

**REPORT NUMBER: MCW-DOT-SOI003**

**VEHICLE INTO POLE CRASH TEST  
IN SUPPORT OF NHTSA FRONTAL SMALL OVERLAP PROGRAM**

**2007 FORD TAURUS 4-DOOR SEDAN CRABBED INTO POLE  
AIM FOR THE HEAD PROCEDURE**

**TEST DATE: OCTOBER 12, 2010  
NHTSA NUMBER: R7 0213**

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Test Vehicle: 2007 Ford Taurus 4-Door Sedan  
Test Program: Frontal Small Overlap

NHTSA Number: R7 0213  
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Date:

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16. Abstract A 56.1 km/h Moving Test Platform with a crabbed 2007 Ford Taurus 4-door sedan was impacted into a rigid segmented pole. This test was conducted on the subject to obtain research data indicant of NHTSA's Frontal Small Overlap Program. The test was conducted at the Medical College of Wisconsin (MCW) in Milwaukee, Wisconsin on October 12, 2010. The impact velocity of the test platform was 56.1 km/h, and the ambient temperature at the struck side of the vehicle was 20 °C. The test vehicle's occupant performance is as follows:																													
<table border="1"> <thead> <tr> <th></th> <th><u>Units</u></th> <th><u>DRIVER</u></th> <th><u>PASS.</u></th> </tr> </thead> <tbody> <tr> <td>15 millisecond Head Injury Criteria (HIC15)</td> <td></td> <td>535.3</td> <td>207.8</td> </tr> <tr> <td>Chest maximum resultant acceleration</td> <td>G's</td> <td>35.8</td> <td>34.5</td> </tr> <tr> <td>Maximum chest deflection</td> <td>MM</td> <td>-31.6</td> <td>-25.0</td> </tr> <tr> <td>Left femur maximum axial compressive force</td> <td>NWT</td> <td>-4026.0</td> <td>-1164.3</td> </tr> <tr> <td>Right femur maximum axial compressive force</td> <td>NWT</td> <td>-4147.7</td> <td>-50.4</td> </tr> </tbody> </table>							<u>Units</u>	<u>DRIVER</u>	<u>PASS.</u>	15 millisecond Head Injury Criteria (HIC15)		535.3	207.8	Chest maximum resultant acceleration	G's	35.8	34.5	Maximum chest deflection	MM	-31.6	-25.0	Left femur maximum axial compressive force	NWT	-4026.0	-1164.3	Right femur maximum axial compressive force	NWT	-4147.7	-50.4
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17. Key Words Frontal Small Overlap Program THOR 50 <sup>th</sup> percentile Dummy Hybrid III 5 <sup>th</sup> percentile Dummy			18. Distribution Statement Copies of this report are available from: U.S. Department of Transportation National Highway Traffic Safety Administration Technical Reference Division 1200 New Jersey Ave, SE, Room W43-410 Washington, D.C. 20590																										
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## **SECTION 1 PURPOSE**

This 56.1 km/h moving test platform into a rigid segmented pole test is part of Frontal Offset Program sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-10-D-00159. The purpose of this test was to obtain vehicle crashworthiness and occupant restraint system performance data for consumer information purposes.

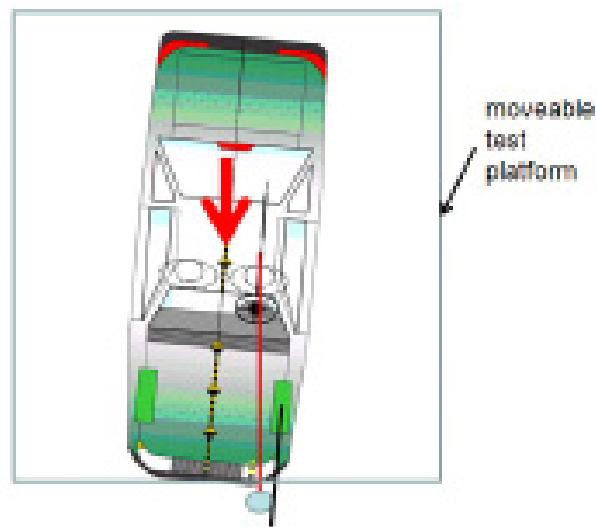
This test was conducted in accordance with the instructions set forth by NHTSA for a vehicle crabbed into a pole aimed at the head, outlined in Task Order (TO) DXXXXXX. Data was obtained indicant of Federal Motor Vehicle Safety Standard (FMVSS) 208 – Occupant Crash Protection, FMVSS 212 – Windshield Mounting, FMVSS 219 (partial) – Windshield Zone Intrusion, and FMVSS 301 – Fuel System Integrity, in addition to the requirements of TO DXXXXXX.

*\* No TO was given for the soi003. Interagency Agreement (IAA) no: 22-09-X-00193.*

## SECTION 2 SUMMARY OF TEST

A model year 2007 Ford Taurus 4-door sedan on a moveable test platform was towed into a segmented pole. The test vehicle remained stationary on the test platform until impact. The test vehicle was positioned at 8.5° (cw) on the moveable platform and the center of the left tire was aligned with the left side of the pole.

The moveable test platform towed the stationary vehicle into the pole at 56.1 km/h (34.9 mph). The vehicle was crabbed at 8.5 degrees relative to the longitudinal center of the track. The offset of the vehicle was 14 percent of the outer width of the test vehicle.



The as tested vehicle mass was 1742.7 kg (3842 lbs). The test was conducted by The Medical College of Wisconsin on October 13, 2010.

The test was documented by 1 real time and 12 high-speed video cameras. Camera locations and other pertinent data are located in Data Sheet No. 6 of this report. Pre – and post – test photographs of the test vehicle, test platform, and setup were taken using a digital still camera. Photographic documentation of the test is presented in Appendix A of this report.

One (1) 50% adult male THOR LX anthropomorphic test device (ATD) (Serial No. 0007) was seated in the left front (driver's) seating position and one (1) Part 572O 5% adult female (HIII 5<sup>th</sup>) ATD (Serial No. 421) was seated in the left rear seating position. The THOR LX driver was positioned according to instructions specified in Laboratory Test Procedure for FMVSS No. 208, "Occupant Crash Protection", TP208 13, July 27, 2005. The HIII 5% left rear seat occupant was positioned according to instructions specified in Laboratory Test Procedure for FMVSS No. 214, "Side Impact Protection – Dynamic", TP214D-08, December 15, 2006. (Note: If a different seating procedure is used, include the exact procedure in an Appendix of the report). The driver was restrained with a 3 – point seat belt and a dual stage frontal airbag. The left rear passenger was restrained with a 3 – point seat belt.

197 channels of data from the two ATD's, test vehicle, and pole were collected using a Diversified Technical System (DTS) TDAS PRO data acquisition system. Appendix B contains ATD data plots, as well as vehicle and pole response data plots.

## **SECTION 2 SUMMARY OF TEST (CONTINUED)**

There was 100.0% total windshield retention, with 98.5% and 102.0% retention on the driver's and passenger's side respectively. There appeared to be no intrusion into the protected zone of the windshield during any portion of the impact test. The maximum crush of the underlying structure was 319 mm at DPD 1 to the left of the vehicle's centerline. The maximum crush of the underlying structure was 110 mm at DPD 1 of the lower bumper beam, to the left of the vehicle's centerline. Full vehicle measurements are presented in Section 3 of this report.

All four vehicle doors remained closed and latched during the test. The left front door was jammed shut as a result of the impact. The right front and rear doors remained closed, latched, and operational.

Structural observations include the following: No damage was noted to the pillar or the windows, no sill separation was noted, and there were no other notable effects.

The driver ATD's visible contact points are as follows: The front/right of the head contacted the steering wheel airbag, and the back bottom went to the seatback on rebound. The chest and upper abdomen contacted the steering wheel airbag. The left and right knees contacted their respective knee bolsters and the steering column. The left knee additionally contacted the interior door panel.

The left rear passenger ATD's visible contact points are as follows: The chin moved to the sternum, and on rebound, the back of the head contacted the seat. The chest and abdomen, had no contact. The knees struck the rear of the driver's seat back. Additionally, the left knee contacted the interior door panel on rebound.

**SECTION 2b**  
**CRASH VEHICLE SUMMARY**

<b>PRIMARY IMPACT DATA</b>		
<b>Measured Parameter</b>	<b>Units</b>	<b>Value</b>
Velocity at impact	km/h	56.1
Vehicle test weight	kg	1742.7
Vehicle angle	°	8.5
Vehicle maximum static crush	mm	319
Vertical offset from target point	mm	1 (above)
Lateral offset from target point	mm	2 (right)
Number of data channels	N/a	197
Number of real-time cameras	N/a	1
Number of high-speed cameras	N/a	12

<b>DUMMY CONTACTS</b>		
	<b>Driver</b>	<b>Passenger</b>
Dummy type/serial no.	0007	421
Restraint system	3-point belt/frontal airbag	3-point belt
Head contact	Front/right of head to steering wheel airbag; back bottom to upper seatback on rebound	Chin to sternum and back of head to seat back on rebound
Chest contact	To steering wheel airbag	No contact
Abdomen contact	Upper abdomen to steering wheel airbag	No contact
Left knee contact	To knee bolster, steering column, and interior door panel	To rear of driver's seat back; to interior door panel on rebound
Right knee contact	To knee bolster and steering column	To rear of driver's seat back

**SECTION 2c  
 ATD SUMMARY**

DRIVER				
Loc.	Nomenclature	Source	Max	Min
Head	Angular acceleration (rad/sec <sup>2</sup> )	SIMon	2000	-2750
	Angular acceleration (rad/sec <sup>2</sup> )	SIMon	5500	-6000
	Angular acceleration (rad/sec <sup>2</sup> )	SIMon	700	-1800
	Angular velocity (rad/sec)	SIMon	11	-9
	Angular velocity (rad/sec)	SIMon	10	-38
	Angular velocity (rad/sec)	SIMon	17.5	-21
	36 ms clip	Compute	601.4	
	15 ms clip	Compute	535.3	
	Skull fracture correlate	Compute	74.2	
	Cumulative strain (tolerance = 0.05)	SIMon	1.0	
	Cumulative strain (tolerance = 0.10)	SIMon	0.8	
	Cumulative strain (tolerance = 0.15)	SIMon	0.4	
	Head resultant CG acceleration (G's)	Compute	90.3	
	Neck	UNLC Fx transferred to OC, neck system (N)	1000	86.6
UNLC Fz neck system tension (N)		1000	1211.6	
UNLC Fz neck system compression (N)		1000		-254.8
UNLC My transferred to OC, neck system flexion (Nm)		Compute	17.5	
UNLC My transferred to OC, neck system extension (Nm)		Compute	-5.00	
On head acting through total neck section Fx (N)		Thortest	120.3	-1305.4
On head acting through total neck section Fy (N)		Thortest	747.4	-59.6
On head acting through total neck section Fz (N)		Thortest	247.9	-1423.6
On head acting through tot. neck sect. Mx (Nm)		Thortest	20.8	-18.2
On head acting through tot. neck sect. My (Nm)		Thortest	4.84	-45.1
On head acting through tot. neck sect. Mz (Nm)		Thortest	10.5	-27.8
On head acting through O.C. joint only Fx(N)		Thortest	147.8	-1260.2
On head acting through O.C. joint only Fz (N)		Thortest	292.9	-728.6
On head acting through O.C. joint only My (Nm)	Thortest	3.25	-7.19	
Chest	Upper CRUX x-deflection, right (mm)	Thortest	0.33	-31.3
	Upper CRUX y-deflection, right (mm)	Thortest	4.74	-14.5
	Upper CRUX z-deflection, right (mm)	Thortest	16.8	-0.02
	Upper CRUX "d" displacement, right (mm)	Thortest	0.03	-31.6
	Upper CRUX x-deflection, left (mm)	Thortest	3.10	-8.86
	Upper CRUX y-deflection, left (mm)	Thortest	6.01	-10.9
	Upper CRUX z-deflection, left (mm)	Thortest	7.94	-0.08
	Upper CRUX "d" displacement, left (mm)	Thortest	2.91	-7.99

**SECTION 2c**  
**ATD SUMMARY (CONTINUED)**

Chest	Lower CRUX x-deflection, right (mm)	Thortest	0.01	-17.4
	Lower CRUX y-deflection, right (mm)	Thortest	2.04	-13.4
	Lower CRUX z-deflection, right (mm)	Thortest	14.7	-0.52
	Lower CRUX "d" displacement, right (mm)	Thortest	0.01	-21.5
	Lower CRUX x-deflection, left (mm)	Thortest	5.49	-0.41
	Lower CRUX y-deflection, left (mm)	Thortest	1.10	-1.04
	Lower CRUX z-deflection, left (mm)	Thortest	10.2	-4.48
	Lower CRUX "d" displacement, left (mm)	Thortest	4.67	-5.28
	Chest CG acceleration, 3 ms clip (G's)	Compute	32.6	
Abdomen	Max upper string pot (mm)	Compute	5.51	-3.68
	Upper viscous criteria	Compute	0.01	
	Lower right x-deflection (mm)	Thortest	33.1	-0.01
	Lower right y-deflection (mm)	Thortest	0.48	-1.41
	Lower right z-deflection (mm)	Thortest	4.33	0.00
	Right viscous criterion based on x-deflection	Compute	0.38	
	Lower left x-deflection (mm)	Thortest	25.1	0.00
	Lower left y-deflection (mm)	Thortest	16.2	-12.7
	Lower left z-deflection (mm)	Thortest	0.28	-1.73
Left viscous criterion based on x-deflection	Compute	0.23		
Pelvis	Pelvis CG resultant acceleration (G's)	Compute	43.6	
Acetabulum	Right Fx force (N)	600	830.2	-1963.5
	Right Fy force (N)	600	196.5	-896.6
	Right Fz force (N)	600	733.5	-169.8
	Resultant force (N)	Compute	2167.9	
	Left Fx force (N)	600	580.8	-2914.5
	Left Fy force (N)	600	803.1	-478.5
	Left Fz force (N)	600	1101.2	-310.5
	Resultant force (N)	Compute	3168.9	
Femur	Right Fz force (N)	600	568.4	-4147.7
	Right Mx moment (Nm)	600	27.0	-97.1
	Right My moment (Nm)	600	81.1	-16.2
	Resultant force (N)	Compute	109.7	
	Left Fz force (N)	600	434.5	-4026.0
	Left Mx moment (Nm)	600	25.4	-107.6
	Left My moment (Nm)	600	98.5	-13.9
	Resultant force (N)	Compute	135.1	

**SECTION 2c**  
**ATD SUMMARY (CONTINUED)**

<b>PASSENGER</b>				
<b>Loc.</b>	<b>Nomenclature</b>	<b>Source</b>	<b>Max</b>	<b>Min</b>
Head	Angular acceleration (rad/sec <sup>2</sup> )	SIMon	2000	-1400
	Angular acceleration (rad/sec <sup>2</sup> )	SIMon	9800	-500
	Angular acceleration (rad/sec <sup>2</sup> )	SIMon	9500	-4000
	Angular velocity (rad/sec)	SIMon	18	-17.5
	Angular velocity (rad/sec)	SIMon	650	-10
	Angular velocity (rad/sec)	SIMon	400	-10
	36 ms clip	Compute	490.6	
	15 ms clip	Compute	207.8	
	Skull fracture correlate	Compute	45.4	
	Cumulative strain (tolerance = 0.05)	SIMon	1.0	
	Cumulative strain (tolerance = 0.10)	SIMon	1.0	
	Cumulative strain (tolerance = 0.15)	SIMon	1.0	
	Head resultant CG acceleration (G's)	Compute	47.3	
Neck	Upper neck tension (N)	1000	1805.4	
	Upper neck compression (N)	1000		-162.4
	Upper neck NTF	Compute	0.62	
	Upper neck NTE	Compute	0.53	
	Upper neck NCF	Compute	0.01	
	Upper neck NCE	Compute	0.49	
Chest	Chest deflection (mm)	Thortest	0.11	-25.0
	Chest CG acceleration, 3 ms clip (G's)	Compute	30.1	
Femur	Right Fz force (N)	600	786.9	-50.4
	Left Fz force (N)	600	756.0	-1164.3

**SECTION 2d**  
**TEST NOTES/ DATA ANOMOLIES**

- Onboard Driver Oblique Camera and Offboard Overhead Oblique Cameras were lost at impact
- Driver Thoracic (T<sub>12</sub>) (Z) Acceleration was questionable
- Driver Anterior Spring (Z) Force was questionable
- Driver Right Upper Tibia (Y) Moment was questionable
- The Bottom of the Engine Block (X) Acceleration failed at ~85 msec
- The Left Front Disc Brake Caliper (X) Acceleration failed at ~115 msec
- The Driver's Left Knee, Center Contact Switch gave meaningless data
- The Driver's Left Knee, Left of Center Contact Switch gave meaningless data
- The Passenger's Left Knee, Left of Center Contact Switch failed

**DATA SHEET NO. 1  
 GENERAL TEST AND VEHICLE PARAMETER DATA**

VEHICLE INFORMATION	
NHTSA no.	R7 0213
Make	Ford
Model	Taurus
Body style	4-door sedan
Year	2007
VIN	1FAFP53U77A208887
Color	Green
Delivery date	September 27, 2010
Odometer reading (mi)	48783
Odometer reading (km)	78509
Dealer	Packey Webb Auto Center
Transmission	Automatic
Final drive	FWD
Type/no. of cylinders	4
Engine disp. (L)	3.0
Engine placement	Lateral
Roof rack	No
Sunroof/T-top	No
Tinted glass	No
Traction control	Yes
Power brakes	Yes
Front disc	Yes
Rear disc	No

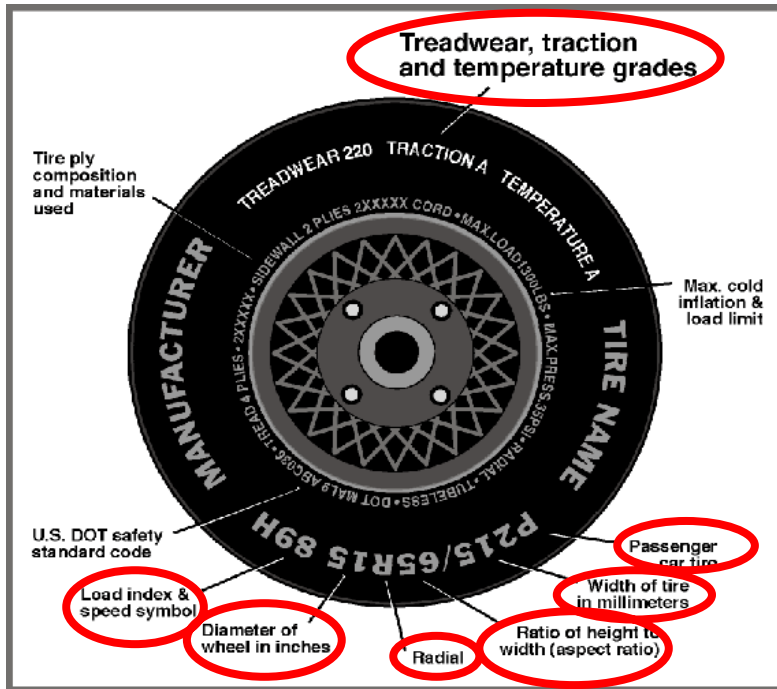
VEHICLE OPTIONS	
Anti-lock brakes	Yes
All-wheel drive	No
Power steering	Yes
Driver front airbag	Yes
Driver side airbag	Yes
Driver head airbag	No
Driver curtain airbag	No
Driver knee airbag	No
Pass. front airbag	No
Pass. side airbag	No
Pass. head airbag	No
Pass. curtain airbag	No
Pretensioners	Yes
Load limiters	Yes
Bucket seats	Yes – front only
Air conditioning	Yes
AM/FM CD	No
Tilt steering	Yes
Automatic door locks	Yes
Power windows	Yes
Power seats	Yes
Other	
Other	

Does owner's manual provide instructions to turn off automatic door locks?

DATA FROM CERTIFICATION LABEL			
Manufactured by	Ford Motor Company	GVWR (kg)	2125
		GAWR front (kg)	1158
Date of manufacture	October 2006	GAWR rear (kg)	967

VEHICLE SEATING AND WEIGHT CAPACITY				
Measured Parameter	Front	Rear	Third	Total
Type of seats	Bucket	Split bench	N/a	
Number of occupants	3	3	N/a	6
Capacity Wt. (VCW) (kg)				498
Cargo Wt. (RCLW) (kg)				89.8

**DATA SHEET NO. 1**  
**GENERAL TEST AND VEHICLE PARAMETER DATA (CONTINUED)**



TIRE INFORMATION		
Measured Parameter	Front	Rear
Maximum tire pressure (kPa)	240	240
Cold / test pressure (kPa)	205	205
Recommended tire size	P215/60R16	P215/60R16
Tire size on vehicle	P215/60R16	P215/60R16
Tire manufacturer	Cooper	Cooper
Tire model	Trendsetter SE	Trendsetter SE
Treadware	440	440
Traction	A	A
Temperature grade	B	B
Tire plies sidewall	2	2
Tire plies body	6	6
Load index & speed symbol	94S	94S
Tire material	Nylon, Polyester, Steel	Nylon, Polyester, Steel
DOT safety code (right)	PMX8	PMX8
DOT safety code (right)	C2H	C2H

**DATA SHEET NO. 1  
 GENERAL TEST AND VEHICLE PARAMETER DATA (CONTINUED)**

TEST VEHICLE WEIGHTS							
	Units	As delivered (UVW) (Axle)			As tested (ATW) (Axle)		
		Front	Rear	Total	Front	Rear	Total
Left	kg	485.8	266.3		524.8	382.8	
Right	kg	482.6	270.3		466.8	368.3	
Ratio	%	64.3	35.7		56.9	43.1	
Totals	kg	968.4	536.6	1505.0	991.6	751.1	1742.7

TARGET TEST WEIGHT CALCULATION		
	Units	Value
Total delivered weight (UVW)	kg	1505.0
Weight of one (1) P572E ATD & one (1) P572O ATD	kg	154.2
Rated cargo/luggage weight (RCLW)	kg	90.7
Calculated vehicle target weight (TVTW)	kg	1749.9

TEST VEHICLE ATTITUDES AND CG						
	Units	LF	RF	LR	RR	CG (aft of front axle)
As delivered	mm	728	738	716	716	984.1
As tested	mm	712	732	677	674	1189.6
Fully loaded	mm	712	724	668	668	

GENERAL TEST VEHICLE DATA		
Measurement description	Units	Value
Total vehicle wheel base	mm	2760
Total vehicle length at left side	mm	4800
Total vehicle length at centerline	mm	5026
Total vehicle length at right side	mm	4800
Weight of ballast in cargo area	kg	90.7
Weight of vehicle components removed	kg	29.5
Amt of Stoddard solvent in fuel tank	L	43.7

Mass of ballast added (kg): 90.7

Components removed from test vehicle

- Right rear tail-light

**DATA SHEET NO. 1  
 GENERAL TEST AND VEHICLE PARAMETER DATA (CONTINUED)**

<b>VEHICLE STRUCTURAL MEASUREMENTS</b>		
	<b>Elements</b>	<b>Pre-test</b>
<b>1</b>	Total length	5026
<b>2</b>	Total width	1862
<b>3</b>	Bumper top height	550
<b>4</b>	Bumper bottom height	273
<b>5</b>	Longitudinal member top height	275
<b>6</b>	Longitudinal member bottom height	175
<b>7</b>	Distance between longitudinal members	855
<b>8</b>	Longitudinal member width	1000
<b>9</b>	Engine top height	760
<b>10</b>	Engine bottom height	188
<b>11</b>	Engine and gearbox width	920
<b>12</b>	Front bumper – engine distance	540
<b>13</b>	Bonnet leading edge height	715
<b>14</b>	Front shock absorber fixing width	1115
<b>15</b>	Front bumper – front axle distance	1045
<b>16</b>	Front axle – A pillar distance	1460
<b>17</b>	A pillar – B pillar distance	1210
<b>18</b>	B pillar – rear axle distance	1135
<b>19</b>	B – pillar – C – pillar distance	985
<b>20</b>	Roof sill bottom height	1280
<b>21</b>	Roof sill top height	1355
<b>22</b>	Floor sill bottom height	285
<b>23</b>	Floor sill top height	350

**DATA SHEET NO. 1A**  
**ELECTRIC VEHICLE PARAMETER DATA**

**ELECTRIC VEHICLE PROPULSION SYSTEM**

Type of electric vehicle (electric/hybrid): \_\_\_\_\_  
Propulsion battery type: \_\_\_\_\_  
Nominal voltage: \_\_\_\_\_ V  
Physical location of automatic propulsion battery disconnect: \_\_\_\_\_  
Auxiliary battery type: \_\_\_\_\_

**PROPULSION BATTERY SYSTEM DATA (COTR SUPPLIED DATA)**

Electrolyte fluid type: \_\_\_\_\_  
Electrolyte fluid specific gravity: \_\_\_\_\_  
Electrolyte fluid kinematic viscosity: \_\_\_\_\_ centistokes  
Electrolyte fluid color: \_\_\_\_\_  
Propulsion battery coolant type, color, specific gravity (if applicable): \_\_\_\_\_  
Location of battery in module: \_\_\_\_\_  
Inside passenger compartment: \_\_\_\_\_  
Outside passenger compartment: \_\_\_\_\_

Measure and record battery state of charge (note: check which condition applies and specify the manufacturer's value):

Maximum state of charge recommended by manufacturer: \_\_\_\_\_  
Test voltage (> 95% of maximum state of charge): \_\_\_\_\_  
Test voltage (within normal operating voltage range): \_\_\_\_\_

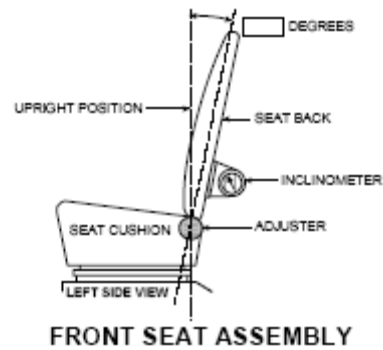
**VEHICLE CHASSIS GROUND POINT(S) LOCATION(S)**

Details of vehicle chassis ground point(s) and location(s):

**PROPULSION BATTERY SYSTEM**

Details of propulsion battery components:

**DATA SHEET NO. 2**  
**SEAT ADJUSTMENT, FUEL SYSTEM, AND STEERING WHEEL**



**Seat back position**

The driver and passenger seat back is positioned according to the manufacturers designated angle.

SEAT BACK POSITION	
Driver seat back angle:	15.9° (at head-rest post)
Passenger seat back angle:	Non-adjustable

**Seat fore/aft positions**

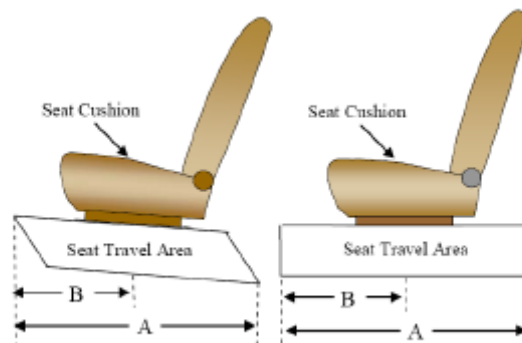
The total seat travel was measured from forward most position to rearmost position, irrespective of vertical seat height in those positions. The seat was set at the longitudinal mid position with vertical adjustment at the lowest position obtainable for both the driver and passenger.

SEAT FORE/AFT POSITION		
	Total fore/aft travel	Placed in position #
Driver seat	242 mm	Mid-position
Passenger Seat	Non-adjustable	N/a

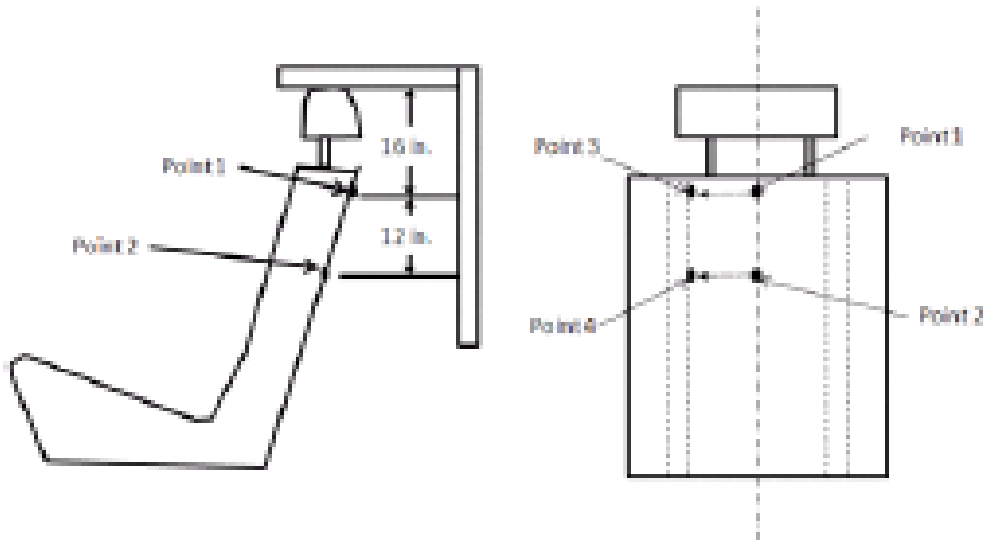
**Seat belt position**

The adjustable anchorage locations are positioned according to the manufacture's specifications.

SEAT BELT ADJUSTABLE ANCHORAGE (D-RING)		
	Total # of positions	Placed in position #
Driver seat	5	Highest position
Passenger seat	Non-adjustable	N/a



**DATA SHEET NO. 2**  
**SEAT ADJUSTMENT, FUEL SYSTEM, AND STEERING WHEEL (CONTINUED)**



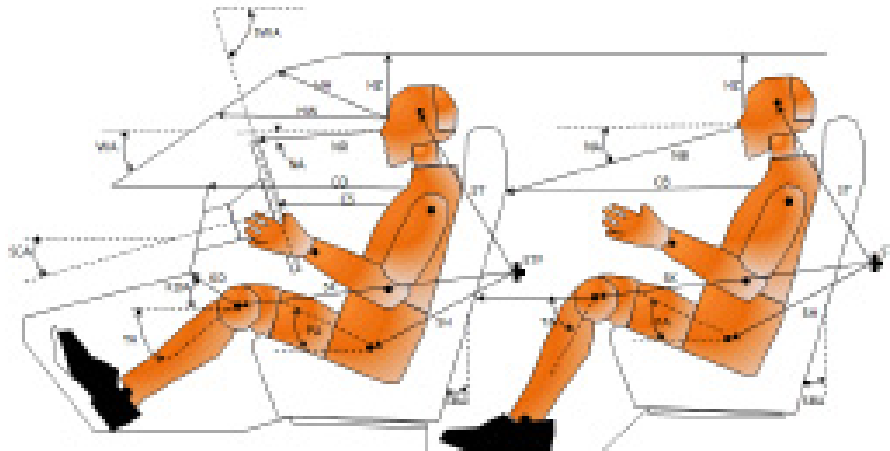
	<b>X</b>	<b>Y</b>	<b>Z</b>
Point 3	2326.5	-221.0	-252.0
Point 4	2371.4	-220.7	-103.3

**DATA SHEET NO. 2**  
**SEAT ADJUSTMENT, FUEL SYSTEM, AND STEERING WHEEL (CONTINUED)**

FUEL TANK CAPACITY			
Description	Units	Value	
Usable capacity of standard equipment fuel tank	L	47.0	
Usable capacity of optional equipment fuel tank	L	0	
1/3 of usable capacity	L	15.7	
Amount of <input type="checkbox"/> toddard added for test	L	43.7	
% Usable capacity (92%-94%)	%	93.0	
Operational instructions	None		
Electric fuel pump present	Yes		
Operating condition of test vehicle for fuel pump operation	The fuel pump is activated when the ignition is turned on.		

STEERING COLUMN POSITIONS			
Lowermost position no. 1	14.1°		
Geometric center position no. 2	22.1°		
Uppermost position no. 3	30.0°		
Telescopic steering wheel travel	Non-telescoping		
Test position	N/a		
Steering wheel positioned 22.1° relative to side sill panel. The steering column did not have a telescope adjustment and it was therefore set as positioned.			

**DATA SHEET NO. 3**  
**DUMMY LONGITUDINAL CLEARANCE DIMENSIONS**



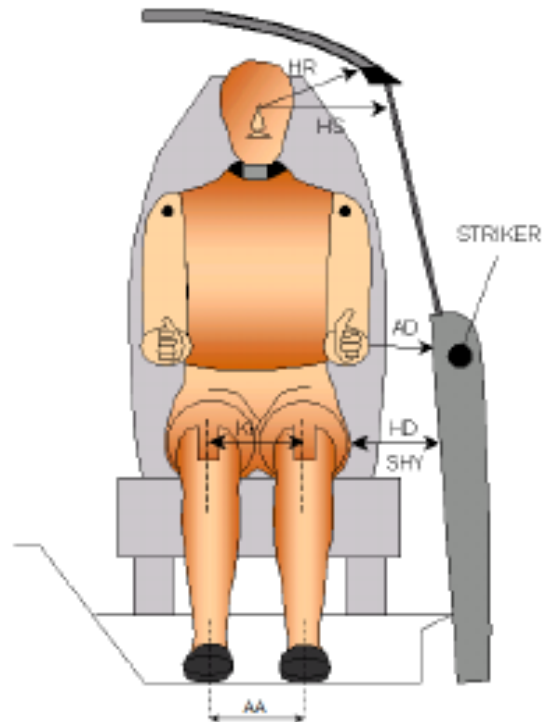
DUMMY LONGITUDINAL CLEARANCE MEASUREMENTS					
Code	Measurement description	Driver		LR passenger	
		Length (mm)	Angle (°)	Length (mm)	Angle (°)
WA°	Windshield angle		-25.4		
S WA°	Steering wheel angle		22.1		
SCA°	Steering column angle		-21.1		
SA°	Seat back angle (hr post)		17.0		21.1
HZ	Head to roof (Z)	257	90	317	90
HH	Head to header	479	20.9		
HW	Head to windshield	838	0.0		
NR/NB	Nose to rim/seat back	555	-4.3	517	-9.6
CD/CB	Chest to dash/seat back	689	8.3	528	14.1
CS	Chest to steering hub	469	-1.1		
RA	Rim to abdomen	551	48.7		
KDL/KDR	Left knee to dash/seat back	195	14.9	196	7.5
KDR/KBR	Right knee to dash/seat back	126	14.3	194	8.0
PA°	Pelvic angle		20.2		24.4
TA°	Tibia angle		-39.6		-61.2
SK	Striker to knee	477		734	
ST	Striker to head	634		423	
SH	Striker to H-point	309		554	
HAX°	Head angle X		0.0		
HAY°	Head angle Y		1.3		
NAX°	Neck angle X		-1.5		
NAY°	Neck angle Y		-0.5		
TAX°	T angle X		-32.1		
TAY°	T angle Y		50.6		
LAX°	Lumbar angle X		-3.2		
LAY°	Lumbar angle Y		37.6		

**DATA SHEET NO. 3b**  
**DUMMY CMM MEASUREMENTS**

CMM MEASUREMENTS						
Description	Driver			LR passenger		
	X	Y	Z	X	Y	Z
Striker (driver/passenger)	2468.5	-800.9	-6.73	1447.1	-790.5	-210.3
Head CG	2372.0	-441.6	-520.5	1558.8	-456.6	-444.3
Bridge of nose	2468.4	-361.0	-520.5	1647.2	-381.8	-456.9
Tip of nose	2475.2	-362.7	-481.8	1670.9	-380.4	-423.7
Shoulder bolt	2406.8	-556.2	-273.4	1556.7	-533.2	-200.6
Tip of chin	2485.1	-365.6	-403.0	1656.8	-372.2	-347.0
H-point	2615.3	-541.5	72.7	1722.3	-489.5	122.5
Left knee	3015.5	-542.1	0.32	2061.3	-461.0	20.5
Right knee*	3018.3	-259.6	-5.53	2073.3	-230.8	41.9
Left ankle	3338.2	-538.4	275.4	2227.1	-452.5	323.0
Right ankle*	3343.5	-236.6	270.4	2232.8	-277.8	309.8
Left heel	3379.6	-528.2	393.7	2153.5	-453.9	405.2
Right heel	3331.3	-224.8	397.2	2167.8	-253.0	399.4
Driver's outboard seat anchor bolt	2941.9	-574.6	357.8			
Outboard head restraint post	2241.8	-462.1	-342.8			
Top of head restraint	2241.8	-357.6	-607.7			
Center of steering wheel	2976.9	-361.7	-252.9			

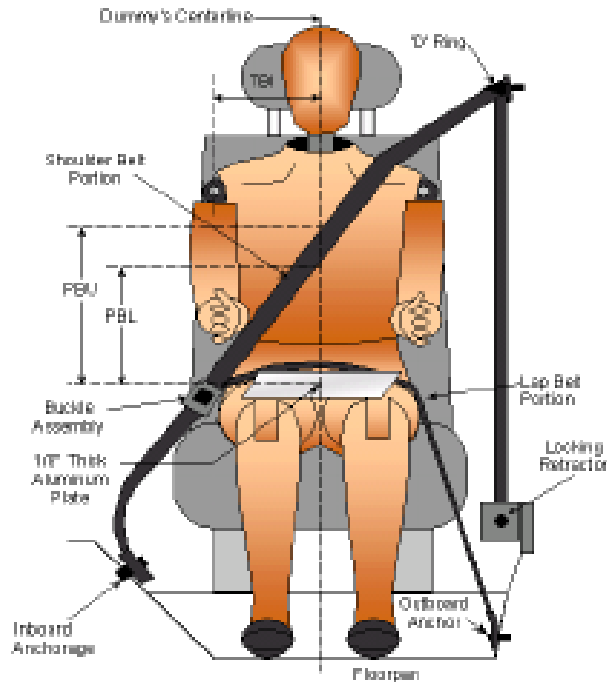
\* Right knee and ankle taken on the inboard side for the driver ATD and right ankle for passenger

**DATA SHEET NO. 4**  
**DUMMY LATERAL CLEARANCE DIMENSIONS**



DUMMY LATERAL CLEARANCE DIMENSIONS			
Code	Description	Driver	LR passenger
AD	Arm to door	116	116
HD	H-point to door	147	201
HR	Head to side header	185	214
HS	Head to side window	241	185
KK	Knee to knee	310	164
SHY	Striker to H-point (Y direction)	259	301
AA	Ankle to ankle	300	205

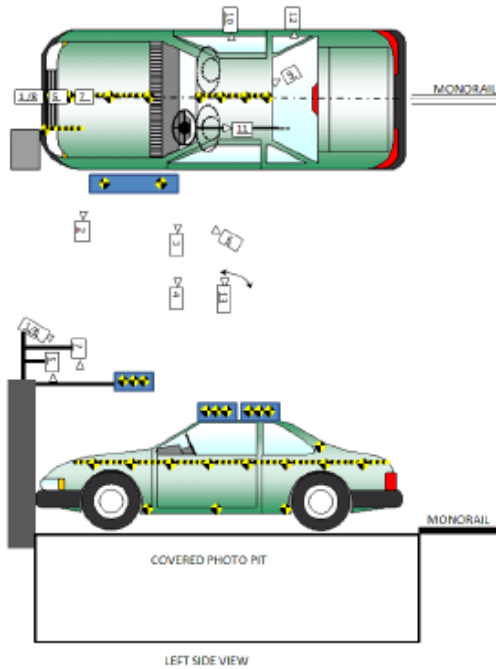
**DATA SHEET NO. 5  
 SEAT BELT POSITIONING DATA**



SEAT BELT POSITIONING DATA				
Code	Measurement description	Units	Left front seat	Left rear seat
PBU	Top surface of aluminum plate to belt upper edge	mm	307	250
PBL	Top surface of aluminum plate to belt lower edge	mm	231	170

BELT LENGTH DATA		
Measurement description	Driver	Passenger
Shoulder belt length as measured ATD	814	846
Lap belt length as measured on ATD	662	585
Remainder of belt on reel	655	677
Total belt length for continuous webbing systems	2131	2108

**DATA SHEET NO. 6  
 HIGH-SPEED CAMERA LOCATIONS AND DATA**



HIGH SPEED CAMERA LOCATIONS						
Cam. No.	View	Coordinates			Lens	Rate
		X	Y	Z		
		mm	mm	mm	mm	fps
1	Front view of test vehicle	3200	2743	-3120	25	1000
2	Lateral view of test vehicle	-1006	-10058	-755	35	1000
3	Left steering column view of test vehicle	-823	-10016	-734	50	1000
4	Overall left view of test vehicle	-914	-10044	-720	25	1000
5	Overhead close-up view of test vehicle	-1620	229	-5906	35	1000
6	Overhead oblique view of test vehicle	938	3658	-2740	25	1000
7	Overhead overall view of test vehicle	-457	503	-5889	12.5	1000
8	Windshield view of test vehicle	2972	1829	-3104	50	1000
9	Test vehicle onboard driver oblique view	-2704	758	-716	12.5	1000
10	Test vehicle onboard driver side view	-1972	1471	-452	12.5	1000
11	Test vehicle onboard foot view	-1702	215	310	10	1000
12	Test vehicle onboard passenger side view	-2989	1476	-458	12.5	1000
13	Real-time film coverage of test	-	-	-	-	-

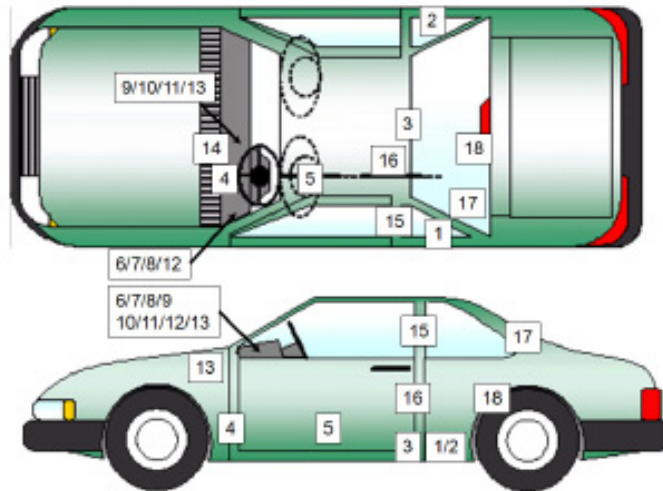
Origin

X Impact Point  
 Y Impact Point  
 Z Impact Point

Orientation

X +(X) Forward  
 Y +(Y) Right  
 Z +(Z) Down

**DATA SHEET NO. 7**  
**VEHICLE INSTRUMENTATION LOCATIONS**



VEHICLE INSTRUMENTATION DATA						
Loc. no.	Accelerometer location		Positive direction		Negative direction	
			Max	Time (ms)	Max	Time (ms)
1	Left rear seat cross member (G's)	X	4.74	13.9	-20.7	70.6
		Y	11.7	90.6	-2.56	66.6
2	Right rear seat cross member (G's)	X	2.33	205.0	-14.6	69.4
		Y	10.7	90.2	-1.56	10.5
3	Vehicle CG (G's)	X	2.95	229.0	-25.4	134.2
		Y	13.3	82.2	-11.6	106.2
		Z	25.7	81.3	-24.1	70.8
4	Behind brake pedal (G's)	X	225.2	77.8	-111.7	64.2
		Y	105.2	92.8	-63.6	113.8
		Z	51.3	66.2	-46.4	77.8
5	Driver left knee center contact switch 1 (V)		5.20*	-55.8	3.44*	272.4
6	Driver left knee left of center contact switch 2 (V)		10.2*	88.0	6.80*	228.2
7	Driver left knee right of center contact switch 3(V)		-5015.7	93.0	-5046.5	114.1
8	Passenger left knee center contact switch 1 (V)		-4995.6	115.5	-5008.6	133.7
9	Passenger left knee left of center contact switch 2 (V)		-10.77**	-100.0	-10.77**	-100.0
10	Passenger left knee right of center contact switch 3(V)		-5167.6	223.2	-5172.5	212.4
11	Driver IP (G's)	X	35.0	103.7	-53.8	113.1

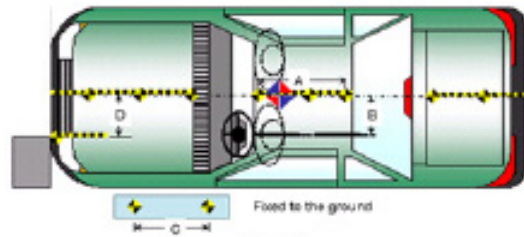
**DATA SHEET NO. 7**  
**VEHICLE INSTRUMENTATION LOCATIONS (CONTINUED)**

VEHICLE INSTRUMENTATION DATA						
Loc. no.	Accelerometer location		Positive direction		Negative direction	
			Max	Time (ms)	Max	Time (ms)
12	Driver air bag squib (V)	1	0.04	364.4	-0.36	364.8
		2	0.06	269.9	-0.03	214.2
13	Driver shoulder belt (N)		4458.3	107.8	-14.8	244.6
14	Driver lap belt (N)		3057.4	105.4	-2.13	-63.6
15	Passenger shoulder belt (N)		4221.4	115.0	-14.8	238.8
16	Passenger lap belt (N)		2056.2	100.3	-3.48	395.8

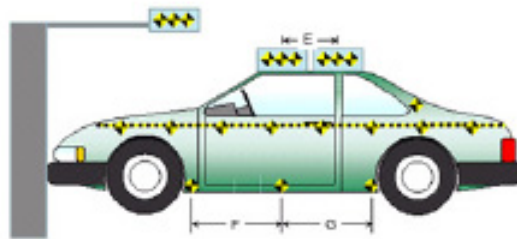
\* Meaningless data

\*\* Channel failed during testing

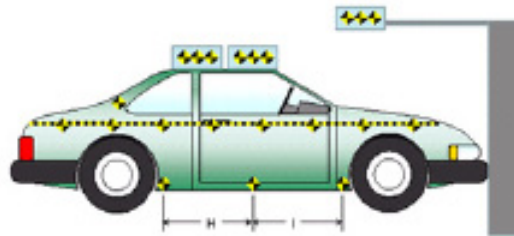
**DATA SHEET NO. 8**  
**VEHICLE PHOTOGRAPHIC REFERENCE TARGET LOCATIONS**



Top View



Left Side View



Right Side View

VEHICLE PHOTOGRAPHIC REFERENCE TARGET LOCATIONS	
Item	Value
A	1081
B	370
C	617
D	655
E	577
F	1102
G	704
H	696
I	1102

**DATA SHEET NO. 9**  
**TEST VEHICLE SUMMARY OF RESULTS**

<b>ACCELEROMETERS</b>	
<b>Driver dummy accelerometers</b>	34
<b>Passenger dummy accelerometers</b>	21
<b>Vehicle structural accelerometers</b>	22
<b>Total</b>	77

<b>CAMERA COVERAGE</b>	
<b>High speed vehicle onboard</b>	4
<b>High speed vehicle offboard</b>	8
<b>Real-time panning</b>	1
<b>Total</b>	13

**DATA SHEET NO. 10  
 POST TEST OBSERVATIONS**

<b>TEST DUMMY INFORMATION AND CONTACT POINTS</b>			
<b>Description</b>	<b>Driver</b>	<b>Passenger</b>	<b>Picture ref.</b>
Dummy type	THOR-LX	HIII 5% female	
Dummy serial no.	T1-0006	421	
Lower leg type	LX	HIII 5% legs	
Lower leg serial no.	LX109 (left), LX110 (right)	421	
Head contact	Front/right of head to steering wheel airbag; back bottom to upper seatback on rebound	Chin to sternum and back of head to seatback on rebound	A-51/A-62
Upper torso contact	To steering wheel airbag	No contact	A-51/ A-63
Lower torso contact	Upper abdomen to steering wheel airbag	No contact	A-40/ A-63
Left knee contact	To knee bolster, steering column, and interior door panel	To interior door panel	A-46/A-63
Right knee contact	To knee bolster and steering column	No contact	A-46/A-63

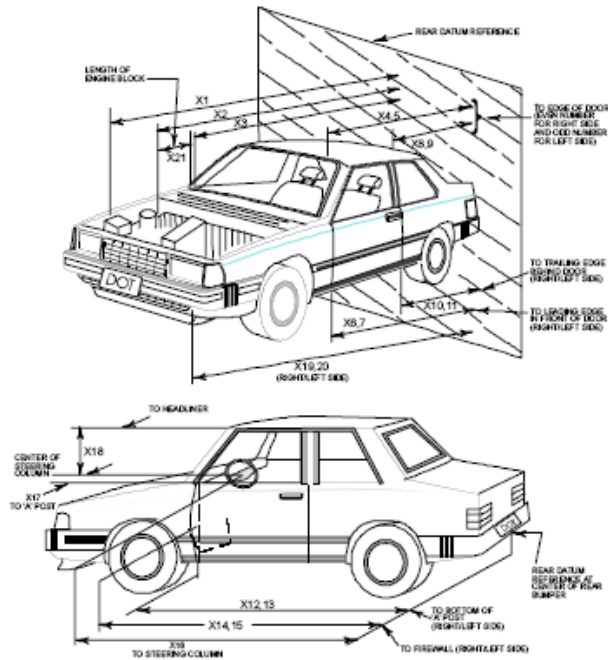
<b>DOOR OPENING AND SEAT TRACK INFORMATION</b>		
<b>Description</b>	<b>Driver</b>	<b>Passenger</b>
Locked/unlocked doors	Unlocked	Unlocked
Front door opening	Closed/locked/inoperable	Closed/locked/operable
Rear door opening	Closed/locked/operable	Closed/locked/operable
Seat track shift (mm)	None	None
Seat back failure	None	None
Glazing damage	No intrusion	N/a

<b>POST TEST STRUCTURAL OBSERVATIONS</b>		
<b>Critical areas of performance</b>	<b>Observations/conclusions</b>	<b>Picture ref.</b>
Windshield damage	Heavy cracking at lower left corner extending along bottom of windshield and along windshield centerline	A-6
Window damage	Driver's side window shattered at impact	A-36
Other notable effects	None noted	N/a

**DATA SHEET NO. 10  
 POST TEST OBSERVATIONS (CONTINUED)**

<b>SUPPLEMENTAL RESTRAINT SYSTEM INFORMATION</b>				
<b>Restraint type</b>	<b>Driver (occupant 1)</b>		<b>Passenger (occupant 2)</b>	
	Installed	Operated	Installed	Operated
Front airbag	Yes – steering wheel	Deployed	No	N/a
Pelvis/torso airbag	No	N/a	No	N/a
Curtain (or other head) airbag	No	N/a	No	N/a
Knee airbag	No	N/a	No	N/a
Seat belt pretensioner	Yes	Deployed	No	N/a
Seat belt load limiter	Yes	N/a	Yes	N/a

**DATA SHEET NO. 11**  
**VEHICLE PROFILE MEASUREMENTS**



VEHICLE DIMENSIONS				
Code	Description	Pre test	Post test	Change
		mm	mm	mm
1	Total length of vehicle at centerline	5026	4842	-184
2	Rear surface of vehicle to front of engine	4435	4440	5
3	Rear surface of vehicle to firewall	3780	3645	-135
4	Rear surface of vehicle to upper leading edge of right door	3465	3463	-2
5	Rear surface of vehicle to upper leading edge of left door	3465	3445	-20
6	Rear surface of vehicle to lower leading edge of right door	3430	3432	2
7	Rear surface of vehicle to lower leading edge of left door	3430	3260	-170
8	Rear surface of vehicle to upper trailing edge of right door	2380	2384	4
9	Rear surface of vehicle to upper trailing edge of left door	2380	2377	-3
10	Rear surface of vehicle to lower trailing edge of right door	2365	2356	-9
11	Rear surface of vehicle to lower trailing edge of left door	2365	2315	-50

**DATA SHEET NO. 11**  
**VEHICLE PROFILE MEASUREMENTS (CONTINUED)**

<b>VEHICLE DIMENSIONS</b>				
<b>Code</b>	<b>Description</b>	<b>Pre test</b>	<b>Post test</b>	<b>Change</b>
		<b>mm</b>	<b>mm</b>	<b>mm</b>
12	Rear surface of vehicle to bottom of "A" post of right side	3445	3442	-3
13	Rear surface of vehicle to bottom of "A" post of left side	3445	3245	-20
14	Rear surface of vehicle to firewall, right side	3757	3690	-67
15	Rear surface of vehicle to firewall, left side	3757	3465	-292
16	Rear surface of vehicle to steering column	3005	2920	-85
17	Center of steering column to "A" post	440	325	-115
18	Center of steering column to headliner	400	510	110
19	Rear surface of vehicle to right side of front bumper	4800	4920	120
20	Rear surface of vehicle to left side of front bumper	4800	4540	-260
21	Length of engine block	430	430	0
RD	Rear surface of vehicle to right side of dash panel	3144	3150	6
CD	Rear surface of vehicle to center of dash panel	3168	3075	-93
LD	Rear surface of vehicle to left side of dash panel	3144	2947	-197

**DATA SHEET NO. 12**  
**ACCIDENT INVESTIGATION DIVISION DATA**

**VEHICLE INFORMATION**

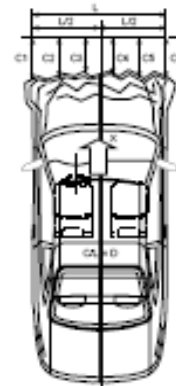
VIN: 1FAPP53U77A208887  
 Vehicle size category: 4-door sedan  
 Wheelbase (mm): 2760  
 Test weight (kg): 1742.7

**ACCELEROMETER DATA**

Accelerometer locations: as given in data sheet no. 7a  
 Cal. procedure/interval: one (1) year, or as needed  
 Integration algorithm: \_\_\_\_\_  
 Linearity: \_\_\_\_\_  
 Impact velocity (km/h ): \_\_\_\_\_  
 Velocity change (km/h): \_\_\_\_\_  
 Time of separation (msec): \_\_\_\_\_

**CRUSH PROFILE**

Collision Deformation Classification: 11FLEE5  
 Midpoint of damage: 701  
 Damage region length: 1402  
 Impact mode: vehicle pulled into pole



CRUSH DEPTH DIMENSIONS					
	Measurement description	Units	Pre-test	Post-test	DIFFERENCE
<b>C1</b>	Crush zone 1 at left side	mm	348	729	381
<b>C2</b>	Crush zone 2 at left side	mm	253	457	204
<b>C3</b>	Crush zone 3 at left side	mm	225	362	137
<b>C4</b>	Crush zone 1 at right side	mm	225	314	89
<b>C5</b>	Crush zone 2 at right side	mm	252	220	-32
<b>C6</b>	Crush zone 3 at right side	mm	348	310	-38
<b>L</b>	C1 to C6	mm	1402	1359	-43

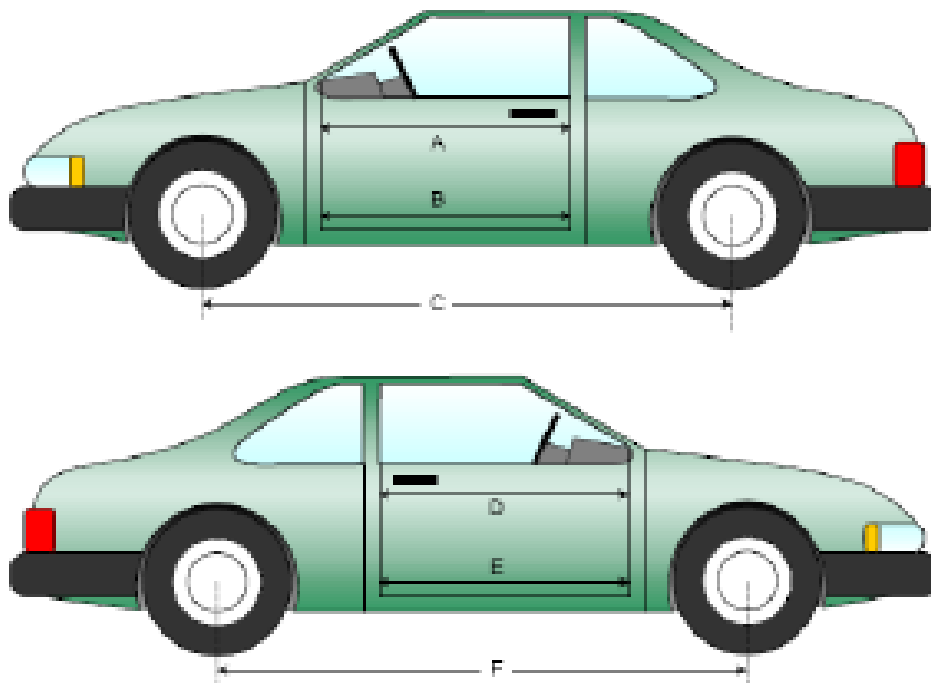
**DATA SHEET NO. 13  
 VEHICLE INTRUSION MEASUREMENTS**

DOOR OPENING WIDTH					
Item	Description	Units	Pre-test	Post-test	Difference
A	Left side upper	mm	1118.0	*	*
B	Left side lower	mm	1082.7	*	*
D	Right side upper	mm	1123.5	1133.6	10.1
E	Right side lower	mm	1115.0	1121.1	6.00

WHEELBASE MEASUREMENTS					
Item	Description	Units	Pre-test	Post-test	Difference
C	Left side wheelbase	mm	2756.3	**	**
F	Right side wheelbase	mm	2763.6	2817.0	53.4

\* Points damaged during testing and were unable to be measured

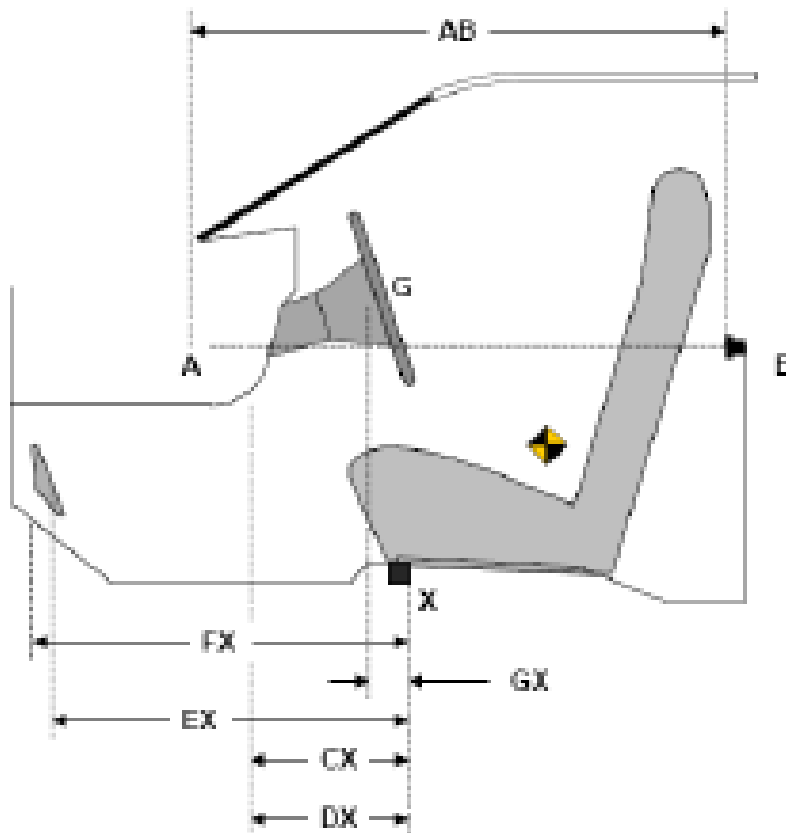
\*\* Tire became disengaged from vehicle during testing



**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

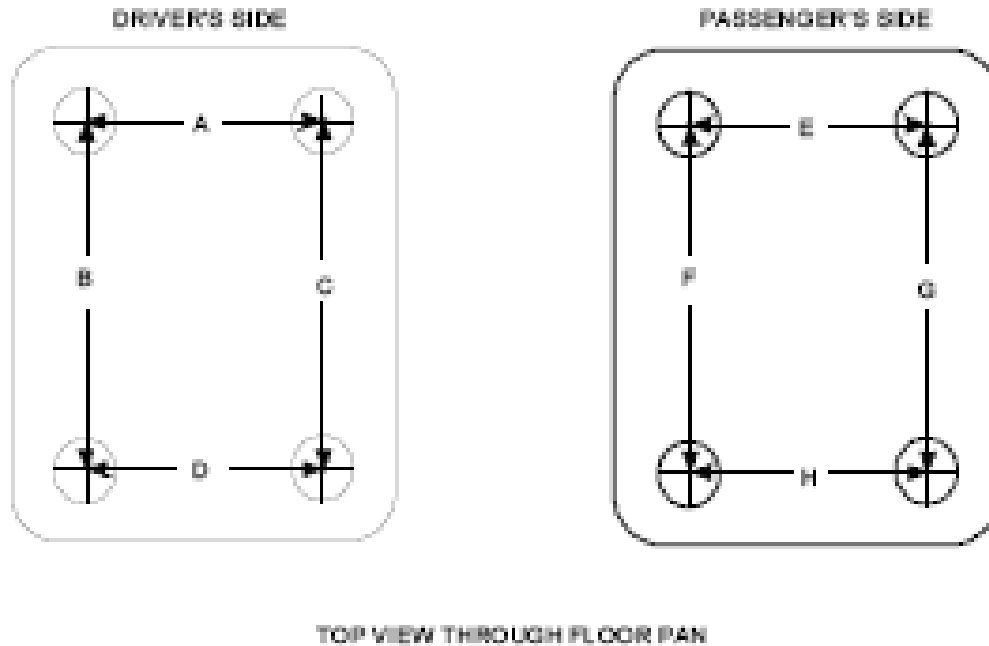
DRIVER COMPARTMENT INTRUSION					
Item	Description	Units	Pre-test	Post-test	Difference
AB	Door opening (inside window jam)	mm	966.1	796.0	-170.1
CX	Left knee bolster to X	mm	276.0	127.8	-148.2
DX	Right knee bolster to X	mm	262.4	159.1	-103.3
EX	Brake pedal to X	mm	534.7	419.8	-114.9
FX	Foot rest to X	mm	553.6	437.0	-116.6
GX	Center of steering column wheel hub to X	mm	35.0	1.80	-33.2

*X = Front of seat track (stationary)*



**DRIVER COMPARTMENT**

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**



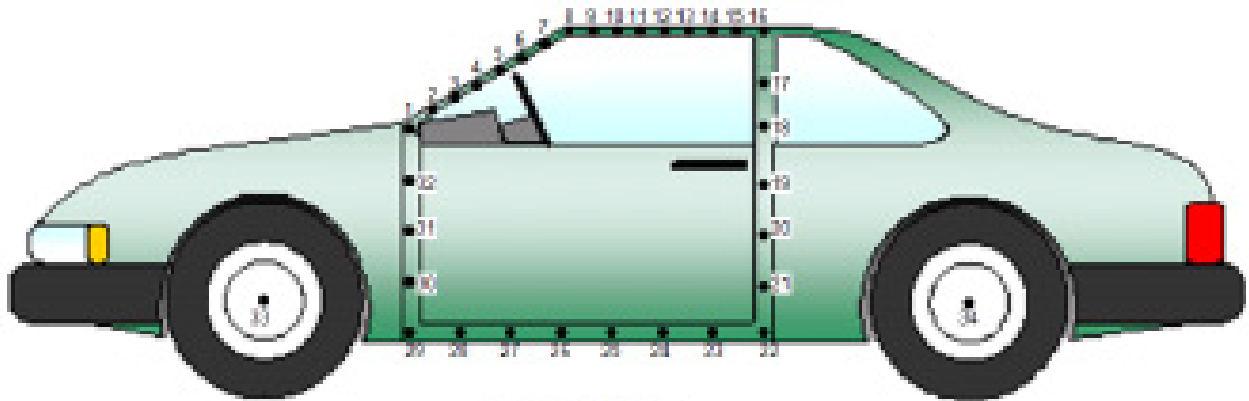
TOP VIEW THROUGH FLOOR PAN

FLOORBOARD DEFORMATION			
Measurement	PRE-TEST	POST-TEST	DIFFERENCE
A	410.5	251.3	159.2
B	191.6	116.8	74.8
C	181.3	172.0	9.3
D	409.4	265.9	143.5
E	*	*	*
F	*	*	*
G	*	*	*
H	*	*	*

All measurements in millimeters

\* Measurement not taken as there was no P2 dummy

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**



Left Side View

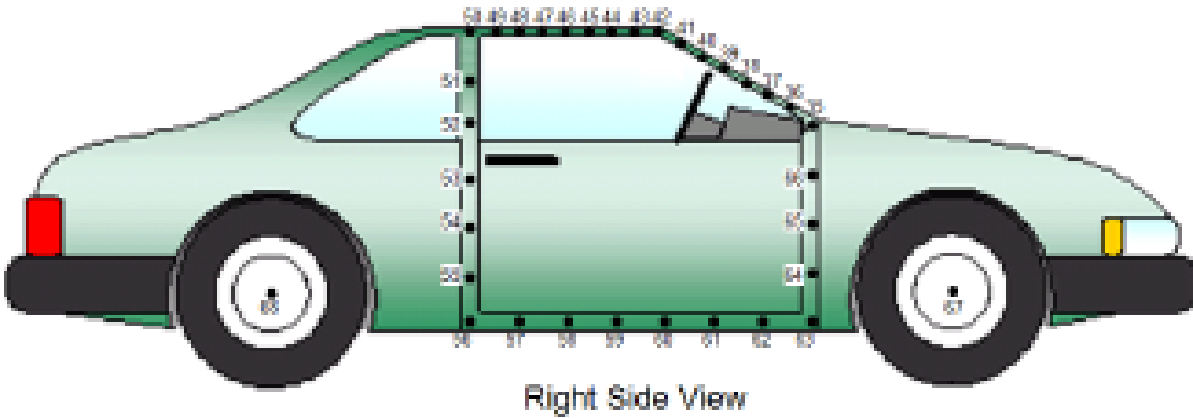
LEFT SIDE DOOR FRAME MEASUREMENTS									
Pt.	Pre-test (mm)			Post-test (mm)			Difference (mm)		
	X	Y	Z	X	Y	Z	X	Y	Z
1	3454.1	-810.2	-278.3	3279.5	-813.8	-227.5	-174.6	-3.60	50.8
2	3368.9	-771.9	-372.8	3214.9	-773.1	-336.4	-154.0	-1.20	36.4
3	3246.8	-733.7	-455.1	3133.3	-736.2	-452.0	-113.5	-2.50	3.10
4	3147.3	-704.1	-515.3	3060.6	-706.8	-542.8	-86.7	-2.70	-27.5
5	3073.1	-683.7	-555.5	3003.8	-686.6	-606.1	-69.3	-2.90	-50.6
6	3009.7	-662.3	-589.6	2956.3	-665.6	-659.3	-53.4	-3.30	-69.7
7	2940.4	-639.1	-624.4	2902.3	-642.8	-714.7	-38.1	-3.70	-90.3
8	2865.0	-619.6	-655.6	2839.1	-625.2	-767.2	-25.9	-5.60	-111.6
9	2799.8	-604.9	-680.1	2779.1	-608.1	-797.8	-20.7	-3.20	-117.7
10	2731.2	-594.8	-697.8	2709.5	-590.9	-800.2	-21.7	3.90	-102.4
11	2647.0	-586.0	-714.4	2625.5	-571.2	-793.8	-21.5	14.8	-79.4
12	2577.1	-581.7	-724.3	2557.2	-556.8	-783.6	-19.9	24.9	-59.3
13	2512.8	-579.7	-730.3	2495.1	-545.4	-770.9	-17.7	34.3	-40.6
14	2442.6	-578.7	-735.0	2427.3	-534.0	-754.0	-15.3	44.7	-19.0
15	2380.8	-580.0	-737.0	2367.5	-526.2	-737.5	-13.3	53.8	-0.50
16	2291.9	-581.7	-738.0	2294.1	-531.4	-728.2	2.20	50.3	9.80
17	2309.7	-716.8	-563.9	2284.1	-675.4	-547.0	-25.6	41.4	16.9
18	2339.6	-799.7	-397.7	2318.9	-758.1	-382.0	-20.7	41.6	15.7
19	2391.2	-920.0	-140.9	2372.5	-882.7	-127.1	-18.7	37.3	13.8

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

LEFT SIDE DOOR FRAME MEASUREMENTS									
Pt.	Pre-test (mm)			Post-test (mm)			Difference (mm)		
	X	Y	Z	X	Y	Z	X	Y	Z
20	2383.2	-919.1	18.8	2359.7	-885.6	33.0	-23.5	33.5	14.2
21	2370.1	-929.5	154.7	*	*	*	*	*	*
22	2336.6	-874.4	335.7	2298.5	-857.4	349.2	-38.1	17.0	13.5
23	2468.4	-873.0	334.2	2420.7	-854.4	352.2	-47.7	18.6	18.0
24	2580.1	-871.7	333.2	2530.4	-866.8	352.7	-49.7	4.90	19.5
25	2721.6	-871.5	331.5	2671.4	-886.6	351.5	-50.2	-15.1	20.0
26	2835.3	-871.0	330.5	2784.5	-899.7	352.2	-50.8	-28.7	21.7
27	3020.8	-865.4	332.6	2970.6	-916.9	354.4	-50.2	-51.5	21.8
28	3254.8	-866.4	326.5	*	*	*	*	*	*
29	3434.7	-859.4	329.7	*	*	*	*	*	*
30	3465.9	-900.3	185.8	*	*	*	*	*	*
31	3501.7	-895.6	-20.4	*	*	*	*	*	*
32	3509.2	-892.8	-168.0	*	*	*	*	*	*
33	3960.1	-885.0	321.7	*	*	*	*	*	*
34	1203.8	-886.4	326.4	1190.4	-885.4	304.3	-13.4	1.00	-22.1

\* Point damaged during test

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

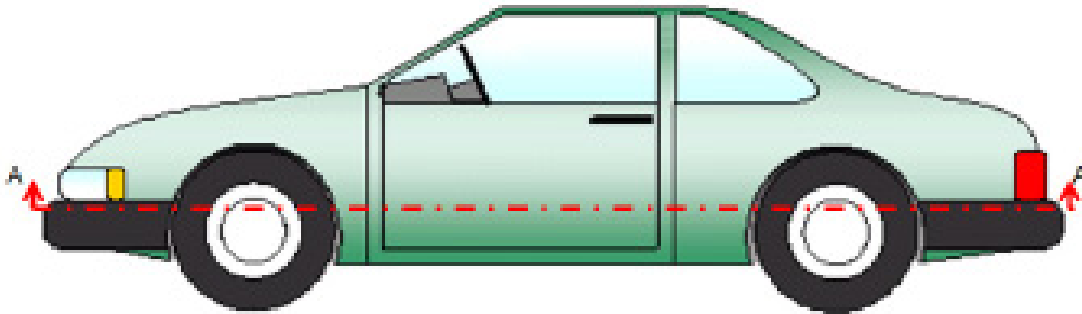


RIGHT SIDE DOOR FRAME MEASUREMENTS									
Pt.	Pre-test (mm)			Post-test (mm)			Difference (mm)		
	X	Y	Z	X	Y	Z	X	Y	Z
35	3457.1	825.0	-264.3	3466.8	803.8	-324.5	9.70	-21.2	-60.2
36	3316.2	771.5	-394.6	3323.8	750.8	-452.9	7.60	-20.7	-58.3
37	3208.3	740.1	-463.7	3215.1	721.1	-521.3	6.80	-19.0	-57.6
38	3112.0	712.8	-520.1	3117.2	695.7	-576.7	5.20	-17.1	-56.6
39	3033.6	687.4	-563.9	3037.5	672.4	-619.9	3.90	-15.0	-56.0
40	2966.8	667.1	-596.6	2970.2	653.6	-652.1	3.40	-13.5	-55.5
41	2908.1	647.4	-625.9	2910.7	635.3	-681.1	2.60	-12.1	-55.2
42	2823.0	626.6	-658.8	2824.6	616.9	-713.9	1.60	-9.70	-55.1
43	2737.9	611.8	-683.3	2739.4	605.0	-737.5	1.50	-6.80	-54.2
44	2674.9	604.7	-696.8	2676.5	599.1	-750.8	1.60	-5.60	-54.0
45	2616.2	600.5	-705.5	2618.0	596.4	-759.2	1.80	-4.10	-53.7
46	2554.9	596.6	-713.1	2556.5	593.7	-766.9	1.60	-2.90	-53.8
47	2493.5	595.3	-718.1	2495.3	593.3	-771.6	1.80	-2.00	-53.5
48	2420.7	594.0	-722.4	2423.0	593.2	-775.8	2.30	-0.80	-53.4
49	2355.2	593.7	-723.9	2357.2	594.4	-777.1	2.00	0.70	-50.5
50	2285.9	592.1	-726.6	2287.3	594.4	-779.7	1.40	2.30	-53.1
51	2302.0	685.0	-608.3	2305.8	684.7	-661.8	3.80	-0.30	-53.5
52	2325.3	761.0	-482.3	2331.1	761.8	-536.3	5.80	0.80	-54.0
53	2391.0	929.4	-162.5	2400.6	932.7	-219.2	9.60	3.30	-56.7

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

<b>RIGHT SIDE DOOR FRAME MEASUREMENTS</b>									
<b>Pt.</b>	<b>Pre-test (mm)</b>			<b>Post-test (mm)</b>			<b>Difference (mm)</b>		
	<b>X</b>	<b>Y</b>	<b>Z</b>	<b>X</b>	<b>Y</b>	<b>Z</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
54	2383.0	917.0	-6.01	2393.1	922.1	-63.0	10.1	5.10	-57.0
55	2362.4	929.1	199.7	2373.5	937.1	142.9	11.1	8.00	-56.8
56	2334.4	870.2	353.9	2345.9	879.6	298.6	11.5	9.40	-55.3
57	2449.2	869.9	355.0	2463.0	892.9	296.5	13.8	23.0	-58.5
58	2560.4	865.1	357.7	2573.6	886.8	298.1	13.2	21.7	-59.6
59	2736.1	864.9	357.1	2748.6	882.0	297.5	12.5	17.1	-59.6
60	2884.2	864.4	356.7	2895.8	876.4	297.1	11.6	12.0	-59.6
61	3034.6	861.3	358.4	3045.5	869.2	298.4	10.9	7.90	-60.0
62	3165.6	860.0	358.7	3177.8	864.5	298.2	12.2	4.50	-60.5
63	3442.9	868.9	347.6	3455.4	868.5	289.6	12.5	-0.40	-58.0
64	3477.0	912.3	160.2	3494.6	906.0	100.8	17.6	-6.30	-59.4
65	3505.0	910.3	1.12	3522.7	903.0	-58.4	17.7	-7.30	-59.5
66	3514.5	914.9	-129.6	3534.2	910.5	-189.2	19.7	-4.40	-59.6
67	3963.9	891.9	355.3	4036.7	828.0	330.0	72.8	-63.9	-25.3
68	1200.3	884.4	348.5	1219.7	902.2	304.4	19.4	17.8	-44.1

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**



SECTION A-A							
Pt.	Pre-test			Pt.	Post-test		
	X	Y	Z		X	Y	Z
1	2.78	-97.7	-2.37	1	0.45	-97.1	1.94
2	6.44	-197.0	-2.12	2	4.58	-196.7	0.90
3	14.5	-295.3	-3.07	3	12.1	-295.5	-0.28
4	26.0	-394.1	-3.50	4	23.7	-394.2	-1.38
5	42.5	-491.1	-3.45	5	40.3	-490.9	-2.19
6	66.7	-587.7	-3.94	6	64.7	-587.0	-4.18
7	101.3	-678.1	-4.78	7	99.2	-677.5	-5.72
8	167.5	-751.1	-4.76	8	164.9	-750.2	-5.67
9	258.2	-789.7	-2.34	9	255.4	-788.8	-4.14
10	352.9	-811.9	0.29	10	350.3	-811.5	-1.45
11	451.7	-831.5	3.05	11	449.8	-831.2	0.79
12	550.7	-847.2	5.00	12	547.1	-847.2	3.30
13	650.7	-860.5	8.32	13	646.9	-860.9	5.99
14	749.1	-872.7	11.1	14	745.8	-873.0	7.70
15	848.0	-885.4	15.0	15	844.5	-885.8	11.0
16	1578.6	-921.0	52.4	16	1559.7	-983.7	41.5
17	1678.1	-921.1	50.7	17	1658.1	-972.0	41.8
18	1779.4	-920.9	52.9	18	1759.0	-960.4	48.6
19	1877.8	-921.1	53.1	19	1857.2	-948.8	52.8
20	1976.9	-920.5	55.8	20	1955.4	-937.3	57.5
21	2075.5	-921.2	55.9	21	2053.1	-926.8	61.6
22	2173.9	-921.4	57.4	22	2150.9	-916.7	65.6
23	2273.5	-921.9	57.8	23	2250.8	-907.3	69.8
24	2372.8	-922.6	59.8	24	2348.1	-905.4	81.7
25	2471.2	-922.9	60.5	25	2423.4	-925.1	88.8
26	2569.9	-921.5	61.9	26	2519.7	-948.6	96.1
27	2667.5	-920.0	63.5	27	2518.3	-949.7	96.1
28	2766.4	-918.4	65.8	28	2613.5	-972.1	100.0

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

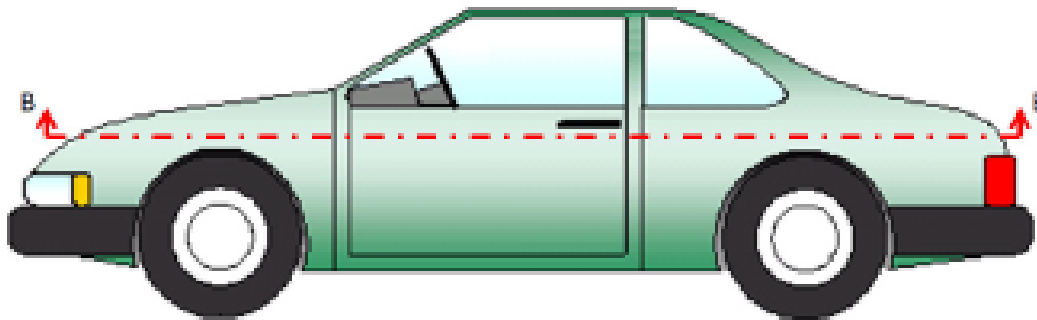
SECTION A-A							
Pt.	Pre-test			Pt.	Post-test		
	X	Y	Z		X	Y	Z
29	2863.5	-916.7	68.1	29	2709.5	-993.7	106.4
30	2960.7	-915.5	70.0	30	2804.3	-1013.6	114.7
31	3058.7	-913.8	72.0	31	2900.2	-1033.5	121.1
32	3158.1	-911.3	75.1	32	2996.6	-1051.8	128.0
33	3255.7	-909.4	77.0	33	3093.8	-1067.1	135.4
34	3355.0	-907.1	78.9	34	3190.4	-1080.7	140.9
35	3451.6	-904.4	83.9	35	3289.2	-1091.2	147.1
36	3549.7	-902.1	90.1	36	*	*	*
37	4385.4	-862.8	74.6	37	*	*	*
38	4483.6	-846.3	75.8	38	*	*	*
39	4581.4	-826.2	76.5	39	*	*	*
40	4677.3	-801.5	74.7	40	*	*	*
41	4765.2	-758.0	76.8	41	5352.1	-615.6	375.9
42	4837.9	-689.6	77.4	42	5393.5	-523.1	366.7
43	4890.2	-606.0	78.4	43	5413.4	-424.1	354.2
44	4927.7	-512.2	79.6	44	5412.5	-325.7	332.1
45	4955.9	-416.5	80.9	45	5403.5	-229.5	308.2
46	4979.0	-317.8	81.6	46	5388.3	-132.6	281.2
47	4995.4	-219.0	82.3	47	5367.5	-39.0	254.4
48	5006.5	-118.5	82.9	48	5339.4	54.5	225.0
49	5008.5	82.4	83.7	49	5266.2	232.0	165.9
50	4999.8	183.5	84.1	50	5220.6	318.4	136.9
51	4986.0	282.1	85.2	51	5170.3	399.7	108.8
52	4965.4	378.8	85.7	52	5114.4	477.1	82.0
53	4939.1	473.9	86.1	53	5053.9	550.6	56.3
54	4906.1	568.1	87.1	54	4987.5	619.5	32.7
55	4858.7	655.8	86.9	55	4909.7	678.8	13.6
56	4793.8	729.4	85.9	56	4820.9	719.7	1.65
57	4712.4	781.9	84.6	57	4726.1	738.3	1.70
58	4609.8	845.0	94.6	58	4625.5	733.5	17.0
59	4519.1	861.0	97.7	59	4529.6	738.7	25.4
60	4420.4	876.8	96.0	60	4433.4	762.9	28.0
61	4323.3	890.2	94.7	61	4338.3	785.2	31.3
62	3524.8	911.2	110.3	62	3540.8	899.5	51.4
63	3425.0	915.6	104.7	63	3436.4	905.9	42.3
64	3325.4	916.7	97.8	64	3337.4	910.0	36.2
65	3224.5	918.1	94.9	65	3236.6	914.4	33.4

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

SECTION A - A							
Pt.	Pre-test			Pt.	Post-test		
	X	Y	Z		X	Y	Z
66	3125.8	919.5	91.9	66	3137.8	918.6	31.1
67	3026.9	920.8	90.0	67	3039.6	922.1	29.3
68	2928.3	921.6	88.0	68	2940.8	925.8	27.6
69	2827.9	921.8	86.3	69	2840.4	929.7	24.9
70	2729.7	922.1	83.7	70	2742.0	933.3	23.9
71	2630.1	922.7	81.1	71	2641.7	937.0	21.7
72	2530.9	922.9	79.5	72	2543.3	939.3	19.9
73	2434.1	923.1	78.1	73	2446.6	941.3	18.3
74	2334.1	922.4	75.4	74	2345.0	930.5	20.0
75	2237.4	920.4	74.8	75	2247.4	930.5	20.3
76	2140.8	919.2	72.3	76	2150.8	930.8	18.2
77	2044.7	917.5	69.7	77	2053.8	931.5	17.4
78	1944.2	924.6	69.4	78	1955.3	932.2	15.1
79	1845.1	924.0	70.1	79	1856.5	932.8	15.7
80	1744.3	923.5	68.3	80	1755.4	933.2	14.6
81	1647.0	922.7	68.6	81	1659.0	933.5	15.1
82	1548.7	922.6	64.8	82	1561.9	933.8	9.56
83	842.2	886.0	22.1	83	854.9	904.2	-27.2
84	744.4	873.1	20.2	84	756.5	894.1	-28.3
85	644.4	860.8	17.1	85	657.0	883.3	-31.0
86	546.9	847.0	15.2	86	558.2	870.4	-33.5
87	447.9	830.2	11.7	87	459.2	854.8	-36.3
88	351.1	811.0	8.7	88	362.6	837.4	-38.4
89	254.8	788.4	5.92	89	265.8	816.6	-40.4
90	164.8	750.6	4.01	90	174.3	780.1	-41.3
91	100.4	681.0	2.90	91	108.9	711.5	-42.4
92	64.8	588.2	1.93	92	71.9	620.1	-43.2
93	40.6	492.1	1.80	93	46.0	524.0	-44.1
94	23.9	395.5	0.87	94	28.0	426.9	-45.5
95	12.6	298.0	-0.11	95	15.9	329.9	-47.1
96	5.73	197.8	-1.36	96	7.28	230.1	-48.2
97	1.47	97.5	-1.74	97	2.05	129.9	-48.7

\* Point damaged during test

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**



SECTION B-B							
Pt.	Pre-test			Pt.	Post-test		
	X	Y	Z		X	Y	Z
1	128.5	-5.30	-376.9	1	120.6	-4.72	-372.0
2	131.4	-104.7	-378.5	2	123.6	-104.1	-373.1
3	137.3	-203.0	-376.0	3	129.7	-203.1	-370.2
4	147.5	-303.4	-369.4	4	140.6	-303.4	-364.9
5	159.1	-401.6	-363.2	5	158.2	-403.1	-358.5
6	181.9	-498.1	-352.0	6	181.4	-499.6	-347.7
7	262.0	-681.9	-324.5	7	263.3	-679.5	-323.8
8	344.2	-736.9	-305.3	8	345.7	-734.9	-305.0
9	435.8	-770.4	-290.3	9	437.0	-769.2	-290.9
10	532.5	-795.1	-281.3	10	533.7	-794.8	-281.2
11	628.2	-808.9	-285.7	11	629.4	-808.4	-286.0
12	726.4	-821.0	-289.4	12	727.0	-820.2	-289.8
13	826.3	-832.0	-291.7	13	826.2	-831.1	-292.1
14	924.5	-840.7	-293.6	14	924.8	-840.2	-293.3
15	1024.4	-847.9	-294.7	15	1025.1	-847.1	-294.5
16	1124.7	-854.5	-293.8	16	1125.5	-853.4	-293.5
17	1223.6	-859.4	-292.8	17	1224.3	-858.0	-292.4
18	1321.3	-863.2	-292.2	18	1322.2	-861.5	-291.9
19	1419.8	-867.1	-291.1	19	1405.9	-937.1	-305.0
20	1519.0	-870.7	-289.3	20	1503.6	-929.9	-300.3
21	1617.4	-873.6	-287.3	21	1602.8	-921.8	-295.0
22	1716.6	-877.0	-283.9	22	1701.3	-912.9	-290.0
23	1814.9	-879.0	-282.2	23	1799.2	-903.8	-285.3
24	1914.8	-881.0	-279.9	24	1899.1	-895.3	-277.5
25	2014.4	-883.2	-276.3	25	1998.7	-885.4	-271.4
26	2114.3	-885.4	-272.8	26	2097.1	-876.4	-263.9
27	2214.0	-885.3	-271.8	27	2196.8	-864.8	-259.4

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

SECTION B-B							
Pt.	Pre-test			Pt.	Post-test		
	X	Y	Z		X	Y	Z
28	2312.3	-887.1	-268.8	28	2294.9	-855.0	-253.2
29	2411.8	-889.2	-270.1	29	2385.7	-899.4	-247.3
30	2509.3	-890.4	-265.4	30	2481.6	-920.6	-236.0
31	2609.1	-889.9	-262.5	31	2578.1	-940.9	-227.5
32	2708.7	-889.2	-258.7	32	2675.5	-961.4	-218.5
33	2806.1	-884.8	-251.8	33	2772.6	-981.1	-210.3
34	2905.5	-883.7	-247.5	34	2867.8	-1000.7	-200.3
35	3004.3	-882.0	-243.5	35	2964.7	-1020.2	-191.2
36	3104.3	-881.0	-237.8	36	3061.7	-1040.2	-180.8
37	3204.7	-877.4	-235.0	37	3160.2	-1059.1	-172.2
38	3301.9	-874.2	-230.7	38	3255.4	-1077.5	-163.1
39	3399.7	-871.0	-225.7	39	3351.4	-1096.1	-154.3
40	3496.6	-868.1	-220.0	40	*	*	*
41	3595.3	-866.3	-215.0	41	3306.3	-928.8	-174.3
42	3693.9	-863.6	-209.3	42	3377.2	-997.2	-173.6
43	3793.3	-859.7	-203.8	43	3414.4	-945.3	-189.1
44	3890.6	-855.3	-196.8	44	3404.4	-851.9	-216.3
45	3988.7	-849.0	-189.6	45	*	*	*
46	4089.1	-840.4	-181.4	46	3400.1	-701.5	-248.5
47	4186.4	-829.8	-171.4	47	3458.4	-638.2	-257.8
48	4283.4	-818.5	-159.3	48	3546.0	-622.6	-258.3
49	4379.8	-805.3	-144.2	49	3645.4	-637.5	-257.6
50	4476.3	-791.7	-123.8	50	3732.6	-680.5	-252.9
51	4570.3	-775.0	-102.9	51	*	*	*
52	4656.6	-731.9	-85.6	52	*	*	*
53	4721.3	-659.3	-73.1	53	*	*	*
54	4770.9	-571.1	-65.5	54	*	*	*
55	4834.8	-385.9	-52.1	55	4488.9	-598.1	-349.6
56	4850.2	-286.6	-59.7	56	4534.8	-508.5	-358.3
57	4857.3	-187.2	-69.1	57	4570.1	-414.8	-366.0
58	4863.0	-88.9	-75.6	58	4606.5	-322.1	-365.3
59	4874.1	40.8	-58.9	59	4636.6	-227.3	-361.9
60	4869.6	139.1	-55.6	60	4663.3	-131.6	-352.9
61	4862.5	237.7	-47.5	61	4686.6	-37.2	-338.3
62	4855.4	334.8	-34.0	62	4710.3	57.0	-316.7
63	4835.7	430.1	-36.8	63	4720.6	152.3	-301.3
64	4810.2	523.5	-36.8	64	4785.7	402.3	-172.3

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

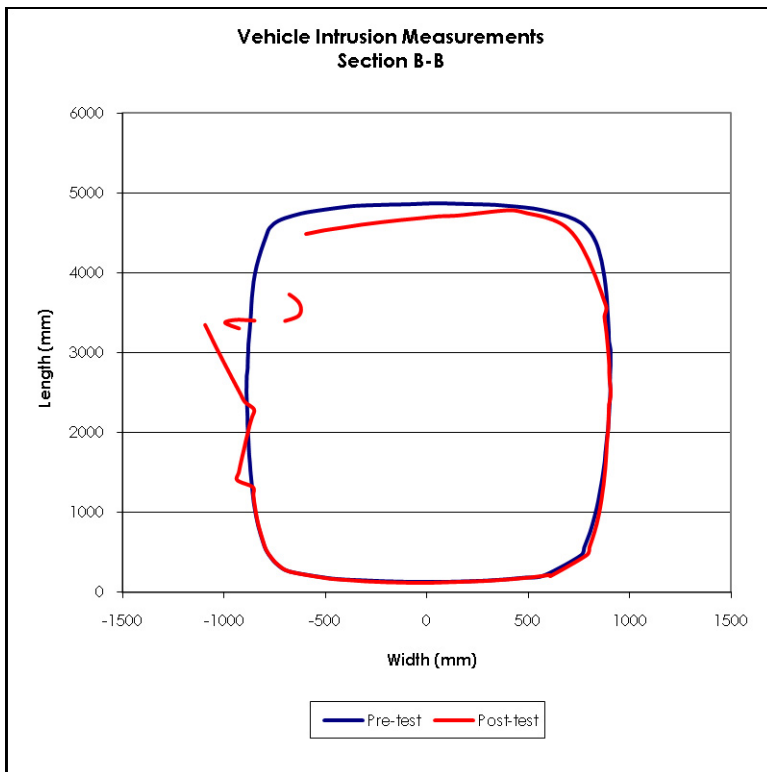
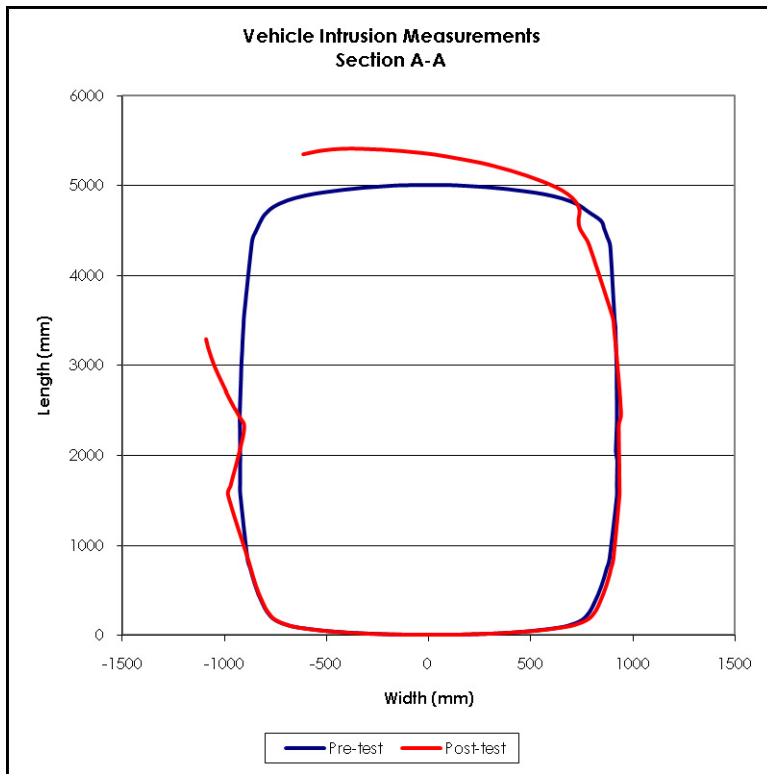
SECTION B-B							
Pt.	Pre-test			Pt.	Post-test		
	X	Y	Z		X	Y	Z
65	4764.4	611.9	-46.9	65	4748.1	493.8	-167.6
66	4707.5	695.1	-60.5	66	4698.7	583.1	-166.0
67	4631.5	756.9	-78.7	67	4628.1	653.8	-173.2
68	4538.8	795.7	-92.5	68	4545.7	698.8	-167.7
69	4444.2	821.2	-103.4	69	4451.3	731.5	-175.5
70	4345.1	838.6	-117.5	70	4353.6	757.1	-186.6
71	4248.4	850.0	-131.4	71	4258.0	777.6	-197.4
72	4150.9	860.0	-142.5	72	4161.8	796.1	-206.8
73	4051.6	867.2	-152.6	73	4063.4	812.7	-215.9
74	3951.9	874.0	-160.4	74	3964.1	829.3	-221.6
75	3849.6	879.3	-167.5	75	3863.4	844.1	-228.6
76	3745.6	883.5	-173.8	76	3760.0	859.1	-233.7
77	3645.3	887.0	-179.0	77	3660.6	872.5	-238.3
78	3543.5	888.9	-185.3	78	3559.7	884.1	-245.3
79	3444.7	891.4	-190.7	79	3454.8	874.8	-253.2
80	3344.2	893.6	-196.5	80	3354.3	879.9	-258.2
81	3244.2	895.8	-201.3	81	3254.8	884.5	-263.2
82	3144.4	896.7	-208.1	82	3155.1	888.3	-268.8
83	3039.7	904.1	-216.1	83	3055.0	891.9	-273.9
84	2943.3	904.5	-216.1	84	2956.4	895.3	-277.6
85	2843.5	904.3	-221.3	85	2855.9	898.0	-281.7
86	2743.7	902.3	-225.5	86	2755.8	898.5	-286.0
87	2643.8	901.4	-229.6	87	2656.1	900.3	-289.1
88	2541.4	903.7	-234.9	88	2553.0	904.6	-294.7
89	2443.4	901.9	-241.7	89	2455.2	904.8	-301.7
90	2343.0	899.1	-245.9	90	2352.4	897.3	-300.7
91	2242.1	897.1	-250.4	91	2252.2	896.0	-304.7
92	2141.3	894.5	-255.3	92	2151.4	894.5	-308.9
93	2042.9	891.9	-259.8	93	2052.4	893.3	-312.4
94	1943.4	886.9	-264.6	94	1953.5	889.6	-317.3
95	1843.0	882.7	-267.5	95	1852.8	886.4	-319.6
96	1744.9	878.7	-273.5	96	1753.1	884.1	-324.7
97	1645.6	875.5	-278.6	97	1654.6	881.9	-329.8
98	1545.6	870.4	-281.9	98	1554.7	879.0	-332.0
99	1447.1	864.7	-285.3	99	1455.4	874.8	-335.7
100	1347.4	858.1	-288.1	100	1357.8	871.0	-337.1
101	1247.9	851.0	-292.3	101	1258.2	865.4	-340.6

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

SECTION B-B							
Pt.	Pre-test			Pt.	Post-test		
	X	Y	Z		X	Y	Z
102	1148.7	844.0	-295.5	102	1159.1	859.9	-343.4
103	1050.1	835.8	-298.6	103	1059.8	853.3	-346.0
104	951.8	825.9	-301.6	104	961.1	845.6	-347.9
105	853.1	815.2	-303.4	105	862.6	836.9	-349.1
106	755.2	803.7	-303.8	106	764.7	826.4	-350.1
107	657.7	789.2	-304.8	107	666.9	814.3	-350.2
108	560.6	774.4	-303.3	108	568.9	800.9	-348.6
109	462.2	758.4	-300.1	109	470.7	787.5	-344.7
110	212.3	577.9	-334.6	110	205.6	607.5	-399.0
111	184.0	483.9	-350.3	111	219.1	604.0	-384.0
112	162.3	388.1	-361.0	112	189.8	509.7	-399.8
113	146.5	291.8	-367.9	113	167.4	414.9	-410.3
114	136.1	192.1	-373.4	114	150.1	317.1	-416.5
115	130.0	92.1	-375.9	115	139.1	218.9	-422.3

\* Point damaged during test

**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**



**DATA SHEET NO. 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

TEST VEHICLE FRONTAL PROFILE DATA - PRE							
		Vehicle Left			Vehicle Right		
		Pt. 1	Pt. 2	Pt. 3	Pt. 4	Pt. 5	Pt. 6
Bottom of Front Bumper	X	4810.8	4942.9	4994.4	4996.3	4949.0	4818.8
	Y	-705.4	-426.7	-161.2	124.2	405.2	697.1
	Z	226.2	236.5	220.8	222.3	243.8	235.3
Top of Front Bumper	X	4812.8	4944.2	4995.8	4998.3	4948.3	4785.3
	Y	-702.6	-430.5	-150.3	144.0	416.5	699.2
	Z	79.7	83.1	84.3	90.3	90.1	76.3
Upper Radiator Support	X	4429.3	4546.0	4602.1	4597.6	4547.4	4433.9
	Y	-723.9	-426.2	-123.4	123.4	420.8	717.2
	Z	-125.2	-101.2	-108.1	-104.3	-92.7	-112.3

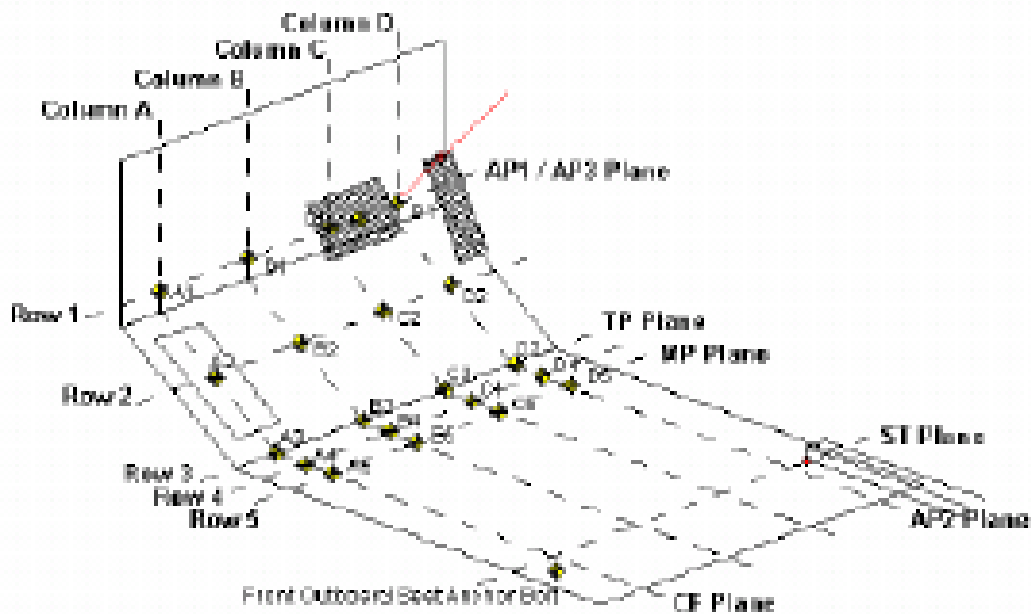
TEST VEHICLE FRONTAL PROFILE DATA - POST							
		Vehicle Left			Vehicle Right		
		Pt. 1	Pt. 2	Pt. 3	Pt. 4	Pt. 5	Pt. 6
Bottom of Front Bumper	X	*	4759.5	4859.8	4916.1	4923.5	4873.5
	Y	*	-559.5	-304.9	-28.5	259.1	259.1
	Z	*	5.11	9.64	37.5	89.7	89.7
Top of Front Bumper	X	*	4750.0	4855.1	4912.6	4916.1	4820.1
	Y	*	-545.5	-281.5	4.58	282.2	584.2
	Z	*	-145.6	-120.9	-91.6	-62.8	-36.9
Upper Radiator Support	X	*	4372.8	4475.4	4513.0	4517.6	4429.4
	Y	*	-469.2	-181.0	61.7	356.8	657.6
	Z	*	-325.8	-280.4	-253.5	-227.2	-191.4

**DATA SHEET NUMBER 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

TEST VEHICLE FRONTAL PROFILE DATA - CHANGE							
		Vehicle Left			Vehicle Right		
		Pt. 1	Pt. 2	Pt. 3	Pt. 4	Pt. 5	Pt. 6
<b>Bottom of Front Bumper</b>	<b>X</b>	*	-183.4	-134.6	-80.2	-25.5	54.7
	<b>Y</b>	*	-132.8	-143.7	-152.7	-146.1	-438.0
	<b>Z</b>	*	-231.4	-211.2	-184.8	-154.1	-145.6
<b>Top of Front Bumper</b>	<b>X</b>	*	-194.2	-140.7	-85.7	-32.2	34.8
	<b>Y</b>	*	-115.0	-131.2	-139.4	-134.3	-115.0
	<b>Z</b>	*	-228.7	-205.2	-181.9	-152.9	-113.2
<b>Upper Radiator Support</b>	<b>X</b>	*	-173.2	-126.7	-84.6	-29.8	-4.50
	<b>Y</b>	*	-43.0	-57.6	-61.7	-64.0	-59.6
	<b>Z</b>	*	-224.6	-172.3	-149.2	-134.5	-79.1

\* Point damaged during test

**DATA SHEET NUMBER 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**



AP1: Y – Z plane passing through D1

AP2: X – Z plane passing through D1

AP3: X – Y plane passing through D1

MP: Y – Z plane, halfway between the ST plane and the AP1 plane

CF plane: X – Z plane passing through the center of the footrest

BP plane: X – Z plane passing through the center of the brake pedal

TP plane: Y – Z plane, the intersection of the BP plane and the intersection of the toe pan and floorboard

Column A: The intersection of the vehicle and the CF plane

Column D: The intersection of the vehicle and the AP2 plane

Row 1: The intersection of the vehicle and the AP3 plane

Row 3: The intersection of the vehicle of the TP plane

Row 5: The intersection of the vehicle and the MP plane

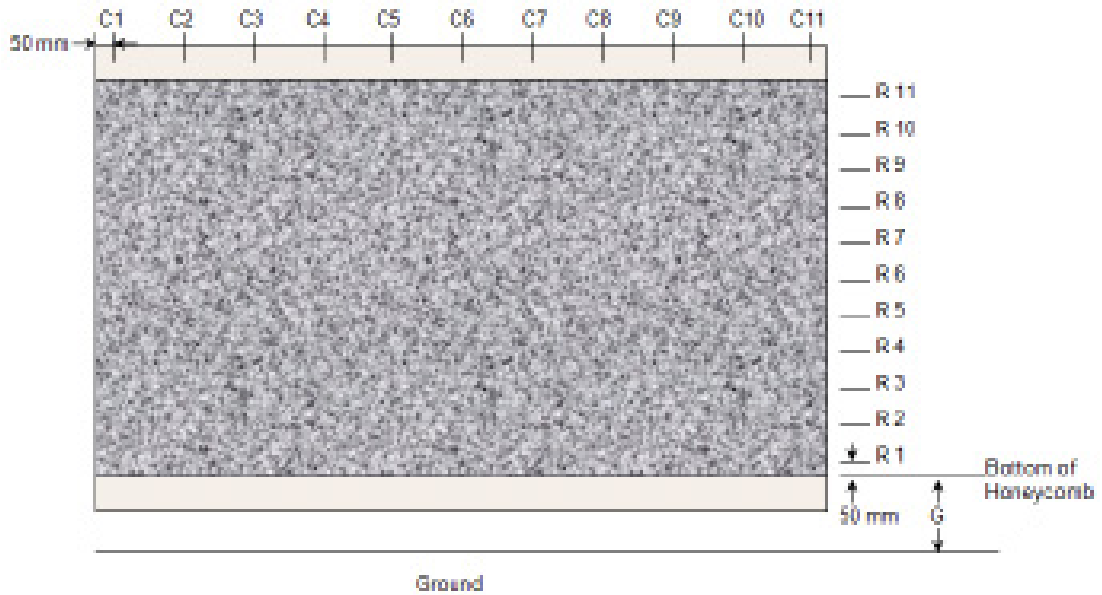
Row 2: evenly spaced between rows 1 and 3

Row 4: evenly spaced between rows 3 and 5

**DATA SHEET NUMBER 13**  
**VEHICLE INTRUSION MEASUREMENTS (CONTINUED)**

FLOORBOARD MEASUREMENTS									
Intrusion Location	Pre-test (mm)			Post-test (mm)			Difference (mm)		
	X	Y	Z	X	Y	Z	X	Y	Z
A1	3503.6	-578.7	226.2	3331.0	-458.5	258.8	-172.6	120.2	32.6
B1	3606.7	-442.2	319.7	3479.9	-375.2	333.0	-126.8	67.0	13.3
C1	3596.2	-298.3	316.4	3468.6	-285.5	333.8	-127.6	12.8	17.4
D1	3610.0	-184.1	329.6	3467.1	-229.7	330.8	-142.9	-45.6	1.20
A2	3471.2	-580.7	286.2	3311.8	-450.9	305.8	-159.4	129.8	19.6
B2	3539.0	-442.6	379.5	3415.9	-378.4	392.0	-123.1	64.2	12.5
C2	3536.6	-300.8	377.5	3417.1	-294.3	394.6	-119.5	6.50	17.1
D2	3531.6	-183.7	388.6	3419.5	-235.0	400.0	-112.1	-51.3	11.4
A3	3465.1	-580.7	370.8	3311.0	-488.3	403.2	-154.1	92.4	32.4
B3	3451.4	-450.8	419.4	3358.5	-379.6	445.1	-92.9	71.2	25.7
C3	3453.1	-310.2	418.3	3356.0	-294.3	449.6	-97.1	15.9	31.3
D3	3436.8	-170.2	407.0	3352.8	-237.0	454.4	-84.0	-66.8	47.4
A4	3367.9	-584.6	413.5	3303.8	-485.0	401.5	-64.1	99.6	-12.0
B4	3361.2	-449.1	421.9	3274.5	-386.3	479.7	-86.7	62.8	57.8
C4	3358.1	-311.3	423.5	3269.5	-298.9	476.8	-88.6	12.4	53.3
D4	3352.0	-177.8	408.6	3265.7	-238.5	472.7	-86.3	-60.7	64.1
A5	3273.5	-589.0	417.6	3194.2	-511.7	415.1	-79.3	77.3	-2.50
B5	3269.4	-452.2	420.8	3188.3	-391.0	479.6	-81.1	61.2	58.8
C5	3267.3	-313.2	422.0	3181.0	-302.9	472.9	-86.3	10.3	50.9
D5	3255.5	-179.6	379.2	3180.8	-245.8	457.2	-74.7	-66.2	78.0
Brake pedal	3477.0	-334.6	213.7	3311.0	-284.3	217.6	-166.0	50.3	3.90
IP left	3335.9	-557.5	41.8	3019.0	-550.9	-92.4	-316.9	6.60	-134.2
IP right	3314.6	-183.9	78.1	3050.3	-122.9	-65.9	-264.3	61.0	-144.0
Steering column	2976.9	-361.7	-252.9	2893.0	-315.2	-298.5	-83.9	46.5	-45.6
Front outboard bolt	2941.9	-574.6	357.8	2891.2	-546.2	408.2	-50.7	28.4	50.4

**DATA SHEET NUMBER 14**  
**MDB CRUSH MEASUREMENTS**



BARRIER X-CRUSH												
		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
		50 mm	# mm	# mm	# mm	# mm	# mm	# mm	# mm	# mm	# mm	# mm
R1	# mm											
R2	# mm											
R3	# mm											
R4	# mm											
R5	# mm											
R6	# mm											
R7	# mm											
R8	# mm											
R9	# mm											
R10	# mm											
R11	# mm											

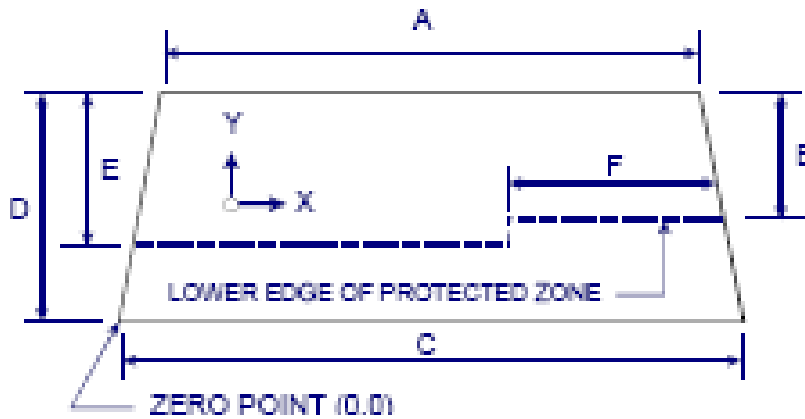
\* No MDB was used in test

**DATA SHEET NUMBER 15**  
**SUMMARY OF FMVSS 212, 219 (PARTIAL), AND 301 DATA**

**Windshield mounting:** standard mount

**Temperature of windshield molding during test:** not measured

WINDSHIELD PERIPHERY MEASUREMENTS			
Measurement	Pre-test (mm)	Post-test (mm)	% Retention
Left side	2149	2193	102.0
Right side	2149	2117	98.5
Total	4298	4310	100.0



WINDSHIELD MEASUREMENTS		
A	mm	1130
B	mm	365
C	mm	1564
D	mm	802
E	mm	430
F	mm	579

**AREA OF PROTECTED ZONE FAILURES**

A. Provide coordinates of the area that the protected zone was penetrated more the 0.25 inches by a vehicle component other than one that is normally in contact with the windshield

B. Provide coordinates of the area beneath the protected zone that the inner surface of the windshield was penetrated by a vehicle component

A	
X	Y

B	
X	Y

\*\* No windshield penetration of more than 0.25 inches

**DATA SHEET NUMBER 15**  
**SUMMARY OF FMVSS 212, 219 (PARTIAL), AND 301 DATA (CONTINUED)**

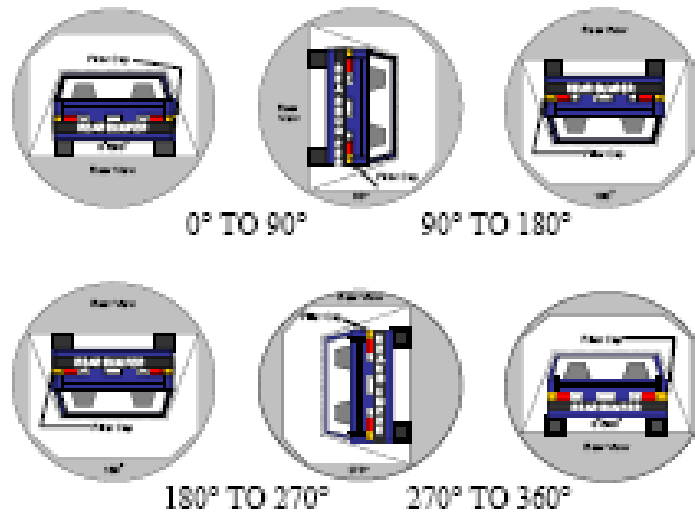
**FMVSS 301 FUEL SYSTEM INTEGRITY POST IMPACT DATA**

Temperature at time of impact: 24° C

Test time: 8:30 pm

STODDARD SOLVENT SPILLAGE MEASUREMENTS				
Period	Description	Maximum allowable spillage	Spillage	
			Amount	Location
A	From impact until vehicle motion ceases	1 oz	0	N/a
B	5 minutes after vehicle motion ceases	5 oz	0	N/a
C	Next 25 minutes	1 oz/minute	0	N/a

**DATA SHEET NUMBER 16**  
**SUMMARY OF FMVSS 301 STATIC ROLLOVER RESULTS**

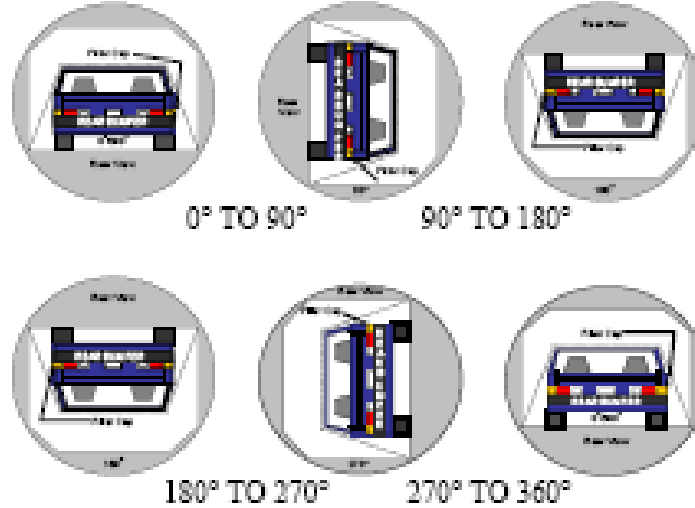


FMVSS301 SOLVENT COLLECTION TIME TABLE			
Test phase	Rotation time (sec.)	Hold time (sec.)	Total time (sec.)
Tolerance	60-180	>= 300	-
0° to 90°	65	300	365
90° to 180°	66	300	366
180° to 270°	65	300	365
270° to 360°	65	300	365

FMVSS 301 SPILLAGE TABLE				
Test phase	First 5 min.	6 <sup>th</sup> min.	7 <sup>th</sup> min.	8 <sup>th</sup> min.
0° to 90°	0	0	0	0
90° to 180°	0	0	0	0
180° to 270°	0	0	0	0
270° to 360°	0	0	0	0

FMVSS 301 SPILLAGE TABLE	
Test phase	Spillage location
0° to 90°	N/a
90° to 180°	N/a
180° to 270°	N/a
270° to 360°	N/a

**DATA SHEET NUMBER 16A**  
**SUMMARY OF FMVSS 305 STATIC ROLLOVER RESULTS FOR**  
**ELECTRIC-POWERED VEHICLES**



FMVSS305 ELECTROLYTE COLLECTION TIME TABLE			
Test phase	Rotation time (sec.)	Hold time (sec.)	Total time (sec.)
Tolerance	60-180	>= 300	-
0° to 90°			
90° to 180°			
180° to 270°			
270° to 360°			

FMVSS305 ELECTROLYTE SPILLAGE TABLE	
Test phase	Spillage location
0° to 90°	N/a
90° to 180°	N/a
180° to 270°	N/a
270° to 360°	N/a

**Total spillage (L):**

1. Is the total spillage of propulsion battery electrolyte greater than 5.0 Liters?  
 YES                      NO (fail)
2. Is propulsion battery electrolyte spillage visible in the passenger compartment?  
 YES                      NO (fail)

**DATA SHEET NUMBER 16A**  
**SUMMARY OF FMVSS 305 STATIC ROLLOVER RESULTS FOR**  
**ELECTRIC-POWERED VEHICLES (CONTINUED)**

**ELECTRICAL ISOLATION CALCULATION**

$R_{i1} = R_o (1 + V_2/V_1)[V_1 - V_1']/V_1'$

Ri1 = \_\_\_\_\_  $\Omega$  90°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri1 = \_\_\_\_\_  $\Omega$  180°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri1 = \_\_\_\_\_  $\Omega$  270°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri1 = \_\_\_\_\_  $\Omega$  360°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds

$R_{i2} = R_o (1 + V_2/V_1)[V_2 - V_2']/V_2'$

Ri2 = \_\_\_\_\_  $\Omega$  90°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri2 = \_\_\_\_\_  $\Omega$  180°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri2 = \_\_\_\_\_  $\Omega$  270°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri2 = \_\_\_\_\_  $\Omega$  360°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds

Ri = the lesser of Ri1 and Ri2

Ri = \_\_\_\_\_  $\Omega$  90°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri = \_\_\_\_\_  $\Omega$  180°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri = \_\_\_\_\_  $\Omega$  270°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri = \_\_\_\_\_  $\Omega$  360°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds

Ri/Vb = electrical isolation value/nominal battery voltage

Minimum electrical isolation value is 500 $\Omega$ /V

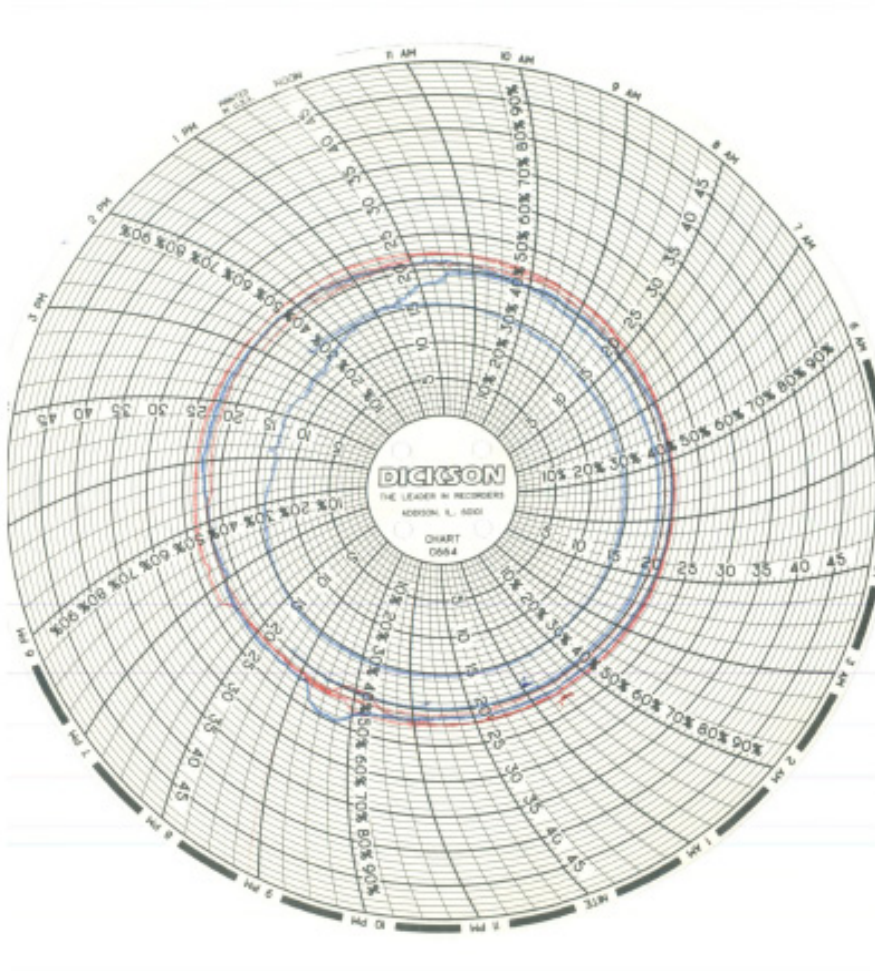
Ri/Vb = \_\_\_\_\_  $\Omega$  90°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri/Vb = \_\_\_\_\_  $\Omega$  180°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri/Vb = \_\_\_\_\_  $\Omega$  270°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds  
 Ri/Vb = \_\_\_\_\_  $\Omega$  360°      Time: \_\_\_\_\_ minutes \_\_\_\_\_ seconds

- Is the measured electrical isolation value  $\geq$  500  $\Omega$ /V?  
 YES                      NO (fail)

COMMENTS:

*Note: If measured voltage is zero and results in a division by zero, record "zero volts." This "zero voltage" condition is considered as being compliant.*

**DATA SHEET NUMBER 17**  
**DUMMY/VEHICLE TEMPERATURE STABILIZATION**



**DATA SHEET NUMBER 18**  
**PRE-IMPACT ELECTRIC ISOLATION MEASUREMENTS AND CALCULATIONS**  
**(ELECTRIC VEHICLES ONLY)**

**VOLTMETER INFORMATION**

Make: \_\_\_\_\_  
Model: \_\_\_\_\_  
S/n: \_\_\_\_\_  
Internal impedance value (MΩ): \_\_\_\_\_  
Resolution (V): \_\_\_\_\_  
Last calibration date: \_\_\_\_\_

**PROPULSION BATTERY INFORMATION**

Normal operating voltage range specified by the manufacturer =  $V_b =$  \_\_\_\_\_ V

**PROPULSION BATTERY TO VEHICLE CHASSIS**

*Vehicle chassis point(s) determined and supplied to contractor by COTR*

$V_1 =$  \_\_\_\_\_ V  
 $V_2 =$  \_\_\_\_\_ V

**PROPULSION BATTERY TO VEHICLE CHASSIS ACROSS RESISTOR**

$R_o =$  \_\_\_\_\_ Ω

**ELECTRICAL ISOLATION MEASUREMENT**

*Note: If measured voltage is zero and results in a division by zero, record "zero volts." This "zero voltage" condition is considered as being compliant.*

$V_1' =$  \_\_\_\_\_ V

$R_{i1} = R_o (1 + V_2/V_1)[(V_1 - V_1')/V_1']$

$R_{i1} =$  \_\_\_\_\_ Ω

$V_2' =$  \_\_\_\_\_ V

$R_{i2} = R_o (1 + V_1/V_2)[(V_2 - V_2')/V_2']$

$R_{i2} =$  \_\_\_\_\_ Ω

$R_i =$  the lesser of  $R_{i1}$  and  $R_{i2}$

$R_i =$  \_\_\_\_\_ Ω pre-test

$R_i/V_b =$  \_\_\_\_\_ Ω/V (electrical isolation value); minimum = 500 Ω/V

- Is the measured electrical isolation value  $\geq$  500 Ω/V?  
YES                      NO (fail)

COMMENTS:

**DATA SHEET NUMBER 19  
POST-IMPACT ELECTRIC ISOLATION MEASUREMENTS AND CALCULATIONS  
(ELECTRIC VEHICLES ONLY)**

Make: \_\_\_\_\_  
Model: \_\_\_\_\_  
S/n: \_\_\_\_\_  
Internal impedance value: \_\_\_\_\_ MΩ  
Nominal propulsion battery voltage (Vb): \_\_\_\_\_ V

*Note: Record V1, V2, and V1', V2' voltage measurements immediately after the impacted vehicle comes to rest.*

V1 = \_\_\_\_\_ V; Impact time: \_\_\_\_\_ minutes \_\_\_\_\_ s  
V2 = \_\_\_\_\_ V; Impact time: \_\_\_\_\_ minutes \_\_\_\_\_ s  
V1' = \_\_\_\_\_ V; Impact time: \_\_\_\_\_ minutes \_\_\_\_\_ s  
V2' = \_\_\_\_\_ V; Impact time: \_\_\_\_\_ minutes \_\_\_\_\_ s

**ELECTRICAL ISOLATION MEASUREMENT**

*Note: If measured voltage is zero and results in a division by zero, record "zero volts." This "zero voltage" condition is considered as being compliant.*

$R_{i1} = R_o (1 + V_2/V_1)[(V_1 - V_1')/V_1']$   
Ri1 = \_\_\_\_\_ Ω Impact time: \_\_\_\_\_ minutes \_\_\_\_\_ s  
 $R_{i2} = R_o (1 + V_1/V_2)[(V_2 - V_2')/V_2']$   
Ri2 = \_\_\_\_\_ Ω Impact time: \_\_\_\_\_ minutes \_\_\_\_\_ s  
Ri = the lesser of Ri1 and Ri2  
Ri = \_\_\_\_\_ Ω Impact time: \_\_\_\_\_ minutes \_\_\_\_\_ s  
Ri/Vb = Electrical isolation value/Nominal battery voltage  
Minimum electrical isolation value is 500 Ω/V  
Ri/Vb = \_\_\_\_\_ Ω/V Impact time: \_\_\_\_\_ minutes \_\_\_\_\_ s

- Is the measured electrical isolation value  $\geq 500 \Omega/V$ ?  
YES NO (fail)

**PROPULSION BATTERY SYSTEM COMPONENTS**

Describe propulsion battery module movement within the passenger compartment:

**DATA SHEET NUMBER 19  
POST-IMPACT ELECTRIC ISOLATION MEASUREMENTS AND CALCULATIONS (CONTINUED)  
(ELECTRIC VEHICLES ONLY)**

**Has the propulsion battery module moved within the passenger compartment?**

**YES                      NO (fail)**

**Describe intrusion of an outside propulsion battery component into the passenger compartment:**

**Has an outside propulsion battery component intruded into the passenger compartment?**

**YES                      NO (fail)**

**Is propulsion battery electrolyte spillage visible in the passenger compartment?**

**YES                      NO (fail)**

Test Vehicle: 2007 Ford Taurus 4-Door Sedan  
Test Program: Frontal Small Overlap

NHTSA Number: R7 0213  
Test Date: October 12, 2010

**APPENDIX A**  
**PHOTOGRAPHS**

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Figure A-1: Left front 3/4 view, as received



Figure A-2: Left rear 3/4 view, as received



Figure A-3: Manufacturer's label



Figure A-4: Tire placard

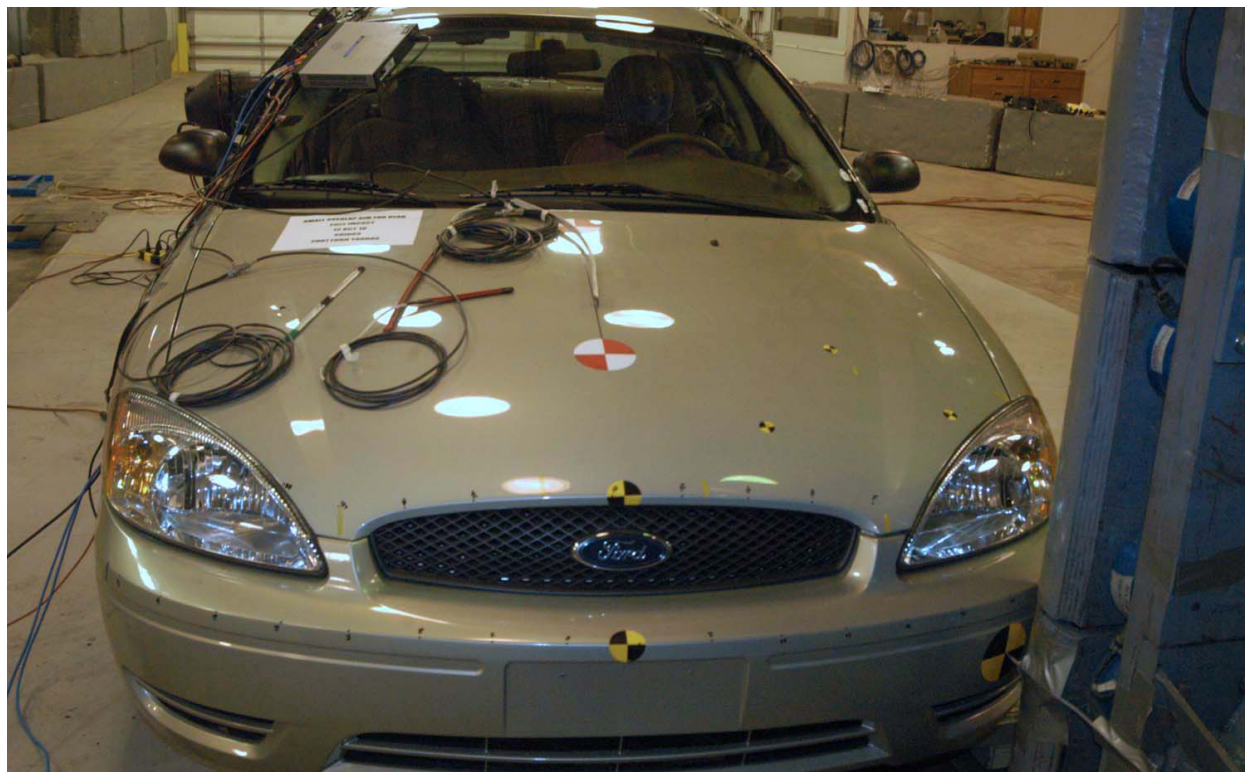


Figure A-5: Pre test front view of test vehicle

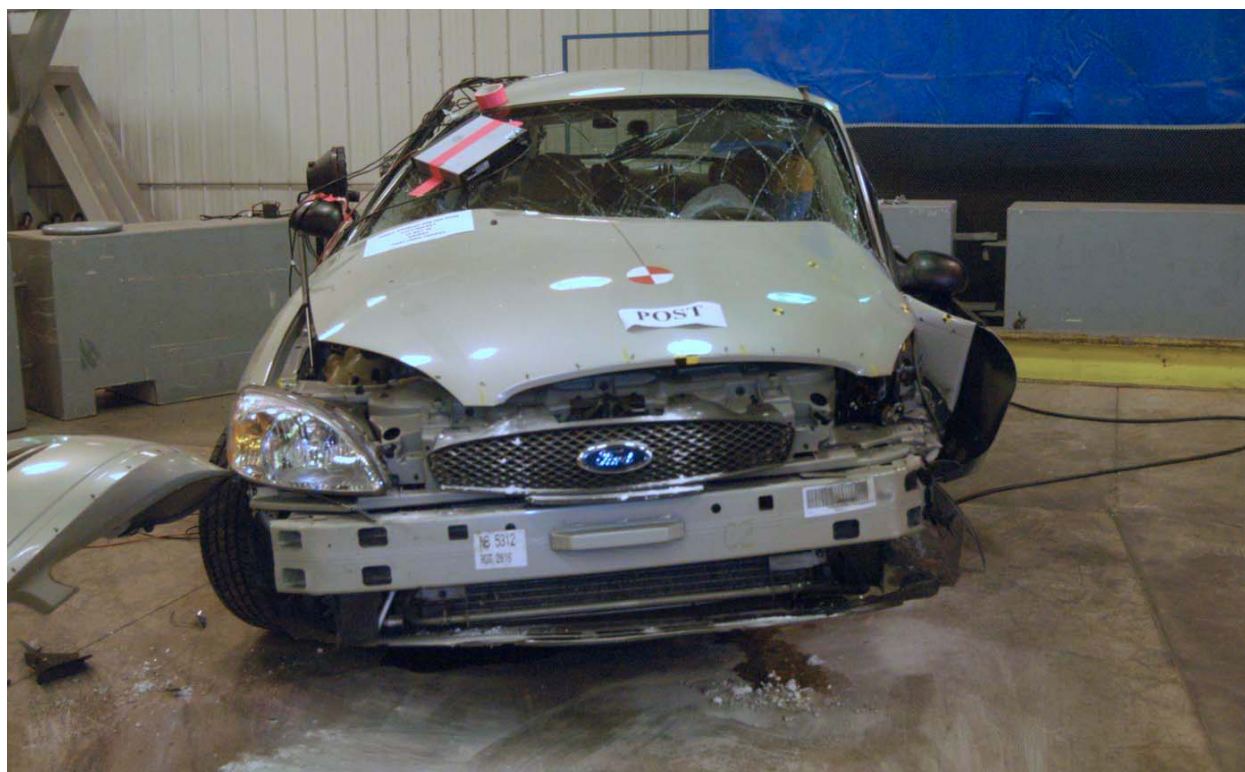


Figure A-6: Post test front view of test vehicle

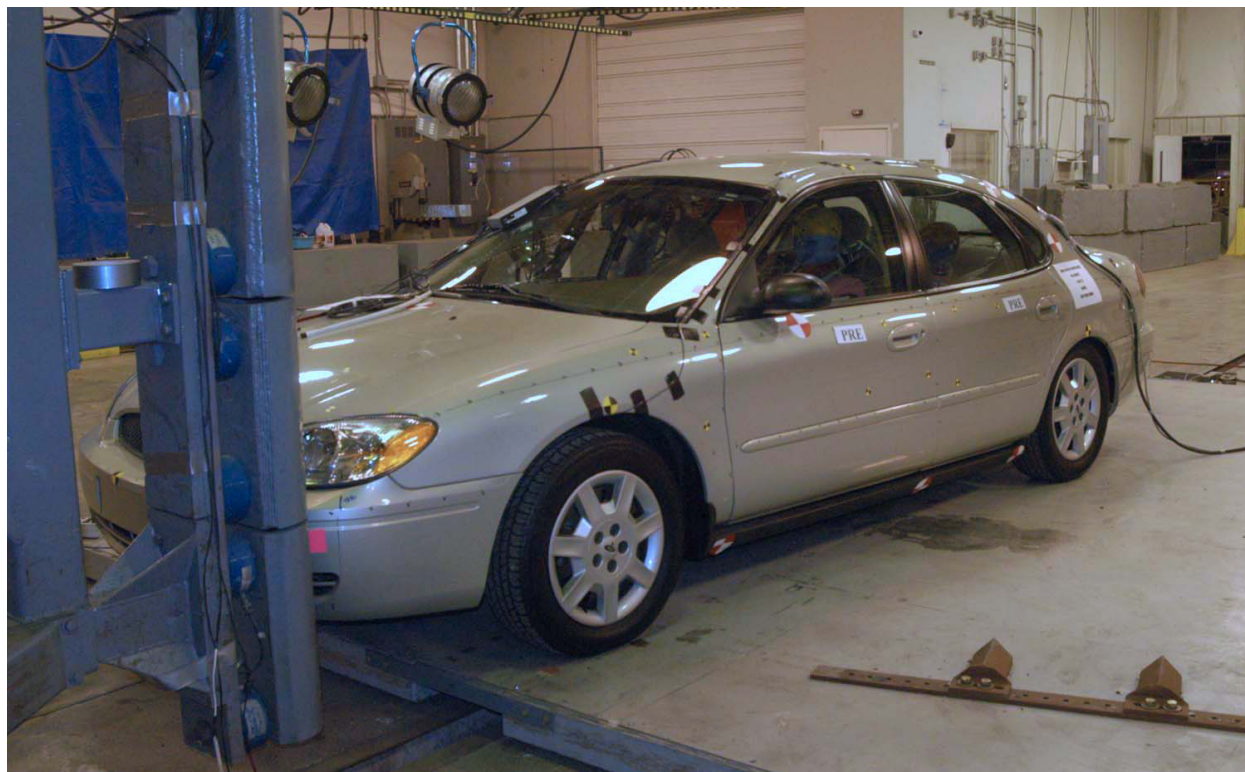


Figure A-7: Pre test left front 3/4 view of test vehicle

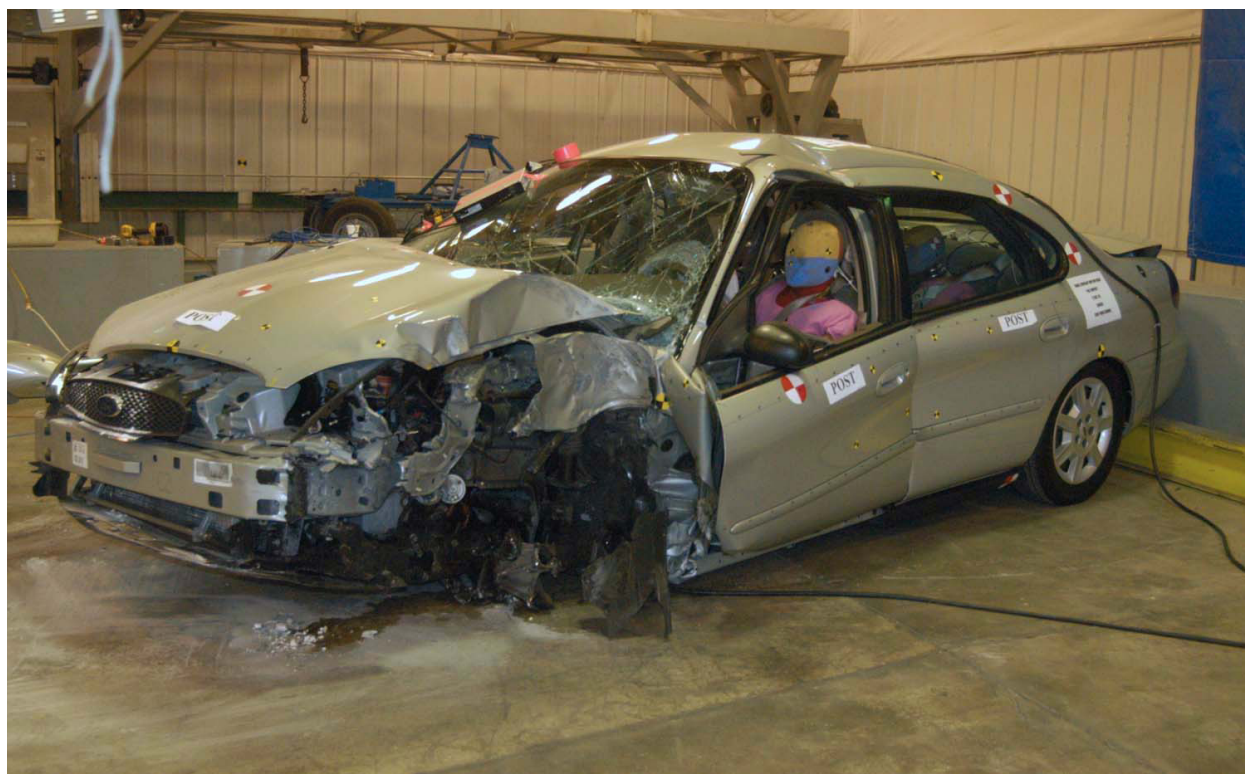


Figure A-8: Post test left front 3/4 view of test vehicle



Figure A-9: Pre test left side view of test vehicle



Figure A-10: Post test left side view of test vehicle



Figure A-11: Pre test left rear 3/4 view of test vehicle



Figure A-12: Post test left rear 3/4 view of test vehicle



Figure A-13: Pre test rear view of test vehicle



Figure A-14: Post test rear view of test vehicle



Figure A-15: Pre test right rear 3/4 view of test vehicle



Figure A-16: Post test right rear 3/4 view of test vehicle

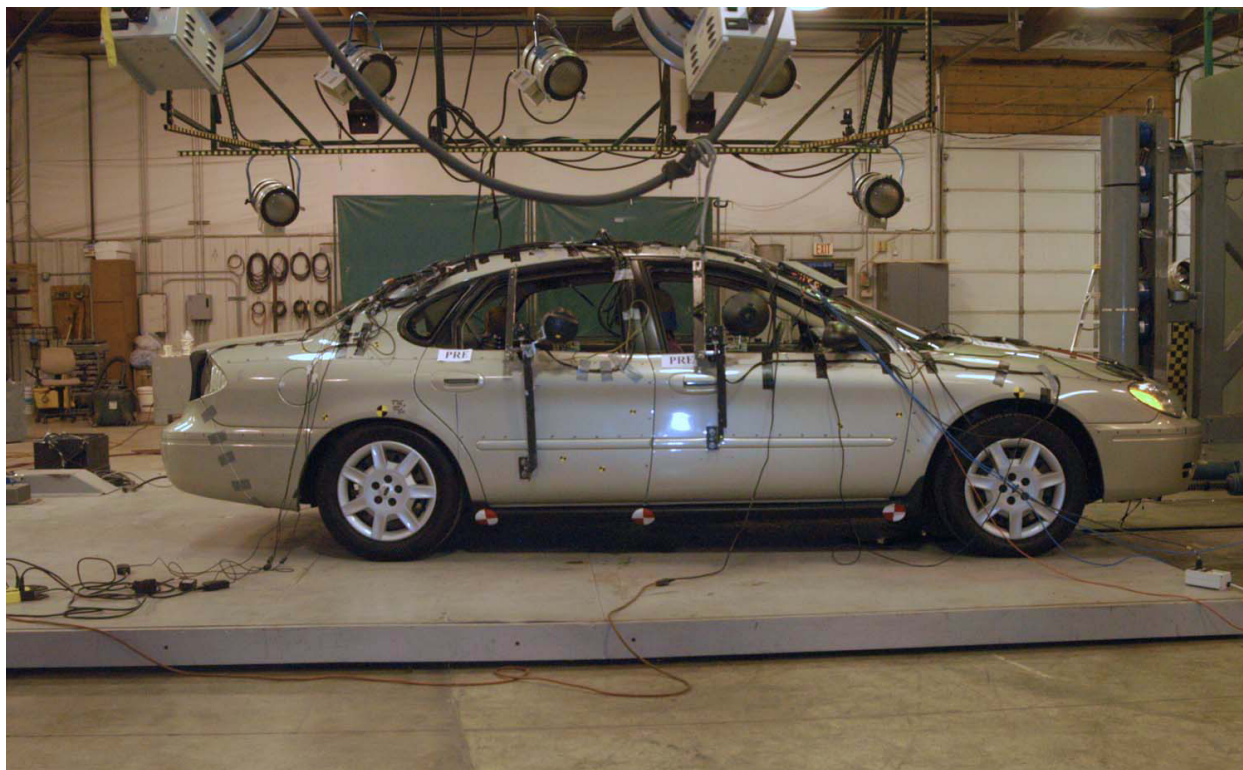


Figure A-17: Pre test right side view of test vehicle



Figure A-18: Post test right side view of test vehicle

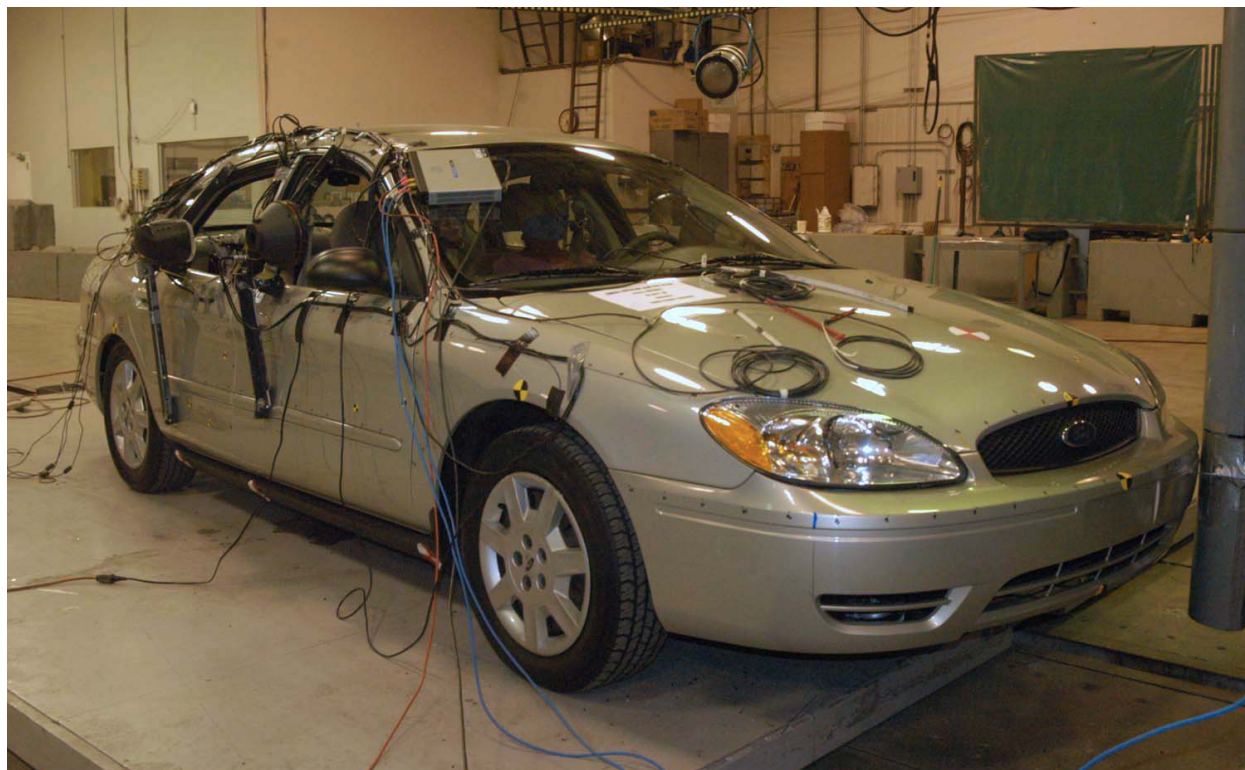


Figure A-19: Pre test right front 3/4 view of test vehicle

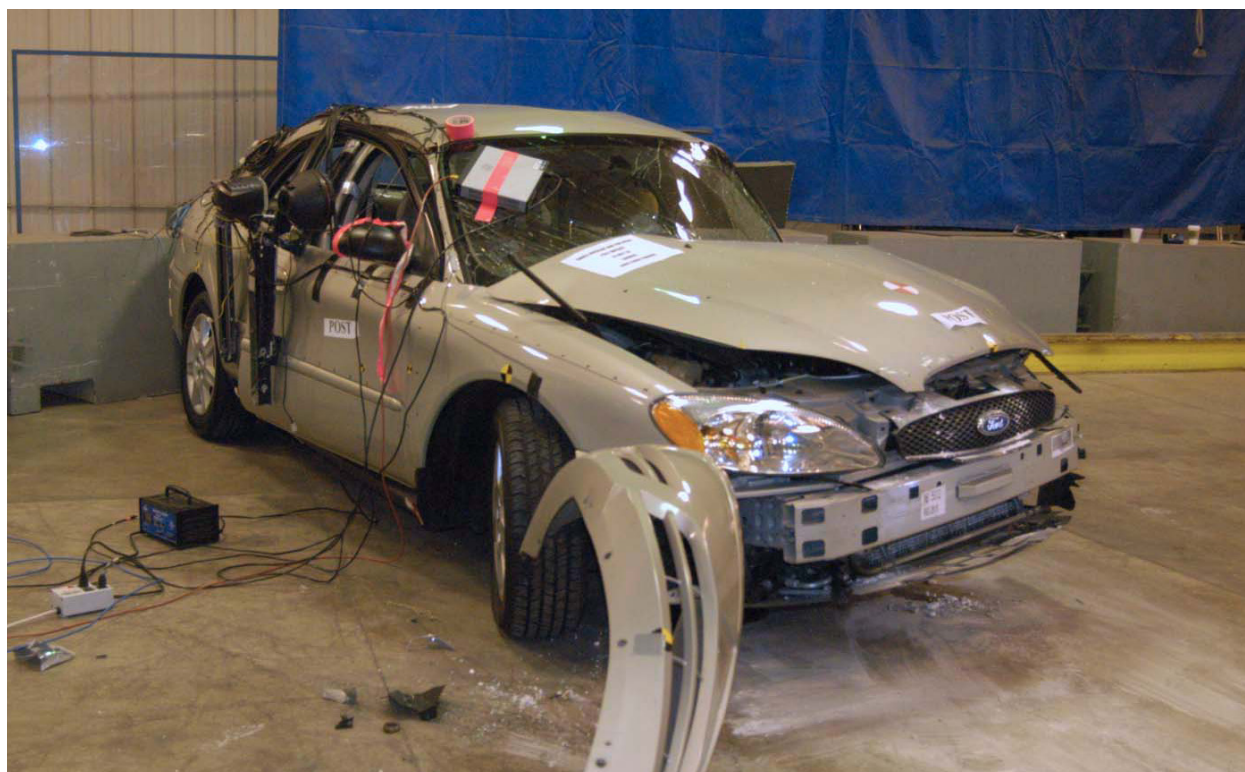


Figure A-20: Post test right front 3/4 view of test vehicle



Figure A-21: Pre test front left 3/4 side view of left side doors



Figure A-22: Post test left 3/4 view of left side doors



Figure A-23: Pre test front right 3/4 view of right side doors



Figure A-24: Post test front right 3/4 view of right side doors

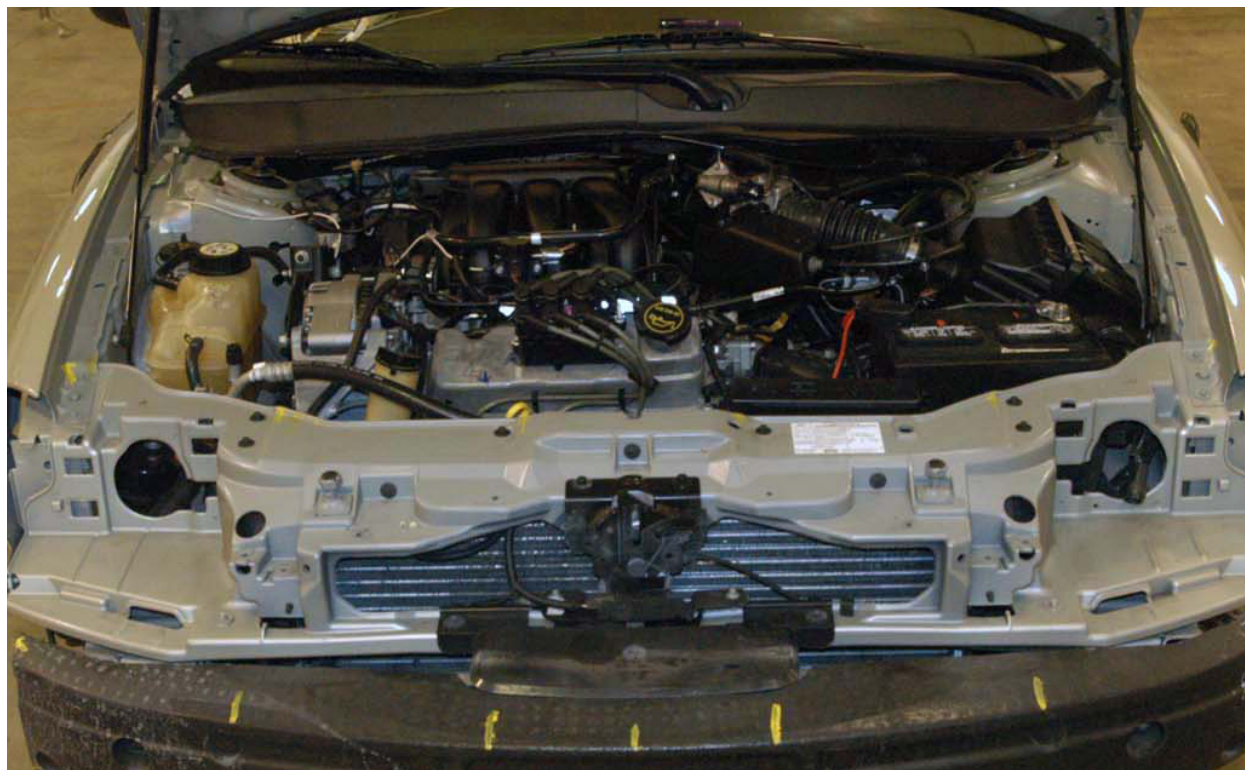


Figure A-25: Pre test engine compartment

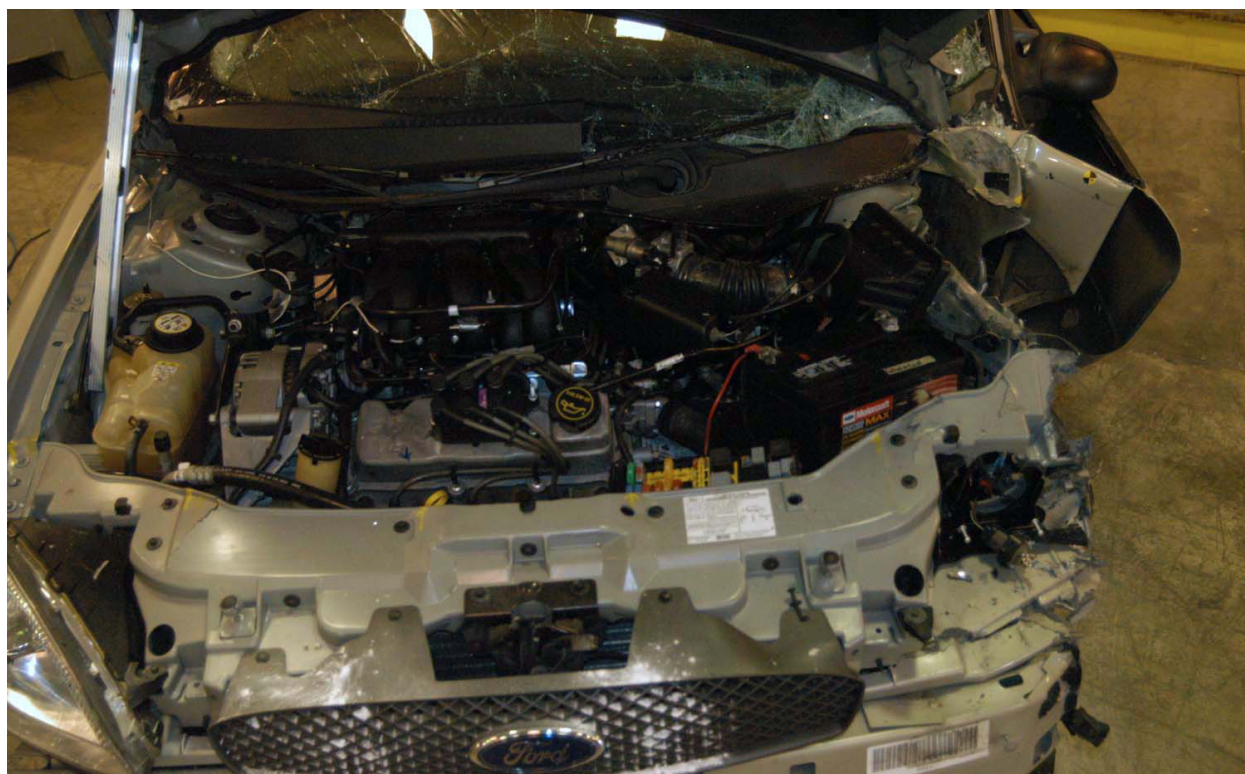


Figure A-26: Post test engine compartment



Figure A-27: Pre test fuel cap

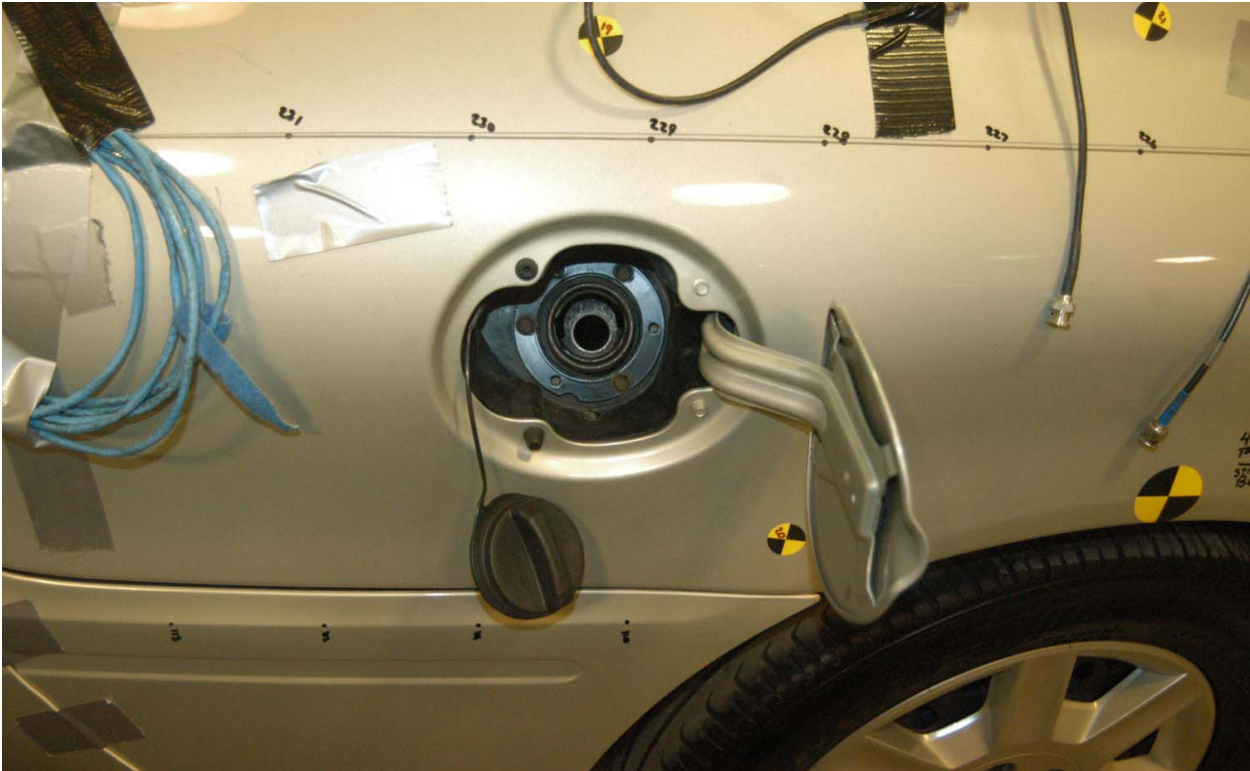


Figure A-28: Post test fuel cap



Figure A-29: Pre test front underbody



Figure A-30: Post test front underbody



Figure A-31: Pre test mid-underbody



Figure A-32: Post test mid-underbody



Figure A-33: Pre test driver front



Figure A-34: Post test driver front



Figure A-35: Pre test driver through window



Figure A-36: Post test driver through window



Figure A-37: Pre test driver (door open)



Figure A-38: Post test driver (door open)



Figure A-39: Pre test driver abdomen close-up



Figure A-40 Post test driver abdomen close-up



Figure A-41: Pre test driver feet



Figure A-42: Post test driver feet



Figure A-43: Pre test driver foot/leg close-up



Figure A-44: Post test driver foot/leg close-up



Figure A-45: Pre test driver knee bolster (left side)



Figure A-46: Post test driver knee bolster



Figure A-47: Pre test driver floor-pan

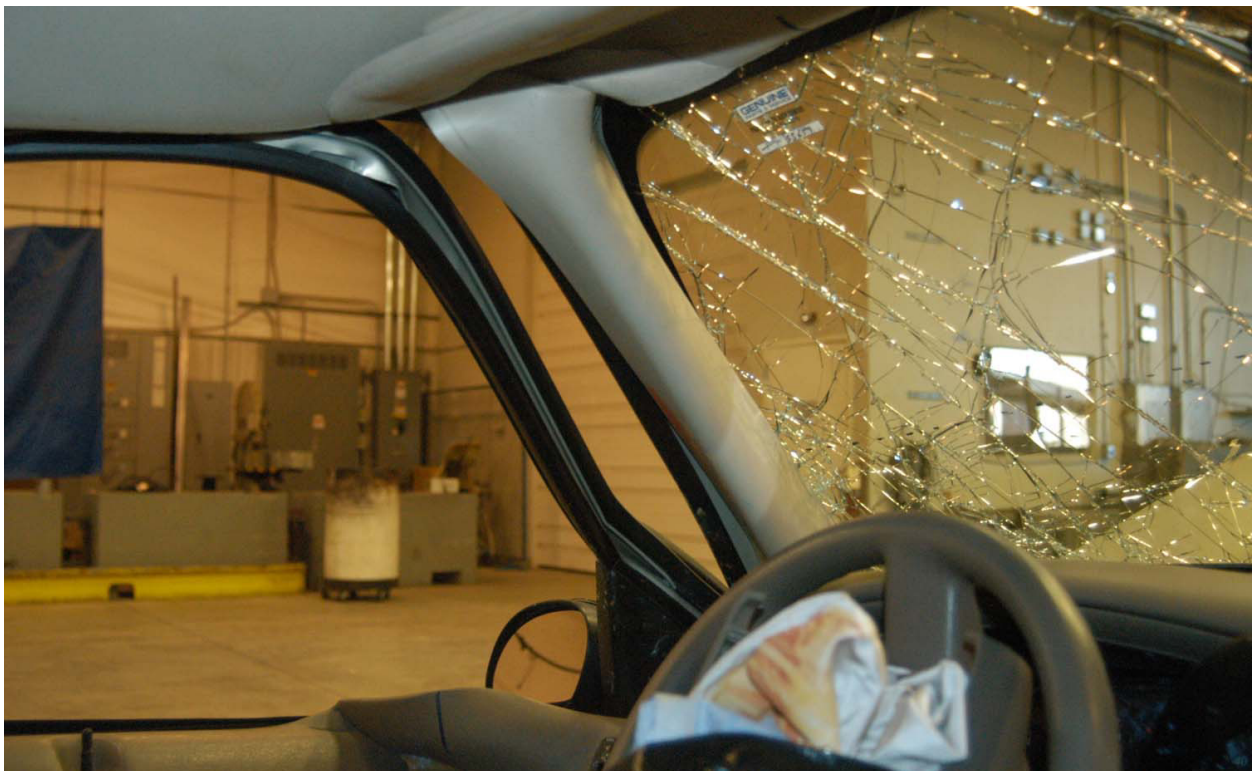


Figure A-48: Post test driver head contact



Figure A-49: Post test driver head contact (close up)



Figure A-50: Post test driver knee contact



Figure A-51: Post test driver airbag contact



Figure A-52: Pre test passenger right



Figure A-53: Post test passenger right



Figure A-54: Pre test passenger through window



Figure A-55: Post test passenger through window



Figure A-56: Pre test passenger door open

Figure A-57: Post test passenger door open - N/a



Figure A-58: Pre test passenger feet



Figure A-59: Post test passenger feet



Figure A-60: Pre test passenger foot/leg close-up



Figure A-61: Post test passenger foot/leg close-up



Figure A-62: Post test passenger head contact



Figure A-63: Post test passenger knee contact



Figure A-64: Impact



Figure A-65: FMVSS301 0 degrees



Figure A-66: FMVSS301 90 degrees

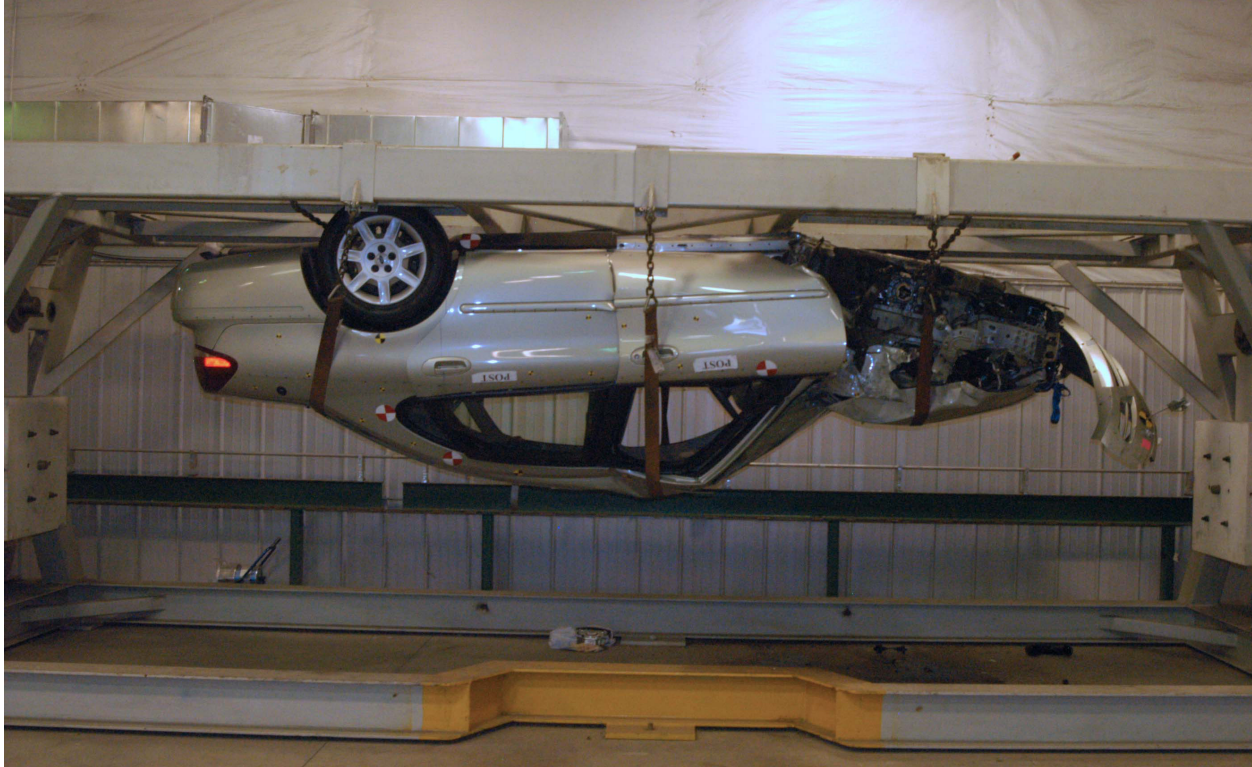


Figure A-67: FMVSS301 180 degrees

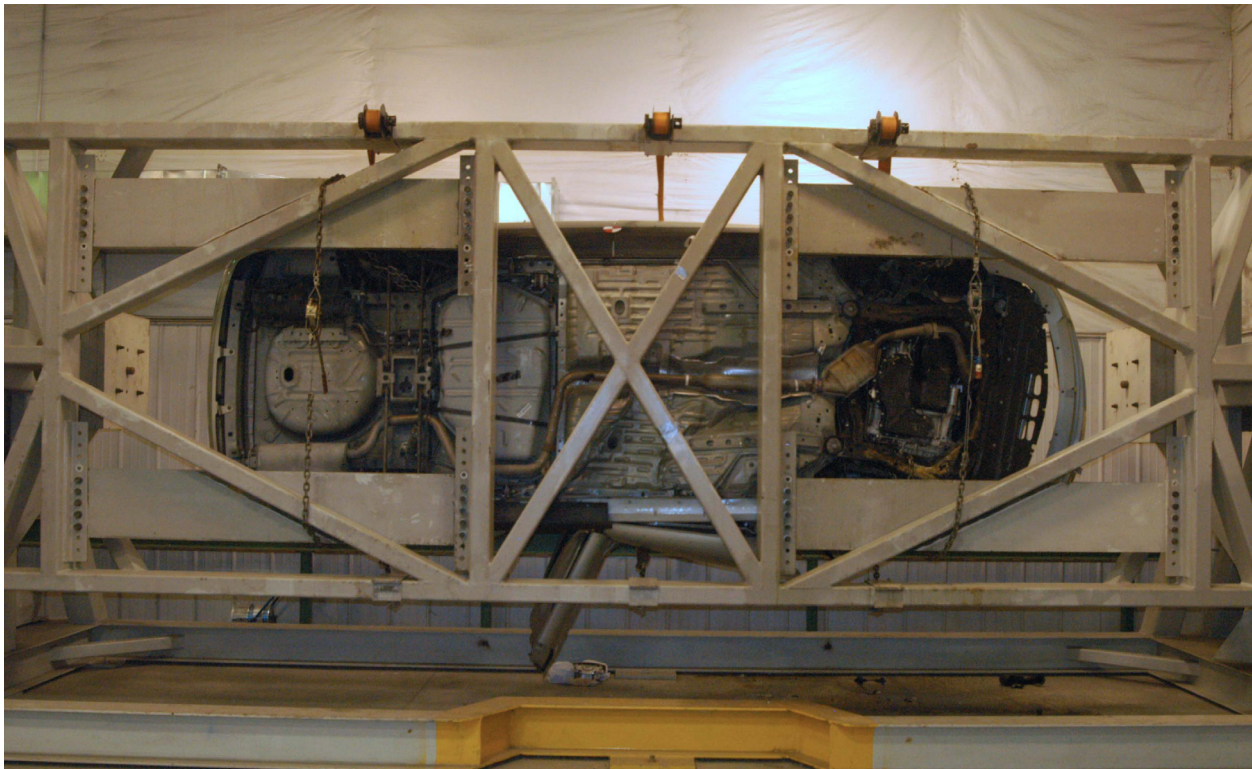


Figure A-68: FMVSS301 270 degrees



Figure A-69: FMVSS301 360 degrees

Test Vehicle: 2007 Ford Taurus 4-Door Sedan  
Test Program: Frontal Small Overlap

NHTSA Number: R7 0213  
Test Date: October 12, 2010

## **APPENDIX B**

### **THOR/HIII – 5<sup>th</sup> PERCENTILE, VEHICLE AND POLE RESPONSE DATA**

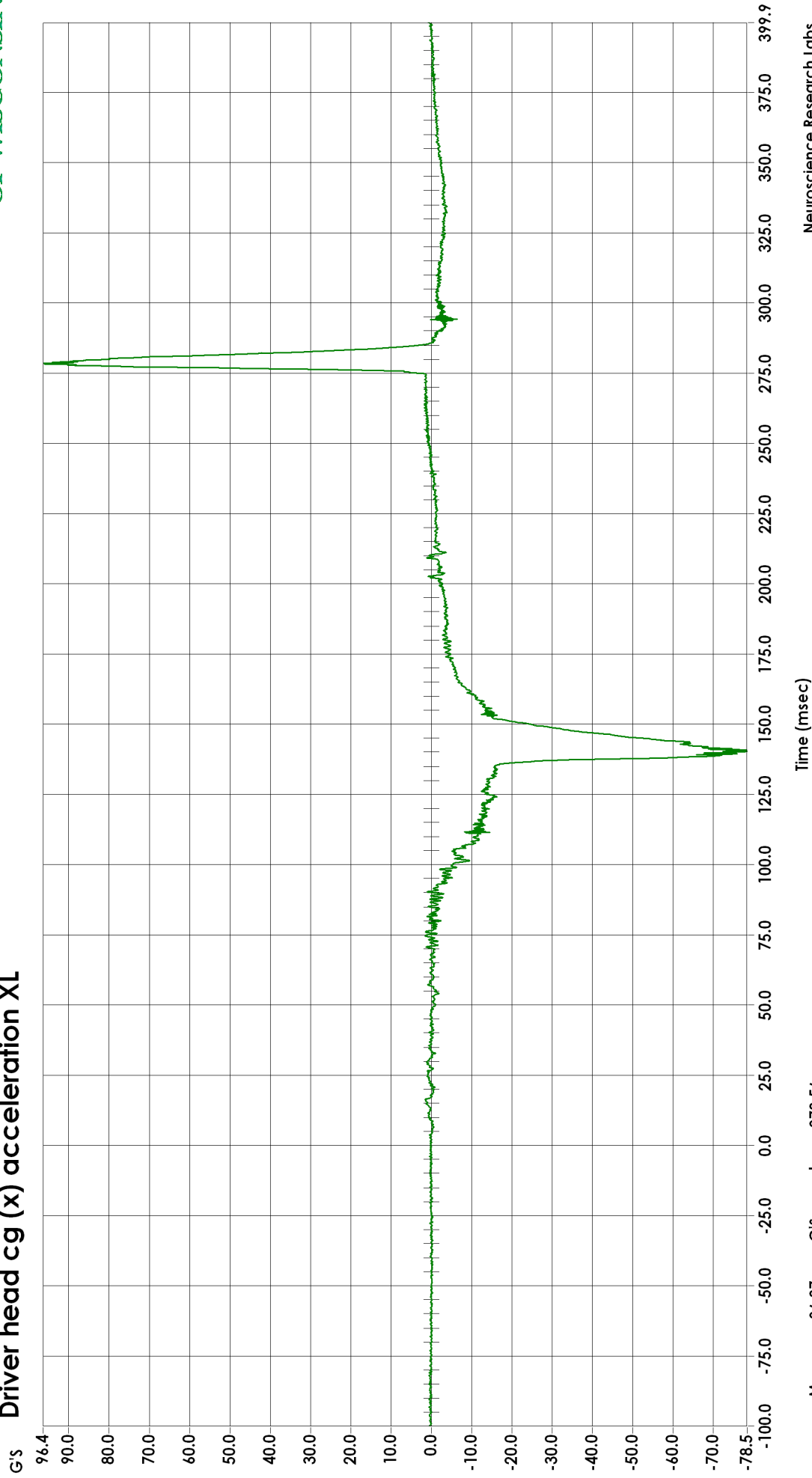


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HDCG  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P51885

### Driver head cg (x) acceleration XL



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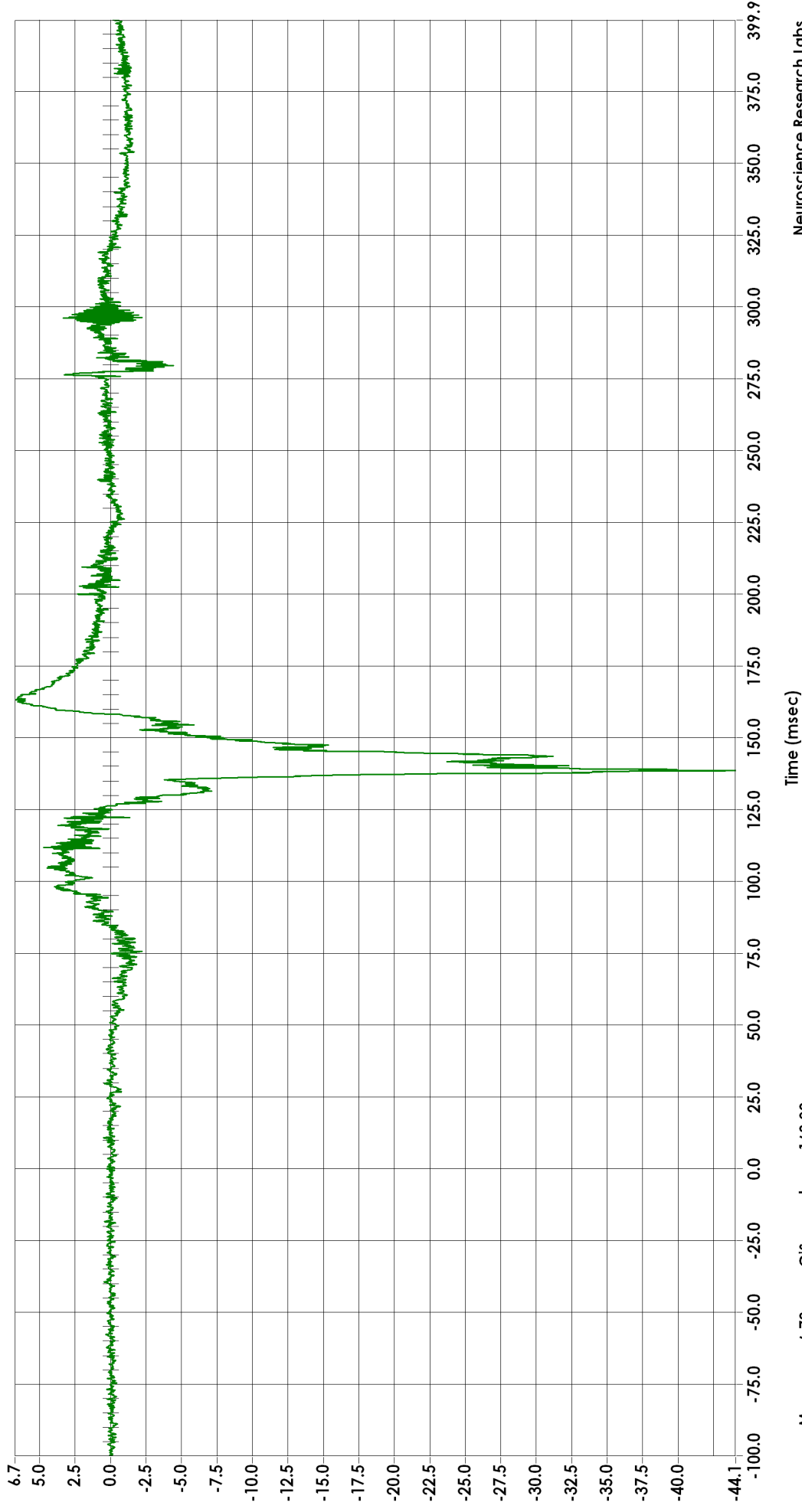
Test ID SOI003  
 Date 10-12-2010  
 Description 2007 Ford Taurus Small Overlap Test

Filter CFC1000  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

Sensor Location HDCG  
 Sensor Info ENDEVCO 7264C-2000TZ  
 Serial Number P52058



### Driver head cg (y) acceleration YL

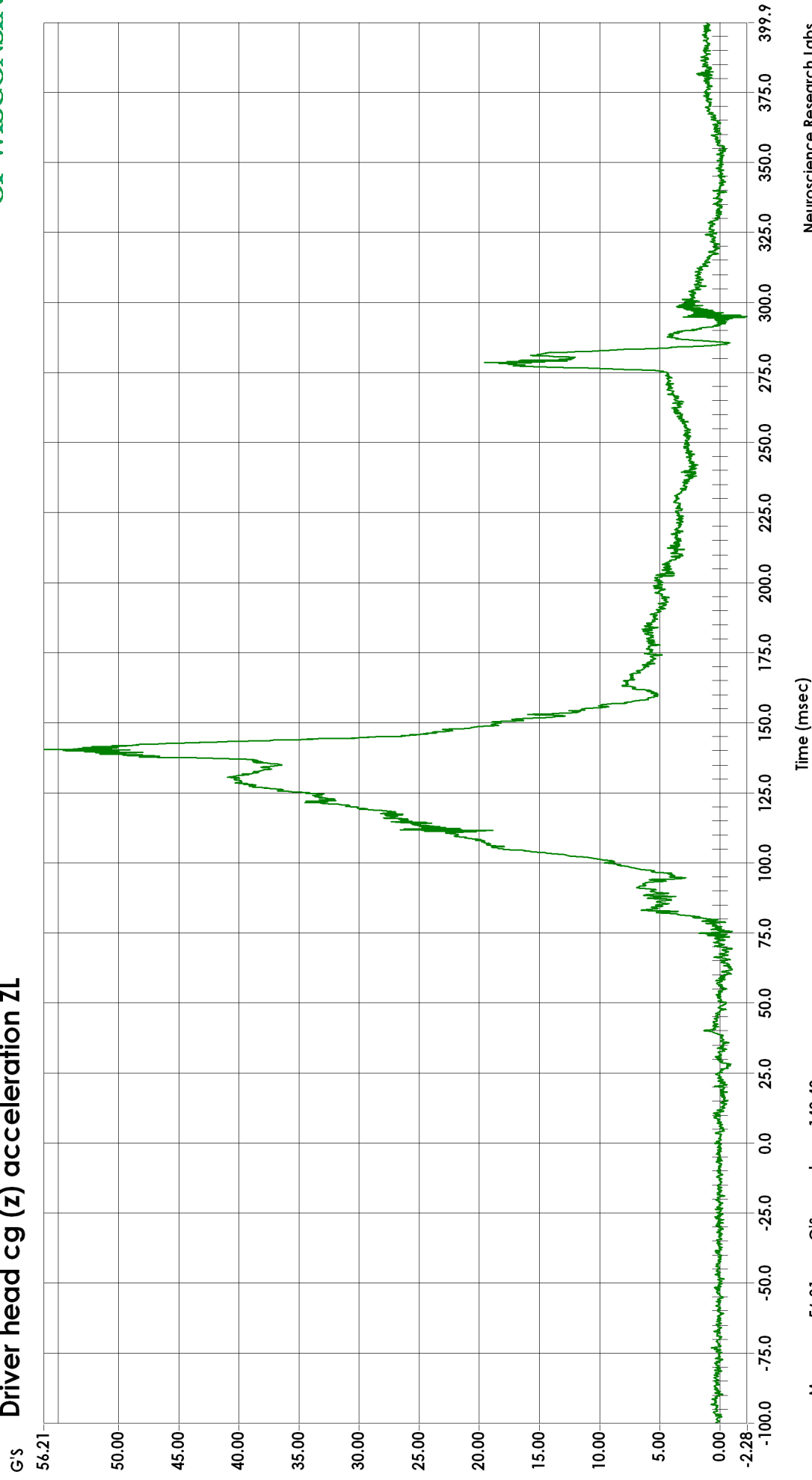


Max 6.73 G's at 163.20 msec  
 Min -44.05 G's at 138.56 msec

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 Milwaukee, WI 53295

<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	HDCG
		<b>Sensor Info</b>	ENTRAN EGE6G-2K
		<b>Serial Number</b>	12105

**Driver head cg (z) acceleration ZL**



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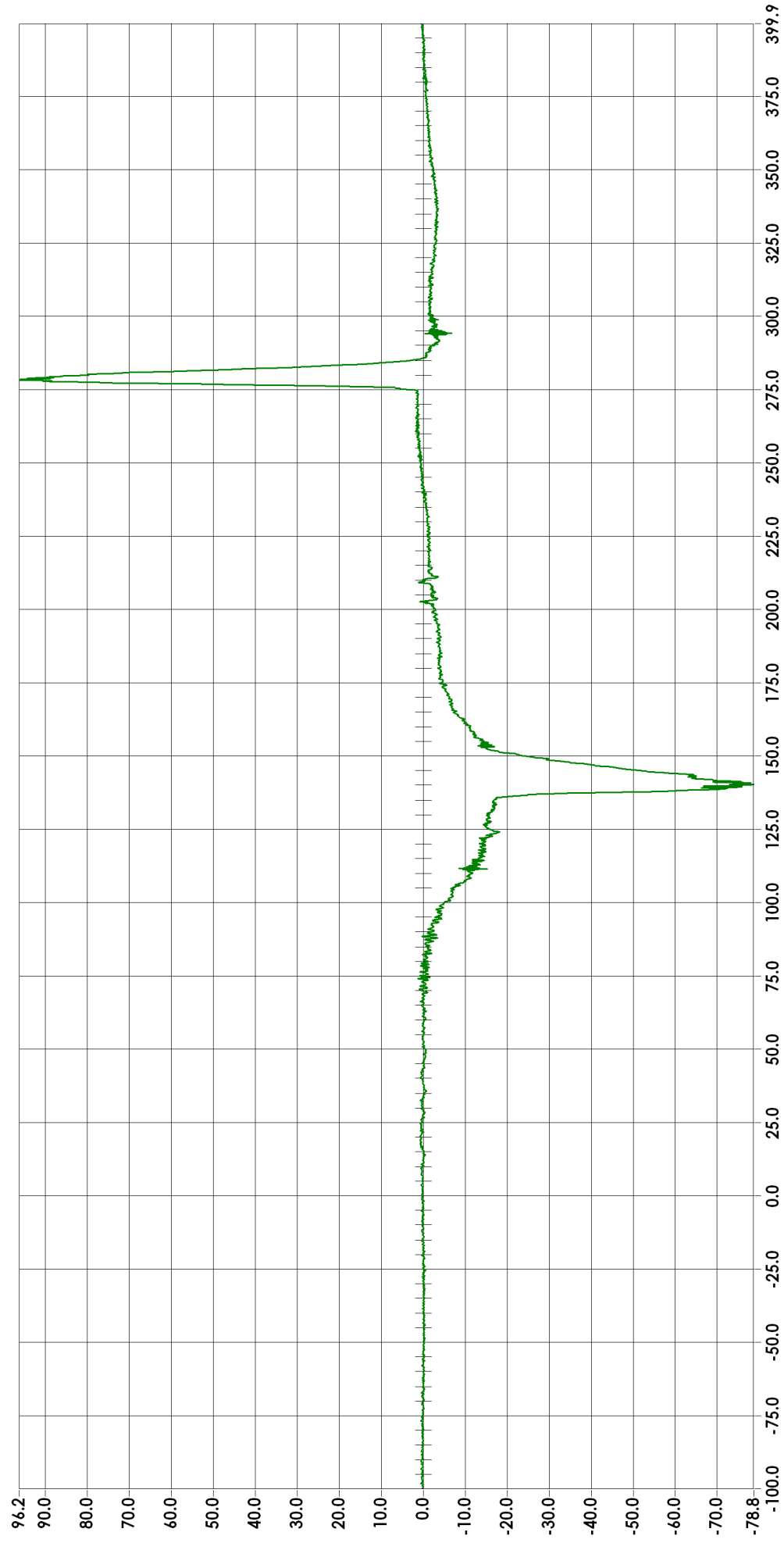


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HDCG  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12100

### Driver redundant head cg (x) acceleration XL



**Max** 96.22 G's at 278.24 msec  
**Min** -78.77 G's at 140.24 msec

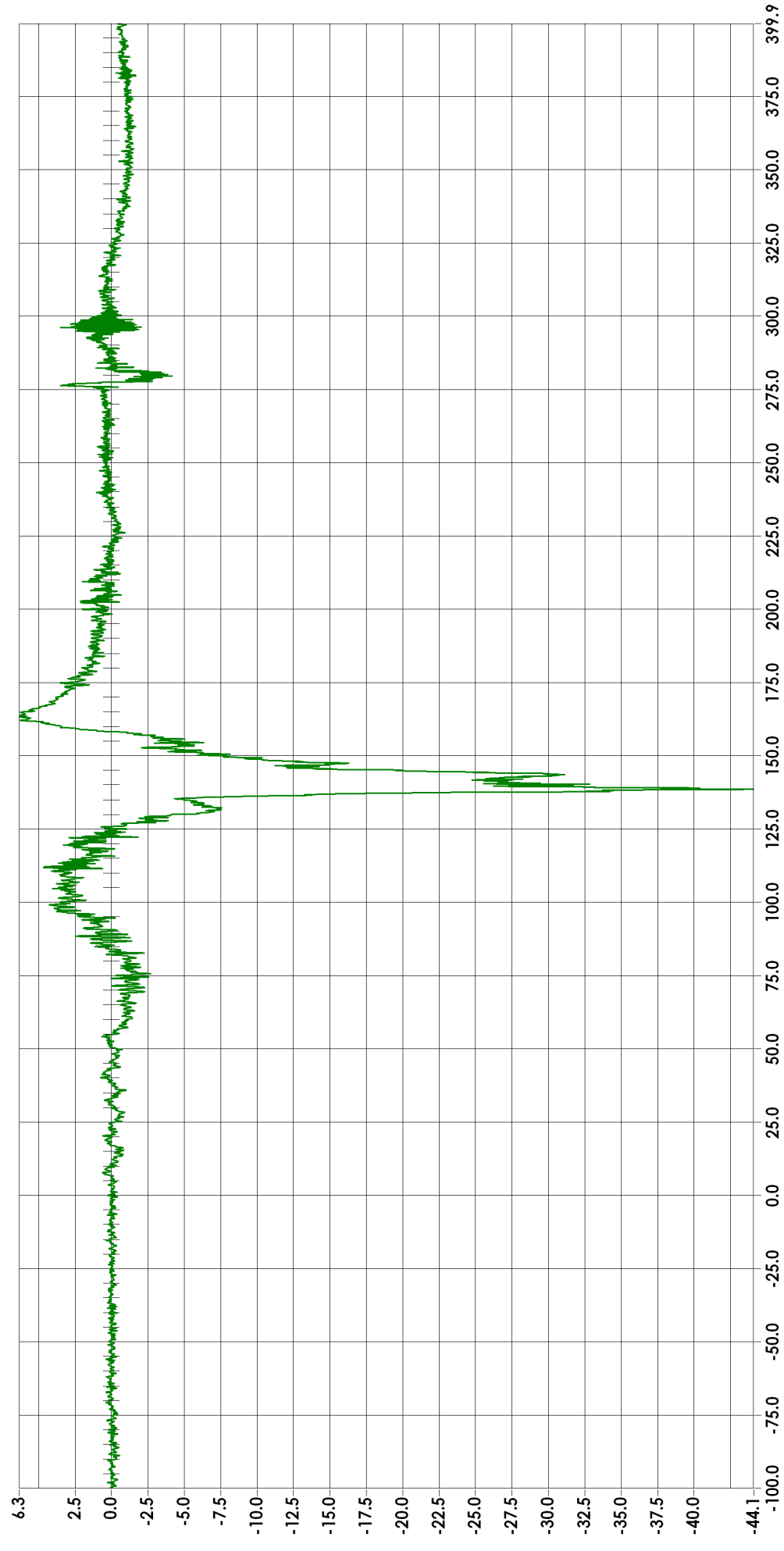
Time (msec)

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 Research 151  
 Milwaukee, WI 53295



<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	HDCG
		<b>Sensor Info</b>	ENDEVCO 7264D-2KTZ-2-360
		<b>Serial Number</b>	12120

### Driver redundant head cg (y) acceleration YL



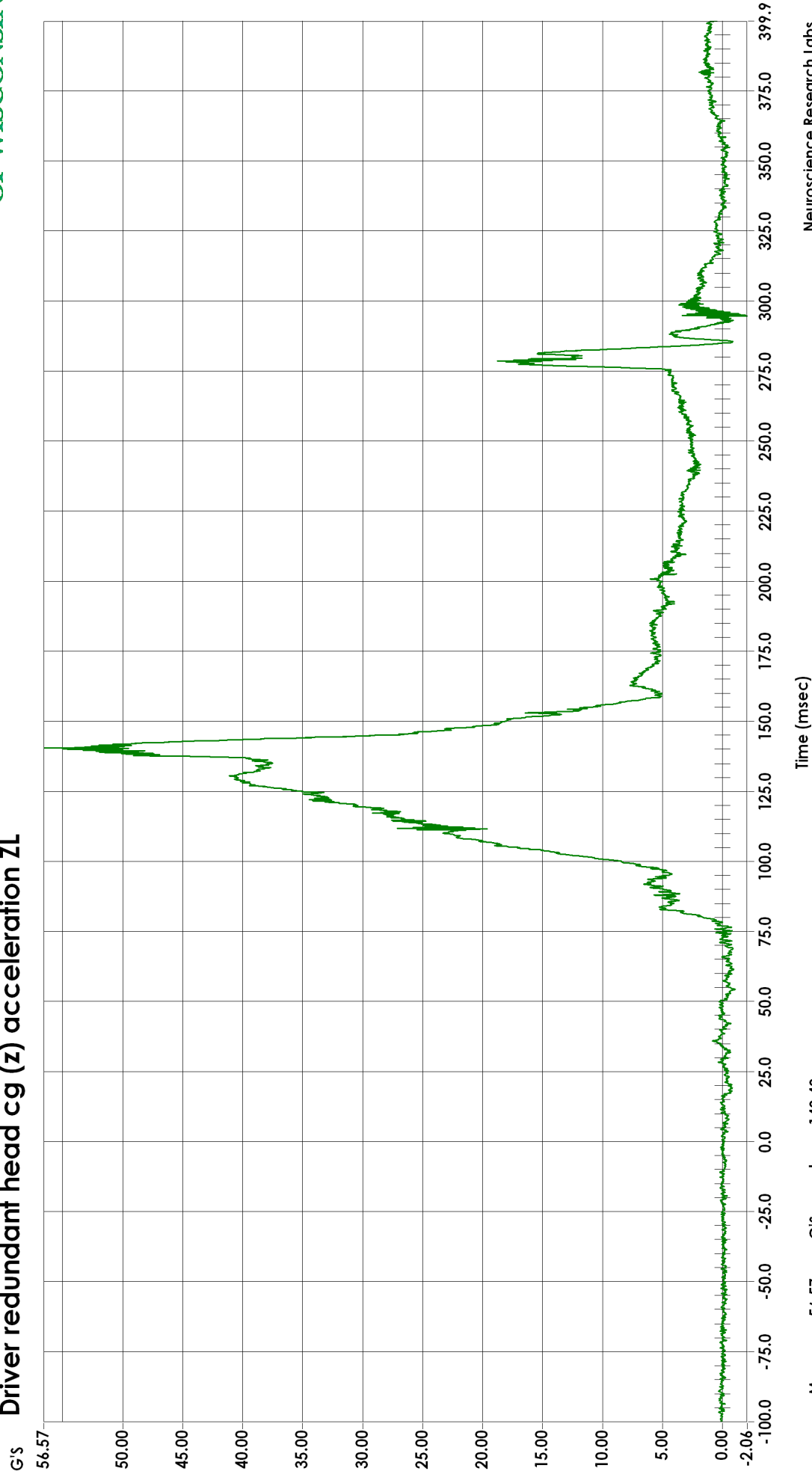
<b>Max</b>	6.33	<b>G's</b>	at	163.28	<b>msec</b>
<b>Min</b>	-44.11	<b>G's</b>	at	138.56	<b>msec</b>

SOI003 Plot 005

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	HDCG
		<b>Sensor Info</b>	ENDEVCO 7264C-2000TZ
		<b>Serial Number</b>	P12359

### Driver redundant head cg (z) acceleration ZL



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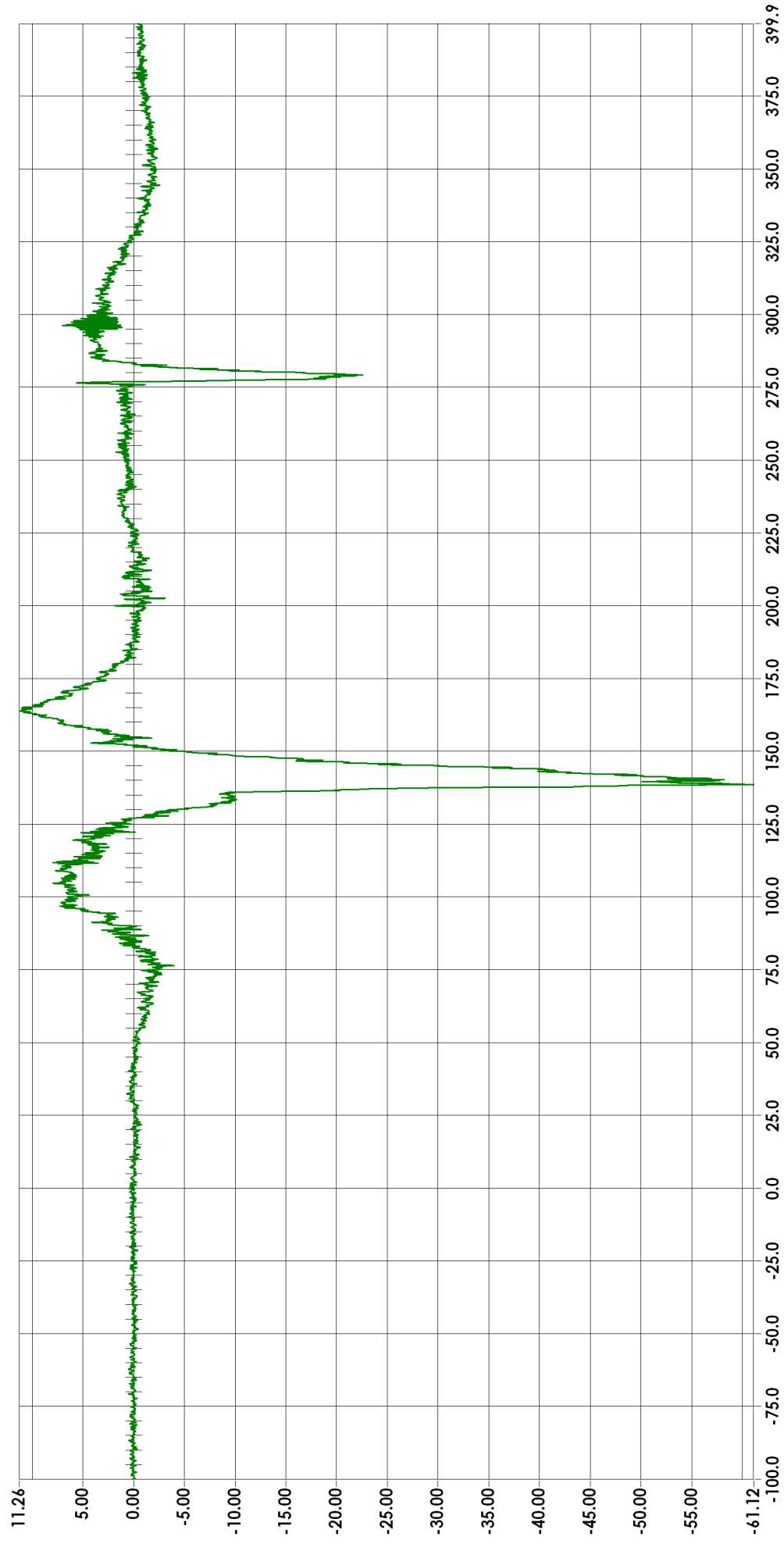


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HD9X  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P49200

### G's Driver internal nap (x) arm (y) face acceleration YL



**Max** 11.26 G's at 163.84 msec  
**Min** -61.12 G's at 138.56 msec

Time (msec)

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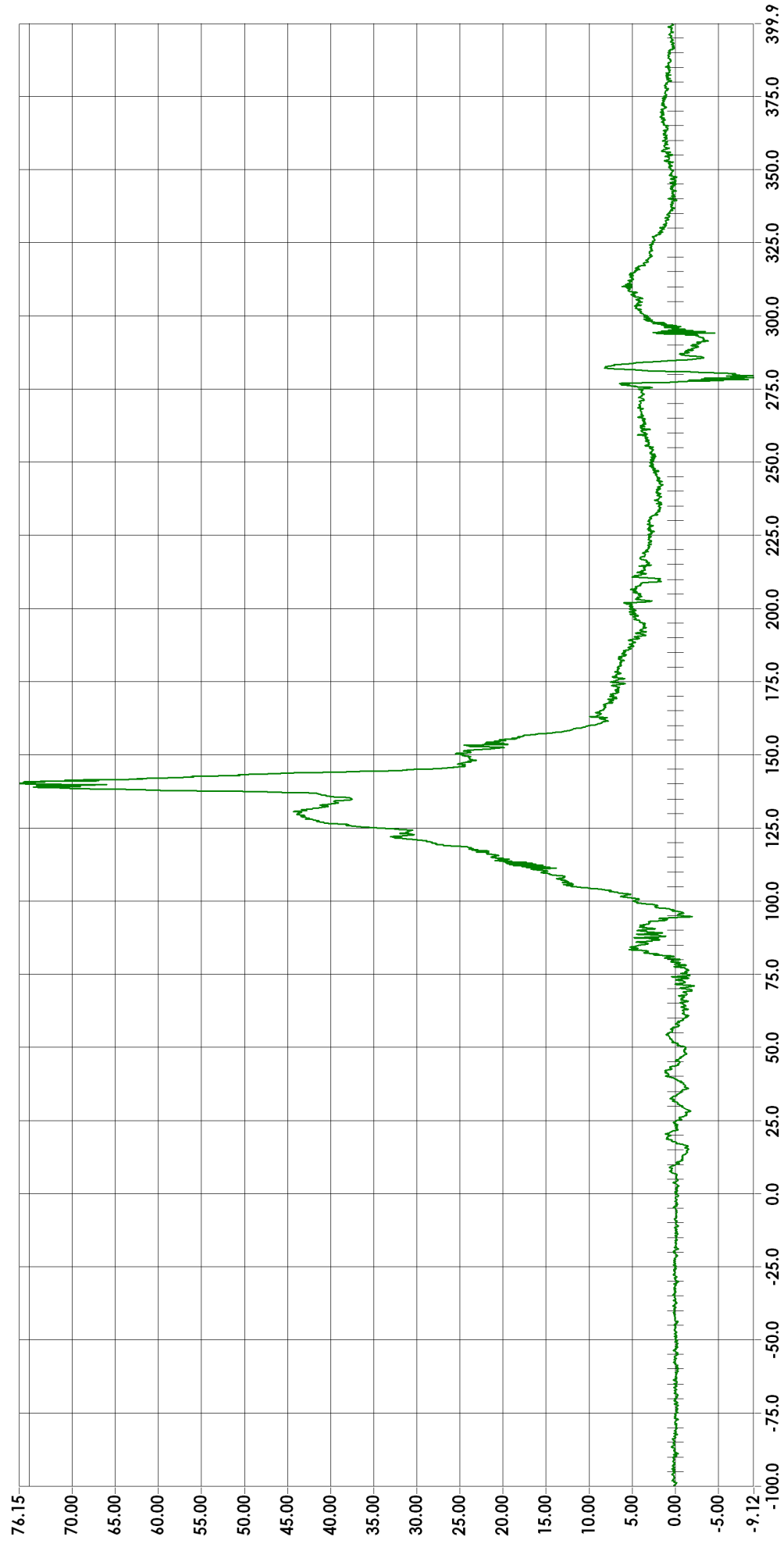


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HD9X  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P49440

### Driver internal nap (x) arm (z) face acceleration ZL



**Max** 76.15 G's at 140.16 msec  
**Min** -9.12 G's at 278.96 msec

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SOI003 Plot 008

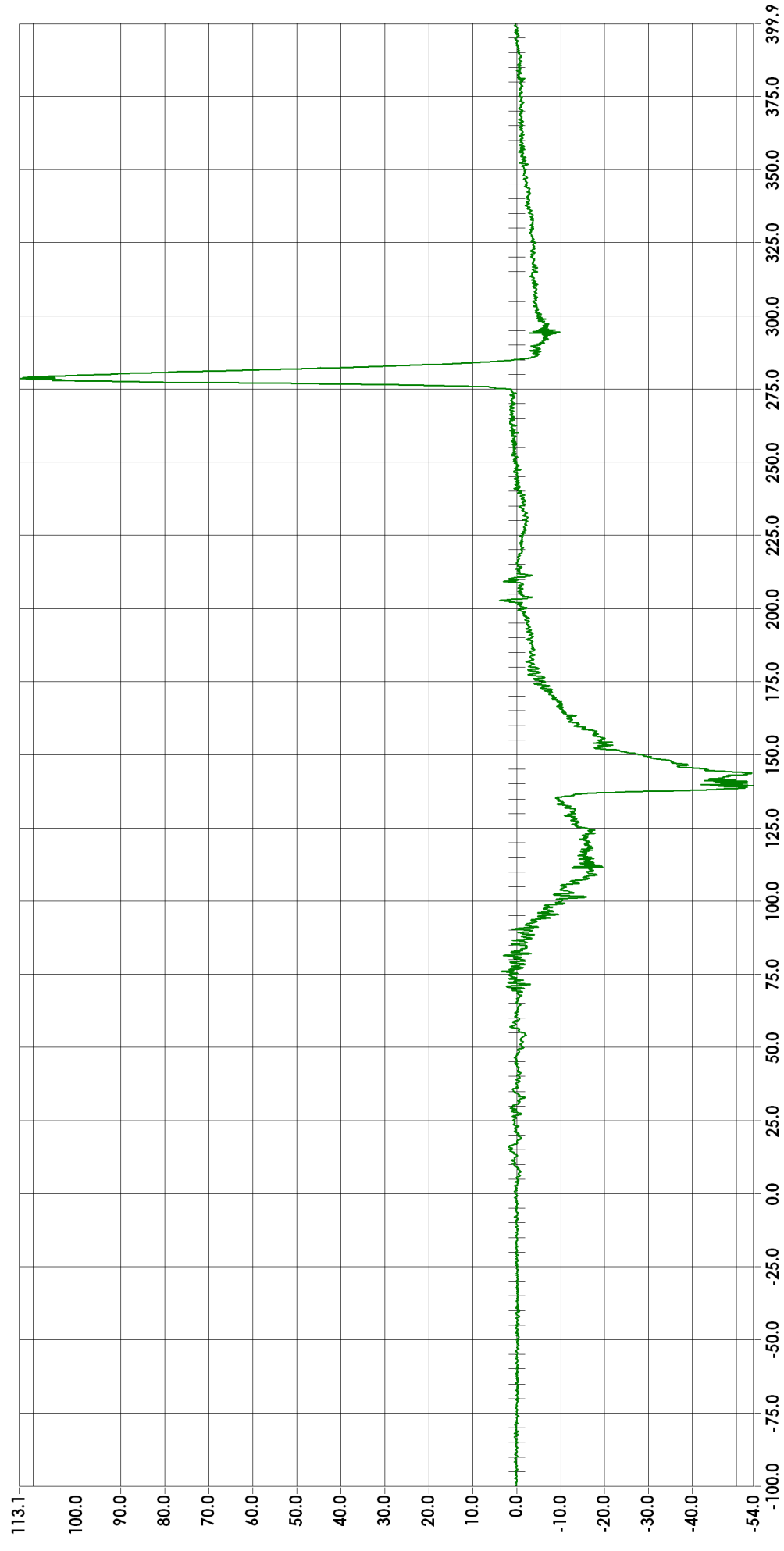


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HD9Y  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P50098

### Driver internal nap (y) arm (x) face acceleration XL



**Max** 113.14 G's at 278.64 msec  
**Min** -53.95 G's at 139.52 msec

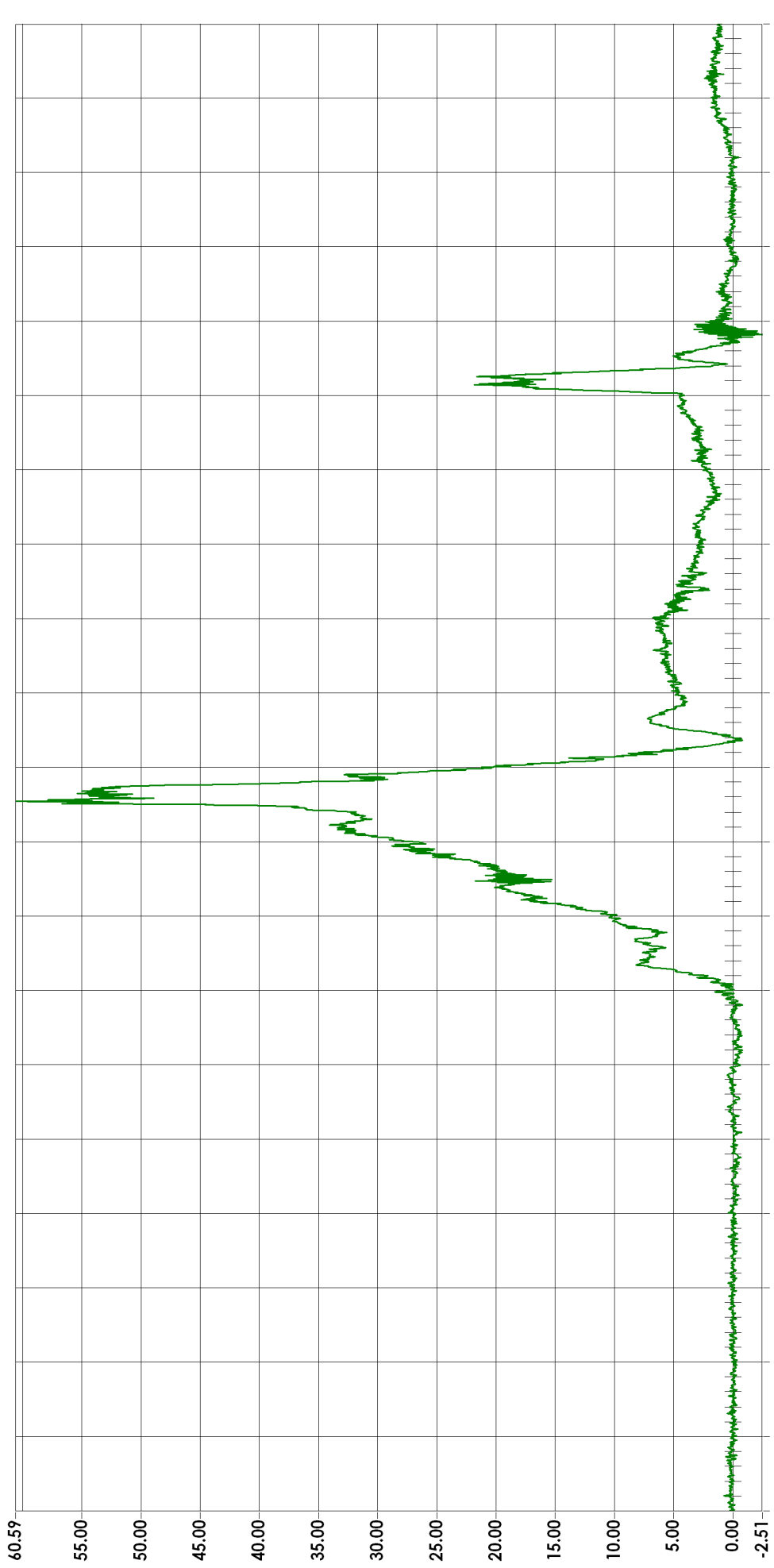
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 Research 151  
 Milwaukee, WI 53295

SOI003 Plot 009



<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	HD9Y
		<b>Sensor Info</b>	ENDEVCO 7264C-2000TZ
		<b>Serial Number</b>	12097

### Driver internal nap (y) arm (z) face acceleration ZL



<b>Max</b>	60.59	<b>G's</b>	at	138.56	<b>msec</b>
<b>Min</b>	-2.51	<b>G's</b>	at	295.44	<b>msec</b>

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 Research 151  
 Milwaukee, WI 53295

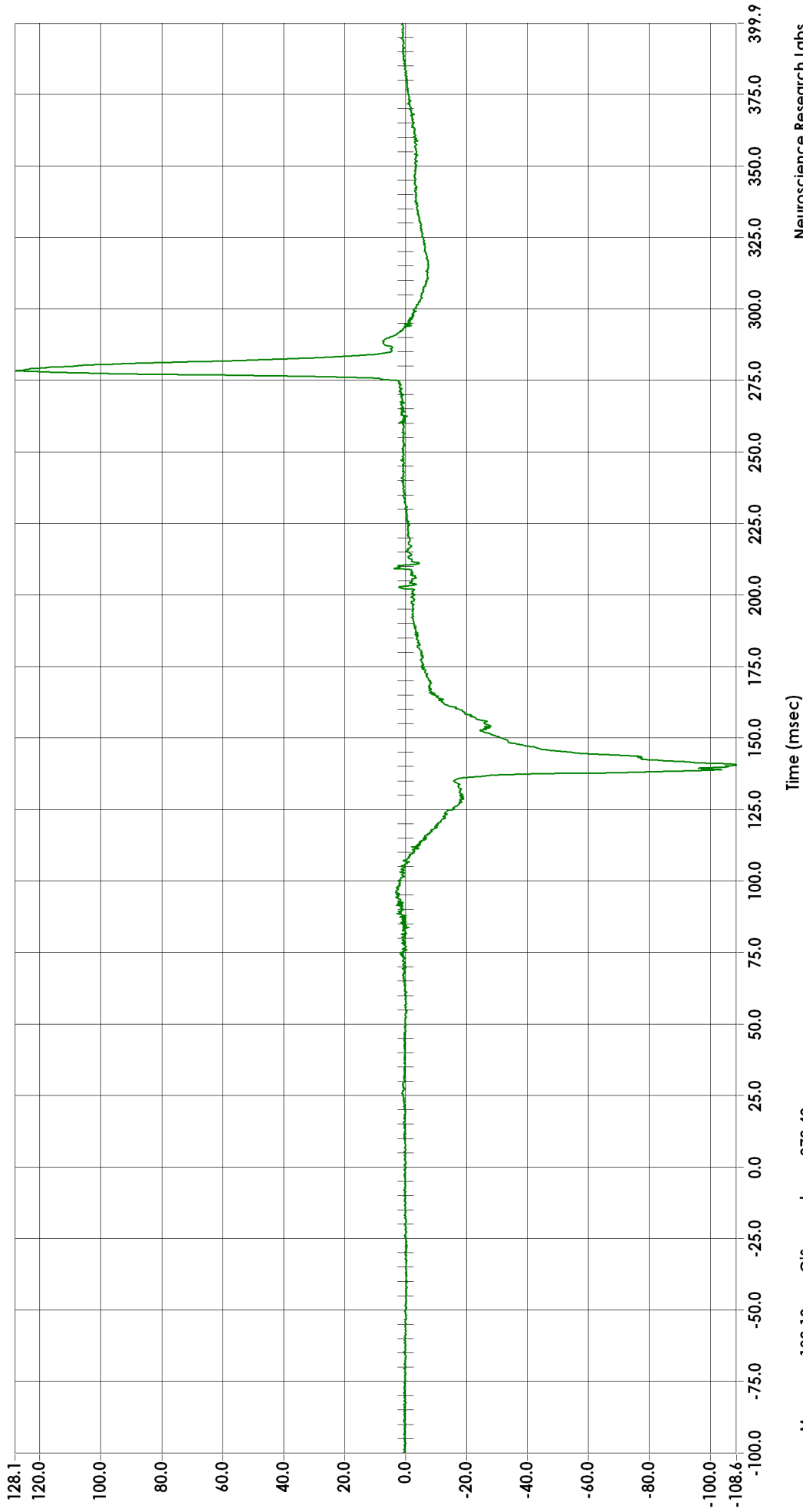


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HD9Z  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P52105

### Driver internal nap (z) arm (x) face acceleration XL



**Max** 128.10 G'S at 278.40 msec  
**Min** -108.61 G'S at 140.48 msec

Time (msec)

Neuroscience Research Labs  
 5000 West National Ave  
 Research 151  
 Milwaukee, WI 53295

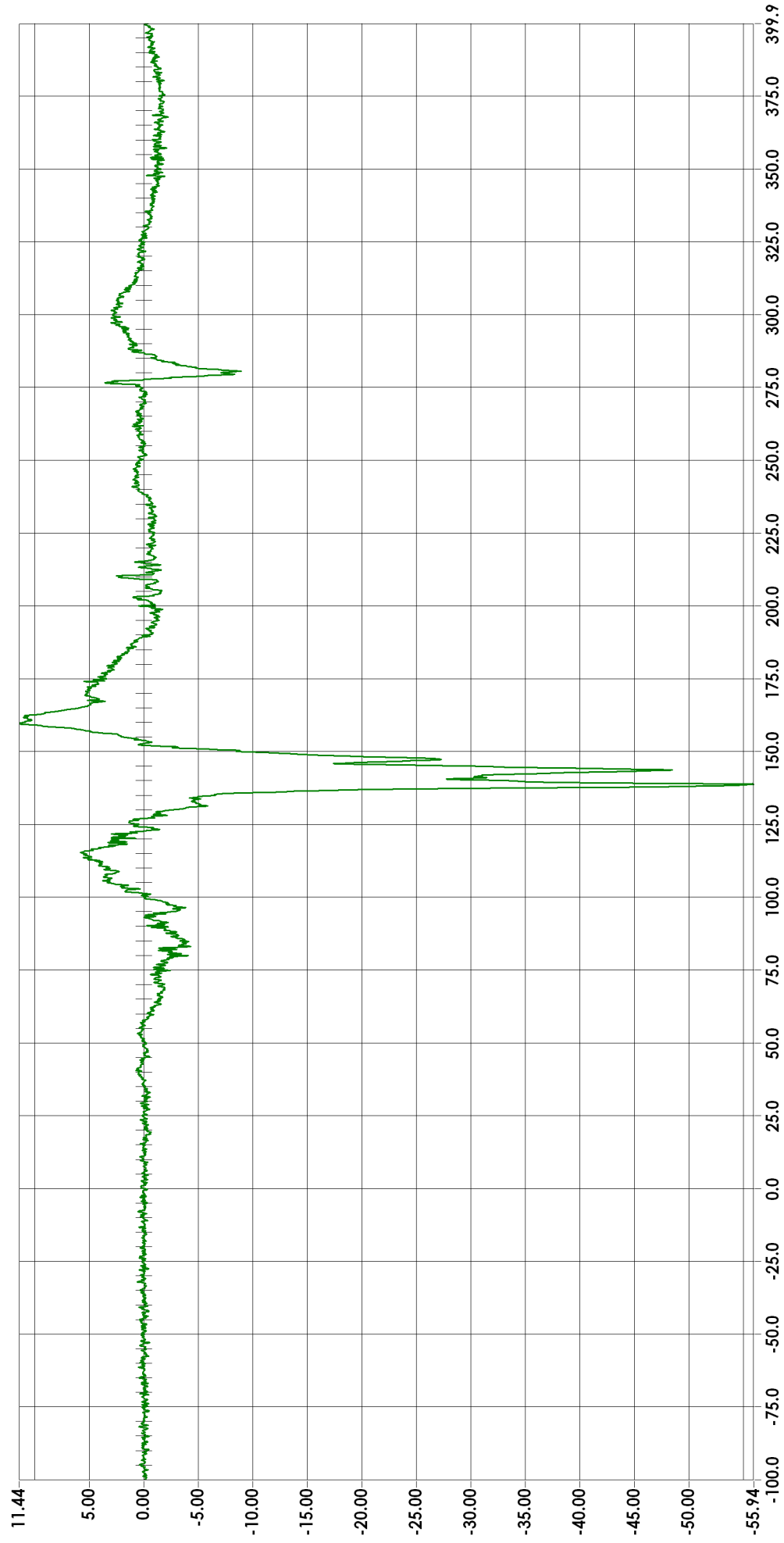


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HD9Z  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P51915

**G's Driver internal nap (z) arm (y) face acceleration YL**



**Max** 11.44 G's at 159.84 msec  
**Min** -55.94 G's at 138.72 msec

Time (msec)

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 Research 151  
 Milwaukee, WI 53295

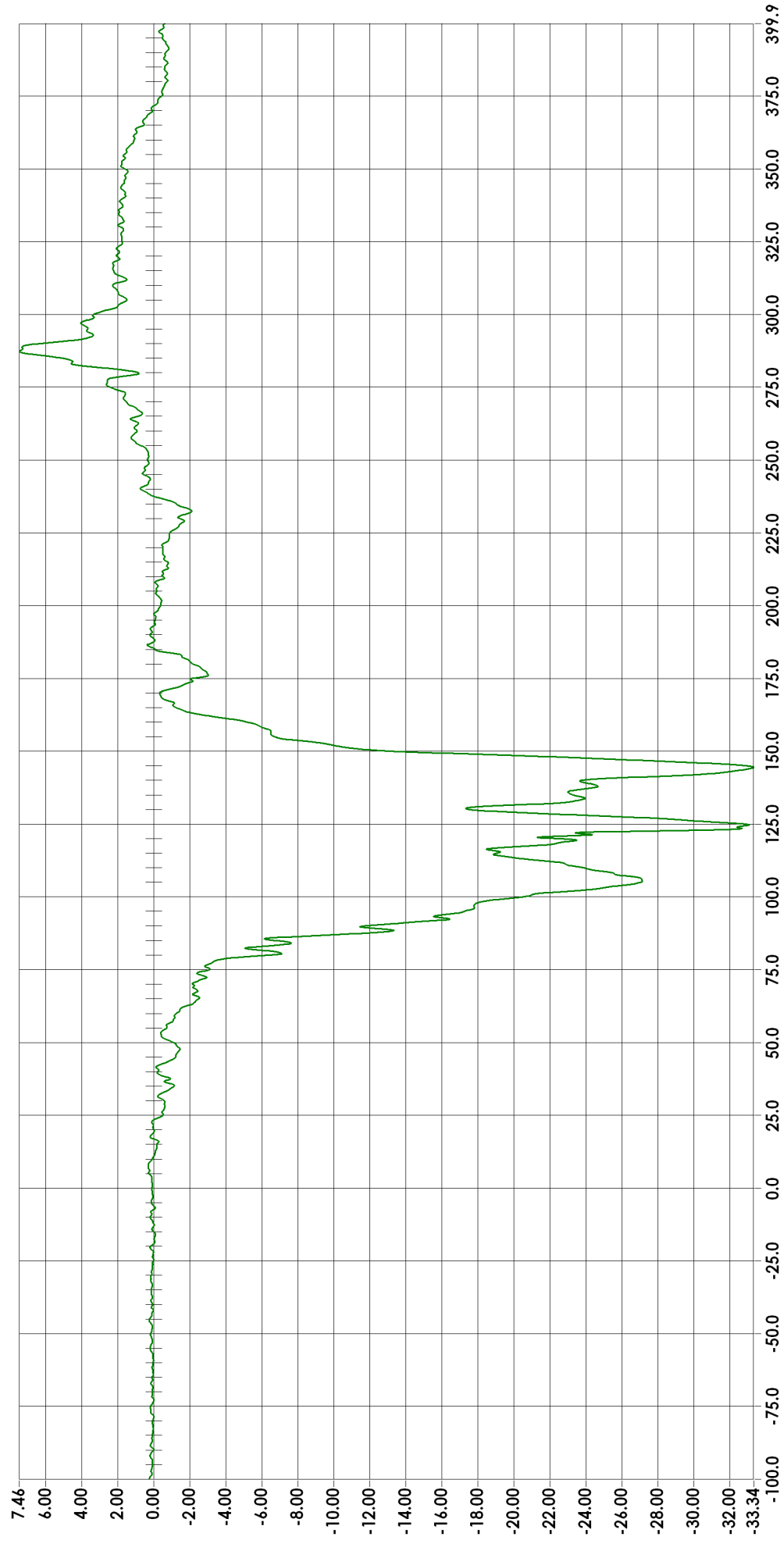


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SPNU  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P64006

### Driver t1 (x) acceleration XL



Time (msec)

**Max** 7.46 G's at 287.28 msec  
**Min** -33.34 G's at 144.56 msec

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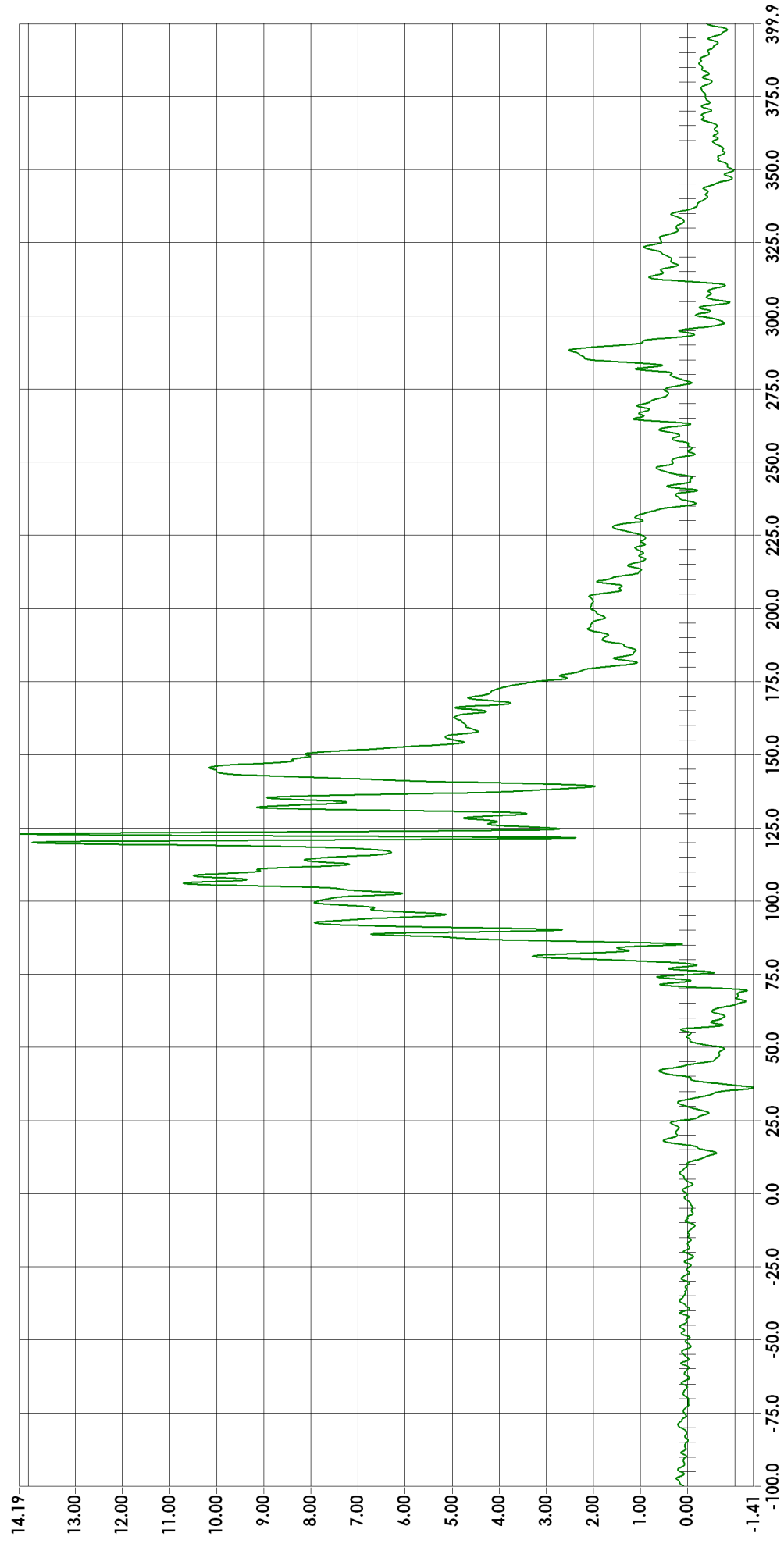


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SPNU  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P64005

### Driver t1 (y) acceleration YL



Time (msec)

**Max** 14.19 G'S at 122.88 msec  
**Min** -1.41 G'S at 36.16 msec

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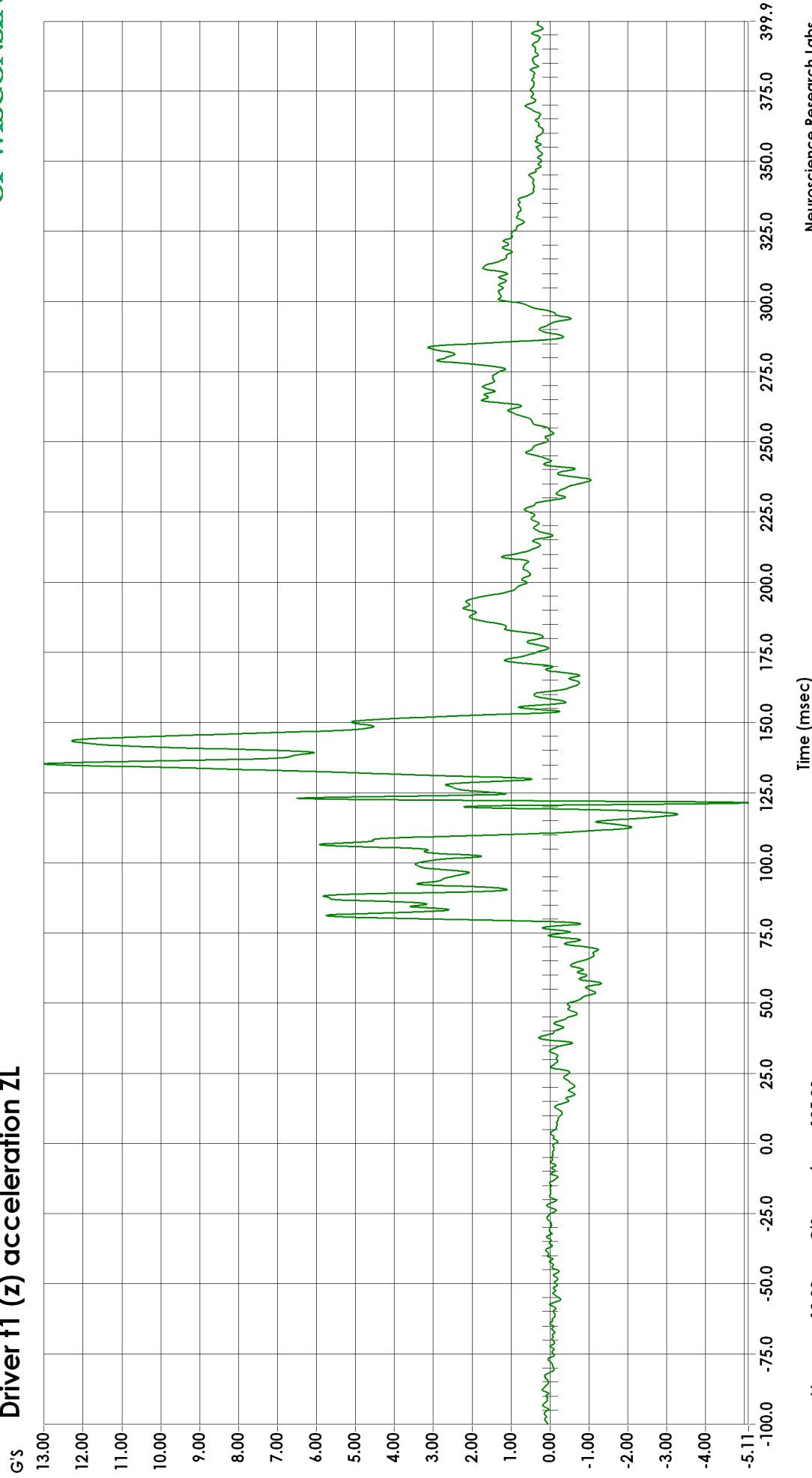


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SPNU  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P64003

### Driver t1 (z) acceleration ZL



**Max** 13.00 G's at 135.20 msec  
**Min** -5.11 G's at 121.36 msec

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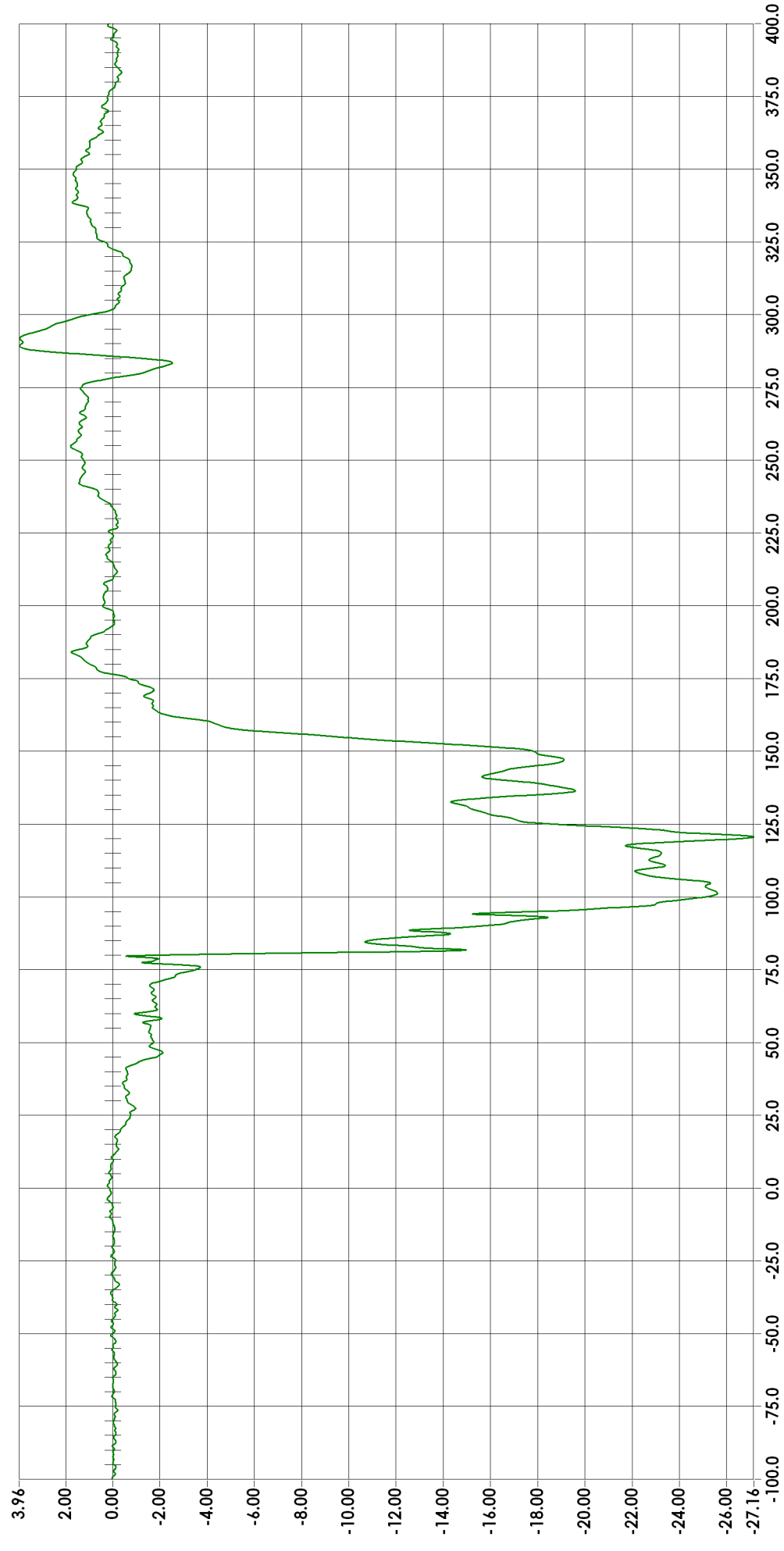


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHST  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P63990

### Driver t4 (x) acceleration XL



**Max** 3.96 G's at 289.28 msec  
**Min** -27.16 G's at 120.64 msec

Time (msec)

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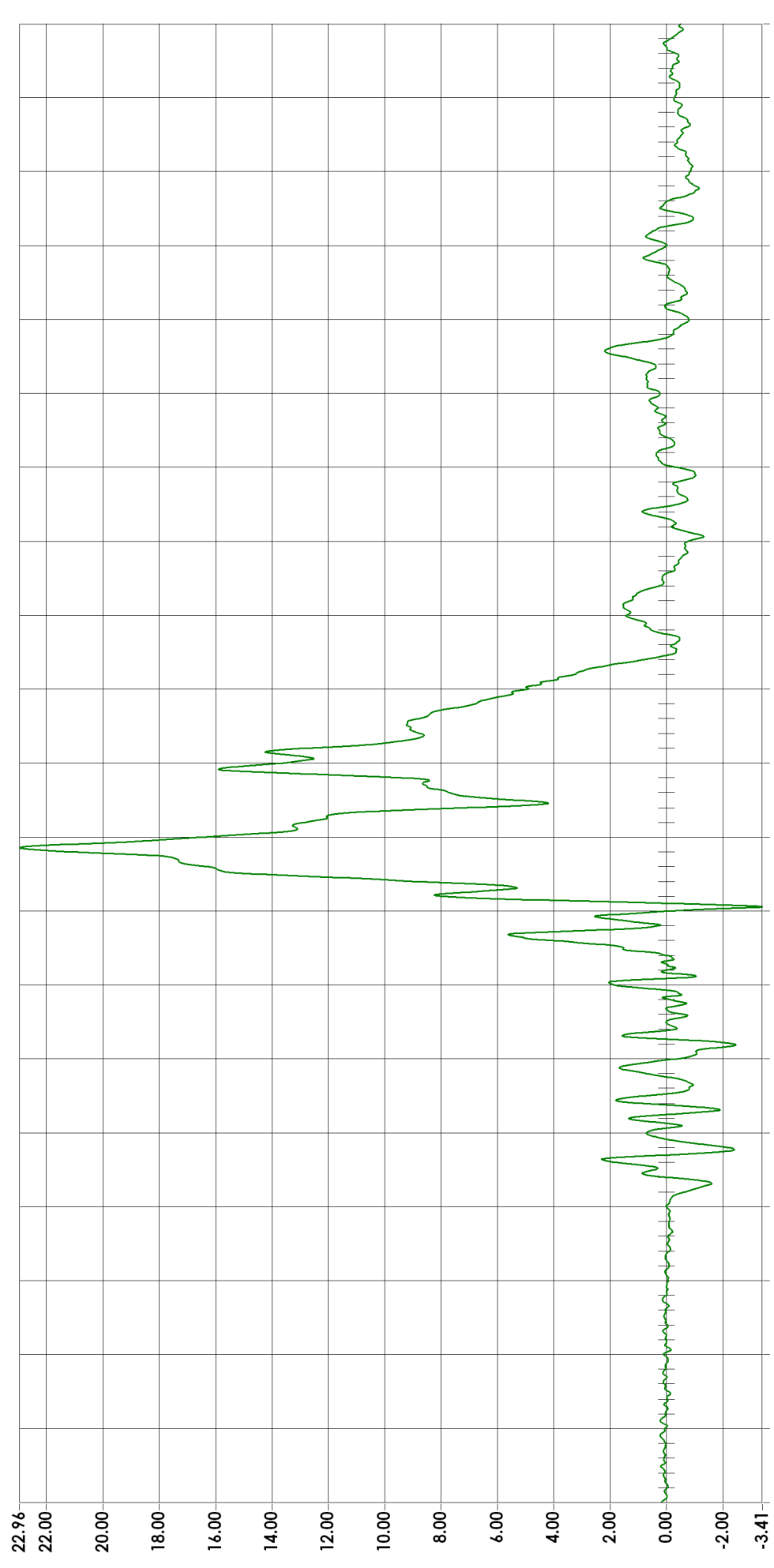


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHST  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P64000

### Driver t4 (y) acceleration YL



Max	22.96	G'S	at	121.44	msec
Min	-3.41	G'S	at	101.44	msec

Time (msec)

Neuroscience Research Labs  
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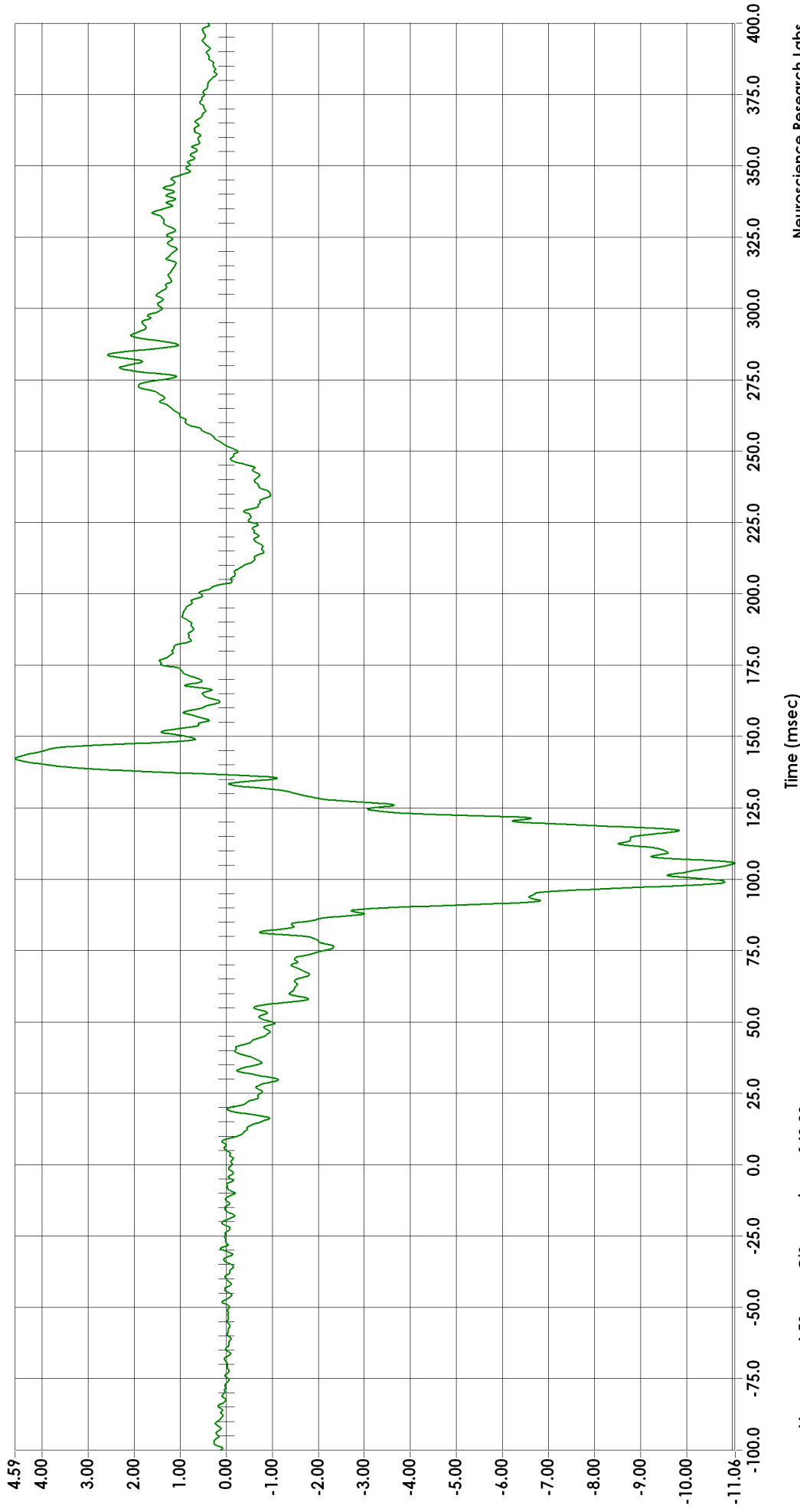


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHST  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P63841

### Driver t4 (z) acceleration ZL



**Max** 4.59 G's at 142.32 msec  
**Min** -11.06 G's at 105.68 msec

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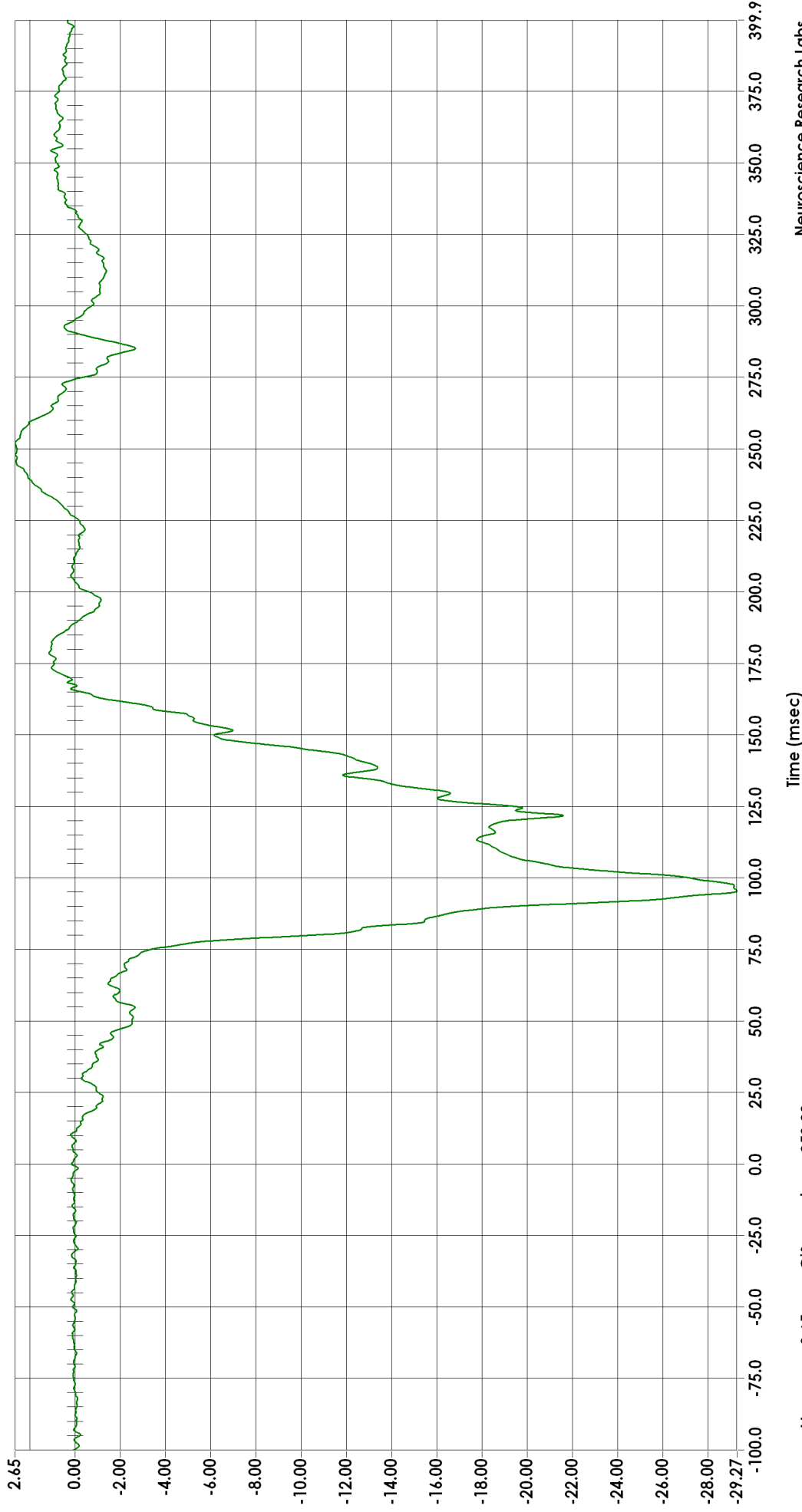
Test ID SOI003  
 Date 10-12-2010  
 Description 2007 Ford Taurus Small Overlap Test

Filter CFC180  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

Sensor Location SPNL  
 Sensor Info ENDEVCO 7264C-2000TZ  
 Serial Number P63983



### Driver t12 (x) acceleration XL



Max 2.65 G's at 252.08 msec  
 Min -29.27 G's at 95.52 msec

Time (msec)

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 Milwaukee, WI 53295

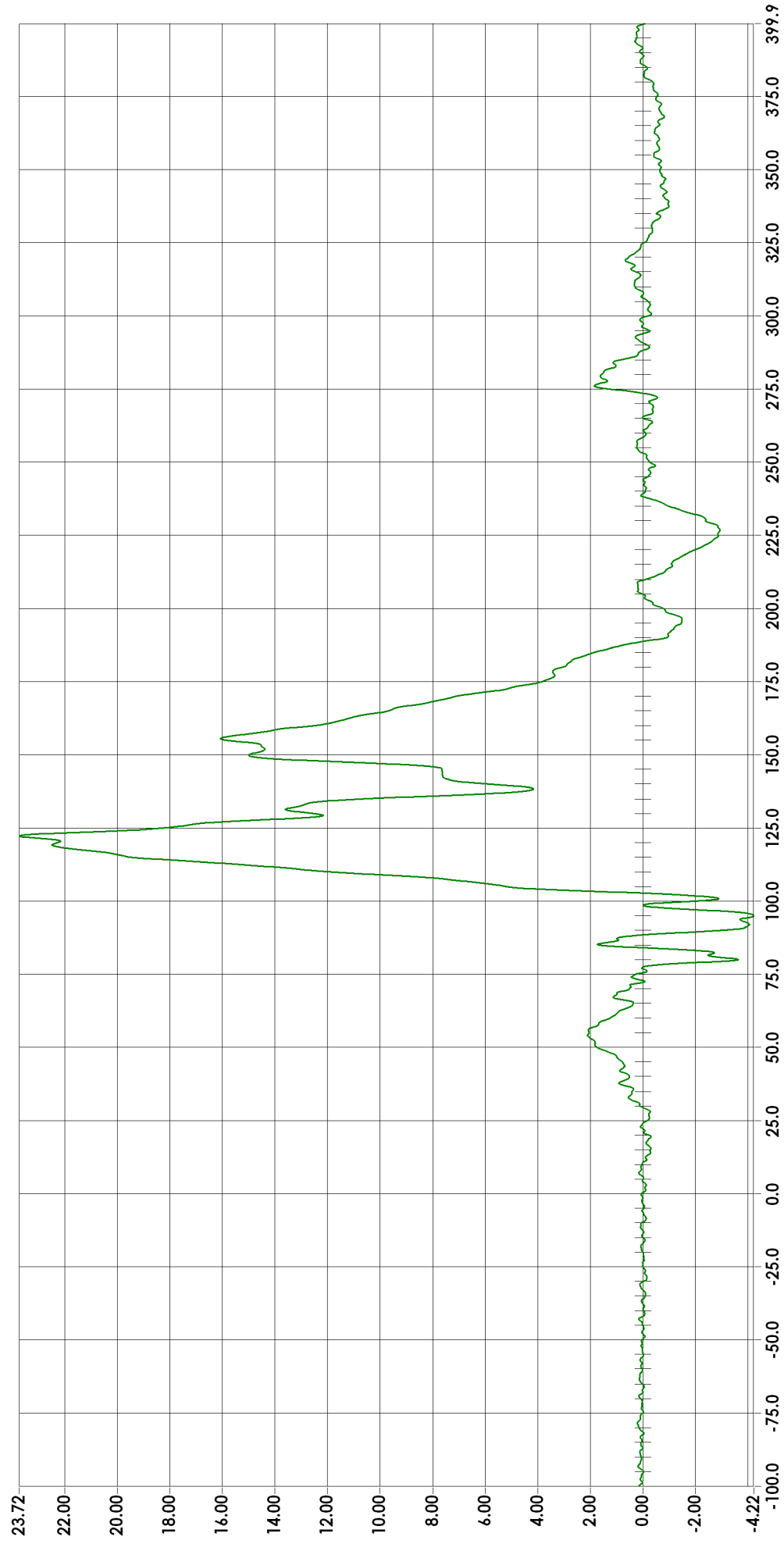


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SPNL  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P63992

### Driver t12 (y) acceleration YL



**Max** 23.72 G'S at 122.24 msec  
**Min** -4.22 G'S at 94.96 msec

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SOI003 Plot 020

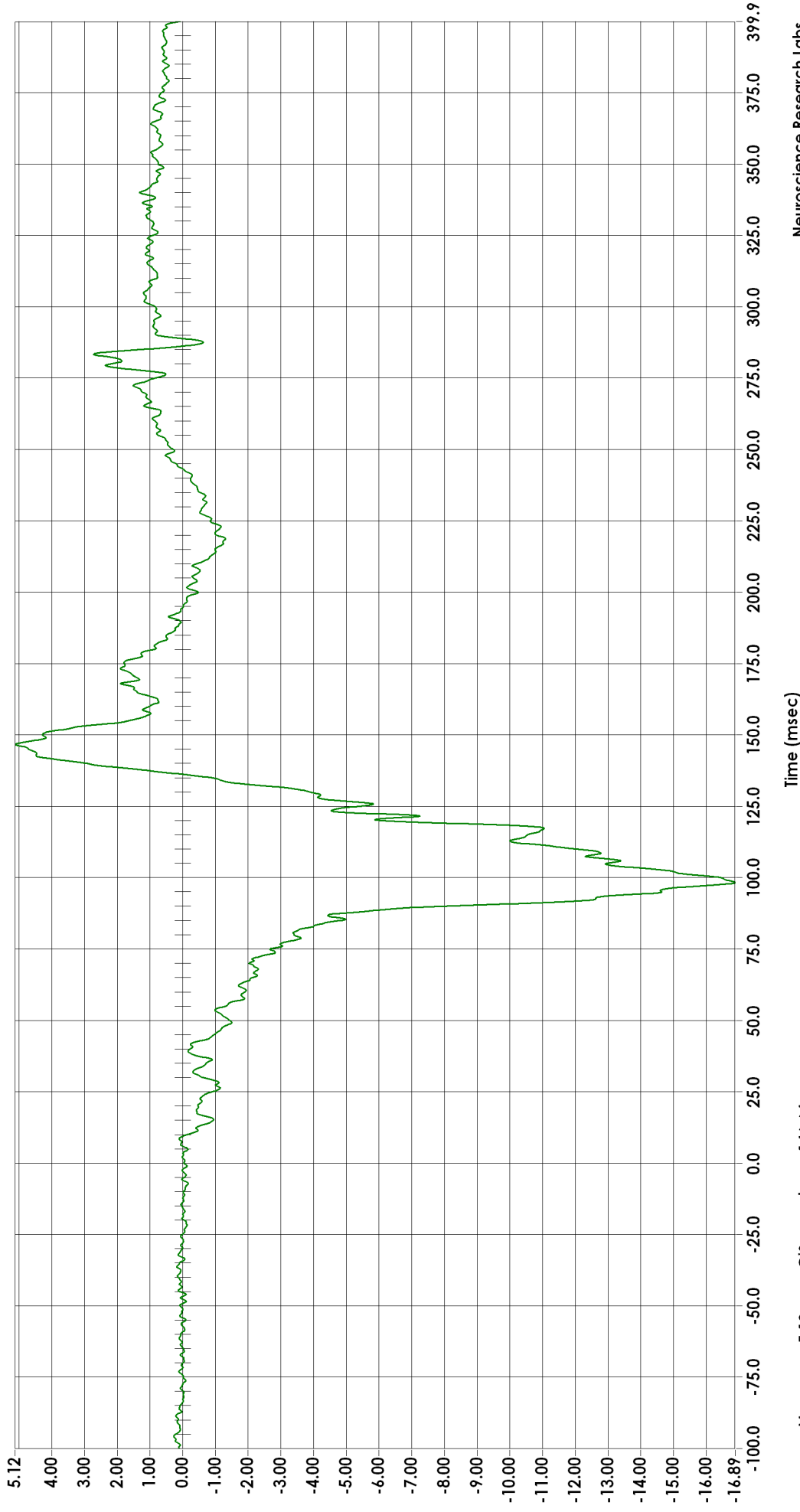


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SPNL  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P63997

### G's Driver t12 (z) acceleration ZL



**Max** 5.12 G's at 146.64 msec  
**Min** -16.89 G's at 98.32 msec

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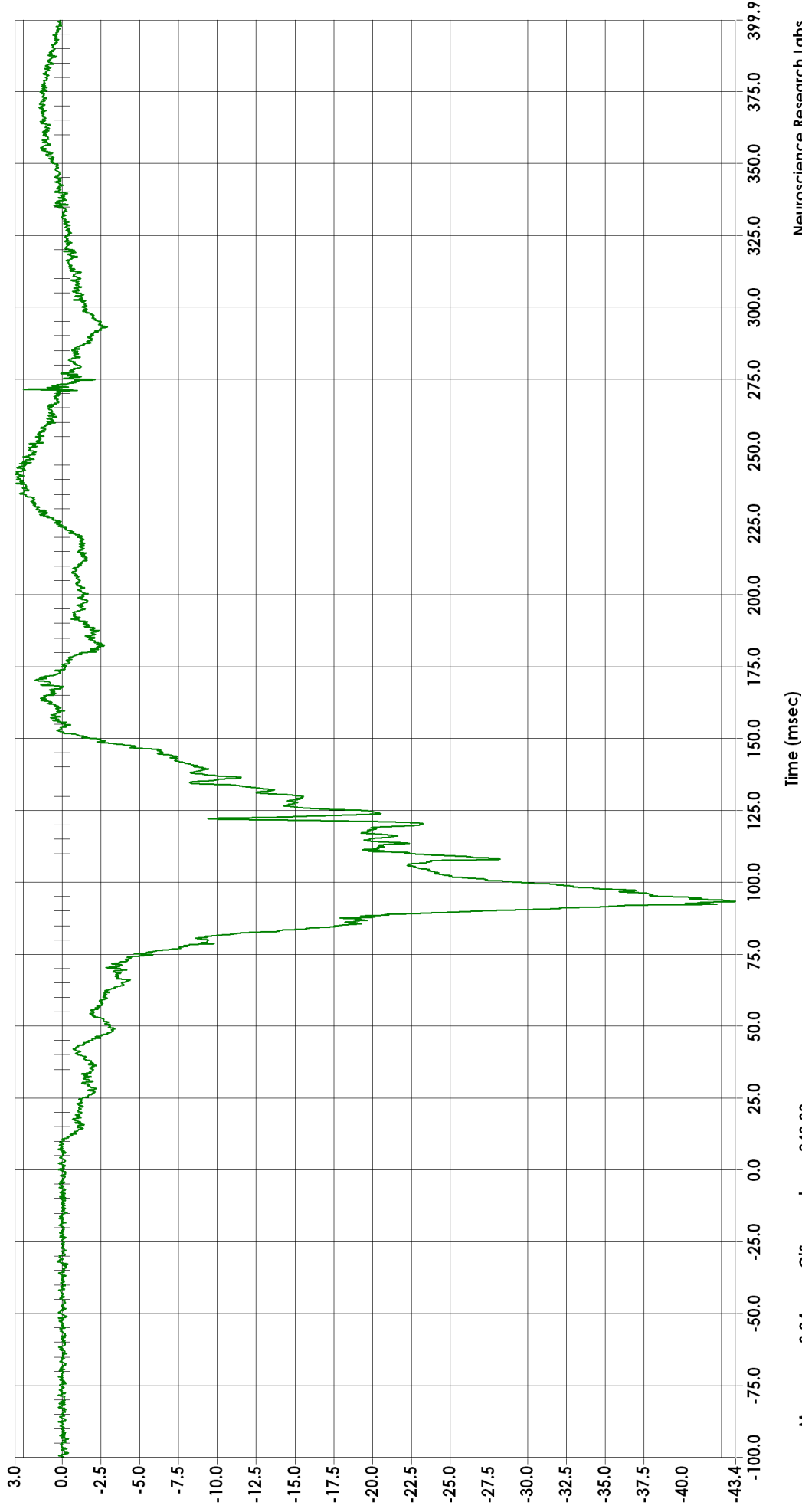
**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**Sensor Location** PVCN  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P63981



### G's Driver pelvis (x) acceleration XL



Neuroscience Research Labs  
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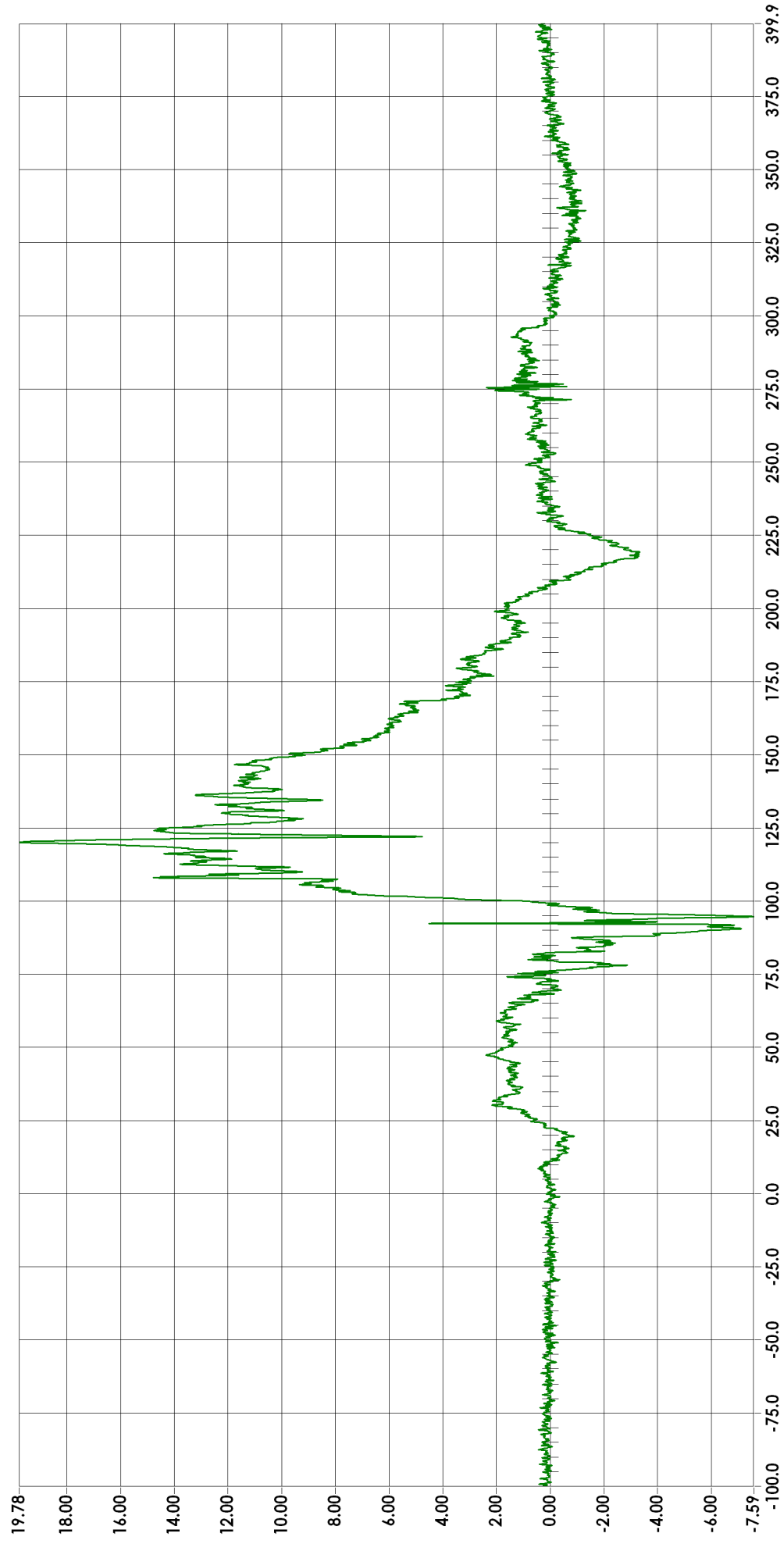


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** PVCN  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P64007

### Driver pelvis (y) acceleration YL



**Max** 19.78 G's at 120.08 msec  
**Min** -7.59 G's at 94.72 msec

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SOI003 Plot 023

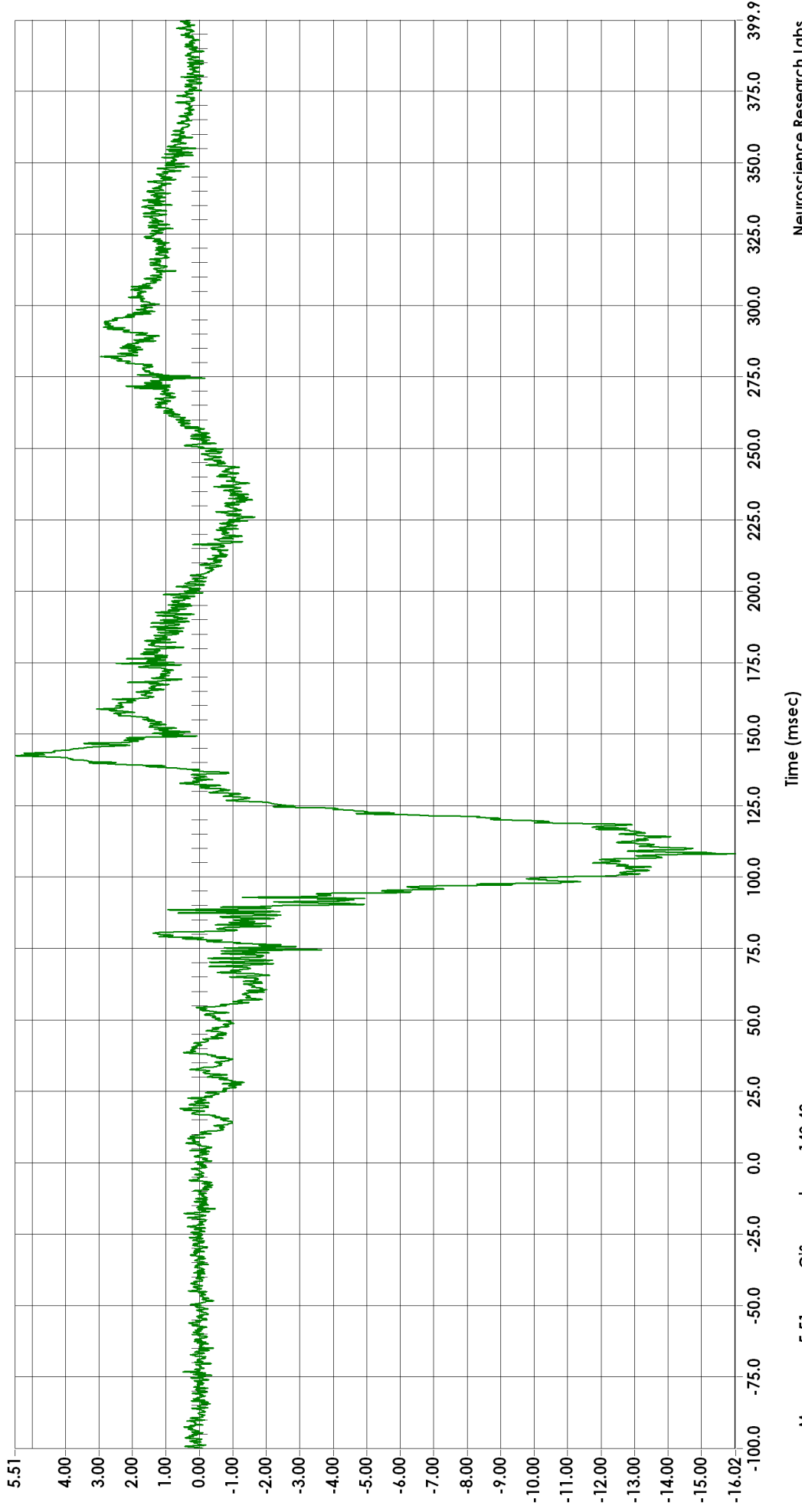


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** PVCN  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P63995

### G's Driver pelvis (z) acceleration ZL



**Max** 5.51 G's at 142.48 msec  
**Min** -16.02 G's at 108.08 msec

SOI003 Plot 024

Time (msec)

Neuroscience Research Labs  
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 Research 151  
 Milwaukee, WI 53295

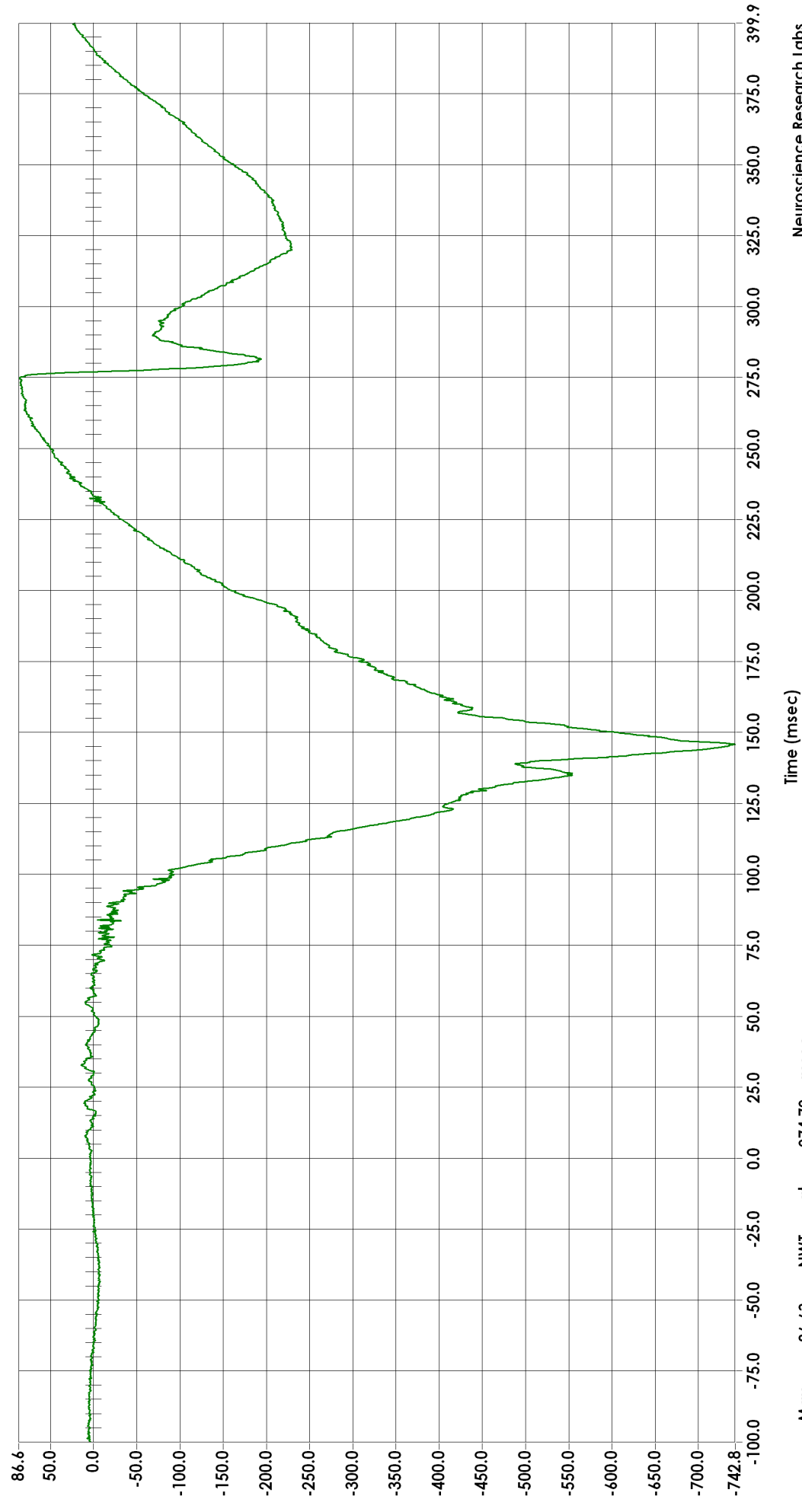


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKU  
**Sensor Info** Denton 3454J  
**Serial Number** 3454J\_76\_FX

### Driver upper neck load cell (x) force XL



**Max** 86.63 NWT at 274.72 msec  
**Min** -742.77 NWT at 145.76 msec

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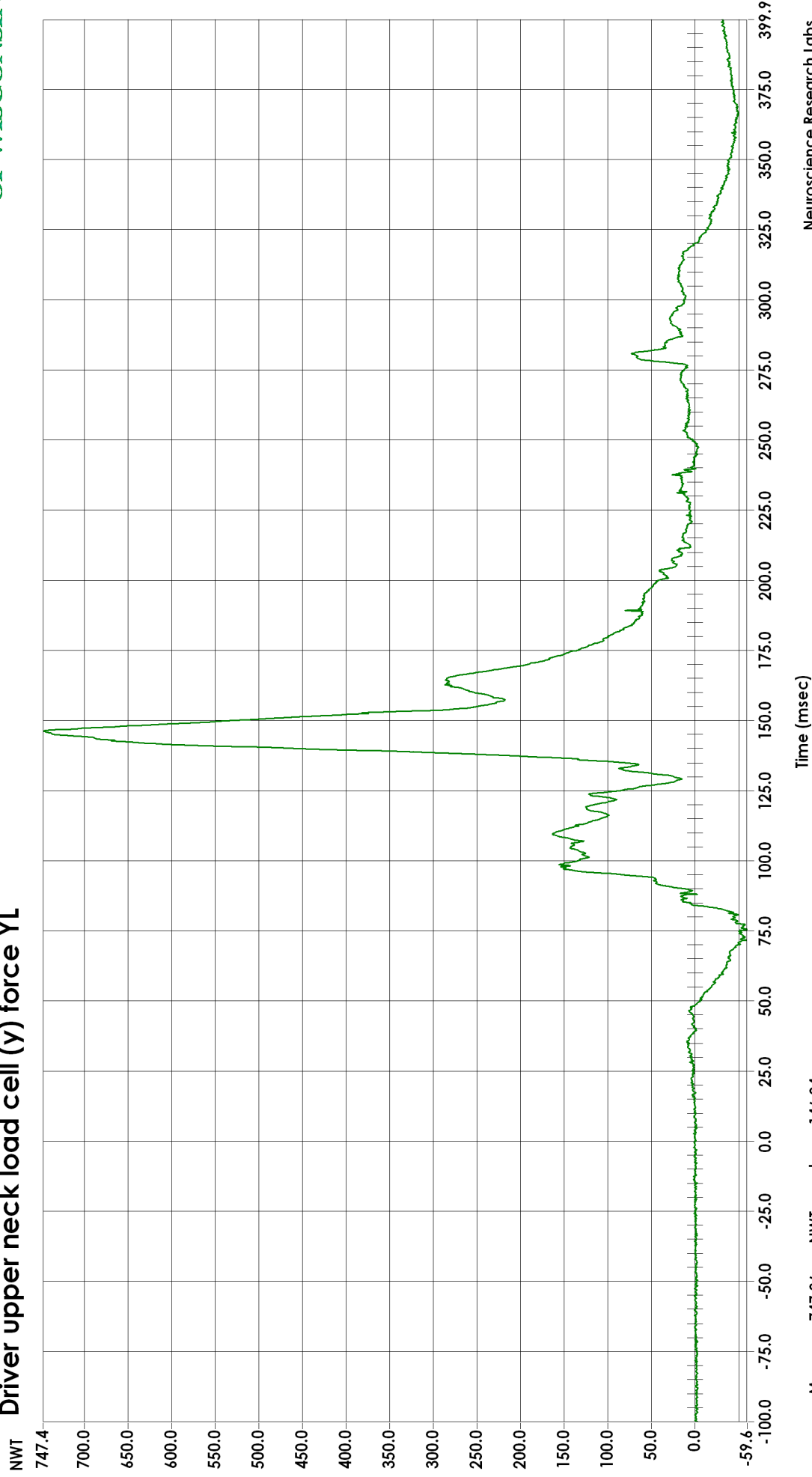


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKU  
**Sensor Info** Denton 3454J  
**Serial Number** 3454J\_76\_FY

### Driver upper neck load cell (y) force YL



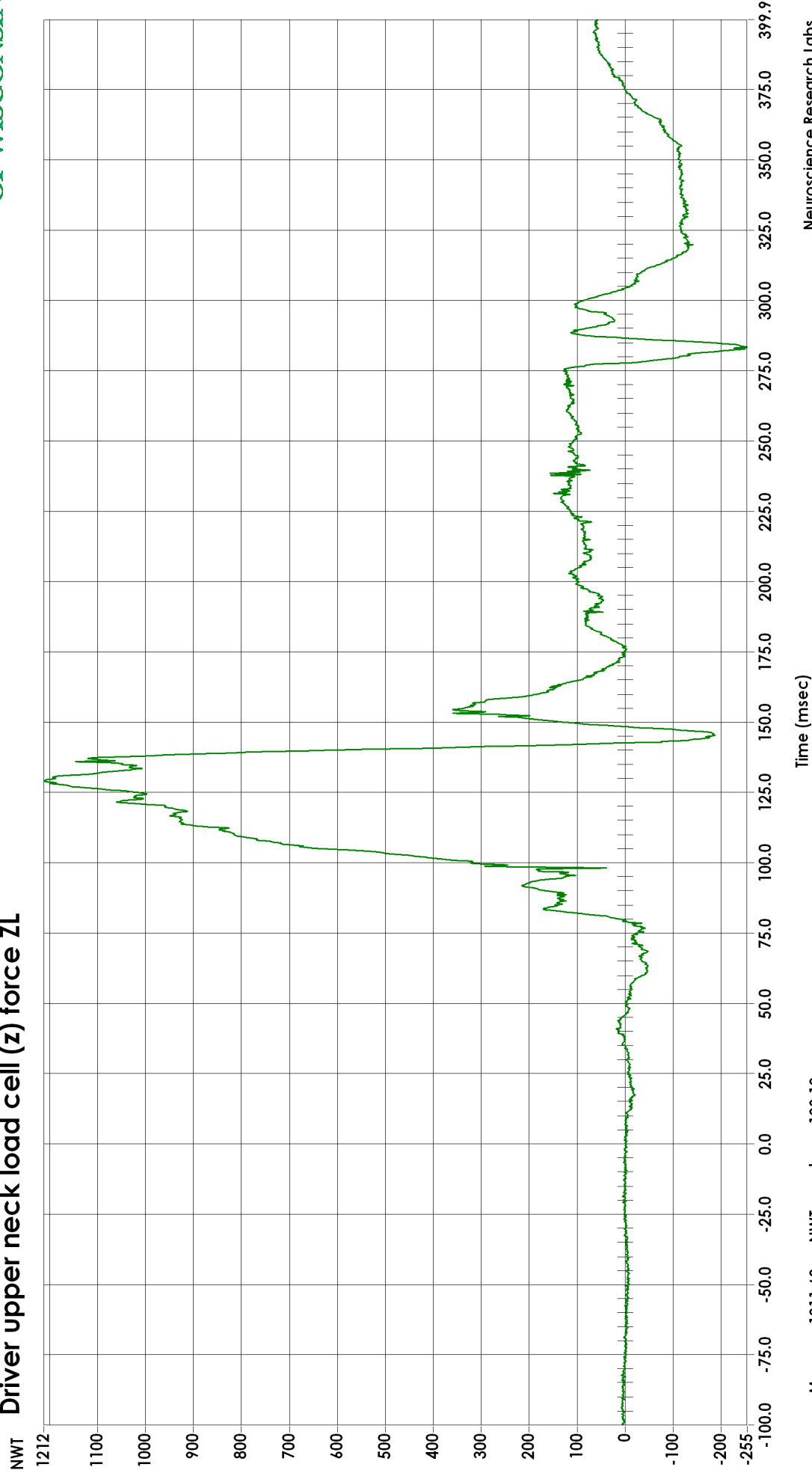
**Max** 747.36 NWT at 146.24 msec  
**Min** -59.61 NWT at 75.52 msec

SOI003 Plot 026

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 5000 West National Ave  
 Research 151  
 Milwaukee, WI 53295

<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	NEKU
		<b>Sensor Info</b>	Denton 3454J
		<b>Serial Number</b>	3454J_76_FZ

### Driver upper neck load cell (z) force ZL



<b>Max</b>	1211.63	<b>NWT</b>	at	129.12	<b>msec</b>
<b>Min</b>	-254.84	<b>NWT</b>	at	283.36	<b>msec</b>

SOI003 Plot 027

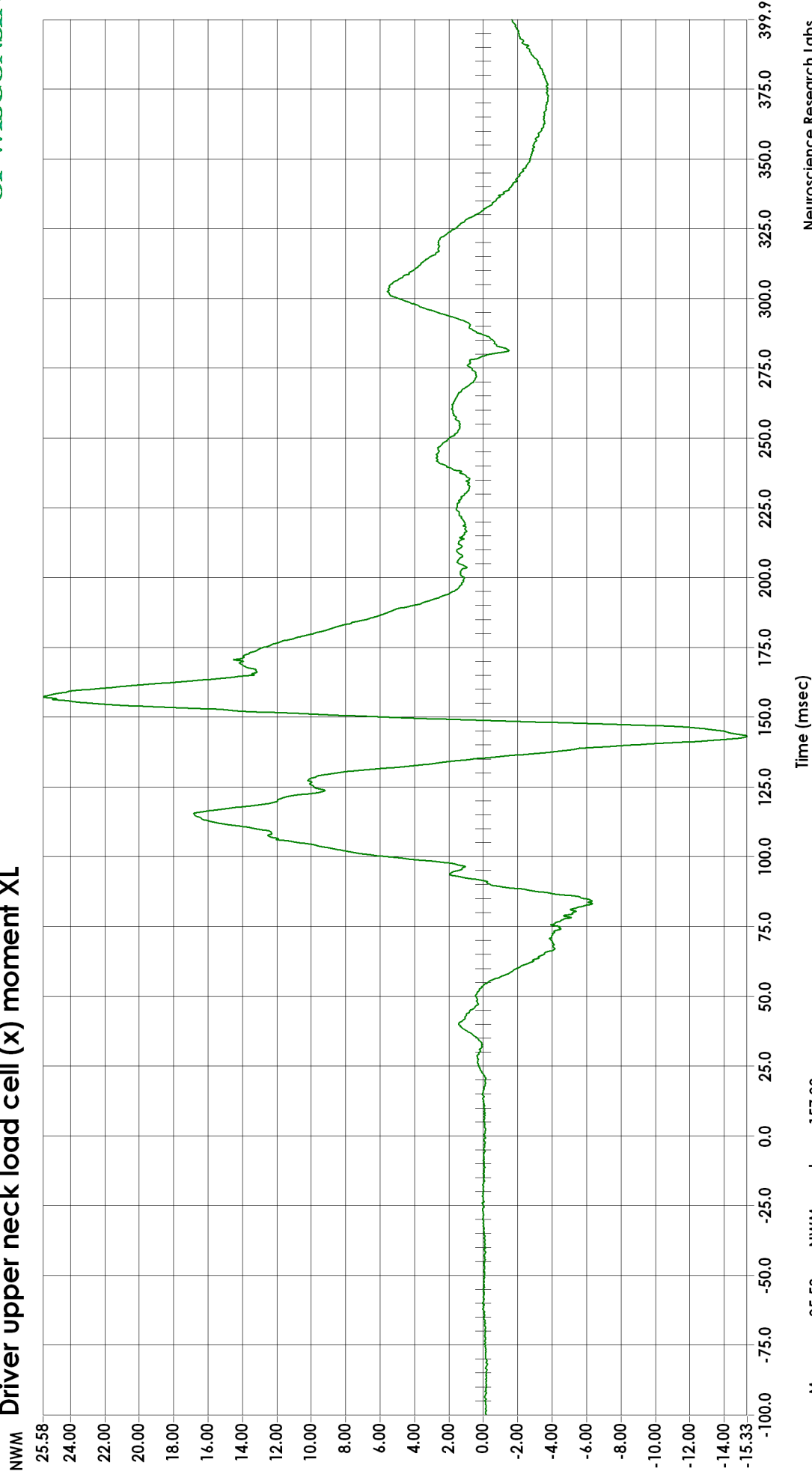


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKU  
**Sensor Info** Denton 3454J  
**Serial Number** 3454J\_76\_MX

### Driver upper neck load cell (x) moment XL



**Max** 25.58 NWM at 157.20 msec  
**Min** -15.33 NWM at 143.20 msec

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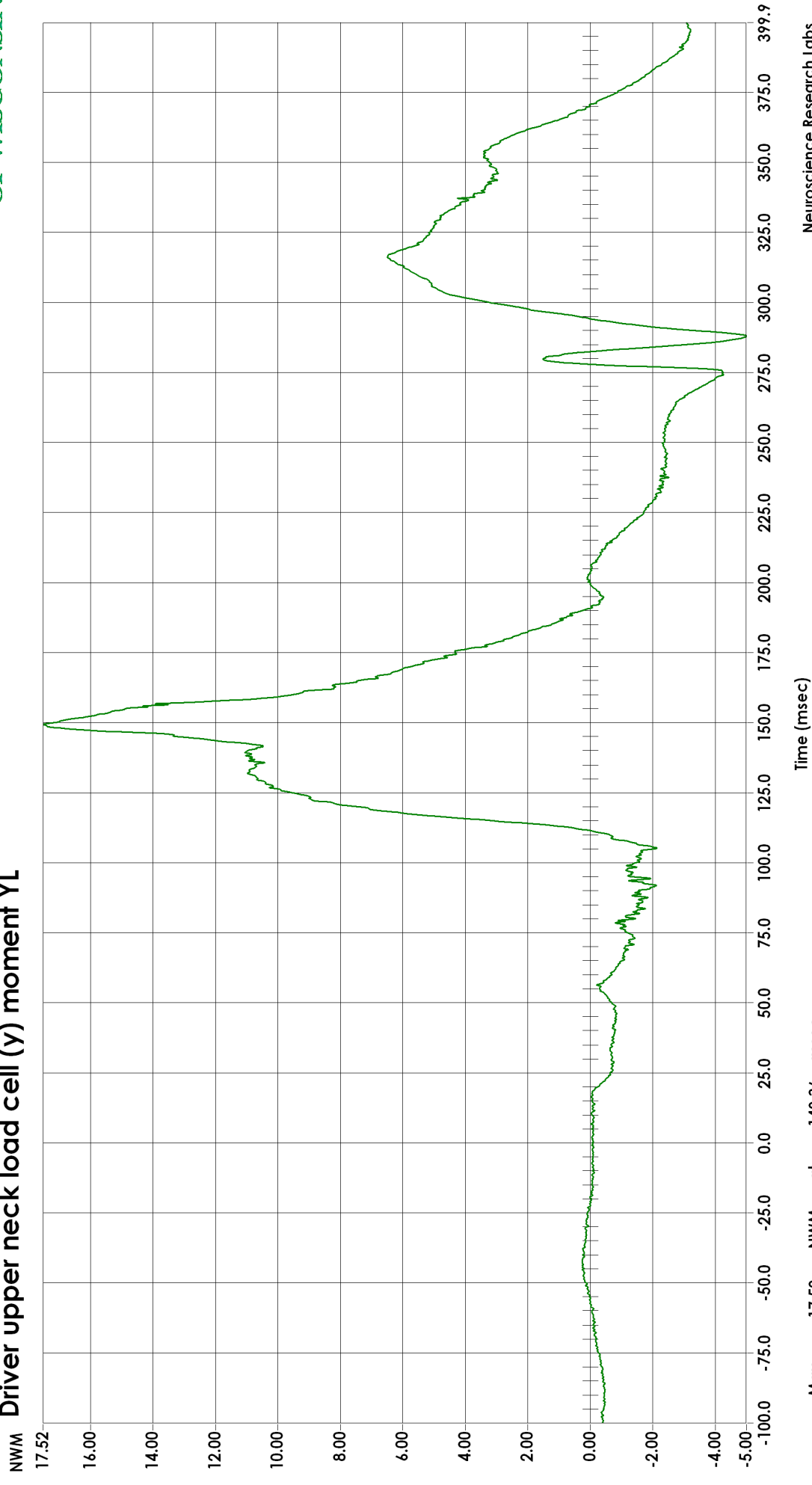


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**Sensor Location** NEKU  
**Sensor Info** Denton 3454J  
**Serial Number** 3454J\_76\_MY

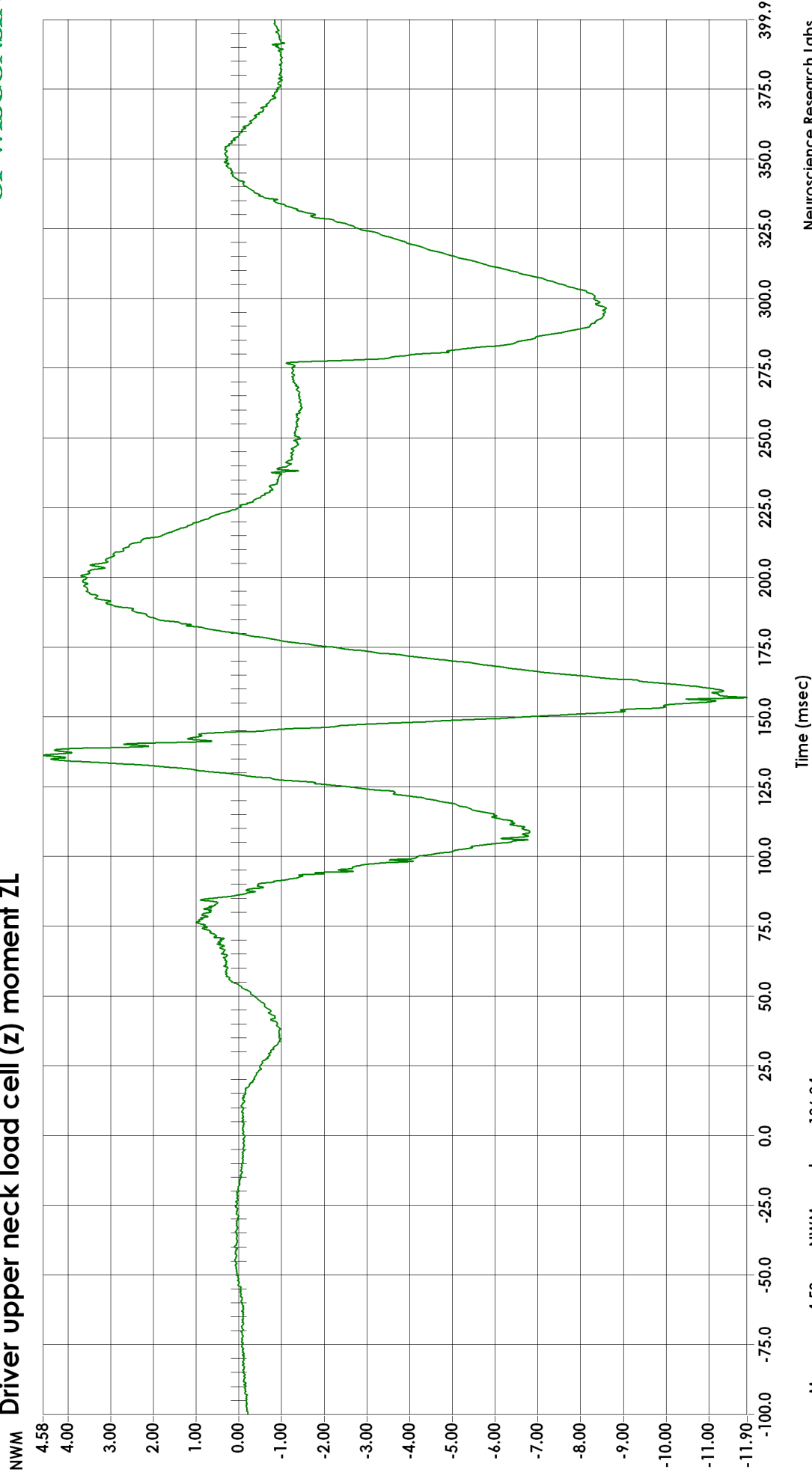
### Driver upper neck load cell (y) moment YL



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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC600
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	NEKU
		<b>Sensor Info</b>	Denton 3454J
		<b>Serial Number</b>	3454J_76_MZ

### Driver upper neck load cell (z) moment ZL



<b>Max</b>	4.58	<b>NWM</b>	at	136.24	<b>msec</b>
<b>Min</b>	-11.90	<b>NWM</b>	at	156.96	<b>msec</b>

SOI003 Plot 030

Time (msec)

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Milwaukee, WI 53295

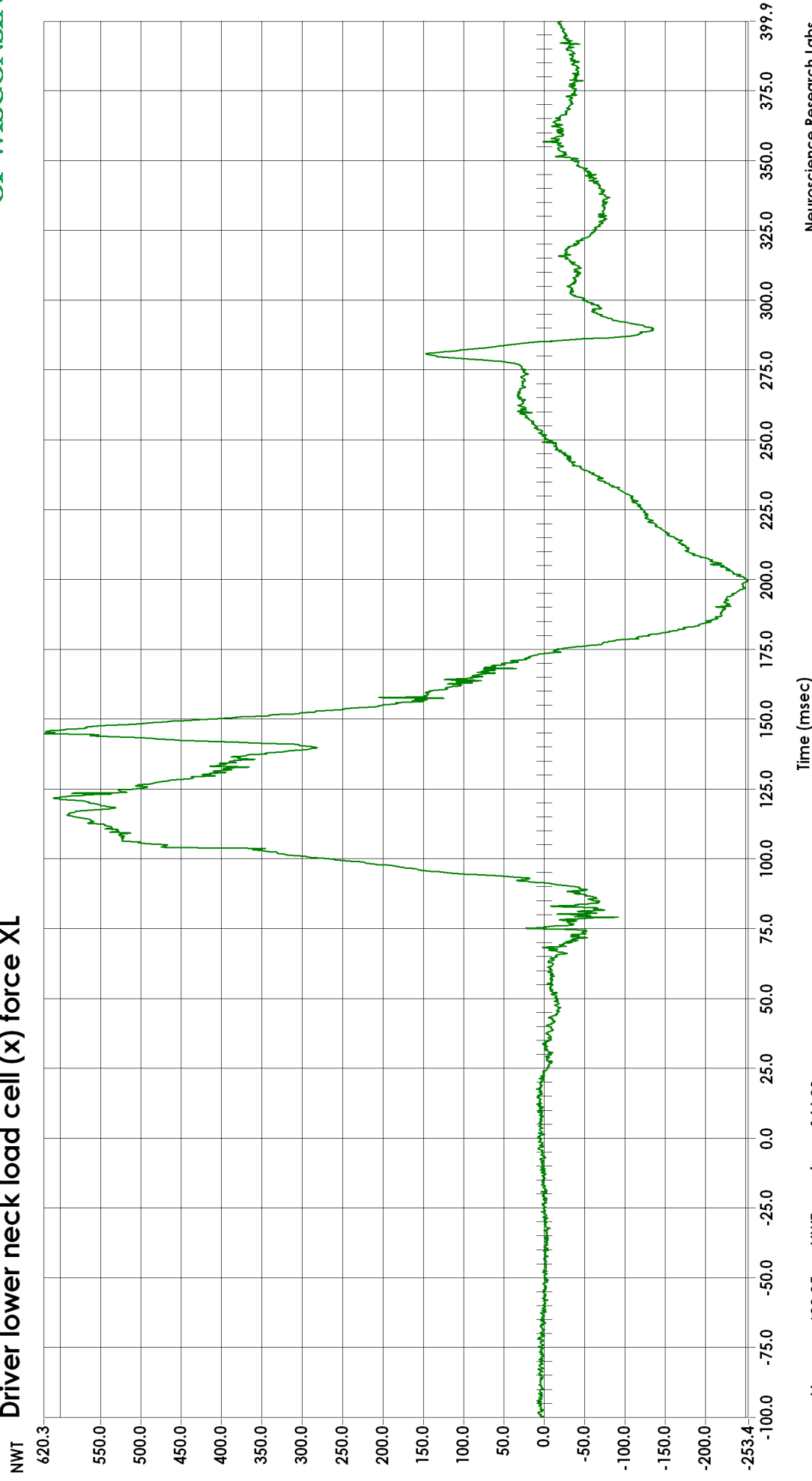


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 4366J  
**Serial Number** 4366J\_85\_FX

### Driver lower neck load cell (x) force XL



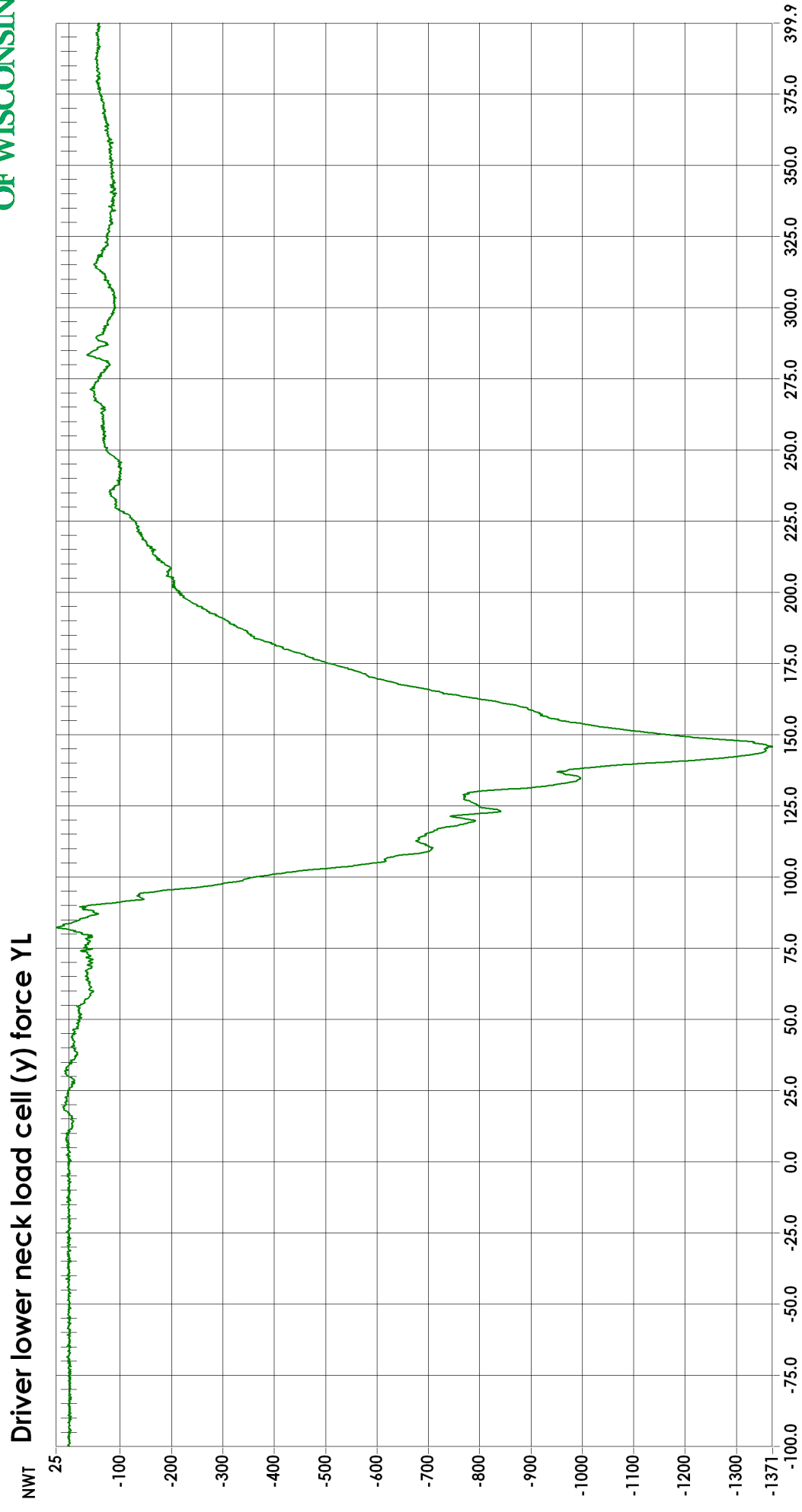
Neuroscience Research Labs  
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**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 4366J  
**Serial Number** 4366J\_85\_FY



**Max** 24.90 **NWT** at 82.24 msec  
**Min** -1370.59 **NWT** at 145.76 msec

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SOI003 Plot 032

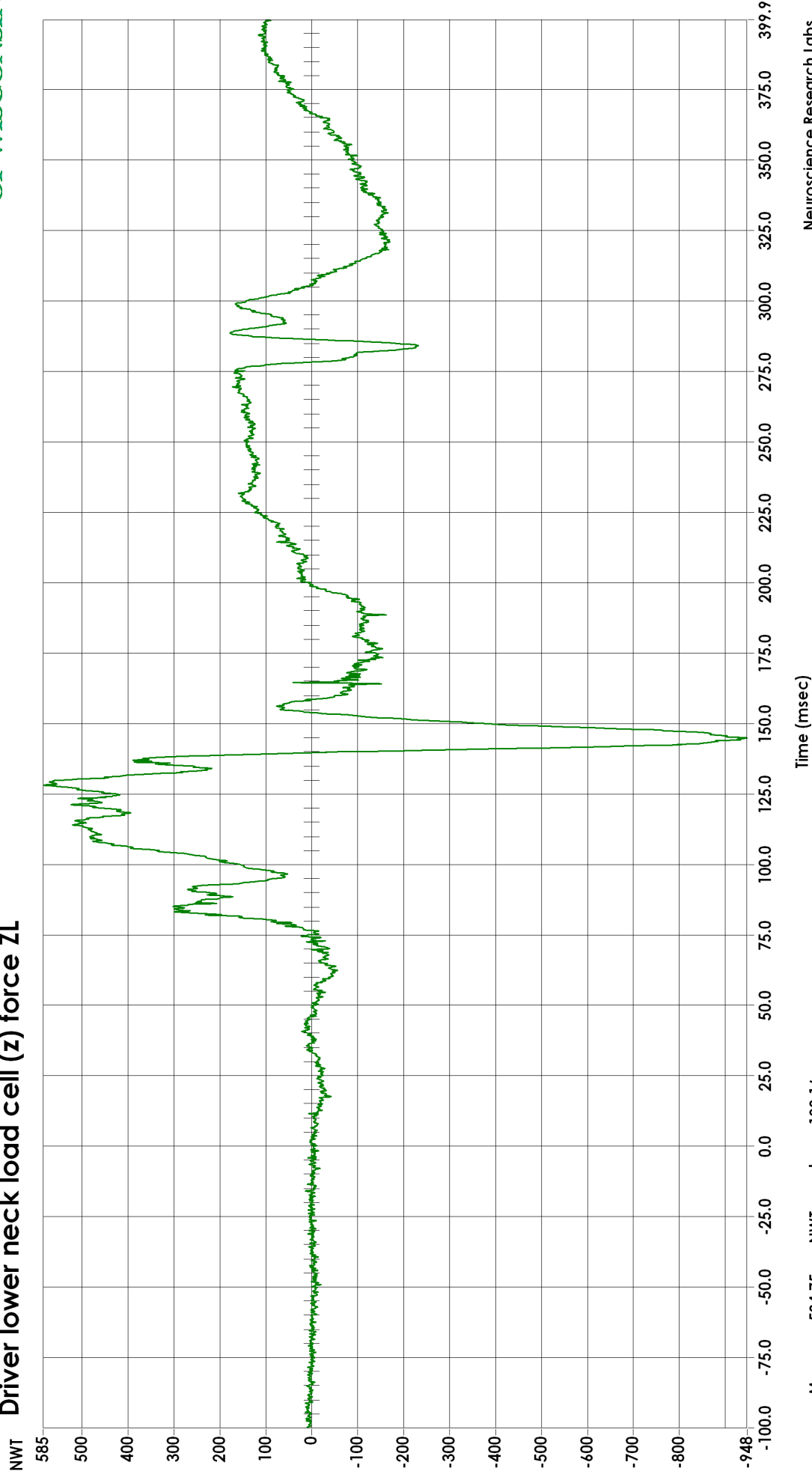


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 4366J  
**Serial Number** 4366J\_85\_FZ

### Driver lower neck load cell (z) force ZL



**Max** 584.75 NWT at 128.16 msec  
**Min** -947.86 NWT at 144.88 msec

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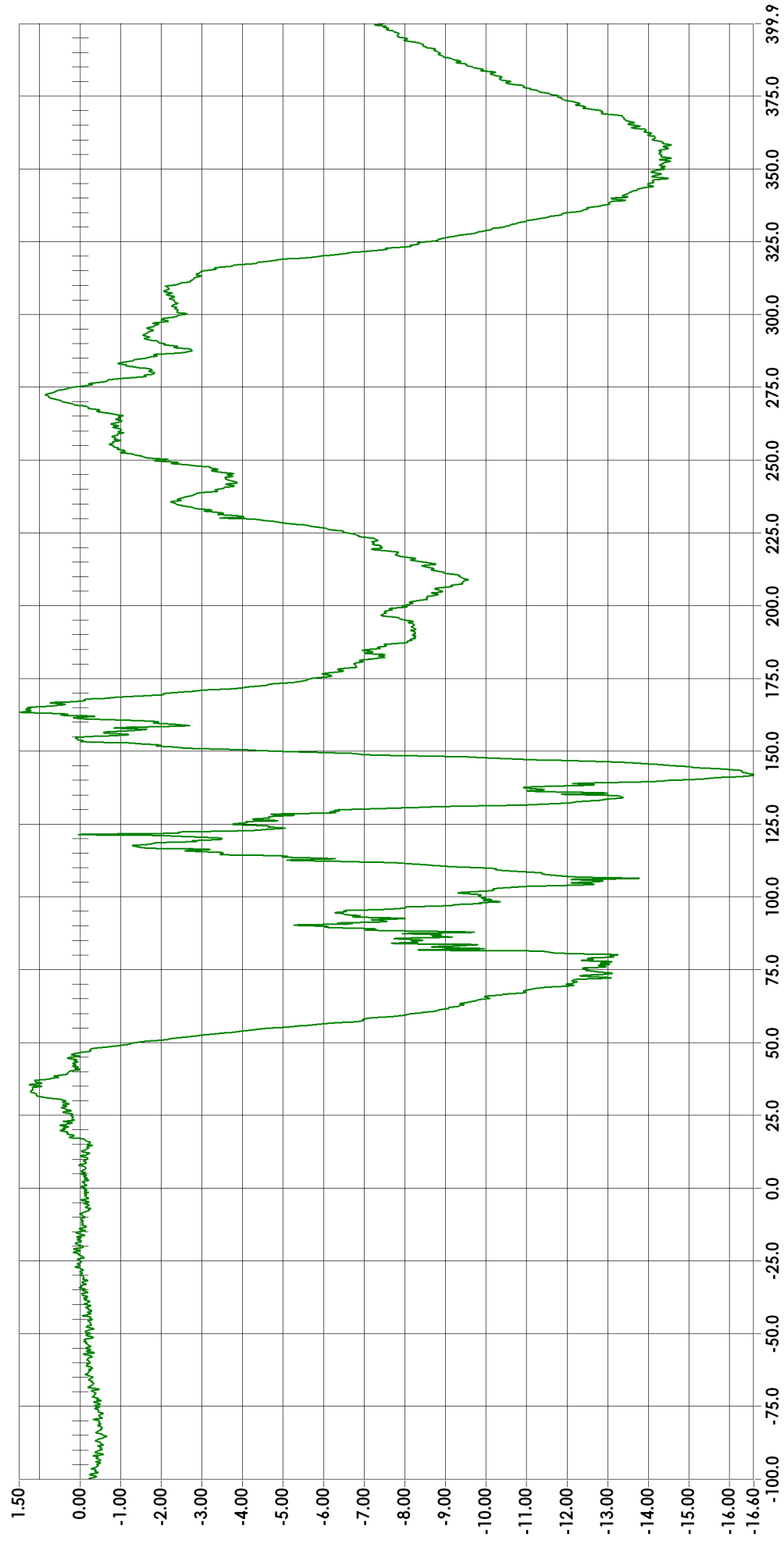


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 4366J  
**Serial Number** 4366J\_85\_MX

### Driver lower neck load cell (x) moment XL



**Max** 1.50 NWM at 163.44 msec  
**Min** -16.60 NWM at 141.92 msec

SOI003 Plot 034

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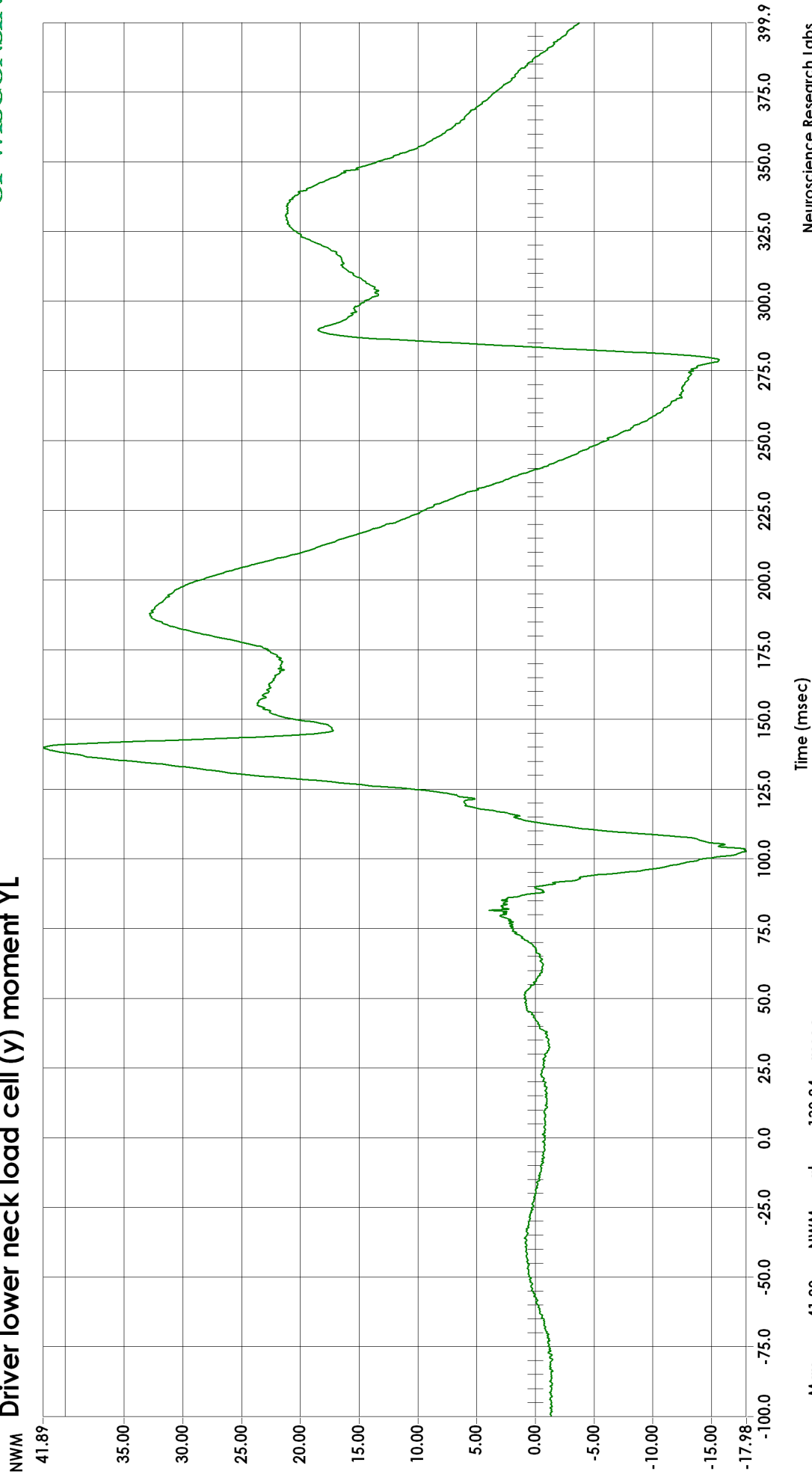


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 4366J  
**Serial Number** 4366J\_85\_MY

### Driver lower neck load cell (y) moment YL



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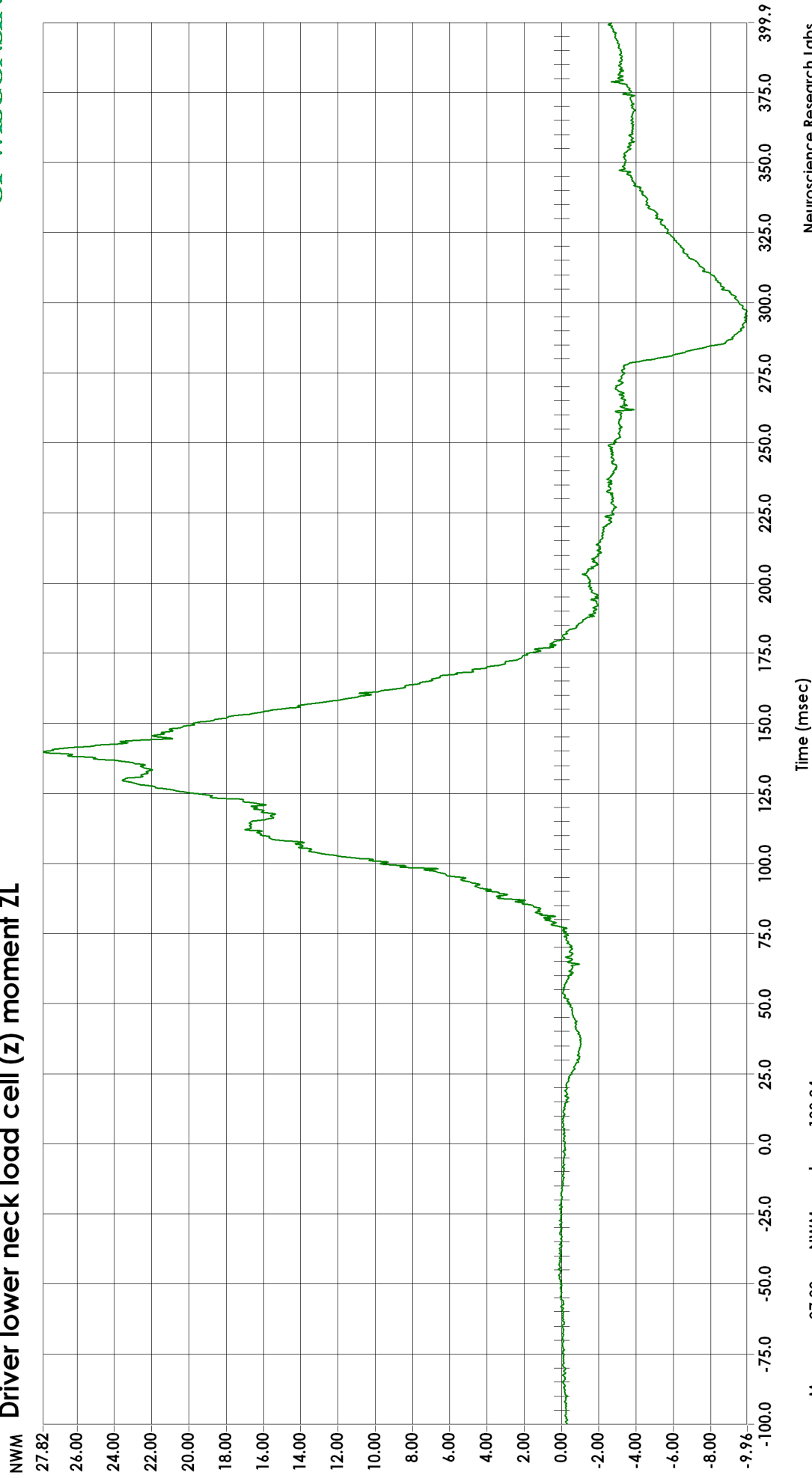


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 4366J  
**Serial Number** 4366J\_85\_MZ

### Driver lower neck load cell (z) moment ZL



**Max** 27.82 NWM at 139.84 msec  
**Min** -9.96 NWM at 295.28 msec

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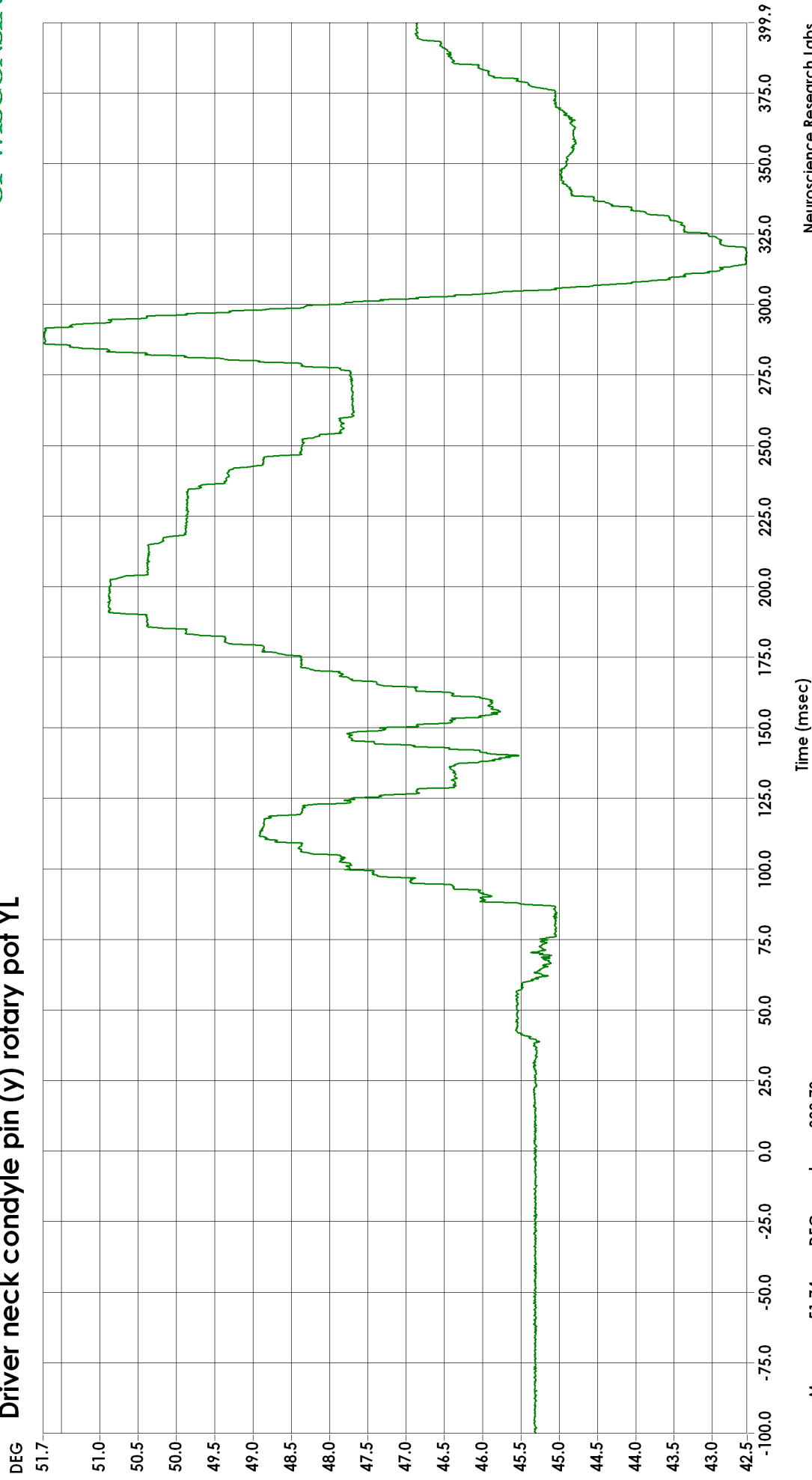


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKU  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** PD210-4B\_0441

### Driver neck condyle pin (y) rotary pot YL



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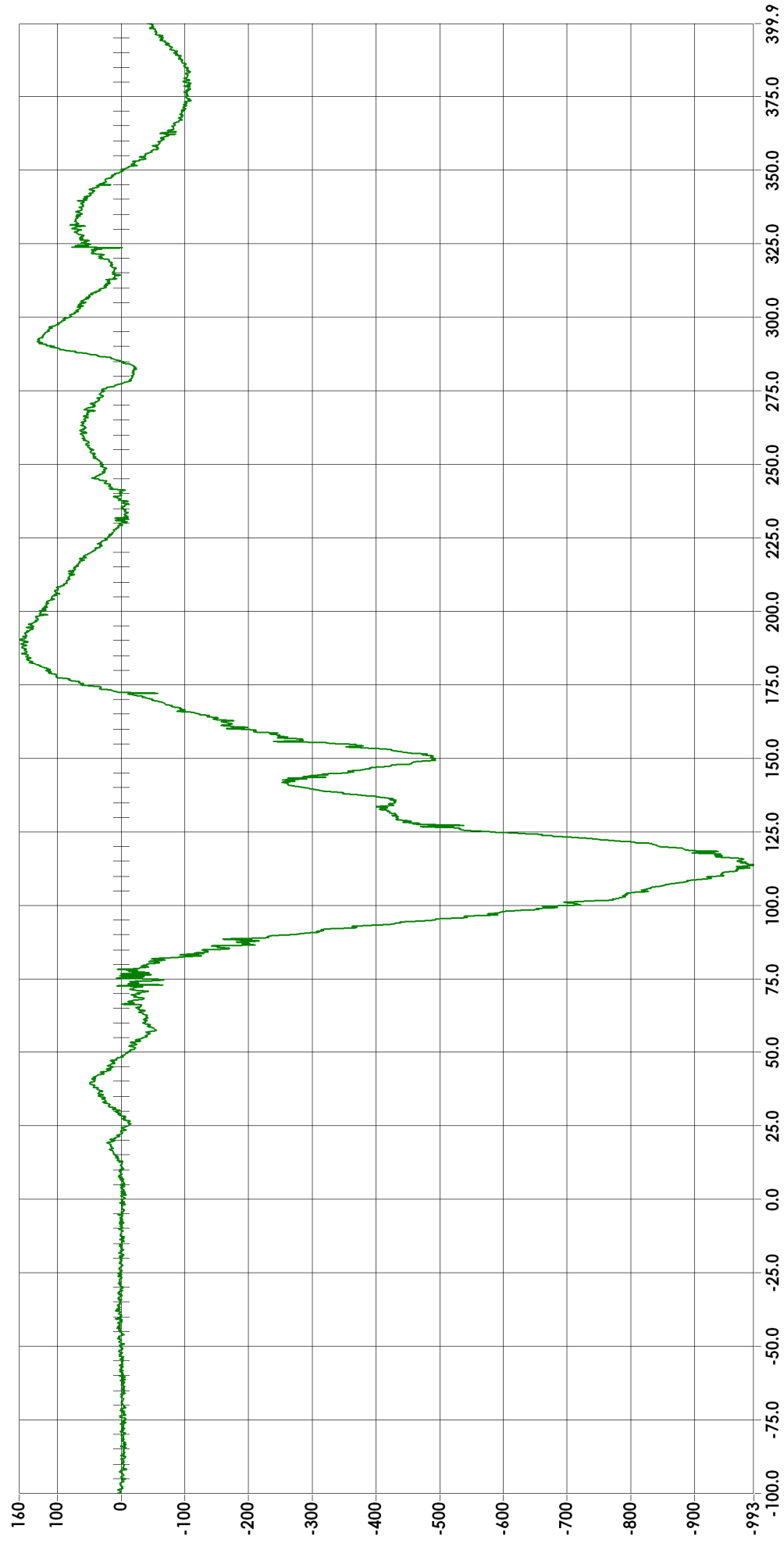


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SPNL  
**Sensor Info** Denton 1911A  
**Serial Number** 1911A\_125\_FX

### Driver thoracic t12 (x) force XL



**Max** 159.97 NWT at 190.40 msec  
**Min** -993.35 NWT at 113.76 msec

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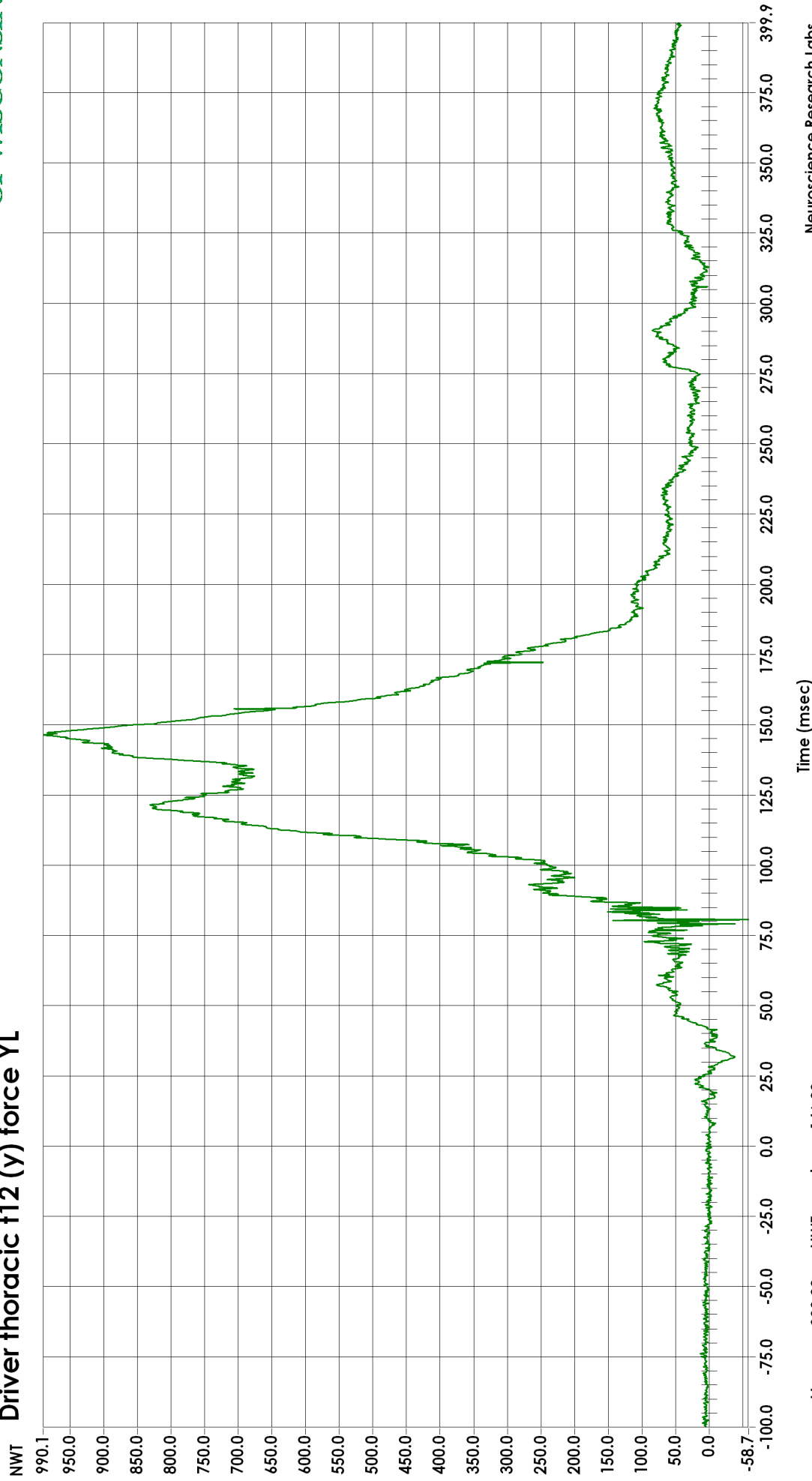


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SPNL  
**Sensor Info** Denton 1911A  
**Serial Number** 1911A\_125\_FY

### Driver thoracic t12 (y) force YL



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 Milwaukee, WI 53295

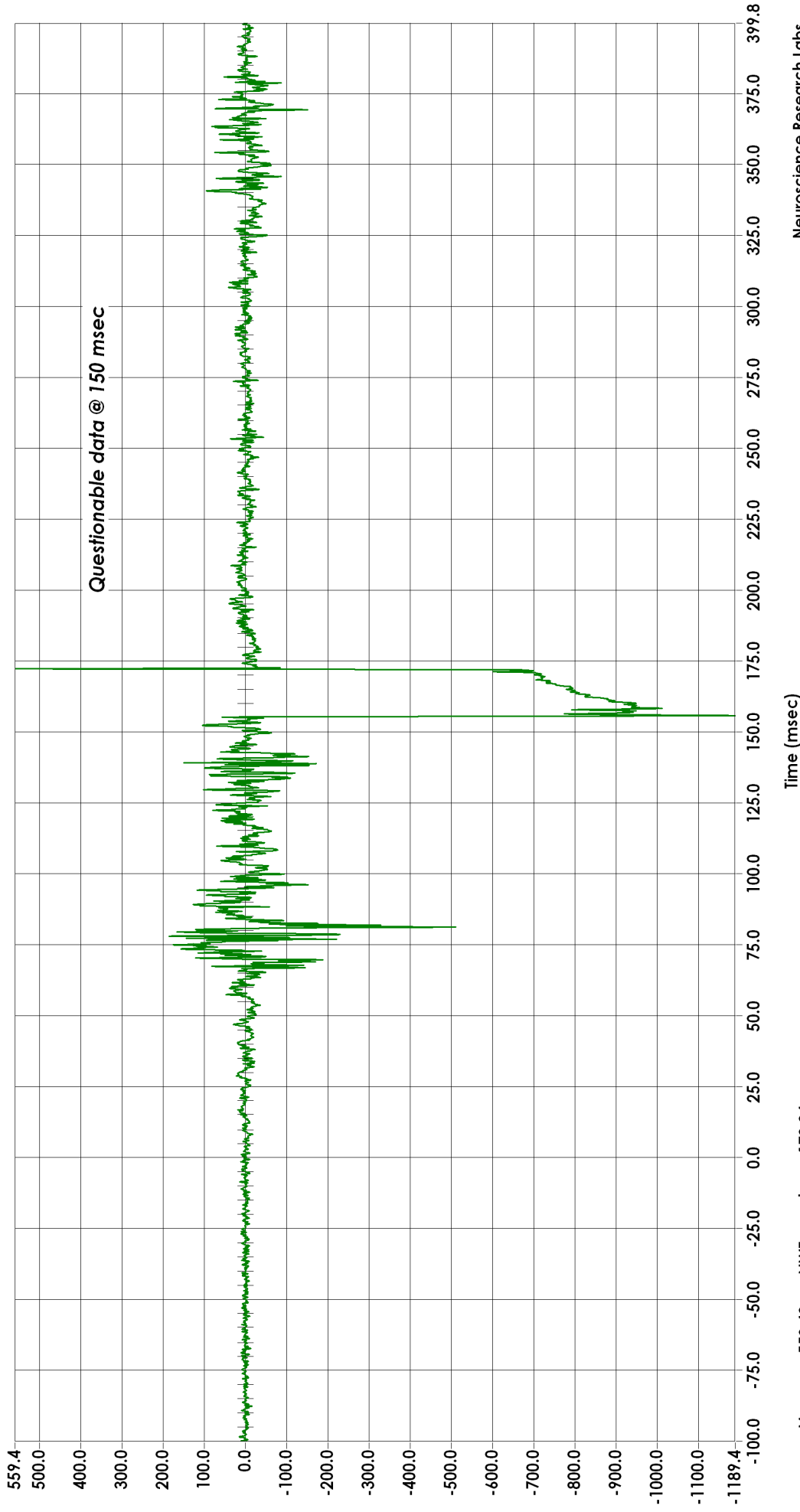


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SPNL  
**Sensor Info** Denton 1911A  
**Serial Number** 1911A\_125\_FZ

### NWT Driver thoracic t12 (z) force ZL



**Max** 559.42 NWT at 172.24 msec  
**Min** -1189.42 NWT at 155.76 msec

SOI003 Plot 040

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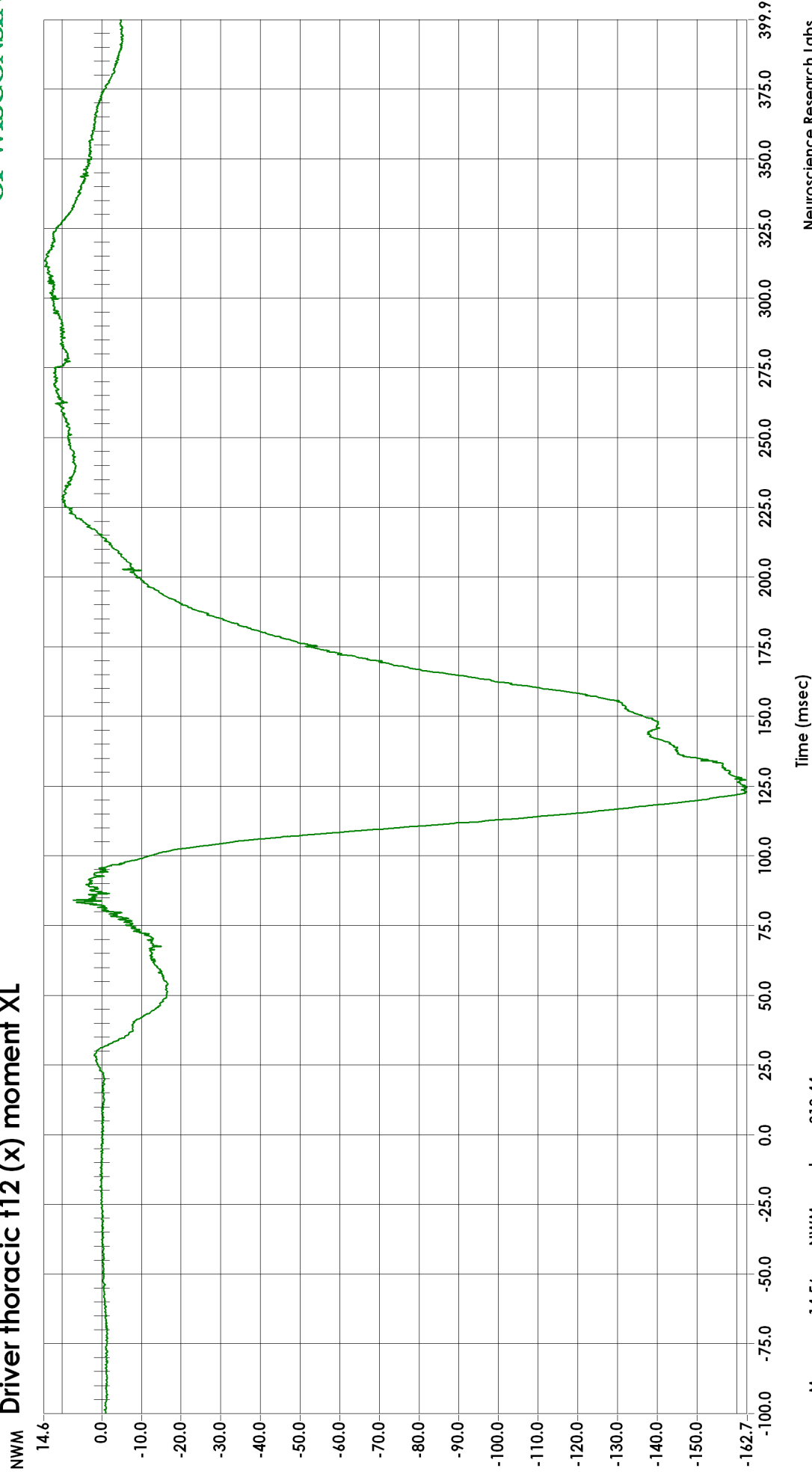
**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SPNL  
**Sensor Info** Denton 1911A  
**Serial Number** 1911A\_125\_MX



### Driver thoracic t12 (x) moment XL



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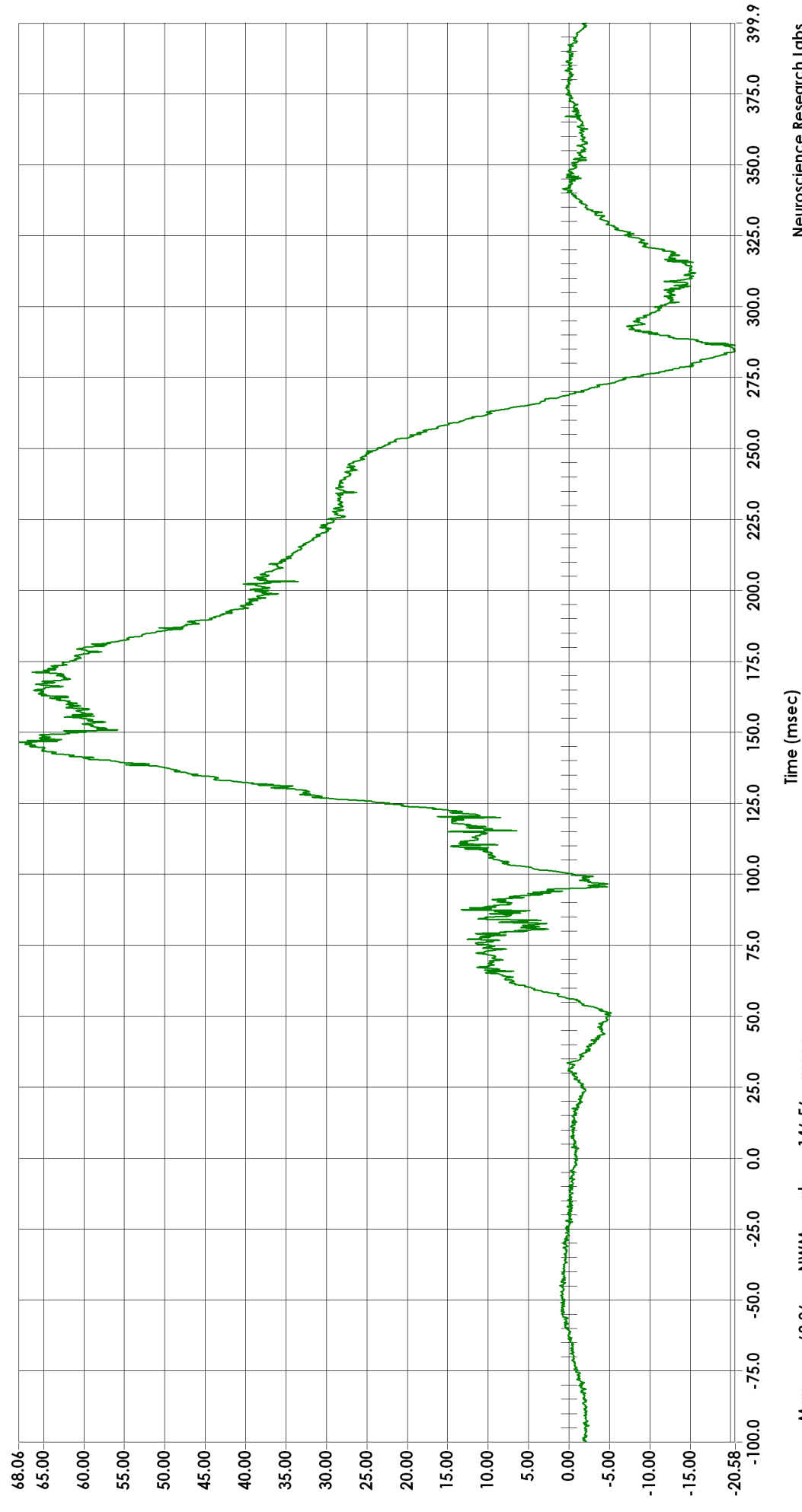


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SPNL  
**Sensor Info** Denton 1911A  
**Serial Number** 1911A\_125\_MY

### Driver thoracic t12 (y) moment YL

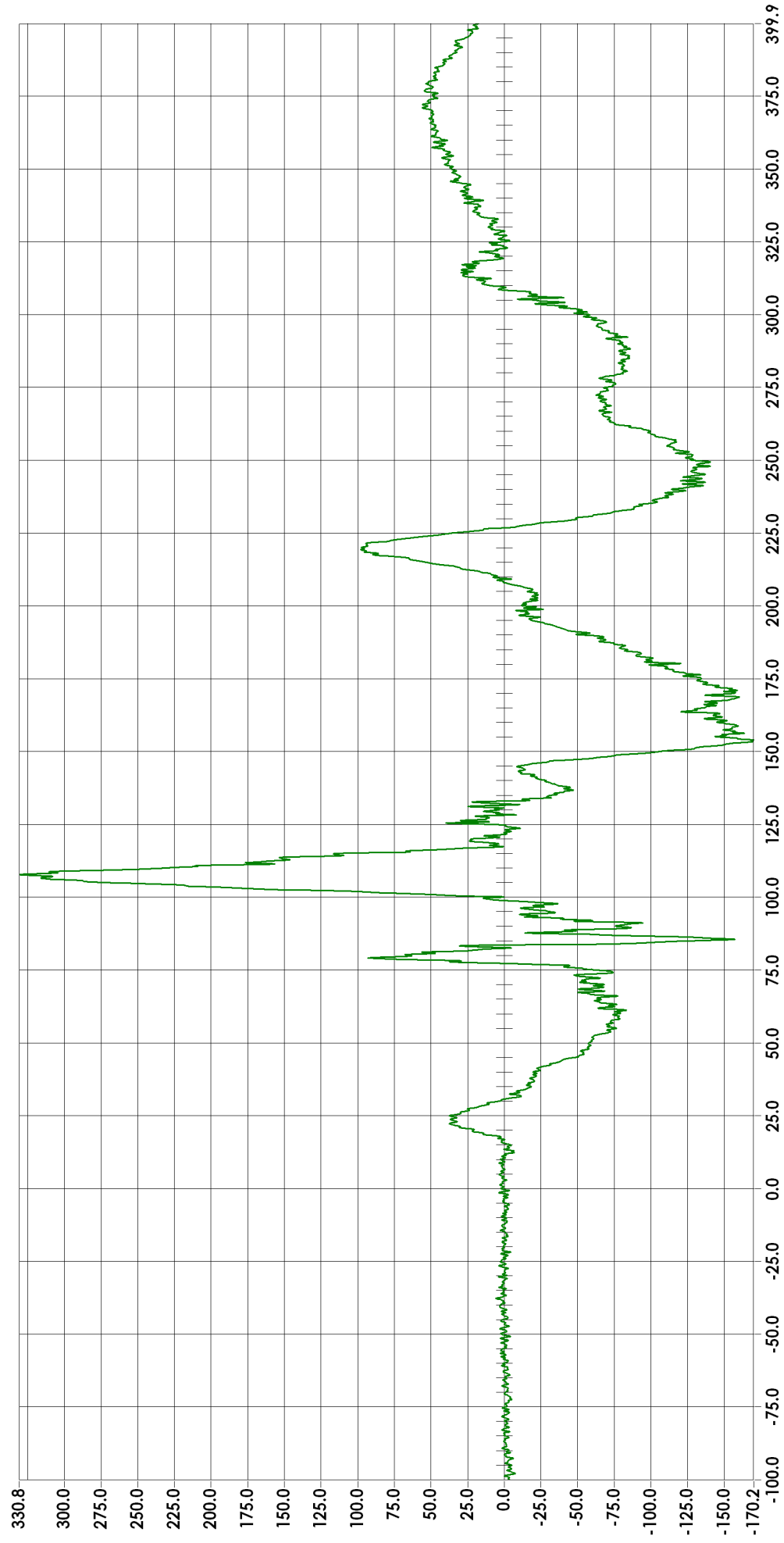


**Max** 68.06 NWM at 146.56 msec  
**Min** -20.58 NWM at 284.40 msec

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC600
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	FMRR
		<b>Sensor Info</b>	Denton 1914A
		<b>Serial Number</b>	1914A_261_FX

### Driver right femur (x) force XL



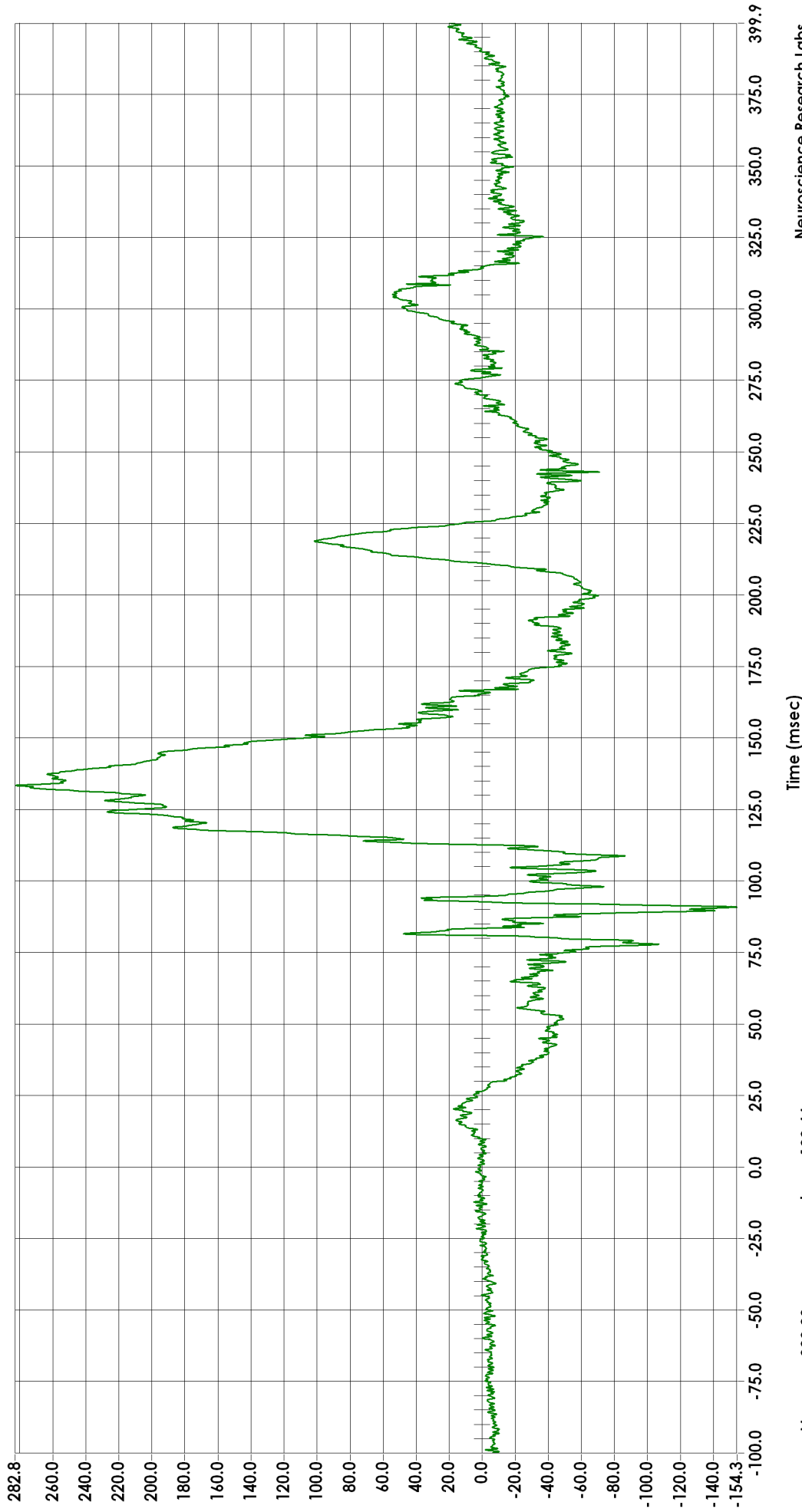
Time (msec)

<b>Max</b>	330.78	<b>at</b>	107.76 msec
<b>Min</b>	-170.23	<b>at</b>	154.00 msec

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC600
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	FMRR
		<b>Sensor Info</b>	Denton 1914A
		<b>Serial Number</b>	1914A_261_FY

### Driver right femur (y) force YL



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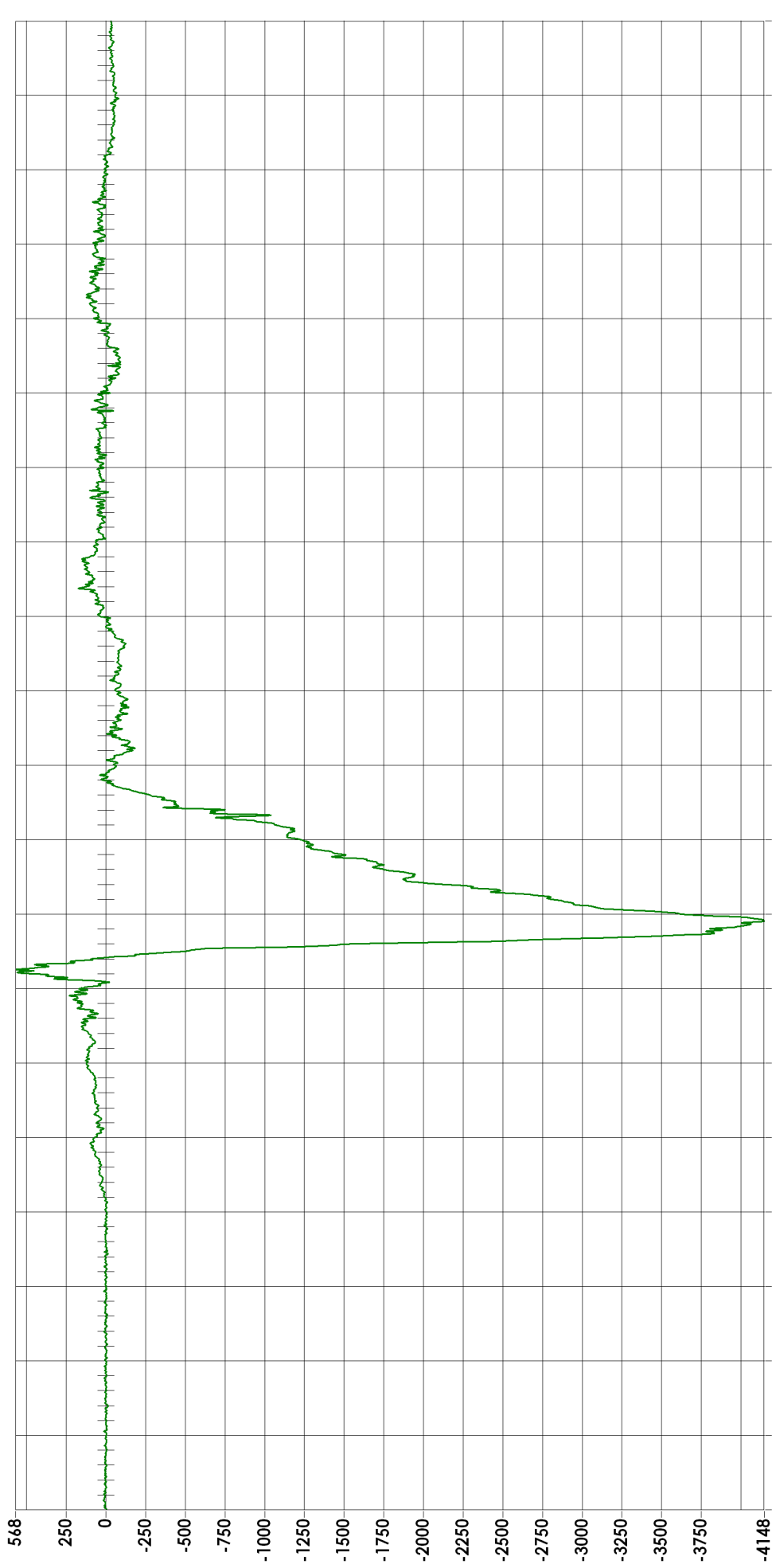
**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FMRR  
**Sensor Info** Denton 1914A  
**Serial Number** 1914A\_261\_FZ



### Driver right femur (z) force ZL



Time (msec)

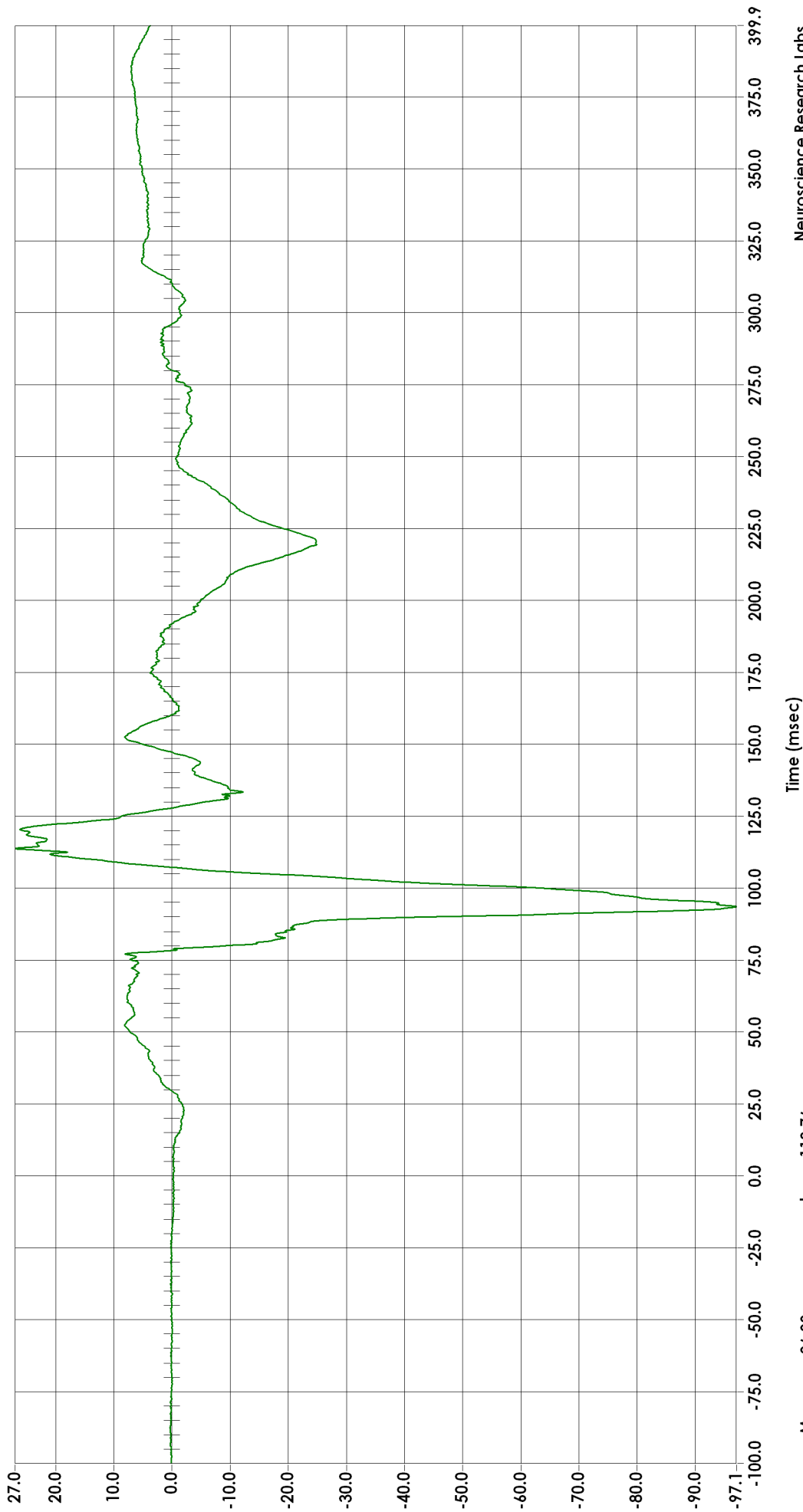
**Max** 568.37 at 81.36 msec  
**Min** -4147.66 at 97.68 msec

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SOI003 Plot 045

<b>Test ID</b>	SOI003	<b>Filter</b>	CFC600
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	FMRR
		<b>Sensor Info</b>	Denton 1914A
		<b>Serial Number</b>	1914A_261_MX

### Driver right femur (x) moment XL



<b>Max</b>	26.99	<b>at</b>	113.76 msec
<b>Min</b>	-97.12	<b>at</b>	93.52 msec

Time (msec)

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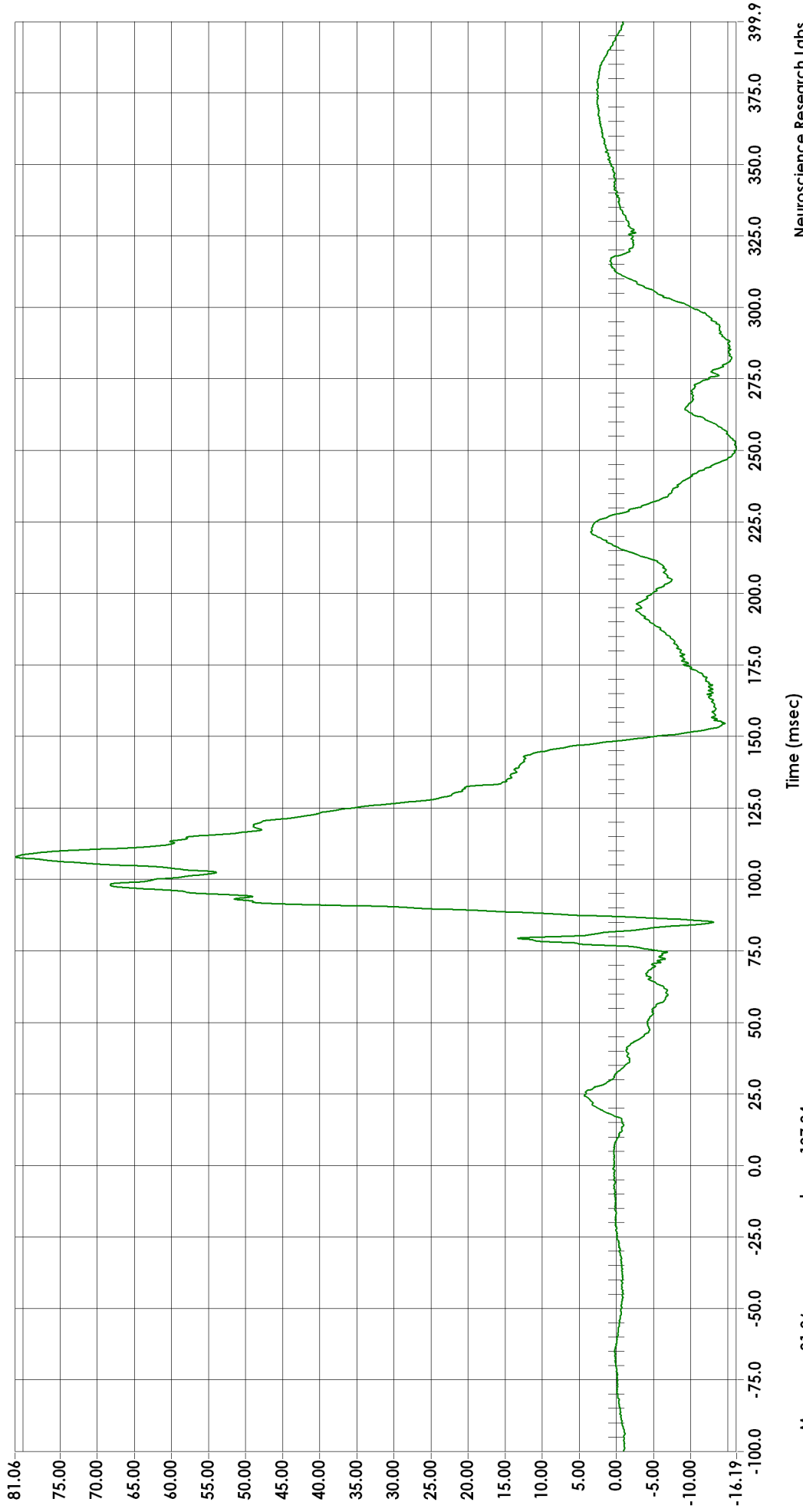


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FMRR  
**Sensor Info** Denton 1914A  
**Serial Number** 1914A\_261\_MY

### Driver right femur (y) moment YL



**Max** 81.06 at 107.84 msec  
**Min** -16.19 at 250.40 msec

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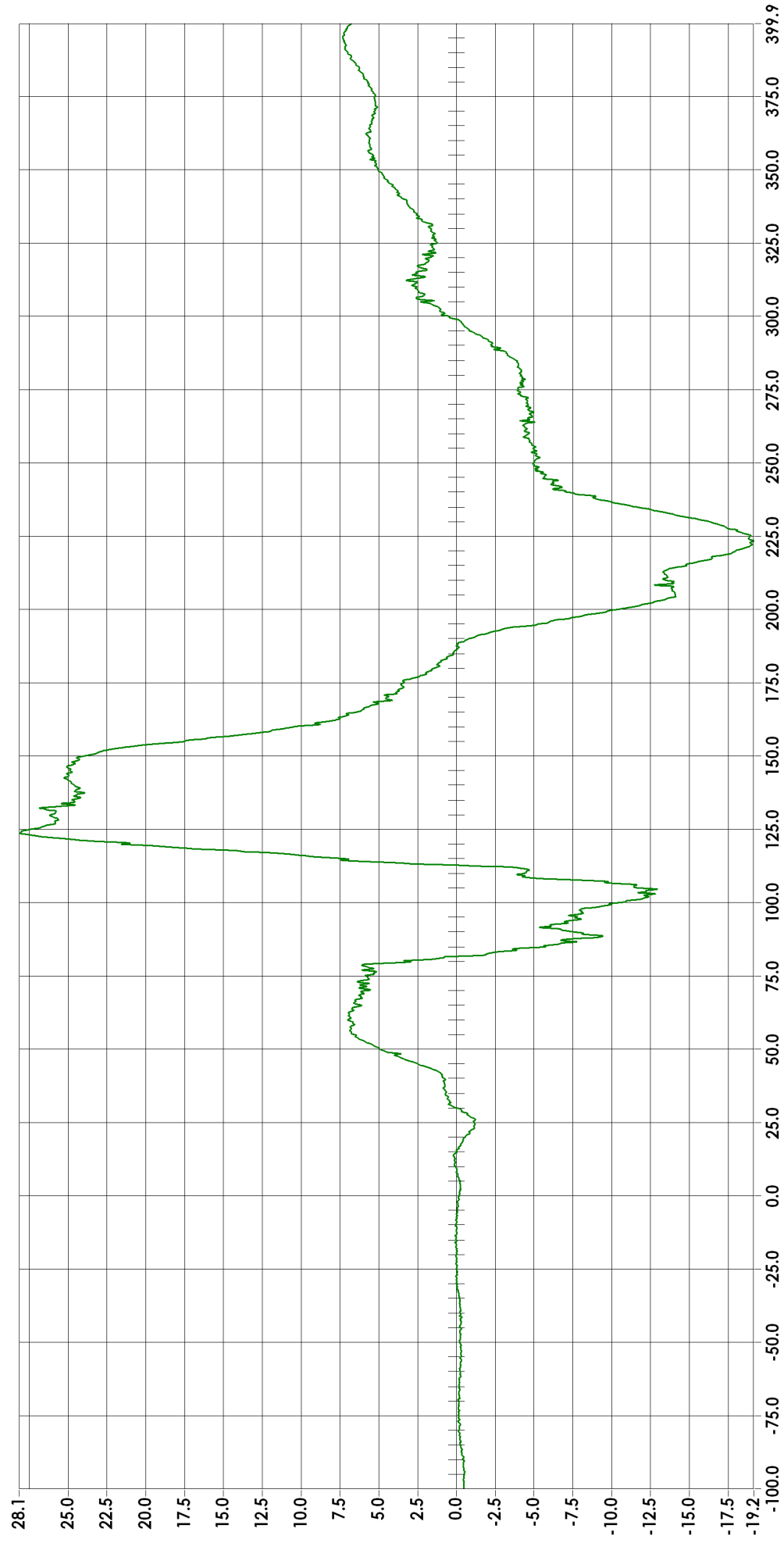


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FMRR  
**Sensor Info** Denton 1914A  
**Serial Number** 1914A\_261\_MZ

### Driver right femur (z) moment ZL



Time (msec)

**Max** 28.15 at 123.68 msec  
**Min** -19.15 at 223.44 msec

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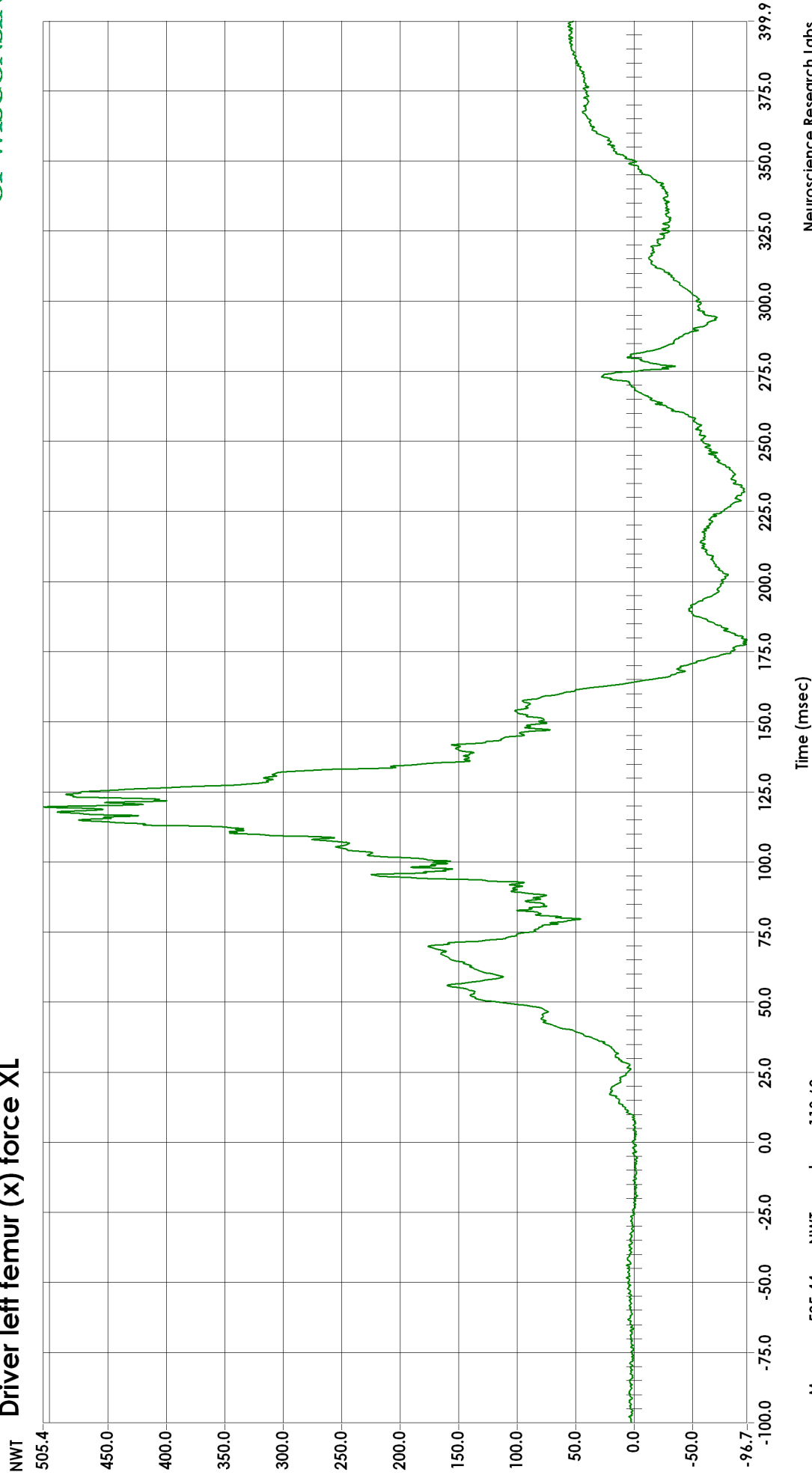


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FMRL  
**Sensor Info** Denton 1914A  
**Serial Number** 1914A\_376\_FX

### Driver left femur (x) force XL



**Max** 505.44 NWT at 119.60 msec  
**Min** -96.75 NWT at 179.20 msec

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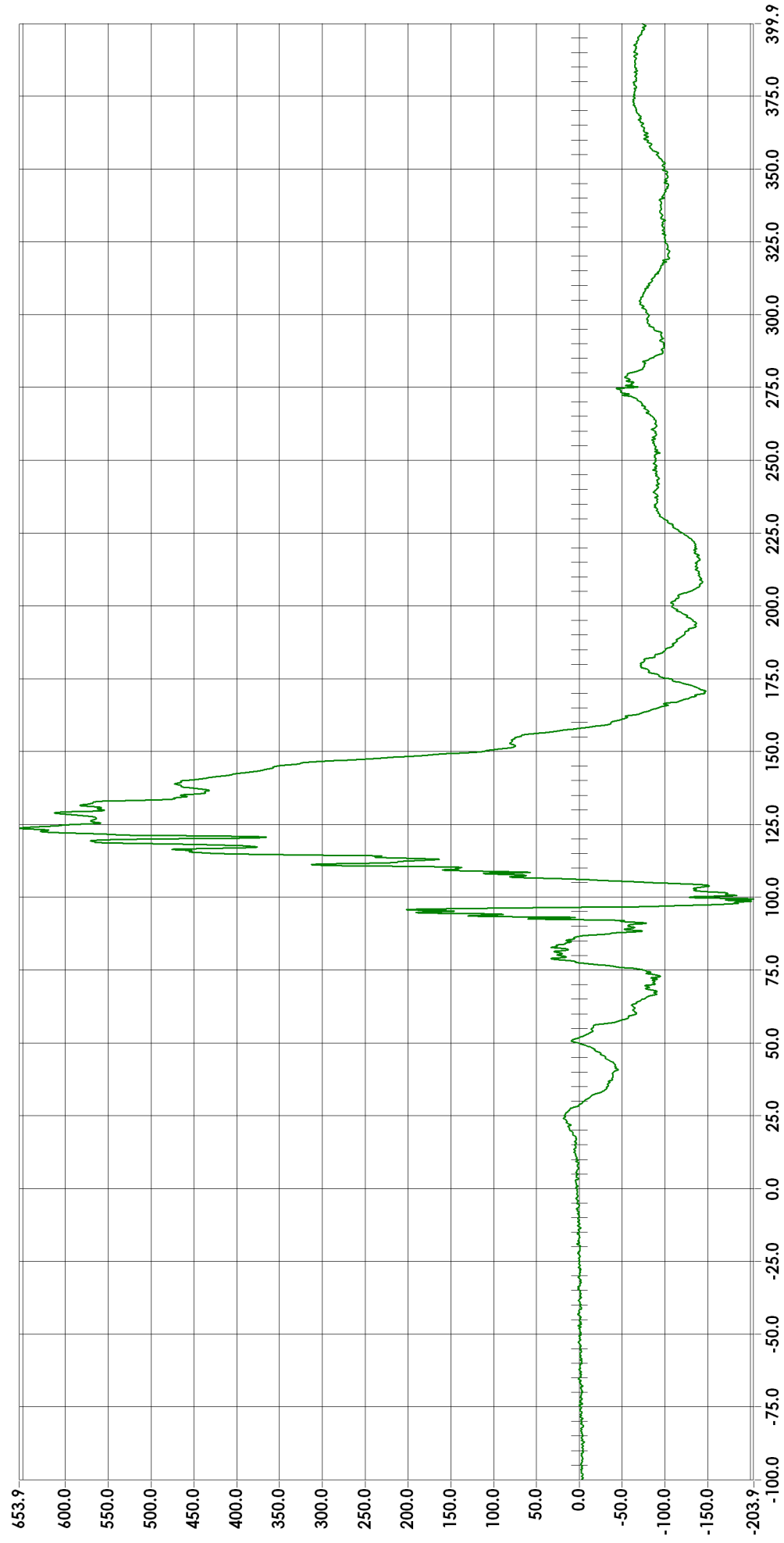


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FMRL  
**Sensor Info** Denton 1914A  
**Serial Number** 1914A\_376\_FY

### Driver left femur (y) force YL



**Max** 653.94 NWT at 123.68 msec  
**Min** -203.88 NWT at 99.36 msec

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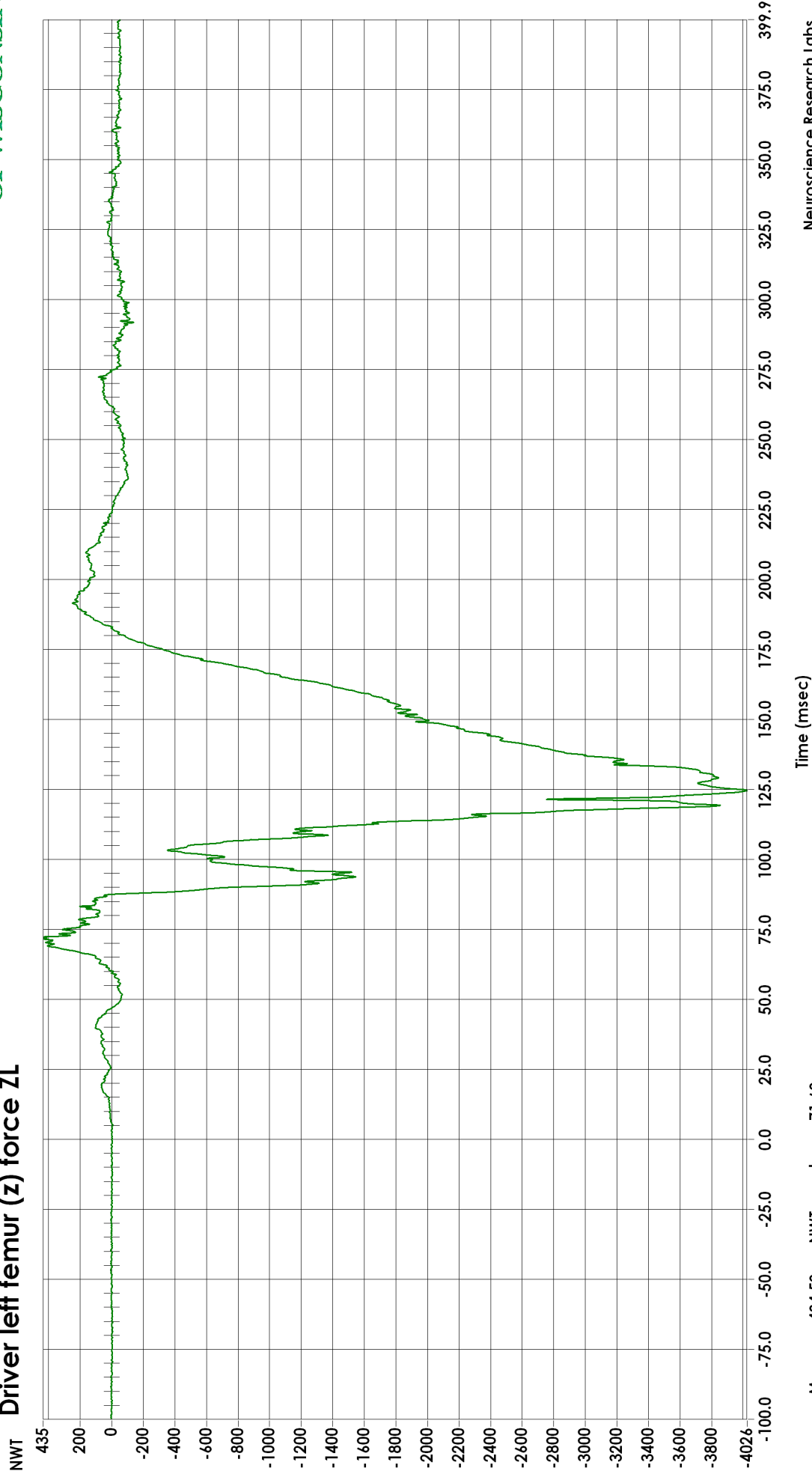
**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter**  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**Sensor Location** FMRL  
**Sensor Info** Denton 1914A  
**Serial Number** 1914A\_376\_FZ



### Driver left femur (z) force ZL



**Max** 434.52 NWT at 71.60 msec  
**Min** -4026.00 NWT at 124.56 msec

Time (msec)

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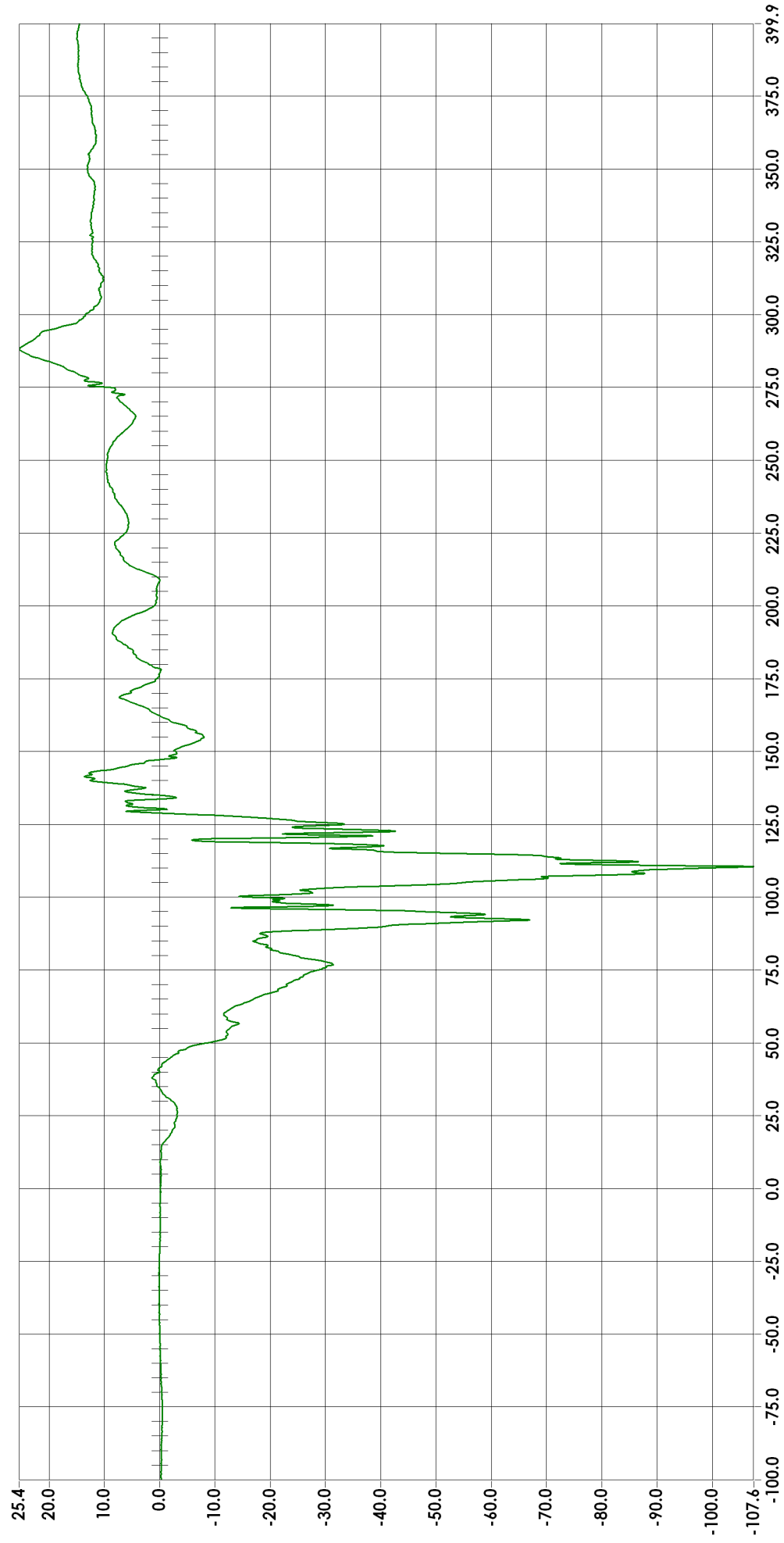


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FMRL  
**Sensor Info** Denton 1914A  
**Serial Number** 1914A\_376\_MX

### Driver left femur (x) moment XL



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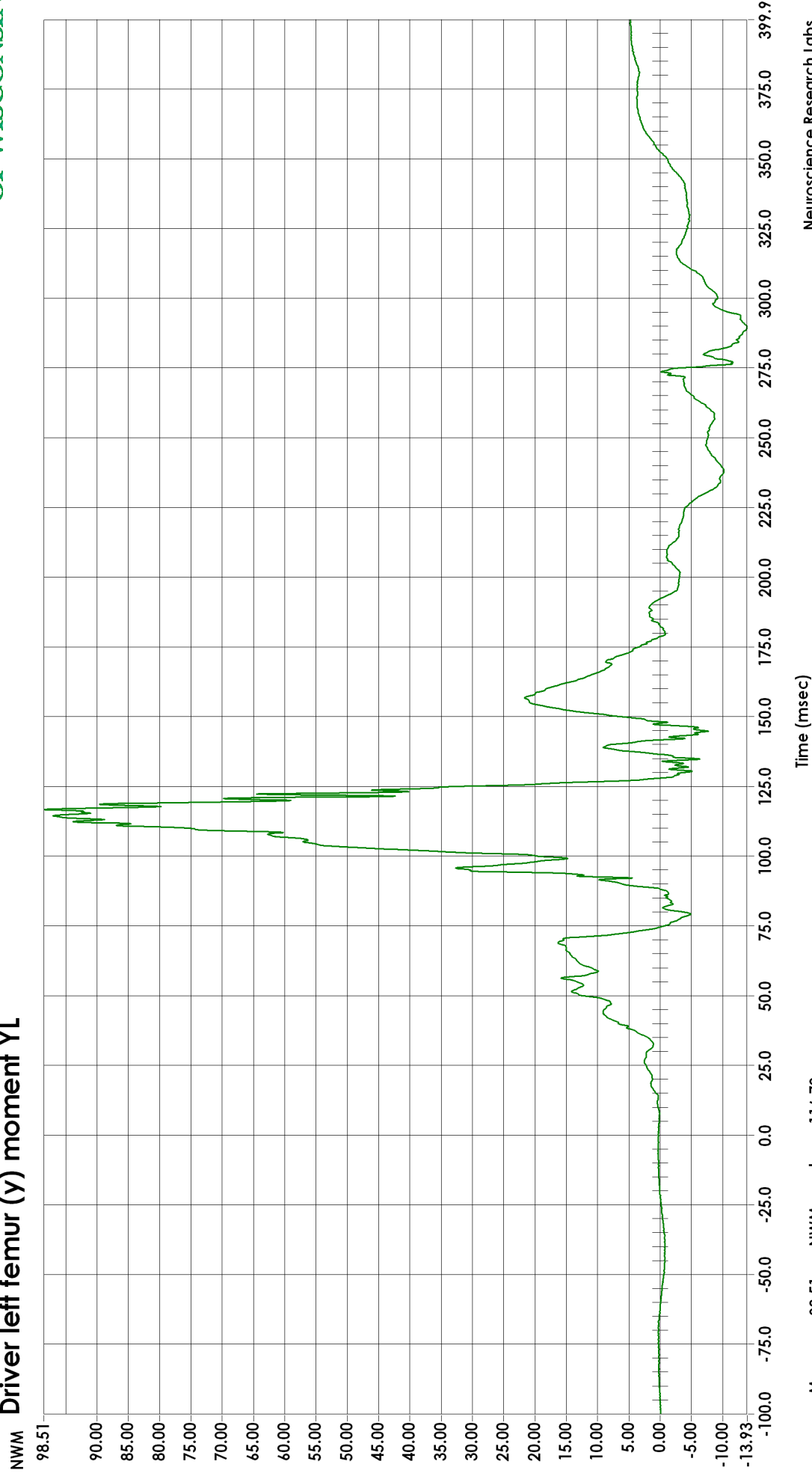


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FMRL  
**Sensor Info** Denton 1914A  
**Serial Number** 1914A\_376\_MY

### Driver left femur (y) moment YL



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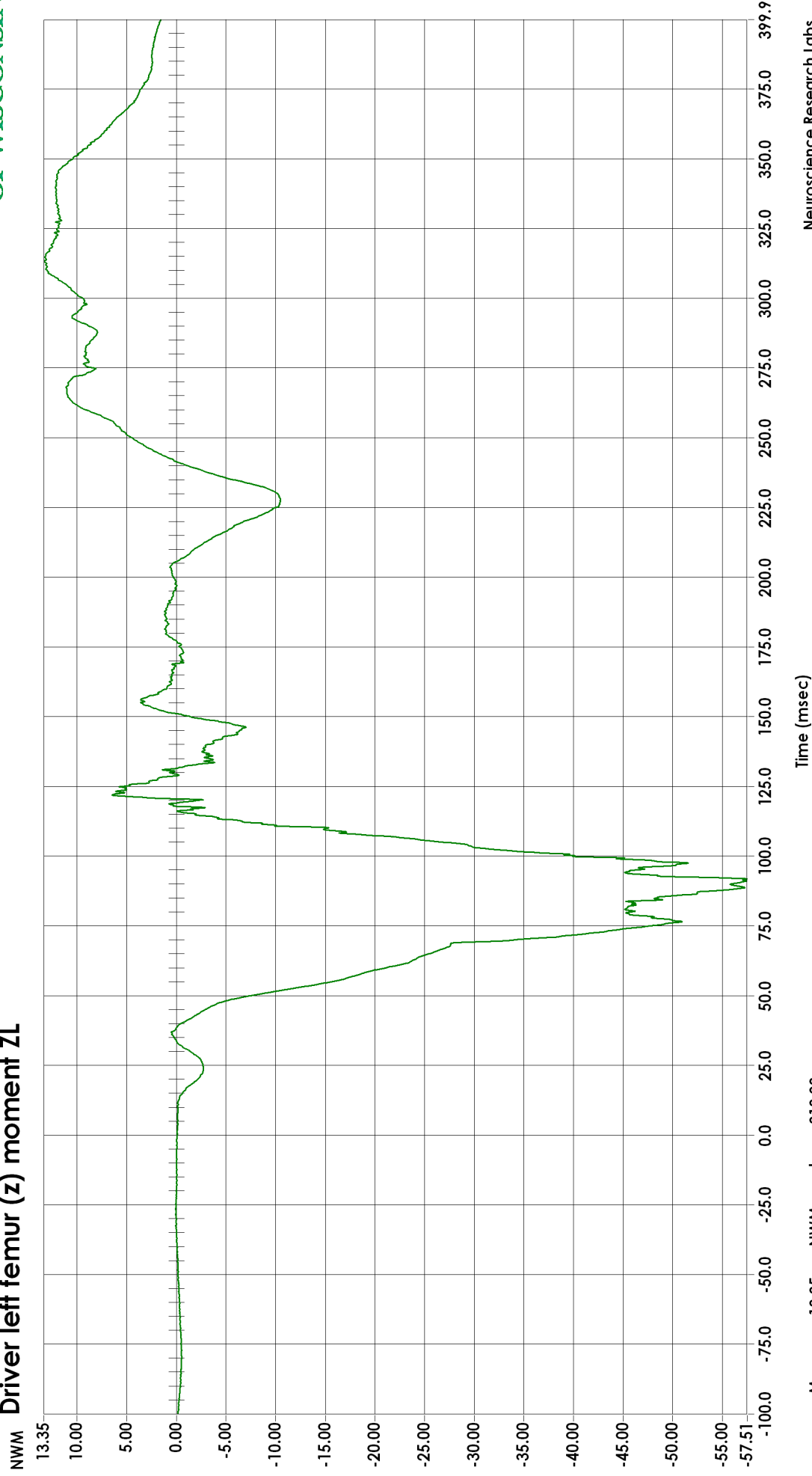


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FMRL  
**Sensor Info** Denton 1914A  
**Serial Number** 1914A\_376\_MZ

### Driver left femur (z) moment ZL



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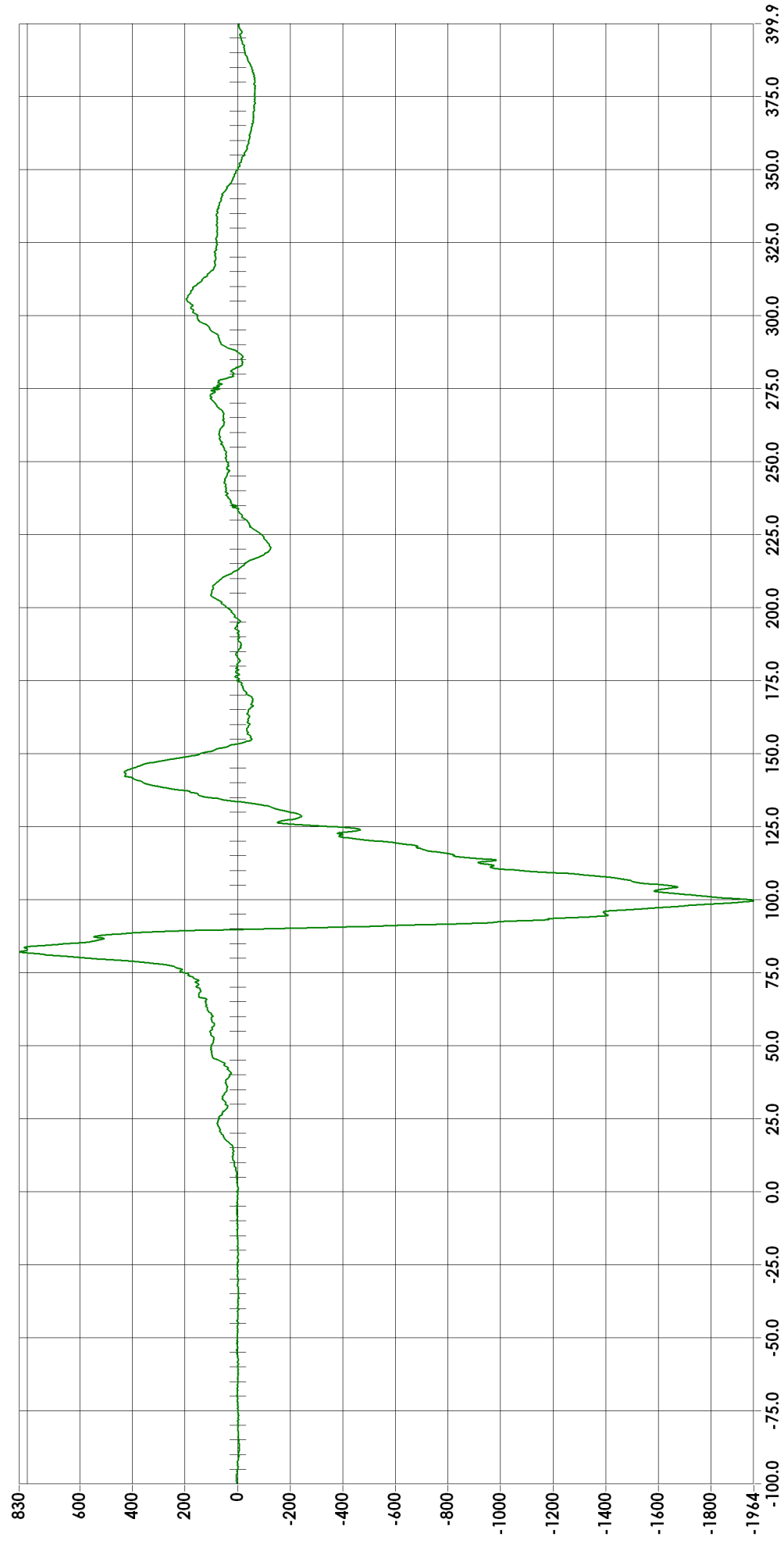


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** PVAR  
**Sensor Info** Denton 3455J  
**Serial Number** 3455J\_79\_FX

### Driver right acetabular (x) force XL



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**SOI003 Plot 055**

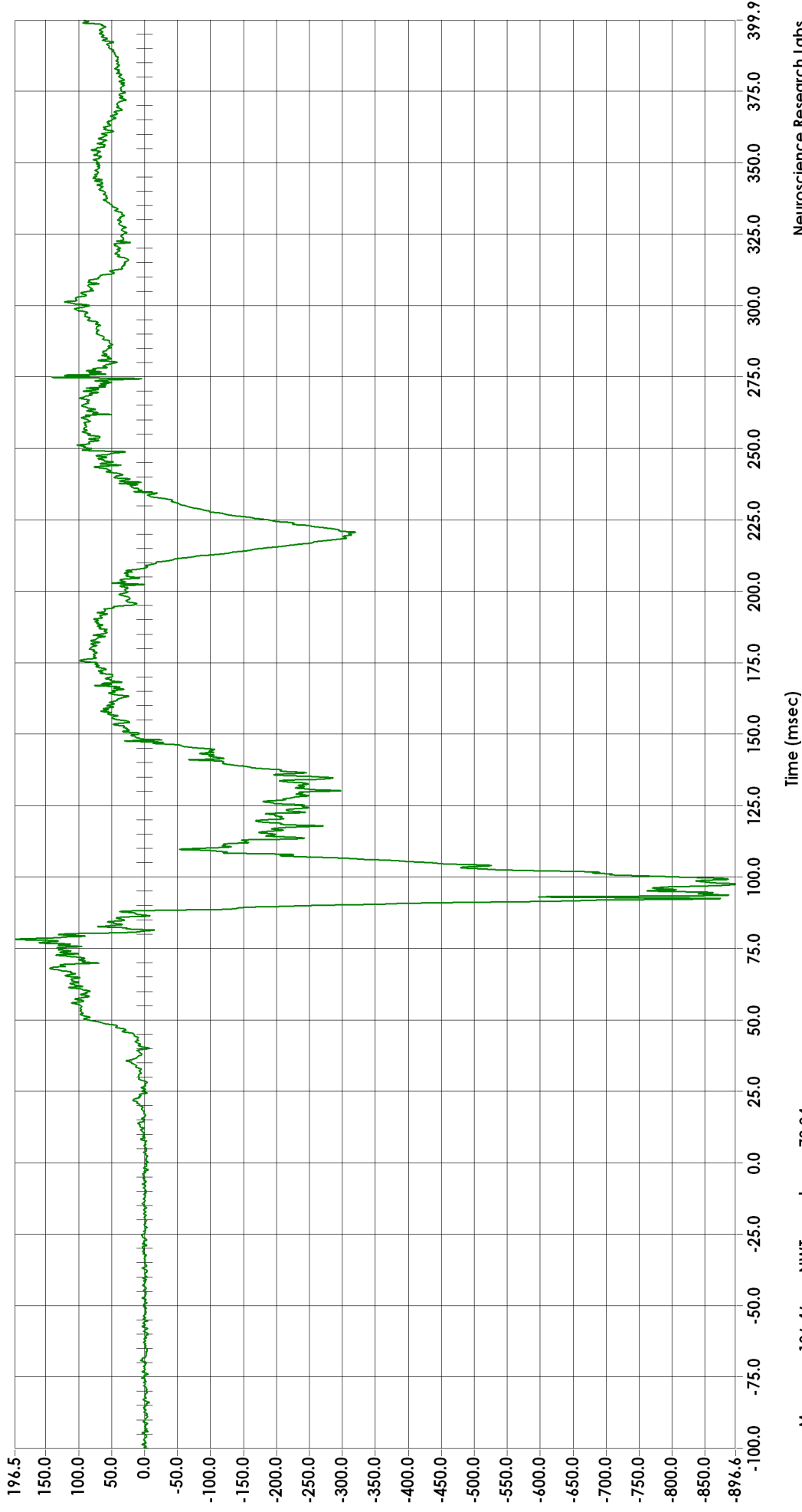


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** PVAR  
**Sensor Info** Denton 3455J  
**Serial Number** 3455J\_79\_FY

### Driver right acetabular (y) force YL



**Max** 196.46 NWT at 78.24 msec  
**Min** -896.64 NWT at 97.52 msec

Time (msec)

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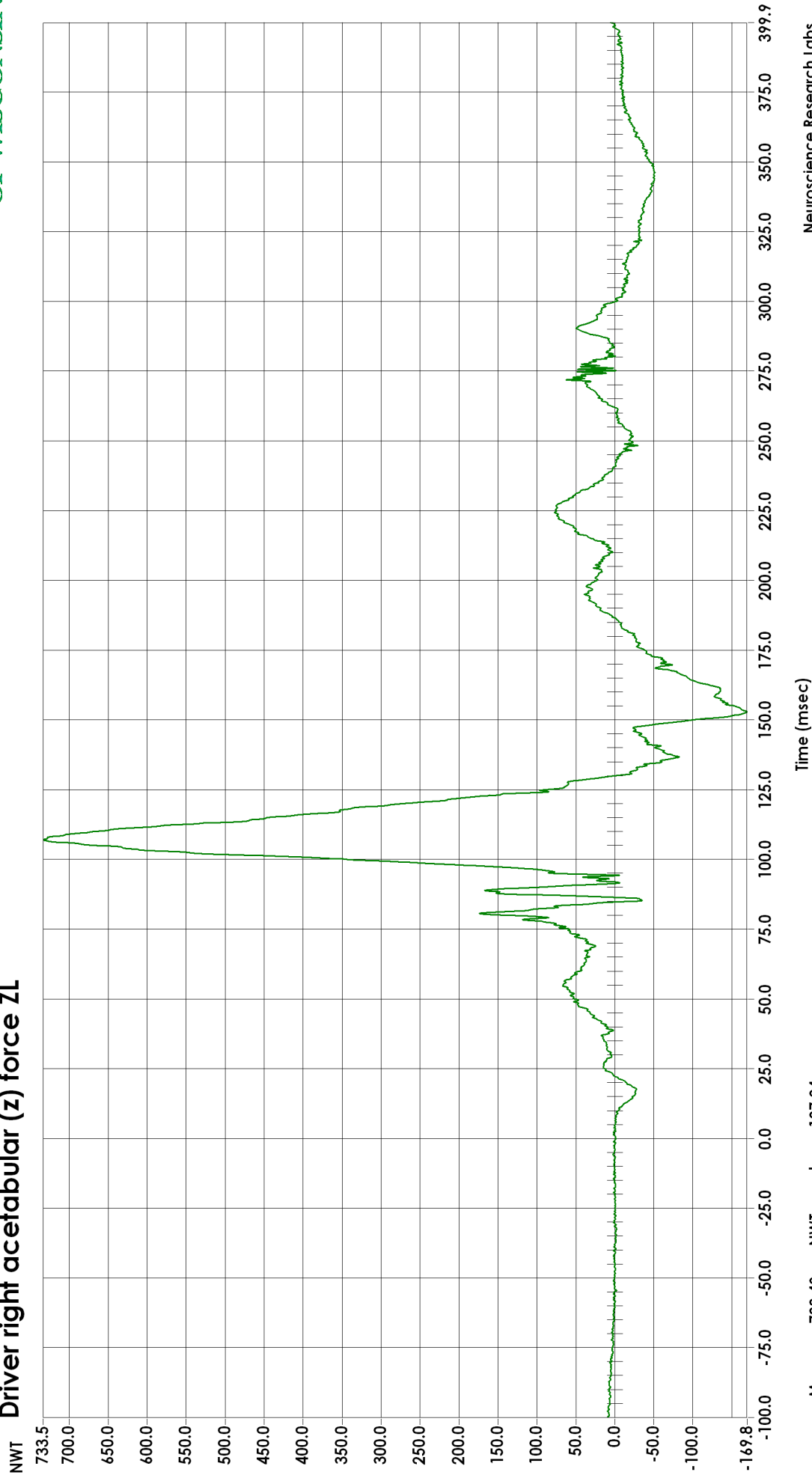


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** PVAR  
**Sensor Info** Denton 3455J  
**Serial Number** 3455J\_79\_FZ

### Driver right acetabular (z) force ZL



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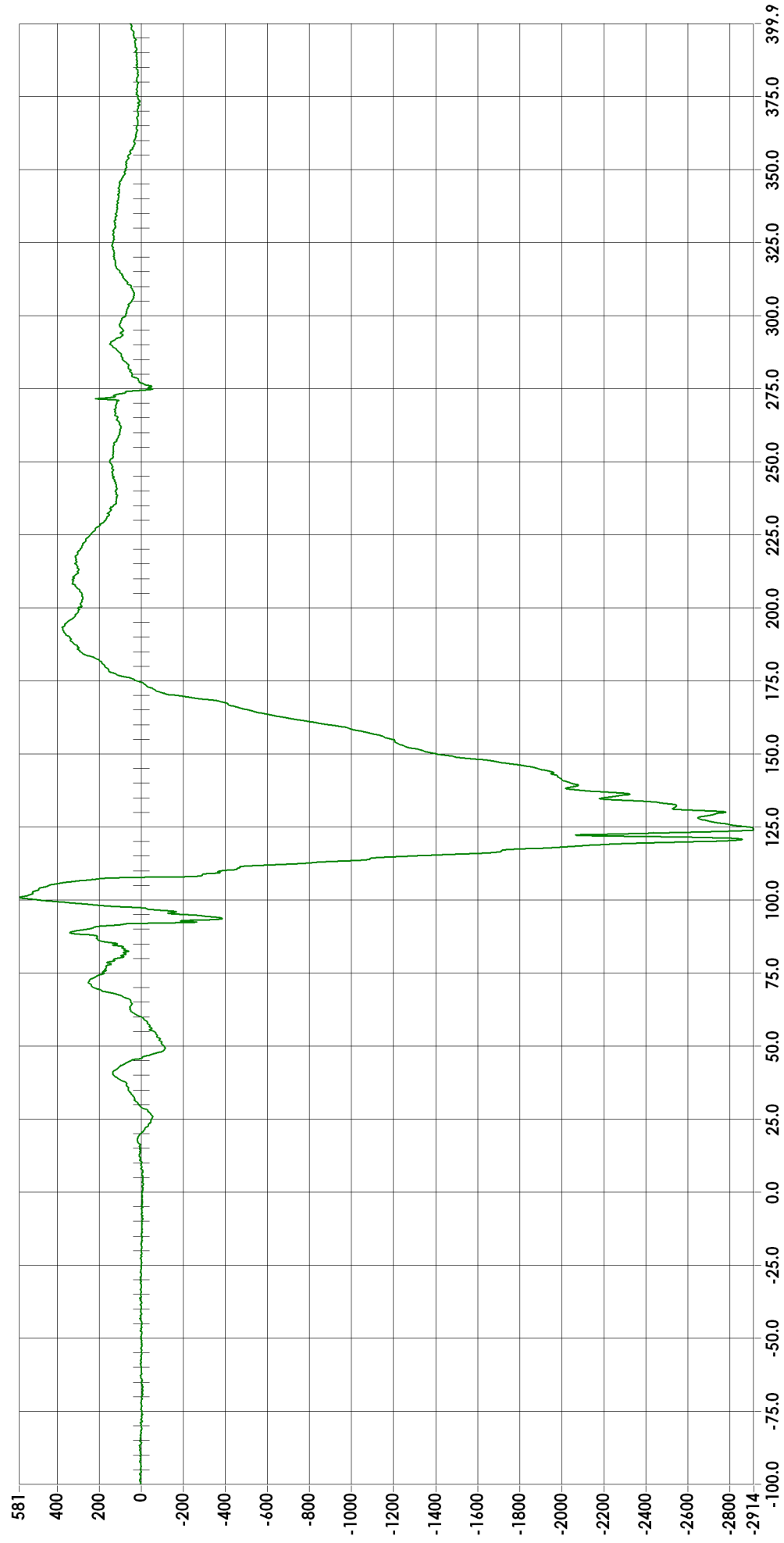


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** PVAL  
**Sensor Info** Denton 3855  
**Serial Number** 3855\_83\_FX

### Driver left acetabular (x) force XL



**Max** 580.81 NWT at 100.88 msec  
**Min** -2914.45 NWT at 124.08 msec

Time (msec)

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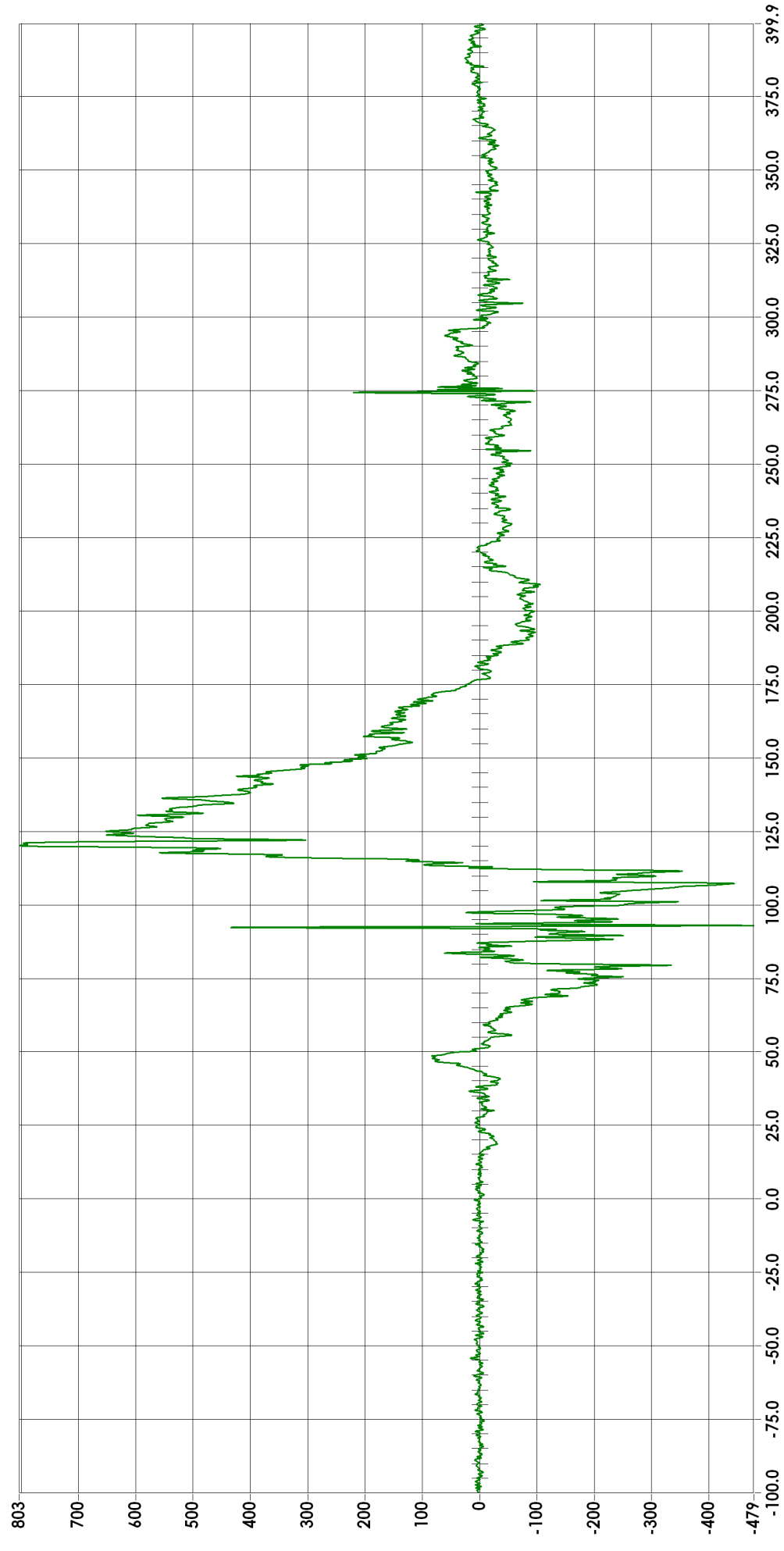


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** PVAL  
**Sensor Info** Denton 3855  
**Serial Number** 3855\_83\_FY

### Driver left acetabular (y) force YL



**Max** 803.07 NWT at 120.24 msec  
**Min** -478.51 NWT at 93.04 msec

Time (msec)

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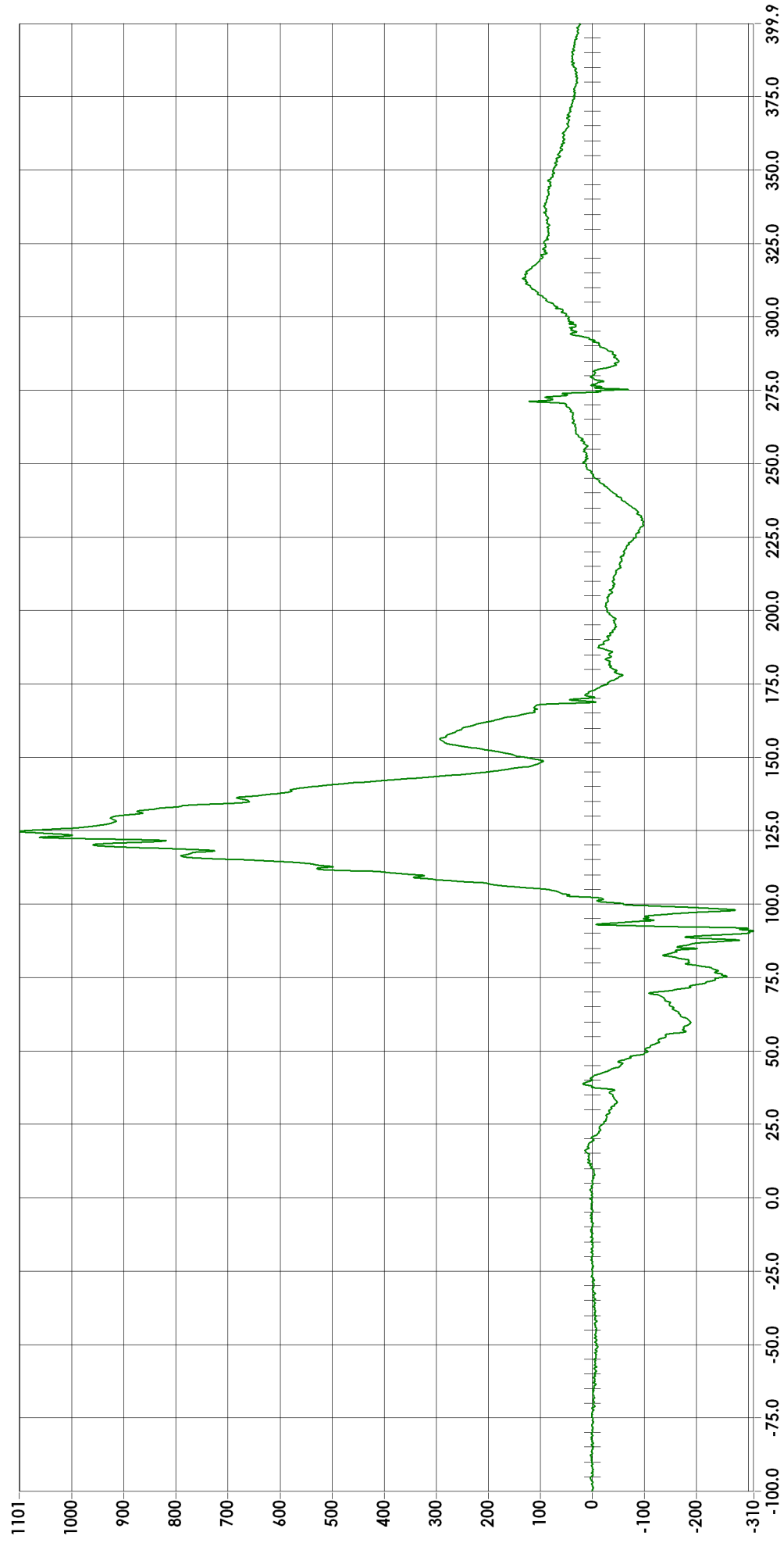


**Filter**  
 CFC600  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**Sensor Location**  
 PVAL  
**Sensor Info**  
 Denton 3855  
 Serial Number 3855\_83\_FZ

**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

### Driver left acetabular (z) force ZL



**Max** 1101.16 NWT at 124.80 msec  
**Min** -310.47 NWT at 90.88 msec

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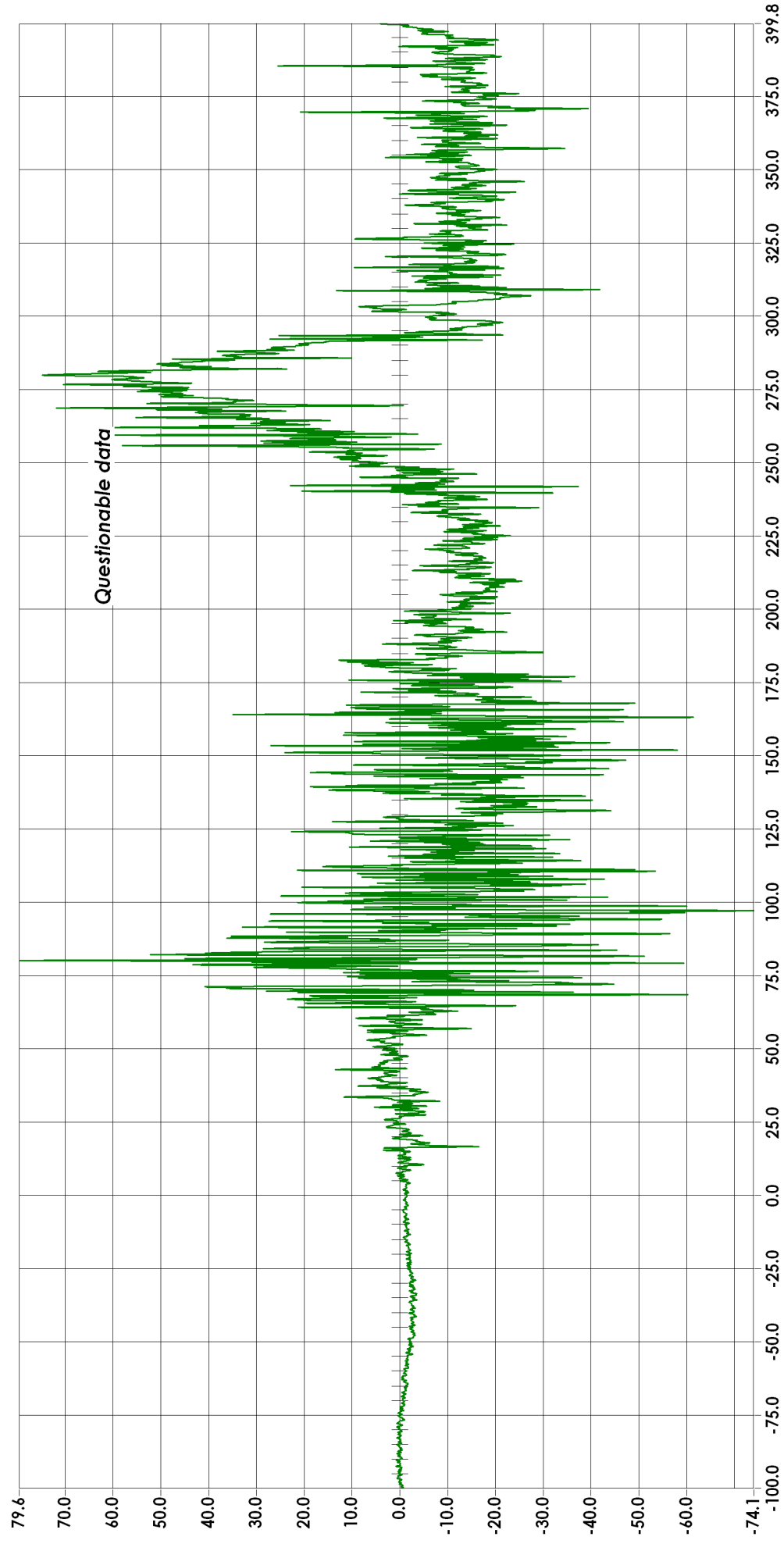


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NKCA  
**Sensor Info** Denton 6005  
**Serial Number** 6005J\_78

### Driver anterior spring (z) force ZL



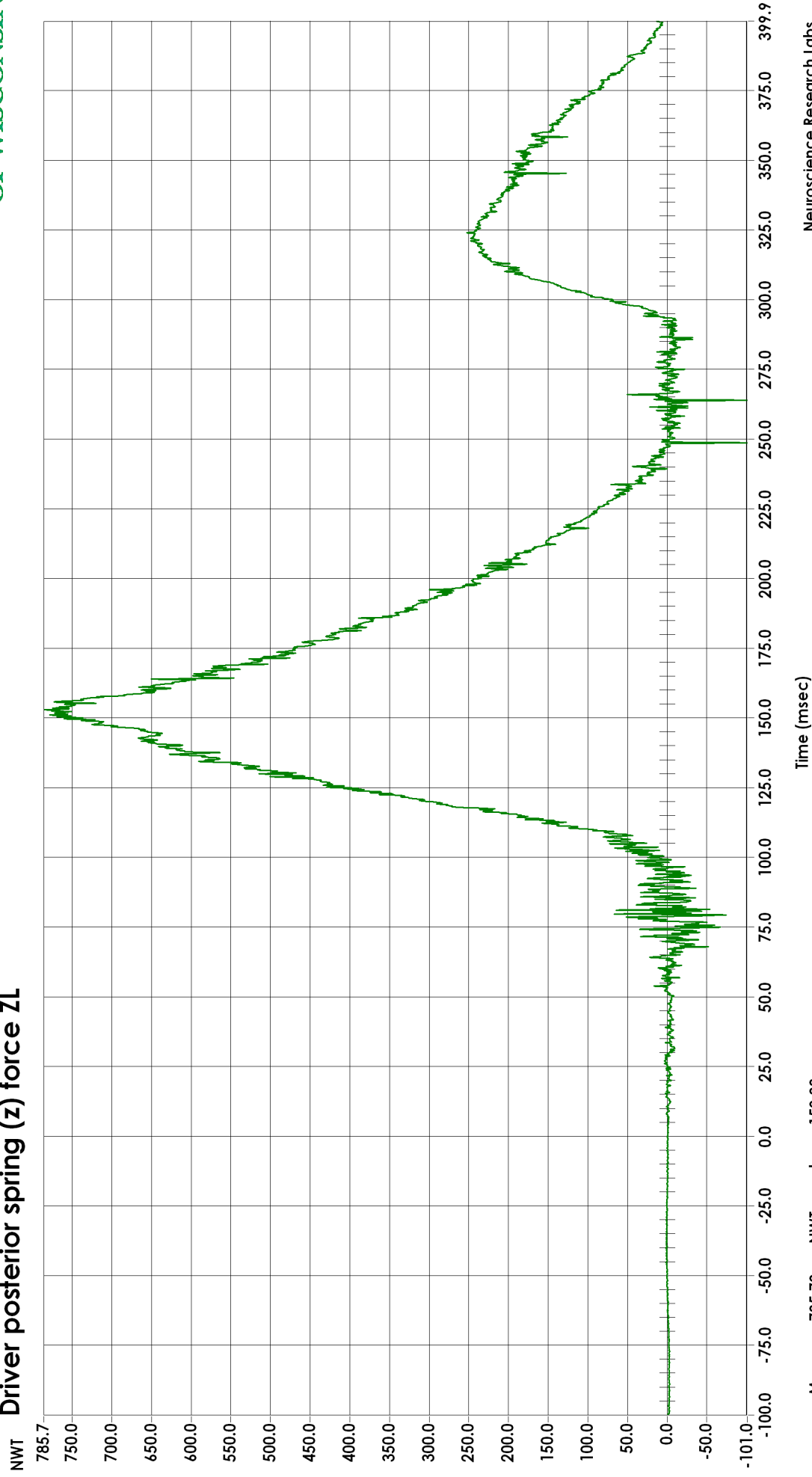
**Max** 79.60 NWT at 80.08 msec  
**Min** -74.06 NWT at 97.04 msec

Time (msec)

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	NKCP
		<b>Sensor Info</b>	Denton 6005
		<b>Serial Number</b>	6005J_77

### Driver posterior spring (z) force ZL



<b>Max</b>	785.70	<b>NWT</b>	at	152.88	<b>msec</b>
<b>Min</b>	-101.05	<b>NWT</b>	at	263.92	<b>msec</b>

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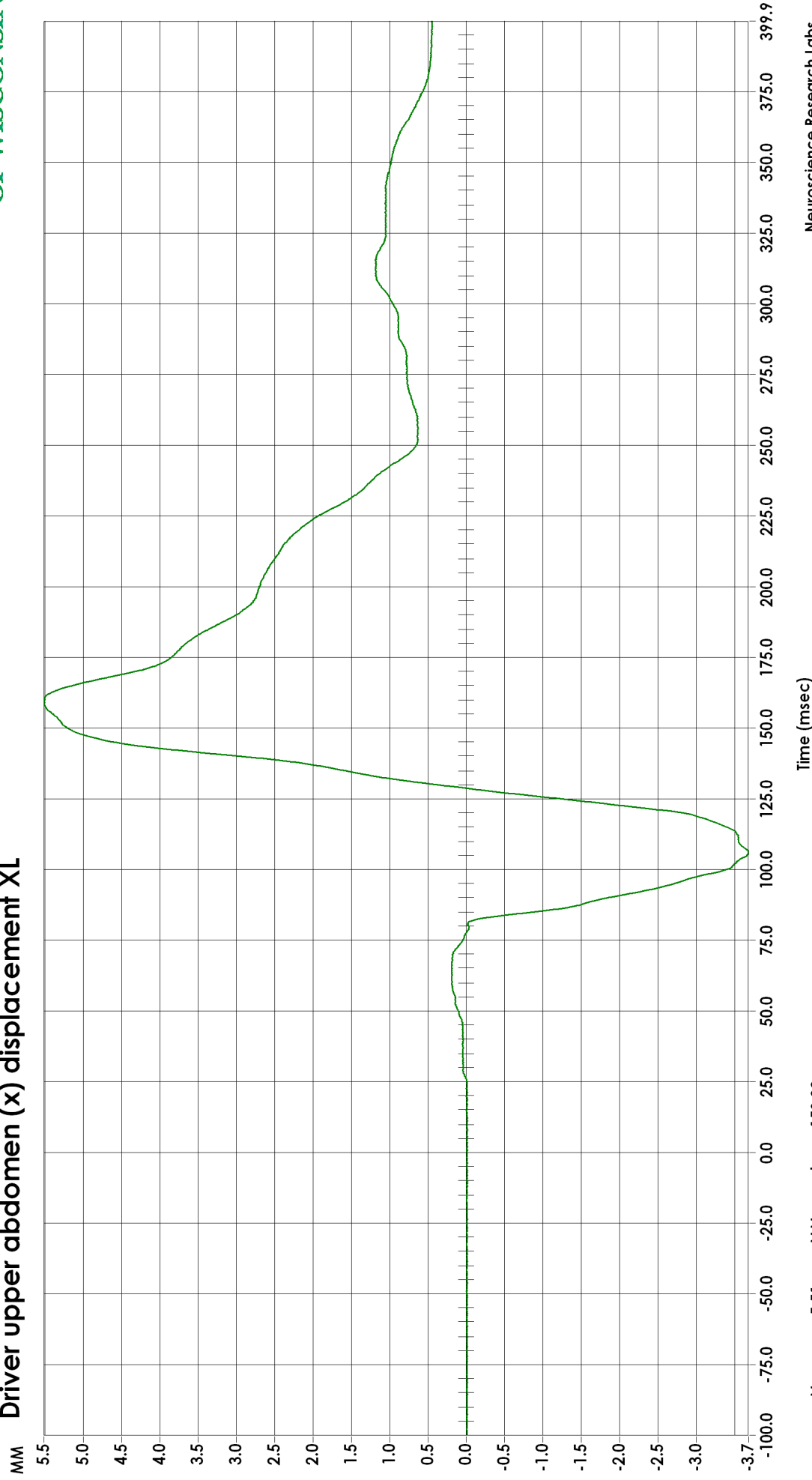


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** ABDU  
**Sensor Info** Space Age 300647  
**Serial Number** 39184

### Driver upper abdomen (x) displacement XL



**Max** 5.51 MM at 159.28 msec  
**Min** -3.68 MM at 105.60 msec

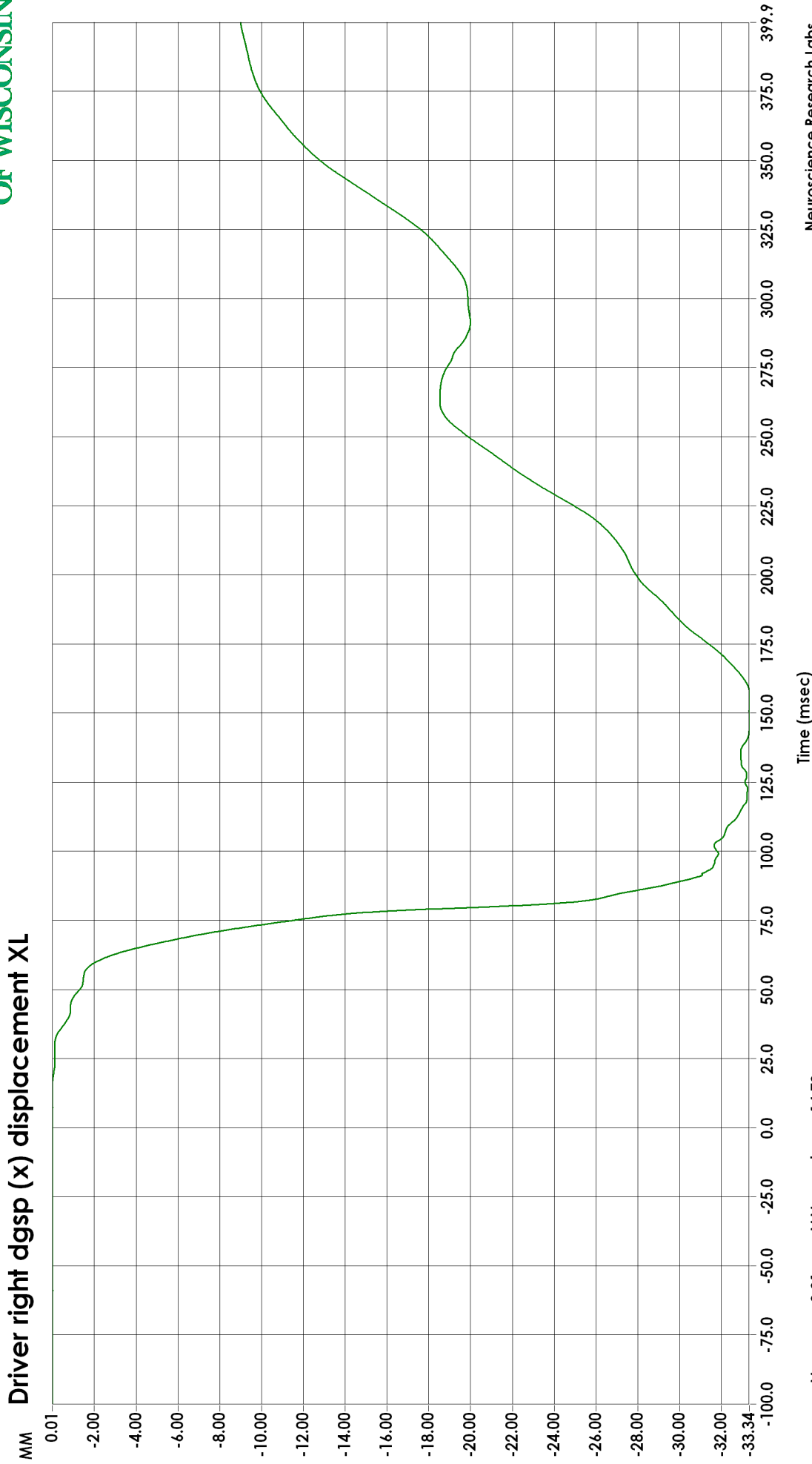
Neuroscience Research Labs  
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**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** ABDR  
**Sensor Info** Space\_Age\_Control E10DA  
**Serial Number** 14486



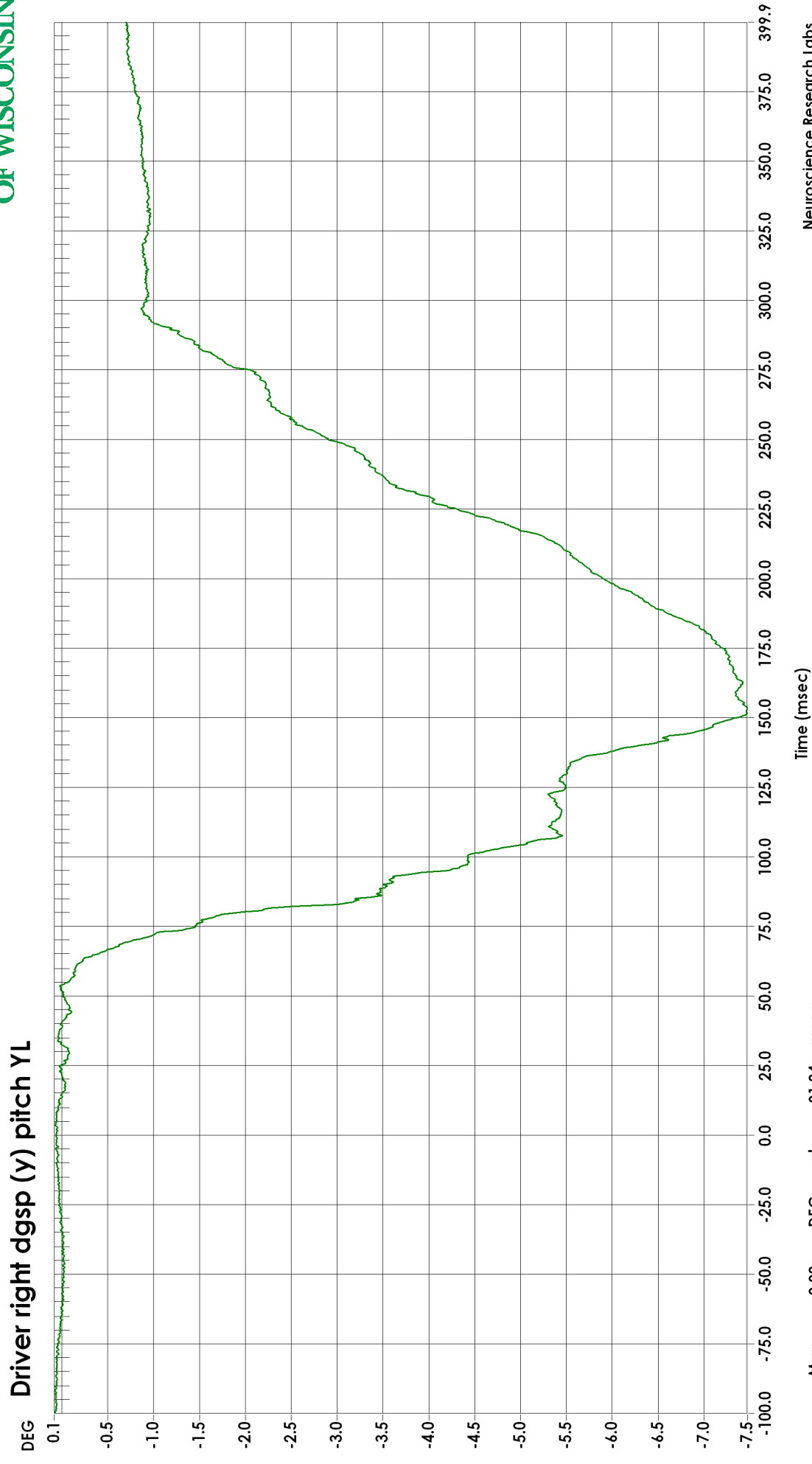
Neuroscience Research Labs  
 5000 West National Ave  
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 Milwaukee, WI 53295



**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** ABDR  
**Sensor Info** Space\_Age\_Control E10DA  
**Serial Number** 104



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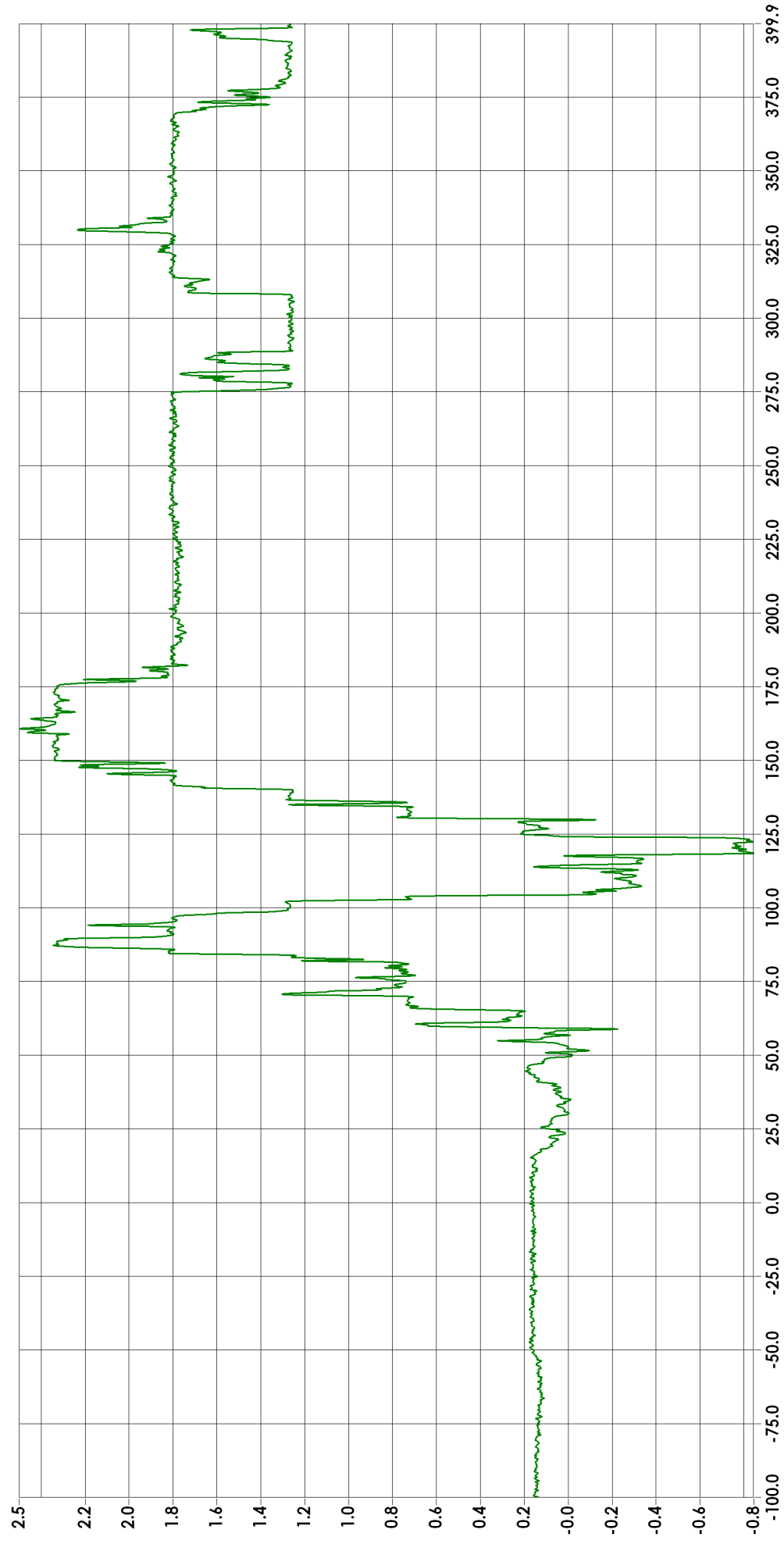


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** ABDR  
**Sensor Info** Contelec PD210\_4B  
**Serial Number** 361

### Driver right dgsp (z) yaw ZL



Time (msec)

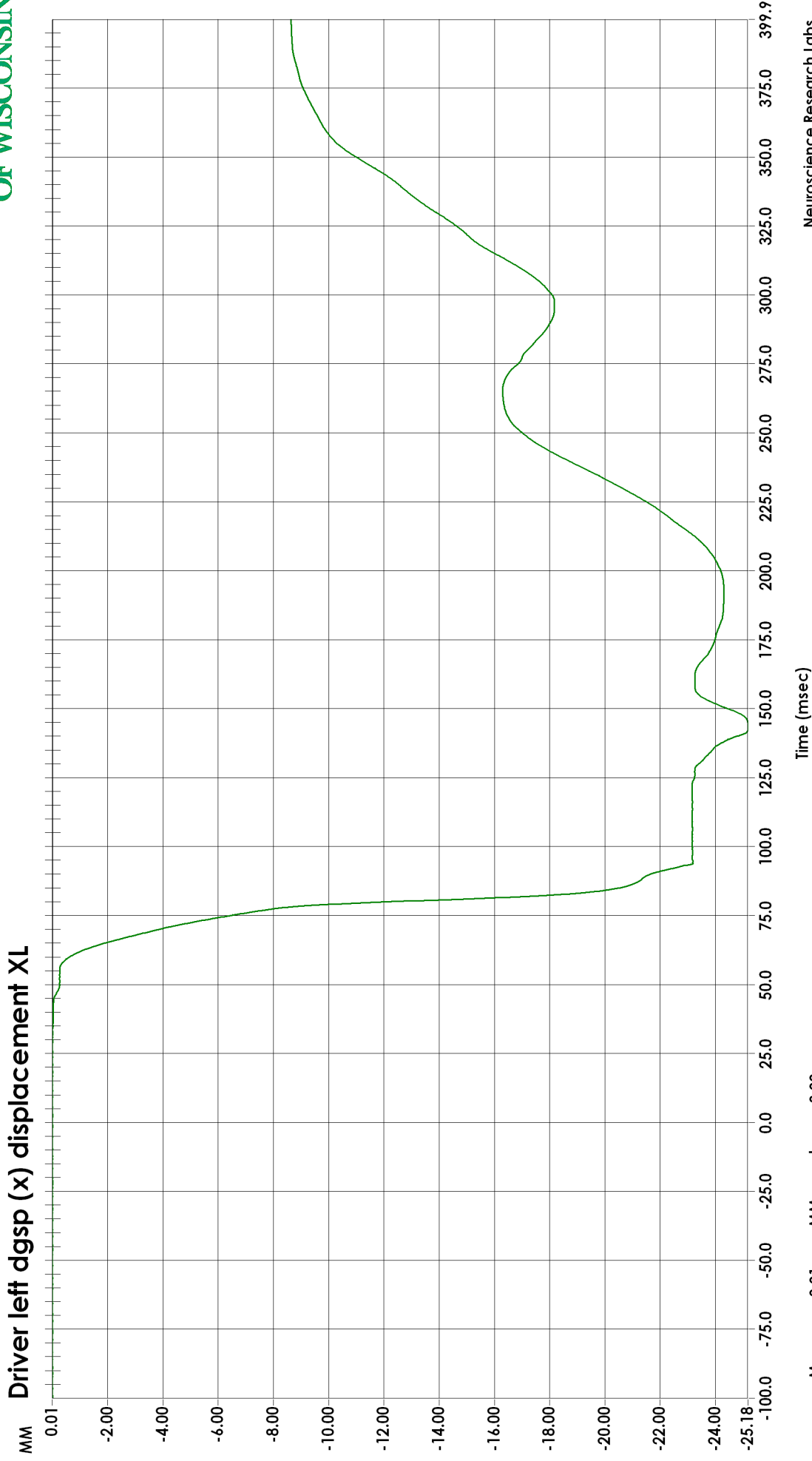
**Max** 2.50 DEG at 160.72 msec  
**Min** -0.85 DEG at 118.48 msec

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**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** ABDL  
**Sensor Info** Space\_Age\_Control E10DA  
**Serial Number** 256



**Max** 0.01 MM at 8.00 msec  
**Min** -25.18 MM at 142.32 msec

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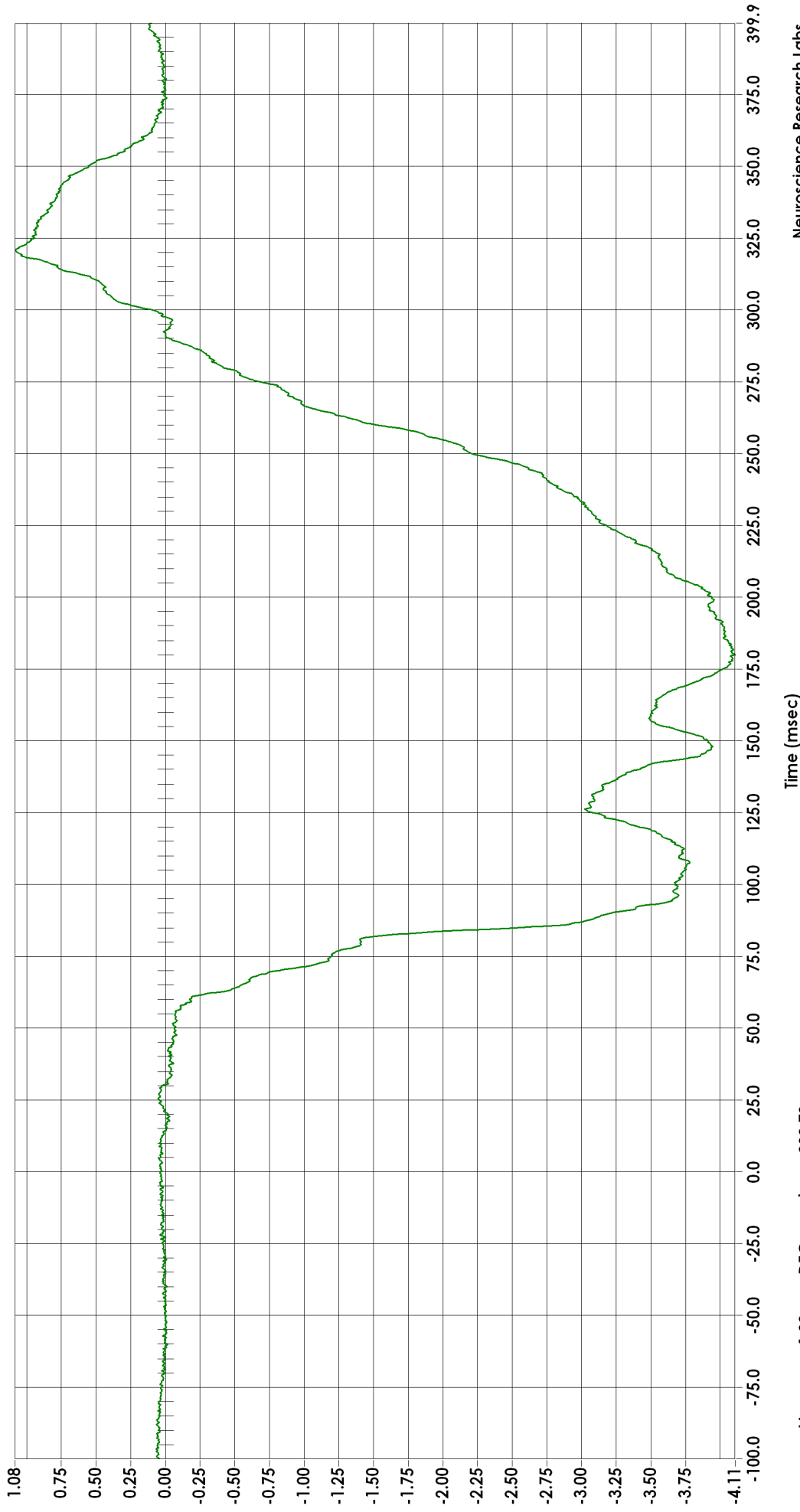


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** ABDL  
**Sensor Info** Space\_Age\_Control E10DA  
**Serial Number** 107

### Driver left dgsp (y) pitch YL



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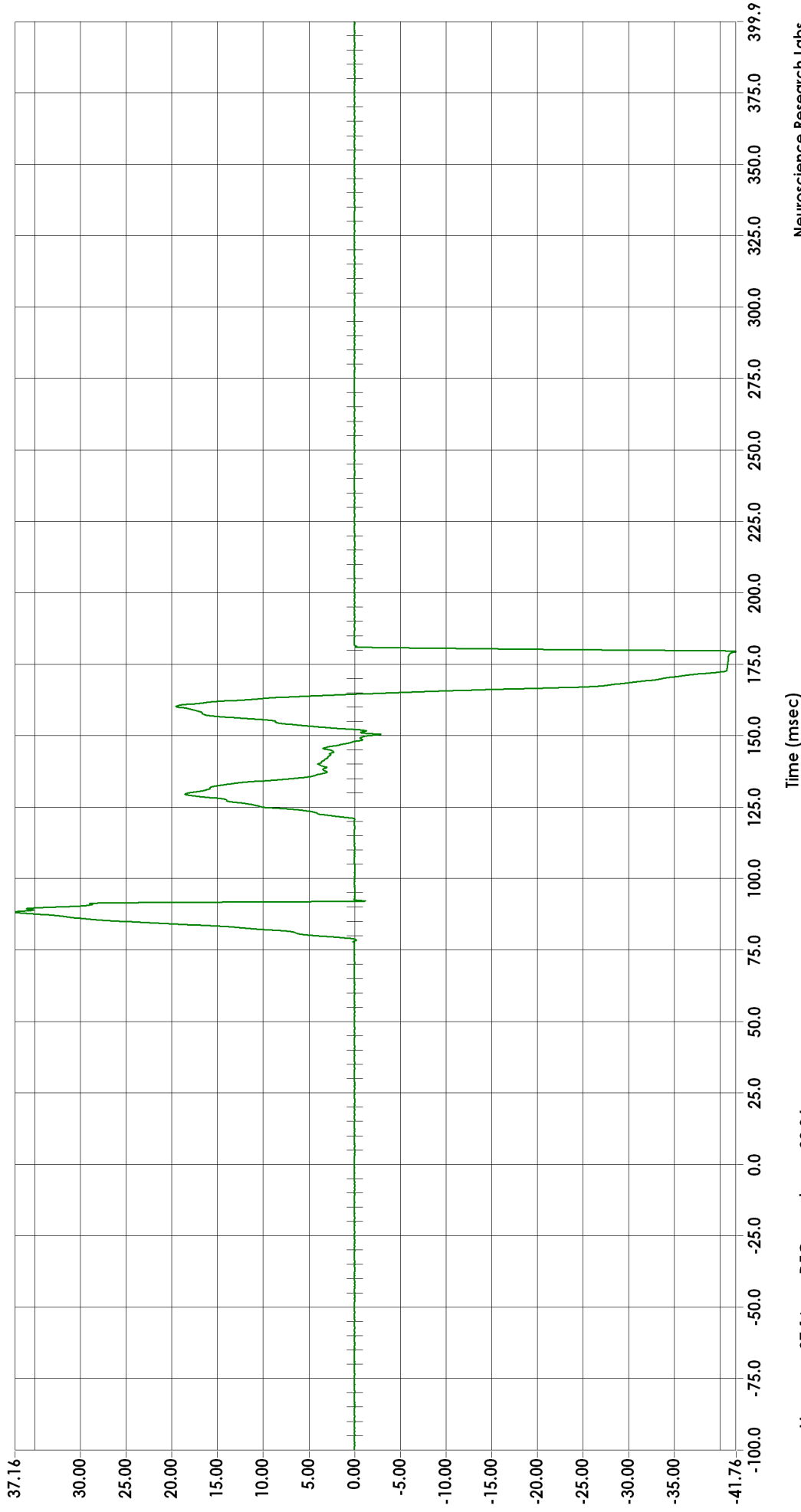


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** ABDL  
**Sensor Info** Contelec PD210\_4B  
**Serial Number** 410

### Driver left dgsp (z) yaw ZL



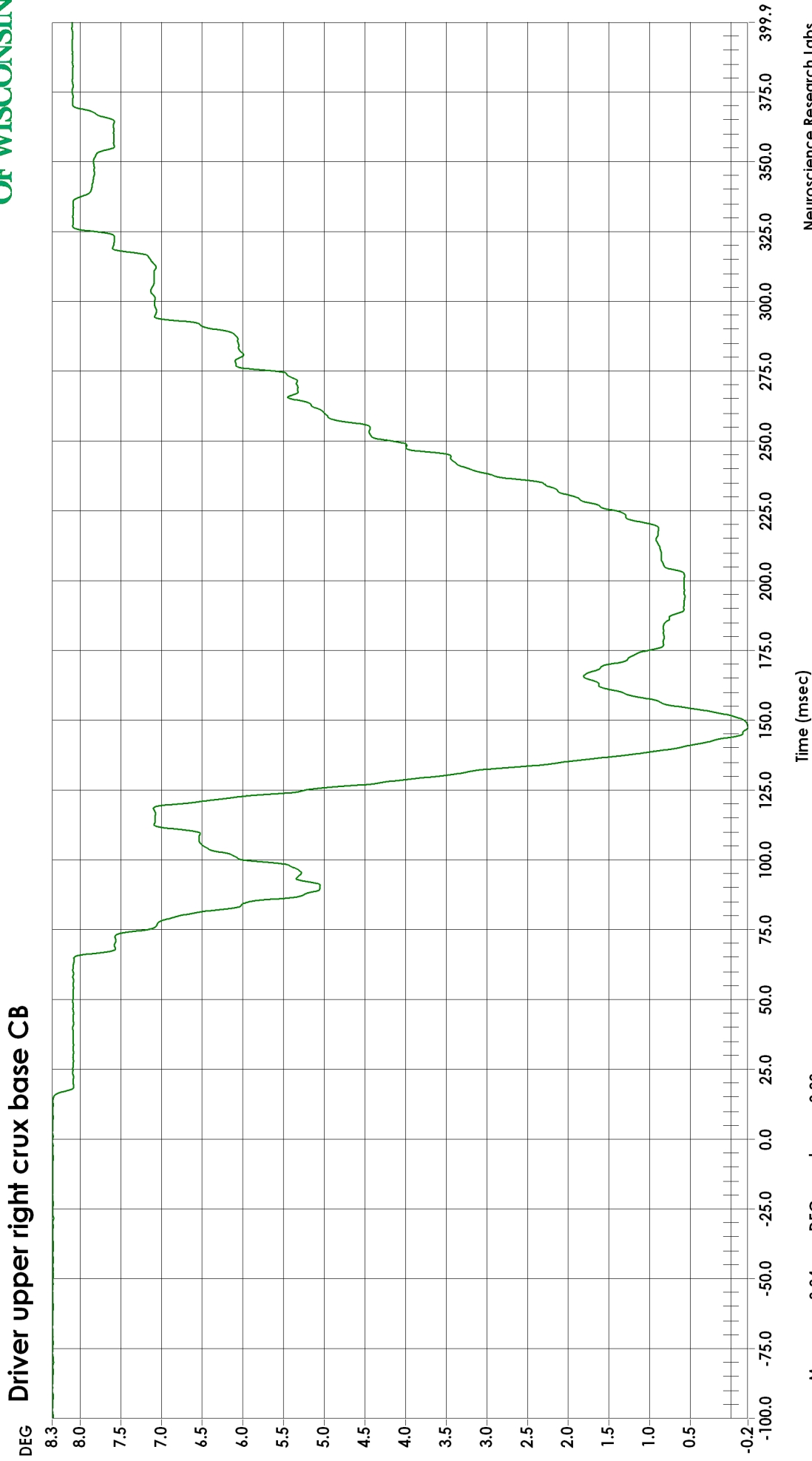
Neuroscience Research Labs  
 5000 West National Ave  
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 Milwaukee, WI 53295



**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHRU  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_0001



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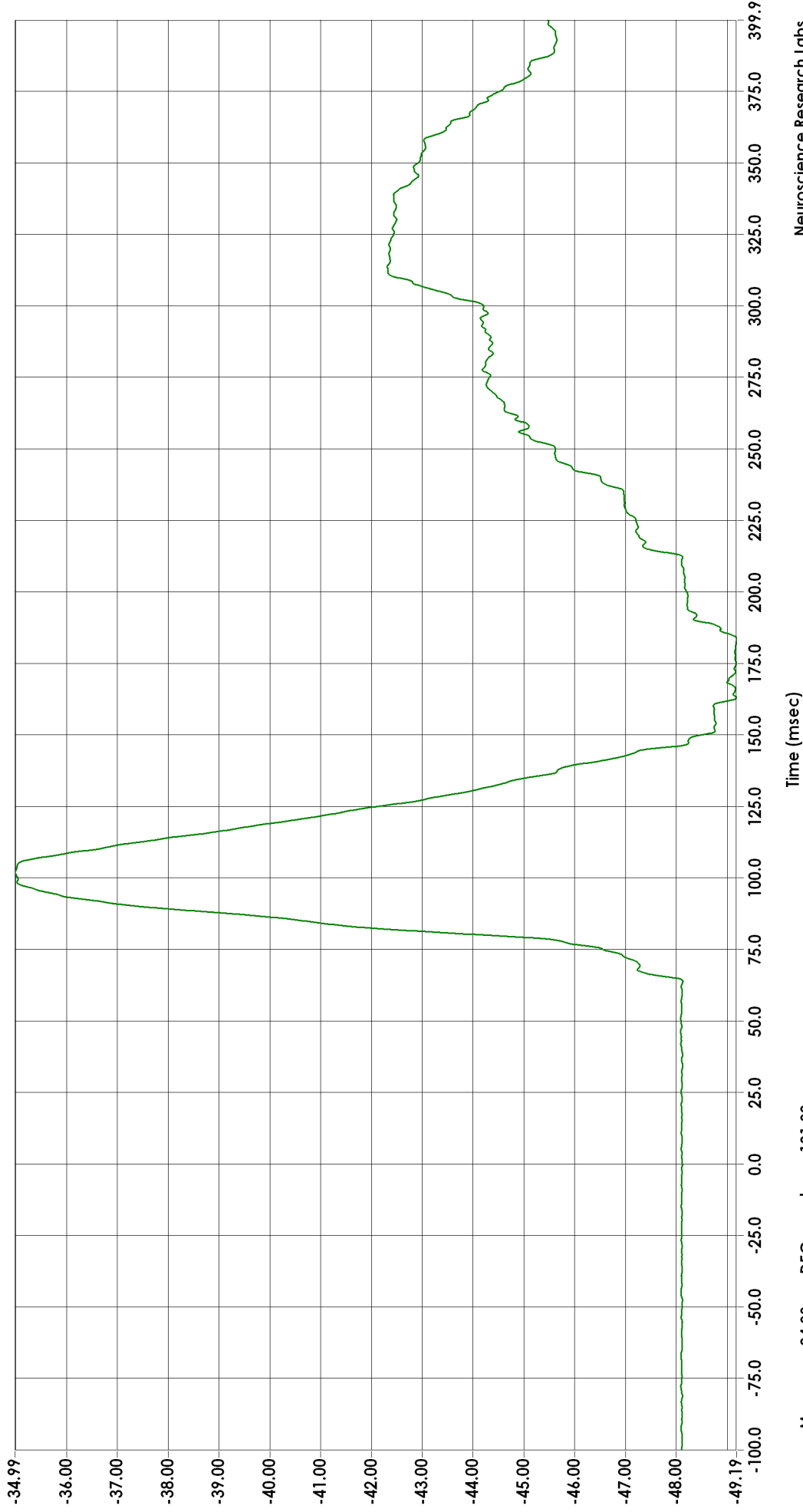


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHRU  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_0307

### Driver upper right crux mid CM



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 Milwaukee, WI 53295

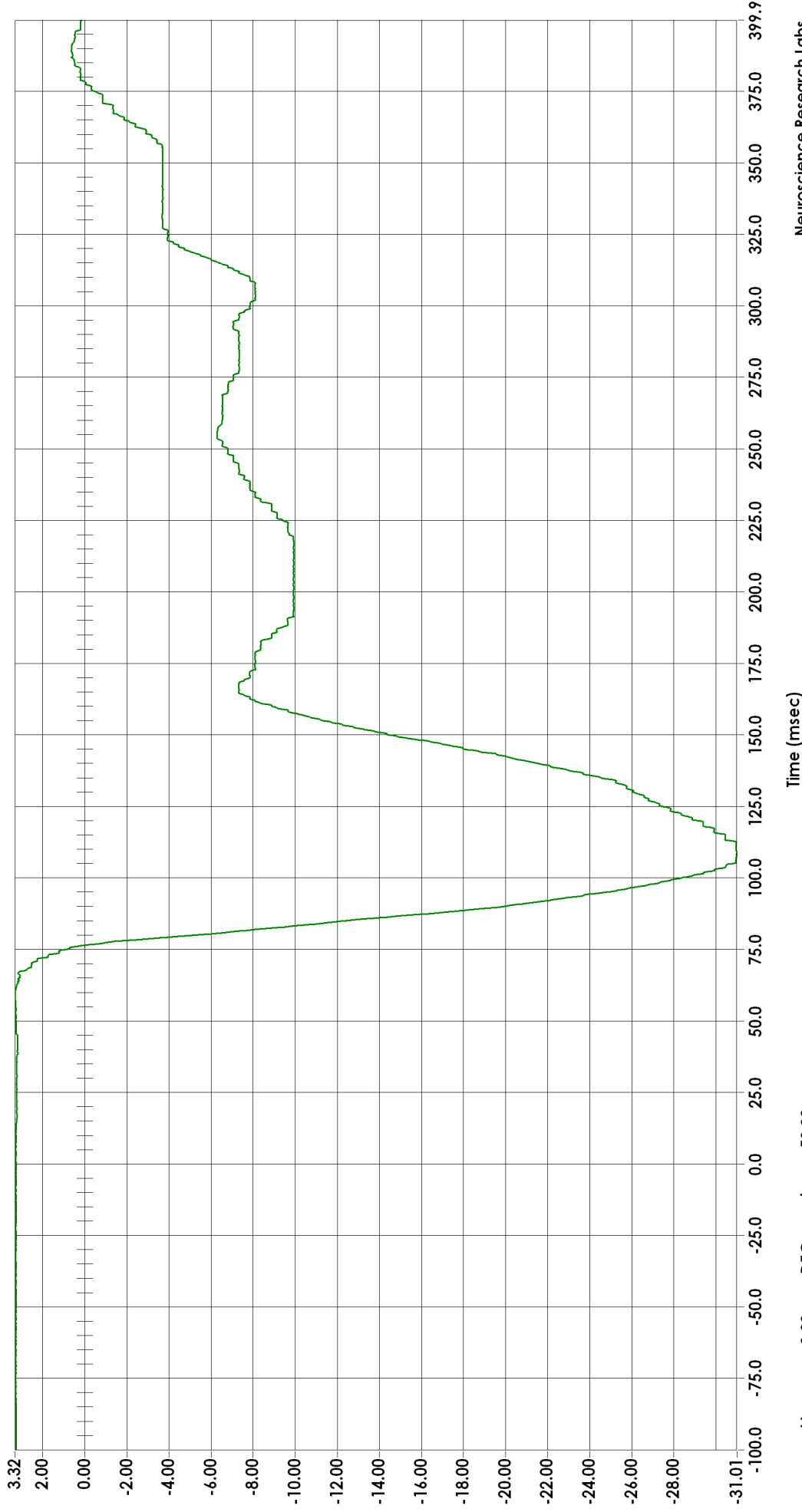


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHRU  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_0003

### Driver upper right crux elbow CE



**Max** 3.32 DEG at 58.08 msec  
**Min** -31.01 DEG at 109.04 msec

SOI003 Plot 072

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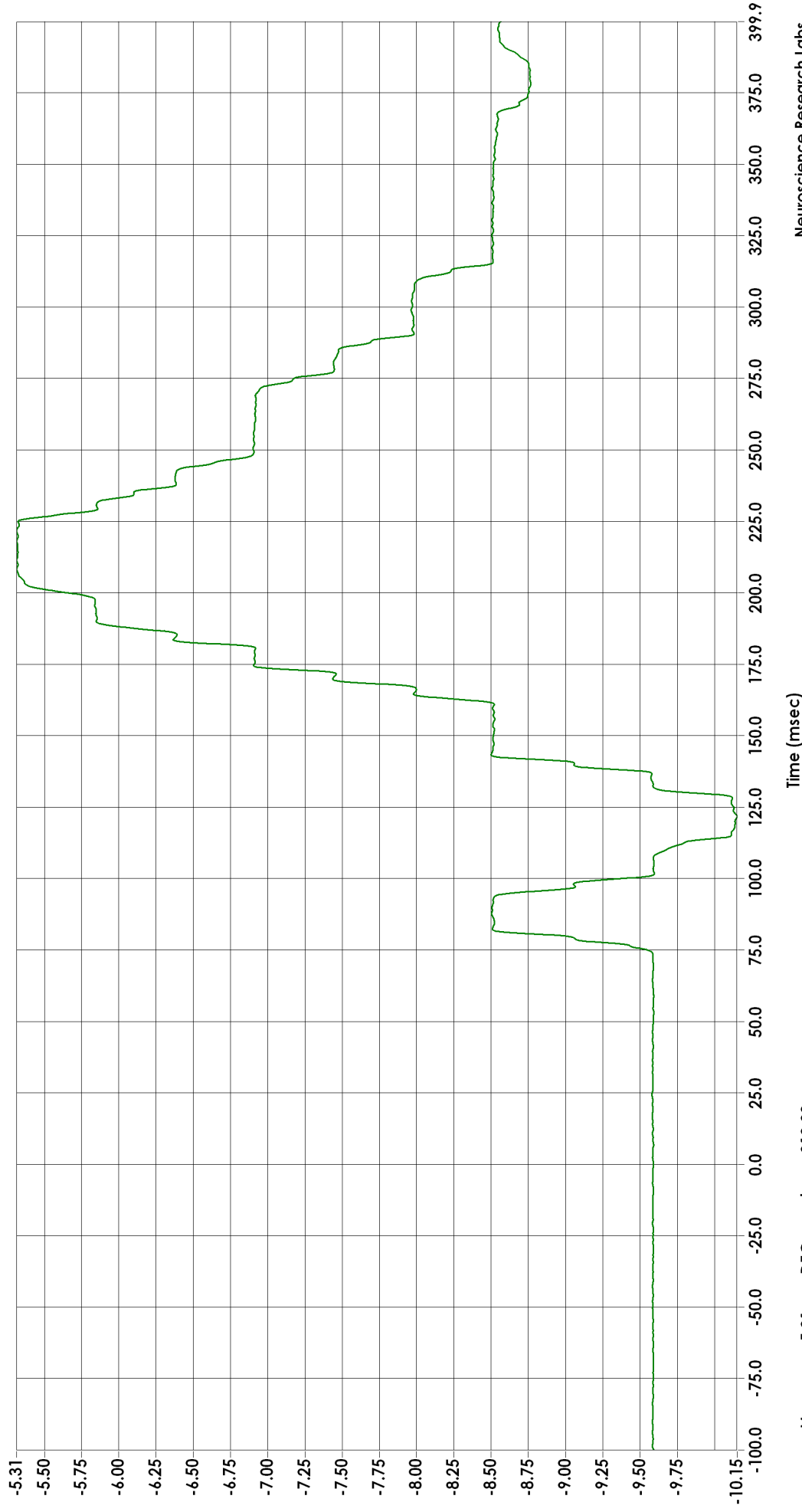


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHLU  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_0040

### Driver upper left crux base CB



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**Max** -5.31 DEG at 218.08 msec  
**Min** -10.15 DEG at 121.76 msec  
 SOI003 Plot 073

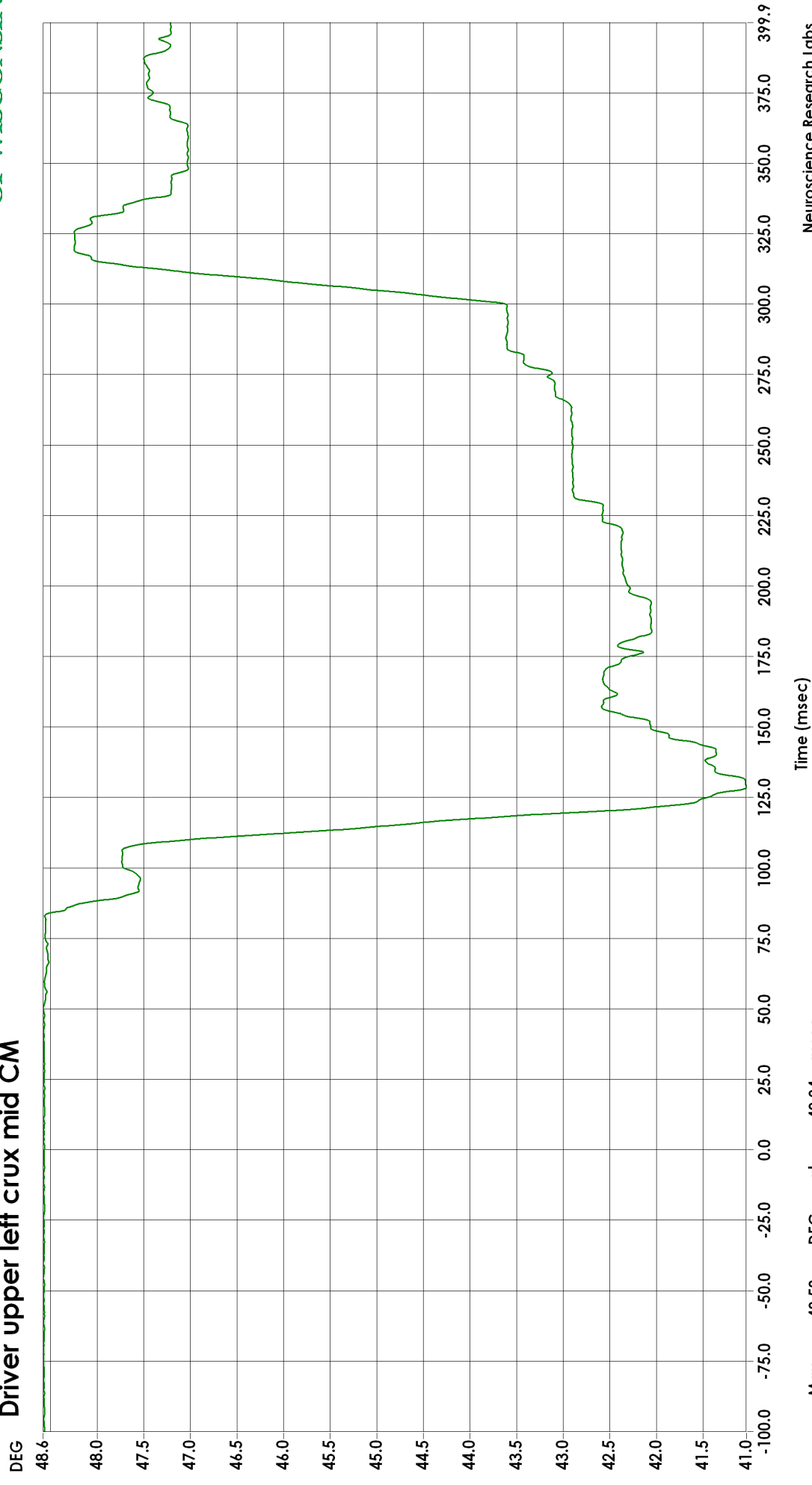


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**Sensor Location** CHLU  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_0041

### Driver upper left crux mid CM



**Max** 48.58 DEG at -40.24 msec  
**Min** 41.03 DEG at 128.72 msec

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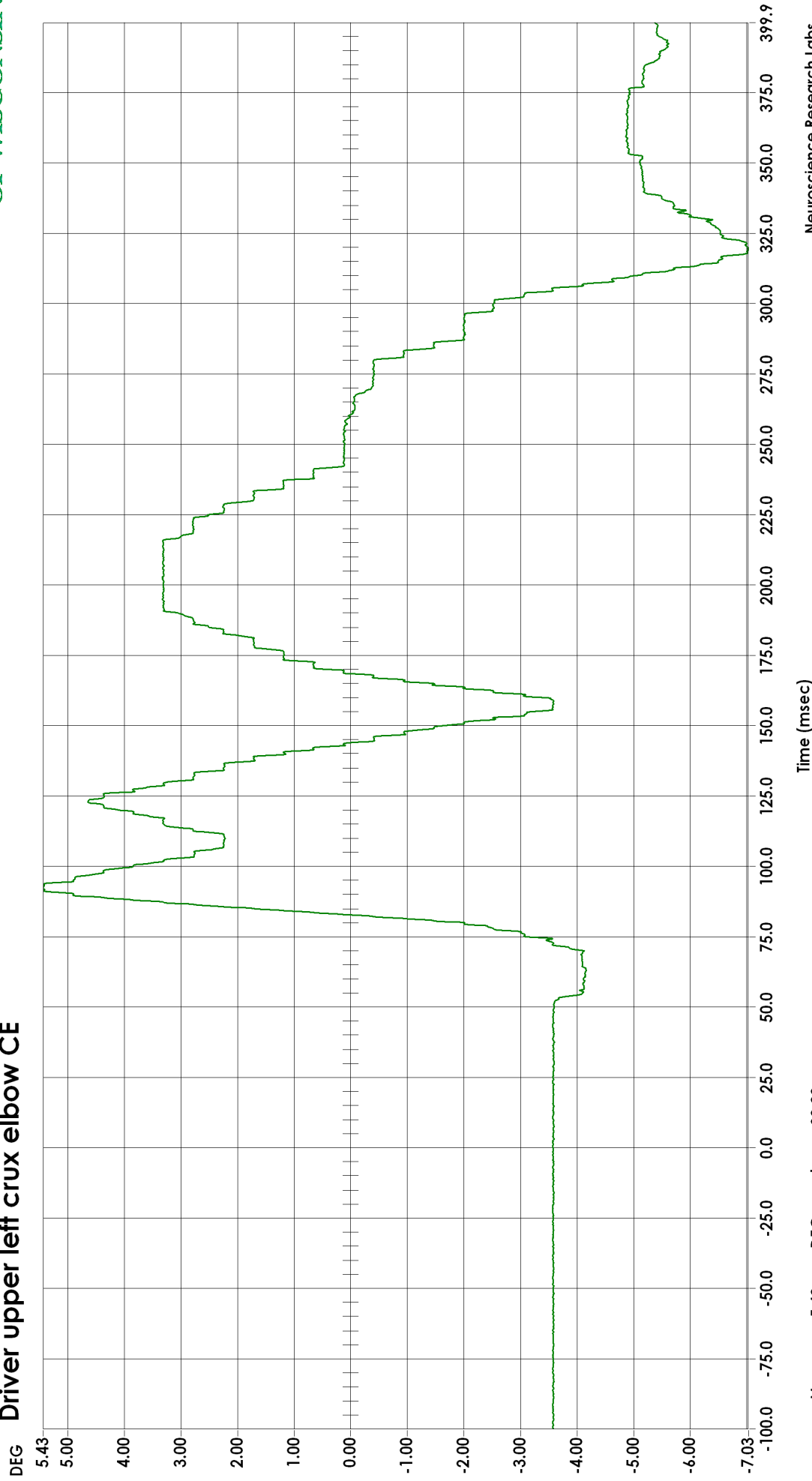


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHLU  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_0529

### Driver upper left crux elbow CE



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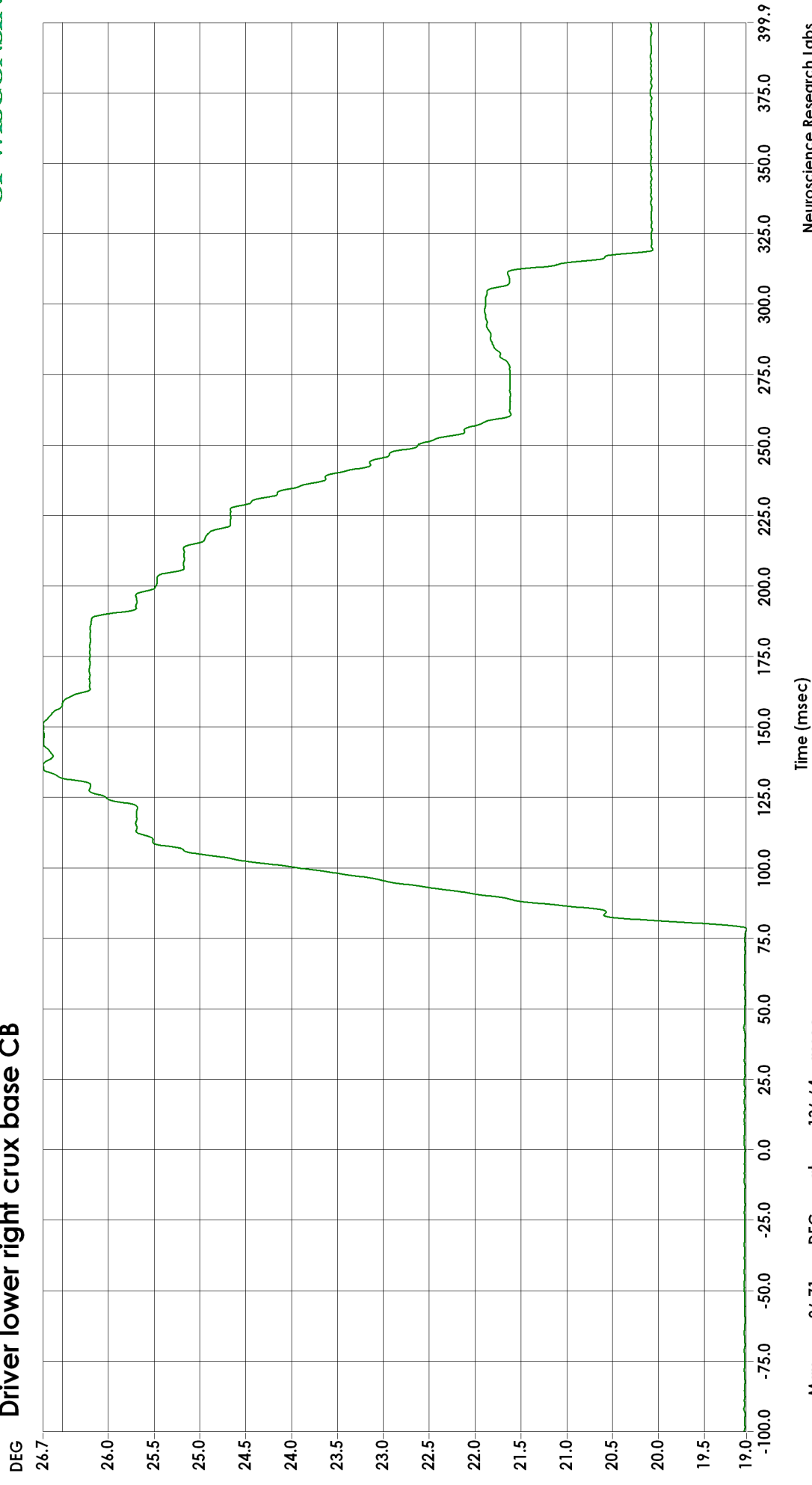


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHRL  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_0043

### Driver lower right crux base CB



**Max** 26.71 DEG at 136.64 msec  
**Min** 19.04 DEG at 78.32 msec

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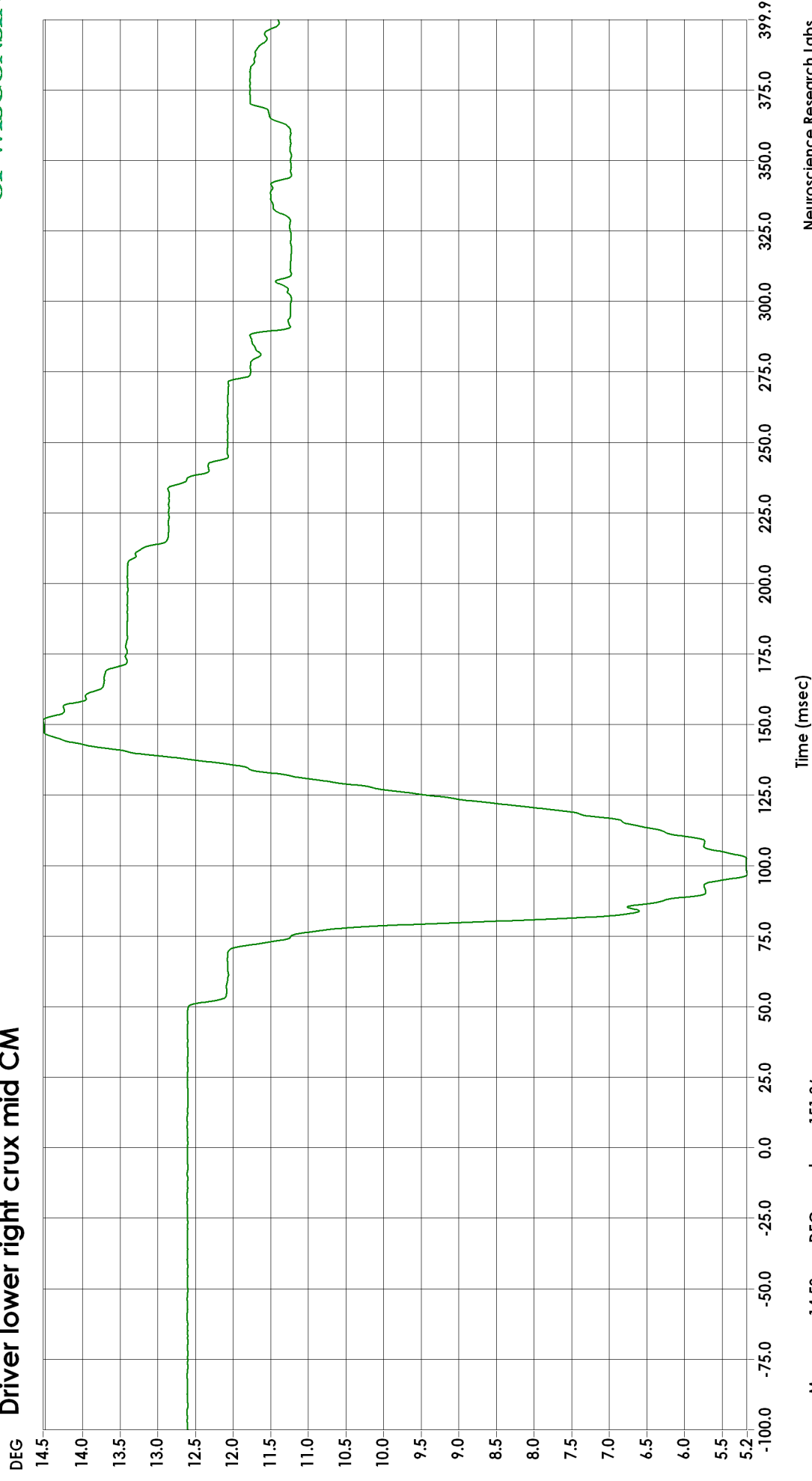
**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**Sensor Location** CHRL  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_00706



### Driver lower right crux mid CM



**Max** 14.52 DEG at 151.36 msec  
**Min** 5.17 DEG at 96.96 msec

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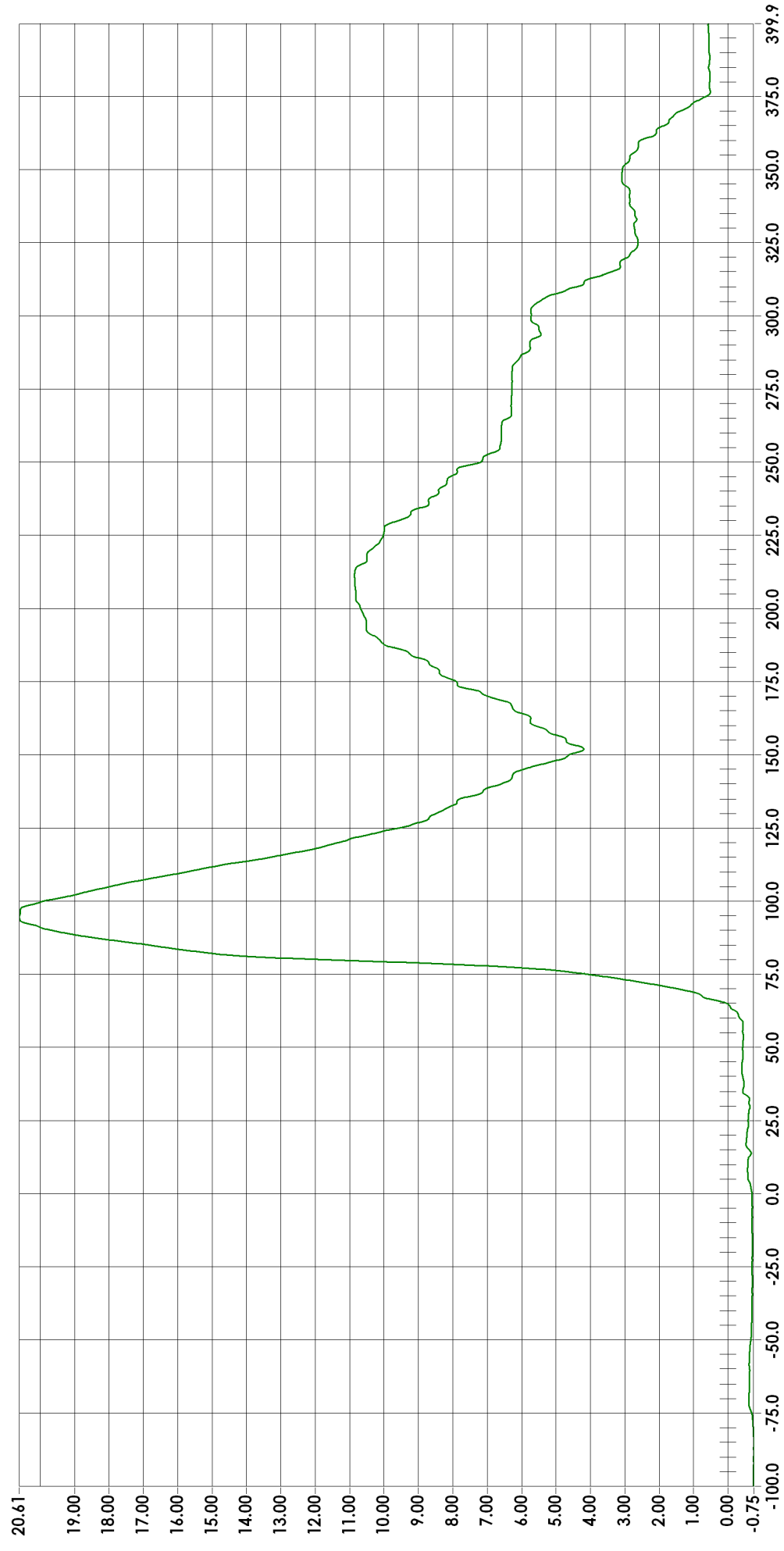


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHRL  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_0559

### Driver lower right crux elbow CE



**Max** 20.61 DEG at 94.48 msec  
**Min** -0.75 DEG at -85.36 msec

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SOI003 Plot 078

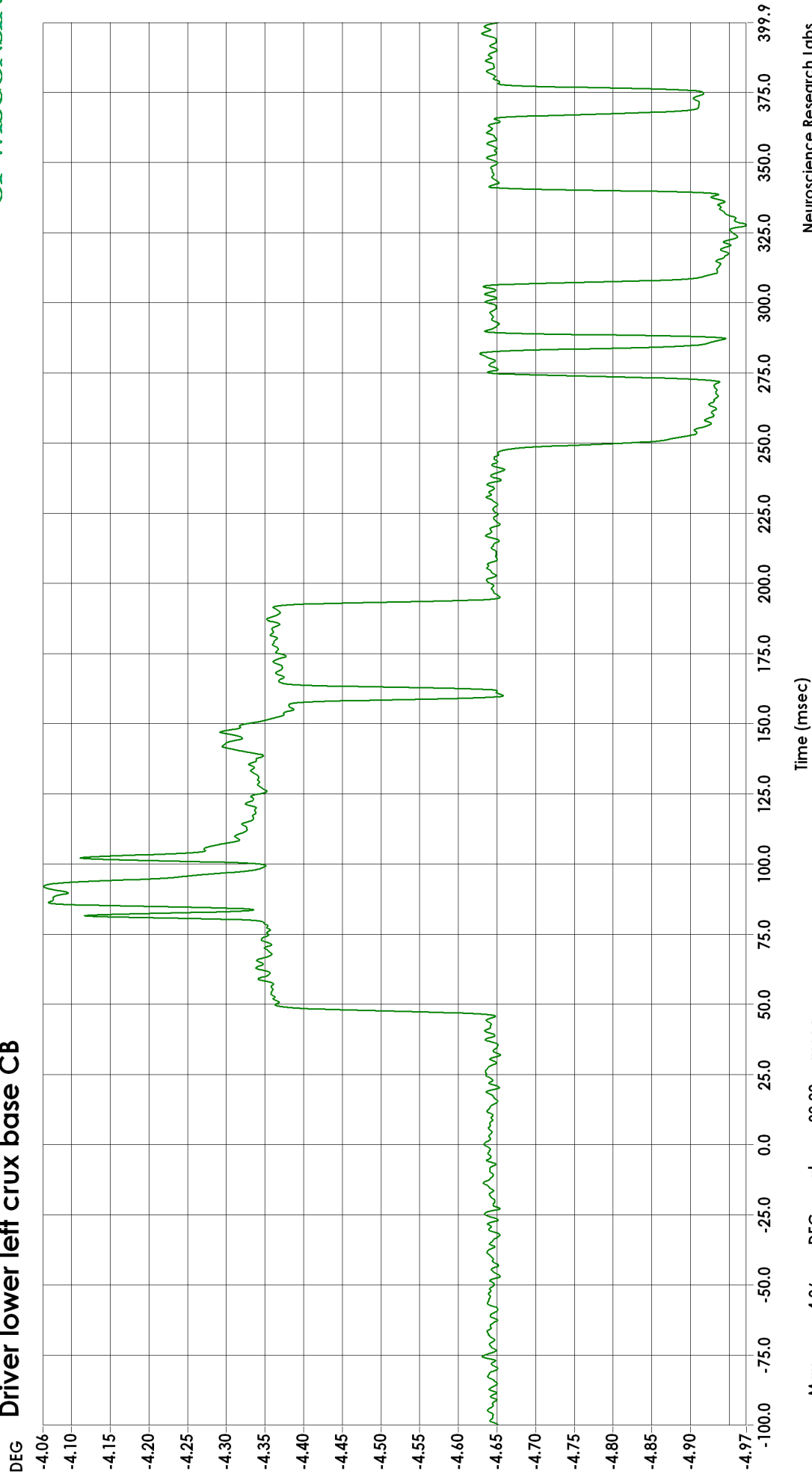


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHLL  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_23

### Driver lower left crux base CB



**Max** -4.06 DEG at 92.00 msec  
**Min** -4.97 DEG at 327.76 msec

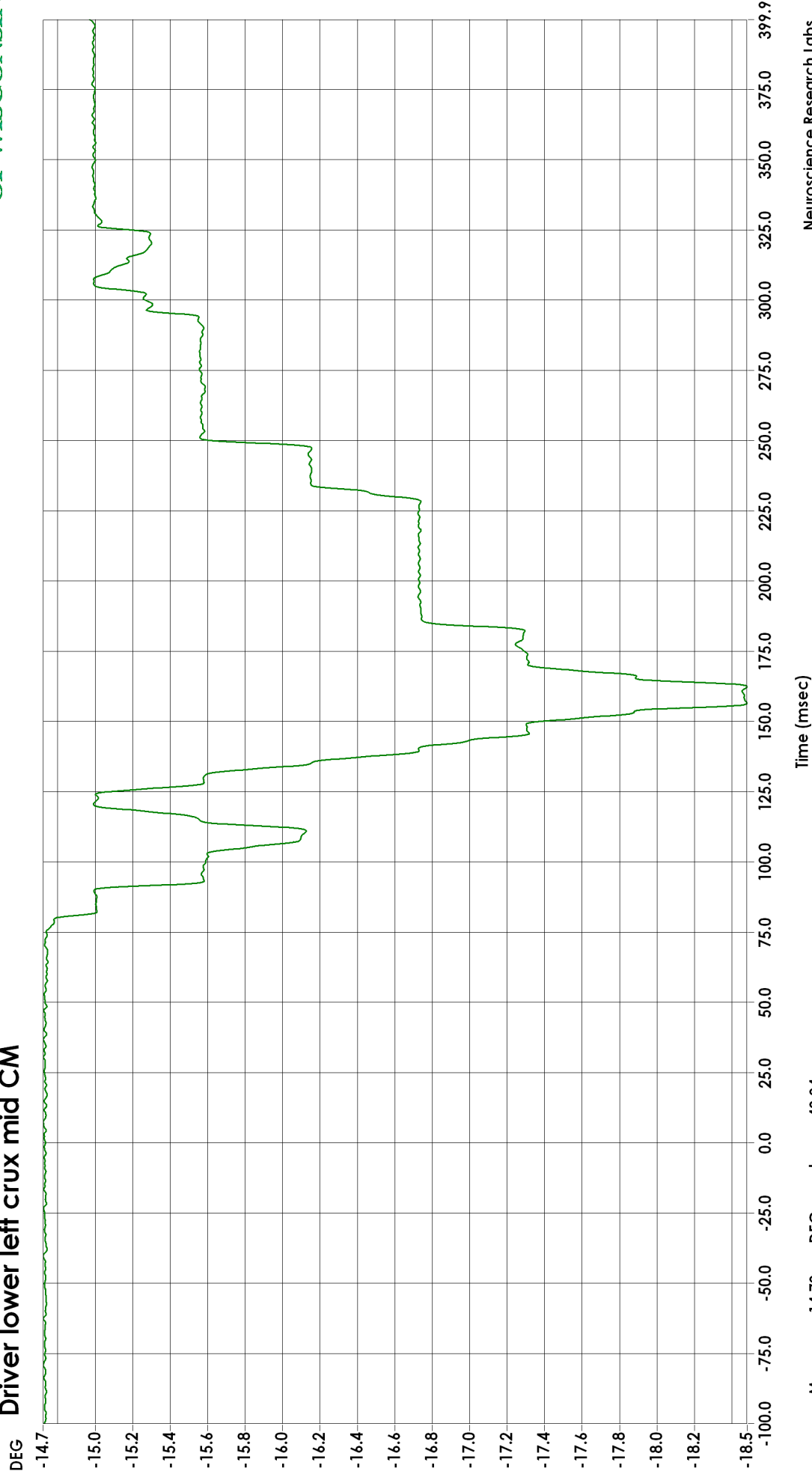
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SOI003 Plot 079



**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test  
**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250  
**Sensor Location** CHLL  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_0357

**Driver lower left crux mid CM**



**Max** -14.72 DEG at -40.24 msec  
**Min** -18.48 DEG at 162.40 msec

SOI003 Plot 080

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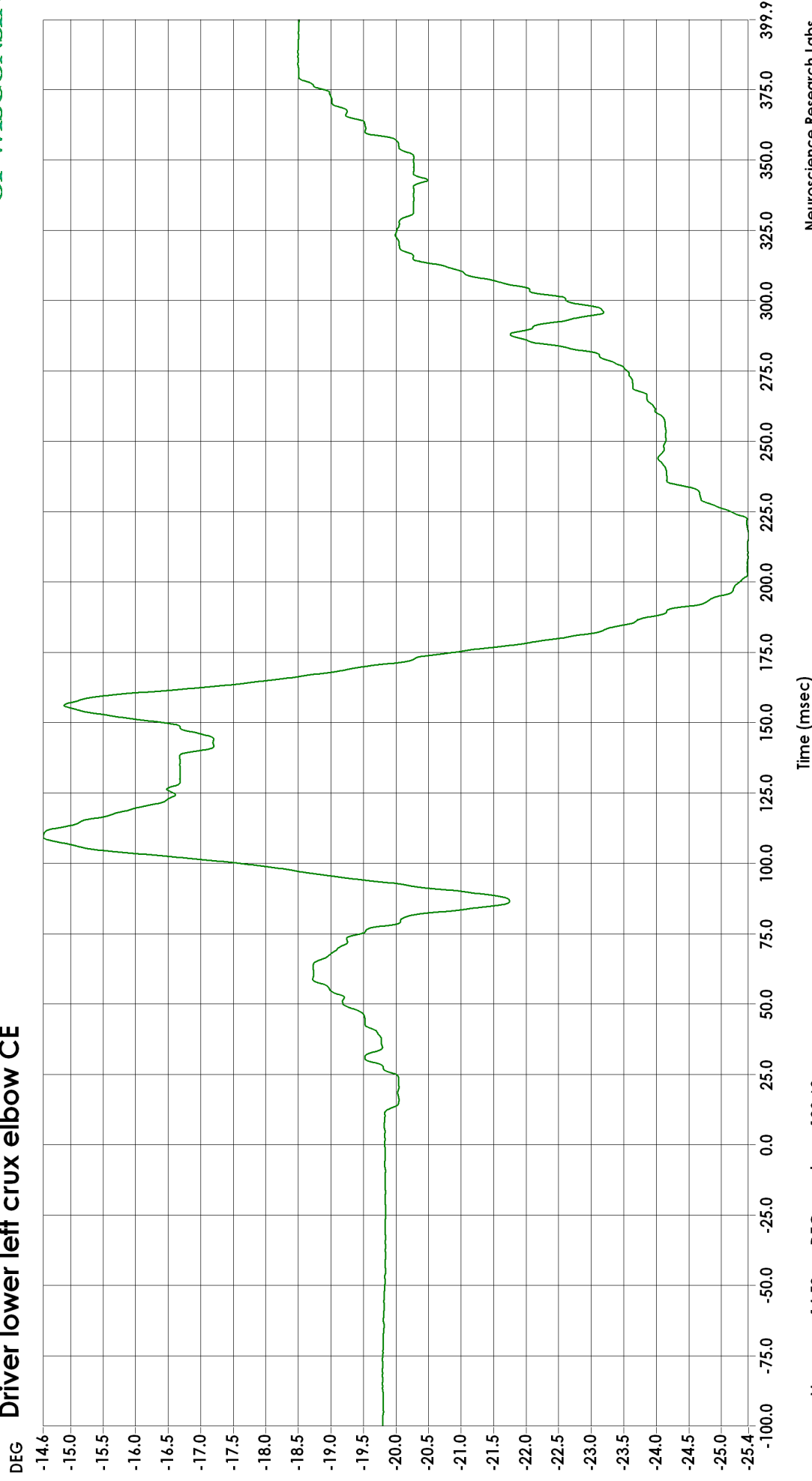
**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**Sensor Location** CHLL  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** CRUX\_0317



### Driver lower left crux elbow CE



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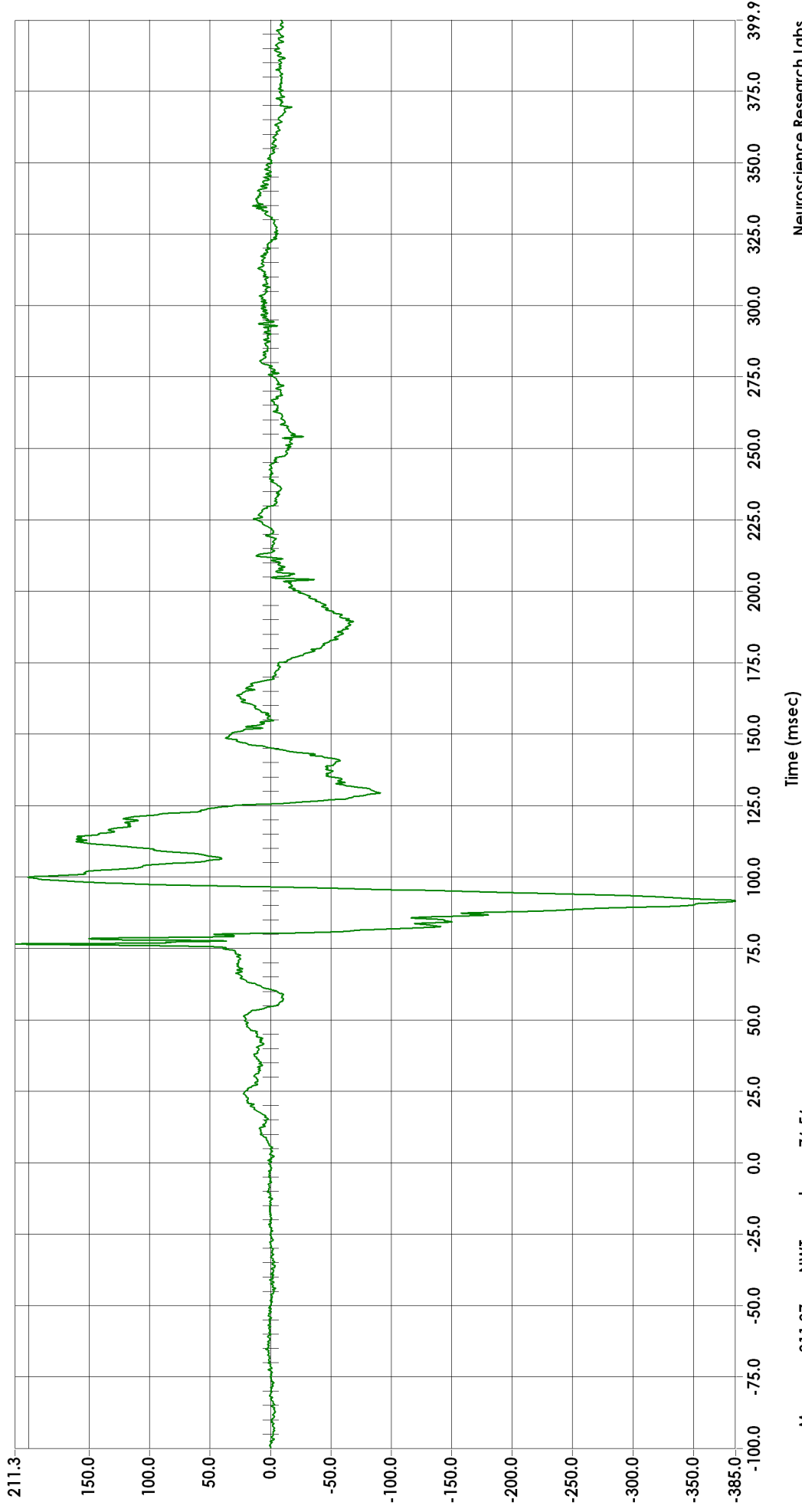


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBRU  
**Sensor Info** Denton 4509J  
**Serial Number** 4509J\_107\_FX

### Driver right upper tibia (x) force XL

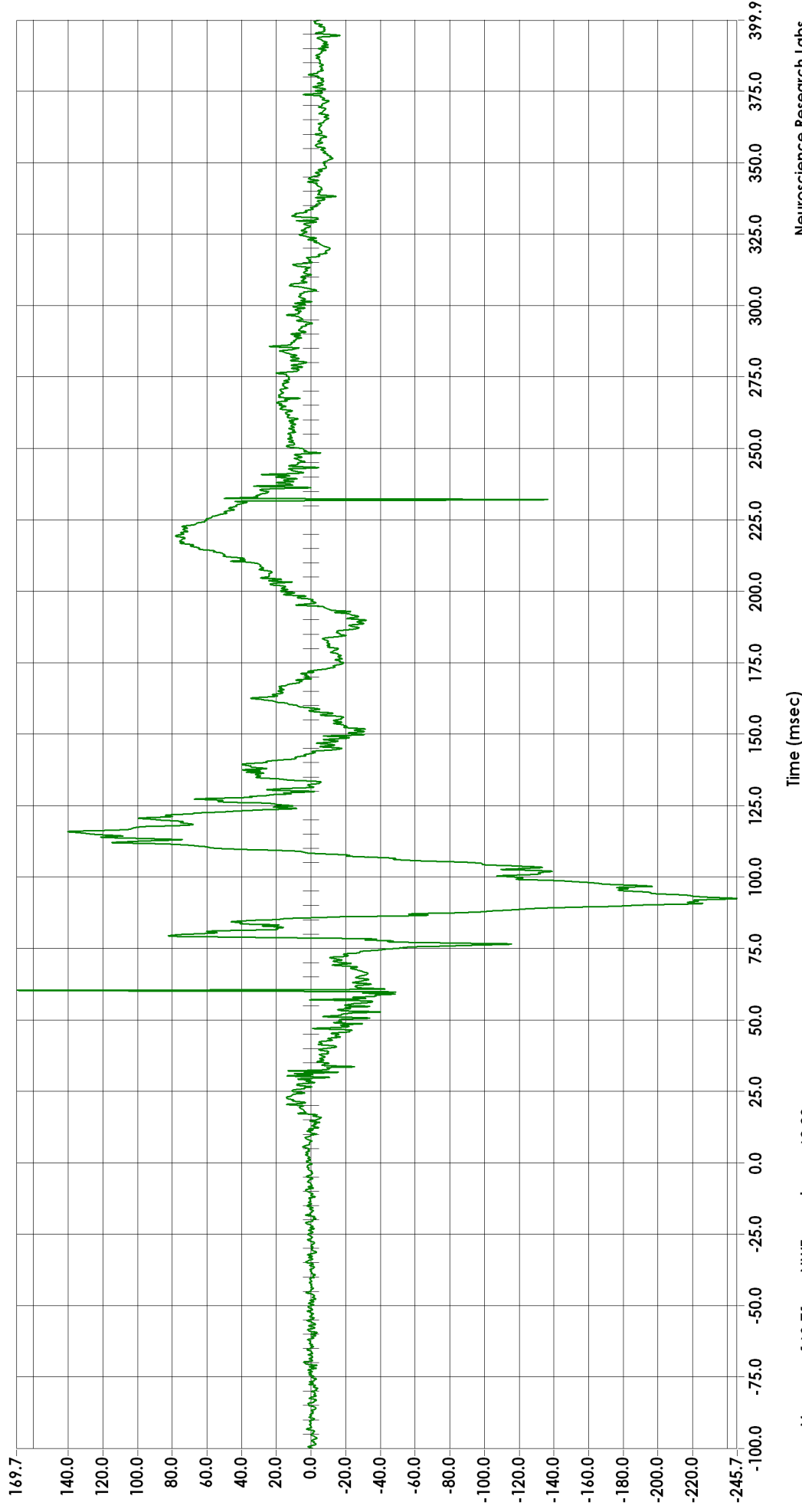


**Max** 211.27 NWT at 76.56 msec  
**Min** -384.96 NWT at 91.60 msec

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC600
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	TBRU
		<b>Sensor Info</b>	Denton 4509J
		<b>Serial Number</b>	4509J_107_FY

**Driver right upper tibia (y) force YL**



<b>Max</b>	169.71	<b>NWT</b>	at	60.32	<b>msec</b>
<b>Min</b>	-245.69	<b>NWT</b>	at	92.48	<b>msec</b>

SOI003 Plot 083

Time (msec)

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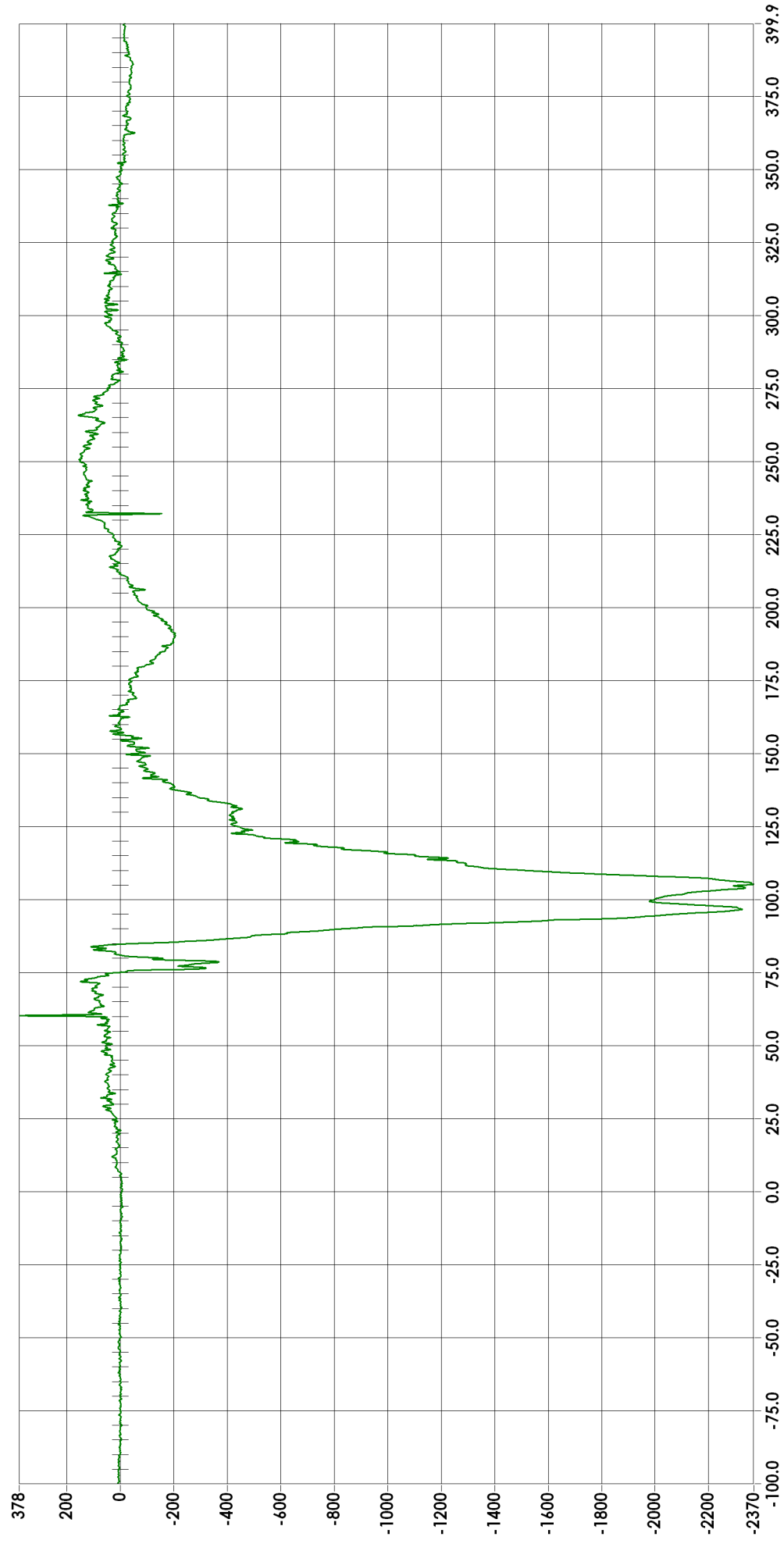


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBRU  
**Sensor Info** Denton 4509J  
**Serial Number** 4509J\_107\_FZ

### Driver right upper tibia (z) force ZL



**Max** 378.48 NWT at 60.32 msec  
**Min** -2369.60 NWT at 105.20 msec

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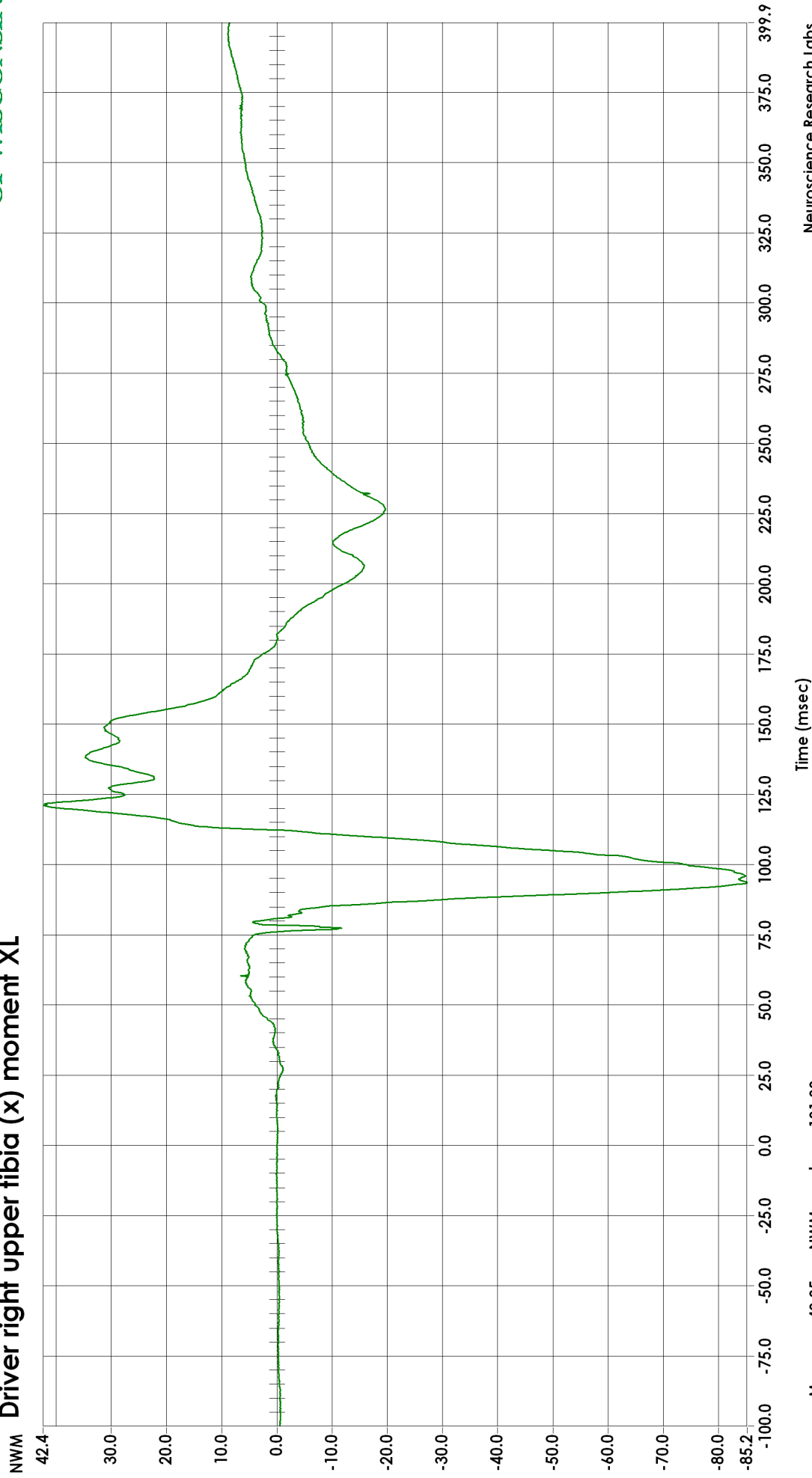


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBRU  
**Sensor Info** Denton 4509J  
**Serial Number** 4509J\_107\_MX

### Driver right upper tibia (x) moment XL



**Max** 42.35 NWM at 121.20 msec  
**Min** -85.21 NWM at 93.60 msec

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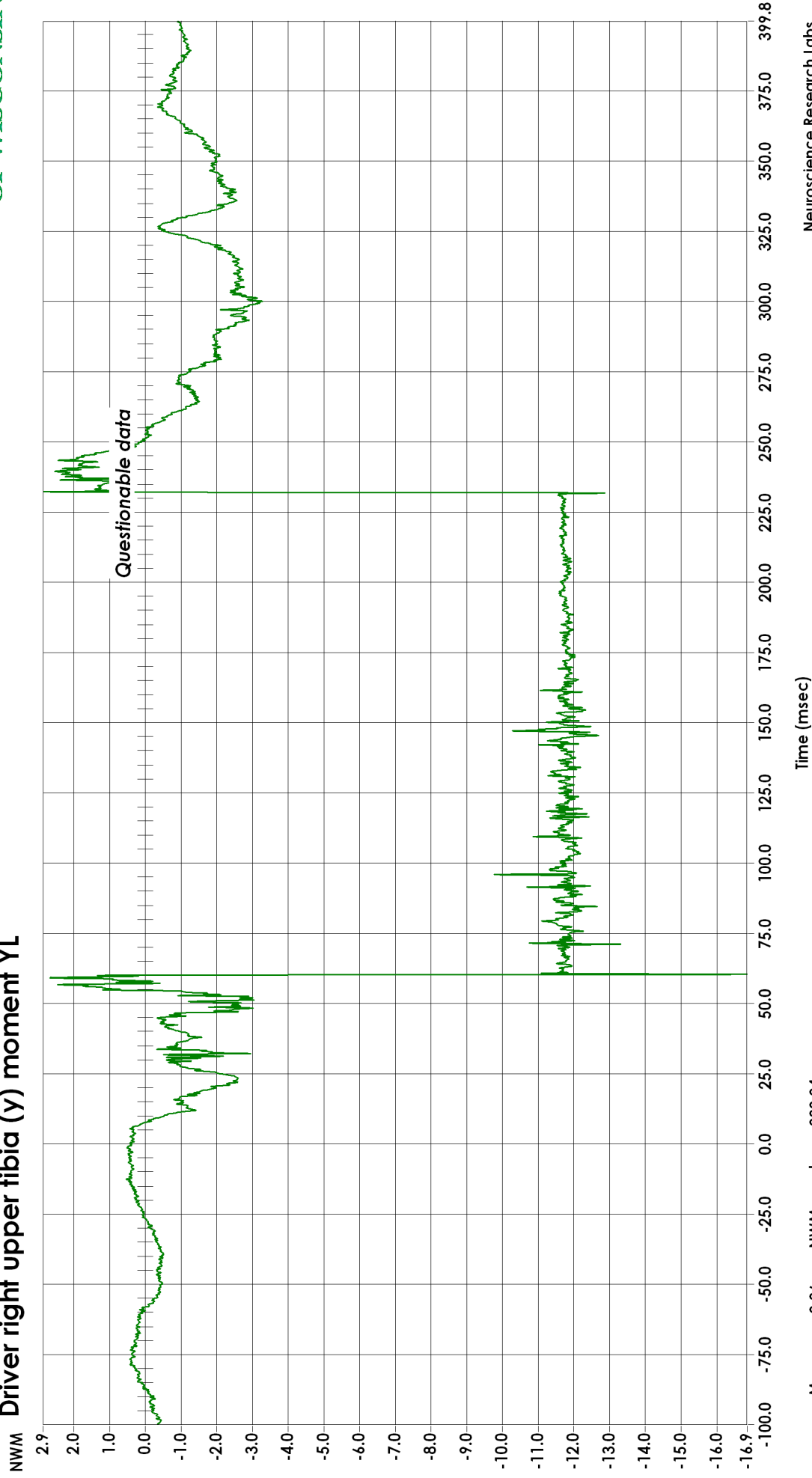


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBRU  
**Sensor Info** Denton 4509J  
**Serial Number** 4509J\_107\_MY

### Driver right upper tibia (y) moment YL



**Max** 2.86 **NWM** at 232.24 msec  
**Min** -16.85 **NWM** at 60.40 msec

Time (msec)

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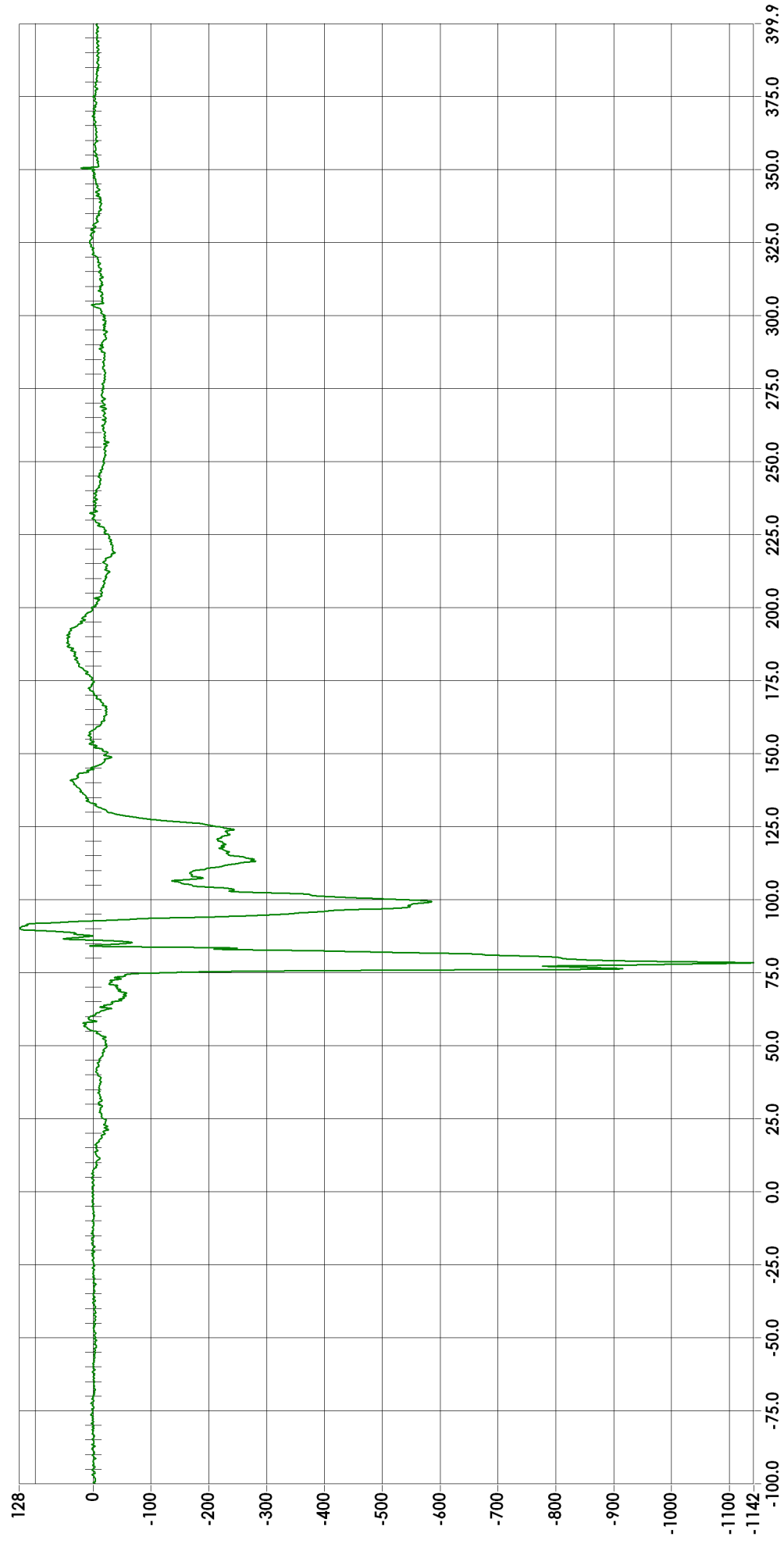


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBRL  
**Sensor Info** Denton 4929J  
**Serial Number** 4929J\_166\_FX

### Driver right lower tibia (x) force XL



**Max** 127.70 NWT at 90.24 msec  
**Min** -1142.21 NWT at 78.32 msec

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SOI003 Plot 087

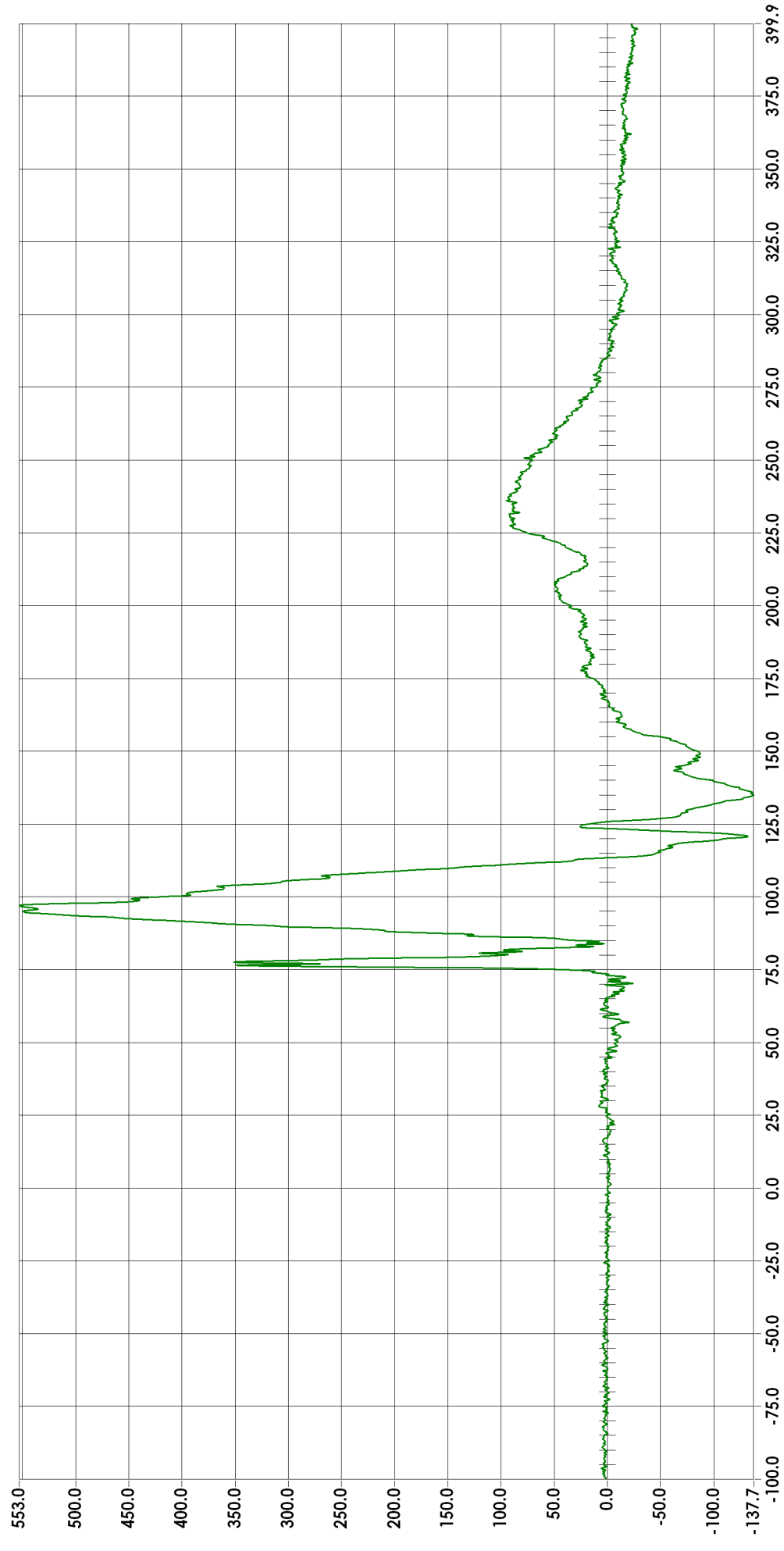


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBRL  
**Sensor Info** Denton 4929J  
**Serial Number** 4929J\_166\_FY

### Driver right lower tibia (y) force YL



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**SOI003 Plot 088**

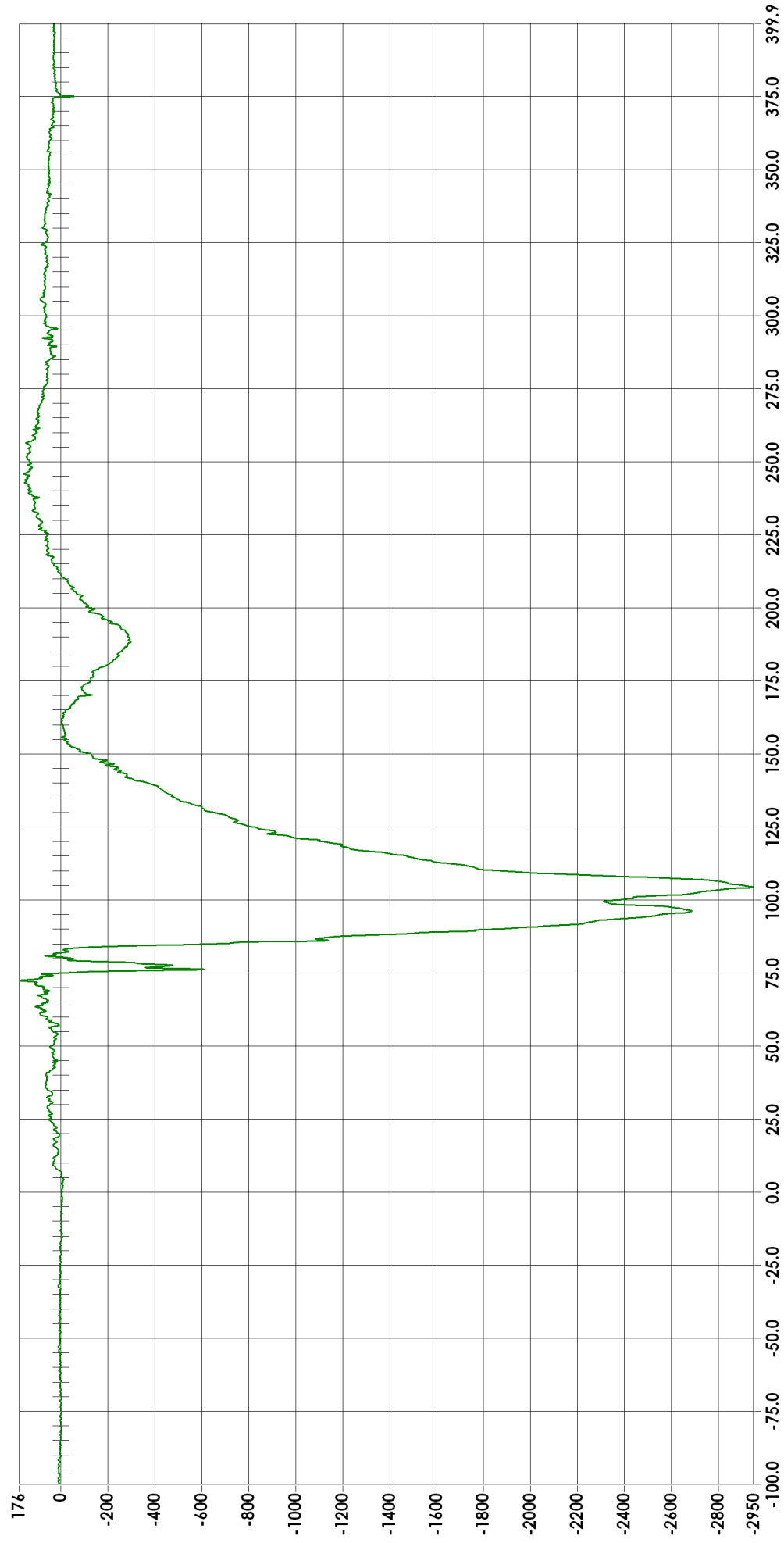


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBRL  
**Sensor Info** Denton 4929J  
**Serial Number** 4929J\_166\_FZ

### Driver right lower tibia (z) force ZL



**Max** 176.05 NWT at 72.40 msec  
**Min** -2950.32 NWT at 104.40 msec

Time (msec)

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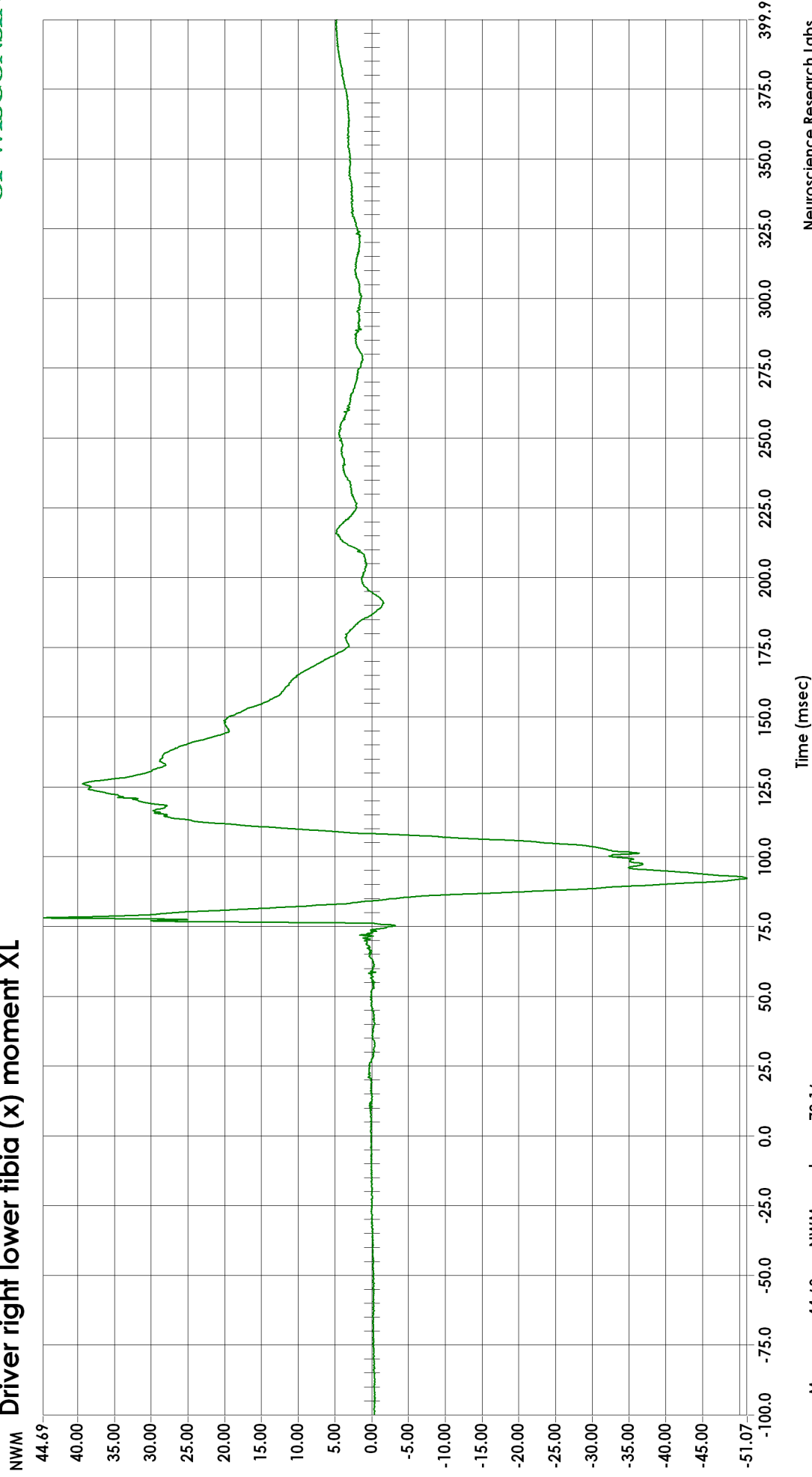


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBRL  
**Sensor Info** Denton 4929J  
**Serial Number** 4929J\_166\_MX

### Driver right lower tibia (x) moment XL



**Max** 44.69 NWM at 78.16 msec  
**Min** -51.07 NWM at 92.32 msec

SOI003 Plot 090

Time (msec)

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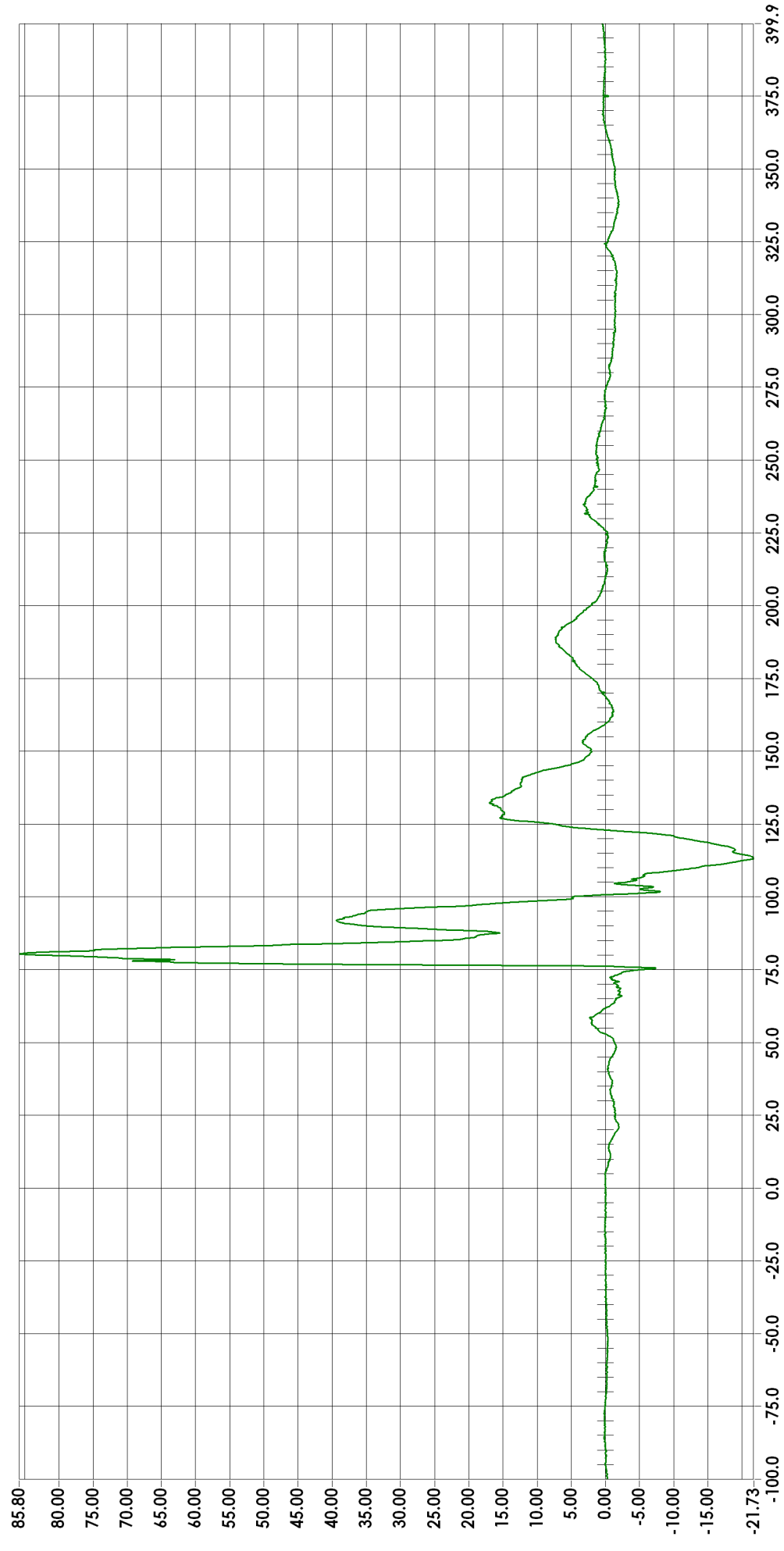


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBRL  
**Sensor Info** Denton 4929J  
**Serial Number** 4929J\_166\_MY

### Driver right lower tibia (y) force YL



**Max** 85.80 NWM at 80.40 msec  
**Min** -21.73 NWM at 113.12 msec  
 SOI003 Plot 091

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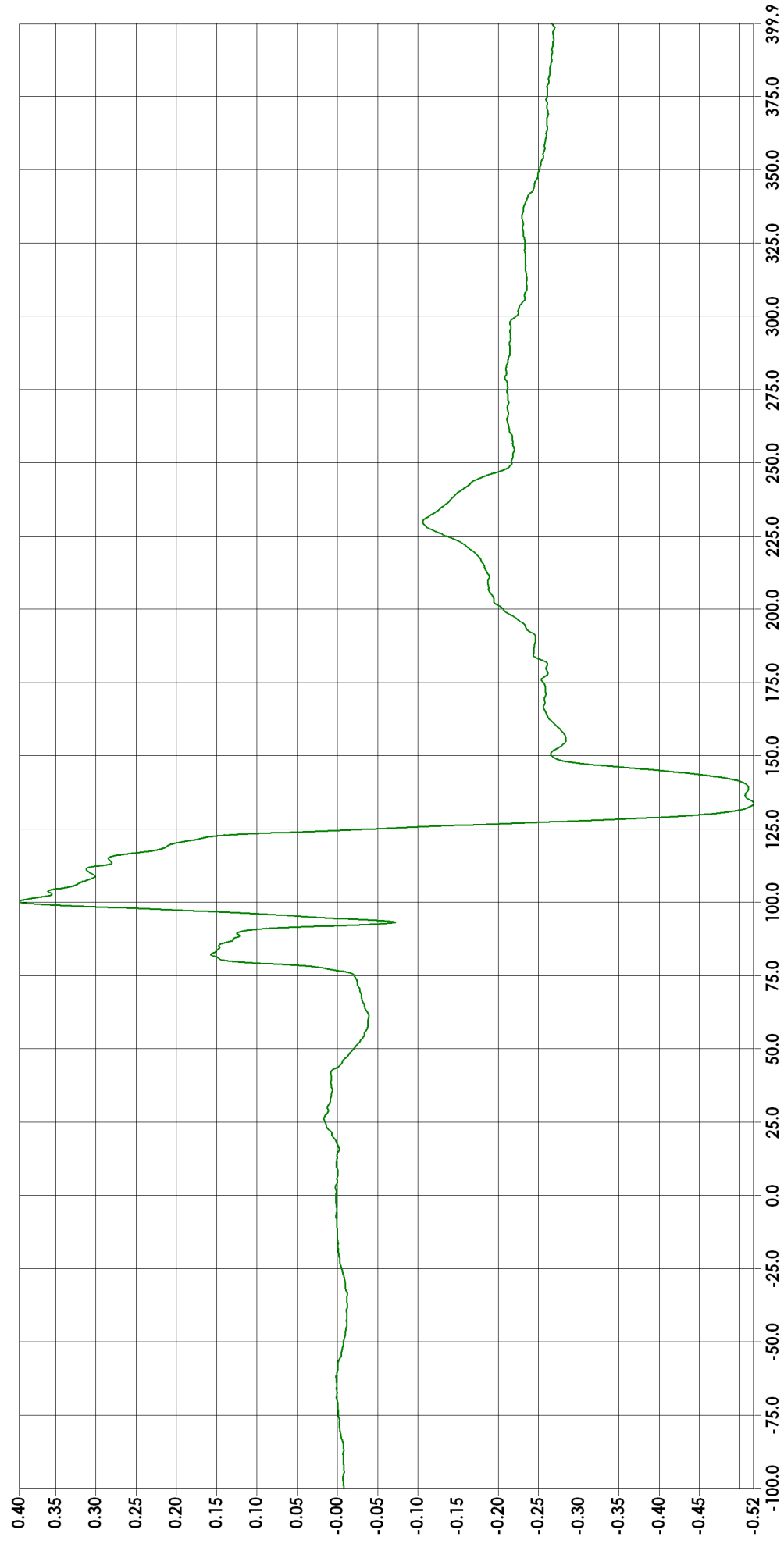


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** KNER  
**Sensor Info** Space Age Controls 150-0121VL  
**Serial Number** 14239

### Driver right knee shear (z) displacement ZL



Time (msec)

**Max** 0.40 mm at 100.24 msec  
**Min** -0.52 mm at 133.84 msec

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SOI003 Plot 092

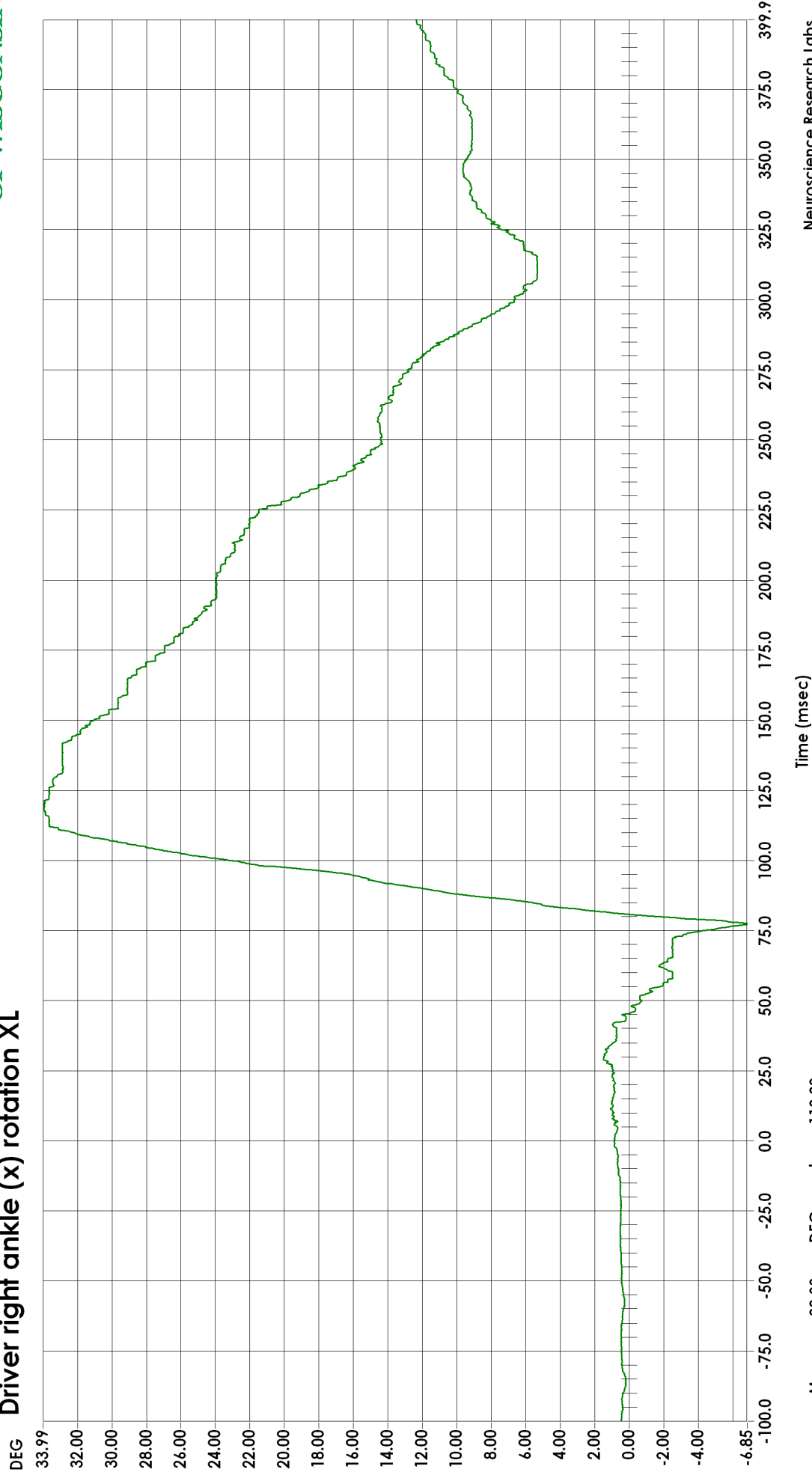


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** ANKR  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** ANKLX 0254

### Driver right ankle (x) rotation XL



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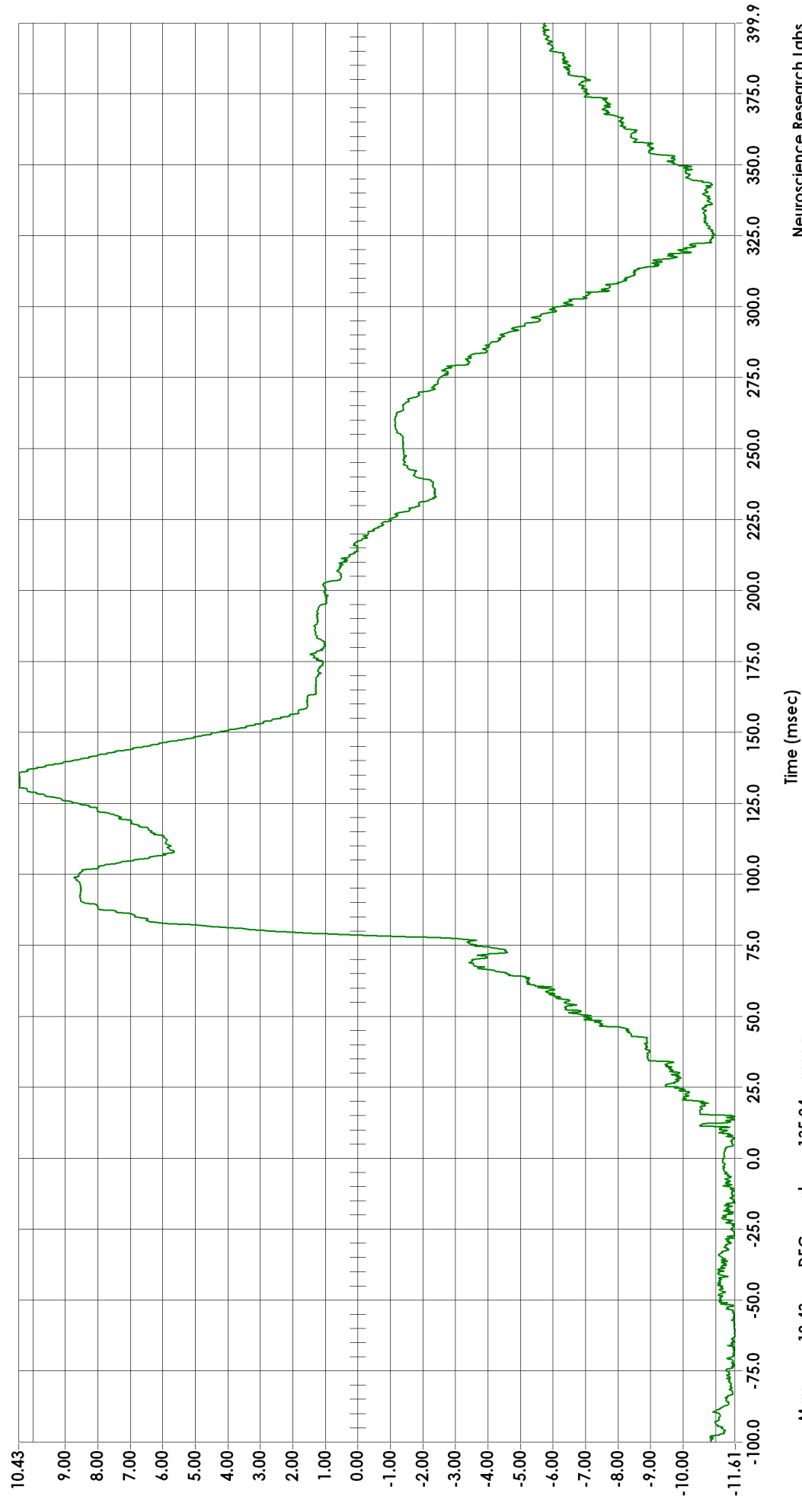


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** ANKR  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** ANKLX 0255

### Driver right ankle (y) rotation YL

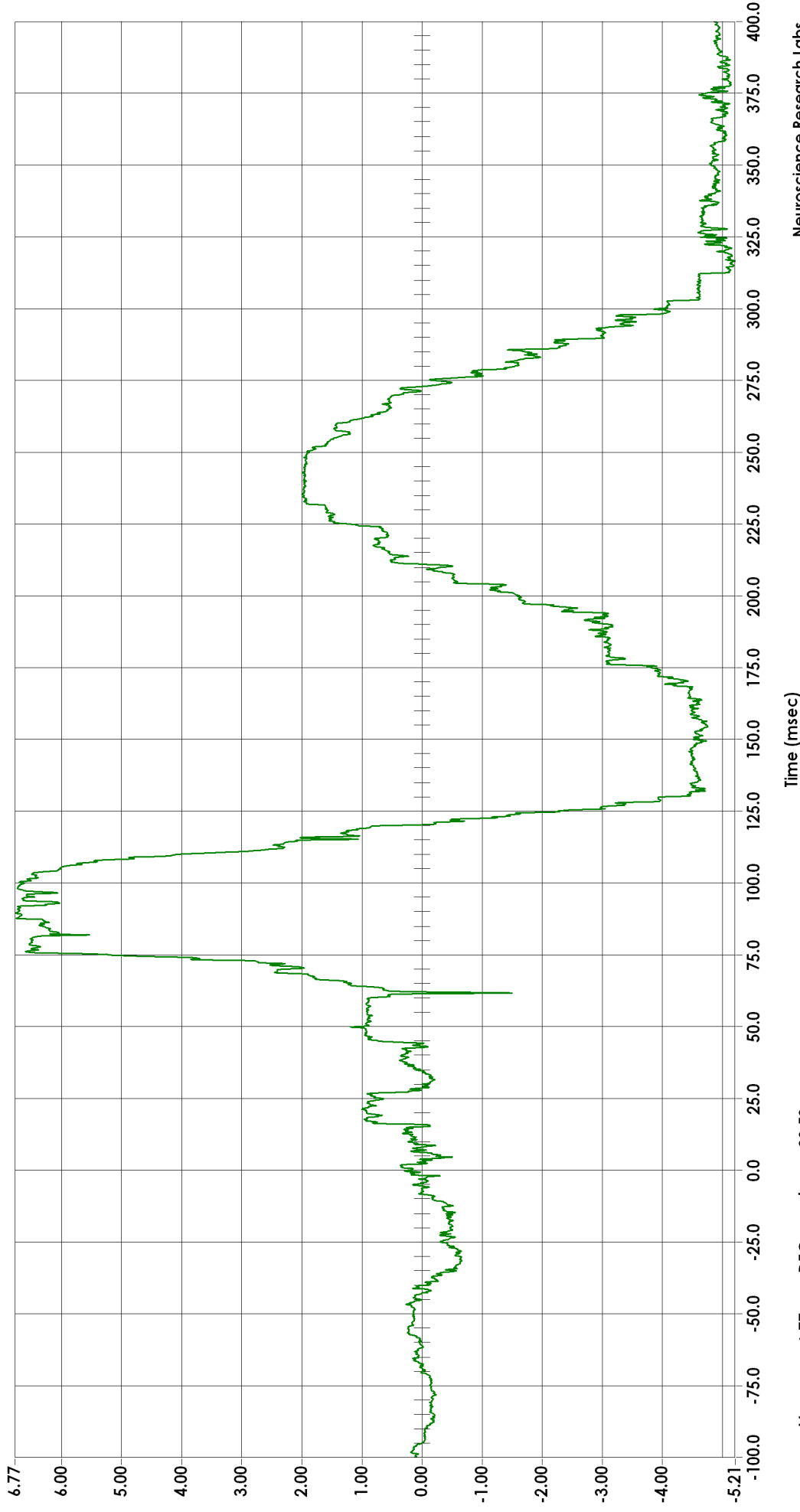


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**Max** 10.43 DEG at 135.04 msec  
**Min** -11.61 DEG at -15.60 msec  
 SOI003 Plot 094

<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	ANKR
		<b>Sensor Info</b>	CONTELEC PD210-4B
		<b>Serial Number</b>	ANKLX 0256

### Driver right ankle (z) rotation ZL



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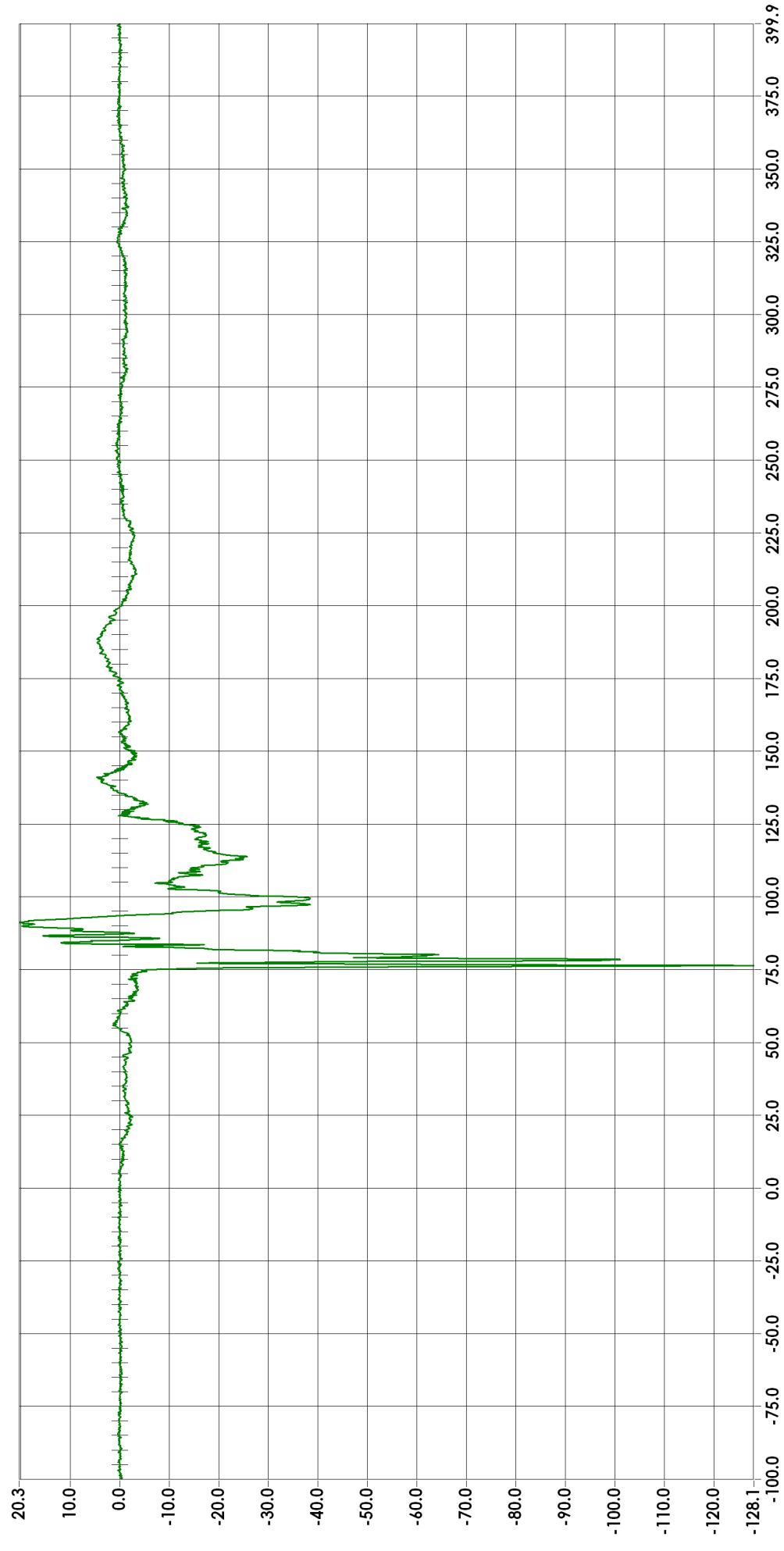


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TIBR  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P52114

### Driver right tibia (x) acceleration XL



**Max** 20.28 G's at 91.28 msec  
**Min** -128.08 G's at 76.40 msec  
 SOI003 Plot 09%

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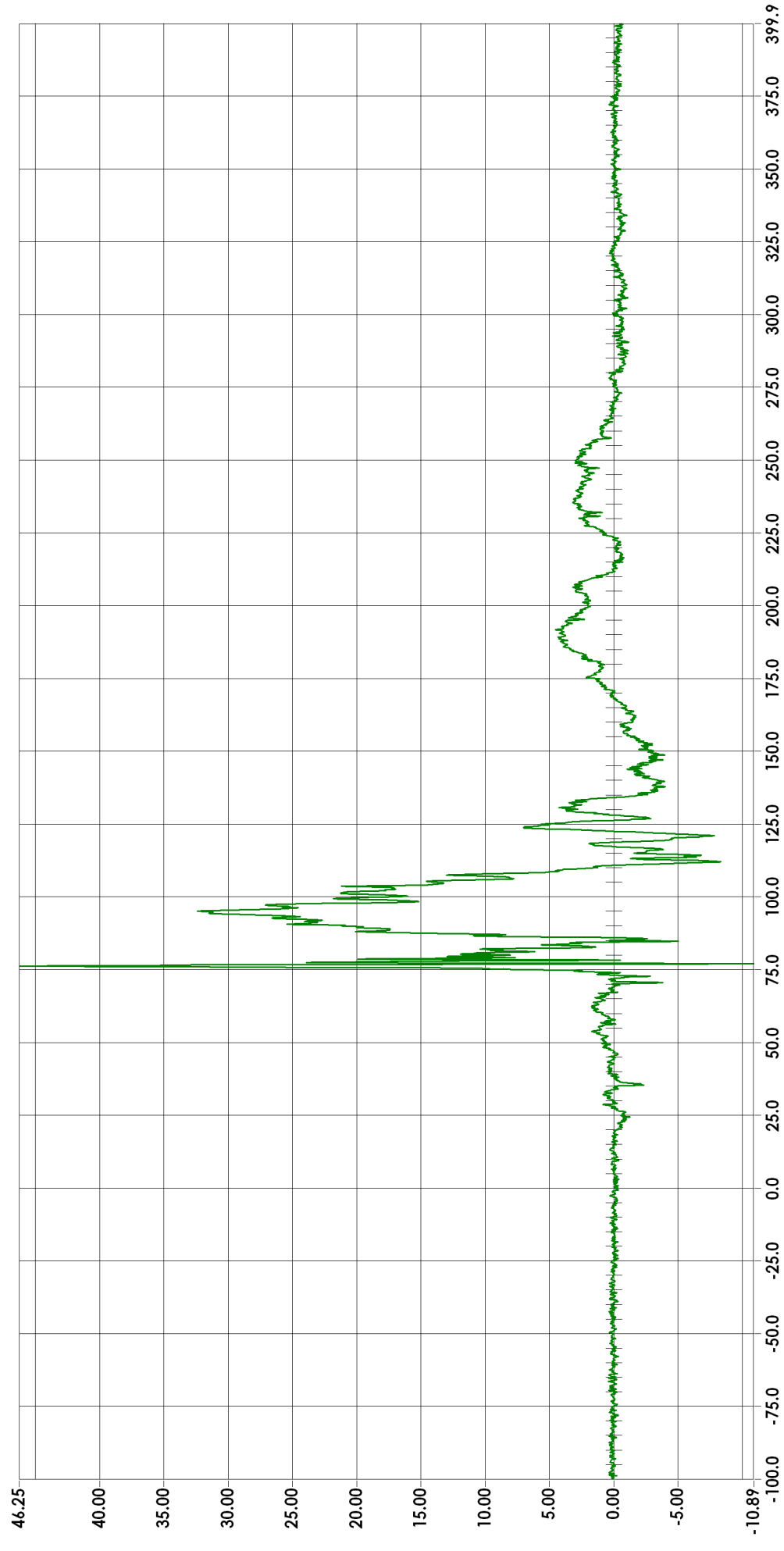


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TIBR  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P52087

### Driver right tibia (y) acceleration YL



**Max** 46.25 G's at 76.24 msec  
**Min** -10.89 G's at 77.04 msec

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SOI003 Plot 097

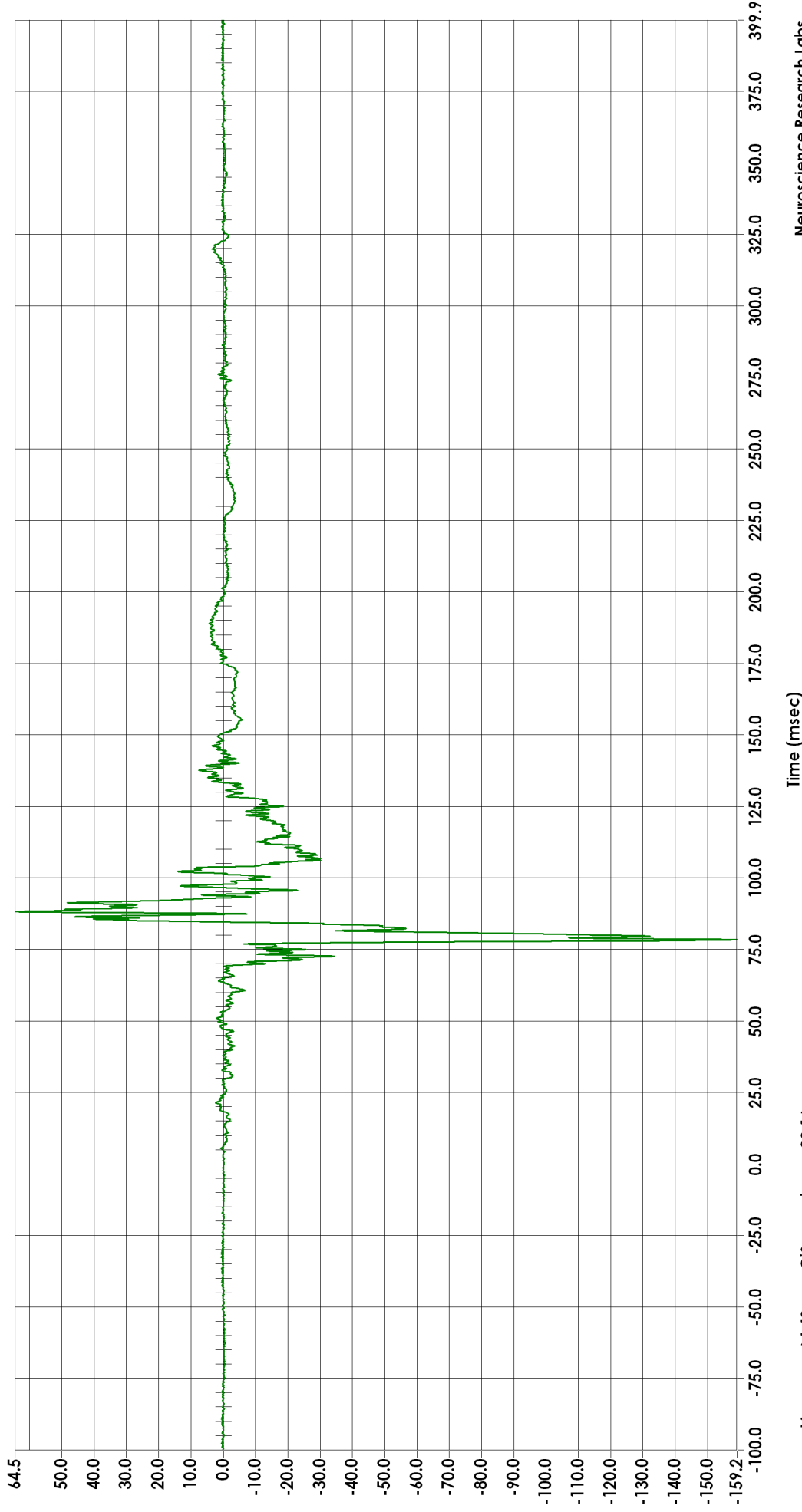


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FOTR  
**Sensor Info** ENTRAN EGEBC-2000  
**Serial Number** 98H13-F01

### G's Driver right foot (x) acceleration XL



**Max** 64.48 G's at 88.16 msec  
**Min** -159.16 G's at 78.40 msec

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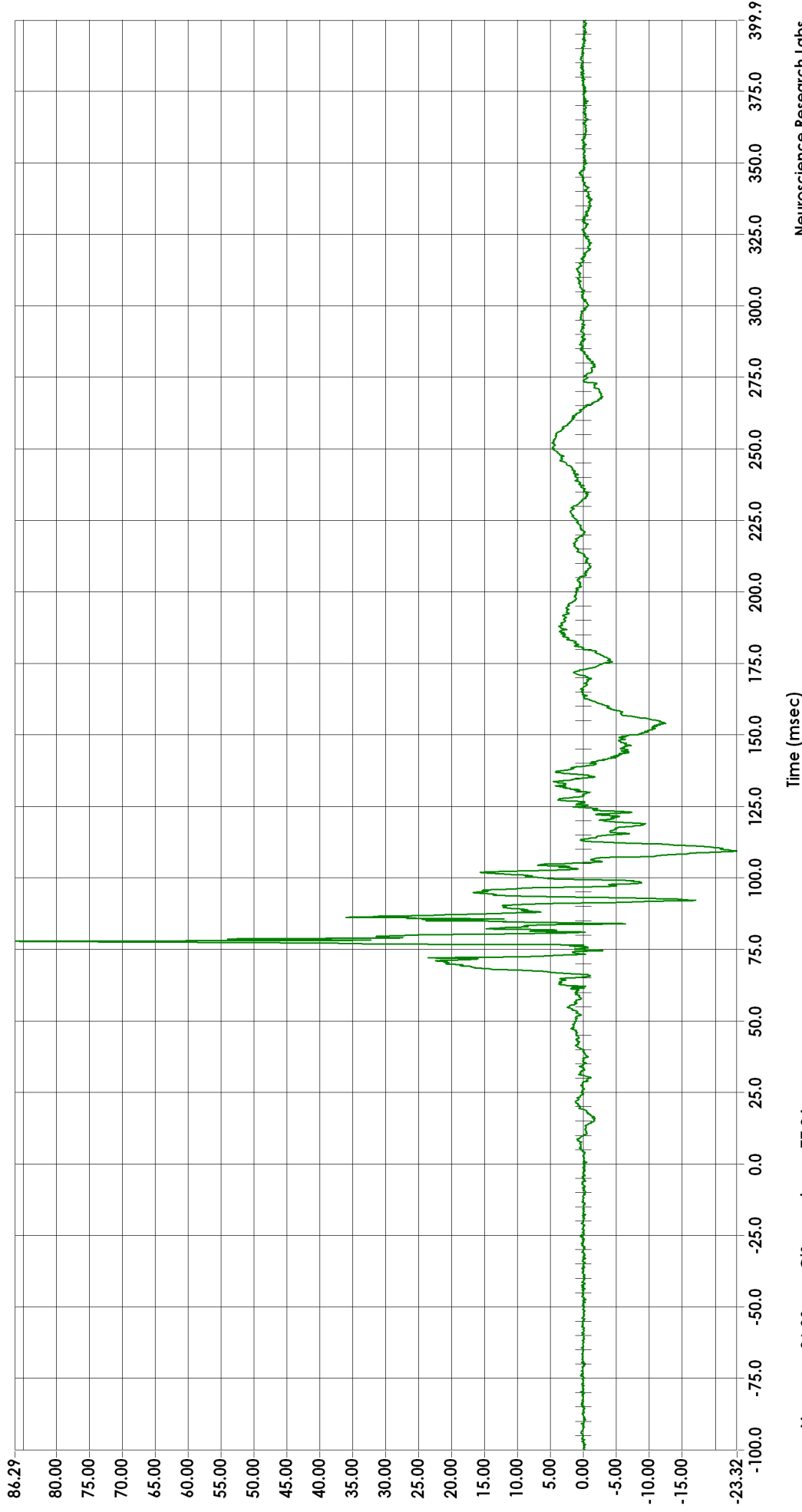


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FOTR  
**Sensor Info** ENTRAN EGEBC-2000  
**Serial Number** 98H10-F12

### Driver right foot (y) acceleration YL



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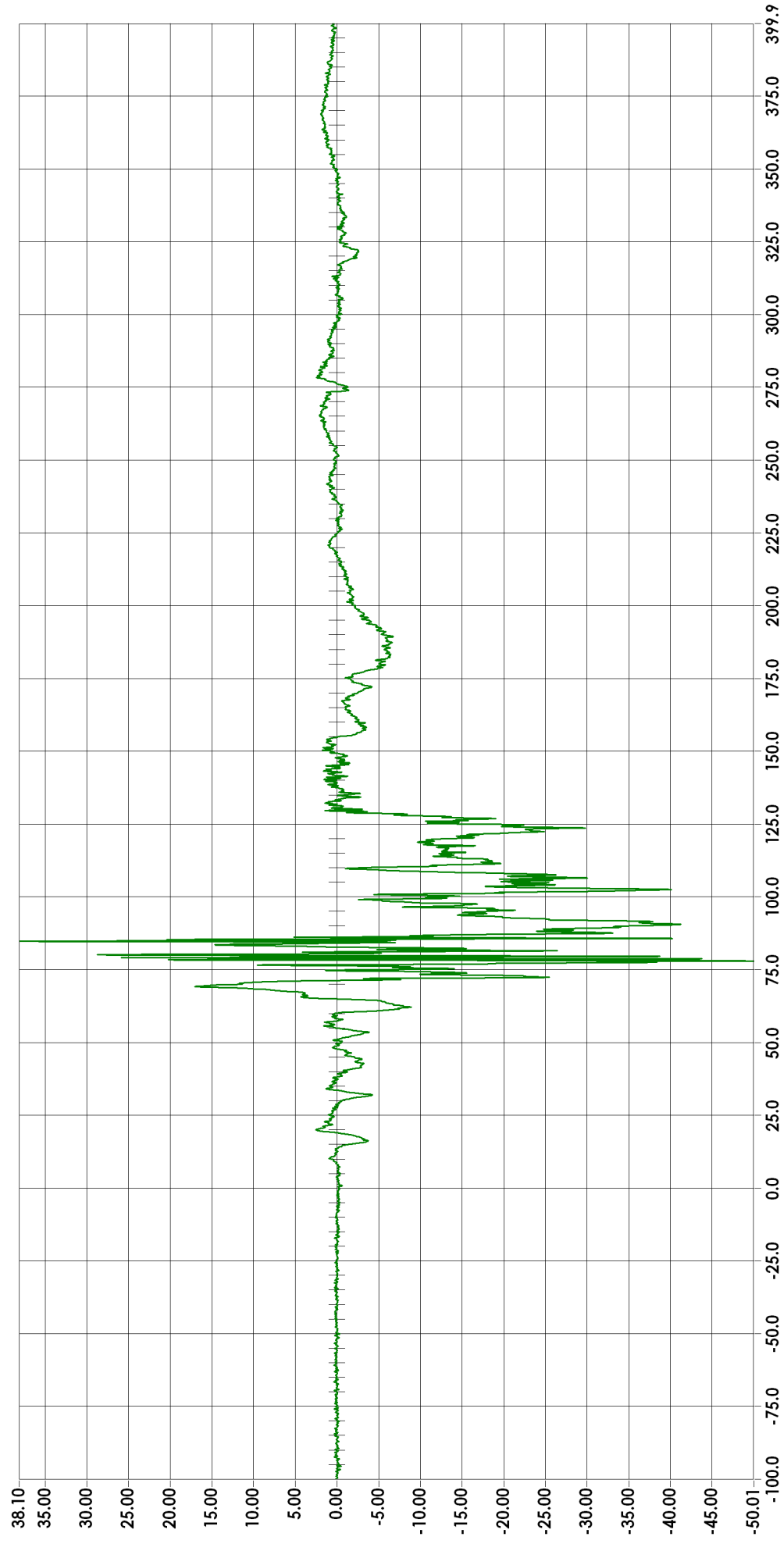


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FOTR  
**Sensor Info** ENTRAN EGE6G-2000  
**Serial Number** 06A07-R14

### Driver right foot (z) acceleration ZL



**Max** 38.10 G's at 84.72 msec  
**Min** -50.01 G's at 78.00 msec

Time (msec)

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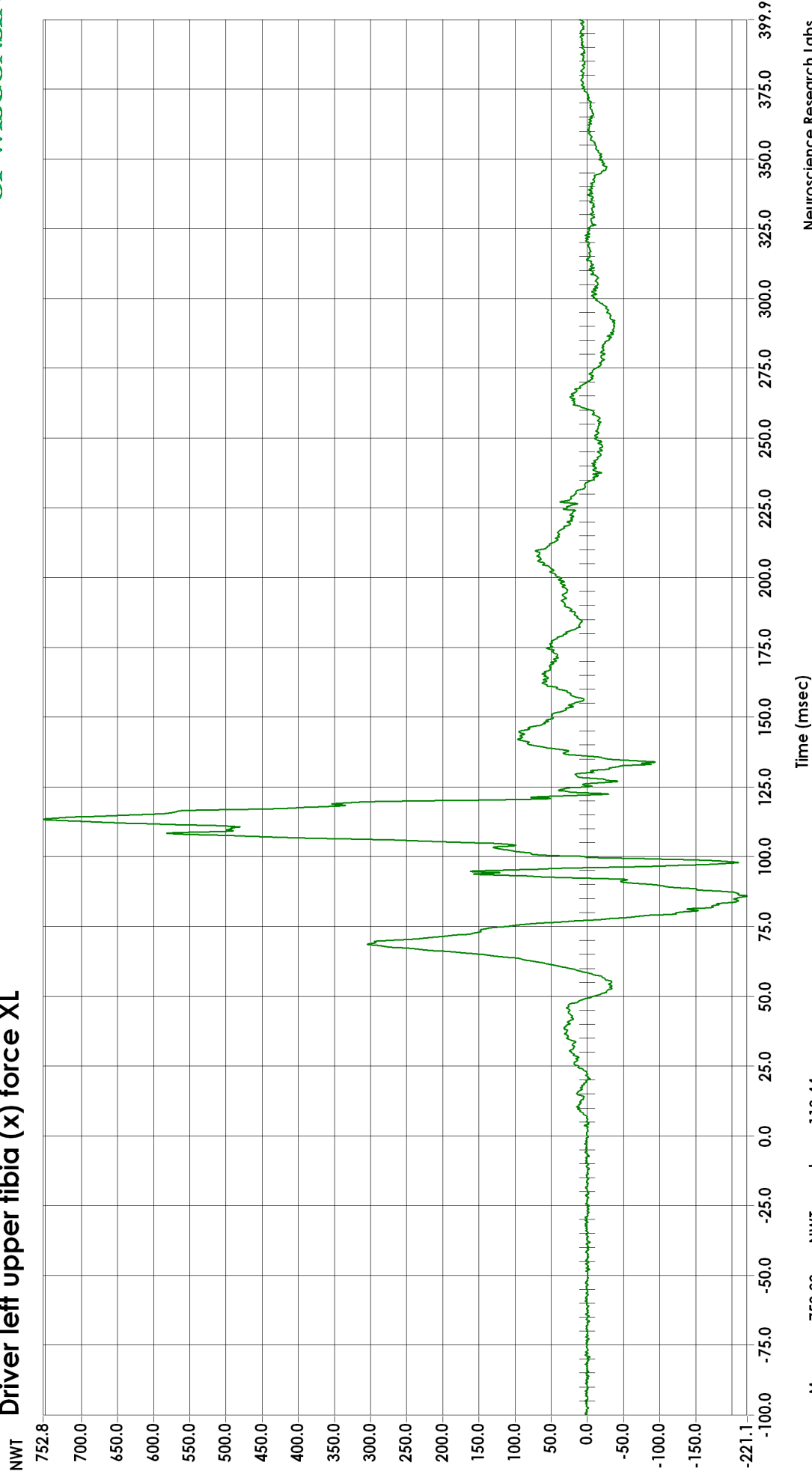


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBLU  
**Sensor Info** Denton 4509J  
**Serial Number** 4509J\_89\_FX

### Driver left upper tibia (x) force XL



**Max** 752.82 NWT at 113.44 msec  
**Min** -221.13 NWT at 85.92 msec

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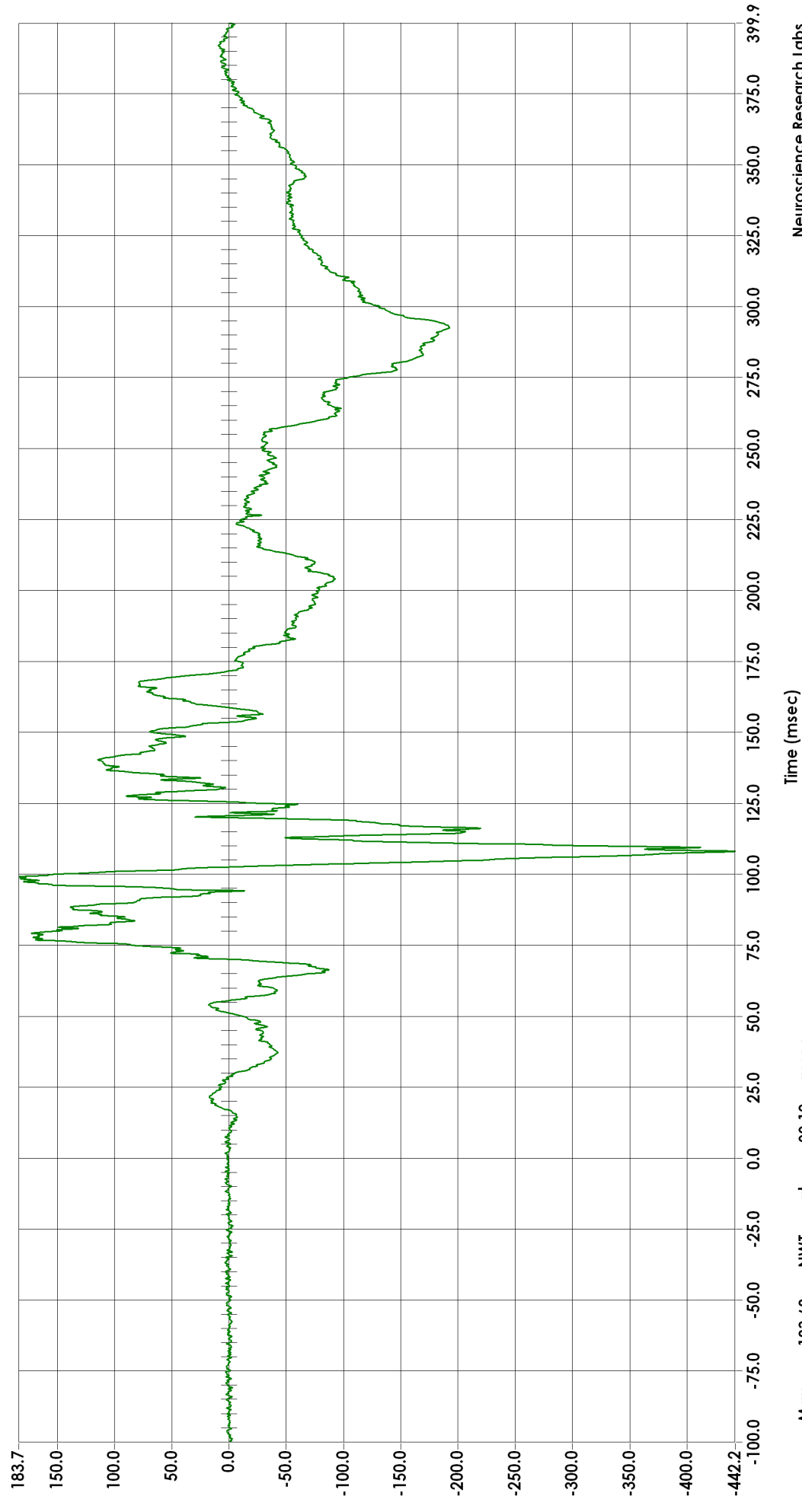


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBLU  
**Sensor Info** Denton 4509J  
**Serial Number** 4509J\_89\_FY

### Driver left upper tibia (y) force YL



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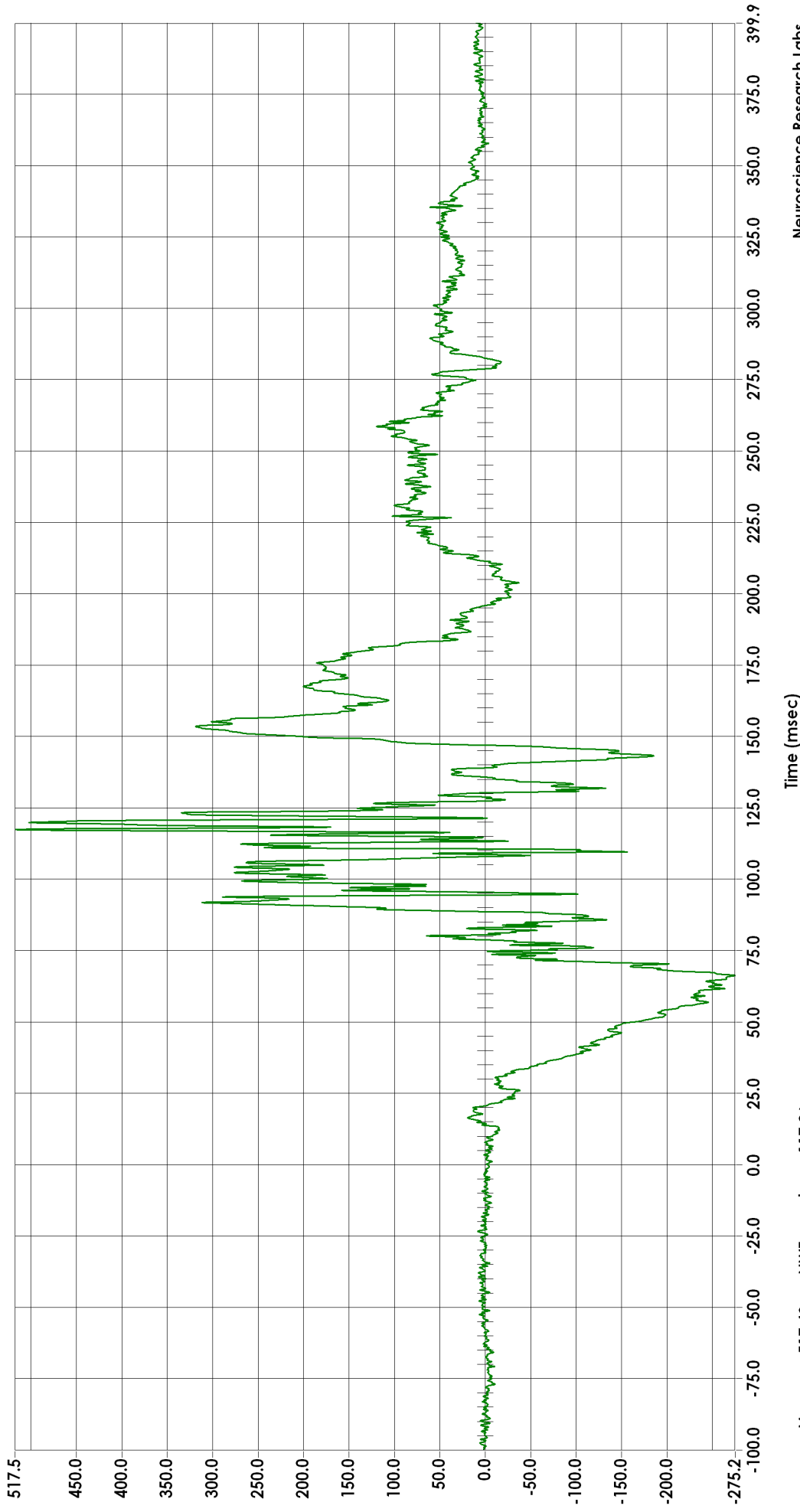


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBLU  
**Sensor Info** Denton 4509J  
**Serial Number** 4509J\_89\_FZ

### Driver left upper tibia (z) force ZL



**Max** 517.49 NWT at 117.36 msec  
**Min** -275.18 NWT at 66.24 msec

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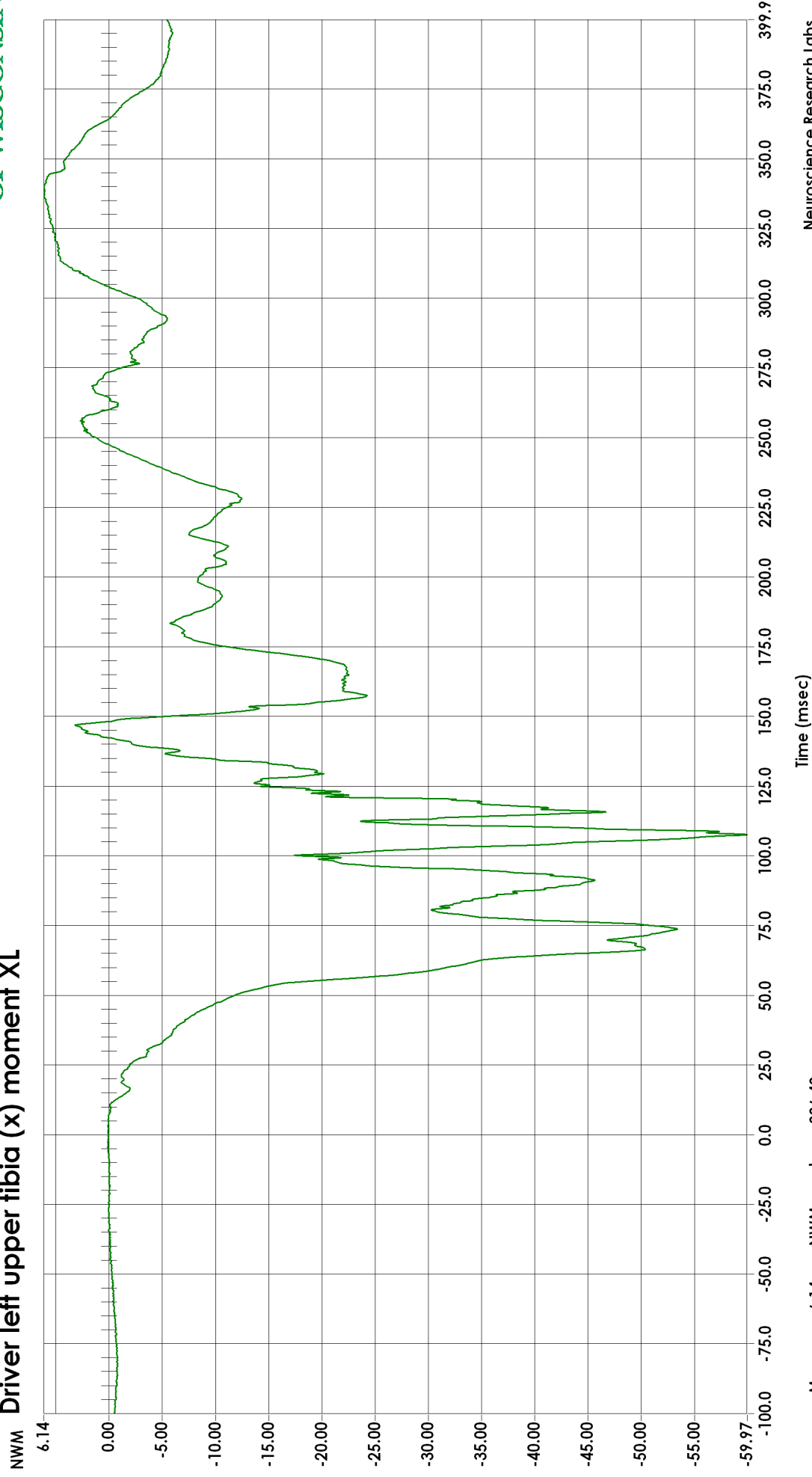
**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBLU  
**Sensor Info** Denton 4509J  
**Serial Number** 4509J\_89\_MX



### Driver left upper tibia (x) moment XL



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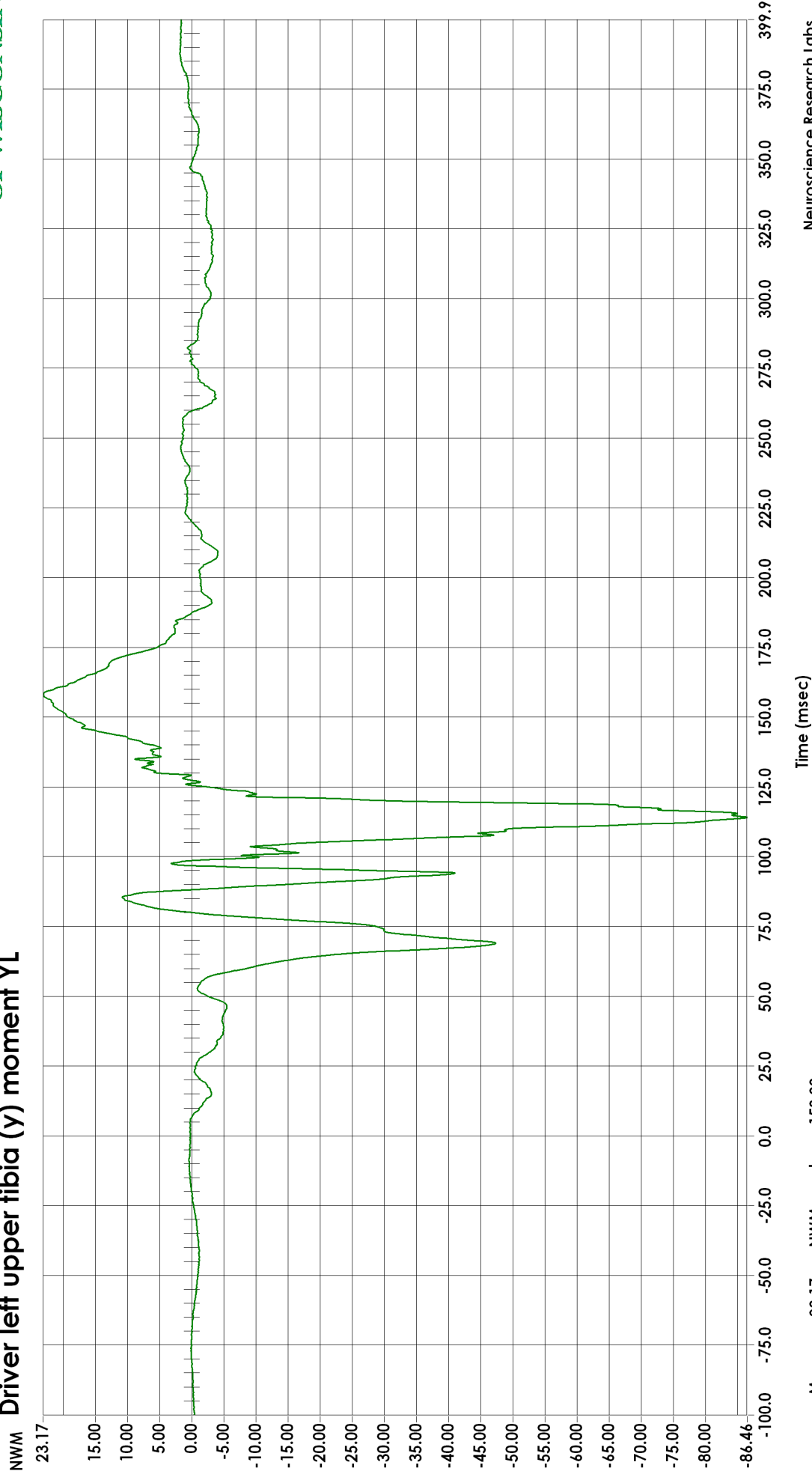


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBLU  
**Sensor Info** Denton 4509J  
**Serial Number** 4509J\_89\_MY

### Driver left upper tibia (y) moment YL



**Max** 23.17 NWM at 158.00 msec  
**Min** -86.46 NWM at 114.08 msec

SOI003 Plot 105

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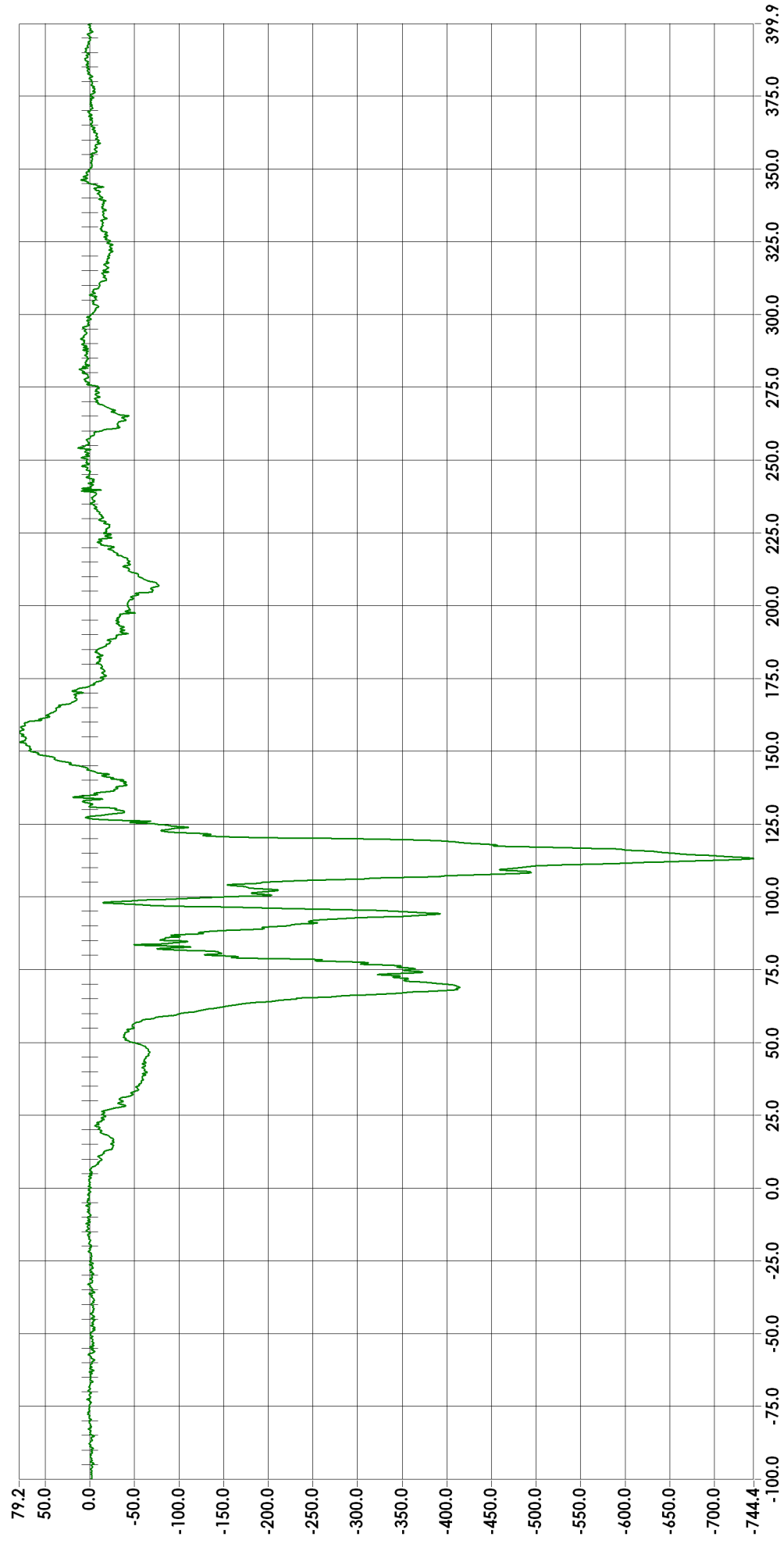


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBLL  
**Sensor Info** Denton 4929J  
**Serial Number** 4929J\_121\_FX

### Driver left lower tibia (x) force XL



**Max** 79.21 NWT at 156.40 msec  
**Min** -744.36 NWT at 113.20 msec  
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 Milwaukee, WI 53295

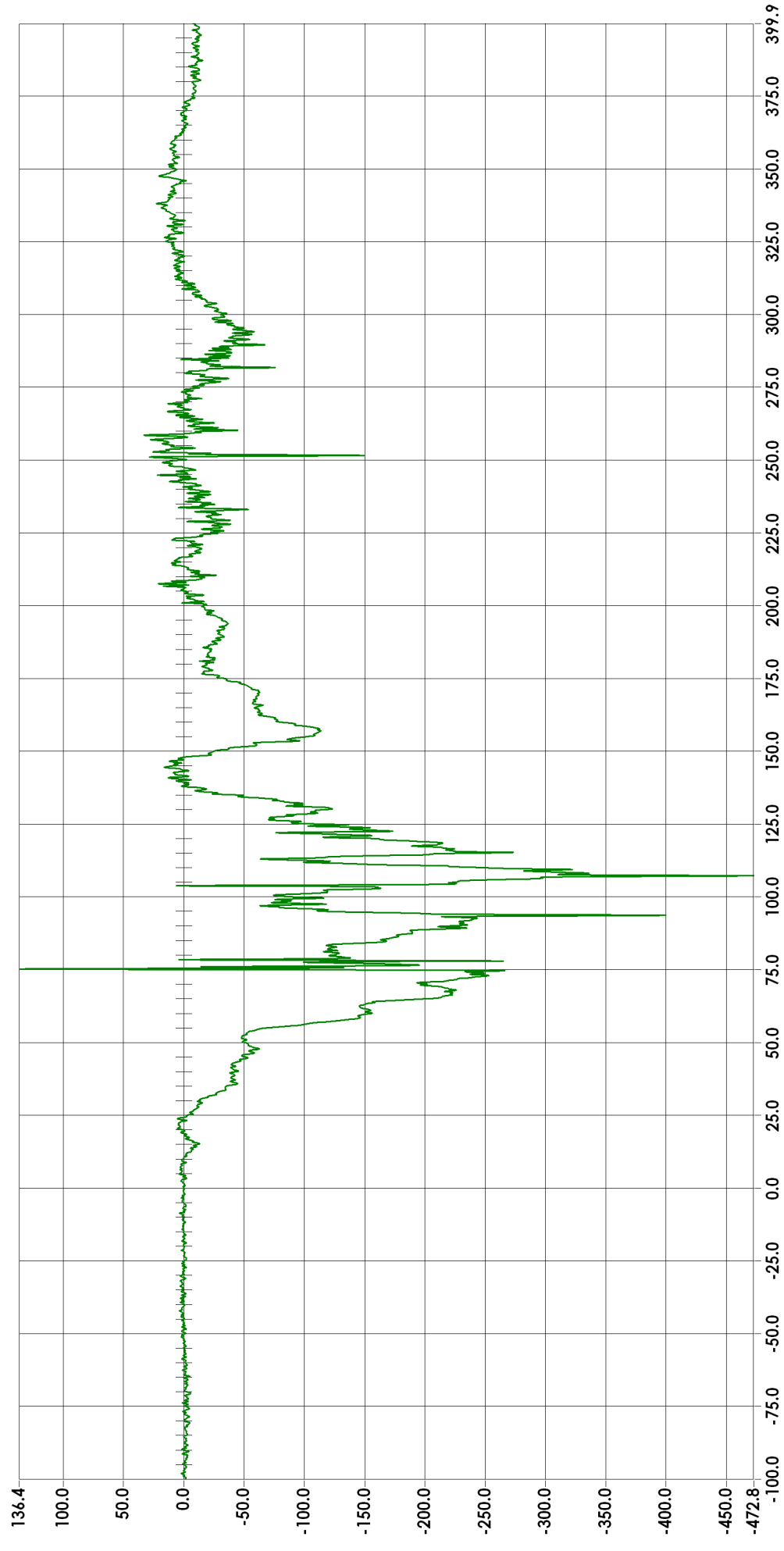


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBLL  
**Sensor Info** Denton 4929J  
**Serial Number** 4929J\_121\_FY

### Driver left lower tibia (y) force YL



**Max** 136.35 NWT at 75.20 msec  
**Min** -472.78 NWT at 107.20 msec

Time (msec)

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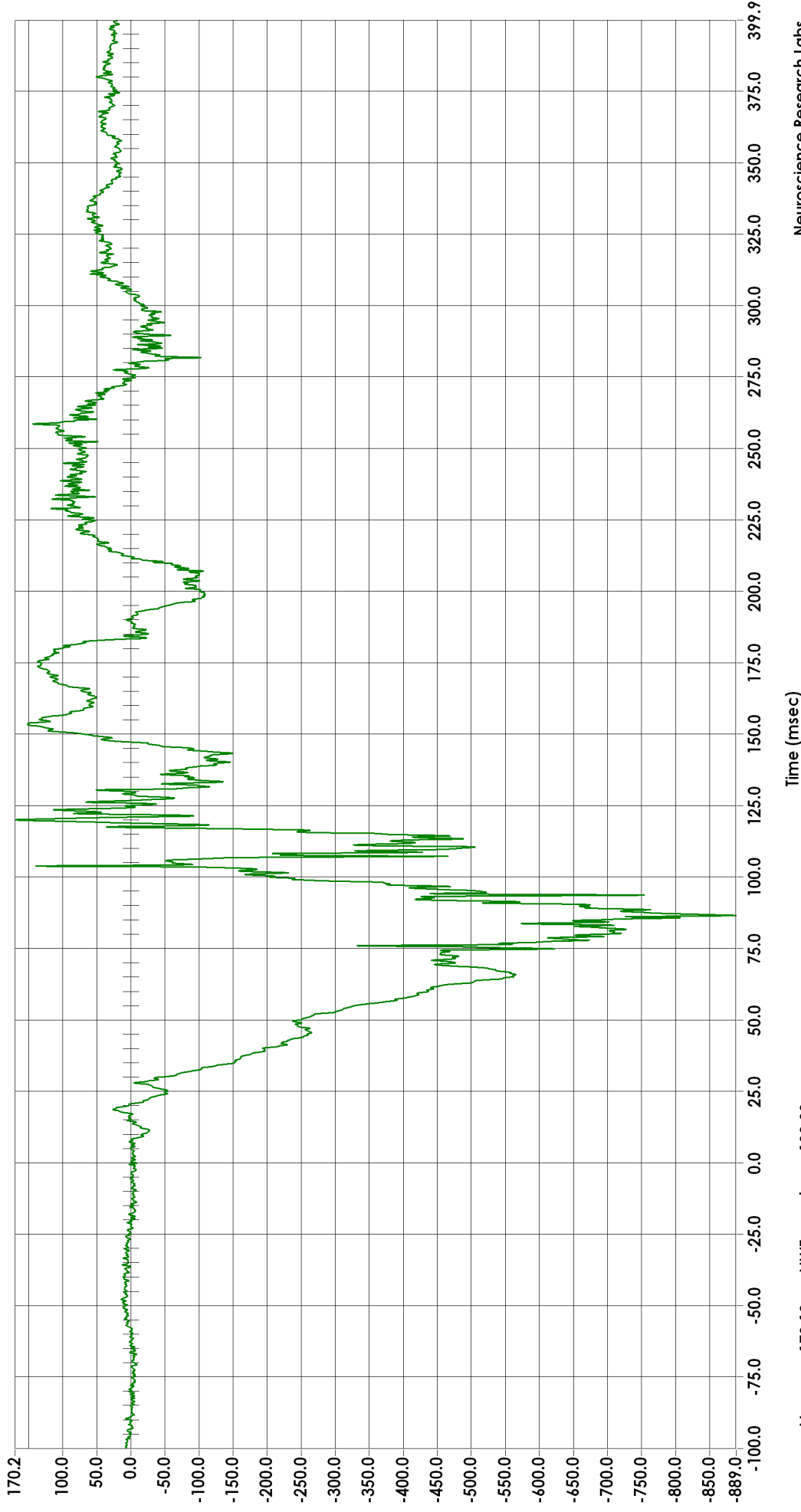


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBLL  
**Sensor Info** Denton 4929J  
**Serial Number** 4929J\_121\_FZ

### Driver left lower tibia (z) force ZL



**Max** 170.18 NWT at 120.00 msec  
**Min** -889.01 NWT at 86.56 msec

Time (msec)

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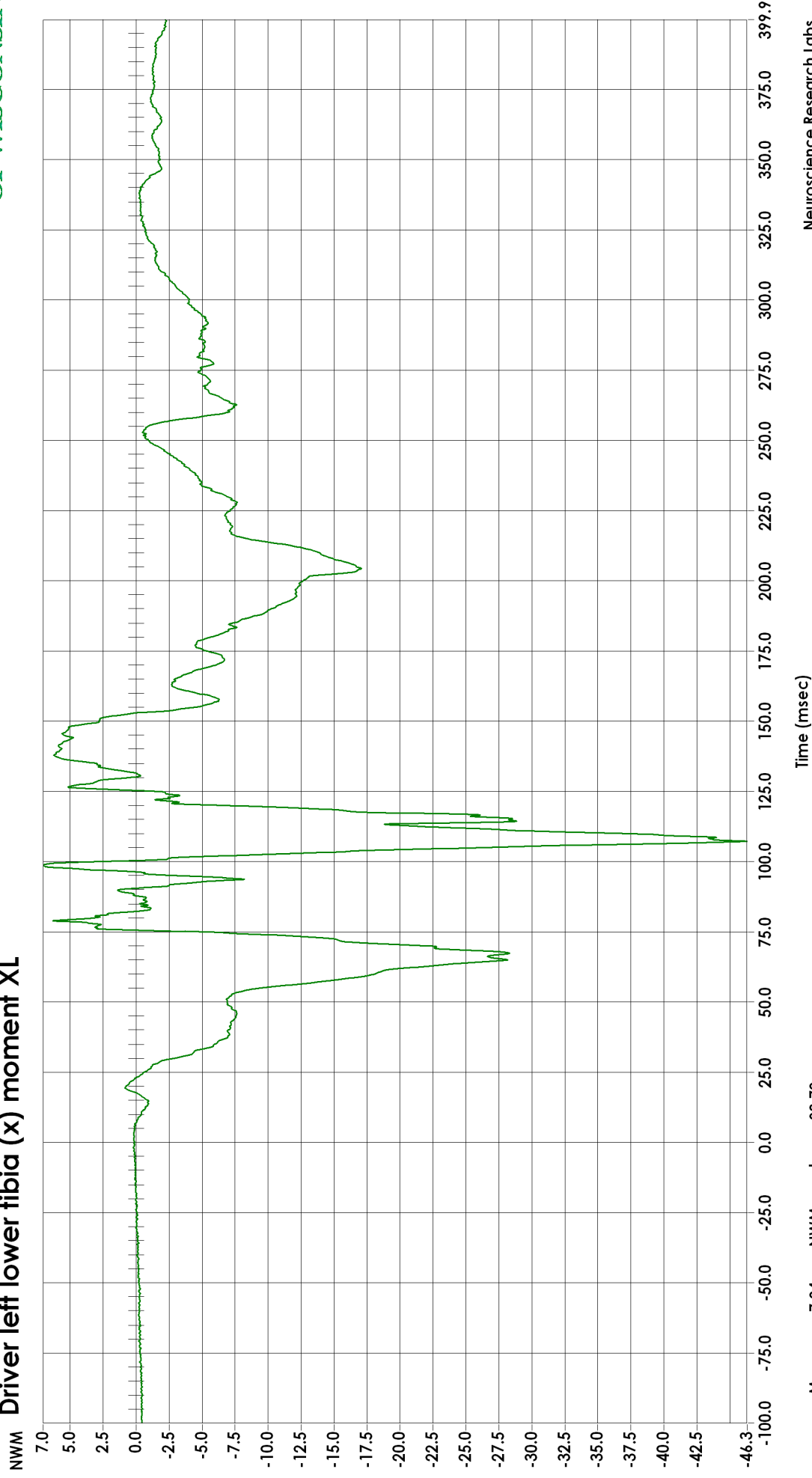


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBLL  
**Sensor Info** Denton 4929J  
**Serial Number** 4929J\_121\_MX

### Driver left lower tibia (x) moment XL



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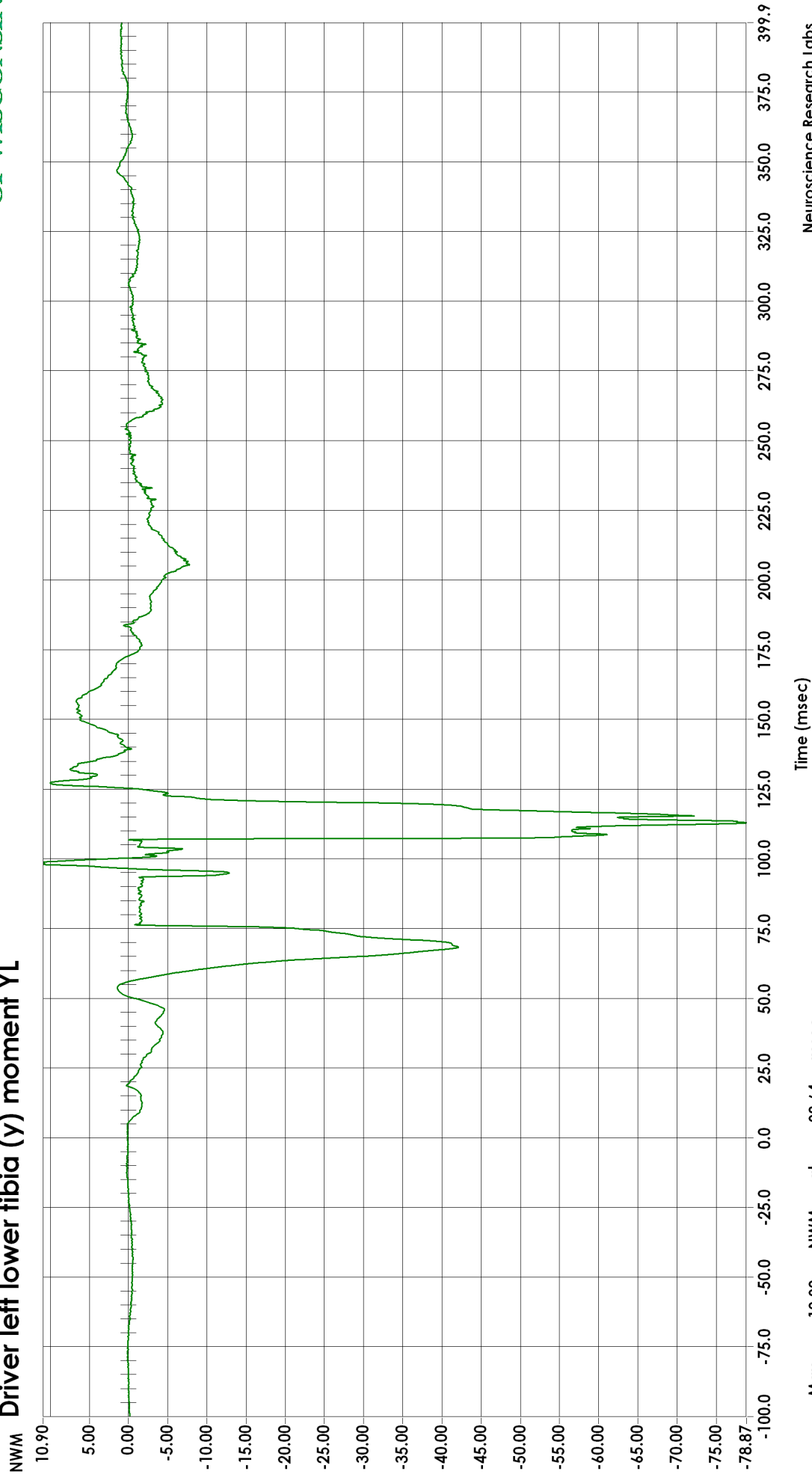


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TBLL  
**Sensor Info** Denton 4929J  
**Serial Number** 4929J\_121\_MY

**Driver left lower tibia (y) moment YL**



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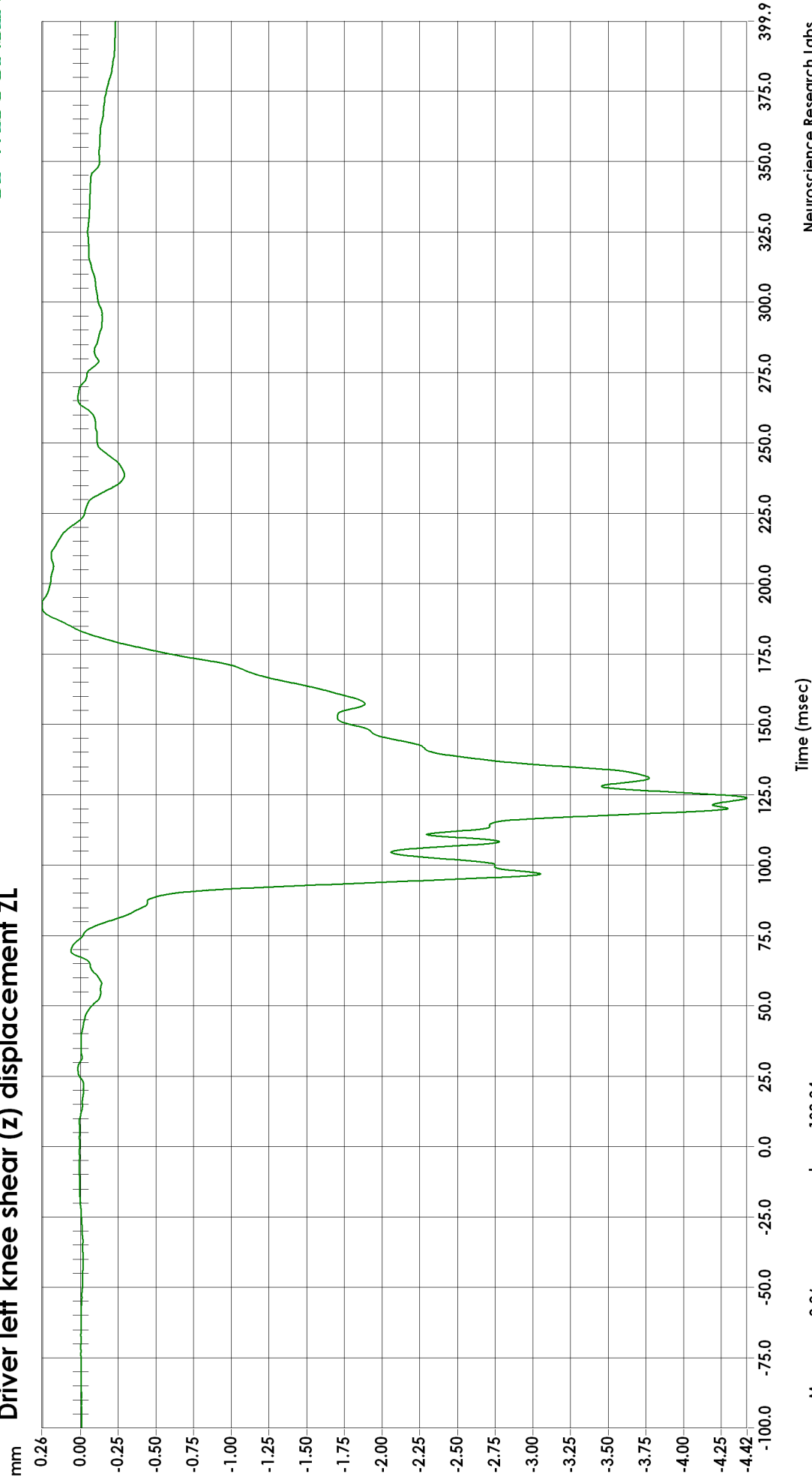
**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**Sensor Location** KNEE  
**Sensor Info** Space Age Controls 150-0121VL  
**Serial Number** 14691



### Driver left knee shear (z) displacement ZL



Max 0.26 mm at 193.04 msec  
 Min -4.42 mm at 123.84 msec

SOI003 Plot 111

Time (msec)

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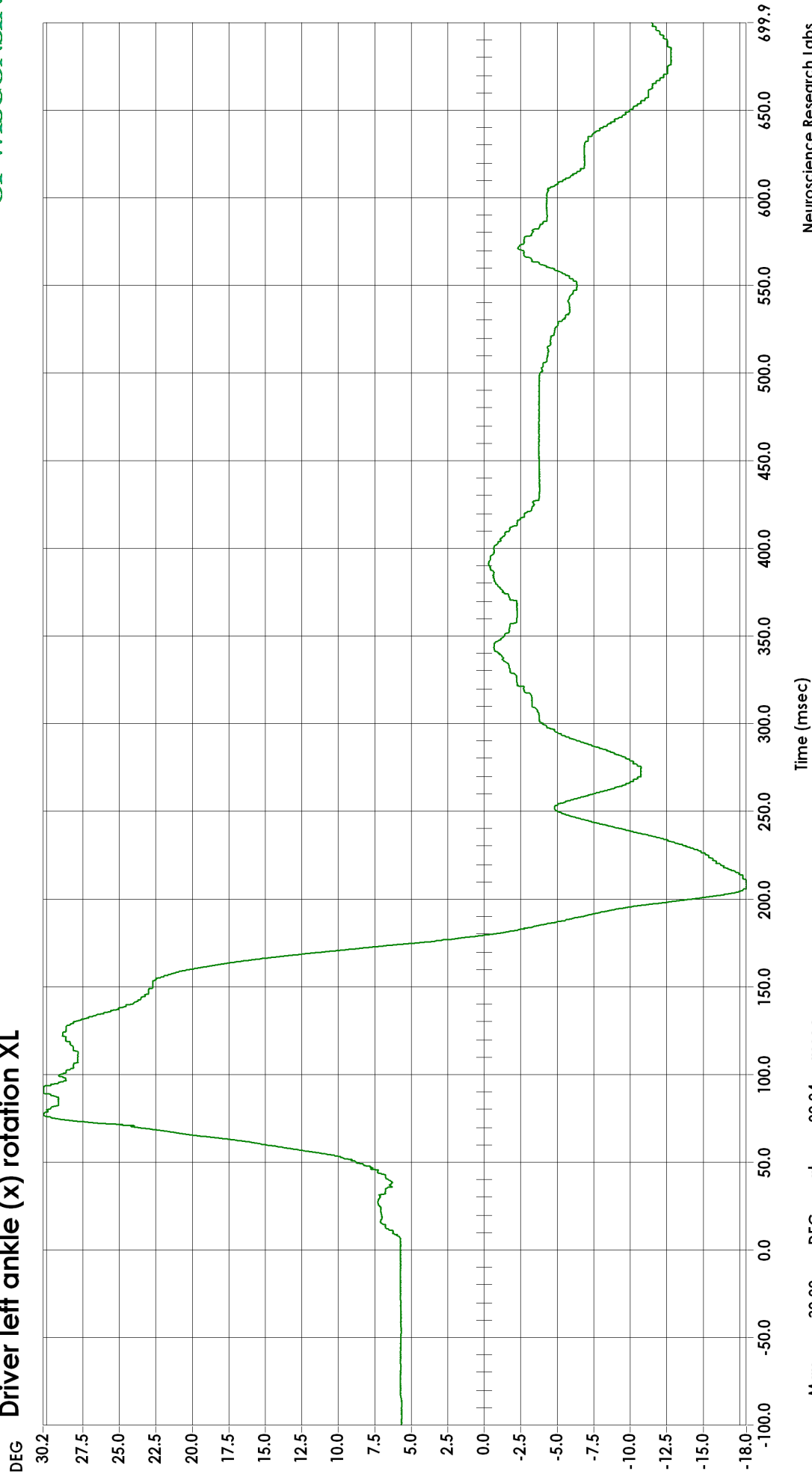


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 10000  
**Pretrigger Points** 1250

**Sensor Location** ANKL  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** ANKLX 0326

### Driver left ankle (x) rotation XL



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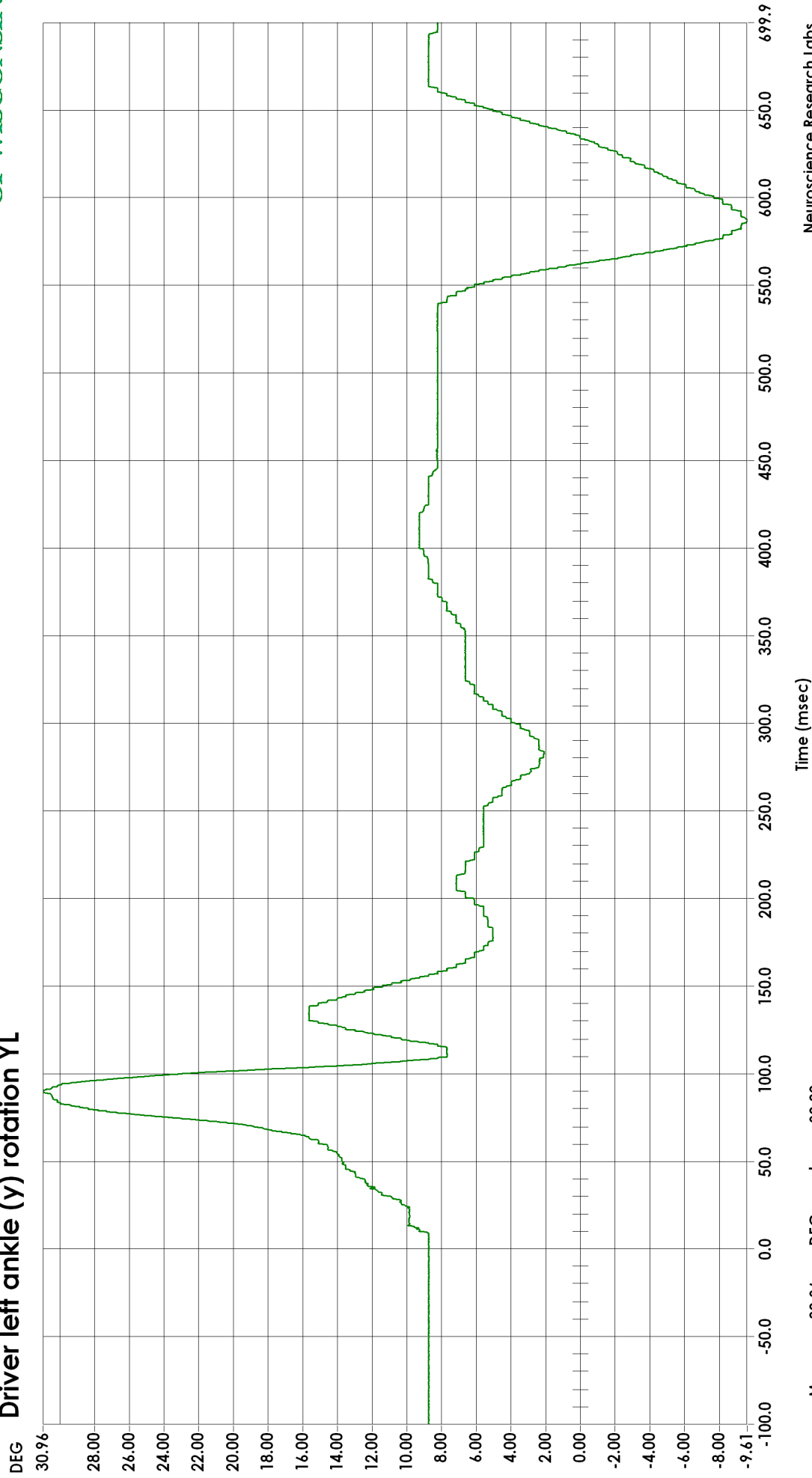


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 10000  
**Pretrigger Points** 1250

**Sensor Location** ANKL  
**Sensor Info** CONTELEC PD210-4B  
**Serial Number** ANKLX 0527

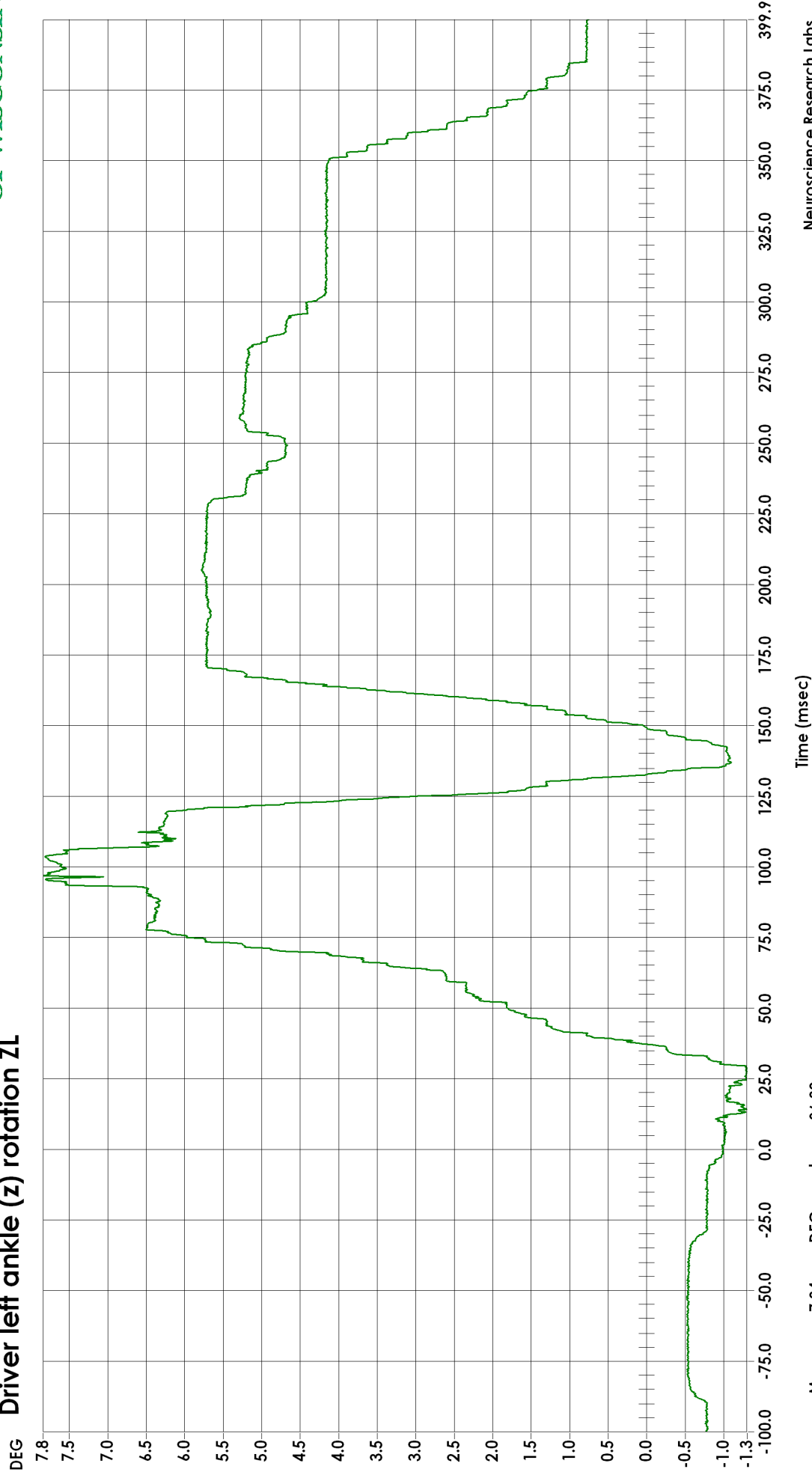
### Driver left ankle (y) rotation YL



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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	ANKL
		<b>Sensor Info</b>	CONTELEC PD210-4B
		<b>Serial Number</b>	ANKLX 0259

### Driver left ankle (z) rotation ZL



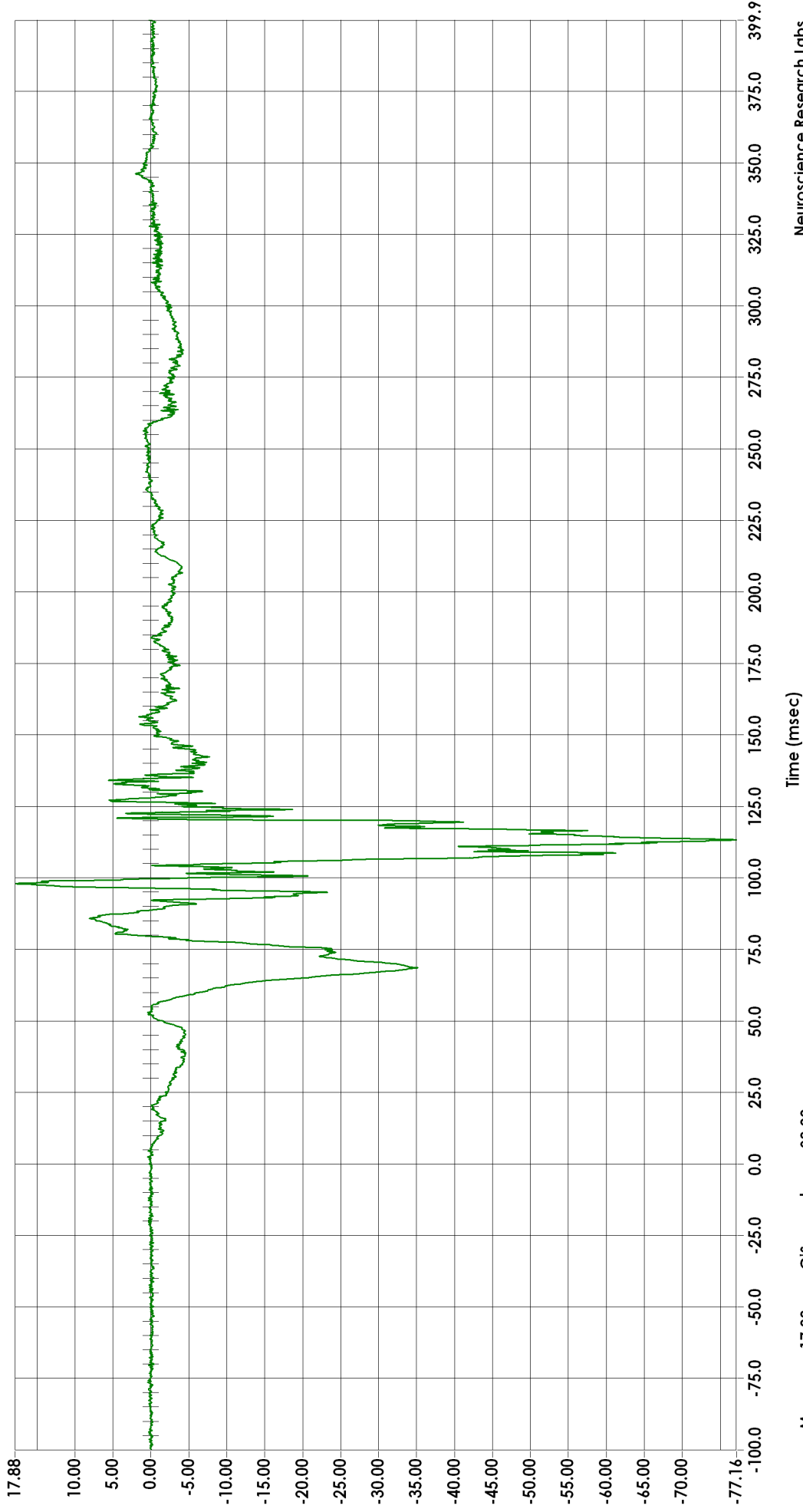
<b>Max</b>	7.84	<b>DEG</b>	<b>at</b>	96.80	<b>msec</b>
<b>Min</b>	-1.31	<b>DEG</b>	<b>at</b>	28.64	<b>msec</b>

SOI003 Plot 114



<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	TIBL
		<b>Sensor Info</b>	ENDEVCO 7264C-2000TZ
		<b>Serial Number</b>	P58806

### G's Driver left tibia (x) acceleration XL



<b>Max</b>	17.88	<b>G's</b>	<b>at</b>	98.00	<b>msec</b>
<b>Min</b>	-77.16	<b>G's</b>	<b>at</b>	113.36	<b>msec</b>

SOI003 Plot 115

Time (msec)

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 Milwaukee, WI 53295

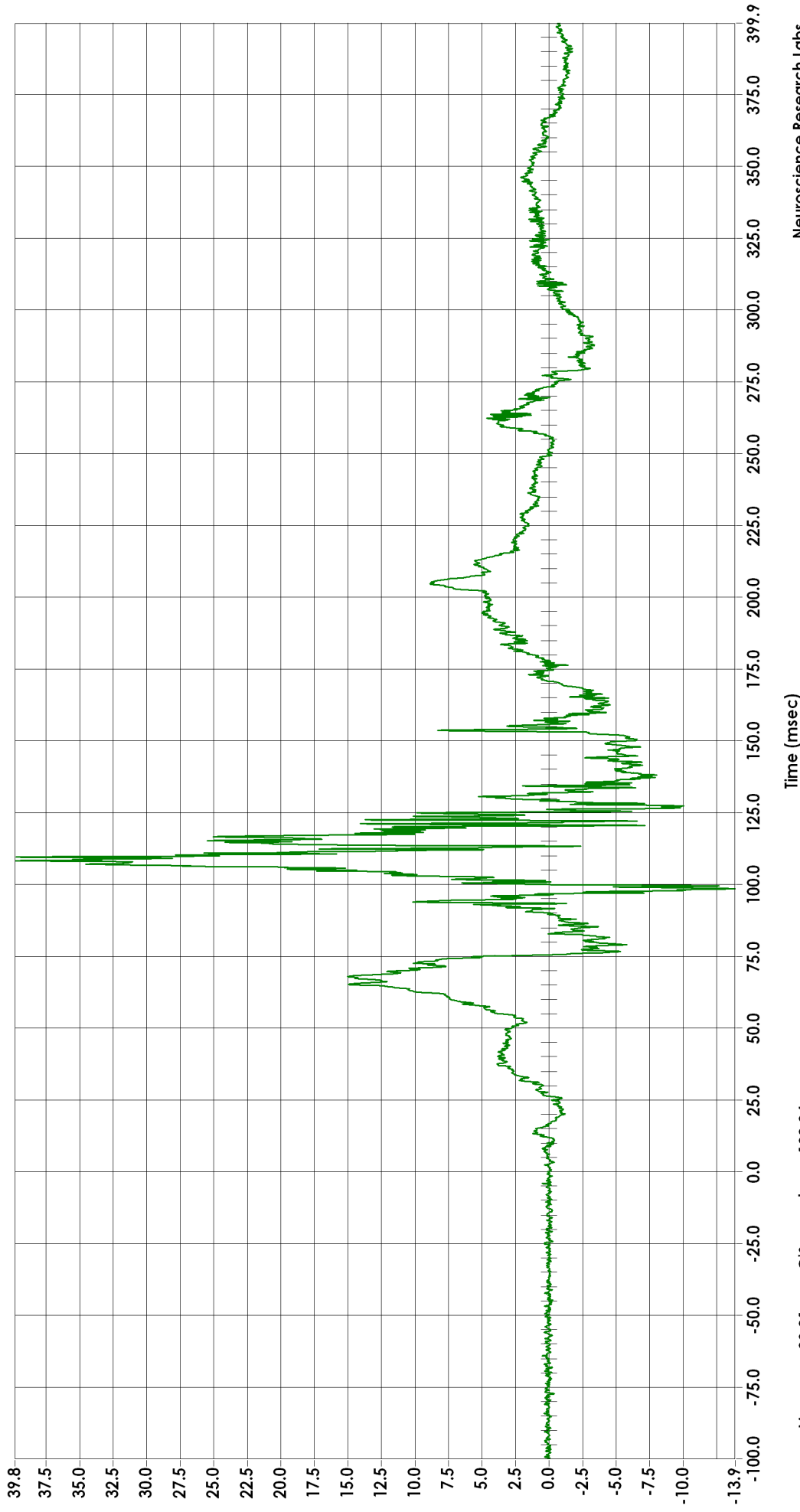


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** TIBL  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P58804

### Driver left tibia (y) acceleration YL



**Max** 39.81 G's at 108.24 msec  
**Min** -13.88 G's at 98.56 msec

Time (msec)

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 Milwaukee, WI 53295

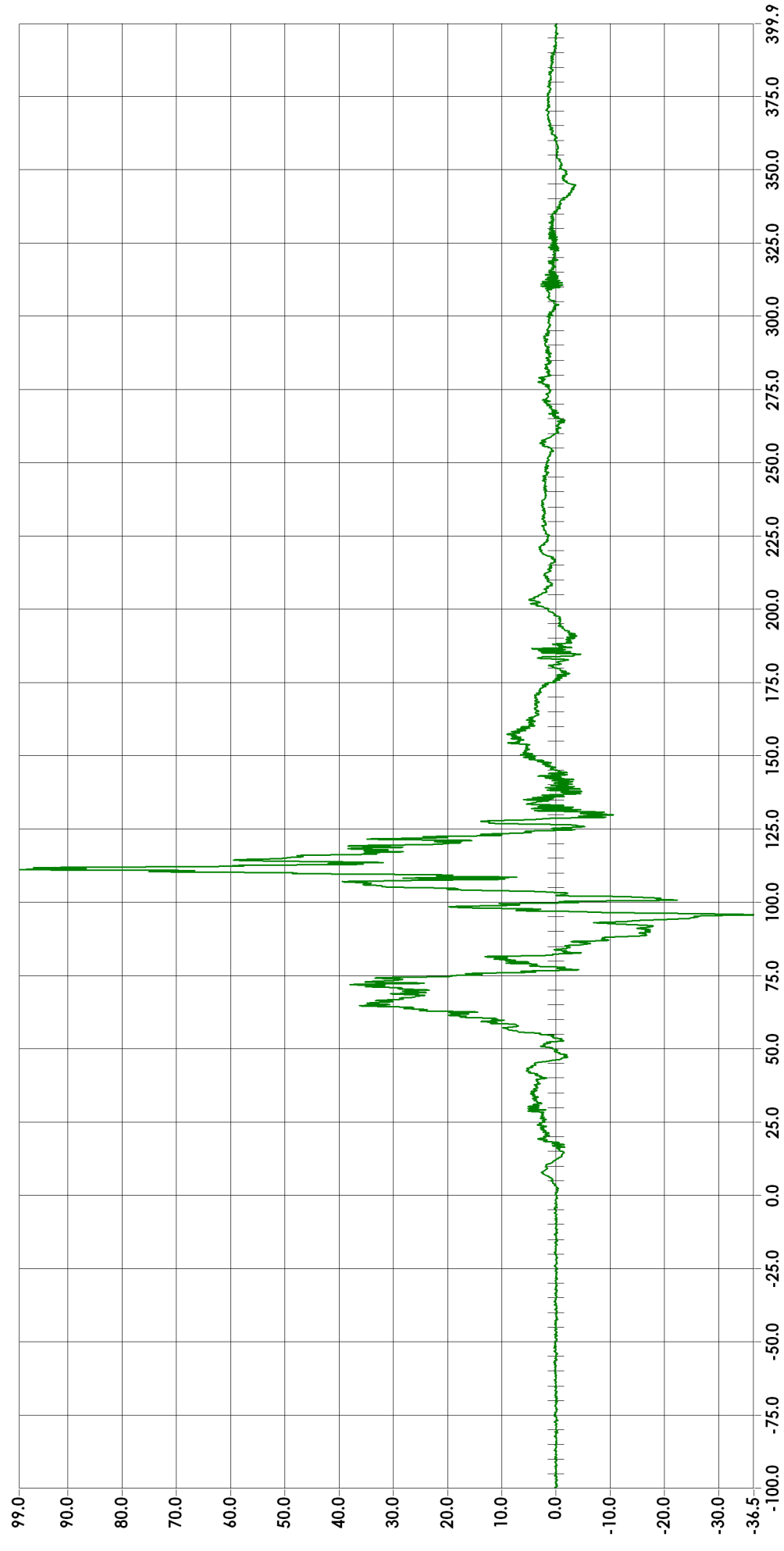


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FOTL  
**Sensor Info** ENDEVCO 7264C-2000TZ  
**Serial Number** P52067

### Driver left foot (x) acceleration XL



**Max** 98.98 G'S at 111.20 msec  
**Min** -36.47 G'S at 95.76 msec

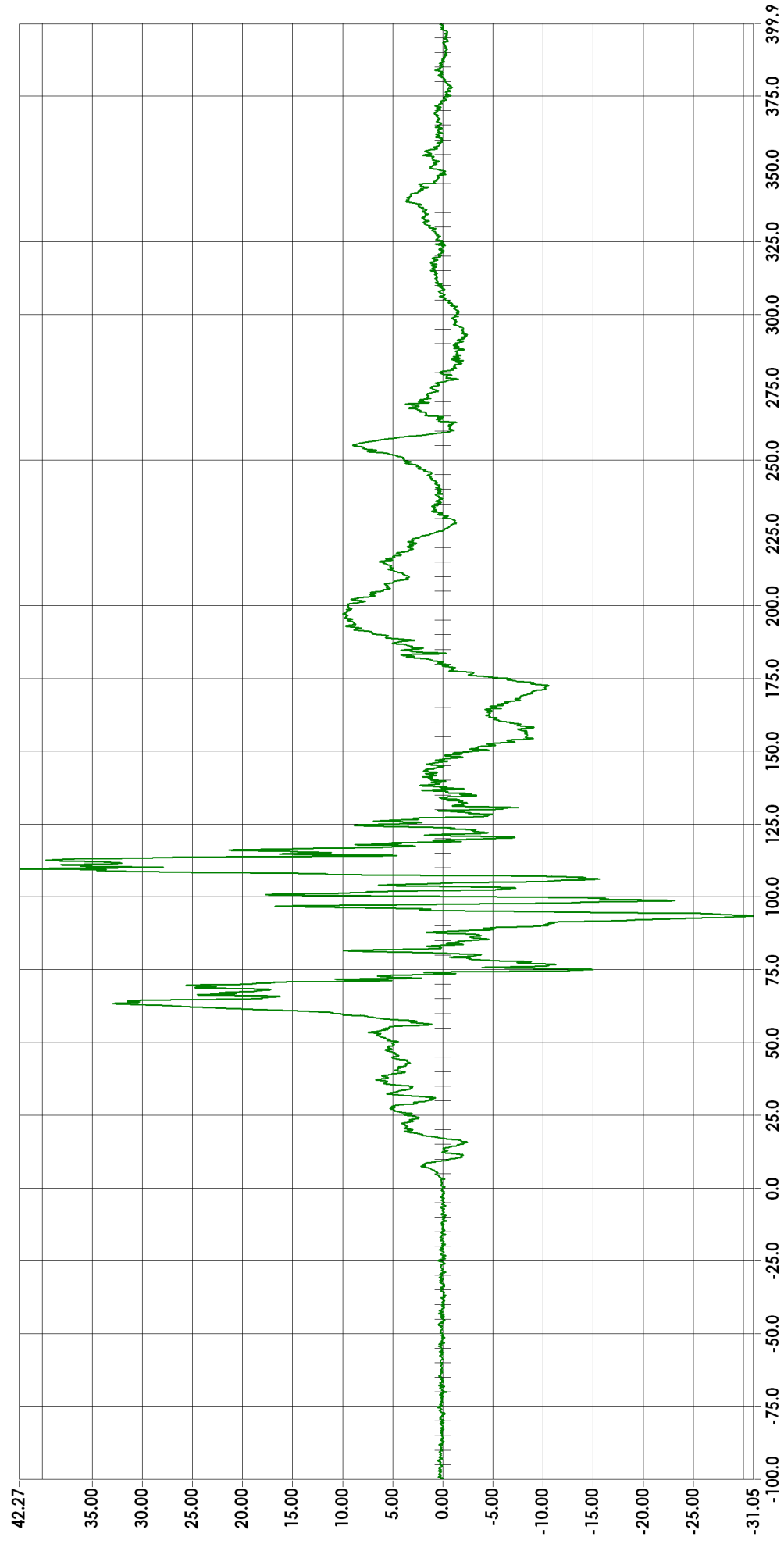
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 Research 151  
 Milwaukee, WI 53295

SOI003 Plot 117



<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	FOTL
		<b>Sensor Info</b>	ENDEVCO 7264C-2000TZ
		<b>Serial Number</b>	P58803

### Driver left foot (y) acceleration YL



Time (msec)

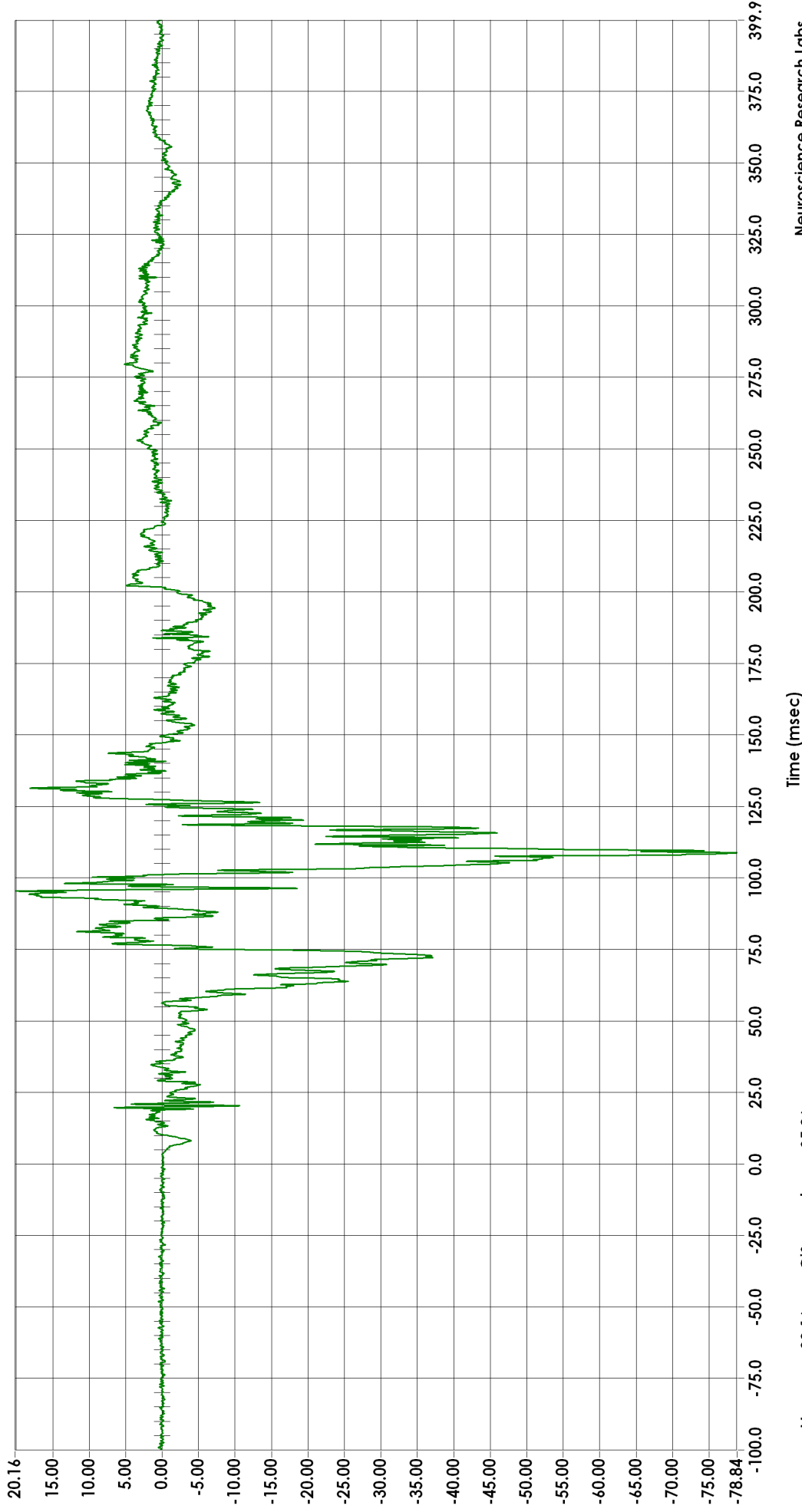
<b>Max</b>	42.27	<b>G's</b>	at	109.68	<b>msec</b>
<b>Min</b>	-31.05	<b>G's</b>	at	93.52	<b>msec</b>

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	FOTL
		<b>Sensor Info</b>	ENDEVCO 7264C-2000TZ
		<b>Serial Number</b>	P50092

### Driver left foot (z) acceleration ZL



<b>Max</b>	20.16	<b>G's</b>	at	95.36	<b>msec</b>
<b>Min</b>	-78.84	<b>G's</b>	at	108.80	<b>msec</b>

SOI003 Plot 119

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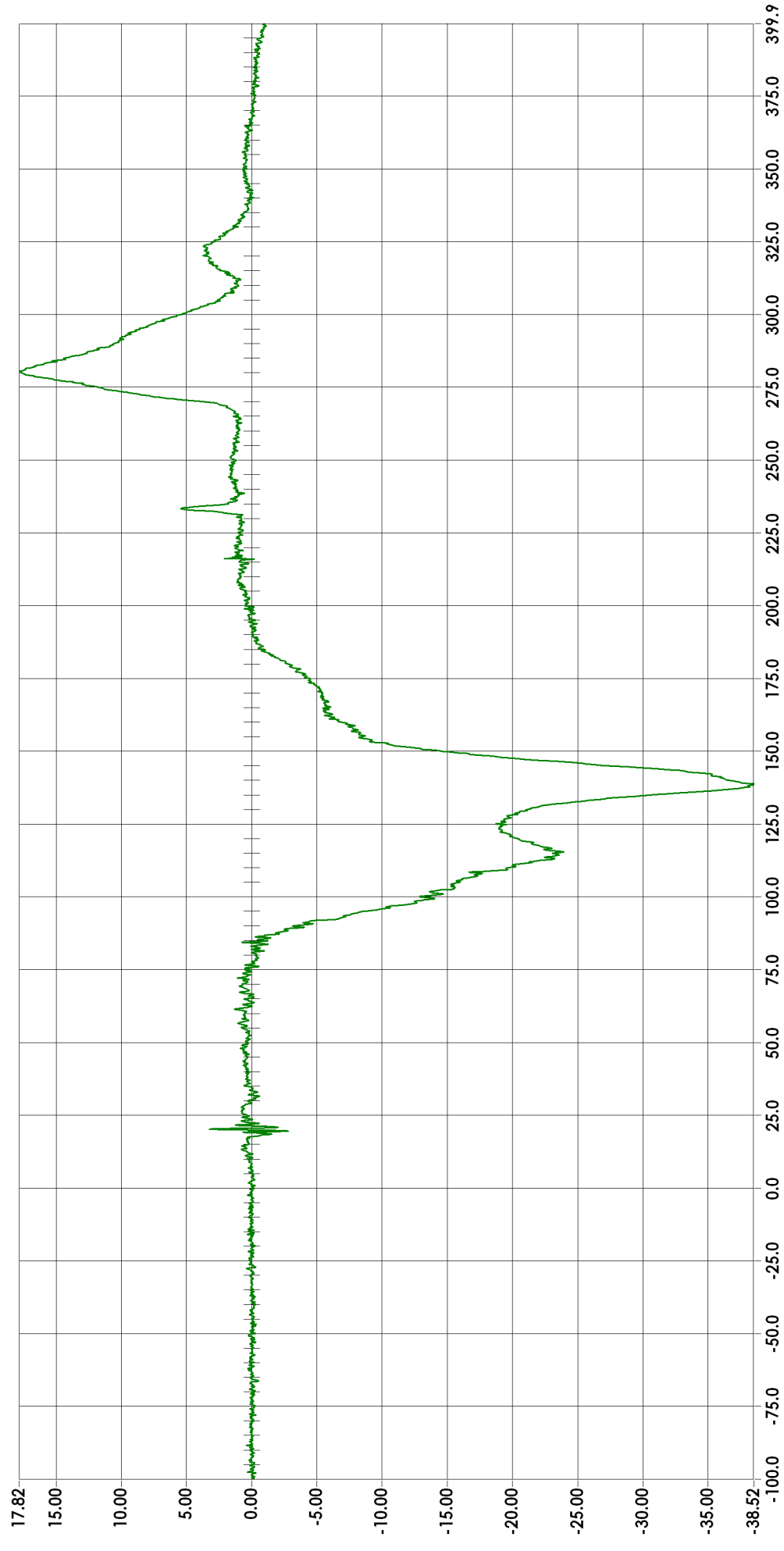


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**Sensor Location** HDCG  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12122

### Passenger head cg (x) acceleration XL



**Max** 17.82 G's at 280.48 msec  
**Min** -38.52 G's at 138.80 msec

Time (msec)

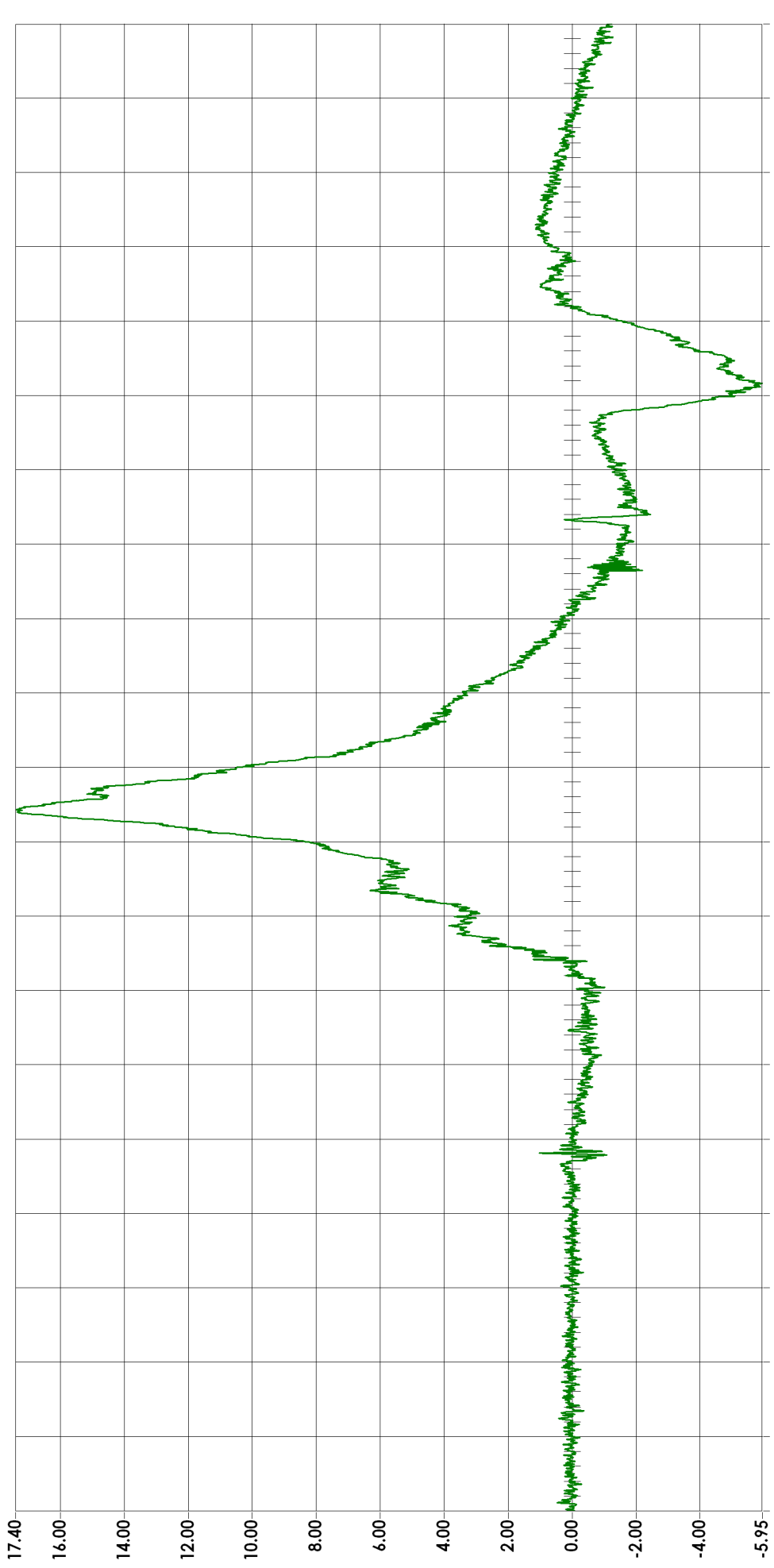
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 Milwaukee, WI 53295

SOI003 Plot 120



<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	HDCG
		<b>Sensor Info</b>	ENDEVCO 7264D-2KTZ-2-360
		<b>Serial Number</b>	12090

### Passenger head cg (y) acceleration YL



<b>Max</b>	17.40	<b>G'S</b>	at	135.76	<b>msec</b>
<b>Min</b>	-5.95	<b>G'S</b>	at	279.04	<b>msec</b>

Time (msec)

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SOI003 Plot 121

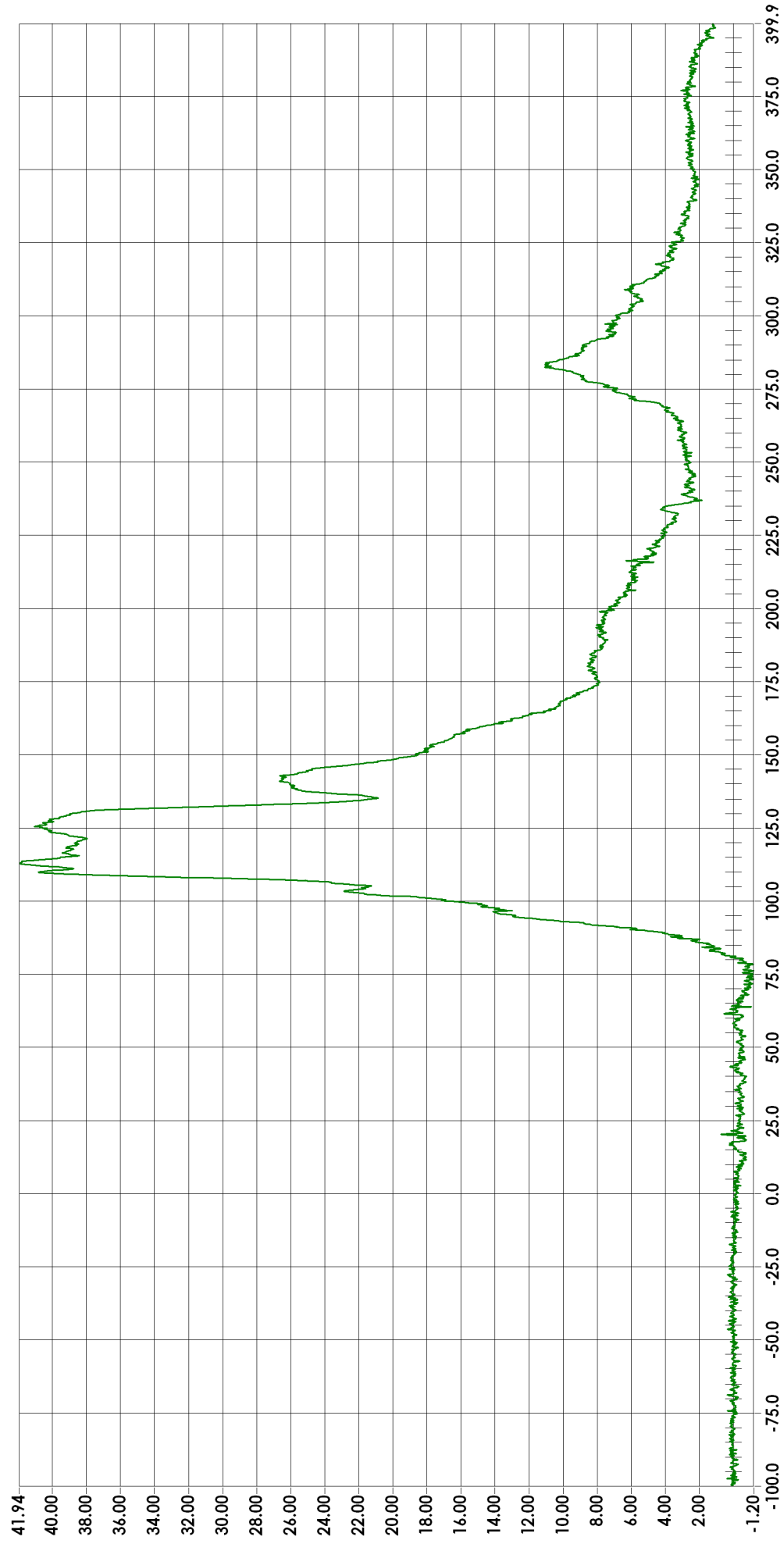


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HDCG  
**Sensor Info** ENDEVCO 7264C-2KTZ-2-360  
**Serial Number** 12091

### Passenger head cg (z) acceleration ZL



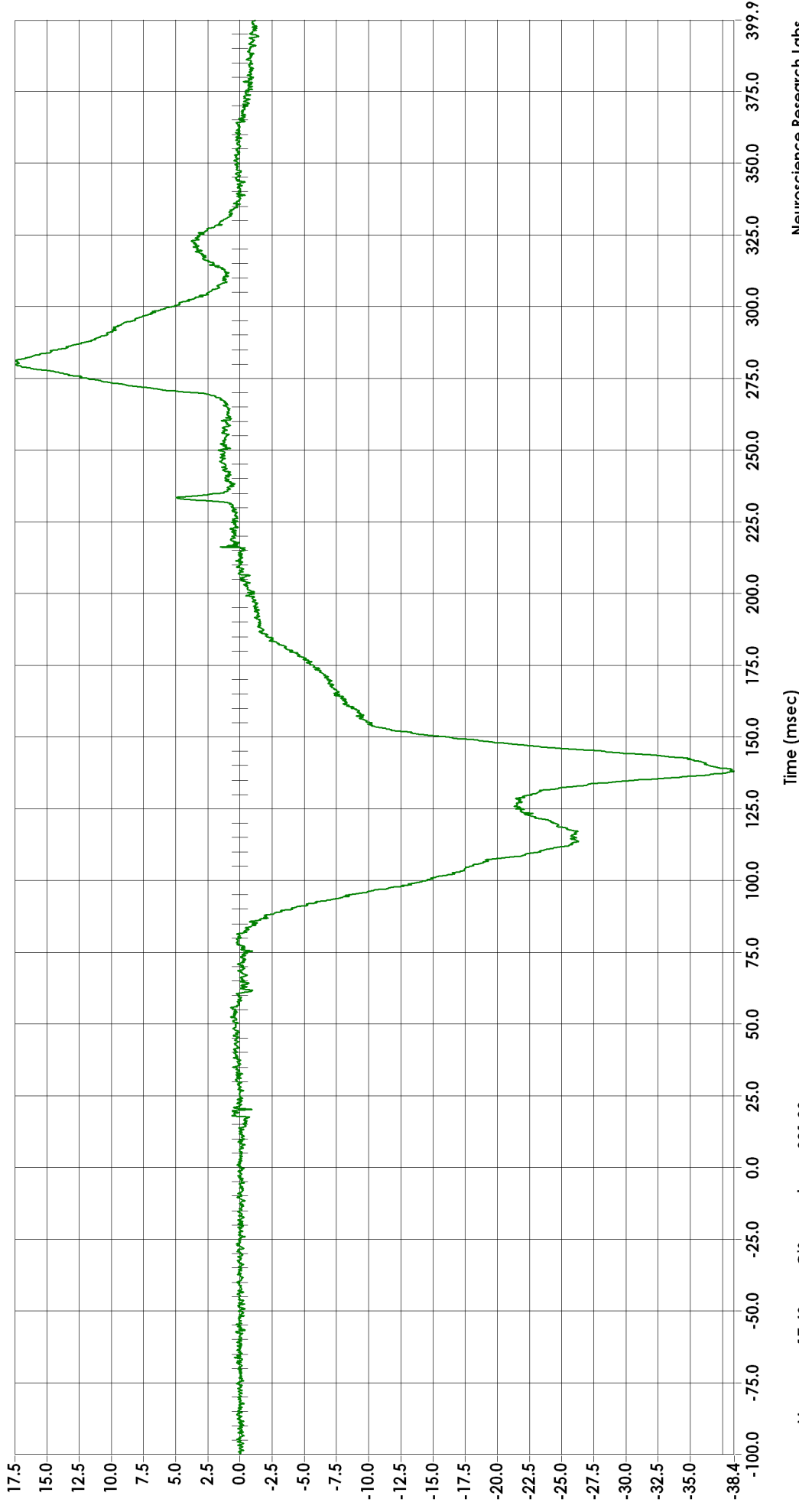
**Max** 41.94 G'S at 112.88 msec  
**Min** -1.20 G'S at 76.16 msec

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	HDCG
		<b>Sensor Info</b>	ENDEVCO 7264D-2KTZ-2-360
		<b>Serial Number</b>	12128

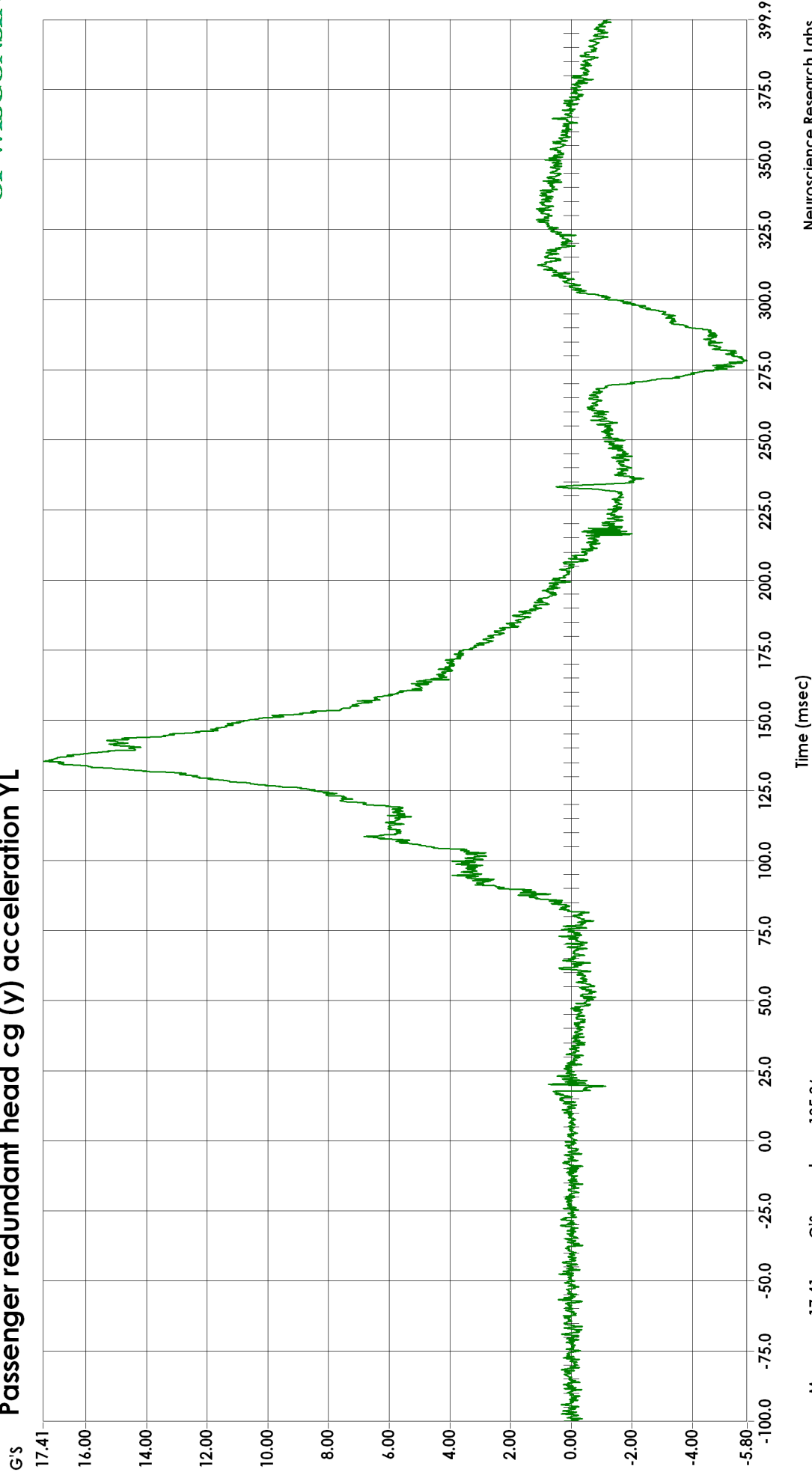
### Passenger redundant head cg (x) acceleration XL



Max 17.49 G's at 281.20 msec  
 Min -38.43 G's at 138.08 msec  
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 Milwaukee, WI 53295  
 SOI003 Plot 123

<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	HDCG
		<b>Sensor Info</b>	ENDEVCO 7264D-2KTZ-2-360
		<b>Serial Number</b>	12092

### Passenger redundant head cg (y) acceleration YL



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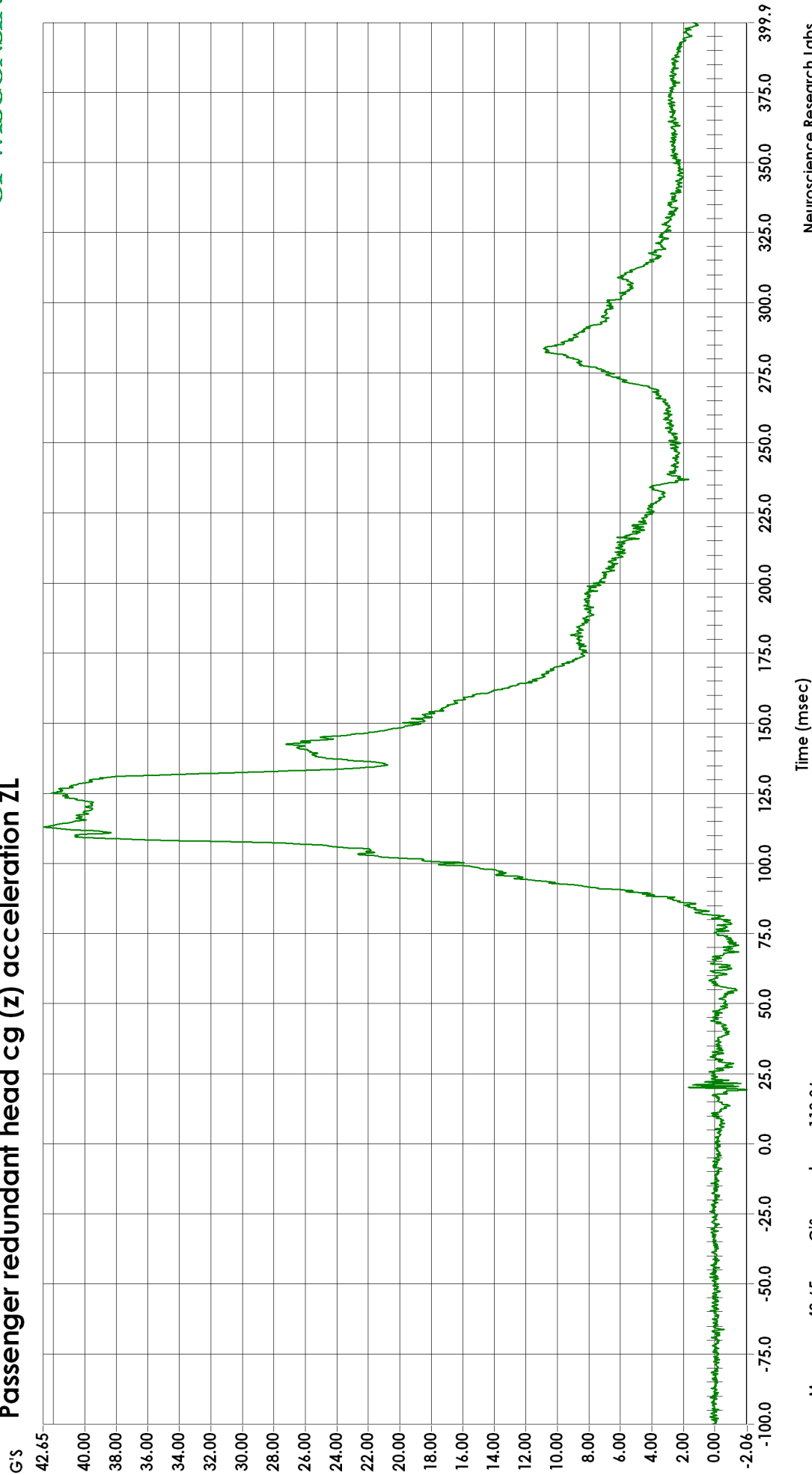


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HDCG  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12101

### Passenger redundant head cg (z) acceleration ZL



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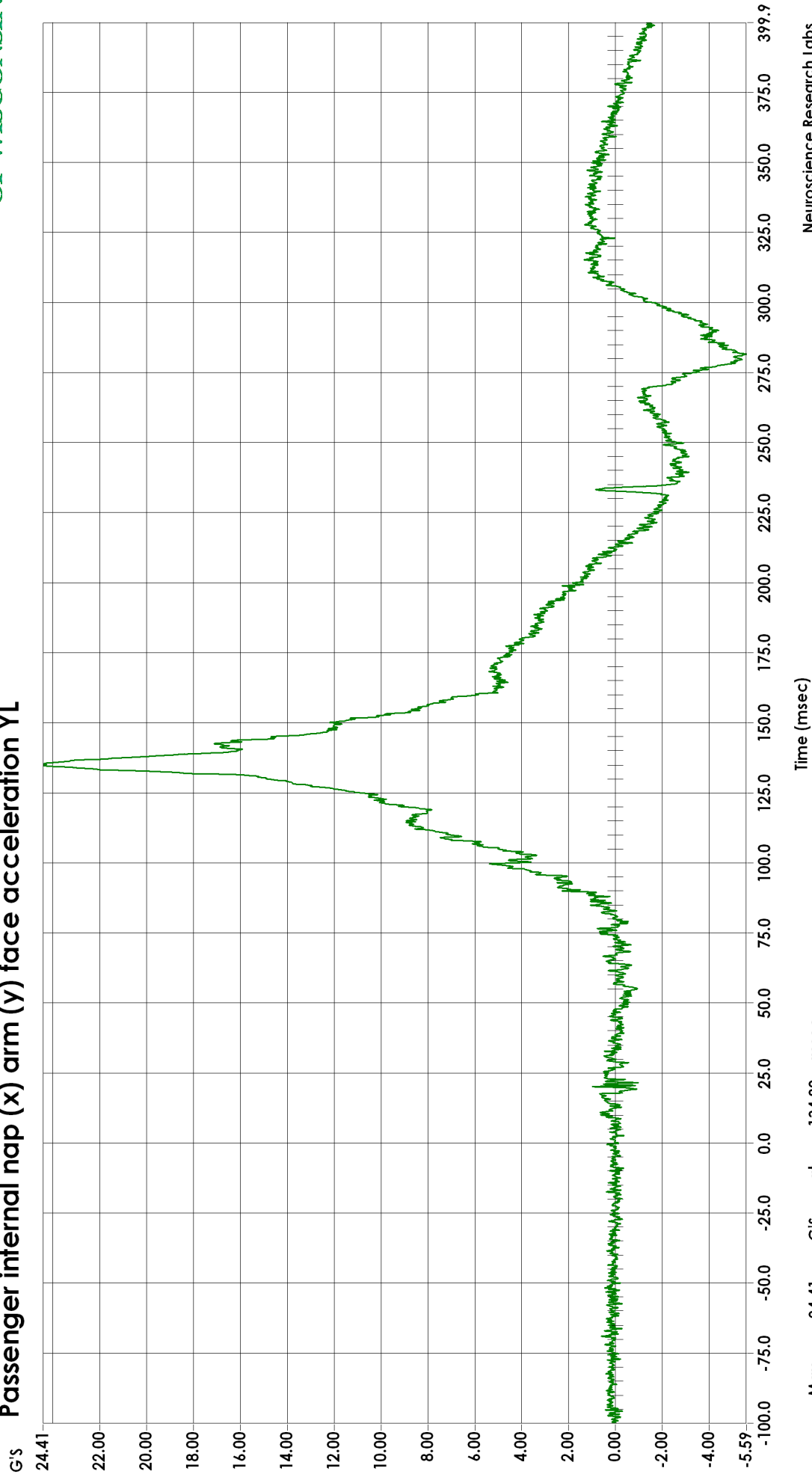


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HD9X  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12129

### Passenger internal nap (x) arm (y) face acceleration YL



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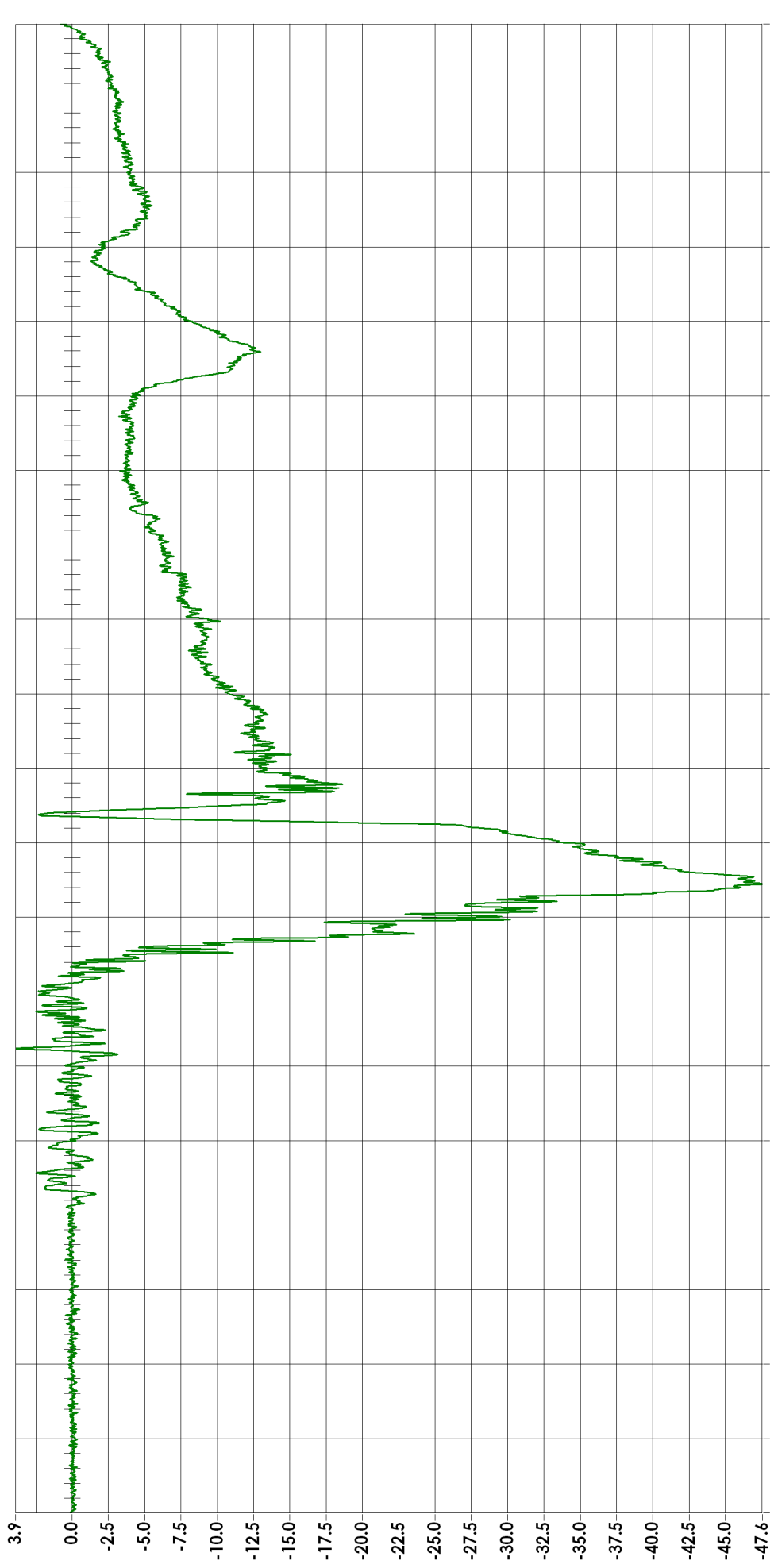


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HD9X  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12138

### Passenger internal nap (x) arm (z) face acceleration ZL



**Max** 3.89 G's at 55.92 msec  
**Min** -47.55 G's at 111.20 msec

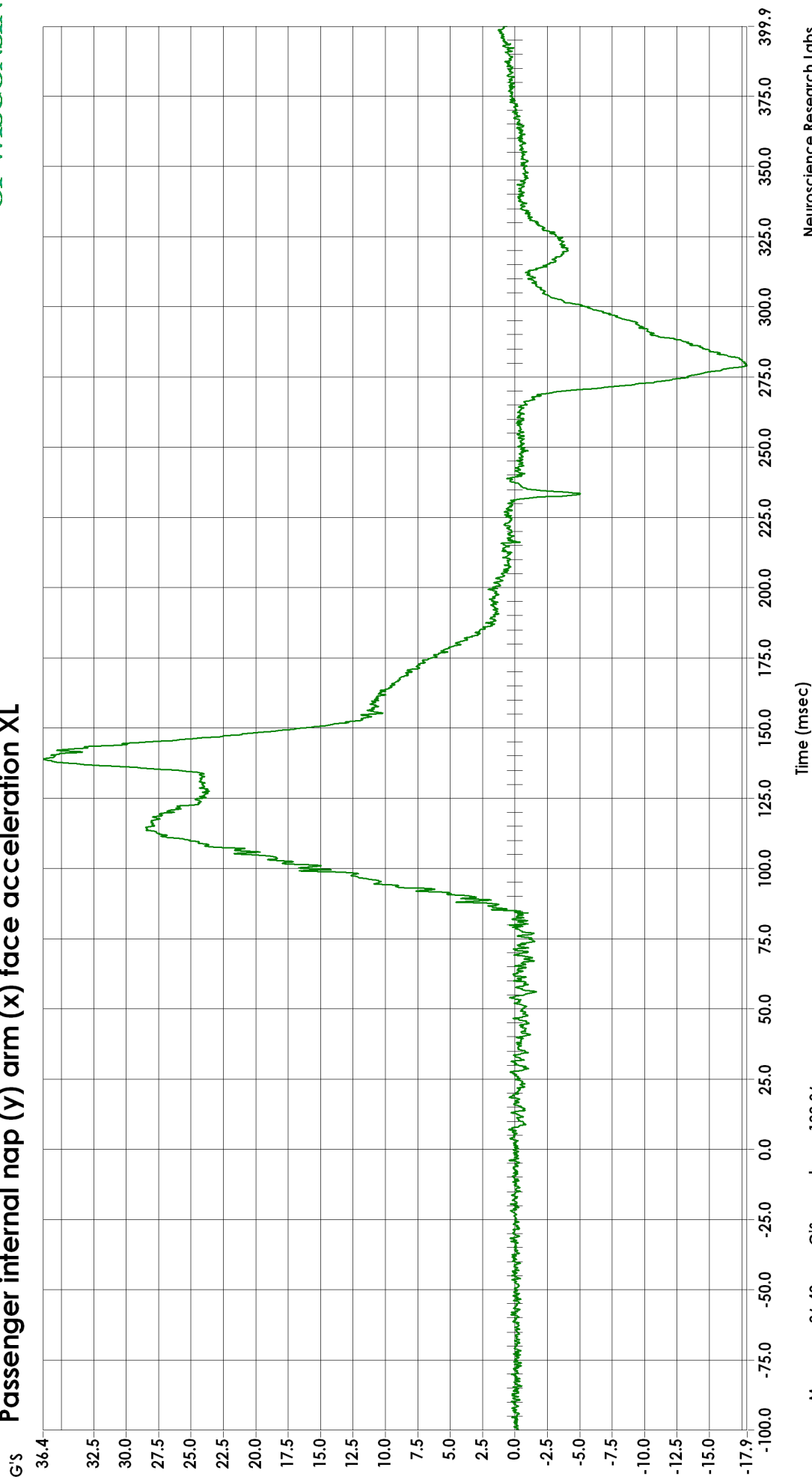
SOI003 Plot 127

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 Milwaukee, WI 53295



<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	HD9Y
		<b>Sensor Info</b>	ENDEVCO 7264C-2KTZ-2-360
		<b>Serial Number</b>	P59121

### Passenger internal nap (y) arm (x) face acceleration XL



<b>Max</b>	36.40	<b>G's</b>	at	138.96	<b>msec</b>
<b>Min</b>	-17.92	<b>G's</b>	at	279.12	<b>msec</b>

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SOI003 Plot 128

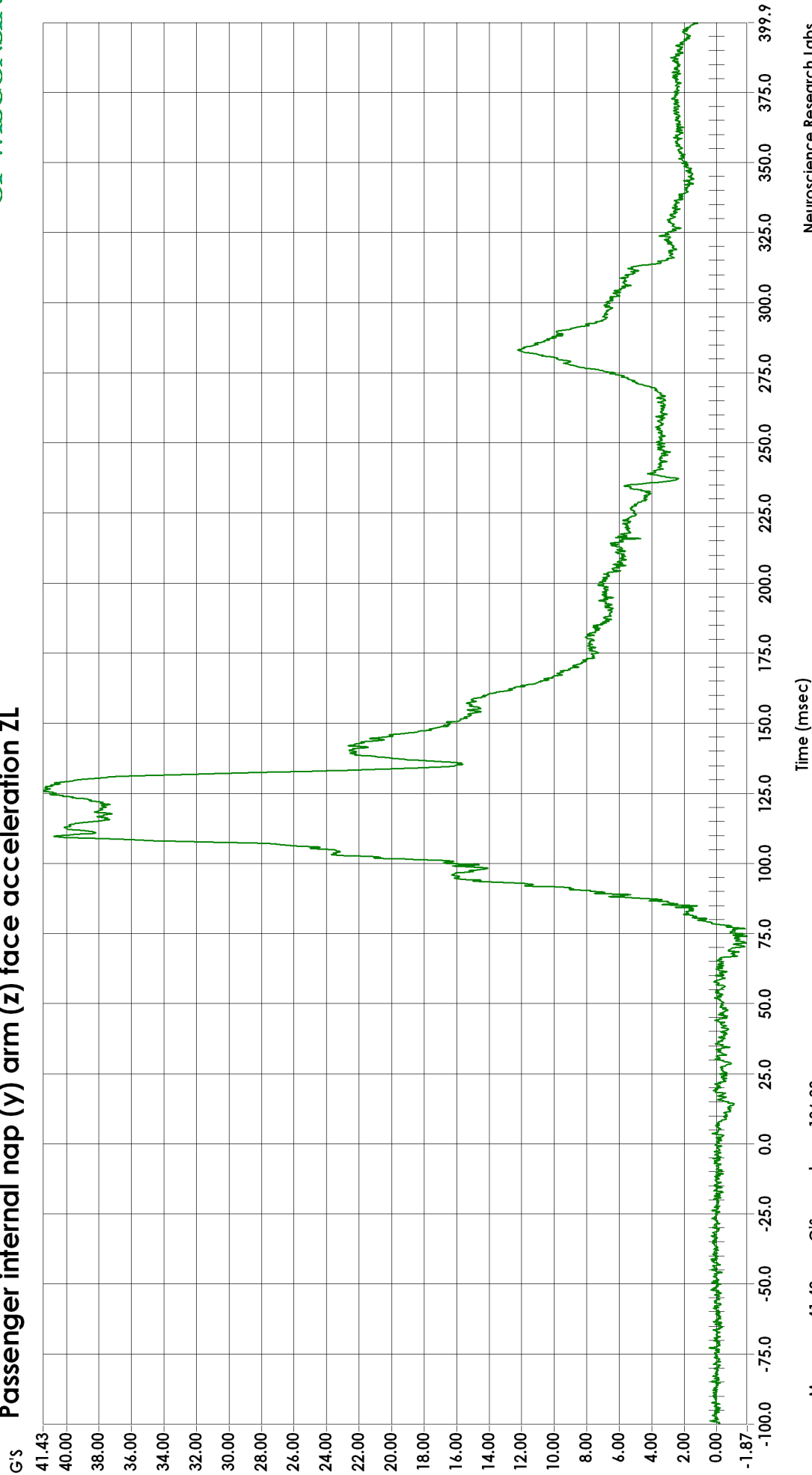


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HD9Y  
**Sensor Info** ENDEVCO 7264C-2KTZ-2-360  
**Serial Number** P59123

### Passenger internal nap (y) arm (z) face acceleration ZL



**Max** 41.43 G's at 126.08 msec  
**Min** -1.87 G's at 74.08 msec

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SOI003 Plot 129

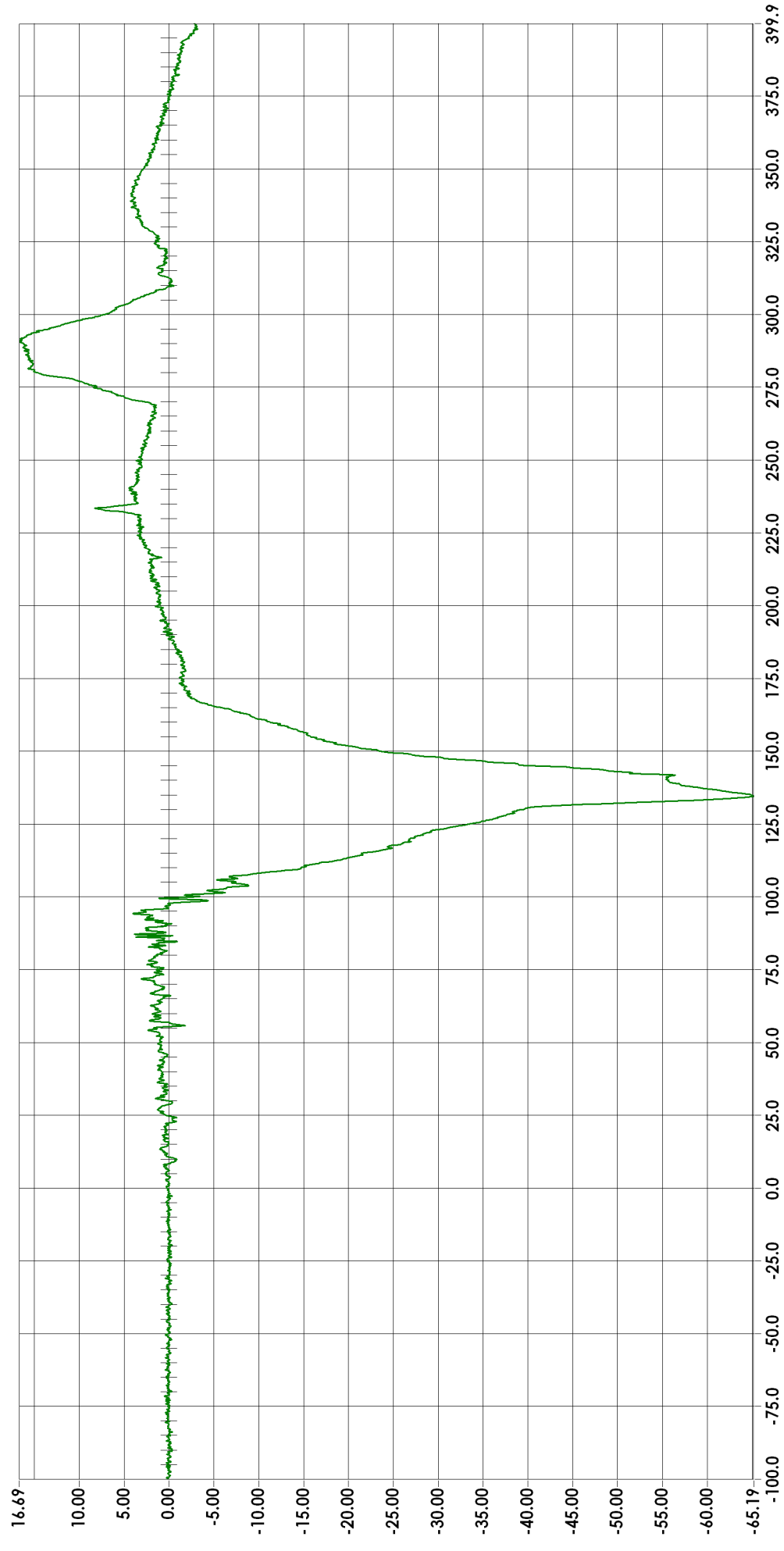


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HD9Z  
**Sensor Info** ENDEVCO 7264C-2KTZ-2-360  
**Serial Number** P59118

### Passenger internal nap (z) arm (x) face acceleration XL



**Max** 16.69 G's at 291.04 msec  
**Min** -65.19 G's at 134.64 msec

SOI003 Plot 130

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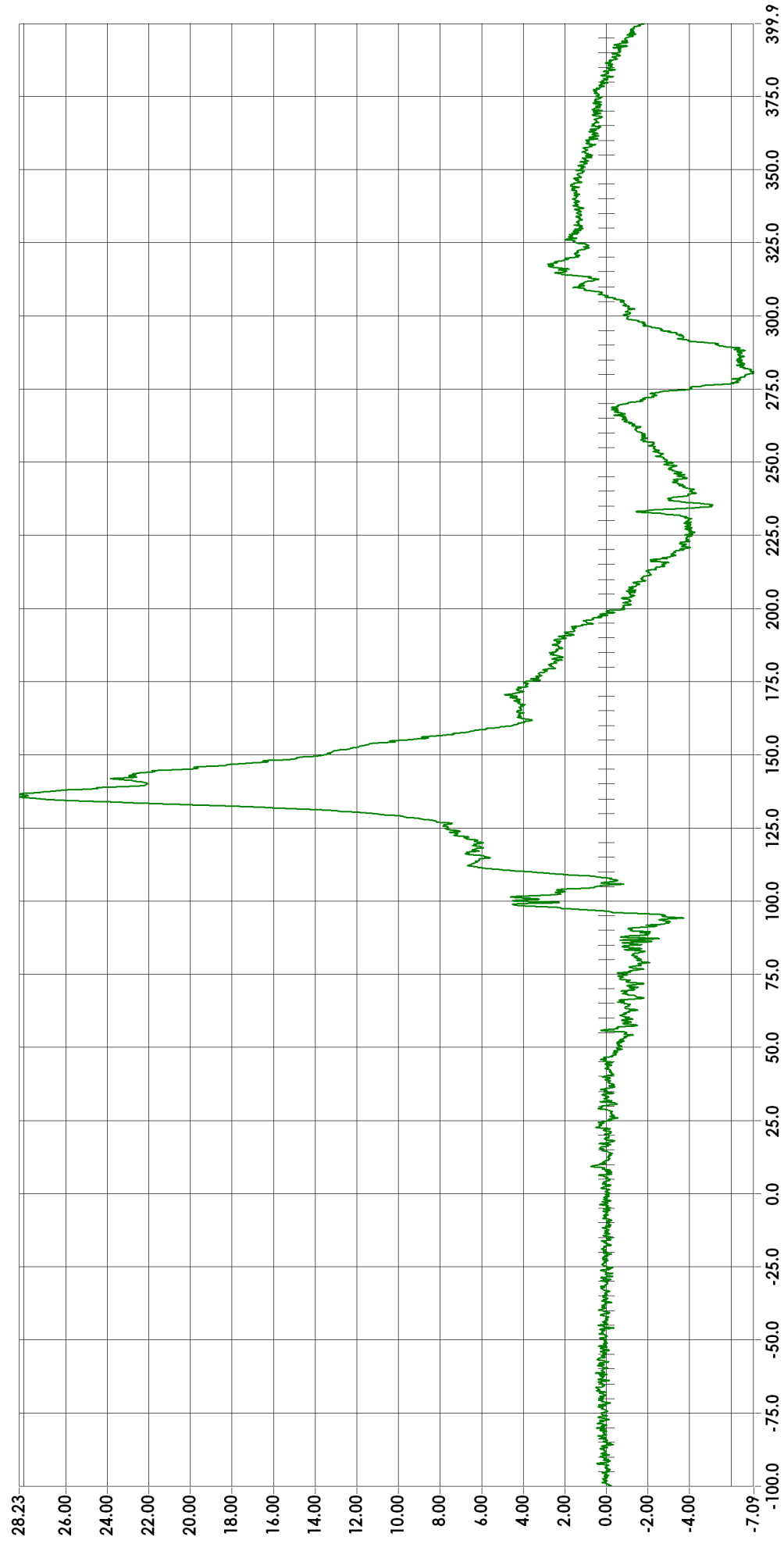


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** HD9Z  
**Sensor Info** ENDEVCO 7264C-2KTZ-2-360  
**Serial Number** P59124

### Passenger internal nap (z) arm (y) face acceleration YL



**Max** 28.23 G's at 136.48 msec  
**Min** -7.09 G's at 280.40 msec

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SOI003 Plot 131

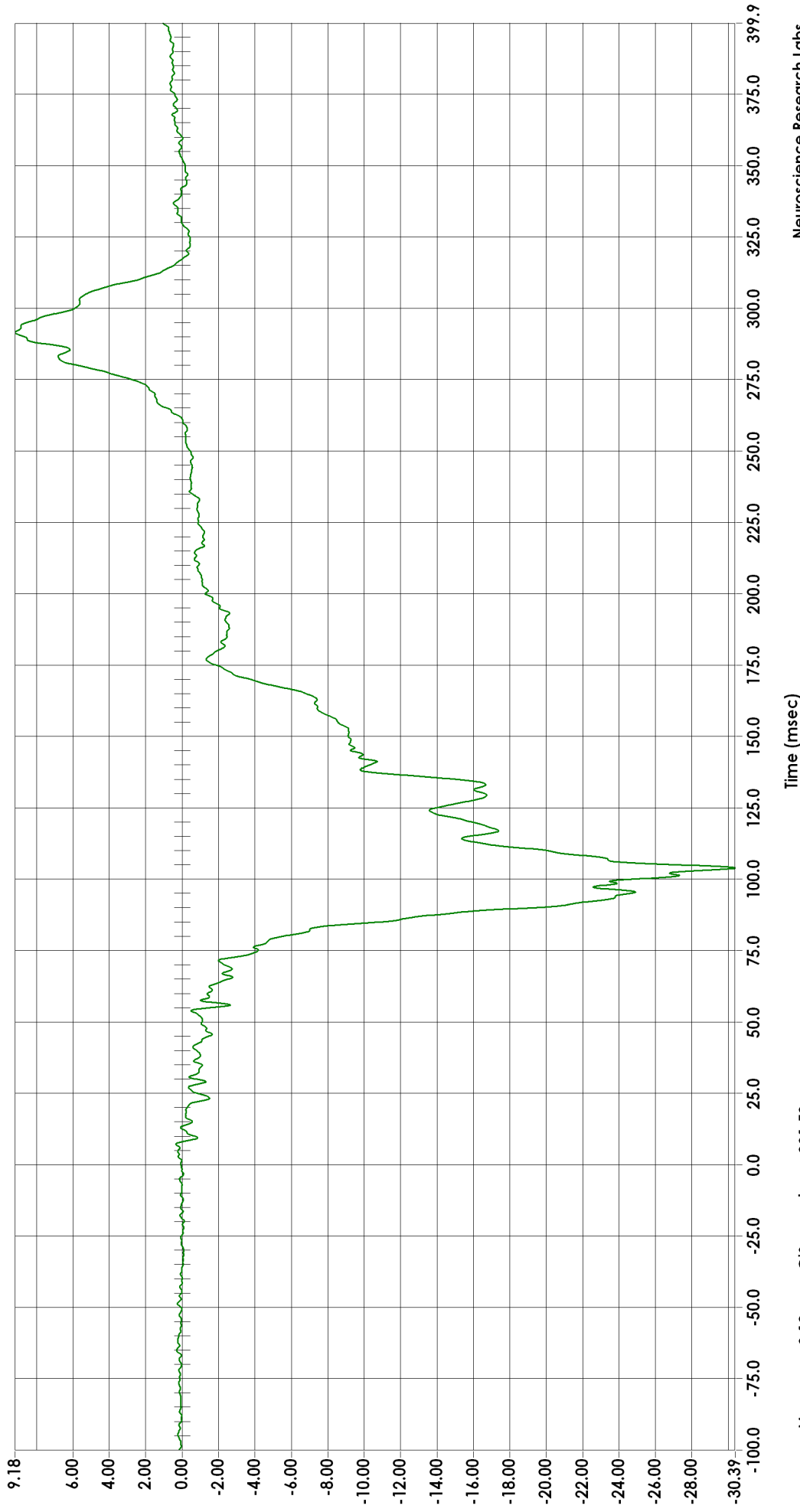


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHST  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12108

### Passenger t4 (x) acceleration XL

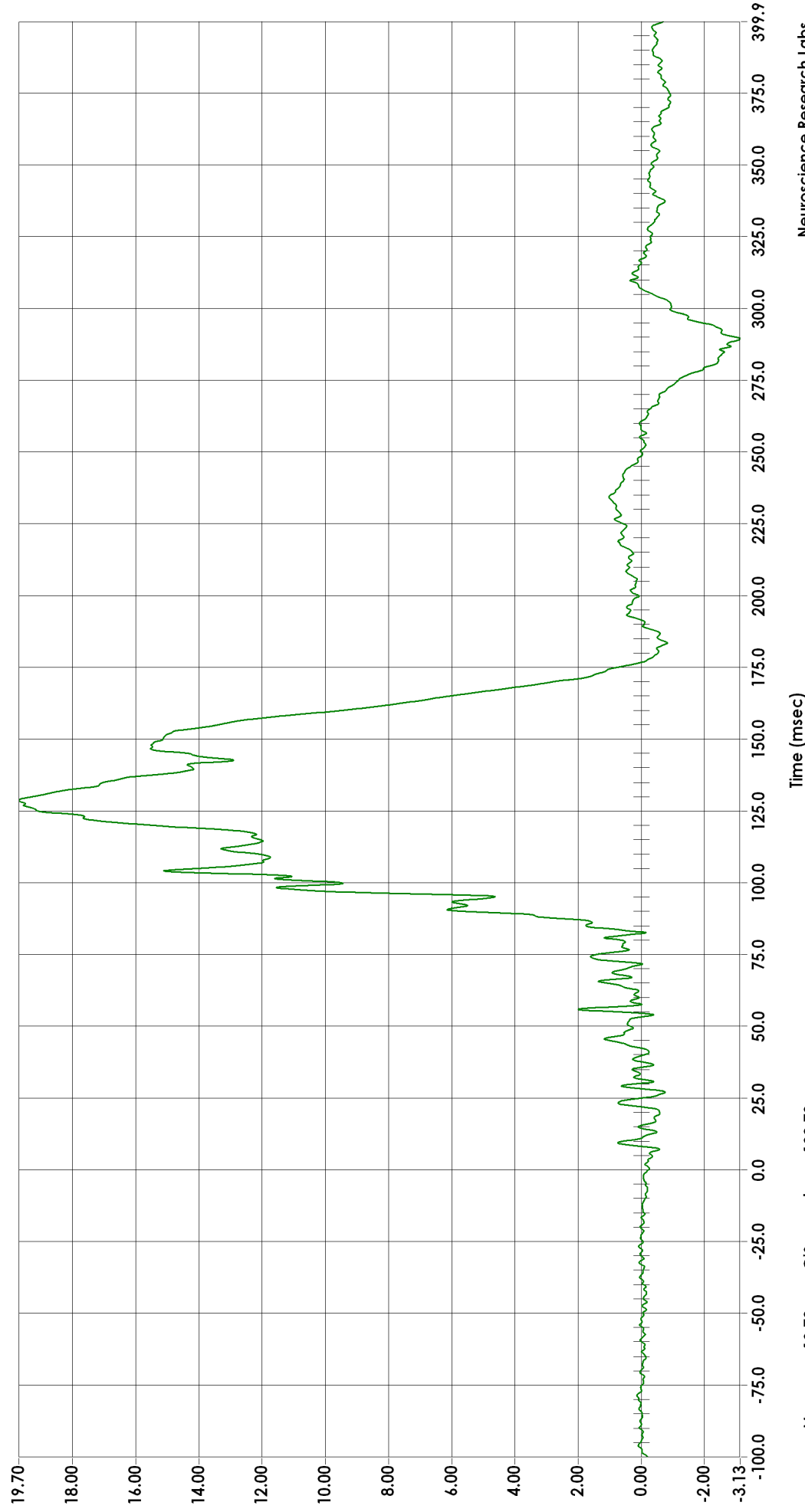


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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC180
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	CHST
		<b>Sensor Info</b>	ENDEVCO 7264D-2KTZ-2-360
		<b>Serial Number</b>	12106

### Passenger t4 (y) acceleration YL



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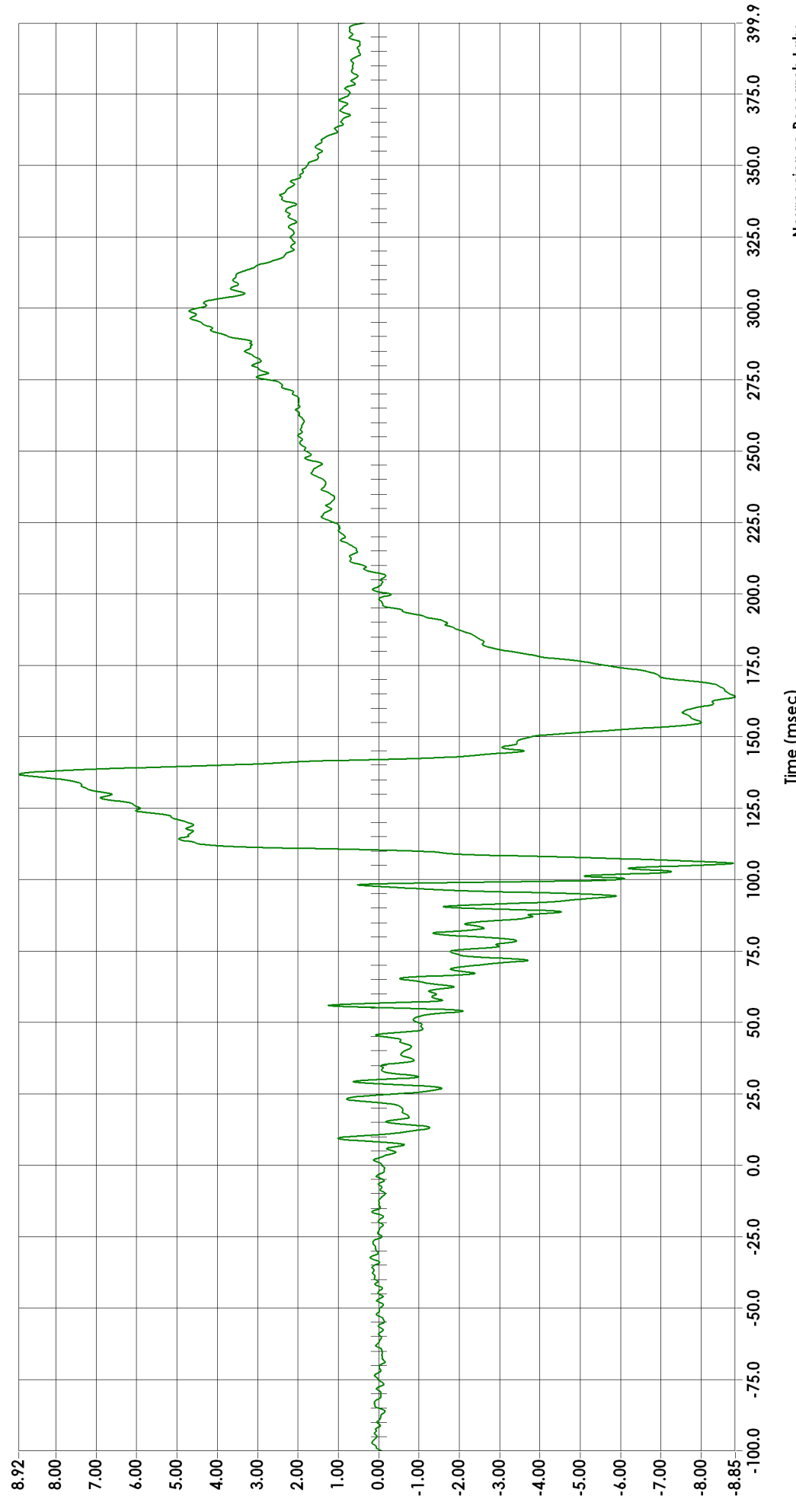


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHST  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12109

### Passenger t4 (z) acceleration ZL

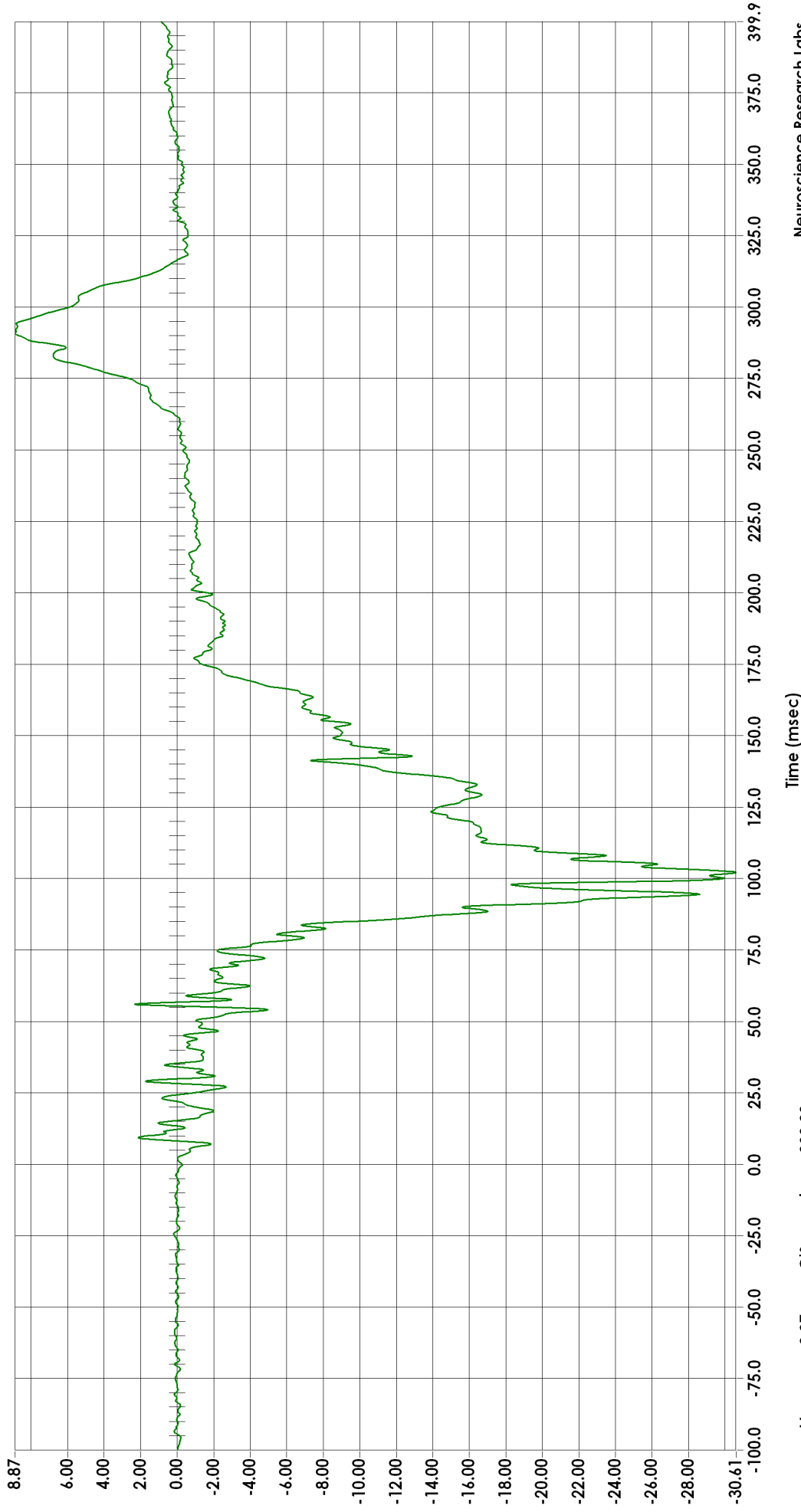


**Max** 8.92 G'S at 136.80 msec  
**Min** -8.85 G'S at 164.08 msec  
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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC180
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	CHST
		<b>Sensor Info</b>	ENDEVCO 7264D-2KTZ-2-360
		<b>Serial Number</b>	12095

### Passenger redundant t4 (x) acceleration XL



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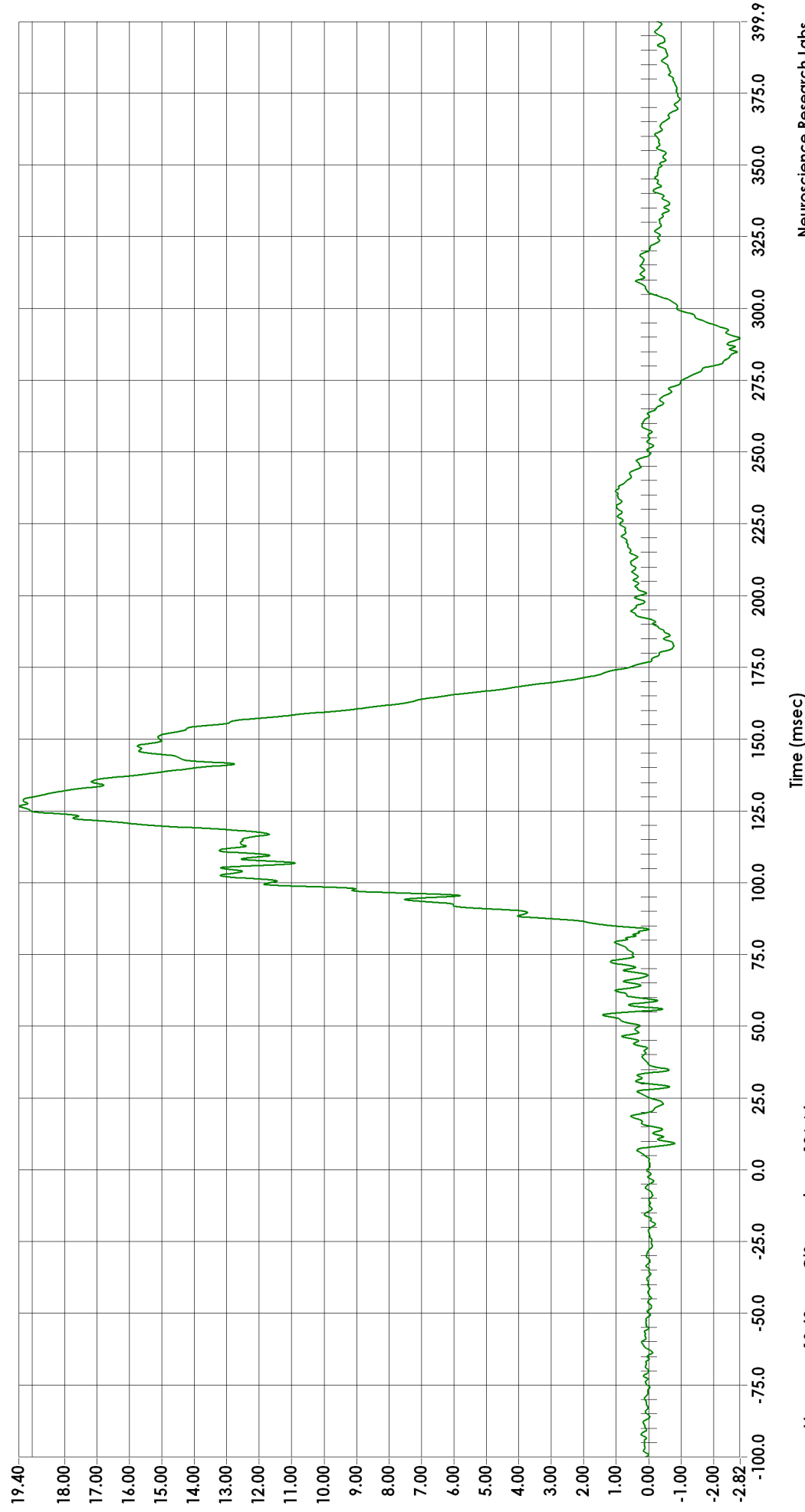


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC180  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHST  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12114

### Passenger redundant t4 (y) acceleration YL

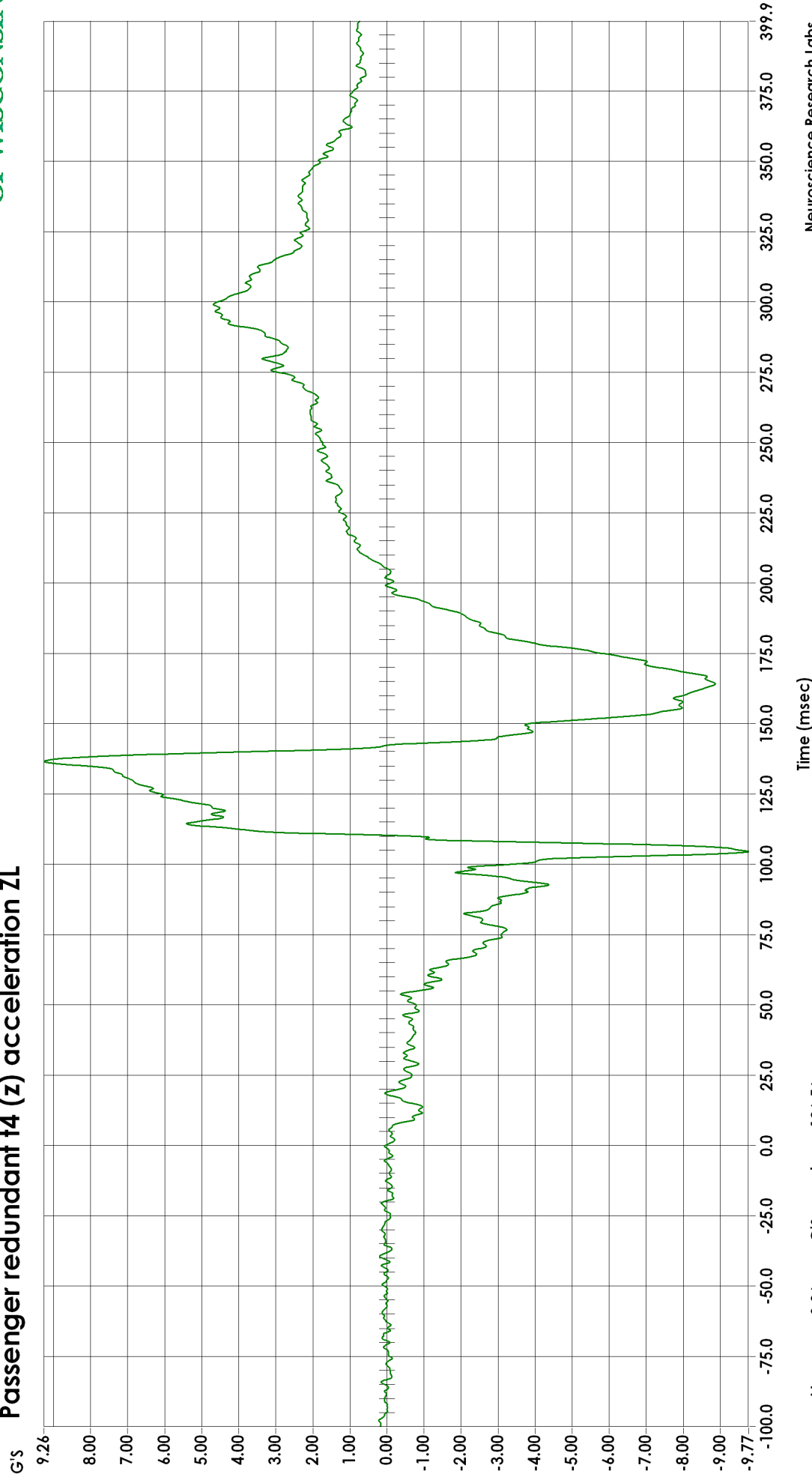


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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC180
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	CHST
		<b>Sensor Info</b>	ENDEVCO 7264D-2KTZ-2-360
		<b>Serial Number</b>	12113

### Passenger redundant t4 (z) acceleration ZL



<b>Max</b>	9.26	<b>G'S</b>	at	136.56	<b>msec</b>
<b>Min</b>	-9.77	<b>G'S</b>	at	104.48	<b>msec</b>

SOI003 Plot 137

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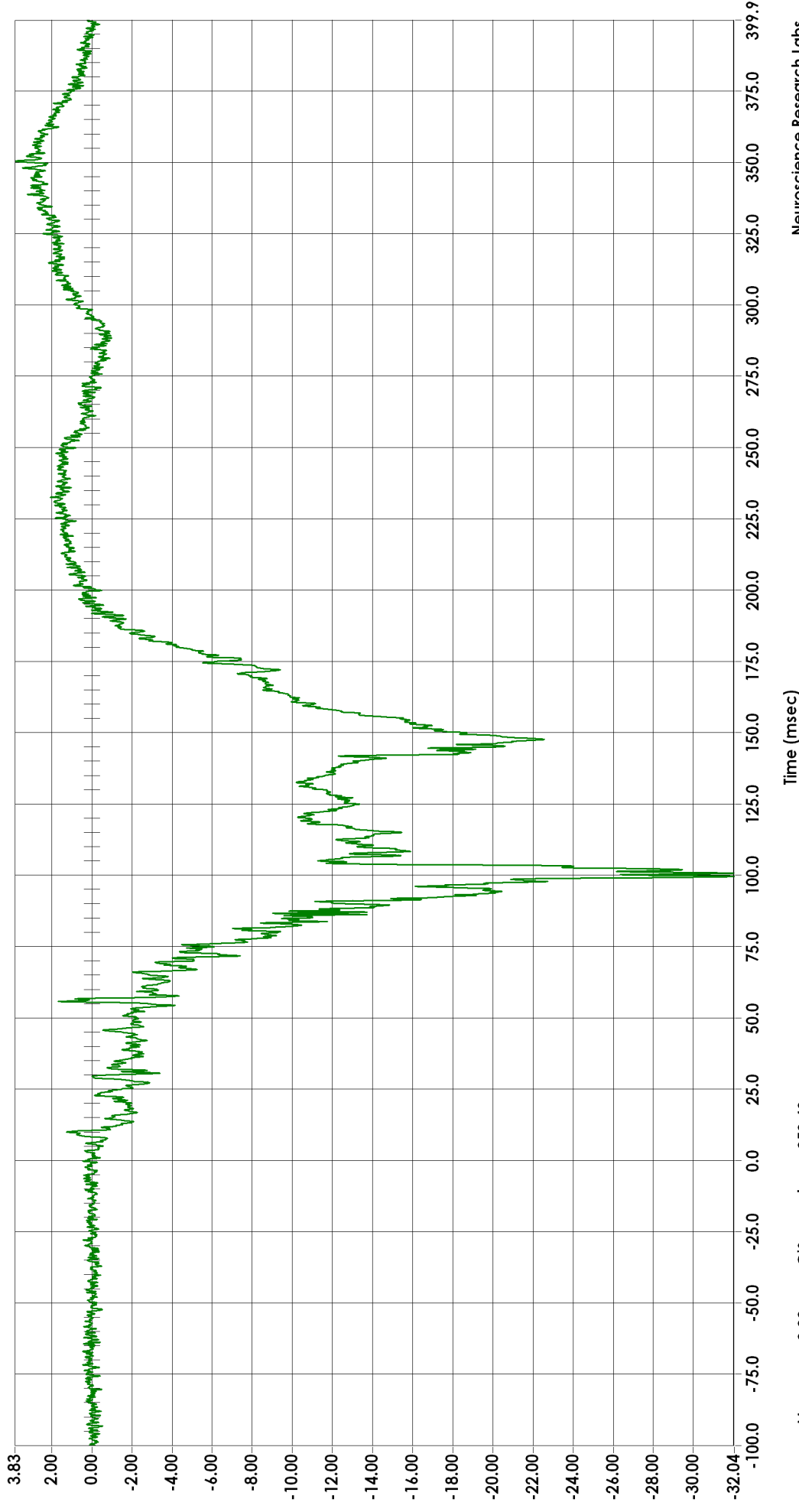


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** PVCN  
**Sensor Info** MSI 64-2000-10-360-XY  
**Serial Number** A011338

### Passenger pelvis (x) acceleration XL



**Max** 3.83 G's at 350.40 msec  
**Min** -32.04 G's at 99.60 msec

Time (msec)

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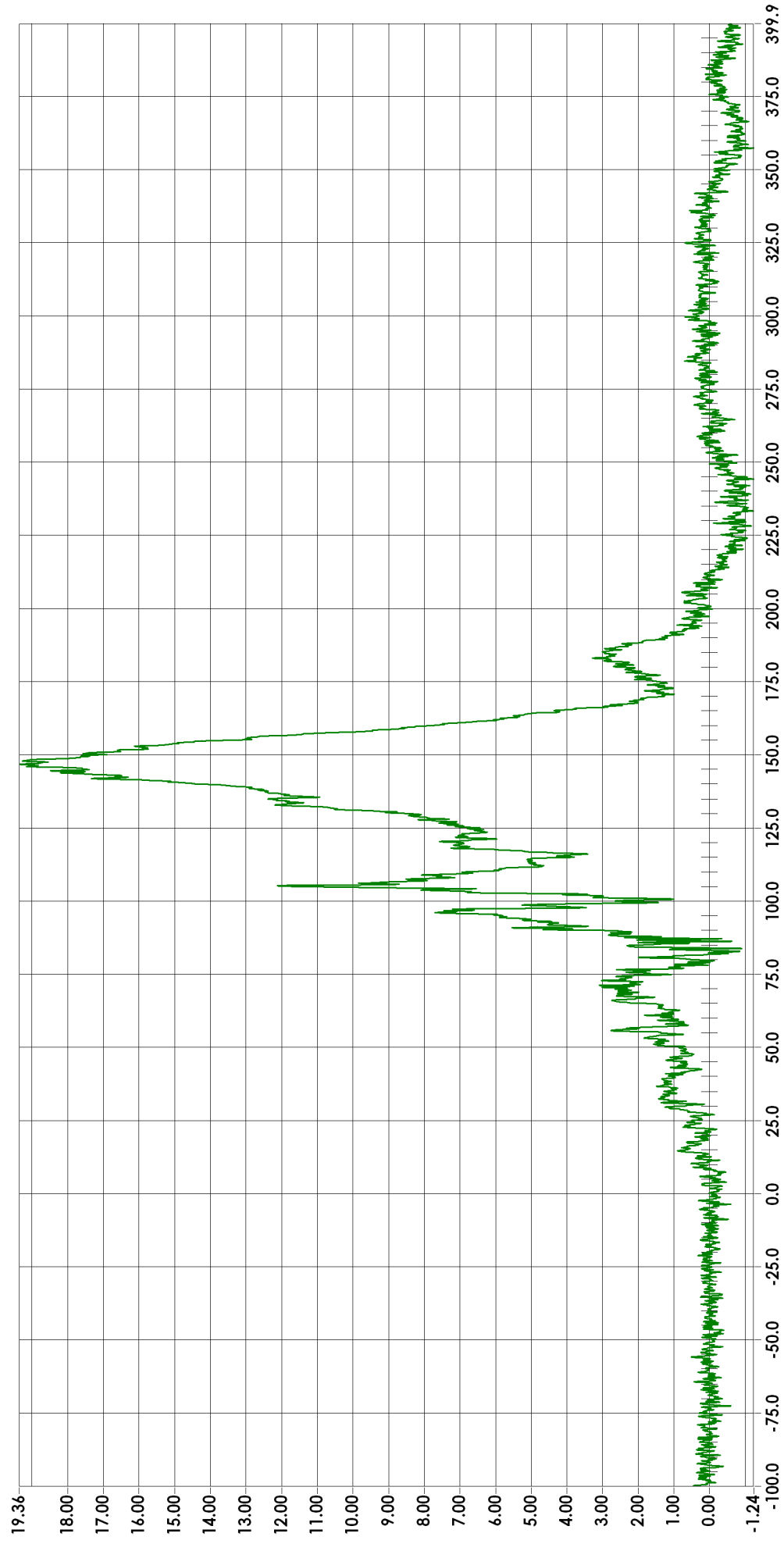


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** PVCN  
**Sensor Info** MSI 64-2000-10-360-XY  
**Serial Number** A011340

### Passenger pelvis (y) acceleration YL



Time (msec)

**Max** 19.36 G's at 146.72 msec  
**Min** -1.24 G's at 357.36 msec

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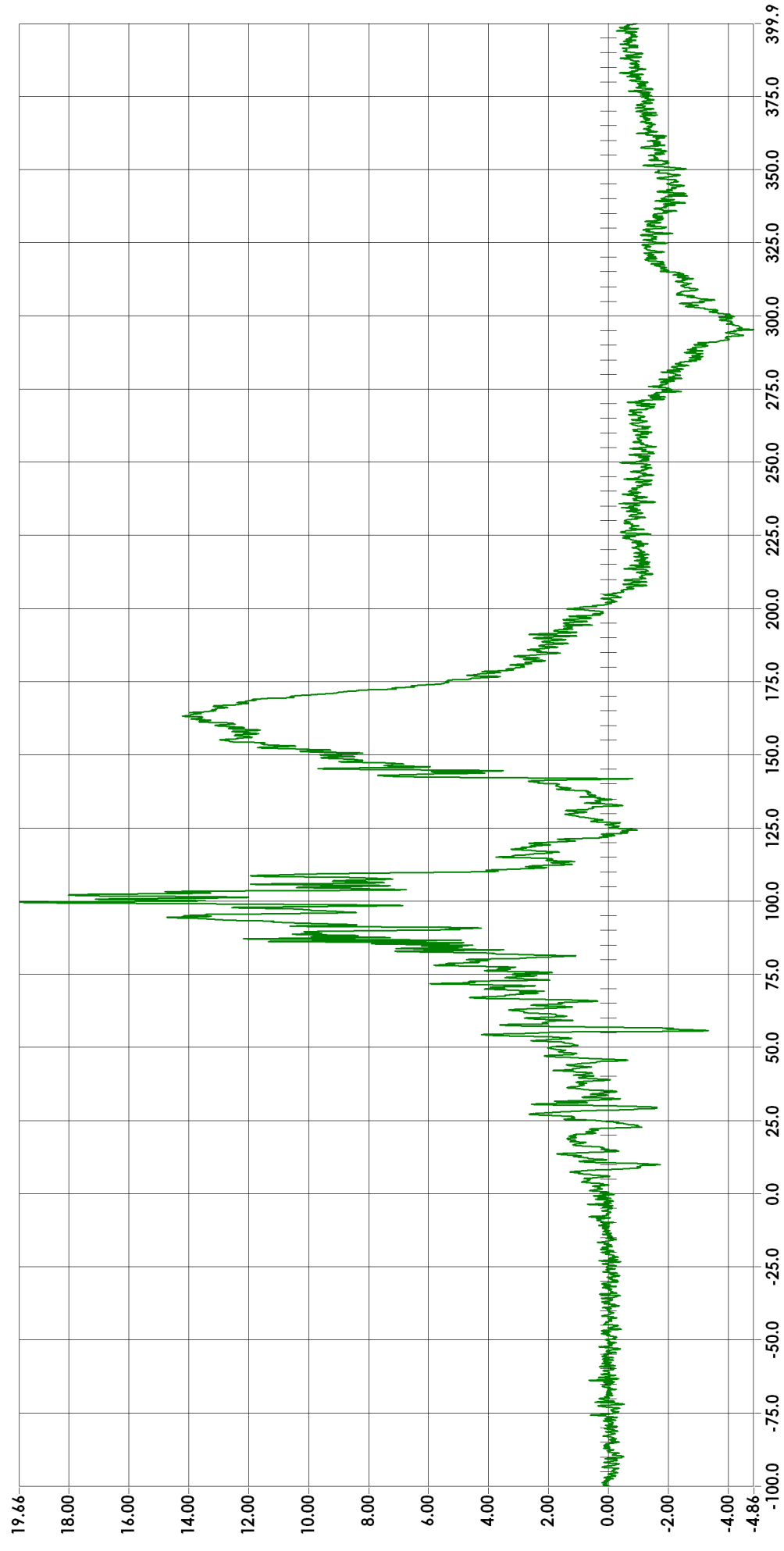


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** PVCN  
**Sensor Info** MSI 64-2000-10-360-XY  
**Serial Number** A011342

### Passenger pelvis (z) acceleration ZL



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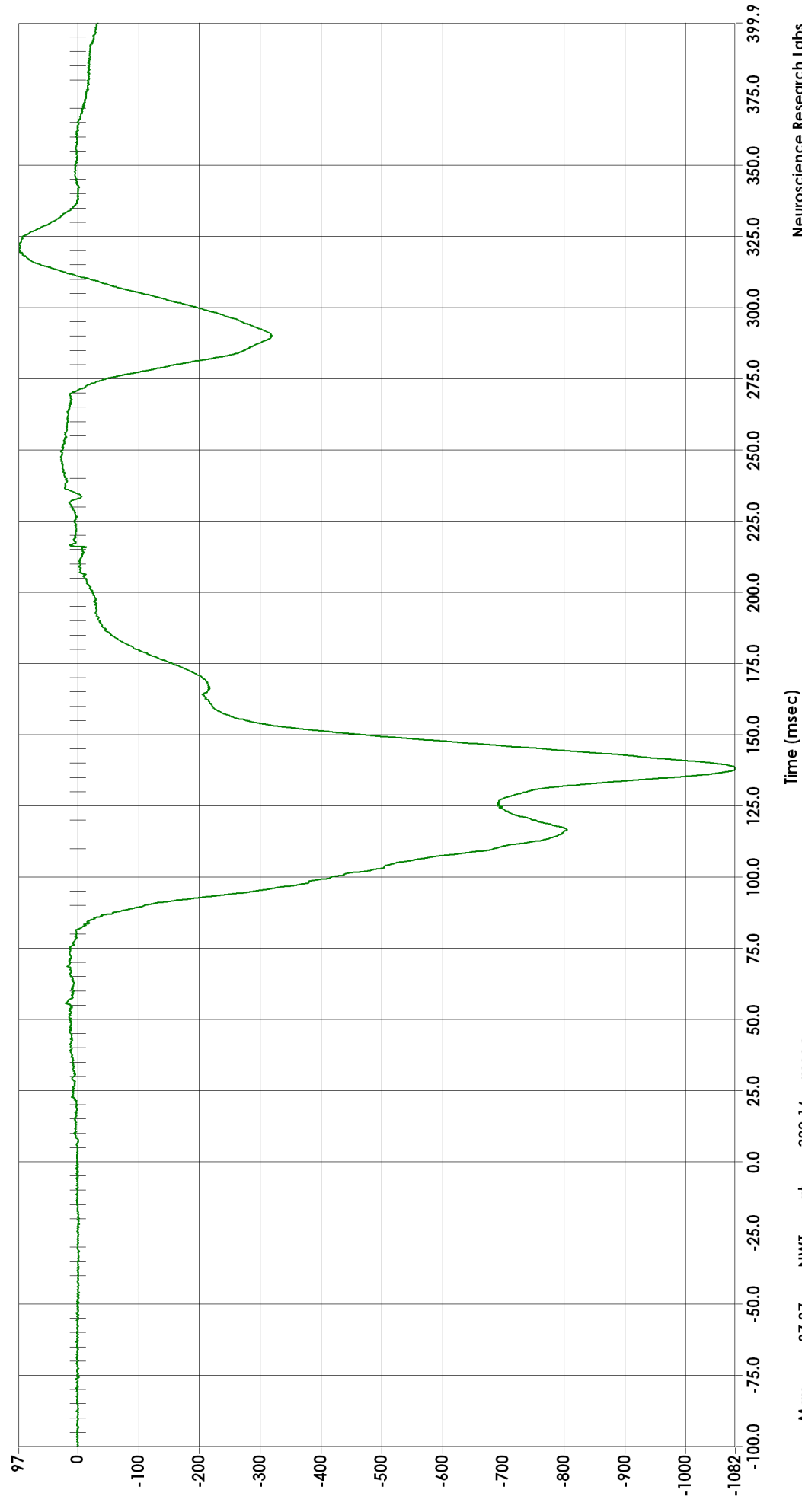


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKU  
**Sensor Info** Denton 1716A  
**Serial Number** 1716A\_0445\_FX

### Passenger upper neck (x) force XL



**Max** 97.07 NWT at 322.16 msec  
**Min** -1081.51 NWT at 138.32 msec

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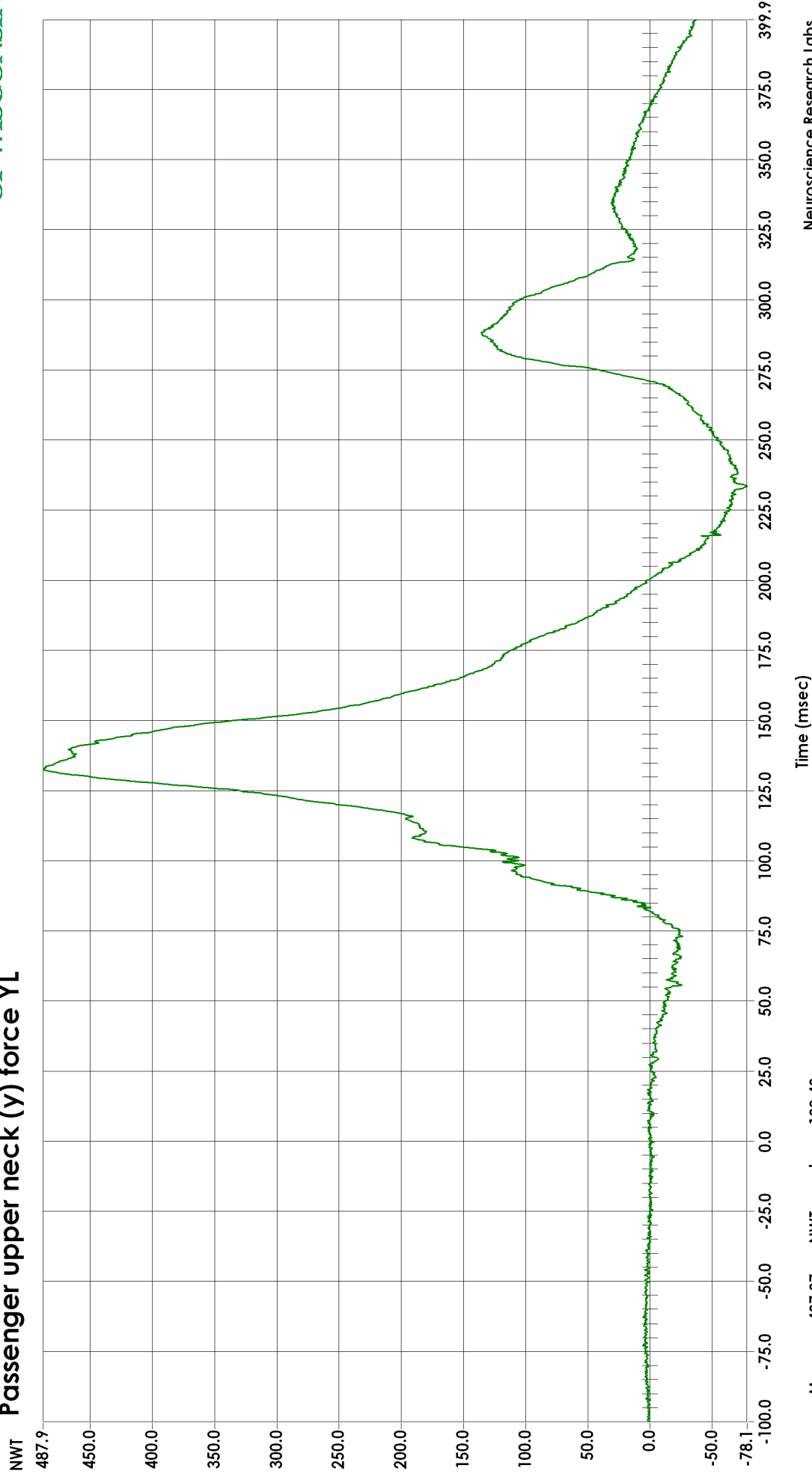


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKU  
**Sensor Info** Denton 1716A  
**Serial Number** 1716A\_0445\_FY

### Passenger upper neck (y) force YL



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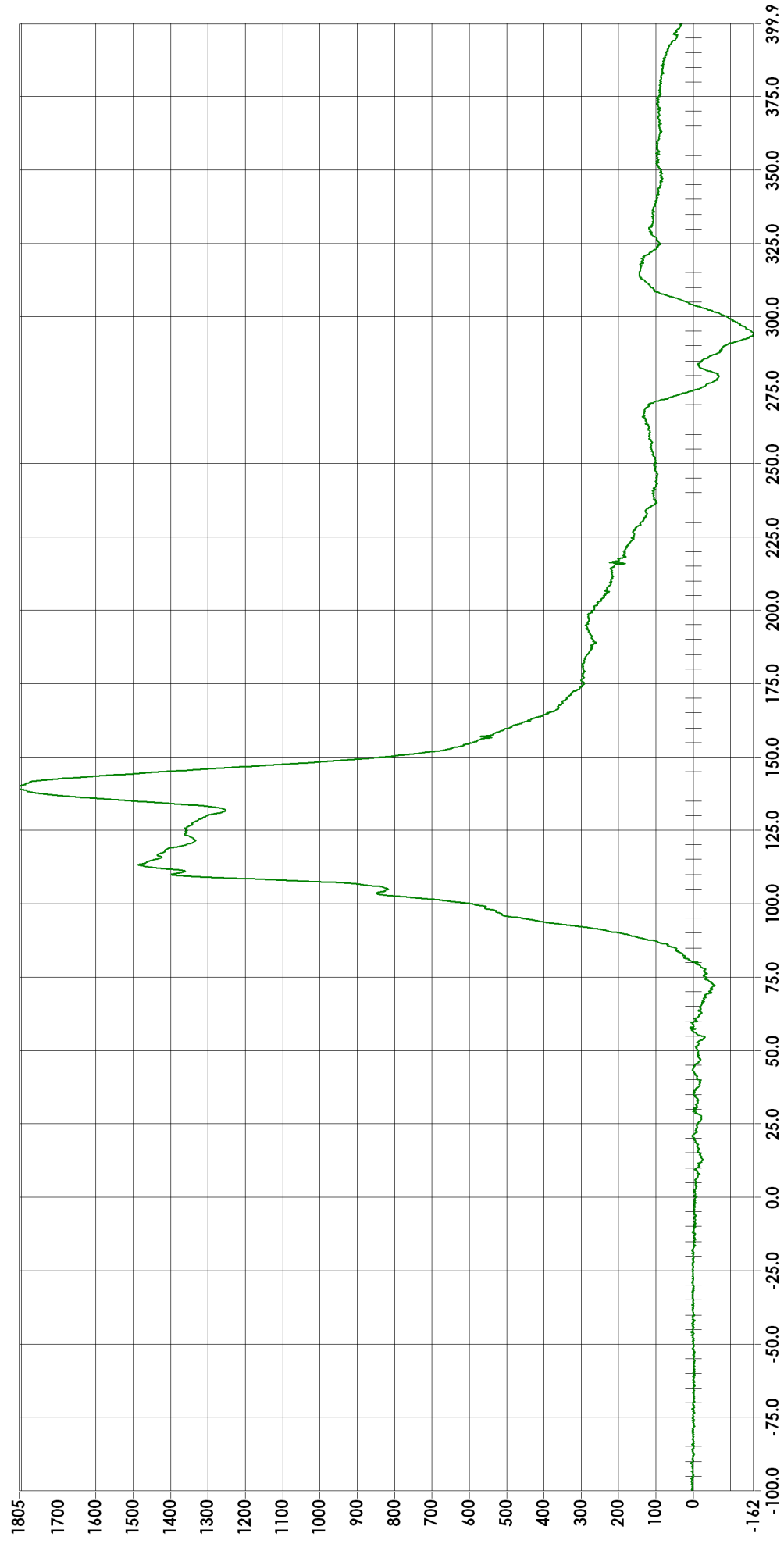


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKU  
**Sensor Info** Denton 1716A  
**Serial Number** 1716A\_0445\_FZ

### Passenger upper neck (z) force ZL



**Max** 1805.42 NWT at 139.44 msec  
**Min** -162.36 NWT at 294.48 msec

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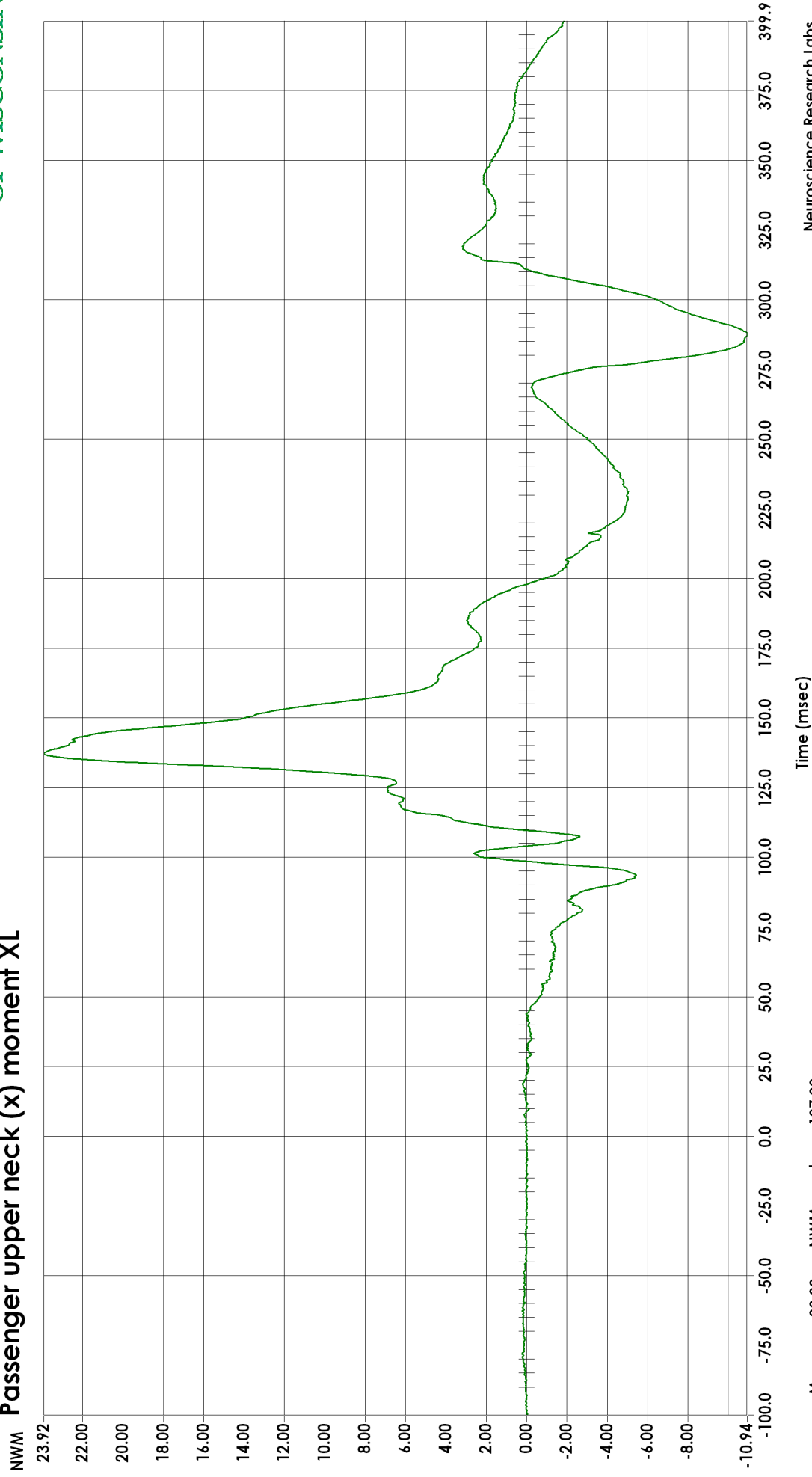


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKU  
**Sensor Info** Denton 1716A  
**Serial Number** 1716A\_0445\_MX

### Passenger upper neck (x) moment XL



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**Max** 23.92 NWM at 137.20 msec  
**Min** -10.94 NWM at 288.08 msec  
 SOI003 Plot 144

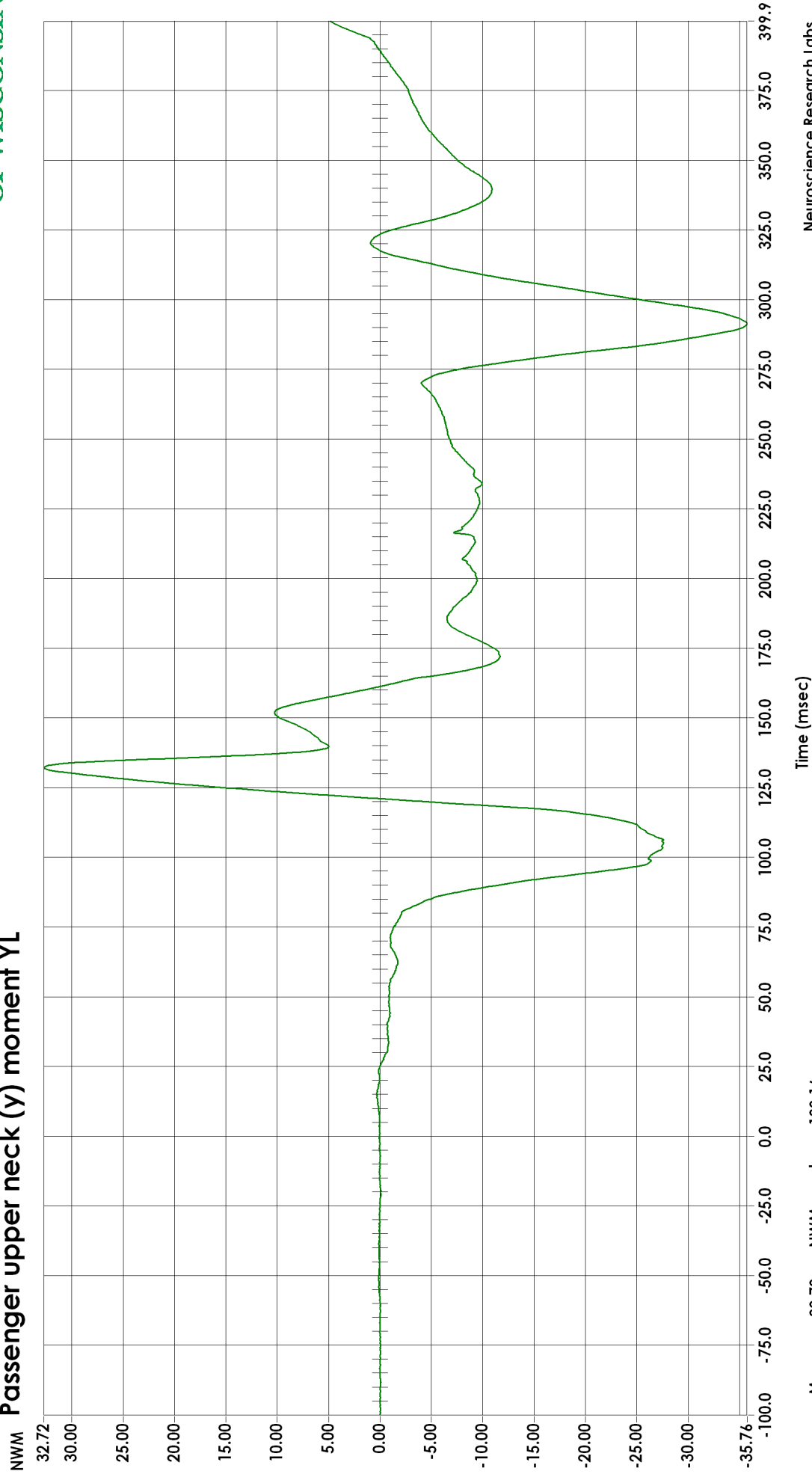


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKU  
**Sensor Info** Denton 1716A  
**Serial Number** 1716A\_0445\_MY

### Passenger upper neck (y) moment YL



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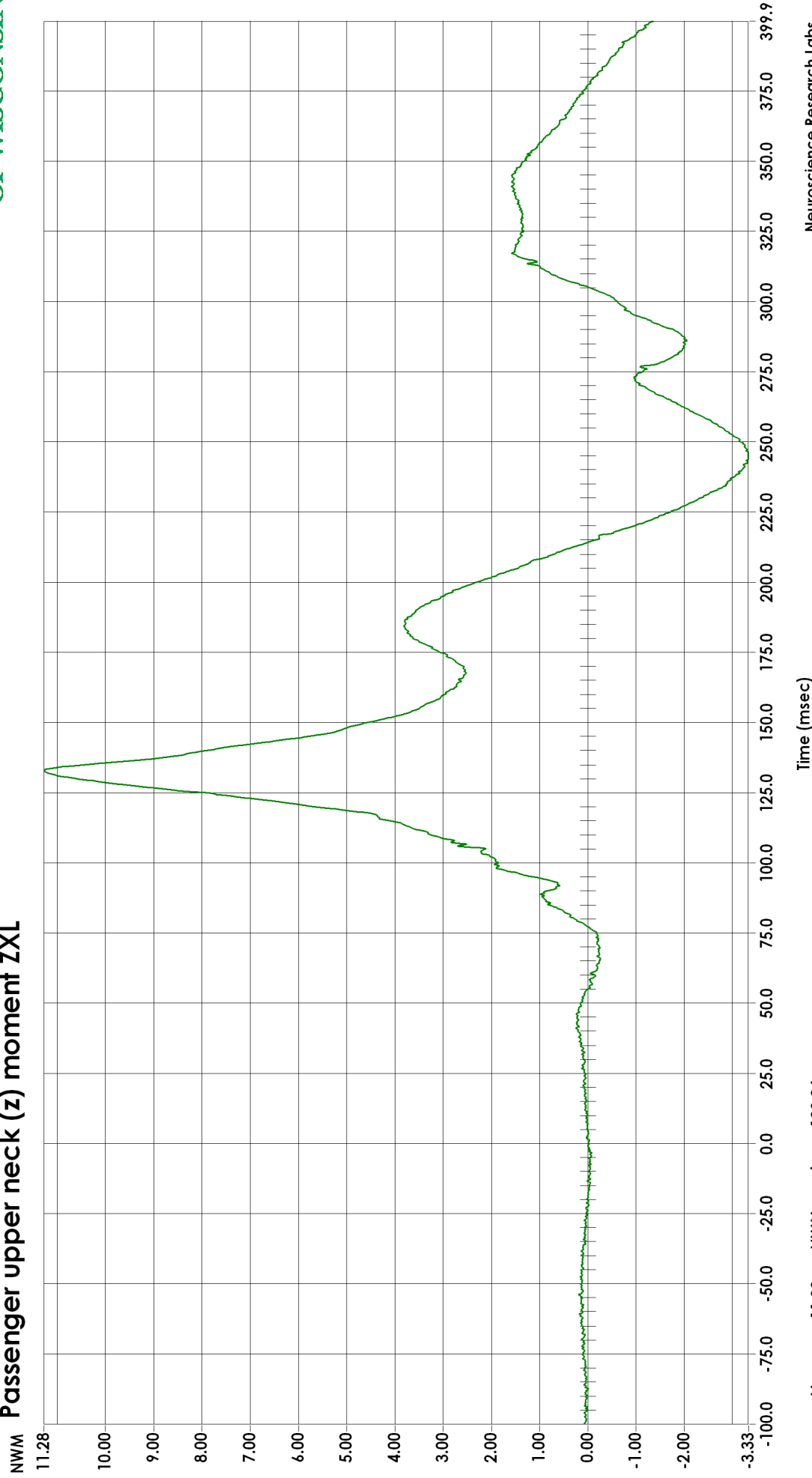


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKU  
**Sensor Info** Denton 1716A  
**Serial Number** 1716A\_0445\_MZ

### Passenger upper neck (z) moment ZXL



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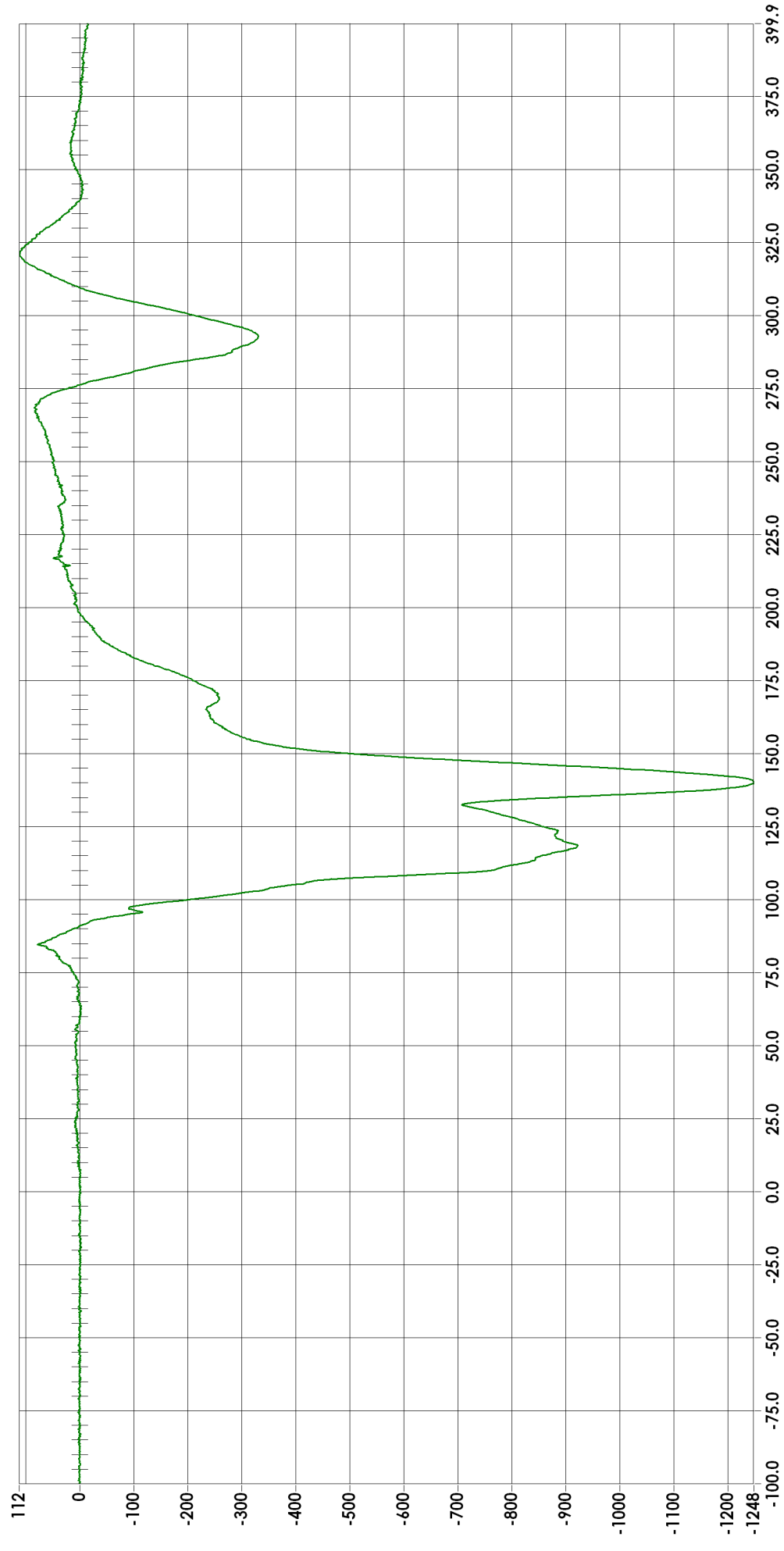


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 3251\_2155  
**Serial Number** 3251\_2155\_152\_FX

### Passenger lower neck (x) force XL



**Max** 112.39 NWT at 320.48 msec  
**Min** -1248.16 NWT at 140.24 msec

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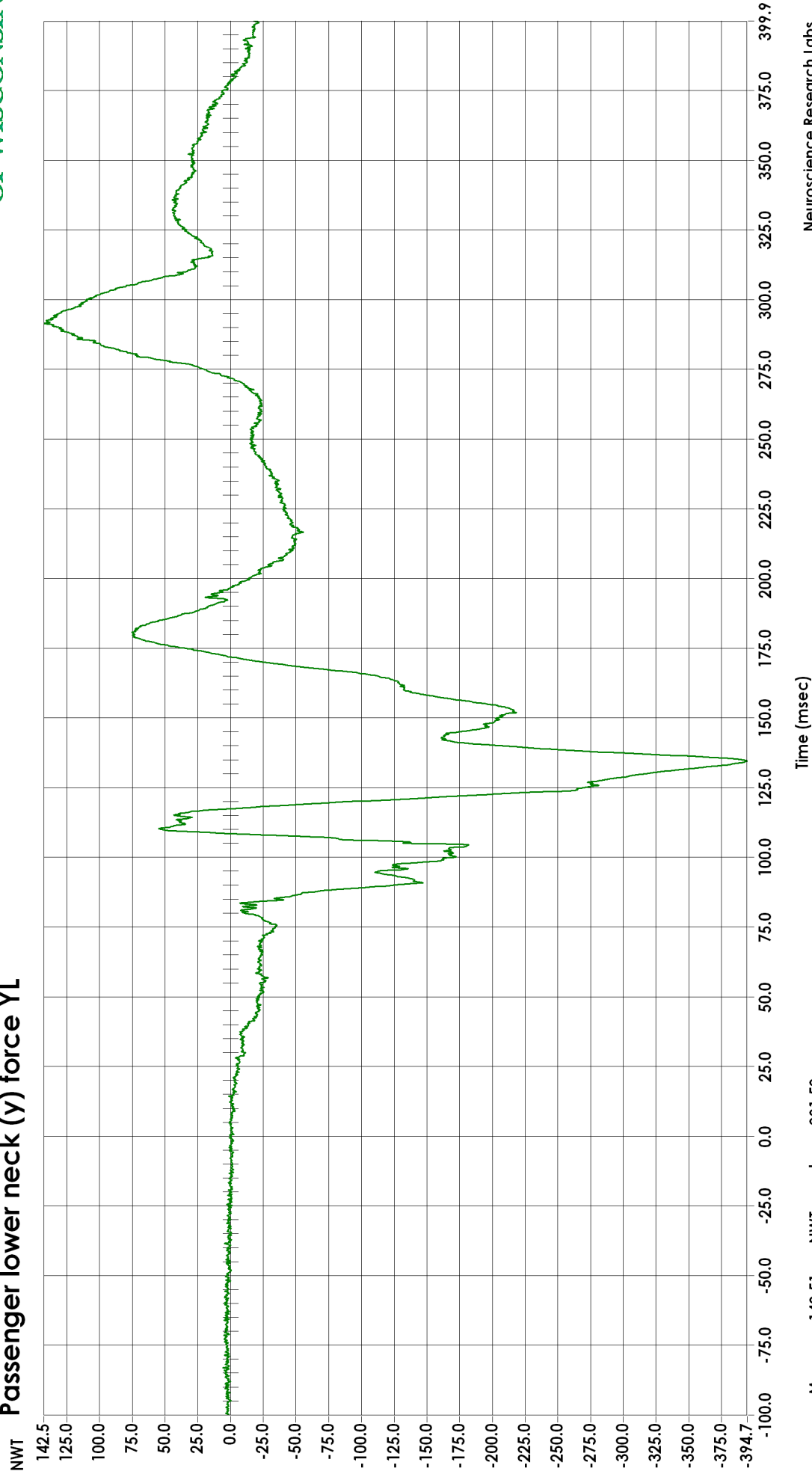


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 3251\_2155  
**Serial Number** 3251\_2155\_152\_FY

### Passenger lower neck (y) force YL



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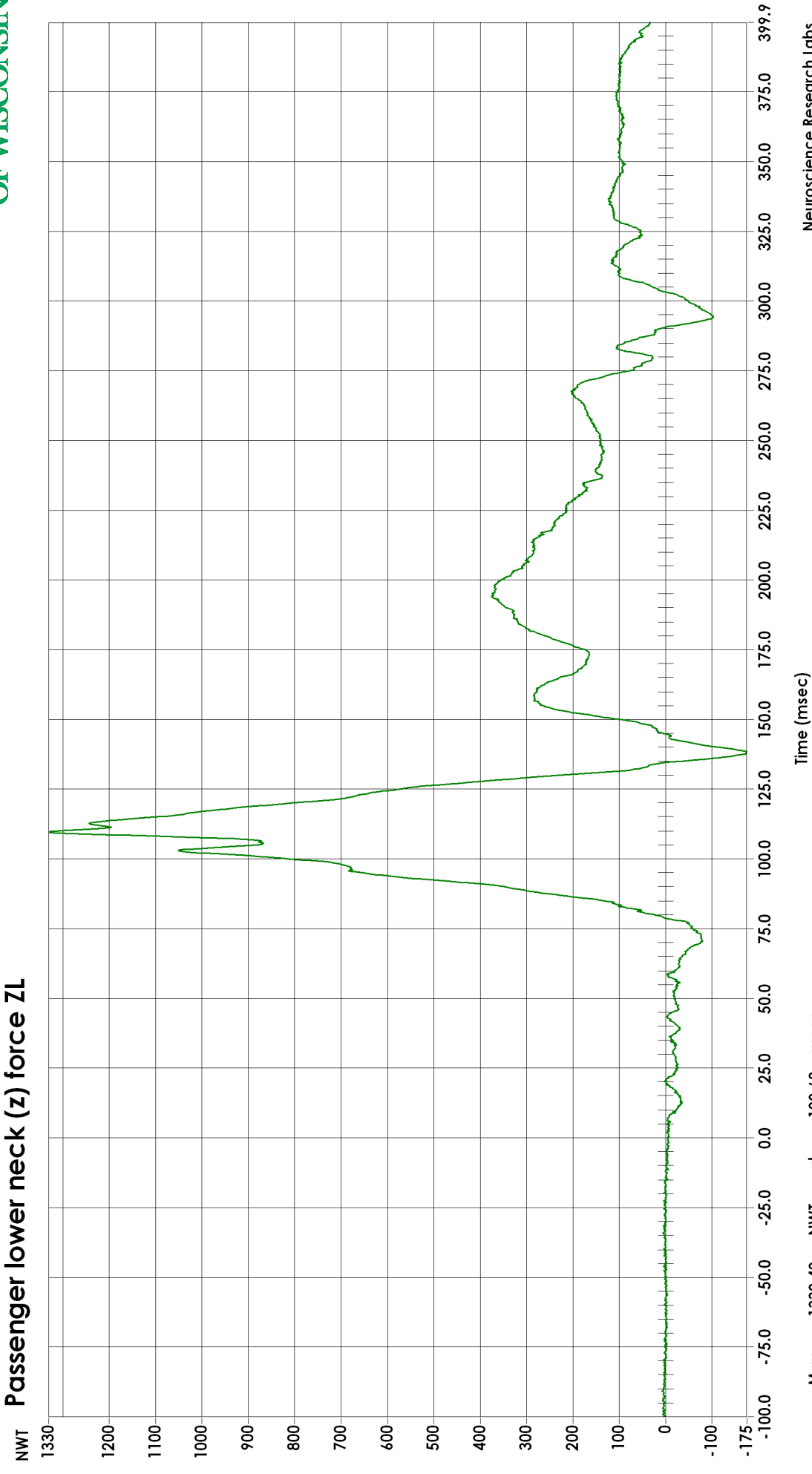


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 3251\_2155  
**Serial Number** 3251\_2155\_152\_FZ

### Passenger lower neck (z) force ZL



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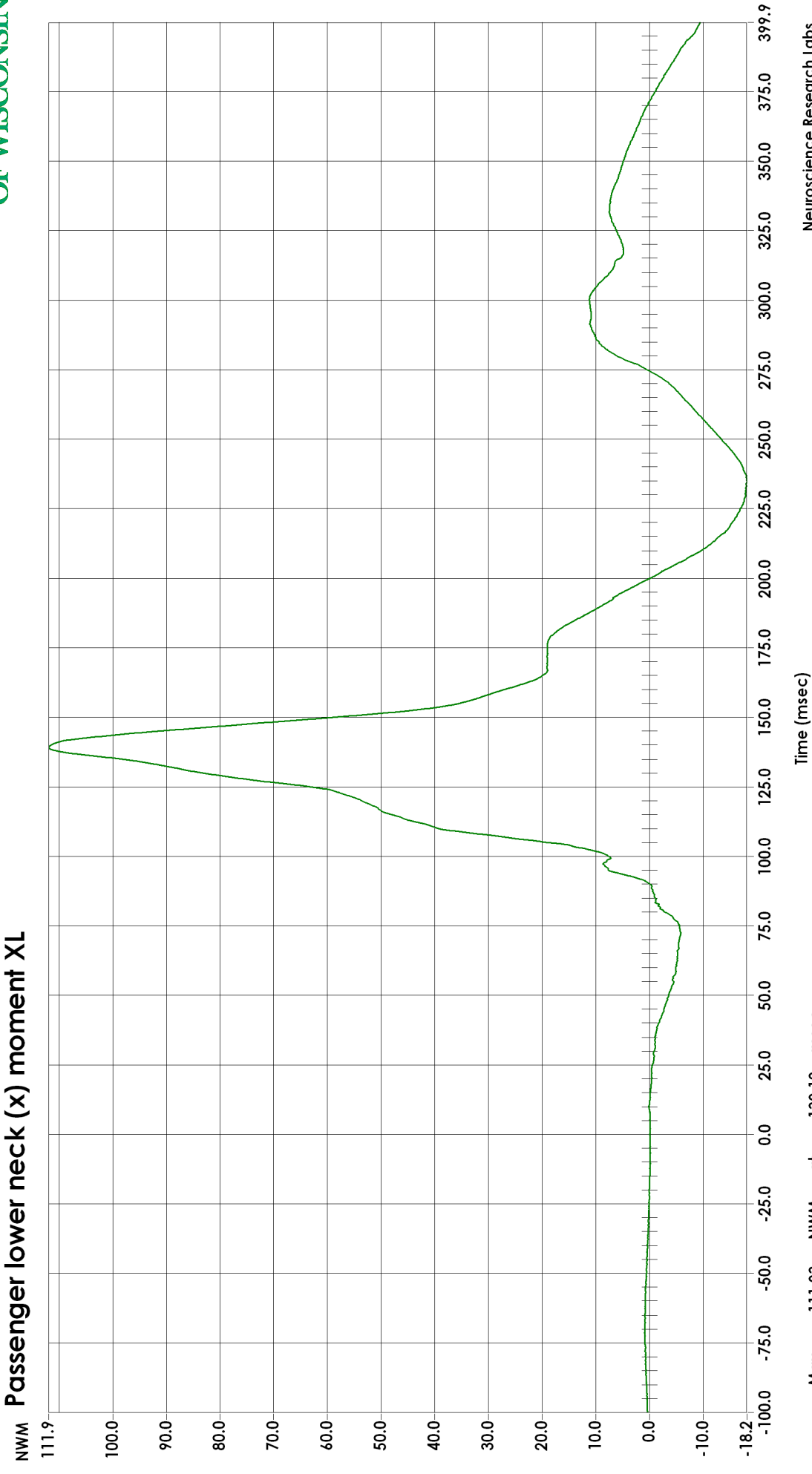


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 3251\_2155  
**Serial Number** 3251\_2155\_152\_MX

### Passenger lower neck (x) moment XL



**Max** 111.93 NWM at 139.12 msec  
**Min** -18.19 NWM at 234.88 msec

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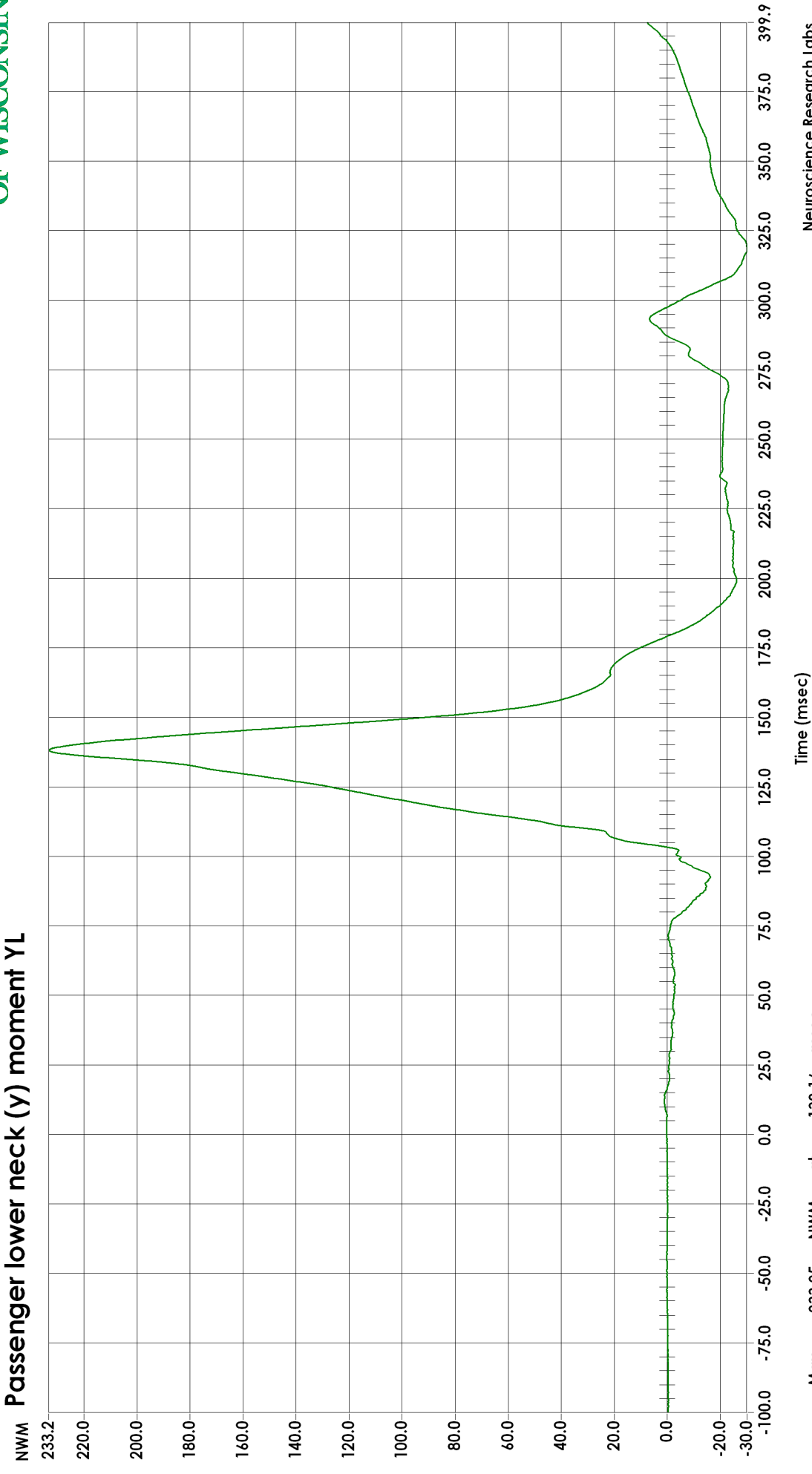


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** NEKL  
**Sensor Info** Denton 3251\_2155  
**Serial Number** 3251\_2155\_152\_MY

### Passenger lower neck (y) moment YL



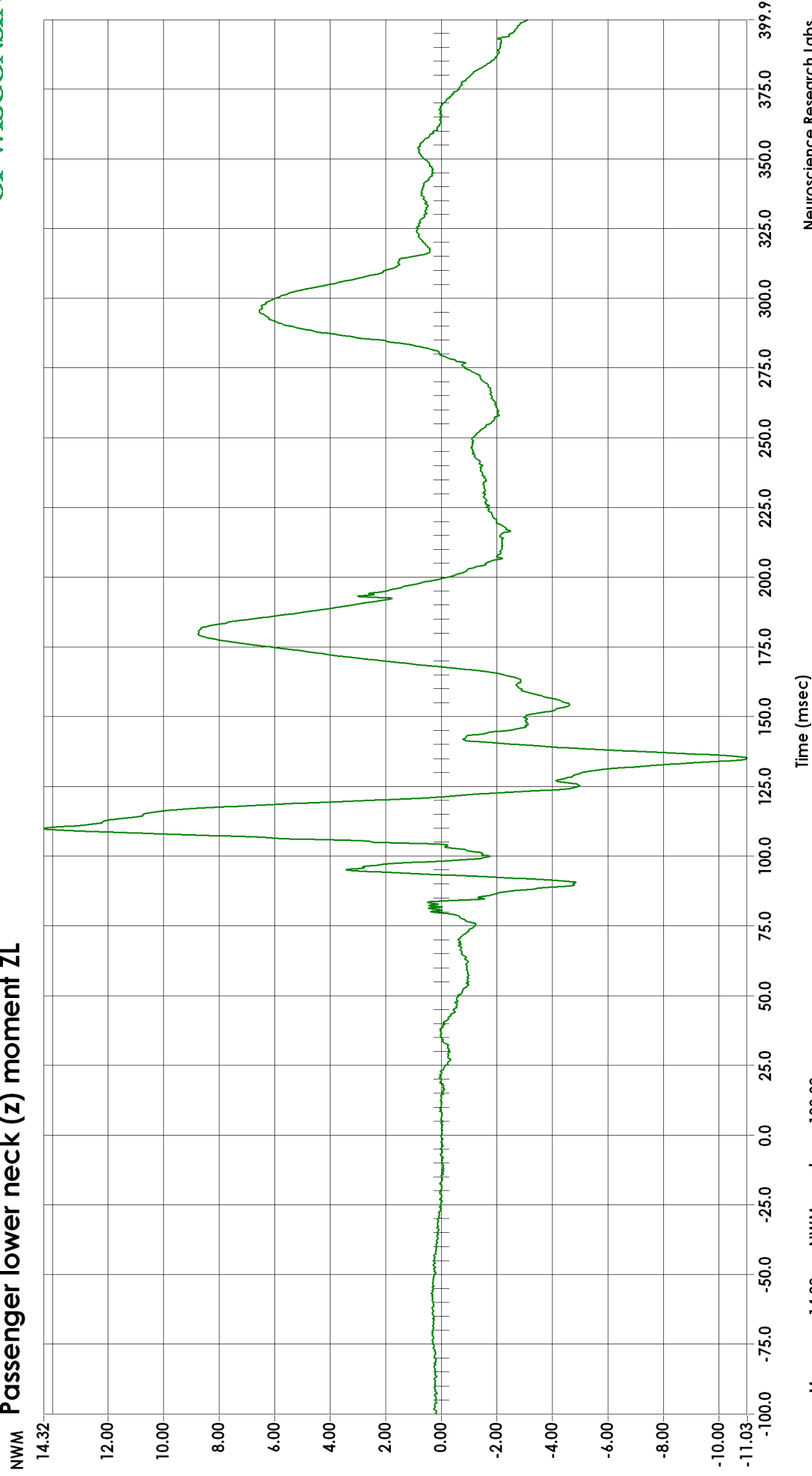
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**Max** 233.25 NWM at 138.16 msec  
**Min** -30.02 NWM at 317.92 msec



<b>Test ID</b>	SOI003	<b>Filter</b>	CFC600
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	NEKL
		<b>Sensor Info</b>	Denton 3251_2155
		<b>Serial Number</b>	3251_2155_152_MZ

### Passenger lower neck (z) moment ZL



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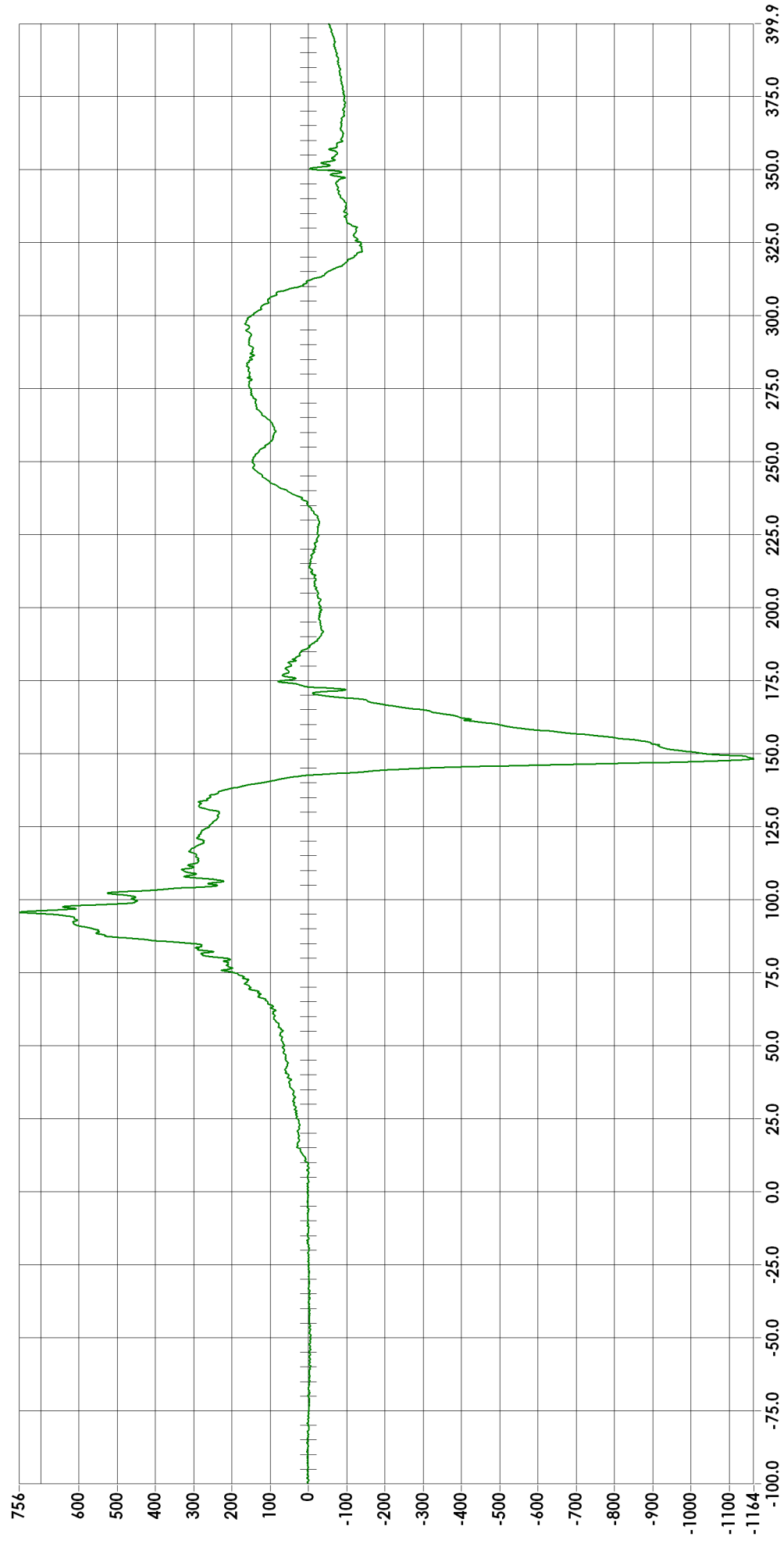


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FMRL  
**Sensor Info** Denton 2121A  
**Serial Number** 2121A\_257

### Passenger left femur (z) force ZL



**Max** 755.99 NWT at 95.68 msec  
**Min** -1164.31 NWT at 148.24 msec

SOI003 Plot 153

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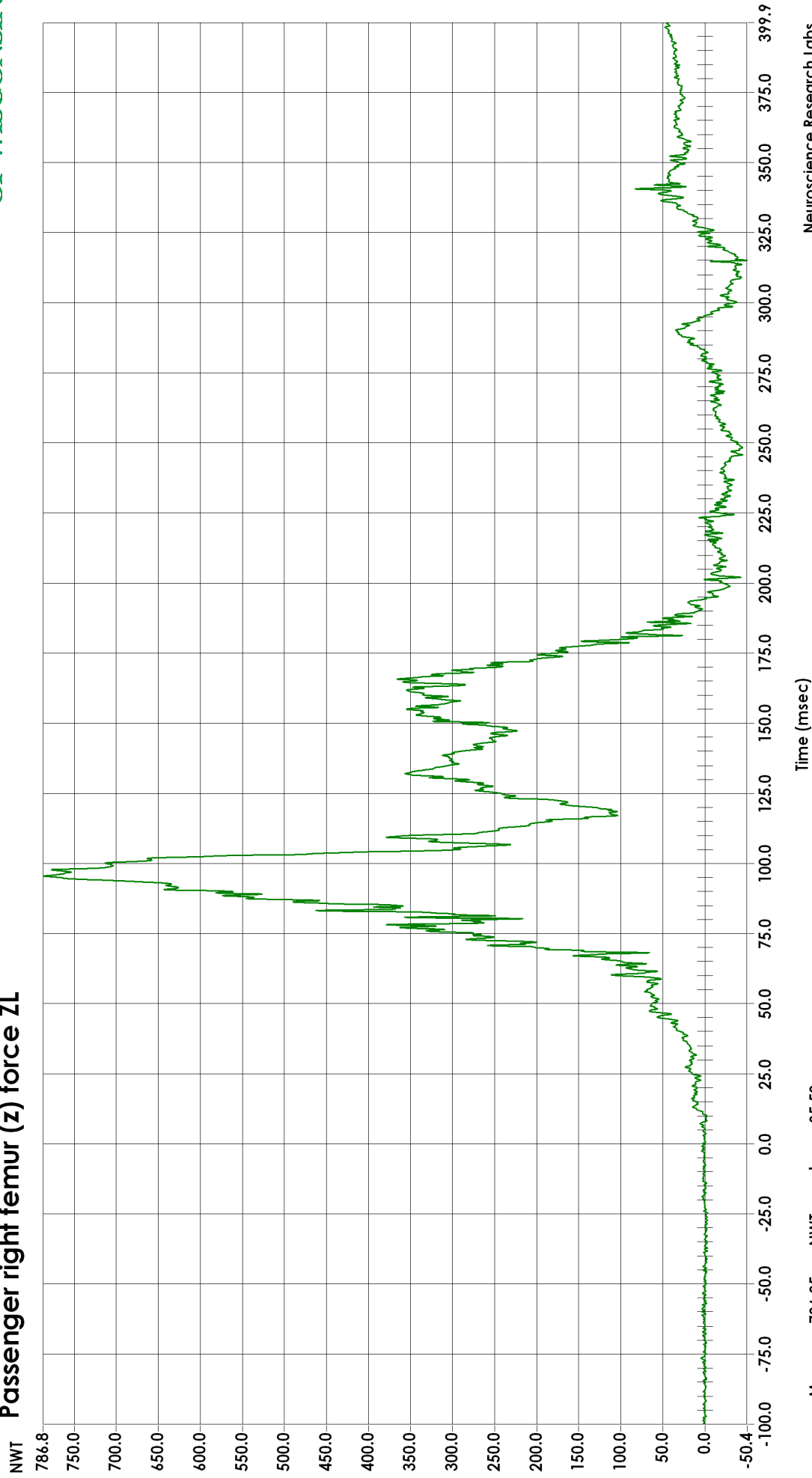


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC600  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FMRR  
**Sensor Info** Denton 2121  
**Serial Number** 2121\_255

### Passenger right femur (z) force ZL



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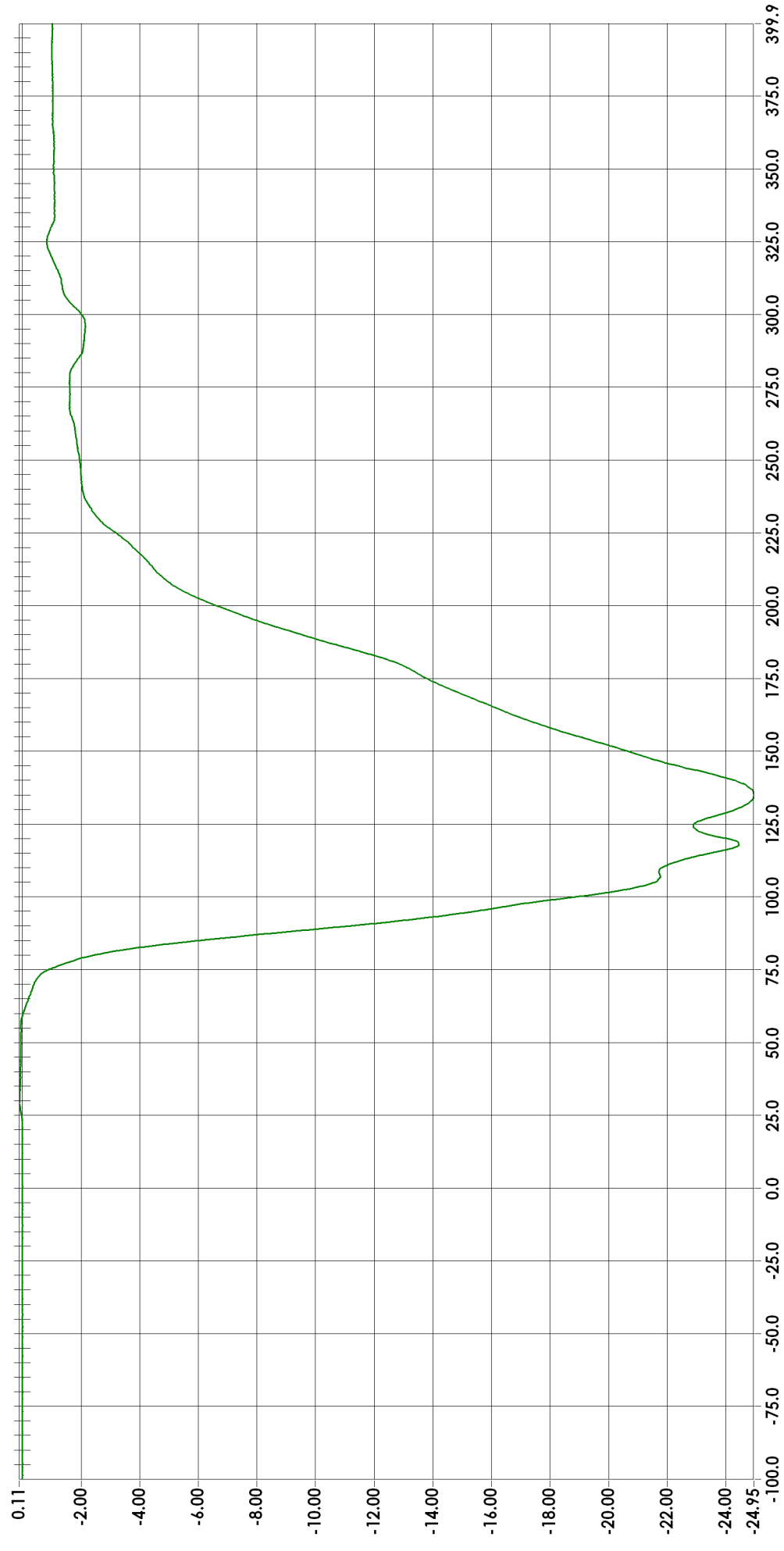


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** CHST  
**Sensor Info** DENTON 14CB1-2897  
**Serial Number** CST421

### Passenger chest (x) displacement XL



Time (msec)

**Max** 0.11 MM at 29.20 msec  
**Min** -24.95 MM at 135.20 msec

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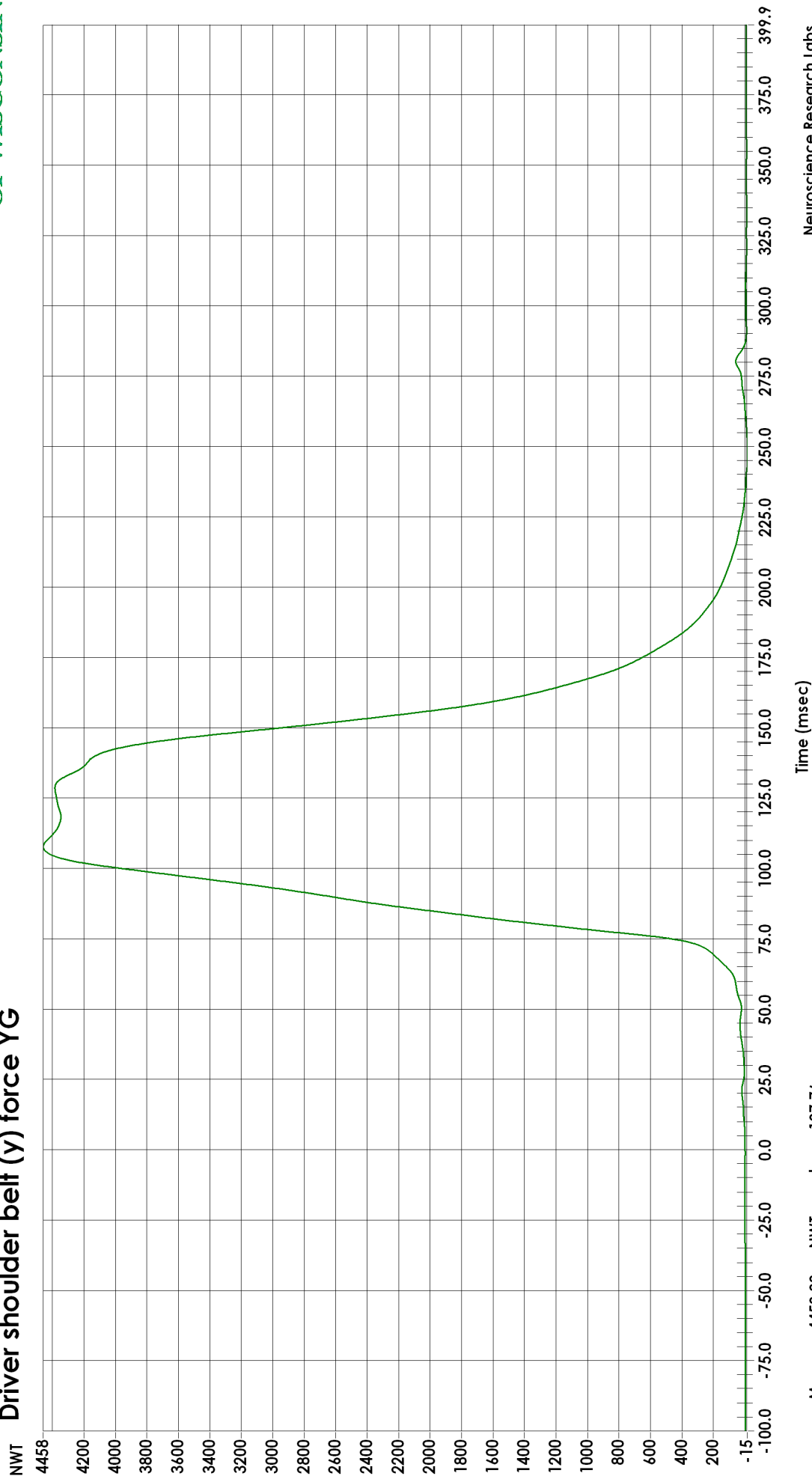


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SHTB  
**Sensor Info** Denton 1910  
**Serial Number** 1910\_164

### Driver shoulder belt (y) force YG



**Max** 4458.33 NWT at 107.76 msec  
**Min** -14.76 NWT at 244.64 msec

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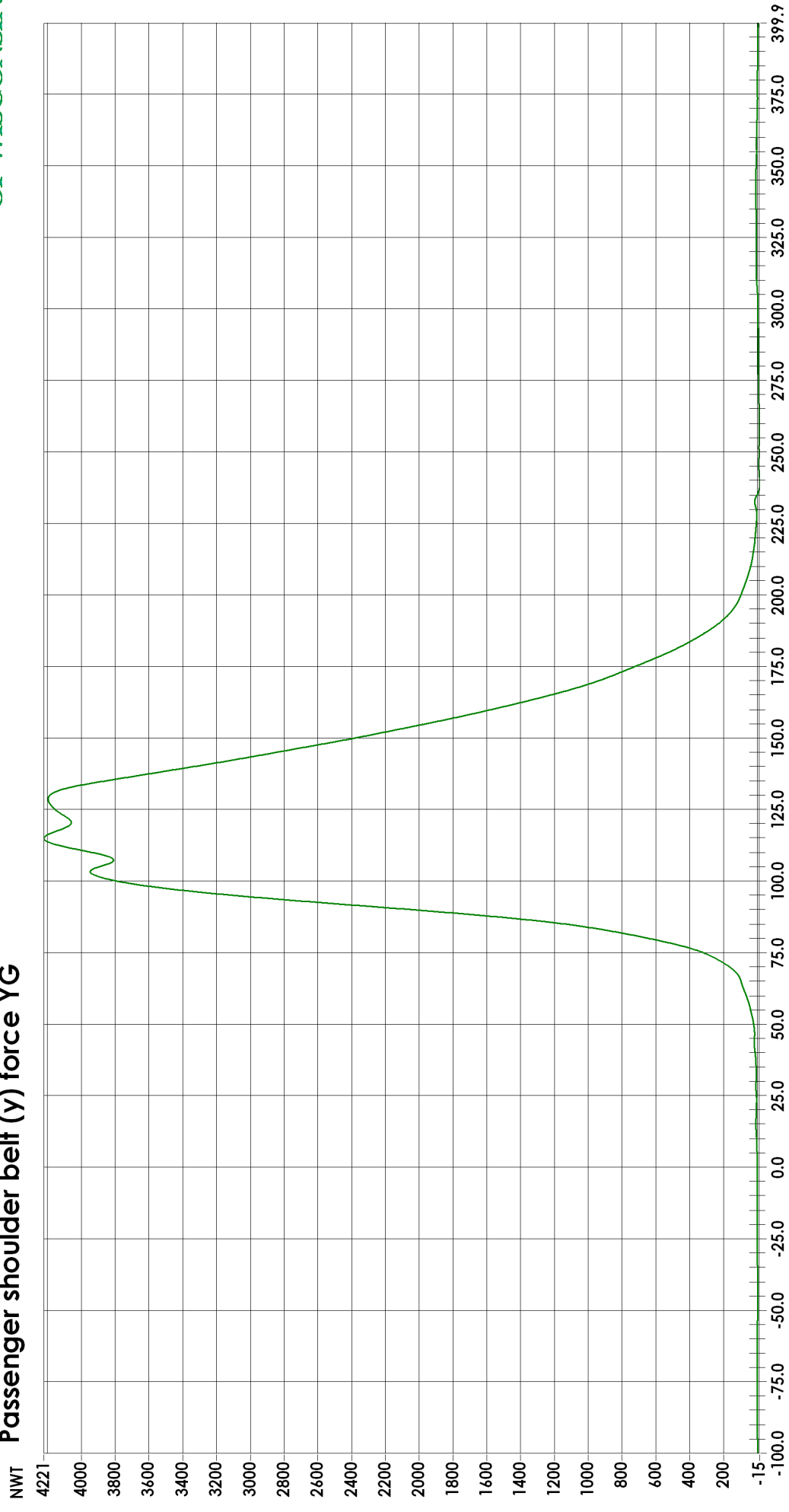


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** SHTB  
**Sensor Info** Denton 1910  
**Serial Number** 1910\_166

### Passenger shoulder belt (y) force YG



Time (msec)

**Max** 4221.42 NWT at 114.96 msec  
**Min** -14.78 NWT at 238.80 msec

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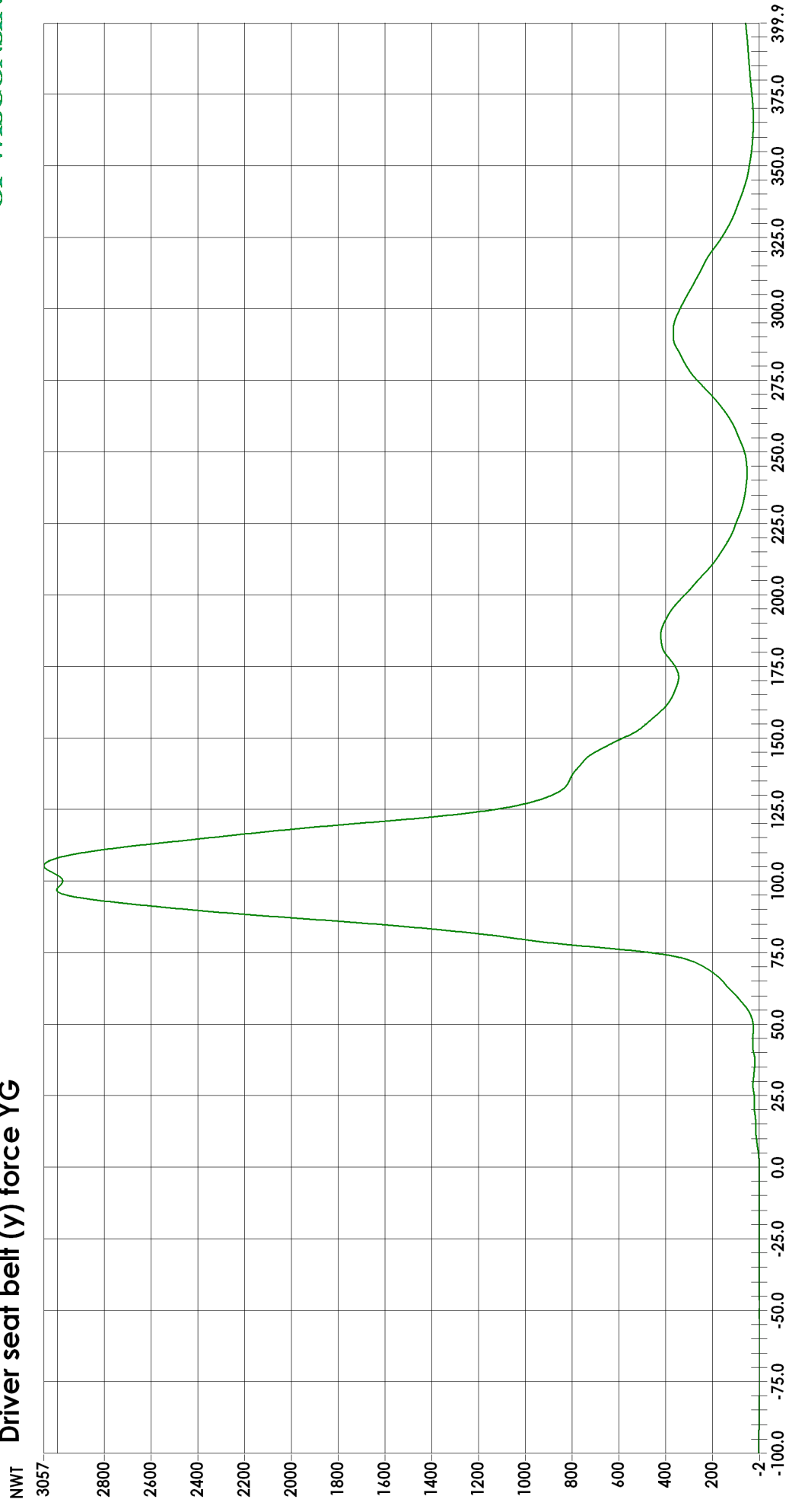


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** LPBO  
**Sensor Info** Denton 3255  
**Serial Number** 3255\_270

### Driver seat belt (y) force YG



Time (msec)

**Max** 3057.38 NWT at 105.36 msec  
**Min** -2.13 NWT at -63.60 msec

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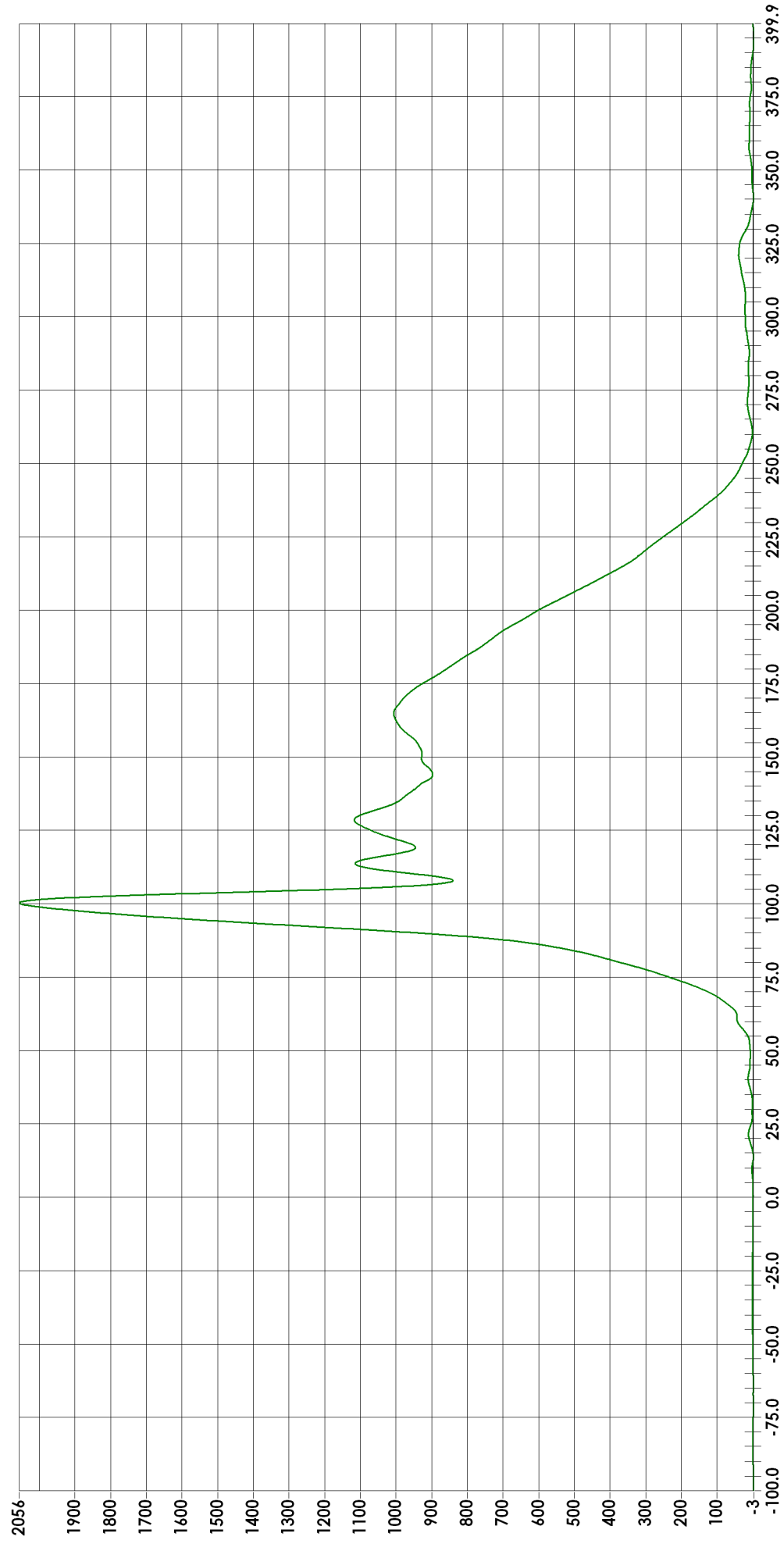


**Filter**  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

**CFC60**  
 Sensor Location LPBO  
 Sensor Info Denton 3255  
 Serial Number 3255\_271

**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

### Passenger seat belt (y) force YG



Time (msec)

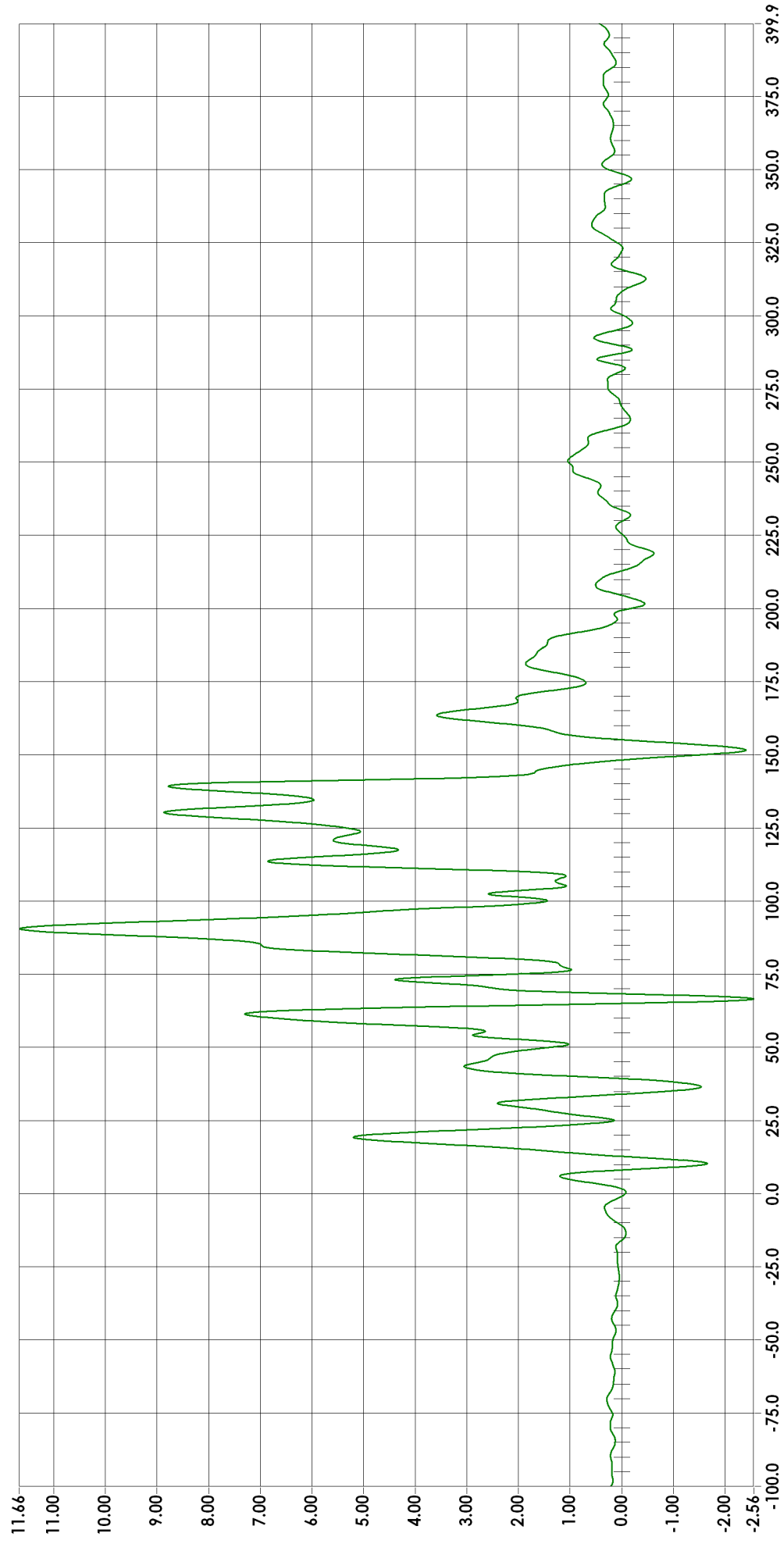
Max 2056.21 NWT at 100.32 msec  
 Min -3.48 NWT at 395.84 msec

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 Milwaukee, WI 53295



<b>Test ID</b>	SOI003	<b>Filter</b>	CFC60
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	DSLR
		<b>Sensor Info</b>	ENDEVCO 7264C-2KTZ-2-180
		<b>Serial Number</b>	P12746

### Left rear seat cross member (y) acceleration YG



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SOI003 Plot 160

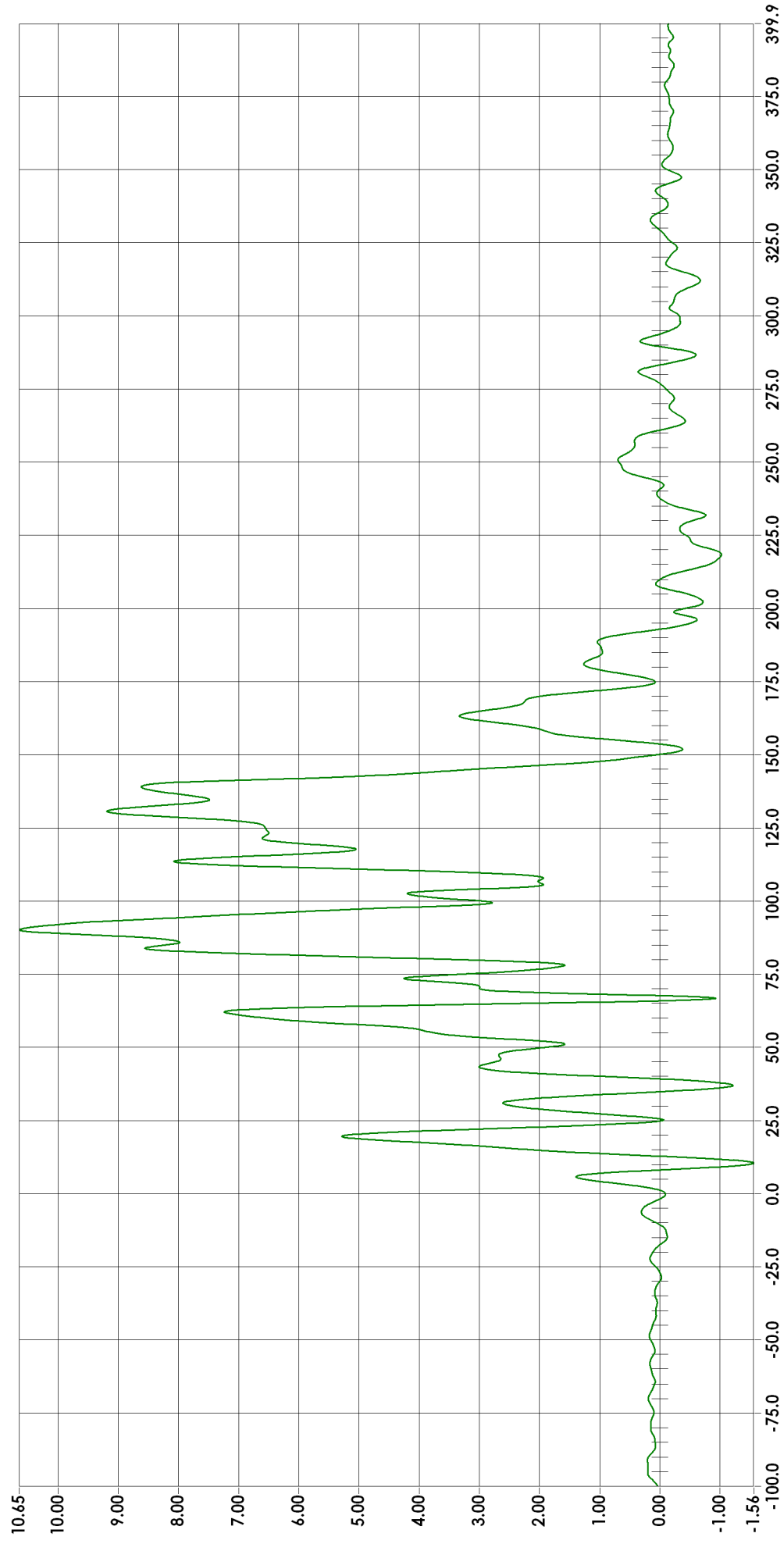


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** DSRR  
**Sensor Info** ENDEVCO 7264C-2KTZ-2-300  
**Serial Number** P21820

### Right rear seat cross member (y) acceleration YG

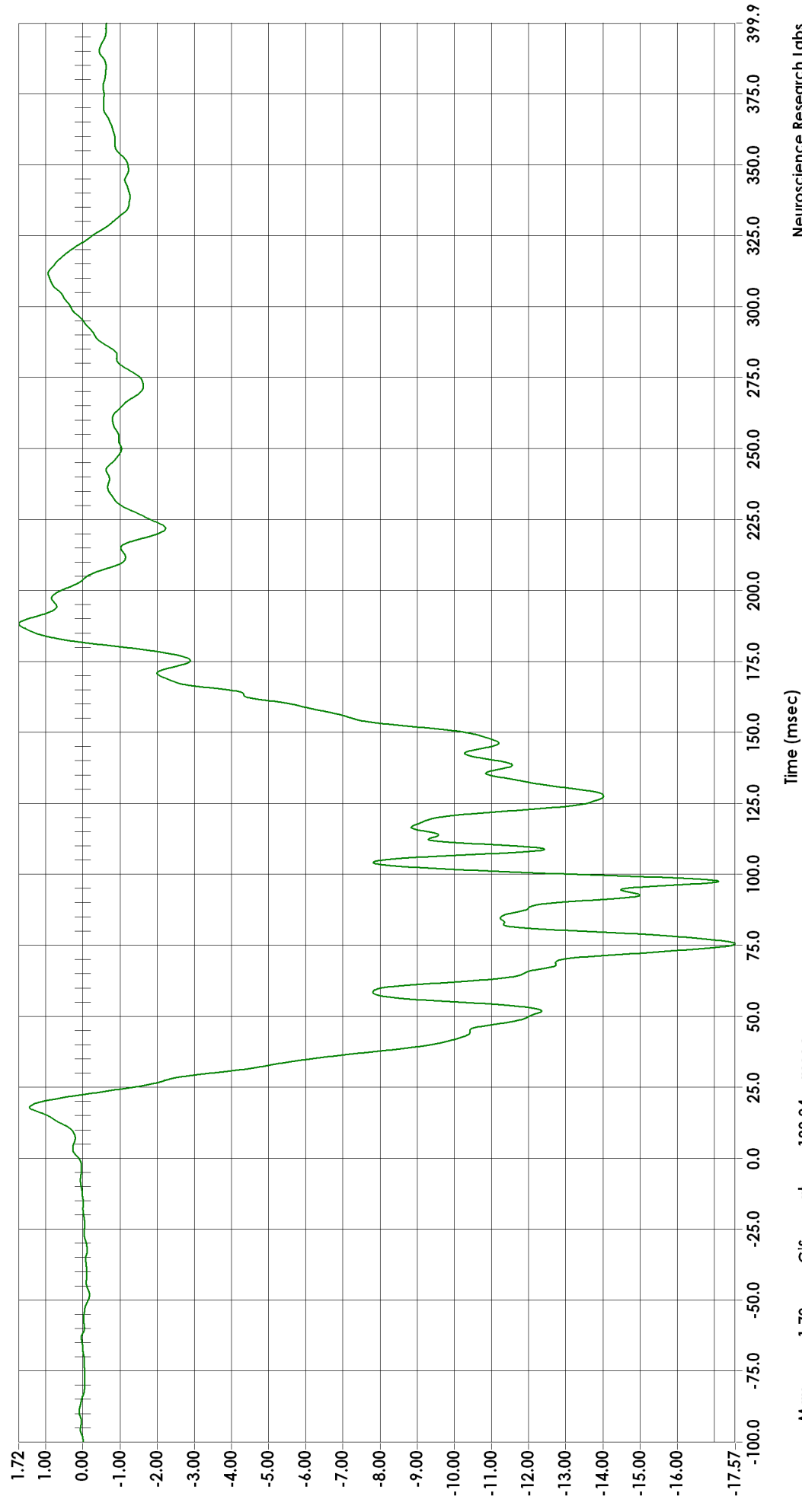


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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC60
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	ENGN
		<b>Sensor Info</b>	ENDEVCO 7264C-2KTZ-2-300
		<b>Serial Number</b>	P22998

### G's Top of engine block (x) acceleration XG



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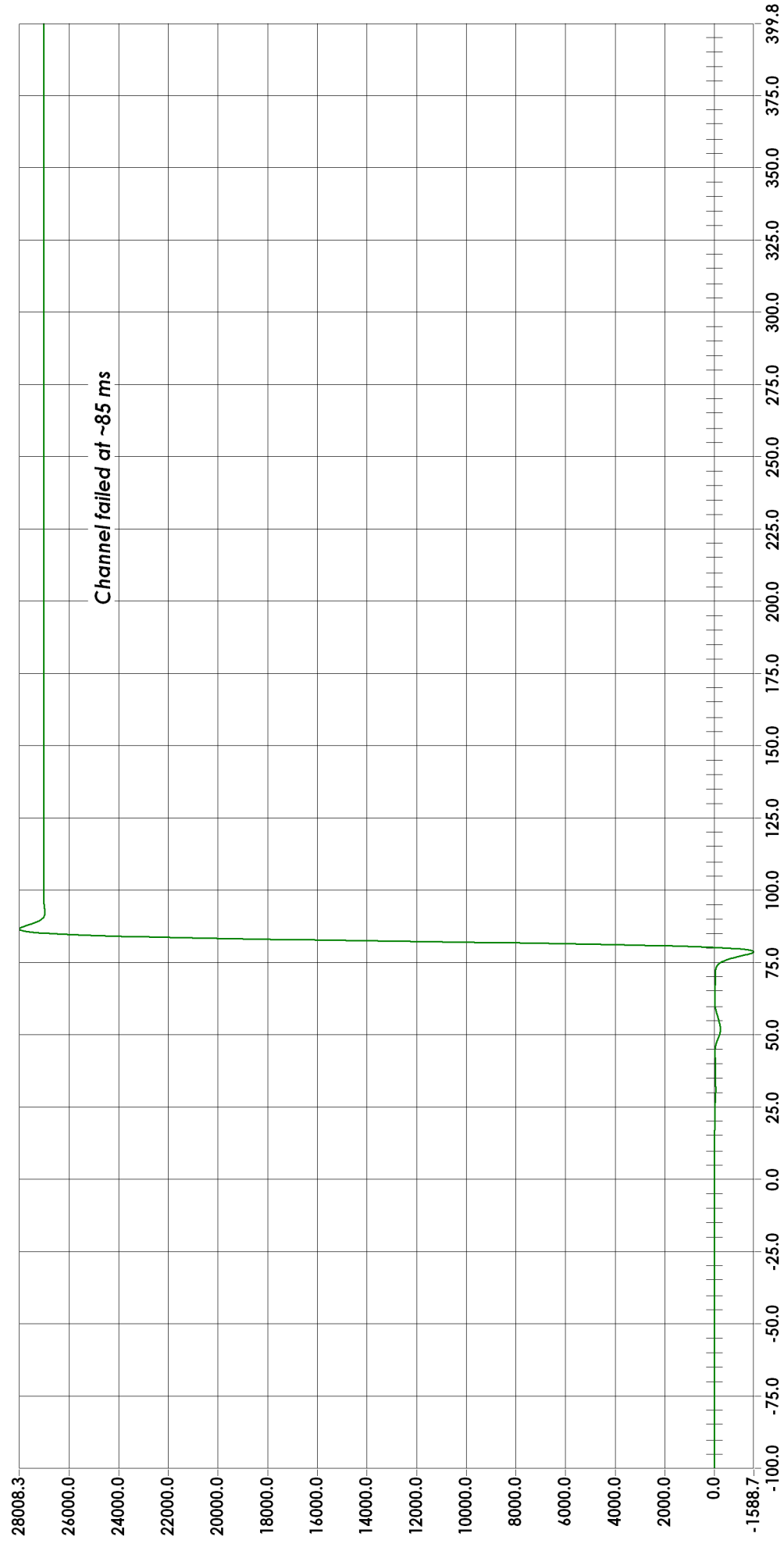


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** ENGN  
**Sensor Info** ENTRAN EGE-73BQ-2000B  
**Serial Number** 98898A26-D05

### Bottom of engine block (x) acceleration XG

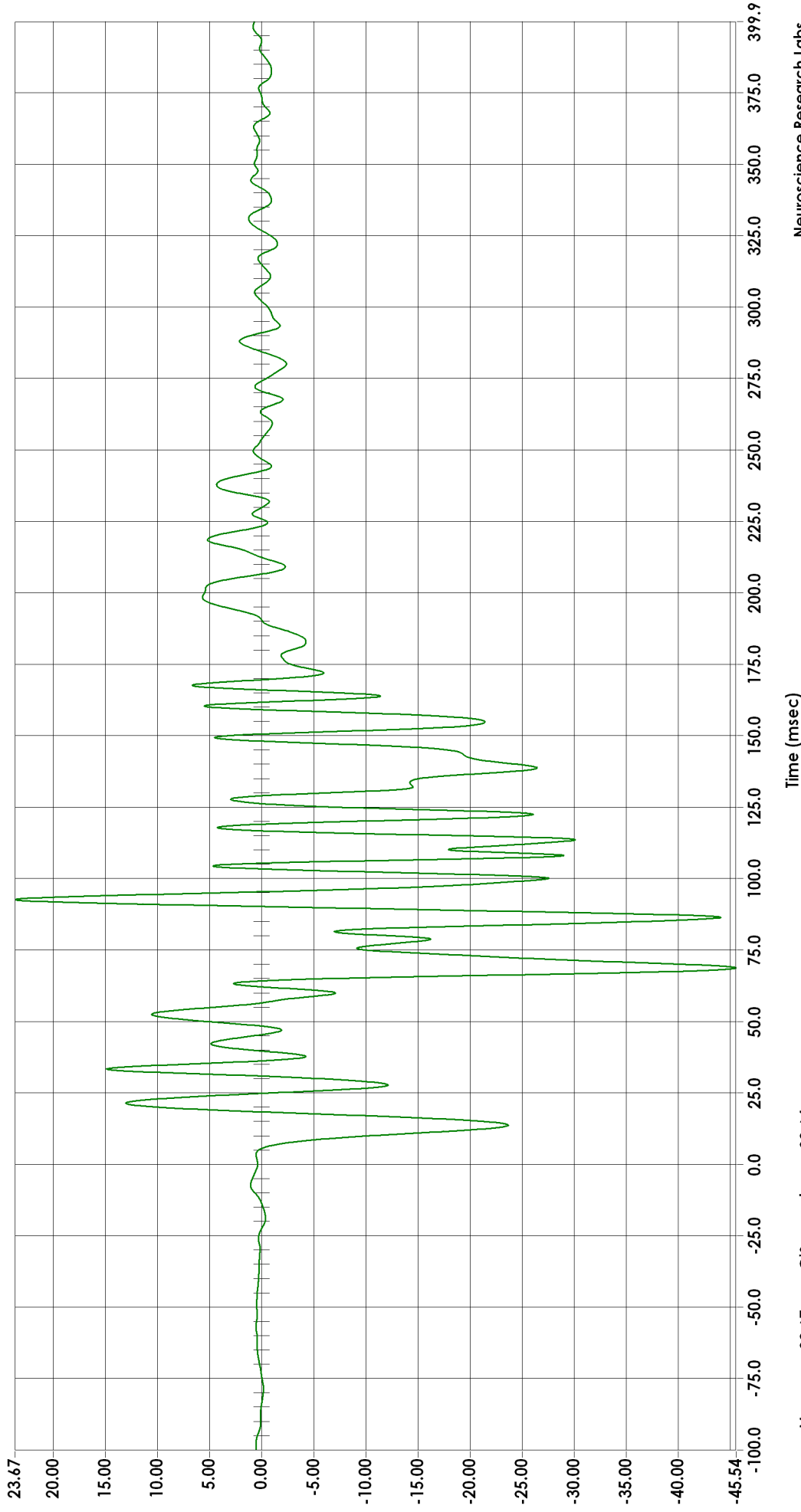


**Max** 28008.26 M/S<sup>2</sup> at 86.56 msec  
**Min** -1588.66 M/S<sup>2</sup> at 78.72 msec

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC60
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	BRCR
		<b>Sensor Info</b>	MSI 52-2000-10-360-XY
		<b>Serial Number</b>	A011644

**Right front disc brake caliper (x) acceleration XG**



<b>Max</b>	23.67	<b>G's</b>	at	92.64	<b>msec</b>
<b>Min</b>	-45.54	<b>G's</b>	at	68.72	<b>msec</b>

SOI003 Plot 164

Time (msec)

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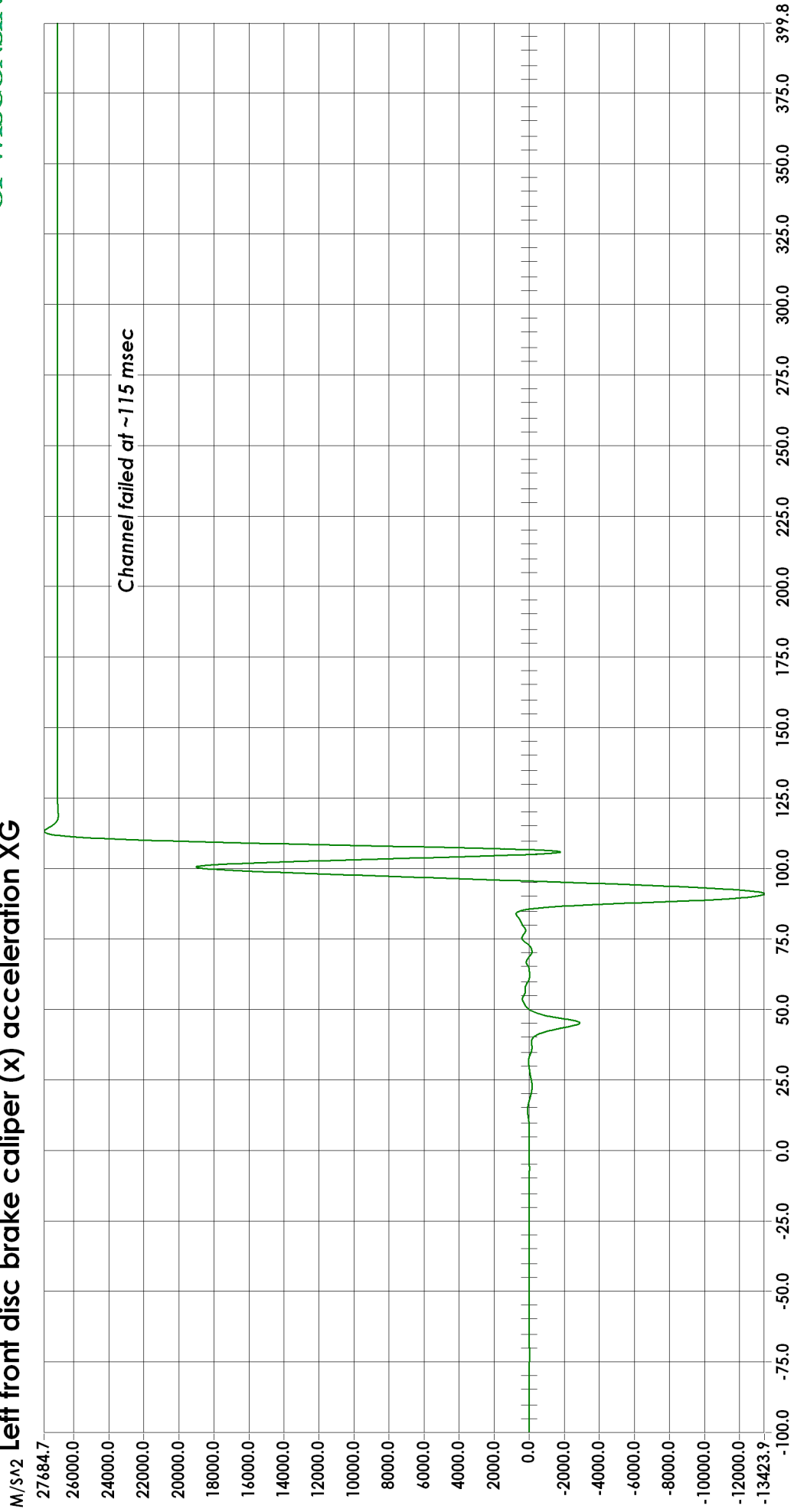
**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** BRCL  
**Sensor Info** MSI 52-2000-10-360-XY  
**Serial Number** A011637



### Left front disc brake caliper (x) acceleration XG



**Max** 27684.72 M/SA<sup>2</sup> at 113.20 msec  
**Min** -13423.88 M/SA<sup>2</sup> at 91.04 msec

Time (msec)

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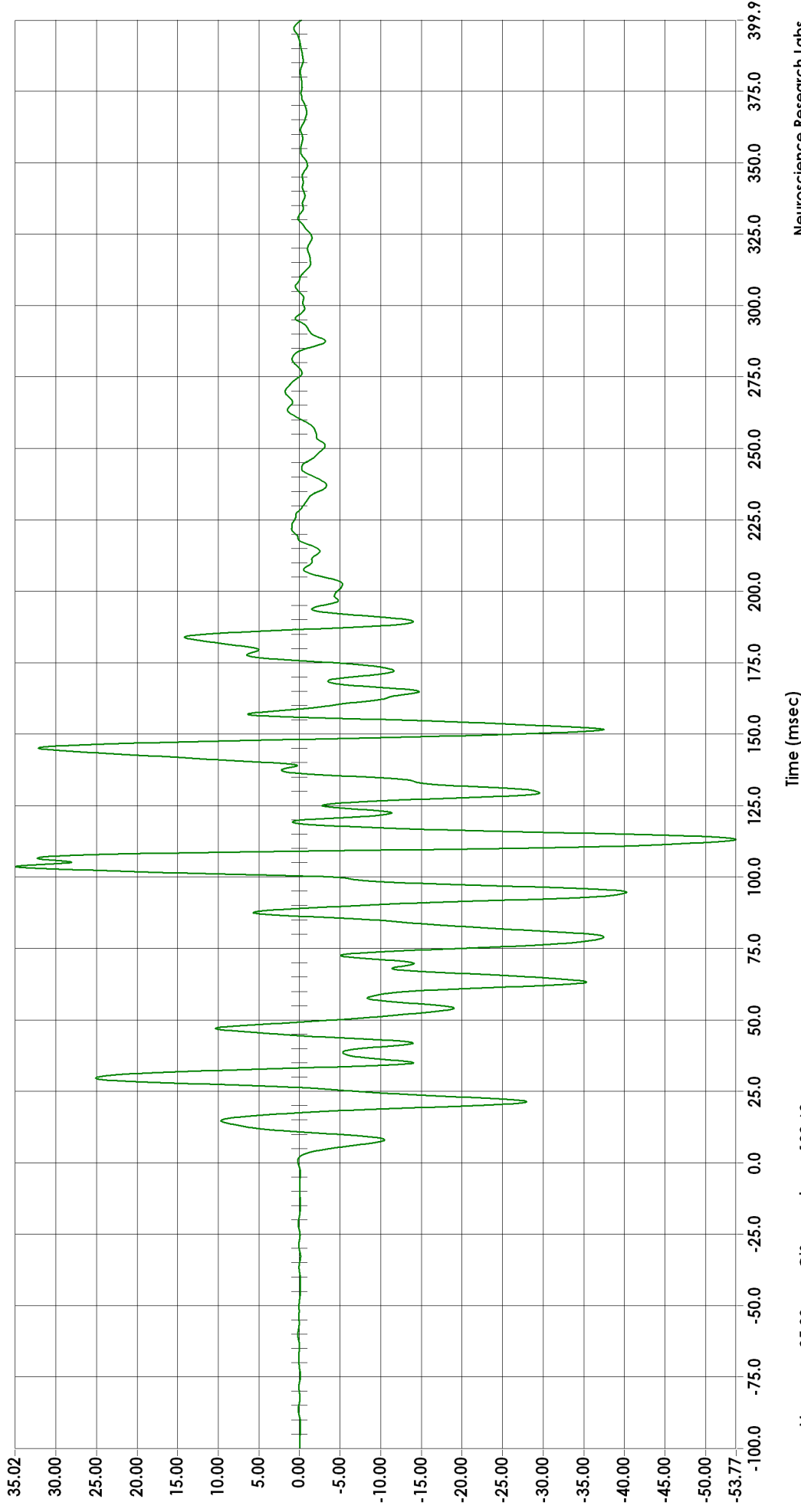
Test ID SOI003  
 Date 10-12-2010  
 Description 2007 Ford Taurus Small Overlap Test

Filter CFC60  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

Sensor Location DPLC  
 Sensor Info ENTRAN EGE-73BQ-2000F  
 Serial Number 98F98E11-K07



### G's Instrument panel (x) acceleration XG



Max 35.02 G's at 103.68 msec  
 Min -53.77 G's at 113.12 msec

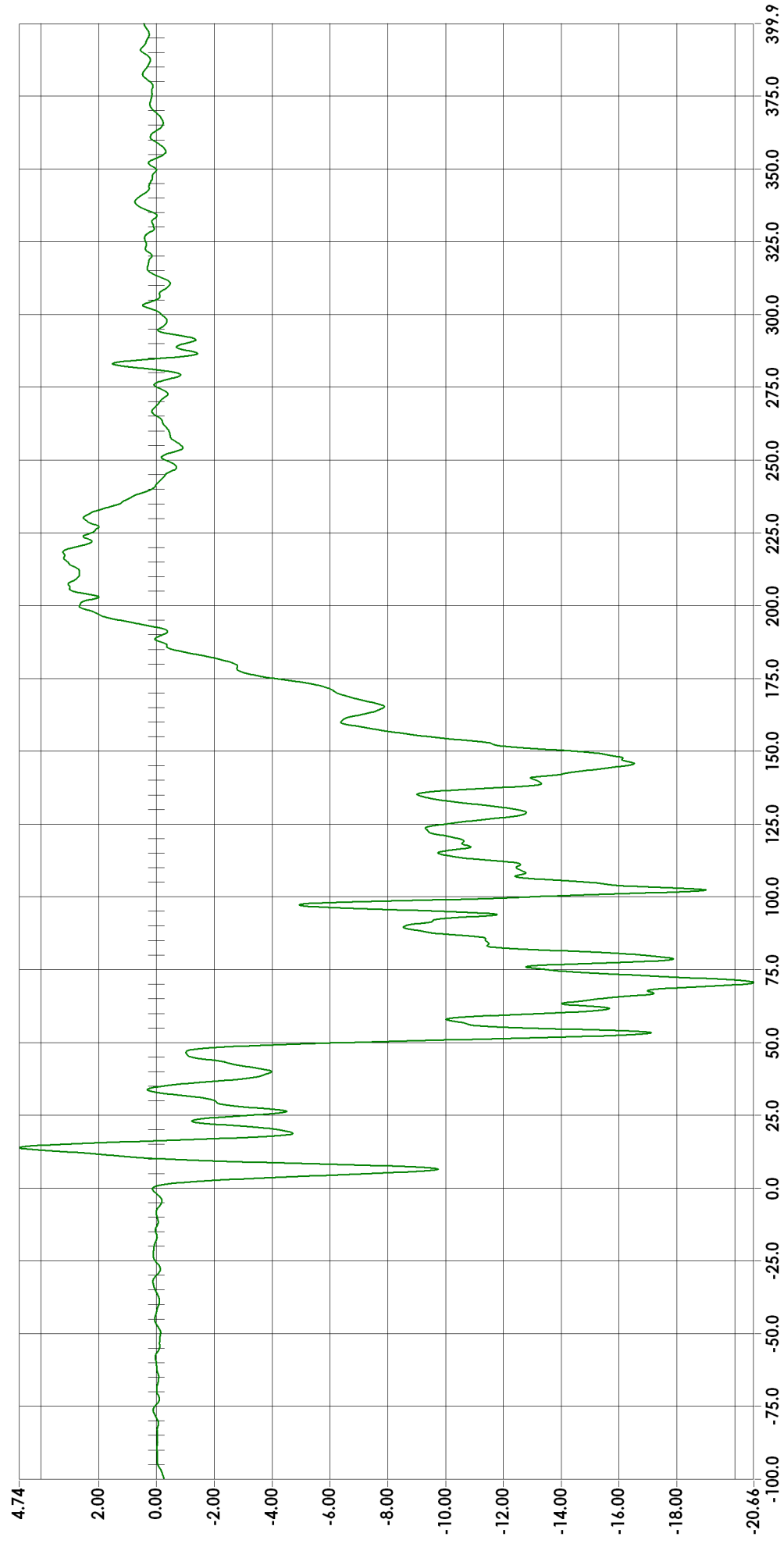
Time (msec)

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC60
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	DSLR
		<b>Sensor Info</b>	ENDEVCO 7264C-2KTZ-2-180
		<b>Serial Number</b>	P13835

**G's Left rear seat cross member (x) acceleration XG**



<b>Max</b>	4.74	<b>G'S</b>	<b>at</b>	13.92	<b>msec</b>
<b>Min</b>	-20.66	<b>G'S</b>	<b>at</b>	70.56	<b>msec</b>

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SOI003 Plot 167

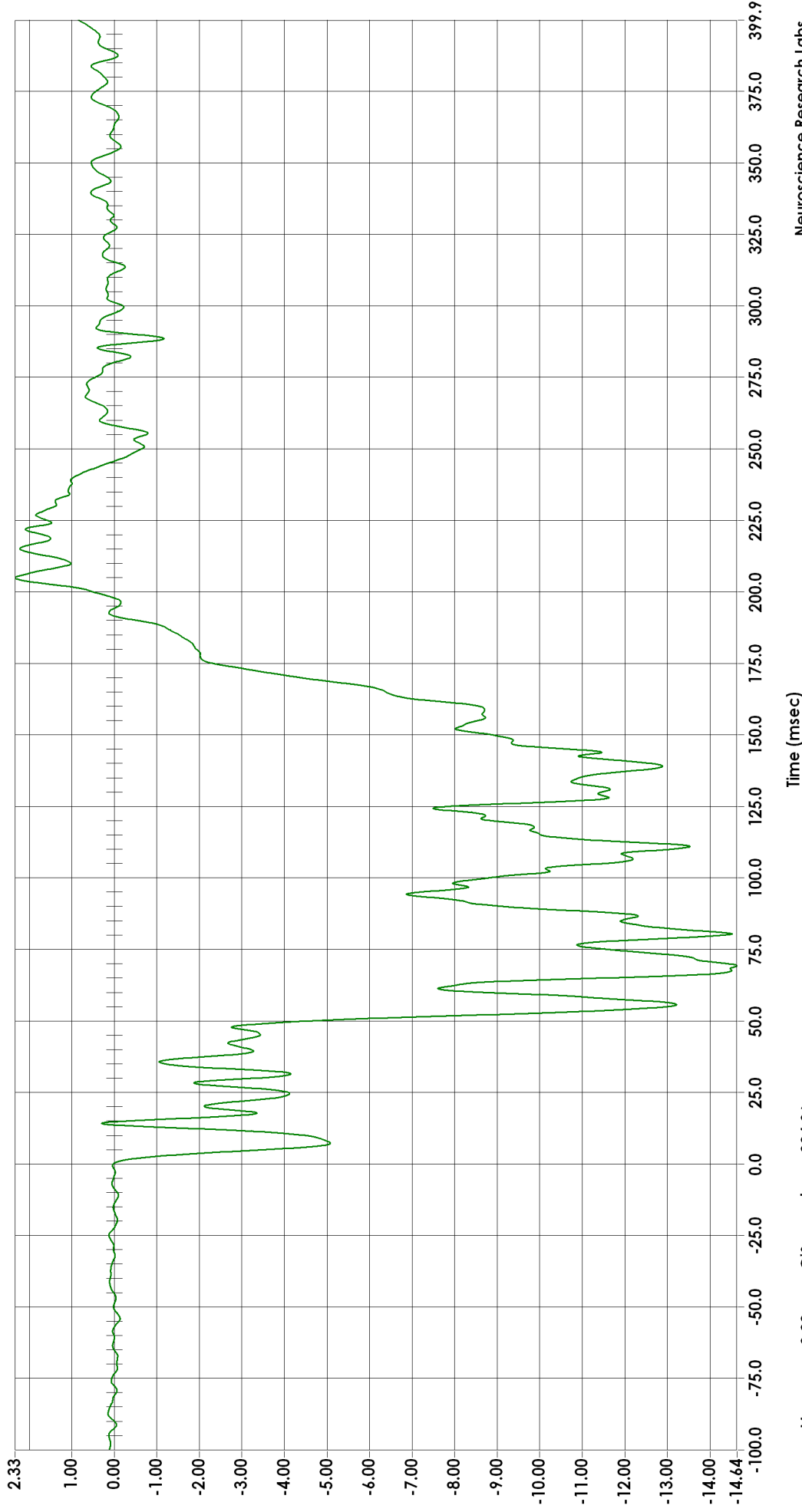
**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** DSRR  
**Sensor Info** ENDEVCO 7264-2000TZ  
**Serial Number** J43474



### G's Right rear seat cross member (x) acceleration XG



**Max** 2.33 G's at 204.96 msec  
**Min** -14.64 G's at 69.36 msec

SOI003 Plot 168

Time (msec)

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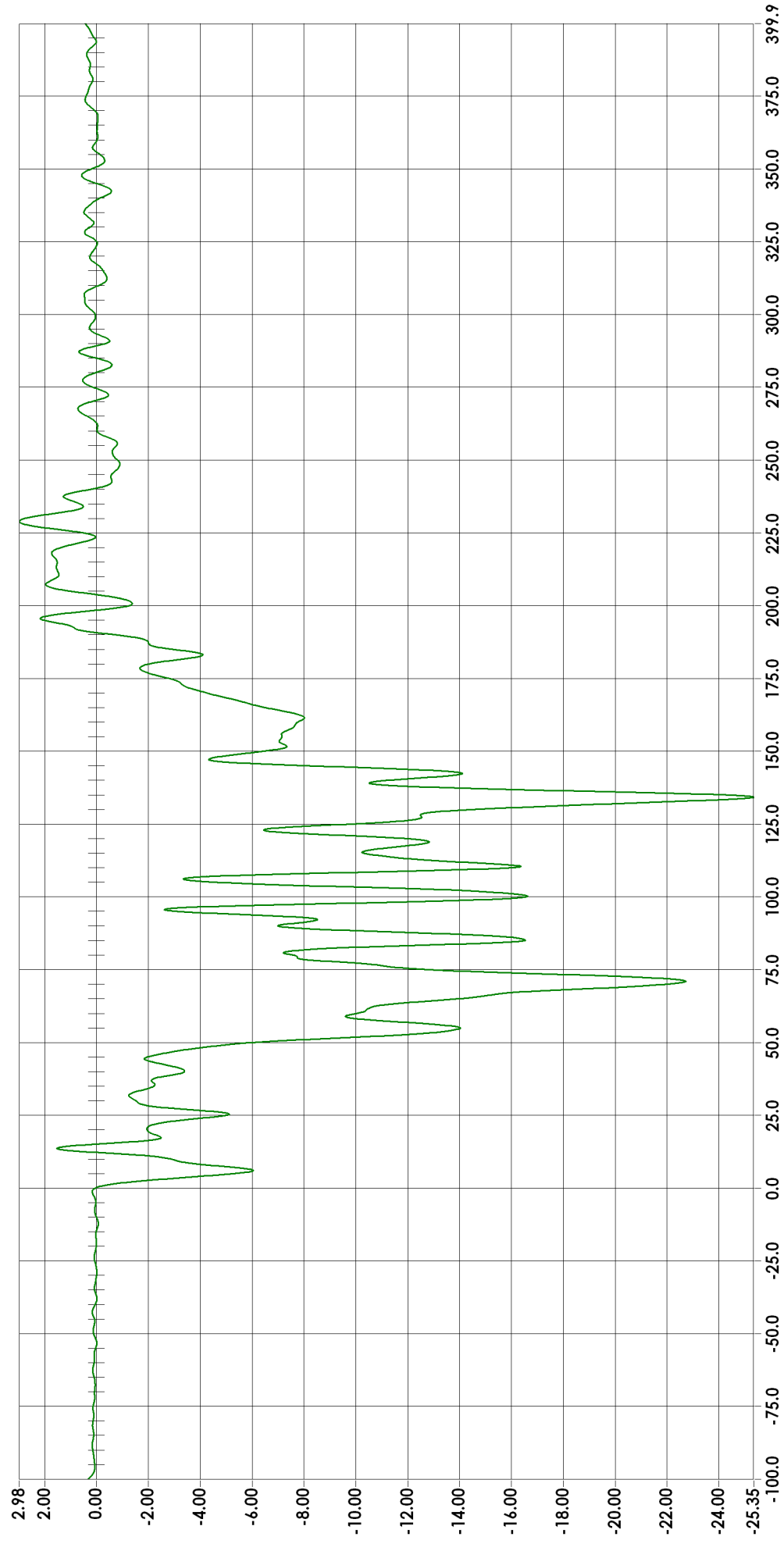


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** VEEG  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12094

### G's Vehicle center of gravity (x) acceleration XG



Time (msec)

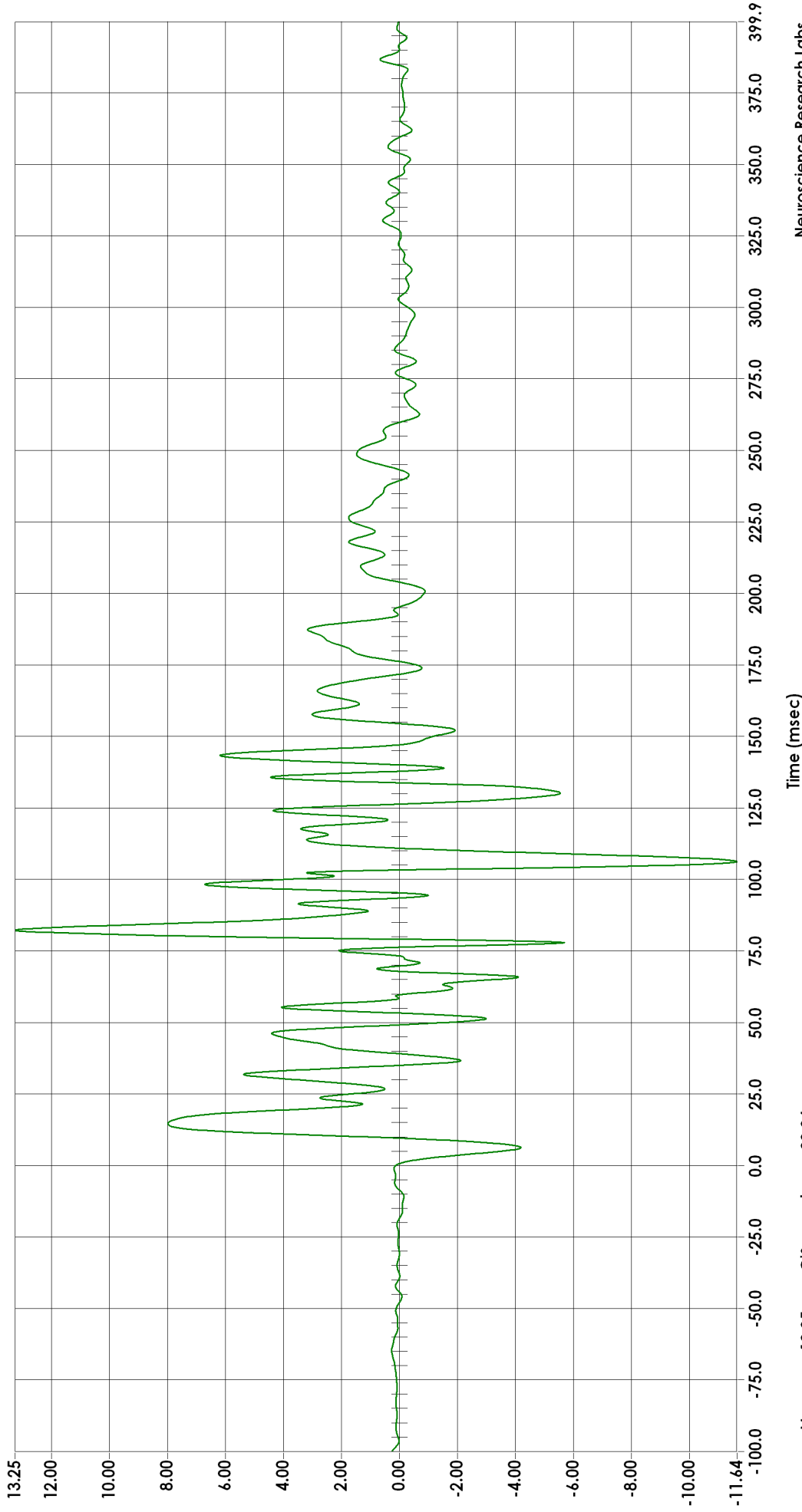
**Max** 2.98 G's at 228.96 msec  
**Min** -25.35 G's at 134.24 msec

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC60
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	VECG
		<b>Sensor Info</b>	MSI 64-2000-10-360-XY
		<b>Serial Number</b>	A011107

### G's Vehicle center of gravity (y) acceleration YG



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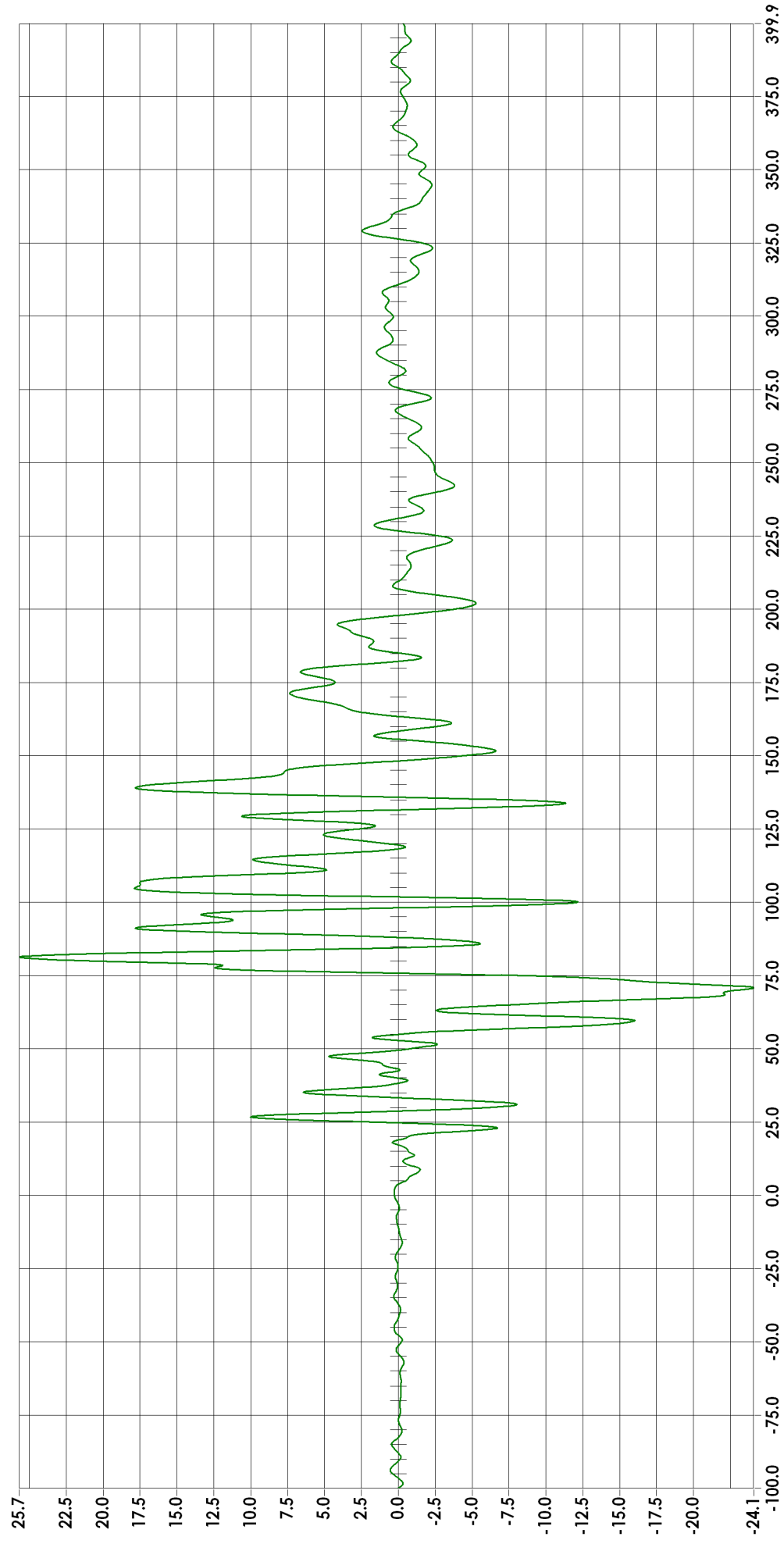


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** VEEG  
**Sensor Info** MSI 64-2000-10-360-XY  
**Serial Number** A011096

### Vehicle center of gravity (z) acceleration ZG



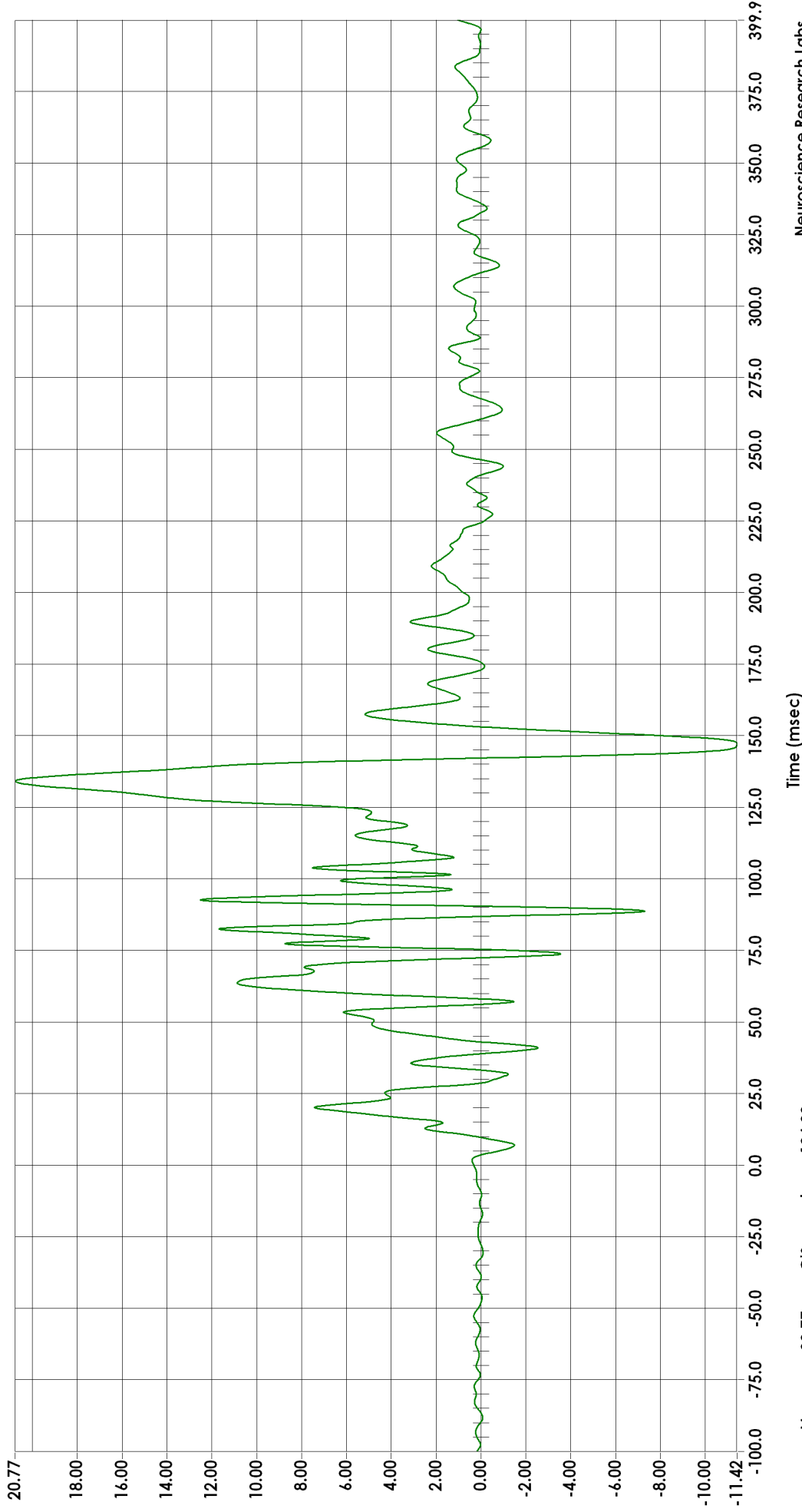
Time (msec)

**Max** 25.68 G's at 81.28 msec  
**Min** -24.09 G's at 70.80 msec

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<b>Test ID</b>	SOI003	<b>Filter</b>	CFC60
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	STLF
		<b>Sensor Info</b>	MSI 52-2000-10-360-XY
		<b>Serial Number</b>	A011649

### G's Driver side mid seat track (x) acceleration XG



<b>Max</b>	20.77	<b>G's</b>	at	134.08	<b>msec</b>
<b>Min</b>	-11.42	<b>G's</b>	at	147.12	<b>msec</b>

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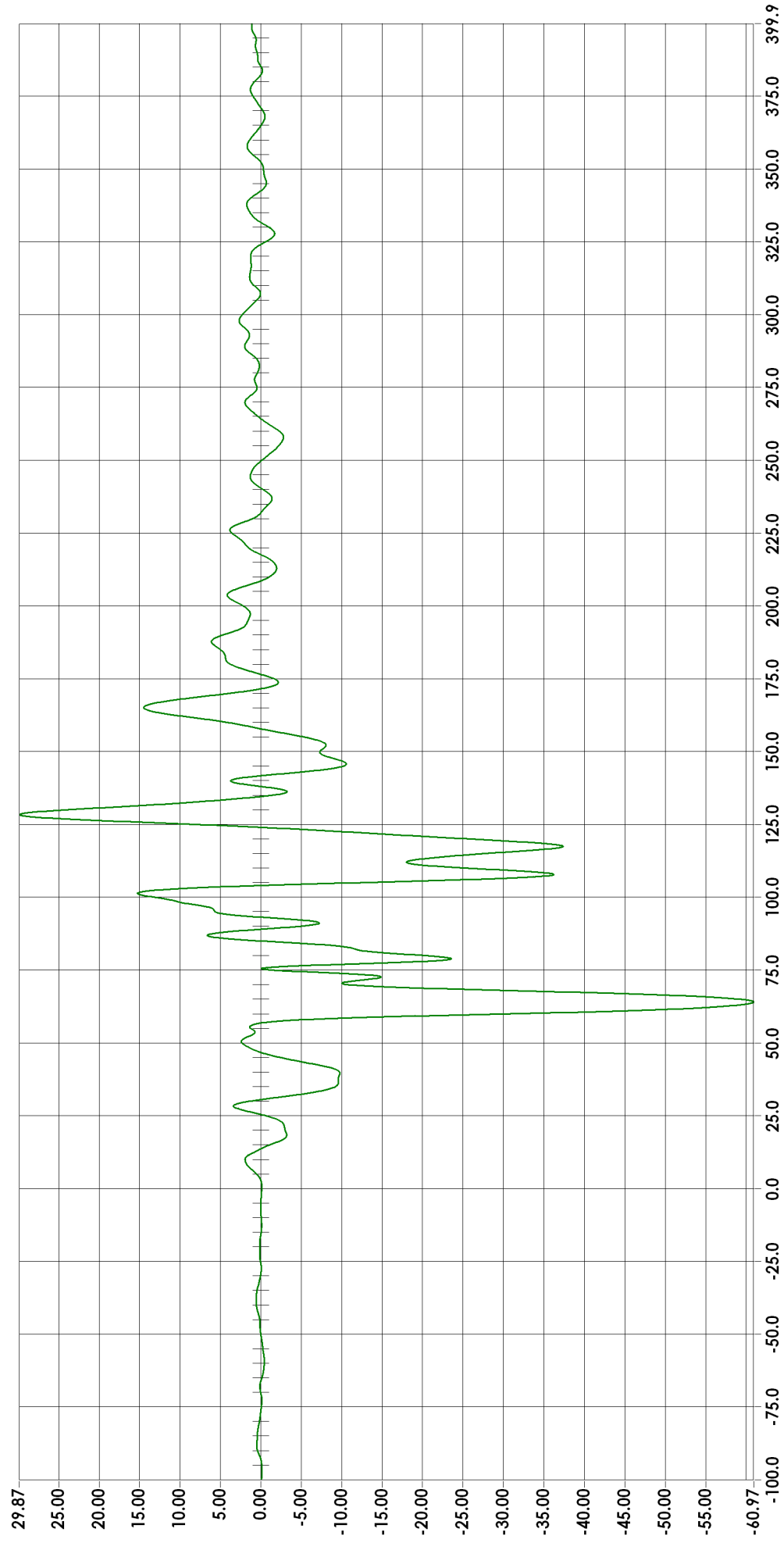


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FLF  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12146

### G's Accelerator pedal (x) acceleration XG



**Max** 29.87 G's at 128.32 msec  
**Min** -60.97 G's at 64.08 msec

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SOI003 Plot 173

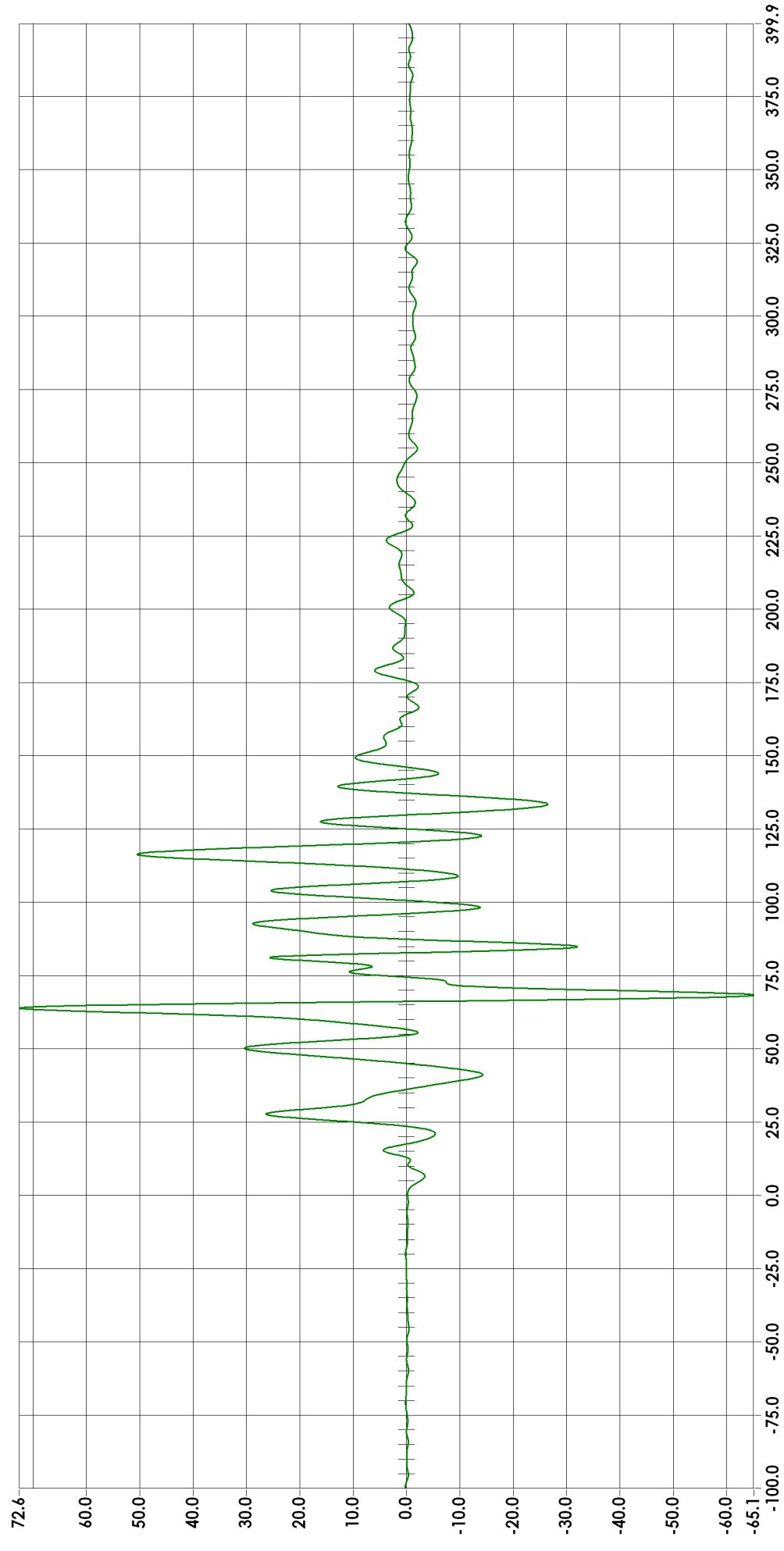


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FLIF  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12089

### Accelerator pedal (y) acceleration YG



Time (msec)

Max 72.61 G's at 63.84 msec  
 Min -65.12 G's at 68.32 msec

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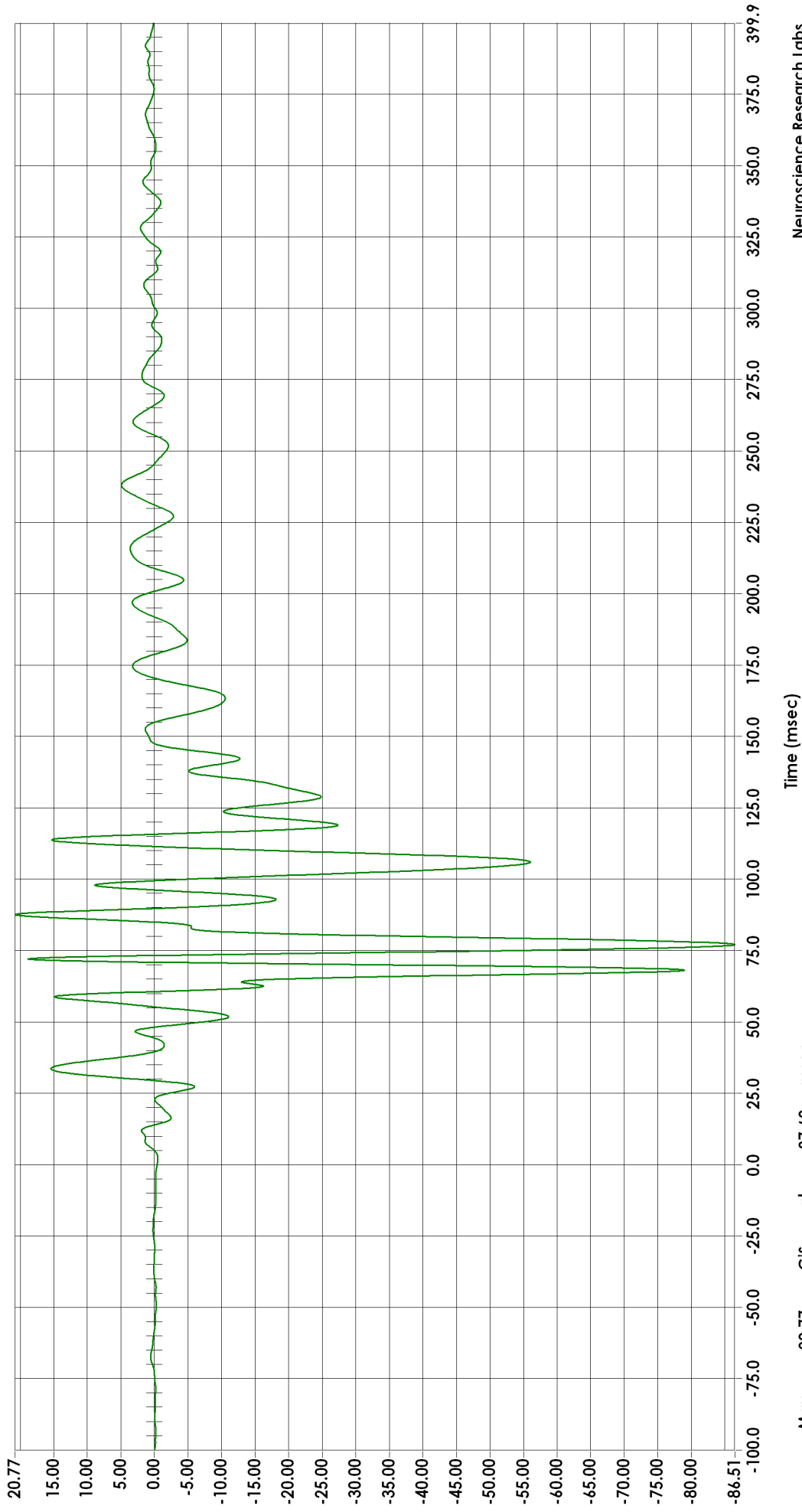


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FLIF  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12088

### Accelerator pedal (z) acceleration ZG



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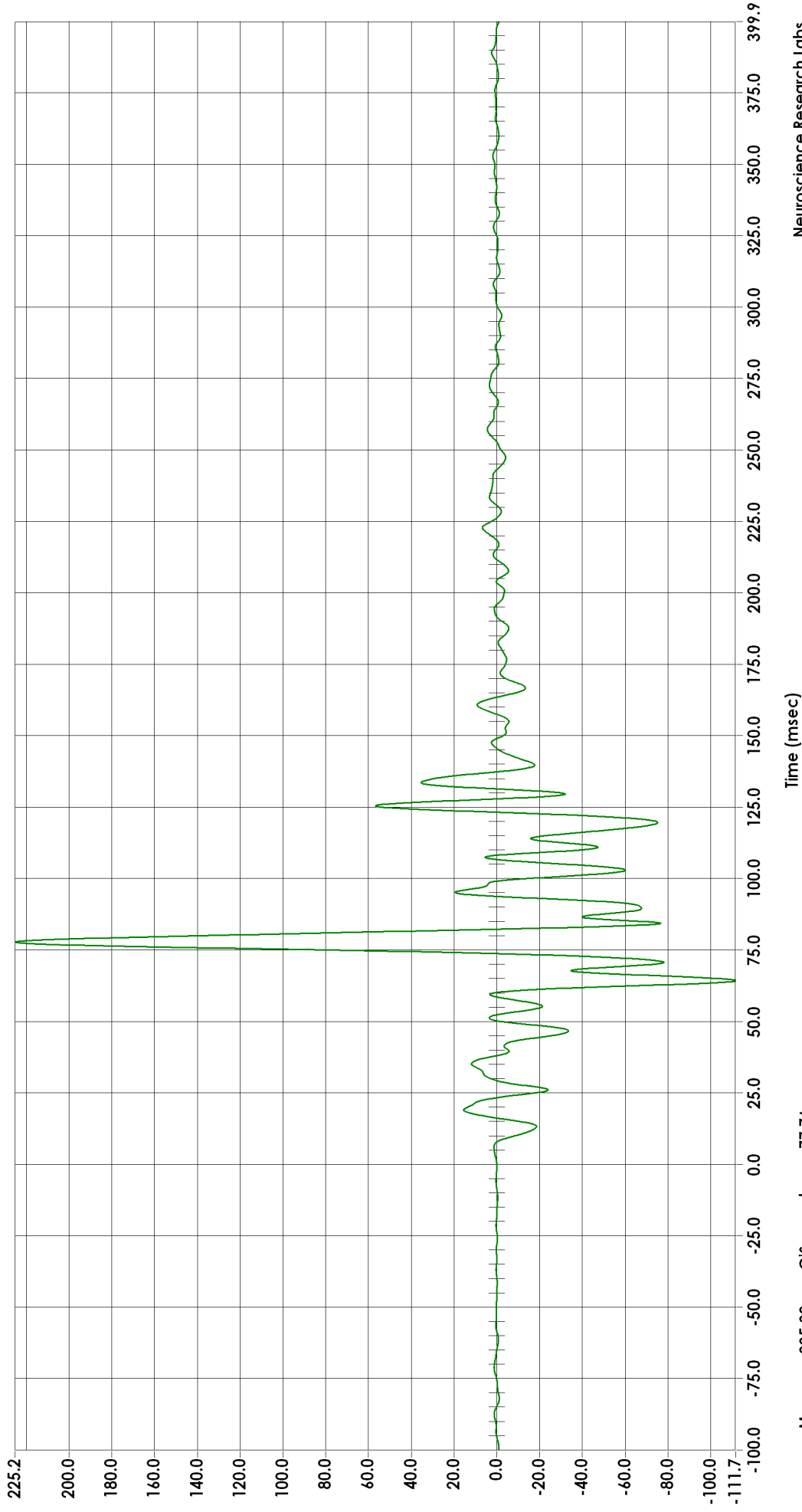


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FLLF  
**Sensor Info** MSI 64-2000-10-360-XY  
**Serial Number** A011331

### Brake pedal (x) acceleration XG



Time (msec)

Max 225.23 G's at 77.76 msec  
 Min -111.67 G's at 64.24 msec

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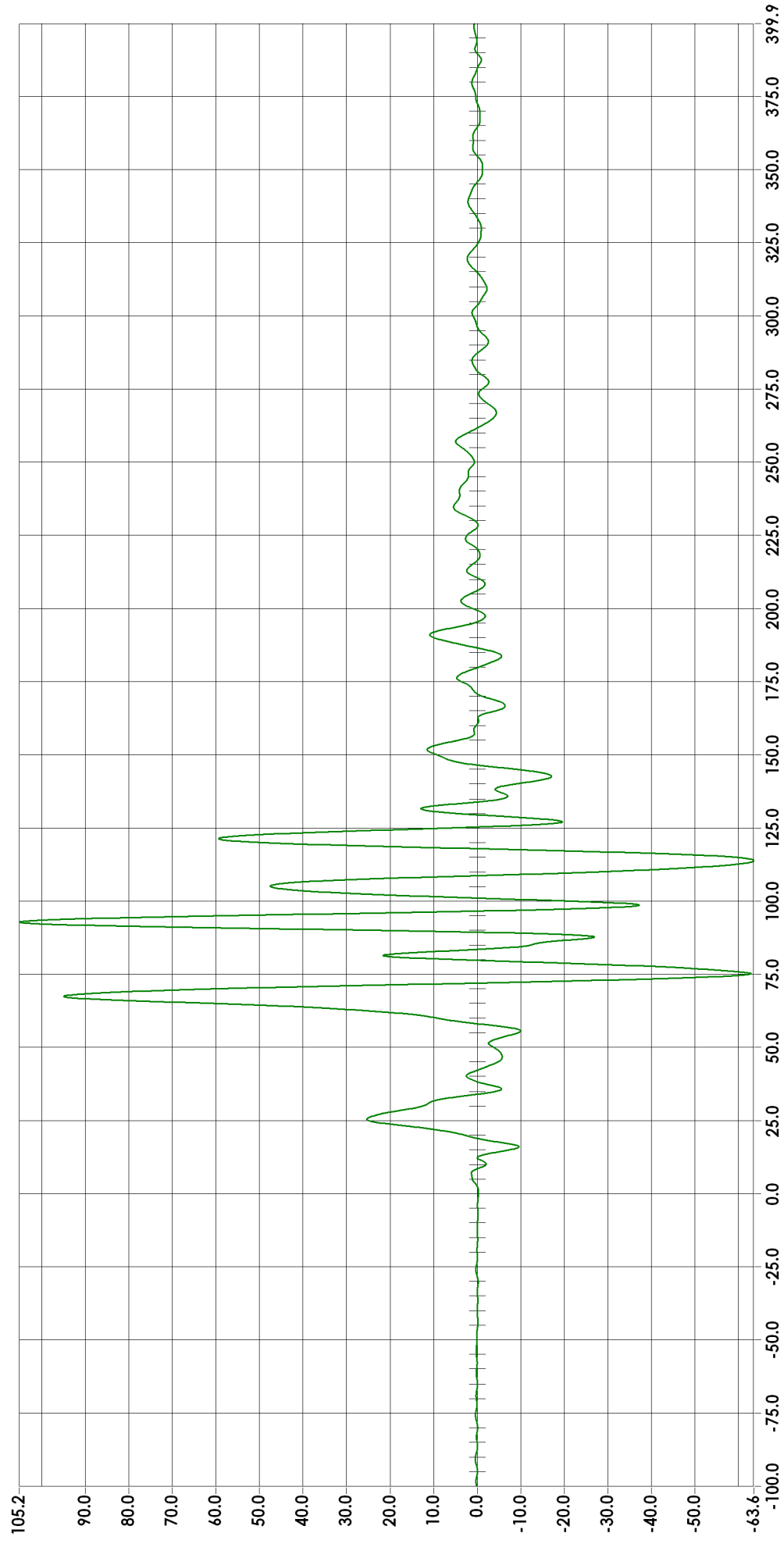


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FLLF  
**Sensor Info** MSI 64-2000-10-360-XY  
**Serial Number** A011321

### Brake pedal (y) acceleration YG



**Max** 105.18 G's at 92.80 msec  
**Min** -63.56 G's at 113.84 msec  
**Time (msec)**  
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 SOI003 Plot 177

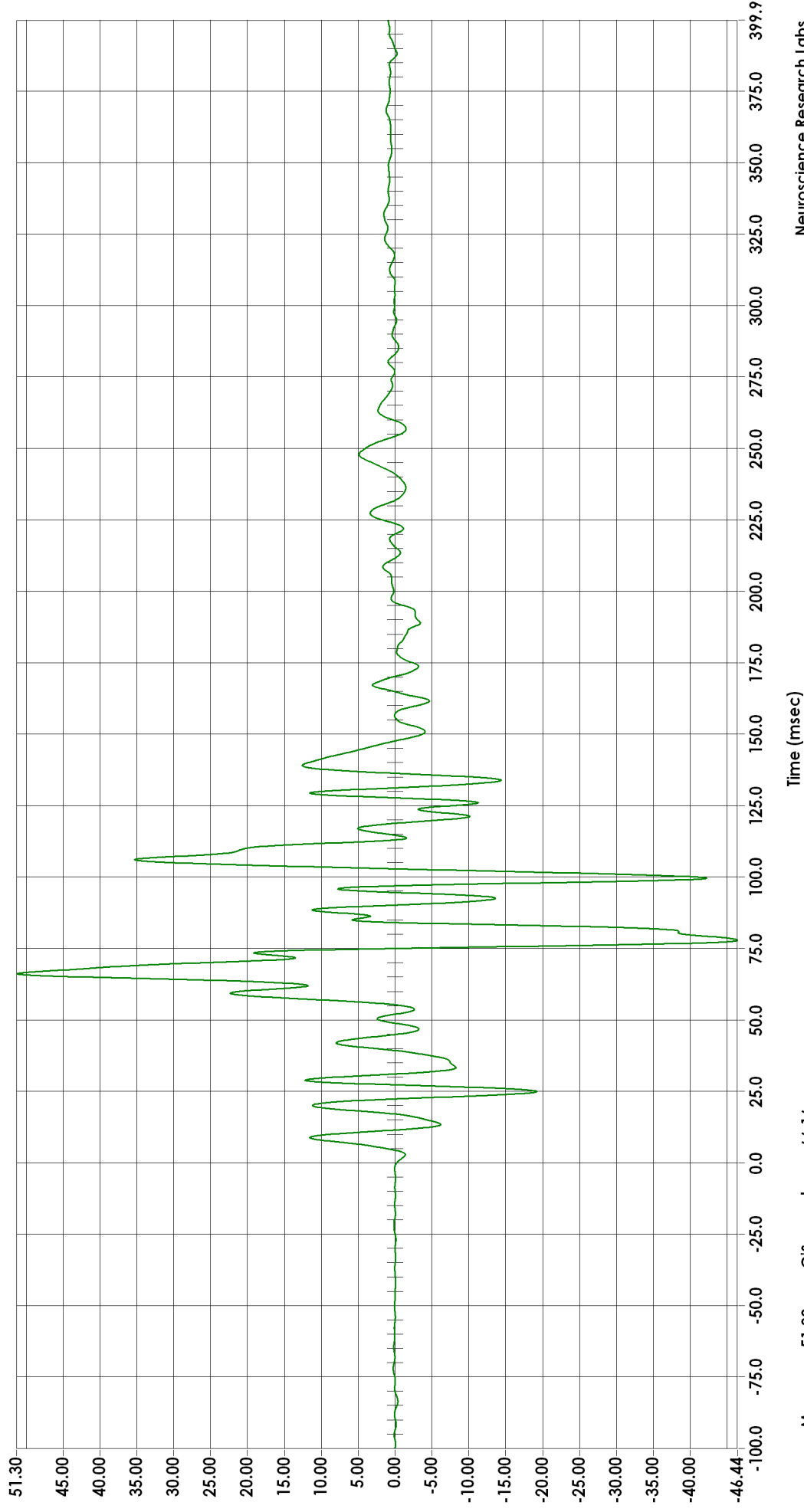


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FLLF  
**Sensor Info** MSI 64-2000-10-360-XY  
**Serial Number** A011312

### Brake pedal (z) acceleration ZG



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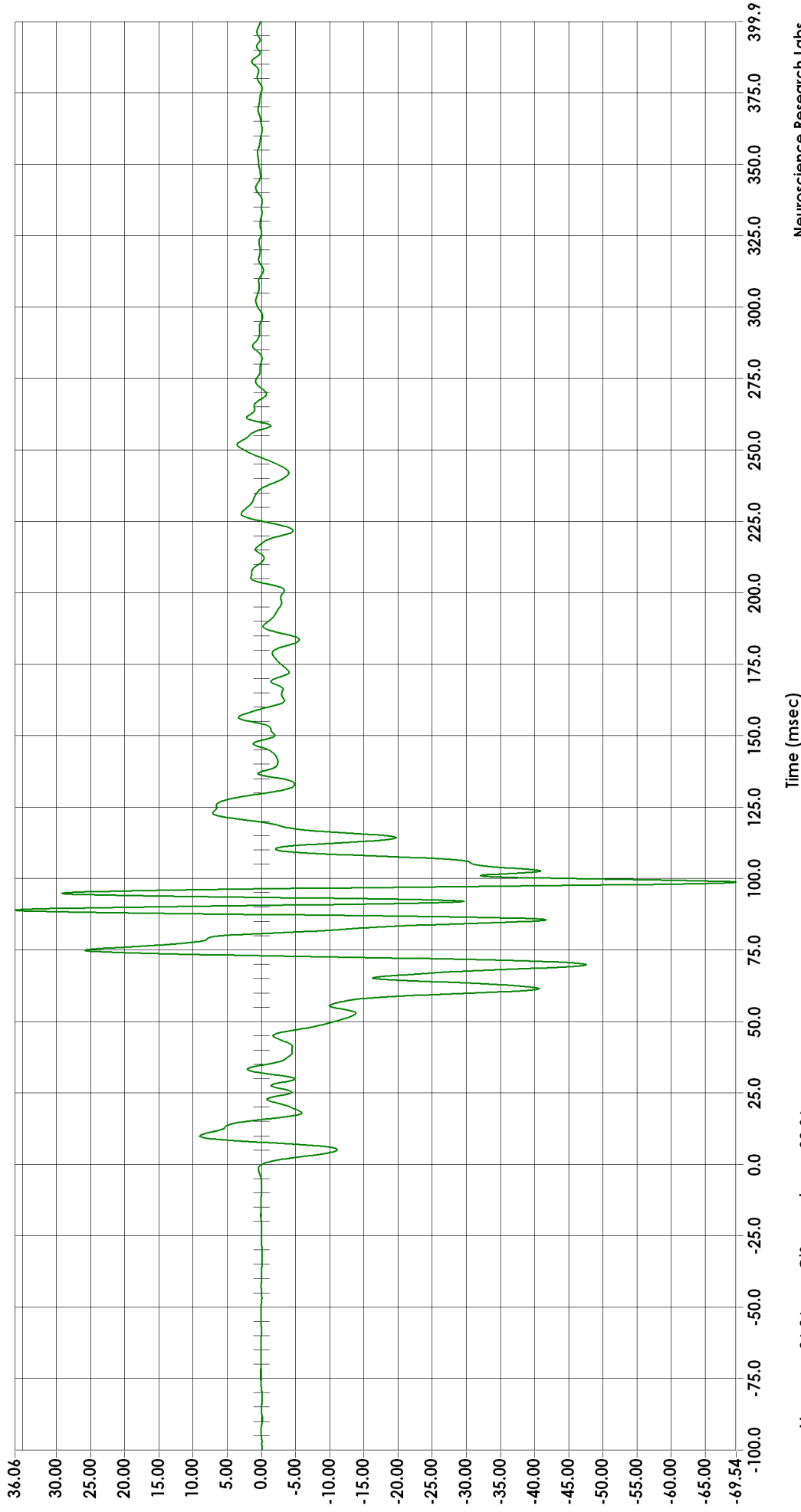


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FLLF  
**Sensor Info** MSI 64-2000-10-360-XY  
**Serial Number** A011343

### Foot rest (x) acceleration XG



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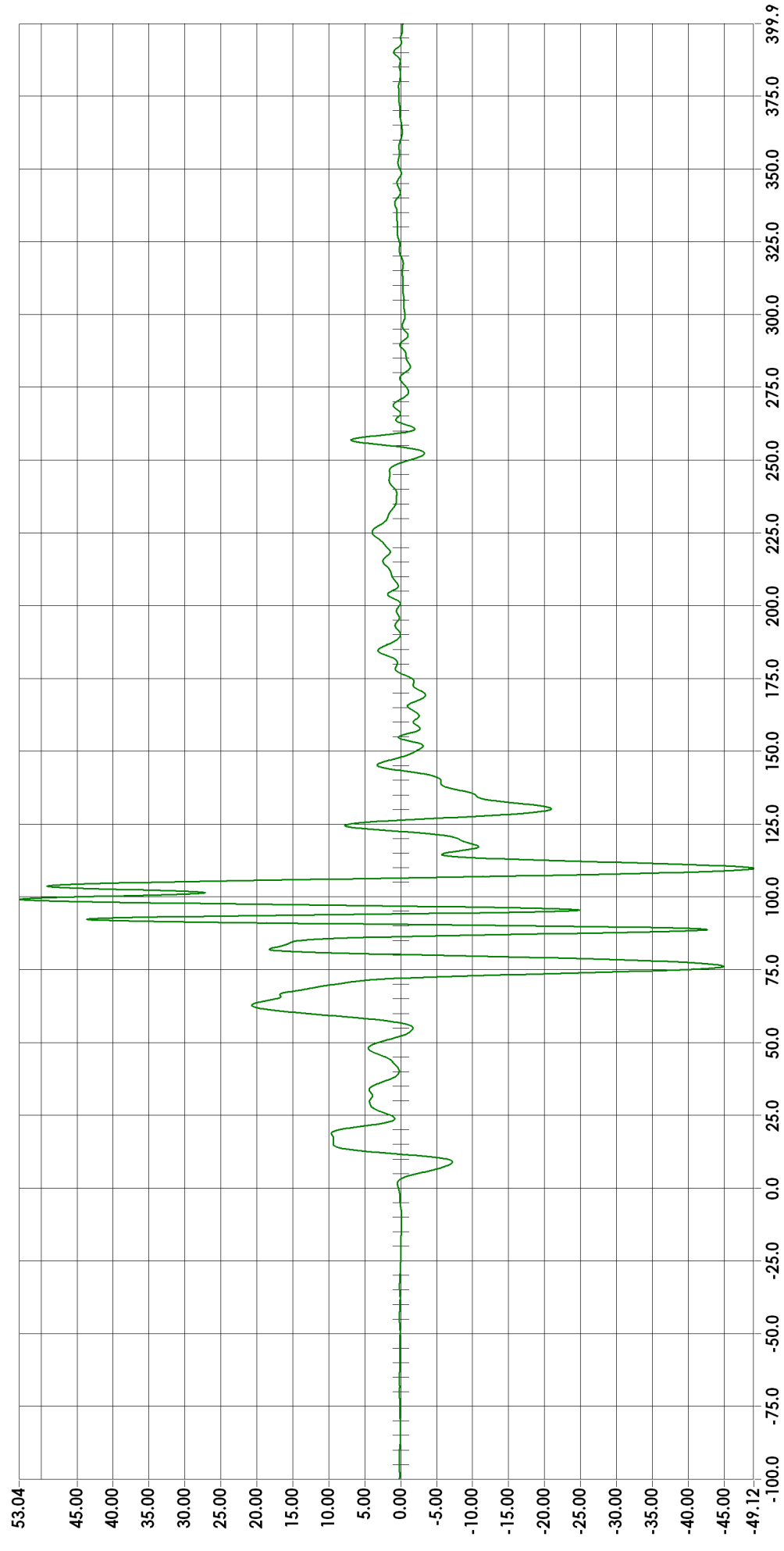


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FLF  
**Sensor Info** ENDEVCO 7264D-2KTZ-2-360  
**Serial Number** 12110

### Foot rest (y) acceleration YG



Time (msec)

**Max** 53.04 G's at 99.12 msec  
**Min** -49.12 G's at 109.76 msec

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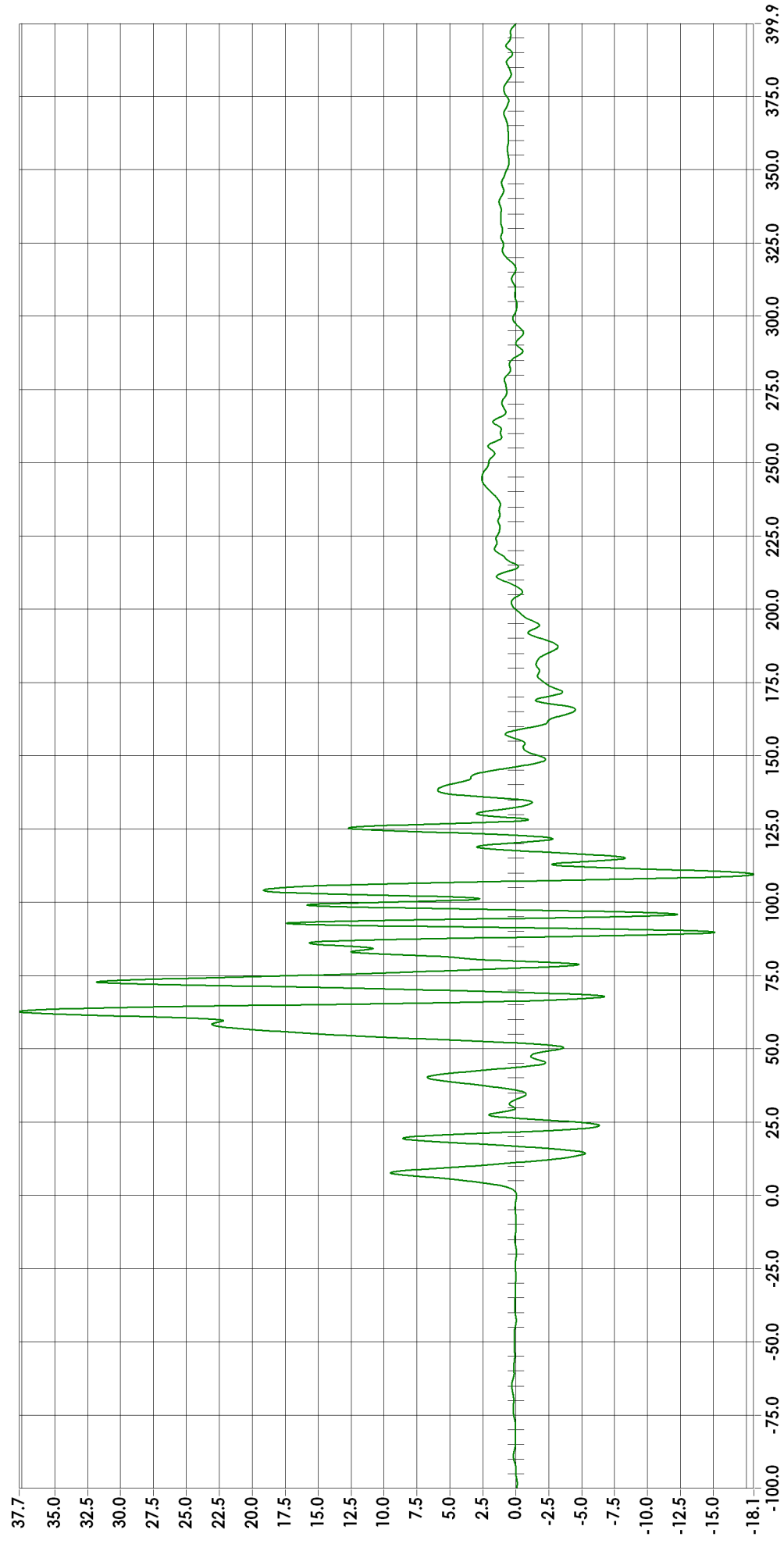


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** FLF  
**Sensor Info** MSI 64-2000-10-360-XY  
**Serial Number** A011334

### Foot rest (z) acceleration ZG



Time (msec)

**Max** 37.69 G's at 62.72 msec  
**Min** -18.08 G's at 109.52 msec

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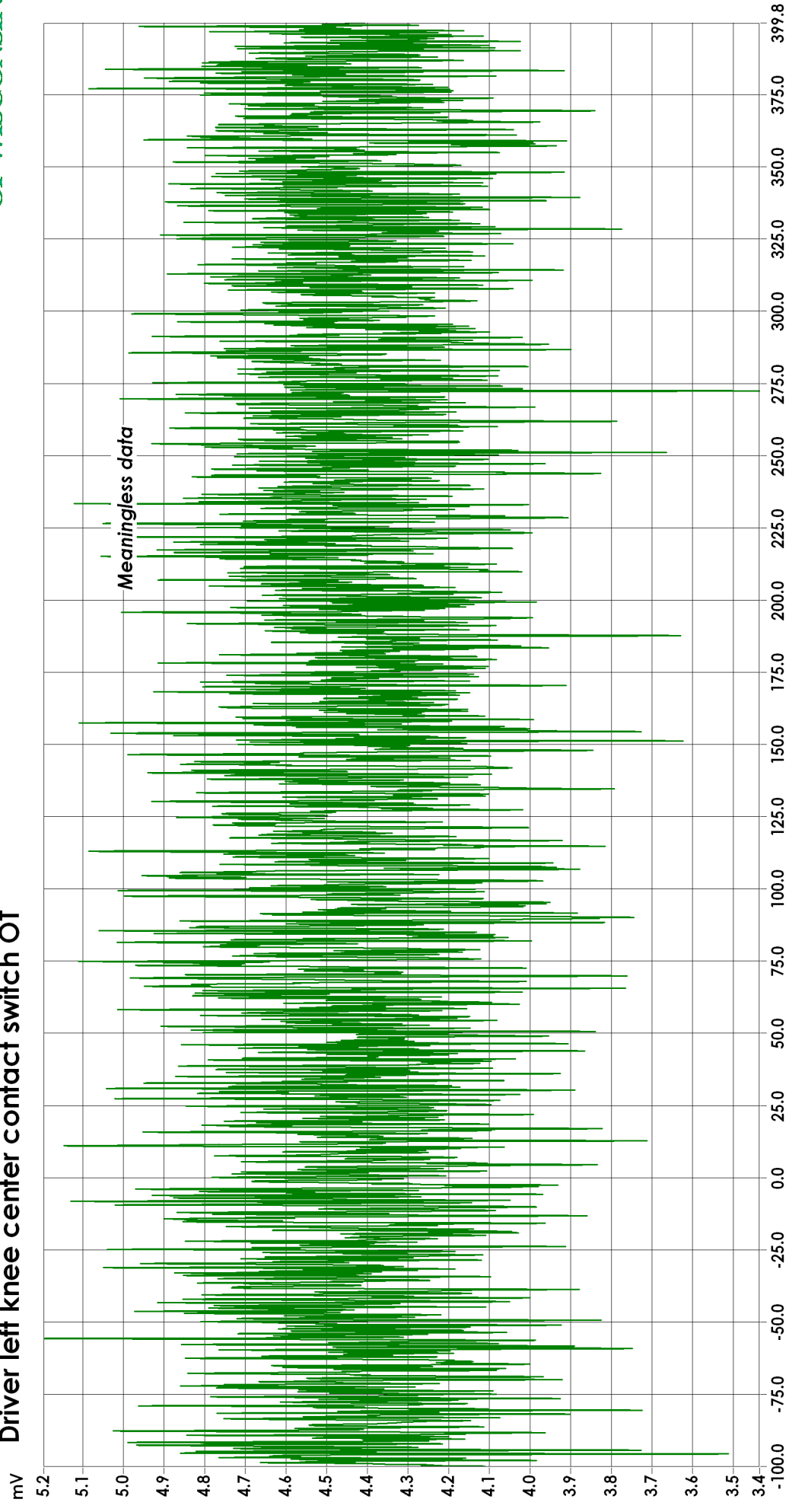


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** KNEE  
**Sensor Info** MCW Contact Switch  
**Serial Number** MCW Contact Switch 1

### Driver left knee center contact switch OT



**Max** 5.20 mV at -55.76 msec  
**Min** 3.44 mV at 272.40 msec

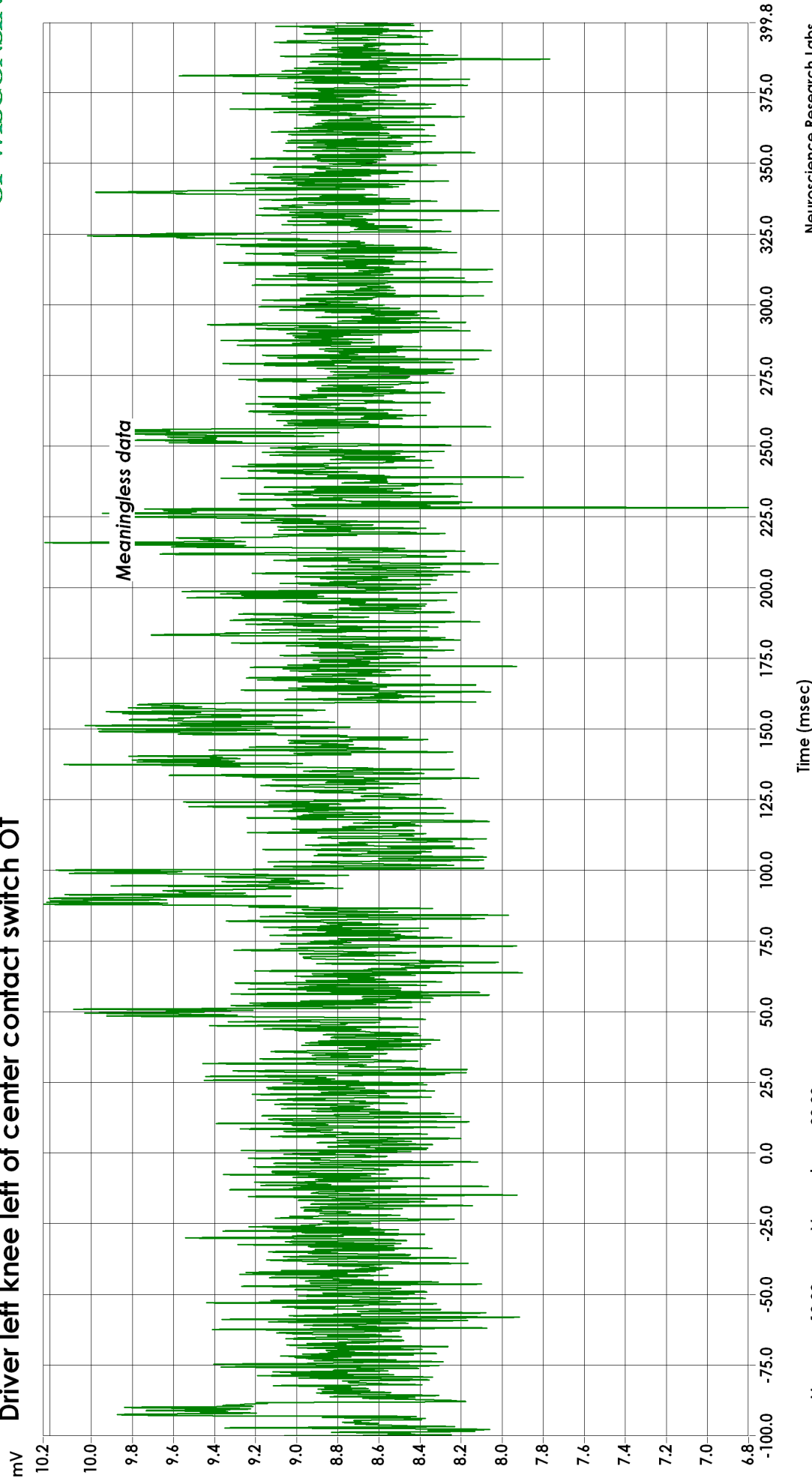
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SOI003 Plot 182



<b>Test ID</b>	SOI003	<b>Filter</b>	CFC1000
<b>Date</b>	10-12-2010	<b>Sampling Rate (Hz)</b>	12500
<b>Description</b>	2007 Ford Taurus Small Overlap Test	<b>Number of Points</b>	6250
		<b>Pretrigger Points</b>	1250
		<b>Sensor Location</b>	KNEE
		<b>Sensor Info</b>	MCW Contact Switch
		<b>Serial Number</b>	MCW Contact Switch 2

### Driver left knee left of center contact switch OT



<b>Max</b>	10.23	<b>mV</b>	<b>at</b>	88.00	<b>msec</b>
<b>Min</b>	6.80	<b>mV</b>	<b>at</b>	228.24	<b>msec</b>

SOI003 Plot 183

Time (msec)

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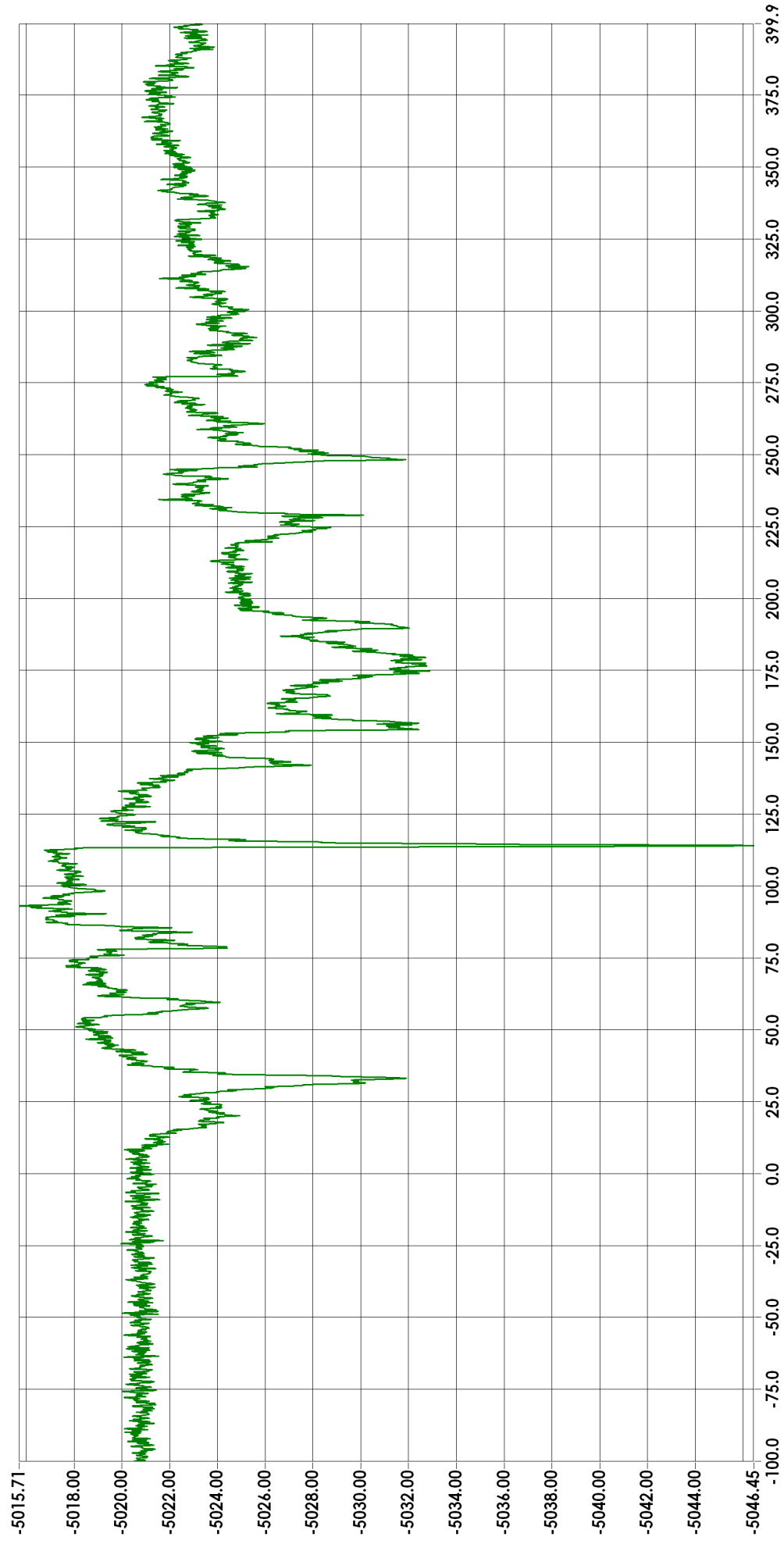


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** KNEE  
**Sensor Info** MCW Contact Switch  
**Serial Number** MCW Contact Switch 3

### Driver left knee right of center contact switch OT



**Max** -5015.71 mV at 93.04 msec  
**Min** -5046.45 mV at 114.08 msec

Time (msec)

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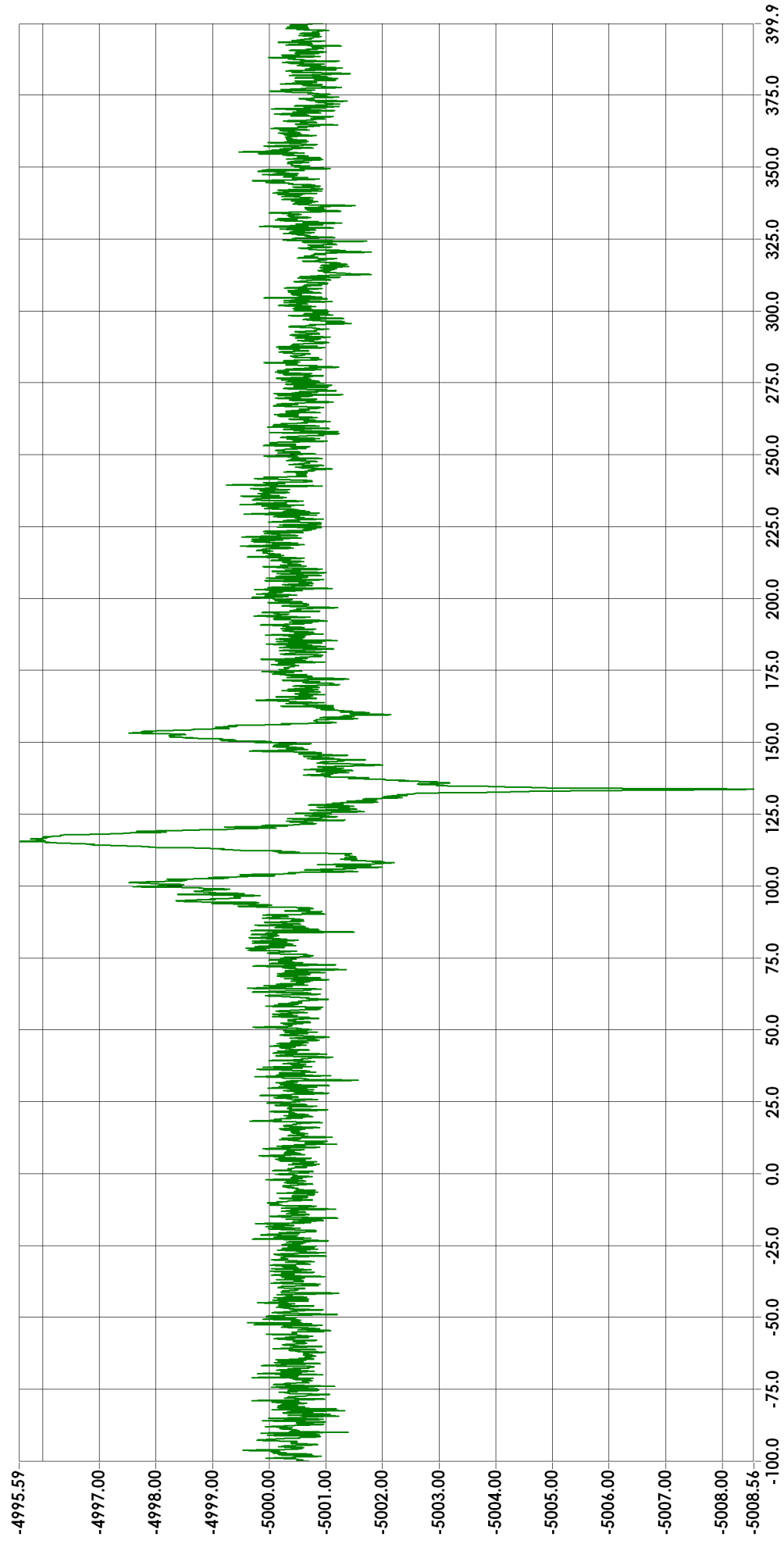


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** KNEE  
**Sensor Info** MCW Contact Switch  
**Serial Number** MCW Contact Switch 4

### Passenger left knee center contact switch OT



**Max** -4995.59 mV at 115.52 msec  
**Min** -5008.56 mV at 133.68 msec

SOI003 Plot 185

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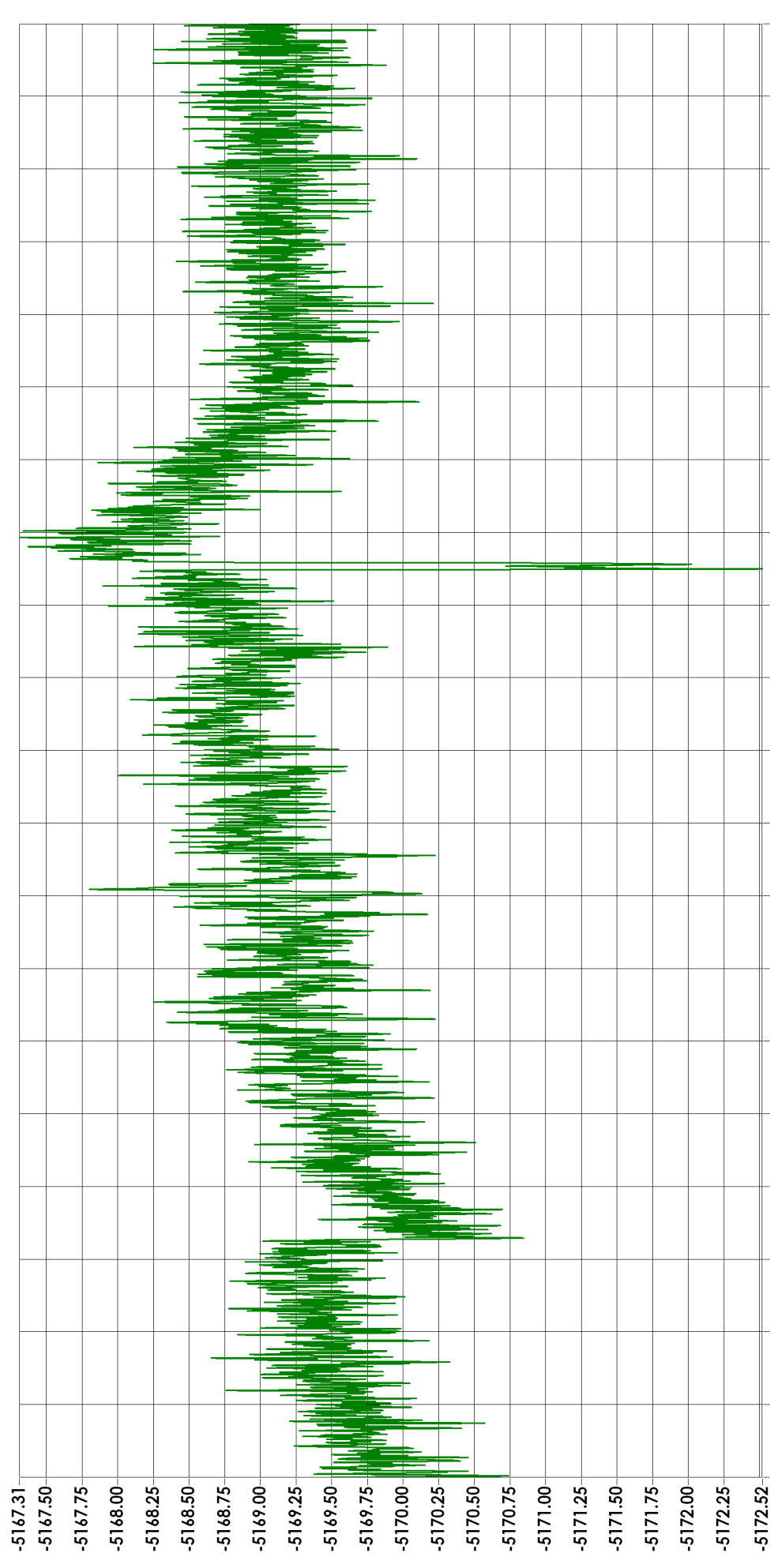


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** KNEE  
**Sensor Info** MCW Contact Switch  
**Serial Number** MCW Contact Switch 6

### Passenger left knee right of center contact switch OT



**Max** -5167.31 mV at 223.20 msec  
**Min** -5172.52 mV at 212.40 msec

Time (msec)

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**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC1000  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** STCL  
**Sensor Info** MCW Airbag Sensor  
**Serial Number** Airbag sensor 1

### Steering wheel airbag squib 1 OT



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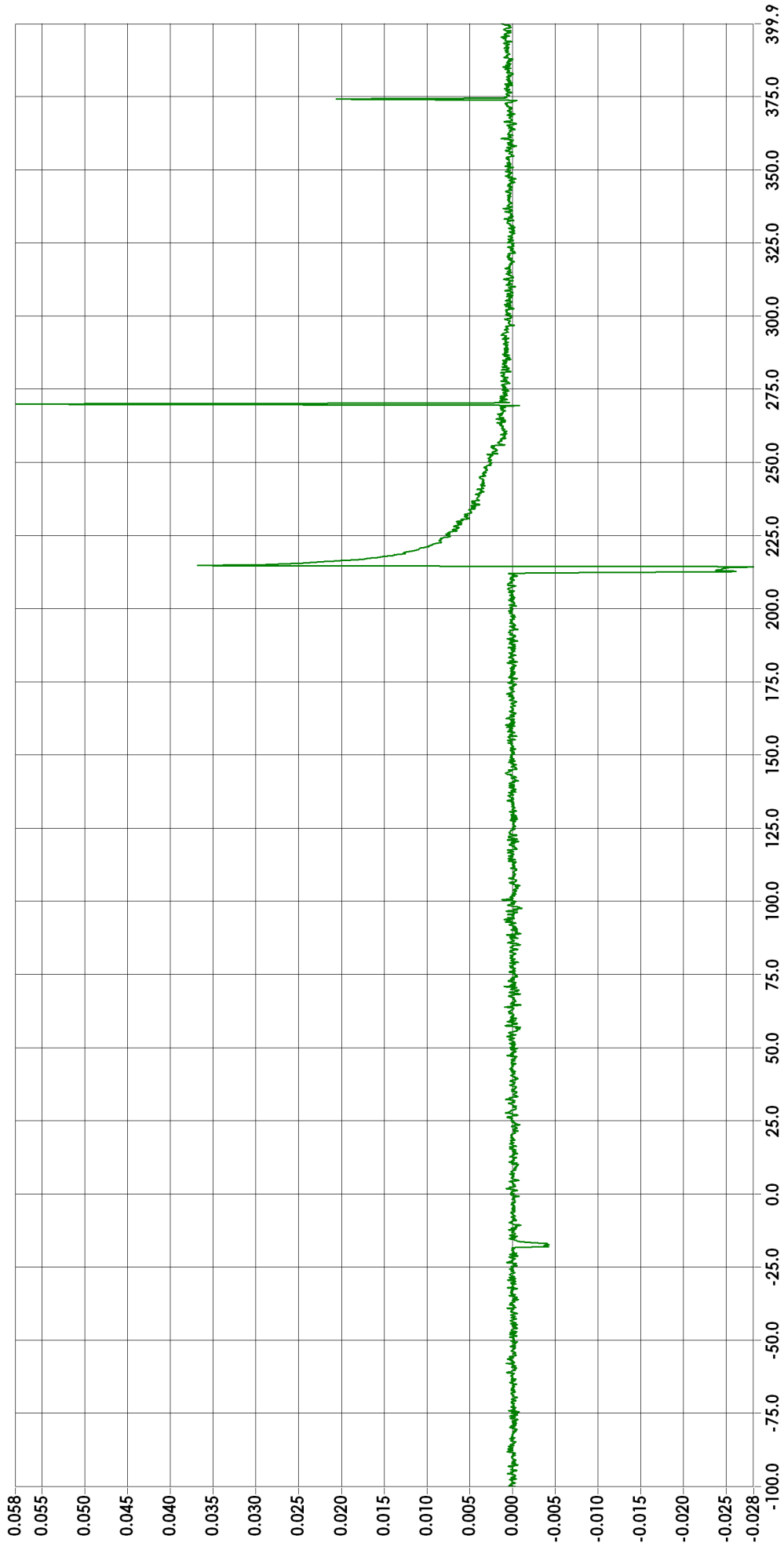
Test ID SOI003  
 Date 10-12-2010  
 Description 2007 Ford Taurus Small Overlap Test

Filter CFC1000  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

Sensor Location STCL  
 Sensor Info MCW Airbag Sensor  
 Serial Number Airbag sensor 2



### VOL Steering wheel airbag squib 2 OT



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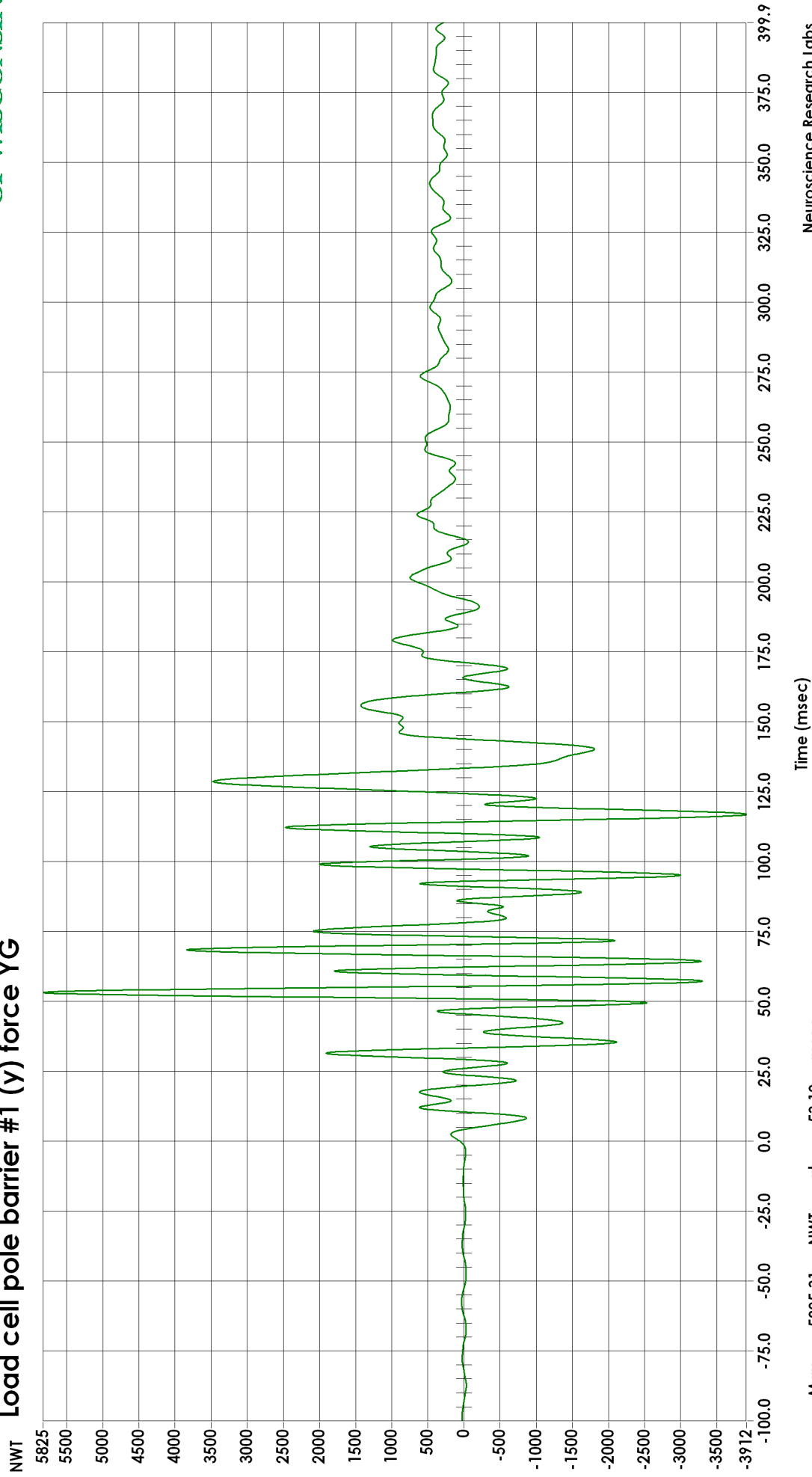
Test ID SOI003  
 Date 10-12-2010  
 Description 2007 Ford Taurus Small Overlap Test

Filter CFC60  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

Sensor Location POLE  
 Sensor Info Interface 1220ACK-50K-B  
 Serial Number 1220ACK-50K-B\_332407



### Load cell pole barrier #1 (y) force YG



Max 5825.31 NWT at 53.12 msec  
 Min -3911.85 NWT at 116.80 msec

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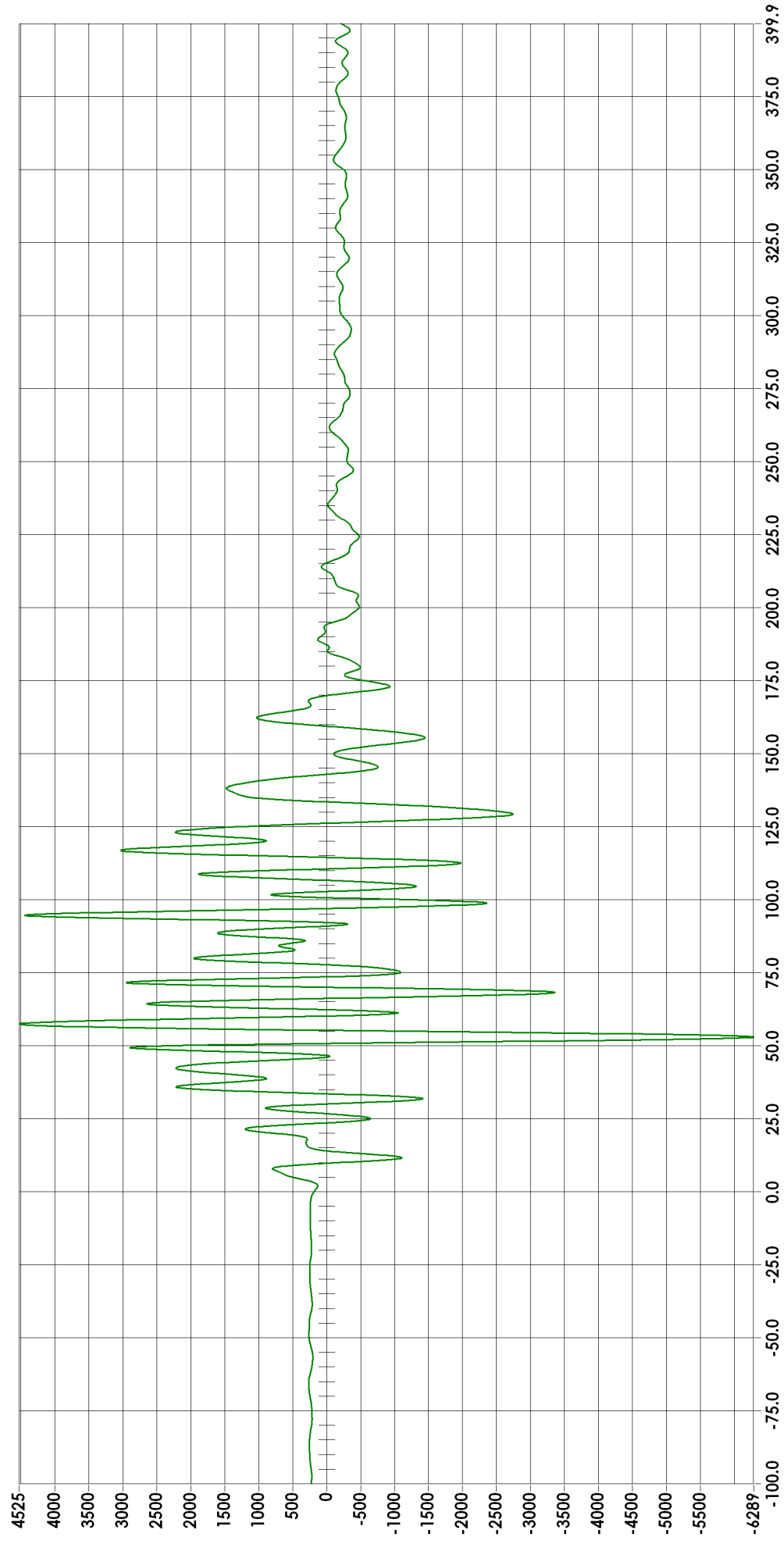


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** POLE  
**Sensor Info** Interface 1220ACK-50K-B  
**Serial Number** 1220ACK-50K-B\_352865

### Load cell pole barrier #2 (y) force YG



**Max** 4525.34 NWT at 57.36 msec  
**Min** -6288.69 NWT at 52.96 msec

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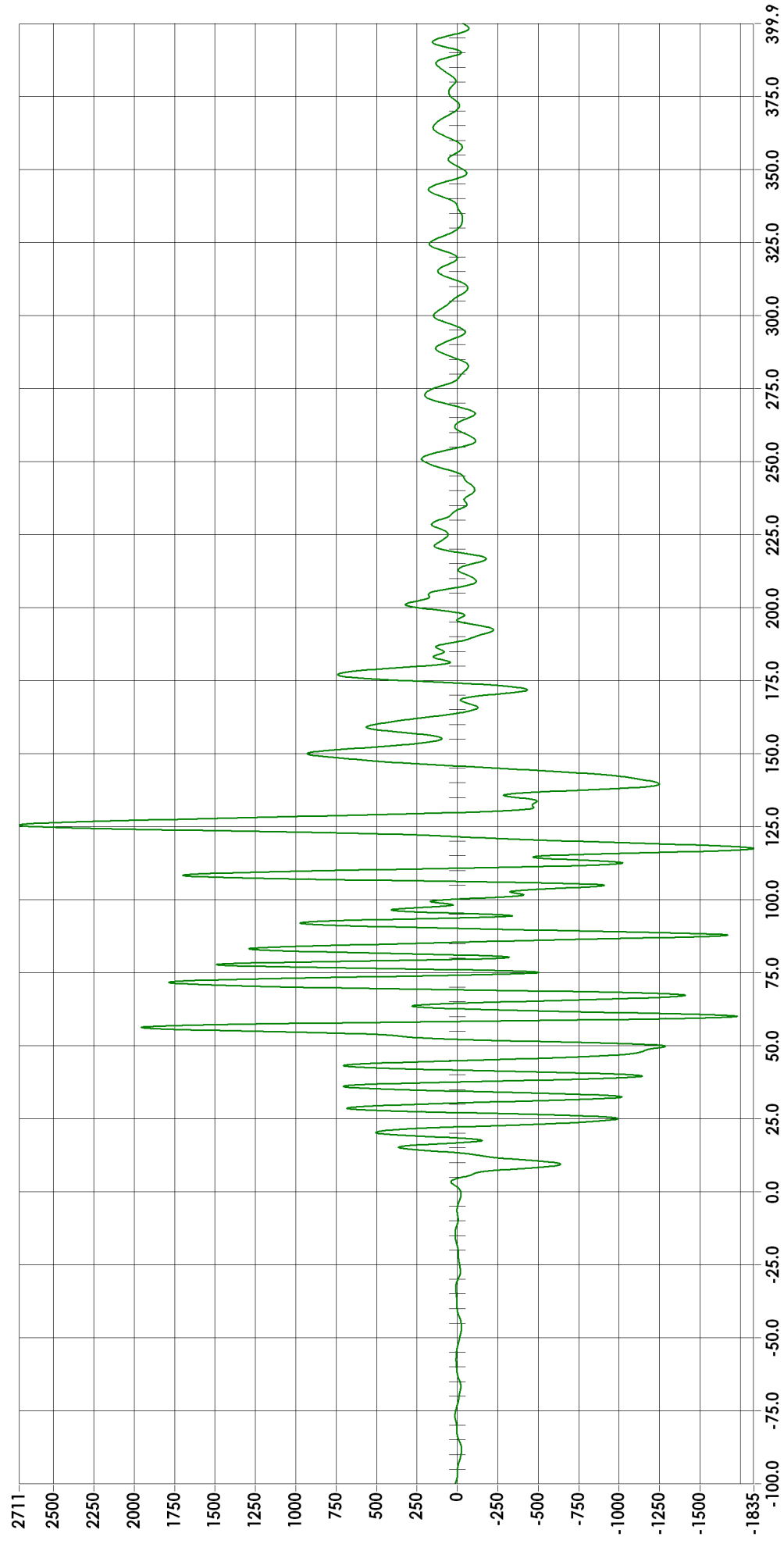


**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** POLE  
**Sensor Info** Interface 1220ACK-50K-B  
**Serial Number** 1220ACK-50K-B\_332420

### Load cell pole barrier #3 (y) force YG



**Max** 2711.47 NWT at 125.52 msec  
**Min** -1834.61 NWT at 117.52 msec

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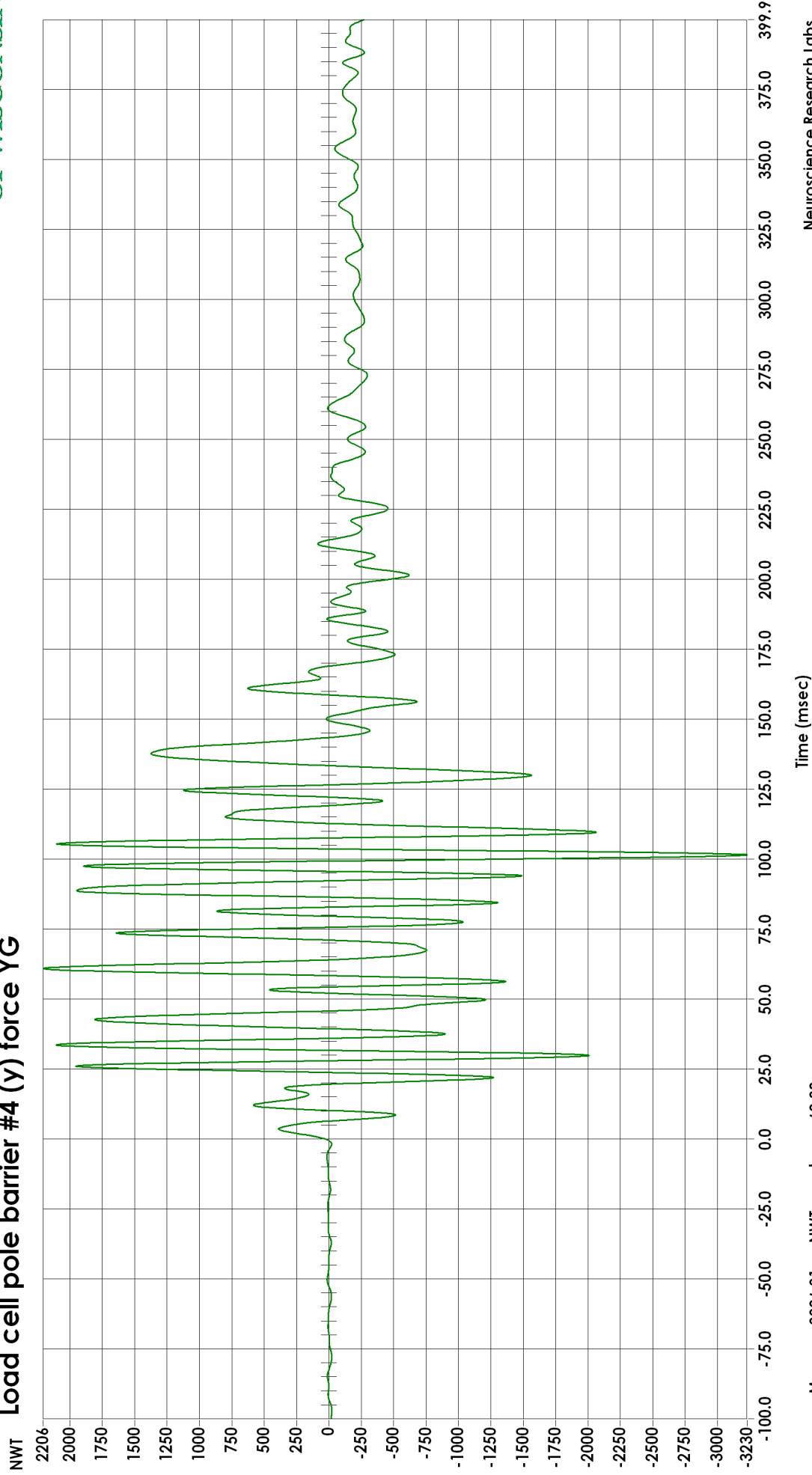
Test ID SOI003  
 Date 10-12-2010  
 Description 2007 Ford Taurus Small Overlap Test

Filter CFC60  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

Sensor Location POLE  
 Sensor Info Interface 1220ACK-50K-B  
 Serial Number 1220ACK-50K-B\_332400



### Load cell pole barrier #4 (y) force YG



Max 2206.21 NWT at 60.88 msec  
 Min -3229.63 NWT at 101.44 msec

Time (msec)

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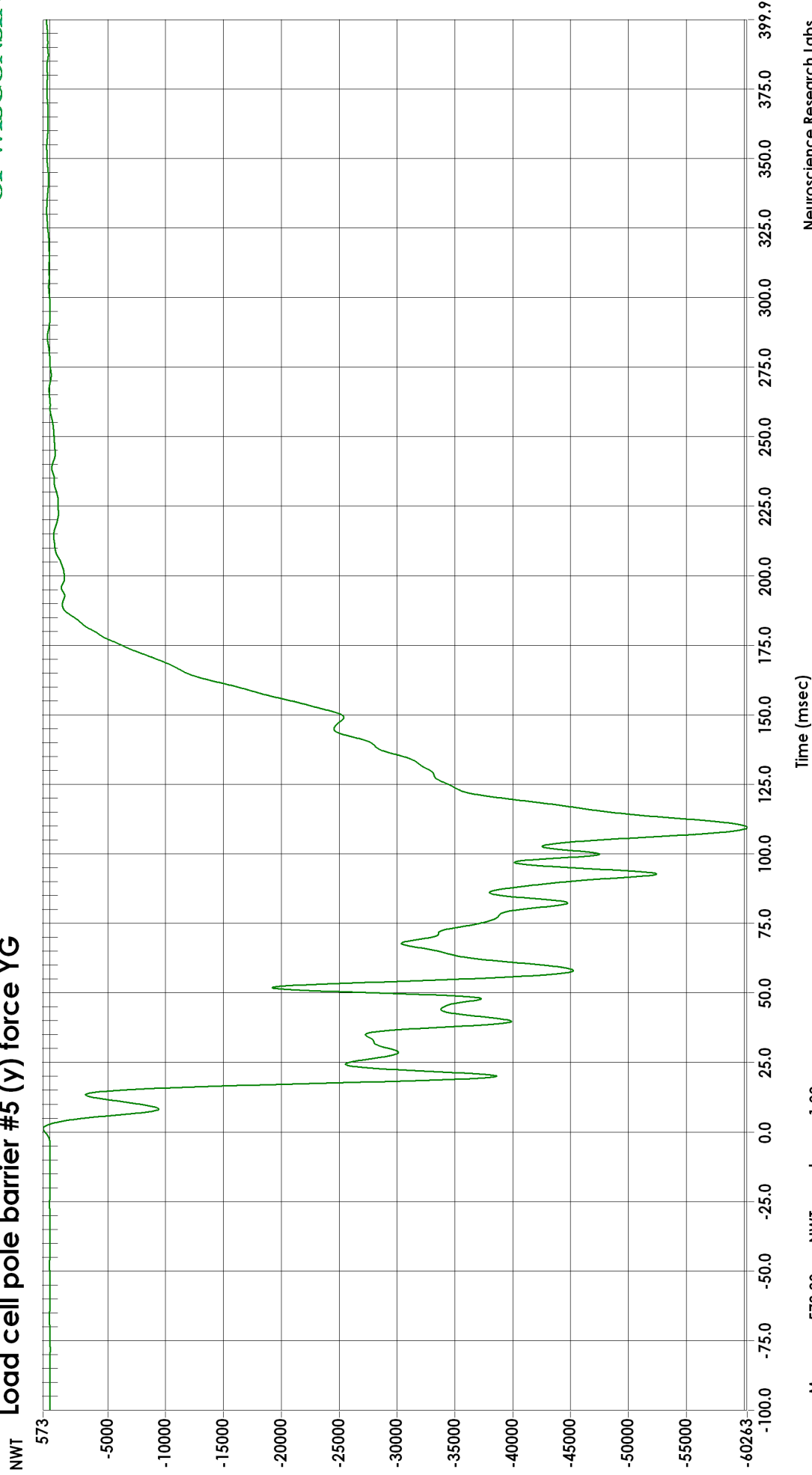
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 Date 10-12-2010  
 Description 2007 Ford Taurus Small Overlap Test

Filter  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

Sensor Location  
 Sensor Info Interface 1220ACK-50K-B  
 Serial Number 1220ACK-50K-B\_330824



### NWT Load cell pole barrier #5 (y) force YG



Max 573.39 NWT at 1.20 msec  
 Min -60263.07 NWT at 109.52 msec

SOI003 Plot 194

Time (msec)

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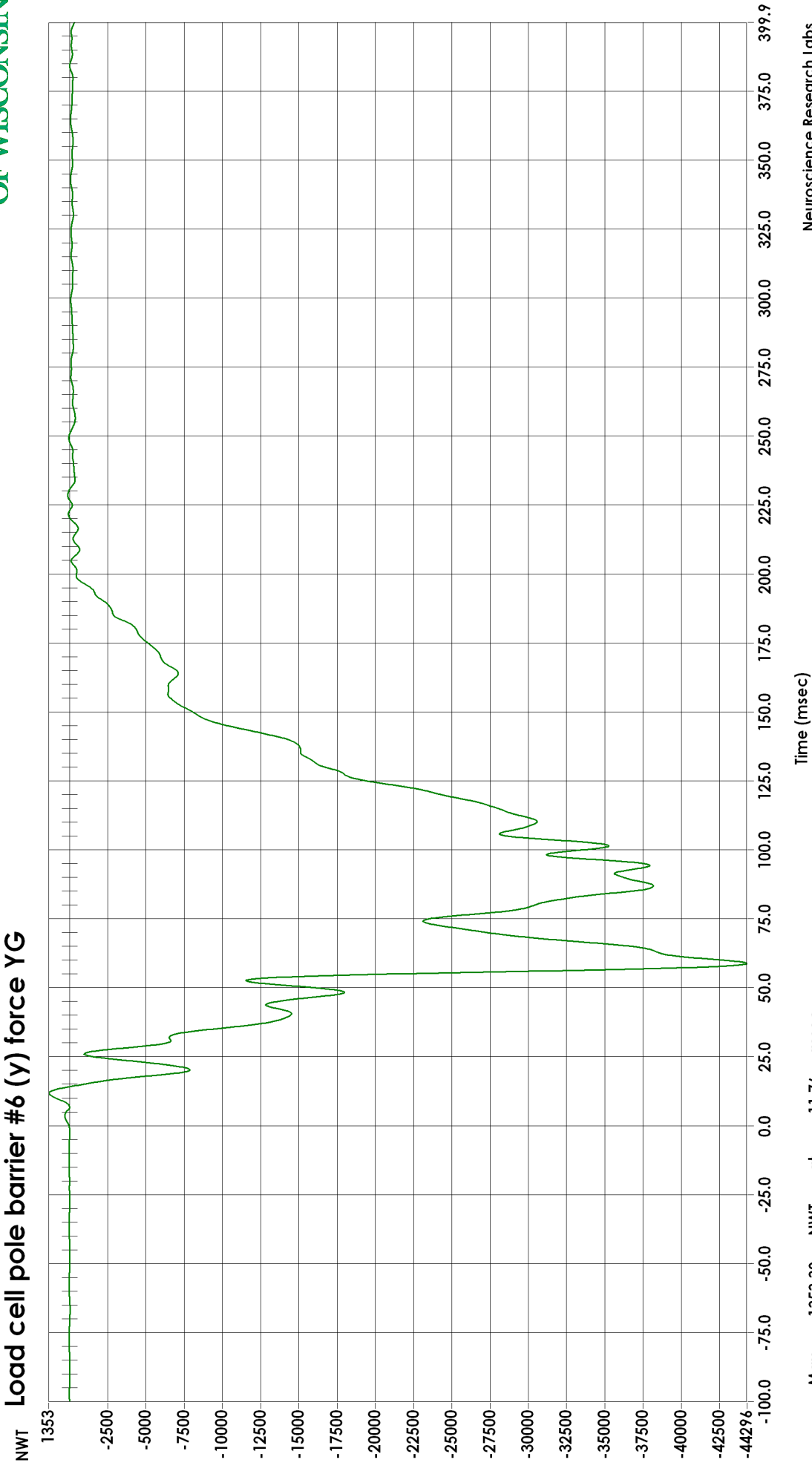
Test ID SOI003  
 Date 10-12-2010  
 Description 2007 Ford Taurus Small Overlap Test

Filter CFC60  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

Sensor Location POLE  
 Sensor Info Interface 1220ACK-50K-B  
 Serial Number 1220ACK-50K-B\_334238



### Load cell pole barrier #6 (y) force YG



Max 1353.39 NWT at 11.76 msec  
 Min -44295.59 NWT at 58.80 msec

SOI003 Plot 195

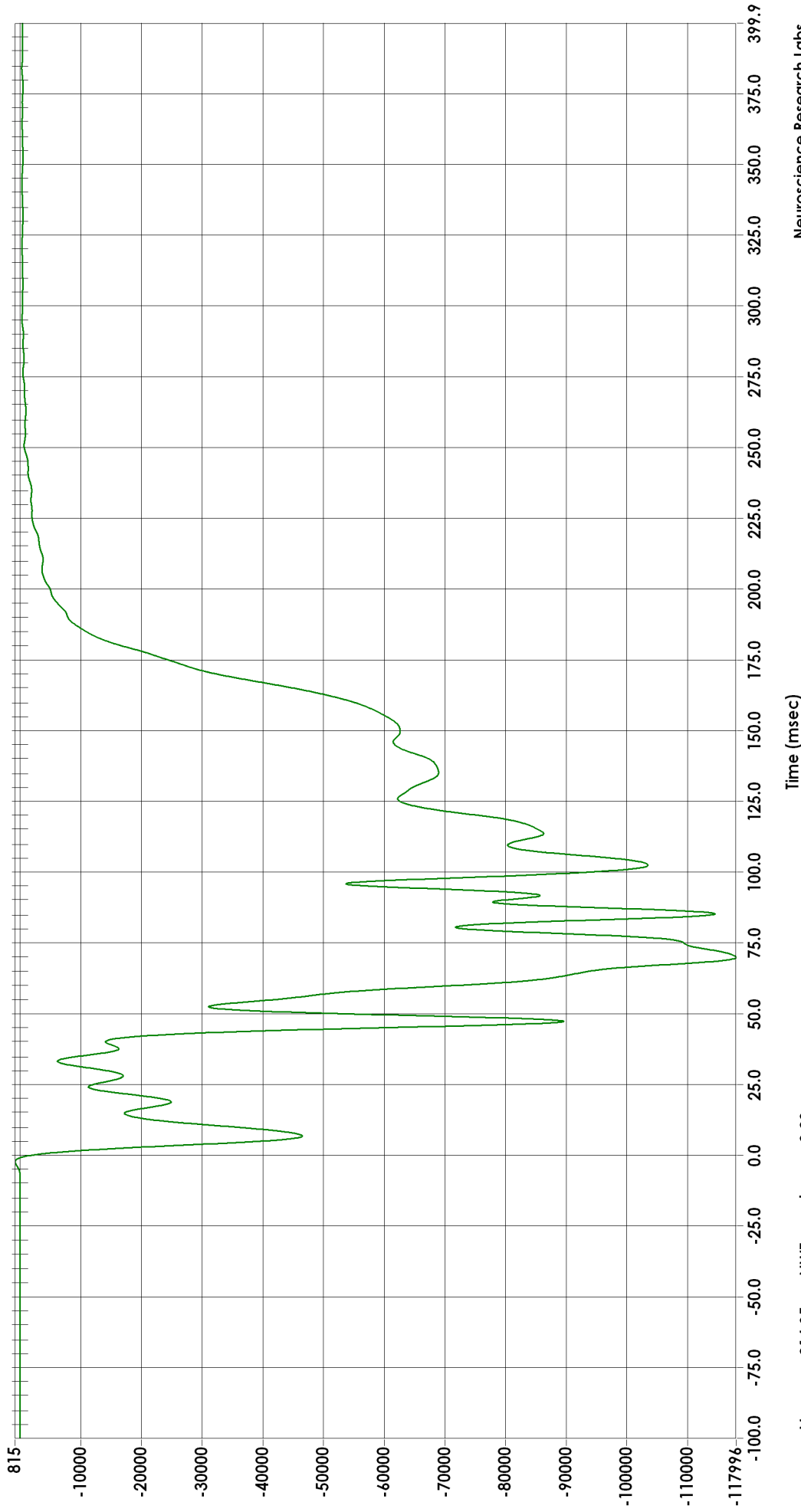
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**Test ID** SOI003  
**Date** 10-12-2010  
**Description** 2007 Ford Taurus Small Overlap Test

**Filter** CFC60  
**Sampling Rate (Hz)** 12500  
**Number of Points** 6250  
**Pretrigger Points** 1250

**Sensor Location** POLE  
**Sensor Info** Interface 1220ACK-50K-B  
**Serial Number** 1220ACK-50K-B\_330834

**NWT Load cell pole barrier #7 (y) force YG**



**Max** 814.95 NWT at -2.32 msec  
**Min** -117995.55 NWT at 69.92 msec

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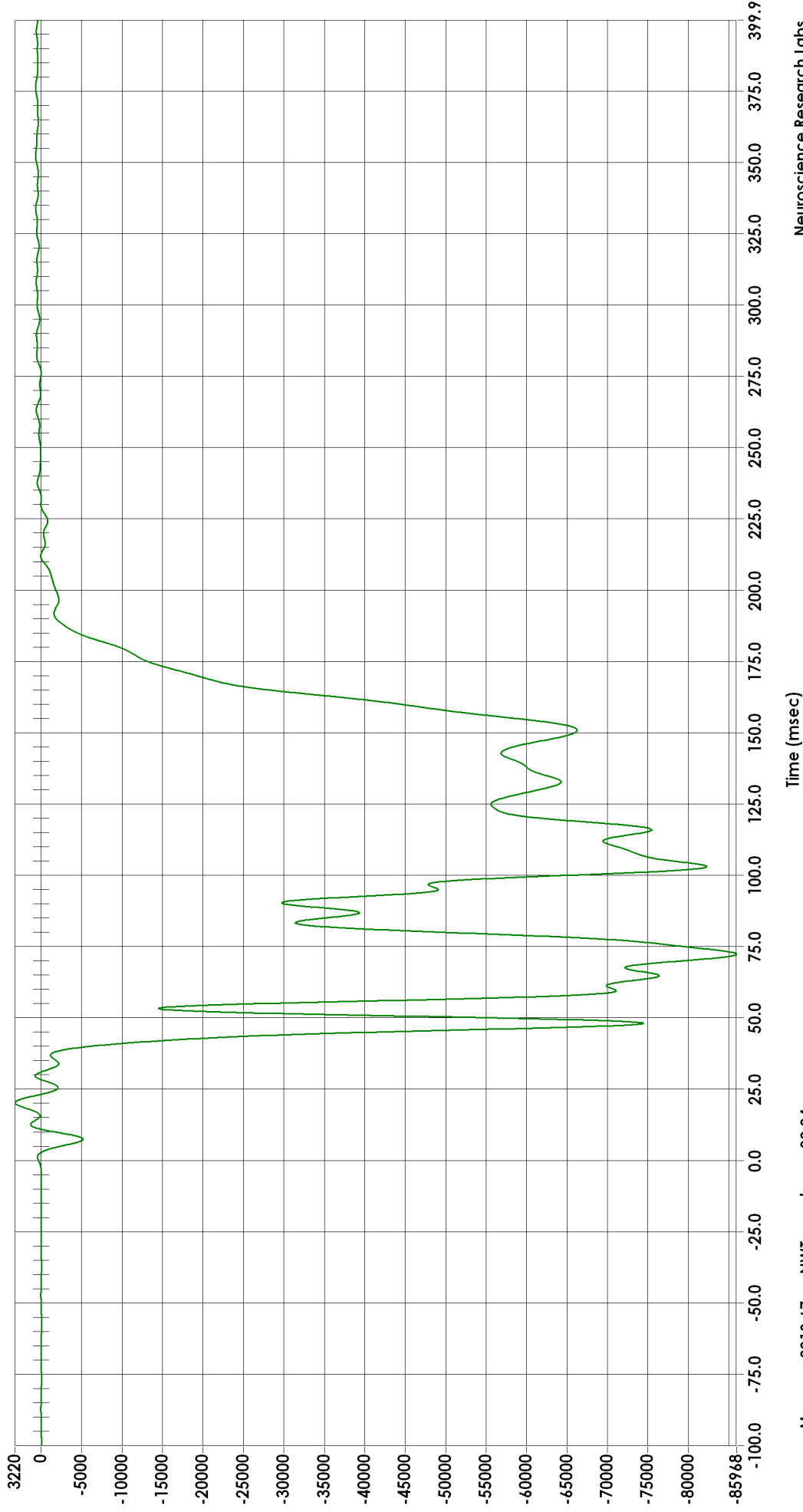
Test ID SOI003  
 Date 10-12-2010  
 Description 2007 Ford Taurus Small Overlap Test

Filter CFC60  
 Sampling Rate (Hz) 12500  
 Number of Points 6250  
 Pretrigger Points 1250

Sensor Location POLE  
 Sensor Info Interface 1220ACK-50K-B  
 Serial Number 1220ACK-50K-B\_332403



### NWT Load cell pole barrier #8 (y) force YG



Max 3219.67 NWT at 20.24 msec  
 Min -85968.12 NWT at 72.32 msec

SOI003 Plot 197

Time (msec)

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