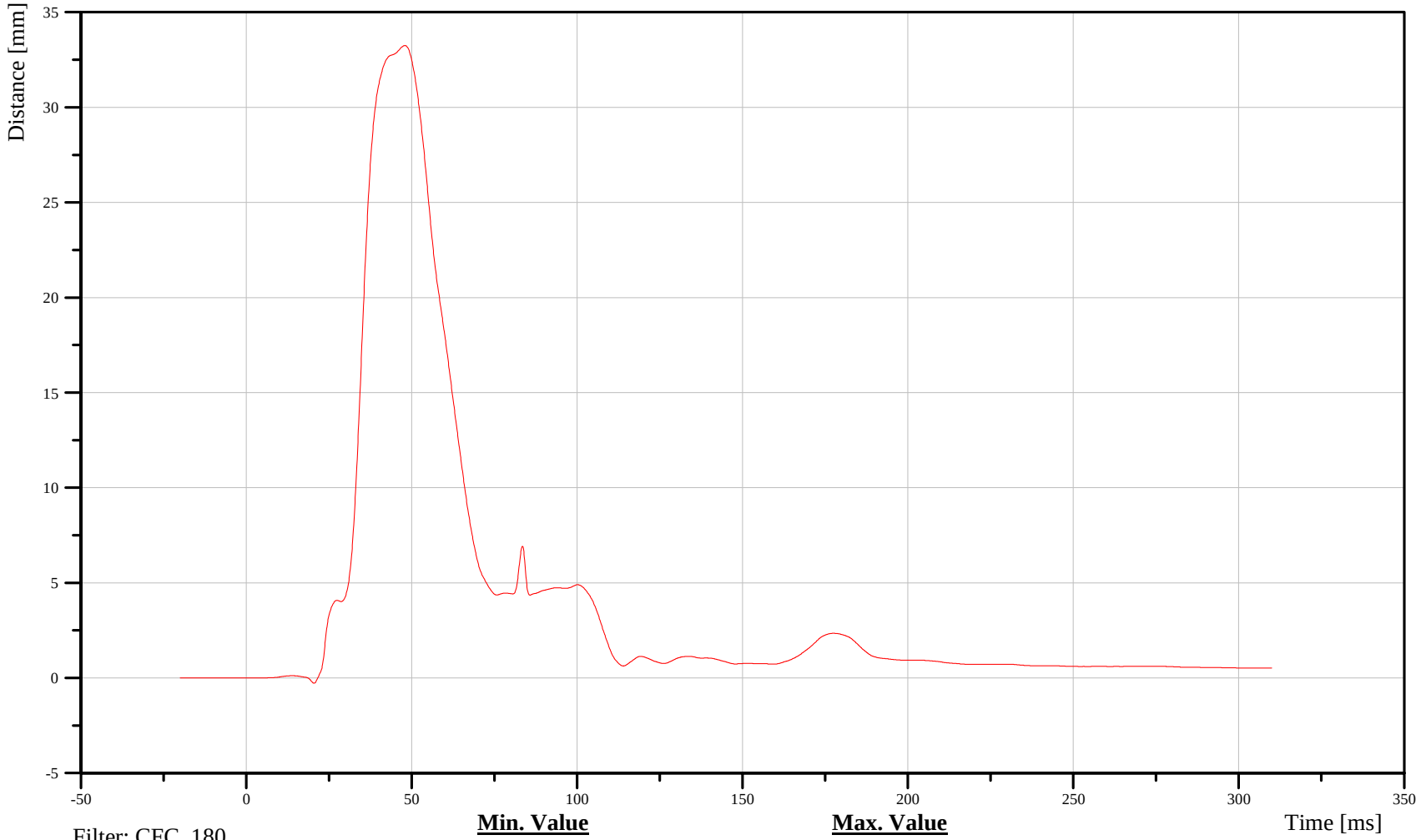
Left Thorax Rib 3 Y-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11TRRI03LES2DSYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-0.28 mm at 20.48 ms

Max. Value
33.24 mm at 48.00 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

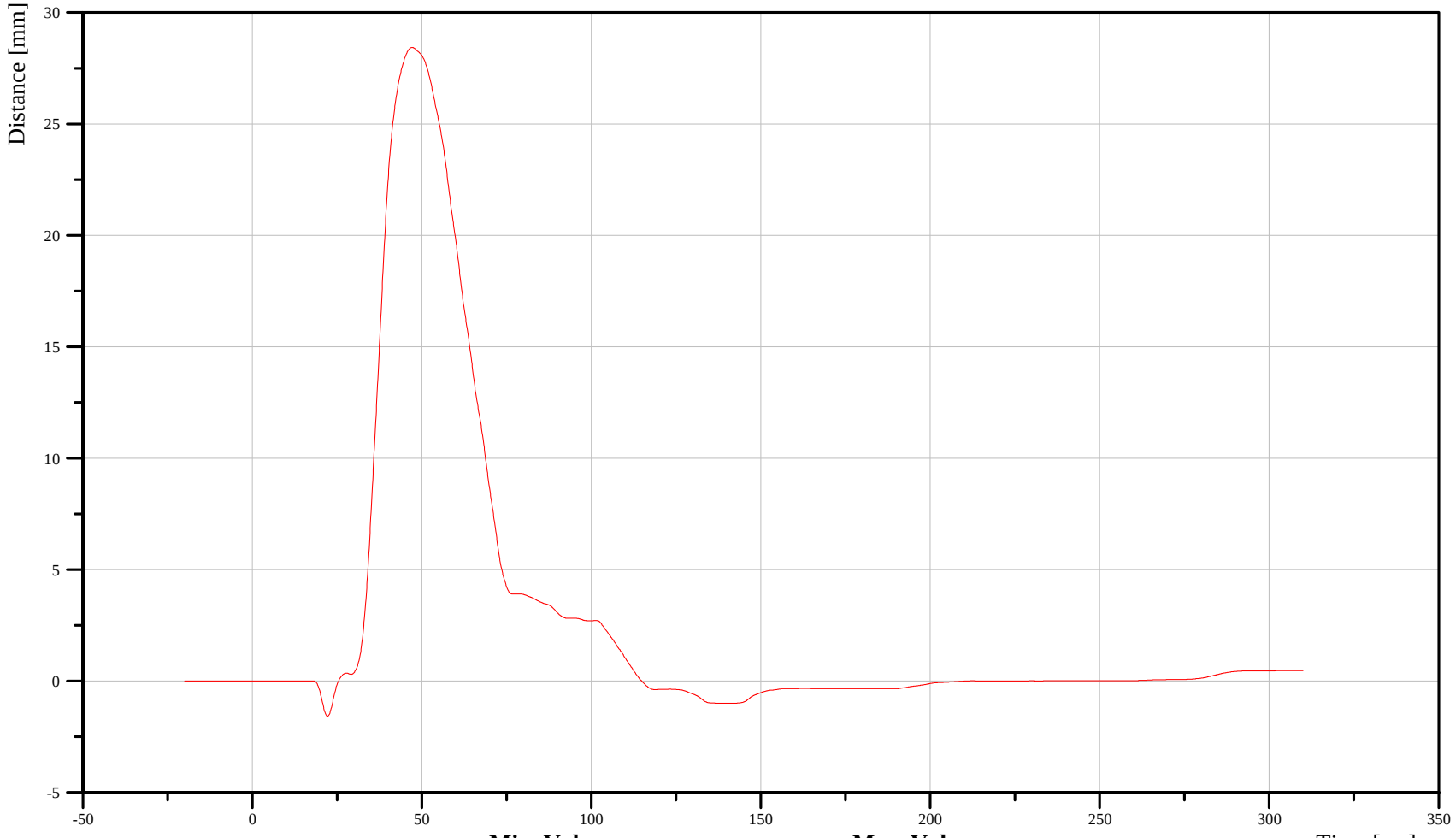
Left Abdomen Rib 1 Y-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11ABRI01LES2DSYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-1.58 mm at 22.16 ms

Max. Value
28.43 mm at 47.12 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

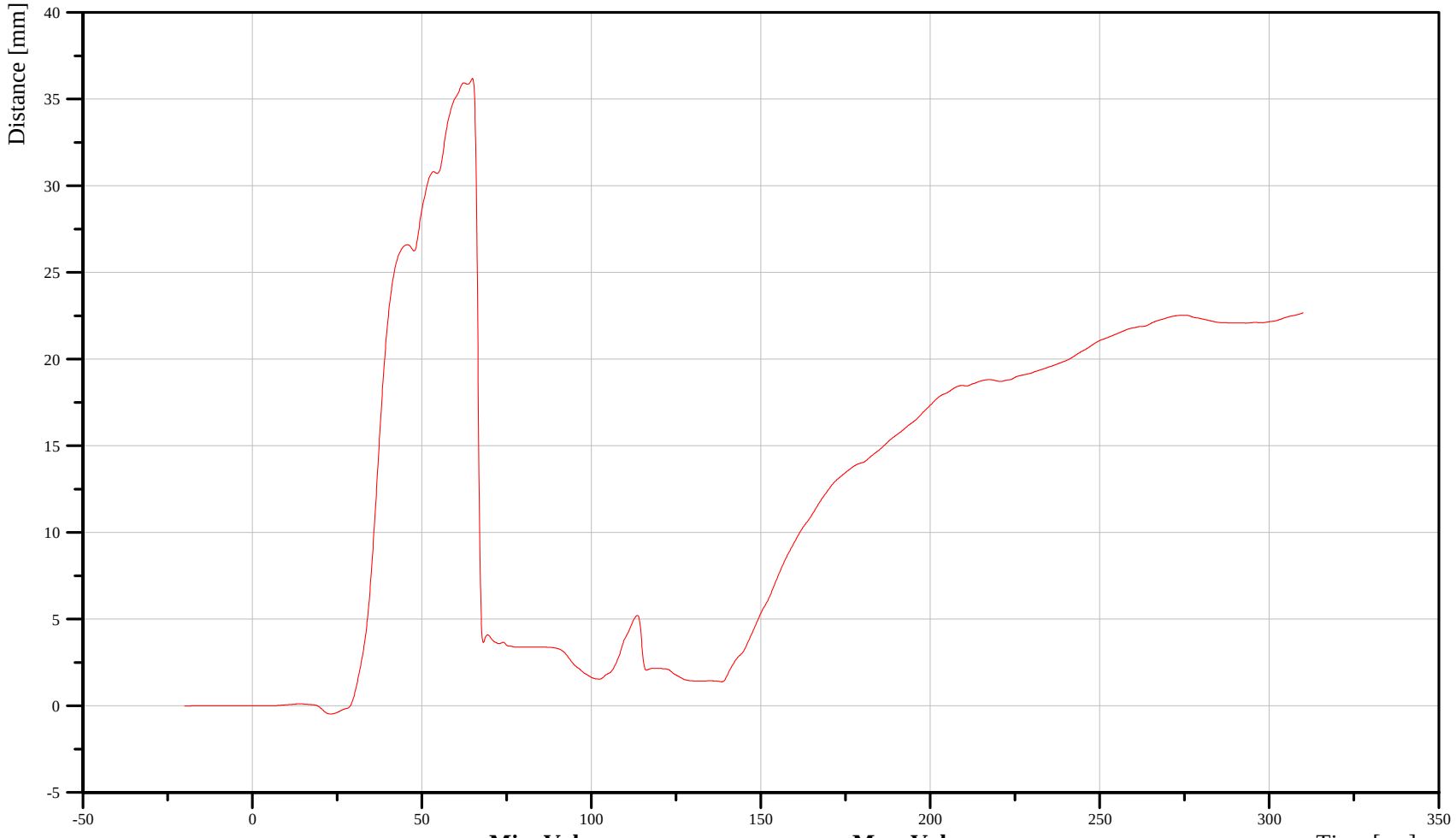
Left Abdomen Rib 2 Y-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11ABRI02LES2DSYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-0.47 mm at 23.04 ms

Max. Value
36.20 mm at 64.96 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

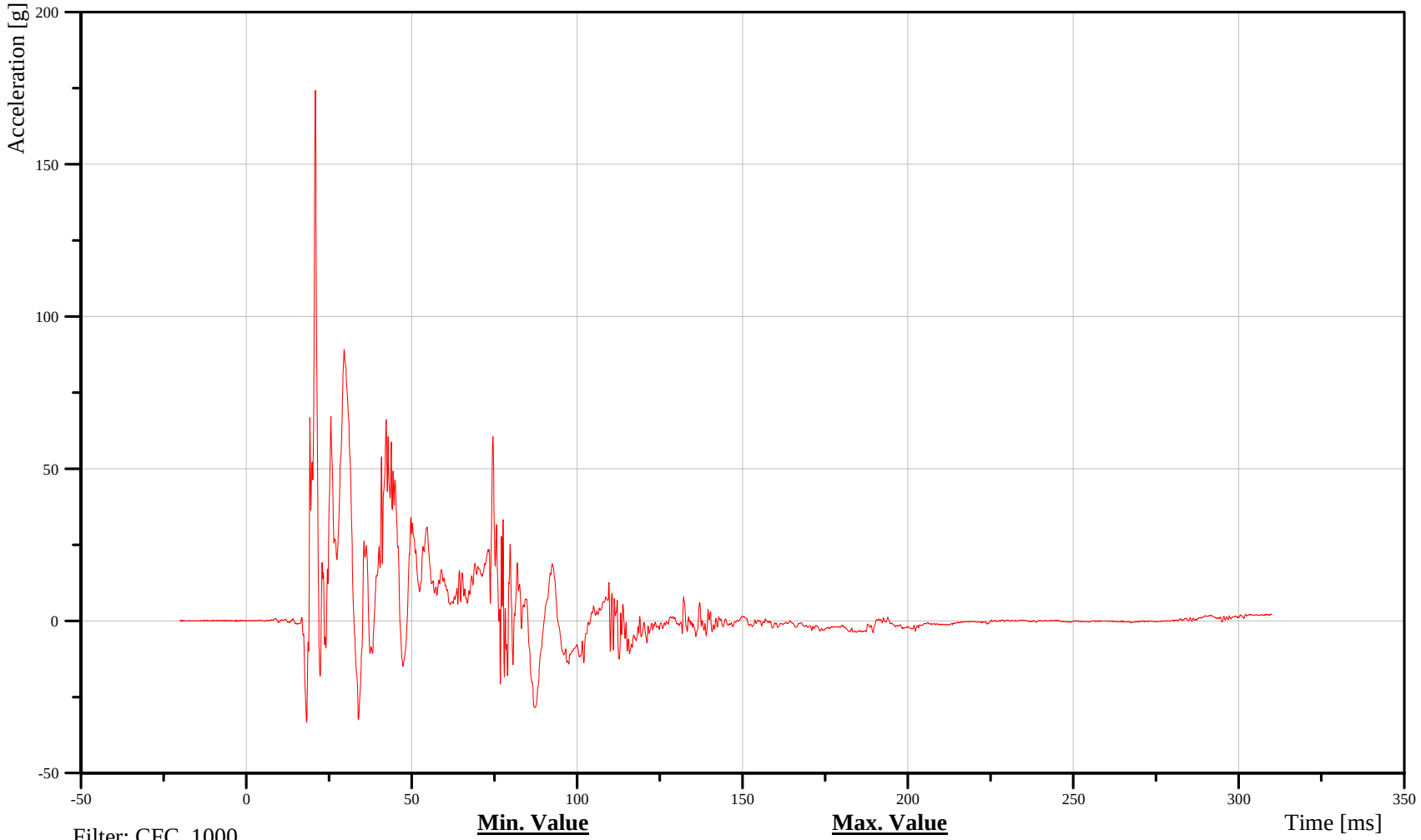
Left Thorax Rib 1 Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11TRRI01LES2ACYA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-33.37 g at 18.24 ms

Max. Value
174.29 g at 20.88 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

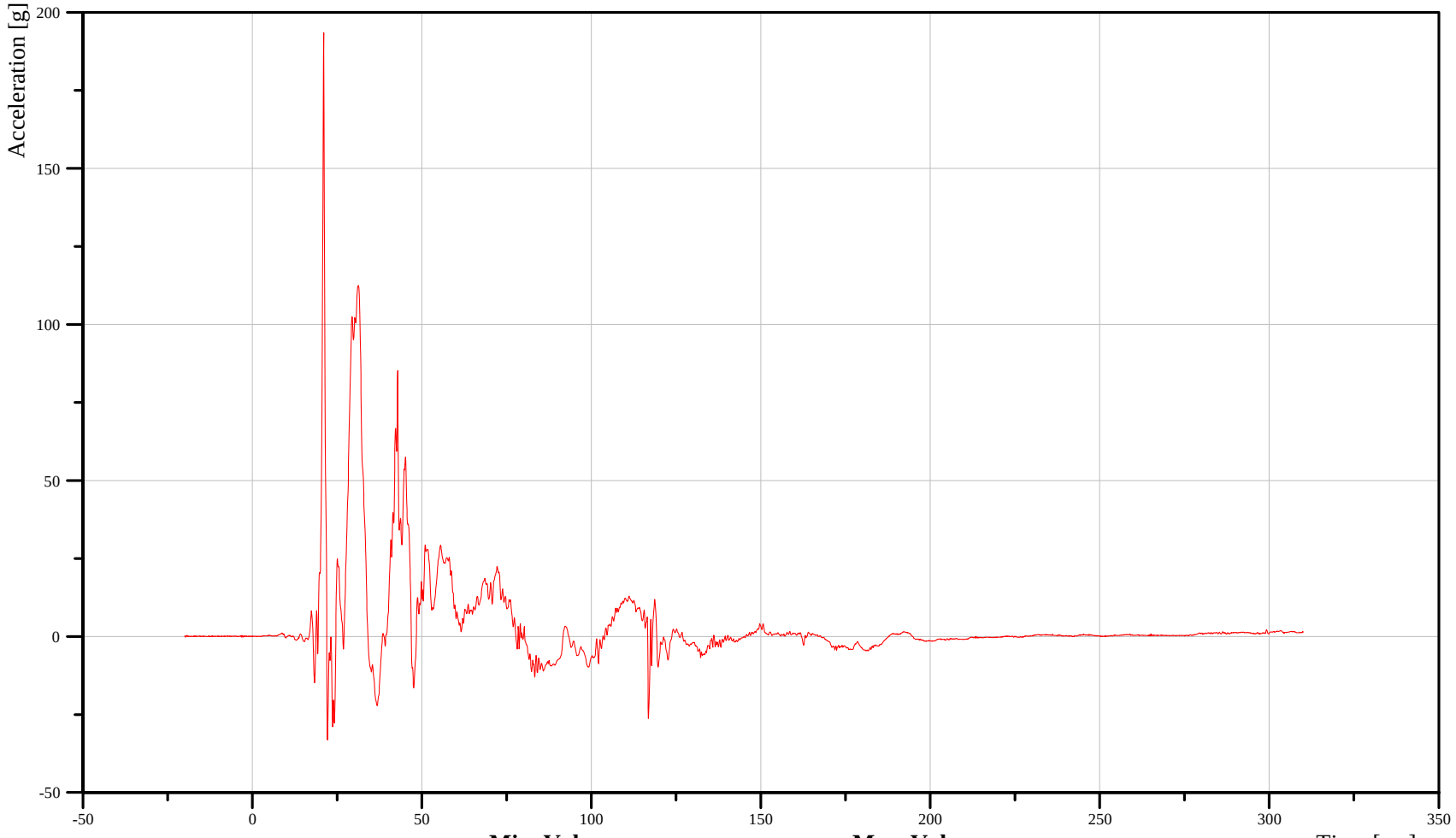
Left Thorax Rib 2 Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11TRRI02LES2ACYA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-33.20 g at 22.24 ms

Max. Value
193.57 g at 21.04 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

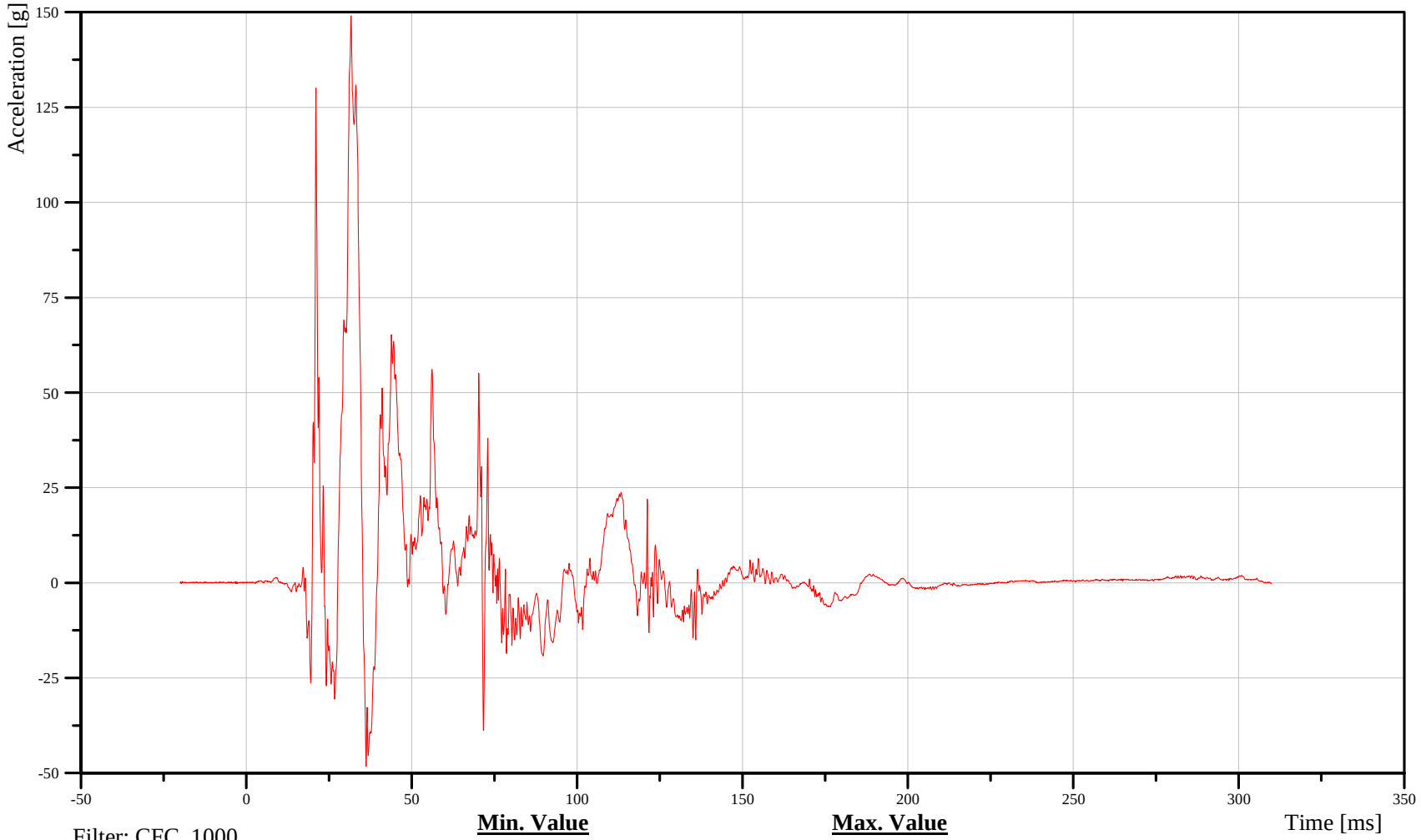
Left Thorax Rib 3 Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11TRRI03LES2ACYA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-48.21 g at 36.24 ms

Max. Value
149.08 g at 31.68 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

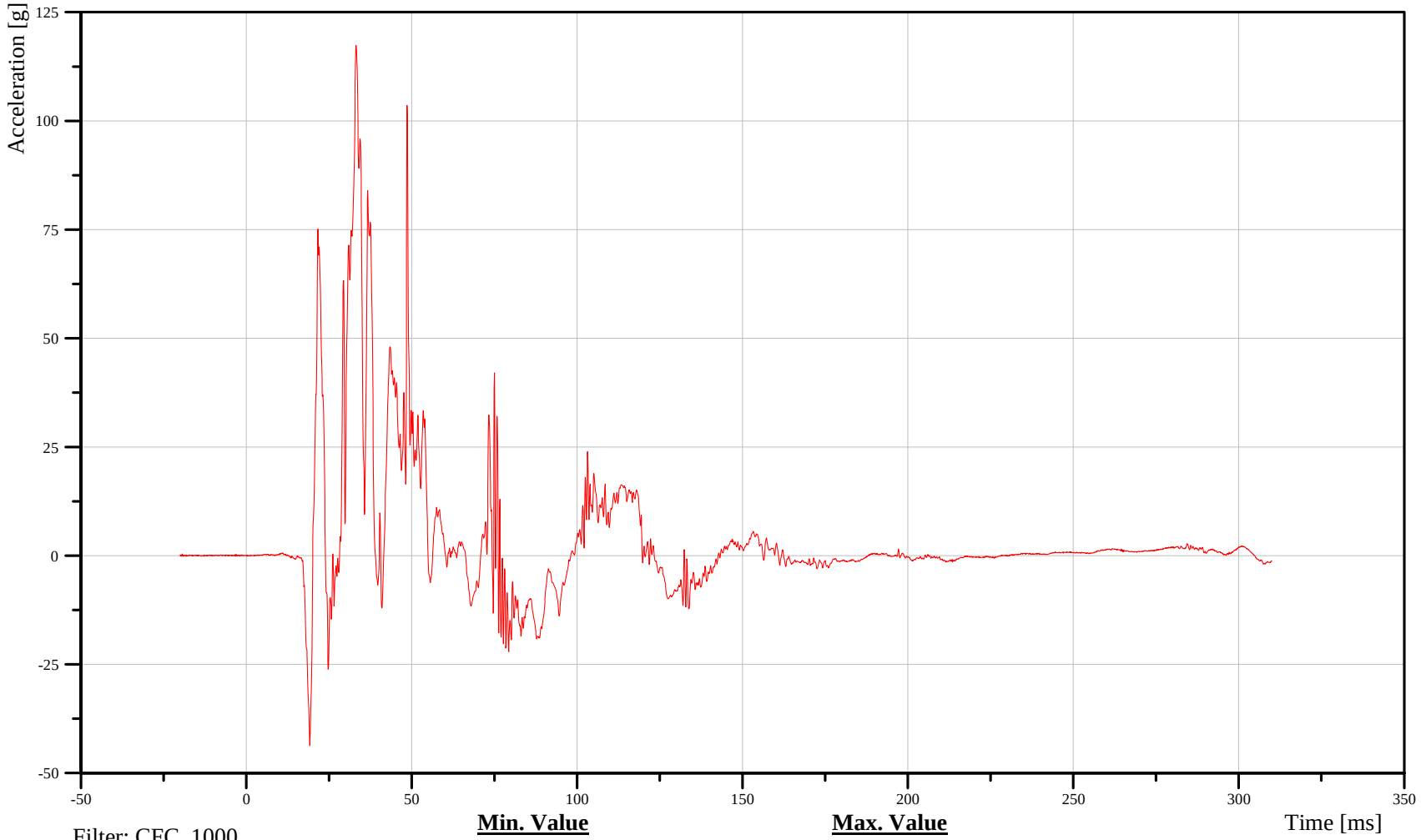
Left Abdomen Rib 1 Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11ABRI01LES2ACYA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-43.66 g at 19.20 ms

Max. Value
117.34 g at 33.20 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

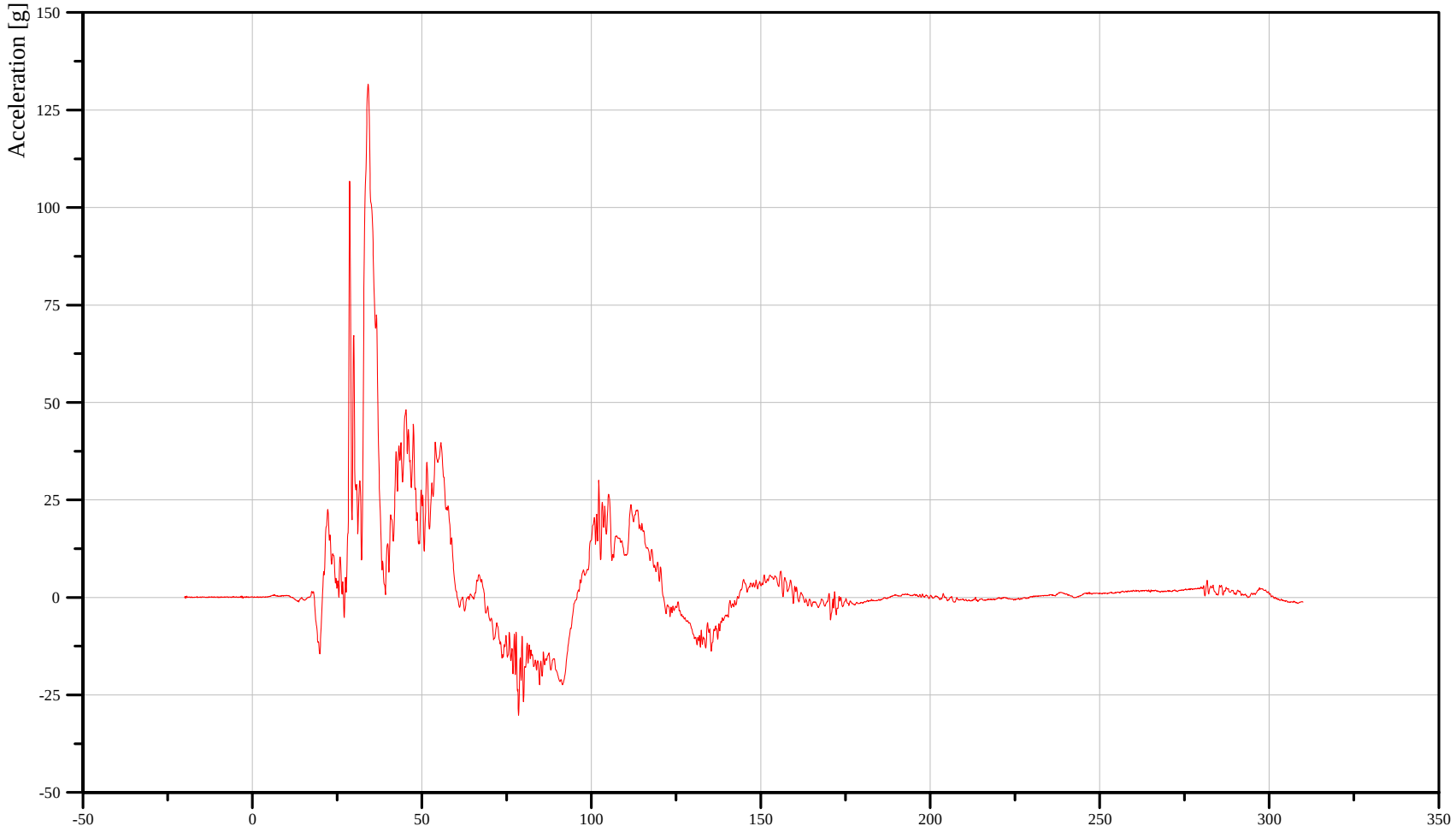
Left Abdomen Rib 2 Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11ABRI02LES2ACYA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-30.29 g at 78.56 ms

Max. Value
131.61 g at 34.16 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

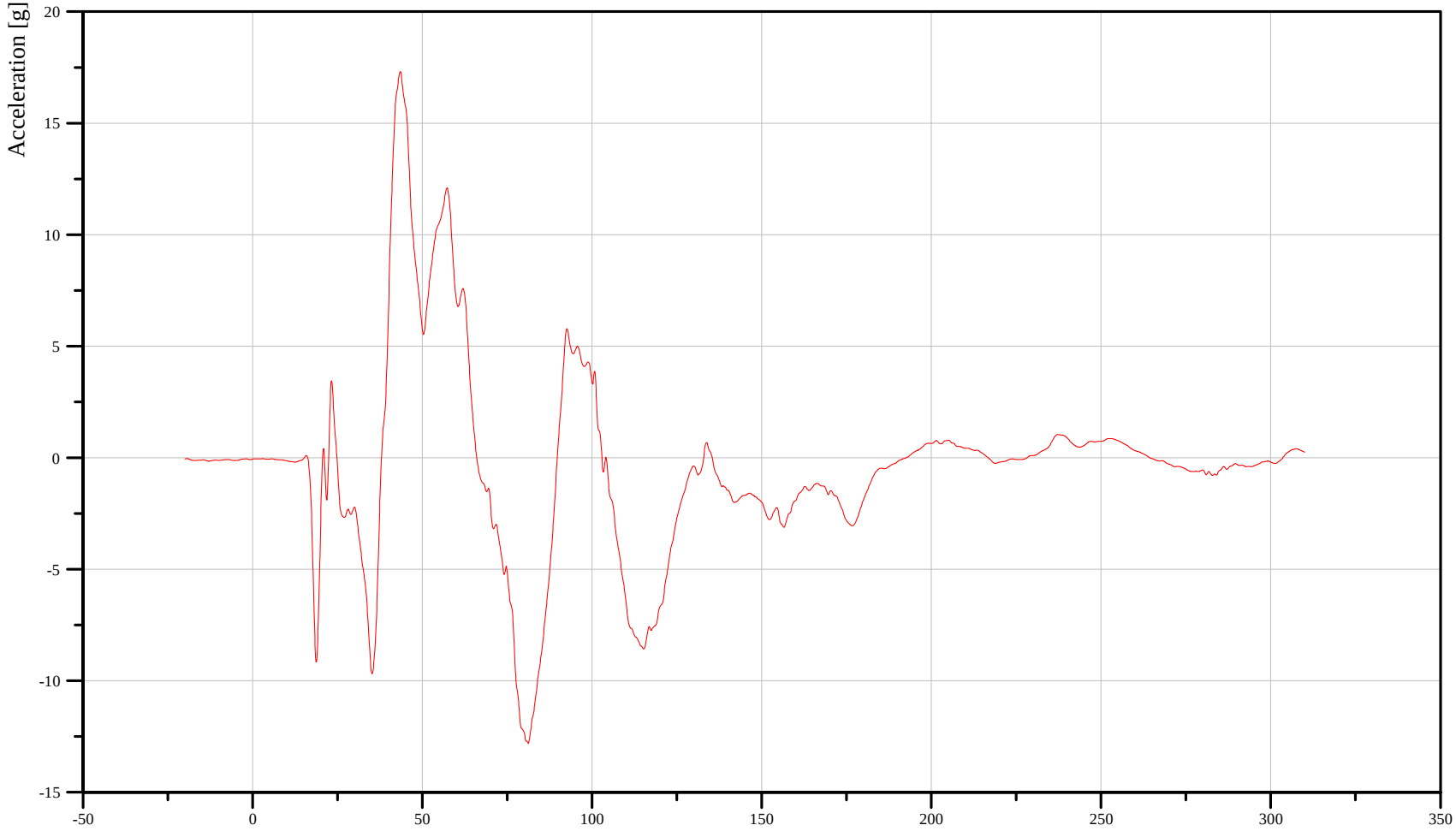
Lower Spine X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SPIN1200S2ACXC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-12.81 g at 81.28 ms

Max. Value
17.31 g at 43.52 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

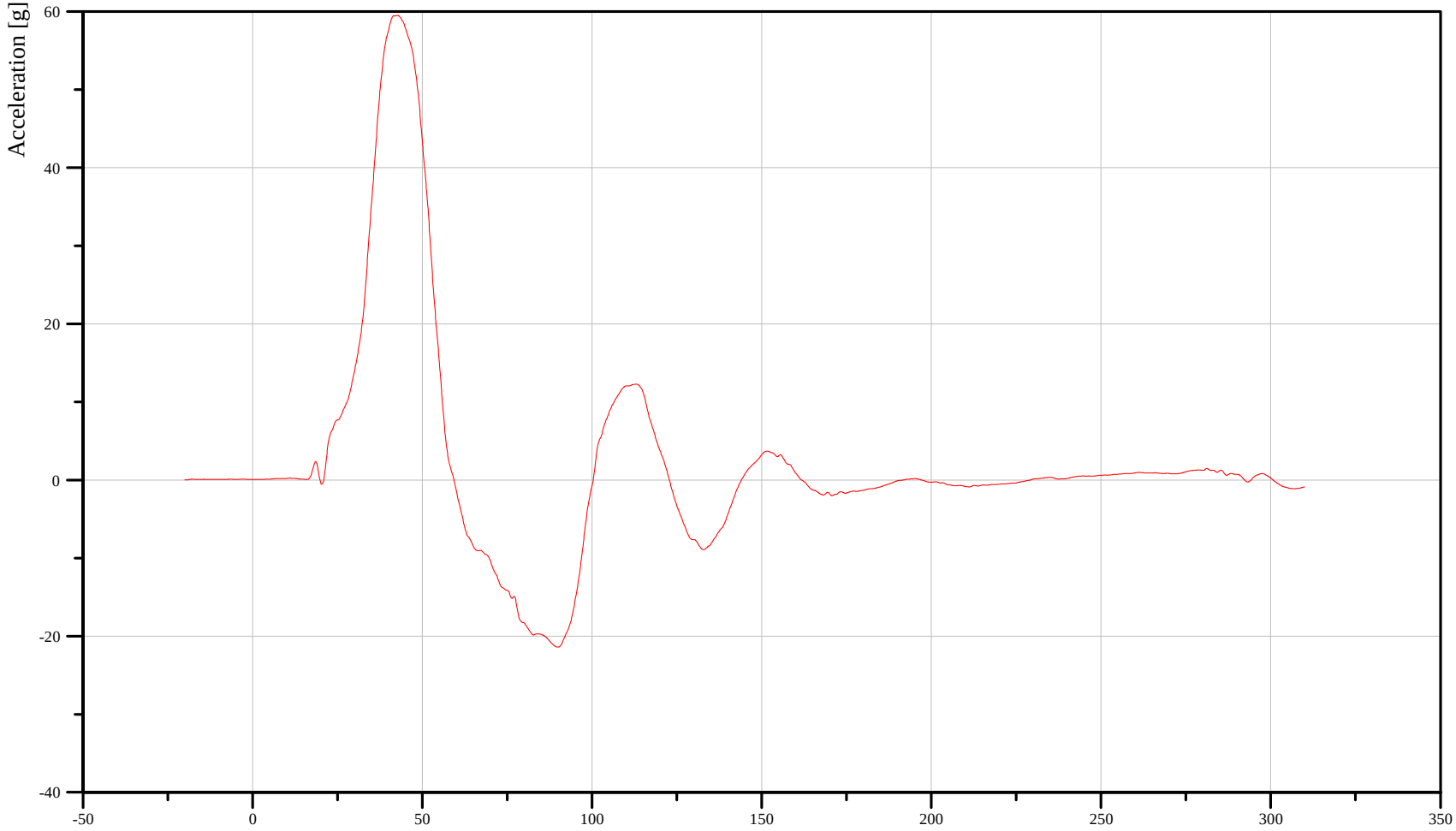
Lower Spine Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SPIN1200S2ACYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-21.40 g at 89.92 ms

Max. Value
59.52 g at 42.80 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

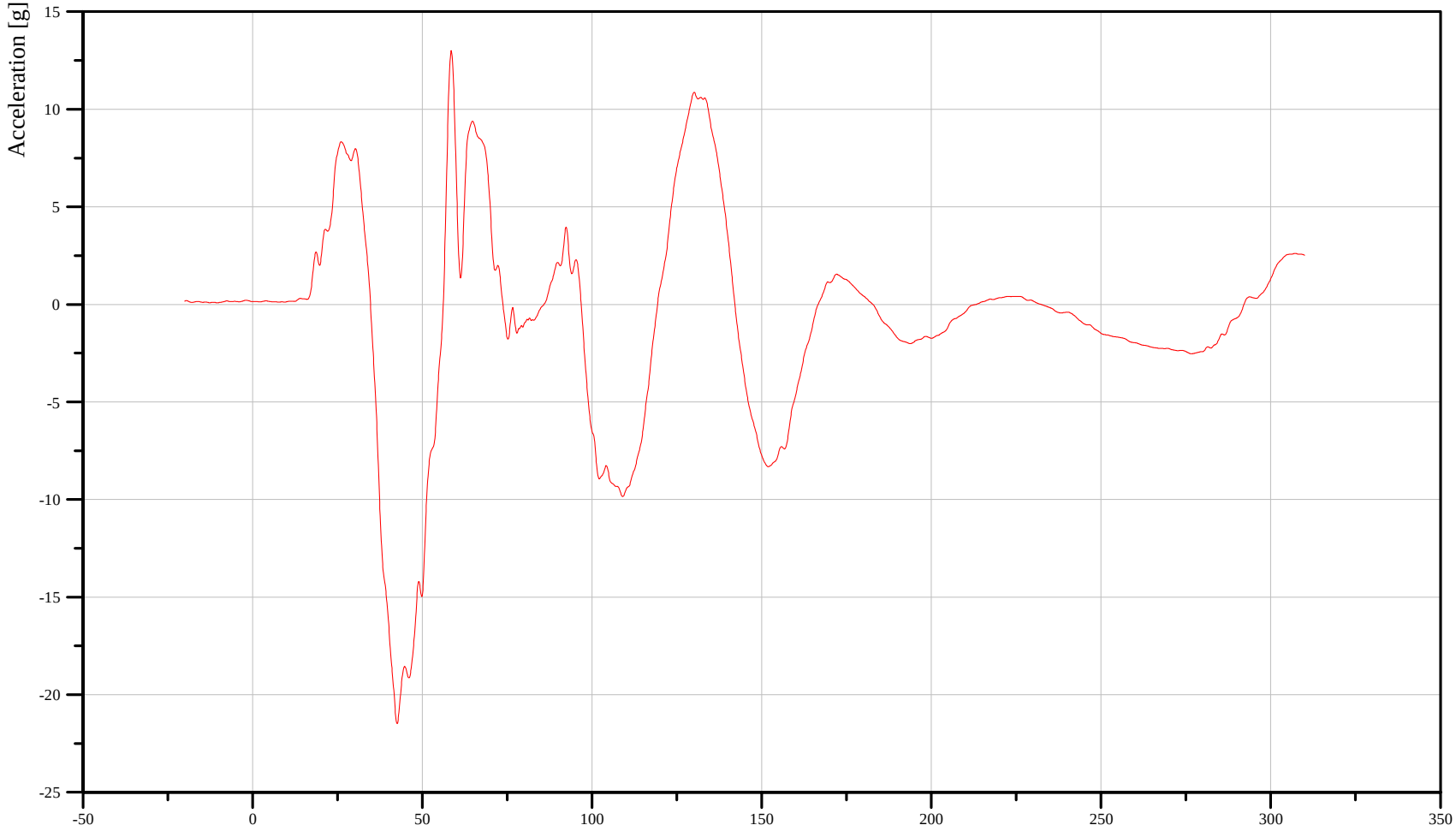
Lower Spine Z-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SPIN1200S2ACZC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-21.48 g at 42.56 ms

Max. Value
13.00 g at 58.56 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

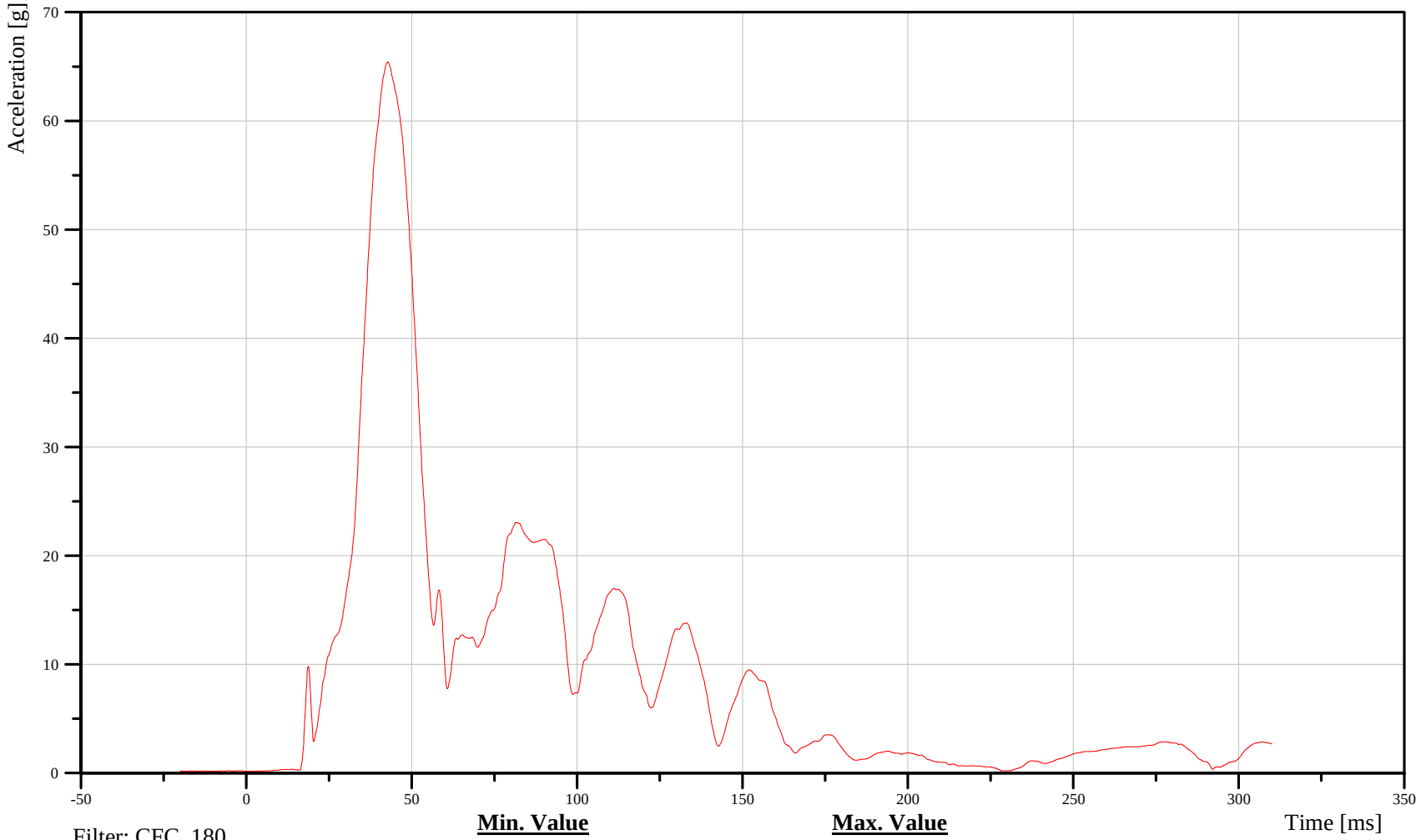
Lower Spine Resultant Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SPIN1200S2ACRC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
0.16 g at -9.44 ms

Max. Value
65.42 g at 42.80 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

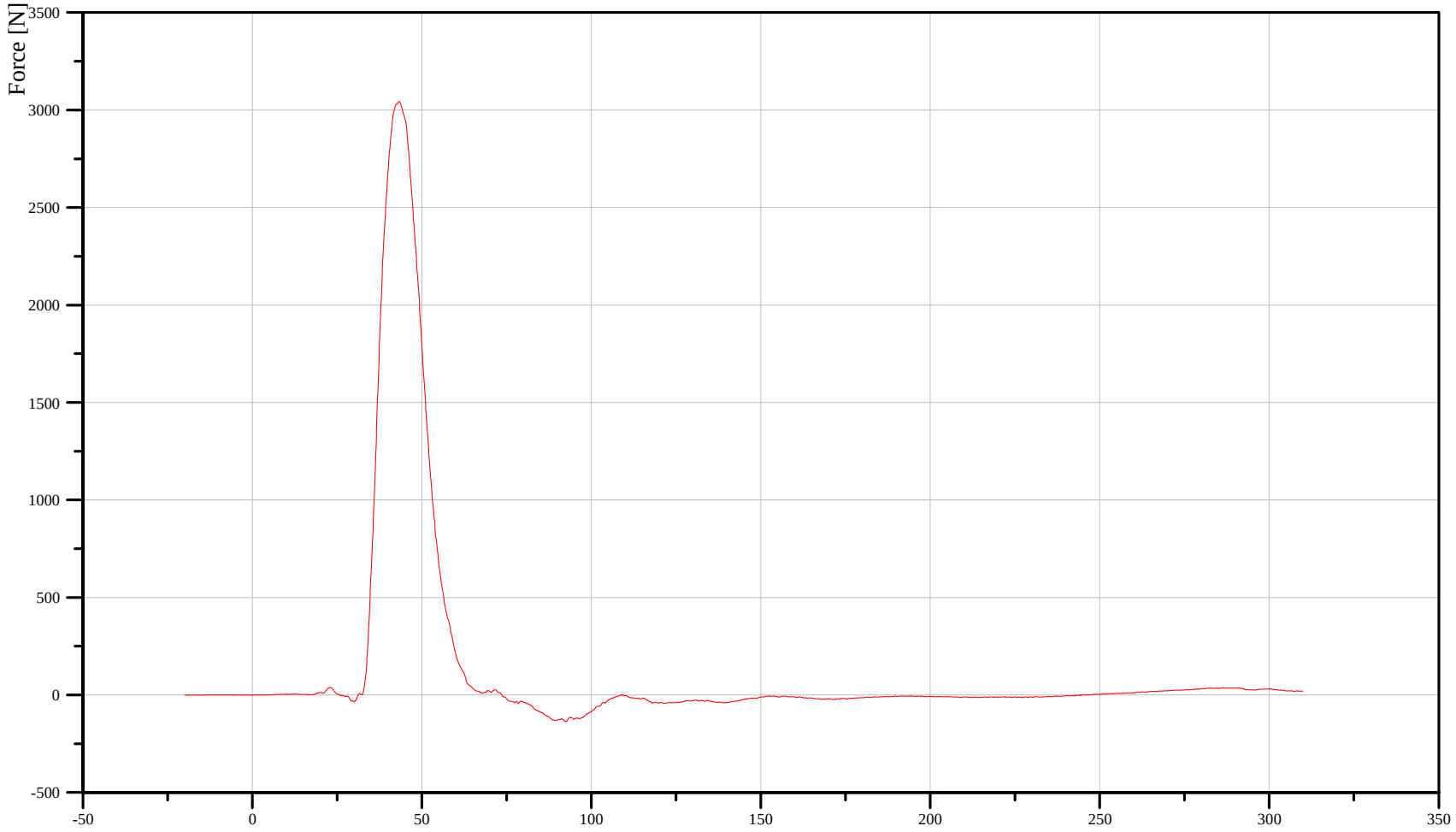
Left Iliac Wing Y-Axis Force

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11ILACLE00S2FOYB

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_600

Min. Value
-135.52 N at 92.64 ms

Max. Value
3,043.42 N at 43.36 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

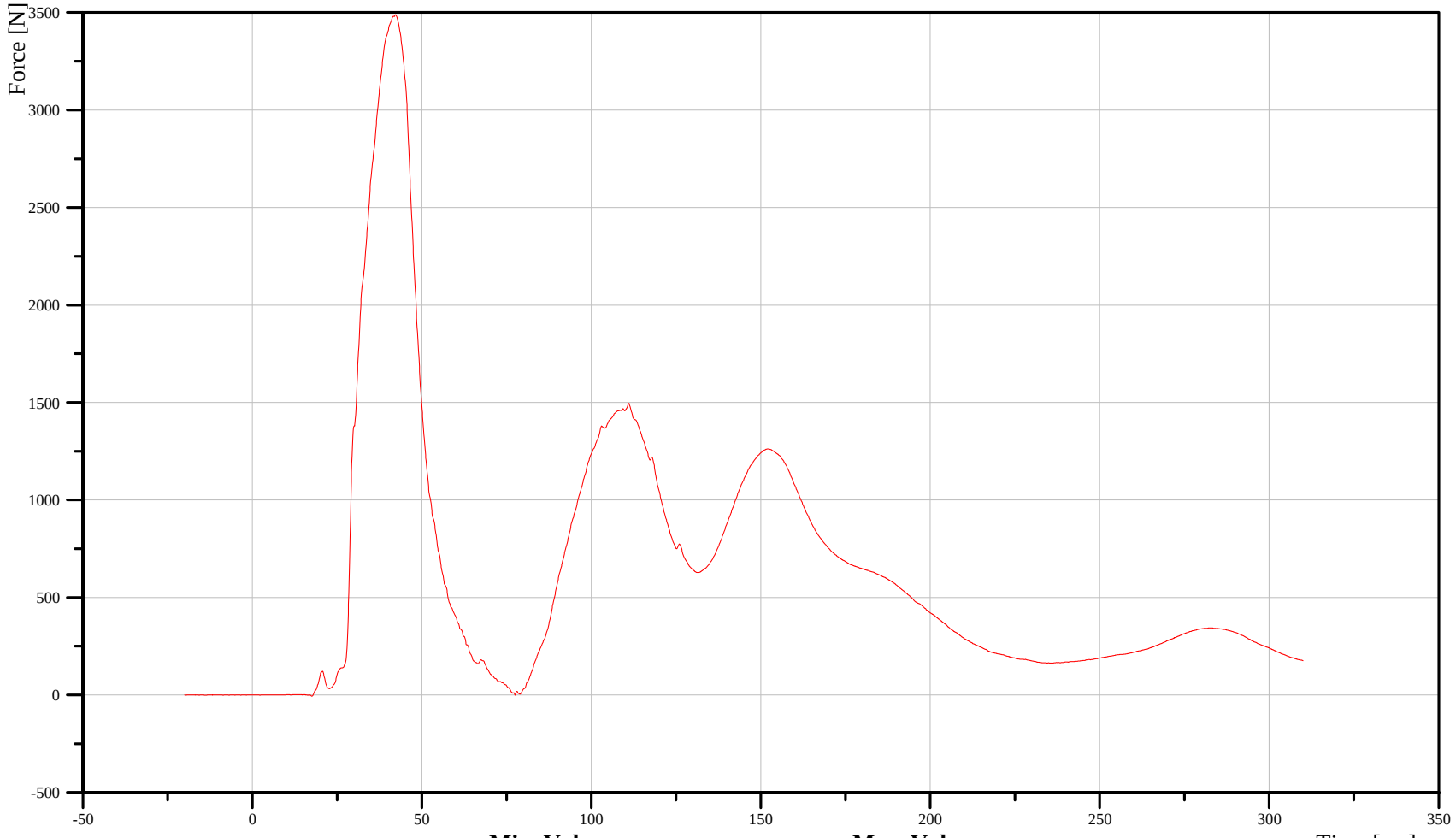
Left Acetabulum Y-Axis Force

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11ACTBLE00S2FOYB

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_600

Min. Value
-5.79 N at 17.60 ms

Max. Value
3,488.92 N at 42.24 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

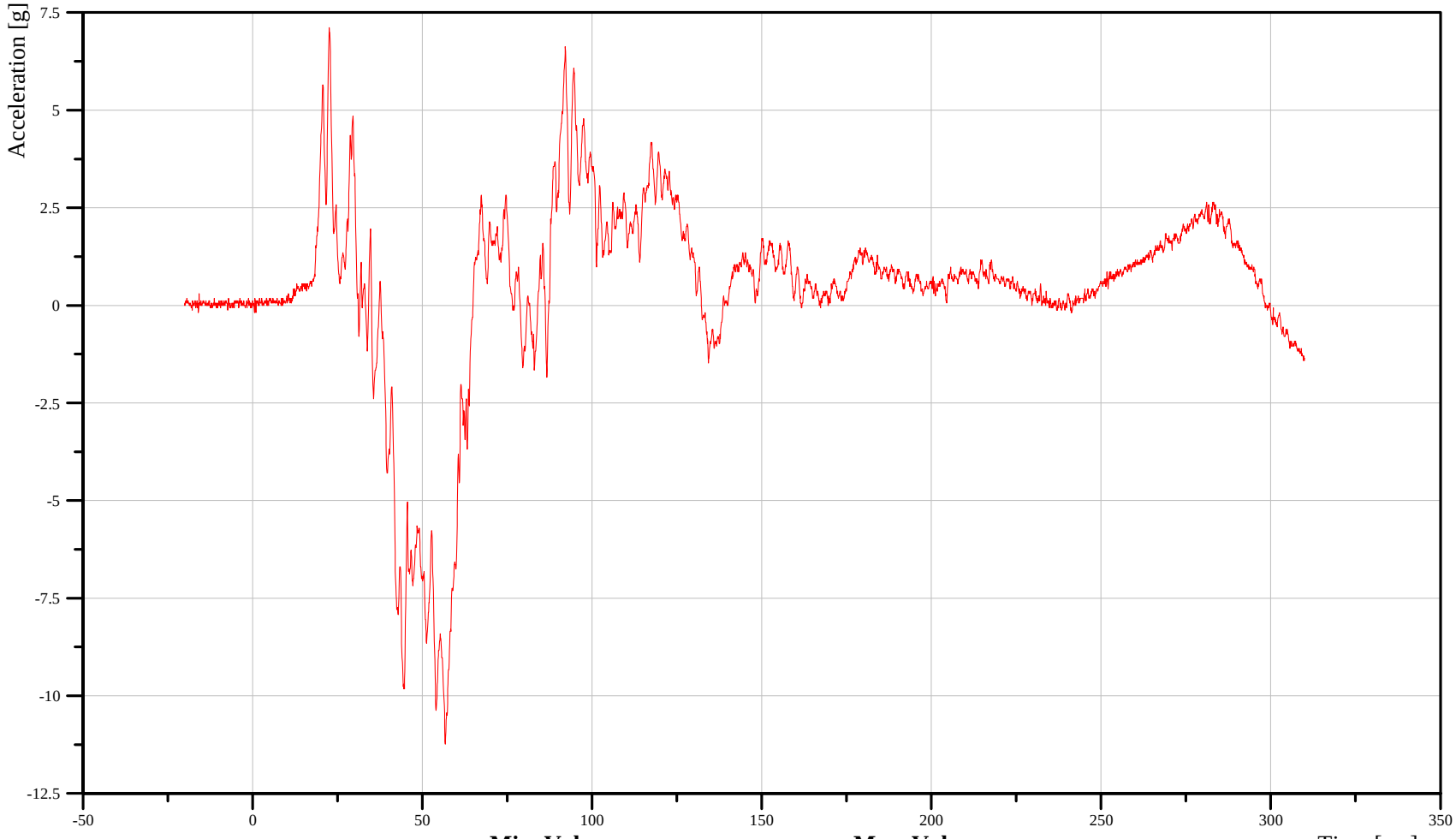
Pelvis X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11PELVCG00S2ACXA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-11.23 g at 56.80 ms

Max. Value
7.12 g at 22.56 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

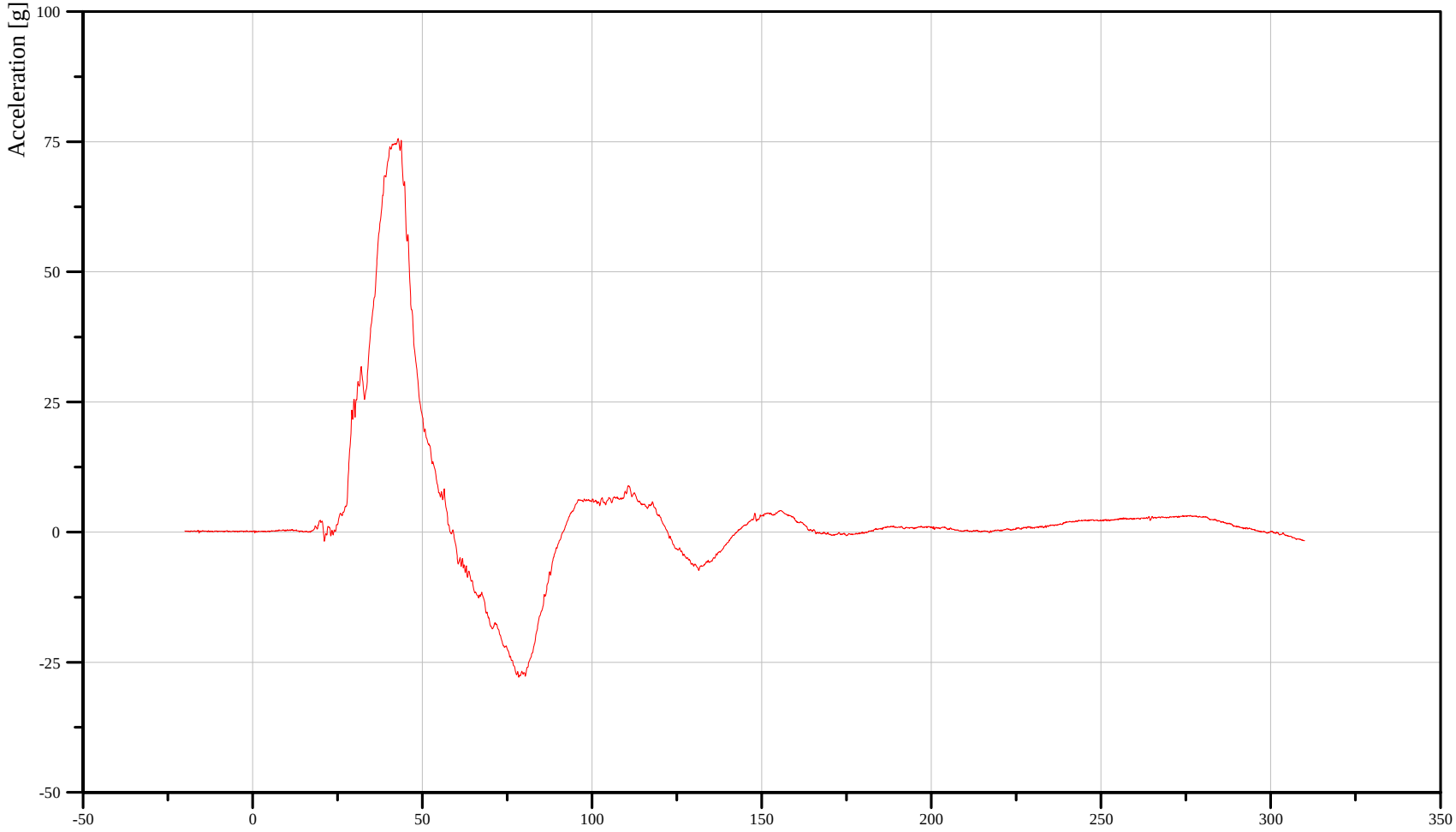
Pelvis Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11PELVCG00S2ACYA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-27.88 g at 78.40 ms

Max. Value
75.64 g at 42.88 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

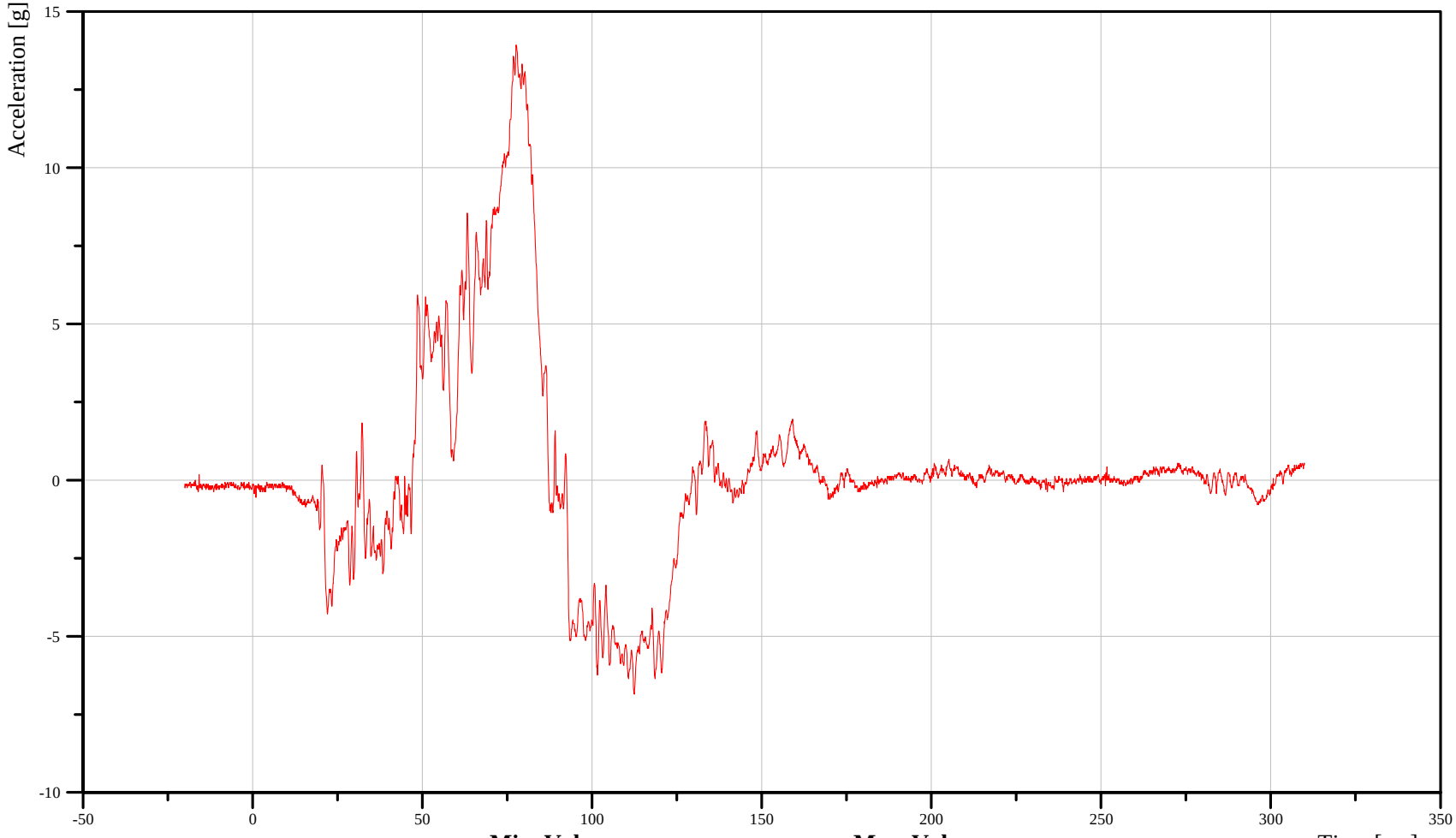
Pelvis Z-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11PELVCG00S2ACZA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-6.85 g at 112.48 ms

Max. Value
13.94 g at 77.68 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

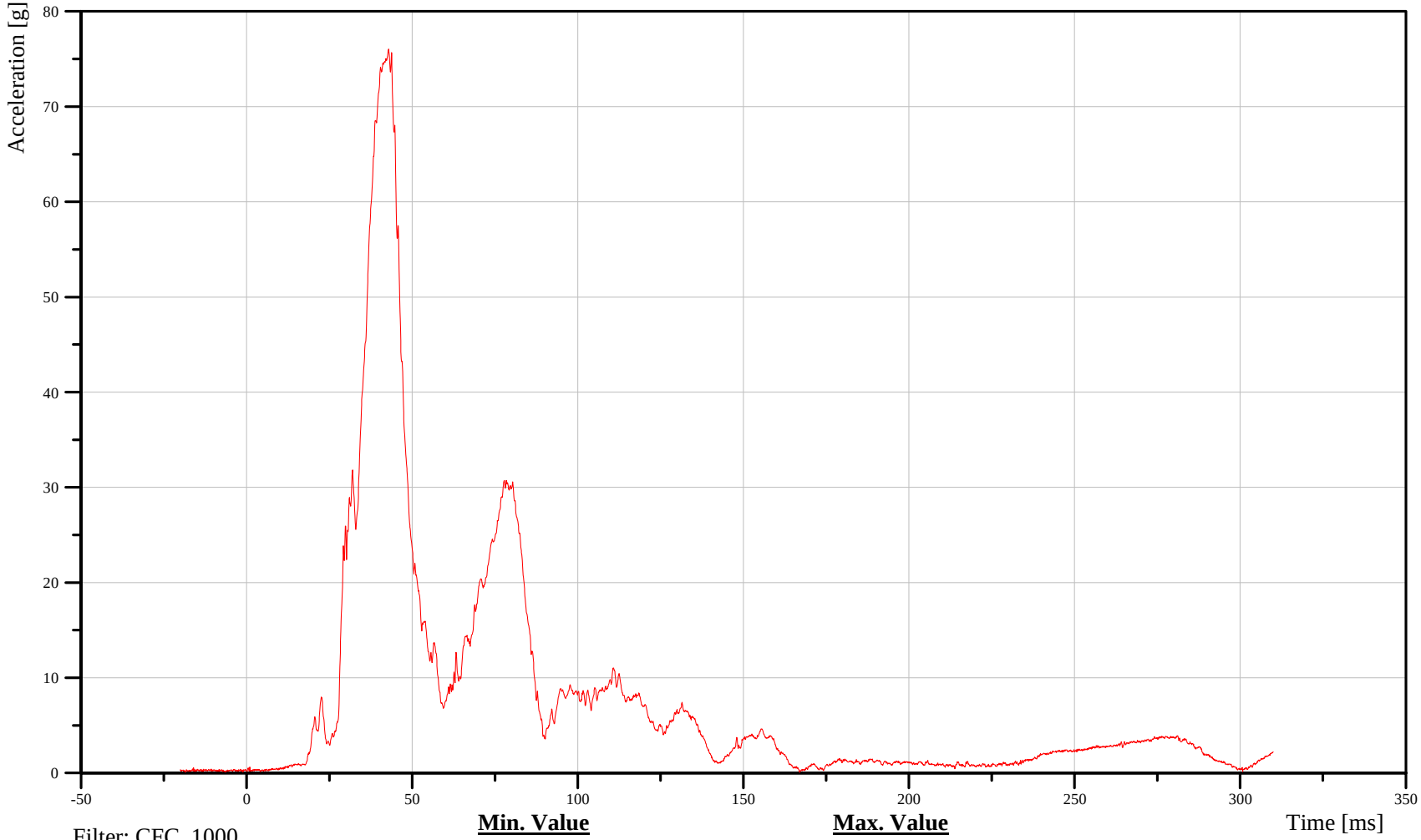
Pelvis Resultant Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11PELVCG00S2ACRA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
0.09 g at 167.04 ms

Max. Value
76.05 g at 42.88 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

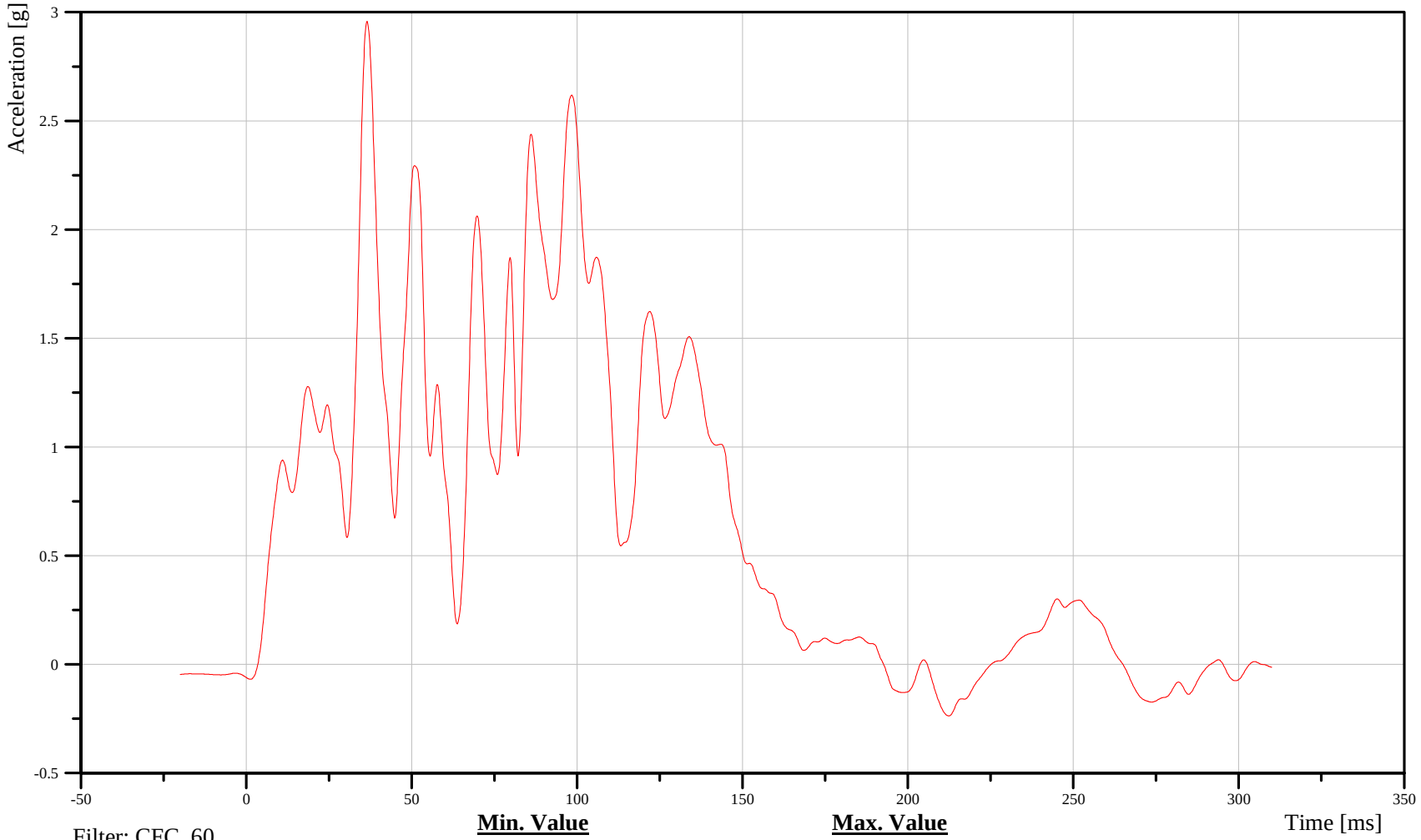
Right Side Sill at Front Seat X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBFR0000ACXD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-0.24 g at 212.32 ms

Max. Value
2.96 g at 36.48 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

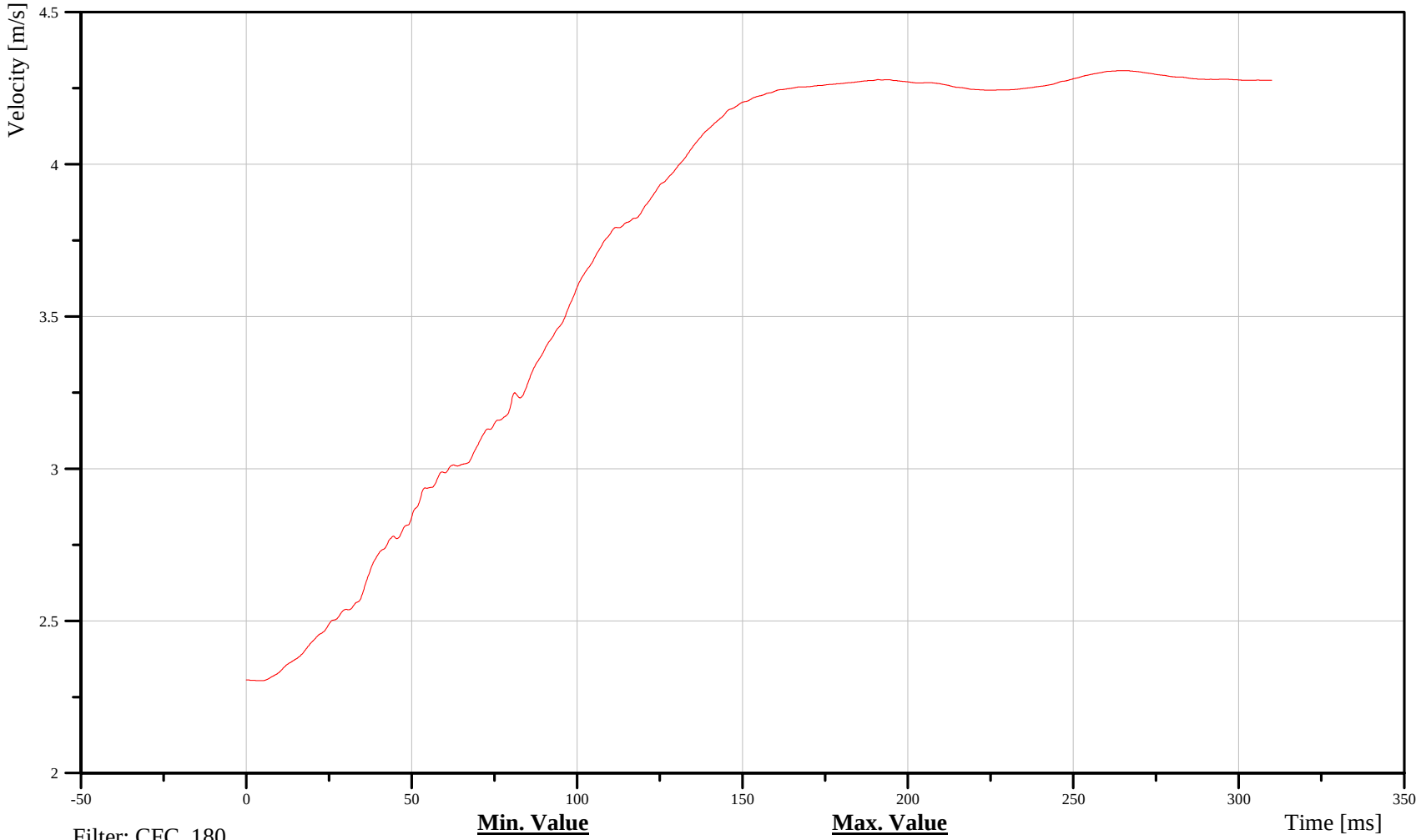
Right Side Sill at Front Seat X-Axis Velocity

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBFR0000VEXC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
2.30 m/s at 4.80 ms

Max. Value
4.31 m/s at 265.76 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

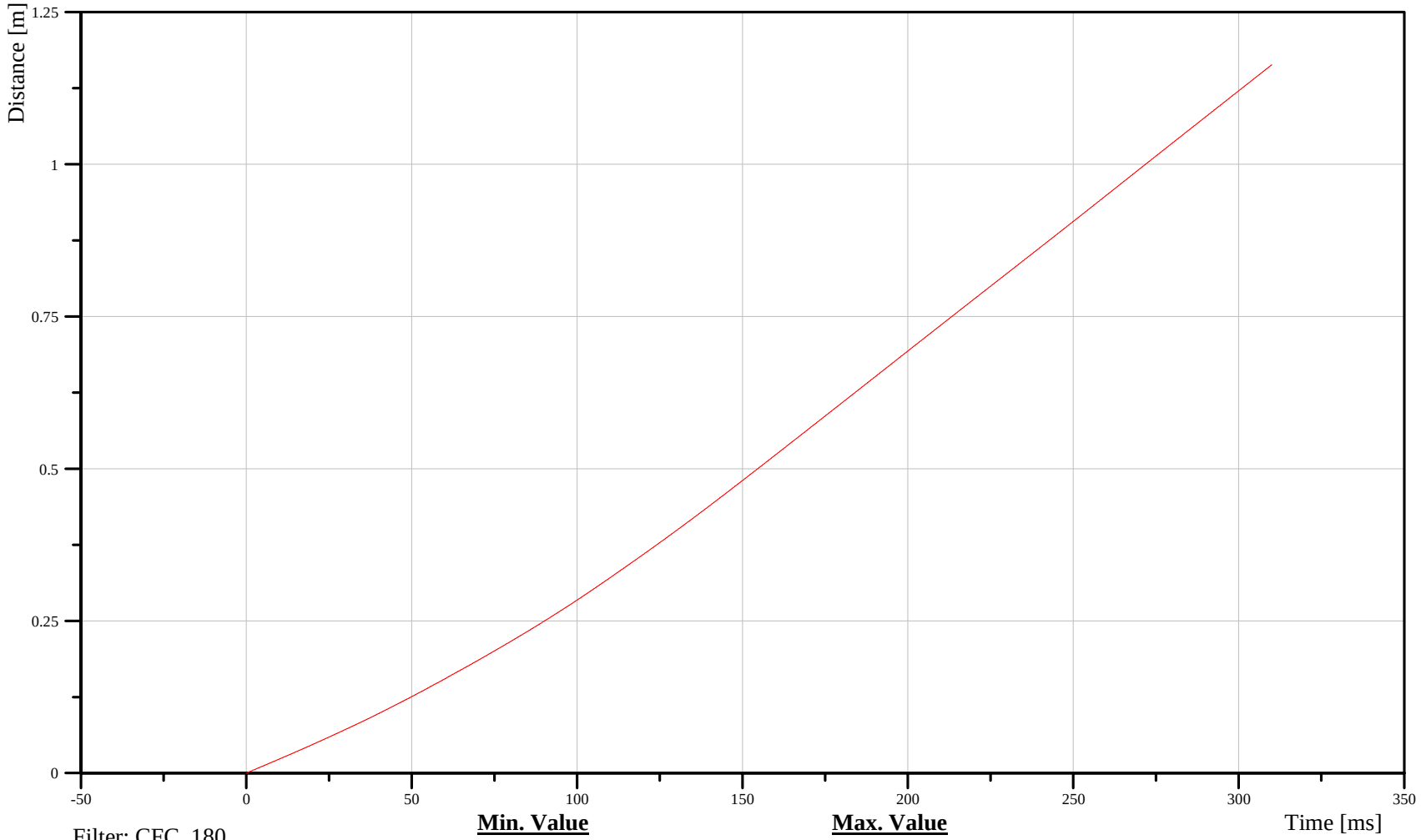
Right Side Sill at Front Seat X-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBFR0000DCXC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
0.00 m at 0.00 ms

Max. Value
1.16 m at 310.00 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

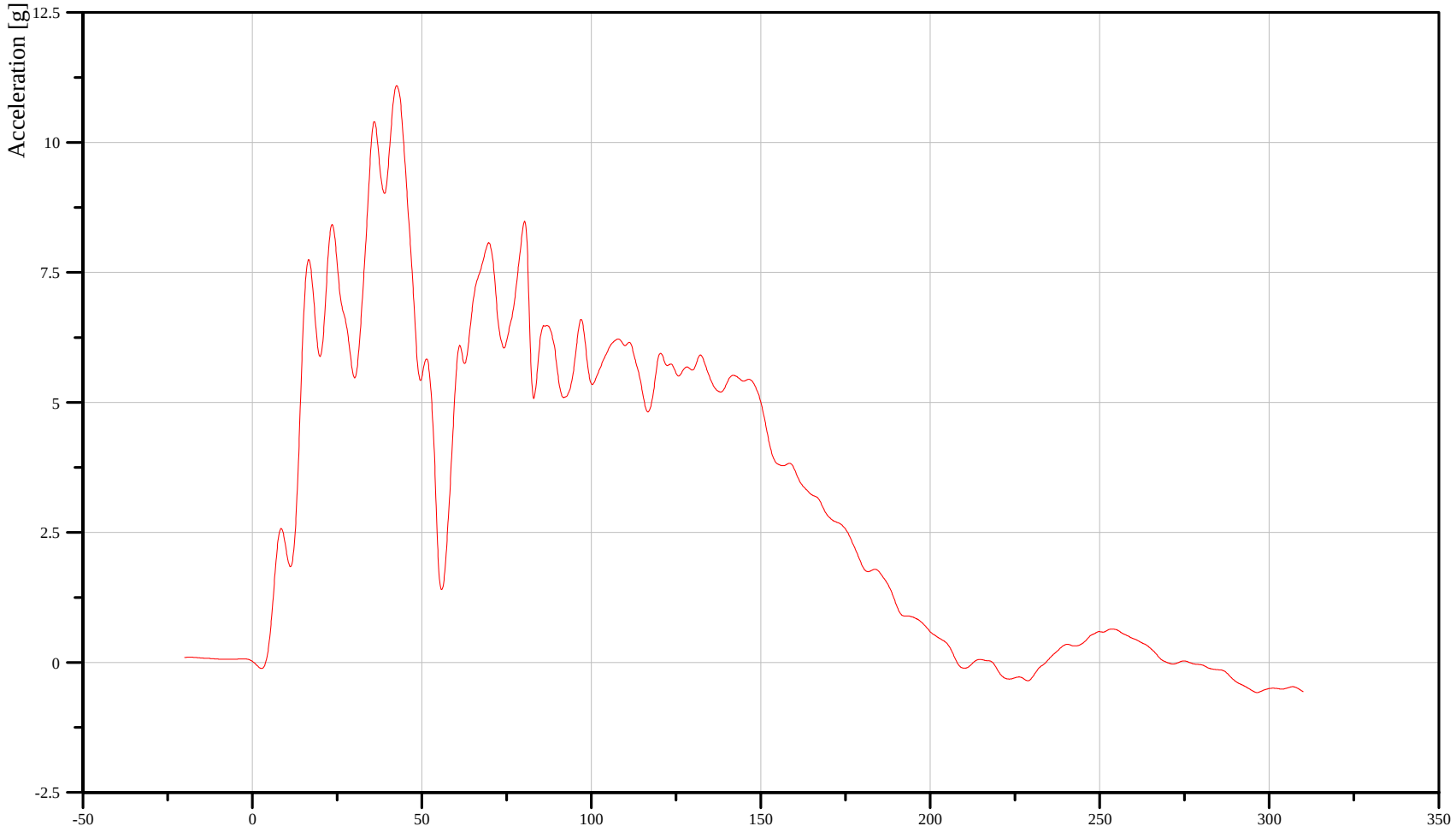
Right Side Sill at Front Seat Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBFR0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-0.58 g at 296.40 ms

Max. Value
11.09 g at 42.56 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

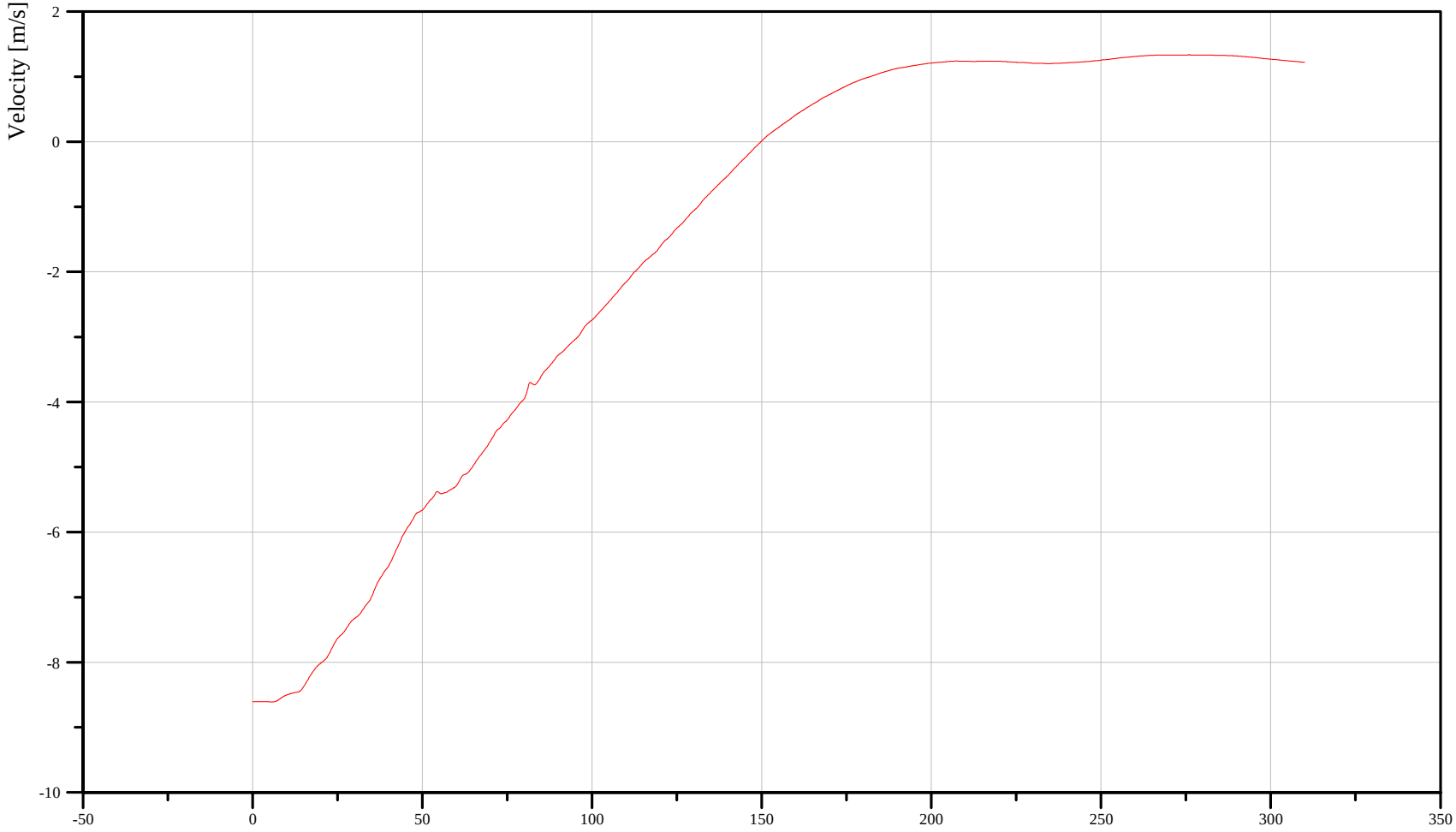
Right Side Sill at Front Seat Y-Axis Velocity

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBFR0000VEYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-8.61 m/s at 5.68 ms

Max. Value
1.34 m/s at 276.00 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

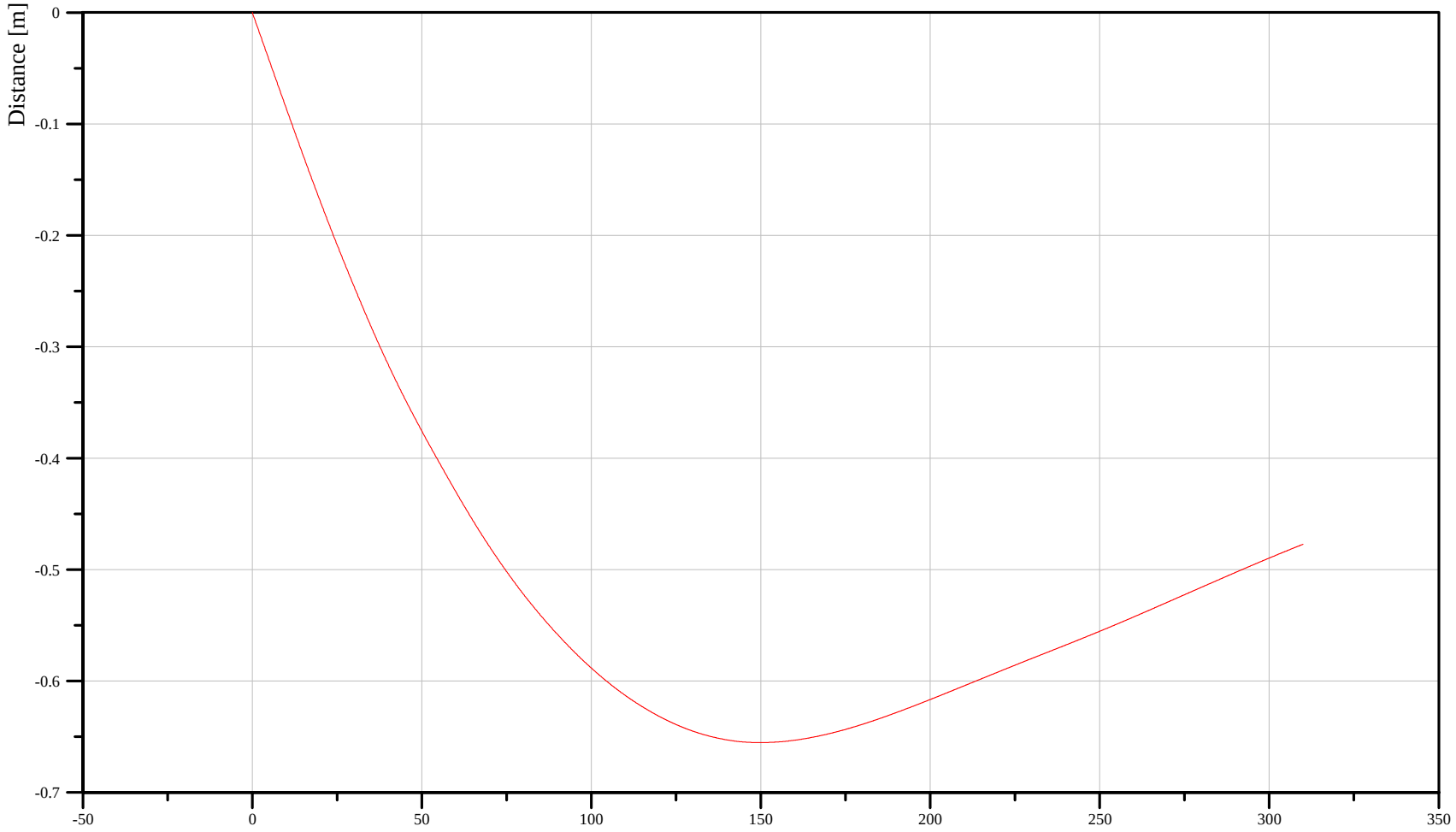
Right Side Sill at Front Seat Y-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBFR0000DCYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-0.66 m at 149.76 ms

Max. Value
0.00 m at 0.00 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

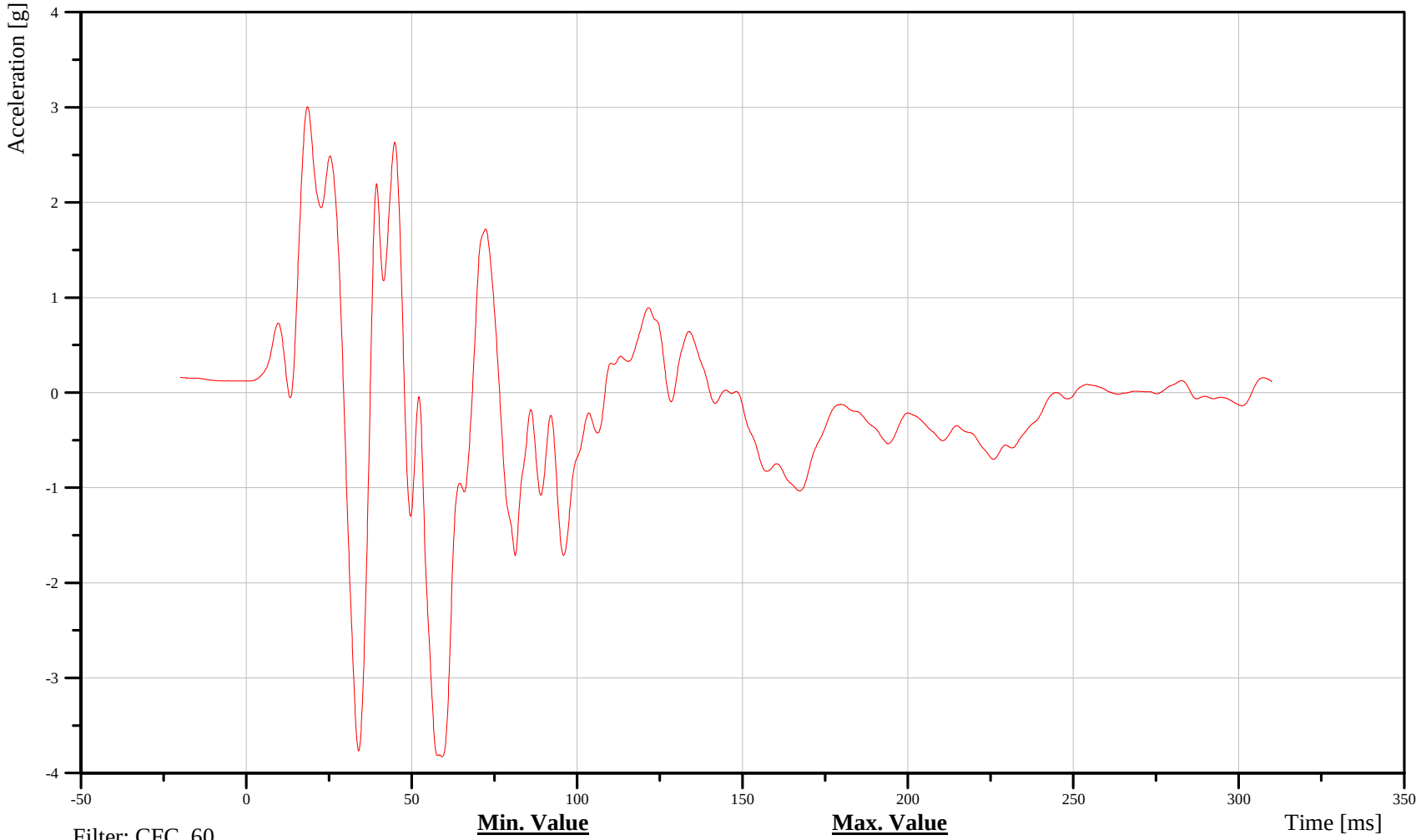
Right Side Sill at Front Seat Z-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBFR0000ACZD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-3.83 g at 59.20 ms

Max. Value
3.01 g at 18.56 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

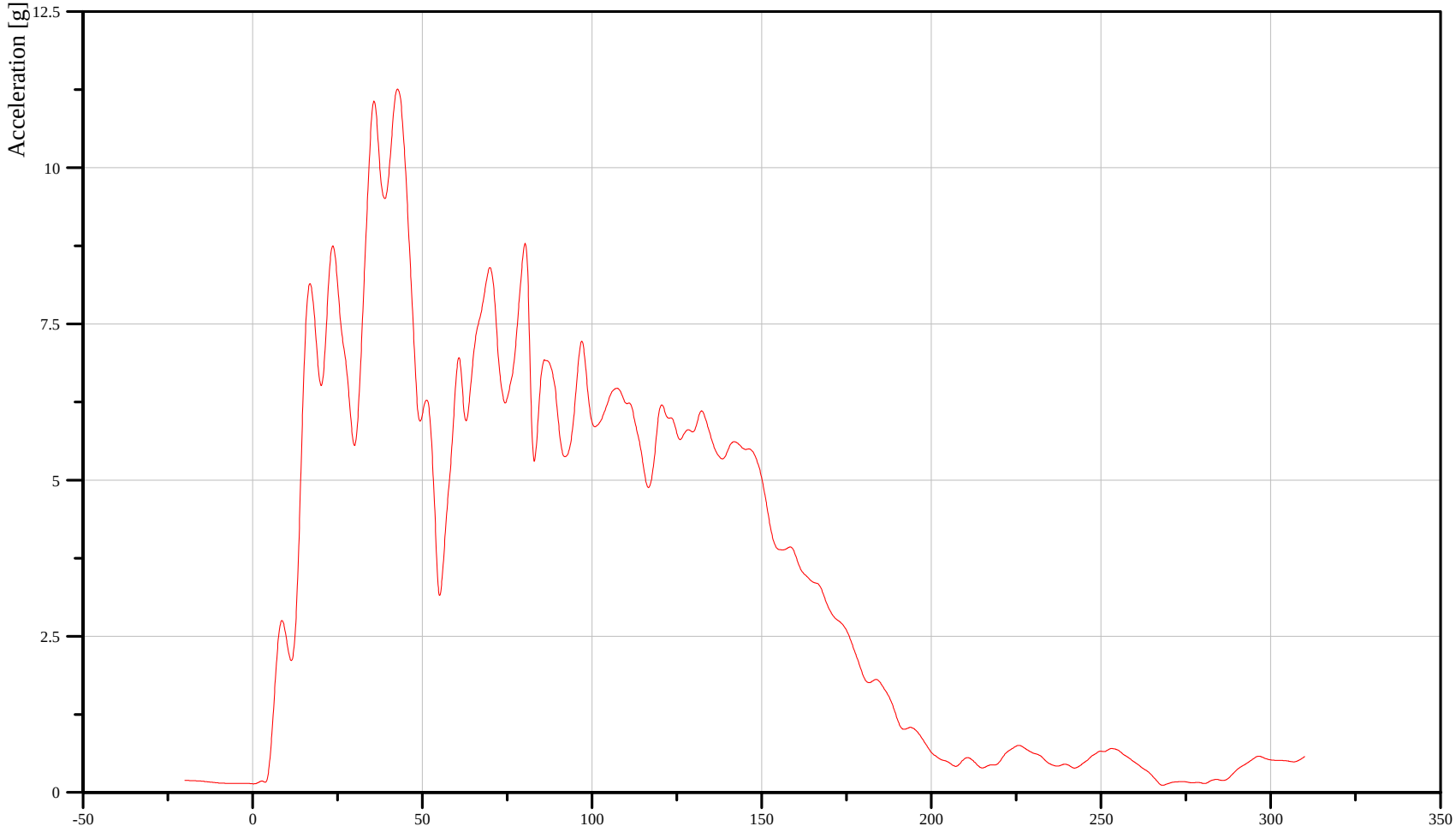
Right Side Sill at Front Seat Resultant Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBFR0000ACRD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
0.12 g at 268.08 ms

Max. Value
11.26 g at 42.72 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

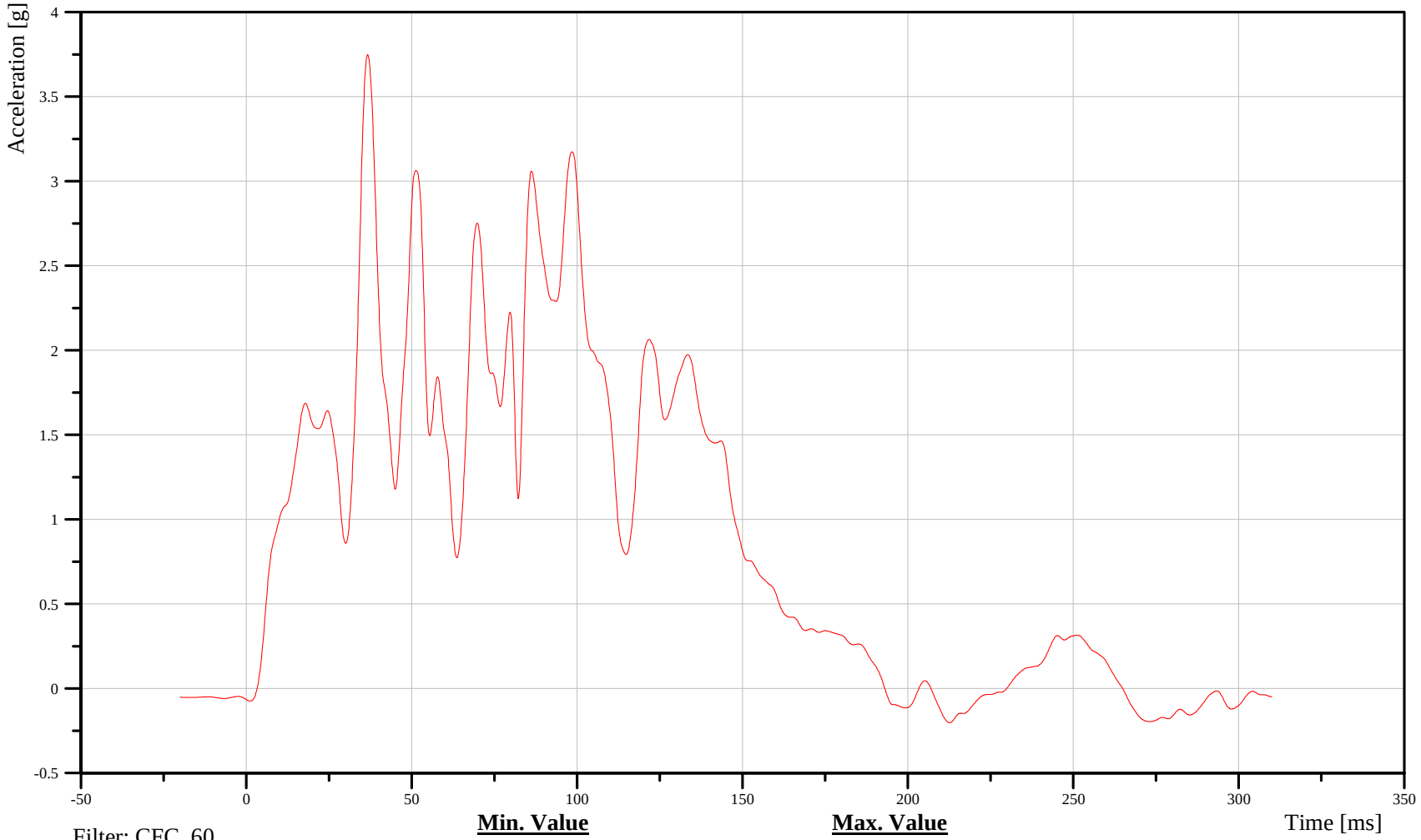
Right Side Sill at Rear Seat X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBRE0000ACXD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-0.20 g at 212.64 ms

Max. Value
3.75 g at 36.72 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

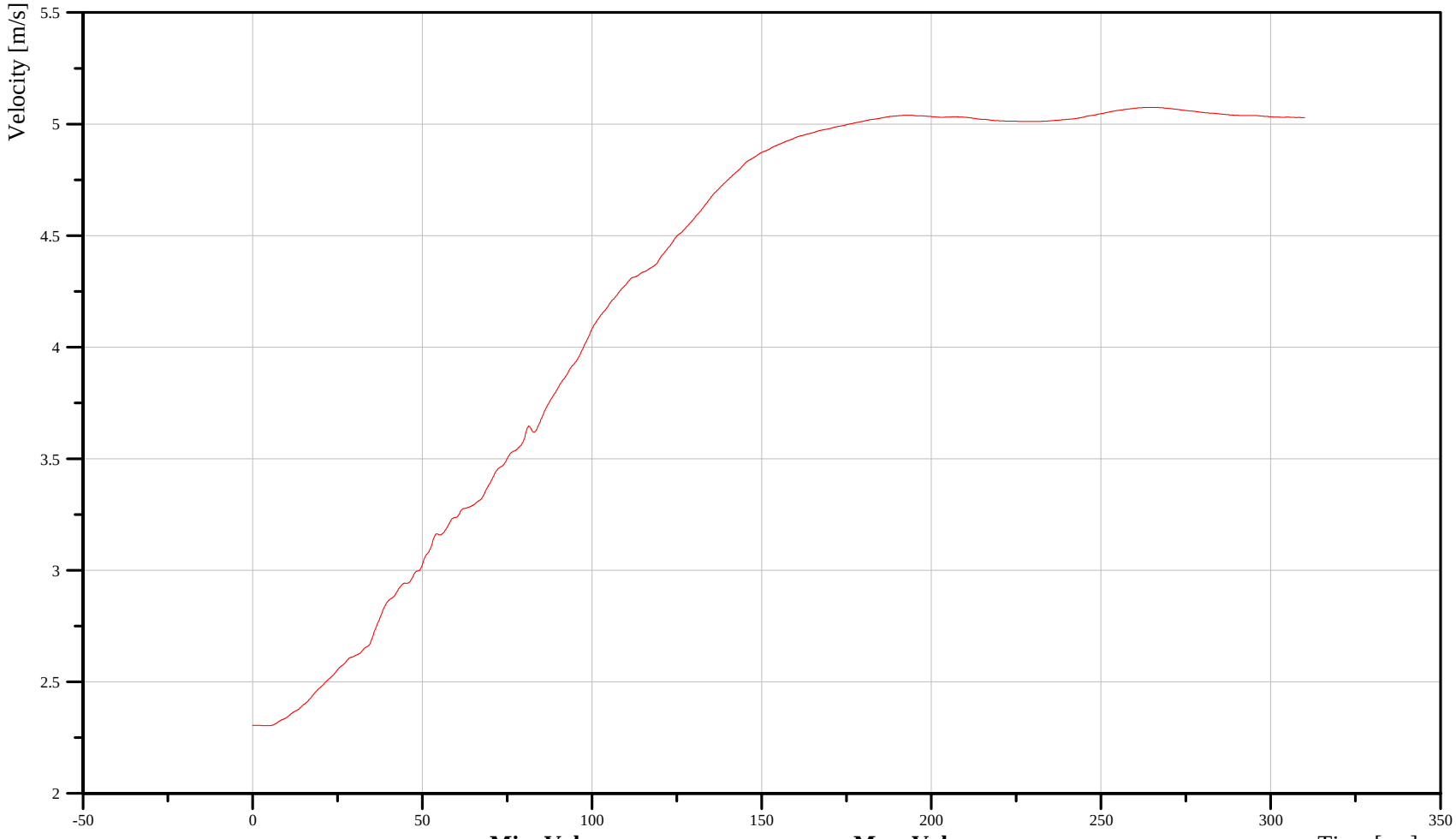
Right Side Sill at Rear Seat X-Axis Velocity

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBRE0000VEXC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
2.30 m/s at 4.72 ms

Max. Value
5.07 m/s at 265.60 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

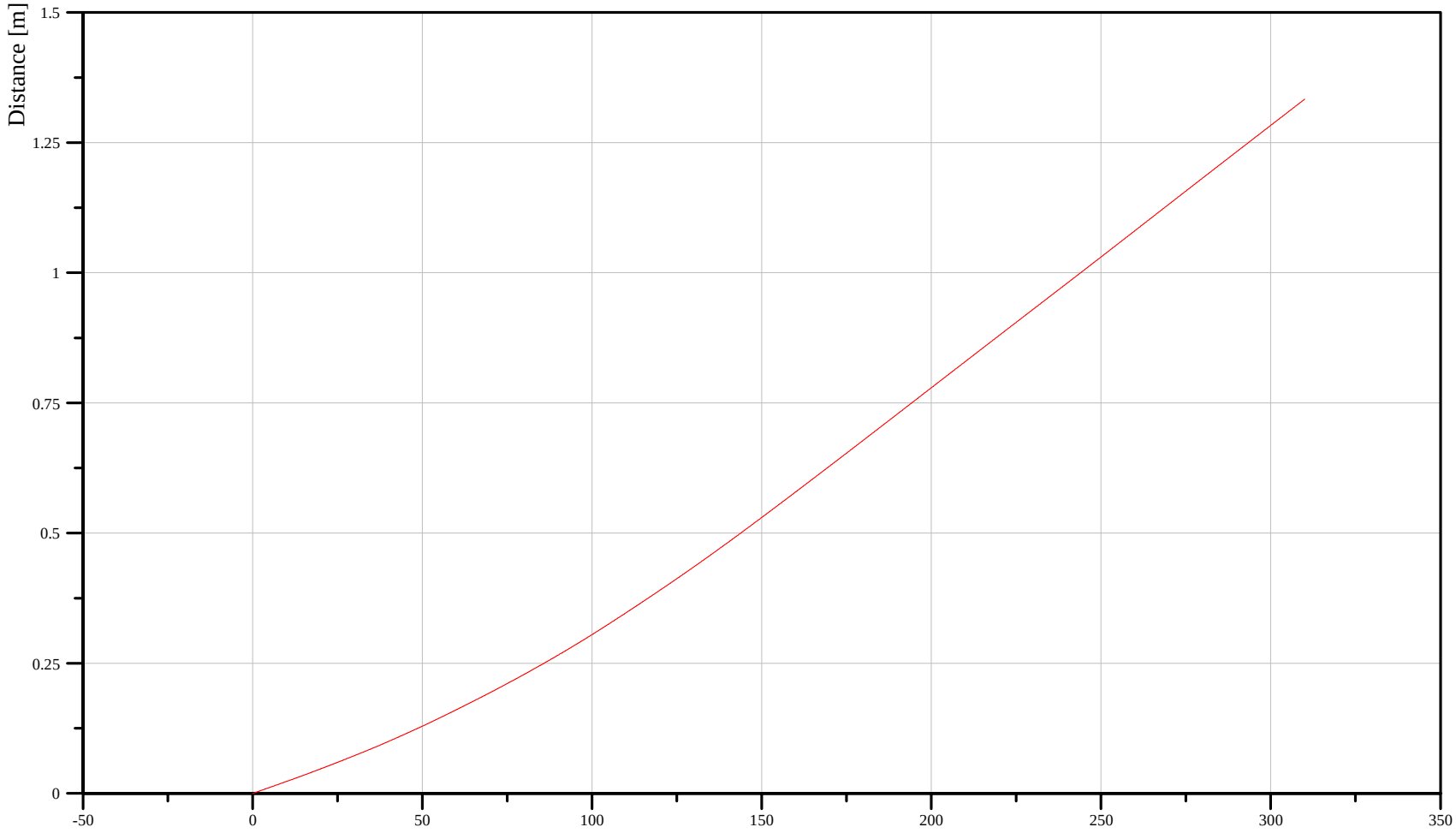
Right Side Sill at Rear Seat X-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBRE0000DCXC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
0.00 m at 0.00 ms

Max. Value
1.33 m at 310.00 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

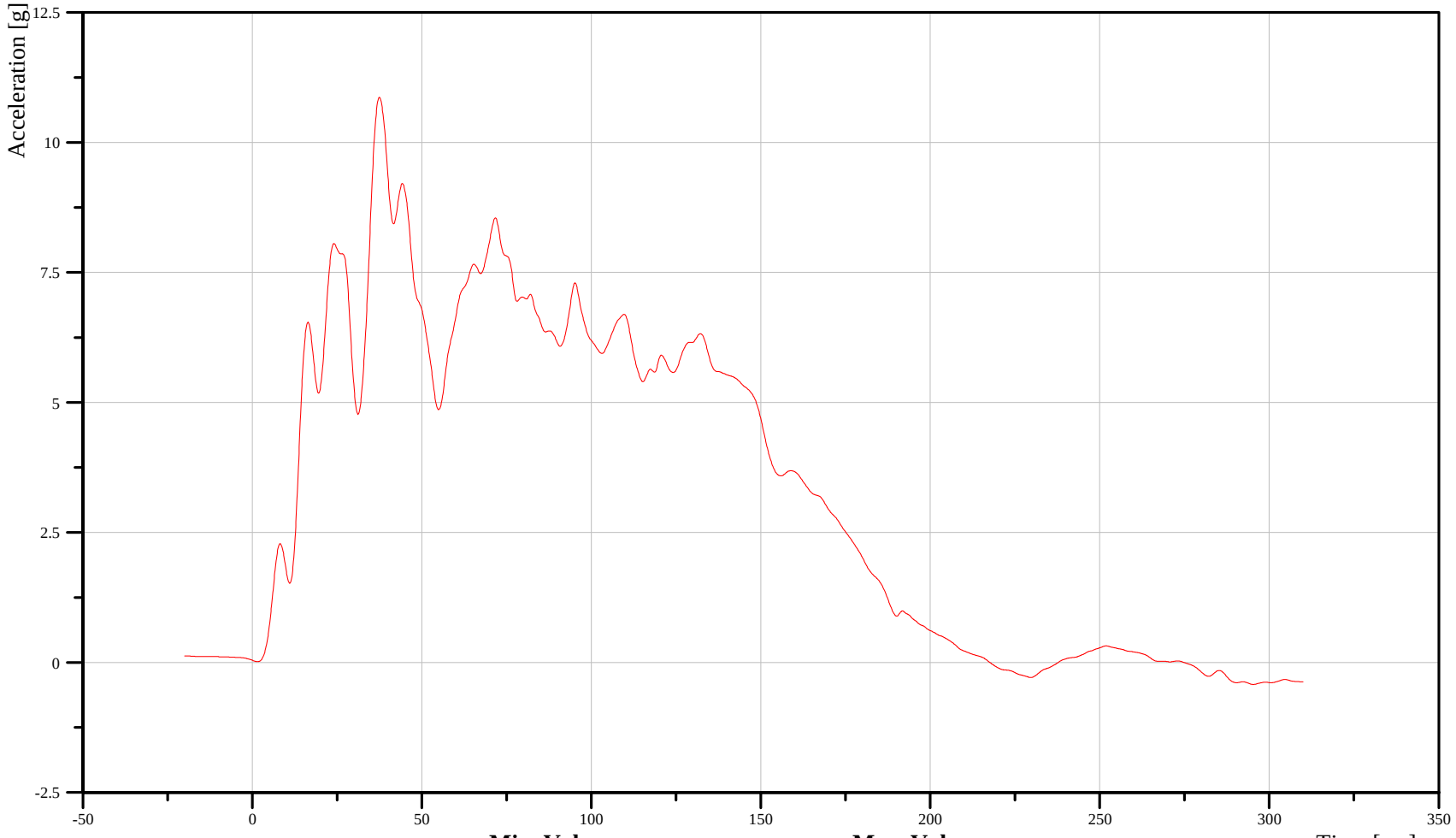
Right Side Sill at Rear Seat Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBRE0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-0.42 g at 295.28 ms

Max. Value
10.87 g at 37.52 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

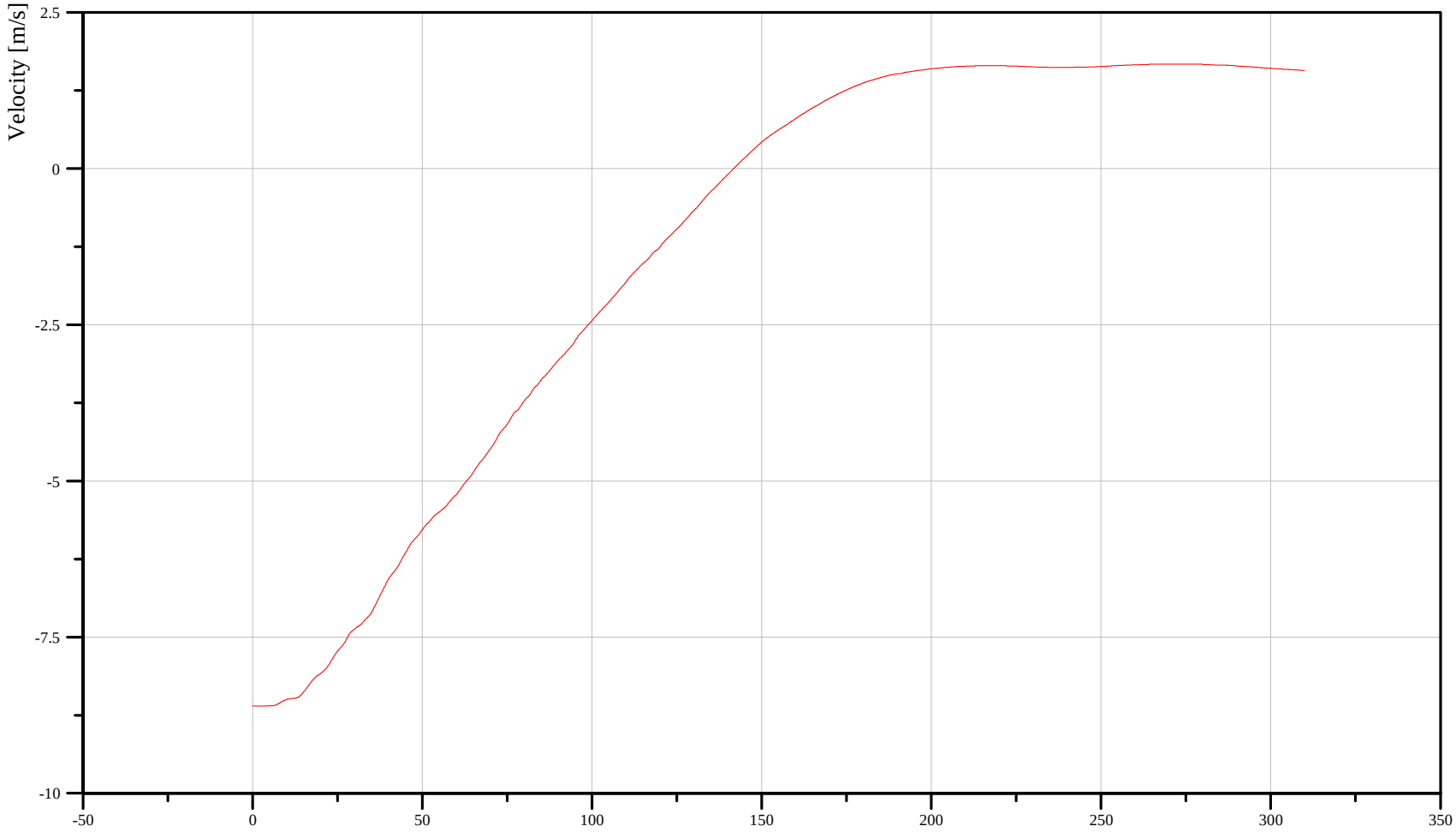
Right Side Sill at Rear Seat Y-Axis Velocity

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBRE0000VEYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-8.61 m/s at 0.00 ms

Max. Value
1.67 m/s at 274.32 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

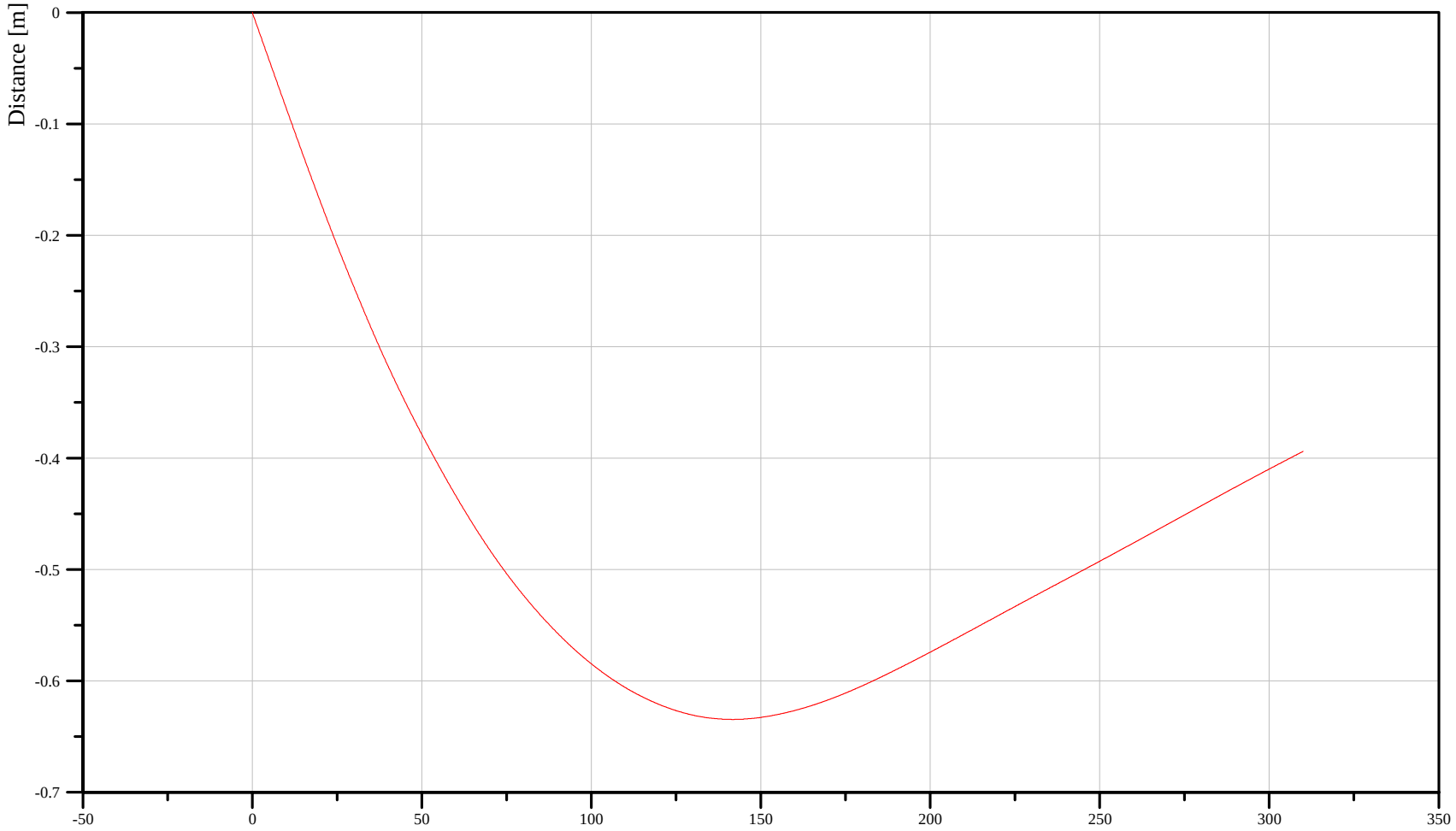
Right Side Sill at Rear Seat Y-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBRE0000DCYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-0.63 m at 141.76 ms

Max. Value
0.00 m at 0.00 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

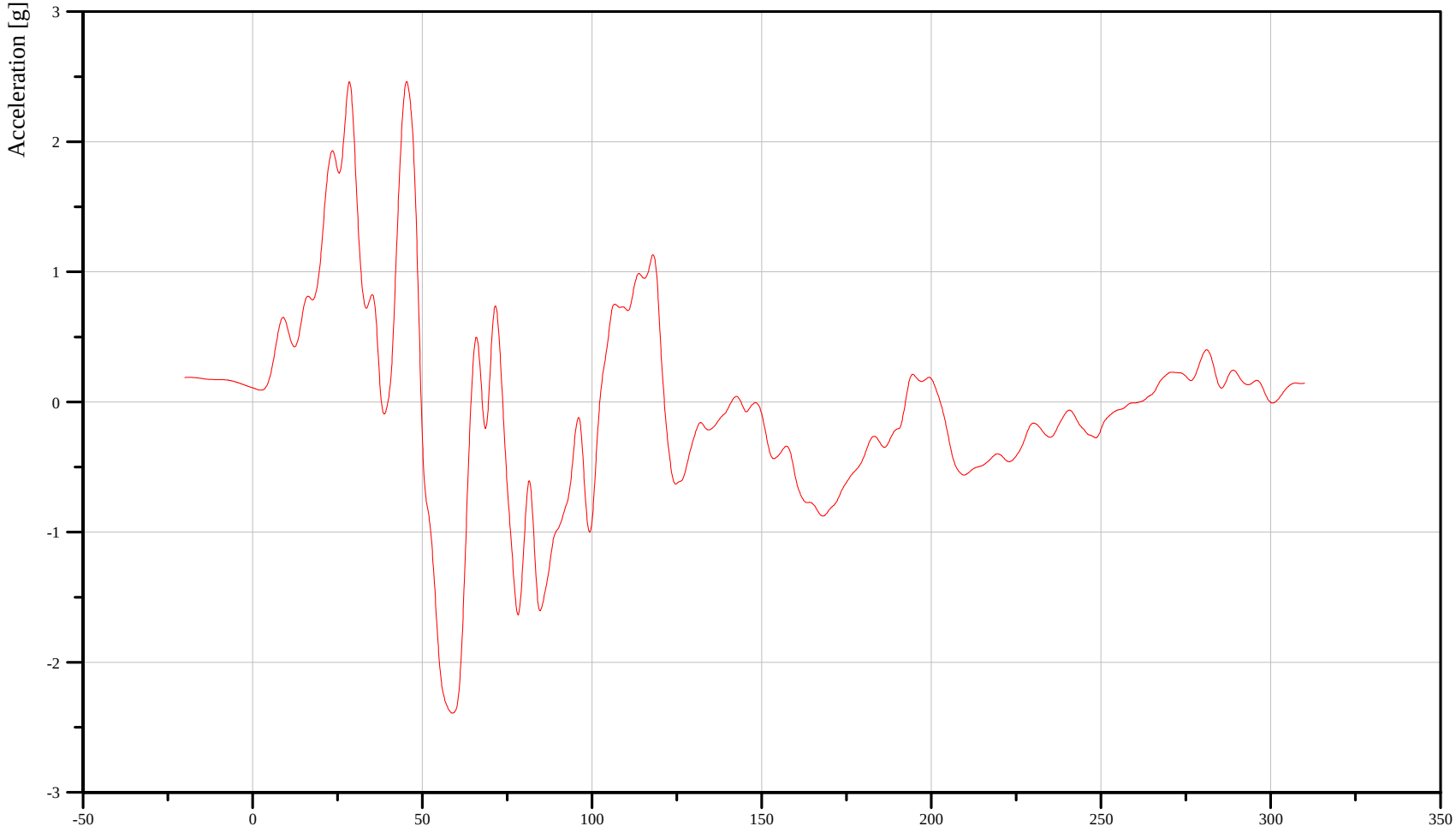
Right Side Sill at Rear Seat Z-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBRE0000ACZD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-2.39 g at 58.88 ms

Max. Value
2.46 g at 45.36 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

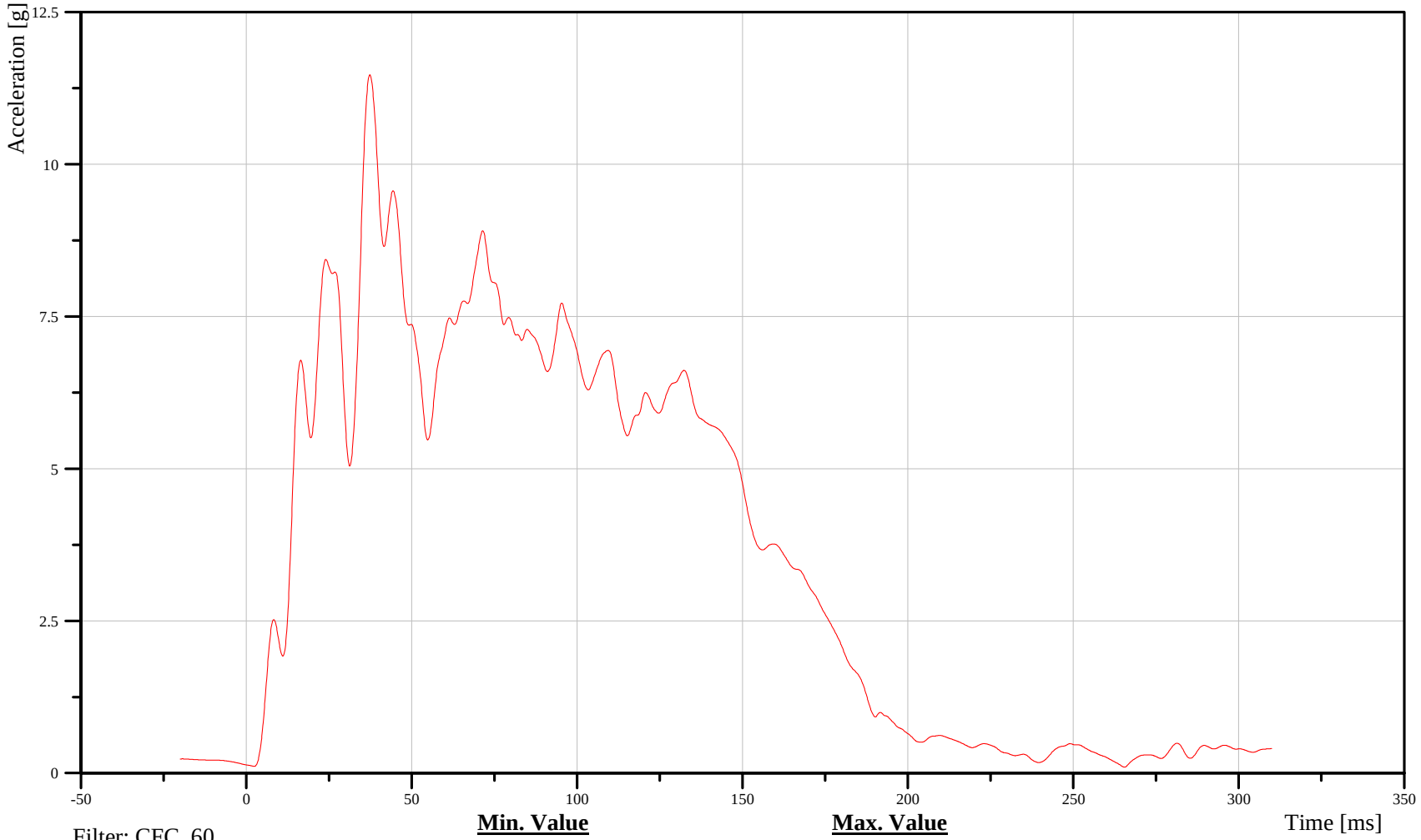
Right Side Sill at Rear Seat Resultant Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16SILBRE0000ACRD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
0.10 g at 265.44 ms

Max. Value
11.47 g at 37.36 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

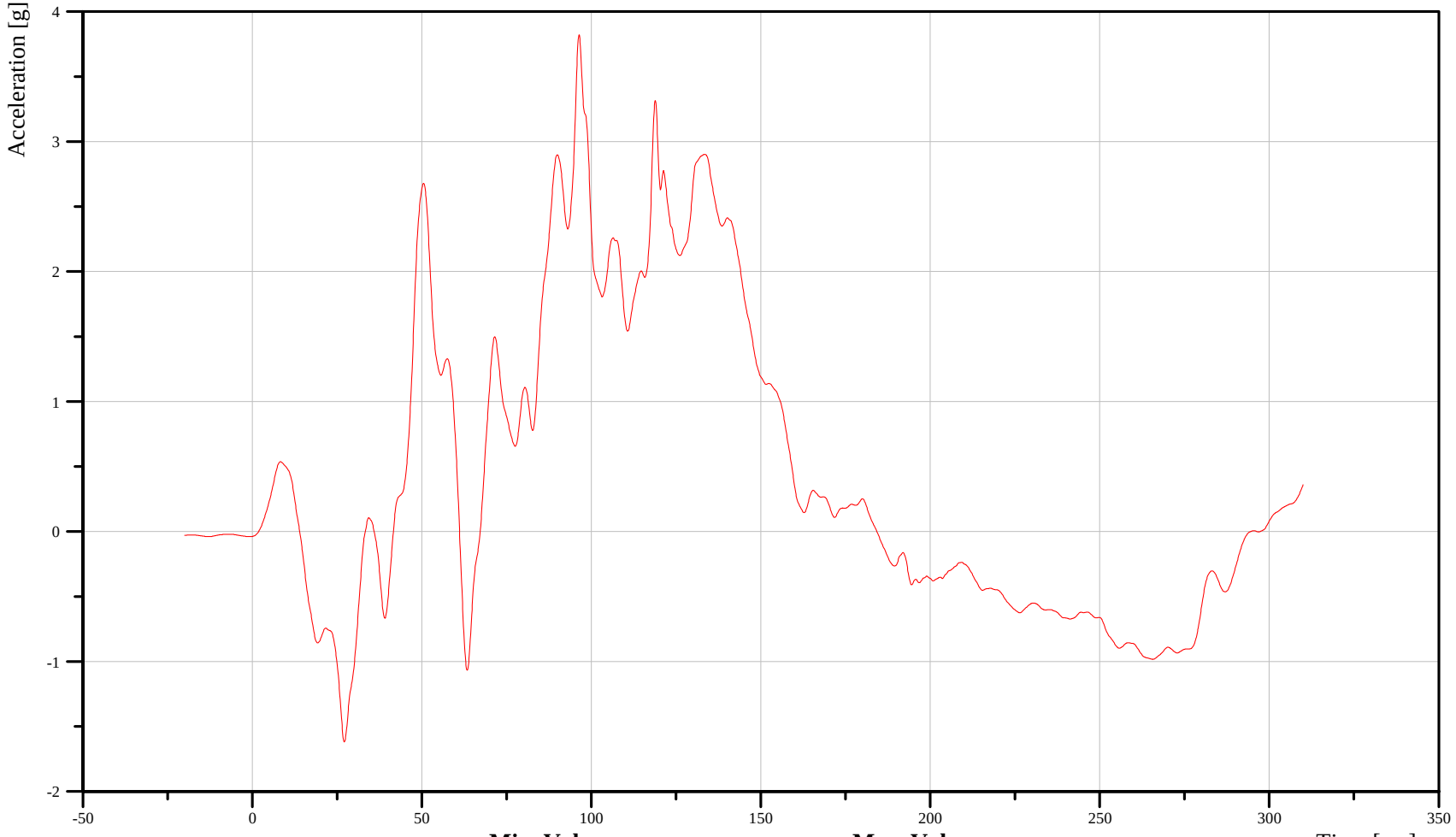
Rear Floorpan Above Axle X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

18FORA000000ACXD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-1.62 g at 27.12 ms

Max. Value
3.82 g at 96.40 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

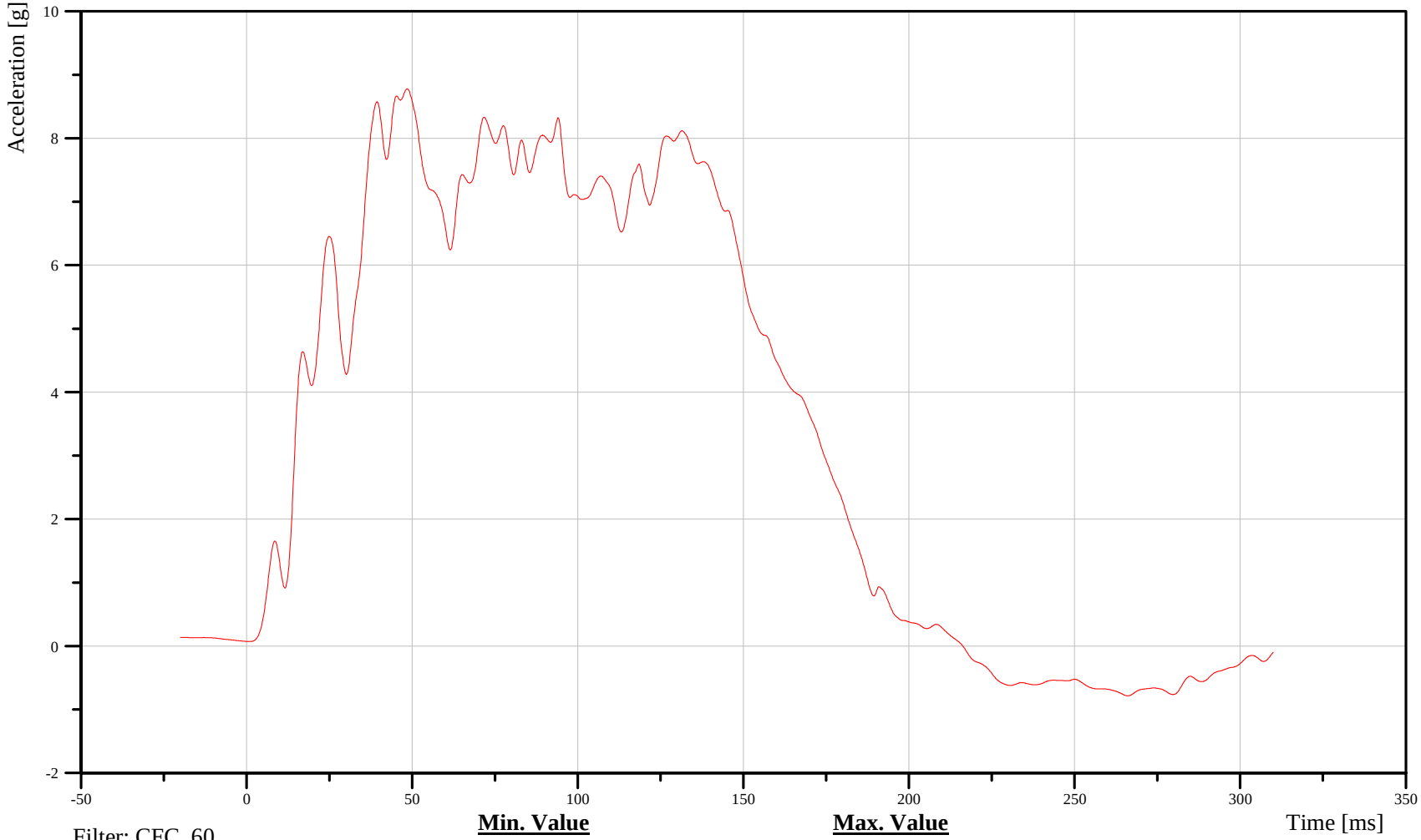
Rear Floorpan Above Axle Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

18FORA000000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-0.78 g at 266.00 ms

Max. Value
8.78 g at 48.48 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

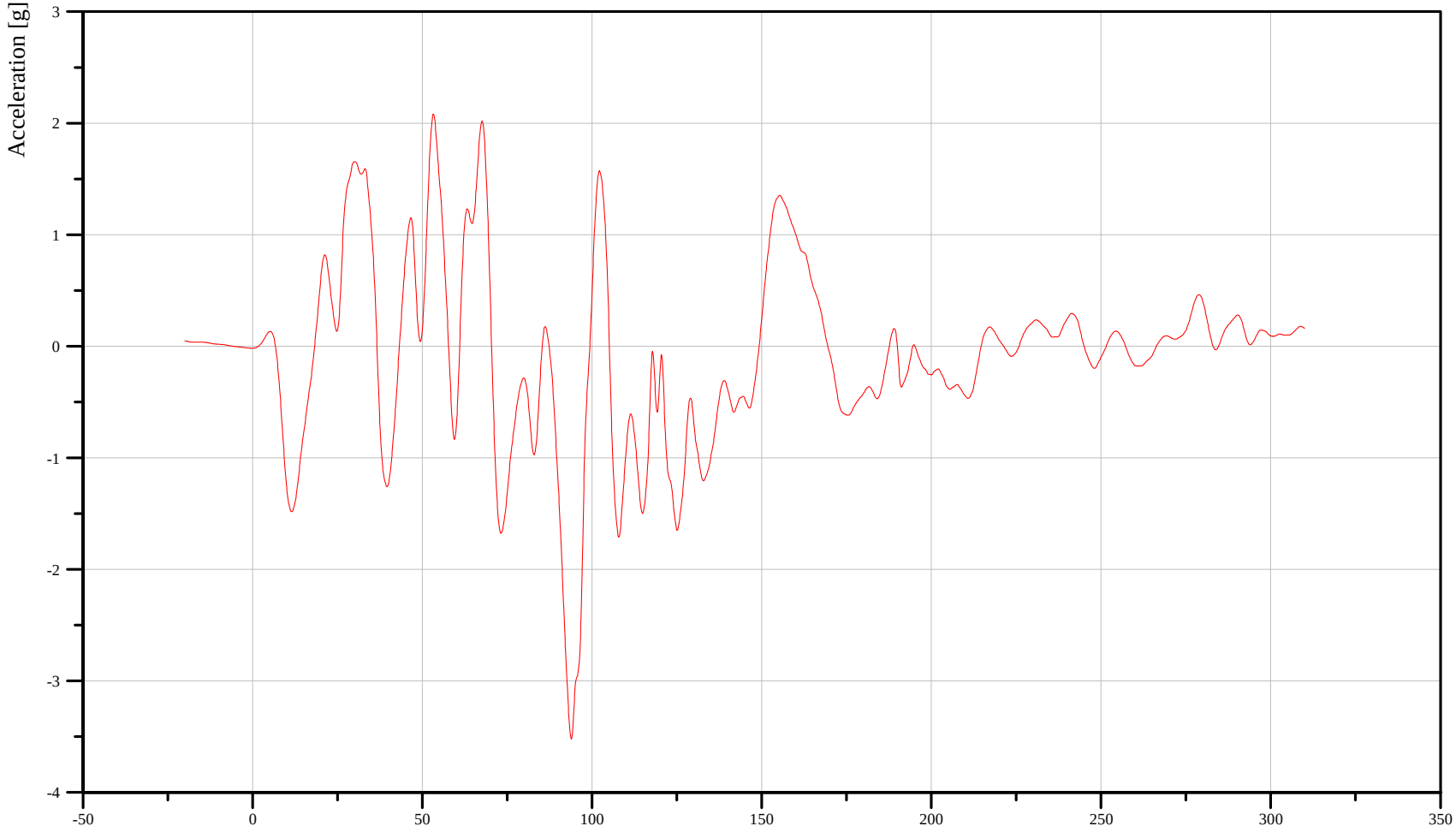
Rear Floorpan Above Axle Z-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

18FORA000000ACZD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-3.52 g at 93.92 ms

Max. Value
2.08 g at 53.28 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

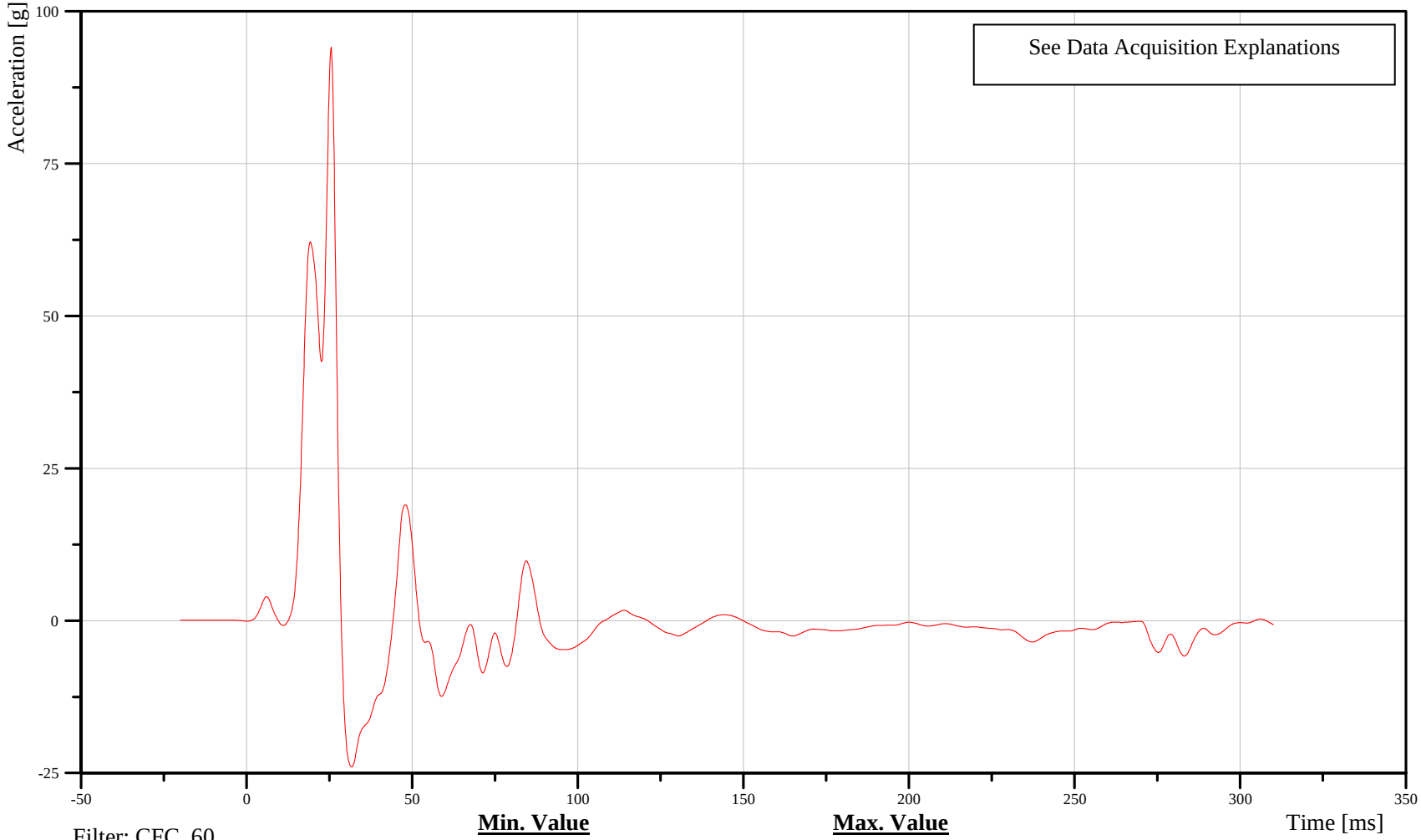
Left Side Sill at Front Seat Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14SILBFR0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-24.00 g at 31.76 ms

Max. Value
94.08 g at 25.52 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

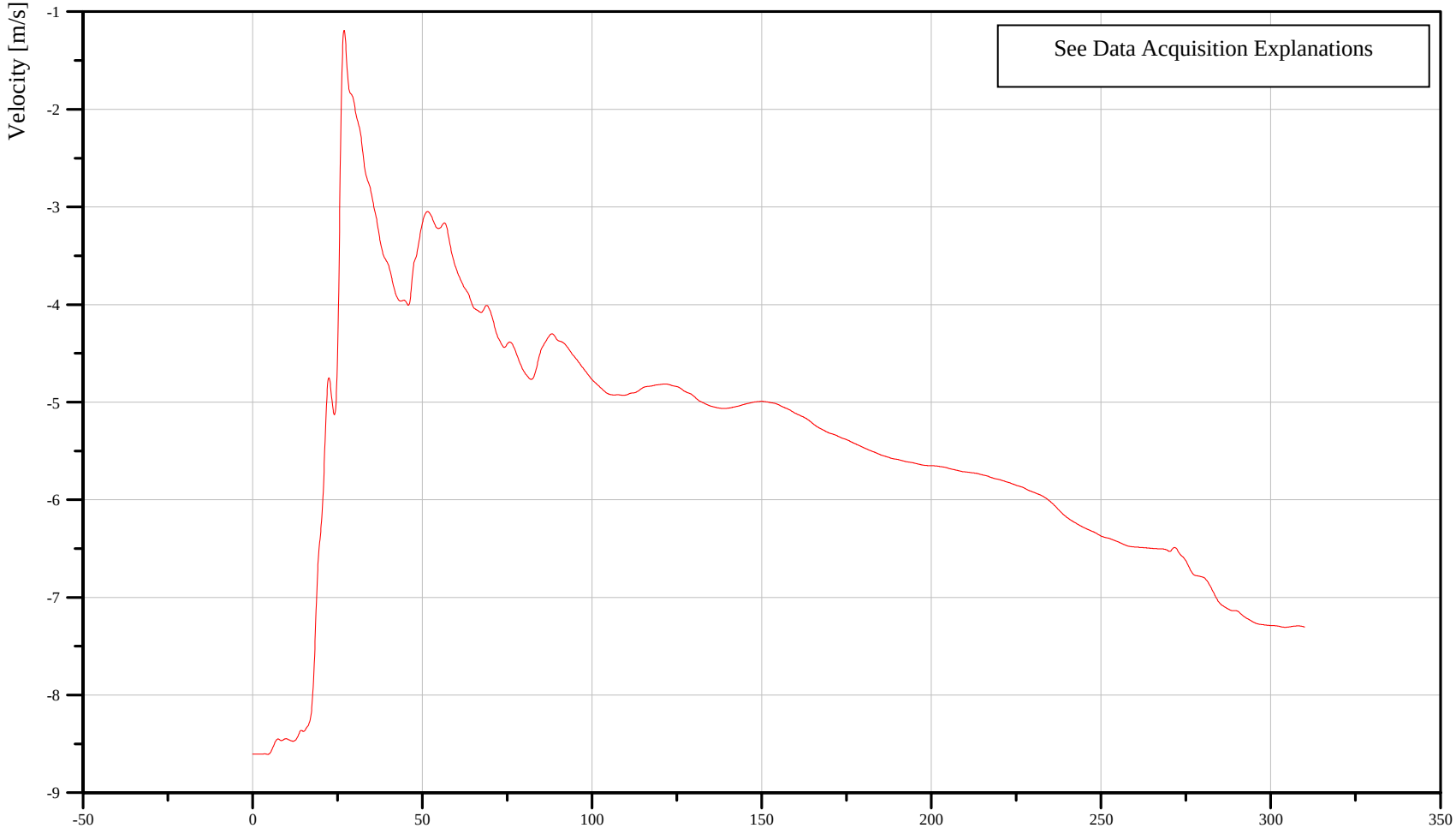
Left Side Sill at Front Seat Y-Axis Velocity

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14SILBFR0000VEYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-8.61 m/s at 4.48 ms

Max. Value
-1.19 m/s at 26.96 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

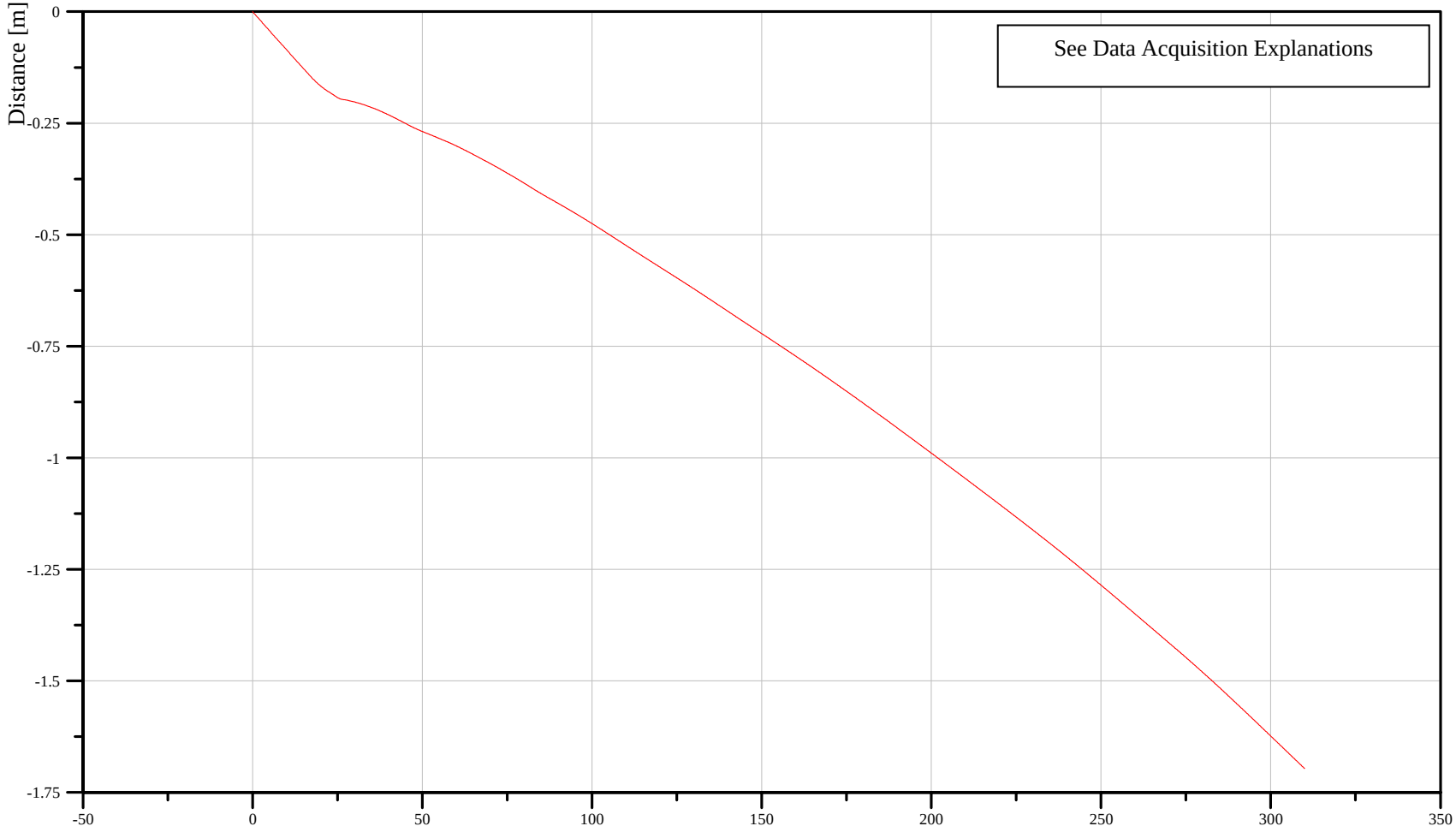
Left Side Sill at Front Seat Y-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14SILBFR0000DCYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-1.70 m at 310.00 ms

Max. Value
0.00 m at 0.00 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

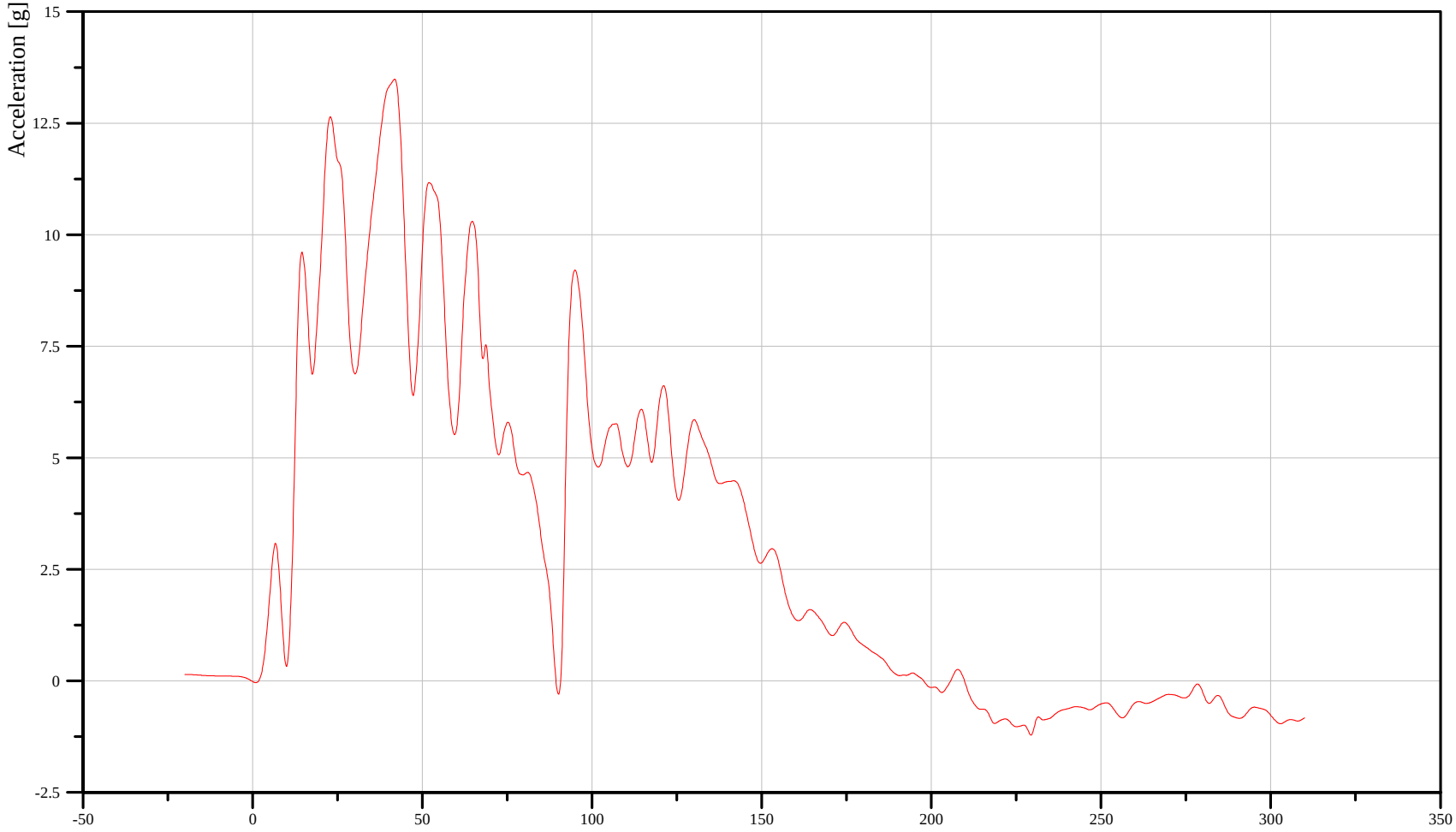
Left Side Sill at Rear Seat Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14SILBRE0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-1.21 g at 229.36 ms

Max. Value
13.49 g at 41.84 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

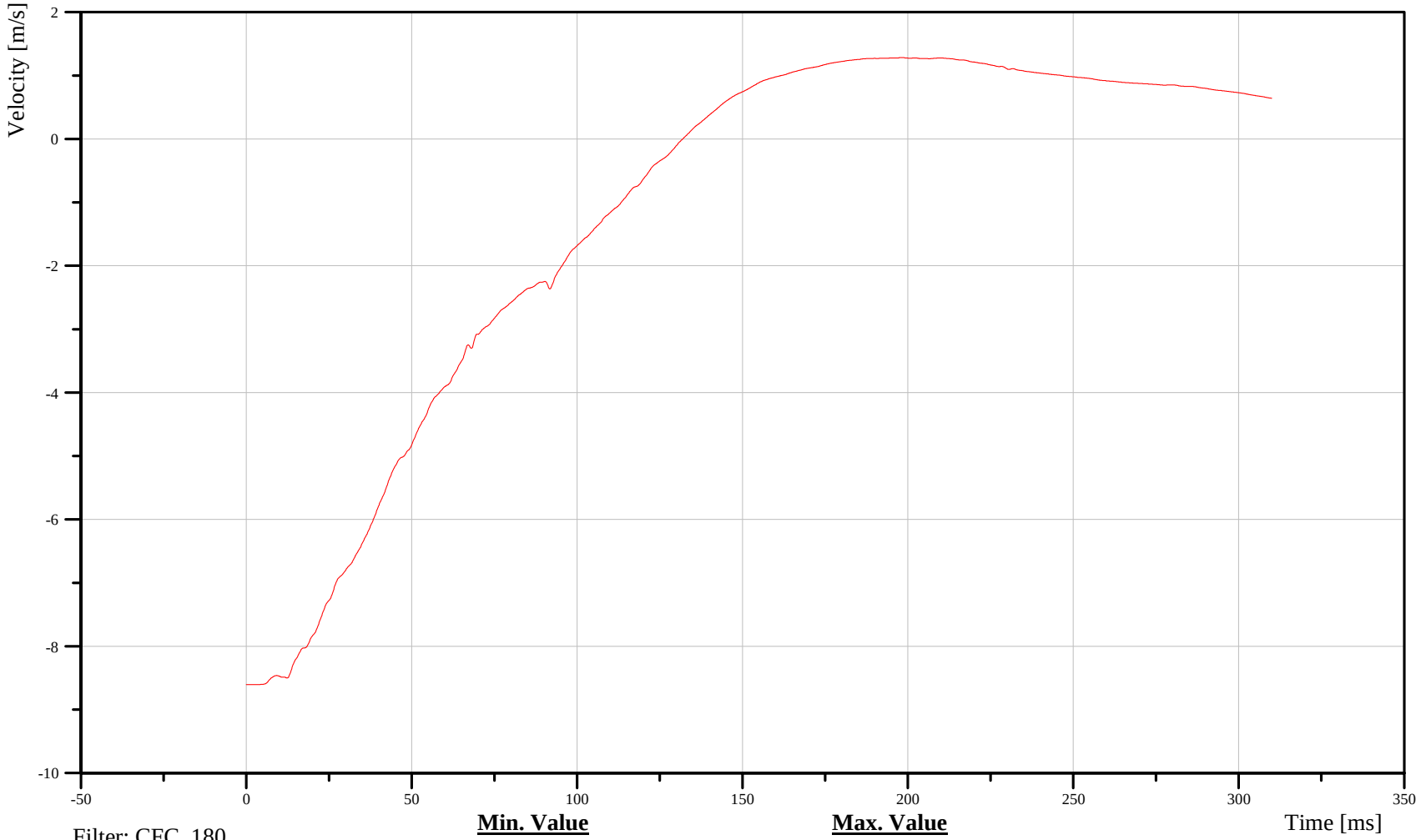
Left Side Sill at Rear Seat Y-Axis Velocity

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14SILBRE0000VEYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-8.61 m/s at 0.00 ms

Max. Value
1.28 m/s at 198.16 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

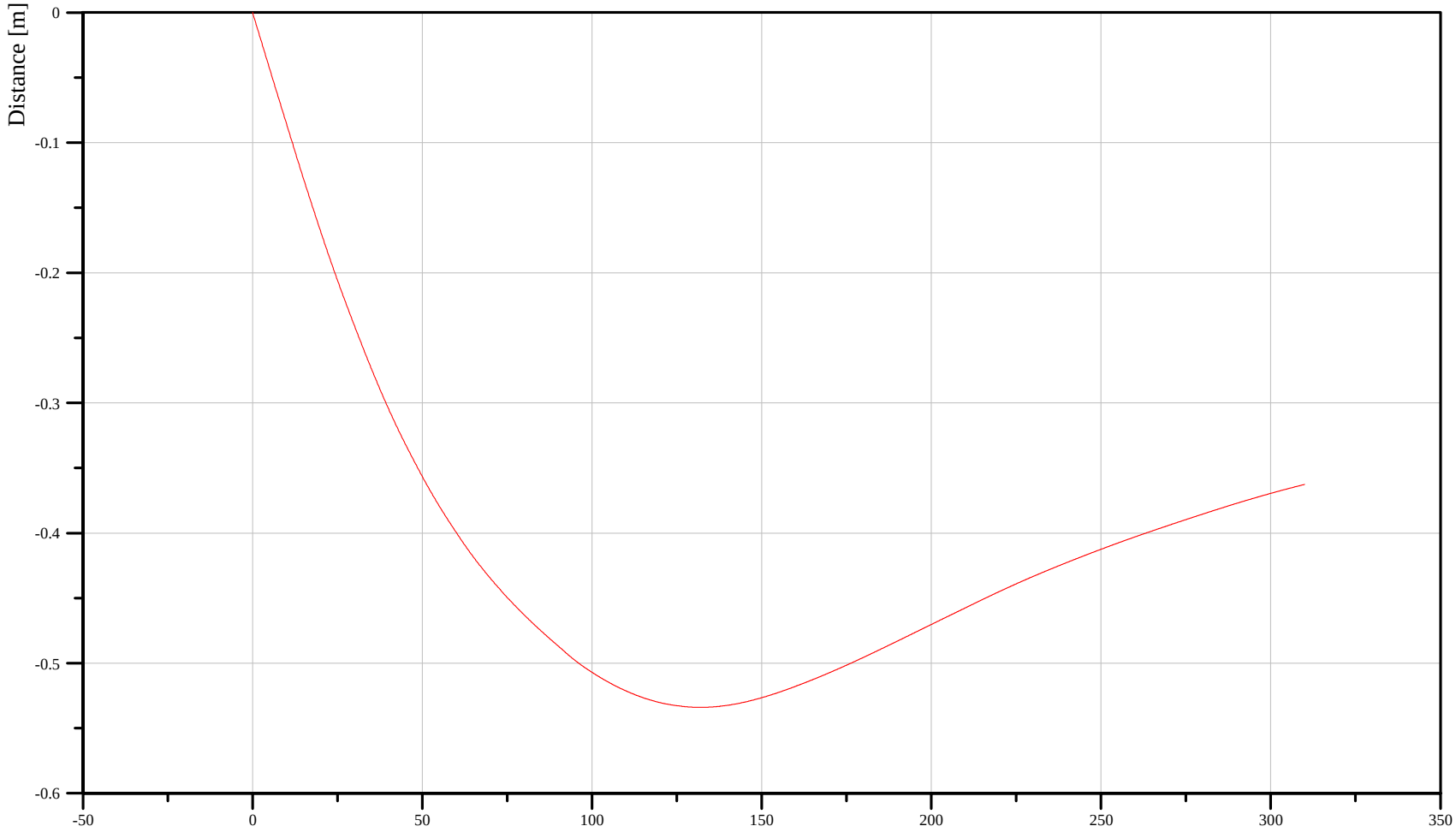
Left Side Sill at Rear Seat Y-Axis Displacement

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14SILBRE0000DCYC

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_180

Min. Value
-0.53 m at 131.92 ms

Max. Value
0.00 m at 0.00 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

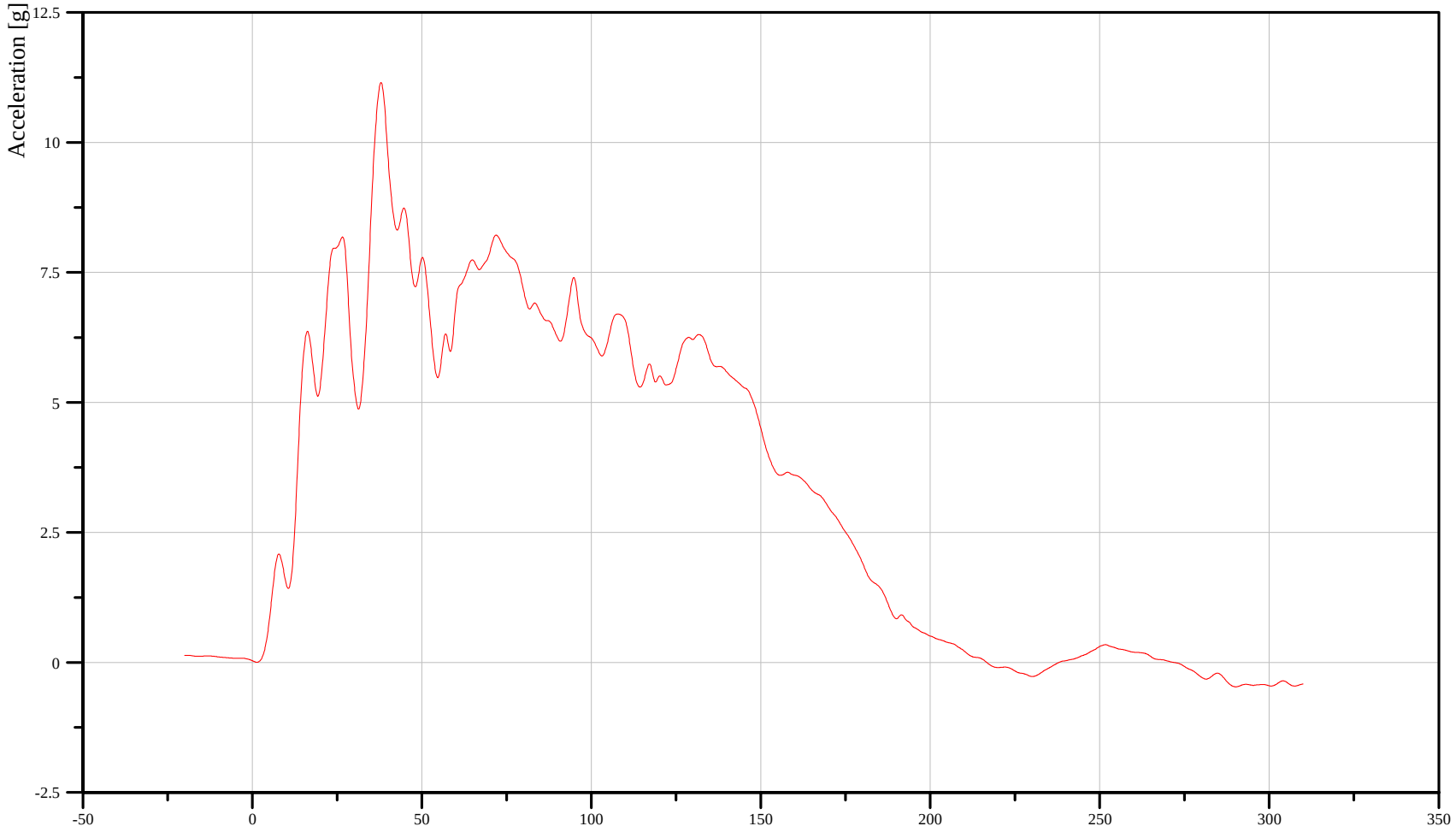
Right Rear Occupant Compartment Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16VEHCRE0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-0.47 g at 290.16 ms

Max. Value
11.15 g at 38.00 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

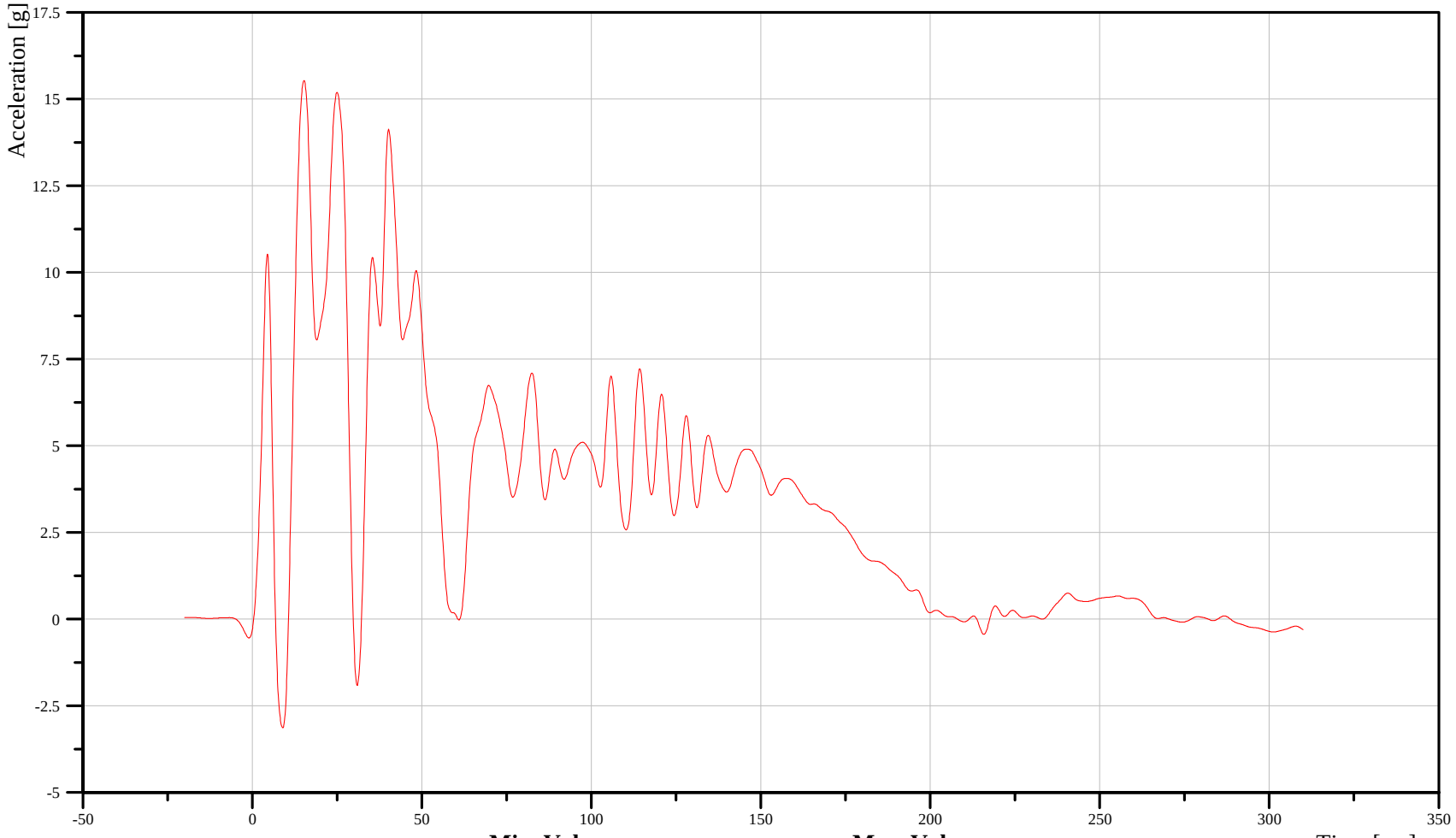
Left Lower A-Pillar Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11APILLO0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-3.13 g at 8.96 ms

Max. Value
15.53 g at 15.28 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

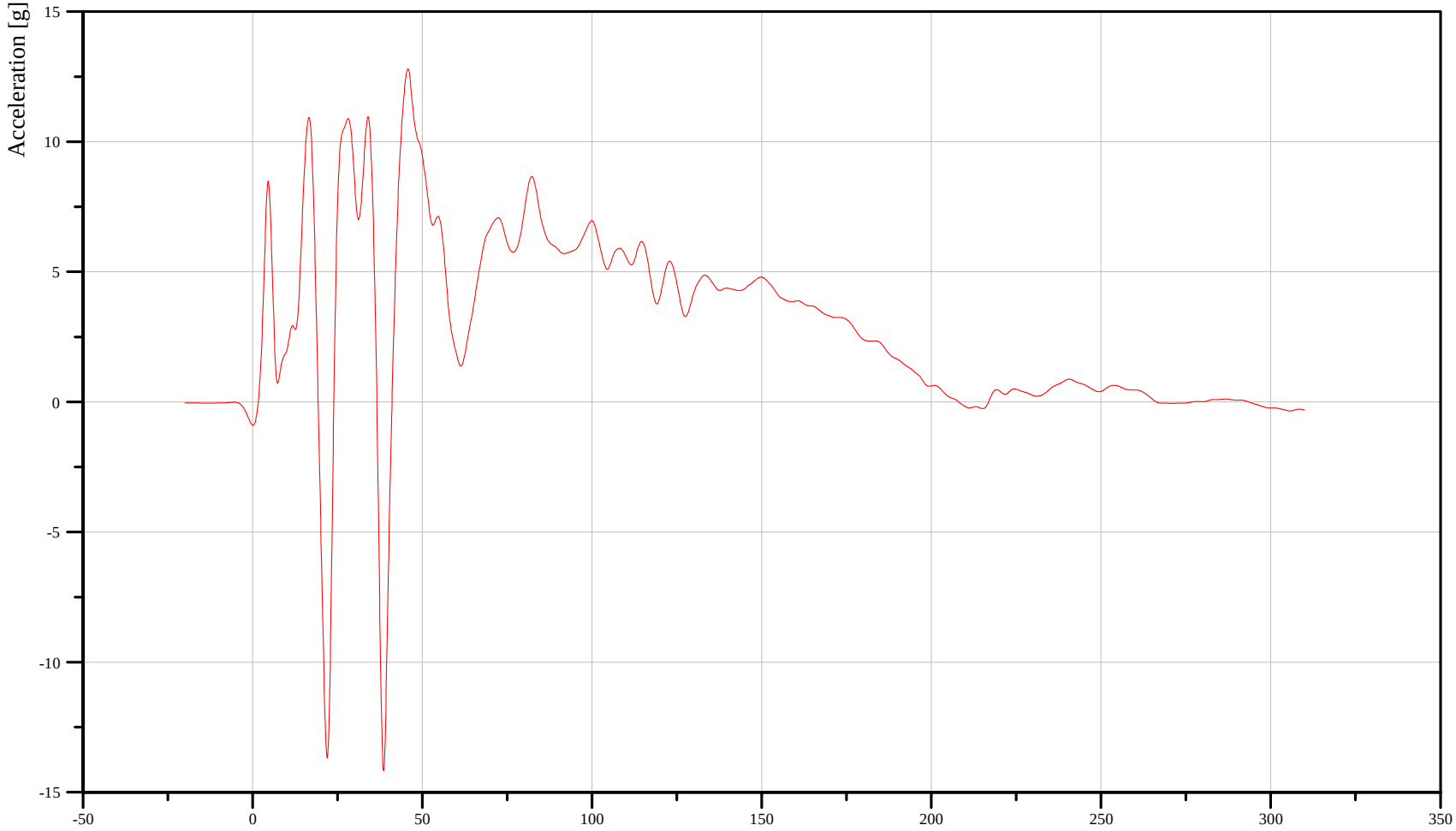
Left Mid A-Pillar Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11APILMI0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-14.16 g at 38.64 ms

Max. Value
12.81 g at 45.76 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

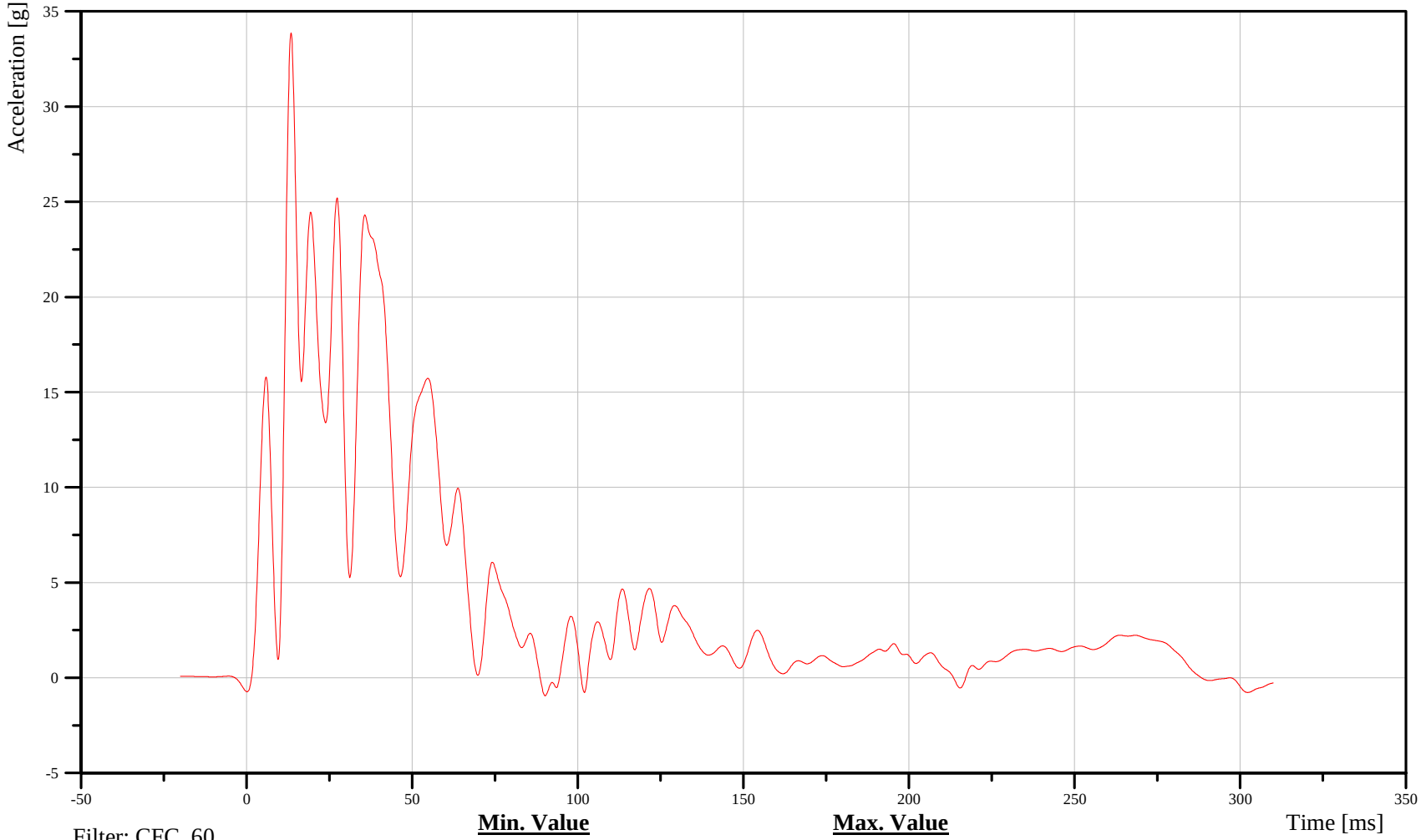
Left Lower B-Pillar Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14BPILLO0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-0.94 g at 90.16 ms

Max. Value
33.86 g at 13.44 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

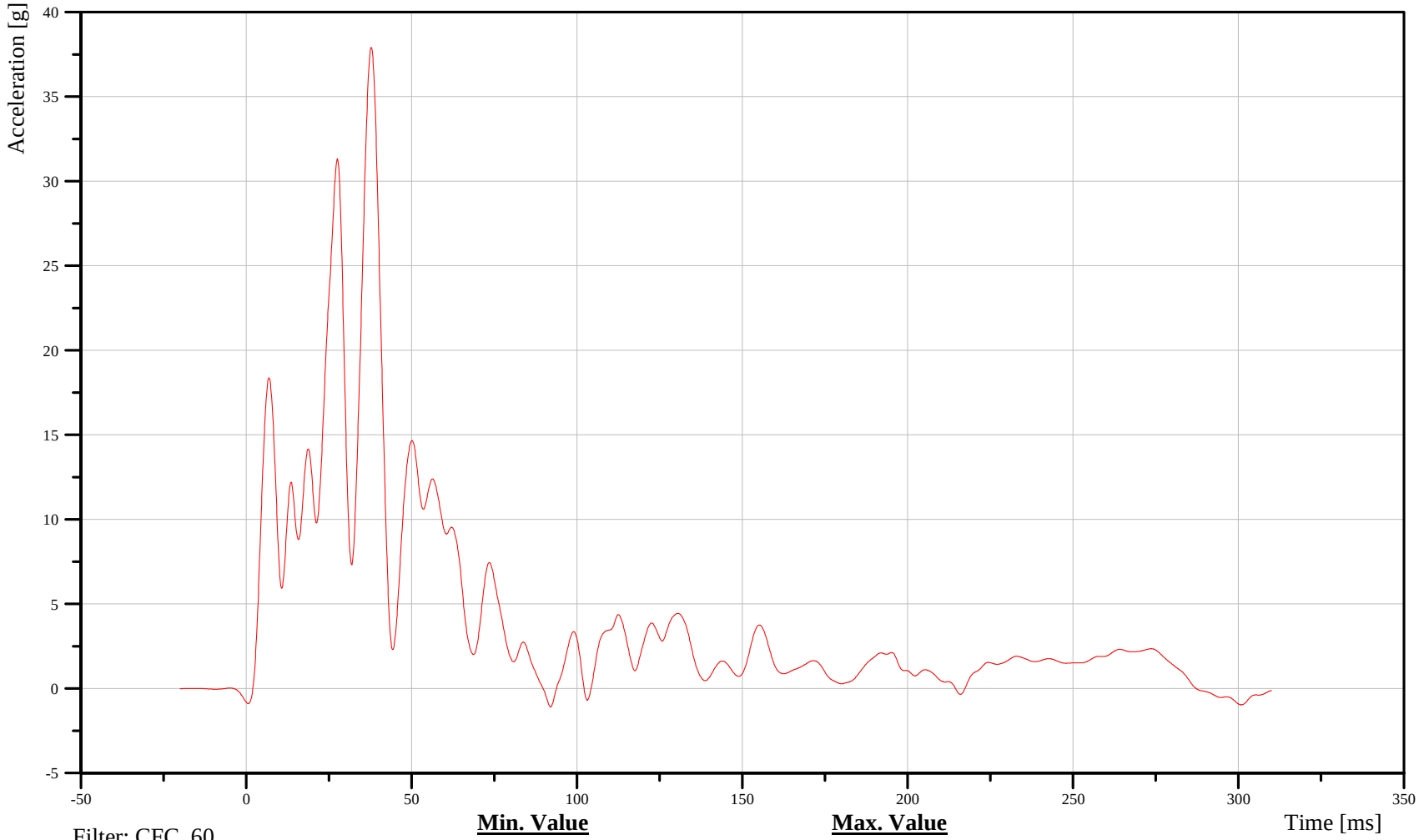
Left Mid B-Pillar Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14BPILMI0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-1.09 g at 92.08 ms

Max. Value
37.91 g at 37.84 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

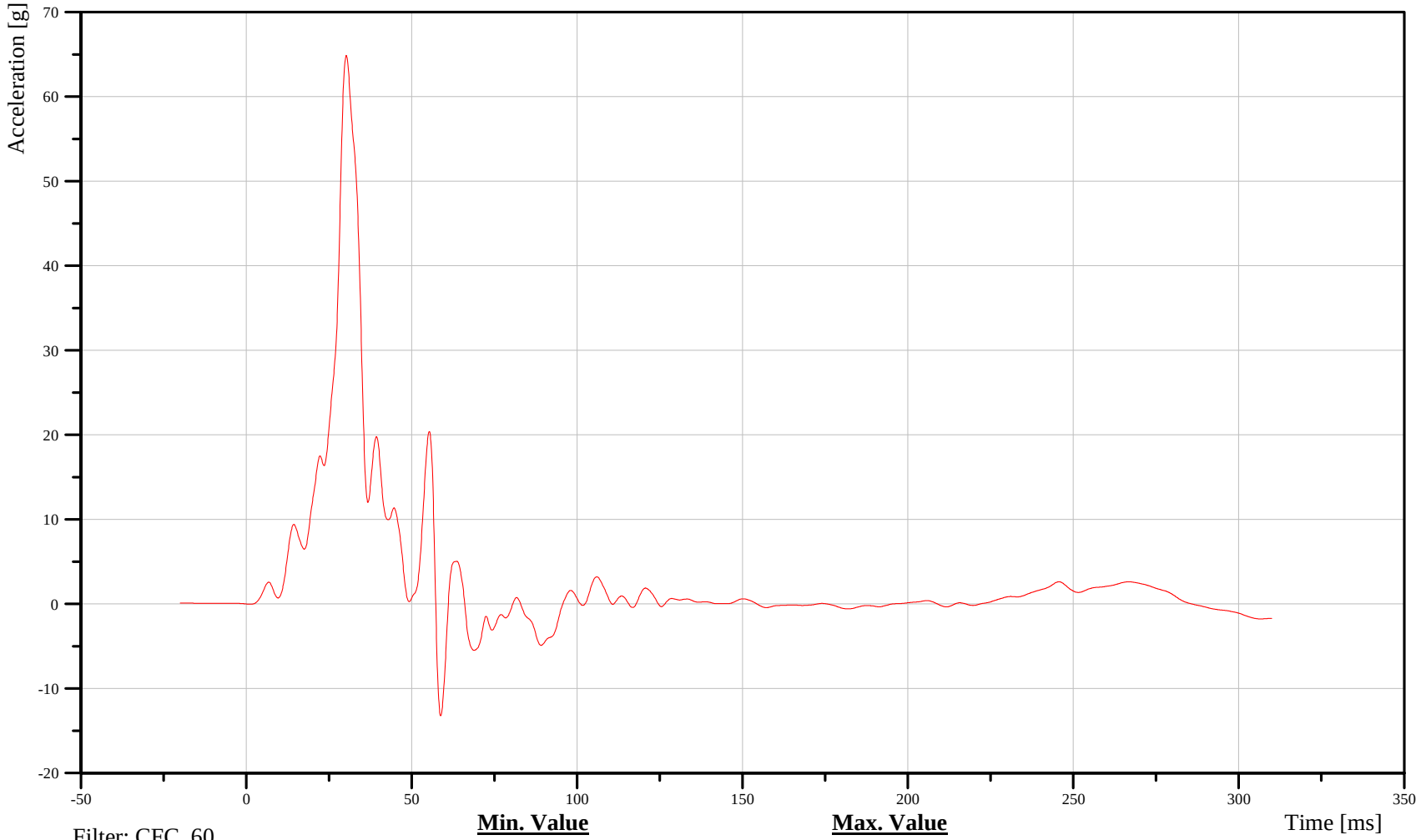
Left Front Seat Track Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11SETRFR0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-13.22 g at 58.80 ms

Max. Value
64.89 g at 30.24 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

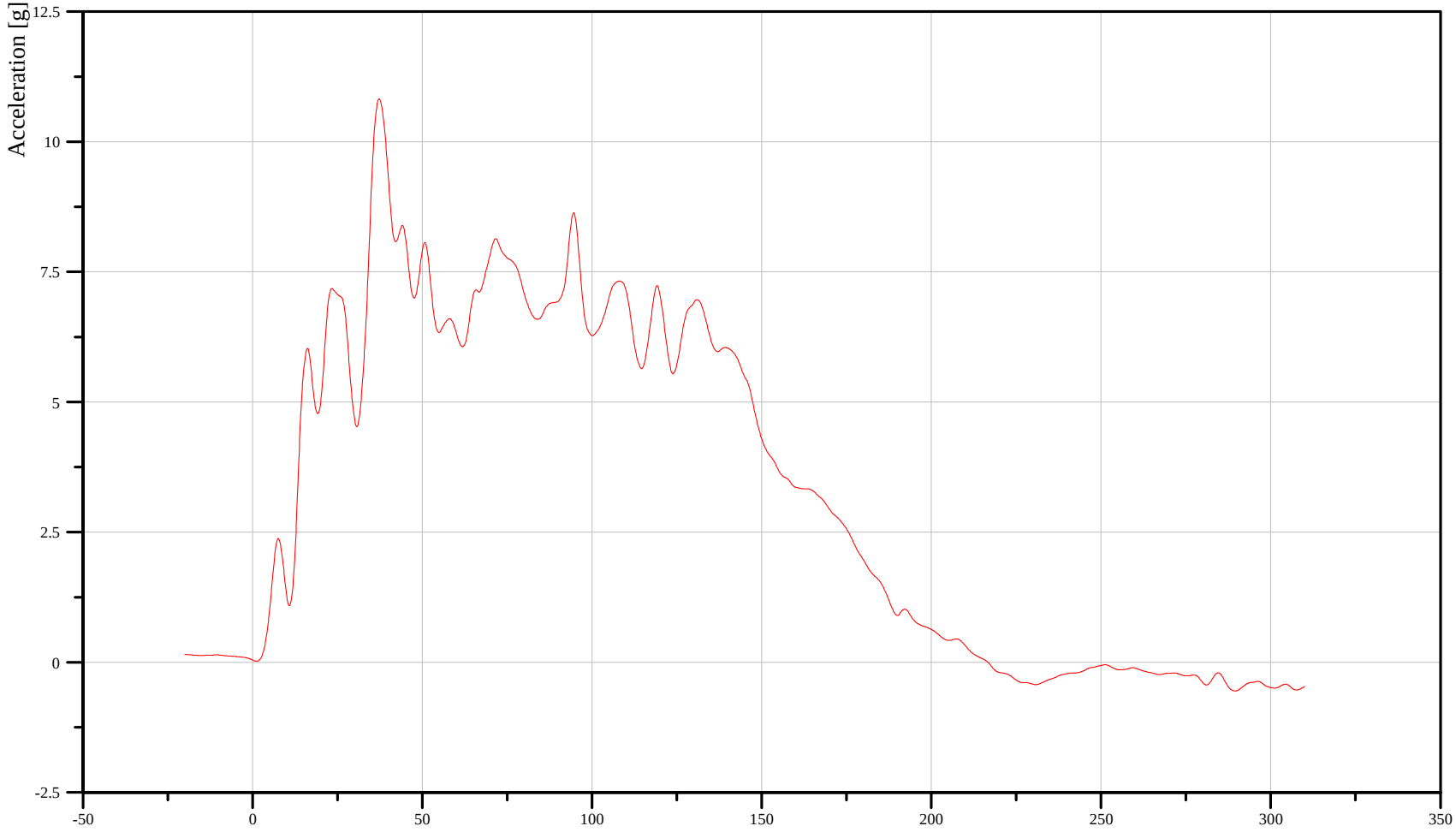
Left Rear Seat Track Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14SETRLERE00ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-0.55 g at 289.52 ms

Max. Value
10.83 g at 37.28 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

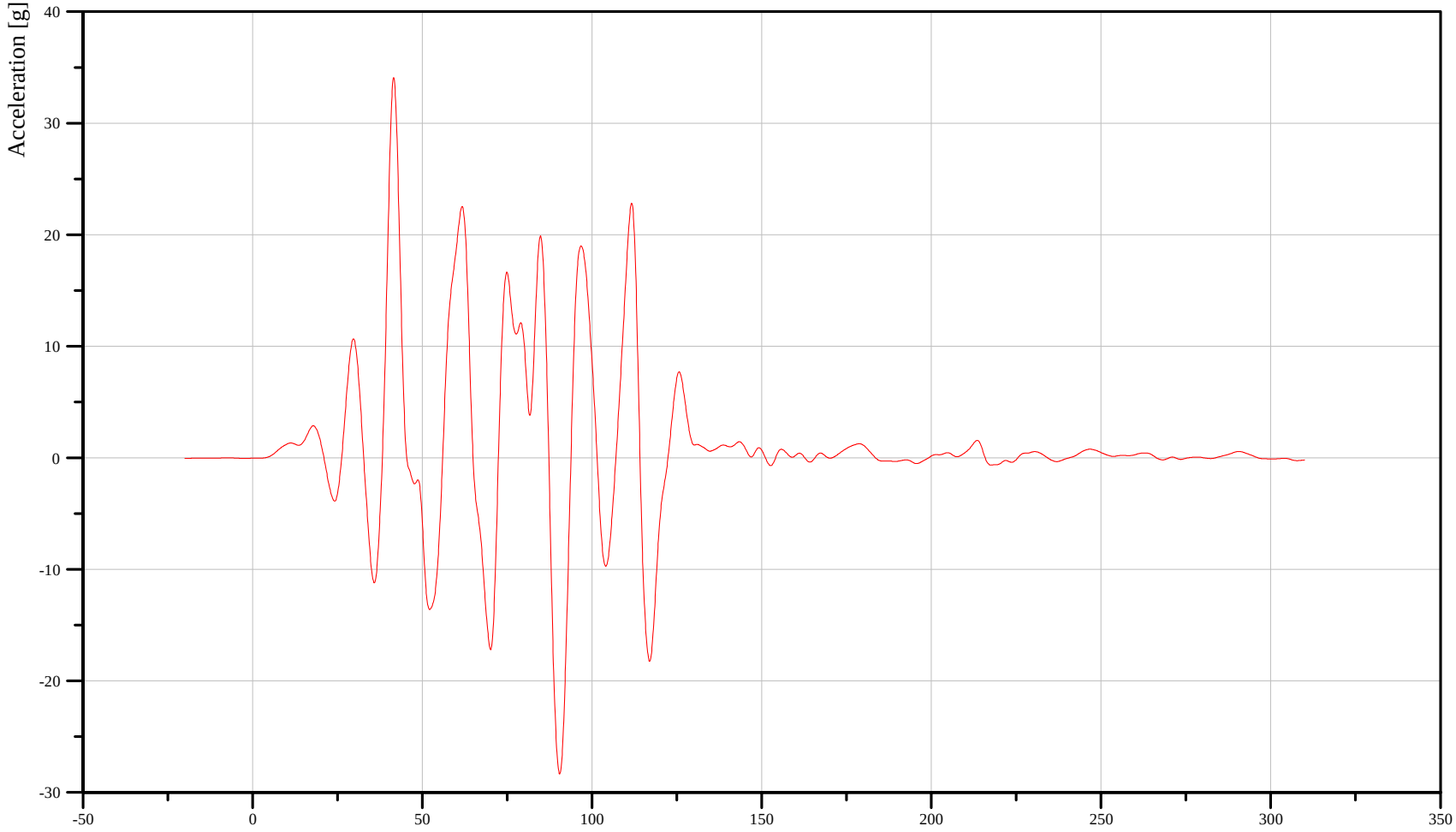
Vehicle Center of Gravity X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

10VEHCCG0000ACXD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-28.35 g at 90.48 ms

Max. Value
34.08 g at 41.60 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

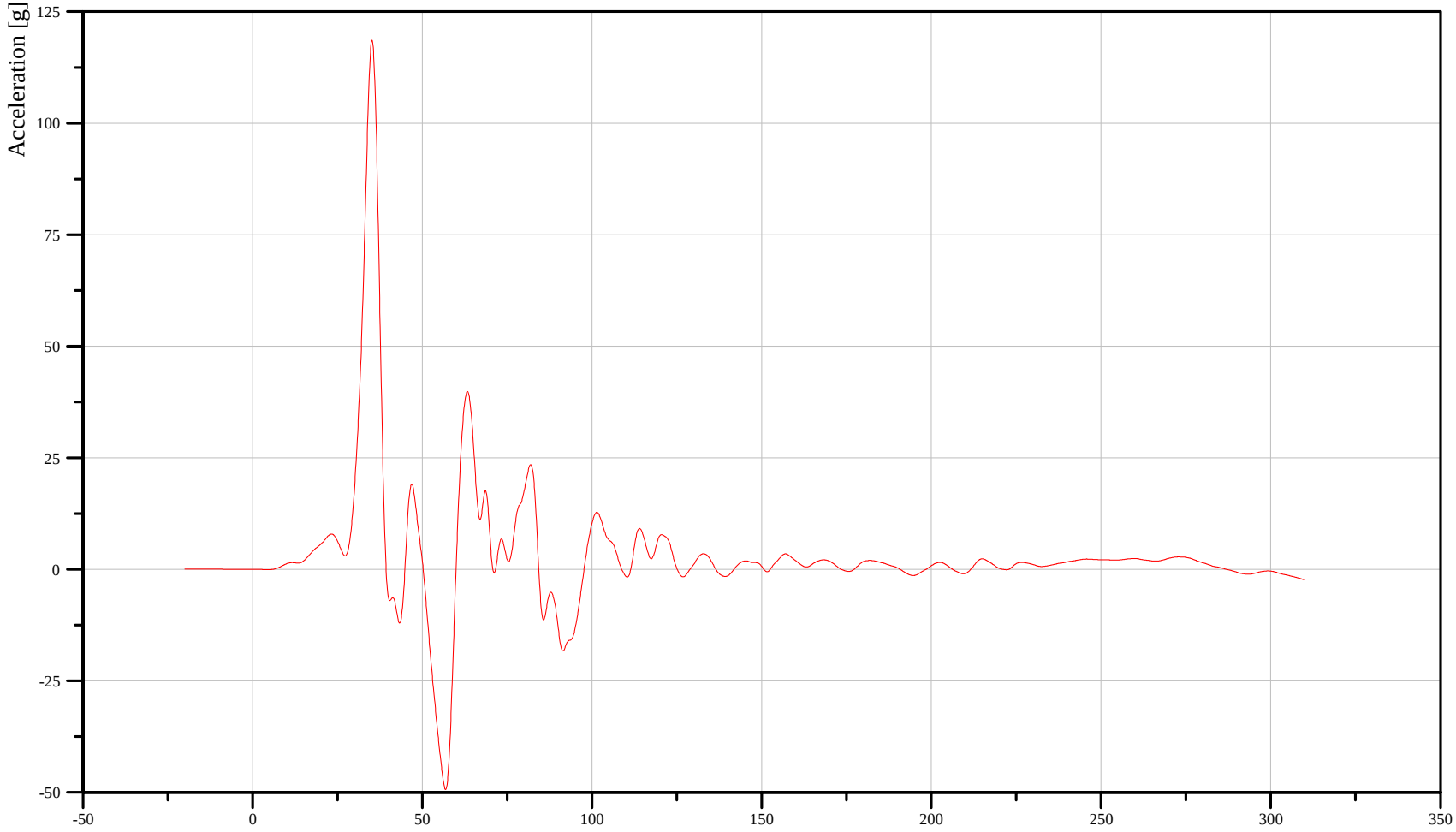
Vehicle Center of Gravity Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

10VEHCCG0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-49.36 g at 56.88 ms

Max. Value
118.61 g at 35.20 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

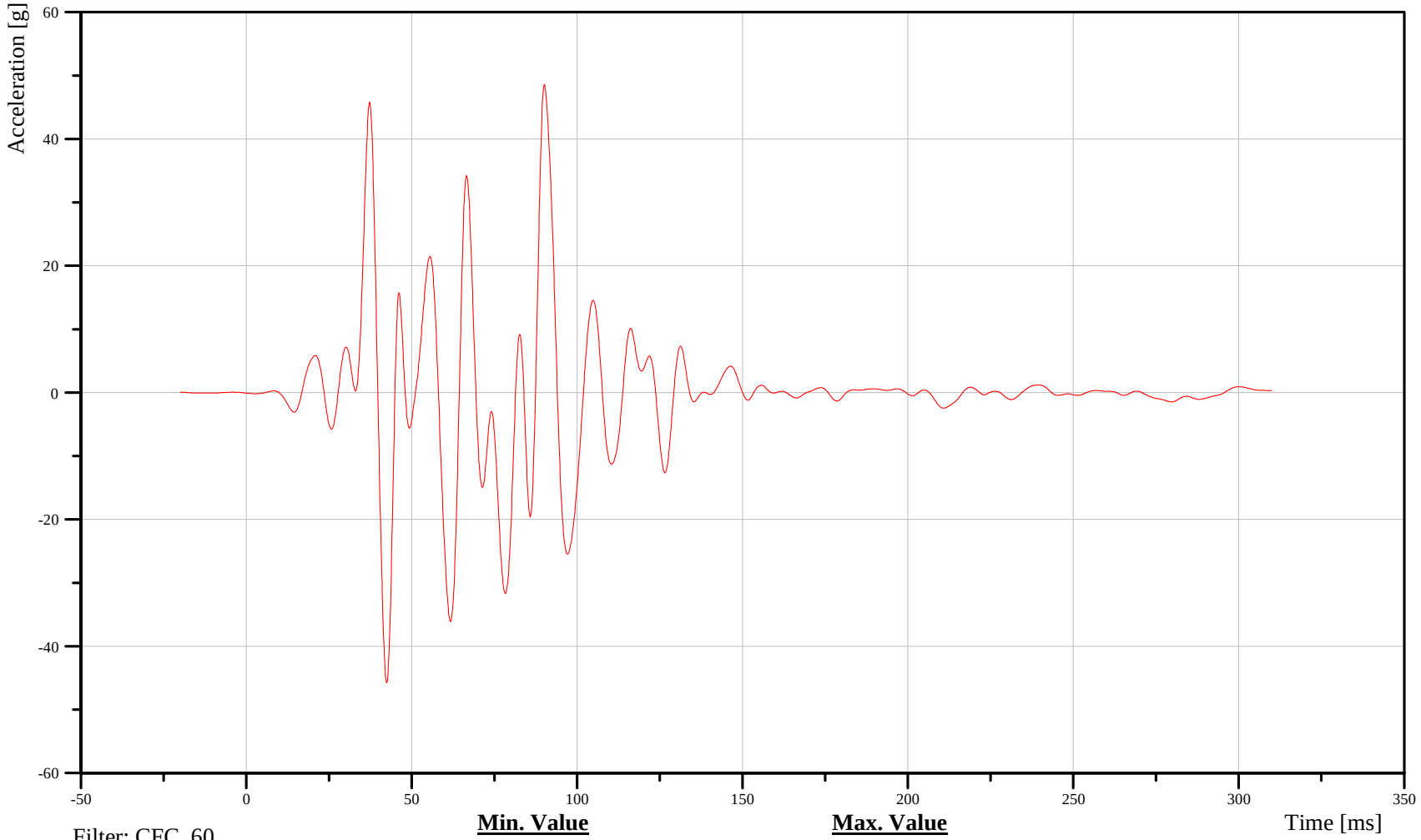
Vehicle Center of Gravity Z-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

10VEHCCG0000ACZD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-45.72 g at 42.48 ms

Max. Value
48.58 g at 90.08 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

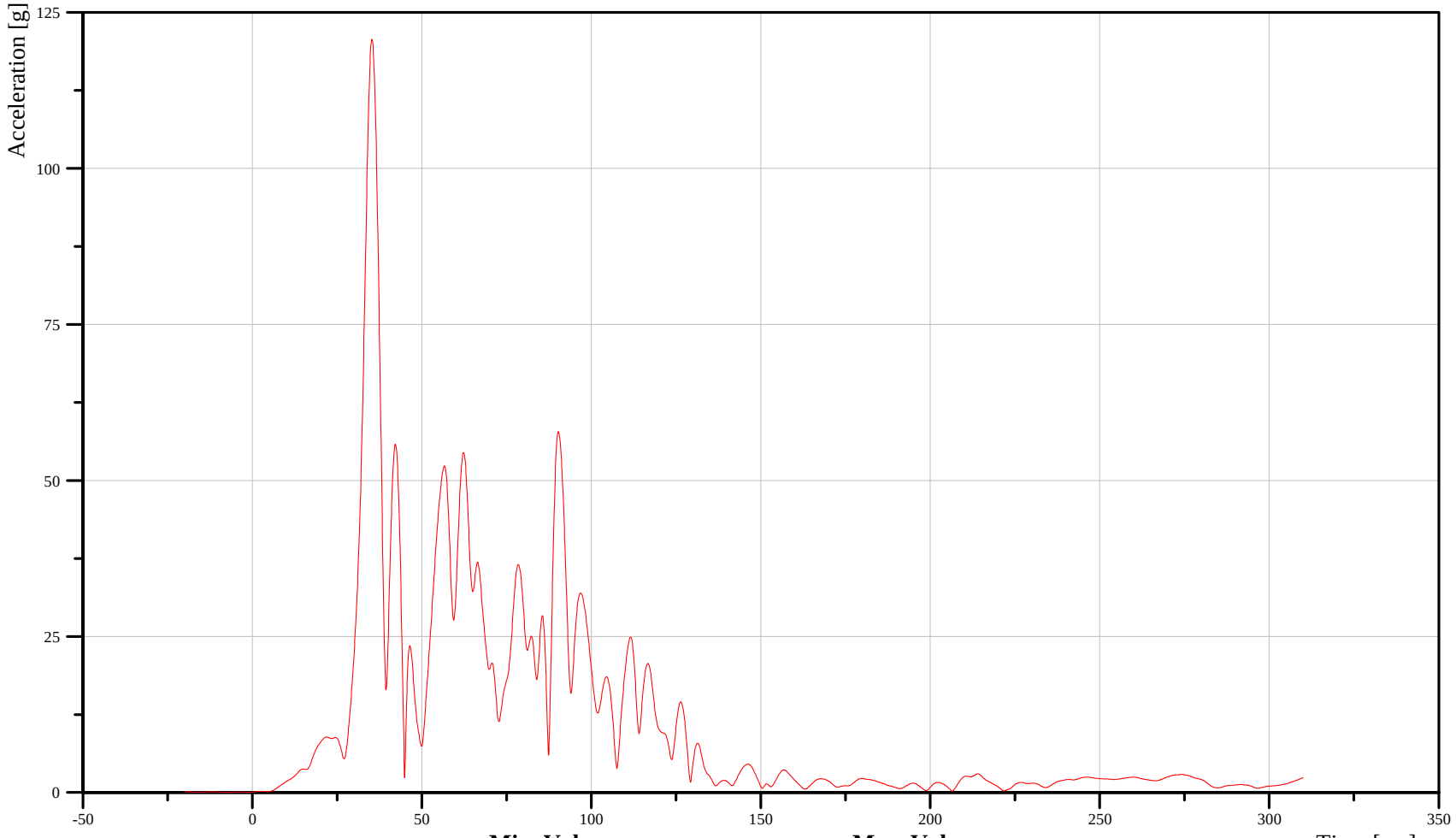
Vehicle Center of Gravity Resultant Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

10VEHCCG0000ACRD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
0.01 g at -6.96 ms

Max. Value
120.75 g at 35.28 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

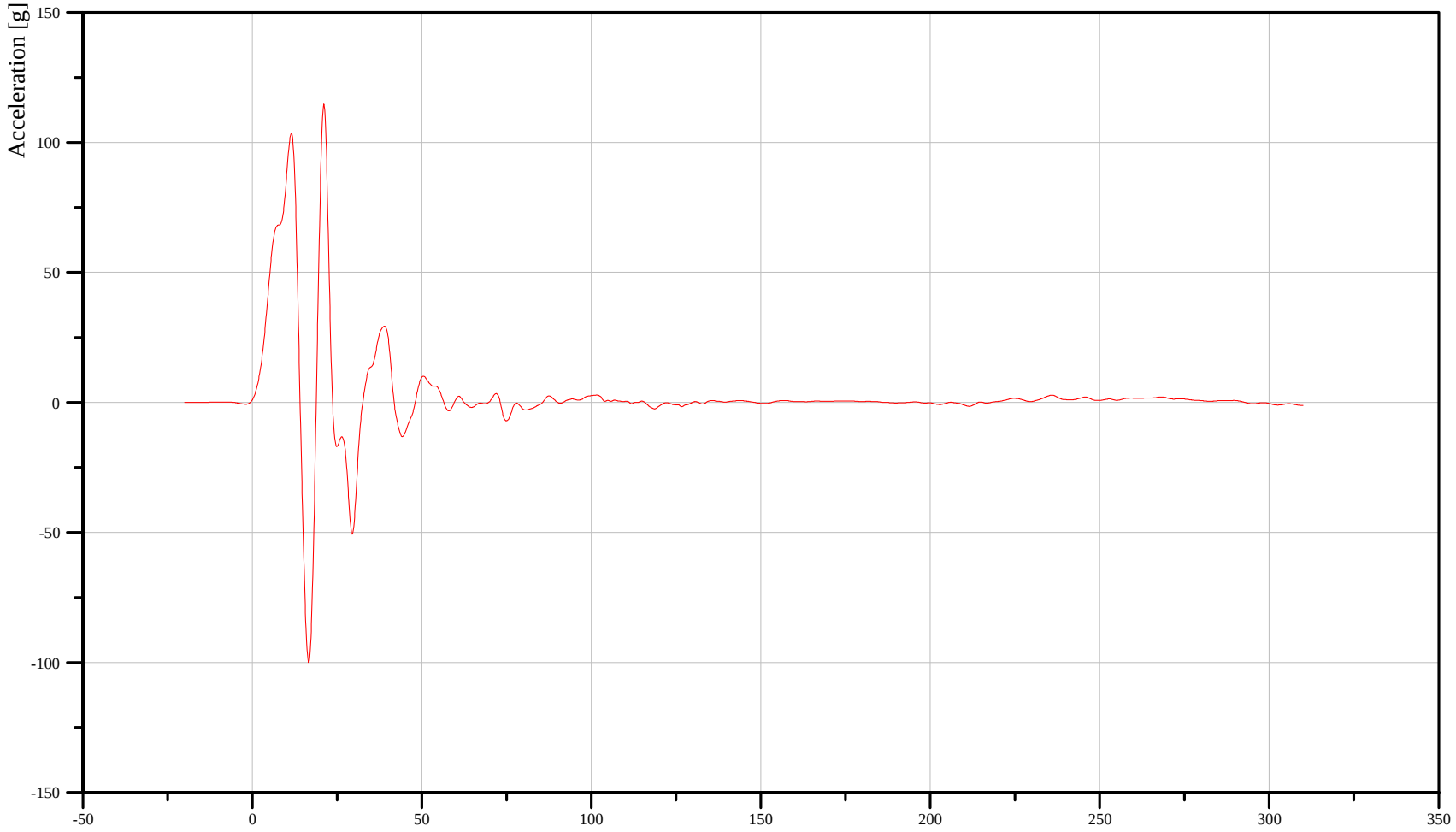
Vehicle Front Door Centerline Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14DOOR000001ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-100.02 g at 16.64 ms

Max. Value
114.77 g at 21.12 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

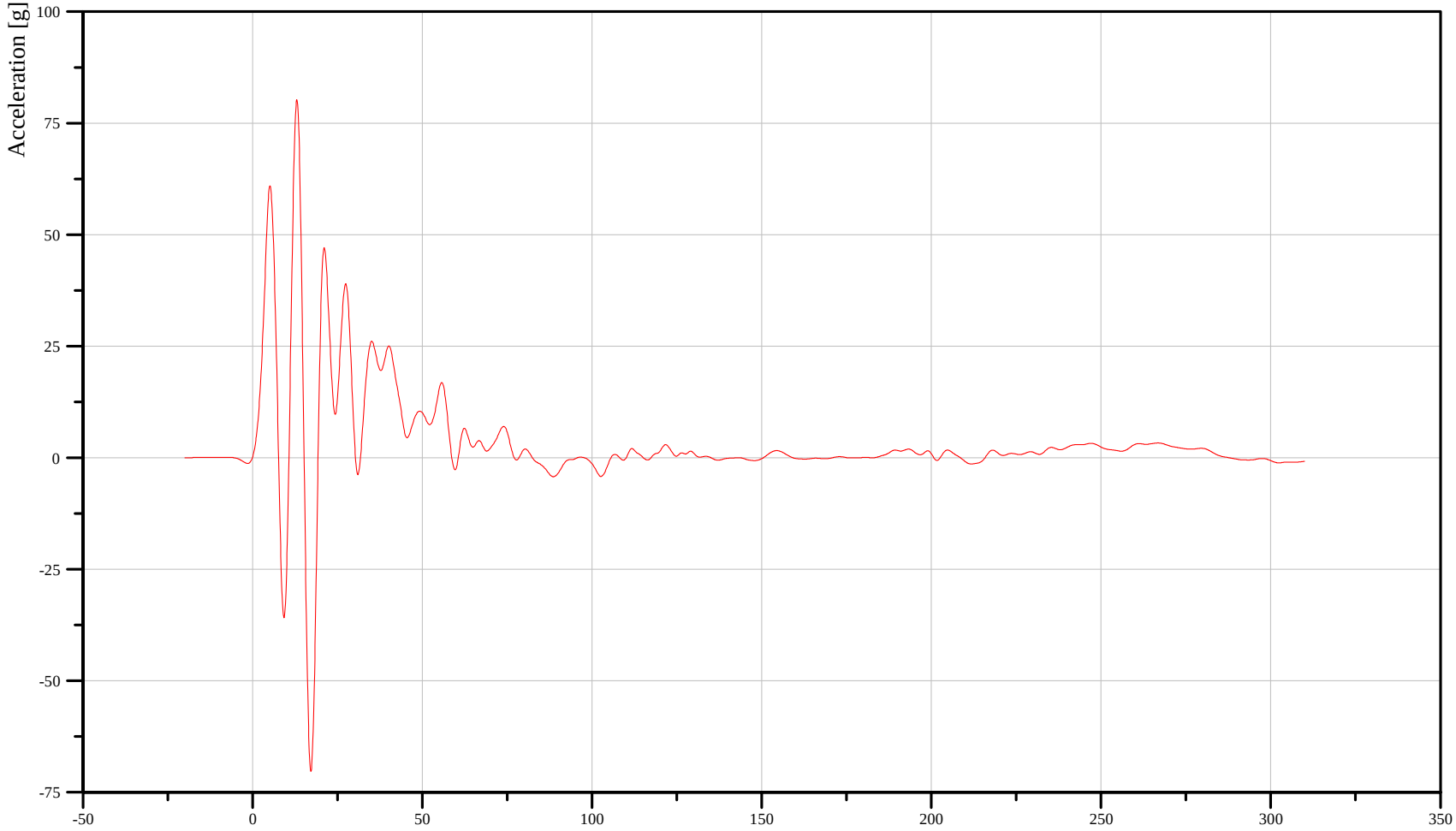
Vehicle Front Door Mid-Rear Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14DOOR000002ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-70.31 g at 17.20 ms

Max. Value
80.27 g at 13.04 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

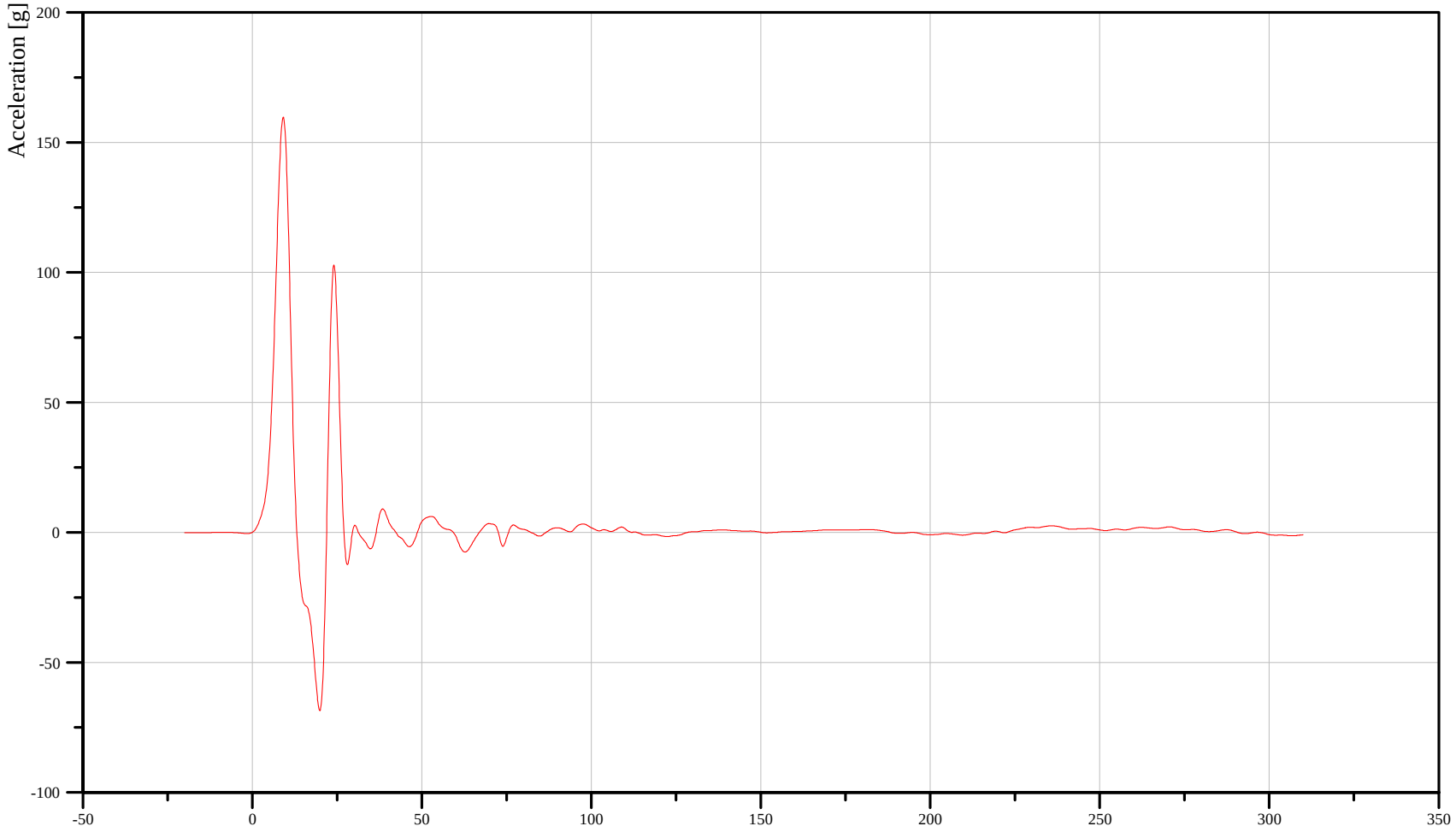
Vehicle Front Door Upper Centerline Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

14DOOR000003ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-68.53 g at 19.92 ms

Max. Value
159.77 g at 9.12 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

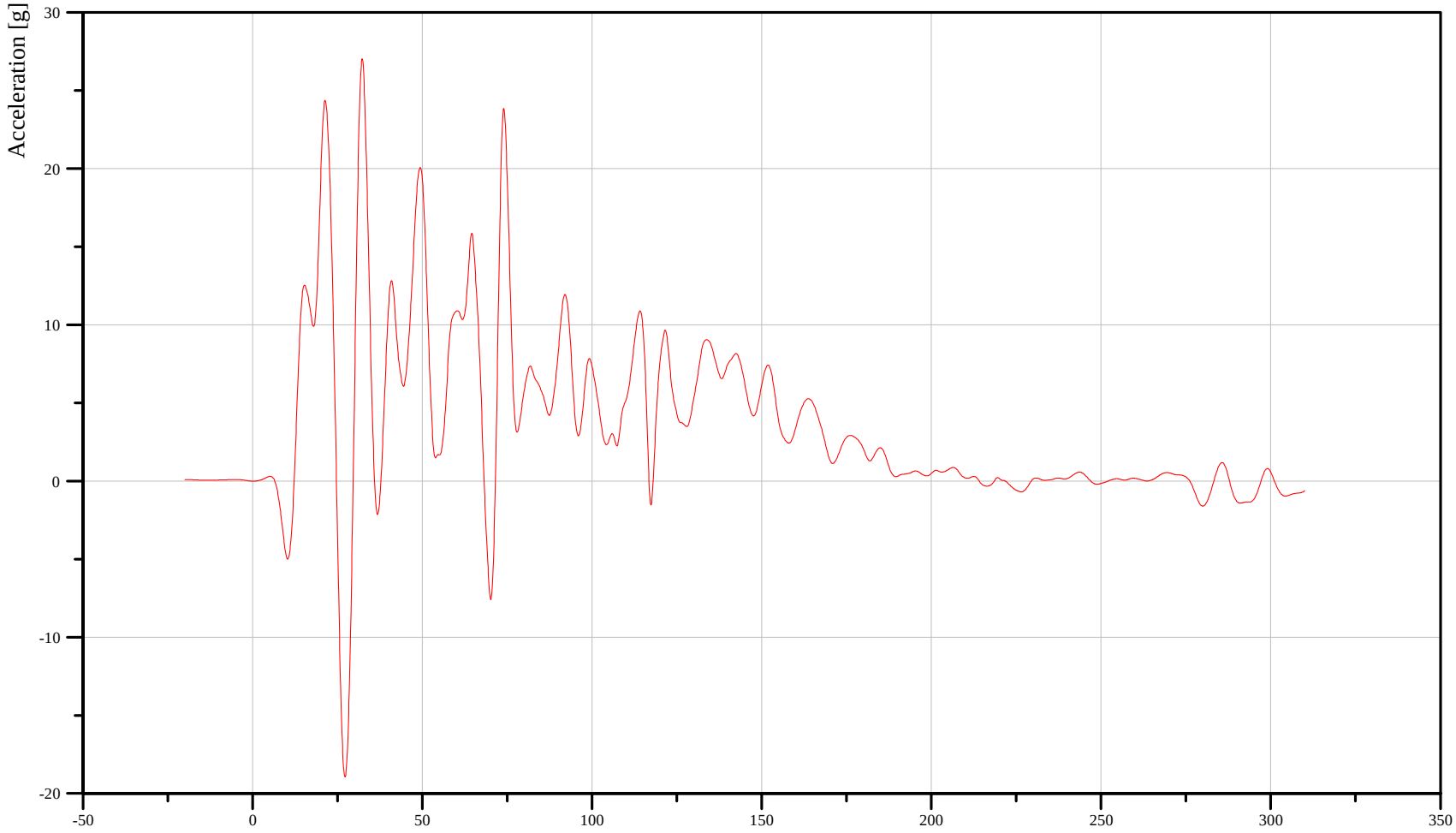
Vehicle Rear Door Mid-Rear Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16DOOR000002ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-18.94 g at 27.20 ms

Max. Value
27.04 g at 32.32 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

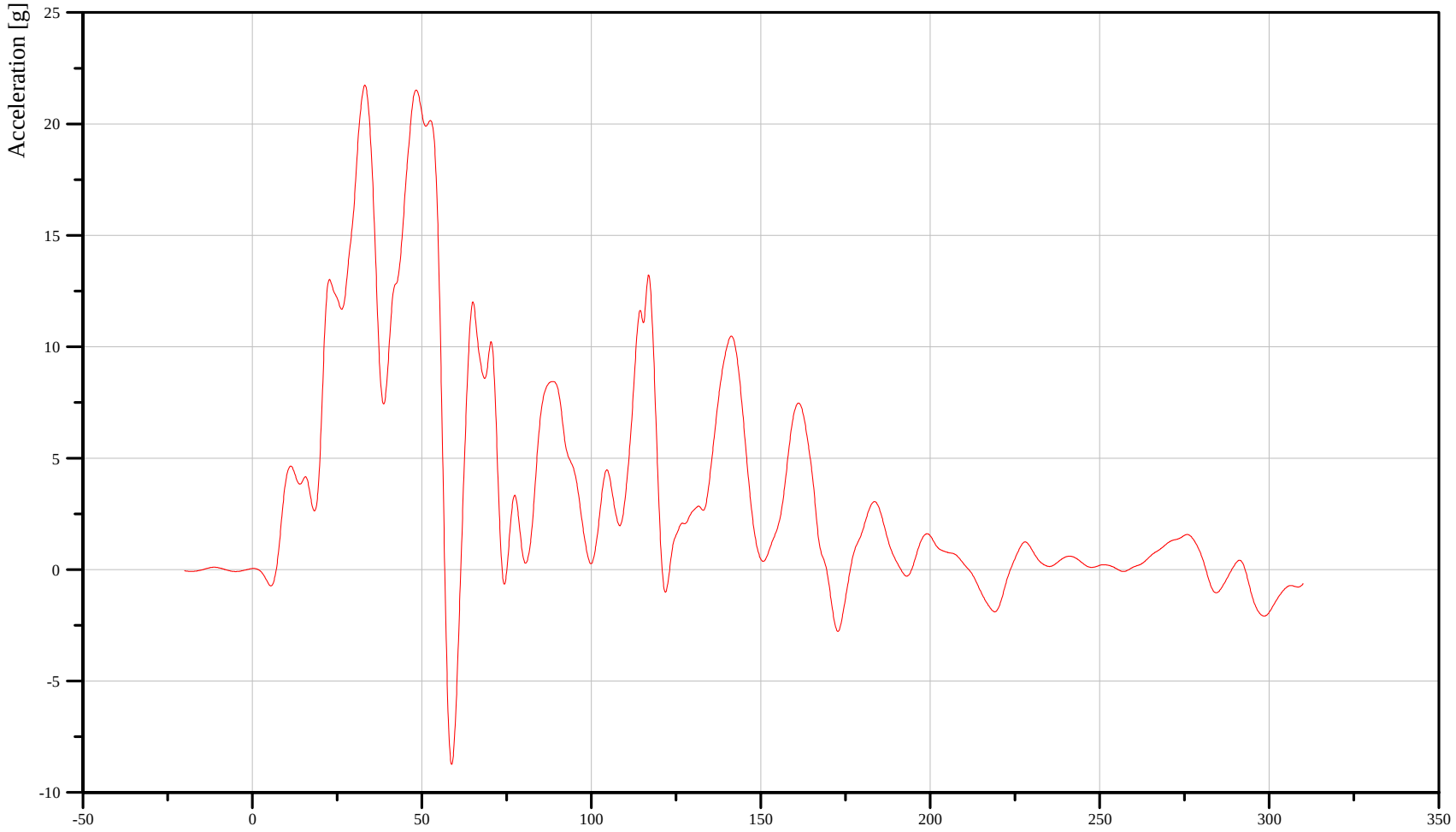
Vehicle Rear Door Upper Centerline Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

16DOOR000003ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-8.74 g at 58.80 ms

Max. Value
21.74 g at 33.20 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

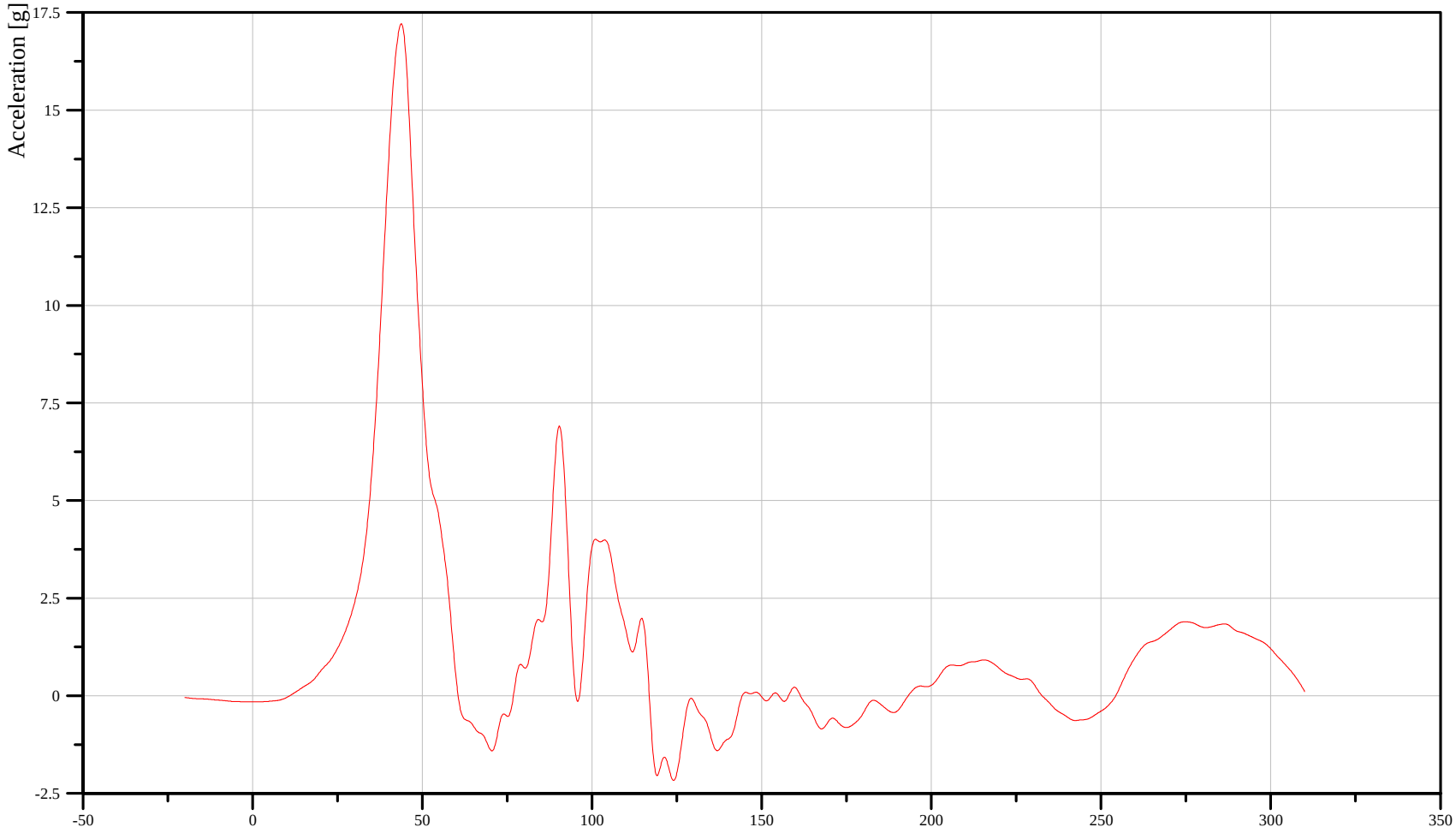
Top of Engine X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

12ENGNTP0000ACXD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-2.17 g at 124.08 ms

Max. Value
17.21 g at 43.84 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

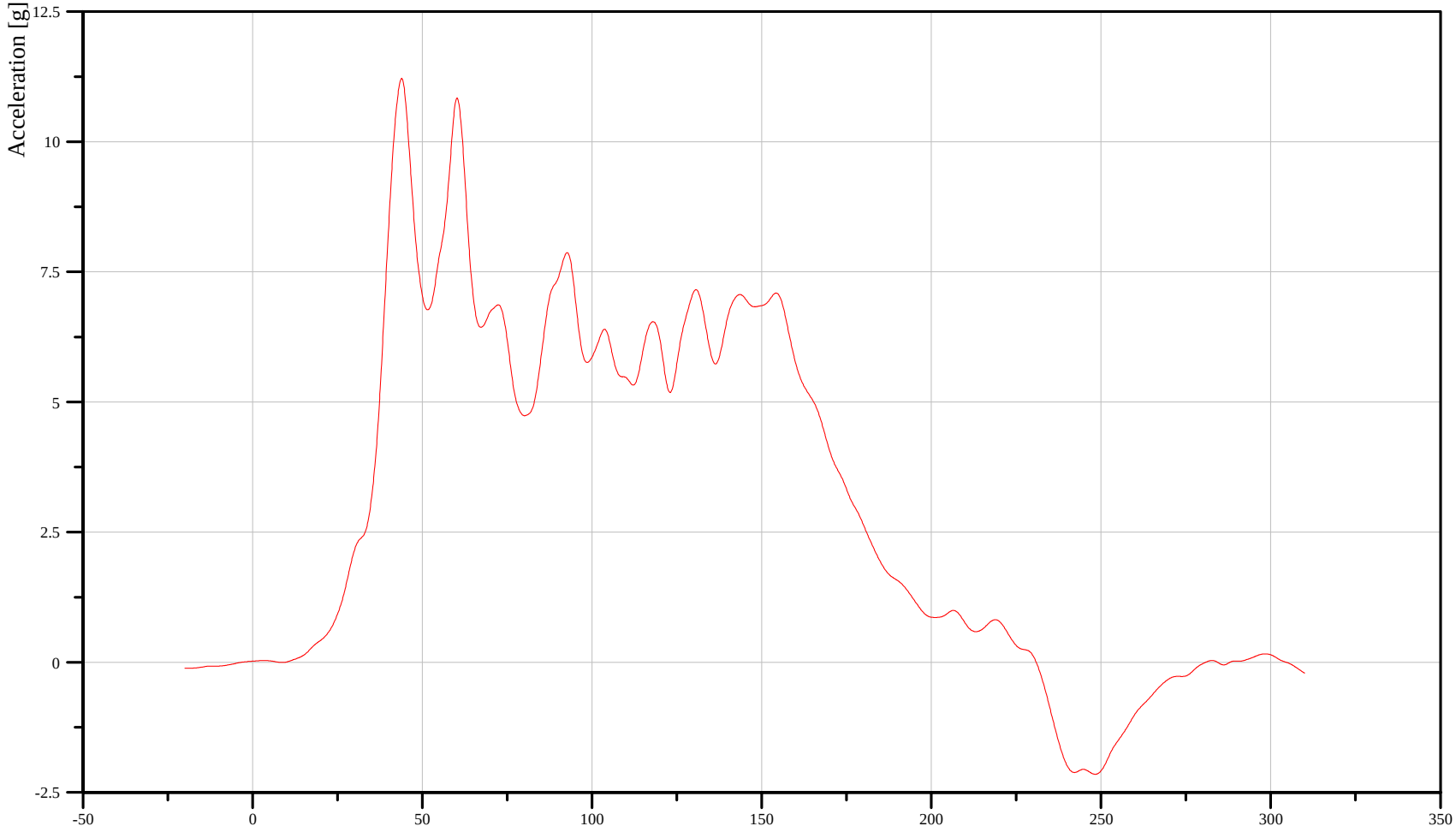
Top of Engine Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

12ENGNTP0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-2.15 g at 248.32 ms

Max. Value
11.22 g at 43.92 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

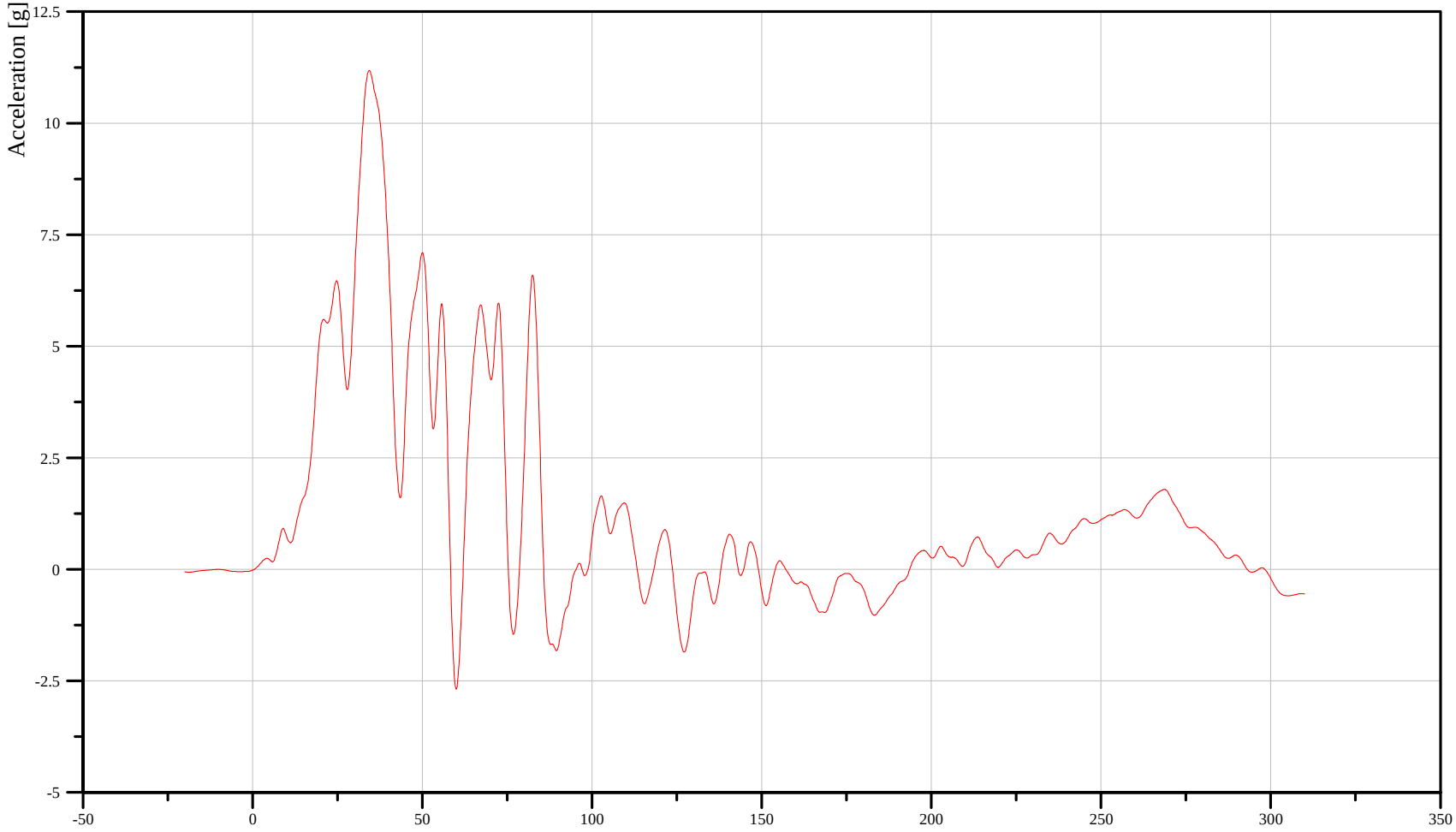
Firewall X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

12VEHC000000ACXD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-2.68 g at 60.00 ms

Max. Value
11.18 g at 34.40 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

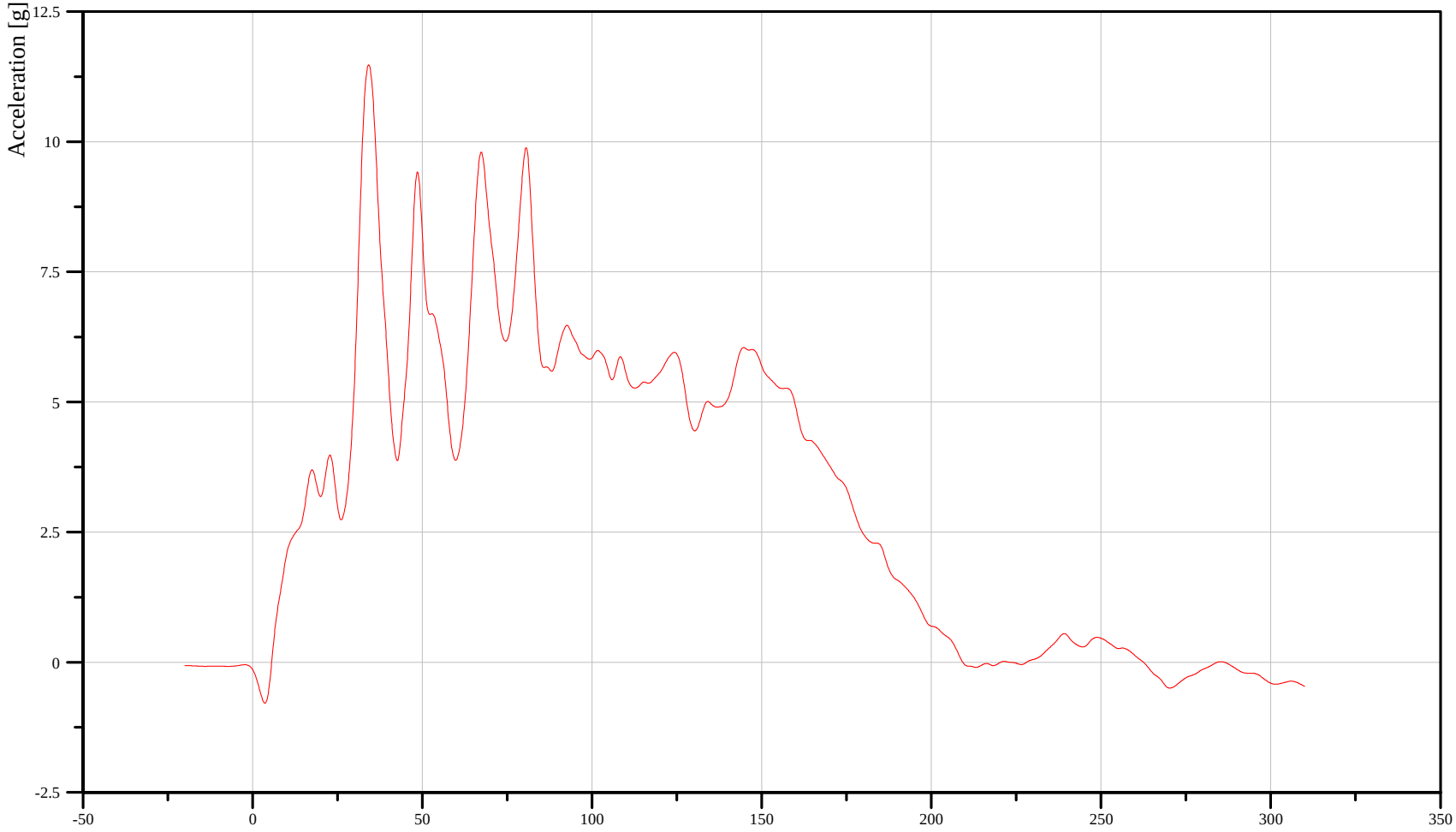
Firewall Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

12VEHC000000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-0.78 g at 3.68 ms

Max. Value
11.48 g at 34.24 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

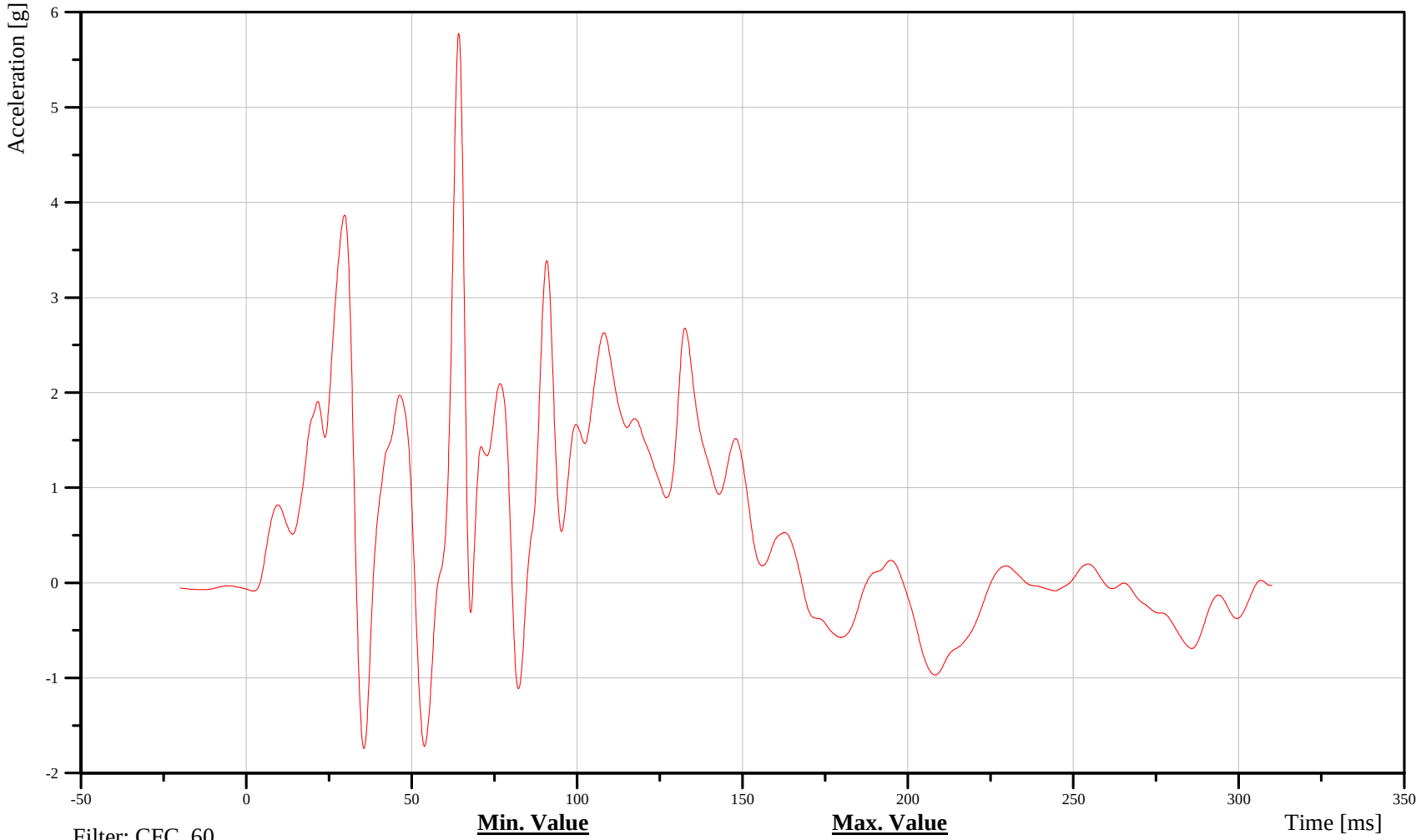
Right Side Roof Rail X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

13ROOF000000ACXD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-1.74 g at 35.60 ms

Max. Value
5.78 g at 64.24 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

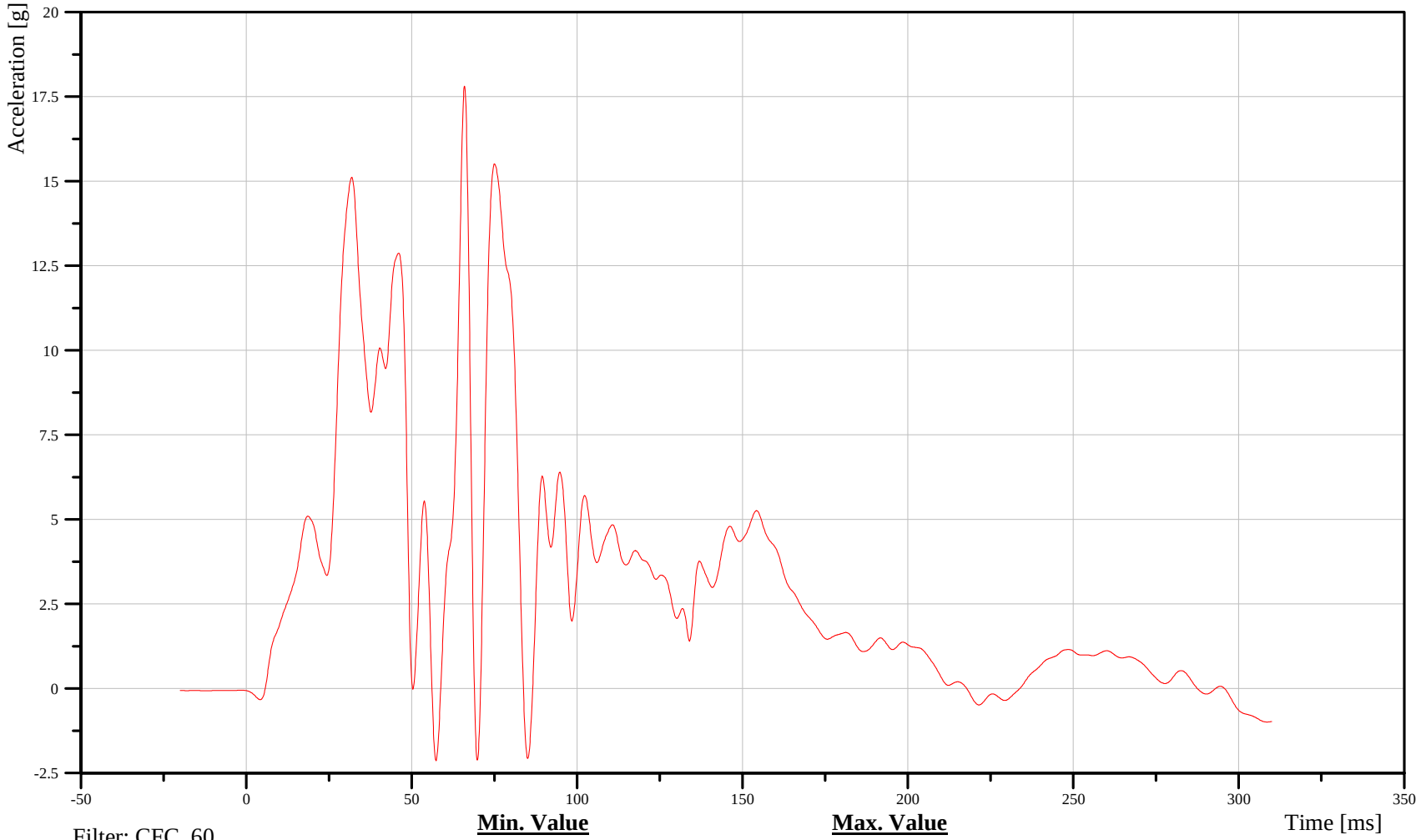
Right Side Roof Rail Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

13ROOF000000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-2.14 g at 57.36 ms

Max. Value
17.81 g at 66.00 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

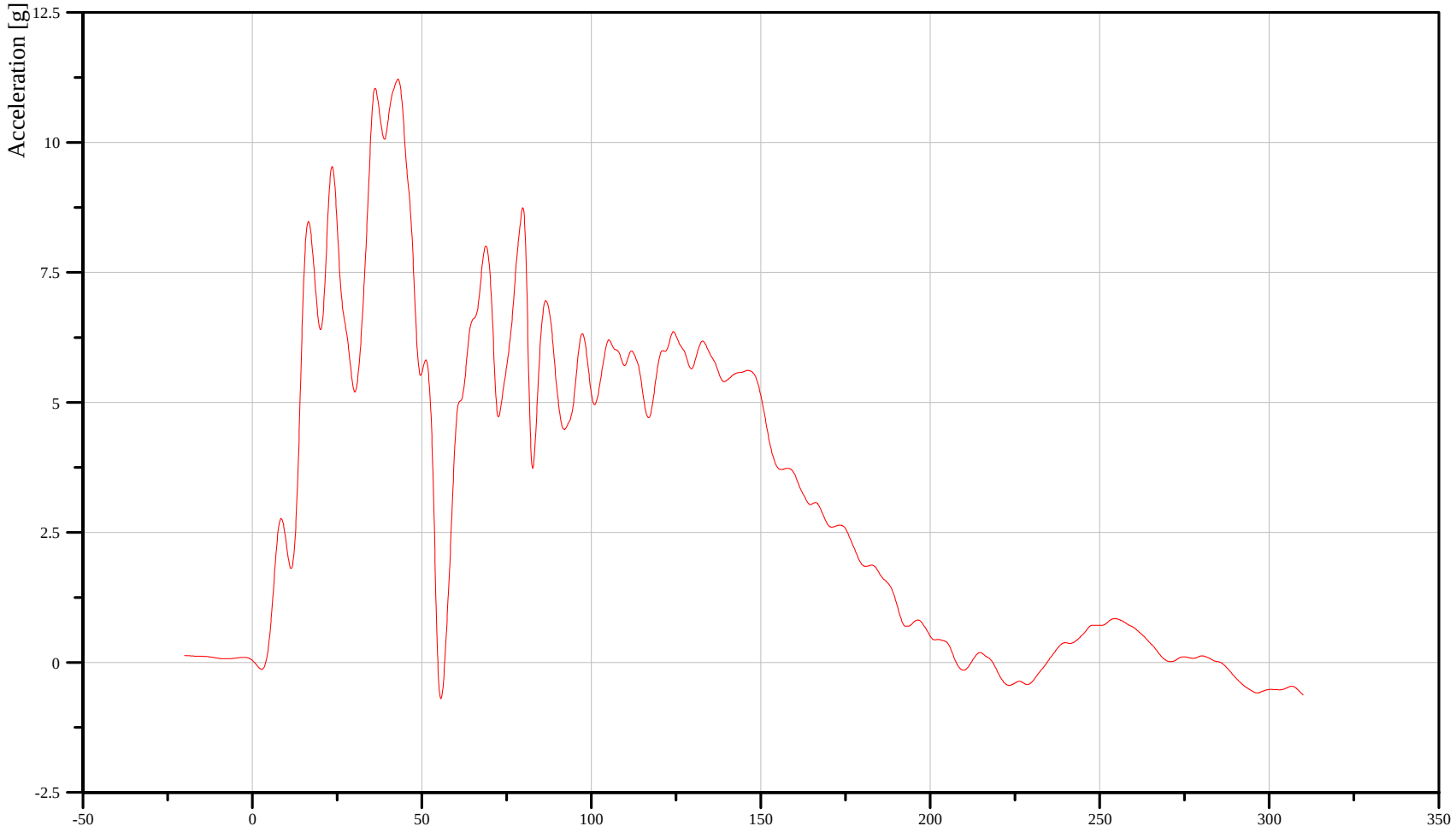
Right Side Sill In-Line With Impact Location Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

13SILBFR0000ACYD

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-0.70 g at 55.60 ms

Max. Value
11.22 g at 42.96 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

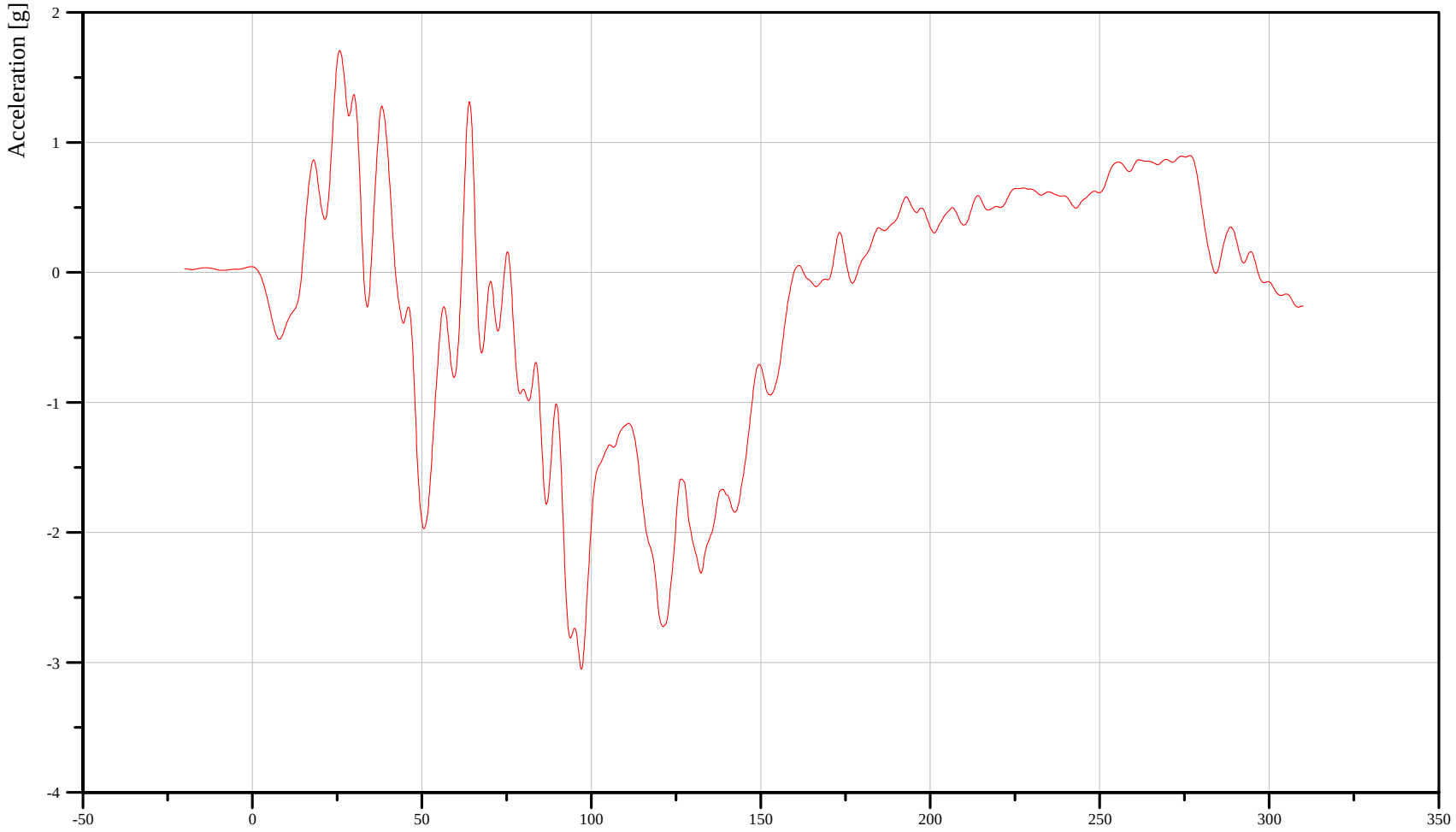
Rear Deck Behind Rear Axle X-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

18DECK000000ACXA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-3.05 g at 97.12 ms

Max. Value
1.71 g at 25.76 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

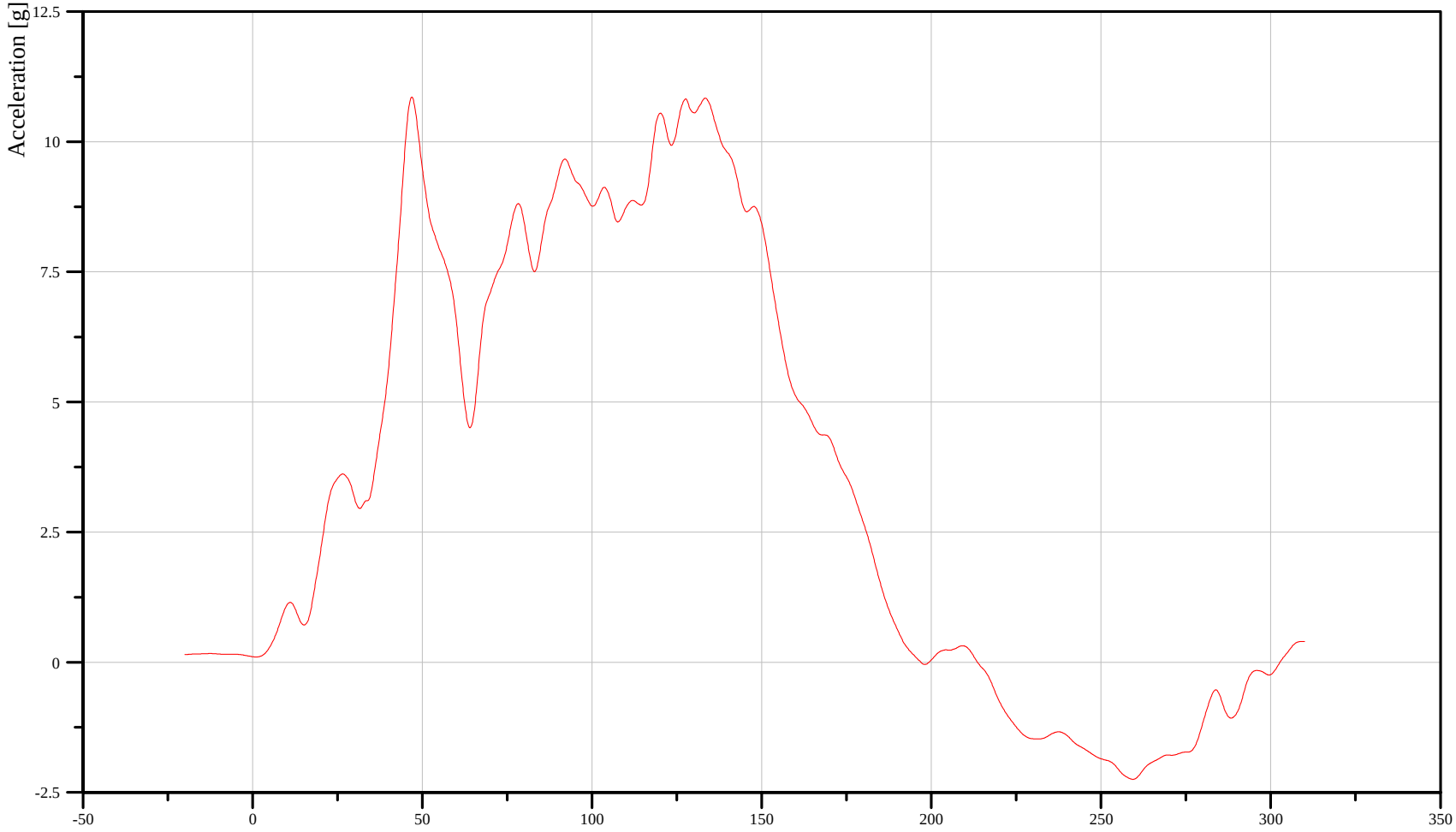
Rear Deck Behind Rear Axle Y-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

18DECK000000ACYA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-2.25 g at 259.36 ms

Max. Value
10.86 g at 46.96 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

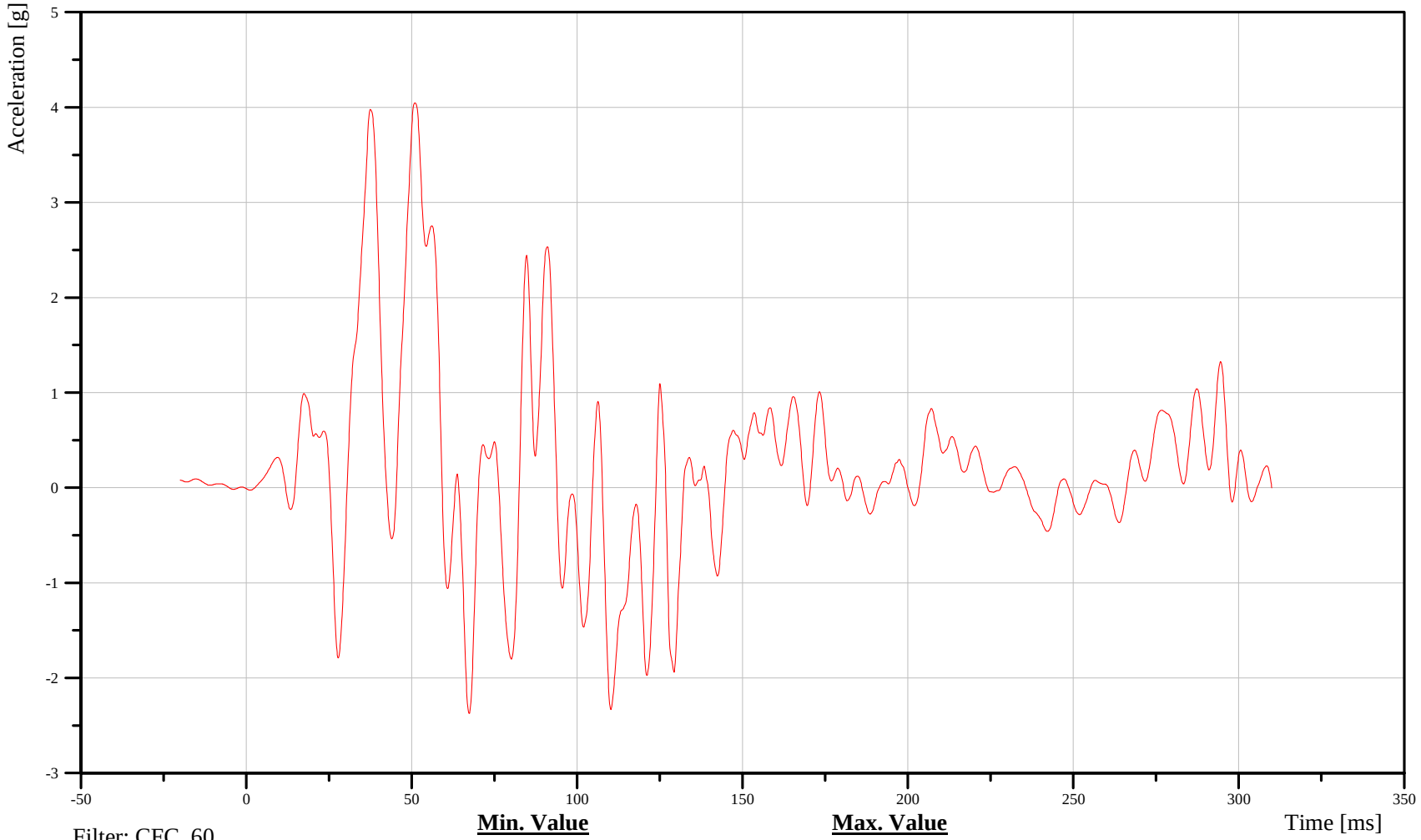
Rear Deck Behind Rear Axle Z-Axis Acceleration

Date: 05/21/2007
Time: 13:38

Customer: VRTC

18DECK000000ACZA

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_60

Min. Value
-2.37 g at 67.36 ms

Max. Value
4.05 g at 50.96 ms

070521

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

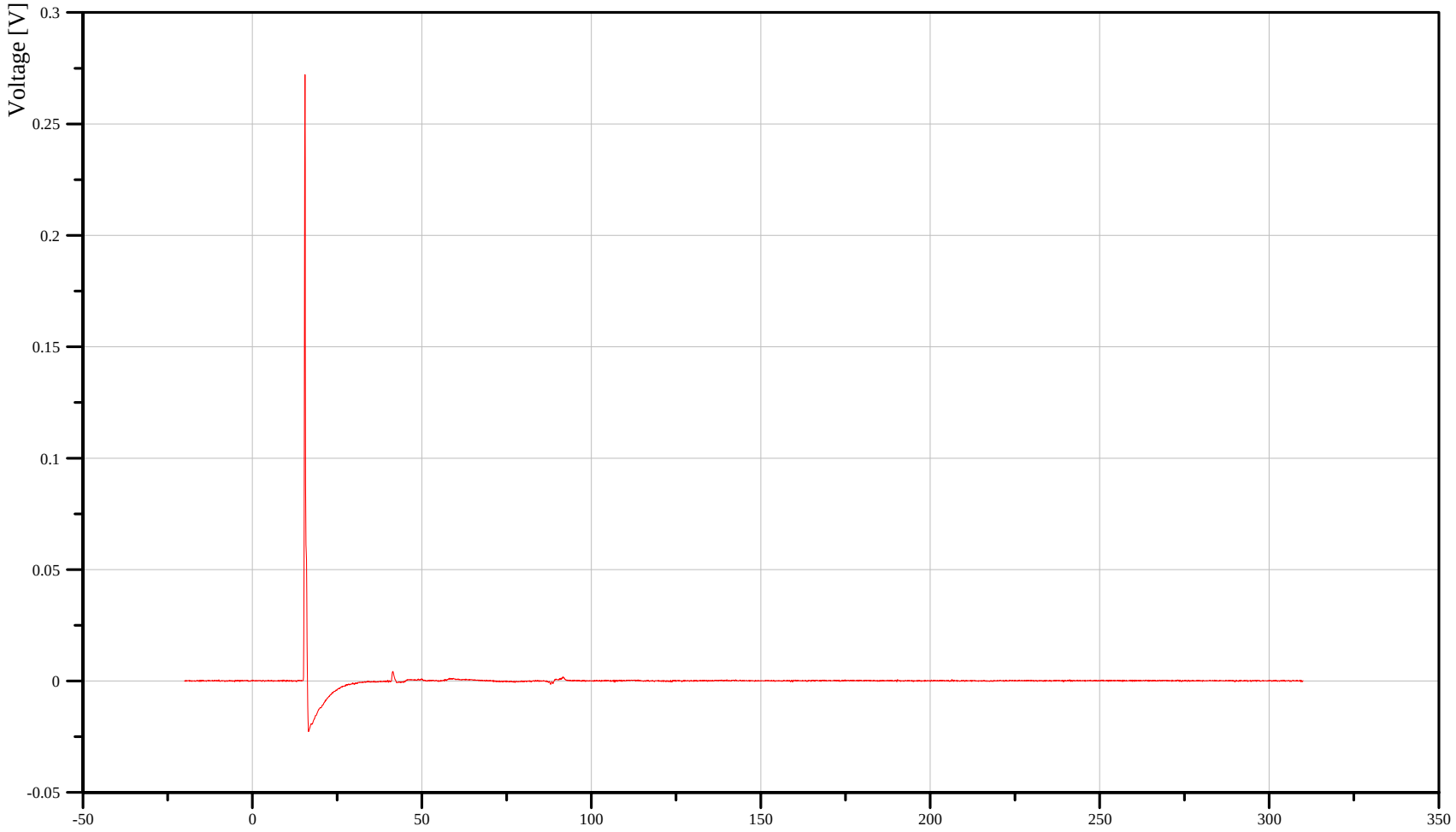
Driver Side Airbag

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11AIRBMILE00CU0A

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-0.02 V at 16.64 ms

Max. Value
0.27 V at 15.52 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

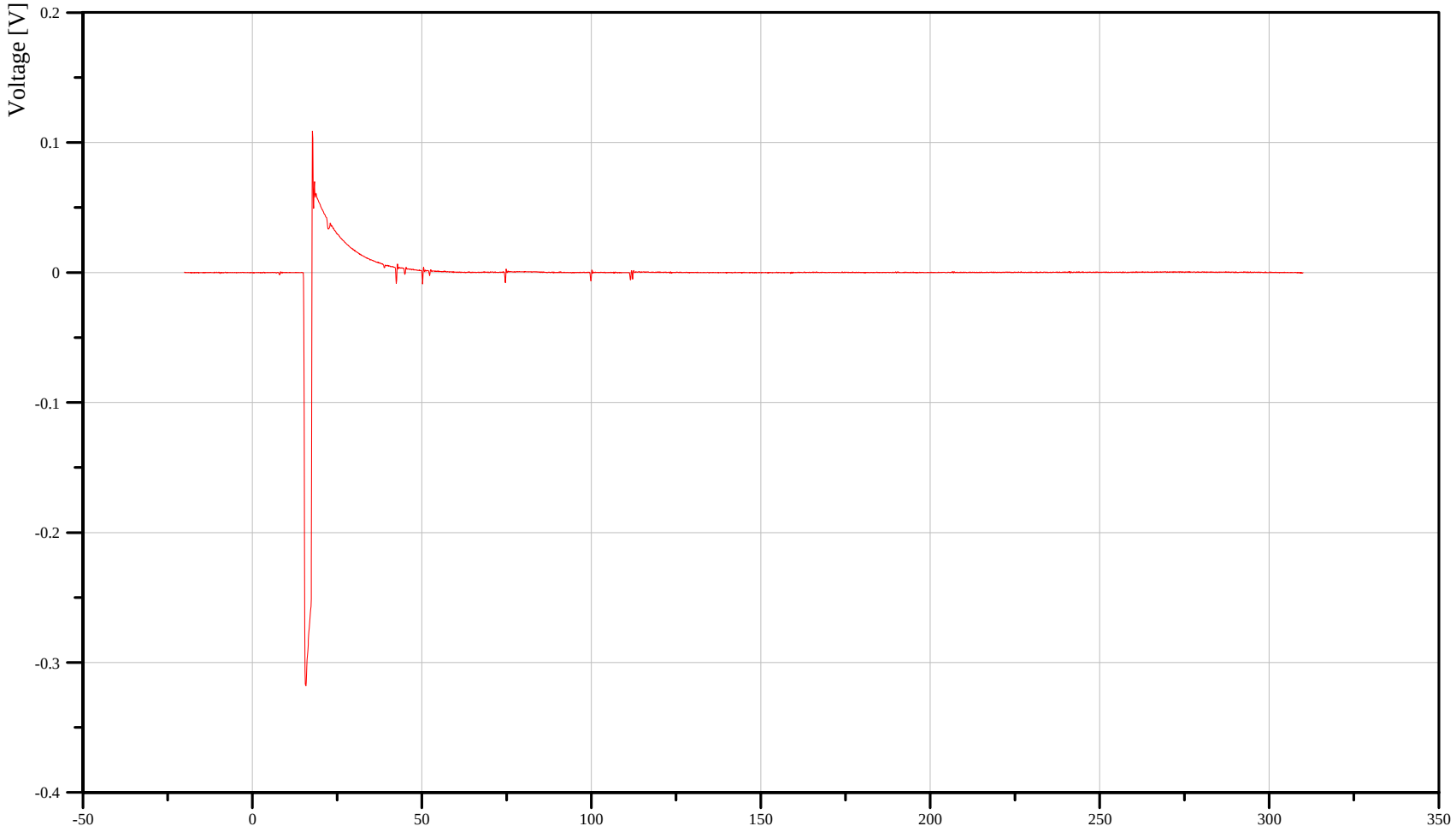
Driver Side Curtain Airbag

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11AIRBTPLE00CU0A

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: CFC_1000

Min. Value
-0.32 V at 15.84 ms

Max. Value
0.11 V at 17.76 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

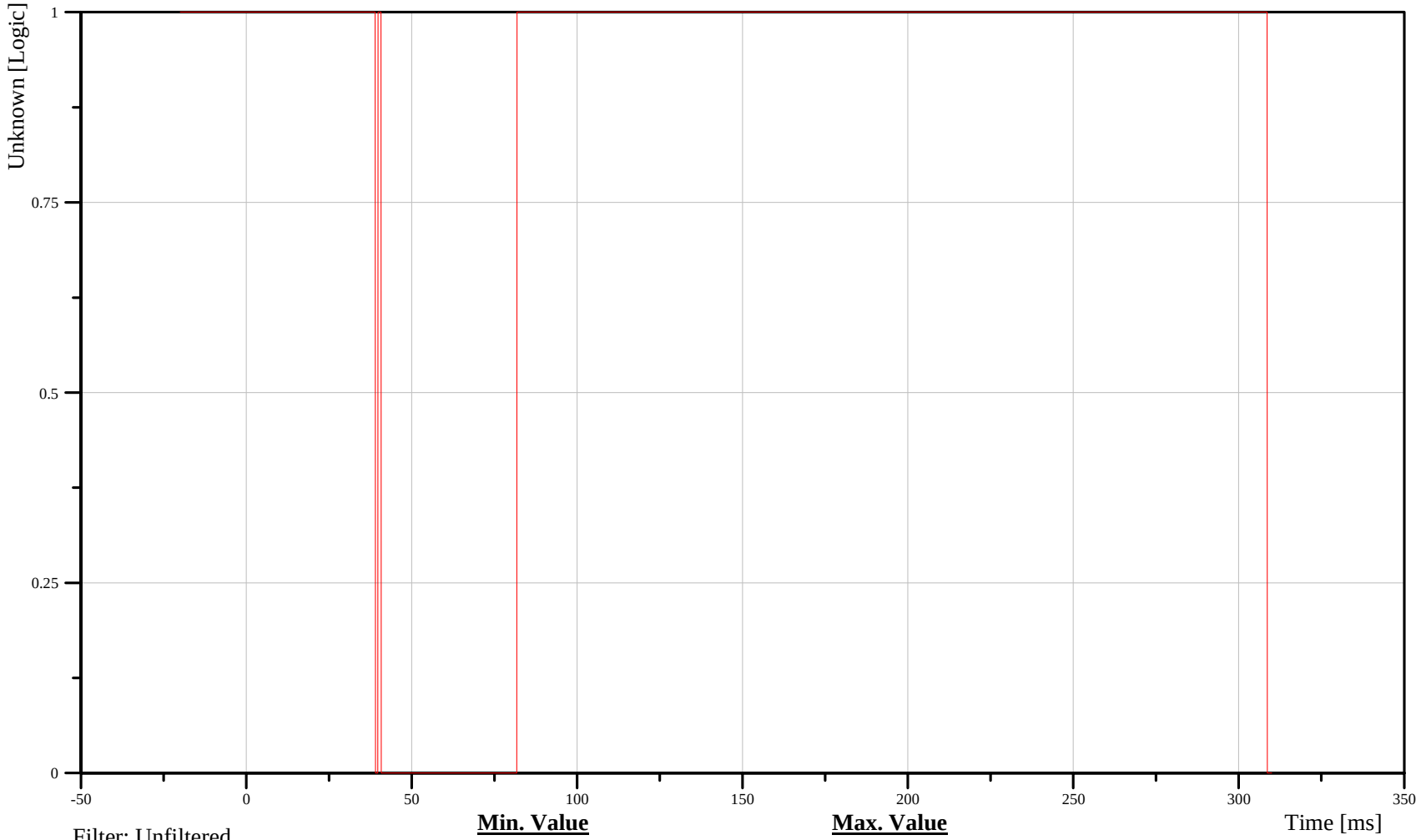
Head Contact Switch

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11CONT000001VO00

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: Unfiltered

Min. Value
0.00 Logic at 39.04 ms

Max. Value
1.00 Logic at -20.00 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

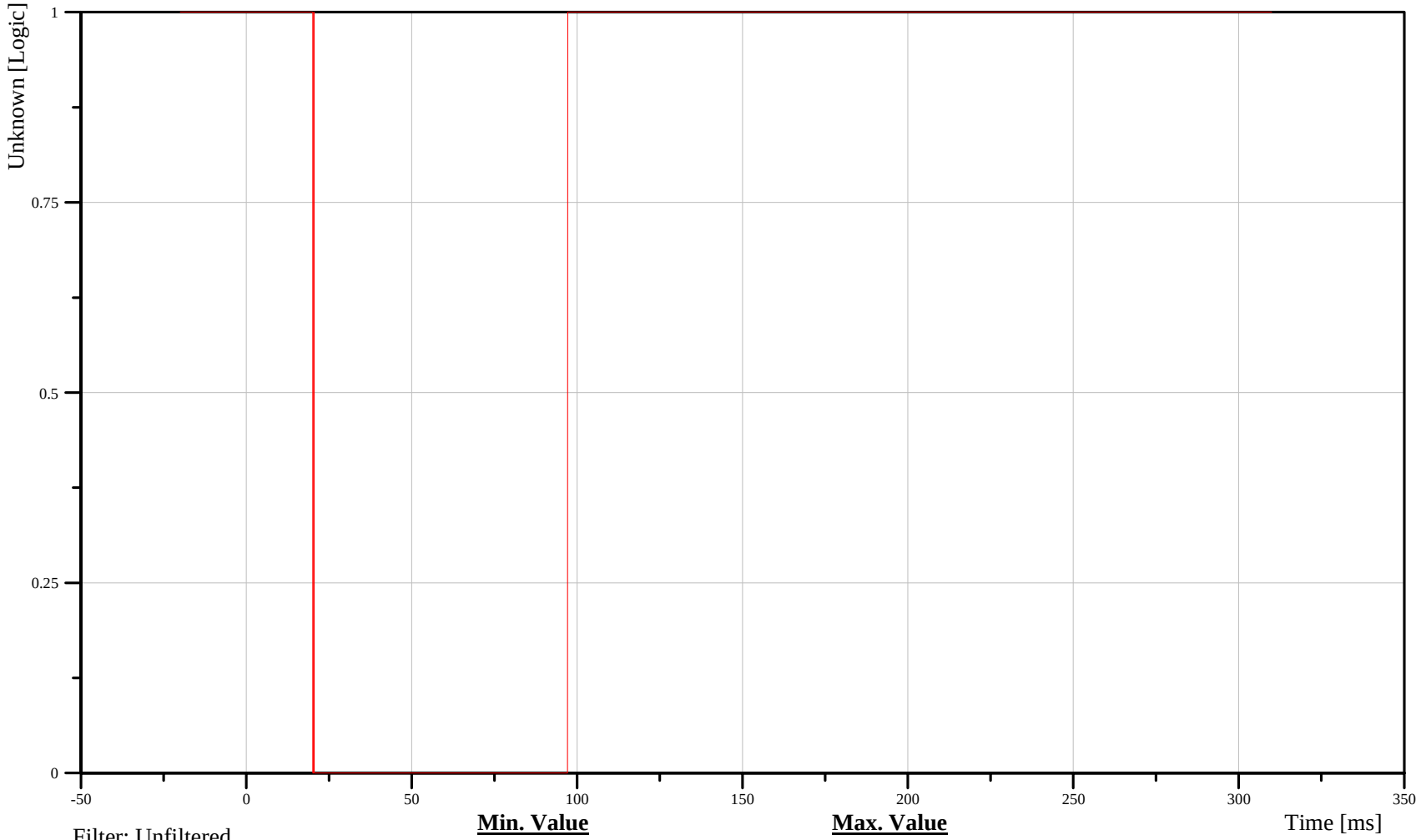
Shoulder Contact Switch

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11CONT000002VO00

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: Unfiltered

Min. Value
0.00 Logic at 20.16 ms

Max. Value
1.00 Logic at -20.00 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

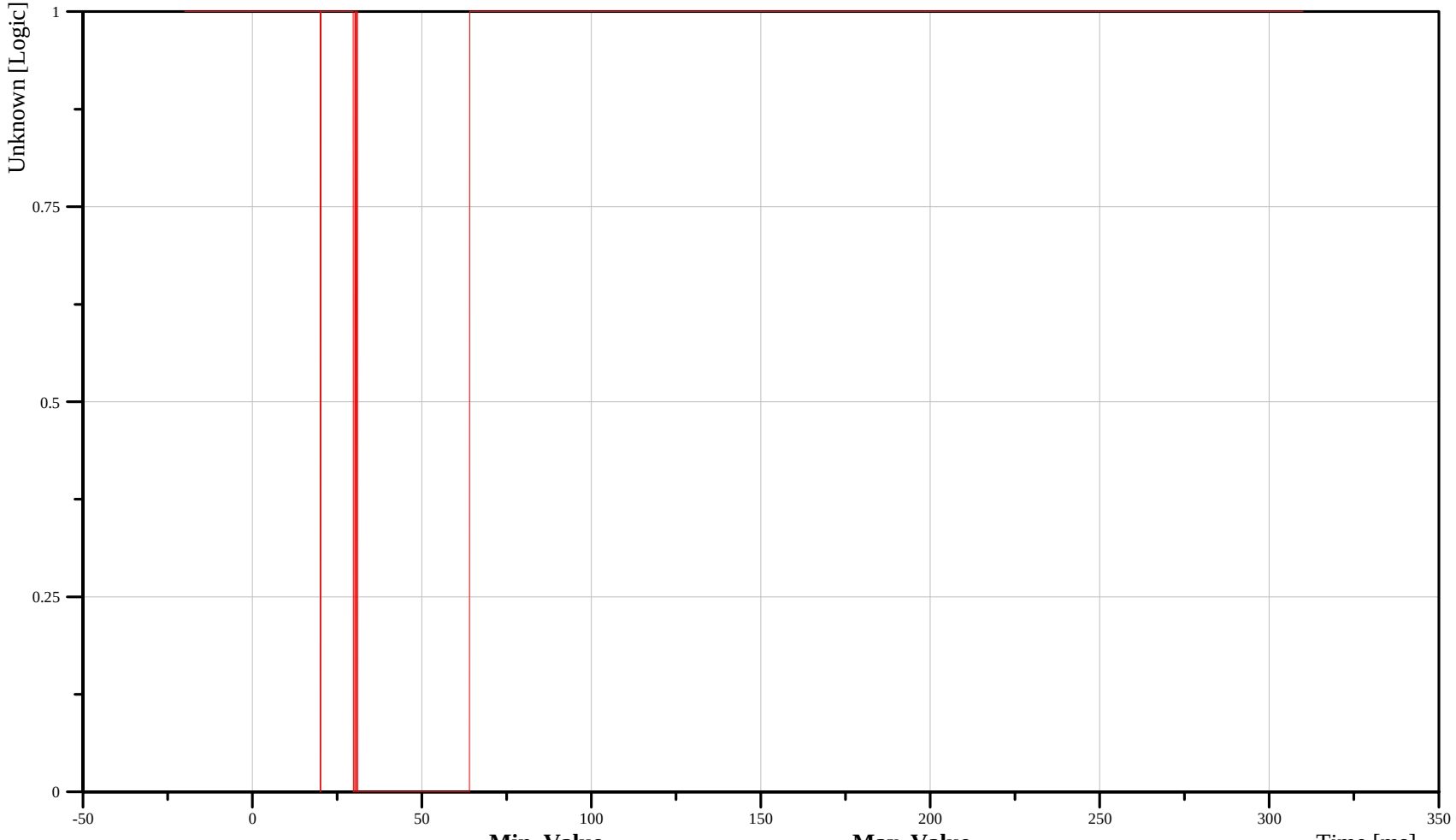
Torso Contact Switch

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11CONT000003VO00

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: Unfiltered

Min. Value
0.00 Logic at 20.16 ms

Max. Value
1.00 Logic at -20.00 ms

2007 Ford Escape Left Side FMVSS 214 Pole Impact at 32 kph

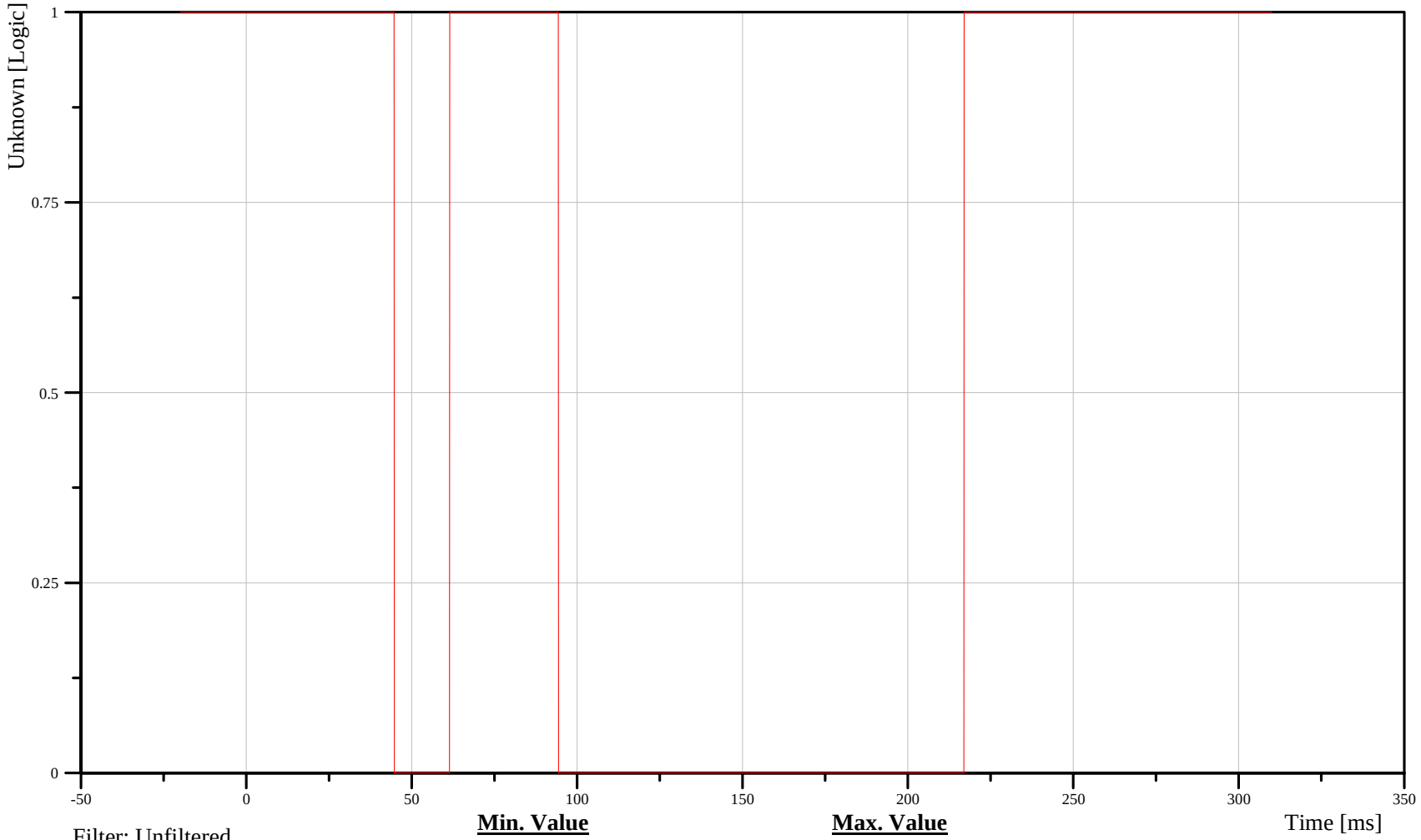
Leg Contact Switch

Date: 05/21/2007
Time: 13:38

Customer: VRTC

11CONT000004VO00

TRC Inc. Test Lab: CTF
Test Number: 070521



Filter: Unfiltered

Min. Value
0.00 Logic at 44.72 ms

Max. Value
1.00 Logic at -20.00 ms

Appendix C

SID-IIs Configuration and Performance Verification Data

Calibration Test Results

Pre-Test

SID-IIs: 056

Configured for Left Side Impact

Transportation Research Center Inc.

Left Lateral Head Drop
SID IIs SBLD Serial No. 056 Certification No. 4-1
Test Date: 5/18/2007

Test Parameter	Specification	Test Results	Pass
Temperature	18.9 - 25.6 °C	20.9 °C	Yes
Relative Humidity	10 - 70 %	40 %	Yes
Peak Head Resultant Acceleration	115 - 137 g	121.9 g	Yes
Peak Head Longitudinal Acceleration	(-15) - 15 g	7.3 g	Yes
Is Head Resultant Acceleration Curve Unimodal within 15% of Peak?	Yes	Yes	Yes

Test meets specifications.

Comments:

Technician

Approved

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

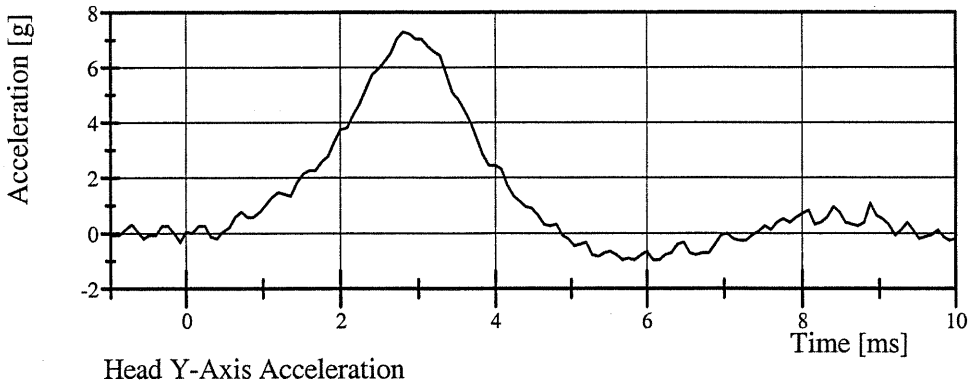
05.18.2007 08:09:31 231

070521

Transportation Research Center Inc.

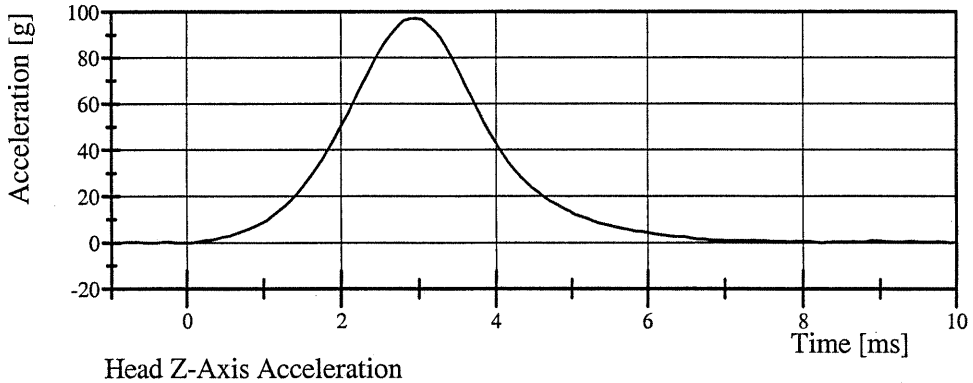
Left Lateral Head Drop
SID IIs SBLD Serial No. 056 Certification No. 4-1
Test Date: 5/18/2007

Head X-Axis Acceleration



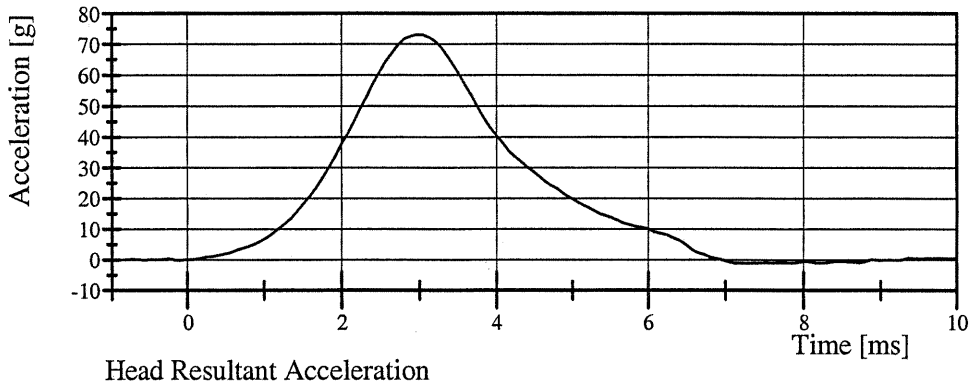
Filter Class: CFC_1000
Max: 7.3 g at 2.8 ms
Min: -1.0 g at 5.7 ms

Head Y-Axis Acceleration



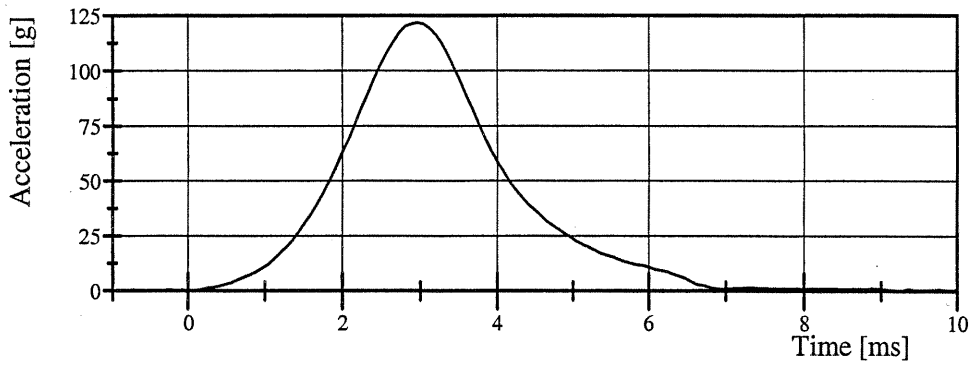
Filter Class: CFC_1000
Max: 97.2 g at 3.0 ms
Min: -0.1 g at -1.0 ms

Head Z-Axis Acceleration



Filter Class: CFC_1000
Max: 73.2 g at 3.0 ms
Min: -1.2 g at 7.3 ms

Head Resultant Acceleration



Filter Class: CFC_1000
Max: 121.9 g at 3.0 ms
Min: 0.1 g at 0.1 ms

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

05.18.2007 08:09:40 231

070521

Transportation Research Center Inc.

Left Lateral Neck
SID IIs SBLD Serial No. 056 Certification No. 4-5
Test Date: 5/18/2007

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	20.9 °C	Yes
Relative Humidity	10 - 70 %	38 %	Yes
Pendulum Velocity	(-5.51) - (-5.63) m/s	-5.591 m/s	Yes
Pendulum Integrated Velocity Change at 10 ms	2.20 - 2.80 m/s	2.651 m/s	Yes
Change at 15 ms	3.30 - 4.10 m/s	3.769 m/s	Yes
Change at 20 ms	4.40 - 5.40 m/s	5.040 m/s	Yes
Change at 25 ms	5.40 - 6.10 m/s	5.880 m/s	Yes
Change at 25 to 100 ms	5.50 - 6.20 m/s	5.891 m/s	Yes
Maximum Headform Flexion occurring between 50ms and 70ms. Peak	(-71) - (-81) deg	-74.1 deg	Yes
Time of Peak	50 - 70 ms	58.7 ms	Yes
Total Neck Occipital Condyles Moment	36 - 44 N·m	41.6 N·m	Yes
Total Neck Occipital Condyles Moment Decay Time to 0 N·m	102 - 126 ms	115.7 ms	Yes

Test meets specifications.

Comments:

Technician

Approved

Specification Source: Procedures based on Final Rule dated 12/14/06.
Polarity in accordance with SAE J211.

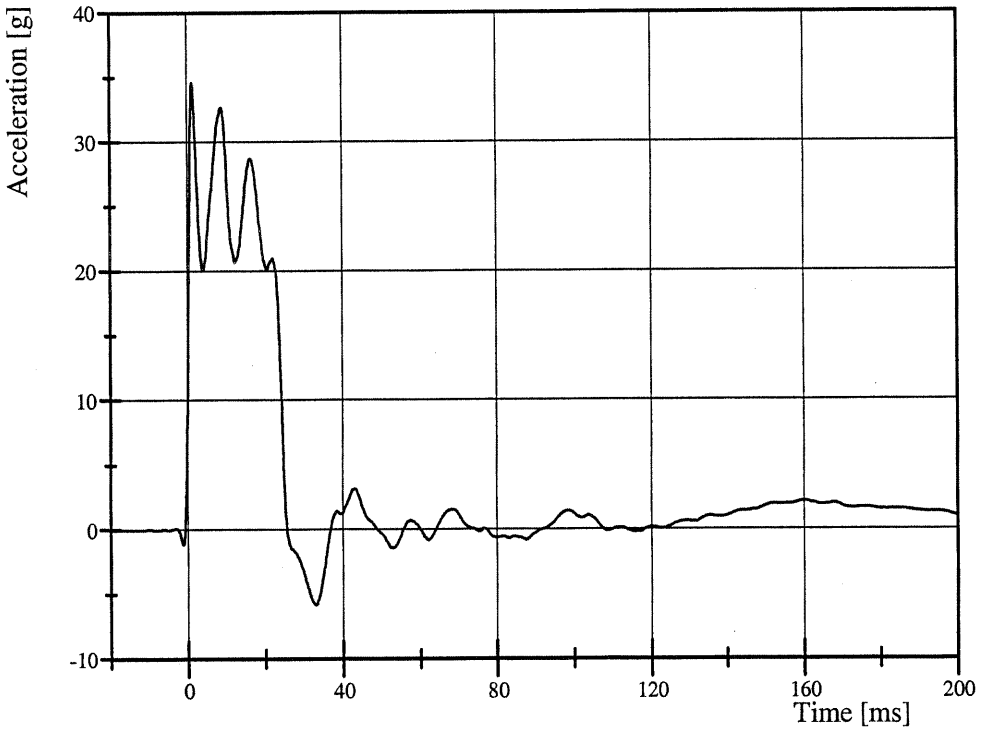
05.18.2007 13:42:28 676

070521

Transportation Research Center Inc.

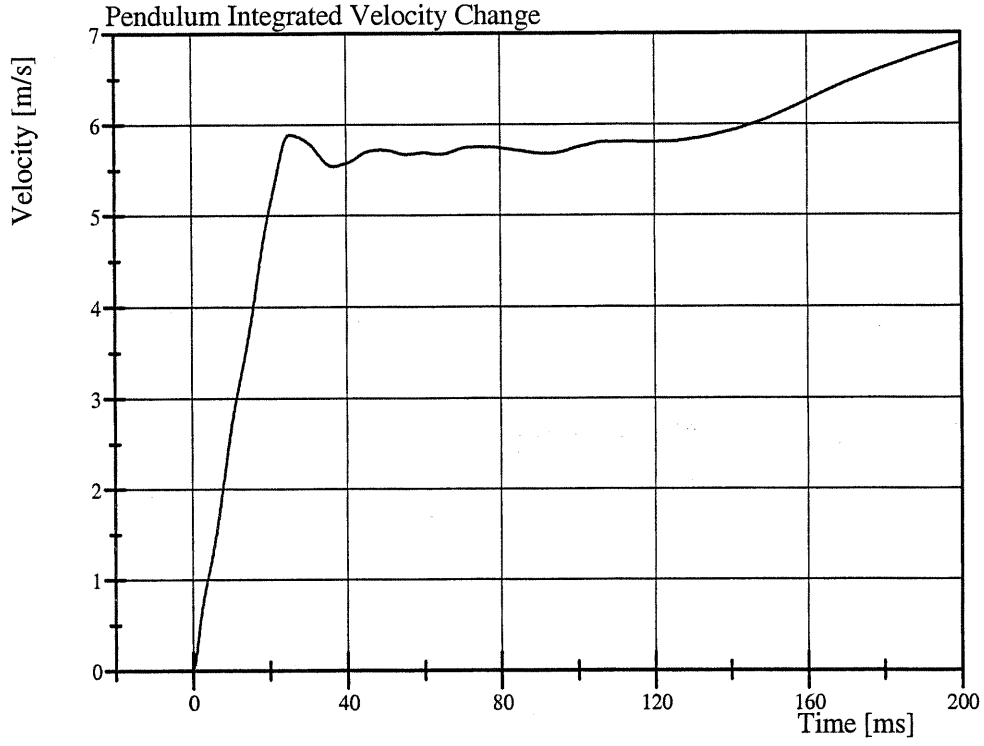
Left Lateral Neck
SID IIs SBLD Serial No. 056 Certification No. 4-5
Test Date: 5/18/2007

Pendulum Acceleration



Filter Class: CFC_180
Max: 34.6 g at 1.4 ms
Min: -5.8 g at 33.0 ms

Pendulum Integrated Velocity Change



Filter Class: CFC_180
Max: 6.9 m/s at 200.0 ms
Min: 0.0 m/s at 0.0 ms

Specification Source: Procedures based on Final Rule dated 12/14/06.
Polarity in accordance with SAE J211.

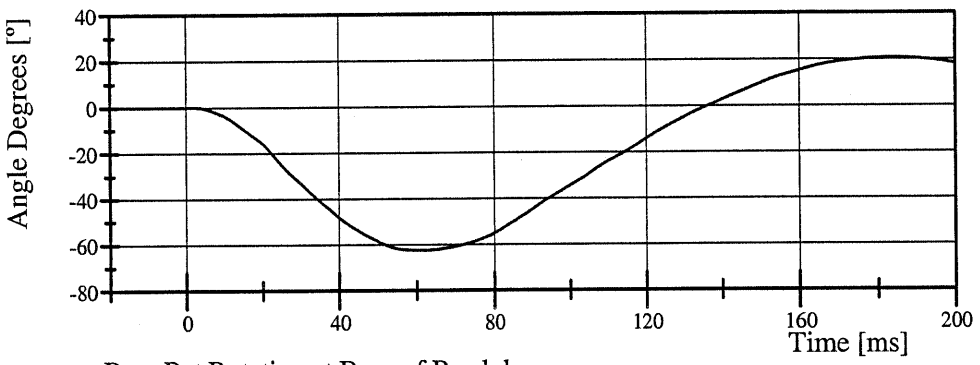
05.18.2007 13:42:35 676

070521

Transportation Research Center Inc.

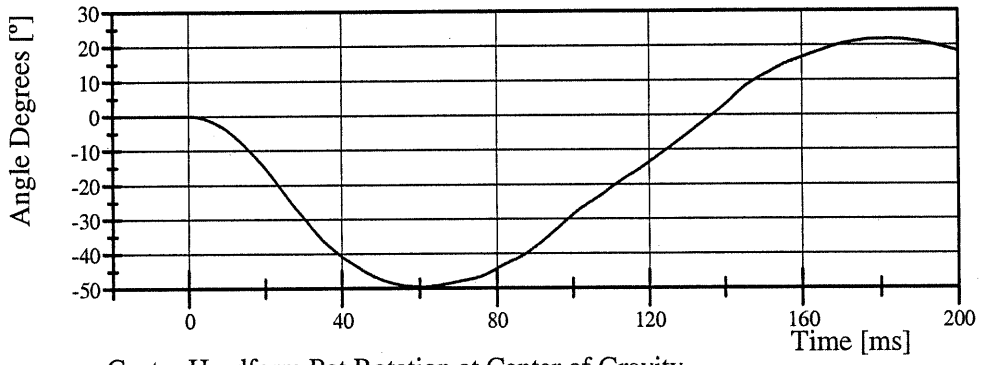
Left Lateral Neck
SID IIs SBLD Serial No. 056 Certification No. 4-5
Test Date: 5/18/2007

Forward Pot Rotation at Base of Pendulum



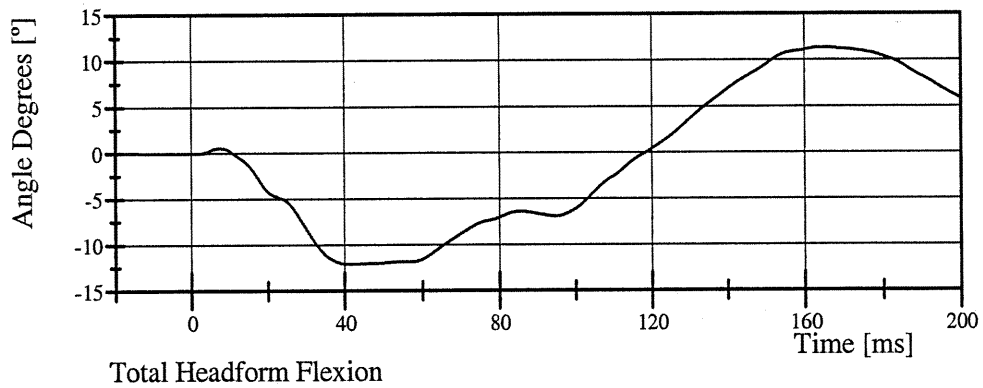
Filter Class: CFC_60
Max: 20.7 ° at 183.3 ms
Min: -62.5 ° at 61.3 ms

Rear Pot Rotation at Base of Pendulum



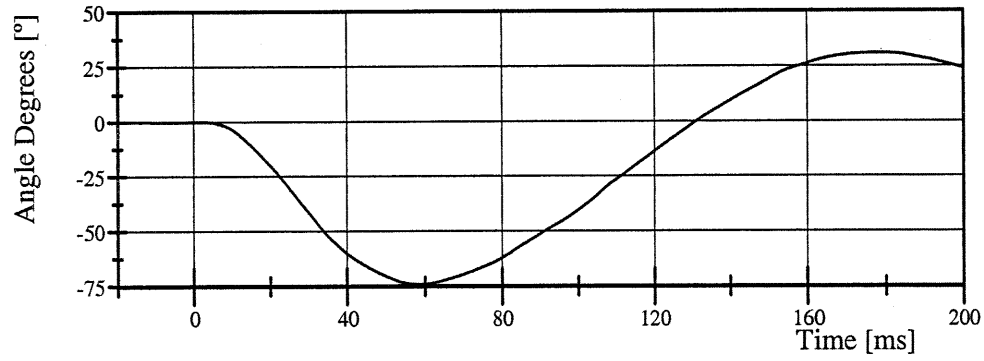
Filter Class: CFC_60
Max: 21.8 ° at 182.2 ms
Min: -49.6 ° at 60.6 ms

Center Headform Pot Rotation at Center of Gravity



Filter Class: CFC_60
Max: 11.3 ° at 164.4 ms
Min: -12.1 ° at 41.5 ms

Total Headform Flexion



Filter Class: CFC_60
Max: 31.0 ° at 178.3 ms
Min: -74.1 ° at 58.7 ms

Specification Source: Procedures based on Final Rule dated 12/14/06.
Polarity in accordance with SAE J211.

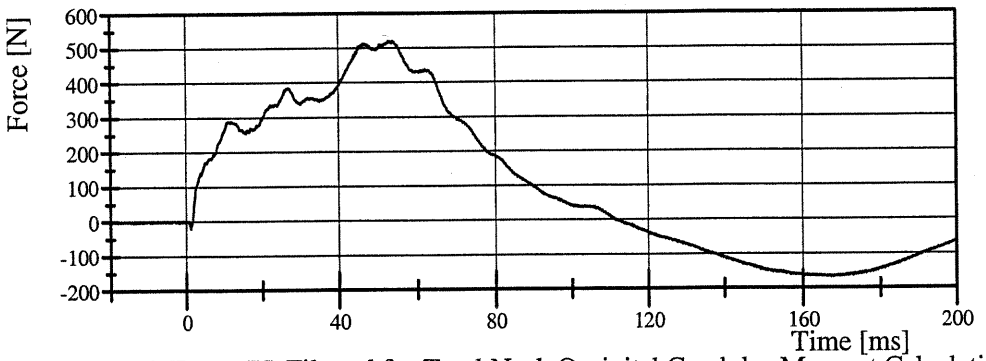
05.18.2007 13:42:36 676

070521

Transportation Research Center Inc.

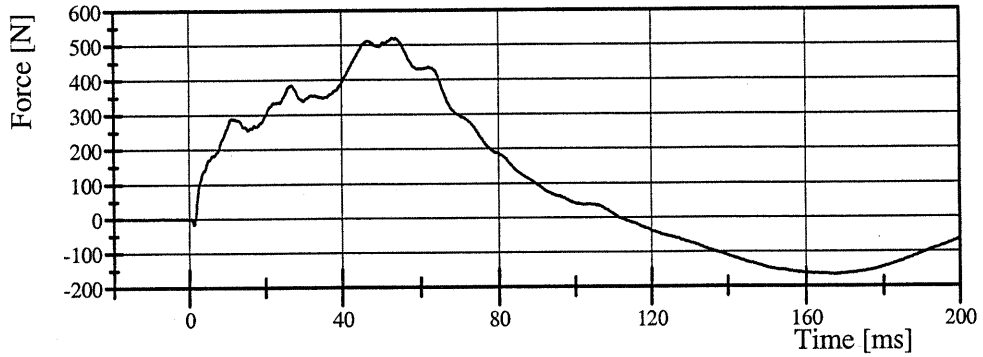
Left Lateral Neck
SID IIs SBLD Serial No. 056 Certification No. 4-5
Test Date: 5/18/2007

Neck Force (Y)



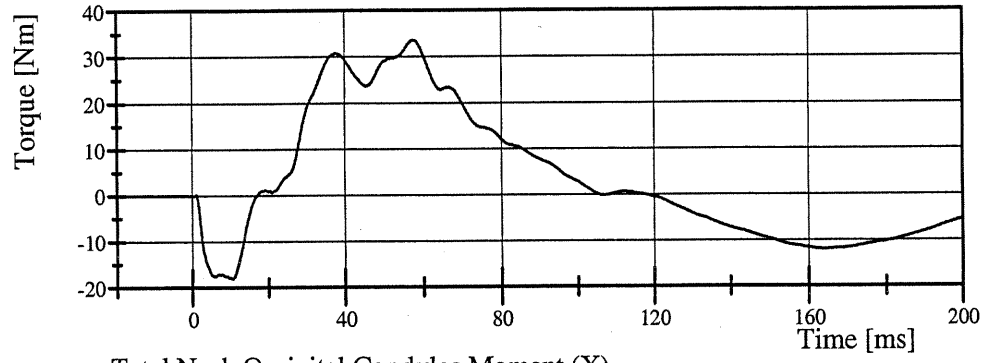
Filter Class: CFC_1000
Max: 520.9 N at 53.8 ms
Min: -167.9 N at 167.8 ms

Neck Force (Y) Filtered for Total Neck Occipital Condyles Moment Calculation



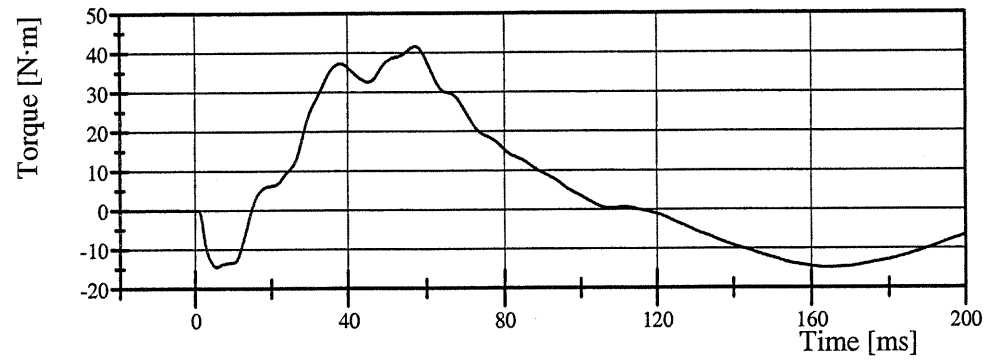
Filter Class: CFC_600
Max: 519.4 N at 53.8 ms
Min: -166.1 N at 167.3 ms

Neck Moment (X)



Filter Class: CFC_600
Max: 33.6 Nm at 57.3 ms
Min: -18.0 Nm at 10.6 ms

Total Neck Occipital Condyles Moment (X)



Filter Class: CFC_600
Max: 41.6 N·m at 57.2 ms
Min: -14.9 N·m at 165.0 ms

Specification Source: Procedures based on Final Rule dated 12/14/06.
Polarity in accordance with SAE J211.

05.18.2007 13:42:37 676

070521

Transportation Research Center Inc.

Left Lateral Thorax with Arm
SID IIs SBLD Serial No. 056 Certification No. 4-1
Test Date: 5/18/2007

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.3 °C	Yes
Relative Humidity	10 - 70 %	35 %	Yes
Impactor Velocity	6.60 - 6.80 m/s	6.642 m/s	Yes
Impactor Acceleration	(-31) - (-36) g	-33.1 g	Yes
Shoulder Displacement	31 - 40 mm	38.3 mm	Yes
Upper Thorax Rib Displacement	26 - 32 mm	30.1 mm	Yes
Center Thorax Rib Displacement	30 - 36 mm	34.3 mm	Yes
Lower Thorax Rib Displacement	32 - 38 mm	35.7 mm	Yes
Upper Spine Lateral Acceleration	34 - 43 g	35.1 g	Yes
Lower Spine Lateral Acceleration	28 - 35 g	34.2 g	Yes

Test meets specifications.

Comments:

Technician

Approved

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

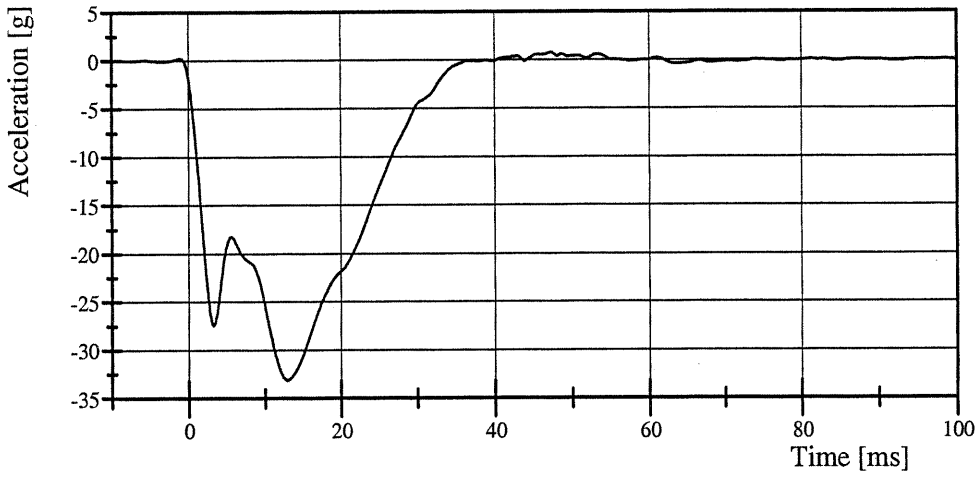
05.18.2007 11:21:58 628

070521

Transportation Research Center Inc.

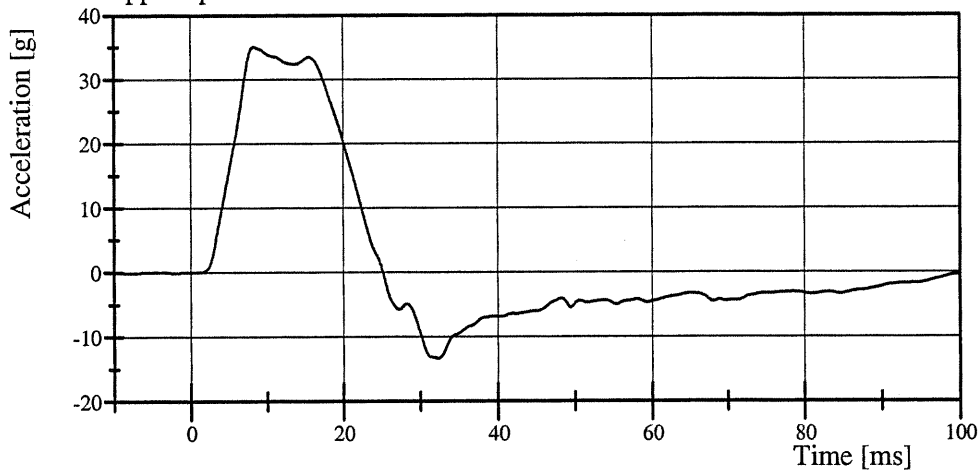
Left Lateral Thorax with Arm
SID IIs SBLD Serial No. 056 Certification No. 4-1
Test Date: 5/18/2007

Probe Acceleration



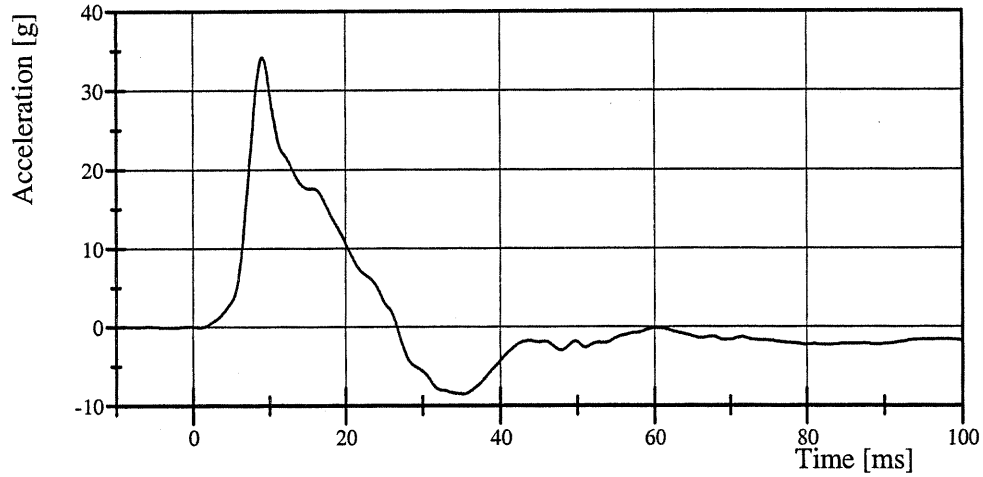
Filter Class: CFC_180
Max: 0.8 g at 47.3 ms
Min: -33.1 g at 12.9 ms

Upper Spine Acceleration



Filter Class: CFC_180
Max: 35.1 g at 8.2 ms
Min: -13.3 g at 32.3 ms

Lower Spine Acceleration



Filter Class: CFC_180
Max: 34.2 g at 9.0 ms
Min: -8.5 g at 35.3 ms

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

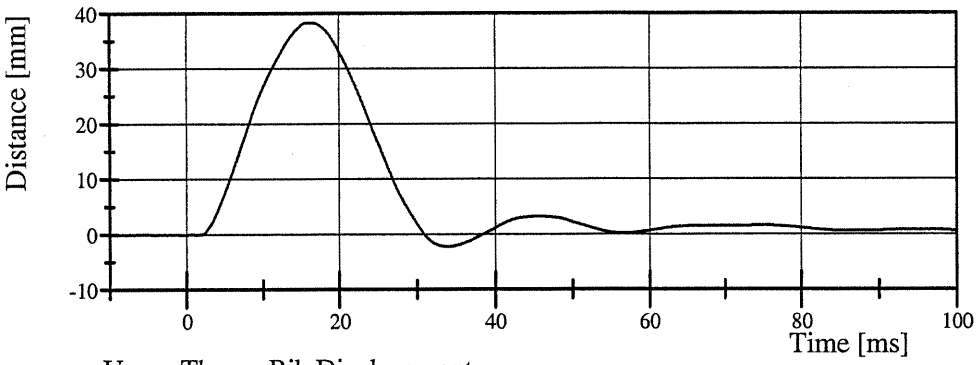
05.18.2007 11:22:08 628

070521

Transportation Research Center Inc.

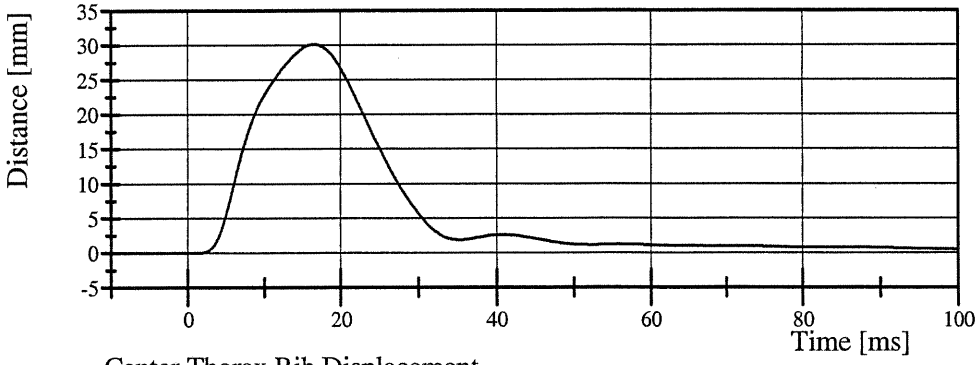
Left Lateral Thorax with Arm
SID IIs SBLD Serial No. 056 Certification No. 4-1
Test Date: 5/18/2007

Shoulder Rib Displacement



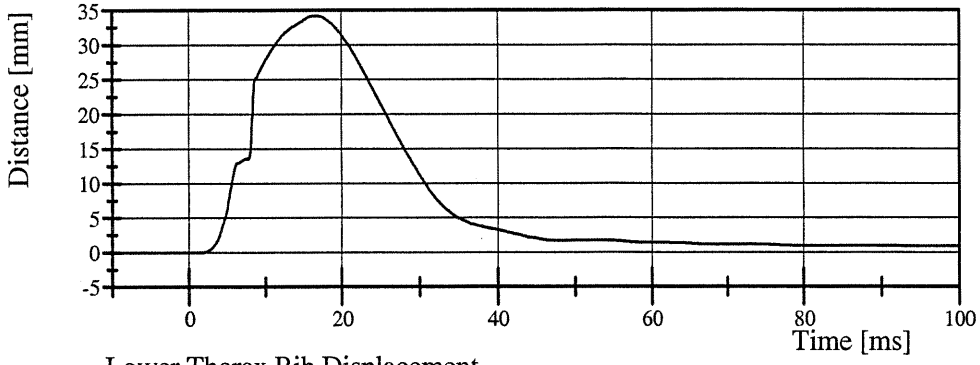
Filter Class: CFC_600
Max: 38.3 mm at 16.3 ms
Min: -2.2 mm at 33.9 ms

Upper Thorax Rib Displacement



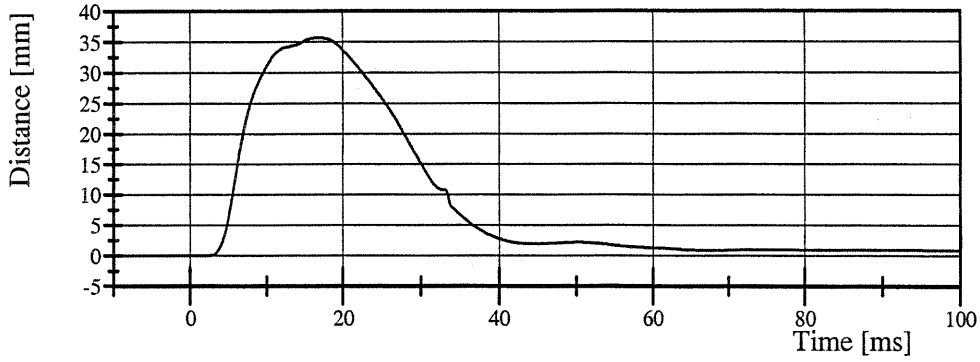
Filter Class: CFC_600
Max: 30.1 mm at 16.6 ms
Min: -0.0 mm at -6.8 ms

Center Thorax Rib Displacement



Filter Class: CFC_600
Max: 34.3 mm at 16.6 ms
Min: -0.0 mm at -6.7 ms

Lower Thorax Rib Displacement



Filter Class: CFC_600
Max: 35.7 mm at 16.7 ms
Min: -0.0 mm at -6.8 ms

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

05.18.2007 11:22:09 628

070521

Transportation Research Center Inc.

Left Lateral Thorax without Arm
SID IIs SBLD Serial No. 056 Certification No. 4-1
Test Date: 5/18/2007

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.4 °C	Yes
Relative Humidity	10 - 70 %	34 %	Yes
Impactor Velocity	4.20 - 4.40 m/s	4.226 m/s	Yes
Impactor Acceleration	(-14) - (-18) g	-15.7 g	Yes
Upper Thorax Rib Displacement	33 - 40 mm	35.3 mm	Yes
Center Thorax Rib Displacement	39 - 45 mm	40.8 mm	Yes
Lower Thorax Rib Displacement	36 - 43 mm	37.3 mm	Yes
Upper Spine Lateral Acceleration	14 - 17 g	15.1 g	Yes
Lower Spine Lateral Acceleration	7 - 10 g	8.9 g	Yes

Test meets specifications.

Comments:

Technician

Approved

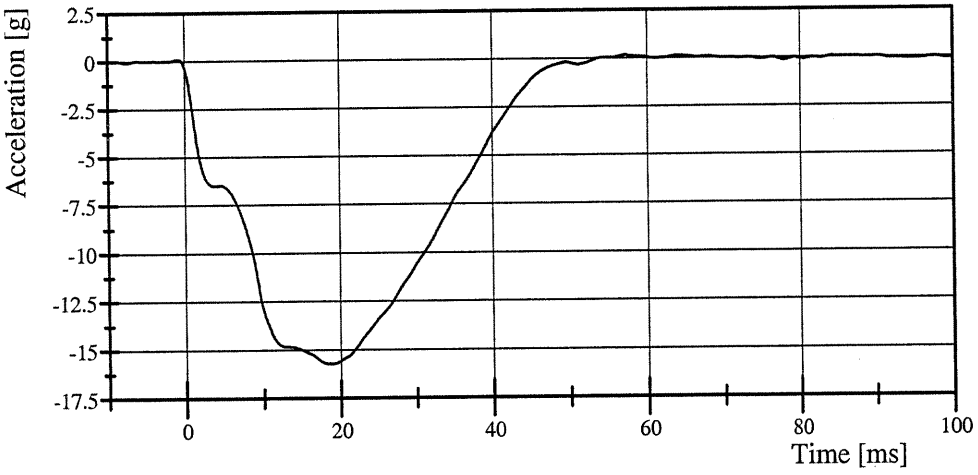
Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

05.18.2007 12:30:28 866

Transportation Research Center Inc.

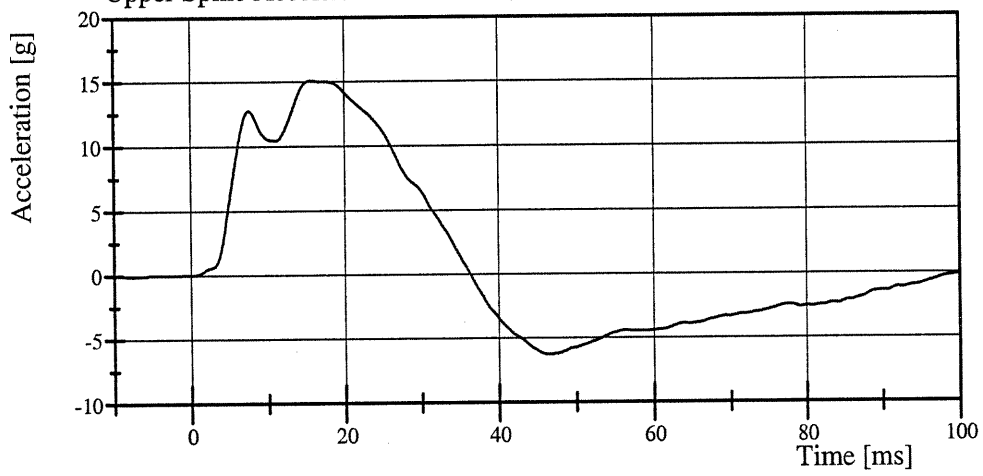
Left Lateral Thorax without Arm
SID IIs SBLD Serial No. 056 Certification No. 4-1
Test Date: 5/18/2007

Probe Acceleration



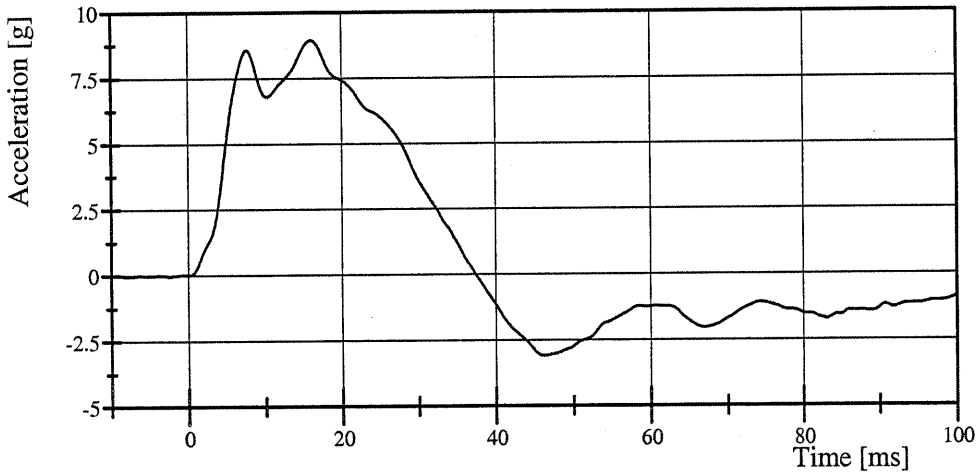
Filter Class: CFC_180
Max: 0.2 g at 57.1 ms
Min: -15.7 g at 18.7 ms

Upper Spine Acceleration



Filter Class: CFC_180
Max: 15.1 g at 15.8 ms
Min: -6.2 g at 46.3 ms

Lower Spine Acceleration



Filter Class: CFC_180
Max: 8.9 g at 16.1 ms
Min: -3.1 g at 46.2 ms

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

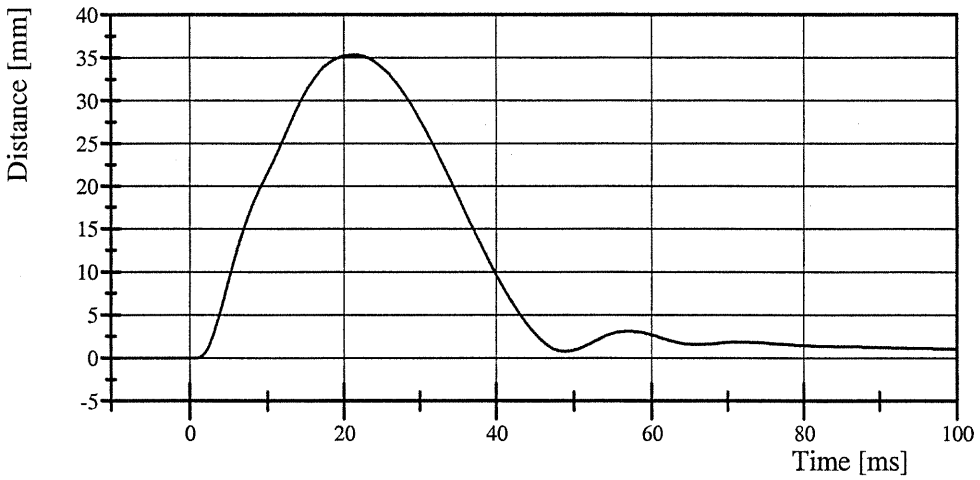
05.18.2007 12:30:41 866

070521

Transportation Research Center Inc.

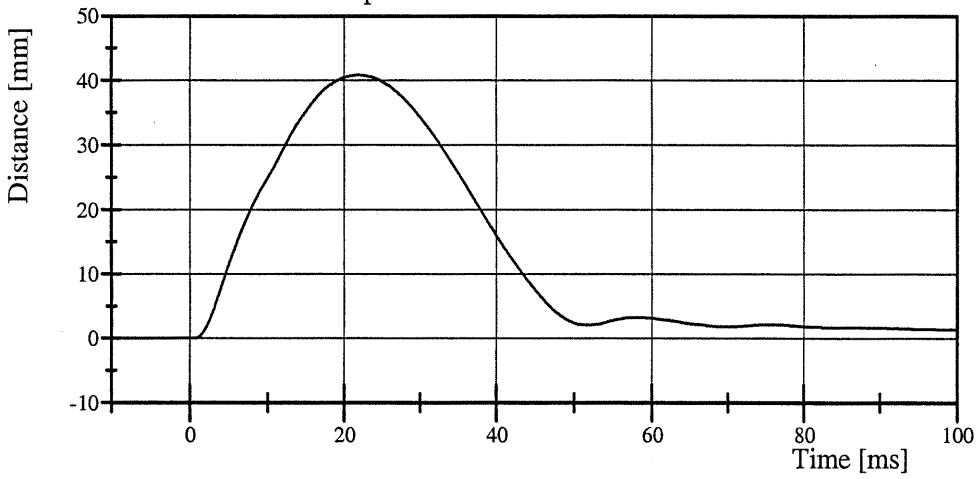
Left Lateral Thorax without Arm
SID IIs SBLD Serial No. 056 Certification No. 4-1
Test Date: 5/18/2007

Upper Thorax Rib Displacement



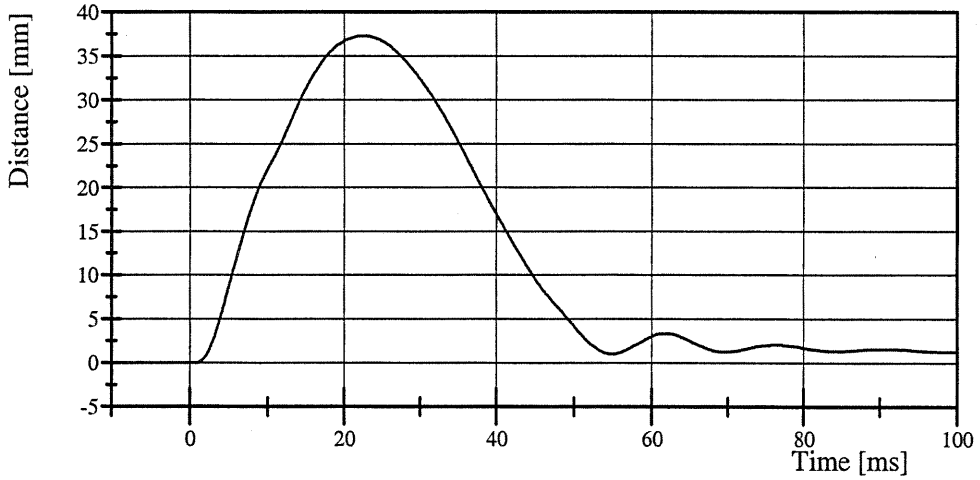
Filter Class: CFC_600
Max: 35.3 mm at 21.5 ms
Min: -0.0 mm at -2.6 ms

Center Thorax Rib Displacement



Filter Class: CFC_600
Max: 40.8 mm at 21.8 ms
Min: -0.0 mm at -4.6 ms

Lower Thorax Rib Displacement



Filter Class: CFC_600
Max: 37.3 mm at 22.6 ms
Min: -0.0 mm at -2.6 ms

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

05.18.2007 12:30:41 866

070521

Transportation Research Center Inc.

Left Lateral Abdomen
SID IIs SBLD Serial No. 056 Certification No. 4-2
Test Date: 5/18/2007

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.4 °C	Yes
Relative Humidity	10 - 70 %	33 %	Yes
Impactor Velocity	4.30 - 4.50 m/s	4.460 m/s	Yes
Impactor Acceleration	(-12) - (-16) g	-14.5 g	Yes
Upper Abdominal Rib Displacement	39 - 47 mm	44.7 mm	Yes
Lower Abdominal Rib Displacement	37 - 46 mm	40.5 mm	Yes
Lower Spine Lateral Acceleration	11.0 - 14.0 g	11.15 g	Yes

Test meets specifications.

Comments:

Technician

Approved

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

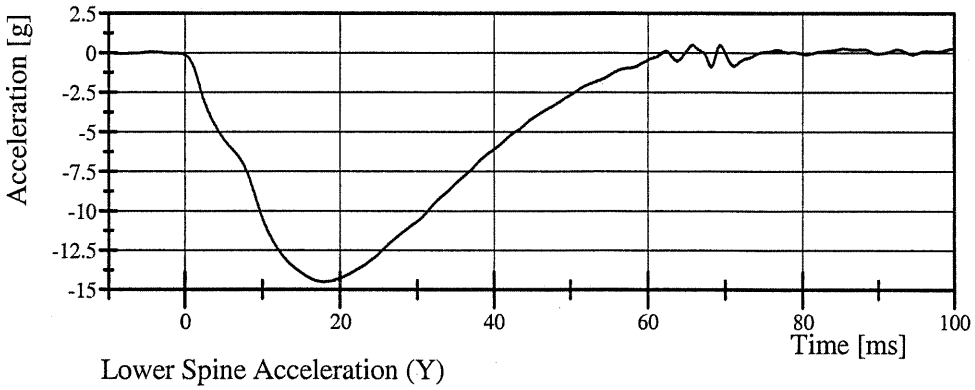
05.18.2007 13:27:16 663

070521

Transportation Research Center Inc.

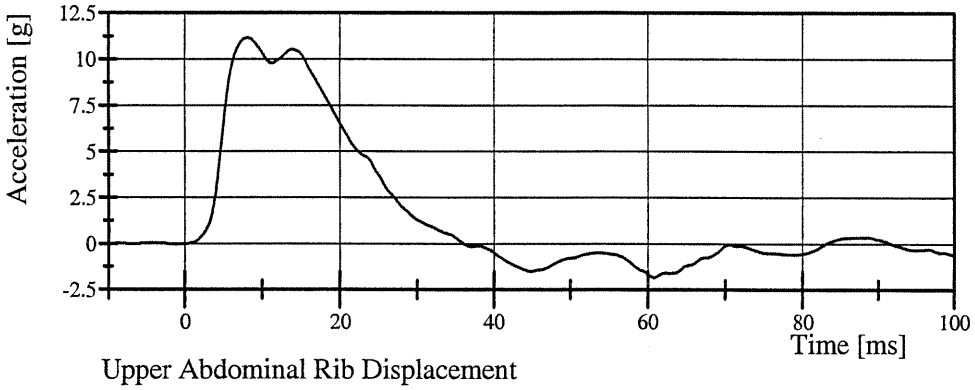
Left Lateral Abdomen
SID IIs SBLD Serial No. 056 Certification No. 4-2
Test Date: 5/18/2007

Probe Acceleration



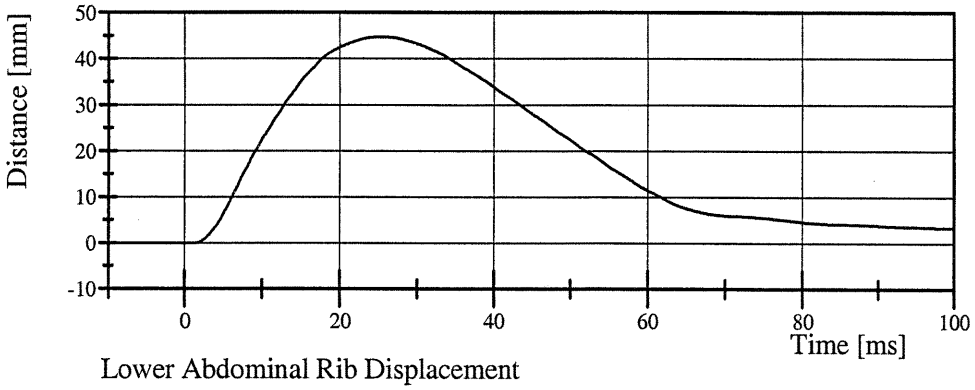
Filter Class: CFC_180
Max: 0.5 g at 65.8 ms
Min: -14.5 g at 17.9 ms

Lower Spine Acceleration (Y)



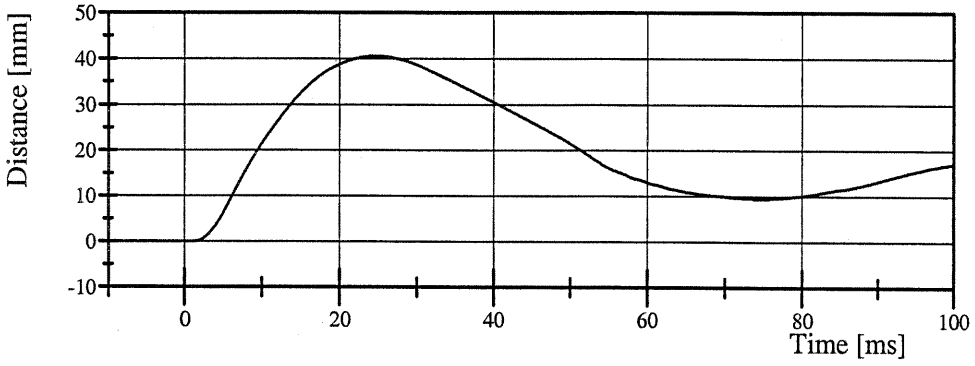
Filter Class: CFC_180
Max: 11.2 g at 8.1 ms
Min: -1.8 g at 60.8 ms

Upper Abdominal Rib Displacement



Filter Class: CFC_600
Max: 44.7 mm at 25.2 ms
Min: -0.0 mm at -0.7 ms

Lower Abdominal Rib Displacement



Filter Class: CFC_600
Max: 40.5 mm at 24.5 ms
Min: -0.0 mm at 0.4 ms

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

05.18.2007 13:27:23 663

070521

Transportation Research Center Inc.

Left Lateral Pelvis
SID IIs SBLD Serial No. 056 Certification No. 4-1
Test Date: 5/18/2007

Test Parameter	Specification	Test Results	Pass
Temperature	20.6 - 22.2 °C	21.0 °C	Yes
Relative Humidity	10 - 70 %	33 %	Yes
Impactor Velocity	6.60 - 6.80 m/s	6.680 m/s	Yes
Impactor Acceleration	(-38.0) - (-47.0) g	-44.21 g	Yes
Peak Pelvis Lateral Acceleration	41.0 - 50.0 g	44.00 g	Yes
Acetabulum Force	3,800 - 4,600 N	4,091.7 N	Yes

Test meets specifications.

Comments:

Technician

Approved

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

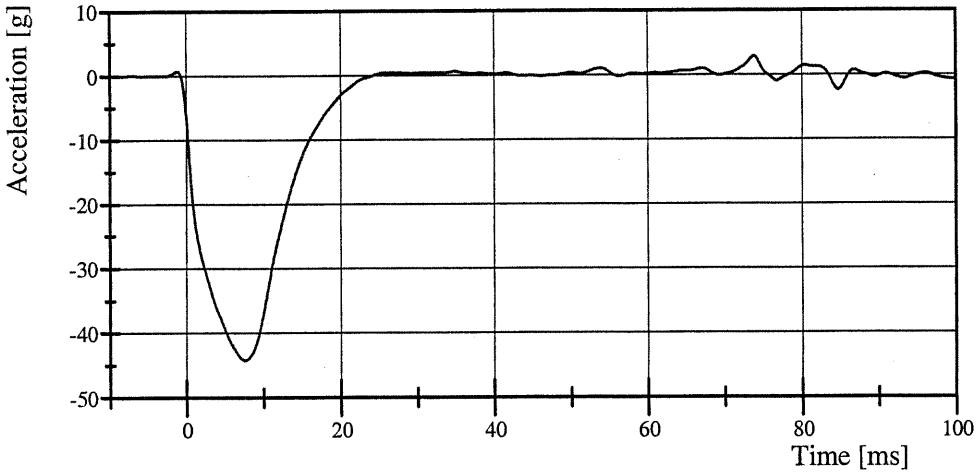
05.18.2007 13:59:38 457

070521

Transportation Research Center Inc.

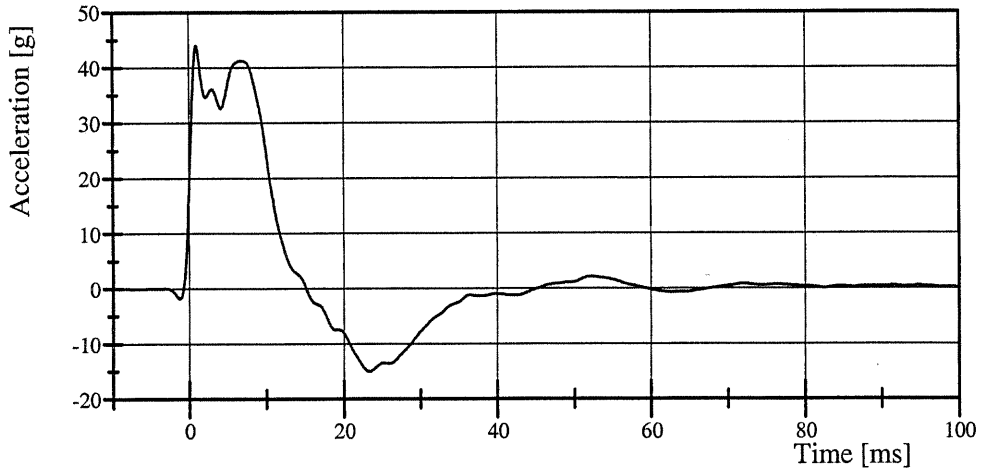
Left Lateral Pelvis
SID IIs SBLD Serial No. 056 Certification No. 4-1
Test Date: 5/18/2007

Probe Acceleration



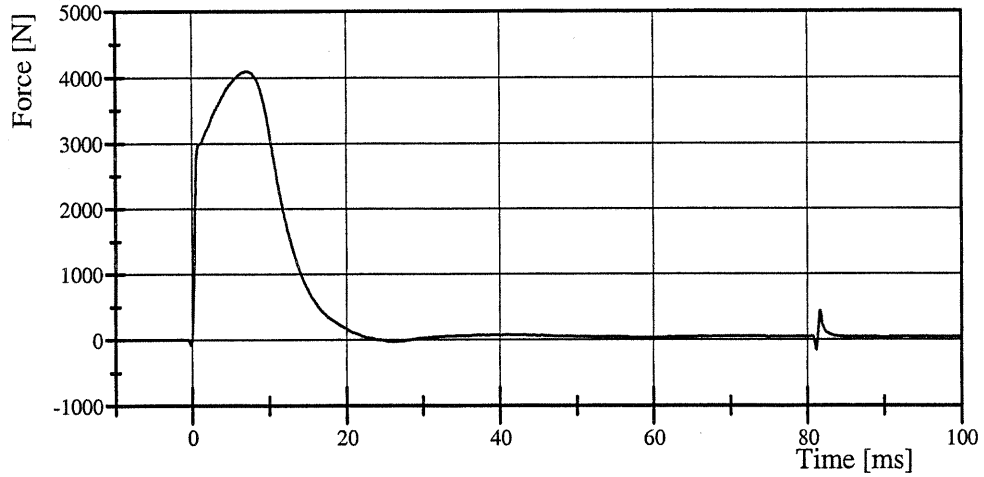
Filter Class: CFC_180
Max: 2.8 g at 73.8 ms
Min: -44.2 g at 7.5 ms

Pelvis Y-Axis Acceleration



Filter Class: CFC_180
Max: 44.0 g at 1.0 ms
Min: -15.0 g at 23.4 ms

Acetabulum Y-Axis Force



Filter Class: CFC_600
Max: 4,091.7 N at 7.1 ms
Min: -145.6 N at 81.2 ms

Specification Source: Procedures based on Final Rule dated 12/14/2006.
Polarity in accordance with SAE J211.

05.18.2007 13:59:47 457

070521

Appendix D

Test Equipment List and Calibration Information

Sign Convention
SAE J211 MAR95

Accelerometers:	+X: Forward	
	+Y: Rightward	
	+Z: Downward	
Potentiometers:	+Chest longitudinal deflection:	Outward
	+Chest lateral deflection:	Rightward
	+Seat belt displacement:	Outward
	+Seat belt extension:	Elongation
	+Knee slider displacement:	Distance between femur and tibia increased (in relation to a seated dummy)
Rotation potentiometers:		
	+About the X-axis:	Left foot-eversion
		Right foot-inversion
	+About the Y-axis:	Left/right foot-dorsiflexion
	+About the Z-axis:	Left foot-internal
		Right foot-external
Load cells:	+Femur force:	Tension
	+Seat belt force:	Tension
	+Barrier force:	Tension
Neck load cells:	+X force:	Head pushed rearward
	+Y force:	Head pushed leftward
	+Z force:	Head pulled upward (tension on neck)
	+X moment:	Left ear rotating toward left shoulder
	+Y moment:	Chin rotating toward chest
	+Z moment:	Chin rotating toward left shoulder
Tibia load cells:	+X force:	Ankle forward, knee rearward
	+Y force:	Ankle rightward, knee leftward
	+Z force:	Tension
	+X moment:	Bottom of tibia moving leftward
	+Y moment:	Bottom of tibia moving rearward

Sign Convention (Continued)
SAE J211 MAR95

Lumbar load cells:	+X force:	Chest rearward, pelvis forward
	+Y force:	Chest leftward, pelvis rightward
	+Z force:	Chest upward, pelvis downward
	+X moment:	Left shoulder toward left hip
	+Y moment:	Sternum toward front of legs
	+Z moment:	Right shoulder forward, left shoulder rearward

Frequency Response Classes
SAE J211 MAR95

Typical Test Measurements	Channel Class
Vehicle Structural Accelerations for use in:	
Total vehicle comparison	60
Collision simulation input	60
Component analysis	600
Integration for velocity or displacement	180
Barrier Face Forces	60
Belt Restraint System Loads	60
Anthropomorphic Test Device	
Head accelerations (linear and angular)	1000
Neck	
Forces	1000
Moments	600
Thorax	
Spine accelerations	180
Rib accelerations	1000
Sternum accelerations	1000
Deflections	600
Lumbar	
Forces	1000
Moments	1000
Pelvis	
Accelerations	1000
Forces	1000
Moments	1000
Femur/Knee/Tibia/Ankle	
Forces	600
Moments	600
Displacements	180
Sled Accelerations	60
Steering Column Loads	600
Head Form Accelerations	1000

The direction column on the following sheets describes the transducer output as mounted and wired in the test location. The polarity column indicates whether a polarity change occurred during data acquisition to conform to J211 MAR95. See Report Sign Convention sheet for description of data output as presented in the report: occasionally channels have been adjusted in post-acquisition processing to conform to J211 MAR95.

Channel Report Test Number 070521

Ref	Transducer ID	ISO Signal Identifier	Description	FScale	Units	DAS Flip	Positive Polarity	Assembly
1	Trig D1	10ZERO000000VO0A	EVENT	1	Logic	+	Bipolar	
2	P54771	11HEADCG00S2ACXA	Head Accel X	2000	g	+	Forward	1-VRTC SID IIs 056 5/03/07.001
3	P49172	11HEADCG00S2ACYA	Head Accel Y	2000	g	-	Leftward	1-VRTC SID IIs 056 5/03/07.002
4	P51299	11HEADCG00S2ACZA	Head Accel Z	2000	g	-	Upward	1-VRTC SID IIs 056 5/03/07.003
5	1716A-1746-FX	11NECKUP00S2FOXA	Upper Neck Force X	8896	N	-	Head forward, chest rearward	1-VRTC SID IIs 056 5/03/07.004
6	1716A-1746-FY	11NECKUP00S2FOYA	Upper Neck Force Y	8896	N	+	Head leftward, chest rightward	1-VRTC SID IIs 056 5/03/07.005
7	1716A-1746-FZ	11NECKUP00S2FOZA	Upper Neck Force Z	13344	N	+	Head upward, chest downward	1-VRTC SID IIs 056 5/03/07.006
8	1716A-1746-MX	11NECKUP00S2MOXA	Upper Neck Moment X	282.5	Nm	-	Right ear toward right shoulder	1-VRTC SID IIs 056 5/03/07.007
9	1716A-1746-MY	11NECKUP00S2MOYA	Upper Neck Moment Y	282.5	Nm	+	Chin toward sternum	1-VRTC SID IIs 056 5/03/07.008
10	1716A-1746-MZ	11NECKUP00S2MOZA	Upper Neck Moment Z	282.5	Nm	+	Chin toward left shoulder	1-VRTC SID IIs 056 5/03/07.009
11	03E03E21-M01	11SHLDLE00S2ACXA	Shoulder Accel X	2000	g	+	Forward	1-VRTC SID IIs 056 5/03/07.010
12	03E03E20-N08	11SHLDLE00S2ACYA	Shoulder Accel Y	2000	g	+	Rightward	1-VRTC SID IIs 056 5/03/07.011
13	02I02I05-F15	11SHLDLE00S2ACZA	Shoulder Accel Z	2000	g	+	Downward	1-VRTC SID IIs 056 5/03/07.012
14	IF-344-107-FX	11SHLDLE00S2FOXA	Shoulder Force X	2000	N	-	Left shoulder rearward, chest forward	1-VRTC SID IIs 056 5/03/07.013
15	IF-344-107-FY	11SHLDLE00S2FOYA	Shoulder Force Y	2000	N	+	Left shoulder rightward, chest leftward	1-VRTC SID IIs 056 5/03/07.014
16	IF-344-107-FZ	11SHLDLE00S2FOZA	Shoulder Force Z	2000	N	+	Left shoulder downward, chest upward	1-VRTC SID IIs 056 5/03/07.015
17	180-3861-056RBSH	11SHRILE00S2DSYA	Shoulder Disp. Y	75	mm	-	Leftward	1-VRTC SID IIs 056 5/03/07.016
18	J28686	11SPIN0100S2ACXA	Upper Spine Accel X (Rib1)	2000	g	+	Forward	1-VRTC SID IIs 056 5/03/07.017
19	J36038	11SPIN0100S2ACYA	Upper Spine Accel Y (Rib1)	2000	g	+	Rightward	1-VRTC SID IIs 056 5/03/07.018
20	ADATO	11SPIN0100S2ACZA	Upper Spine Accel Z (Rib1)	2000	g	+	Downward	1-VRTC SID IIs 056 5/03/07.019
21	180-3862-056RB1	11TRRI01LES2DSYA	Left Thorax Rib 1 Disp. Y (Rib 1)	75	mm	-	Leftward	1-VRTC SID IIs 056 5/03/07.020
22	180-3863-056RB2	11TRRI02LES2DSYA	Left Thorax Rib 2 Disp. Y (Rib 2)	75	mm	-	Leftward	1-VRTC SID IIs 056 5/03/07.021
23	180-3864-056RB3	11TRRI03LES2DSYA	Left Thorax Rib 3 Disp. Y (Rib 3)	75	mm	-	Leftward	1-VRTC SID IIs 056 5/03/07.022
24	180-3865-056RB4	11ABRI01LES2DSYA	Left Abdomin Rib 1 Disp. Y (Rib 4)	75	mm	-	Leftward	1-VRTC SID IIs 056 5/03/07.023
25	180-3866-056RB5	11ABRI02LES2DSYA	Left Abdomin Rib 2 Disp. Y (Rib 5)	75	mm	-	Leftward	1-VRTC SID IIs 056 5/03/07.024
26	J28708	11TRRI01LES2ACYA	Left Thorax Rib 1 Accel Y (Rib 1)	2000	g	+	Rightward	1-VRTC SID IIs 056 5/03/07.025
27	03E03E21-M18	11TRRI02LES2ACYA	Left Thorax Rib 2 Accel Y (Rib 2)	2000	g	+	Rightward	1-VRTC SID IIs 056 5/03/07.026
28	03D03D16-F12	11TRRI03LES2ACYA	Left Thorax Rib 3 Accel Y (Rib 3)	2000	g	+	Rightward	1-VRTC SID IIs 056 5/03/07.027
29	ACCY3	11ABRI01LES2ACYA	Left Abdomin Rib 1 Accel Y (Rib 4)	2000	g	+	Rightward	1-VRTC SID IIs 056 5/03/07.028
30	EH75J	11ABRI02LES2ACYA	Left Abdomin Rib 2 Accel Y (Rib 5)	2000	g	+	Rightward	1-VRTC SID IIs 056 5/03/07.029
31	03E03E18-F18	11SPIN1200S2ACXA	Lower Spine Accel X (Rib 4)	2000	g	-	Rearward	1-VRTC SID IIs 056 5/03/07.030
32	P54290	11SPIN1200S2ACYA	Lower Spine Accel Y (Rib 4)	2000	g	-	Leftward	1-VRTC SID IIs 056 5/03/07.031
33	J35921	11SPIN1200S2ACZA	Lower Spine Accel Z (Rib 4)	2000	g	-	Upward	1-VRTC SID IIs 056 5/03/07.032

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Ref	Transducer ID	ISO Signal Identifier	Description	FScale	Units	DAS Flip	Positive Polarity	Assembly
34	3249J-260-FY	11ACTBLE00S2FOYA	Left Acetabulum Y-Axis Force	8896	N	+	Left acetabulum rightward, chest leftward	1-VRTC SID IIs 056 5/03/07.034
35	IF-507-112-FY	11ILACLE00S2FOYA	Left Iliac Wing Y-Axis Force	13344	N	+	Left iliac rightward, chest leftward	1-VRTC SID IIs 056 5/03/07.033
36	P16493	11PELVCG00S2ACXA	Pelvis X-Axis Acceleration	2000	g	+	Forward	1-VRTC SID IIs 056 5/03/07.035
37	AF973	11PELVCG00S2ACYA	Pelvis Y-Axis Acceleration	2000	g	+	Rightward	1-VRTC SID IIs 056 5/03/07.036
38	J18736	11PELVCG00S2ACZA	Pelvis Z-Axis Acceleration	2000	g	+	Downward	1-VRTC SID IIs 056 5/03/07.037
39	P50825	16SILBFR0000ACXA	Right Side Sill at Front Seat X-Axis Acceleration	400	g	+	Forward	
40	p54287	16SILBFR0000ACYA	Right Side Sill at Front Seat Y-Axis Acceleration	1000	g	-	Leftward	
41	P29191	16SILBFR0000ACZA	Right Side Sill at Front Seat Z-Axis Acceleration	400	g	-	Upward	
42	P50283	16SILBRE0000ACXA	Right Side Sill at Rear Seat X-Axis Acceleration	400	g	+	Forward	
43	P54288	16SILBRE0000ACYA	Right Side Sill at Rear Seat Y-Axis Acceleration	1000	g	-	Leftward	
44	P54196	16SILBRE0000ACZA	Right Side Sill at Rear Seat Z-Axis Acceleration	400	g	-	Upward	
45	P49302	18FORA000000ACXA	Rear Floorpan Above Axle X-Axis Acceleration	1000	g	+	Forward	
46	P49566	18FORA000000ACYA	Rear Floorpan Above Axle Y-Axis Acceleration	1000	g	+	Rightward	
47	P49336	18FORA000000ACZA	Rear Floorpan Above Axle Z-Axis Acceleration	1000	g	-	Upward	
48	P54230	14SILBFR0000ACYA	Left Side Sill at Front Seat Y-Axis Acceleration	1000	g	+	Rightward	
49	P54809	14SILBRE0000ACYA	Left Side Sill at Rear Seat Y-Axis Acceleration	1000	g	+	Rightward	
50	P49959	16VEHCRE0000ACYA	Right Rear Occupant Compartment Y-Axis Acceleration	1500	g	-	Leftward	
51	P45665	11APILLO0000ACYA	Left Lower A-Pillar Y-Axis Acceleration	1500	g	-	Leftward	
52	P50316	11APILMI0000ACYA	Left Mid A-Pillar Y-Axis Acceleration	1500	g	-	Leftward	
53	P49899	14BPILLO0000ACYA	Left Lower B-Pillar Y-Axis Acceleration	1500	g	-	Leftward	
54	P54117	14BPILMI0000ACYA	Left Mid B-Pillar Y-Axis Acceleration	1500	g	-	Leftward	
55	P48067	11SETRFR0000ACYA	Left Front Seat Track Y-Axis Acceleration	1500	g	+	Rightward	
56	P54584	14SETRLERE00ACYA	Left Rear Seat Track Y-Axis Acceleration	1500	g	+	Rightward	
57	P49969	10VEHCCG0000ACXA	Vehicle Center of Gravity X-Axis Acceleration	1000	g	+	Forward	
58	P54216	10VEHCCG0000ACYA	Vehicle Center of Gravity Y-Axis Acceleration	1000	g	-	Leftward	
59	p50887	10VEHCCG0000ACZA	Vehicle Center of Gravity Z-Axis Acceleration	1000	g	-	Upward	
60	P50954	14DOOR000001ACYA	Vehicle Center of Gravity Resultant Acceleration	1500	g	+	Rightward	
61	P54205	14DOOR000002ACYA	Vehicle Front Door Centerline Y-Axis Acceleration	1500	g	+	Rightward	
62	P50829	14DOOR000003ACYA	Vehicle Front Door Mid-Rear Y-Axis Acceleration	1500	g	+	Rightward	
63	p54490	16DOOR000002ACYA	Vehicle Front Door Upper Centerline Y-Axis Acceleration	1500	g	+	Rightward	
64	P46904	16DOOR000003ACYA	Vehicle Rear Door Mid-Rear Y-Axis Acceleration	1500	g	+	Rightward	
65	P54236	12ENGNTP0000ACXA	Vehicle Rear Door Upper Centerline Y-Axis Acceleration	1000	g	+	Rightward	
66	p48633	12ENGNTP0000ACYA	Top of Engine Y-Axis Acceleration	1000	g	+	Rightward	
67	P46612	12VEHC000000ACXA	Firewall X-Axis Acceleration	1000	g	+	Forward	
68	P48543	12VEHC000000ACYA	Firewall Y-Axis Acceleration	1000	g	-	Leftward	
69	P48623	13ROOF000000ACXA	Right Side Roof Rail X-Axis Acceleration	1000	g	+	Forward	
70	P50963	13ROOF000000ACYA	Right Side Roof Rail Y-Axis Acceleration	1000	g	-	Leftward	
71	P54543	13SILBFR0000ACYA	Right Side Sill In-Line With Impact Location Y-Axis Acceleration	1000	g	+	Rightward	
72	p50888	18DECK000000ACXA	Rear Deck Behind Rear Axle X-Axis Acceleration	1000	g	-	Rearward	
73	P45626	18DECK000000ACYA	Rear Deck Behind Rear Axle Y-Axis Acceleration	1000	g	+	Rightward	
74	P50578	18DECK000000ACZA	Rear Deck Behind Rear Axle Z-Axis Acceleration	1000	g	-	Upward	

Channel Report Test Number 070521

Ref	Transducer ID	ISO Signal Identifier	Description	FScale	Units	DAS Flip	Positive Polarity	Assembly
75	ABFire1	11AIRBMILE00CU0A	Driver Side Airbag	5	V	+	Bipolar	
76	ABFire2	11AIRBTPLE00CU0A	Driver Side Curtain Airbag	5	V	+	Bipolar	
77	Bit.00	11CONT000001VO00	Head Contact Switch	1	Logic	+	Bipolar	
78	Bit.01	11CONT000002VO00	Shoulder Contact Switch	1	Logic	+	Bipolar	
79	Bit.02	11CONT000003VO00	Torso Contact Switch	1	Logic	+	Bipolar	
80	Bit.03	11CONT000004VO00	Leg Contact Switch	1	Logic	+	Bipolar	

Command File Test Number 070521

Channel	ISO mnemonic	Channel Title	Filter Class	Flip	Zero	Full Scale
1	11HEADCG00S2ACXA	Head X-Axis Acceleration	1000	-	yes	2000
2	11HEADCG00S2ACYA	Head Y-Axis Acceleration	1000	+	yes	2000
3	11HEADCG00S2ACZA	Head Z-Axis Acceleration	1000	-	yes	2000
3A	11HEADCG00S2ACRA	Head Resultant Acceleration	1000			
4	11NECKUP00S2FOXA	Upper Neck X-Axis Force	1000	+	yes	8896
5	11NECKUP00S2FOYA	Upper Neck Y-Axis Force	1000	+	yes	8896
6	11NECKUP00S2FOZA	Upper Neck Z-Axis Force	1000	+	yes	13344
7	11NECKUP00S2MOXA	Upper Neck Moment About X Axis	600	+	yes	282.5
8	11NECKUP00S2MOYA	Upper Neck Moment About Y Axis	600	+	yes	282.5
9	11NECKUP00S2MOZA	Upper Neck Moment About Z Axis	600	+	yes	282.5
10	11SHLDLE00S2ACXA	Shoulder X-Axis Acceleration	1000	-	yes	2000
11	11SHLDLE00S2ACYA	Shoulder Y-Axis Acceleration	1000	+	yes	2000
12	11SHLDLE00S2ACZA	Shoulder Z-Axis Acceleration	1000	-	yes	2000
12A	11SHLDLE00S2ACRA	Shoulder Resultant Acceleration	1000			
13	11SHLDLE00S2FOXA	Shoulder X-Axis Force	600	+	yes	2000
14	11SHLDLE00S2FOYA	Shoulder Y-Axis Force	600	+	yes	2000
15	11SHLDLE00S2FOZA	Shoulder Z-Axis Force	600	+	yes	2000
16	11SHRILE00S2DSYA	Shoulder Y-Axis Displacement	180	+	yes	75
17	11SPIN0100S2ACXA	Upper Spine X-Axis Acceleration	180	-	yes	2000
18	11SPIN0100S2ACYA	Upper Spine Y-Axis Acceleration	180	-	yes	2000
19	11SPIN0100S2ACZA	Upper Spine Z-Axis Acceleration	180	-	yes	2000
19A	11SPIN0100S2ACRA	Upper Spine Resultant Acceleration	180			
20	11TRRI01LES2DSYA	Left Thorax Rib 1 Y-Axis Displacement	180	+	yes	75
21	11TRRI02LES2DSYA	Left Thorax Rib 2 Y-Axis Displacement	180	+	yes	75
22	11TRRI03LES2DSYA	Left Thorax Rib 3 Y-Axis Displacement	180	+	yes	75
23	11ABRI01LES2DSYA	Left Abdomen Rib 1 Y-Axis Displacement	180	+	yes	75
24	11ABRI02LES2DSYA	Left Abdomen Rib 2 Y-Axis Displacement	180	+	yes	75
25	11TRRI01LES2ACYA	Left Thorax Rib 1 Y-Axis Acceleration	1000	+	yes	2000
26	11TRRI02LES2ACYA	Left Thorax Rib 2 Y-Axis Acceleration	1000	+	yes	2000
27	11TRRI03LES2ACYA	Left Thorax Rib 3 Y-Axis Acceleration	1000	+	yes	2000
28	11ABRI01LES2ACYA	Left Abdomen Rib 1 Y-Axis Acceleration	1000	+	yes	2000
29	11ABRI02LES2ACYA	Left Abdomen Rib 2 Y-Axis Acceleration	1000	+	yes	2000
30	11SPIN1200S2ACXA	Lower Spine X-Axis Acceleration	180	-	yes	2000
31	11SPIN1200S2ACYA	Lower Spine Y-Axis Acceleration	180	+	yes	2000
32	11SPIN1200S2ACZA	Lower Spine Z-Axis Acceleration	180	-	yes	2000
32A	11SPIN1200S2ACRA	Lower Spine Resultant Acceleration	180			
33	11ILACLE00S2FOYA	Left Iliac Wing Y-Axis Force	600	+	yes	13344

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Channel	ISO mnemonic	Channel Title	Filter Class	Flip	Zero	Full Scale
34	11ACTBLE00S2FOYA	Left Acetabulum Y-Axis Force	600	+	yes	8896
35	11PELVCG00S2ACXA	Pelvis X-Axis Acceleration	1000	-	yes	2000
36	11PELVCG00S2ACYA	Pelvis Y-Axis Acceleration	1000	+	yes	2000
37	11PELVCG00S2ACZA	Pelvis Z-Axis Acceleration	1000	-	yes	2000
37A	11PELVCG00S2ACRA	Pelvis Resultant Acceleration	1000			
38	16SILBFR0000ACXA	Right Side Sill at Front Seat X-Axis Acceleration	60	-	yes	400
38A	16SILBFR0000VEXC	Right Side Sill at Front Seat X-Axis Velocity	180			
38B	16SILBFR0000DCXC	Right Side Sill at Front Seat X-Axis Displacement	180			
39	16SILBFR0000ACYA	Right Side Sill at Front Seat Y-Axis Acceleration	60	+	yes	1000
39A	16SILBFR0000VEYC	Right Side Sill at Front Seat Y-Axis Velocity	180			
39B	16SILBFR0000DCYC	Right Side Sill at Front Seat Y-Axis Displacement	180			
40	16SILBFR0000ACZA	Right Side Sill at Front Seat Z-Axis Acceleration	60	-	yes	400
40A	16SILBFR0000ACRA	Right Side Sill at Front Seat Resultant Acceleration	60			
41	16SILBRE0000ACXA	Right Side Sill at Rear Seat X-Axis Acceleration	60	-	yes	400
41A	16SILBRE0000VEXC	Right Side Sill at Rear Seat X-Axis Velocity	180			
41B	16SILBRE0000DCXC	Right Side Sill at Rear Seat X-Axis Displacement	180			
42	16SILBRE0000ACYA	Right Side Sill at Rear Seat Y-Axis Acceleration	60	+	yes	1000
42A	16SILBRE0000VEYC	Right Side Sill at Rear Seat Y-Axis Velocity	180			
42B	16SILBRE0000DCYC	Right Side Sill at Rear Seat Y-Axis Displacement	180			
43	16SILBRE0000ACZA	Right Side Sill at Rear Seat Z-Axis Acceleration	60	-	yes	400
43A	16SILBRE0000ACRA	Right Side Sill at Rear Seat Resultant Acceleration	60			
44	18FORA000000ACXA	Rear Floorpan Above Axle X-Axis Acceleration	60	-	yes	1000
45	18FORA000000ACYA	Rear Floorpan Above Axle Y-Axis Acceleration	60	+	yes	1000
46	18FORA000000ACZA	Rear Floorpan Above Axle Z-Axis Acceleration	60	-	yes	1000
47	14SILBFR0000ACYA	Left Side Sill at Front Seat Y-Axis Acceleration	60	+	yes	1000
47A	14SILBFR0000VEYC	Left Side Sill at Front Seat Y-Axis Velocity	180			
47B	14SILBFR0000DCYC	Left Side Sill at Front Seat Y-Axis Displacement	180			
48	14SILBRE0000ACYA	Left Side Sill at Rear Seat Y-Axis Acceleration	60	+	yes	1000
48A	14SILBRE0000VEYC	Left Side Sill at Rear Seat Y-Axis Velocity	180			
48B	14SILBRE0000DCYC	Left Side Sill at Rear Seat Y-Axis Displacement	180			
49	16VEHCRE0000ACYA	Right Rear Occupant Compartment Y-Axis Acceleration	60	+	yes	1500
50	11APILLO0000ACYA	Left Lower A-Pillar Y-Axis Acceleration	60	+	yes	1500
51	11APILMI0000ACYA	Left Mid A-Pillar Y-Axis Acceleration	60	+	yes	1500
52	14BPILLO0000ACYA	Left Lower B-Pillar Y-Axis Acceleration	60	+	yes	1500
53	14BPILMI0000ACYA	Left Mid B-Pillar Y-Axis Acceleration	60	+	yes	1500
54	11SETRFR0000ACYA	Left Front Seat Track Y-Axis Acceleration	60	+	yes	1500
55	14SETRLERE00ACYA	Left Rear Seat Track Y-Axis Acceleration	60	-	yes	1500

Command File Test Number 070521

Channel	ISO mnemonic	Channel Title	Filter Class	Flip	Zero	Full Scale
56	10VEHCCG0000ACXA	Vehicle Center of Gravity X-Axis Acceleration	60	-	yes	1000
57	10VEHCCG0000ACYA	Vehicle Center of Gravity Y-Axis Acceleration	60	+	yes	1000
58	10VEHCCG0000ACZA	Vehicle Center of Gravity Z-Axis Acceleration	60	-	yes	1000
58A	10VEHCCG0000ACRA	Vehicle Center of Gravity Resultant Acceleration	60			
59	14DOOR000001ACYA	Vehicle Front Door Centerline Y-Axis Acceleration	60	+	yes	1500
60	14DOOR000002ACYA	Vehicle Front Door Mid-Rear Y-Axis Acceleration	60	+	yes	1500
61	14DOOR000003ACYA	Vehicle Front Door Upper Centerline Y-Axis Acceleration	60	+	yes	1500
62	16DOOR000002ACYA	Vehicle Rear Door Mid-Rear Y-Axis Acceleration	60	+	yes	1500
63	16DOOR000003ACYA	Vehicle Rear Door Upper Centerline Y-Axis Acceleration	60	+	yes	1500
64	12ENGNTP0000ACXA	Top of Engine X-Axis Acceleration	60	-	yes	1000
65	12ENGNTP0000ACYA	Top of Engine Y-Axis Acceleration	60	+	yes	1000
66	12VEHC000000ACXA	Firewall X-Axis Acceleration	60	-	yes	1000
67	12VEHC000000ACYA	Firewall Y-Axis Acceleration	60	+	yes	1000
68	13ROOF000000ACXA	Right Side Roof Rail X-Axis Acceleration	60	-	yes	1000
69	13ROOF000000ACYA	Right Side Roof Rail Y-Axis Acceleration	60	+	yes	1000
70	13SILBFR0000ACYA	Right Side Sill In-Line With Impact Location Y-Axis Acceleration	60	+	yes	1000
71	18DECK000000ACXA	Rear Deck Behind Rear Axle X-Axis Acceleration	60	-	yes	1000
72	18DECK000000ACYA	Rear Deck Behind Rear Axle Y-Axis Acceleration	60	+	yes	1000
73	18DECK000000ACZA	Rear Deck Behind Rear Axle Z-Axis Acceleration	60	-	yes	1000
74	11AIRBMILE00CU0A	Driver Side Airbag	1000	+	no	5
75	11AIRBTPLE00CU0A	Driver Side Curtain Airbag	1000	+	no	5
76	11CONT000001VO00	Head Contact Switch	0	+	no	1
77	11CONT000002VO00	Shoulder Contact Switch	0	+	no	1
78	11CONT000003VO00	Torso Contact Switch	0	+	no	1
79	11CONT000004VO00	Leg Contact Switch	0	+	no	1

2007 FORD ESCAPE LEFT SIDE FMVSS 214 POLE IMPACT AT 52 KPH