

EA12-005

CHRYSLER

12-13-2012

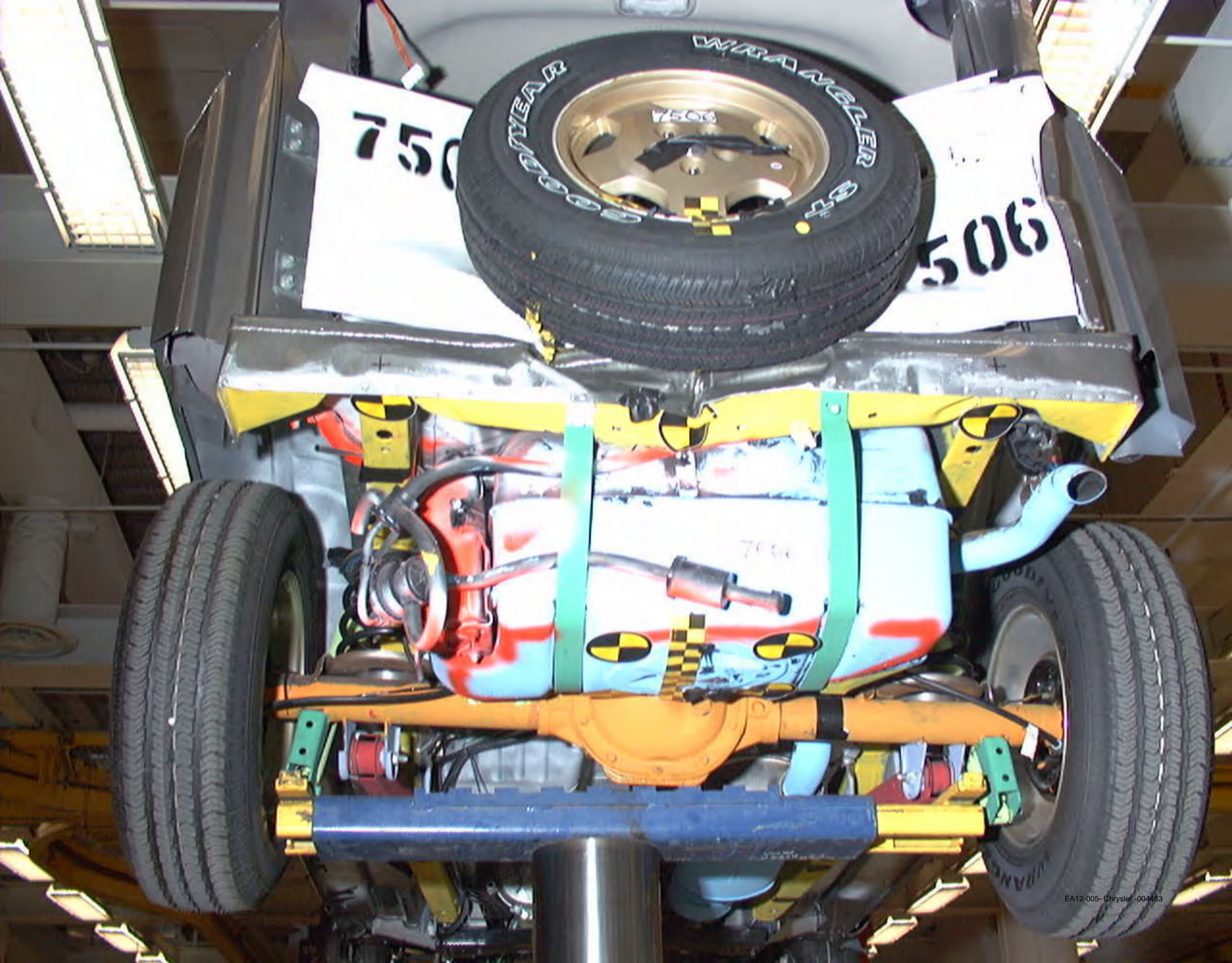
Enclosure 6B

301 Developmental Crash
Tests Public

KJ Development Crash Test

VC07506 PUBLIC

VC07506.Photos-BuildDown



750

506

7506



7506



VC 7506





VC 7506

7506



AP5211
Front

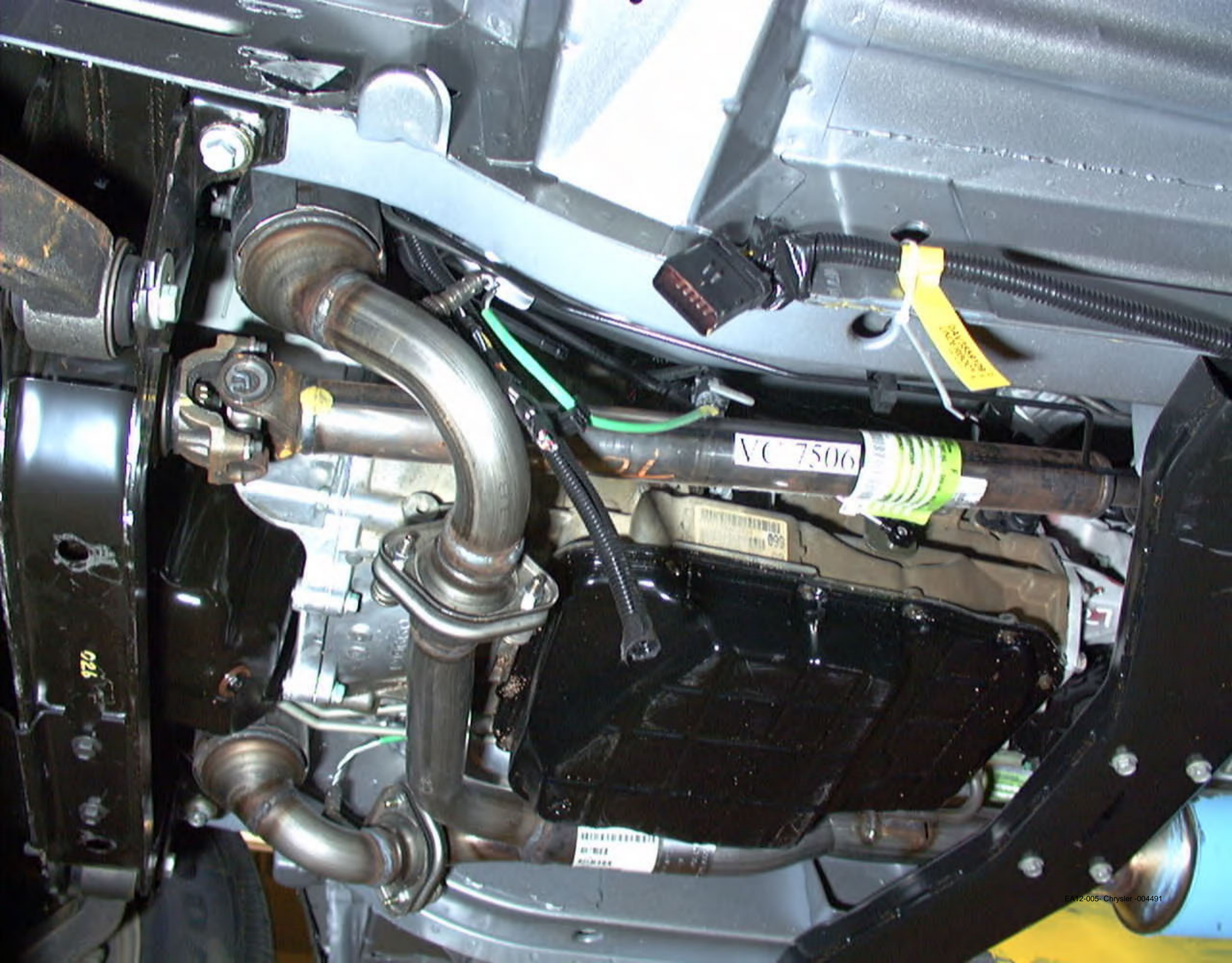


VC 7506





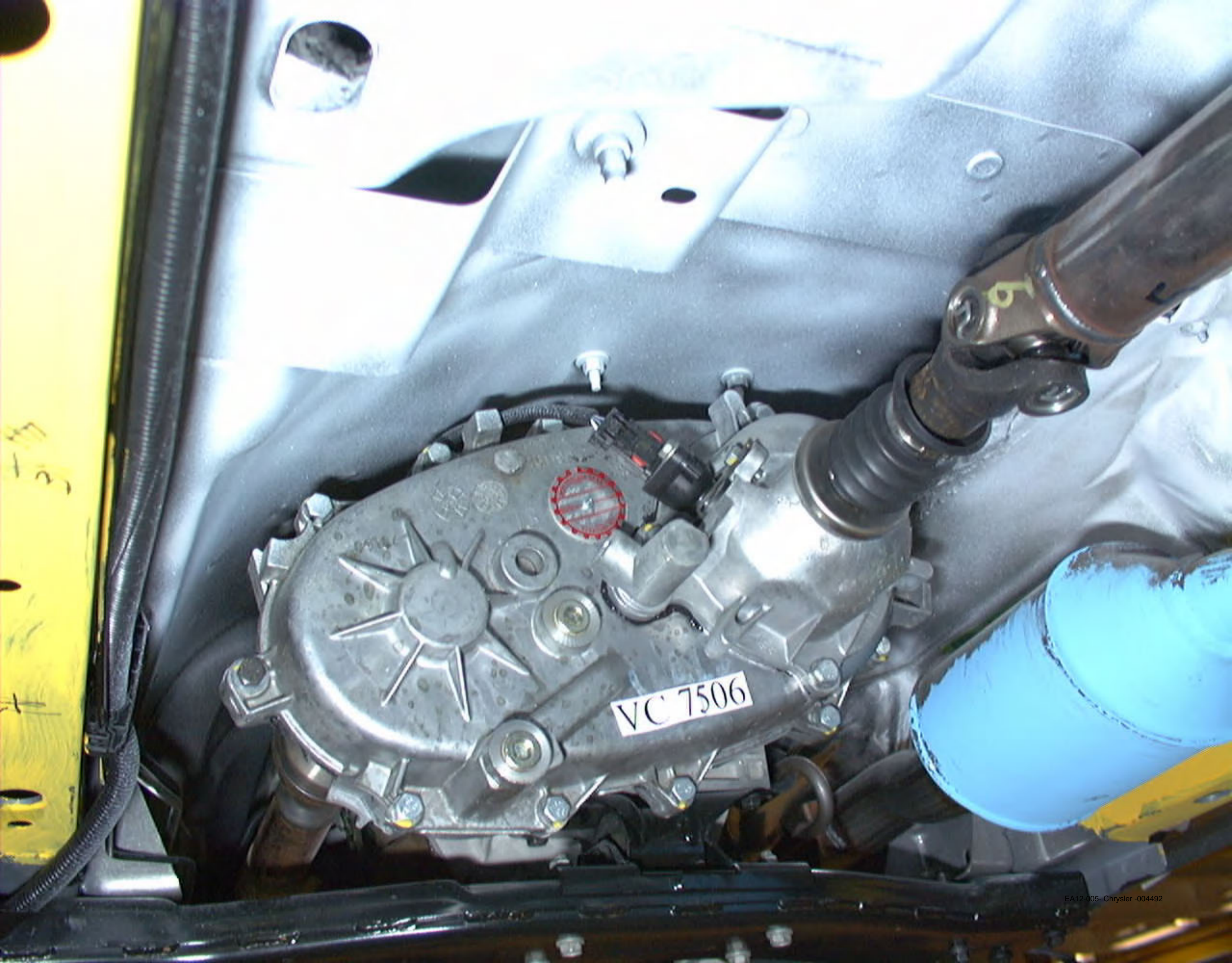
VC 7506



VC 7506

2415555555

026



VC 7506



7489

7489

50100

7506

7506

DODGE RAM

GOODYEAR 27

GOODYEAR 27





M9 E7

7506

6.4 HEMI
TRAILER



VC 7506

VC 7506



7506

RIGLER ST



7489

30-00

7506

WHEELER ST



7506



506

7506



7506

170

7506

7506

7506

6

7506

170 GAS

VC 7506

170 GAS



Alloy on Body

7506

N9 E8



7506

170 ^{6 ml/s}

7506

GOODYEAR

WRANGLER ST



7506

170 6/3/15

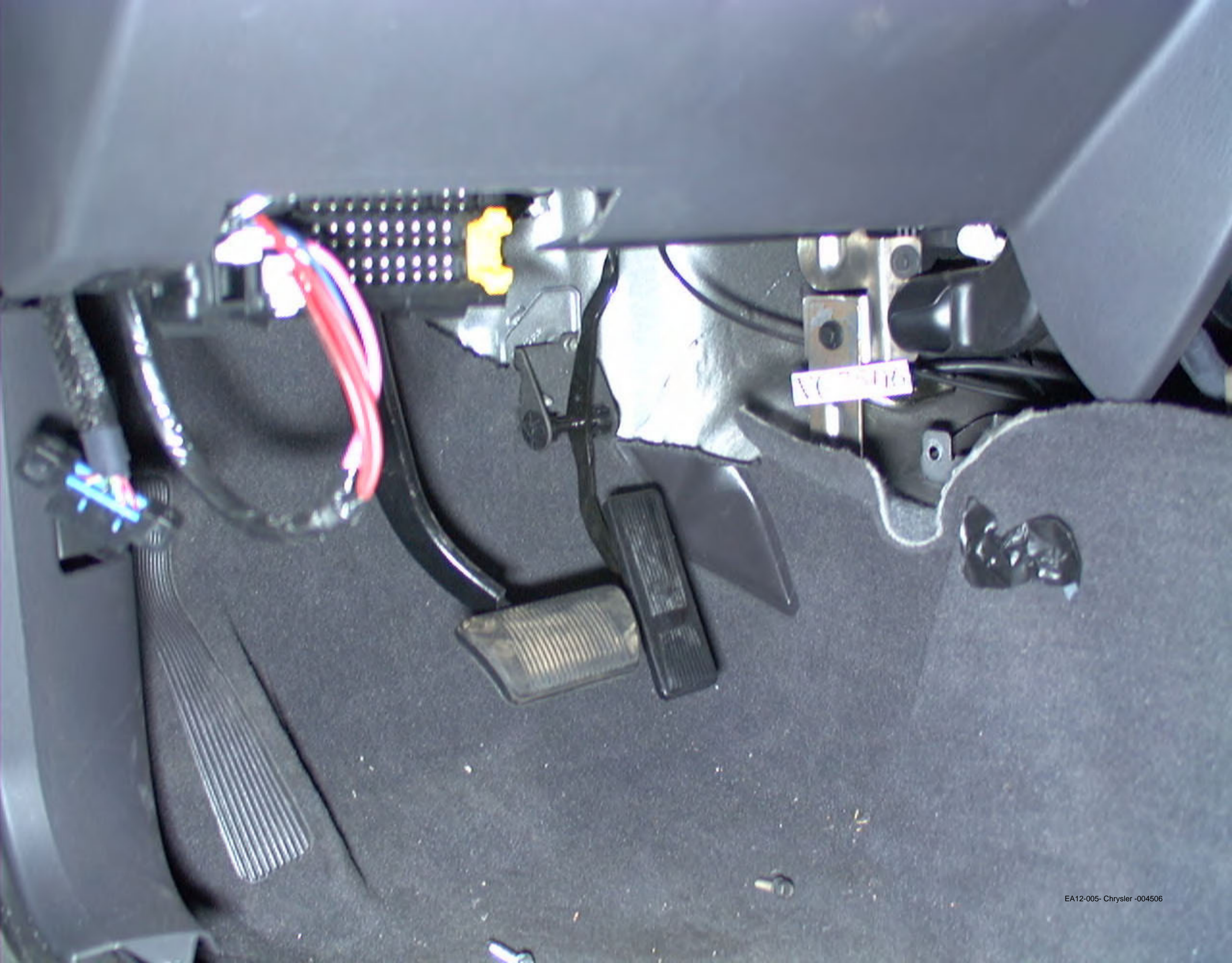
7506

7506

N8

N8









XC 2506

10/11





100-5115





AC 7506



102500



107506

VC 7506

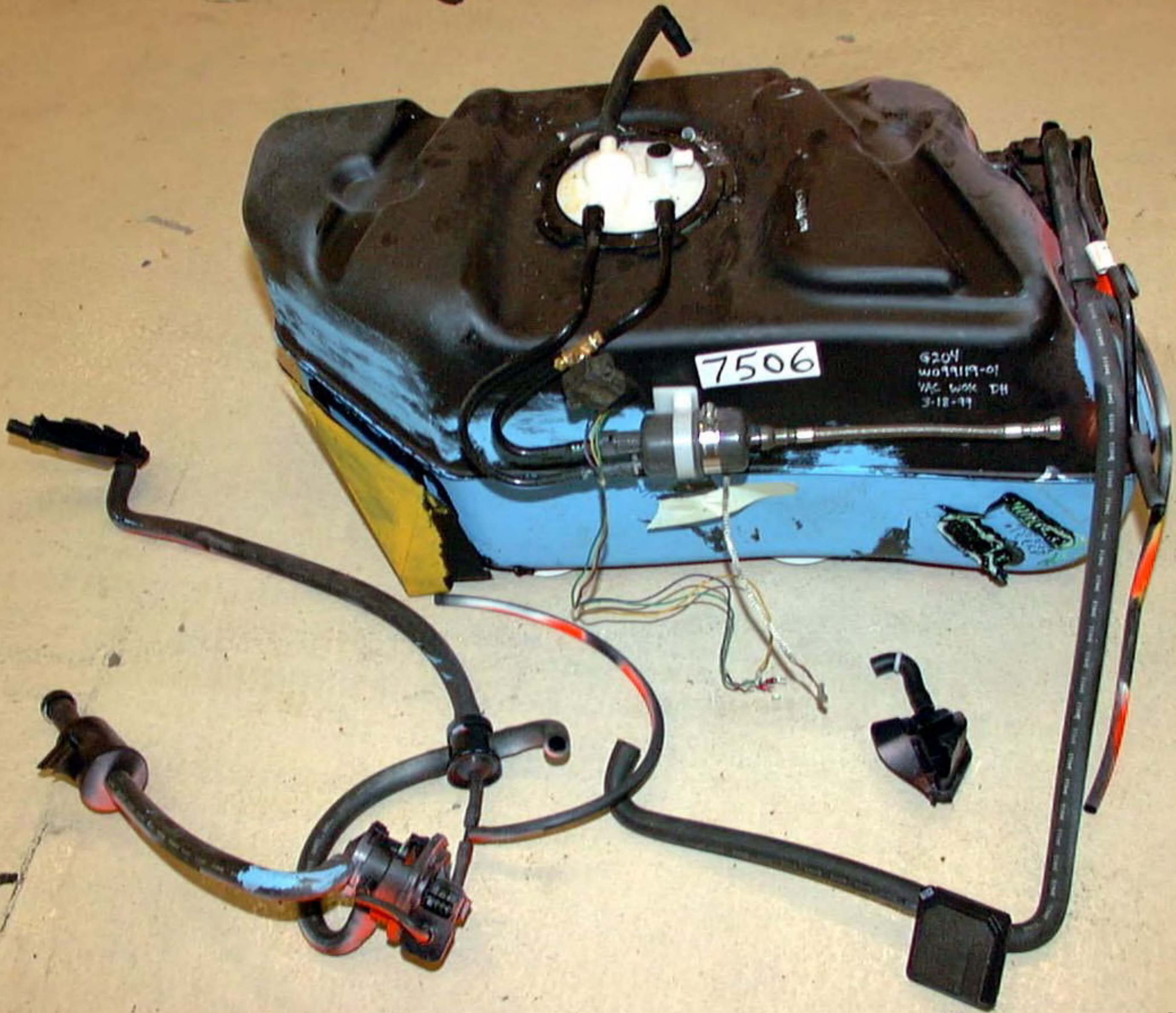


V07506



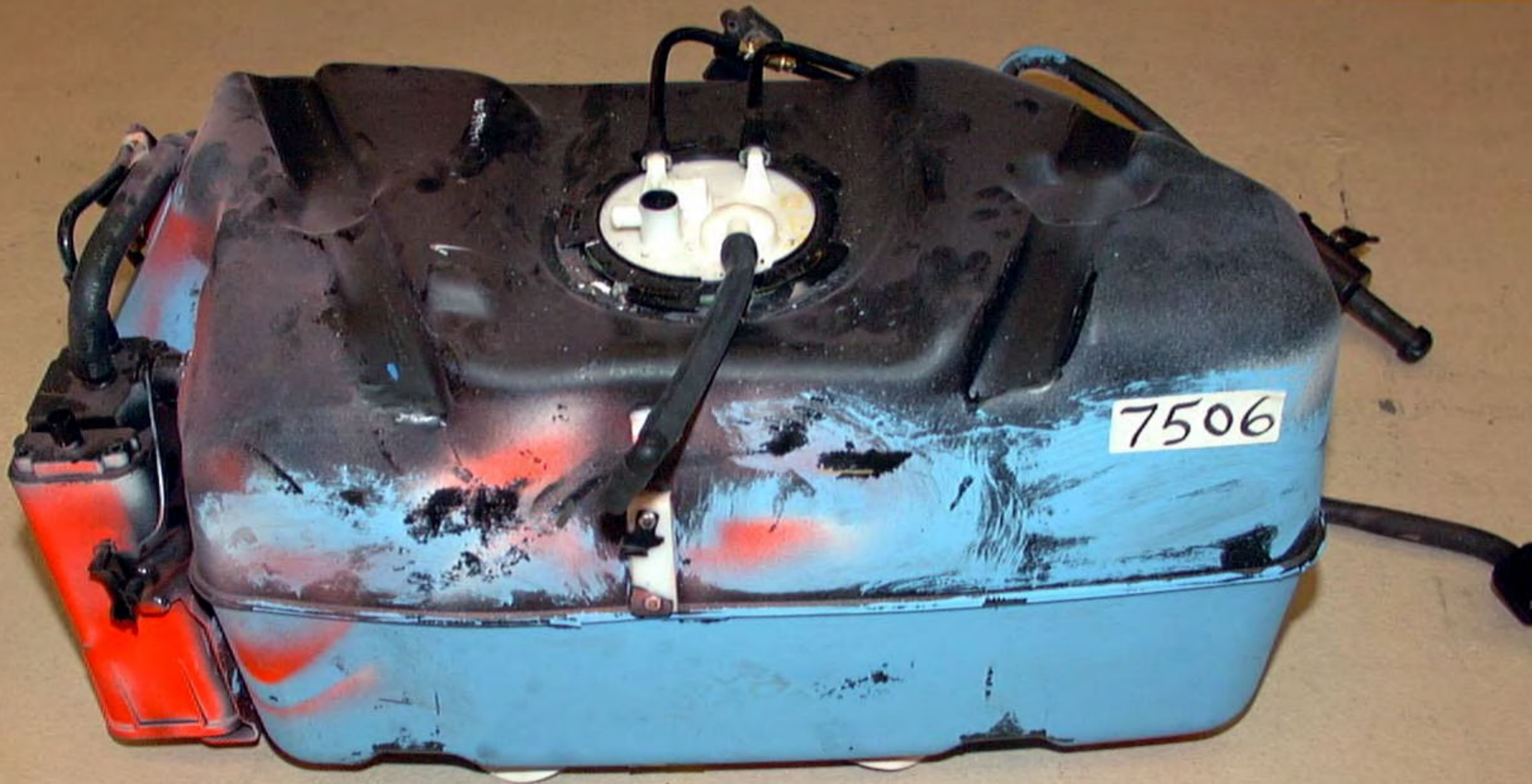


1.500





7506





7506

7

131116 071



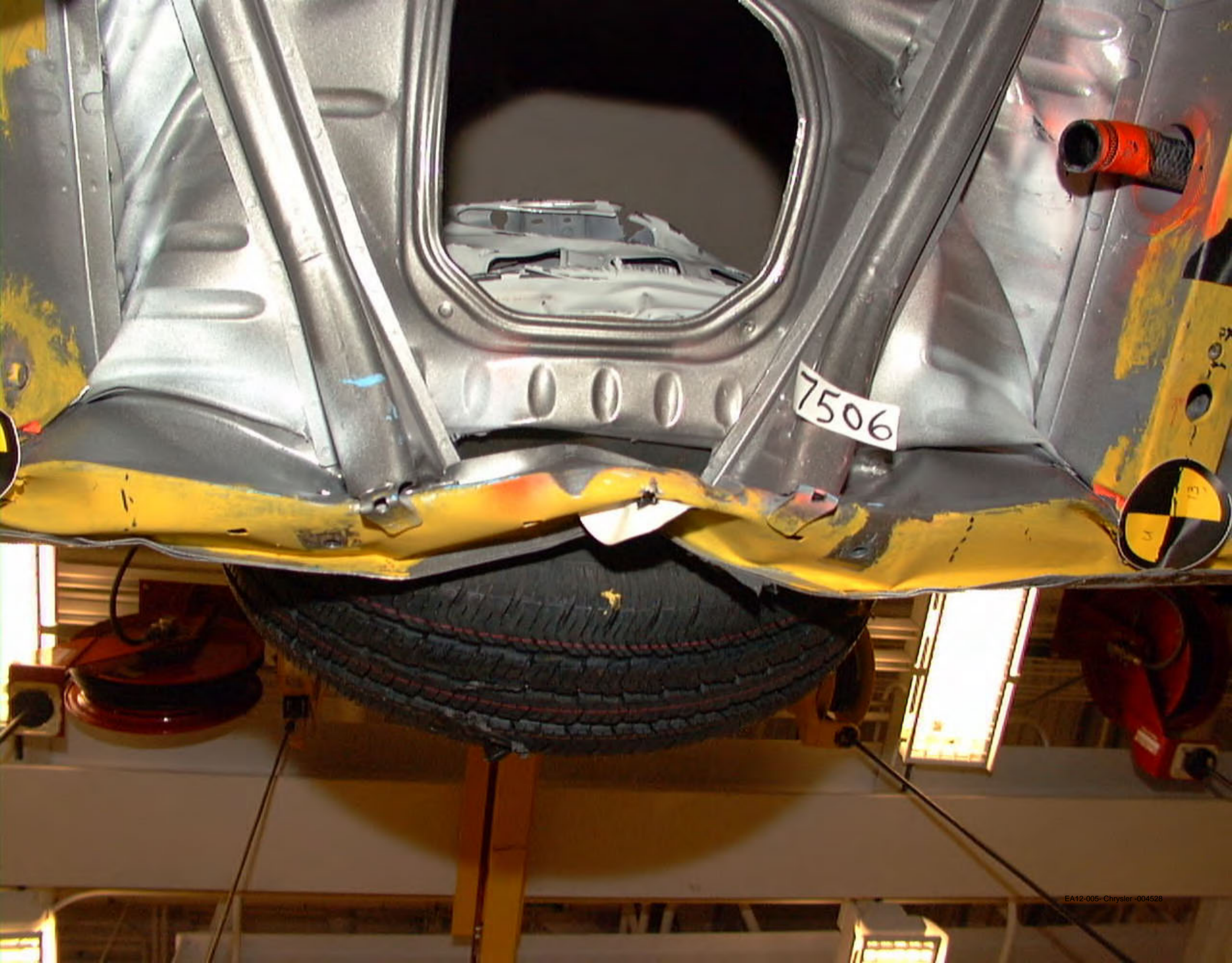
R1



1506

7506





7506



7506

7506

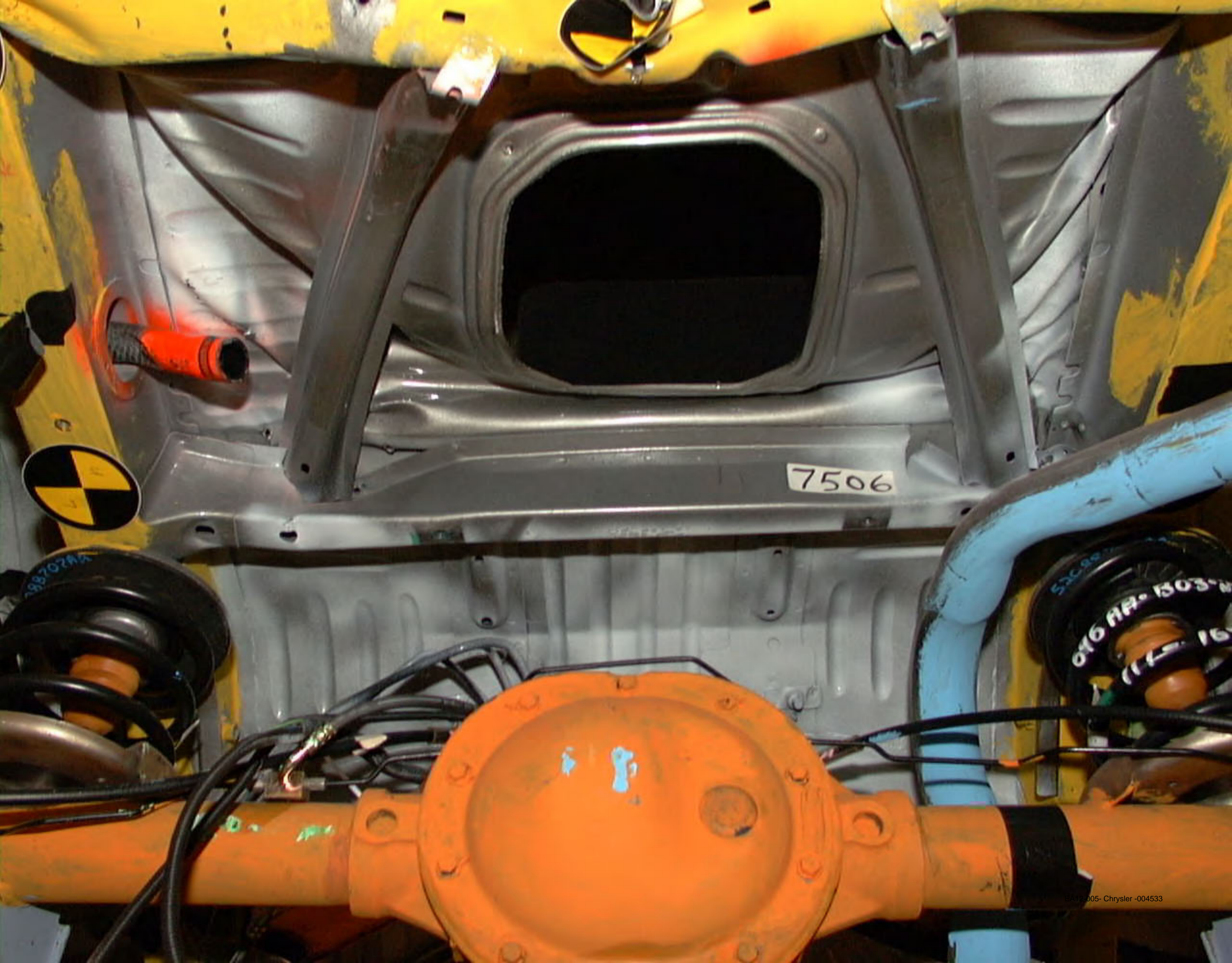
7506



88702AA

7506

96 AA-1303



7506

198702AA

53C-85
016 RP-1503-8
114-15

VC07506
KJ Rear Impact



7506

VC07506
KJ Rear Impact

7506

VC07506

KJ Rear Impact

VC07506

KJ Rear Impact

VCO7506
KJ Rear Impact

EA12-005

CHRYSLER

12-13-2012

Enclosure 6B

301 Developmental Crash
Tests Public

KJ Development Crash Test

VC07506 PUBLIC

VC07506.Photos-
Instrumentation



VC7506 KJ3589
PRE KJJ74
ORC LT FT
CH 38-40 REAR

VC7506 KJ3589
PRE KJJ74
LT FT SILL ST XMB
CH 41-42 REAR

VC7506 KJ358
PRE KJJ74
RT FT SILL ST X
CH 43-44 REAR

43
/
44

VC7506 KJ3589
PRE KJJ74
RT SILL B PLR
CH 47-48 REAR

VC7506 KJ3589
PRE KJJ74
RT RR SILL ST XME
CH 51-52 REAR

51
52

VC7506 KJ350
PRE KJJ74
LT RR SILL ST X
CH 49-50 REAR

VC7506 KJ350
PRE KJJ74
LT SILL B PLR
CH 45-46 REAR

2813

2813

VC7506 KJ3589
PRE KJJ74
LT FT SILL
CH 1 REAR



VC7506 KJ3589
PRE KJJ74
LT RL TRANS XMB
CH 12-13 REAR

EA12-0

VC7506 KJ350
PRE KJJ74
LT RR SILL
OH 3-4 REAR

3/12



VC7506 KJ358
PRE KJJ74
FUEL TK RL PAS
CH 20-28 REAR

VC7506 KJ358
PRE KJJ74
LT RL MID TANK
CH 9-11 REAR

VC7506 KJ358
PRE KJJ74
FUEL TK BTM
CH 23-25 REAR

VC7506 KJ3589
PRE KJJ74
FUEL TK FT FACE
CH 20-22 REAR

VC7506
PRE
RT RL MID
CN 7-B

KJ3589
KJJ74
TANK
REAR

15.6

VC7506 KJ3589
PRE KJJ74
RT RR SILL
CH 5-6 REAR

VC7506 KJ3589
PRE KJJ74
RT RL TRANS XMB
CH 14-15 REAR

7506 KJ3589
PRE KJJ74
RT FT SILL
CH 2 REAR

12-005-C

18
19

VC7506 KJ3589
PRE KJJ74
RT RL FT XMBR
CH 18-19 REAR

VC7506 KJ358
PRE KJJ74
LT RL FT XM BR
CH 16-17 REAR

NO / LT

18
19

VC7506 KJ3589
PRE KJJ74
RT RL FT XMBR
CH 18-19 REAR

EA12-005

CHRYSLER

12-13-2012

Enclosure 6B

301 Developmental Crash
Tests Public

KJ Development Crash Test

VC07506 PUBLIC

VC07506.Photos-PostTest



7506

7506

170 mm

V7506

2409

WRANGLER SRT
GOODYEAR



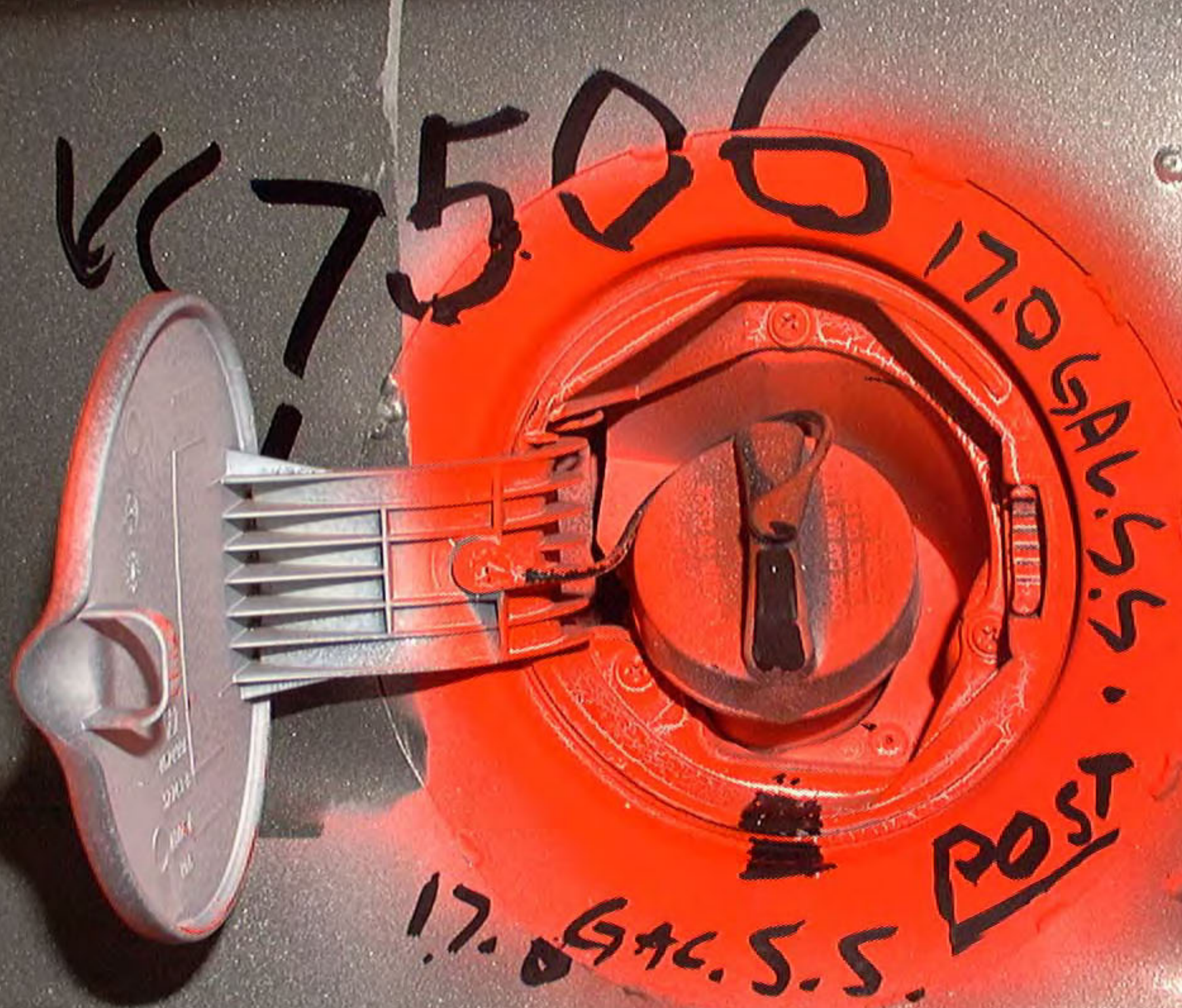
CORPORATION
CHRYSLER FINANCIAL

7506

75

156

GOODYEAR
WRANGLER





750

7506

7506

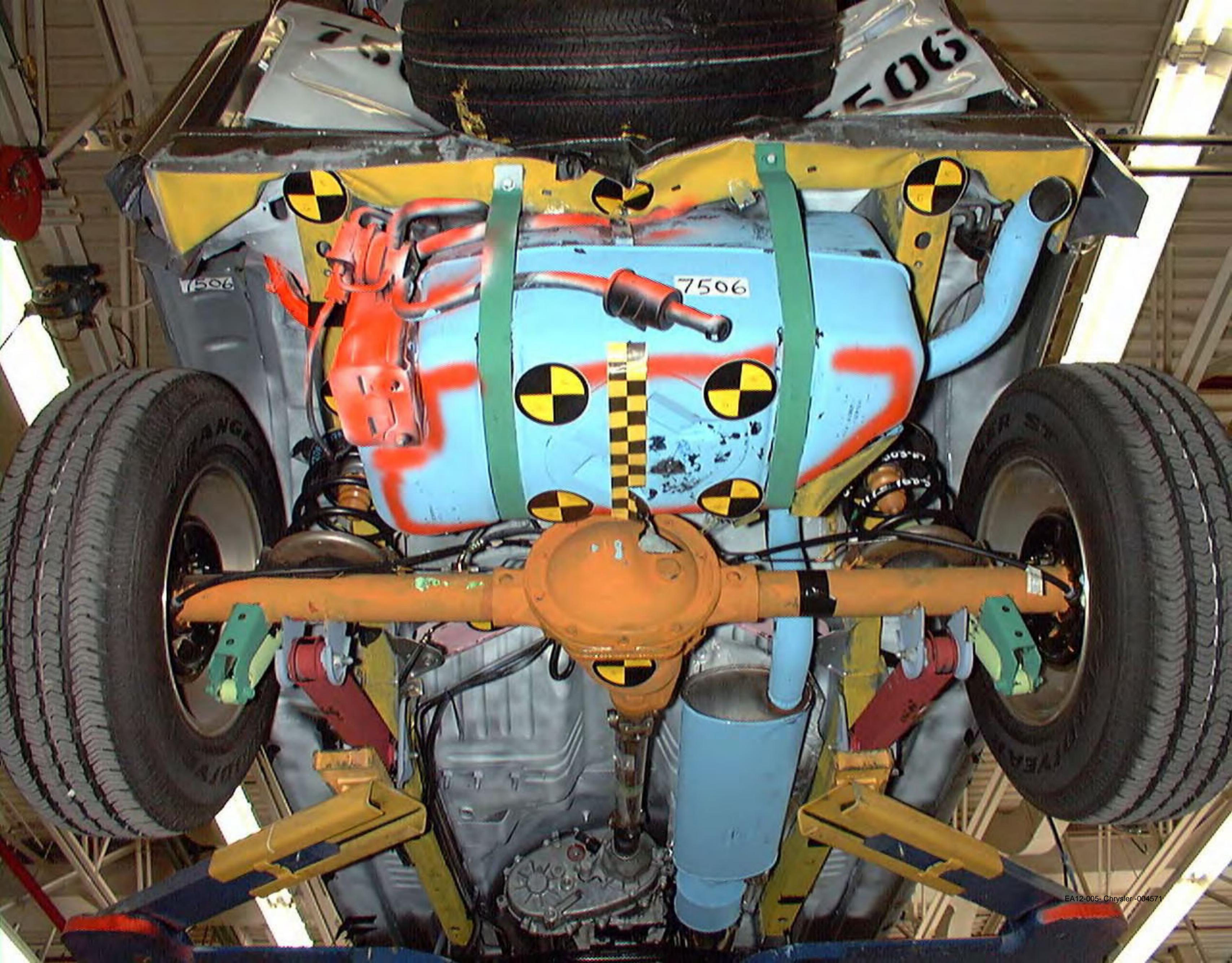
GOODYEAR WRANGLER G4



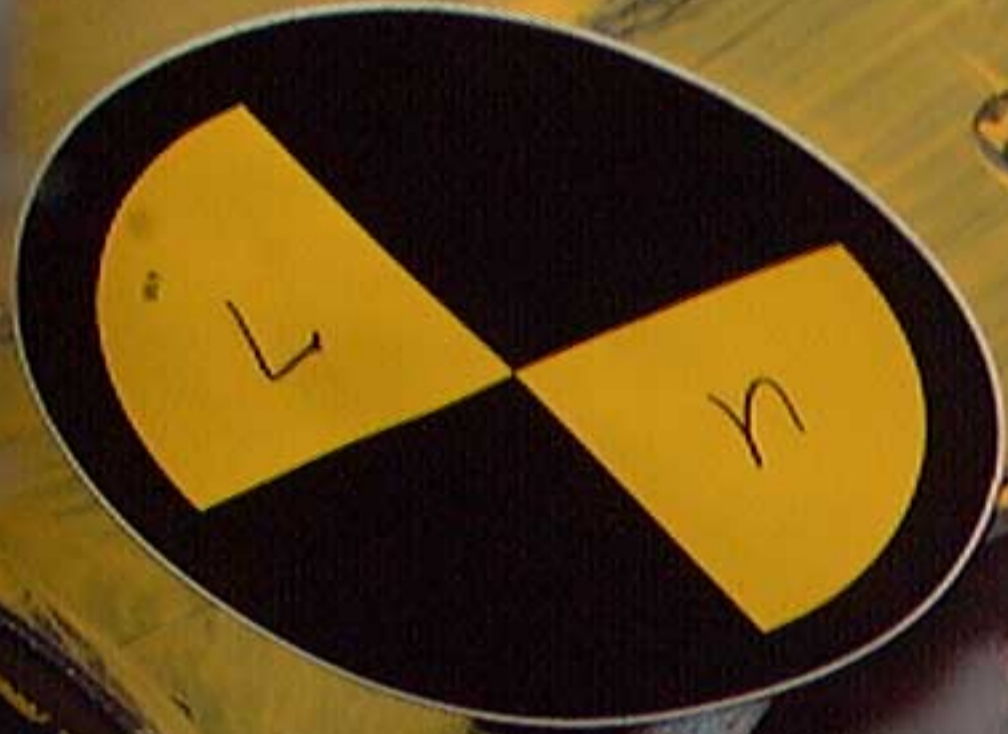
7506

7506

7506



7506



7506

EA12-005

CHRYSLER

12-13-2012

Enclosure 6B

301 Developmental Crash
Tests Public

KJ Development Crash Test

VC07506 PUBLIC

VC07506.Photos-PreTest



7506



7506

GOODYEAR

7506

WRANGLER
GT S-A

506

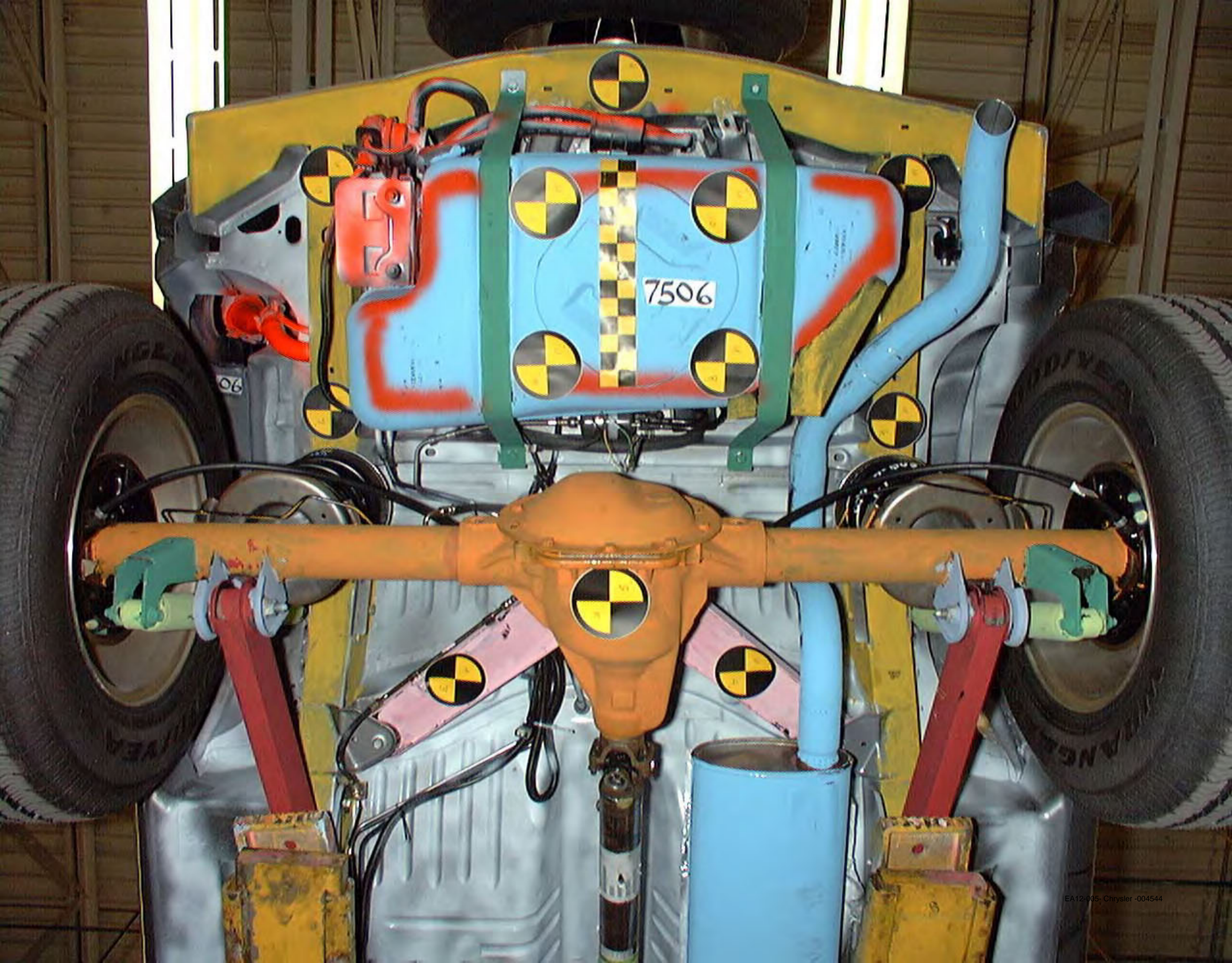
7506



2506

4

7506



7506

06

7506

17.0 GAL. 5.5.

17.0 GAL. 5.5.







7506

7506

170 1/2

7506

7506

2409

EA12-005

CHRYSLER

12-13-2012

Enclosure 6B

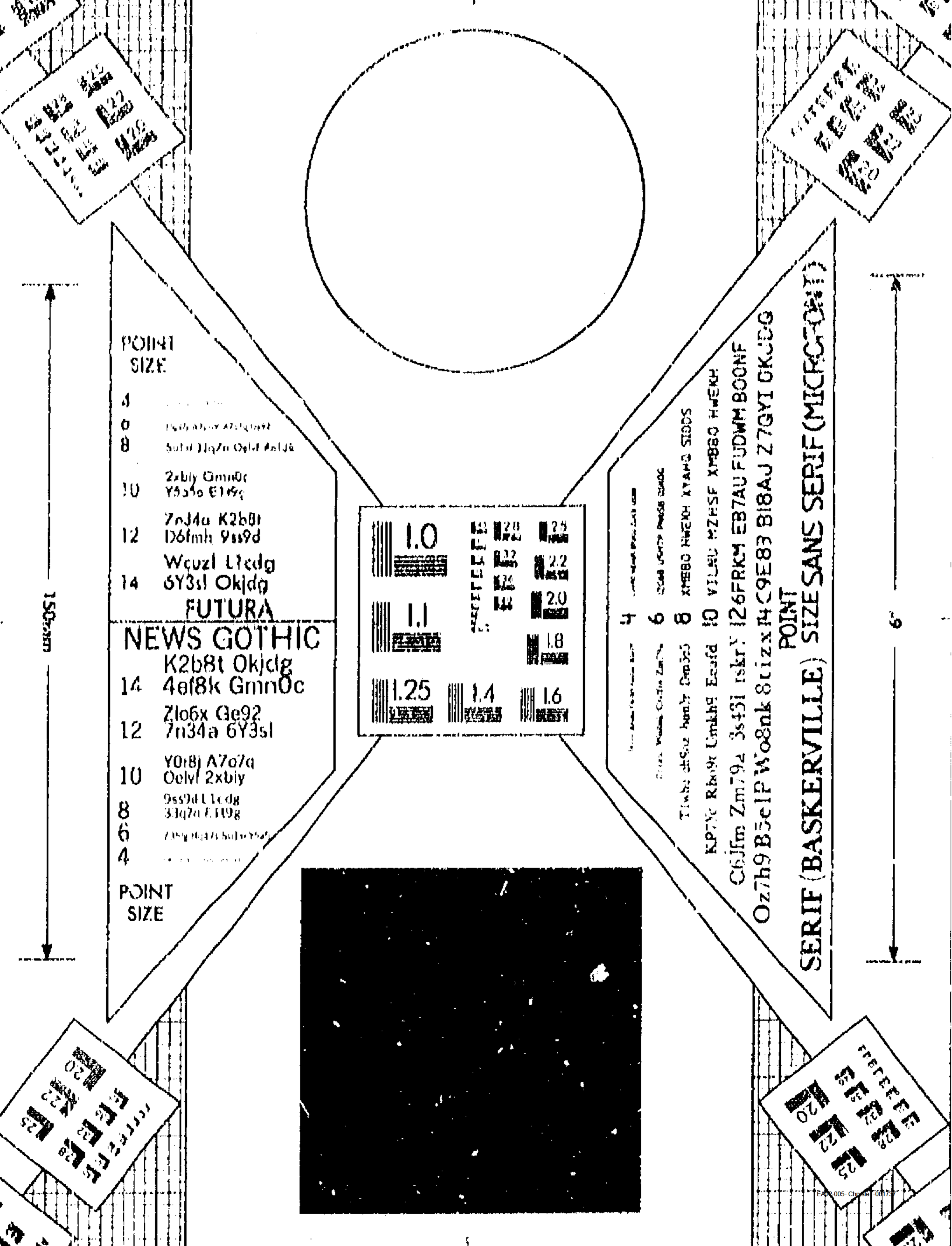
301 Developmental Crash
Tests Public

KJ Development Crash Test

VC07506 PUBLIC

VC7506 Public





POINT SIZE

4
6
8
10
12
14

NEWS GOTHIC

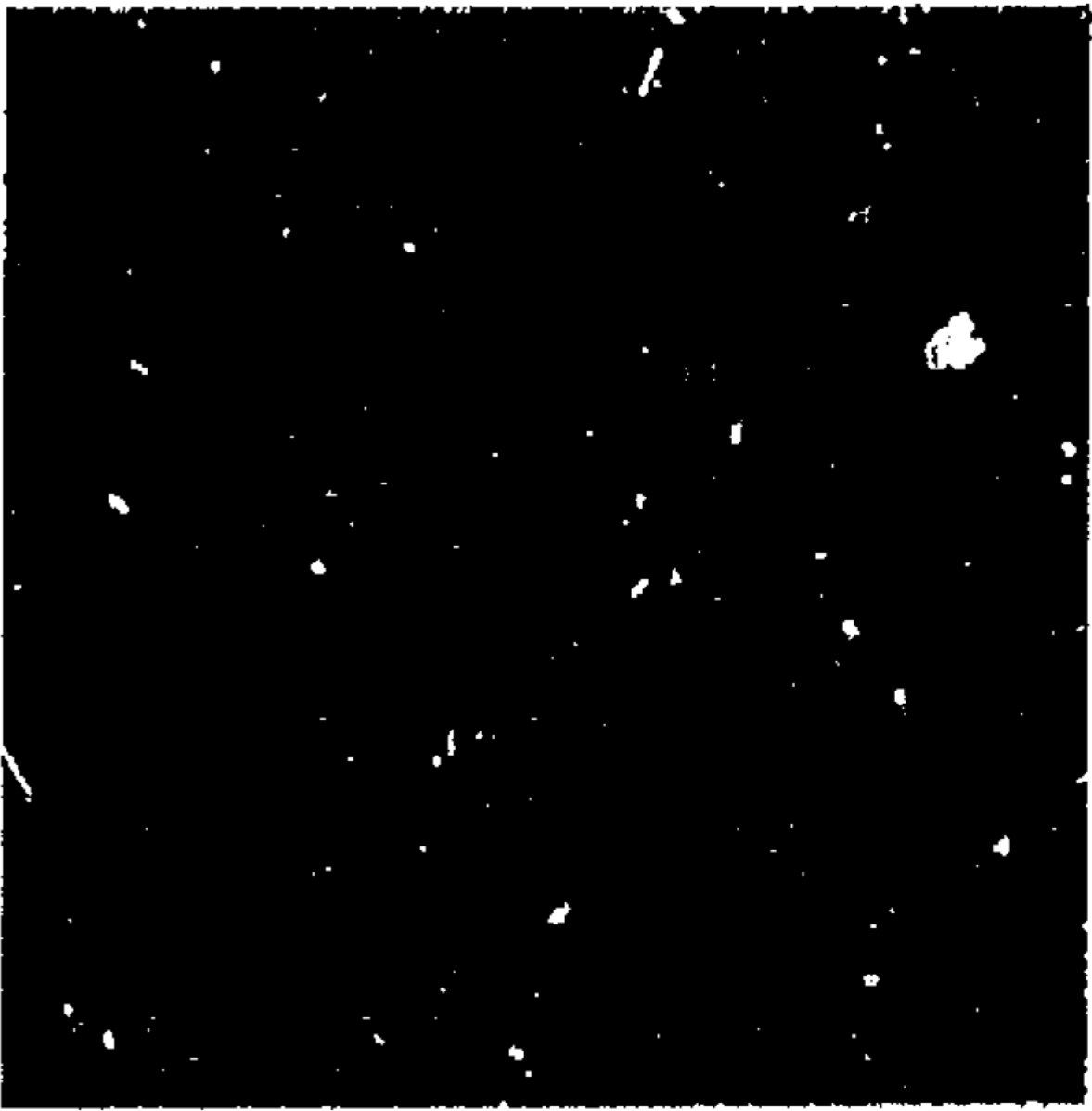
14 K2b8t Okjdg
4ef8k Gmn0c
12 Zlo6x Ge92
7n34a 6Y3sl
10 Y0r8j A7o7q
Oe1v1 2xbiy
8 9ss9d L1cdg
6 3lq7a F119g
4

POINT SIZE

Resolution test chart with line patterns and labels: 1.0, 1.1, 1.25, 1.4, 1.6, 1.8, 2.0, 2.2, 2.5, 2.8, 3.2, 3.6, 4.0.

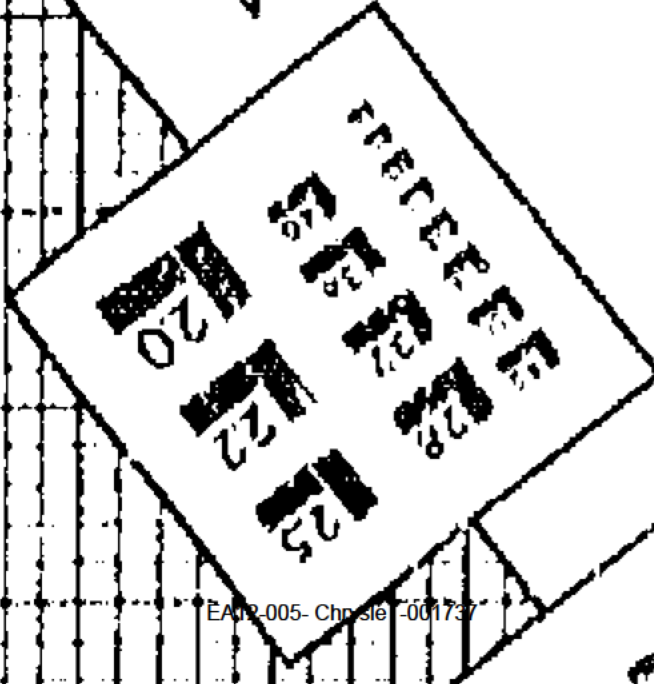
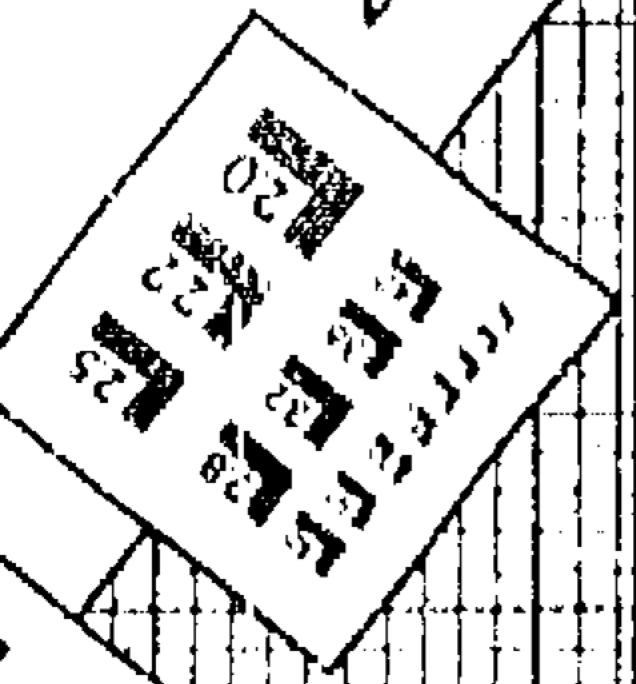
4
6
8
10
12
14
16
18
20
22
25
28
32
36
40

SERIF (BASKERVILLE) SIZE SANS SERIF (MICROFONT)



150/25mm

6"



Retrieval Methods Inc.

1142 E. Big Beaver Rd.

Troy, MI 48083

Declaration of Intent and Purpose

I, Christina Terwin

Employed by Retrieval Methods Inc., do hereby declare that the records microfilmed herein are actual records of DaimlerChrysler Corp. created during its normal course of business and that it is the express intent and purpose of this organization to return all original records microphotographed herein.

Date: 02/14/02

Microfiche Operator: Christina Terwin



SAFETY TEST
VEHICLE CRASH TEST LETTER

PAGE 01

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
2002 MVSS 301 REAR IMPACT DEVELOPMENT.
TEST DATE 04/25/99

TEST PURPOSE	PRIMARY, 2002 USA 301 DEVELOPMENT. DETERMINE FUEL SYSTEM INTEGRITY.		
IMPACT TYPE	TARGET SPEED;	30.1 MPH	
	DAMAGE LOCATION;	REAR	
	BARRIER TYPE;	REAR TYPE IV	
	BARRIER SURFACE;	PLYWOOD	
VEHICLE	BODY CLASS;	KJ	
	CAR LINE;	J	
	BODY;	74	
	ENGINE;	3.7 LITRE	
	ENGINE NOTE;	ELECTRONIC FUEL INJECTION	
	TRANSMISSION;	4 SPEED AUTO 4X4	
	TRANS. NOTE;		
	VIN AS TESTED;	1J4G7S8K5?A	MOD.
	VIN AS BUILT;	1J4G5S8K52A	MOD.
TEST SPEED	30.3 MPH BY ELECTRONIC TRAP.		
TEST WEIGHT (LBS)	4837 TOTAL, 2671 FRONT, 2156 REAR		
OCCUPANTS	LEFT FRONT, HYBRID II BALLAST. RESTRAINT-BELTS ONLY.		AD-47
	RIGHT FRONT, HYBRID II BALLAST. RESTRAINT-BELTS ONLY.		AD-70

SAFETY TEST
VEHICLE CRASH TEST LETTER

PAGE 02

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3509
2002 MY88 301 REAR IMPACT DEVELOPMENT.
TEST DATE 04/25/99

BUILD CONDITION

TARGET WEIGHT (LBS) 4171 TOTAL, 2229 FRONT, 1942 REAR REP MAX OPT.
WEIGHT FOR A 3.7L 4X4 NOT INCLUDING DUMMIES OR
CARGO WEIGHT.

FUEL AND BALLAST 17.0 GALLONS OF STODDARD SOLVENT.
300 LBS OF LUGGAGE BALLAST.
150 LBS OF BALLAST SECURED IN REAR SEAT AREA.
100 LBS OF BALLAST SECURED ON LF FLOORPAN.

SAFETY TEST
VEHICLE CRASH TEST LETTER

PAGE 03

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
2002 MV88 301 REAR IMPACT DEVELOPMENT.
TEST DATE 04/25/99

REPORT CODES

A = TRANSDUCER DATA	B = ALL FILM DATA
C = HIGH SPEED FILM	D = ENGINEER'S REPORT
E = DUMMY KINEMATICS	F = STEERING COLUMN
G = UNDERBODY	H = A-POST
I = DYNAMIC CRUSH	J = ENGINE COMPARTMENT
K = DOOR CRUSH	L = FORCE/CRUSH/ENERGY
M = SPECIAL	N = CATALOG EDP DATA
* = REPORT REQUESTOR	

DISTRIBUTION

R.P. LEVINE	514-17-41 (AB)
M.A. GIELOW	481-02-13 (AB)
M. STEBELTON	422-05-01 (AB)

DATE 04/25/99

TIME 08:49:39

CHRYSLER MOTORS
SAFETY TEST
VEHICLE CRASH TEST REQUEST

SUPPLEMENT NO. 05

ITEM NO. KJ3889

CHARGE NO. BACKUP

ISSUE DATE 3/25/99

VC 7006 30-MPH REAR MOVING BARRIER. KJ-J-74.

NEXT

2002 MV88 301 REAR IMPACT DEVELOPMENT.

TEST DATE

04/25/99

ENGINEER

MANNEY/COLLINGSSPEED 30.1 MPH

SOURCE

TRAP

TEST PURPOSE

PRIMARY, 2002 USA 301 DEVELOPMENT.
DETERMINE FUEL SYSTEM INTEGRITY.

IMPACT TYPE

TARGET SPEED; 30.1 MPH
DAMAGE LOCATION; REAR
BARRIER TYPE; REAR TYPE IV
BARRIER SURFACE; PLYWOOD

VEHICLE

BODY CLASS;	KJ	
CAR LINE;	J	
BODY;	74	
ENGINE;	3.7 LITRE	
ENGINE NOTE;	ELECTRONIC FUEL INJECTION	
TRANSMISSION;	4 SPEED AUTO 4X4	
TRANS. NOTE;		
VIN AS TESTED;	1J4G788K52A	MOD.
VIN AS BUILT;	1J4G888K52A	MOD.

POST TEST REMARKS

CHRYSLER MOTORS
SAFETY TEST
VEHICLE CRASH TEST REQUEST

SUPPLEMENT NO. 05

BUILD CONDITION

TARGET WEIGHT (LBS) 4171 TOTAL, 2229 FRONT, 1942 REAR REP MAX OPT.
WEIGHT FOR A 3.7L 4X4 NOT INCLUDING DUMMIES OR
CARGO WEIGHT.

TEST WEIGHT (LBS) 4827 TOTAL, 2671 FRONT, 2156 REAR

FUEL BALLAST 17 GALLONS OF STODDARD SOLVENT.

LUGGAGE BALLAST 300 LBS.

OTHER BALLAST 200 Right Seat pan
150 Driver seat

OCCUPANTS LEFT FRONT, HYBRID II BALLAST, AD NO 47
RESTRAINT-BELTS ONLY.
RIGHT FRONT, HYBRID II BALLAST, AD NO 70
RESTRAINT-BELTS ONLY.

CHRYSLER MOTORS
SAFETY TEST
VEHICLE CRASH TEST REQUEST

SUPPLEMENT NO. 05

MECHANICAL REQ

TARGET VEHICLE PER THIRD SHEET FOR KJ VEHICLE,
POSITION DRIVER AND PASS SEAT IN MID POSITION &
FULL DOWN,
MEASURE VEHICLE ATTITUDE AS RECEIVED AND WHEN
TESTED,
PRESSURE TEST PRE TEST WITH PUMP RUNNING,
INSTALL FUEL TANK STRAP "SHIM" THAT WILL BE
PROVIDED BY MAC LYNCH (X33463).
INSTALL NEW FUEL FILL TUBE HOUSING PROVIDED BY
MAC LYNCH. PLEASE CONTACT MR. LYNCH OR MYSELF
WHEN READY FOR INSTALLATION OF THESE ITEMS SO
THAT MR. LYNCH MAY BE PRESENT.
FUEL PUMP TO BE RUNNING DURING TEST.
STATIC ROLL VEHICLE POST TEST.
PAINT RAILS AND REAR UNDERBODY COMPONENTS
INCLUDING FUEL FILLER LINE, PASSTHROUGH HOLE IN
RAIL, FUEL TANK, REAR SUSPENSION, REAR BUMPER,
ORV CANISTER, LINES AND EQUIPMENT, ETC. IN
CONTRASTING COLORS FOR UNDERBODY VIEW.

INSTRUMENTATION REQ

SEE THIRD SHEET FOR KJ REAR IMPACT TESTING FOR
ACCEL. LOCATIONS.
TRIAxIAL ACCEL. ON FRONT FACE OF TANK.
TRIAxIAL ACCEL ON BOTTOM OF TANK
TRIAxIAL ACCEL ON SIDE OF TANK NEAR RAIL PASS-THRU
TRIAxIAL ACCEL ON RAIL NEAR ABOVE TANK MOUNTED
ACCEL (NEAR FUEL PASSTHROUGH IN RAIL)
PRESSURE TRANSDUCER IN FUEL TANK (INSTALLED BY
PROC CHASSIS LAB MUST BE INSTRUMENTED/MONITORED)
USE INDUCTIVE PICKUPS (6) TO MONITOR ALL (6) AECM
OUTPUTS.
MONITOR AECM INTERNAL ACCEL & SAFING SENSOR.
TRIAxIAL ACCEL ATTACHED TO ORC FT LT.
BIAxIAL (X&Y) ACCEL ON INBOARD SURFACE OF FRONT
SILL (L&R DOOR) FT SILL FWD STR XMBR
BIAxIAL (X&Y) L&R SILL @ B-PILLAR
BIAxIAL (X&Y) ACCEL INBOARD SURFACE OF REAR DOOR
SILL LT & RT RR SILL FWD ST XMBR

CHRYSLER MOTORS
SAFETY TEST
VEHICLE CRASH TEST REQUEST

SUPPLEMENT NO. 05

PHOTOGRAPHIC REQ

1-VELOCITY CAMERA.
1-PIT CAMERA TO VIEW ORVR EQUIPMENT (ATTACHED TO FUEL TANK).
1-LEFT OVERALL.
1-RIGHT OVERALL.
1-HIGH SPEED VIDEO OF LEFT (DRIVER) SIDE OVERALL.
1-HIGH SPEED VIDEO OF LEFT (DRIVER) SIDE REAR QUARTER.
2-PIT CAMERAS FOR REAR UNDERBODY ANALYSIS.
1-L SIDE CLOSE UP OF FUEL FILLER AREA FROM PIT
1-L&R CLOSE UP OF REAR QUARTER OF VEHICLE.
1-PIT CAMERA CLOSEUP OF L-RAIL FROM KICKUP RWD.
PRE&POST TEST PHOTOS OF OVERALL & UNDERBODY (REAR) , FRAME RAILS, FUEL TANK/REAR AXLE AREA, ETC.
PHOTOS OF ALL SENSOR LOCATIONS.

ALL CAMERAS TO HAVE DIGITAL TIMING IF POSSIBLE.

PRE AND POST TEST DIGITAL PHOTOS.

LM ANALYSIS

REAR DYNAMIC CRUSH.
REAR UNDERBODY ANALYSIS.

VEHICLE VELOCITY - ONLY IF REQUESTED.

REMARKS

TEST REQUESTOR: M.P. LEVINE (X35360)
MAKE 2 COPIES OD FILM AND 1 VIDEO, SEND TO:
M.P. LEVINE 514-17-41 1 FILM & 1 VIDEO
M. GIELOW 481-02-13 1 FILM
PLEASE RETURN VEHICLE TO CTC STRUCTURES LAB
ATTN AMIR HASAN.

T. K. REPORT

FUEL SYSTEM REPORT REQUIRED.

REPORT CODES

A = TRANSDUCER DATA	B = ALL FILM DATA
C = HIGH SPEED FILM	D = ENGINEER'S REPORT
E = DUMMY KINEMATICS	F = STEERING COLUMN
G = UNDERBODY	H = A-POST
I = DYNAMIC CRUSH	J = ENGINE COMPARTMENT
K = DOOR CRUSH	L = FORCE/CRUSH/ENERGY
M = SPECIAL	N = CATALOG EDP DATA
* = REPORT REQUESTOR	

DISTRIBUTION

M.P. LEVINE	514-17-41	(AB)
M.A. GIELOW	481-02-13	(AB)
M. STEBELTON	422-05-01	(AB)

CHRYSLER MOTORS
SAFETY TEST
VEHICLE CRASH TEST REQUEST

SUPPLEMENT NO. 05

*****CHANGED 03/30/99 07:56 LEVINE

SUPPLEMENT 01

BUILD CONDITION

*****CHANGED 03/31/99 11:07 LEVINE

SUPPLEMENT 02

INSTRUMENTATION REQ

MODIFY PRESS TRANSDUCER IN FUEL TANK.
TO READ PRESSURE TRANSDUCER IN FUEL TANK (INSTALLED BY
ADD PROC CHASSIS LAB MUST BE INSTRUMENTED/MONITORED)

PHOTOGRAPHIC REQ

ADD 1-PIT CAMERA TO VIEW ORVR EQUIPMENT (ATTACHED TO
ADD FUEL TANK).

REMARKS

MODIFY M.P. LEVINE 514-17-41
TO READ M.P. LEVINE 514-17-41 1 FILM & 1 VIDEO
ADD M. GIELOW 481-02-13 1 FILM
DELETE M. GIELOW 481-02-13

CHRYSLER MOTORS
SAFETY TEST
VEHICLE CRASH TEST REQUEST

SUPPLEMENT NO. 05

*****CHANGED 03/31/99 11:10 LEVINE SUPPLEMENT 03
MODIFY REAR RAILS MODIFIED TO KJ REPRESENTATIVE LEVEL
TO READ REAR RAILS MODIFIED TO KJ REPRESENTATIVE LEVEL

*****CHANGED 04/07/99 08:16 LEVINE SUPPLEMENT 04

MECHANICAL REQ

ADD INSTALL FUEL TANK STRAP "SHIM" THAT WILL BE
ADD PROVIDED BY MAC LYNCH (X13463).
ADD INSTALL NEW FUEL FILL TUBE HOUSING PROVIDED BY
ADD MAC LYNCH. PLEASE CONTACT MR. LYNCH OR MYSELF
ADD WHEN READY FOR INSTALLATION OF THESE ITEMS SO
ADD THAT MR. LYNCH MAY BE PRESENT.

*****CHANGED 04/12/99 13:05 LEVINE SUPPLEMENT 05

PHOTOGRAPHIC REQ

MODIFY 1-HIGH SPEED VIDEO OF RIGHT SIDE OVERALL.
TO READ 1-HIGH SPEED VIDEO OF LEFT (DRIVER) SIDE OVERALL.
ADD 1-HIGH SPEED VIDEO OF LEFT (DRIVER) SIDE REAR
ADD QUARTER.
DELETE 1-HIGH SPEED VIDEO OF LEFT REAR QUARTER.

X, Y, Z DIMENSIONS

TEST NUMBER VC7506, TEST ENGINEER MANNEY

TEST TYPE: 30 MPH REAR WIND
TYPE & MOV. BARR.

V.I.N. 1J4G7B8K52A

LOCATION	X	Y	Z	LOCATION	X	Y	Z
BC1	XXXX	0.0	XXXX	BC2	166.9	0.0	XXXX
B1	-	-	XXXX	U2			XXXX
U1	105.4	-18.2	11.4	U2	105.9	18.0	11.3
U3	126.5	-10.2	18.5	U4	127.8	8.5	18.7
U5	136.1	-0.7	9.3	U6	143.0	19.0	23.6
U7	142.6	-19.2	23.4	U8	147.0	6.0	12.4
U9	147.2	-4.2	12.5	U10	145.8	5.3	12.0
U11	158.0	-4.3	12.2	U12	158.8	19.0	23.5
U13	158.1	-19.2	23.7	U14			
U15				U16			
U17				U18			
U19				U20			
U21				U22			
U24	164.5	-0.5	23.7				
LFS	02.0	-33.5	14.3				
LMS	85.9	-33.7	14.8				
LRA 4" TARGET W/O BLACK RING	136.5	-33.9	14.0				

TRAMMEL DIMENSIONS:

LFS-LMS

PRE

24.08

U1-U2

36.63

POST

BARRIER BC2 - 11.3
BARRIER UC1 - 14.4

BARRIER LRA - 42.4

LEFT

FRONT SILL

X= 62.0
Y= -33.5
Z= 13.9

MID REAR SILL

X= 95.4
Y= -33.9
Z= 14.4

REAR AXLE

X= 136.5
Y= -33.9
Z= 13.9

TUBE COLOR

Blue

83.7

100.8

151.4

129.7

PHOTO REFERENCE TUBE

GROUND

H_z = 2.3

H_z = 2.3

FORWARD

90.1

83.3

129.8

109.2

PHOTO REFERENCE TUBE

GROUND

H_z = 2.3

H_z = 2.3

CAMERA LATERAL TO LENS MOUNT
(MEASURE TO EAST EDGE OF WEST WALKWAY @ -528.47)

526.4 INCHES

NOTES:

1. THE Z DIMENSION FOR THE SILL TARGETS AND REAR AXLE MUST BE RETAKEN AT THE TEST SITE
2. IF OTHER TUBE POINTS ARE USED, SO INDICATE

FOR REAR IMPACT TESTS - DIMENSIONING BETWEEN SILL TARGETS AND PHOTO REFERENCE TUBE

TEST ENGR C. Collins

VC 1506

TUBE PRE-FA DIAGRAMS 01/26/67

**THE FOLLOWING DOCUMENT(S)
IS MICROFILMED IN AS IS
CONDITION.**

Camera Operator:

Christy A. Stewart

Date:

02/14/02

Restrictions on Application: none

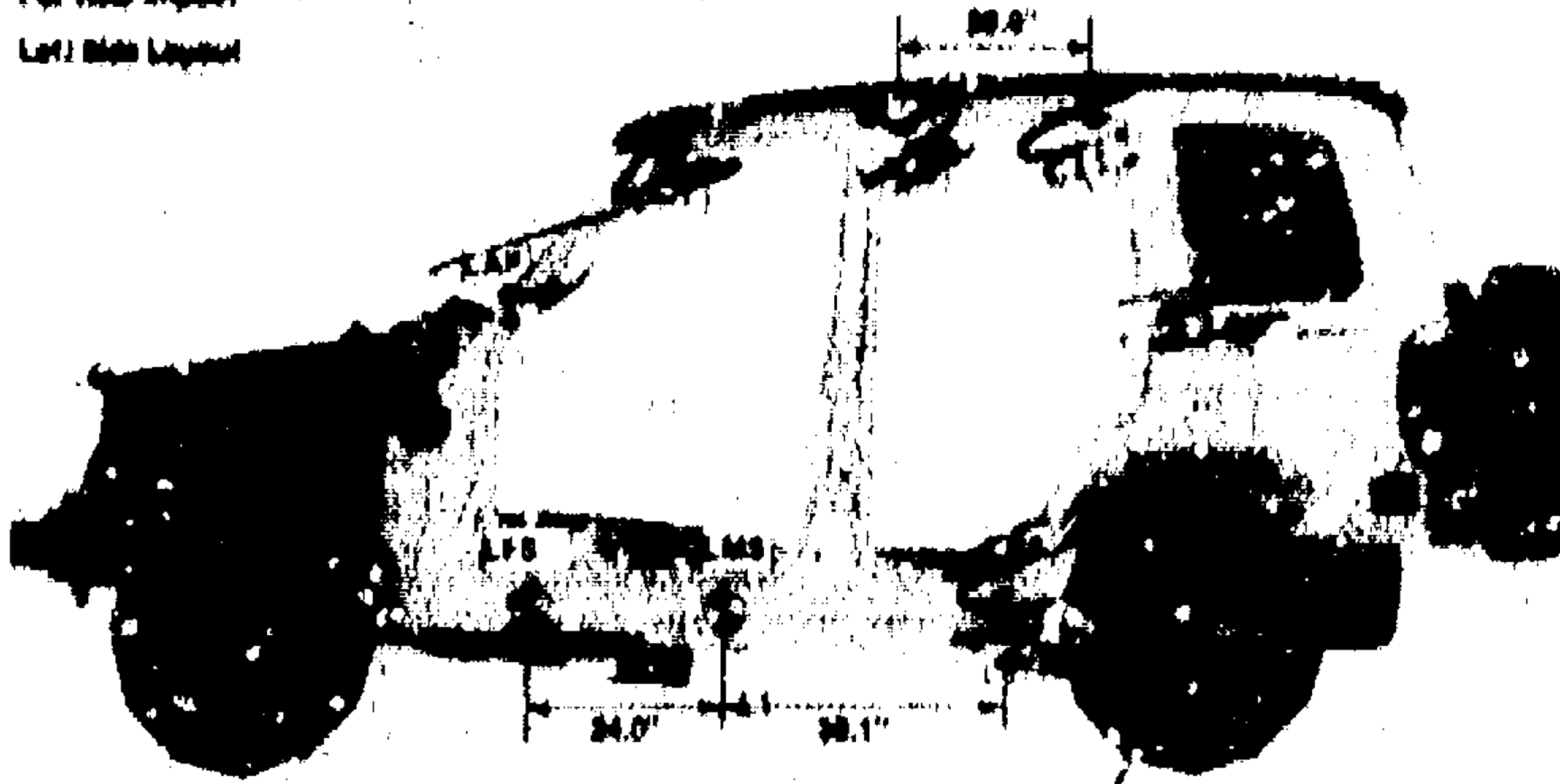
Last Revised: 04/08/99

Final Design Review

Jeep Blacktop Acc KJ

Front and Rearview Mirrors
for Rear Impact

Left Side Layout



Side view
LCP On car panel at widest point
just rear of rear door

LRA

Version: 00

Guidelines to Placement of Critical Targets/Sensors:

Item	Comments
LCP	On car panel at widest point just rear of rear door
L5	Top of C-post on all target plate
L3	23 in. forward of L5 Target plate

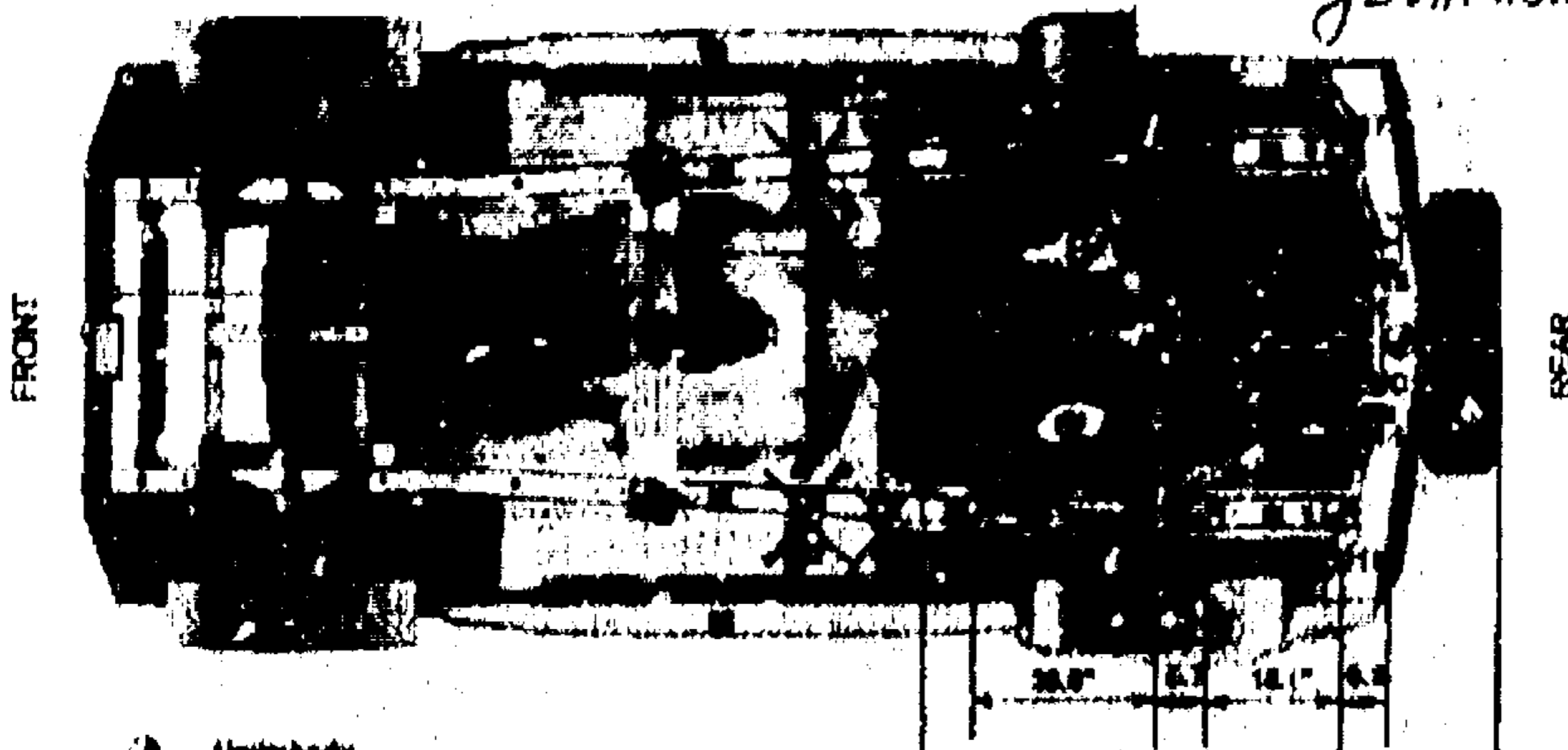
Left Side Layout

Impact Analysis Engineer: name/date
 Data Acquisition Engineer: name/date
 Target Visibility Approved: RRN 04/08/99
 Approved for CPD Use: RRN 04/08/99

VAL,
 FOR THE UPCOMING
 HJ-REAR TEST, WE
 HAD TO MAKE SOME
 CHANGES, AS MARKED
 PLEASE HAVE SOMEONE
 UPDATE THE DIAGRAM.
 THANKS,
 John Manning

File # W389-2506
 Job # 414 KJ
 Title and Measurement Locations
 For This Impact

last!



- Underbody
- Side View
- Single Axis (X) Accelerometer
- Bial (X & Z) Accelerometer

TARGET AIDS

OLD	NEW	OLD	NEW
U5	U1	U6	U8
U7	U3	U11	U4
U9	U5	U13	U6
U11	U7	U12	U8
U13	U9	U14	U10
U15	U11	U16	U12

← 80" LIMIT OF VISIBILITY →

Guidelines to Placement of Critical Targets/Sensors:

Item	Comments

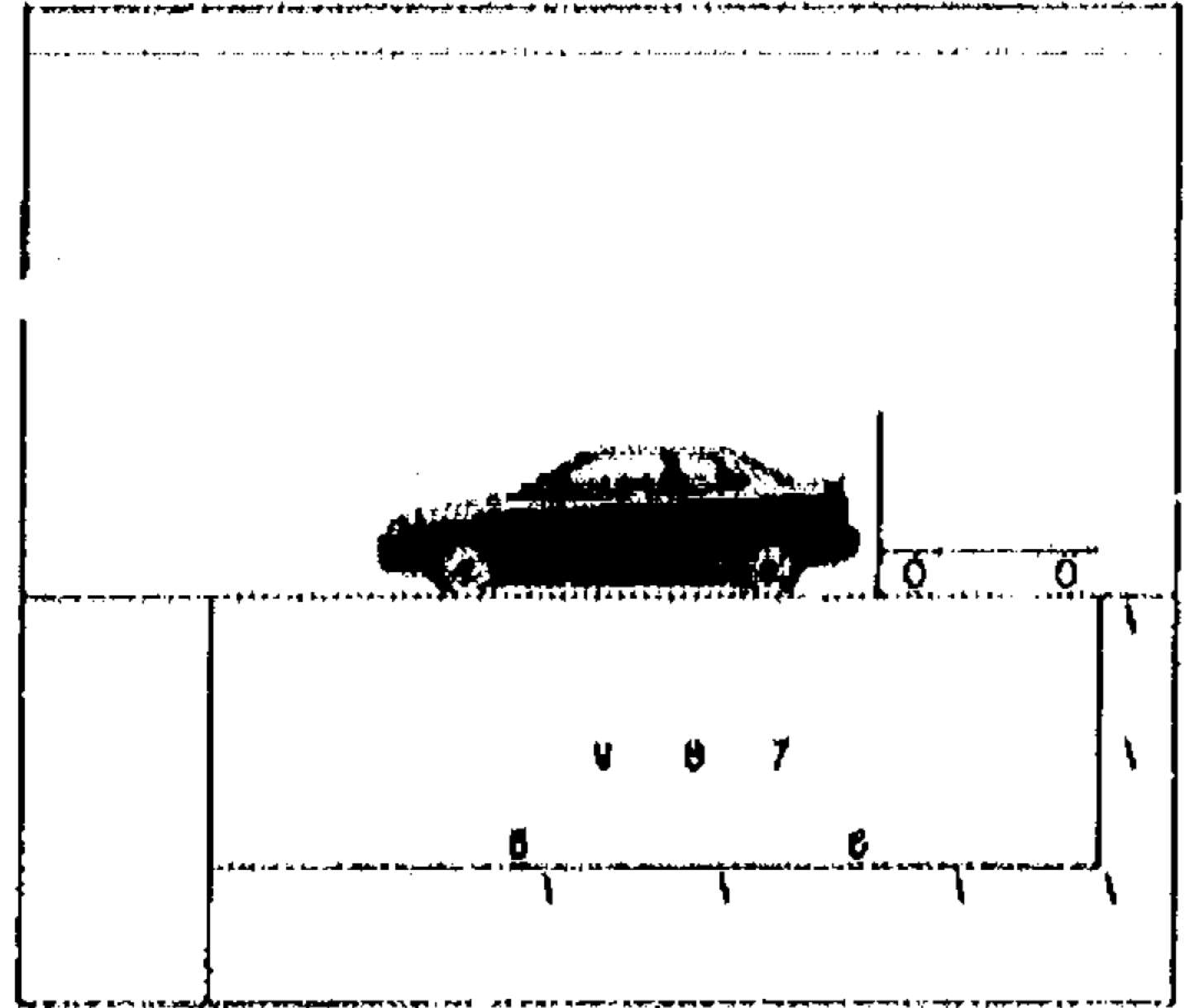
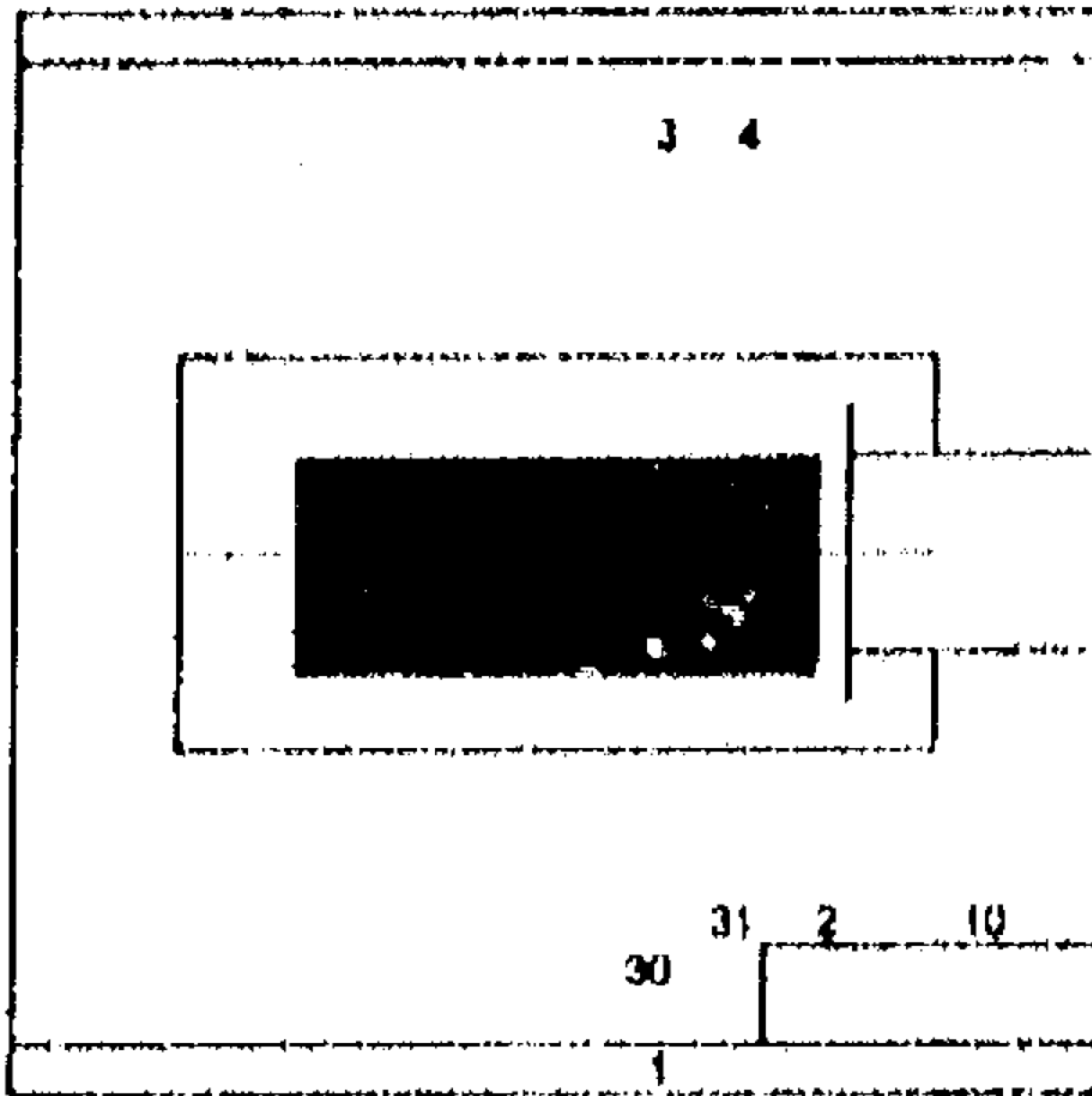
Rear Underbody Layout

Impact Analysis Engineer: name/date
 Data Acquisition Engineer: name/date
 Target Visibility Approved: name/date
 Approved for CP3 Use: name/date

U1 & U7 5 1/2" AHEAD OF FORWARD EDGE OF CONTROL ARM MOUNTING BRKT.
 U3 & U4 AT MIDPOINT OF UPPER SWING ARM

PLAN VIEW

SIDE VIEW



TEST NUMBER:	VC7508	VEHICLE TYPE:	KJ
TEST TYPE:	50 MPH REAR TYPE IV IMPACT	TEST ENGINEER:	MANNEY
REQUEST DATE:	4/26/99		

#	VIEW DESCRIPTION (A=ANALYSIS, T=TIMING REQUIRED)	CAM SN	LENS FL	LENS SN	LENS MFG.	F. STP	PN	SK	CB	MISC
1	A LEFT SIDE OVERALL DYNAMIC CRUSH	1878	18MM	107231	KIN					
2	LT - REAR CLOSE-UP	1874	35MM	111269	KIN					
3	RIGHT SIDE OVERALL	1878	18MM	110888	KIN					
4	RT - REAR CLOSE-UP	1877	35MM	111108	KIN					
5	A PIT - SOUTH	430	13MM	4	COB	4 1/4				
6	A PIT - NORTH	431	13MM	4	COB	4 1/4				
7	PIT - VAPOR CANISTER CLOSE-UP	289	35MM	111200	KIN	4 1/4				
8	PIT - LEFT SIDE - FILL TUBE AREA	288	28MM	110800	KIN	4 1/4				
9	A VELOCITY	286	100MM	82088	LOT	A				
30	V LT - REAR CLOSE-UP	EKTA	ZOOM	814246	SNY	11				

4/26/99

FUEL SYSTEM AND STATIC ROLL-OVER SUMMARY

TEST NUMBER VC7506, ITEM NUMBER KJ3589, TEST ENGINEER MANNEY

V.I.N. 1J4G7B8K57A [REDACTED] TEST DATE 04/25/99, ROLL DATE 04/16/99

TEST TYPE; 30 MPH TYPE IV MOVING BARRIER REAR IMPACT

FUEL; TYPE AND QUANTITY - .767 S.G. STODDARD SOLVENT, 17.0 GALLONS

TEST SPEED 30.3 MPH, TEST WEIGHT 4827 POUNDS.

POST IMPACT LEAKAGE(OZ); AT IMPACT 0

1ST 5 MIN. 0

NEXT 25 MIN. 0

POST TEST PRESSURE CHECK _____

ELECTRIC FUEL PUMP RUN _____

NO STATIC ROLL PERFORMED

STATIC ROLL LEAKAGE WITH VEHICLE Left SIDE DOWN FIRST

FUEL LEAKAGE LOCATIONS DURING STATIC ROLL

ROLL TIME					TOTAL
0-90	1ST 5 MIN				0 *
<u>1:32</u>	POST 5 MIN				0 **
90-180	1ST 5 MIN				0 *
<u>1:34</u>	POST 5 MIN				0 **
180-270	1ST 5 MIN				0 *
<u>1:31</u>	POST 5 MIN				0 **
270-360	1ST 5 MIN				0 *
<u>1:29</u>	POST 5 MIN				0 **

* OUNCES IN 5 MINUTES, ** OUNCES PER MINUTE

POST TEST FUEL SYSTEM OBSERVATIONS No fuel leaks at impact.

No fuel leaks during static roll.
Fuel system integrity was maintained.

LAST FORM MODIFICATION 08/22/96 - GAB (TESTOBS896, DOCVCFORMS)

DATE 04/26/99
TIME 13:04:24.

ELECTRONIC DATA PROCESSING
EDP TEST LETTER

FILED MAY 04 1999
VEHICLE CRASH ENGINEERING
DEPT 5320

VC07506 ITEM KJ3589
VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
2002 MV08 301 REAR IMPACT DEVELOPMENT.
TEST DATE 04/25/99

TEST PURPOSE PRIMARY, 2002 USA 301 DEVELOPMENT.
DETERMINE FUEL SYSTEM INTEGRITY.

IMPACT TYPE TARGET SPEED; 30.1 MPH
DAMAGE LOCATION; REAR
BARRIER TYPE; REAR TYPE IV
BARRIER SURFACE; PLYWOOD

VEHICLE BODY CLASS; KJ
CAR LINE; J
BODY; 74
ENGINE; 3.7 LITRE
ENGINE NOTE; ELECTRONIC FUEL INJECTION
TRANSMISSION; 4 SPEED AUTO 4x4
TRANS. NOTE;
VIN AS TESTED; 1J4G7S8K57A [REDACTED] MOD.
VIN AS BUILT; 1J4G5S8K52A [REDACTED] MOD.

TEST SPEED 30.3 MPH BY ELECTRONIC TRAP.

TEST WEIGHT (LBS) 4827 TOTAL, 2671 FRONT, 2156 REAR

OCCUPANTS LEFT FRONT, HYBRID II BALLAST. AD-47
RESTRAINT-BELTS ONLY.
RIGHT FRONT, HYBRID II BALLAST. AD-70
RESTRAINT-BELTS ONLY.

DATE 04/26/99
TIME 13:04:24.

ELECTRONIC DATA PROCESSING
EDP TEST LETTER

VEHICLE CRASH ENGINEERING
DEPT 5320

VC07506 ITEM KJ3589
VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
2002 MVB8 301 REAR IMPACT DEVELOPMENT.
TEST DATE 04/25/99

BUILD CONDITION

TARGET WEIGHT (LBS) 4171 TOTAL, 2229 FRONT, 1942 REAR REP MAX OPT.
WEIGHT FOR A 3.7L 4X4 NOT INCLUDING DUMMIES OR
CARGO WEIGHT.

FUEL AND BALLAST 17.0 GALLONS OF STODDARD SOLVENT.
300 LBS OF LUGGAGE BALLAST.
150 LBS OF BALLAST SECURED IN REAR SEAT AREA.
100 LBS OF BALLAST SECURED ON LF FLOORPAN.

EDP TECHNICIAN S. MARCHENIA

No. of Pages 06
CC

M. A. GIELOW 481-02-13
M. P. LEVINE 514-17-41
M. STEBELTON 422-05-01

TITLE: Page Index of EDP plots

Pages 001 - 086

Page I-01

***** VC07506A *****

TITLE: Transducer Summary Reports

Pages 001 - 008

PAGE: 001 TBR Channels 001 - 008
 PAGE: 002 TBR Channels 009 - 016
 PAGE: 003 TBR Channels 017 - 024
 PAGE: 004 TBR Channels 025 - 032
 PAGE: 005 TBR Channels 033 - 040
 PAGE: 006 TBR Channels 041 - 048
 PAGE: 007 TBR Channels 049 - 056
 PAGE: 008 TBR Channels 065 - 066

***** VC07506B *****

TITLE: Vehicle Channels

Pages 009 - 082

PAGE: 009 Average of Sill Chls 41, 43, 49, & 51
 PAGE: 010 Average of Frt Sill Chls 41 & 43
 PAGE: 011 LEFT FRONT SILL X, Chl 1
 PAGE: 012 LEFT FRONT SILL X, Chl 1, VD
 PAGE: 013 RIGHT FRONT SILL X, Chl 2
 PAGE: 014 RIGHT FRONT SILL X, Chl 2, VD
 PAGE: 015 LEFT REAR SILL X, Chl 3
 PAGE: 016 LEFT REAR SILL X, Chl 3, VD
 PAGE: 017 LEFT REAR SILL Z, Chl 4
 PAGE: 018 RIGHT REAR SILL X, Chl 5
 PAGE: 019 RIGHT REAR SILL X, Chl 5, VD
 PAGE: 020 RIGHT REAR SILL Z, Chl 6
 PAGE: 021 RT REAR RAIL MID TANK X, Chl 7 *C*
 PAGE: 022 RT REAR RAIL MID TANK X, Chl 7, VD *C*
 PAGE: 023 RT REAR RAIL MID TANK Z, Chl 8
 PAGE: 024 LT REAR RAIL MID TANK X, Chl 9
 PAGE: 025 LT REAR RAIL MID TANK X, Chl 9, VD
 PAGE: 026 LT REAR RAIL MID TANK Y, Chl 10
 PAGE: 027 LT REAR RAIL MID TANK Z, Chl 11
 PAGE: 028 LT RAIL TRANS X/MBR X, Chl 12
 PAGE: 029 LT RAIL TRANS X/MBR X, Chl 12, VD
 PAGE: 030 LT RAIL TRANS X/MBR Z, Chl 13
 PAGE: 031 RT RAIL TRANS X/MBR X, Chl 14
 PAGE: 032 RT RAIL TRANS X/MBR X, Chl 14, VD
 PAGE: 033 RT RAIL TRANS X/MBR Z, Chl 15
 PAGE: 034 LT RAIL FT XMBR X, Chl 16
 PAGE: 035 LT RAIL FT XMBR X, Chl 16, VD
 PAGE: 036 LT RAIL FT XMBR Z, Chl 17
 PAGE: 037 RT RAIL FT XMBR X, Chl 18
 PAGE: 038 RT RAIL FT XMBR X, Chl 18, VD
 PAGE: 039 RT RAIL FT XMBR Z, Chl 19
 PAGE: 040 FUEL TANK FT FACE X, Chl 20 *C*
 PAGE: 041 FUEL TANK FT FACE X, Chl 20, VD *C*
 PAGE: 042 FUEL TANK FT FACE Y, Chl 21
 PAGE: 043 FUEL TANK FT FACE Z, Chl 22
 PAGE: 044 FUEL TANK BTM X, Chl 23 *C*
 PAGE: 045 FUEL TANK BTM X, Chl 23, VD *C*
 PAGE: 046 FUEL TANK BTM Y, Chl 24 *C*
 PAGE: 047 FUEL TANK BTM Z, Chl 25 *C*
 PAGE: 048 FUEL TANK RL PASS-THRU1, Chl 26
 PAGE: 049 FUEL TANK RL PASS-THRU1, Chl 26, VD
 PAGE: 050 FUEL TANK RL PASS-THRU2, Chl 27
 PAGE: 051 FUEL TANK RL PASS-THRU2, Chl 28
 PAGE: 052 FUEL TANK PRESS PSI, Chl 29, CFC 600
 PAGE: 053 DAB SQUIB PRI, Chl 30, Event *N*
 PAGE: 054 DAB SQUIB SEC-2., Chl 31, Event *N*

PAGE: 055 PAB SQUIB PRI, Chl 32, Event
 PAGE: 056 PAB SQUIB SEC-2, Chl 33, Event
 PAGE: 057 PR PRETEN SQUIB, Chl 34, Event
 PAGE: 058 PS PRETEN SQUIB, Chl 35, Event
 PAGE: 059 ORC SAFINO SEN, Chl 36, Event
 PAGE: 060 ORC INTERN ACCEL G, Chl 37
 PAGE: 061 ORC FRONT LT X, Chl 38
 PAGE: 062 ORC FRONT LT X, Chl 38, VD
 PAGE: 063 ORC FRONT LT Y, Chl 39
 PAGE: 064 ORC FRONT LT Z, Chl 40
 PAGE: 065 LT FT SILL FWD ST XMBRX, Chl 41
 PAGE: 066 LT FT SILL FWD ST XMBRX, Chl 41, VD
 PAGE: 067 LT FT SILL FWD ST XMBRY, Chl 42
 PAGE: 068 RT FT SILL FWD ST XMBRX, Chl 43
 PAGE: 069 RT FT SILL FWD ST XMBRX, Chl 43, VD
 PAGE: 070 RT FT SILL FWD ST XMBRY, Chl 44
 PAGE: 071 LT SILL AT B PILLAR X, Chl 45
 PAGE: 072 LT SILL AT B PILLAR X, Chl 45, VD
 PAGE: 073 LT SILL AT B PILLAR Y, Chl 46
 PAGE: 074 RT SILL AT B PILLAR X, Chl 47
 PAGE: 075 RT SILL AT B PILLAR X, Chl 47, VD
 PAGE: 076 RT SILL AT B PILLAR Y, Chl 48
 PAGE: 077 LT RR SILL FWD ST XMBRX, Chl 49
 PAGE: 078 LT RR SILL FWD ST XMBRX, Chl 49, VD
 PAGE: 079 LT RR SILL FWD ST XMBRY, Chl 50
 PAGE: 080 RT RR SILL FWD ST XMBRX, Chl 51
 PAGE: 081 RT RR SILL FWD ST XMBRX, Chl 51, VD
 PAGE: 082 RT RR SILL FWD ST XMBRY, Chl 52

N
 N
 N
 N
 N

C
 C

TITLE: Moving barrier Channels

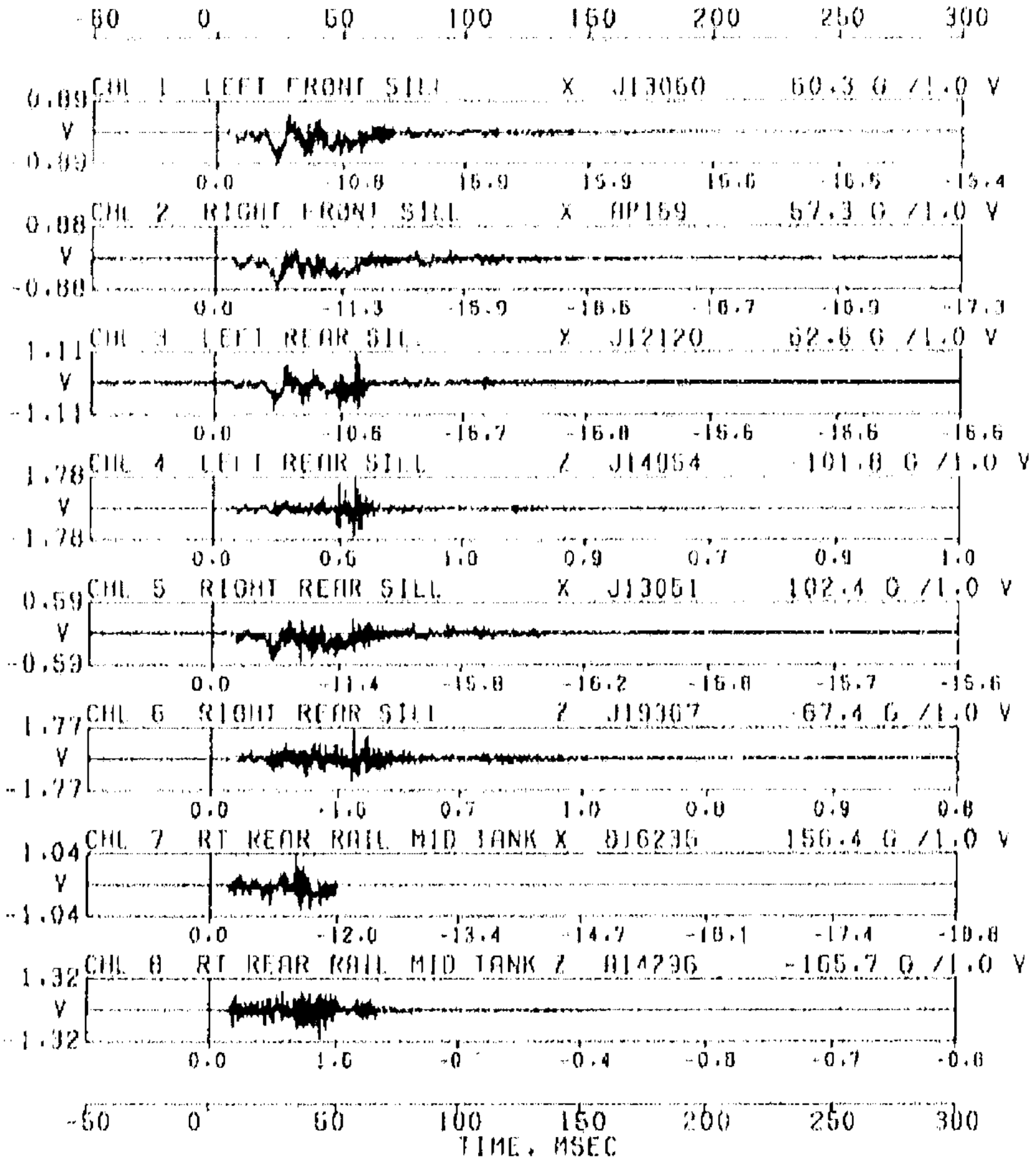
Pages 083 - 086

PAGE: 083 LT RAIL MBAR MID X Chl 65
 PAGE: 084 LT RAIL MBAR MID X, Chl 65, VD
 PAGE: 085 RT RAIL MBAR MID X Chl 66
 PAGE: 086 RT RAIL MBAR MID X, Chl 66, VD

TRANSDUCER SUMMARY REPORT

YC07606 90-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
 2002 MVSS 901 REAR IMPACT DEVELOPMENT,
 IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

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 OF 006
 DATA SET 04/26/99BA
 ERRATA 1

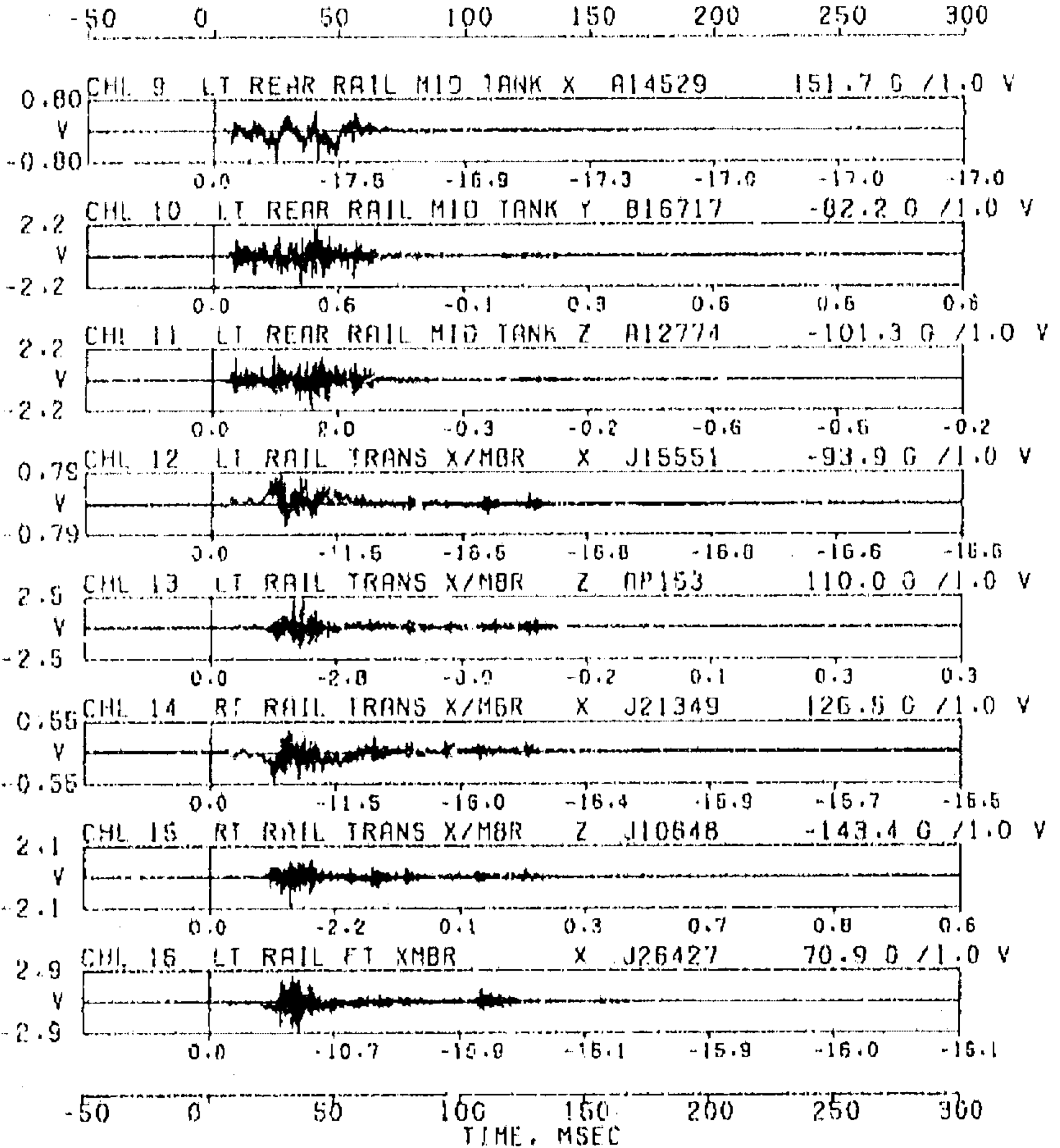


NOTE COMPUTED FIRST INTEGRAL VALUES ARE INDICATED BELOW EACH CHANNEL AND BRIDGED DATA IS INDICATED BY A -B-.

TRANSDUCER SUMMARY REPORT

VC07606 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3509
 2002 KVSS 301 REAR IMPACT DEVELOPMENT,
 IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

PAGE 002
 OF 086
 DATA SET 04/25/99BA
 ERRATA 1

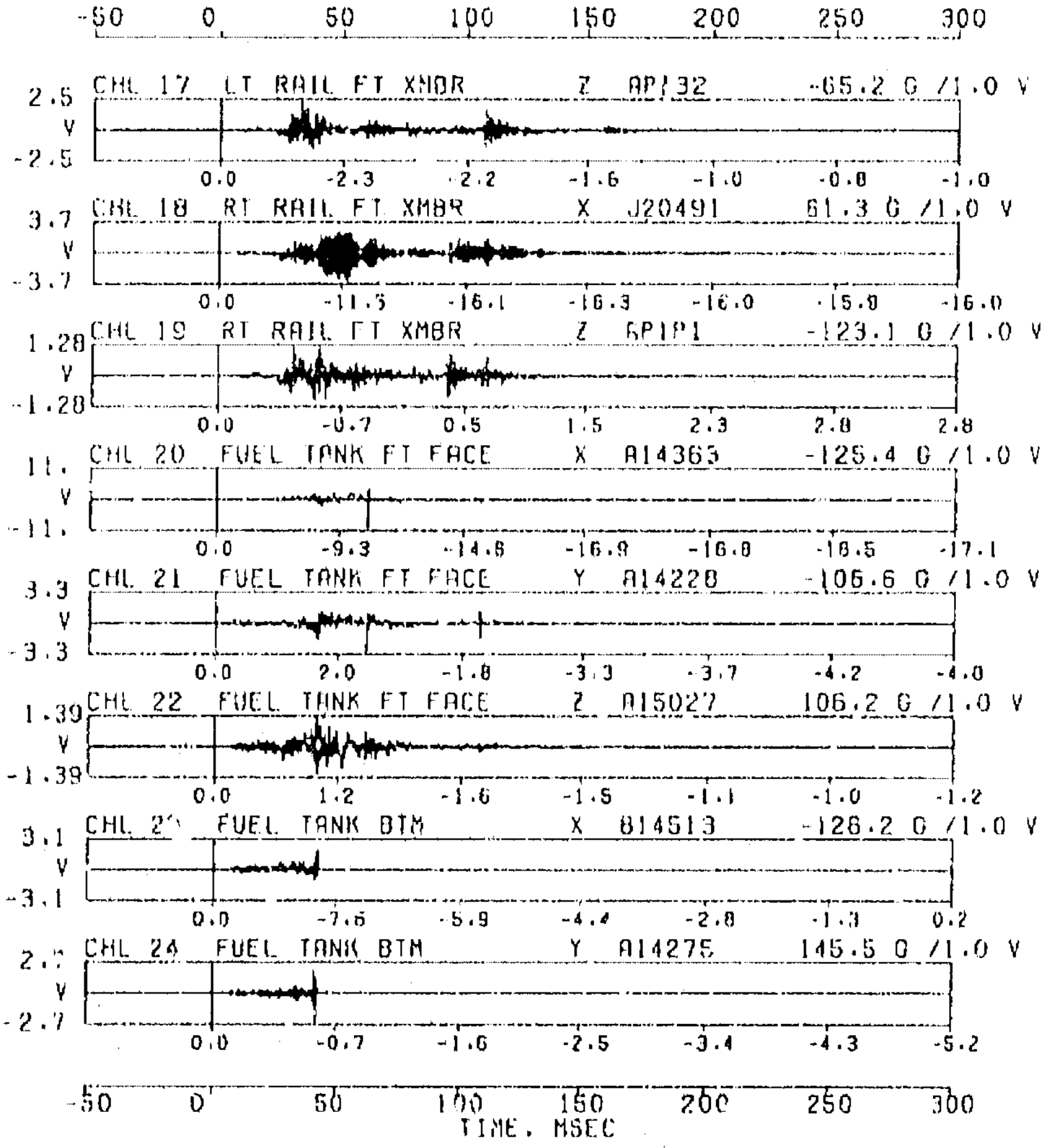


NOTE COMPUTED FIRST INTEGRAL VALUES ARE INDICATED BELOW EACH CHANNEL, AND BRIDGED DATA IS INDICATED BY A -B-.

TRANSDUCER SUMMARY REPORT

VC07508 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
 2002 NVSS 301 REAR IMPACT DEVELOPMENT.
 IMPACT ANALYSIS DEPT. 5320
 APR 25, 1999

PAGE 003
 OF 086
 DATA SET 04/25/9908
 ERRATA 1



NOTE COMPUTED FIRST INTEGRAL VALUES ARE INDICATED BELOW EACH CHANNEL AND BRIDGED DATA IS INDICATED BY A -B-.

TRANSDUCER SUMMARY REPORT

VC07506 30 MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
 2002 MYSS 301 REAR IMPACT DEVELOPMENT,
 IMPACT ANALYSIS DEPT. 5320

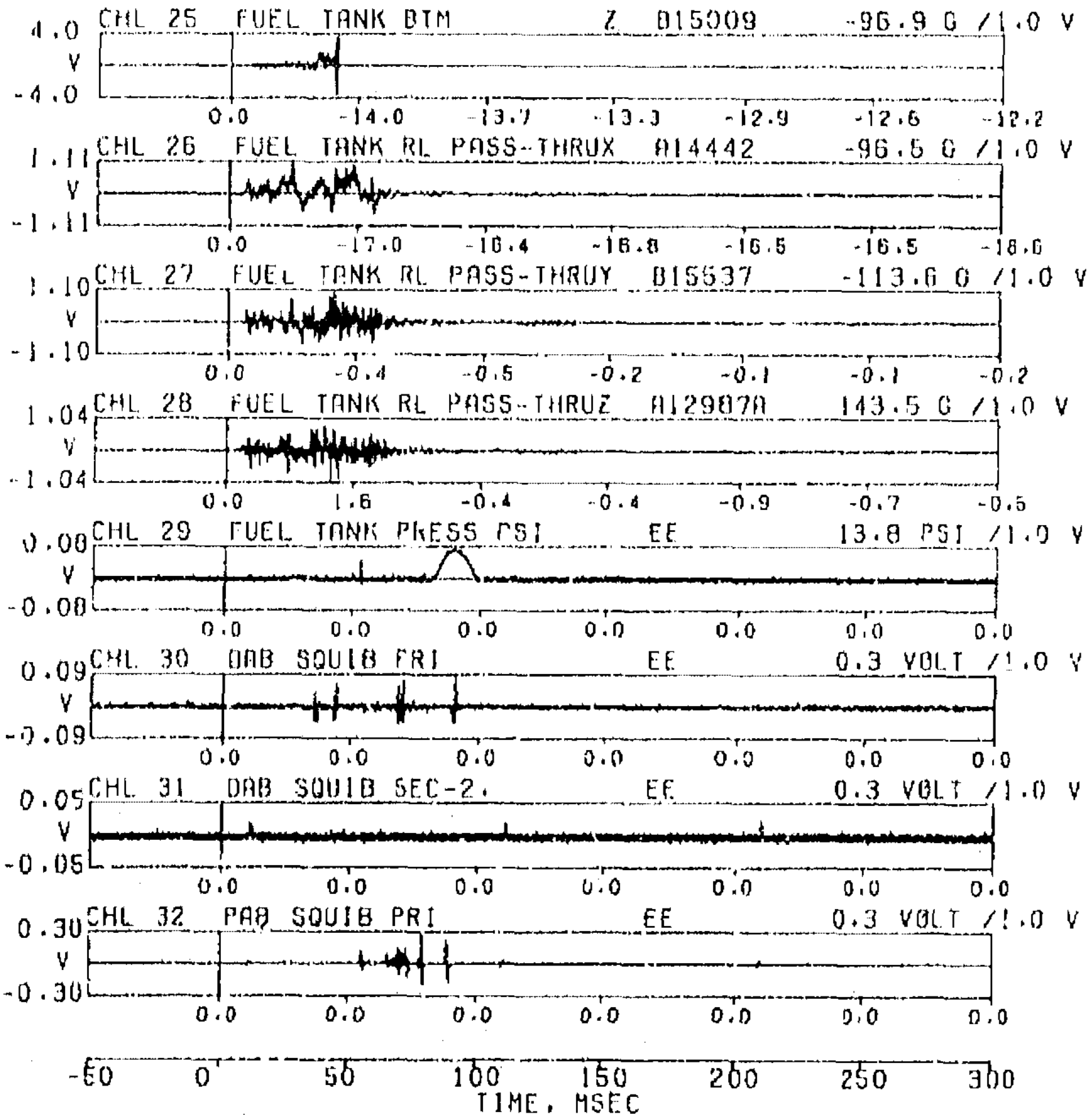
PAGE 004
 OF 086

DATA SET 04/25/99BB

APR 26, 1999

ERRATA 1

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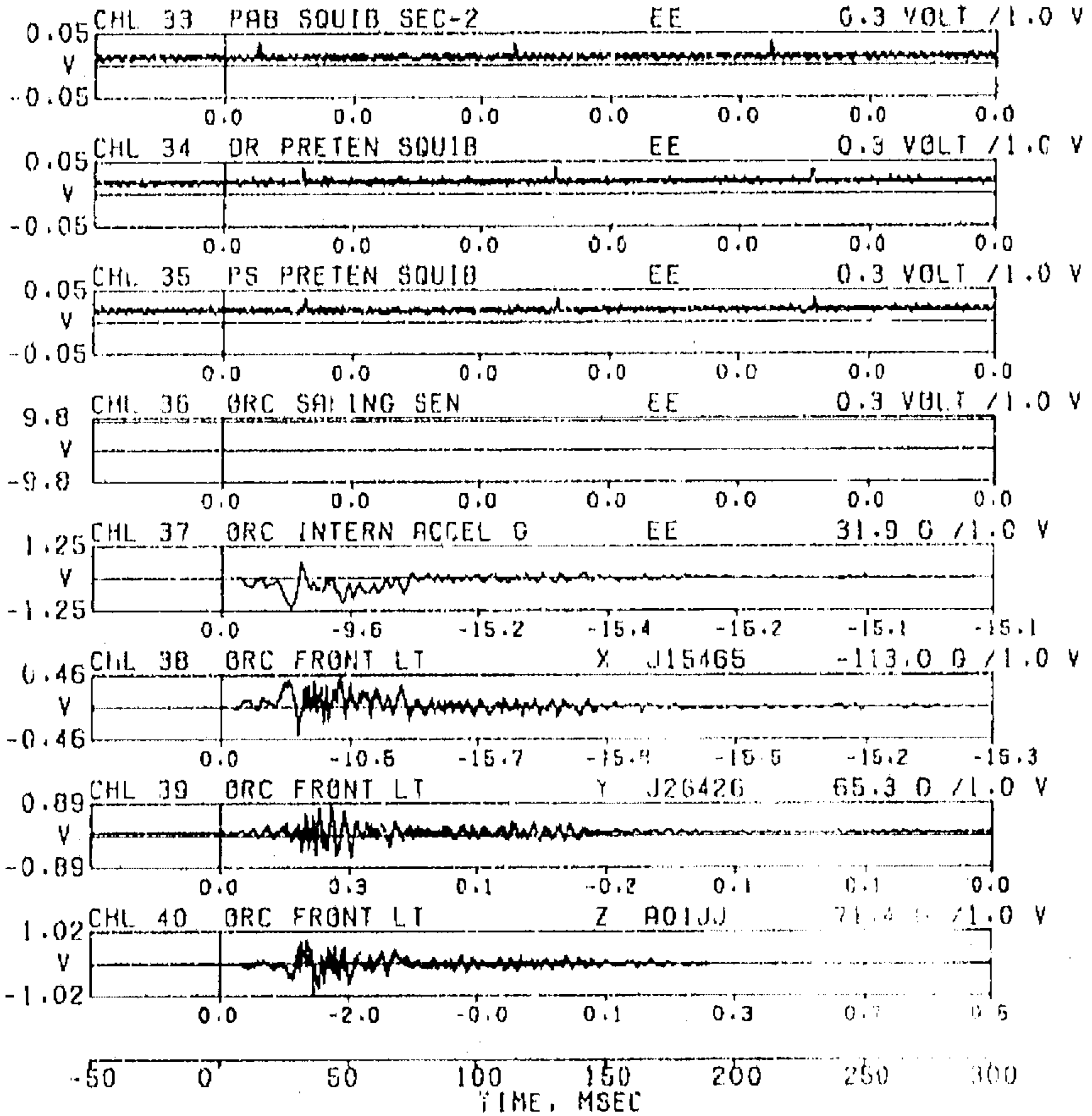
NOTE COMPUTED FIRST INTEGRAL VALUES ARE INDICATED BELOW EACH CHANNEL AND BRIDGED DATA IS INDICATED BY A -B-.

TRANSDUCER SUMMARY REPORT

VC07608 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3500
 2002 HYSS 301 REAR IMPACT DEVELOPMENT.
 IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

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 OF 086
 DATA SET C4/25/99BC
 ERRATA 1

-50 0 50 100 150 200 250 300



NOTE COMPUTED FIRST INTEGRAL VALUES ARE INDICATED BELOW
 EACH CHANNEL AND BRIDGED DATA IS INDICATED BY A -B-.

TRANSDUCER SUMMARY REPORT

VC07808 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3509
 2002 MYSS 301 REAR IMPACT DEVELOPMENT.
 IMPACT ANALYSIS DEPT. 5320

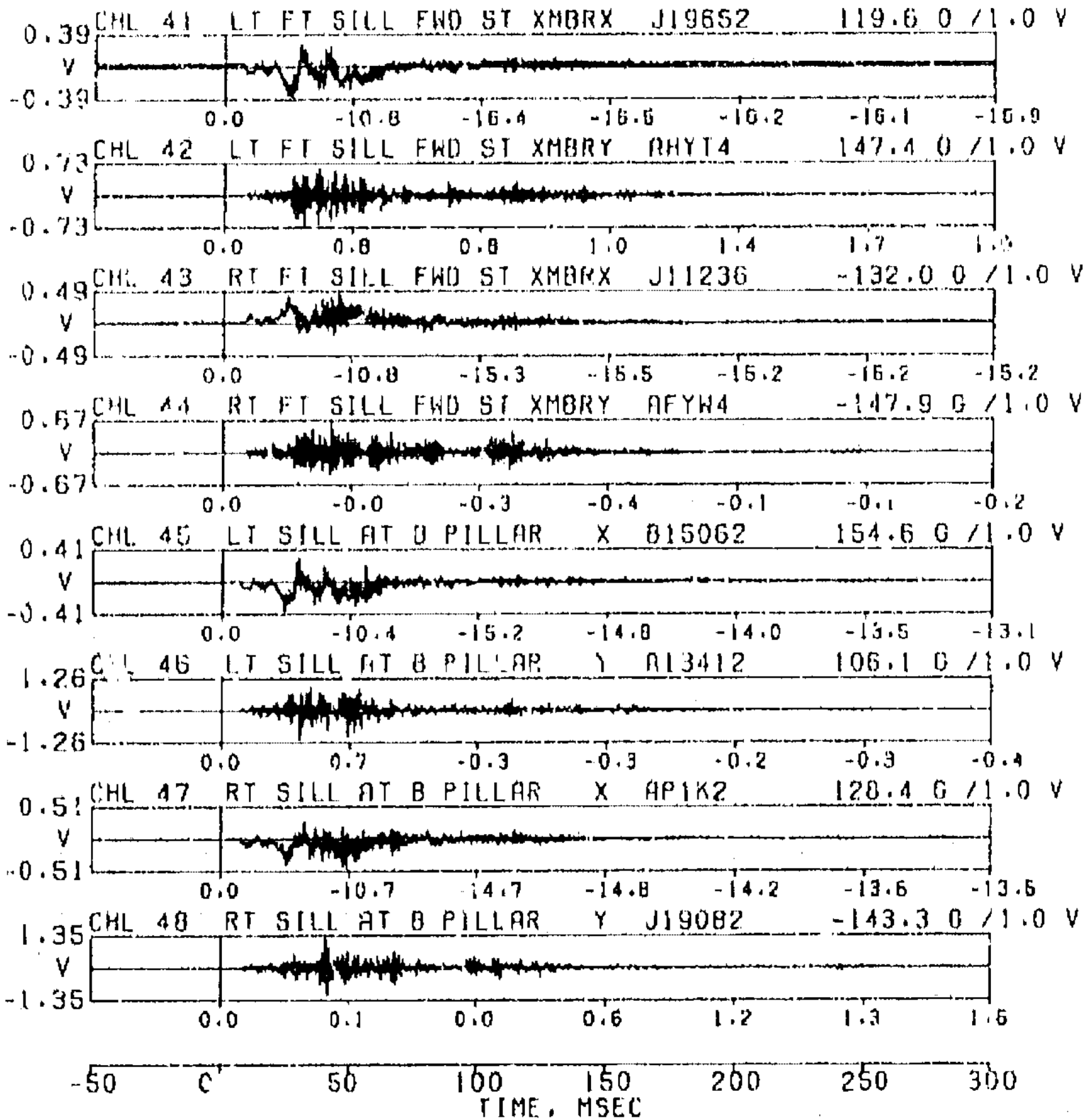
PAGE 006
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DATA SET 04/25/99BC

APR 26, 1999

ERRATA 1

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NOTE COMPUTED FIRST INTEGRAL VALUES ARE INDICATED BELOW EACH CHANNEL AND BRIDGED DATA IS INDICATED BY B -B-

TRANSDUCER SUMMARY REPORT

VC07606 30-MPH REAR MOVING BARRIER, KJ-J-74. ITEM KJ3589
 2002 MYSS 301 REAR IMPACT DEVELOPMENT.
 IMPACT ANALYSIS DEPT. 5320

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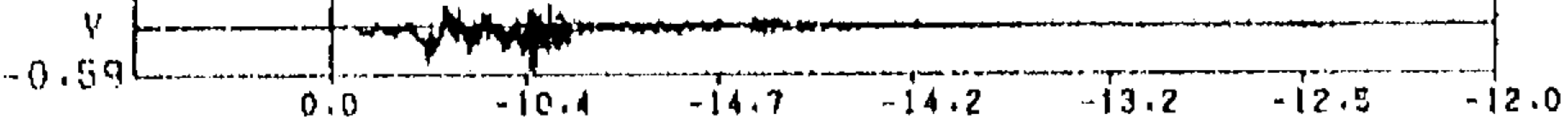
DATA SET 04/25/99DD

APR 26, 1999

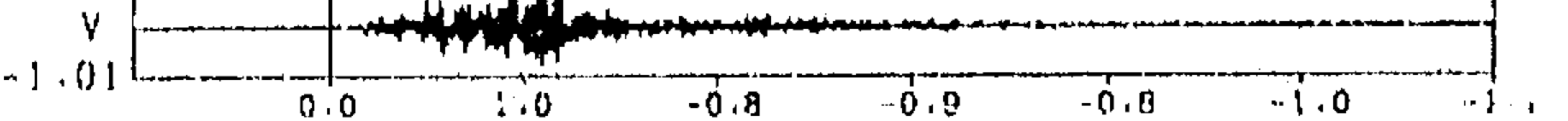
ERRATA 1

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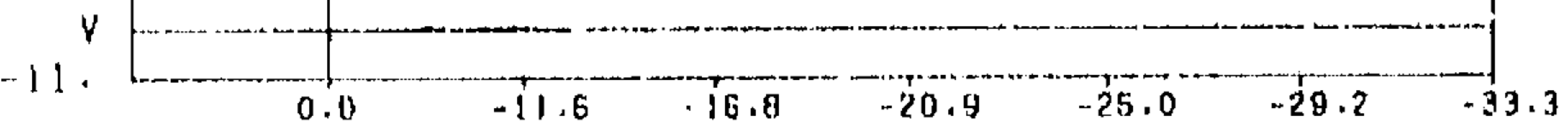
CHL 49 LT RR SILL FWD ST XMBRX A14230 154.2 G / 1.0 V



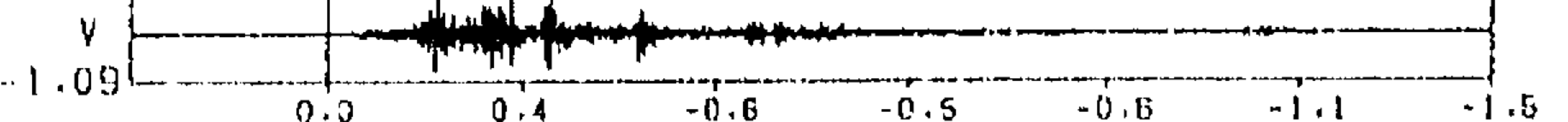
CHL 50 LT RR SILL FWD ST XMBRY A14521 102.9 G / 1.0 V



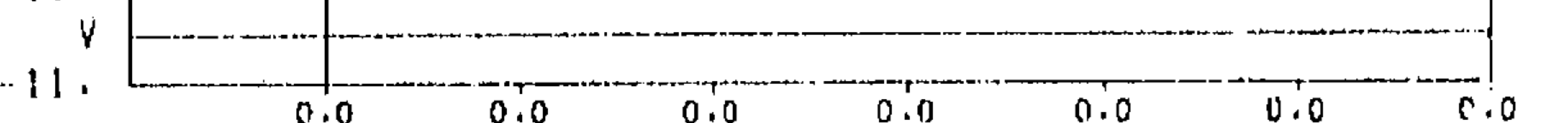
CHL 51 RT RR SILL FWD ST XMBRX J17267 -163.9 G / 1.0 V



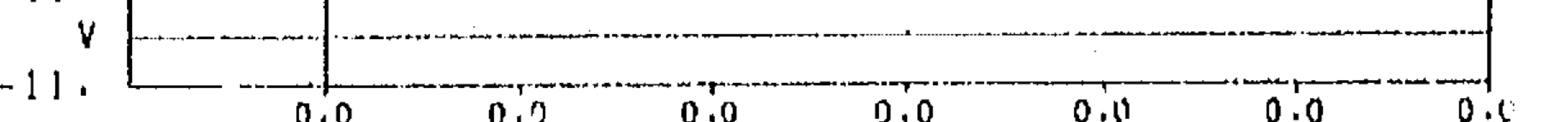
CHL 52 RT RR SILL FWD ST XMBRY J11285 -144.6 G / 1.0 V



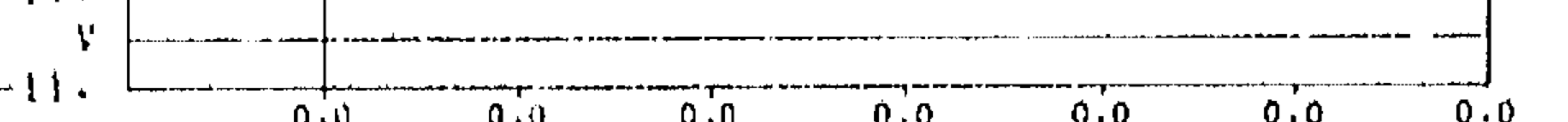
CHL 53 NOT USED 1.0 VOLT / 1.0 V



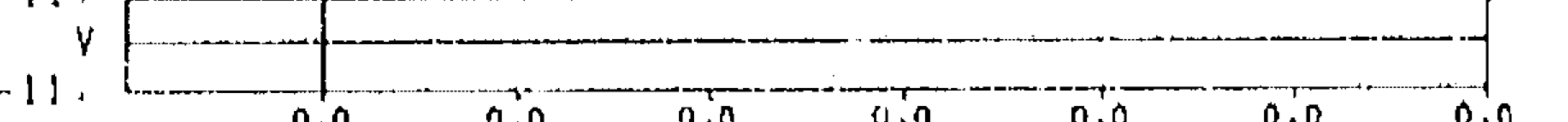
CHL 54 NOT USED 1.0 VOLT / 1.0 V



CHL 55 NOT USED 1.0 VOLT / 1.0 V



CHL 56 NOT USED 1.0 VOLT / 1.0 V



-50 0 50 100 150 200 250 300
 TIME, MSEC

NOTE COMPUTED FIRST INTEGRAL VALUES ARE INDICATED BELOW
 EACH CHANNEL AND BRIDGED DATA IS INDICATED BY A -B-.

TRANSDUCER SUMMARY REPORT

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
 2002 HVSS 301 REAR IMPACT DEVELOPMENT,
 IMPACT ANALYSIS DEPT. 5320

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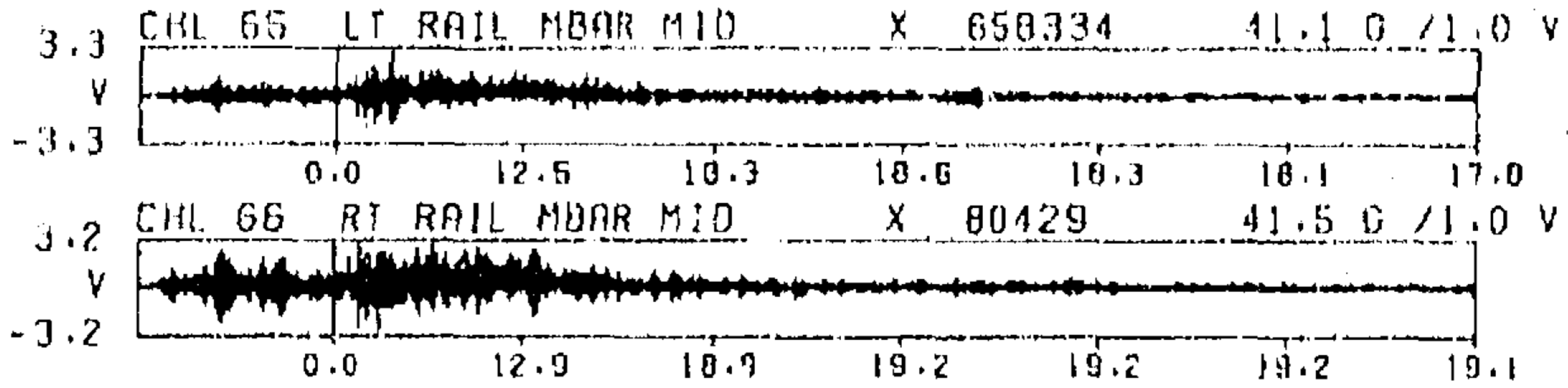
DATA SET 04/25/95BE

APR 26, 1999

ERRATA

1

-50 0 50 100 150 200 250 300



-50 0 50 100 150 200 250 300
 TIME, MSEC

NOTE COMPUTED FIRST INTEGRAL VALUES ARE INDICATED BELOW
 EACH CHANNEL AND BRIDGED DATA IS INDICATED BY A -B-.

AVERAGE OF

CHANNEL 041 LT FT SILL FWD ST XMBRX J19652
CHANNEL 043 RT FT SILL FWD ST XMBRX J11236
CHANNEL 049 LT RR SILL FWD ST XMBRX A14230

FILTER TYPE 1 SAE J2119/00 DC (60(TPF-R) EFF 3/24/86

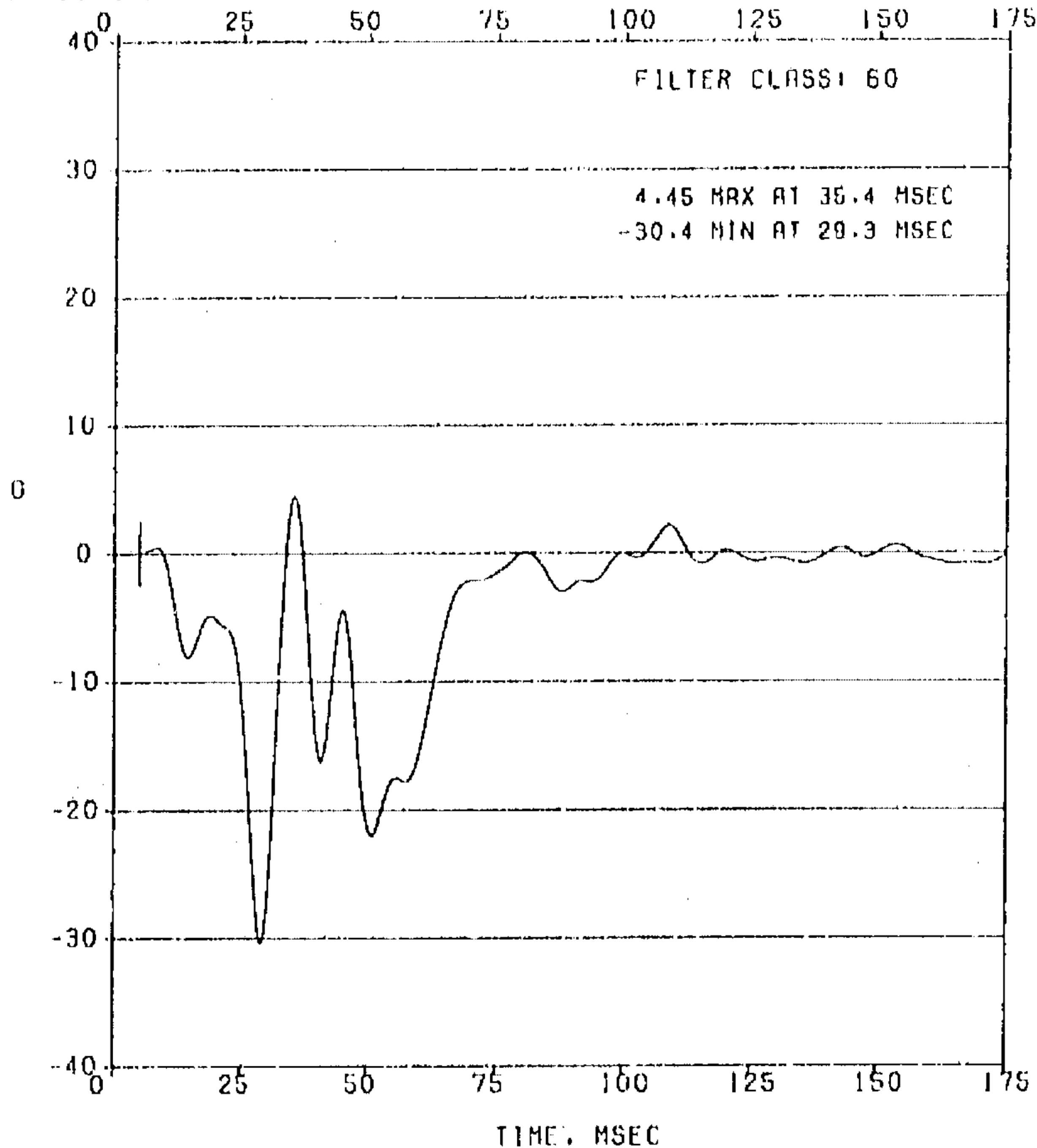
IMPACT ANALYSIS DEPT. 5320

DATA SET 04/25/99BC

APR 26, 1999

ERRATA

1



CAUTION
RT RR SILL FWD ST XMBRX,
INST. MALFUNCTION AFTER 62.7 MS

AVERAGE OF

CHANNEL 041 LT FT SILL FWD ST XMBRX J19652
CHANNEL 043 RT FT SILL FWD ST XMBRX J11236

FILTER TYPE: SAE J2110/00 DC C60(TPF-R) EFF 3/24/86

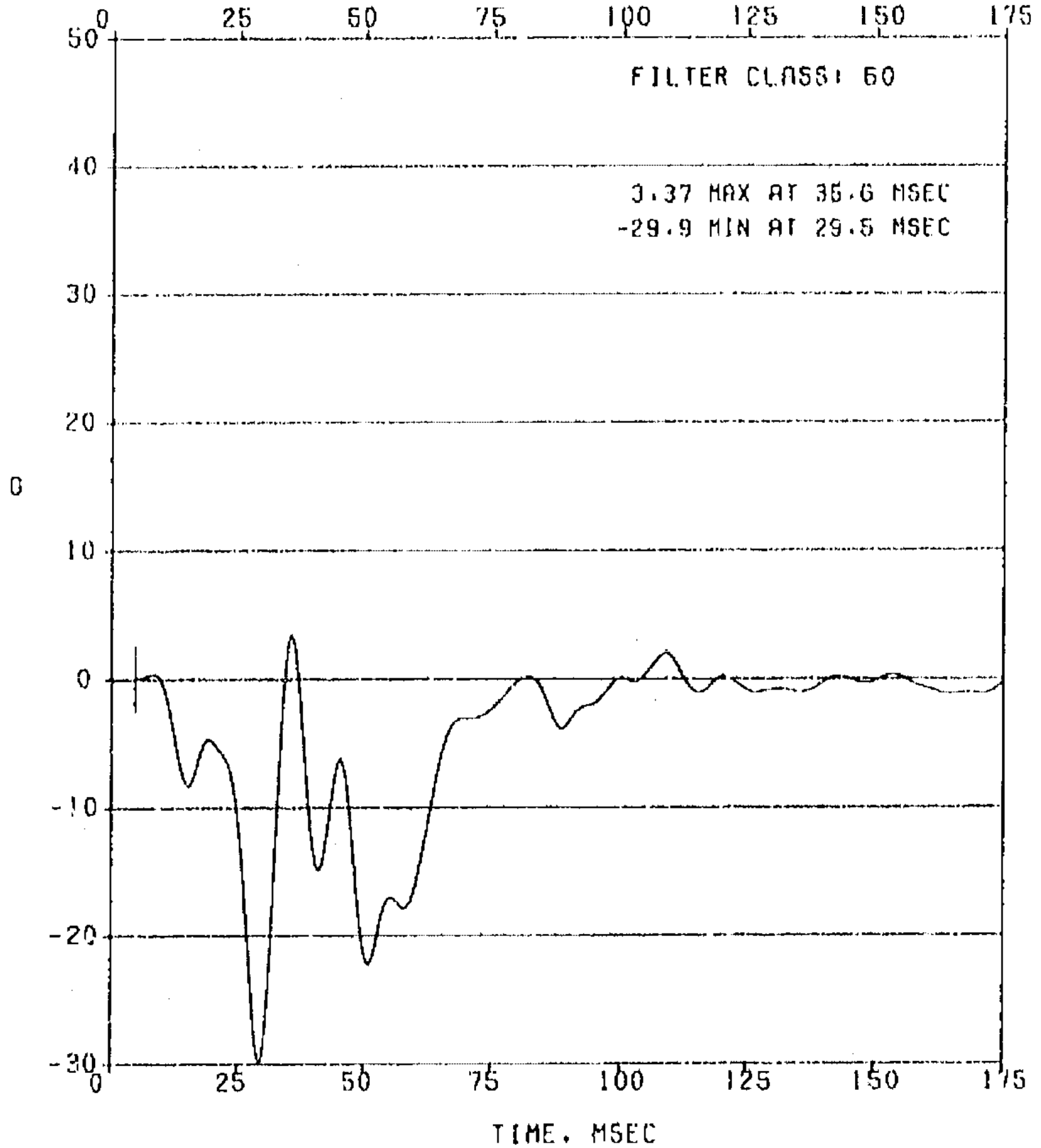
IMPACT ANALYSIS DEPT. 5320

DATA SET 04/25/9900

APR 26, 1999

ERRATA

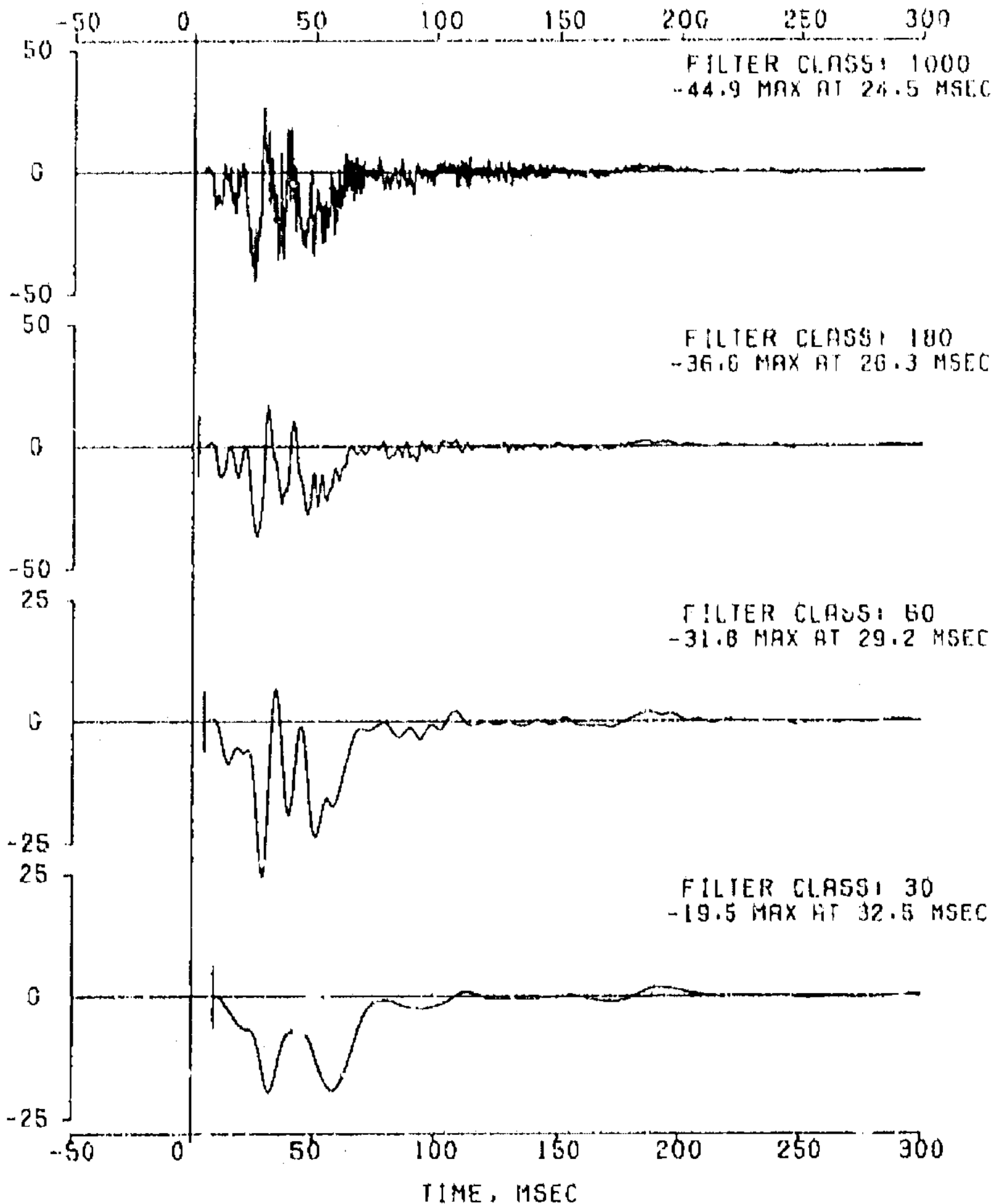
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VC07606 30-MPH REAR MOVING BARRIER, KJ-J-74. ITEM KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 001 LEFT FRONT SILL X J13060
FILTER TYPE: 3BOAS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1850)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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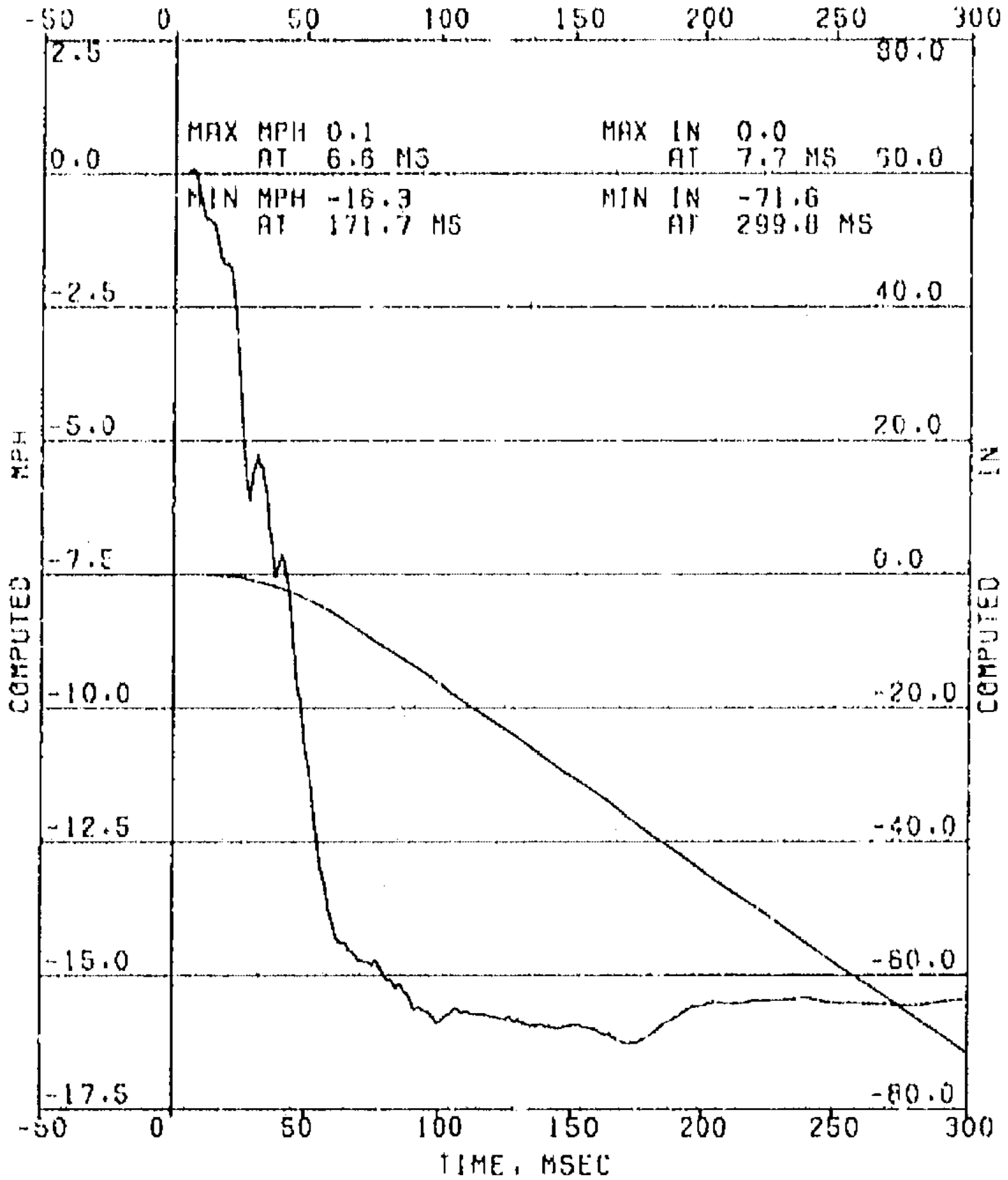
DATA SET 04/25/99BA
ERRATA 1



FILTER TYPE: 000NS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/9900
 ERRATA 1

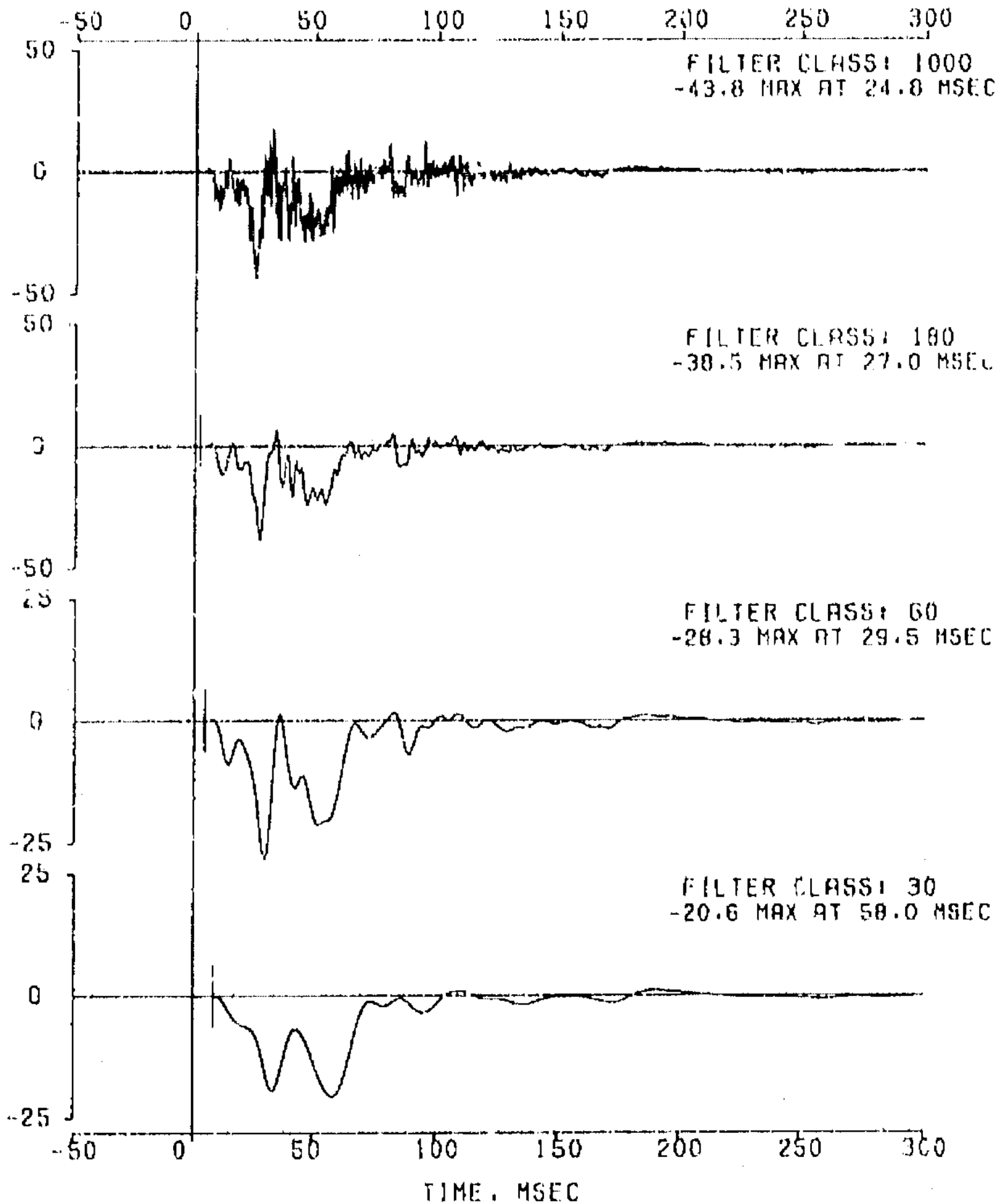


COMPUTED MPH
 COMPUTED IN

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74. ITEM KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 002 RIGHT FRONT SILL X RP159
FILTER TYPE: ODDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1550)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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OF 006

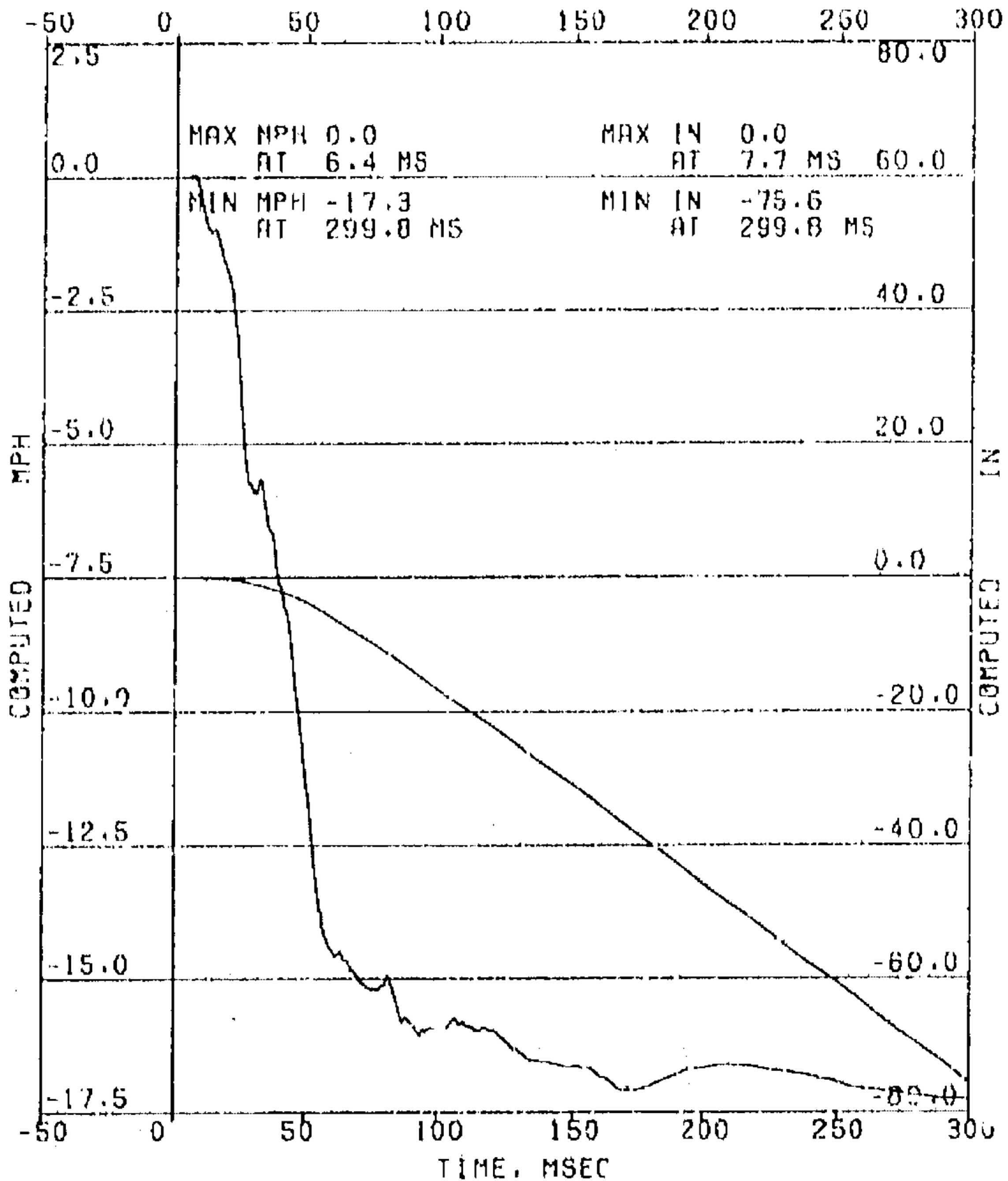
DATA SET 04/25/996.1
ERRATA 1



FILTER TYPE: 000AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

DATA SET 04/25/99BA
ERRATA 1

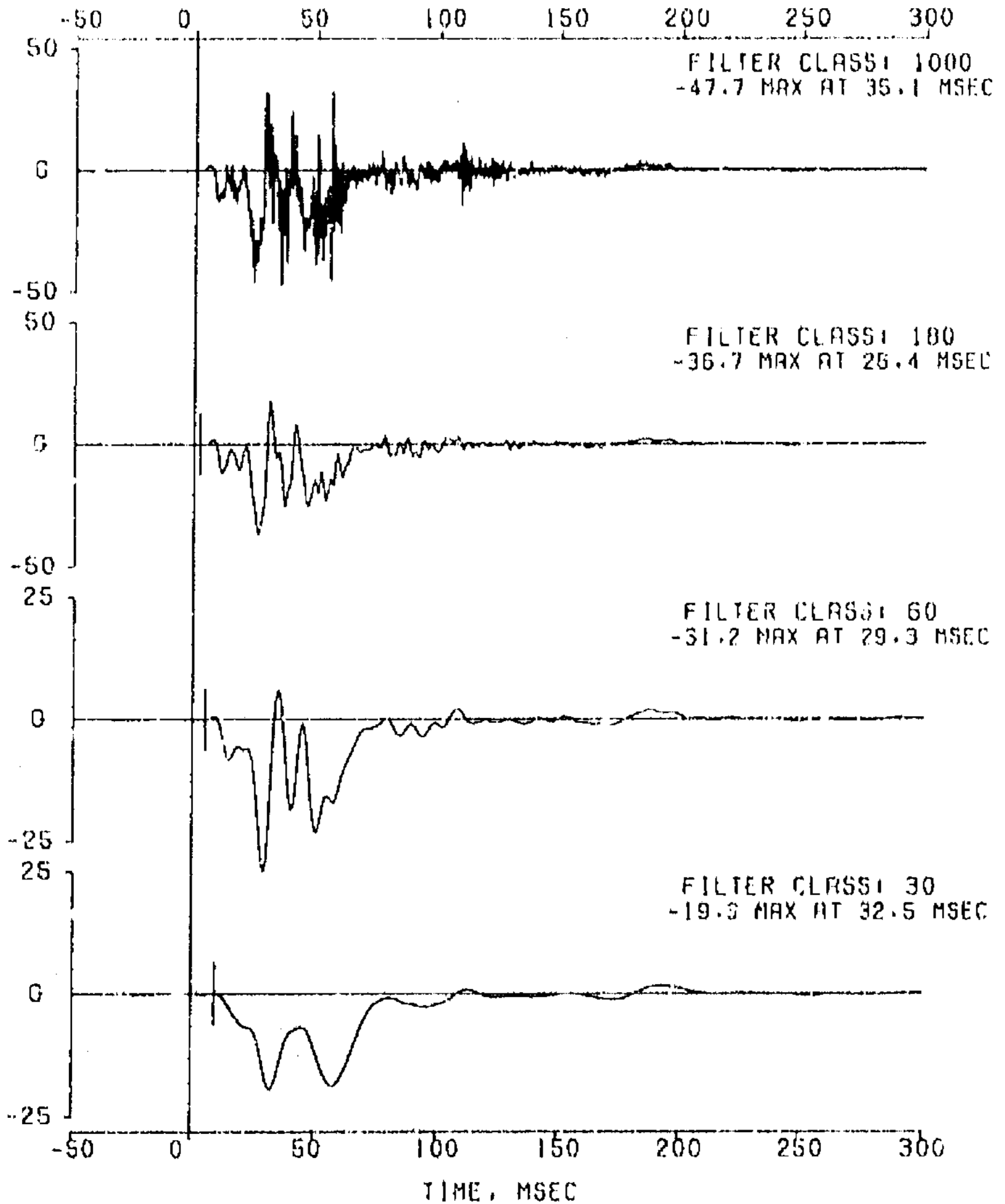


COMPUTED MPH
COMPUTED IN

VC07606 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT,
CHANNEL 003 LEFT REAR SILL X J12120
FILTER TYPE: OBDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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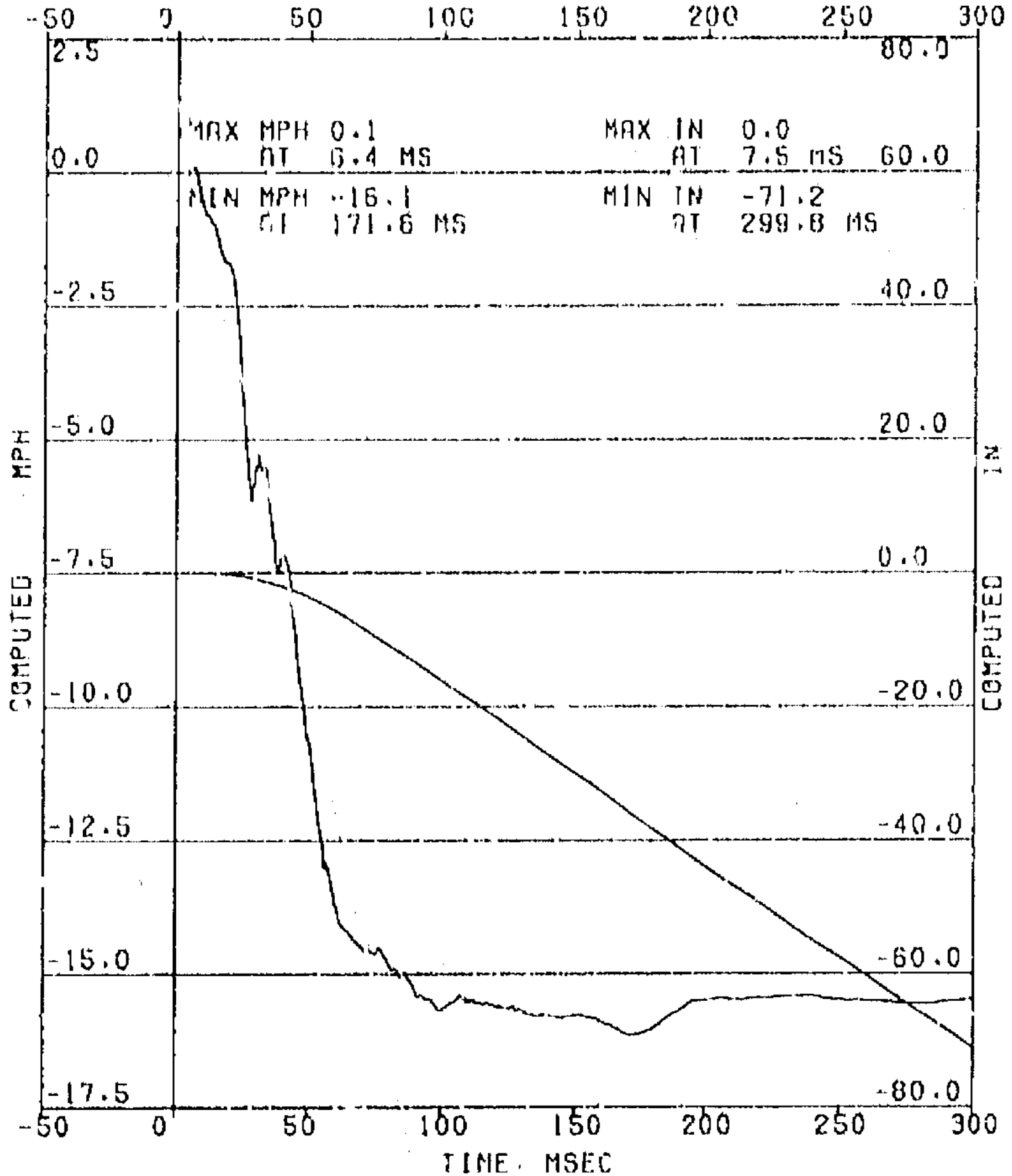
DATA SET 04/25/99BA
ERRATA 1



FILTER TYPE: 080MS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/99BA
 ERRATA 1

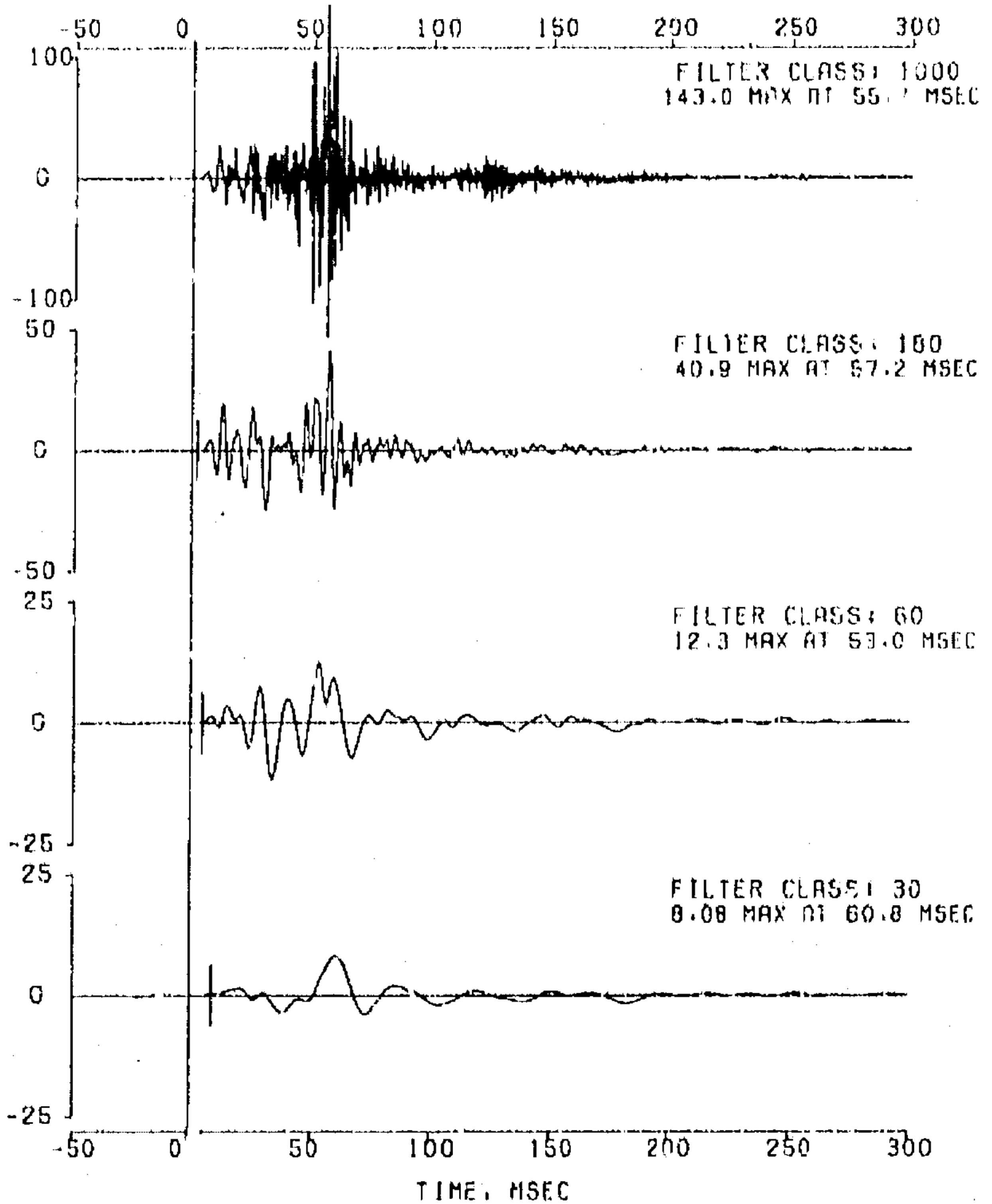


COMPUTED MPH
 COMPUTED IN

YC07500 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3689
2002 HYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 004 LEFT REAR SILL 2 J14954
FILTER TYPE: 080AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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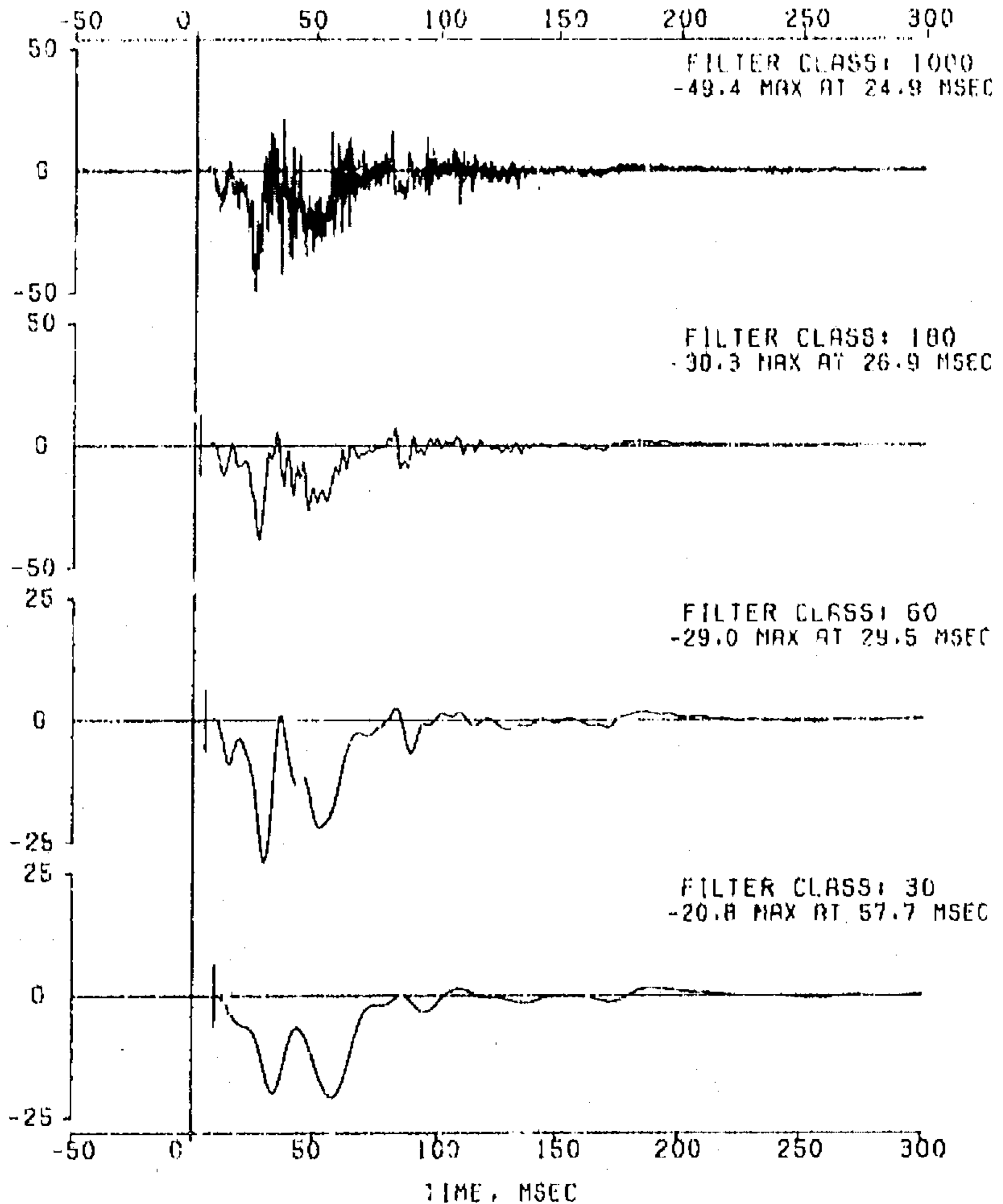
DATA SET 04/25/99BA
ERRATA 1



VC07508 30 MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
2002 MY88 301 REAR IMPACT DEVELOPMENT.
CHANNEL 005 RIGHT REAR SILL X J13051
FILTER TYPE: 080MS-III RESPONSE CORRECTION, CLASS 1000 FILTER(16601
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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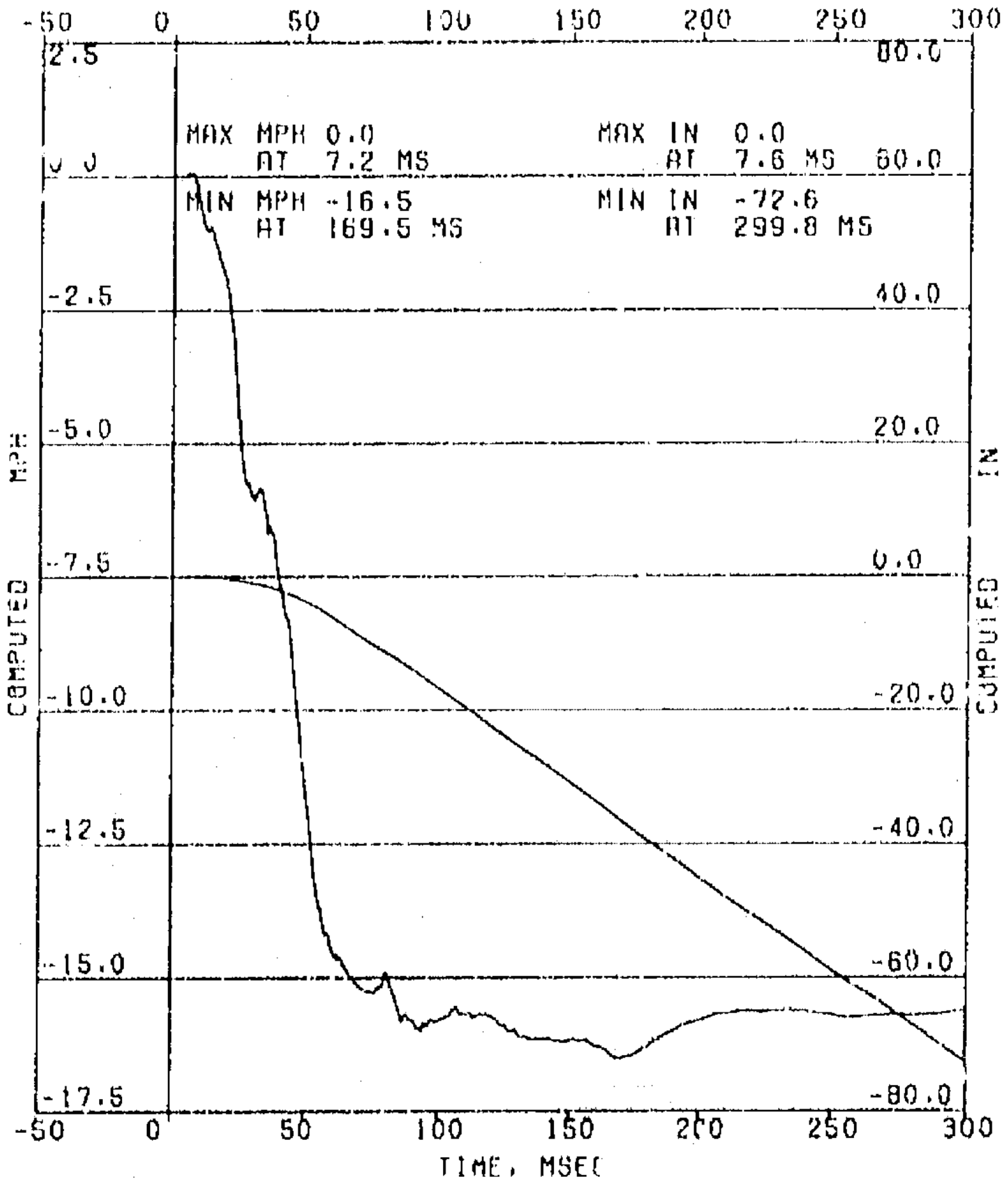
DATA SET 04/25/99BA
ERRATA 1



FILTER TYPE: 08045-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/99BA
 ERRATA 1

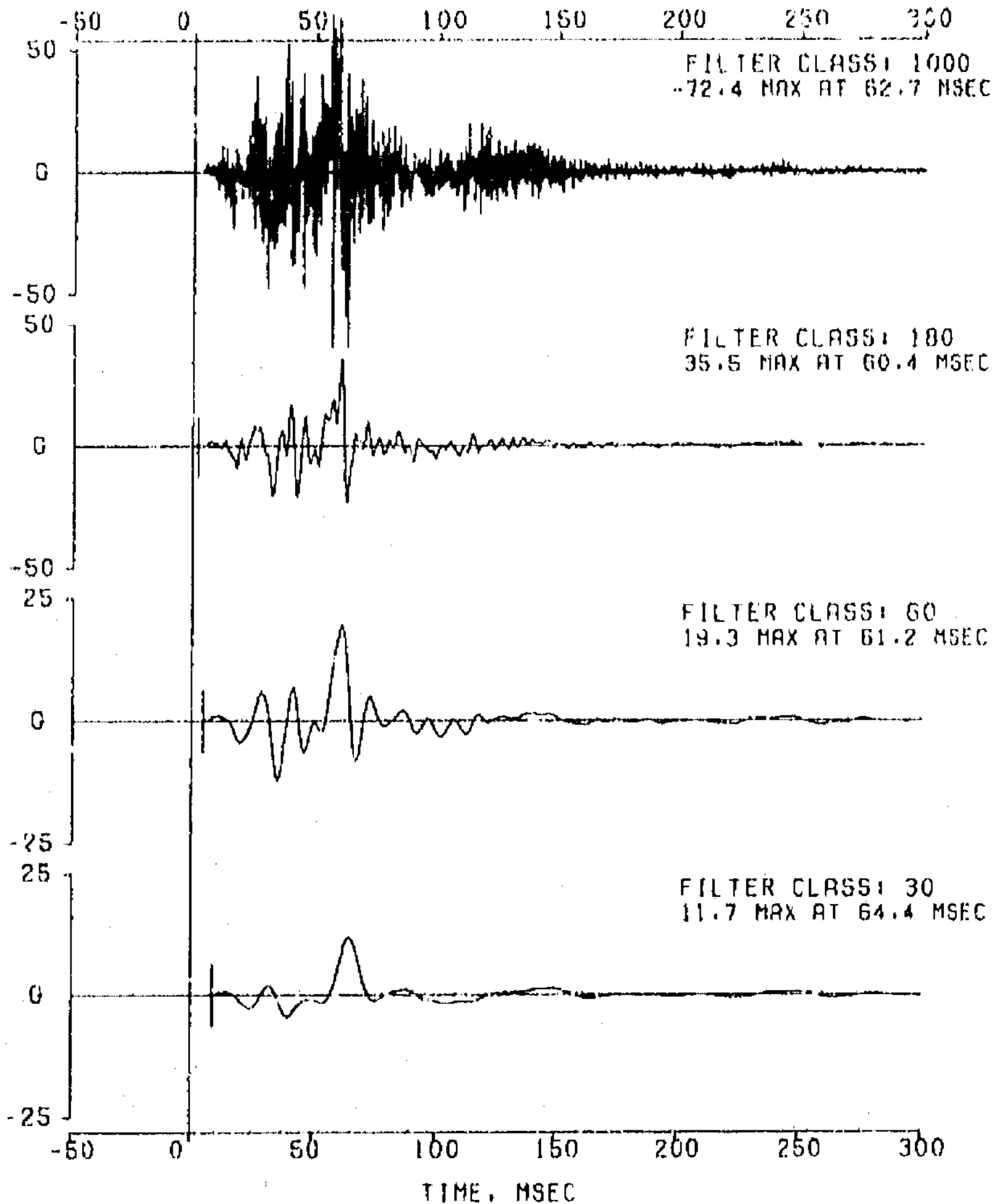


COMPUTED MPH
 COMPUTED IN

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74. ITEM KJ3580
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 006 RIGHT REAR SILL Z J19367
FILTER TYPE: OBDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1560)
IMPACT ANALYSIS DEPT. 6320
APR 26, 1999

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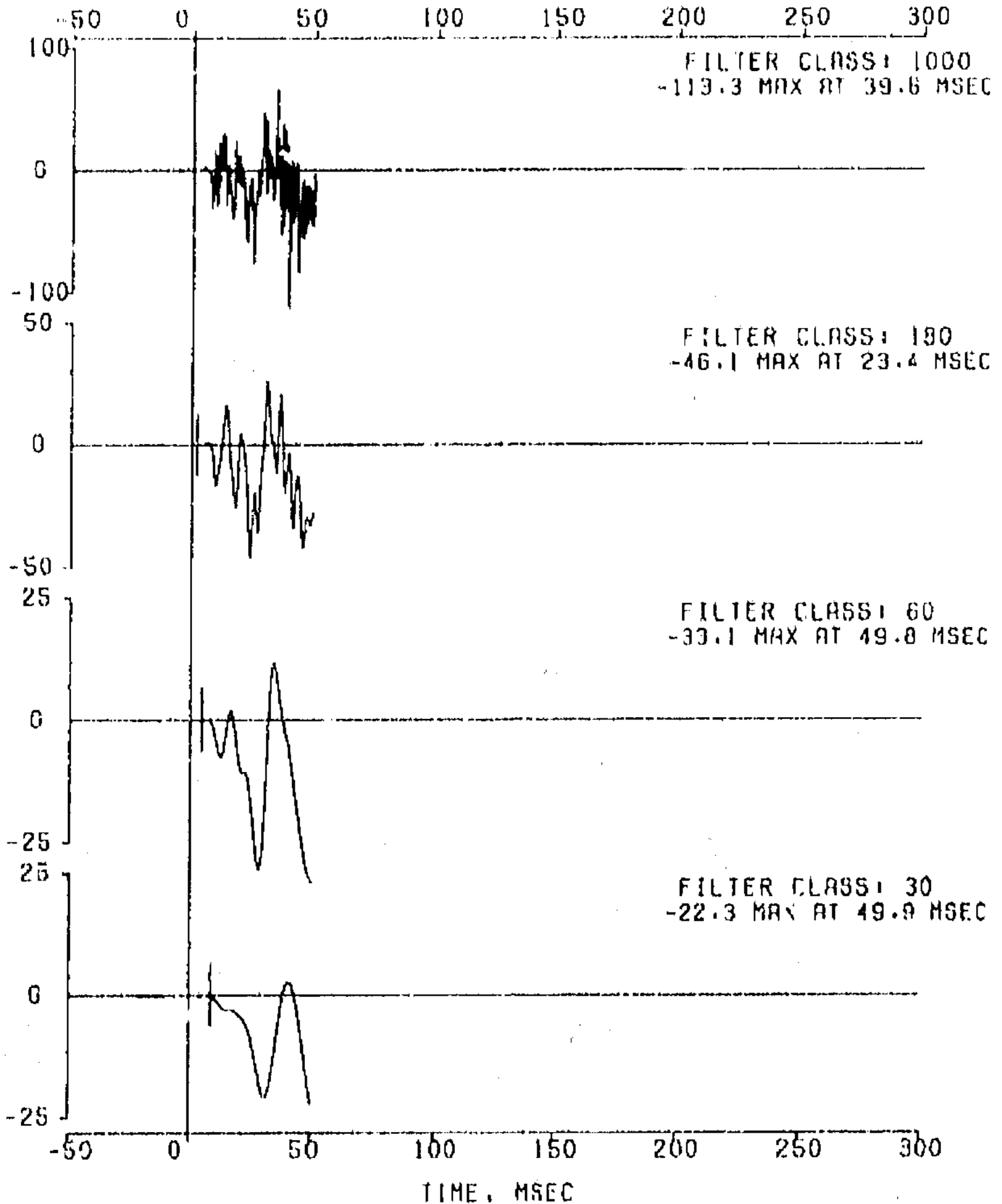
DATA SET 04/25/99BA
ERRATA 1



VC07806 30-MPH REAR MOVING BARRIER, KJ-J-74. ITEM KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 077 RT REAR RAIL MID TANK X 016235
FILTER TYPE: 00085-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1850)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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DATA SET 04/25/9908
ERRATA 1



CAUTION
INST. MALFUNCTION AFTER 49.9 MS

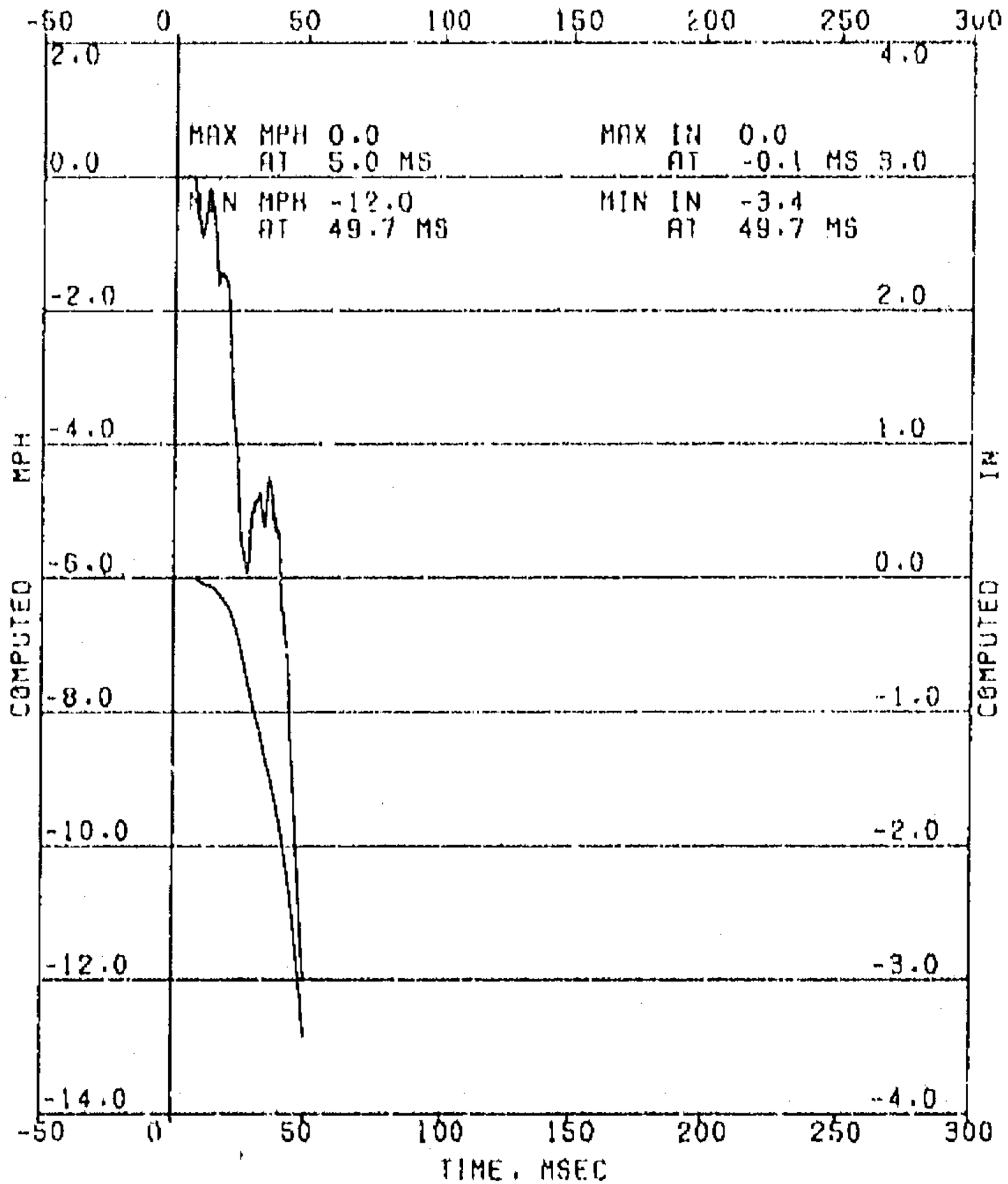
VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
 2002 MYSS 30, REAR IMPACT DEVELOPMENT,
 CHANNEL 007 RT REAR RAIL MID TANK X 816235

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FILTER TYPE: 000AS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/99BR
 ERRATA 1



***** CAUTION *****
 ***** INST. MALFUNCTION AFTER 49.9 MS *****

COMPUTED MPH
 COMPUTED IN

VC07500 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589

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2002 HYDS 301 REAR IMPACT DEVELOPMENT.

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CHANNEL 008 RT REAR RAIL MID TANK 2 A14296

FILTER TYPE: 08095-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)

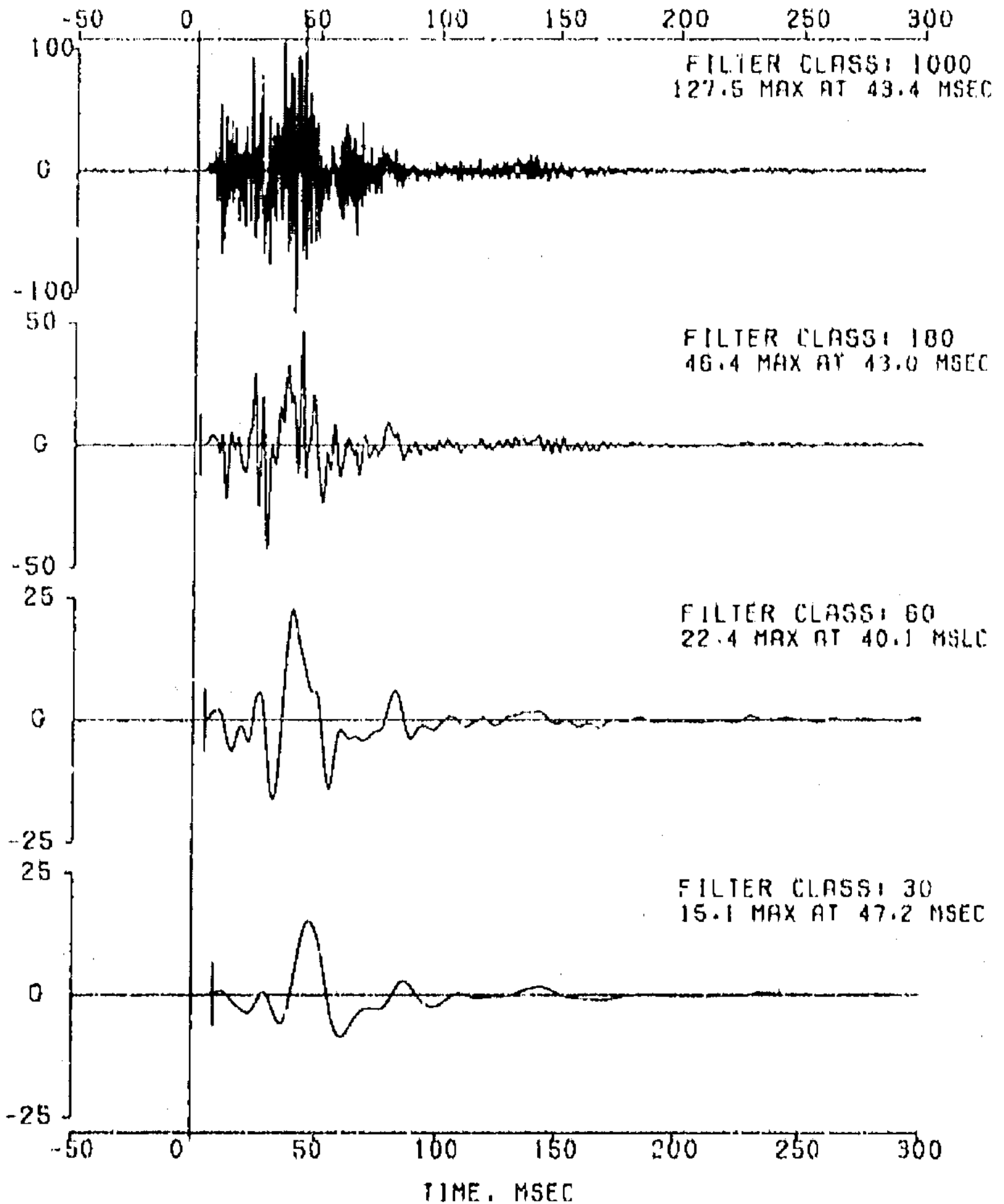
IMPACT ANALYSIS DEPT. 5320

DATA SET 04/25/99BA

APR 26, 1999

ERRATA

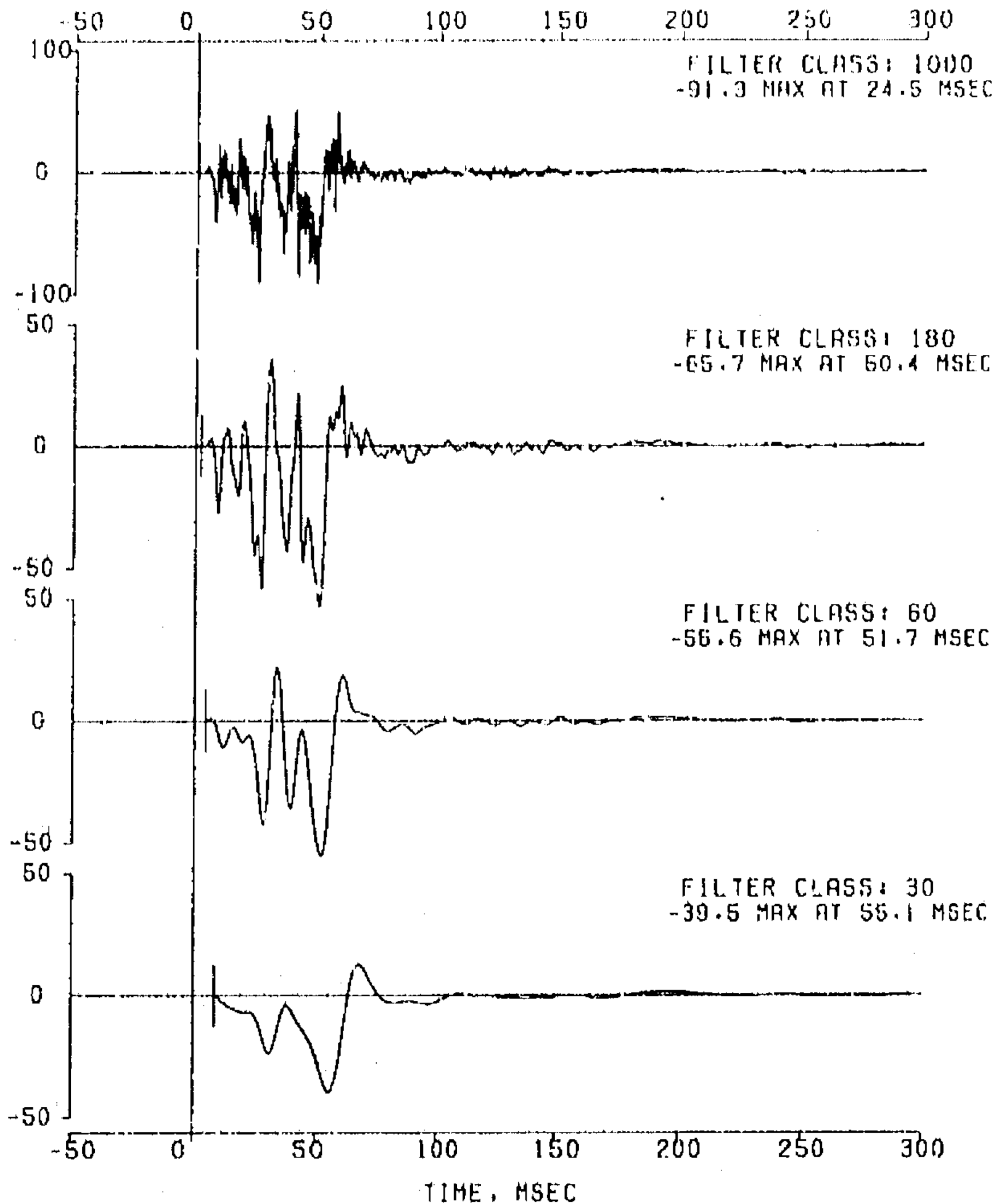
1



VC07506 30-MPH REAR MOVING BARRIER, KJ-U-74, ITEM KJ3500
2002 MYSS 301 REAR IMPACT DEVELOPMENT,
CHANNEL 009 LT REAR RAIL MID TANK X A14529
FILTER TYPE: 080AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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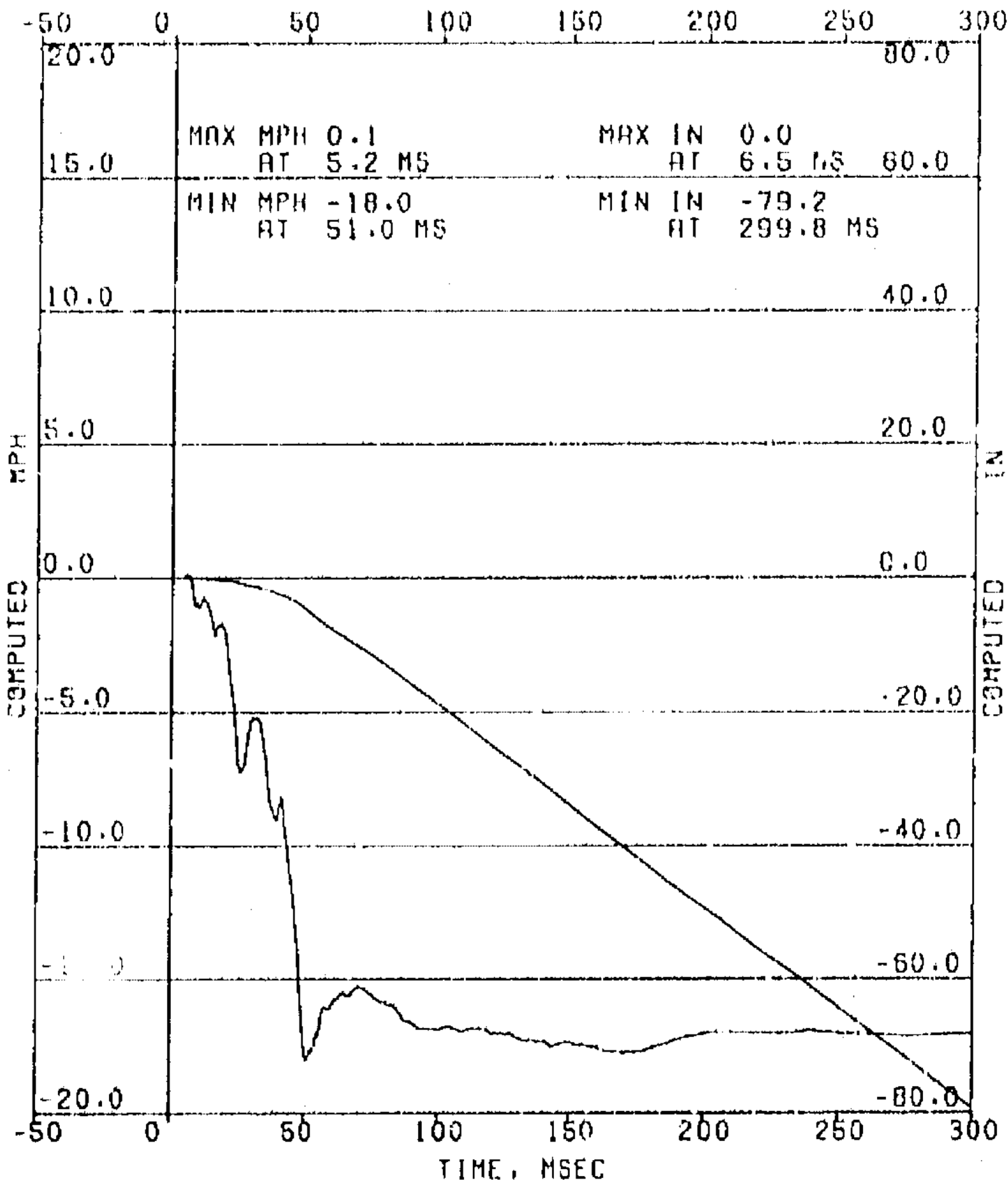
DATA SET 04/25/9900
ERRATA 1



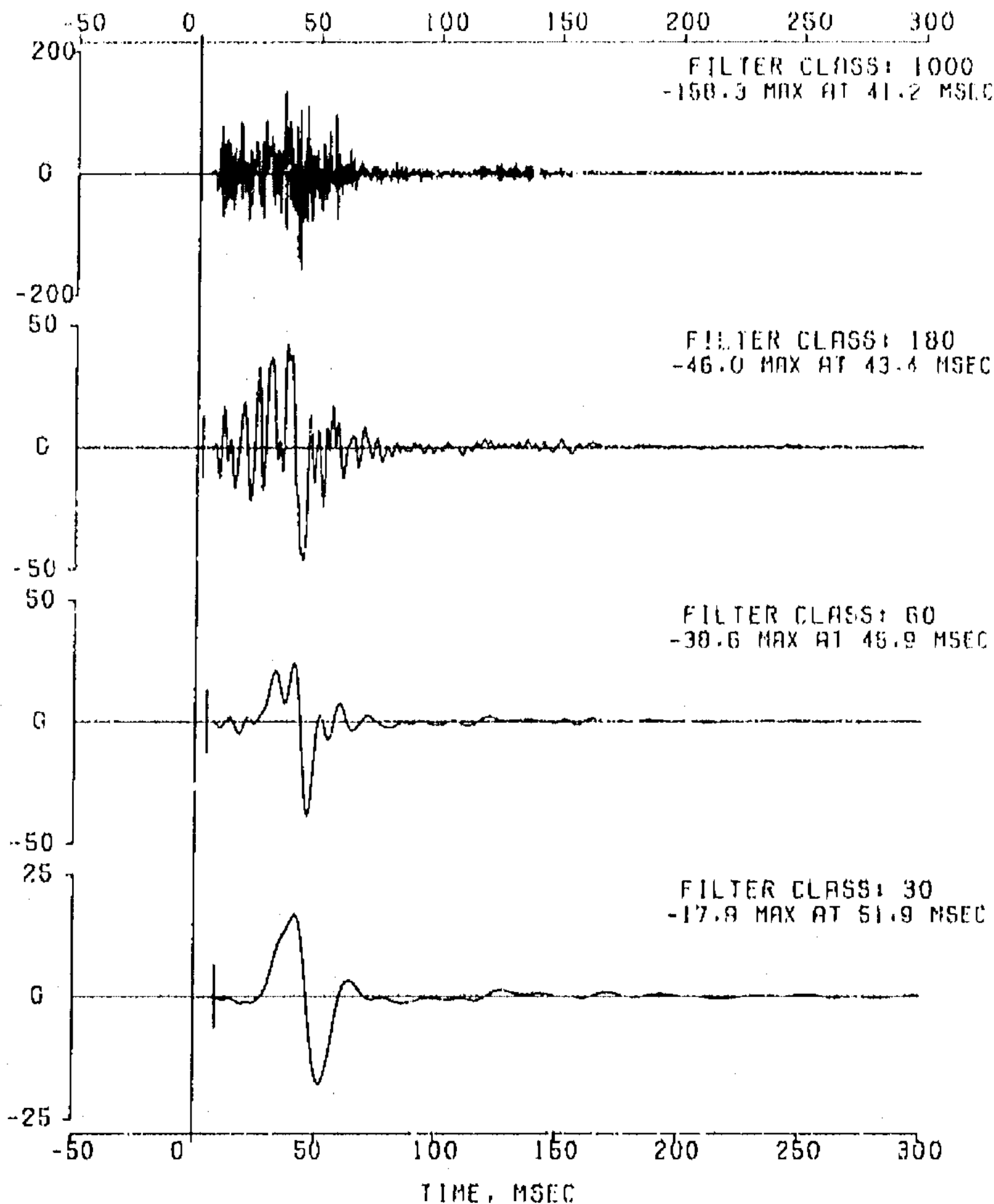
FILTER TYPE: 000RS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/990A
 ERRATA 1



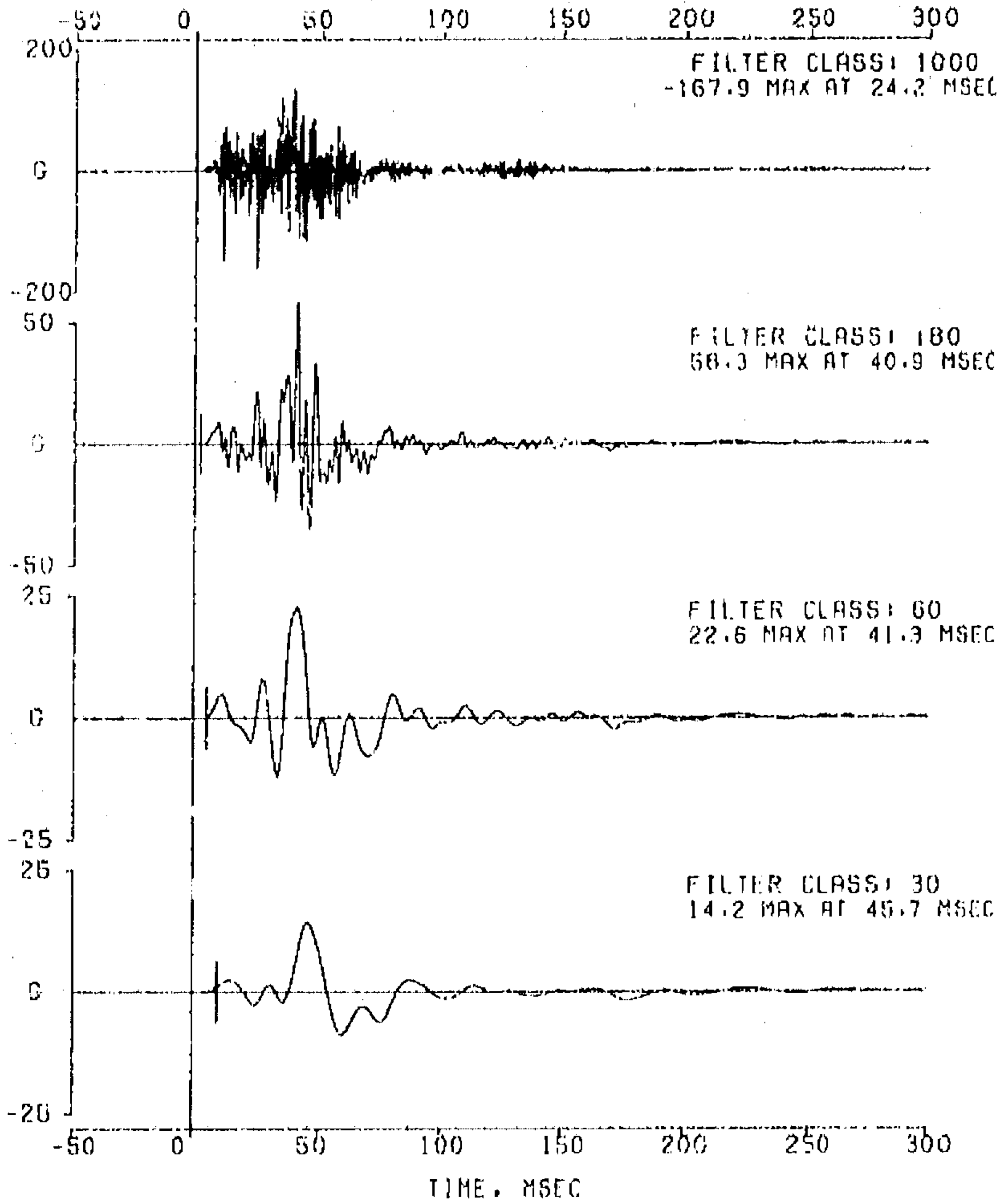
COMPUTED MPH
 COMPUTED IN



VC07508 50-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 011 LT REAR RAIL MID TANK Z A12774
FILTER TYPE: 00DAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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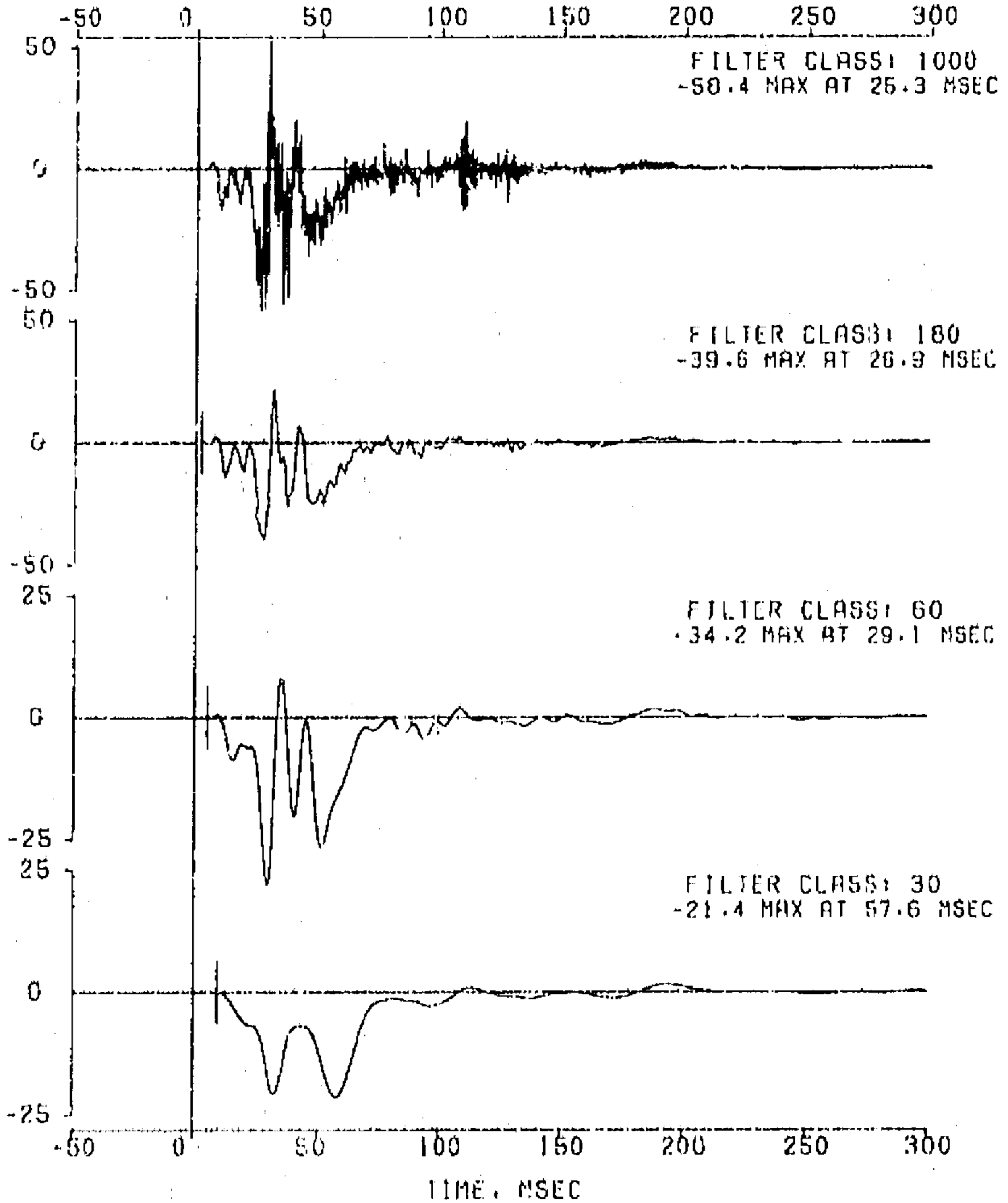
DATA SET 04/25/90BA
ERRATA 1



VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74. ITEM XJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 012 LT RAIL TRANS X/MDR X J15551
FILTER TYPE: JBDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(16501
IMPACT ANALYSIS DEPT. 5320
APR 26, 1995

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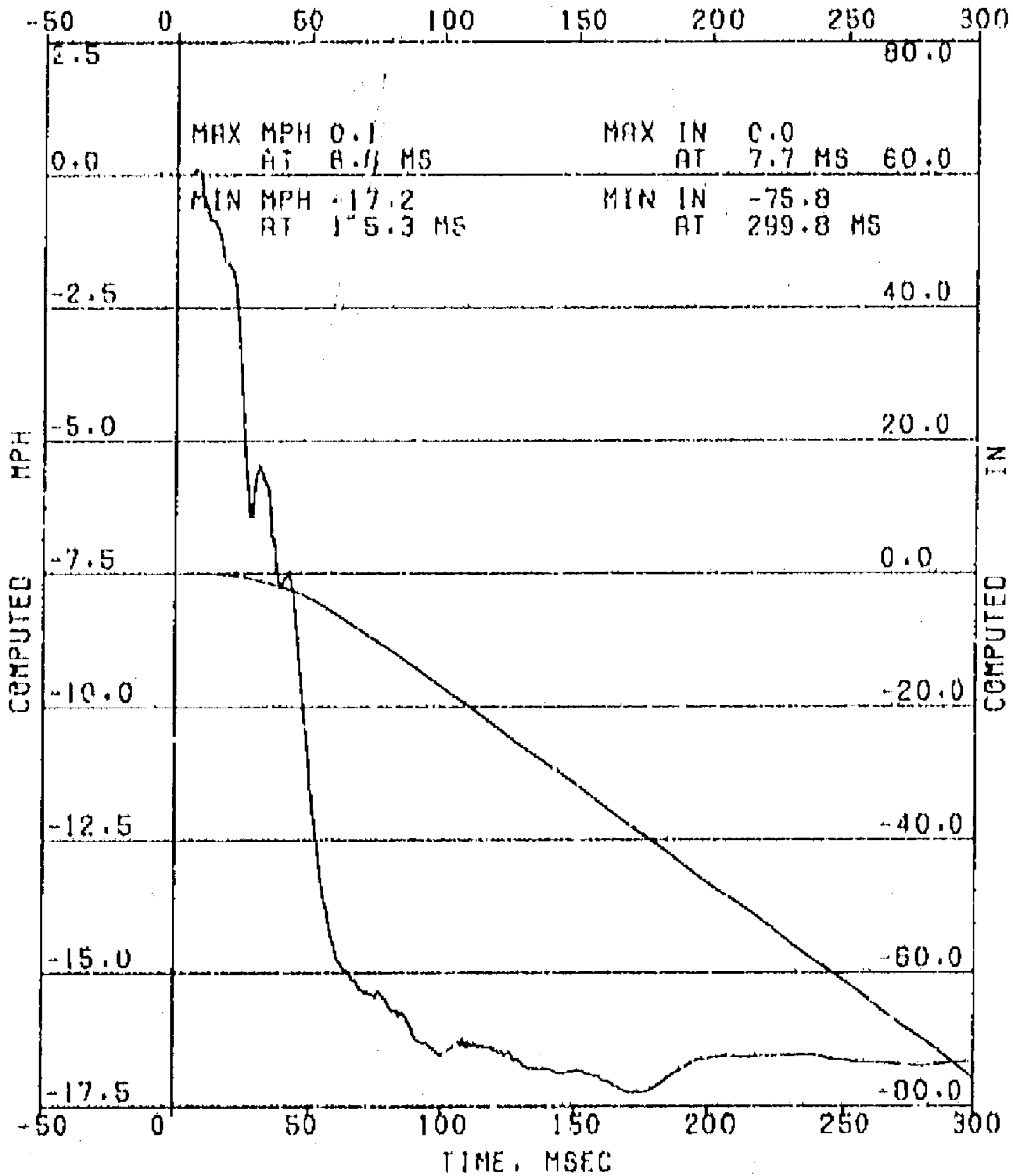
DATA SET 04/25/99BA
ERRATA 1



FILTER TYPE: 000AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/99BA
 ERRATA 1

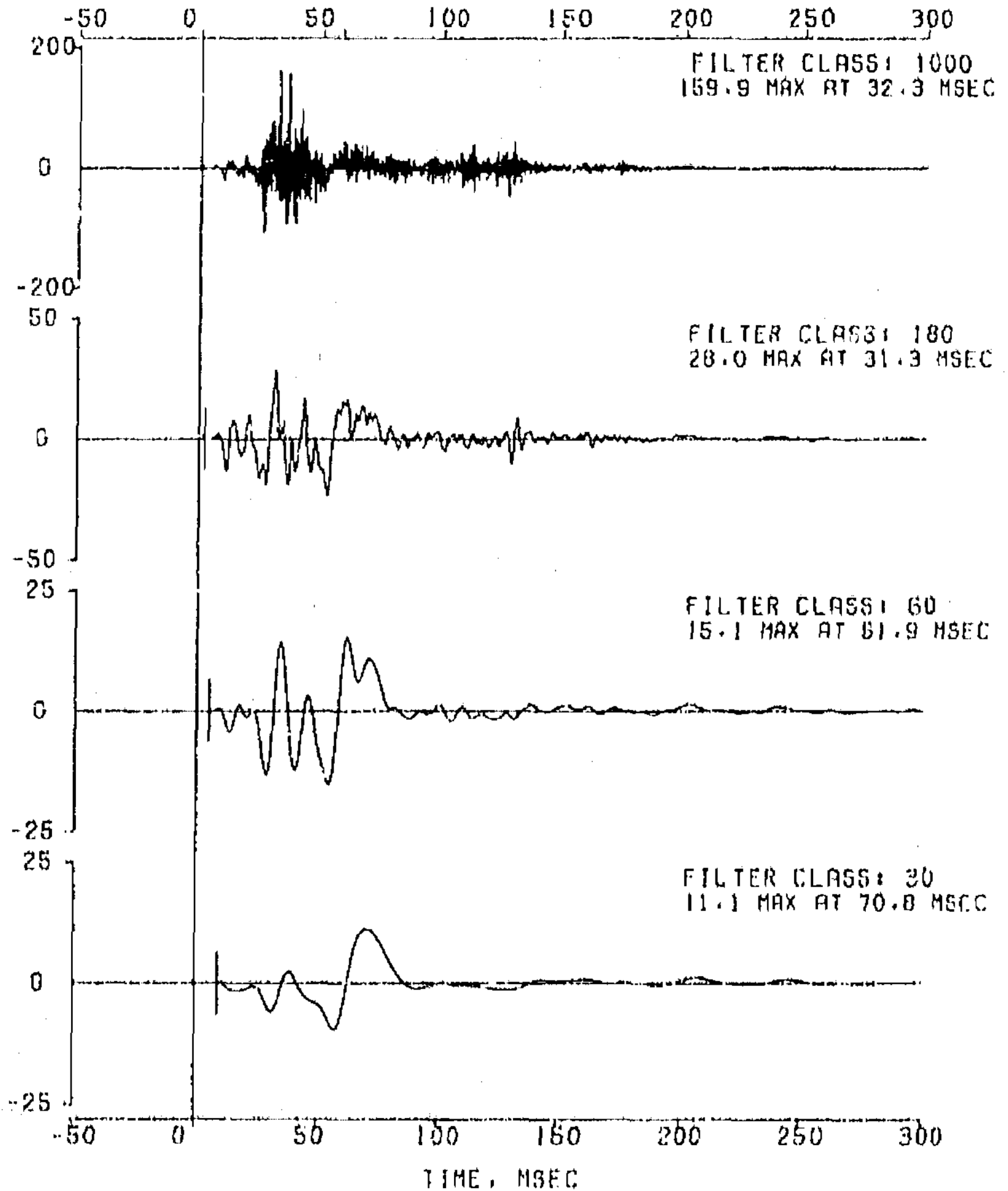


COMPUTED MPH
 COMPUTED IN

VCO7800 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3509
2007 HVSS 301 NEAR IMPACT DEVELOPMENT.
CHANNEL 013 LT RAIL TRANS X/MBR 2 AP153
FILTER TYPE: OBOAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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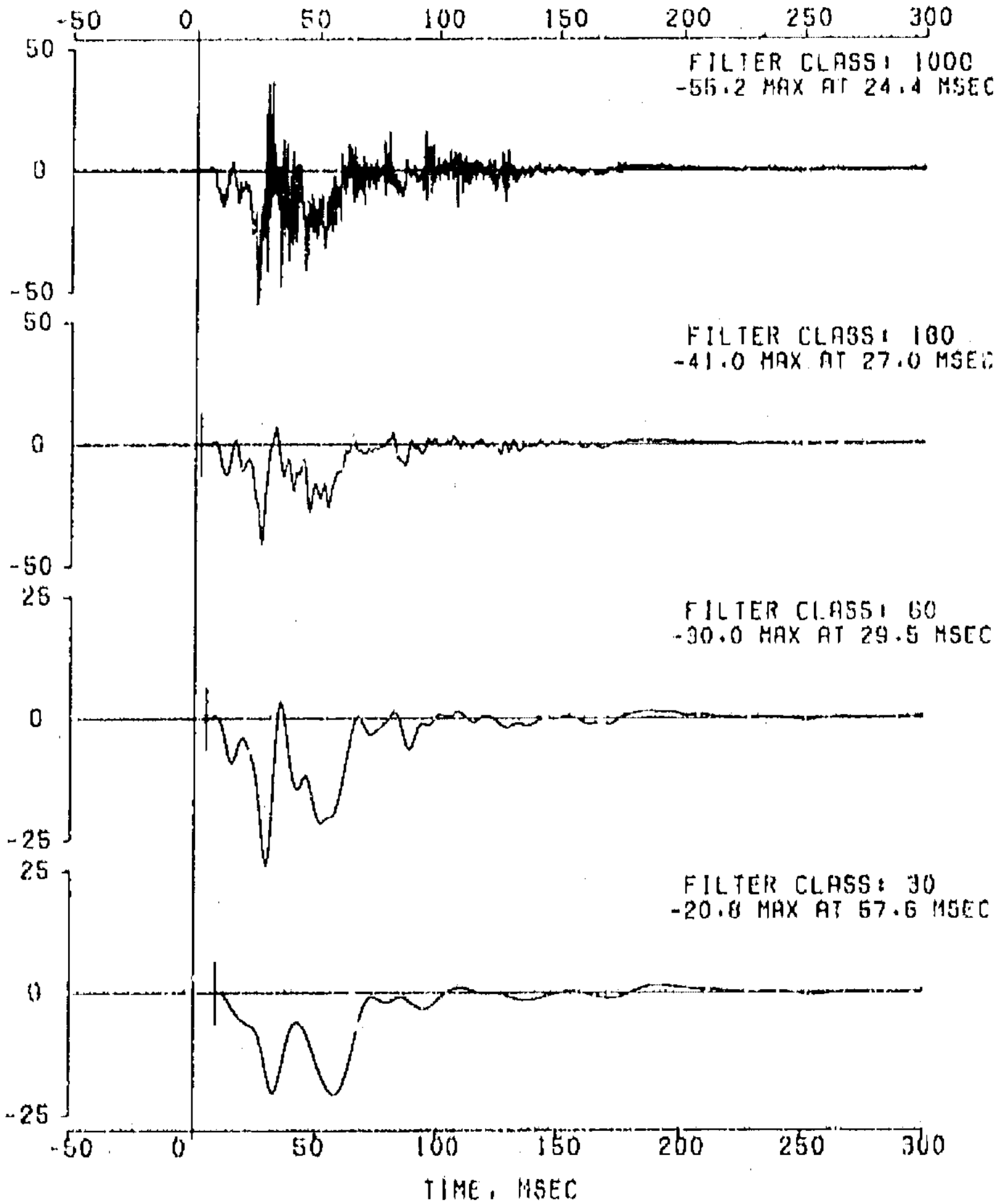
DATA SET 04/25/99BA
ERRATA 1



VC07506 30-MPH REAR MOVING BARRIER, KJ-1-74. ITEM KJ3509
2002 MVSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 014 RT RAIL TRANS X/MDR X J21349
FILTER TYPE: OBOAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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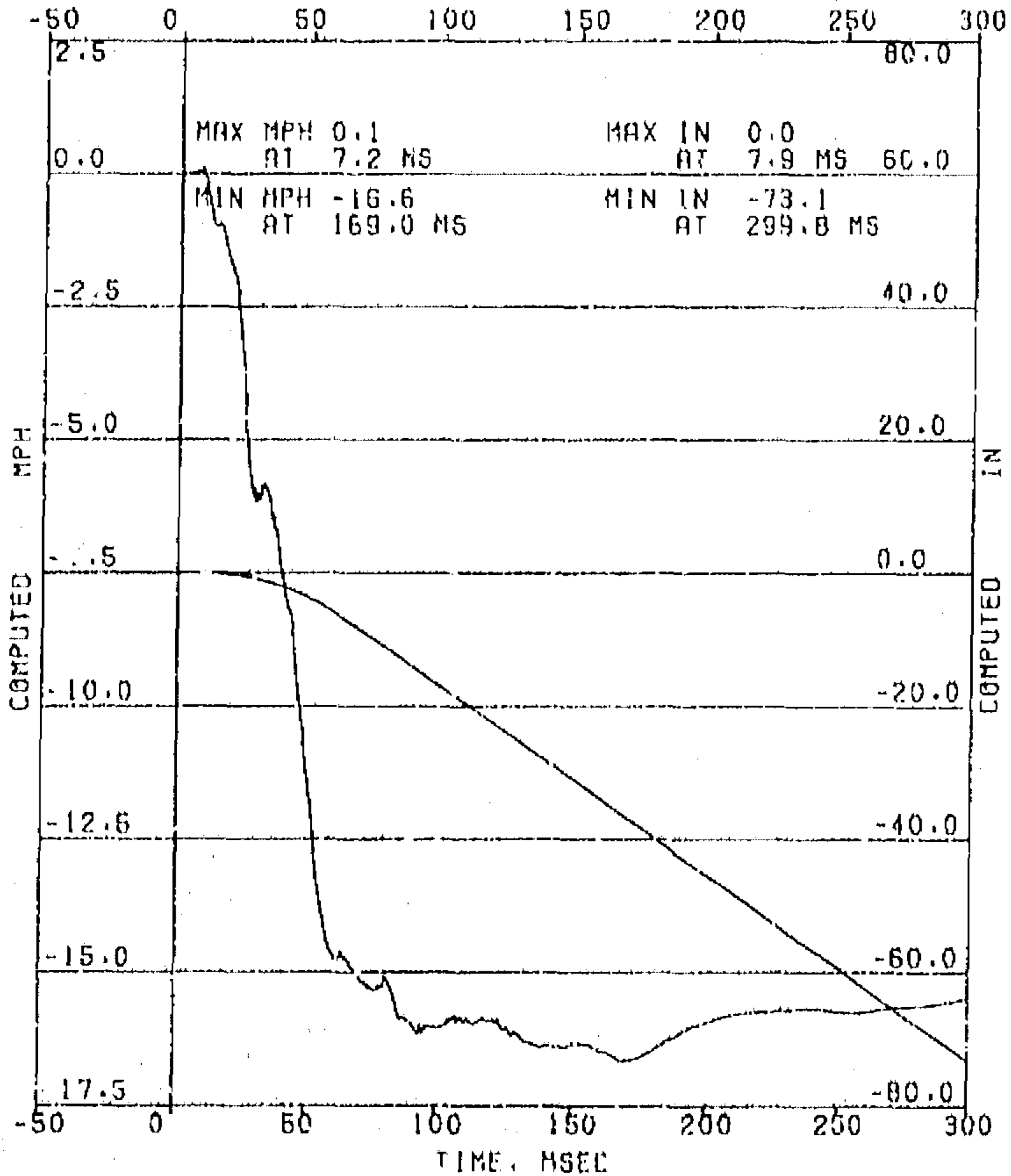
DATA SET 04/25/99DA
ERRATA 1



FILTER TYPE: ODDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

DATA SET 04/25/99BA
ERRATA 1

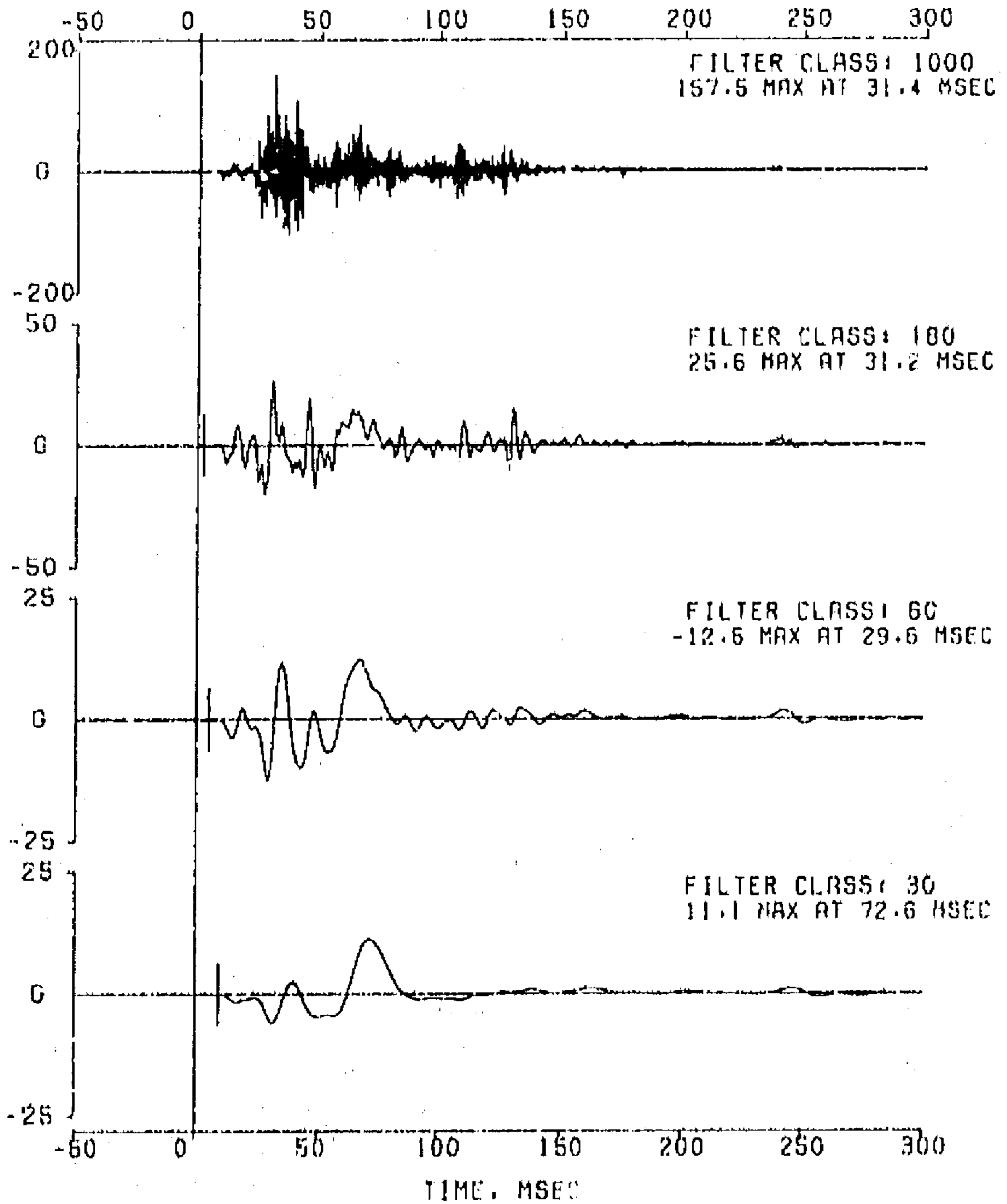


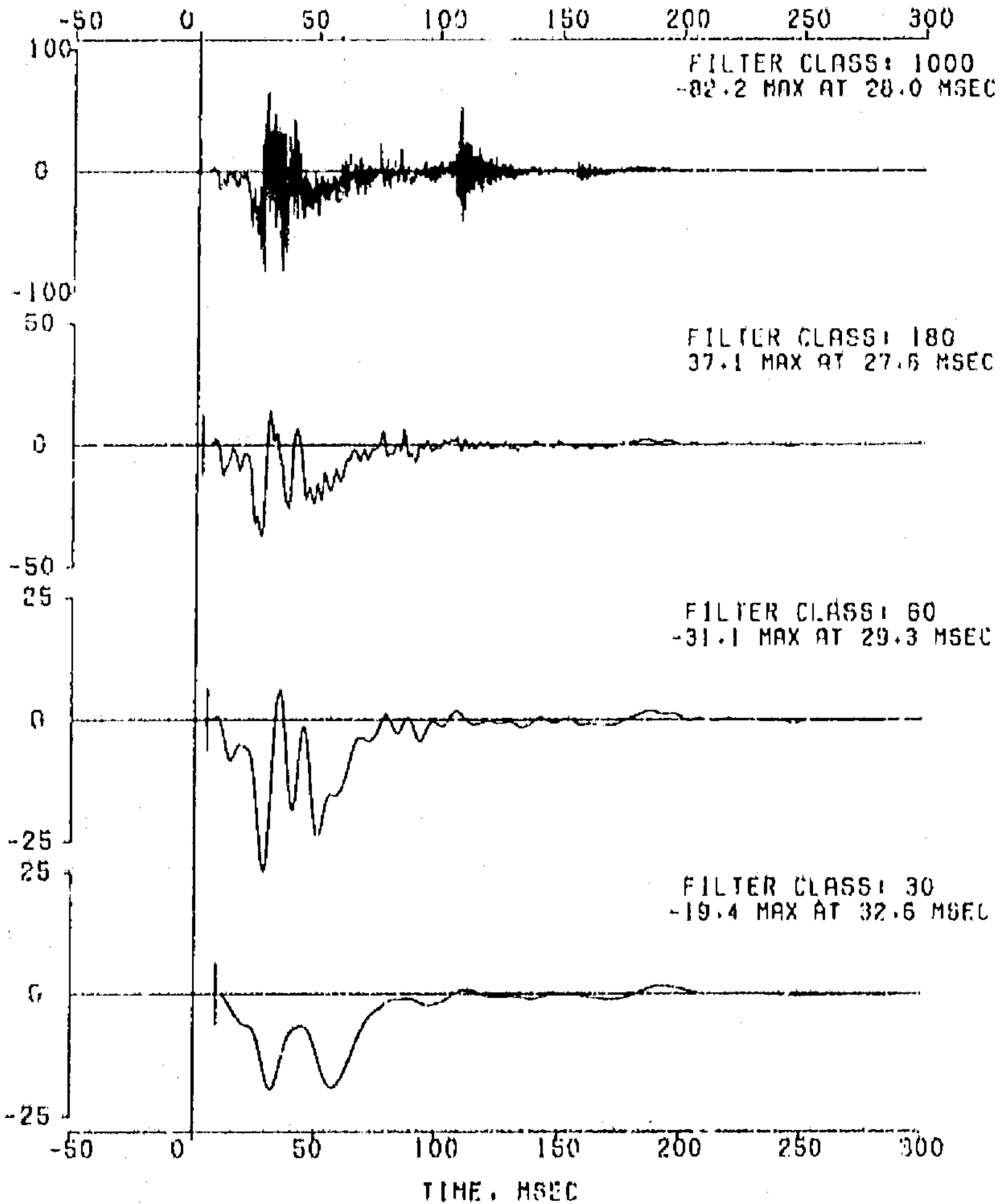
COMPUTED MPH
COMPUTED IN

VC0750E 50-MPH REAR MOVING BARRIER, KJ-J-74. ITEM KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 015 RT RAIL TRANS X/MBR Z J10648
FILTER TYPE: 00DAS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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DATA SET 04/25/998A
ERRATA 1





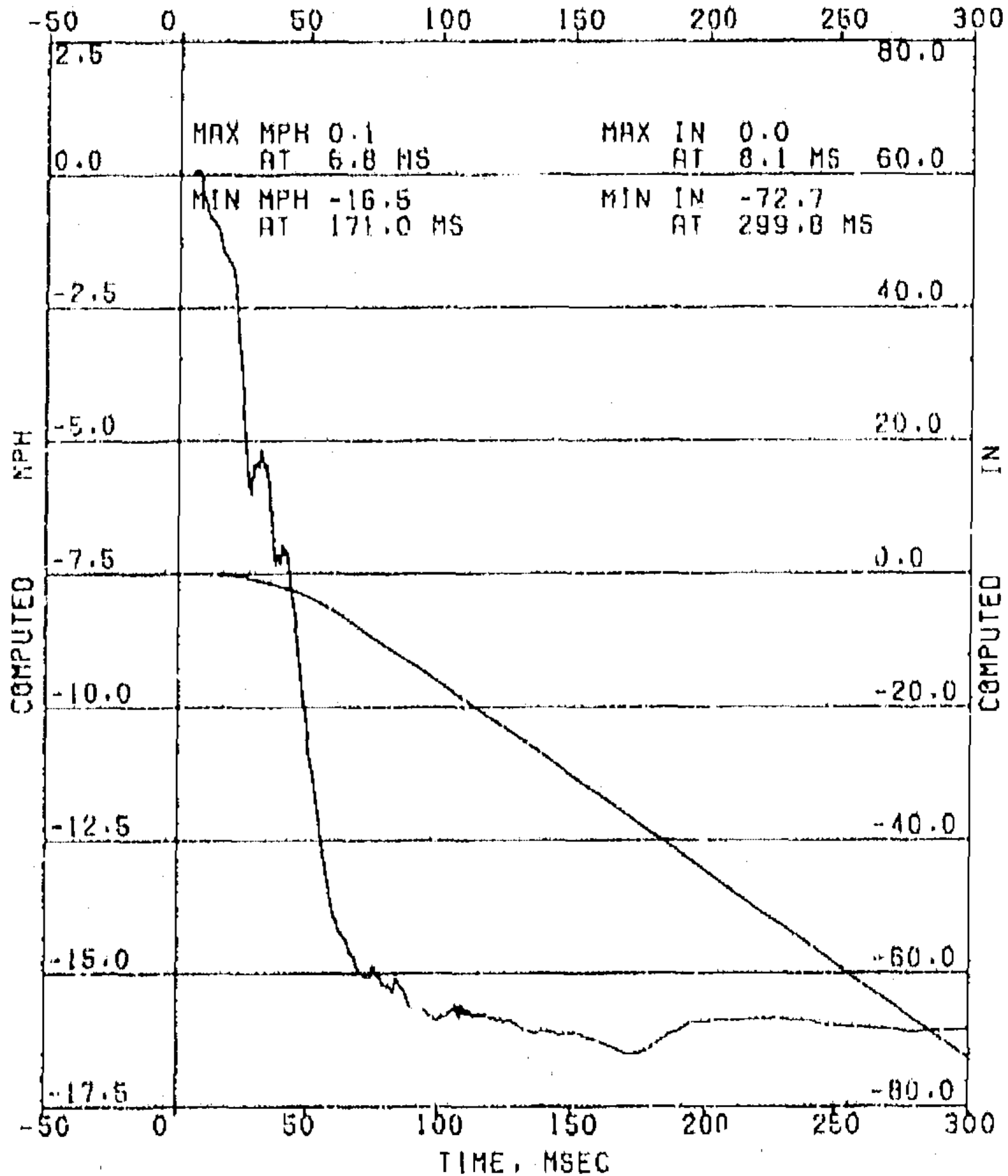
VC07606 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
 2002 MY59 301 REAR IMPACT DEVELOPMENT.
 CHANNEL 016 LT RAIL FT XMBR X J26427

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FILTER TYPE: 080AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/99BA
 ERRATA 1

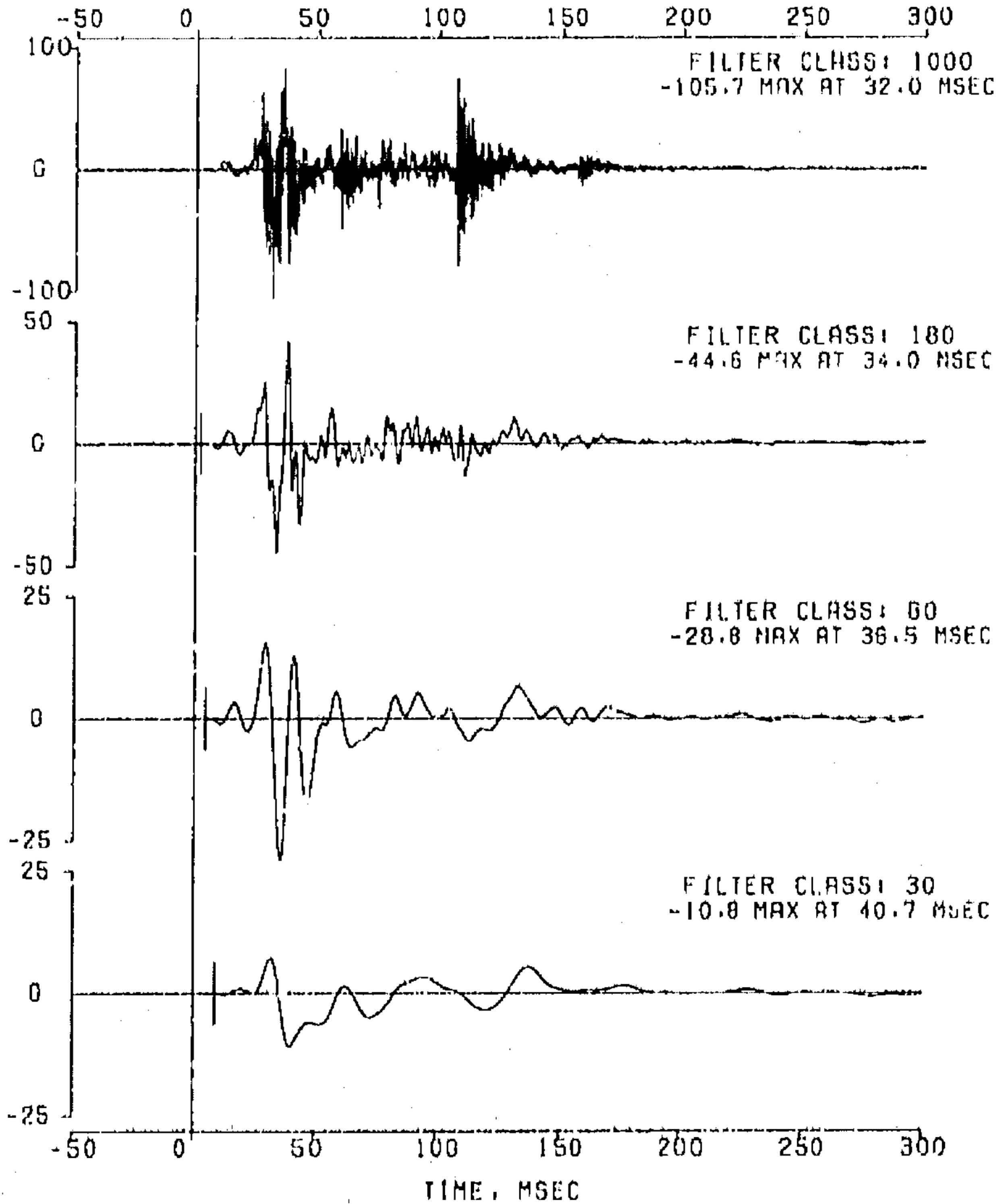


COMPUTED MPH
 COMPUTED IN

VC07606 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
2002 MY98 301 REAR IMPACT DEVELOPMENT.
CHANNEL 017 LT RAIL FT XMBR Z AP132
FILTER TYPE: OBDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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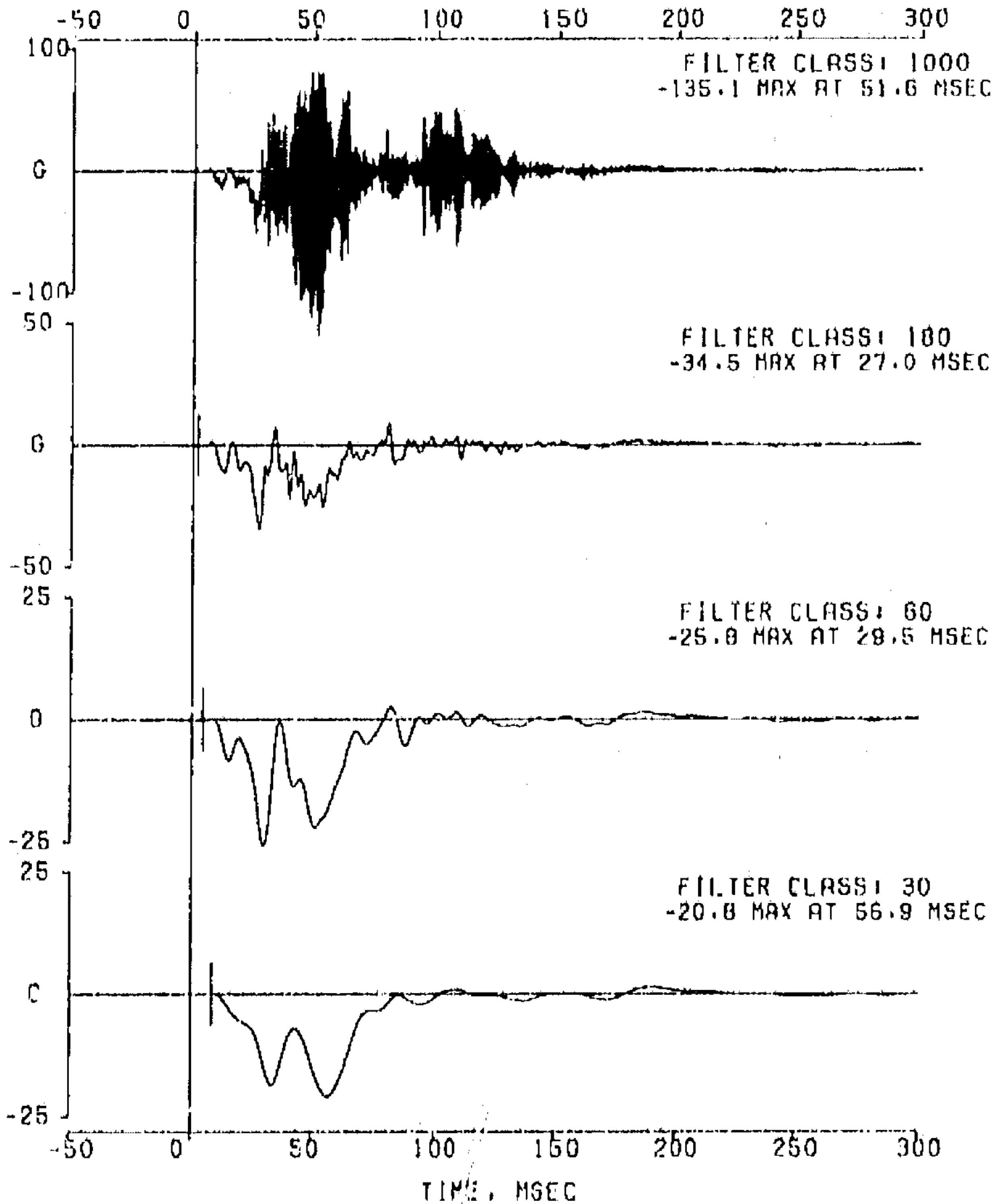
DATA SET 04/25/9900
ERRATA 1



VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3593
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 018 RT RAIL FT XMR X J20491
FILTER TYPE: QBDAS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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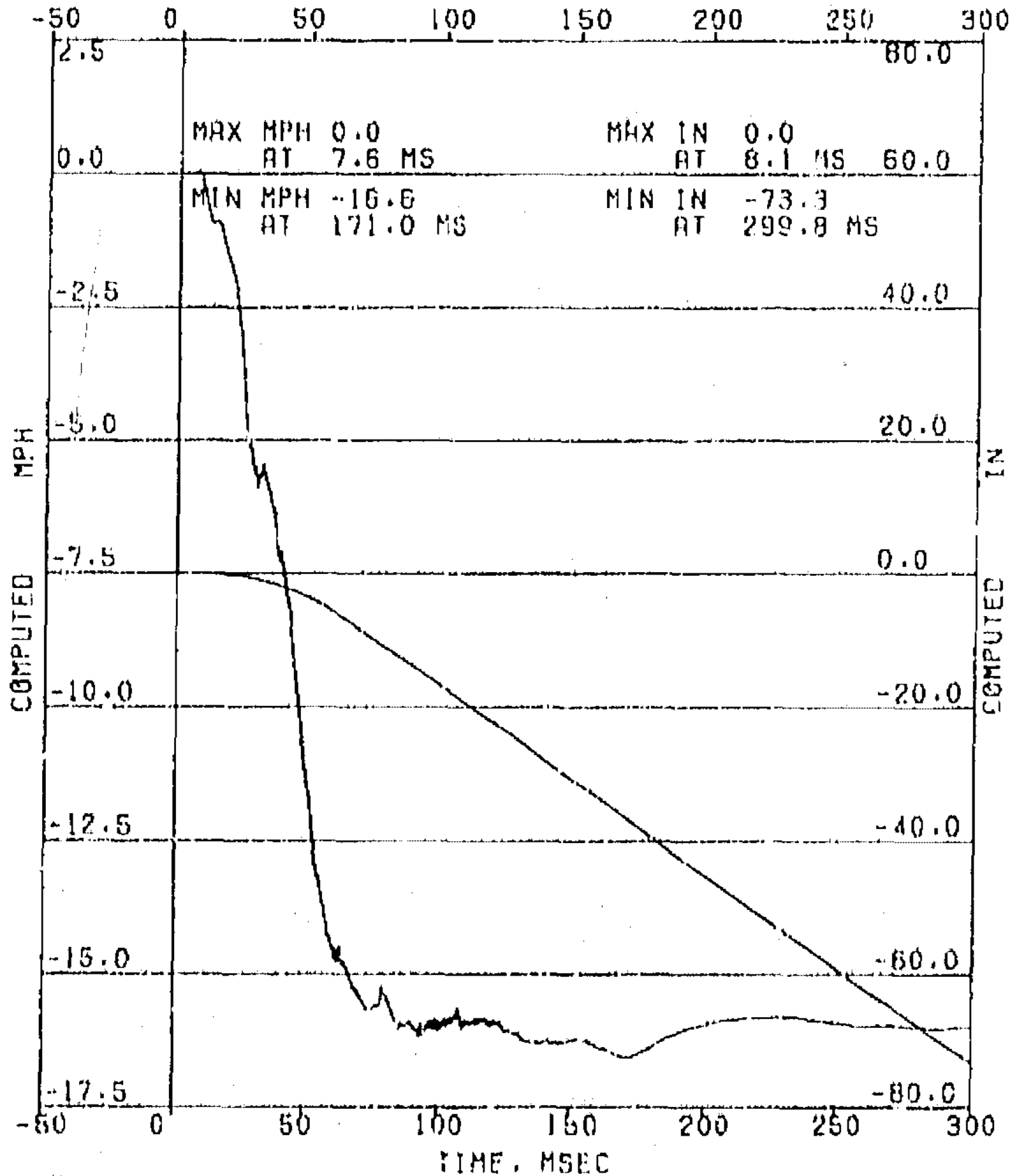
DATA SET 04/25/99BB
ERRATA 1



FILTER TYPE: UBDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER (1650)
FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

DATA SET 04/25/99B8
ERRATA 1

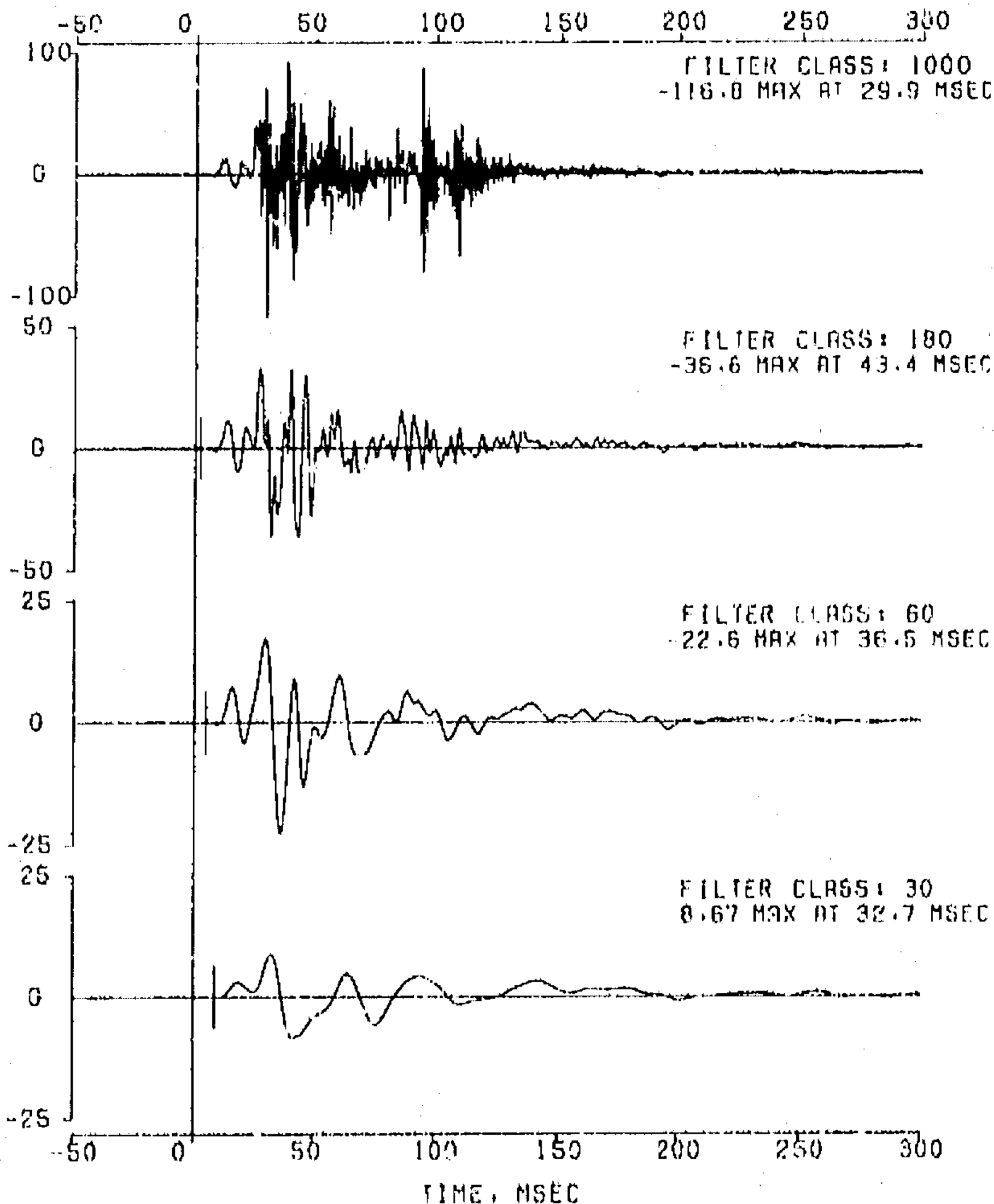


COMPUTED MPH
COMPUTED IN

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
2002 MY85 J01 REAR IMPACT DEVELOPMENT,
CHANNEL 019 RT RAIL FT XMBR Z A71P1
FILTER TYPE: 0000S-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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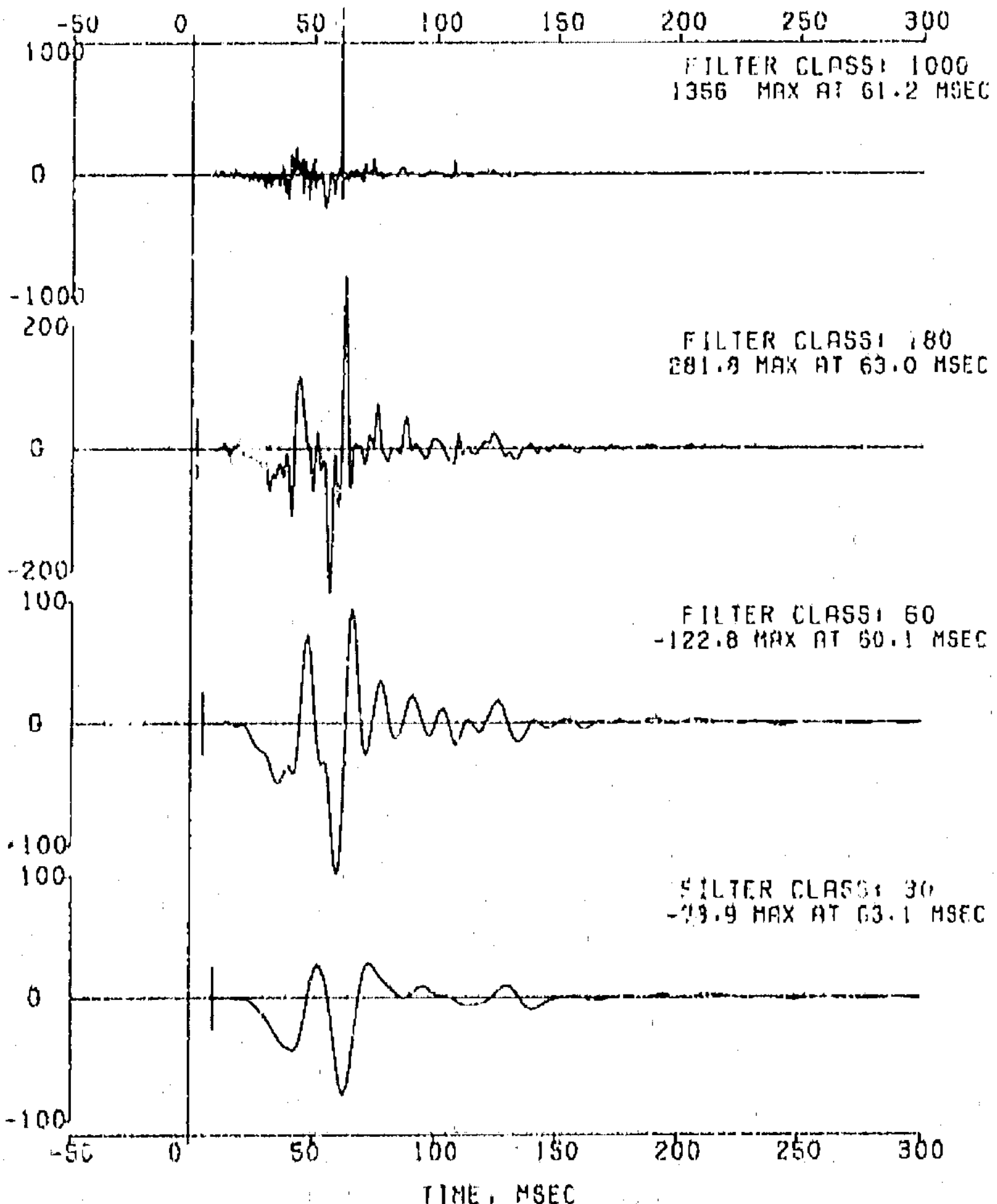
DATA SET 04/25/99BB
ERRATA 1



VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3569
 2002 MYSS 301 REAR IMPACT DEVELOPMENT.
 CHANNEL 020 FUEL TANK FT FACE X A14363
 FILTER TYPE: GBOAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

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DATA SET 04/25/99BB
 ERRATA 1

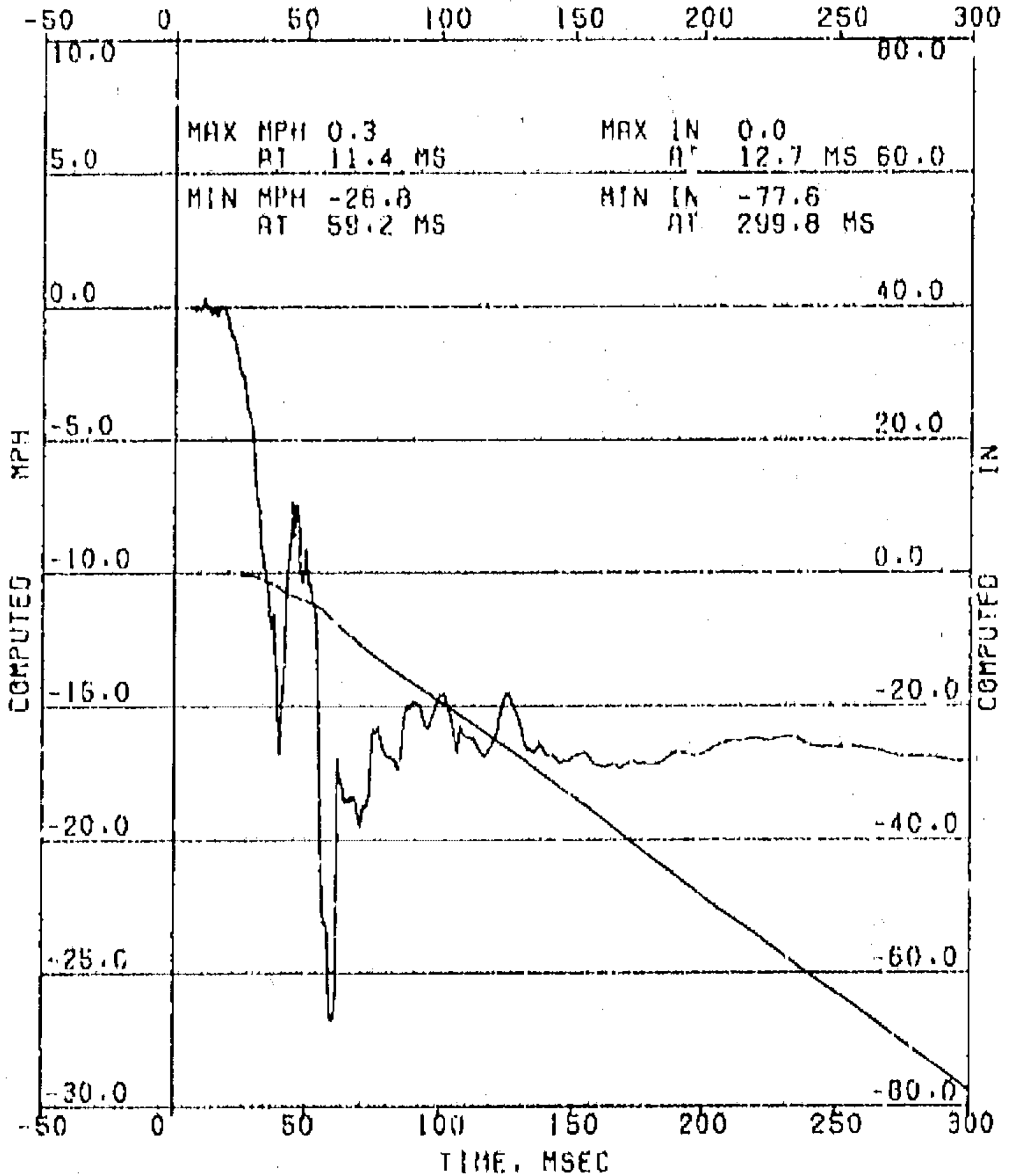


CAUTION
 CHL 20 FUEL TANK FT FACE X A14363 IS SATURATED AT 61.0 MSEC
 61.2 MSEC

FILTER TYPE: 08085-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

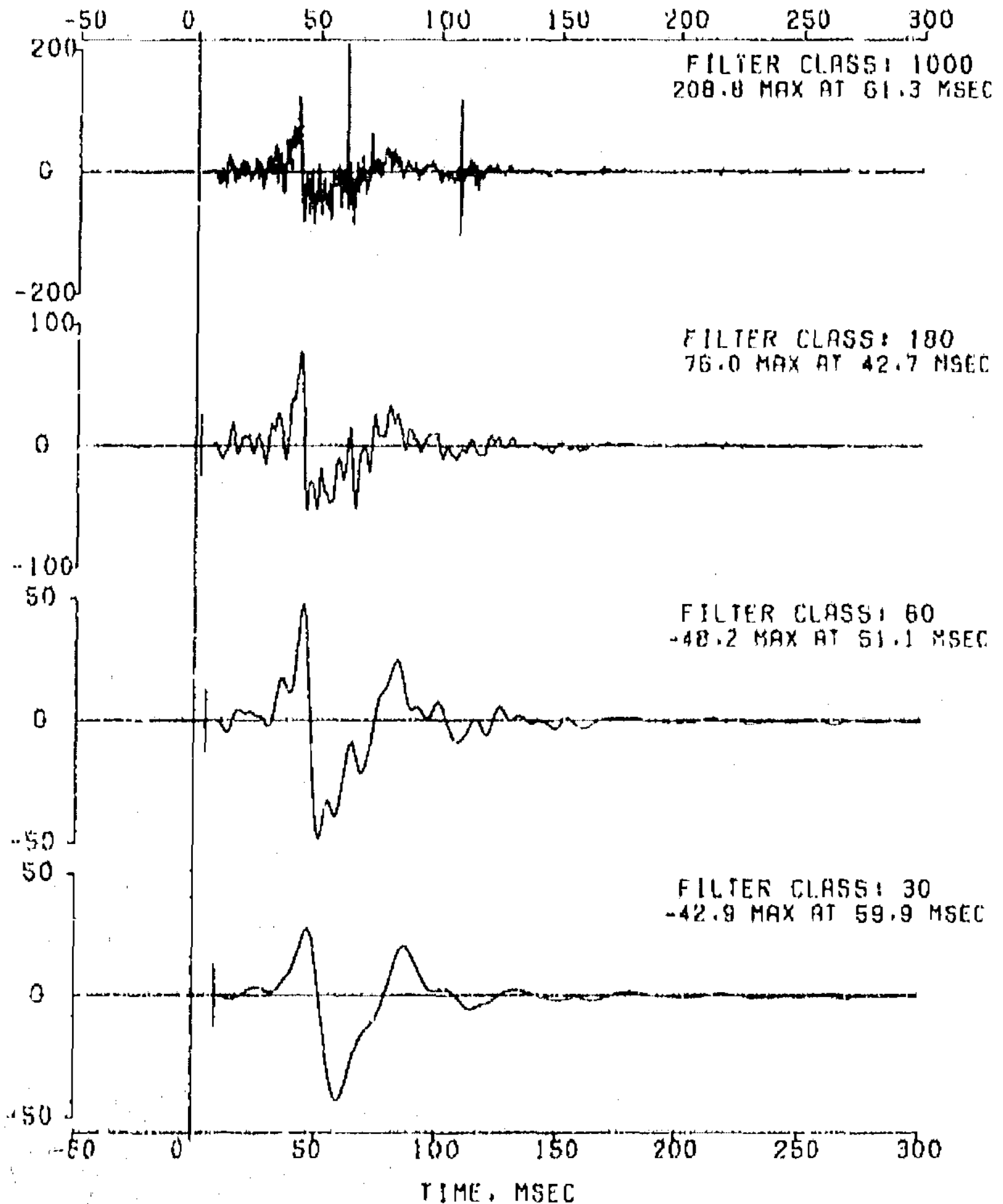
IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/99BB
 ERRATA 1



CAUTION
 CHL 20 FUEL TANK FT FACE X R14363 IS SATURATED AT MAX
 61.0
 61.2

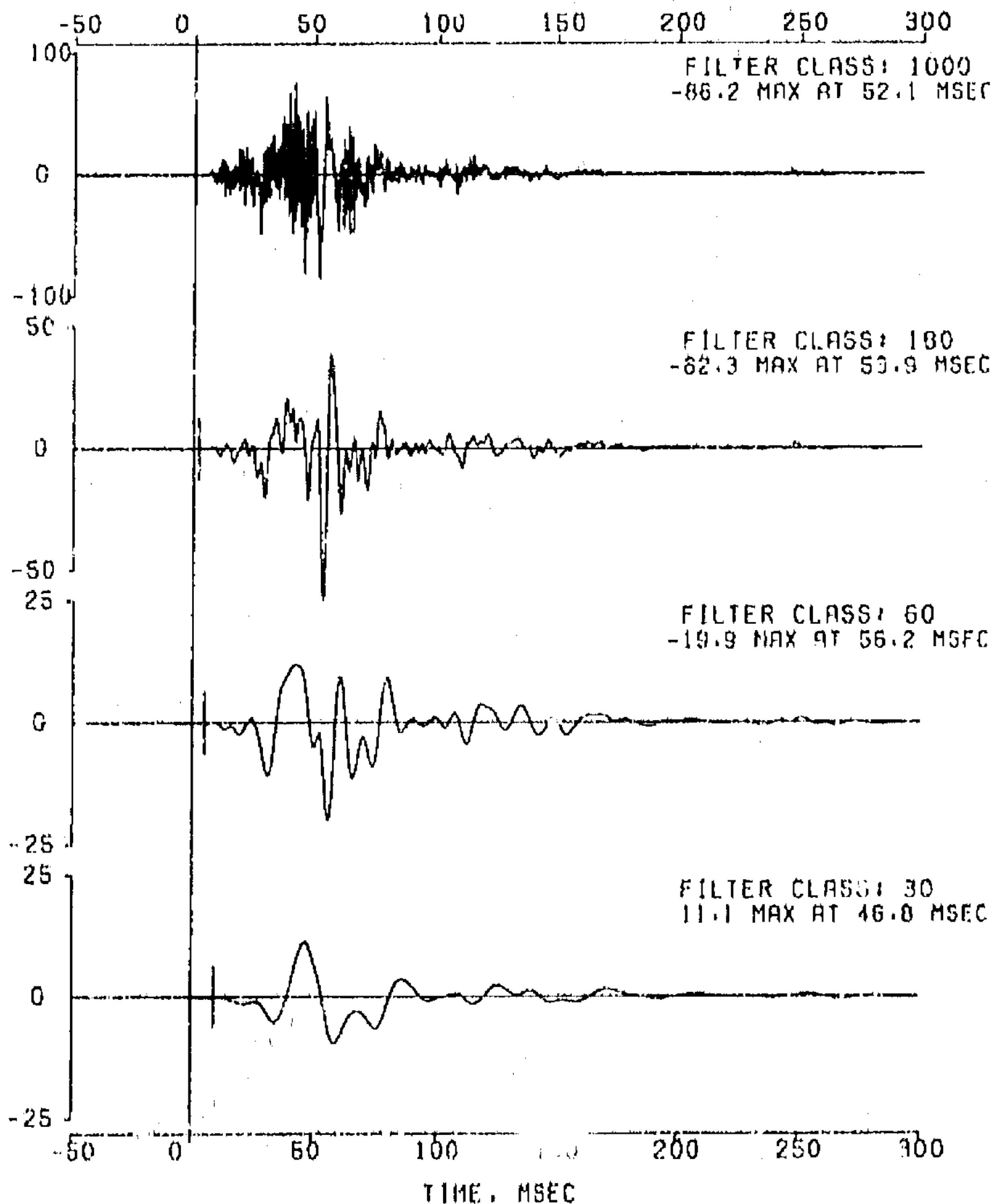
COMPUTED MPH
 COMPUTED IN

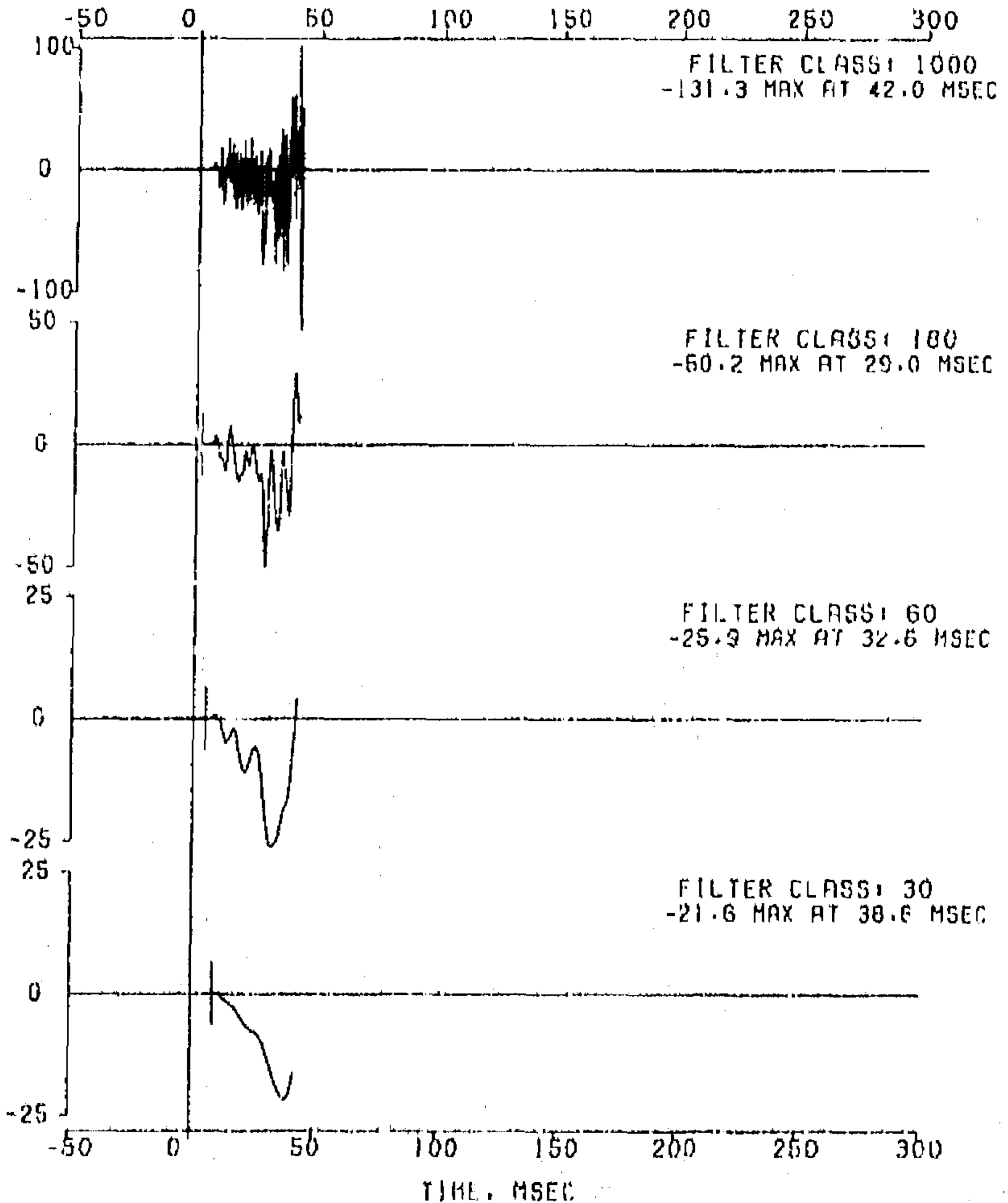


VC07606 30-MPH REAR MOVING BARRIER. KJ-J-74. ITEM KJ3599
2002 MVSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 022 FUEL TANK FT FACE Z A15027
FILTER TYPE: 00DAS-111 RESPONSE CORRECTION. CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 25, 1999

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DATA SET 04/25/99BB
ERRATA 1



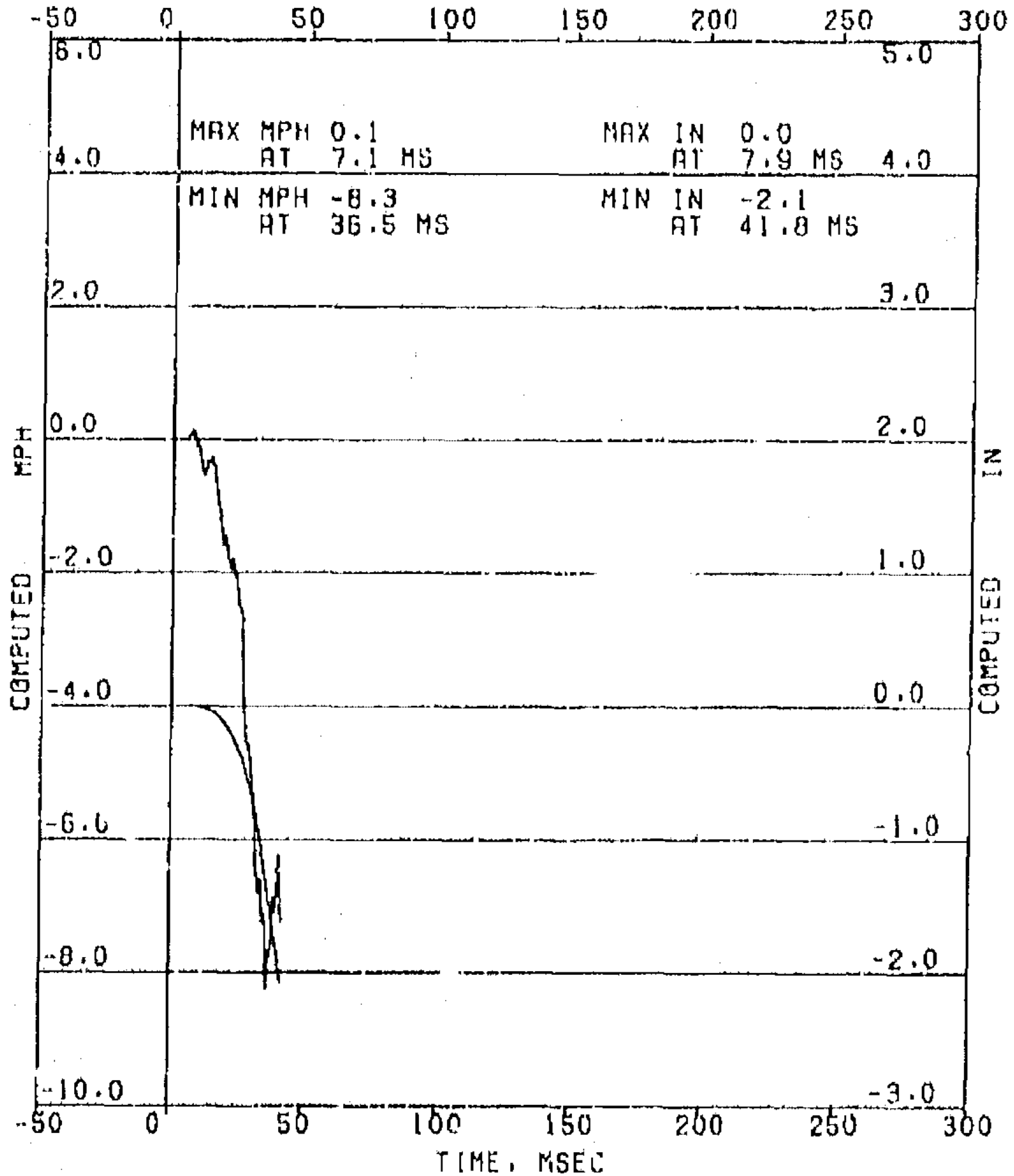


***** CAUTION *****
 ***** INST. MALFUNCTION AFTER 42.0 MS *****

FILTER TYPE: 080AS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/99BB
 ERRATA 1



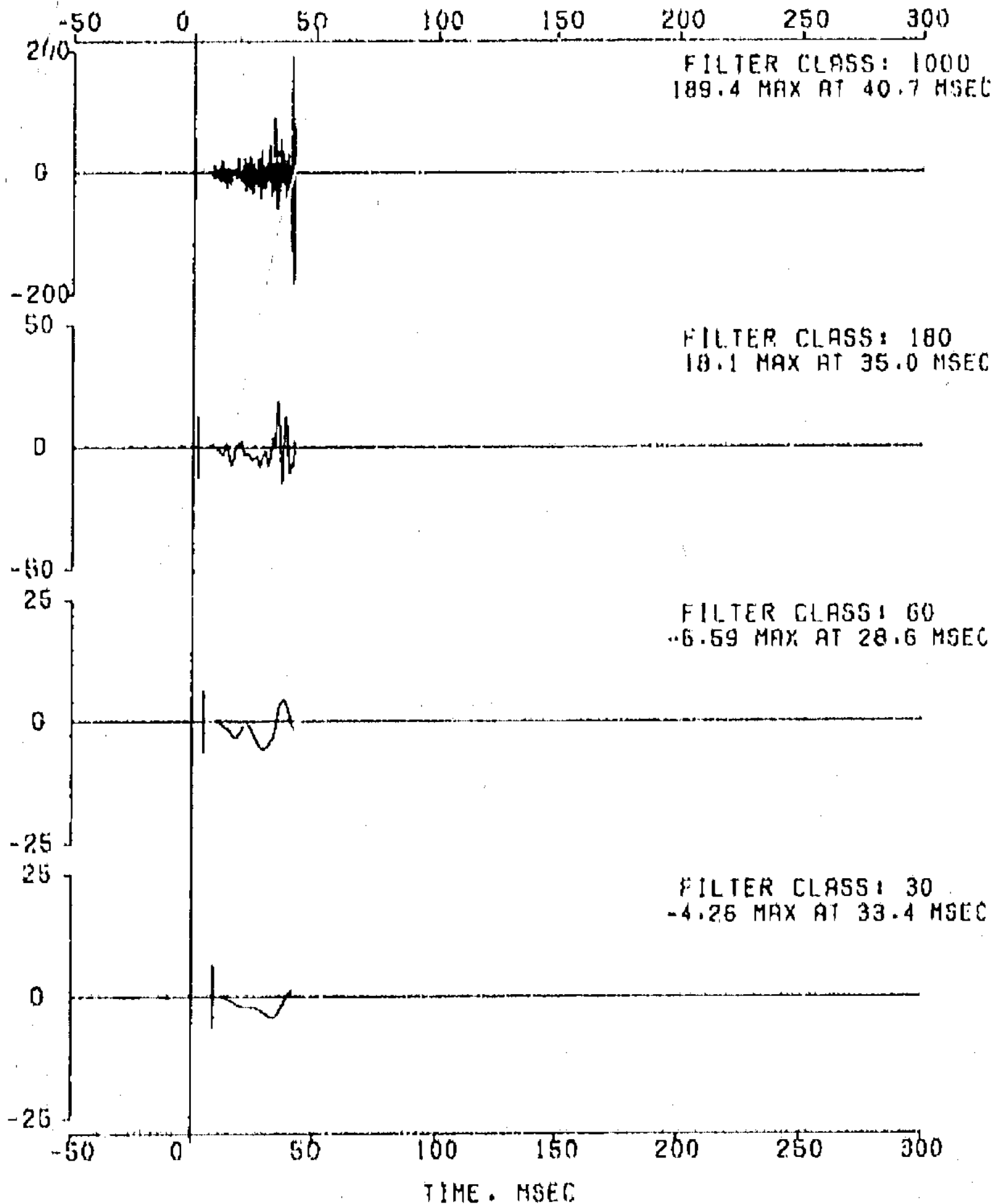
CAUTION
 INST. MALFUNCTION AFTER 42.0 MS

COMPUTED MPH
 COMPUTED IN

VC07006 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3509
2002 MY30 301 REAR IMPACT DEVELOPMENT.
CHANNEL 024 FUEL TANK BTM Y A14275
FILTER TYPE: 0BDR6-1" RESPONSE CORRECTION; CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 23, 1999

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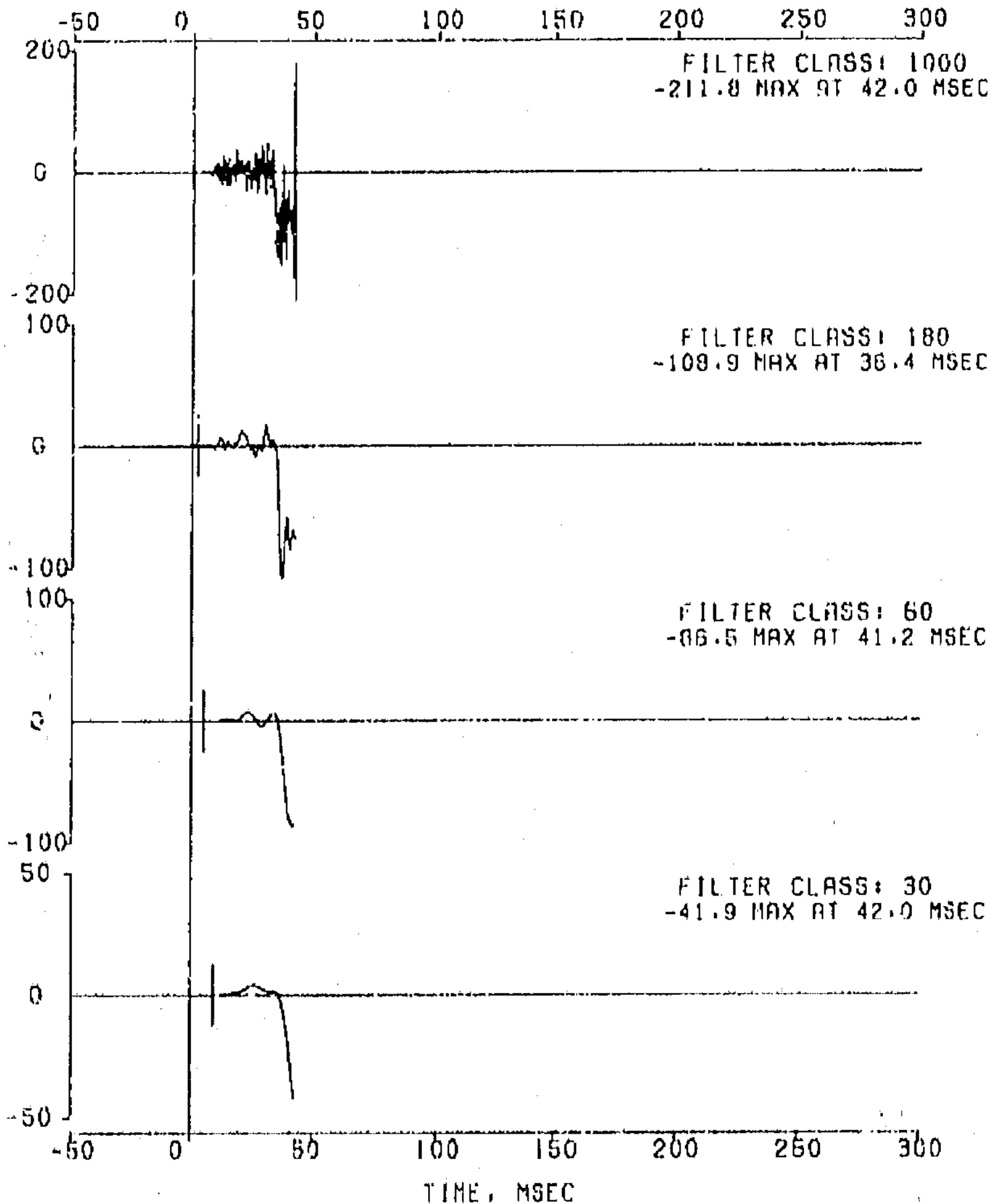
DATA SET 04/25/9980
ERRATA



***** CAUTION *****
***** INST. MALFUNCTION AFTER 42.0 MS *****

VC07508 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
 2007 MYSS 301 REAR IMPACT DEVELOPMENT.
 CHANNEL 025 FUEL TANK DTN 7 815009
 FILTER TYPE: OBDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER (1650)
 IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/99AB
 ERRATA 1

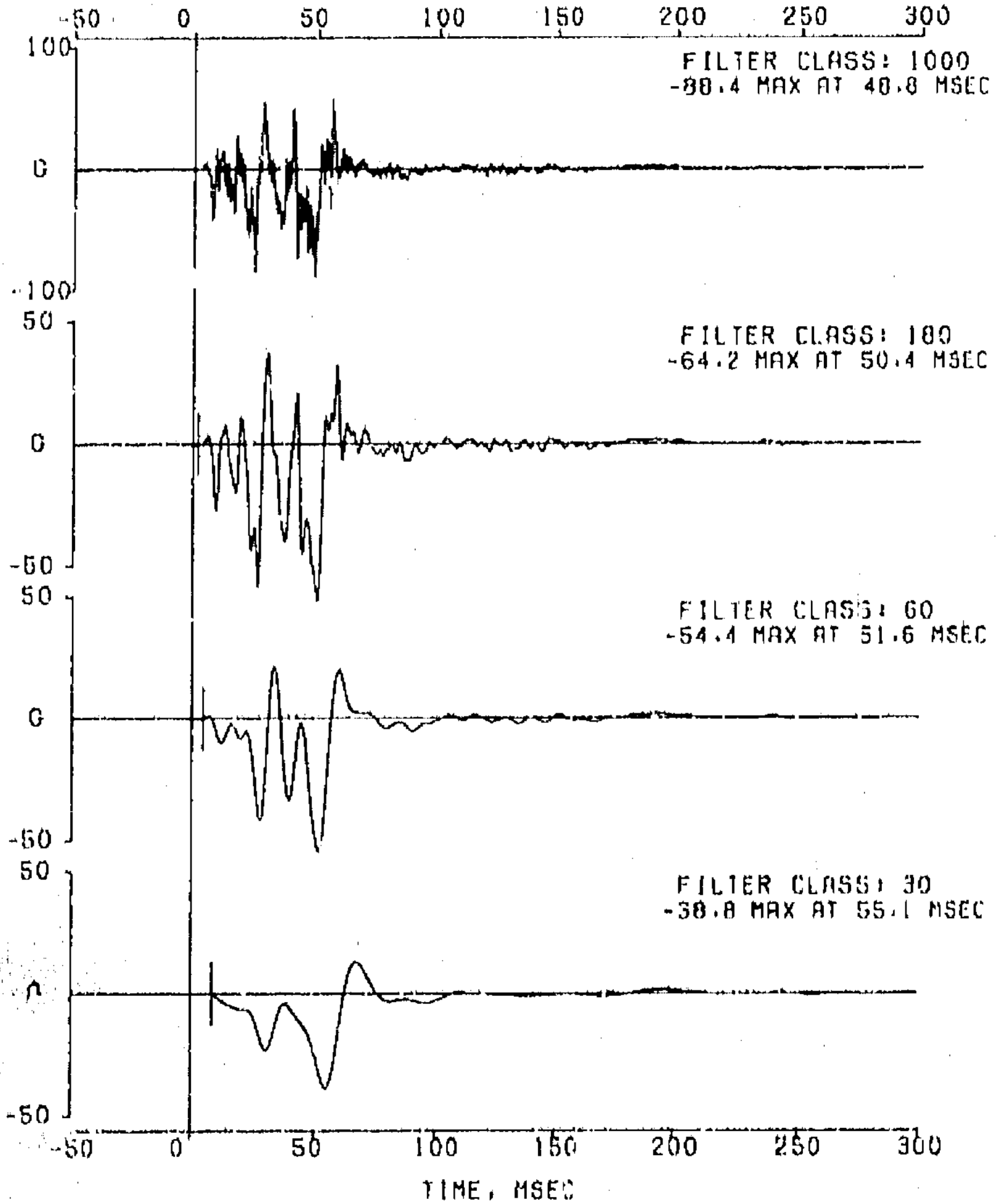


CAUTION
 INGC. MALFUNCTION AFTER 42.0 MS

VC07500 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
2002 HYSS 301 REAR IMPACT DEVELOPMENT,
CHANNEL 026 FUEL TANK RL PASS-THRU A14442
FILTER TYPE: 0BDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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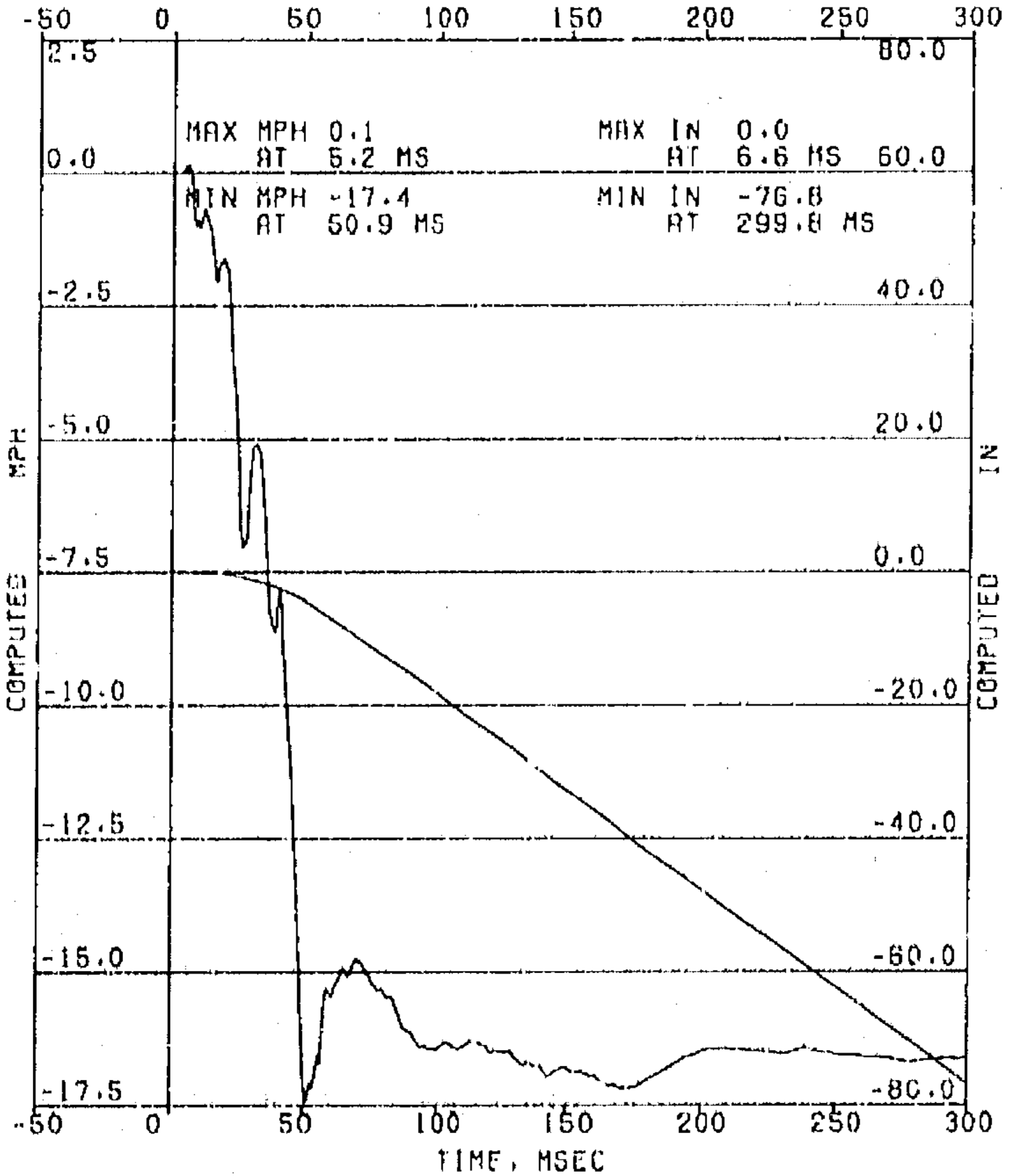
DATA SET 04/25/99BB
ERRATA 1



FILTER TYPE: 080A5-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

DATA SET 04/25/9988
ERRATA 1

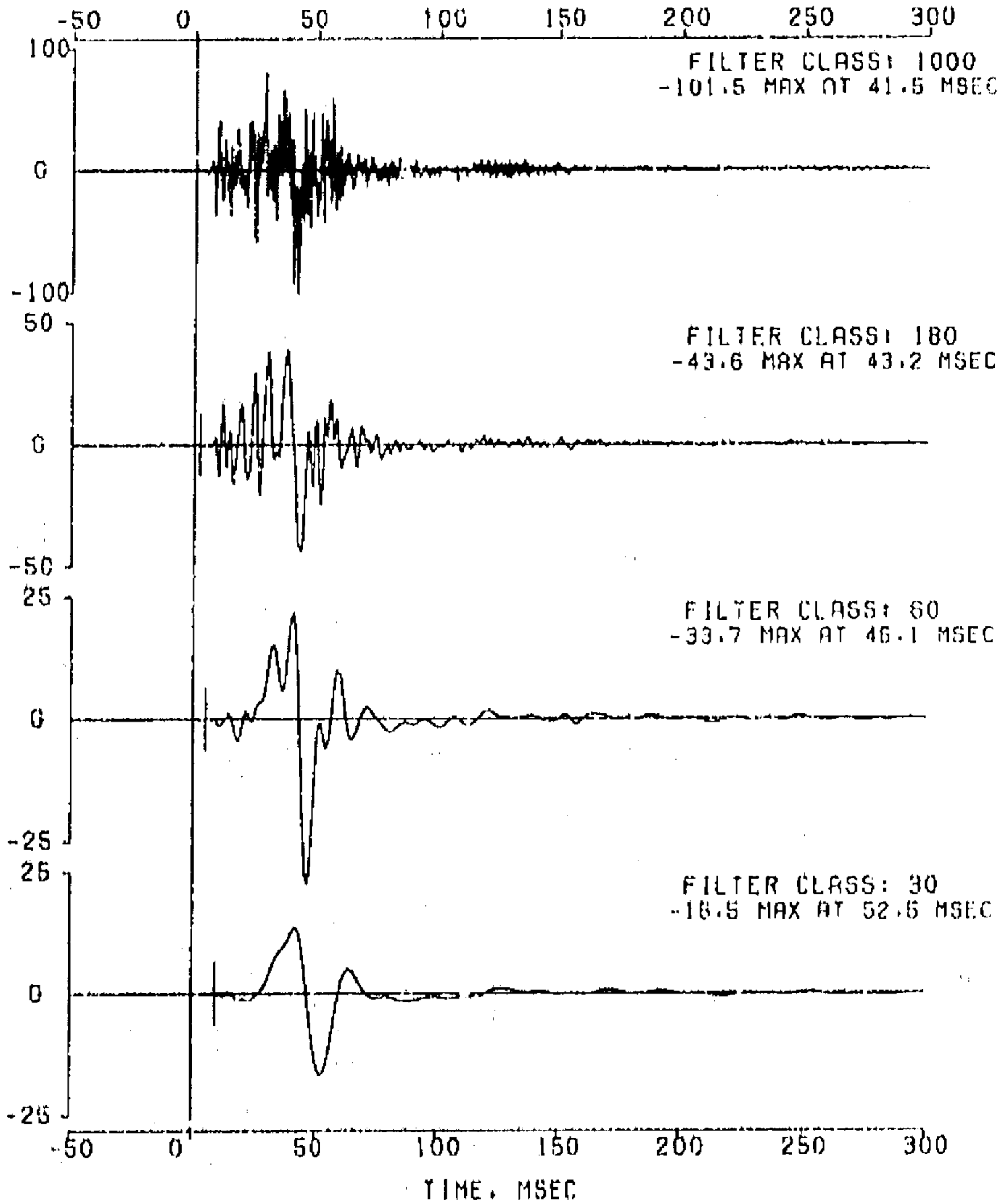


COMPUTED MPH
COMPUTED IN

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3509
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 027 FUEL TANK RL PASS-THRU B15537
FILTER TYPE: 08085-111 RESPONSE CORRECTION, CLASS 1000 FILTER: 16501
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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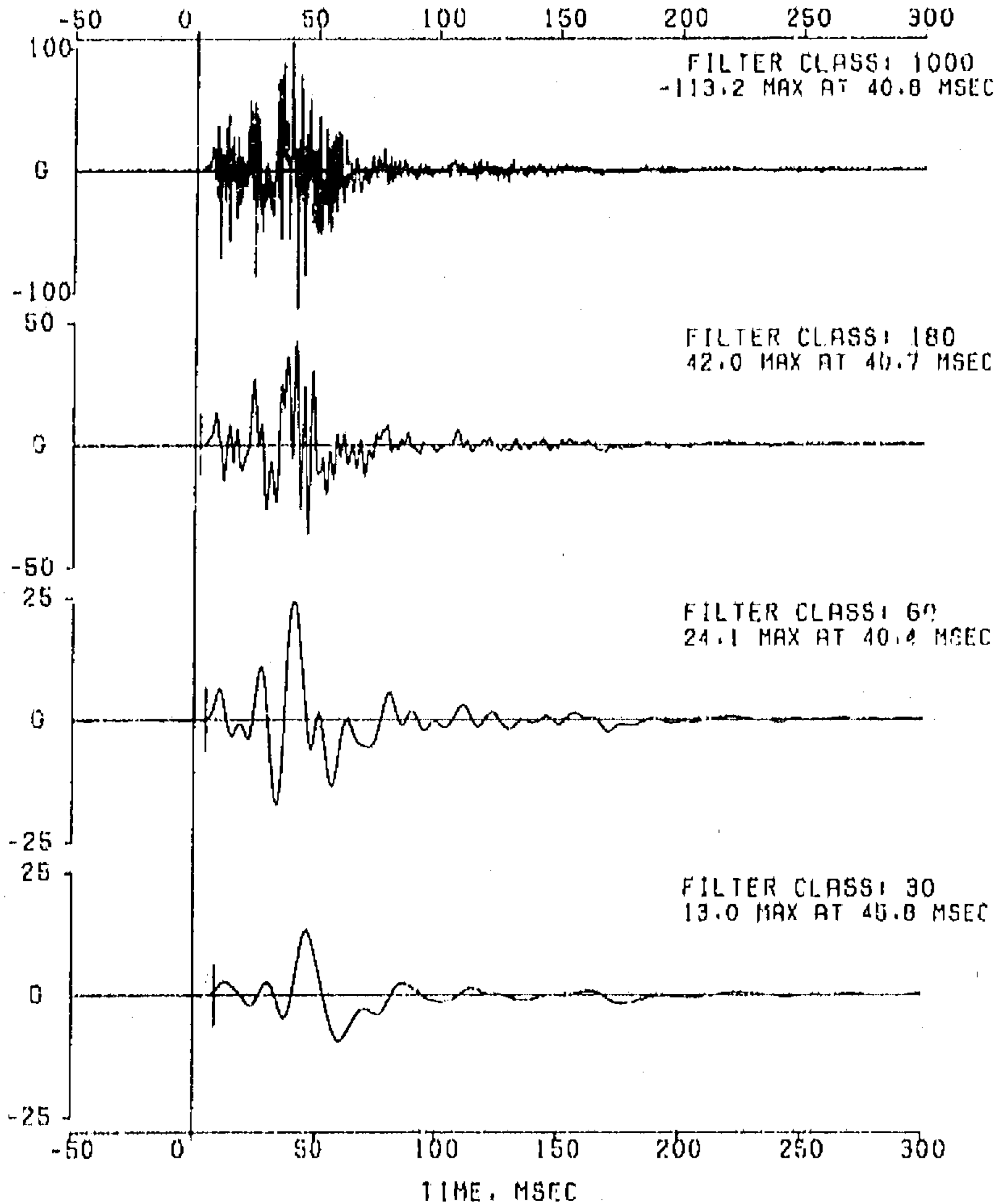
DATA SET 04/25/9988
ERRATA 1



VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74. ITEM KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 028 FUEL TANK KL PASS-THRUZ A12987A
FILTER TYPE: 0B0NS-111 RESPONSE CORRECTION, CLASS 1000 FILTER 6501
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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DATA SET 04.25/99BB
ERRATA 1

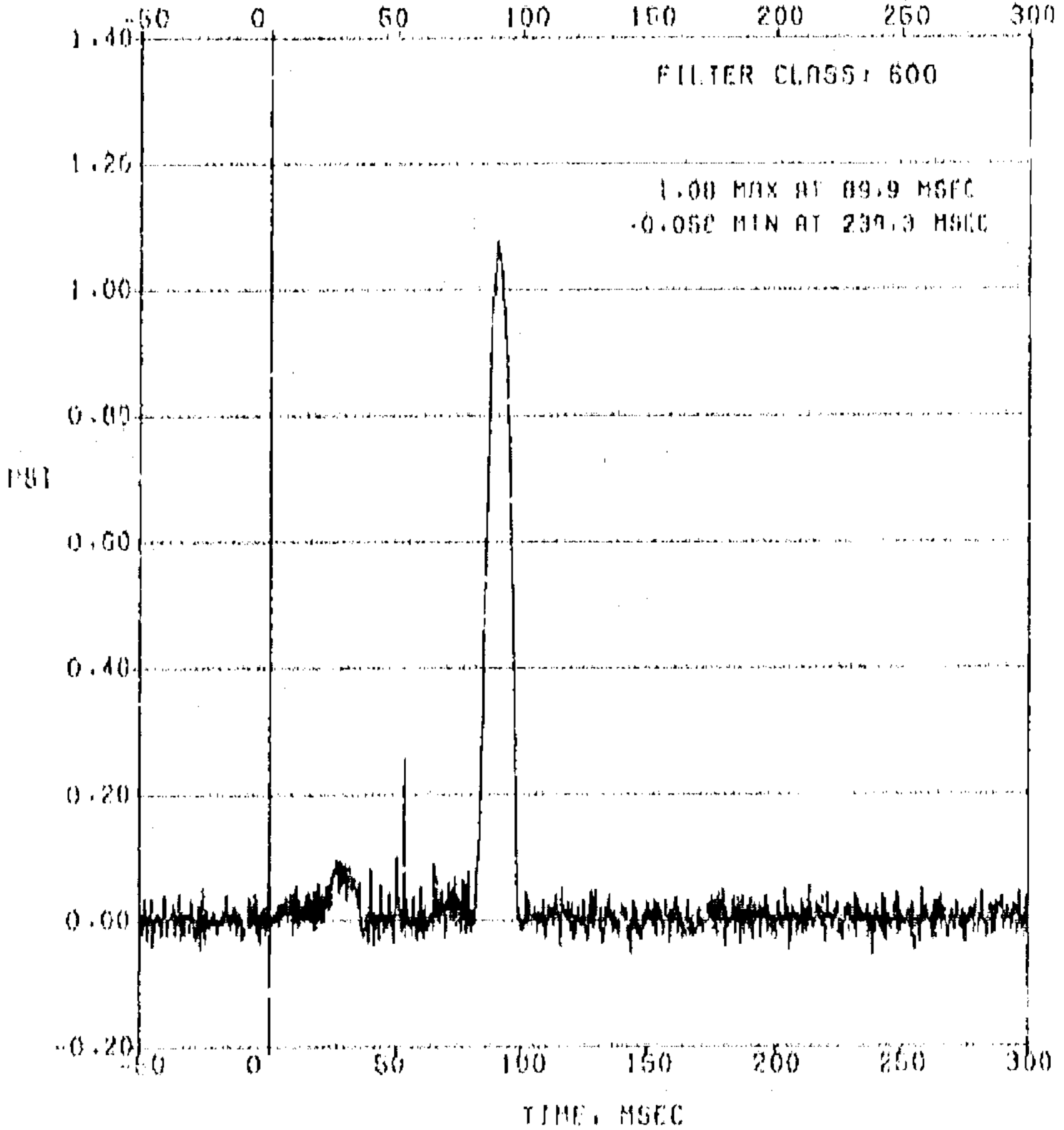


VC07508 30-MPH REAR MOVING BARRIER, KJ-0-74, (TEN KJ0060)
2002 MVSS 301 REAR IMPACT DEVELOPMENT.

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CHANNEL 029 FUEL TANK PRESS PSI EE

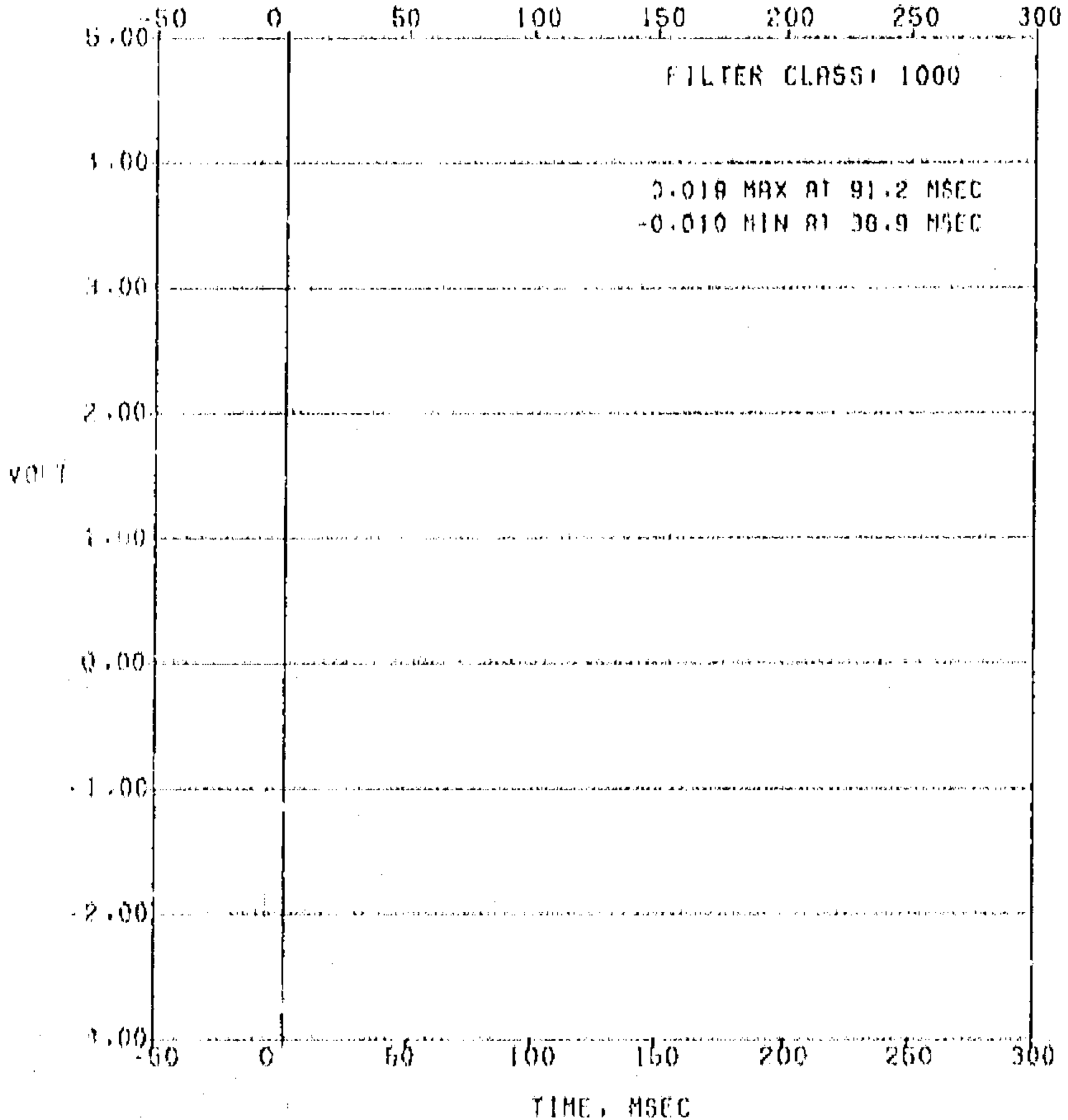
FILTER TYPE: 08003-111 RESPONSE CORRECTION, CLASS 600 FILTER(1000)
IMPACT ANALYSIS DEPT. 5320 DATA SET 04/25/9909
APR 26, 1999 ERRATA 1



CHANNEL 030 0A8 SQ110 PRI

EE

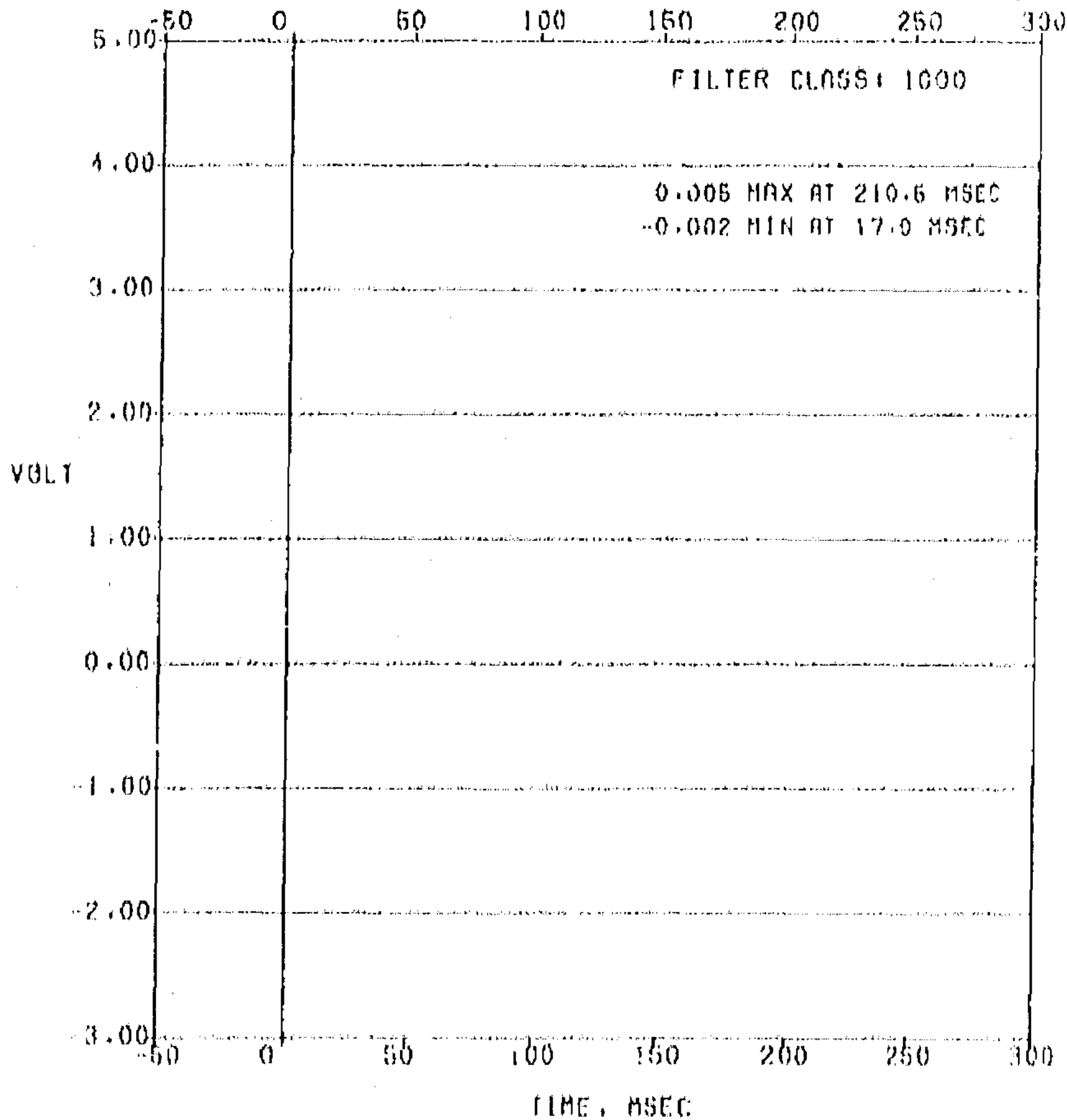
FILTER TYPE: 000AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1680)
IMPACT ANALYSIS DEPT. 5320 DATA SET 04/25/99BB
APR 26, 1999 ERRATA 1



RENDERING... NOTE... NO EVENT

CHANNEL 031 DAS SQUIB SEC-2, EE

FILTER TYPE: OBDAS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 6320 DATA SET 04/25/99BB
APR 26, 1999 ERRATA 1

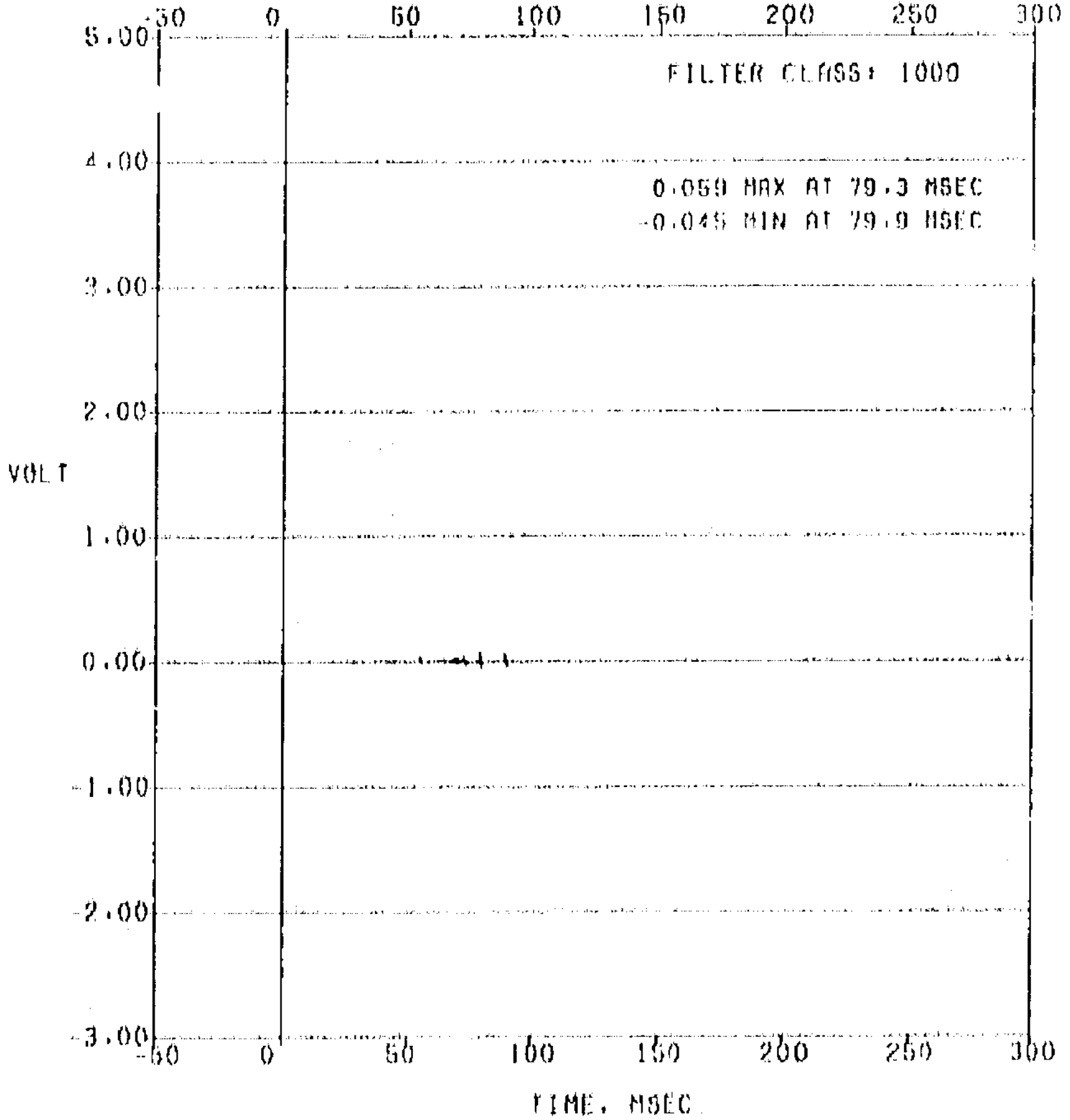


***** NOTE *****
***** NO EVENT *****

CHANNEL 032 PAB 50118 PRI

EE

FILTER TYPE: 00005-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320 DATA SET 04/25/9800
APR 26, 1999 ERRATA 1

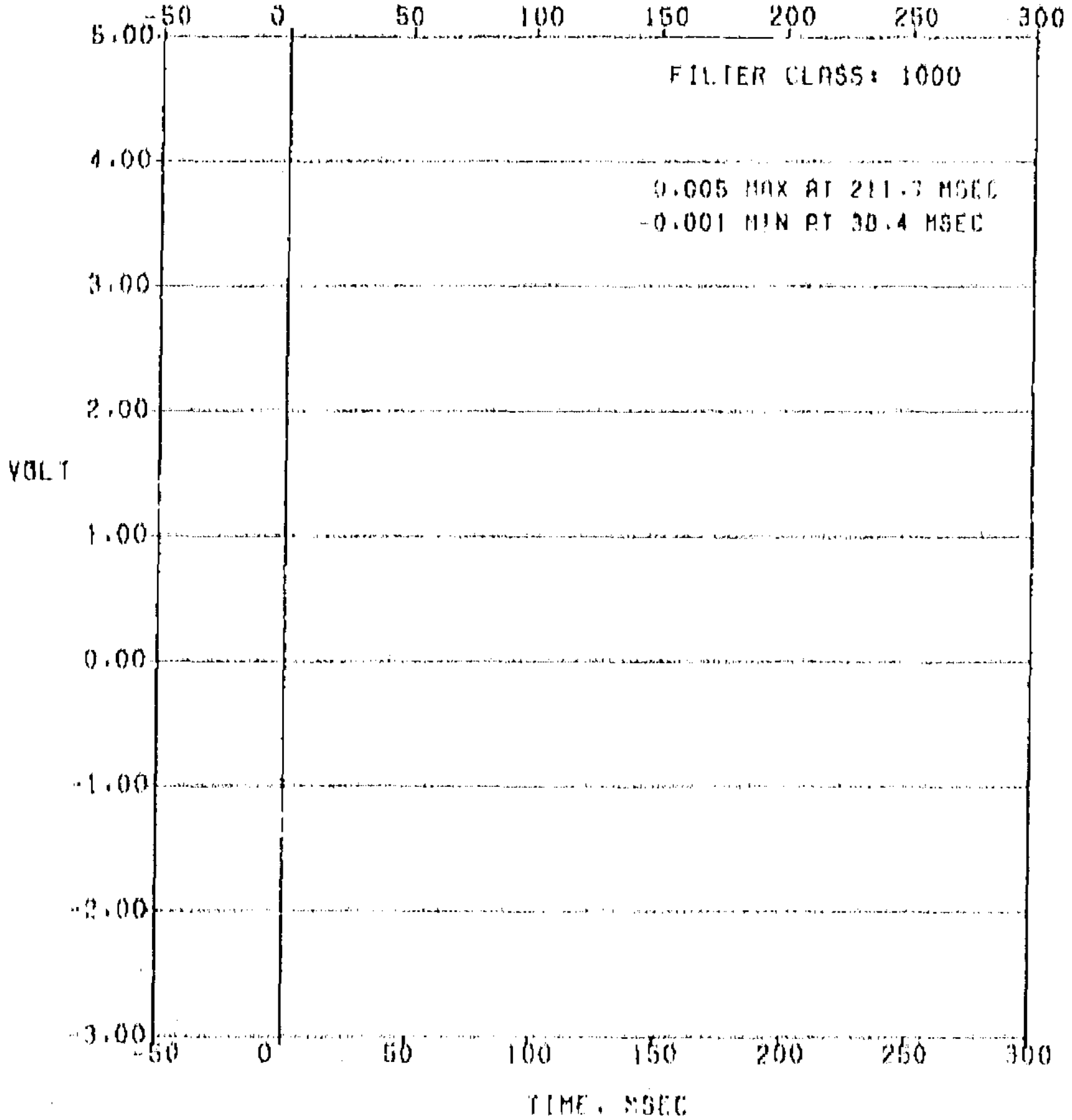


NOTE: NO EVENT

CHANNEL 033 PAB SQUIB SEC-2

EE

FILTER TYPE: 080A3-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320 DATA SET 04/26/9900
APR 26, 1999 ERRATA 1

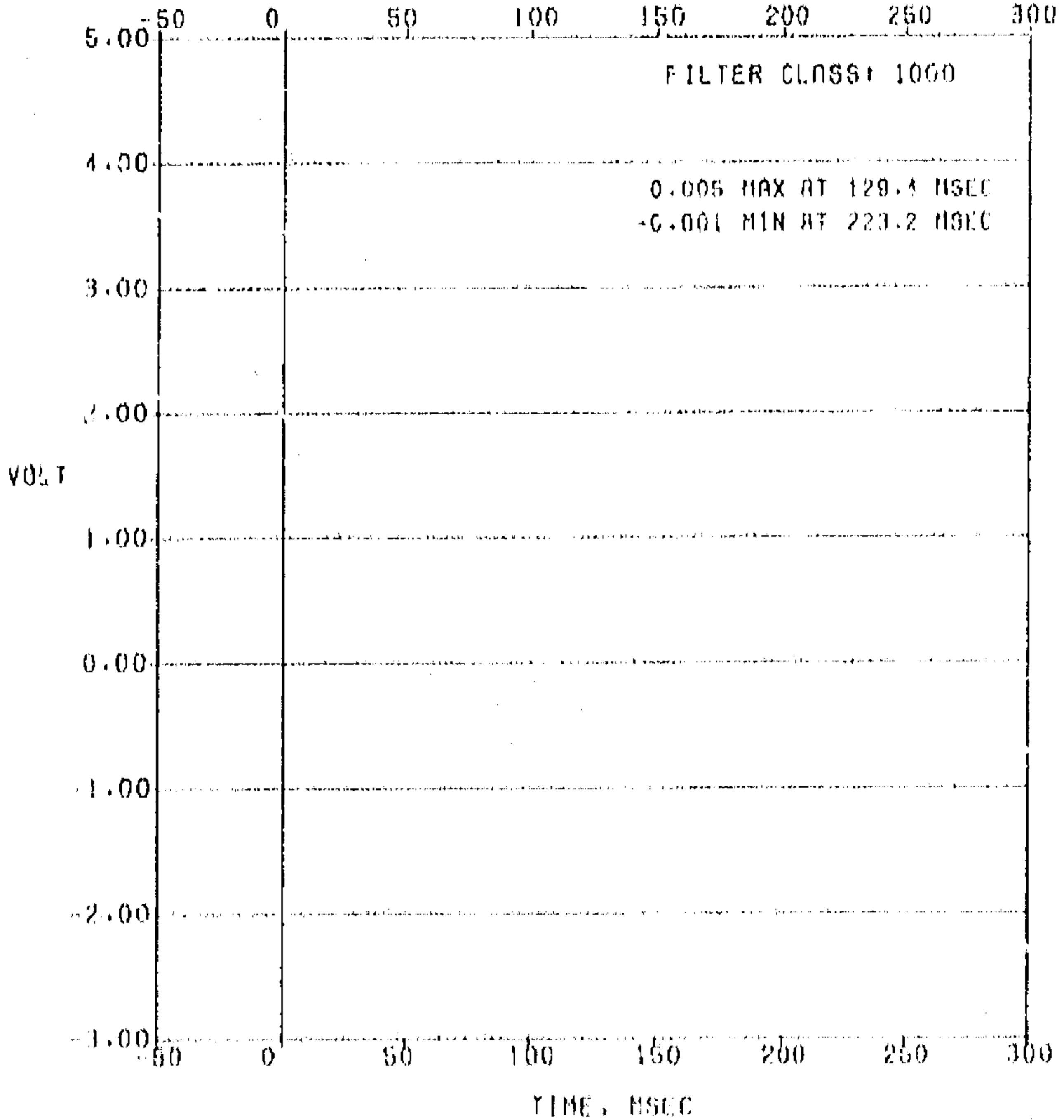


NOTE: NO EVENT

CHANNEL 034 OR PRETEN SQUIB

EE

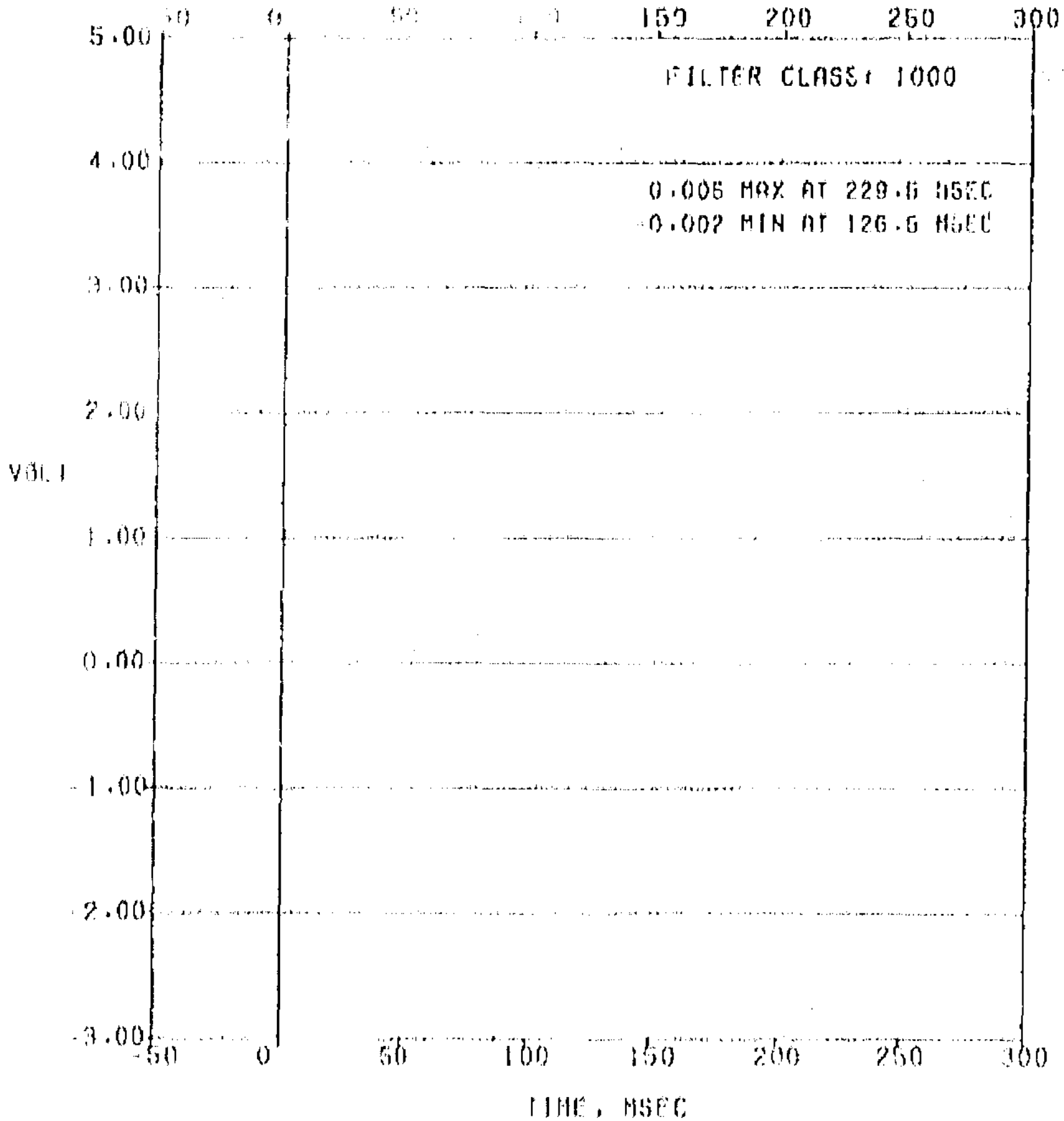
FILTER TYPE: (MBOAS-111) RESPONSE CORRECTION, CLASS 1000 FILTER (1650)
IMPACT ANALYSIS DEPT 9320 DATA SET 04/25/9900
APR 26, 1999 ERRATA 1



NOTE #####
NO EVENT

CHANNEL 035 PS PRETEN SQUIB EE

FILTER TYPE: UBOAG-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1060)
IMPACT ANALYSIS DEPT. 5320 DATA SET 04/25/990C
04/26/1999 ERRATA 1

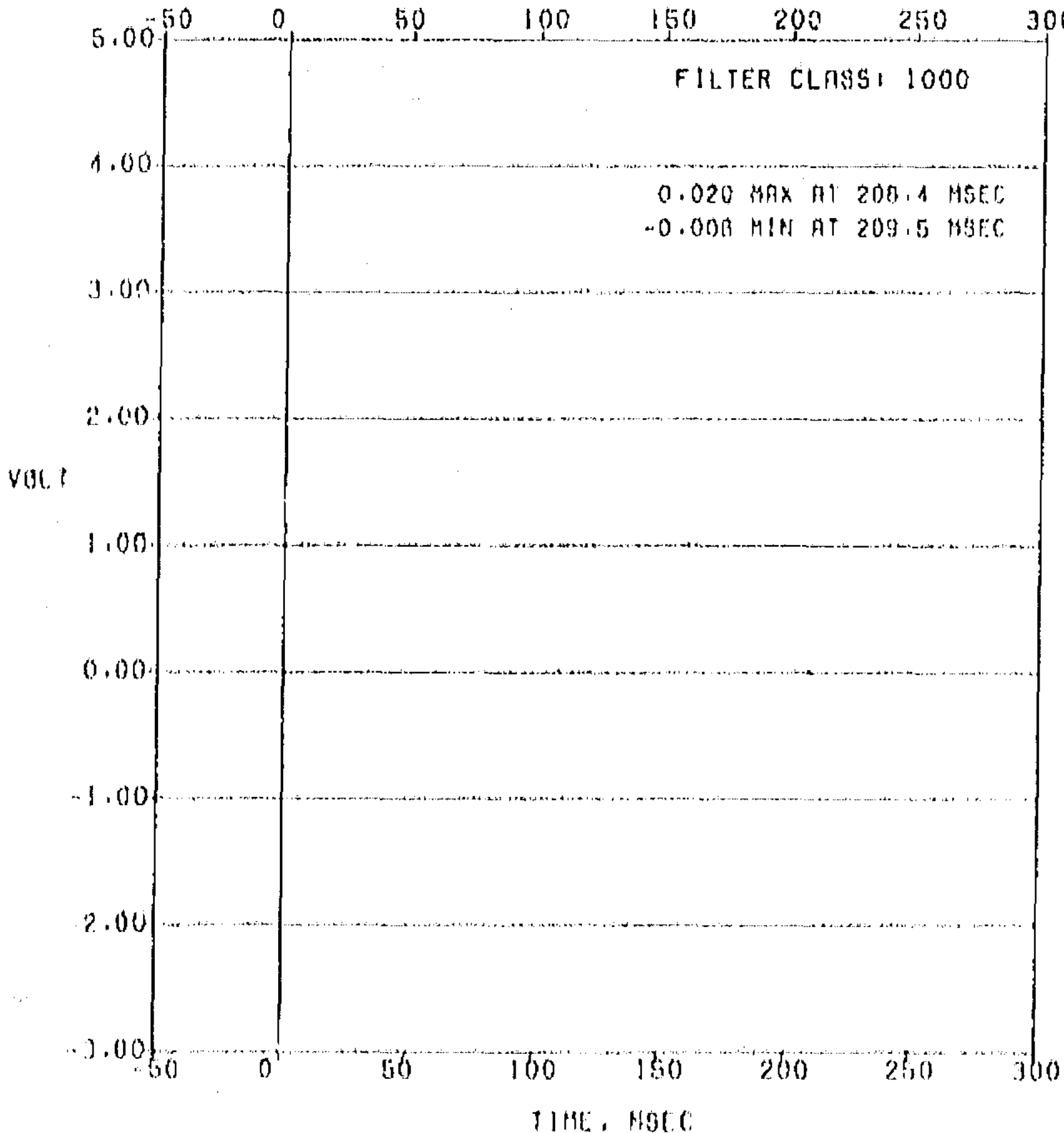


***** NOTE *****
***** NO EVENT *****

CHANNEL 035 ORC SAFINO SEN

EE

FILTER TYPE: 080AS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1850)
IMPACT ANALYSIS DEPT. 5320 DATA SET 04/25/99BC
APR 26, 1999 ERRATA 1

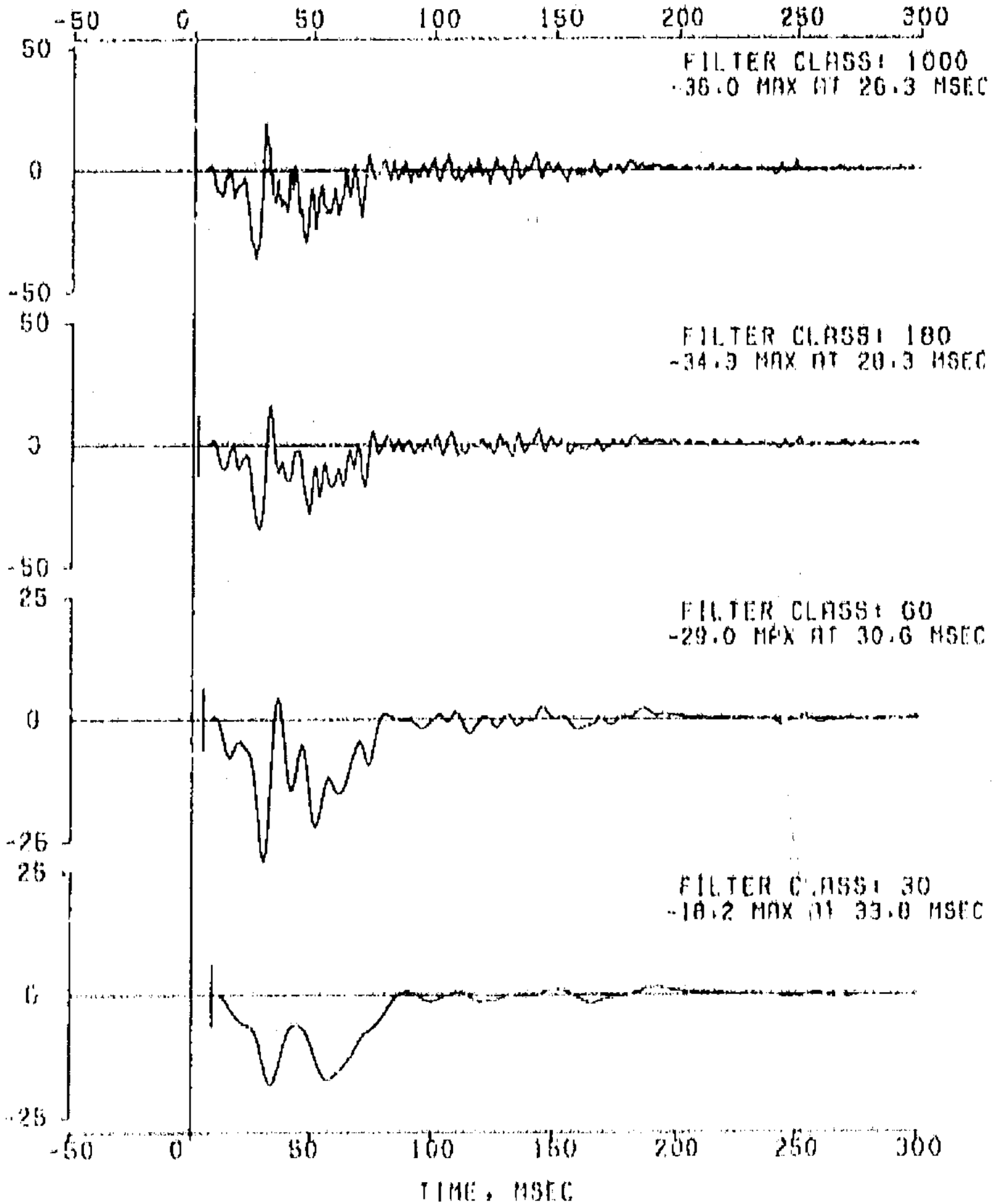


***** NOTE *****
***** NO EVENT *****

VC07508 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ9600
2002 MY95 301 REAR IMPACT DEVELOPMENT,
CHANNEL 037 ORC INTERN ACCEL 0 EE
FILTER TYPE: 000AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1850)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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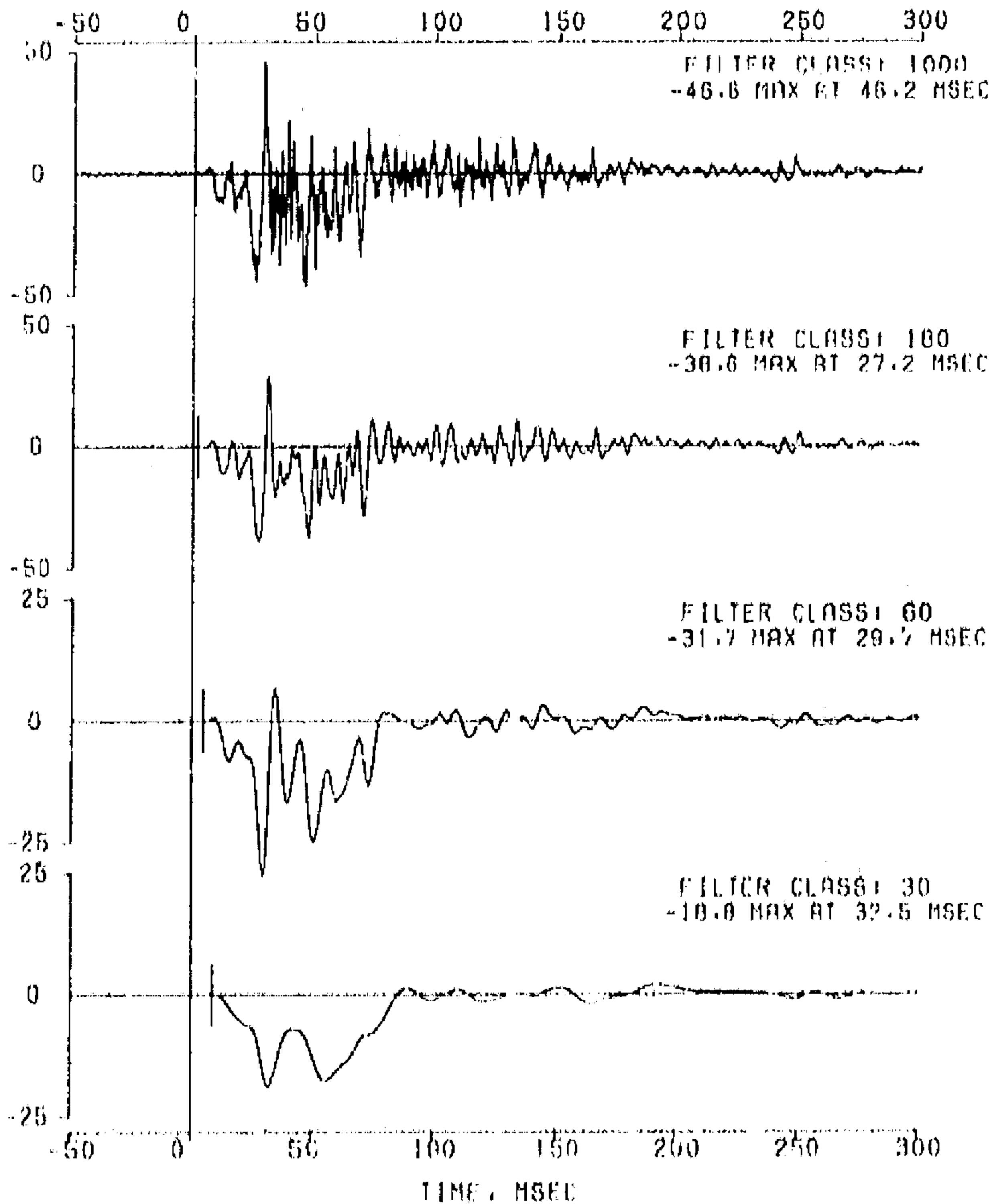
DATA SET 04/25/990C
ERRATA 1



VC07508 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3509
2002 MYSS 301 REAR IMPACT DEVELOPMENT,
CHANNEL 038 ORC FRONT LT X J15465
FILTER TYPE: 080AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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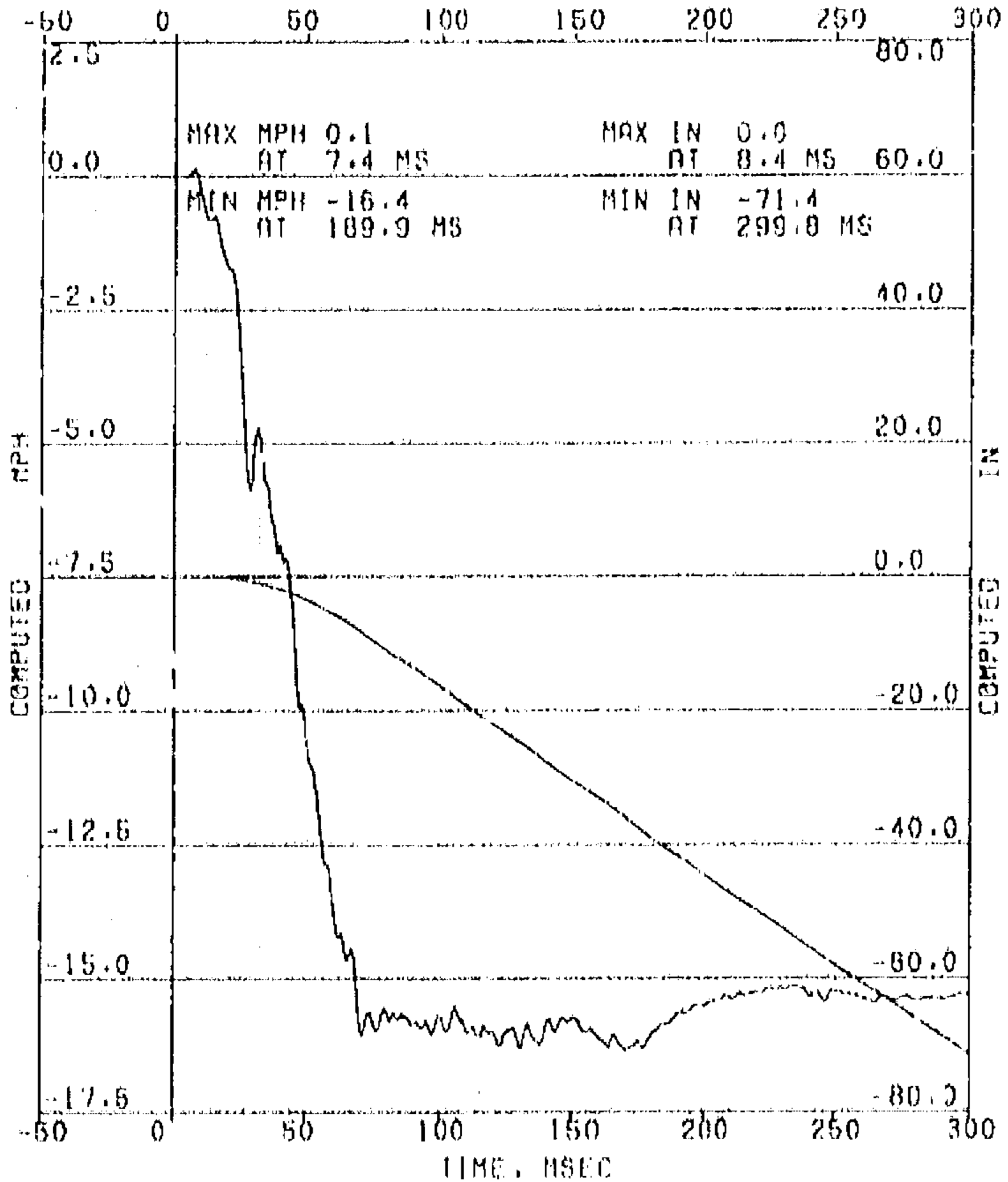
DATA SET 04/25/99BC
ERRATA 1



FILTER TYPE: 00008-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

DATA SET 04/25/99BC
ERRHTA 1

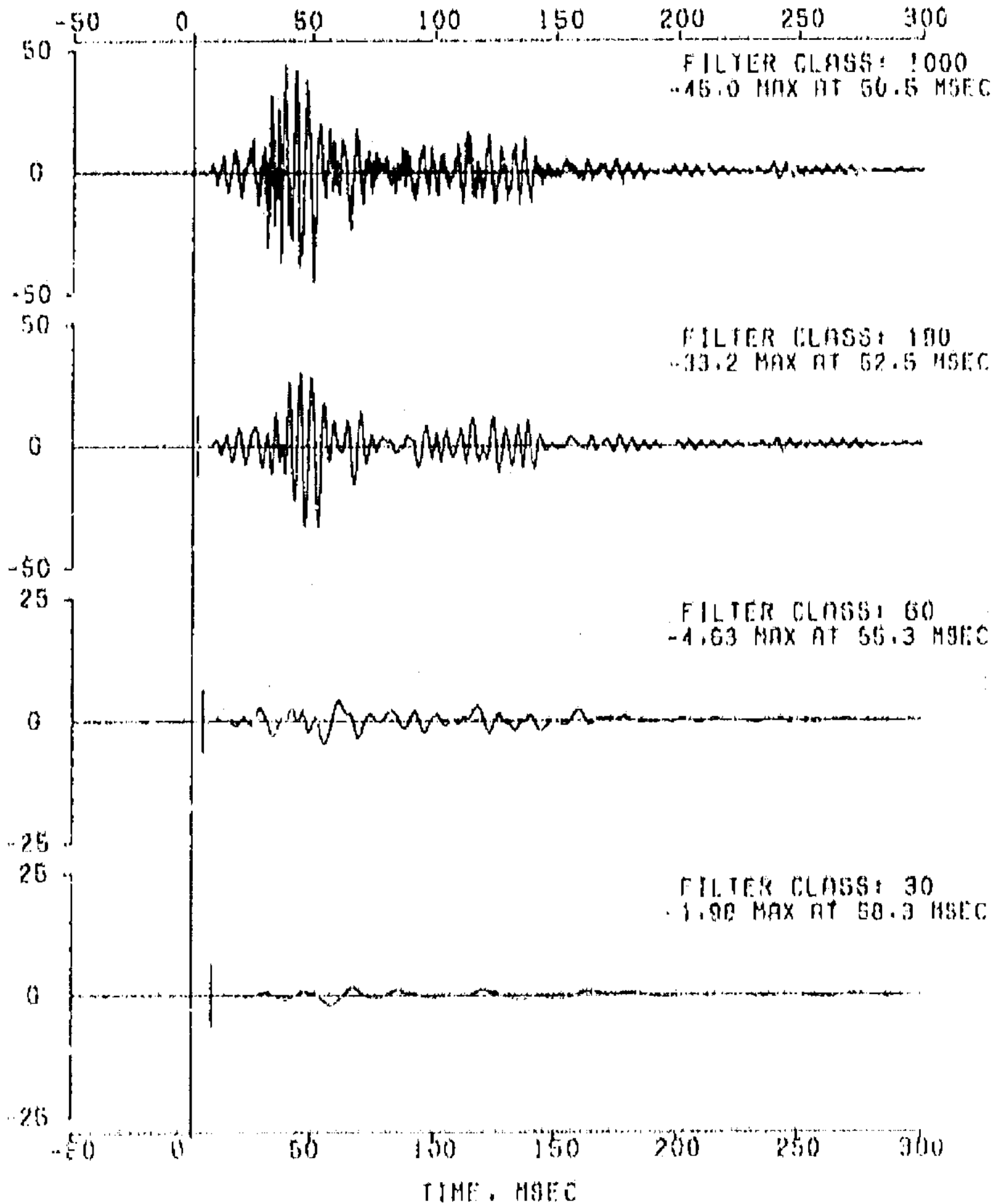


COMPUTED MPH
COMPUTED IN

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT,
CHANNEL 039 ORC FRONT LT Y J2642B
FILTER TYPE: 000AS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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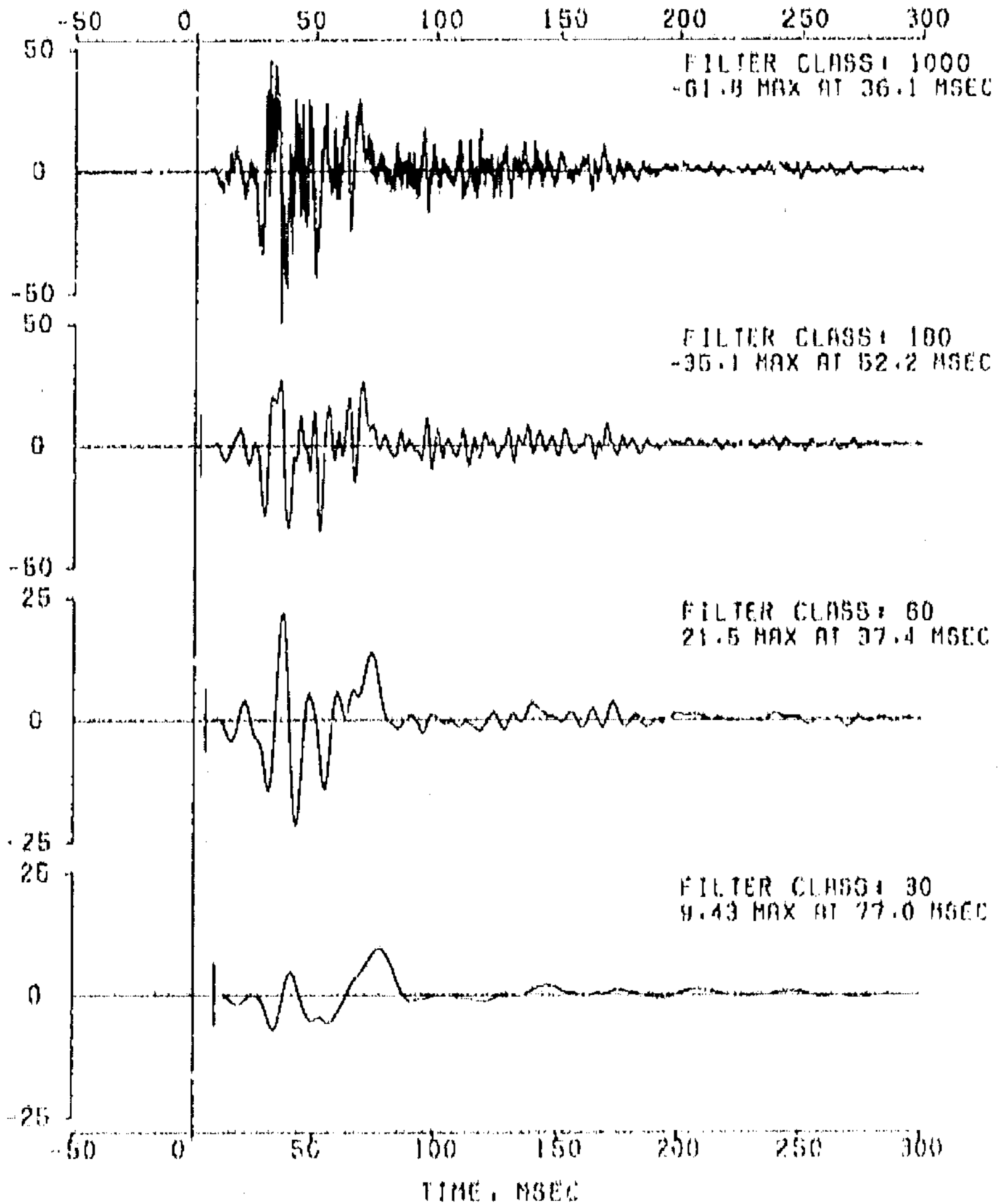
DATA SET 04/25/99BC
ERRATA 1



VC07608 30-MPH REAR MOVING BARRIER, XJ-J-74, ITEM XJ3009
2002 HYSS 301 REAR IMPACT DEVELOPMENT,
CHANNEL 040 CRC FRONT LT Z A01JJ
FILTER TYPE: 080AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1050)
IMPACT ANALYSIS DEPT. 5320
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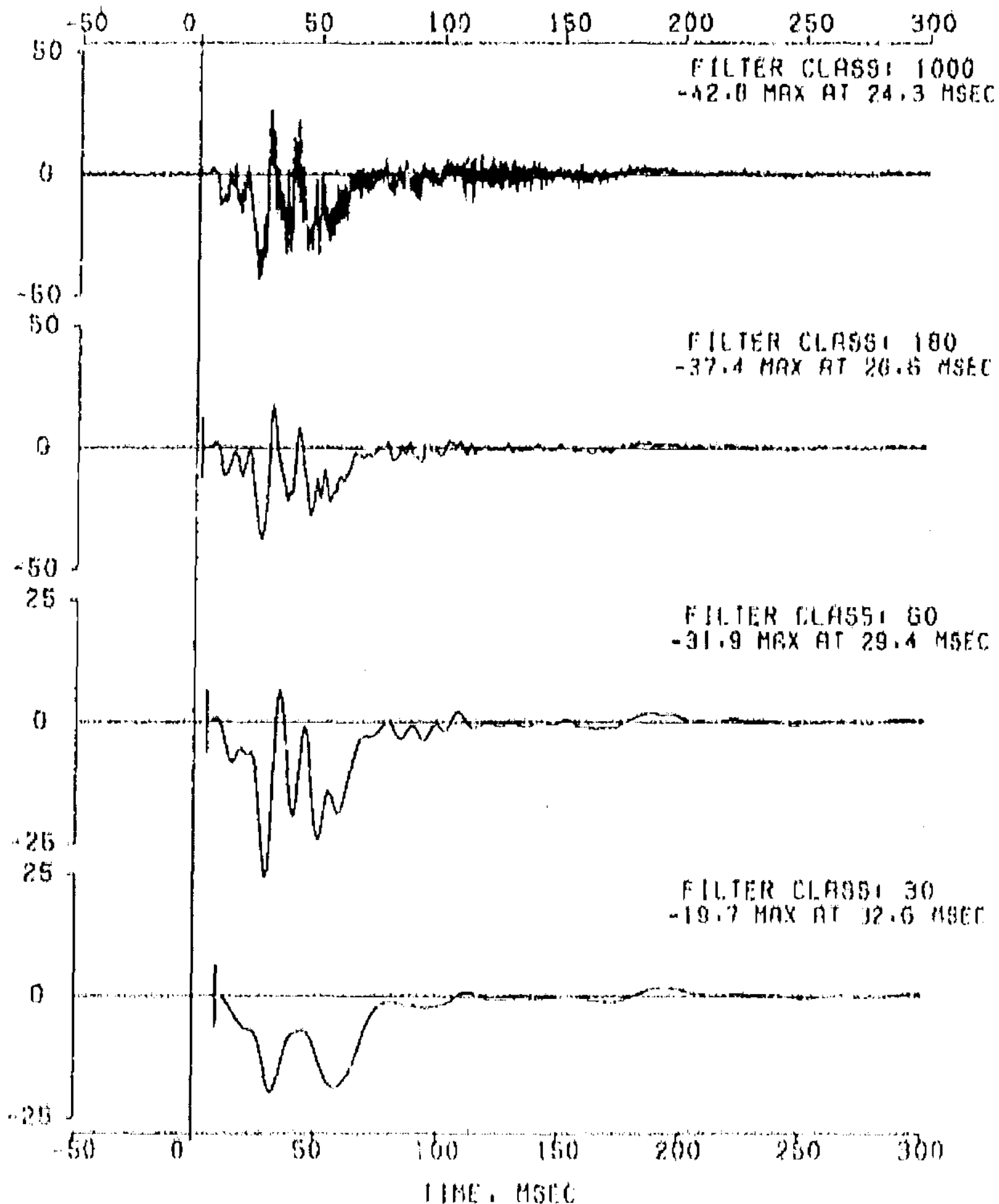
DATA SET 04/25/99BC
ERRATA 1



VC07606 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3509
2002 HYBR 301 REAR IMPACT DEVELOPMENT,
CHANNEL 041 LT FT SILL FWD ST XMBRX J19052
FILTER TYPE: 000AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(18601
IMPACT ANALYSIS DEPT. 5320
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DATA SLT 04/25/99BC
ERRATA 1



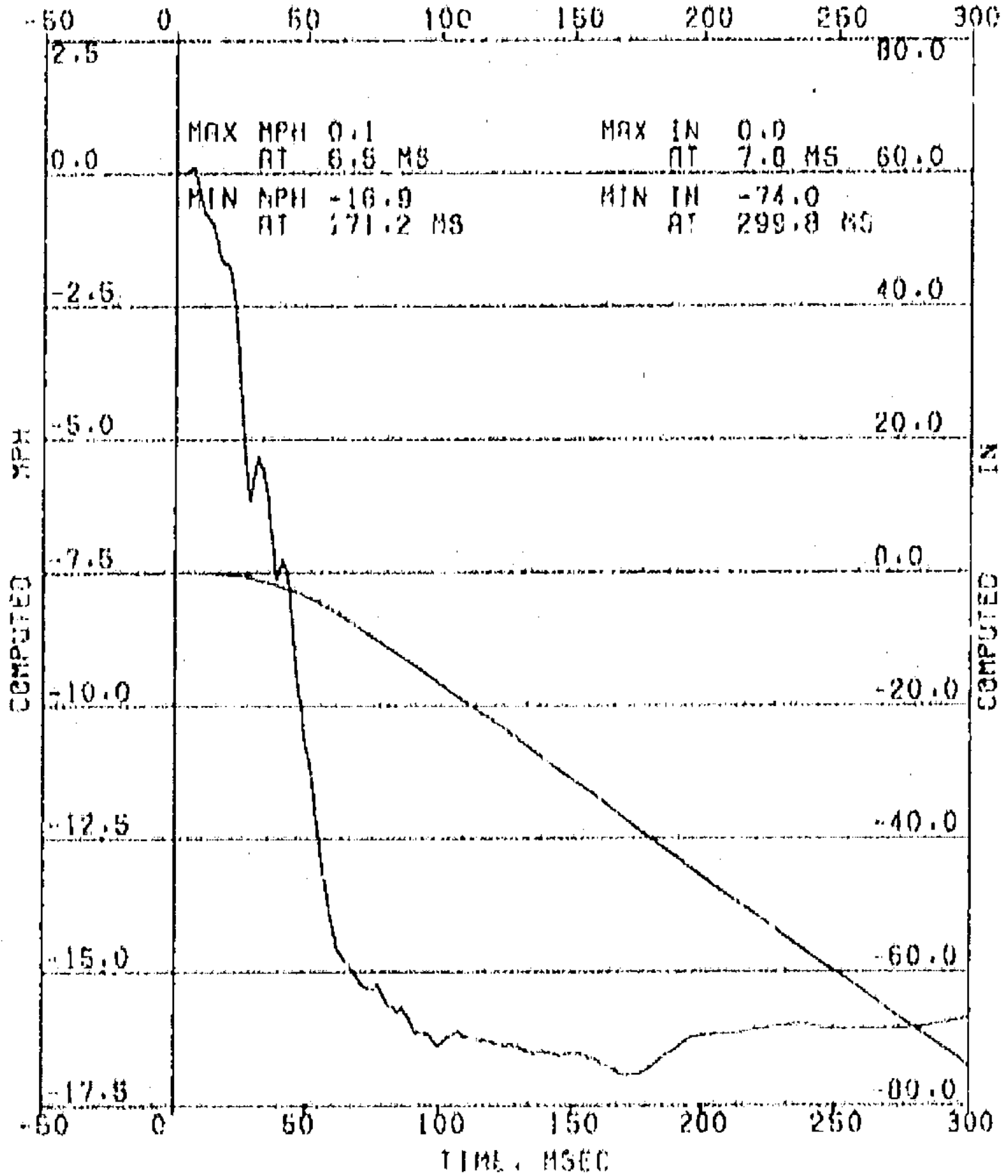
VC07503 30-MPH REAR MOVING BARRIER, KJ-J-74. ITEM KJ3509
 2002 MY88 301 REAR IMPACT DEVELOPMENT.
 CHANNEL 041 LT FT SILL. FWD ST XDRX J19652

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FILTER TYPE: 0003-117 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
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DATA SET 04/25/99DC
 ERRATA 1

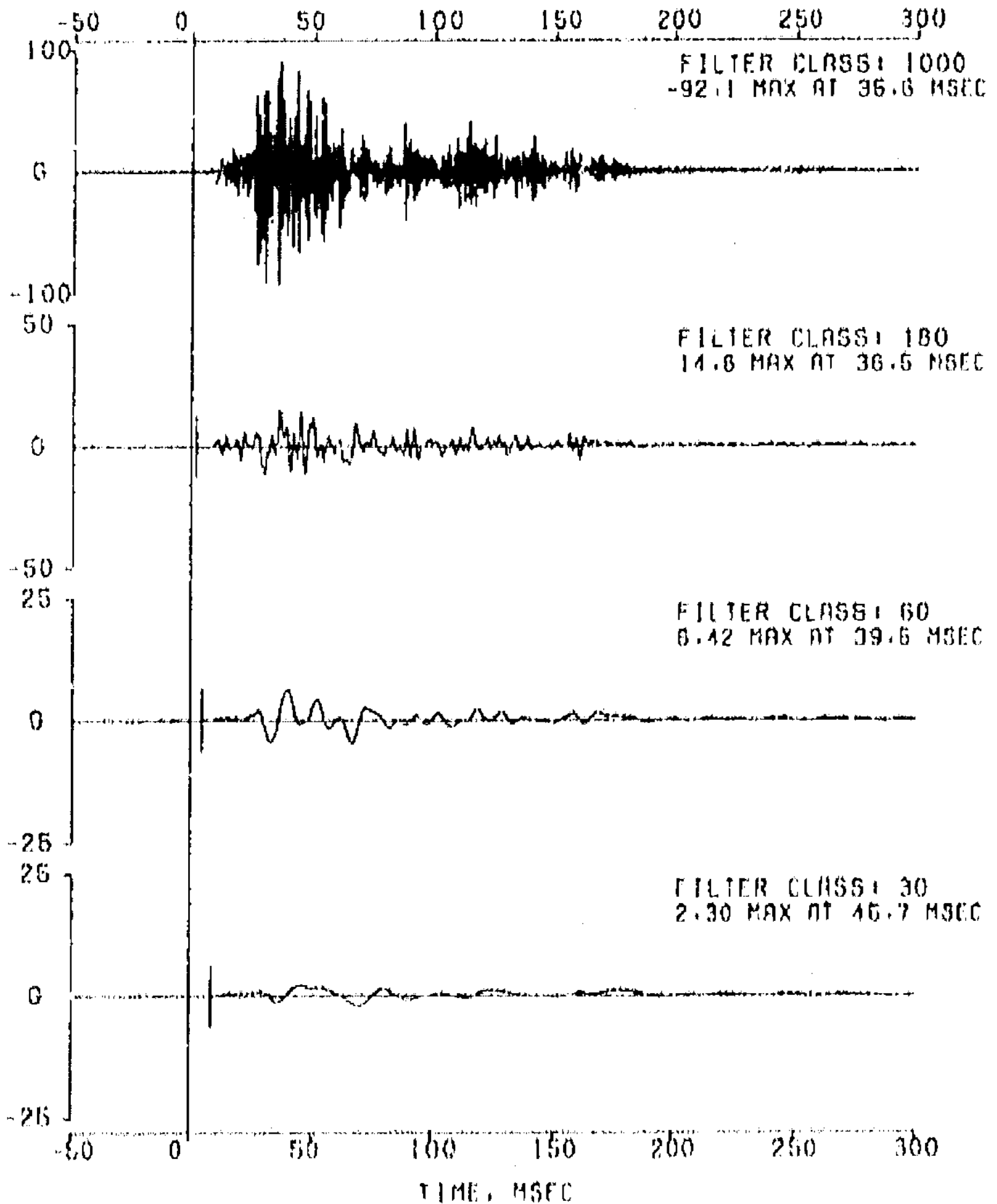


COMPUTED MPH
 COMPUTED IN

VC07500 30-MPH REAR MOVING BARRIER, KJ-J-74, ITCR KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 042 LT FT BILL FWD ST XMBRY ANYT4
FILTER TYPE: 00005-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
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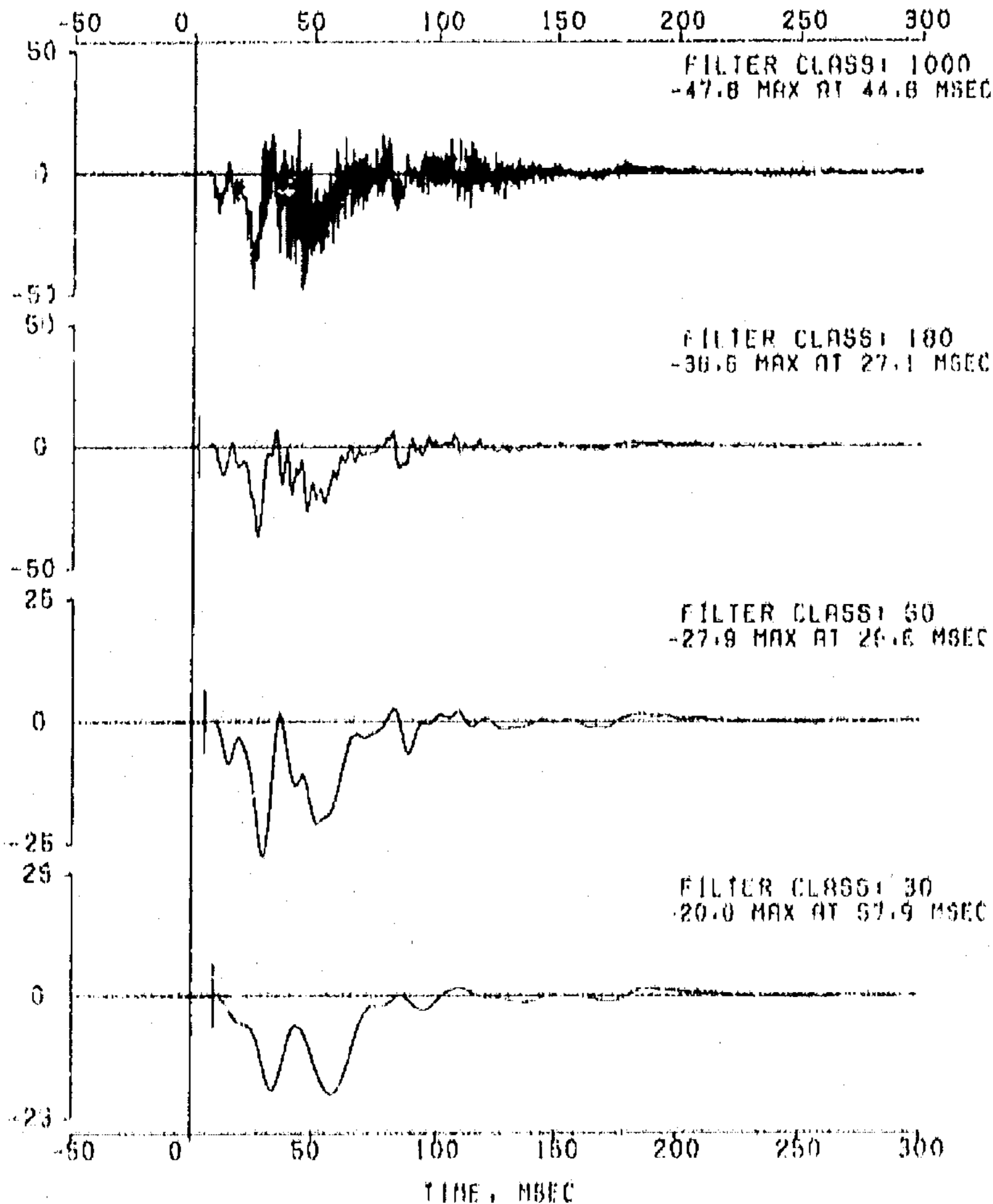
DATA SET 04/25/1990
ERRATA 1



VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3889
2002 MV65 301 REAR IMPACT DEVELOPMENT,
CHANNEL 043 RT FT SILL FWD ST XMBRX J11236
FILTER TYPE: 080A6-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
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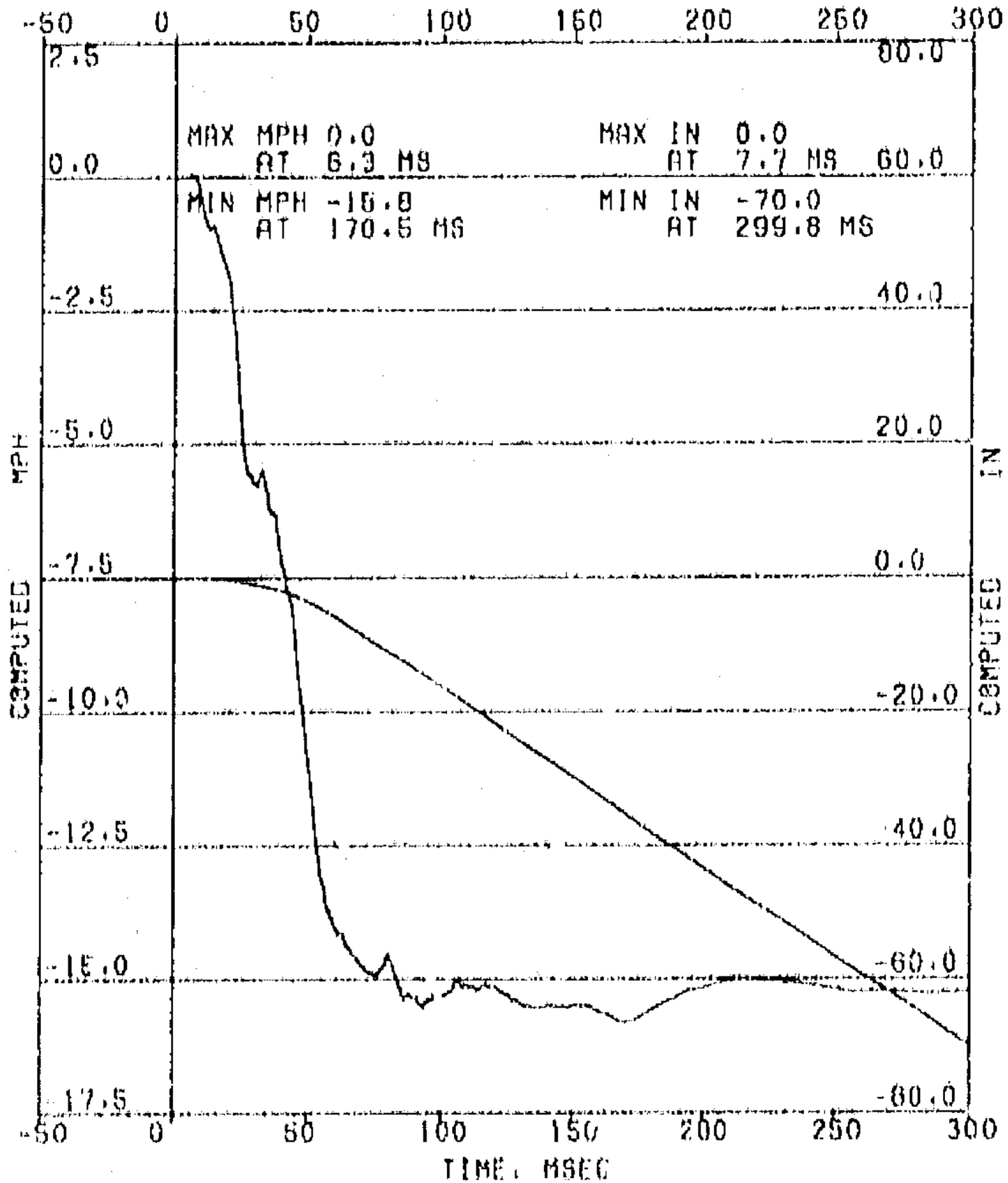
DATA SET 04/25/99BC
ERRATA 1



FILTER TYPE: 080A5-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1050)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/99BC
 ERRATA 1

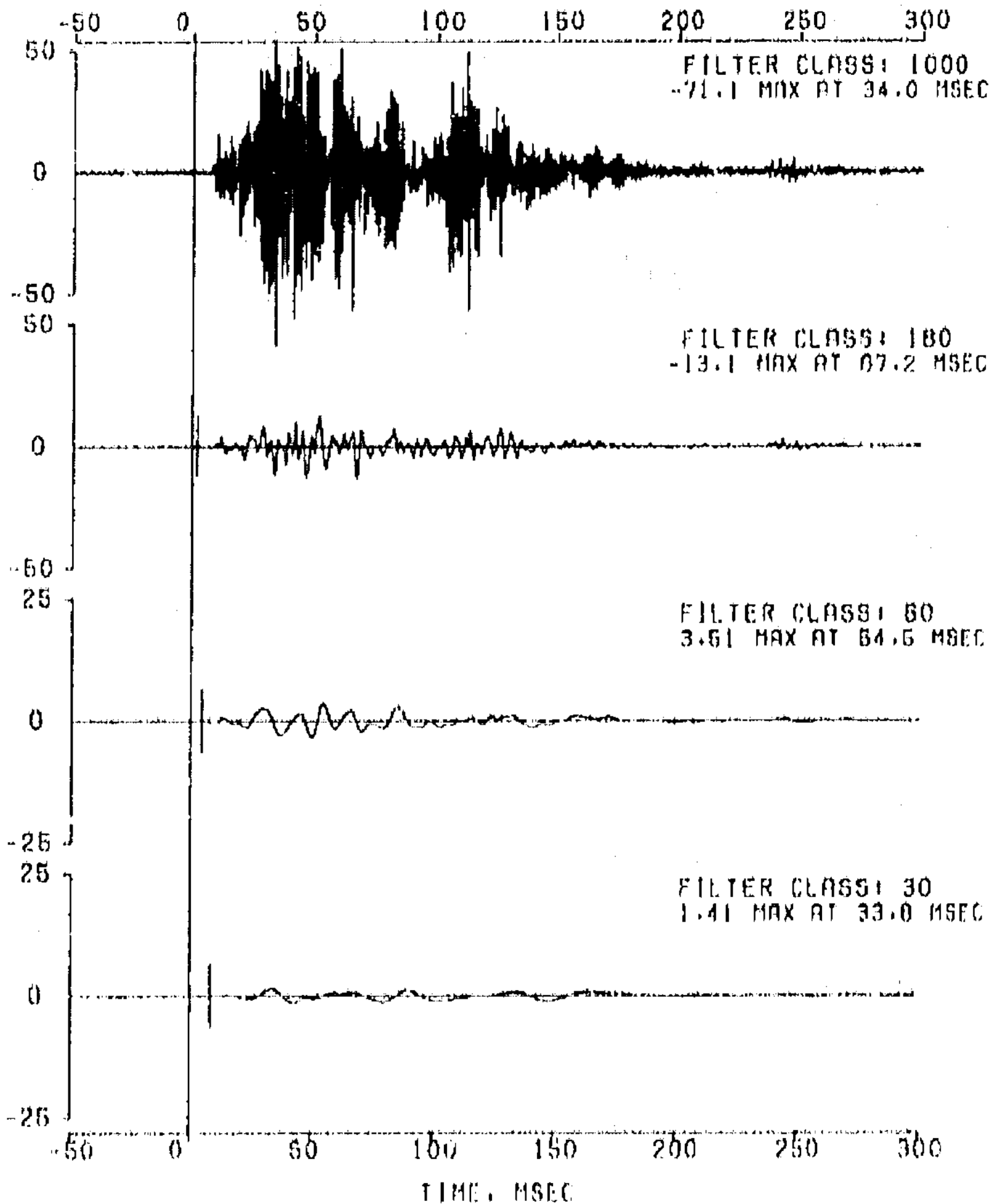


COMPUTED MPH
 COMPUTED IN

VC07606 30-MPH REAR MOVING BARRIER, KJ-U-74, ITEM KJ3509
2002 MY88 301 REAR IMPACT DEVELOPMENT,
CHANNEL 044 RT FT BILL FWD ST XMBRY AFYH4
FILTER TYPE: 080AS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
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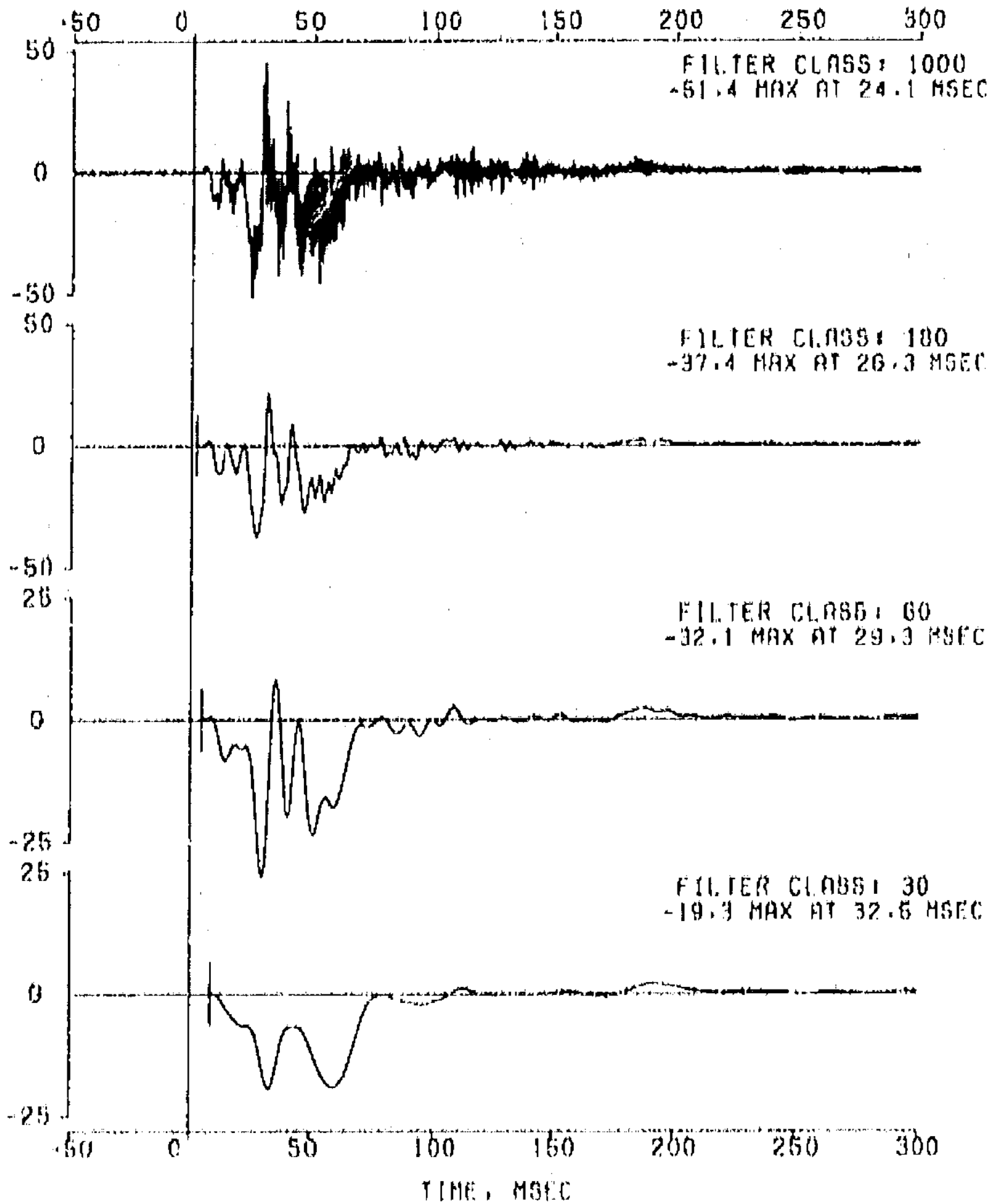
DATA SET 04/25/99BC
ERRATA 1



VC07508 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
2002 MY99 301 REAR IMPACT DEVELOPMENT.
CHANNEL 046 LT SILL AT B PILLAR X 015062
FILTER TYPE: 08DAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
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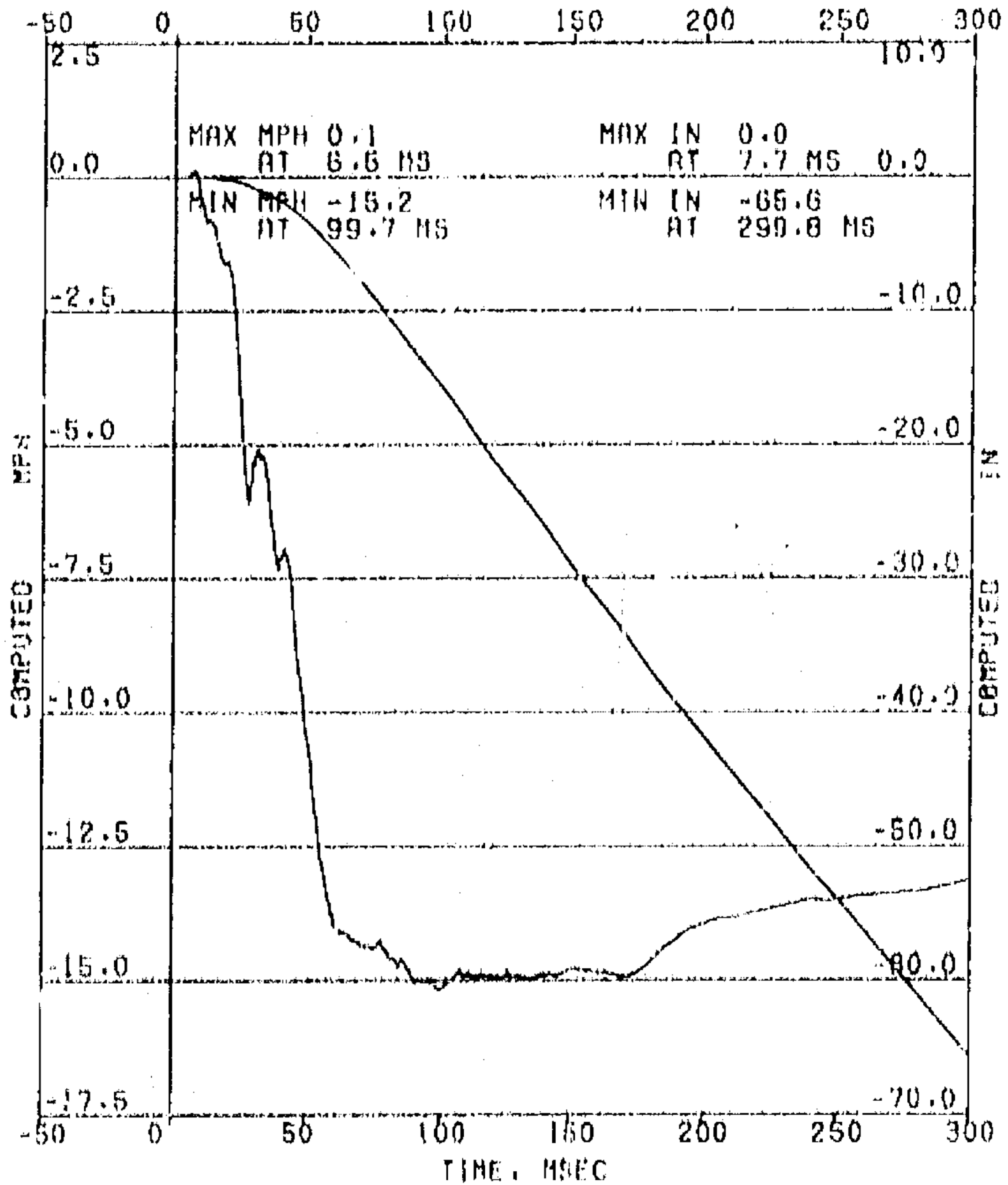
DATA SET 04/25/99BC
ERRATA 1



FILTER TYPE: 000AS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
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DATA SET 04/25/99BC
 ERRATA 1

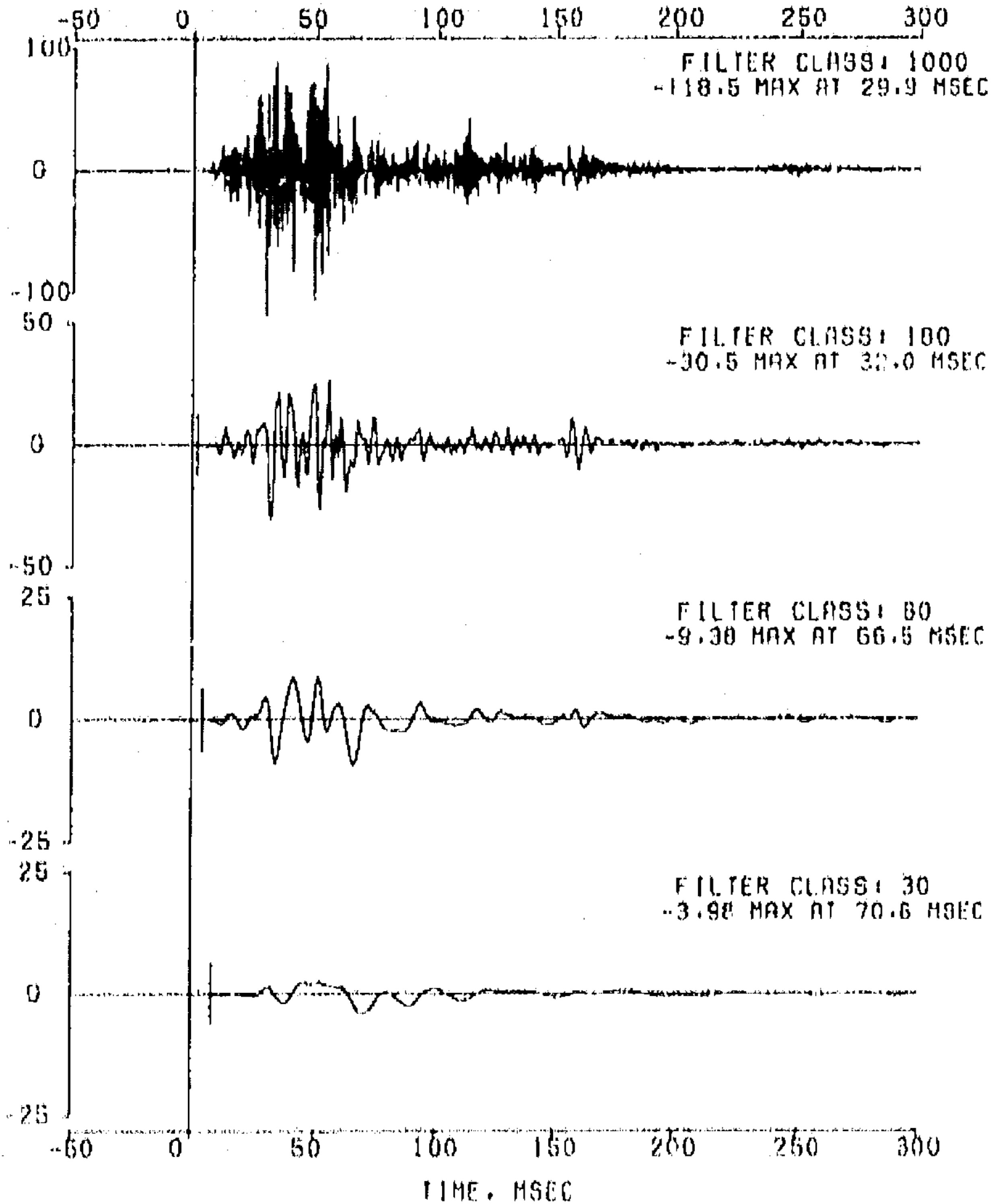


COMPUTED MPH
 COMPUTED IN

YC07808 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
2002 MY98 301 REAR IMPACT DEVELOPMENT.
CHANNEL 046 LT SILL AT B PILLAR Y A13412
FILTER TYPE: 08DAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

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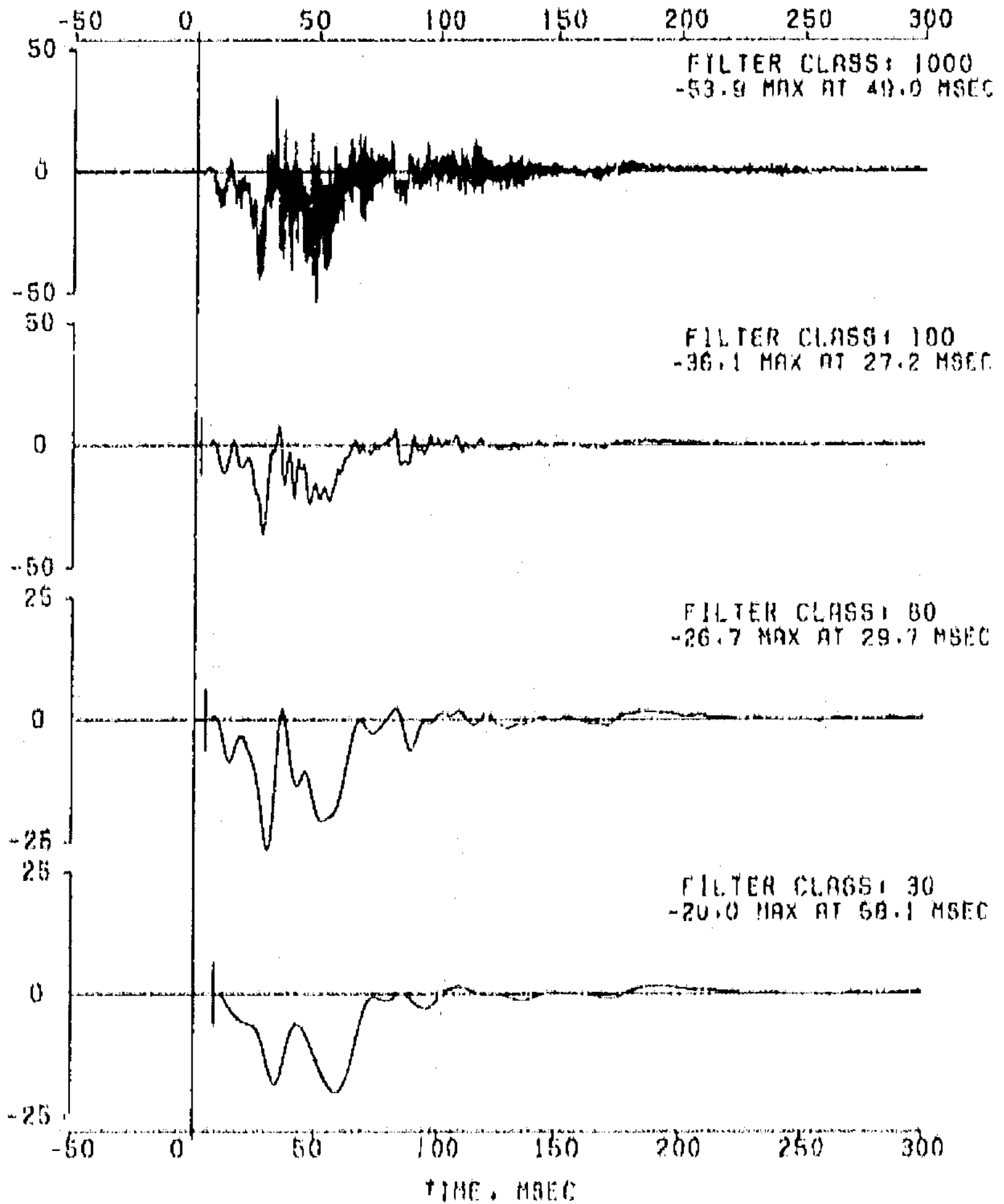
DATA SET 04/25/99BC
ERRATA 1



VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ7509
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 047 RT SILL AT B PILLAR X APIK2
FILTER TYPE: OBDAS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
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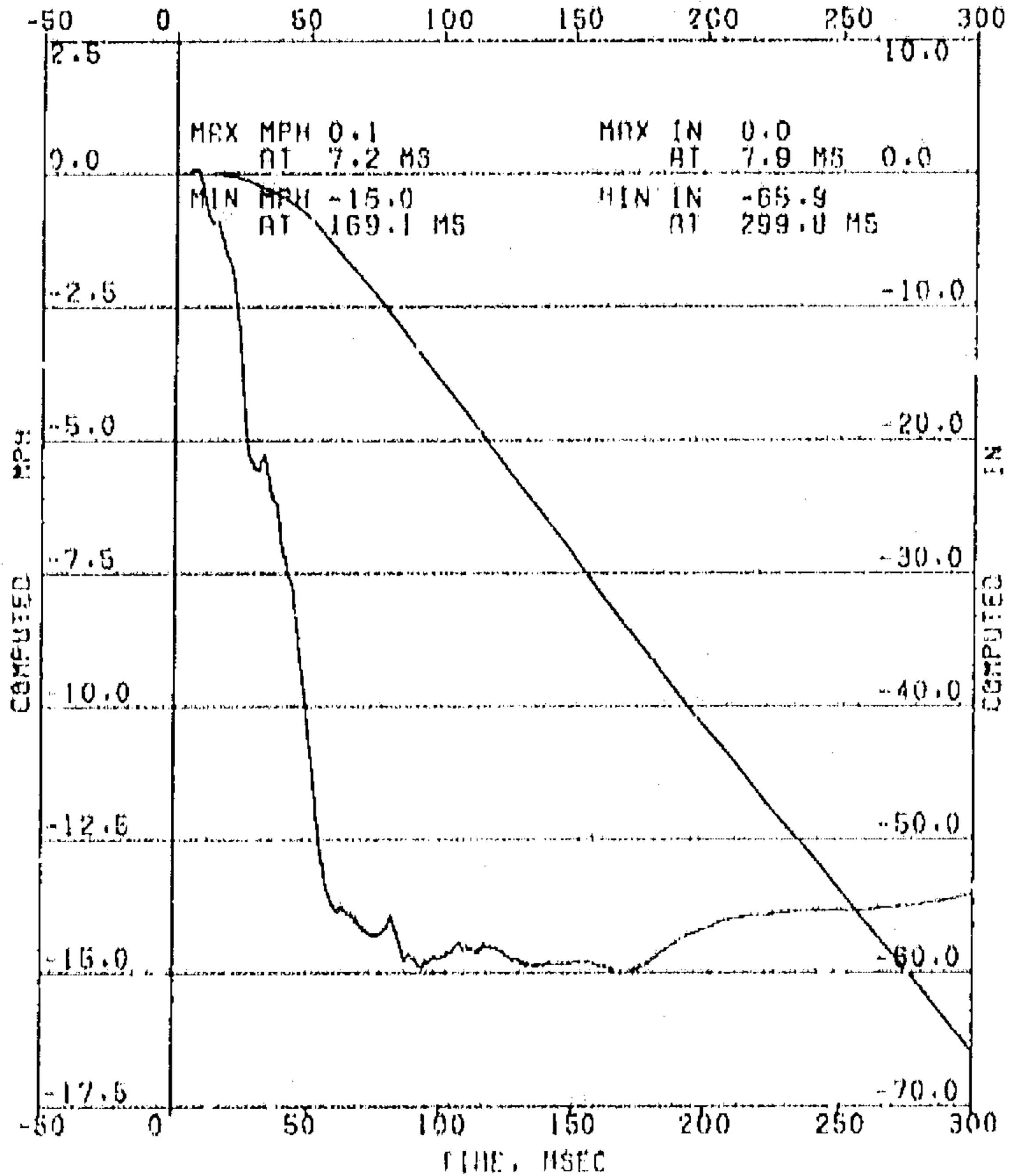
DATA SET 04/25/99BC
ERRATA 1



FILTER TYPE: QBDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
APR 26, 1999

DATA SET 04/25/99BC
ERRATA 1

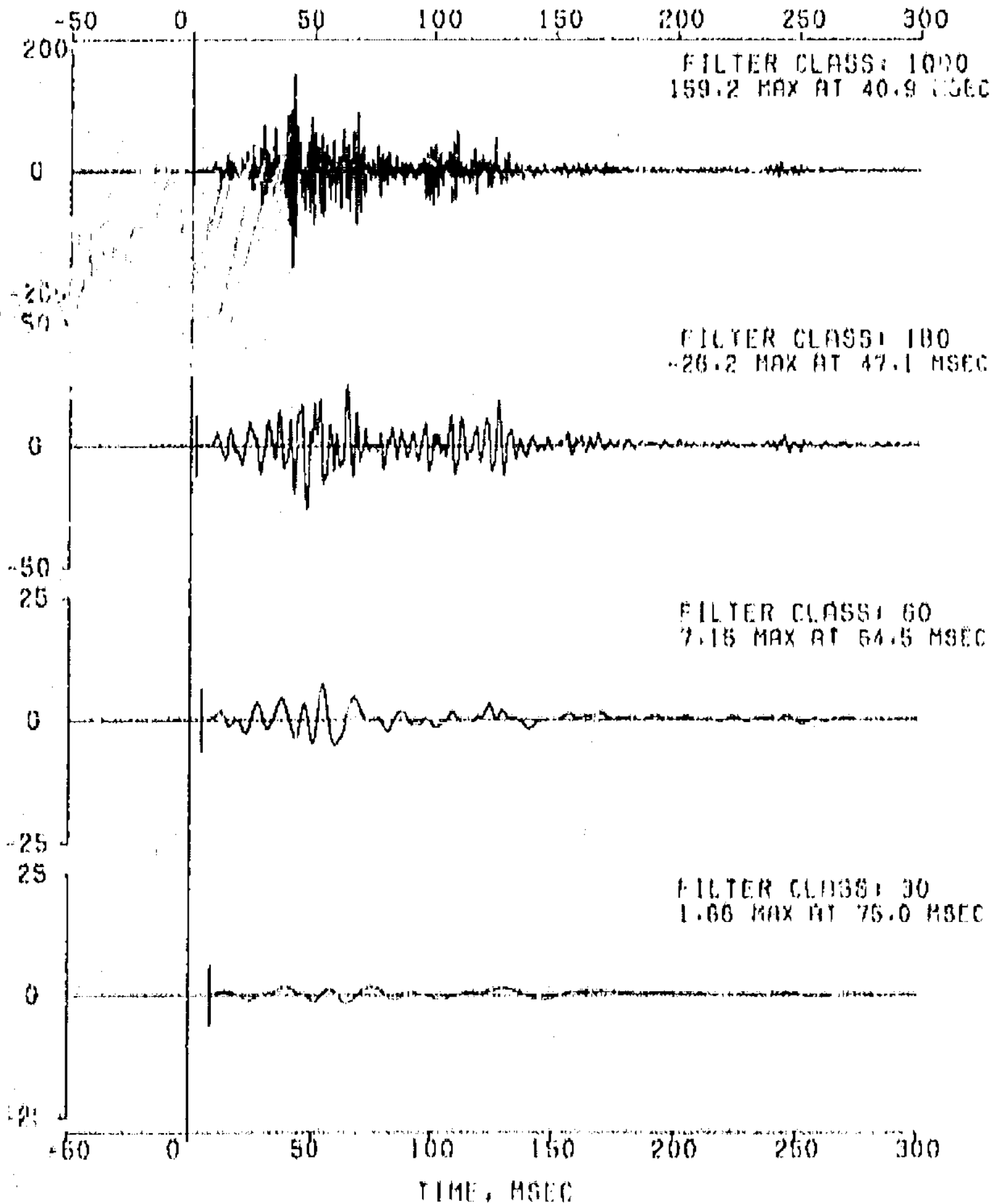


COMPUTED MPH
COMPUTED IN

VC07505 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ9509
2002 HYSS 301 REAR IMPACT DEVELOPMENT.
CHANNEL 048 RT SILL AT B PILLAR Y J19002
FILTER TYPE: OBDAS-III RESPONSE CORRECTION, CLASS 1000 FILTER(1850)
IMPACT ANALYSIS DEPT. 5320
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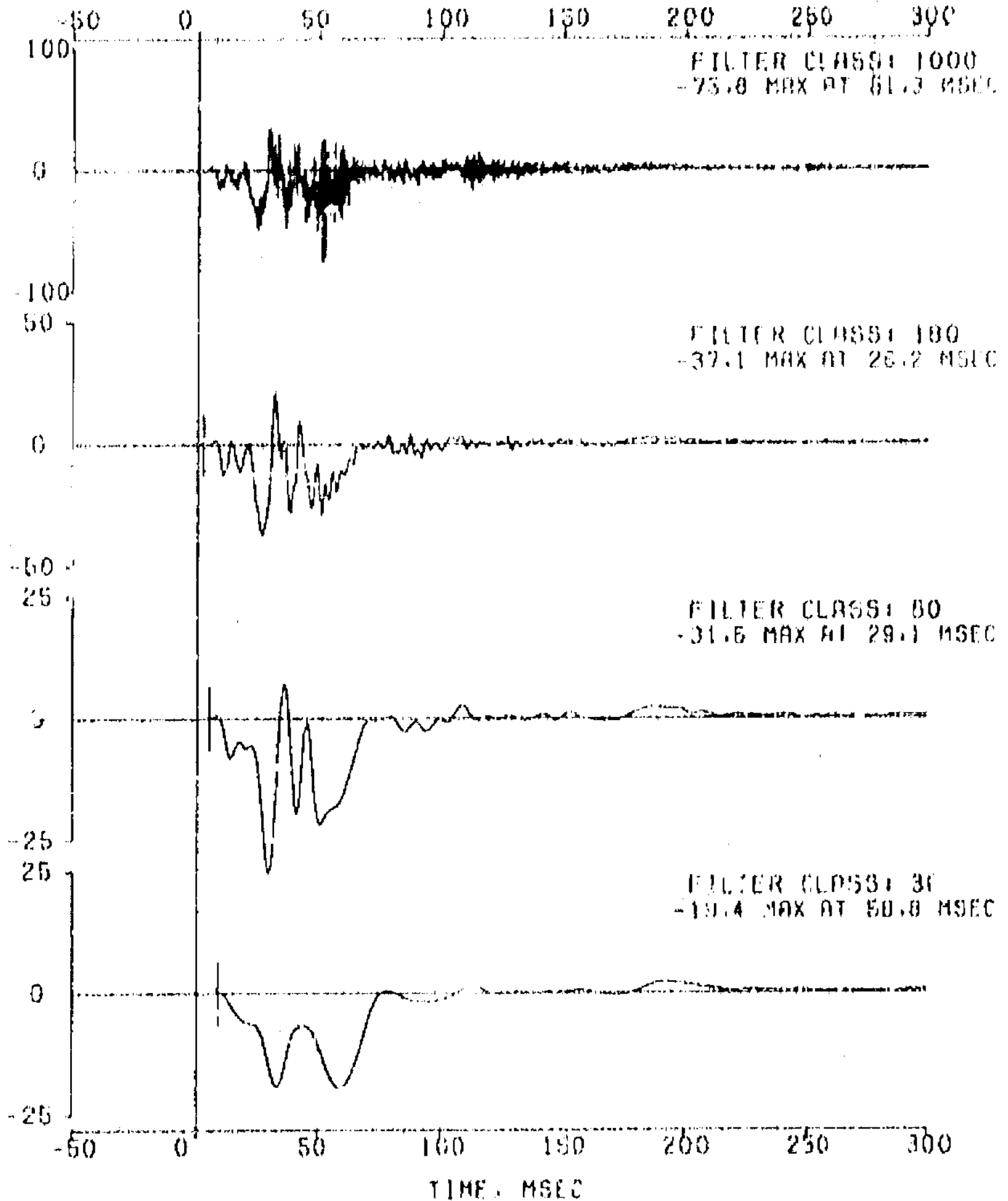
DATA SET 04/25/9900
ERRATA 1



VC07576 30 MPH REAR HOVING BARRIER, KJ-3-74, ITEM KJ3589
2002 MY50 301 REAR IMPACT DEVELOPMENT,
CHANNEL 049 LT RR SILL FWD ST XBRX 014230
FILTER TYPE: 00DAS-L11 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
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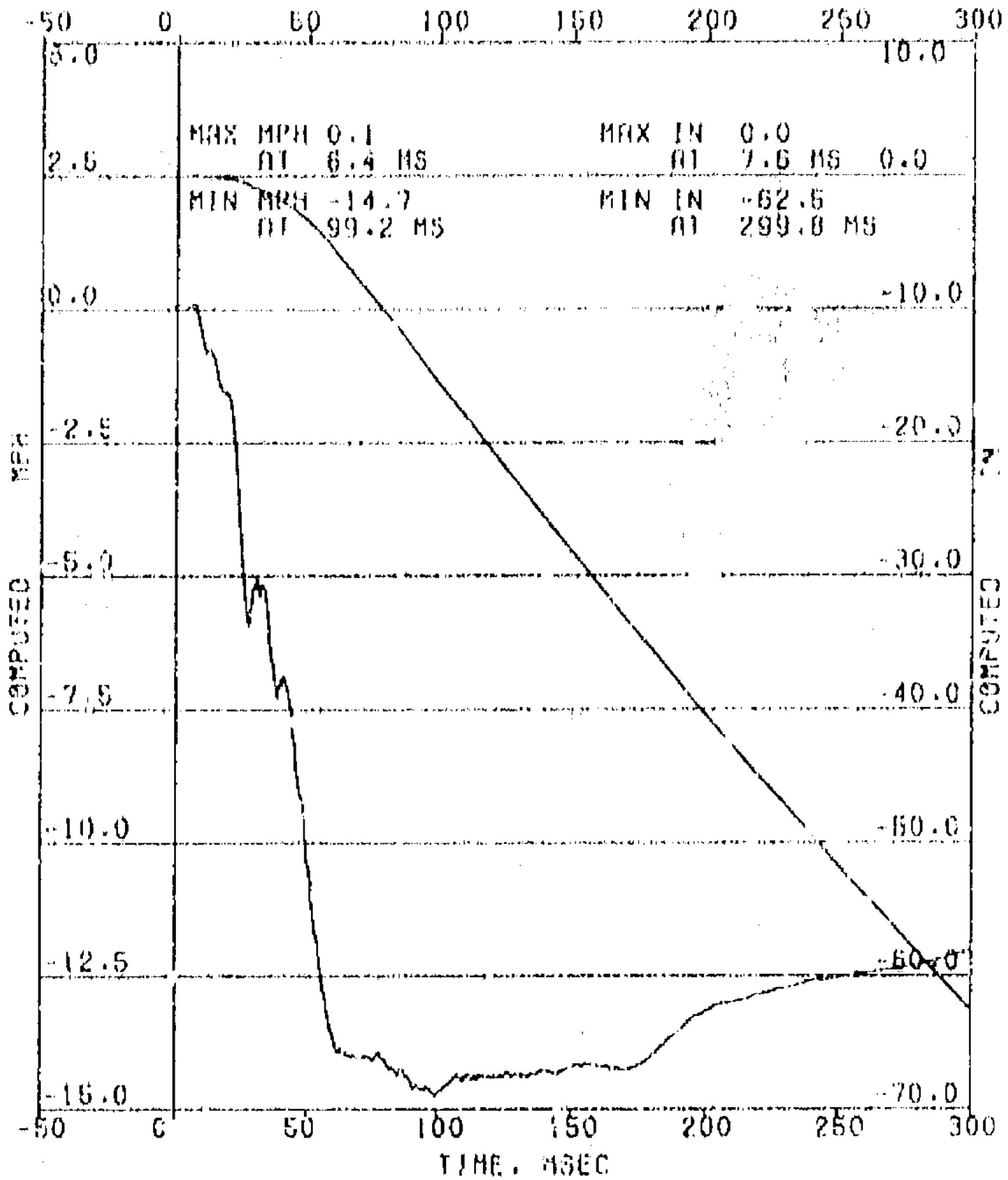
DATA SET 0472579980
ERRATA 1



FILTER TYPE: 09086-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1500)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
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DATA SET 04/25/9930
 ERRATA 1

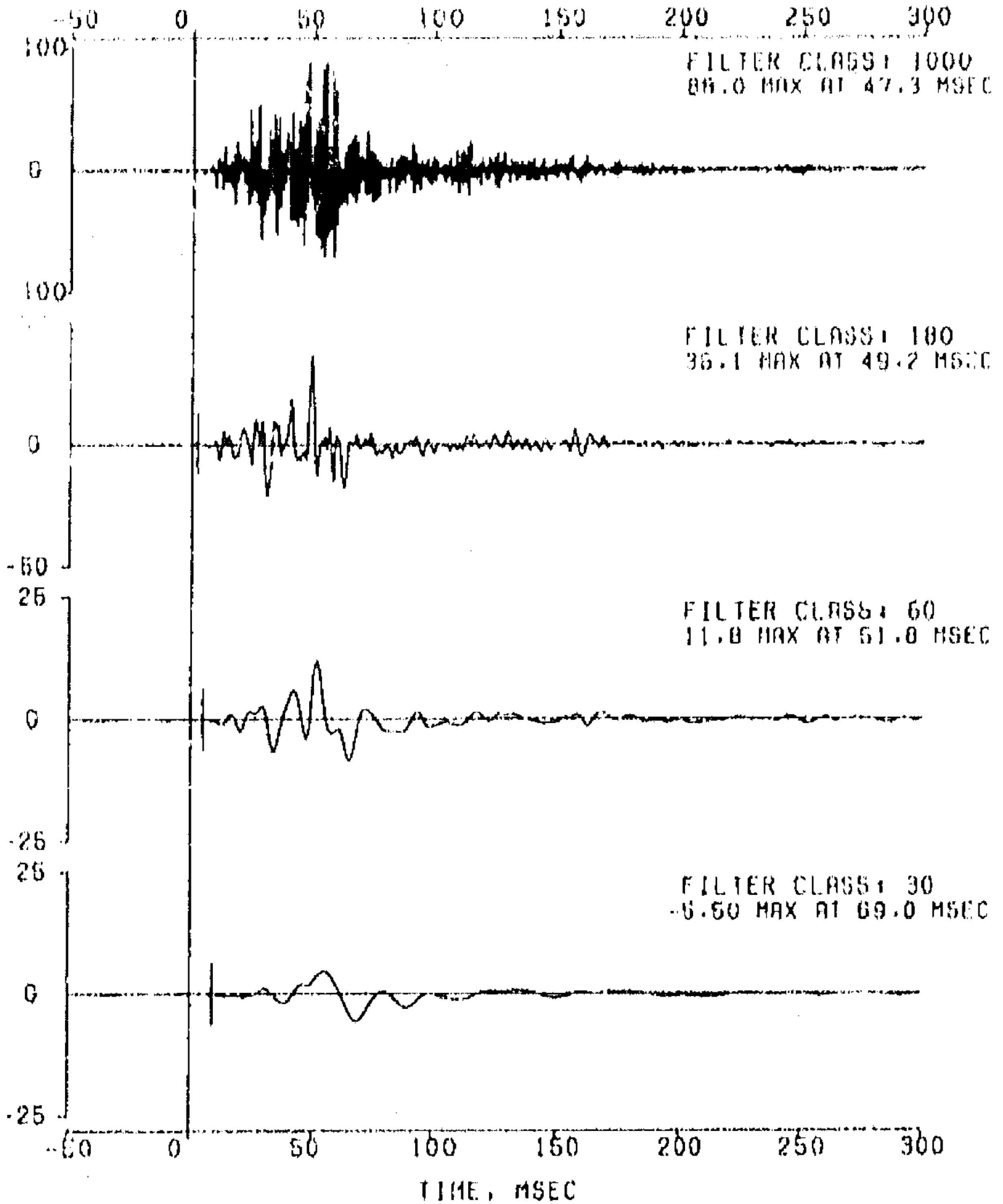


COMPUTED MPH
 COMPUTED IN

VCC7508 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ9580
2002 MY88 301 REAR IMPACT DEVELOPMENT.
CHANNEL 050 LT RR SILL FWD ST XMBRY A14521
FILTER TYPE 1 38009 111 RESPONSE CORRECTION, CLASS 1000 FILTER(1660)
IMPACT ANALYSIS DEPT. 5320
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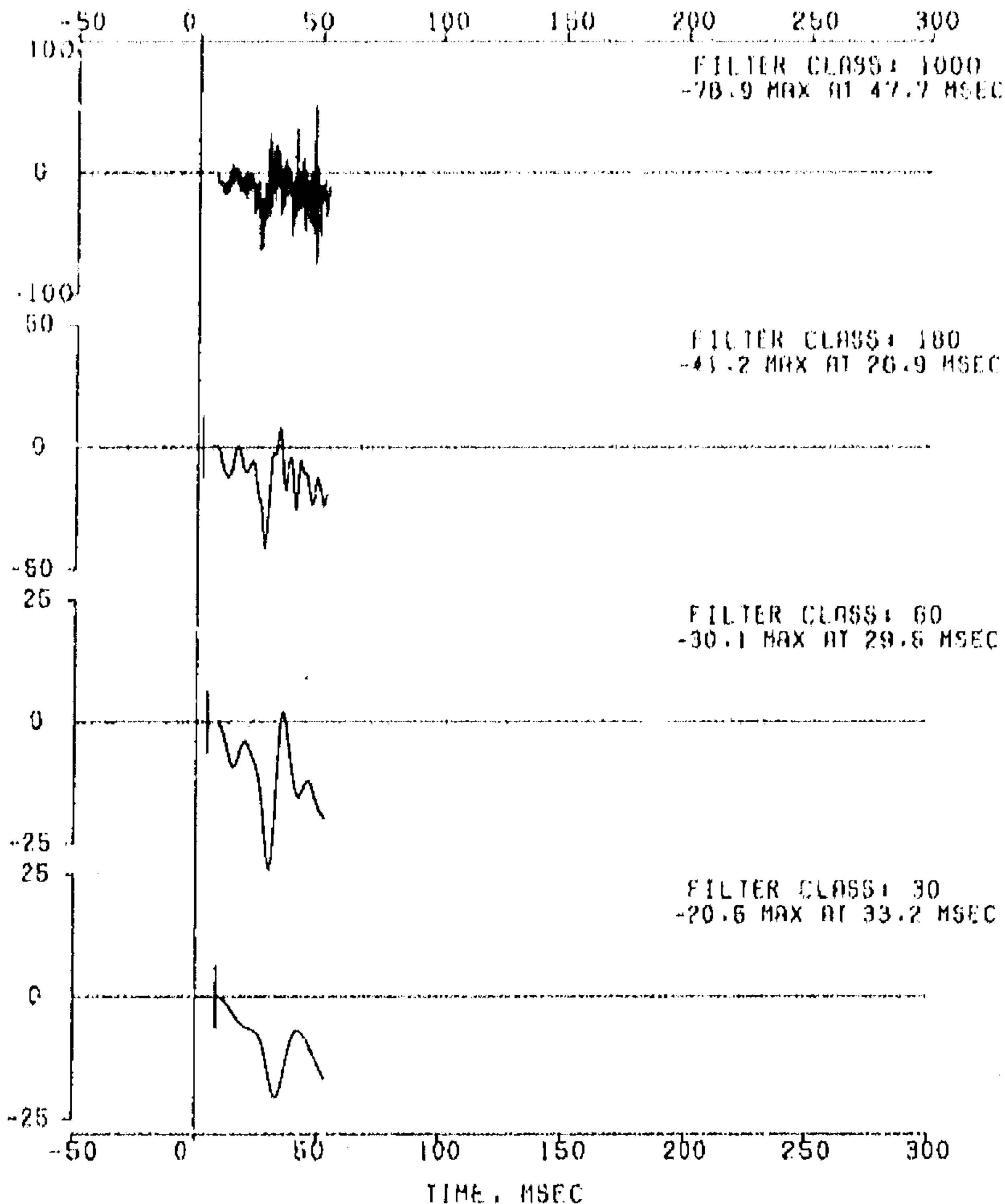
DATA SET 04/26/9900
ERRATA 1



YC07506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3509
 2002 MY56 301 REAR IMPACT DEVELOPMENT,
 CHANNEL 051 REAR SILL FWD ST XMRX J17267
 FILTER TYPE: 080AS-11 RESPONSE CORRECTION, CLASS 1000 FILTER(1680)
 IMPACT ANALYSIS DEPT. 5320
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DATA SET 04/20/99B0
 ERRATA 1

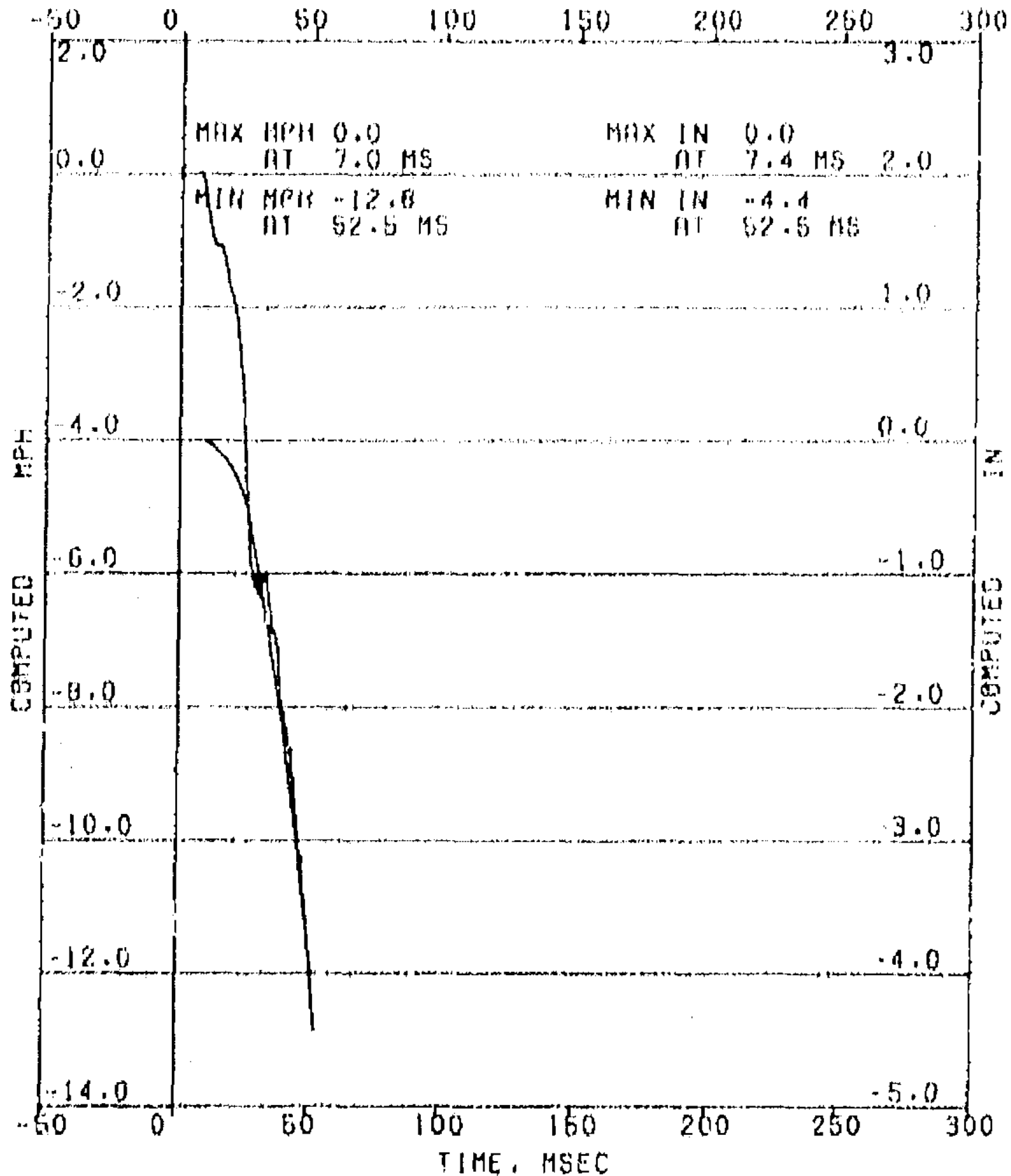


***** CAUTION *****
 ***** AT RR SILL FWD ST XMRX, *****
 ***** INST. MALFUNCTION AFTER 52.7 MS *****

FILTER TYPE: 08003-III RESPONSE CORRECTION, CLASS 1000 FILTER(1050)
 FILTER CLASS: 1000

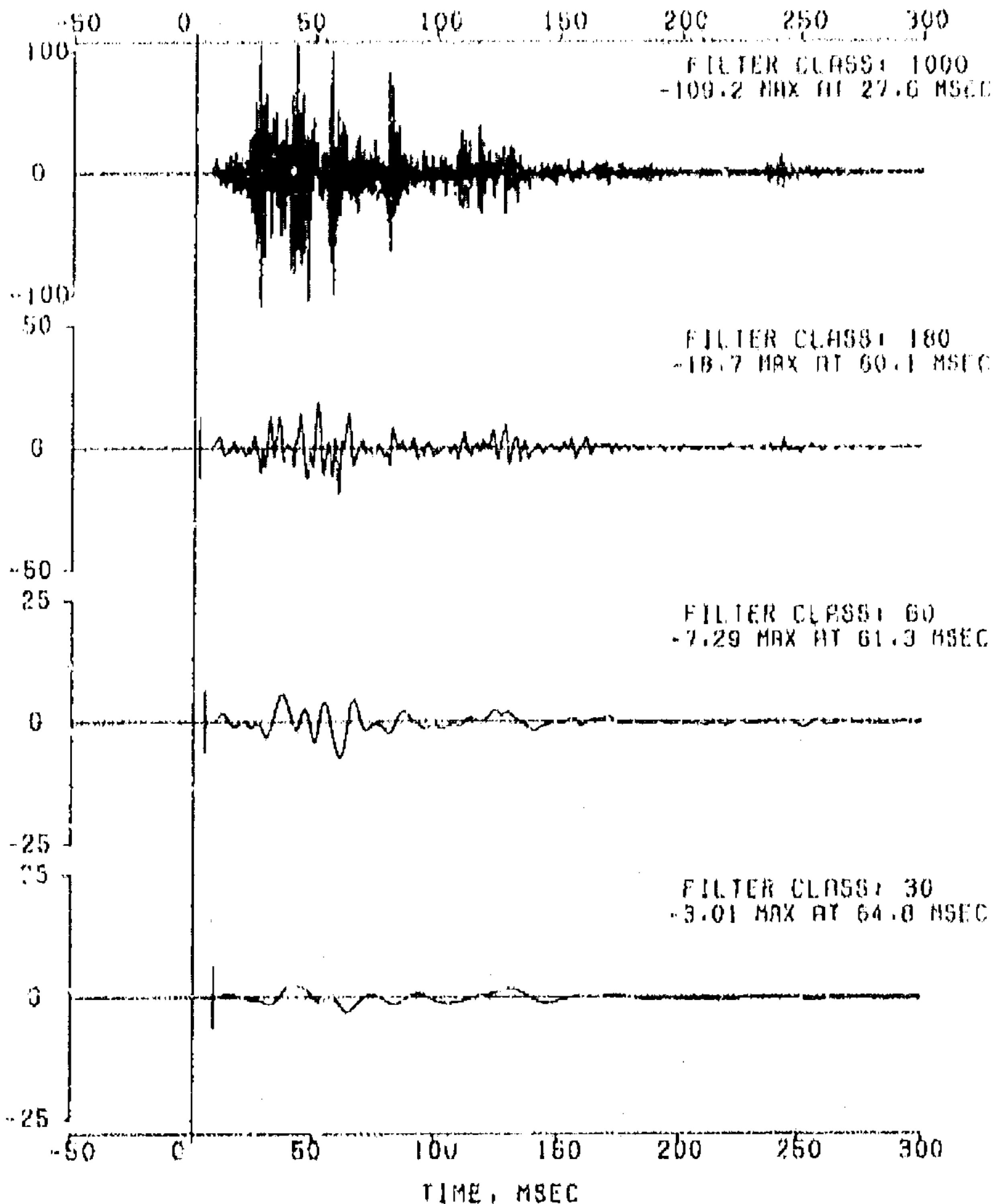
IMPACT ANALYSIS DEPT. 6320
 APR 26, 1999

DATA SET 04/28/9900
 ERRATA 1



CAUTION
 AT RR SILL FWD ST XDRX.
 INST. MALFUNCTION AFTER 52.7 MS

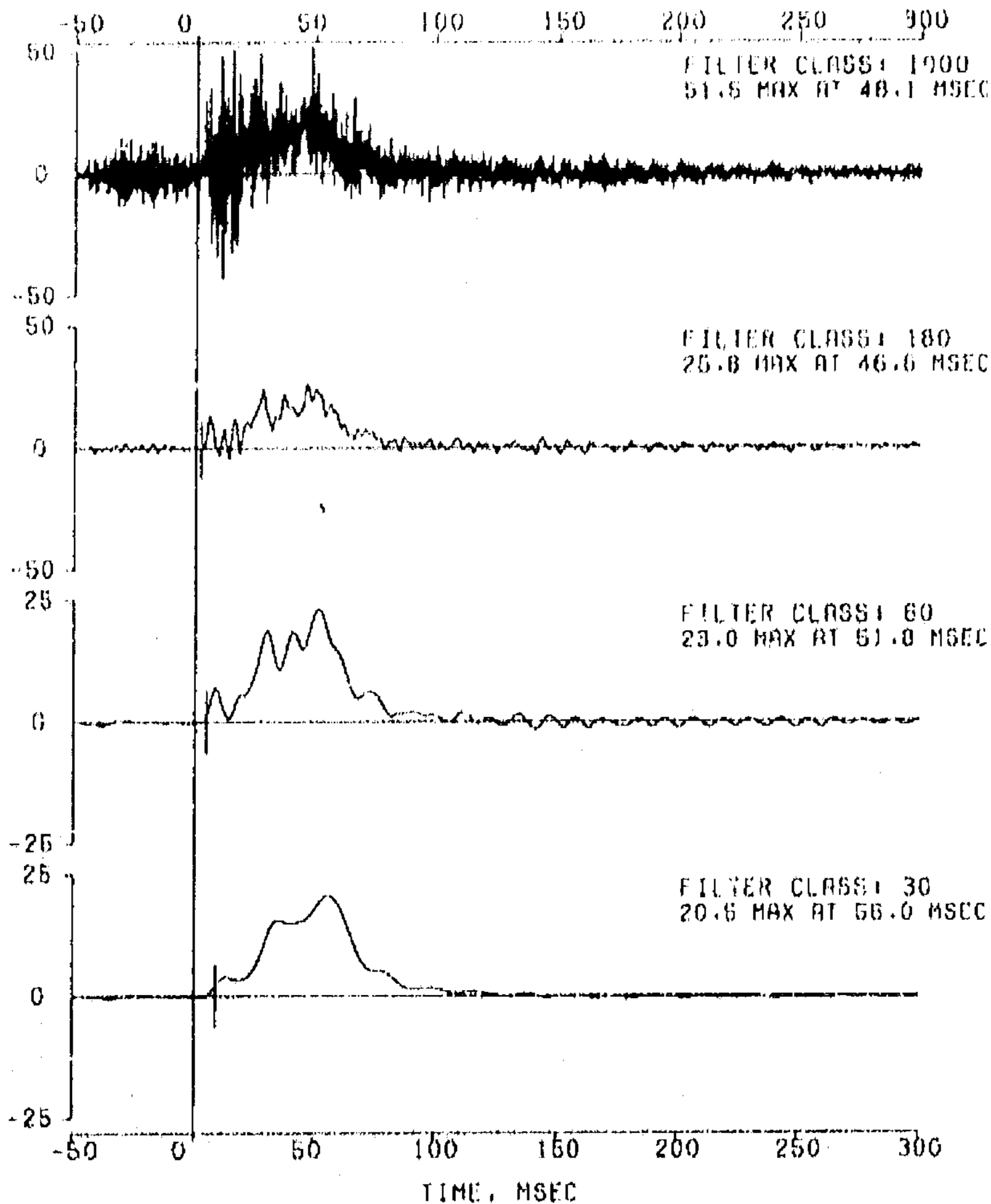
COMPUTED MPH
 COMPUTED IN



YCD7506 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3509
2002 HYSS 001 REAR IMPACT DEVELOPMENT
CHANNEL 065 LT RAIL MBR M10 X 650334
FILTER TYPE: 000AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1850)
IMPACT ANALYSIS DEPT. 5320
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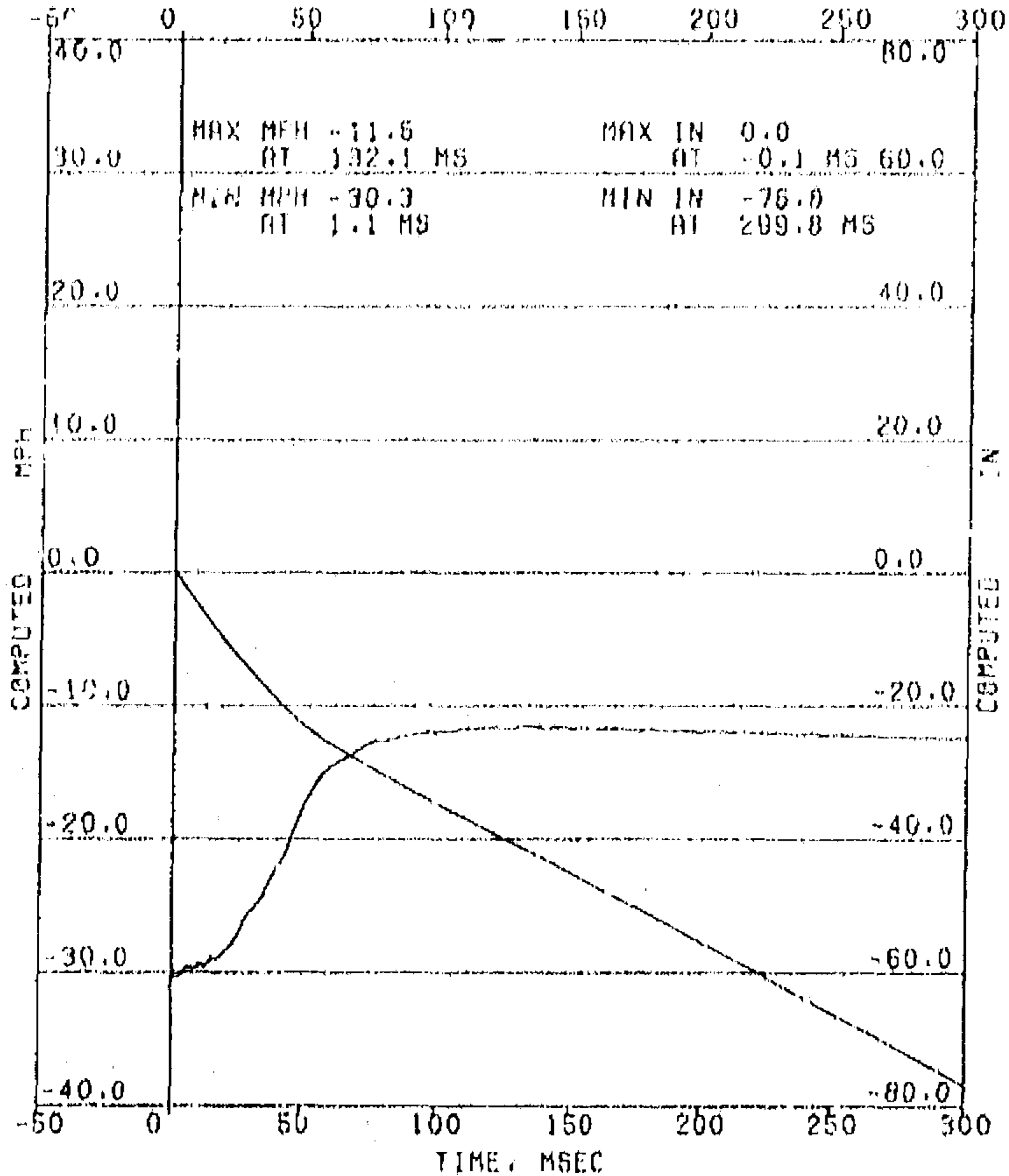
DATA SET 04/25/99BC
ERRATA 1



FILTER TYPE: 0000S-III RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
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DATA SET 04/25/99BE
 ERRATA 1

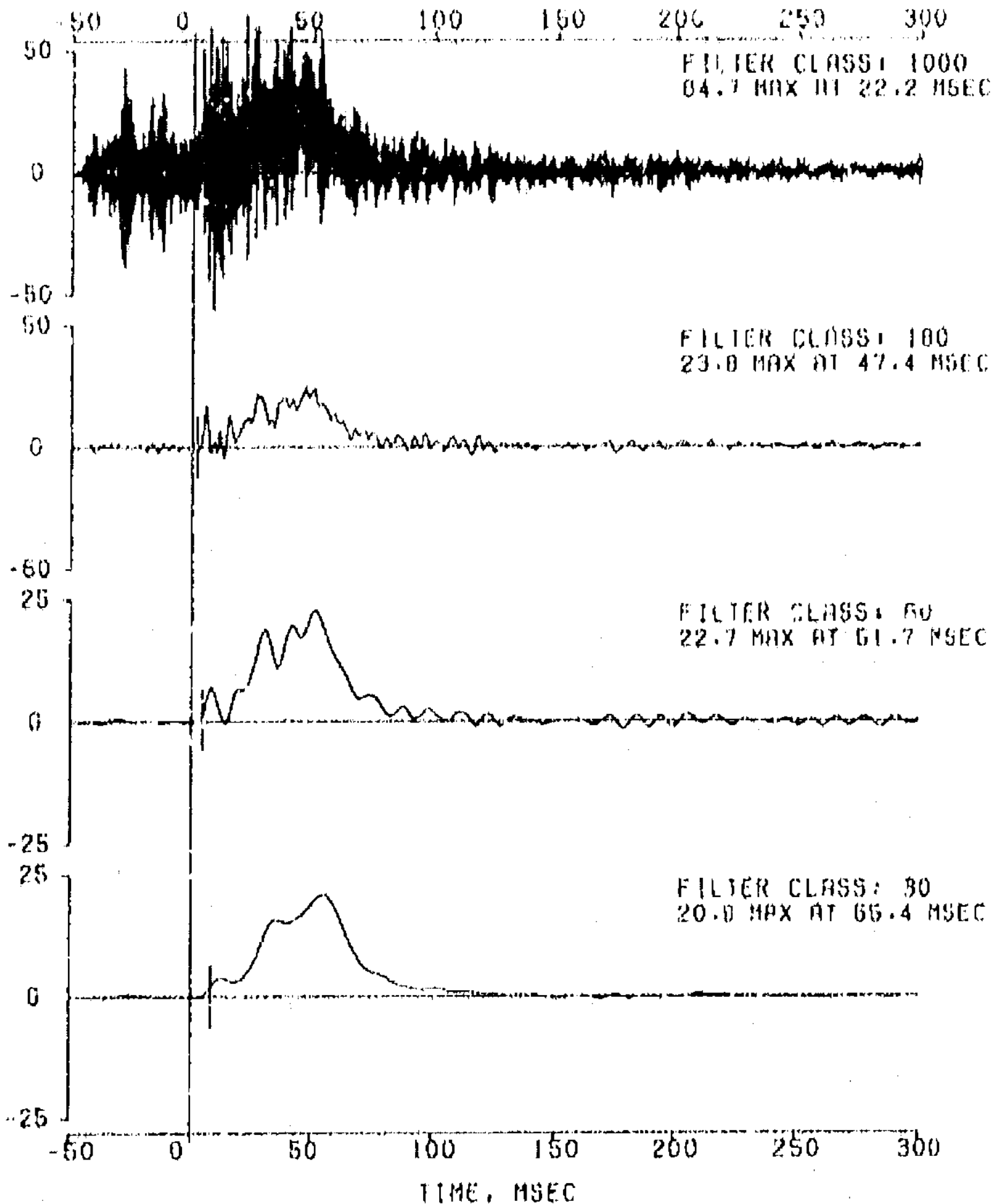


COMPUTED MPH
 COMPUTED IN

VC07608 30-MPH REAR MOVING BARRIER, KJ-J-74, ITEM KJ3589
2002 HYUN 301 REAR IMPACT DEVELOPMENT
CHANNEL 066 RT RAIL HOAR MID X 00429
FILTER TYPE: 080AS-111 RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
IMPACT ANALYSIS DEPT. 5320
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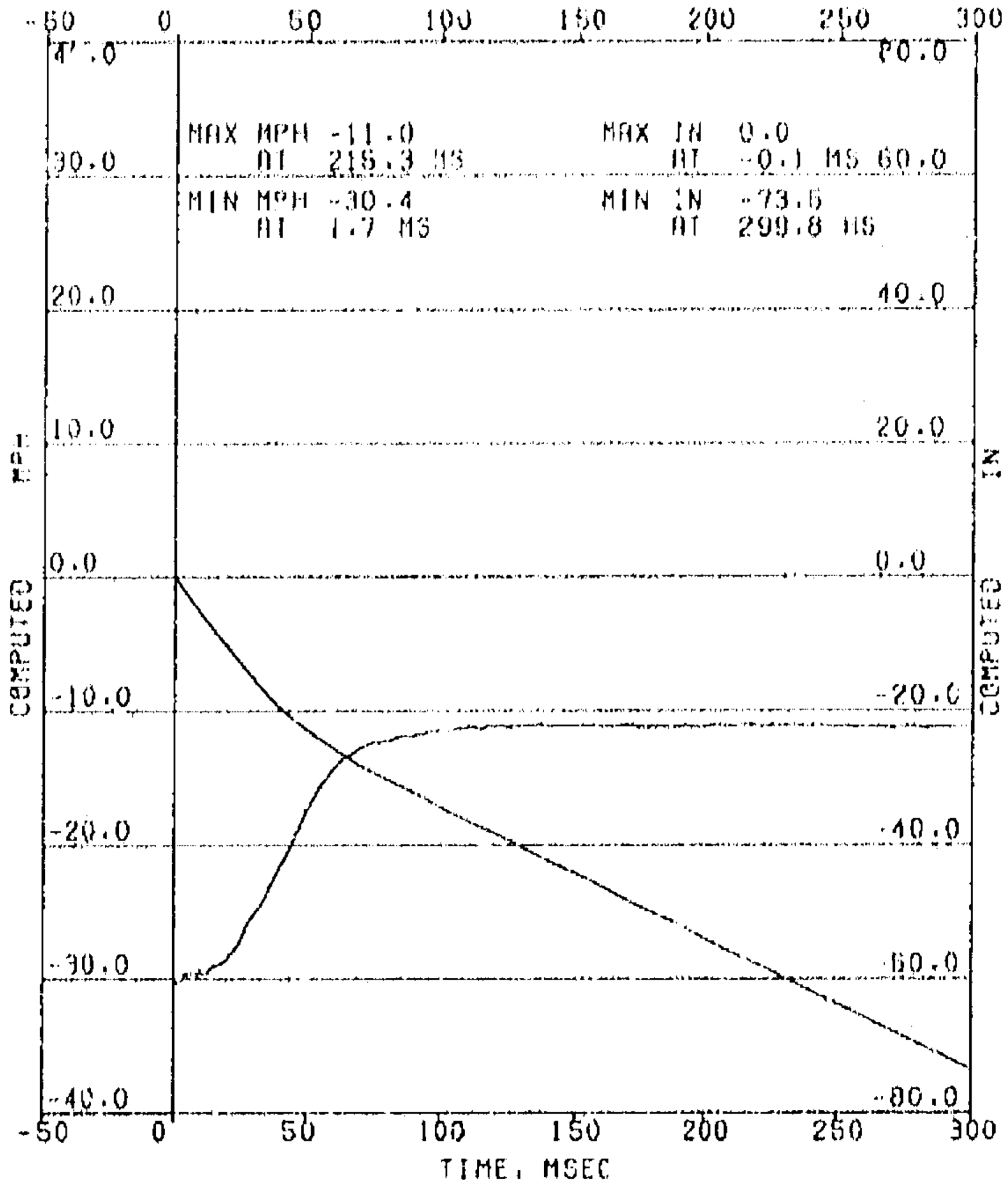
DATA SET 04/25/99DL
ERR7TA 1



FILTER TYPE: OBDAS-1PI RESPONSE CORRECTION, CLASS 1000 FILTER(1650)
 FILTER CLASS: 1000

IMPACT ANALYSIS DEPT. 5320
 APR 26, 1999

DATA SET 04/25/99BE
 ERRATA 1



COMPUTED MPH
 COMPUTED IN

05/03/99

INTER COMPANY CORRESPONDENCE

DATE 05/03/99

TO
DISTRIBUTION

FROM
M. E. REPS

DEPARTMENT
8320

PLANT/OFFICE
CIC

CINS NUMBER
481-00-27

SUBJECT:
REAR DYNAMIC CRUSH ANALYSIS
VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3689
2002 MYSS 301 REAR IMPACT DEVELOPMENT.
TEST DATE 04/25/99

TEST PURPOSE PRIMARY, 2002 USA 301 DEVELOPMENT,
DETERMINE FUEL SYSTEM INTEGRITY.

IMPACT TYPE TARGET SPEED: 30.1 MPH
DAMAGE LOCATION: REAR
BARRIER TYPE: REAR TYPE IV
BARRIER SURFACE: PLYWOOD

VEHICLE BODY CLASS: KJ
CAR LINE: J
BODY: 74
ENGINE: 3.7 LITRE
ENGINE NOTE: ELECTRONIC FUEL INJECTION
TRANSMISSION: 4 SPEED AUTO 4x4
TRANS. NOTE:
VIN AS TESTED: 1J40758K629 [REDACTED] MOD.
VIN AS BUILT: 1J40558K629 [REDACTED] MOD.

TEST SPEED 30.5 MPH BY ELECTRONIC TRAP.

TEST WEIGHT (LBS) 4027 TOTAL, 2071 FRONT, 2156 REAR

OCCUPANTS LEFT FRONT, HYBRID II BALLAST, RD-47
RESTRAINT-BELTS ONLY.
RIGHT FRONT, HYBRID II BALLAST, RD-70
RESTRAINT-BELTS ONLY.

BUILD CONDITION

TARGET WEIGHT (LBS) 4171 TOTAL, 2229 FRONT, 1942 REAR REP MAX OPT.
WEIGHT FOR A 3.7L 4X4 NOT INCLUDING DUMMIES OR
CARGO WEIGHT.

FUEL AND BALLAST 17.0 GALLONS OF STODDARD SOLVENT.
300 LBS OF LUGGAGE BALLAST.
150 LBS OF BALLAST SECURED IN REAR SEAT AREA.
100 LBS OF BALLAST SECURED ON LF FLOORPAN.

REAR DYNAMIC CRUSH, PITCH, AND REAR WHEEL MOTION RELATIVE TO
THE FRONT SILL HAVE BEEN DETERMINED BY FILM ANALYSIS. TIME
WAS BASED ON CAMERA TIMING DATA. LATERAL VALUES WERE HELD
CONSTANT THROUGHOUT THE ANALYSIS.

DYNAMIC CRUSH 19.4 +OR- 1 INCH AT 61. +OR- 5 MSEC.



S. D. BROWN



M. E. CREPS

GRAPHS - 4

TEST VC07508

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GLASSARY OF TERMS

USED IN STANDARD REPORTS

AD	ANTHROPOMORPHIC DEVICE
ATD	ANTHROPOMORPHIC TEST DEVICE
BASE COORD	BASE COORDINATE SYSTEM
C/L	CENTERLINE
CAR COORD	CAR COORDINATE SYSTEM
CCW	COUNTER CLOCKWISE
CORR-IN	SEPARATION IN INCHES (MINUS INITIAL LENGTH)
CORR-MM	SEPARATION IN MM (MINUS INITIAL LENGTH)
CORR-P	CORRECTED (ZEROED) PITCH
CORR-R	CORRECTED (ZEROED) ROLL
CORR-Y	CORRECTED (ZEROED) YAW
CL	CLOCKWISE
EFI	ELECTRONIC FUEL INJECTOR
ENO	ENGINE
ENOPY	ENGINE PITCH AND YAW
FSM	FRONT END SHEET METAL
FUCIAL	REFERENCE POINT OR TARGET
FS	FRONT SILL TARGET
FWD	FORWARD
IP	INSTRUMENT PANEL TARGET
LB	POUNDS
LCP,LOP	LEFT C-POST & QUARTER PANEL TARGETS
LFS,LMS,LRS	LEFT FRONT, MID, & REAR SILL TARGETS
LT	LEFT
MS	MID SILL TARGET
NORMALIZE	PUT ON A COMMON BASIS
NOSE-DOWN	LEADING END BELOW TRAILING
NOSE-UP	LEADING END ABOVE TRAILING
PERF	PERFORMANCE
REF	REFERENCE
REL	RELATIVE TO (ONE-DIMENSIONAL)
RCP,RQP	RIGHT C-POST & QUARTER PANEL TARGETS
RFS,RMS,RPS	RIGHT FRONT, MID, & REAR SILL TARGETS
ROLL-LEFT	LEFT SIDE LOWER THAN RIGHT
ROLL-RIGHT	RIGHT SIDE LOWER THAN LEFT
RS	REAR SILL TARGET
RT	RIGHT
SEP	SEPARATION OF (THREE-DIMENSIONAL)
SYS	SYSTEM
TBI	THROTTLE BODY INJECTOR
TIME,MS	TIME IN MILLISECOND
U/B	UNDERBODY
VS	VERBOS
X	LONGITUDINAL AXIS (INCREASING TOWARD TRAILING EDGE)
XF	X-FILTERED
Y	LATERAL AXIS (INCREASING TO THE RIGHT)
YAW-LEFT	LEADING EDGE TO LEFT
YAW-RIGHT	LEADING EDGE TO RIGHT
Z	VERTICAL AXIS (INCREASING UPWARD)
ZEROED	SHIFTED TO START AT ZERO
ZERO-IN	ZEROED INCHES
ZERO-MM	ZEROED MILLIMETERS

IMPACT ANALYSIS
DEPARTMENT 5320
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TEST VC07506

VE07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ0589
 2002 HVSS 501 REAR IMPACT DEVELOPMENT.

ZERBED X MOTION OF P3 REL TO LFS IN BASE COORD SYS
 VERSUS TIME IN MILLISECONDS

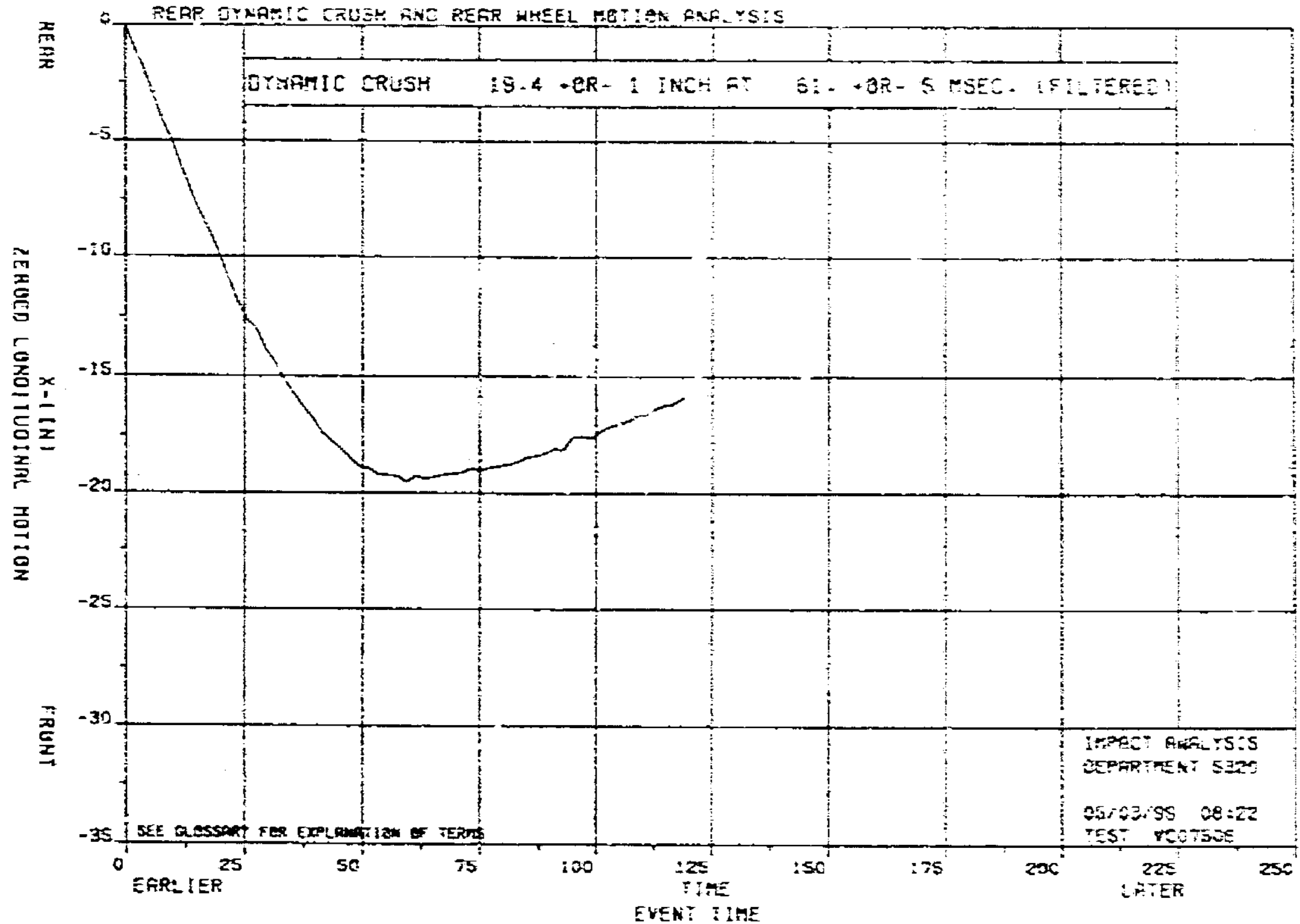


FIGURE 1

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3688
 2002 HVSS 301 REAR IMPACT DEVELOPMENT.

ZERGED Z OF HUB RELATIVE TO LFS IN CAR COORD
 VERSUS ZERGED X OF HUB RELATIVE TO LFS IN CAR COORD

REAR DYNAMIC CRUSH AND REAR WHEEL MOTION ANALYSIS

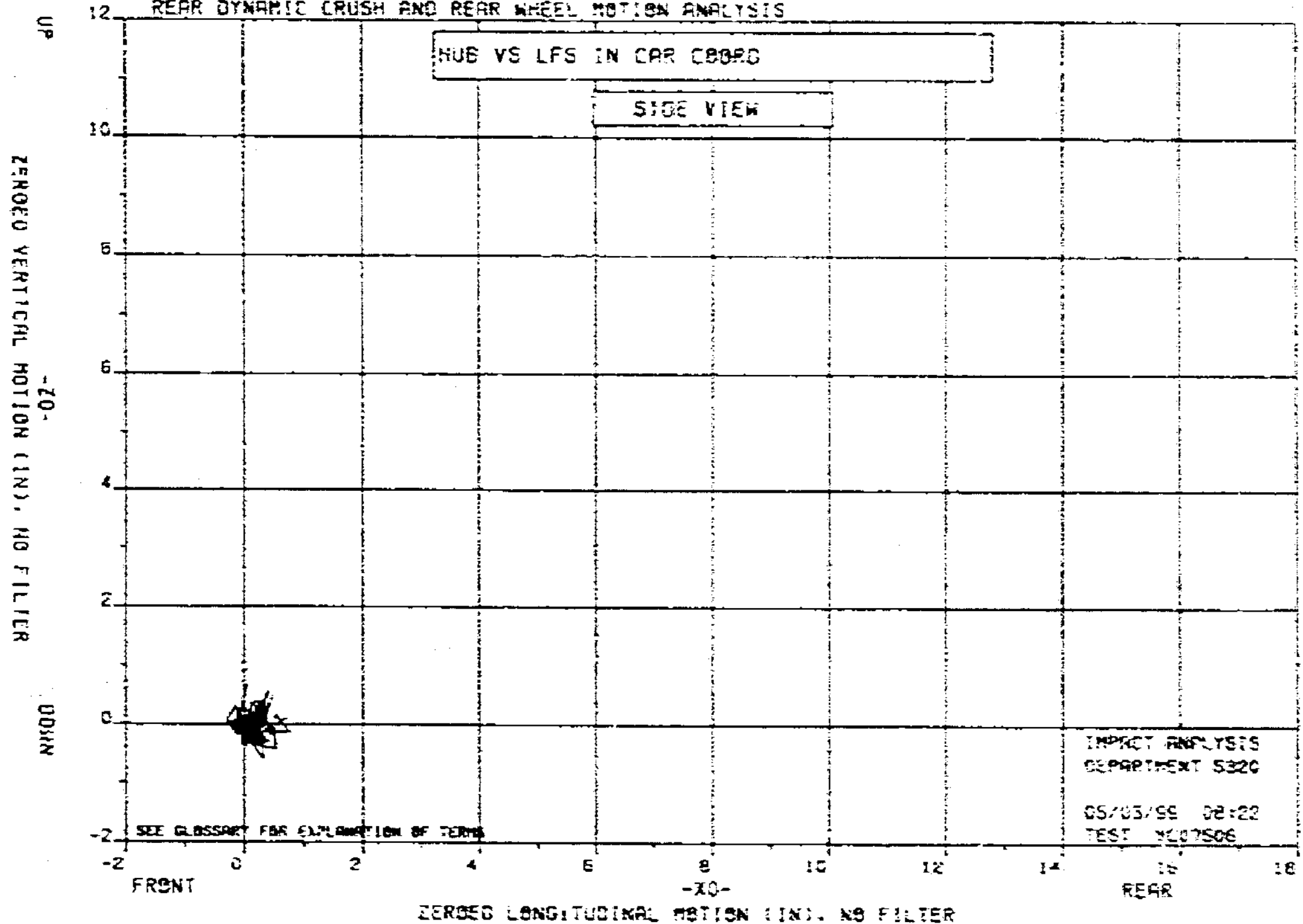


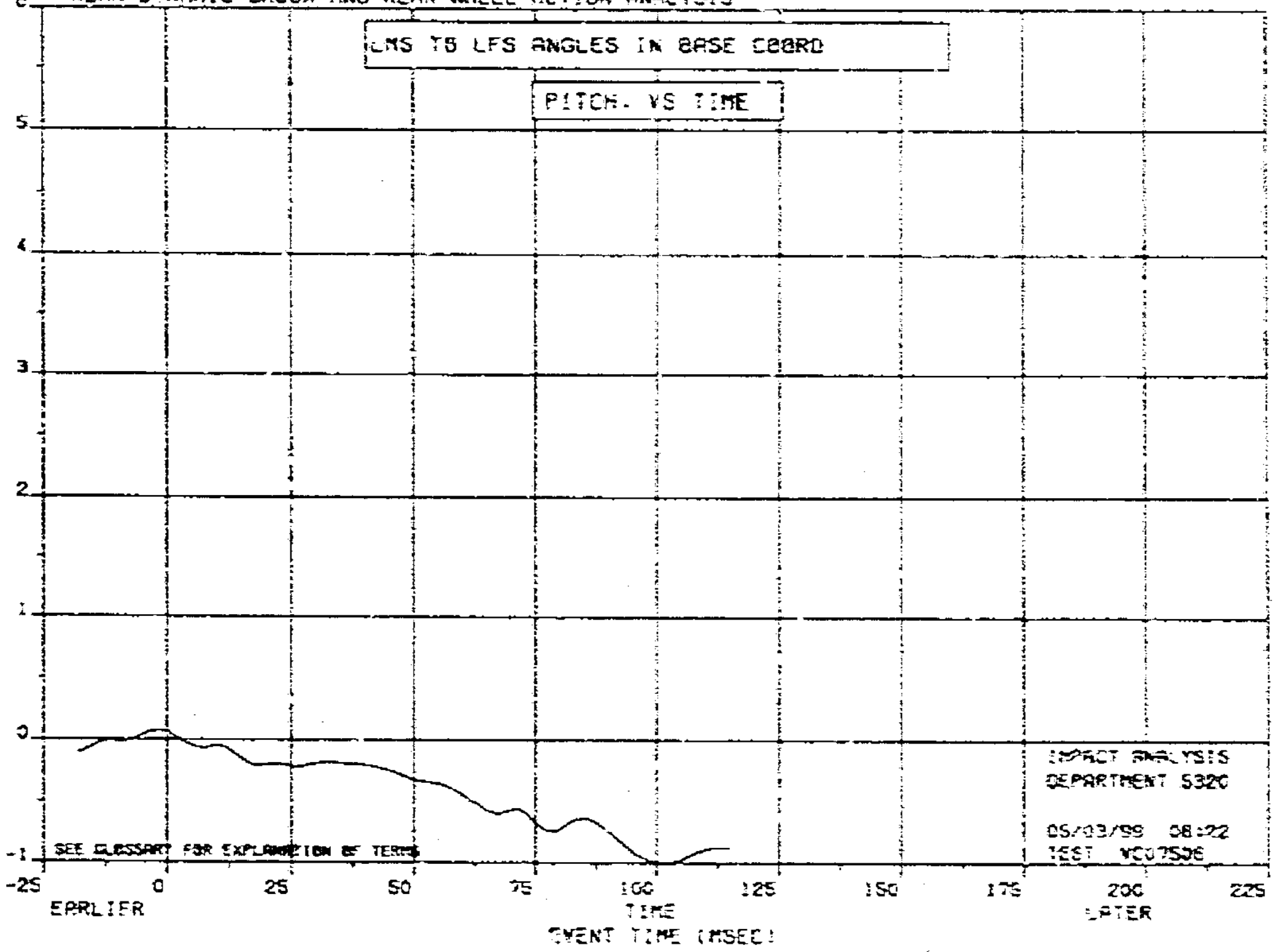
FIGURE 2

VC07506 30-MPH REAR MOVING BARRIER. KU-1-74 ITEM #3886
 2002 MVSS 301 REAR IMPACT DEVELOPMENT.

REAR PITCH OF LMS TO LFS IN BASE COORD SYSTEM
 VERSUS TIME IN MILLISECONDS

REAR DYNAMIC CRUSH AND REAR WHEEL MOTION ANALYSIS

NOSE-UP
 DEGREES CCW AROUND Y RELATIVE TO X (RT SIDE VIEW) 80HZ FILTER
 CORR-P
 NOSE-DOWN



IMPACT ANALYSIS
 DEPARTMENT 5320
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 TEST VC07506

FIGURE 3

VE07506 30-MPH REAR MOVING BARRIER, NJ-3-74 ITEM K03885
 2002 NYSS 301 REAR IMPACT DEVELOPMENT.

LMS TO LFS DISTANCE 24.09 INCHES (INITIAL DIST) (IN)
 VERSUS TIME IN MILLISEC

REAR DYNAMIC CRUSH AND REAR WHEEL MOTION ANALYSIS

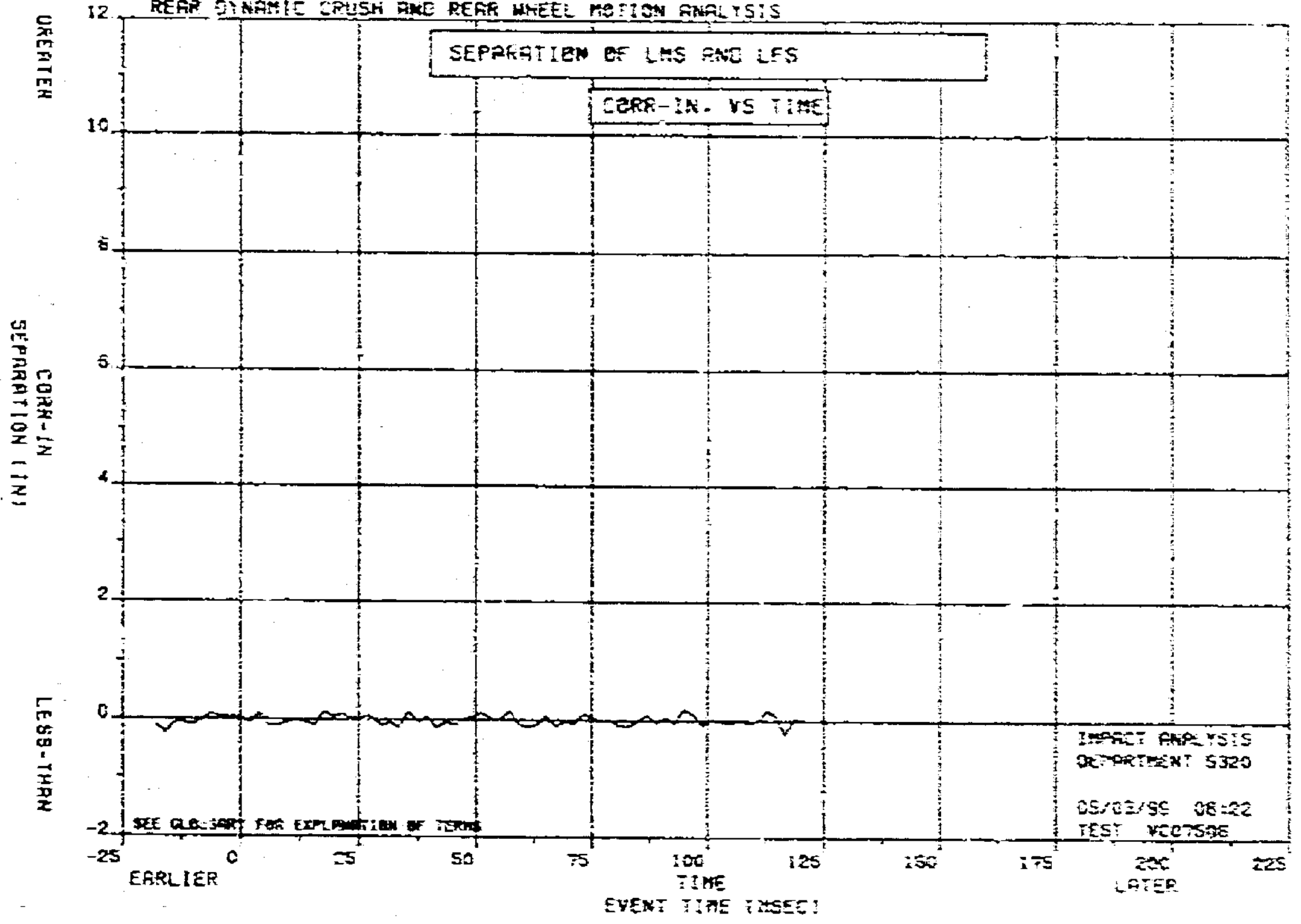


FIGURE 4

FILED MAY 20 1999

INTER COMPANY CORRESPONDENCE

DATE 05/06/99

TO
DISTRIBUTION

FROM
M. E. CREPS

DEPARTMENT
5320

PLANT/OFFICE
CIC

CIMS NUMBER
401-00-27

SUBJECT:

REAR UNDERBODY MOTION ANALYSIS
VC07508 31-MPH REAR MOVING BARRIER, KJ-J-74 ITCM KJ3600
2002 HY53 301 REAR IMPACT DEVELOPMENT.
TEST DATE 04/26/99

TEST PURPOSE

PRIMARY, 2002 USA 301 DEVELOPMENT.
DETERMINE FUEL SYSTEM INTEGRITY.

IMPACT TYPE

TARGET SPEED: 30.3 MPH
DAMAGE LOCATION: REAR
BARRIER TYPE: REAR TYPE 1V
BARRIER SURFACE: PLYWOOD

VEHICLE

BODY CLASS: KJ
CAR LINE: J
BODY: 74
ENGINE: 3.7 LITRE
ENGINE NOTE: ELECTRONIC FUEL INJECTION
TRANSMISSION: 4 SPEED AUTO 4x4
TRANS. NOTE:
VIN AS TESTED: 1J40798K628 [REDACTED] MOD.
VIN AS BUILT: 1J40688K628 [REDACTED] MOD.

TEST SPEED

30.3 MPH BY ELECTRONIC TRAP.

TEST WEIGHT (LBS)

4827 TOTAL, 2071 FRONT, 2106 REAR

OCCUPANTS

LEFT FRONT, HYBRID II BALLAST, AD-47
RESTRAINT-BELTS ONLY.
RIGHT FRONT, HYBRID II BALLAST, AD-70
RESTRAINT-BELTS ONLY.

BUILD CONDITION

TARGET WEIGHT (LBS) 4171 TOTAL, 2229 FRONT, 1942 REAR REP MAX OPT.
WEIGHT FOR A 3.7L 4X4 NOT INCLUDING DUMMIES OR
CARGO WEIGHT.

FUEL AND BALLAST 17.0 GALLONS OF STODDARD SOLVENT,
200 LBS OF LUDGATE BALLAST,
150 LBS OF BALLAST SECURED IN REAR SEAT AREA,
100 LBS OF BALLAST SECURED ON LF FLOORPAN.

THE RELATIVE MOTIONS OF SELECTED REAR UNDERBODY TARGETS HAVE BEEN
DETERMINED BY FILM ANALYSIS. TIME WAS BASED ON CAMERA TIMING DATA.



S. D. BERKOIN



M. E. CREPS

GRAPHS - 27

TEST VC0750R

01/08/89 16:26

PAGE 2 OF 2

G L O S S A R Y O F T E R M S

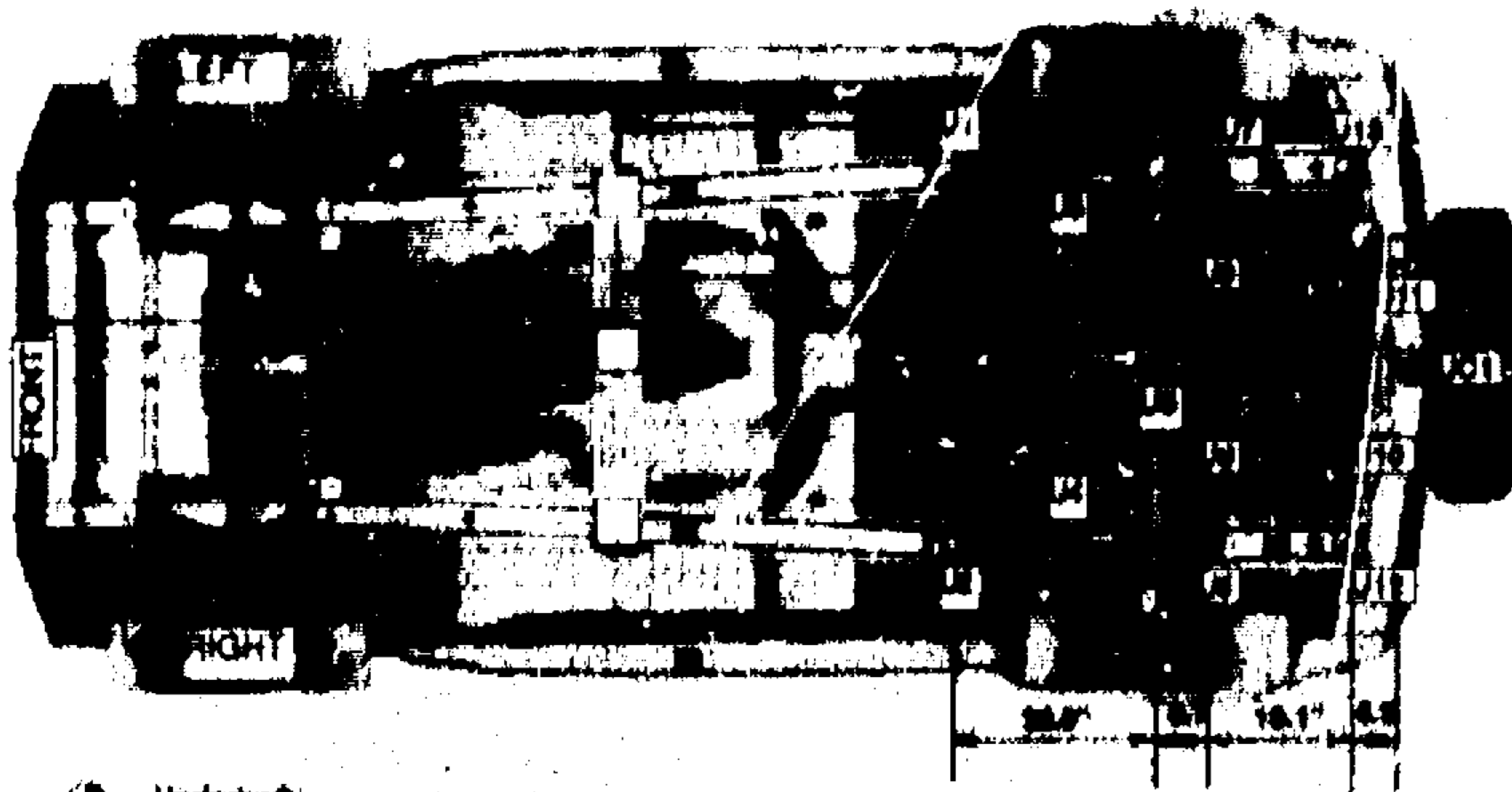
U S E D I N S T A N D A R D R E P O R T S

AD	ANTHROPOMORPHIC DEVICE
ATD	ANTHROPOMORPHIC TEST DEVICE
BASE COORD	BASE COORDINATE SYSTEM
C/L	CENTERLINE
CAR COORD	CAR COORDINATE SYSTEM
CCW	COUNTER CLOCKWISE
CORR-IN	SEPARATION IN INCHES (MINUS INITIAL LENGTH)
CORR-MM	SEPARATION IN MM (MINUS INITIAL LENGTH)
CORR-P	CORRECTED (ZEROED) PITCH
CORR-R	CORRECTED (ZEROED) ROLL
CORR-Y	CORRECTED (ZEROED) YAW
CM	CLOCKWISE
EFI	ELECTRONIC FUEL INJECTION
ENO	ENGINE
ENOPY	ENGINE PITCH AND YAW
FESH	FRONT END SHEET METAL
FIDUCIAL	REFERENCE POINT OR TARGET
FS	FRONT SILL TARGET
FWD	FORWARD
IP	INSTRUMENT PANEL TARGET
LB	POUNDS
LCP, LQP	LEFT C-POST & QUARTER PANEL TARGETS
LFB, LMB, LRB	LEFT FRONT SILL, MID SILL, & REAR SILL TARGETS
LT	LEFT
MS	MID SILL TARGET
NORMALIZE	PUT ON A COMMON BASIS
NOSE-DOWN	LEADING END BELOW TRAILING
NOSE-UP	LEADING END ABOVE TRAILING
PERF	PERFORMANCE
REF	REFERENCE
REL	RELATIVE TO (ONE-DIMENSIONAL)
RCP, RQP	RIGHT C-POST & QUARTER PANEL TARGETS
RFB, RMB, RRB	RIGHT FRONT, MID, & REAR SILL TARGETS
ROLL-LEFT	LEFT SIDE LOWER THAN RIGHT
ROLL-RIGHT	RIGHT SIDE LOWER THAN LEFT
RS	REAR SILL TARGET
RT	RIGHT
SEP	SEPARATION OF (THREE-DIMENSIONAL)
SYS	SYSTEM
TBI	THRUSTLE BODY INJECTOR
TIME.MS	TIME IN MILLISECONDS
U/D	UNDERBODY
VS	VERSUS
X	LONGITUDINAL AXIS (INCREASING TOWARD TRAILING EDGE)
XF	X-FILTERED
Y	LATERAL AXIS (INCREASING TO THE RIGHT)
YAW-LEFT	LEADING EDGE TO LEFT
YAW-RIGHT	LEADING EDGE TO RIGHT
Z	VERTICAL AXIS (INCREASING UPWARD)
ZEROED	SHIFTED TO START AT ZERO
ZERO-IN	ZEROED INCHES
ZERO-MM	ZEROED MILLIMETERS

IMPACT ANALYSIS
DEPARTMENT 5320
05/06/99 16:25
TEST VC07E06

VC07508 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJJ559 2002 MV88 301 REAR IMPACT DEVELOPMENT

Total Mass: 4600 kg
 Jeep Cherokee 4x4 KJ
 Target and Accelerometer Locations for Rear Impact



- ⊙ Underbody
- Side View
- ⊞ Single Axle (R) Accelerometer
- ⊞ Dual (R & L) Accelerometer

TARGET NAME

TARGET DESCRIPTION

U01	CENTER TARGET, REAR BUMPER CROSSMEMBER
U1	LEFT FOREMOST RAIL TARGET
U2	RIGHT FOREMOST RAIL TARGET
U3	LEFT UPPER SWING-ARM TARGET
U4	RIGHT UPPER SWING-ARM TARGET
U5	REAR DIFFERENTIAL TARGET
U6	RIGHT RAIL TARGET -RWD OF AXLE
U7	LEFT RAIL TARGET -RWD OF AXLE
U8	RIGHT FRONT CORNER FUEL TANK TARGET
U9	LEFT FRONT CORNER FUEL TANK TARGET
U10	RIGHT AFT FUEL TANK TARGET
U11	LEFT AFT FUEL TANK TARGET
U12	RIGHT AFTMOST RAIL TARGET - NEAR REAR RIGHT CORNER FUEL TANK
U13	LEFT AFTMOST RAIL TARGET - NEAR REAR LEFT CORNER FUEL TANK

IMPACT ANALYSIS
 DEPARTMENT 5320
 05/08/1999
005- Chrysler -001856
 TEST VC07508 UBR

V007505 30-MPH REAR MOVING BARRIER. RJ-1-74 ITEM KJ3569
 2002 NVSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF MBI RELATIVE TO UCI IN BASE COORD
 VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

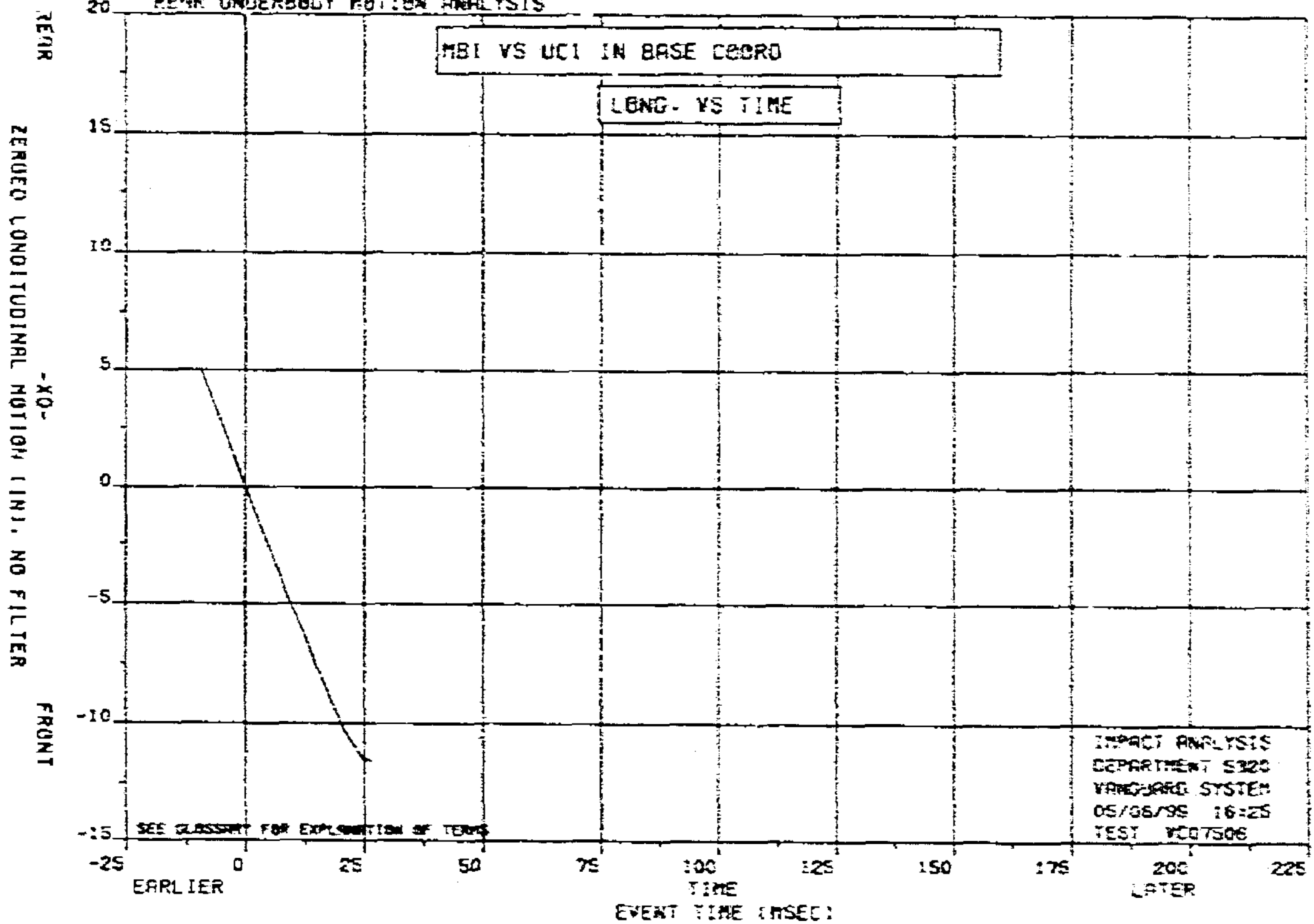


FIGURE 1

VC07505 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
2002 MVSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF UC1 RELATIVE TO U1 IN CAR COORD
VERSUS TIME IN MILLISECONDS

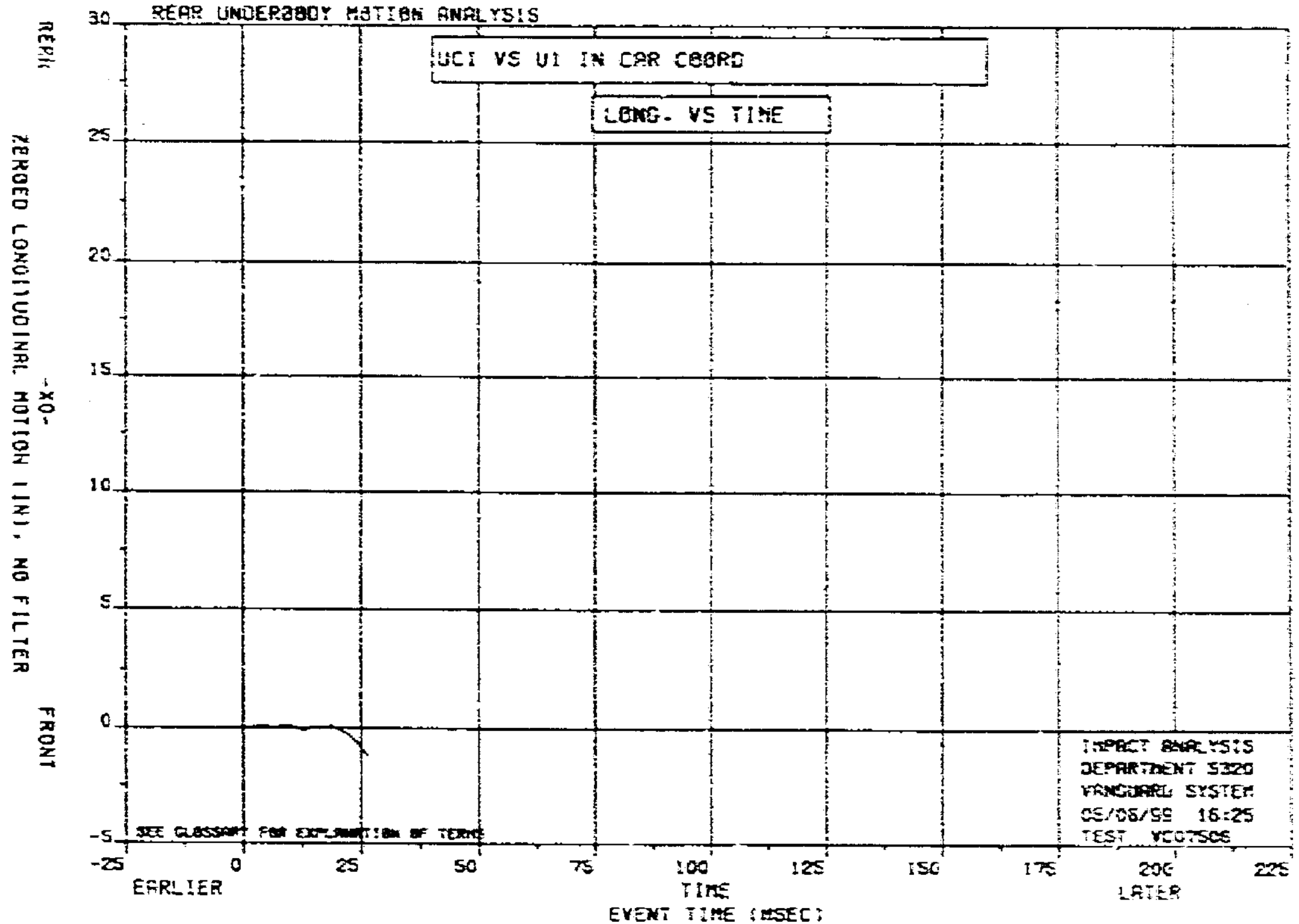


FIGURE 2

VC07S06 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
 2002 HVSS 30: REAR IMPACT DEVELOPMENT.

ZEROED X OF MB1 RELATIVE TO U1 IN BASE COORD
 VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

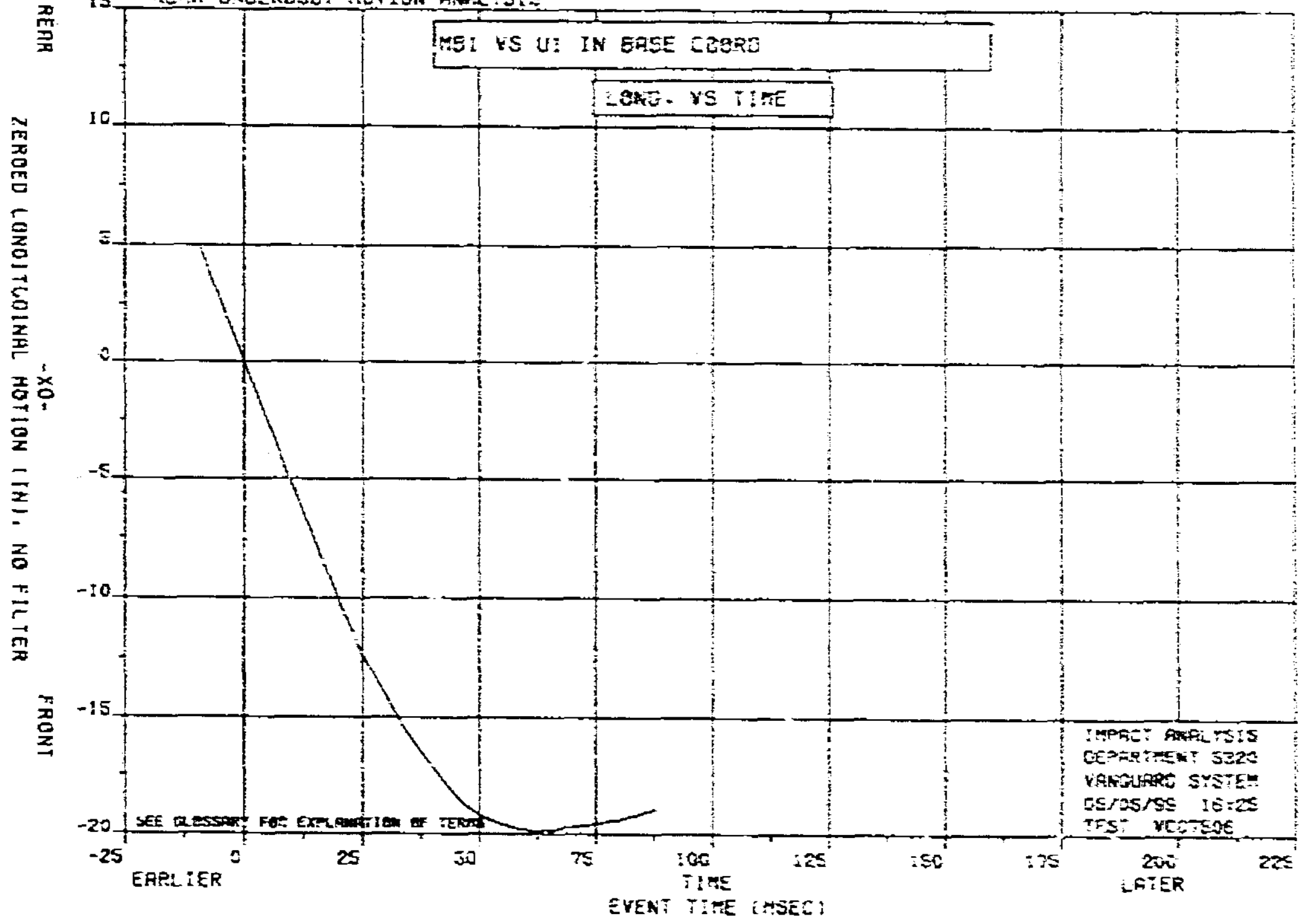


FIGURE 3

VC07506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ5588
 2002 HVSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF M81 RELATIVE TO U7 IN BASE COORD
 VERSUS TIME IN MILLISECONDS

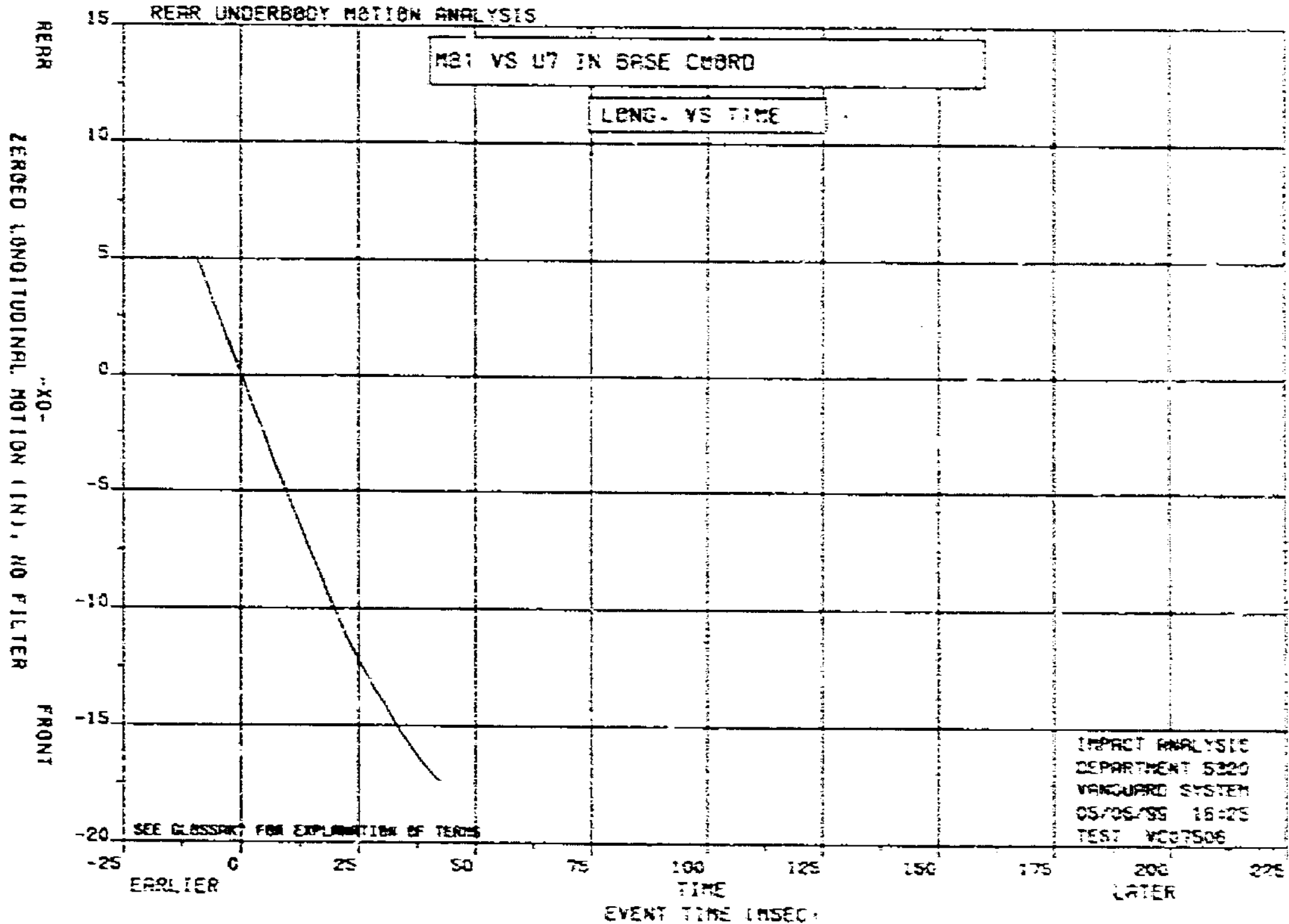


FIGURE 4

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
2002 MVSS 30: REAR IMPACT DEVELOPMENT.

ZERGED X OF MBI RELATIVE TO U13 IN CAR COORD
VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

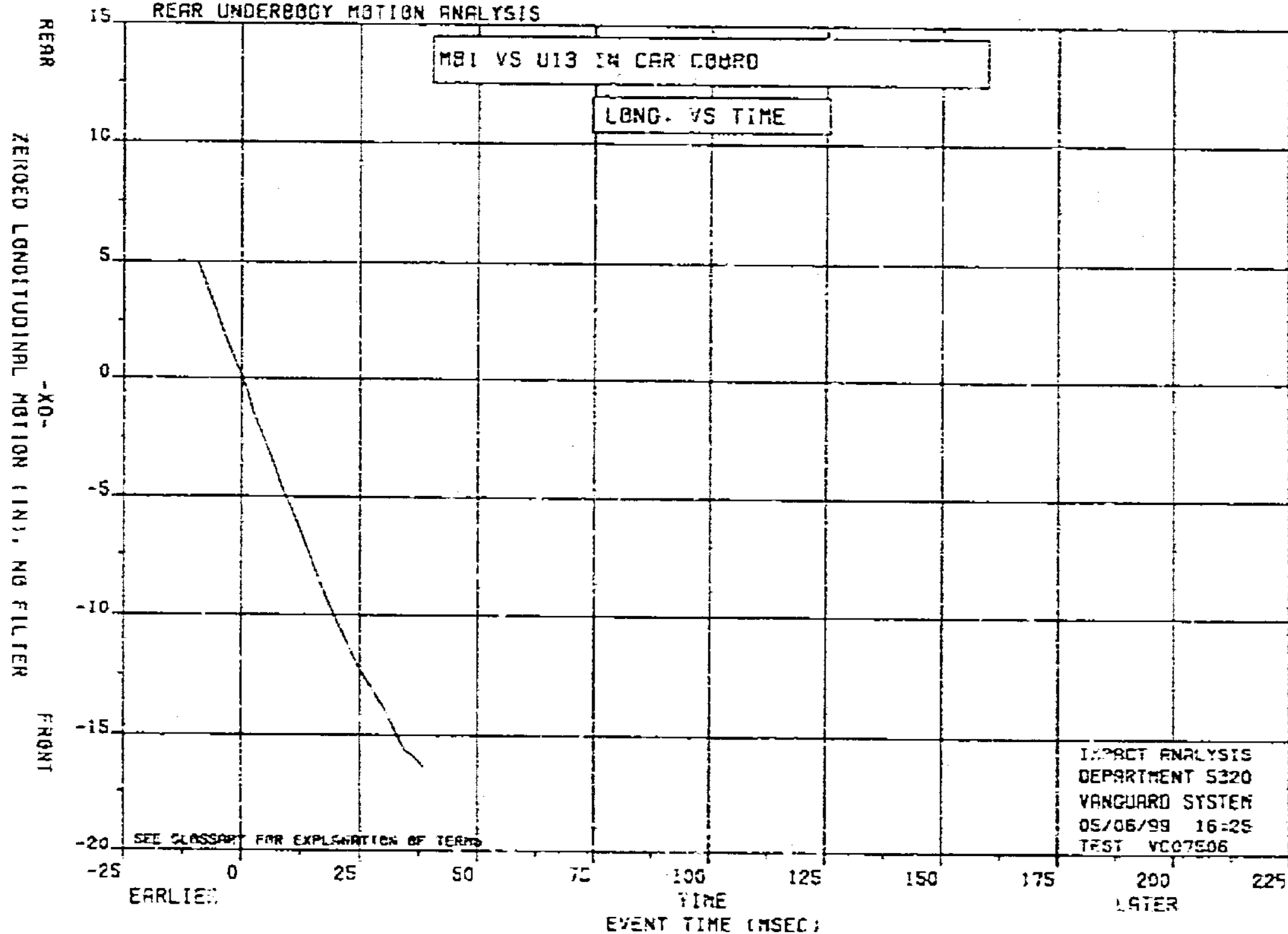


FIGURE 5

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
 2002 MV55 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF U13 RELATIVE TO U7 IN CAR COORD
 VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

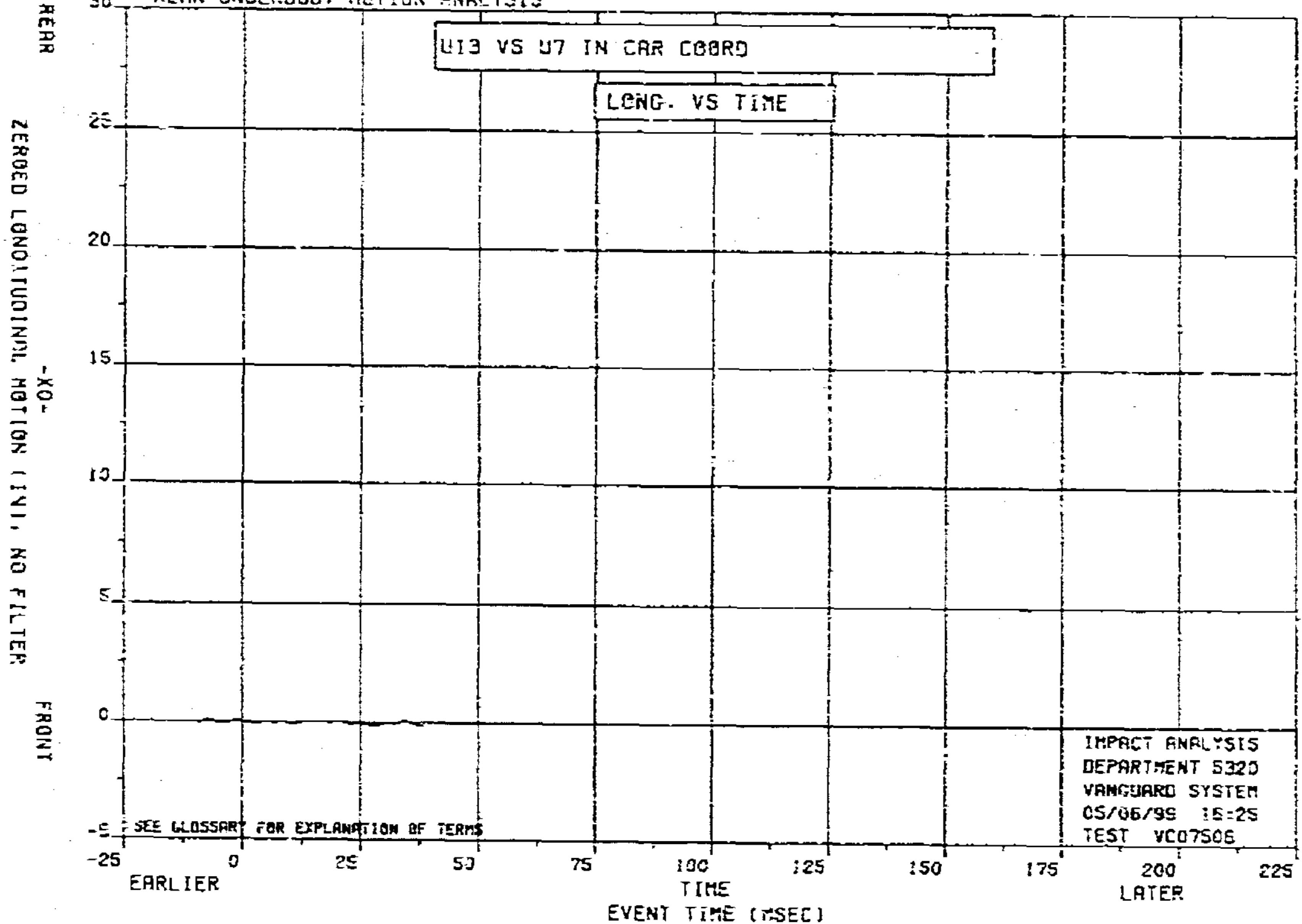


FIGURE 6

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ358C
2002 MV55 301 REAR IMPACT DEVELOPMENT.

ZERGED Y OF U7 RELATIVE TO U1 IN CAR COORD
VERSUS TIME IN MILLISEC8NDS

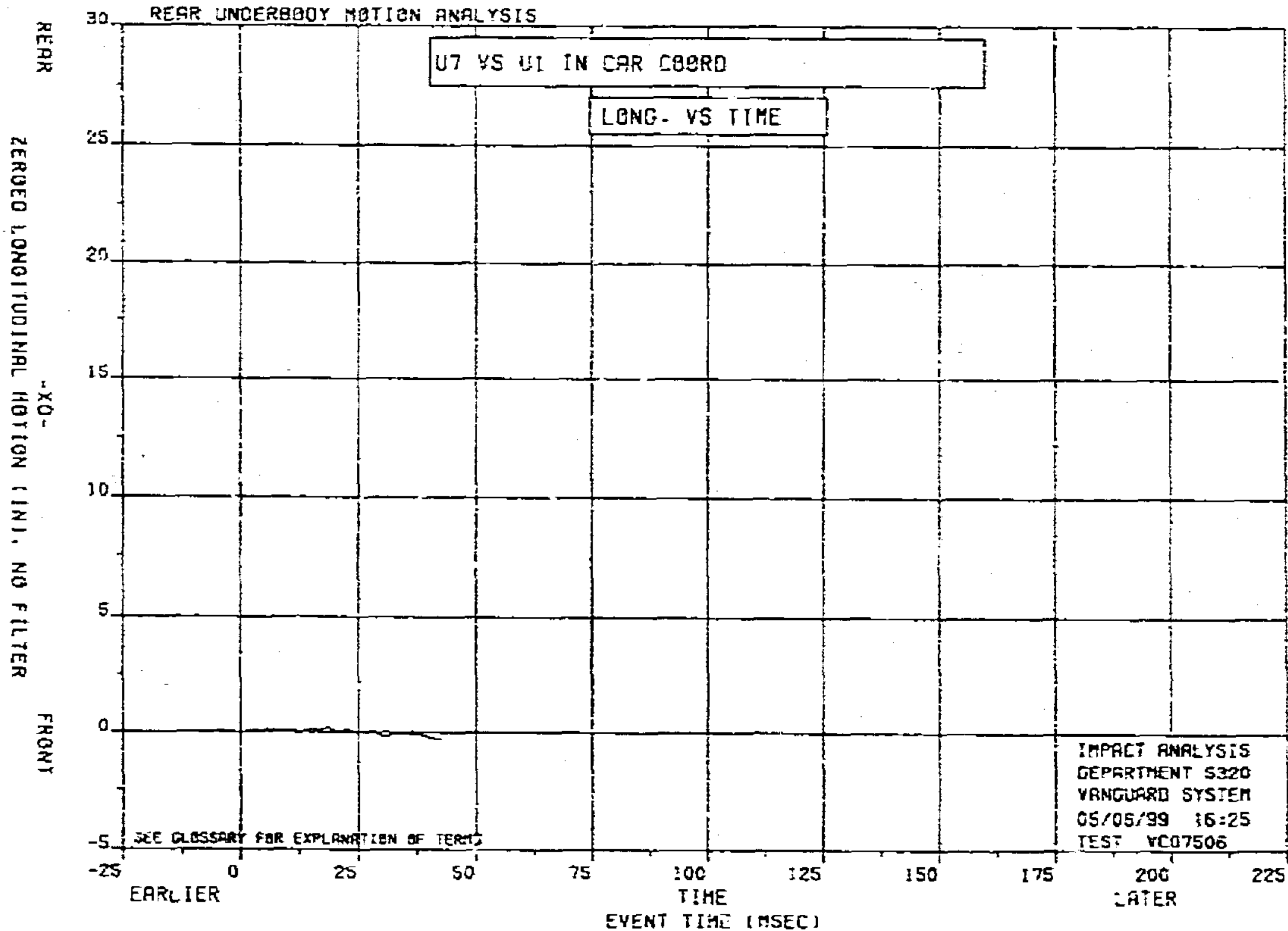


FIGURE 7

VC07506 30-MPH REAR MOVING CARRIER, KJ-J-74 ITEM KJ3589
 2002 MVSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF M22 RELATIVE TO U2 IN BASE COORD
 VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

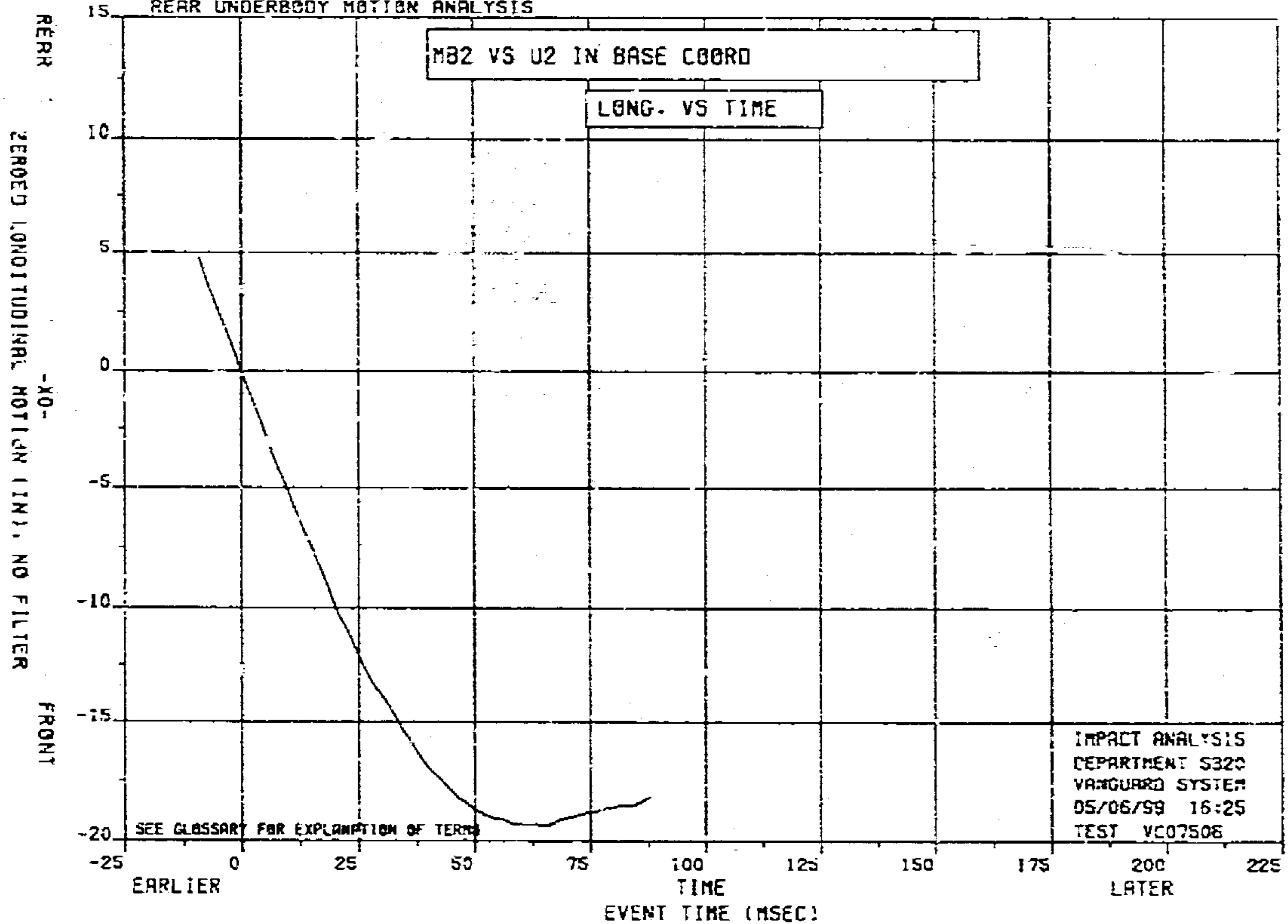


FIGURE 8

VC07506 30-MPH REAR MOVING BARRIER, KJ J-74 ITEM KJ3589
2002 HVSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF MB2 RELATIVE TO U6 IN CAR COORD
VERSUS TIME IN MILLISECONDS

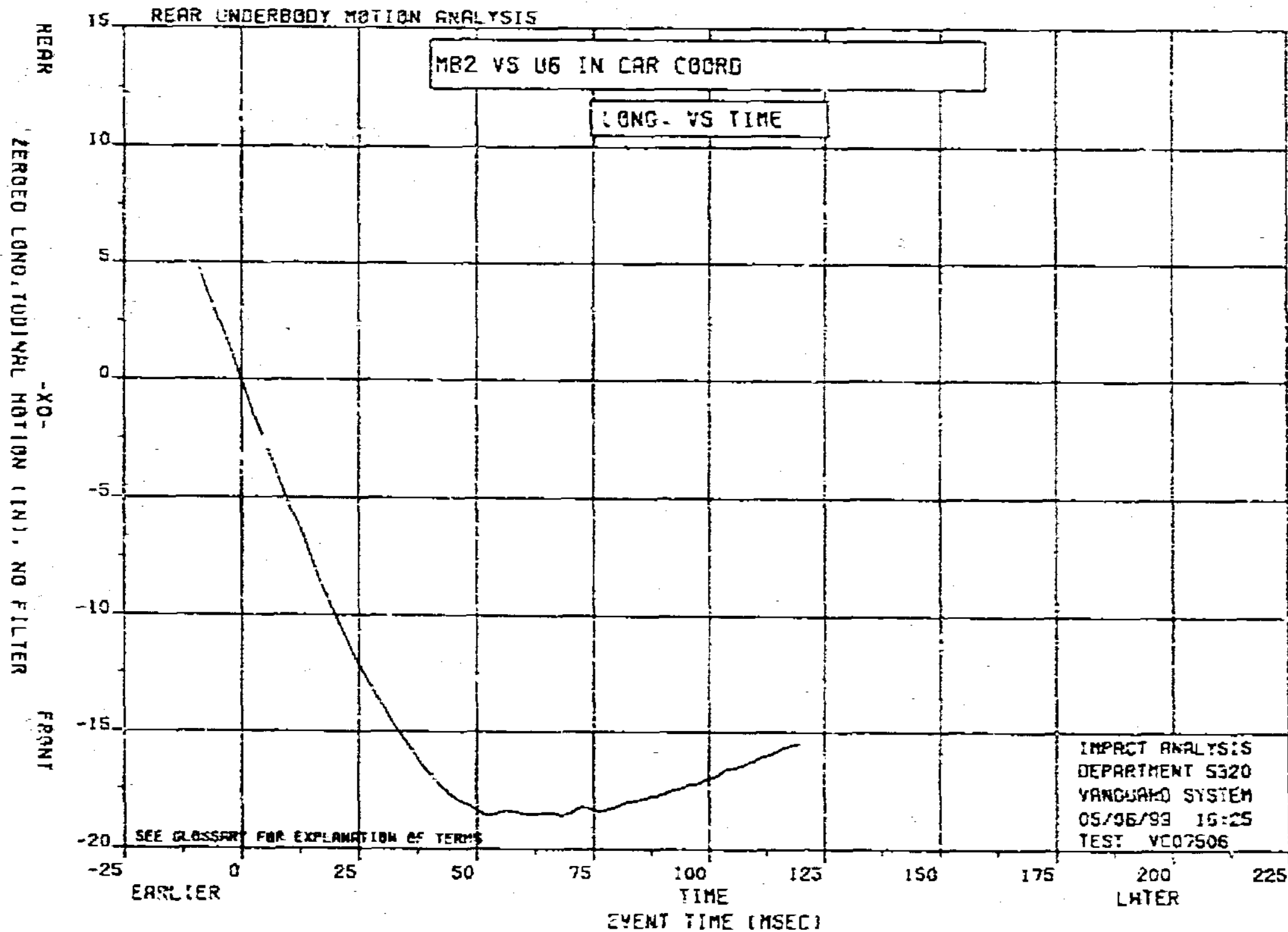


FIGURE 9

VC07S05 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3589
 2002 NVSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF MB2 RELATIVE TO U12 IN CAR COORD
 VERSUS TIME IN MILLISECONDS

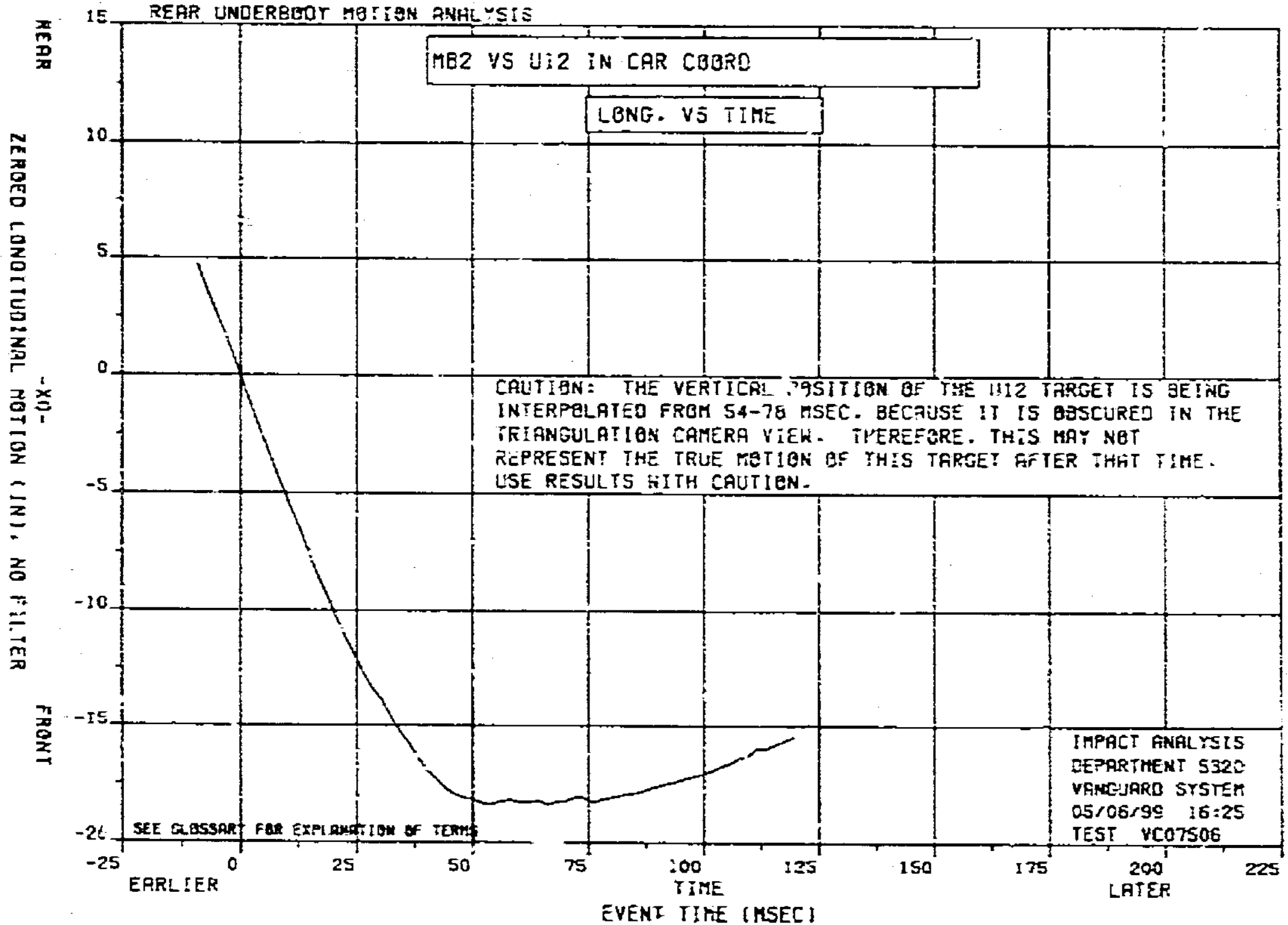


FIGURE 10

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
 2002 MYSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF U12 RELATIVE TO U6 IN CAR COORD
 VERSUS TIME IN MILLISECOND

REAR UNDERBODY MOTION ANALYSIS

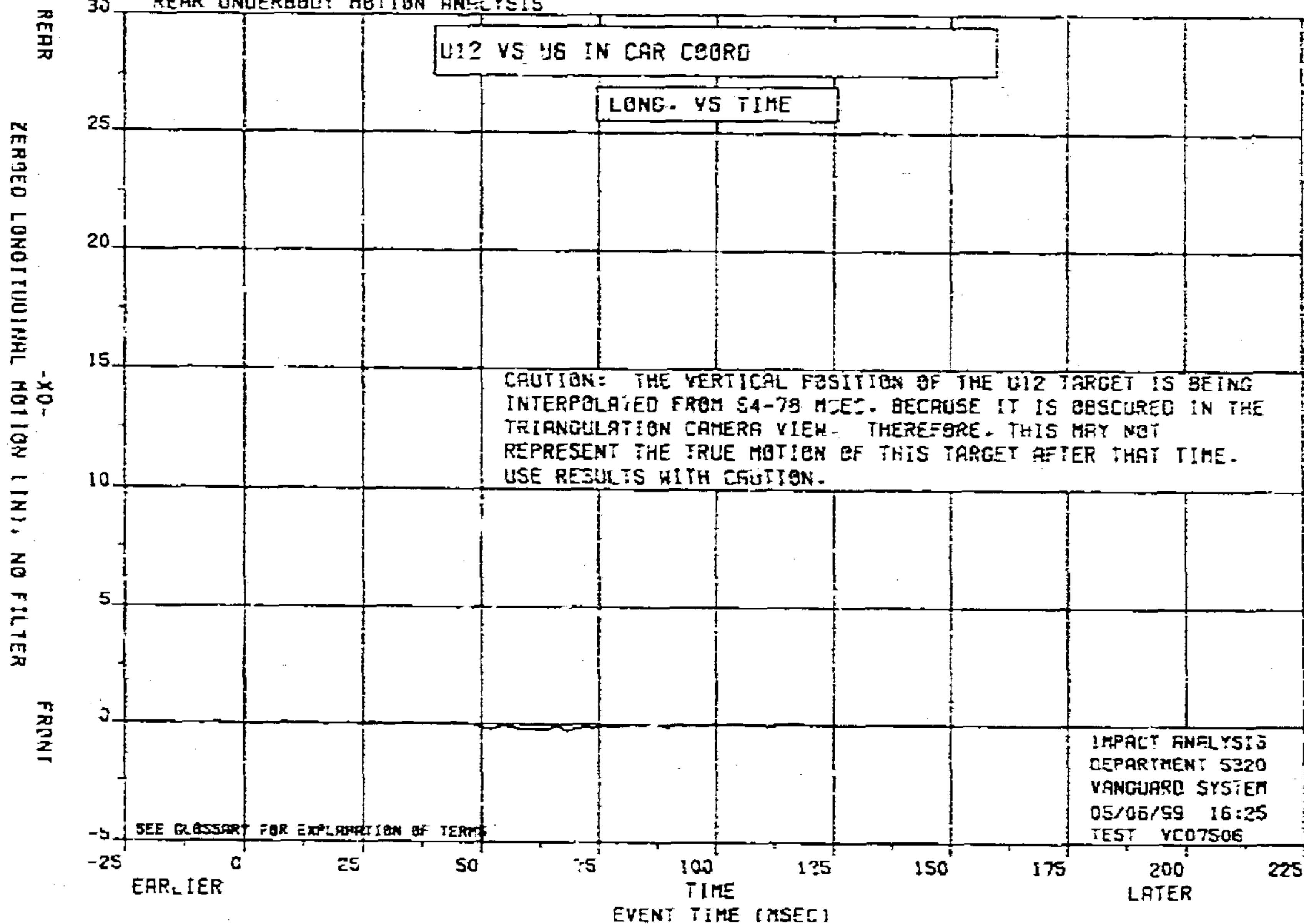


FIGURE 11

VCC7506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM #J3589
 2002 MYSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF U2 RELATIVE TO U2 IN CAR COORD
 VERSUS TIME IN MILLISECOND

REAR UNDERBODY MOTION ANALYSIS

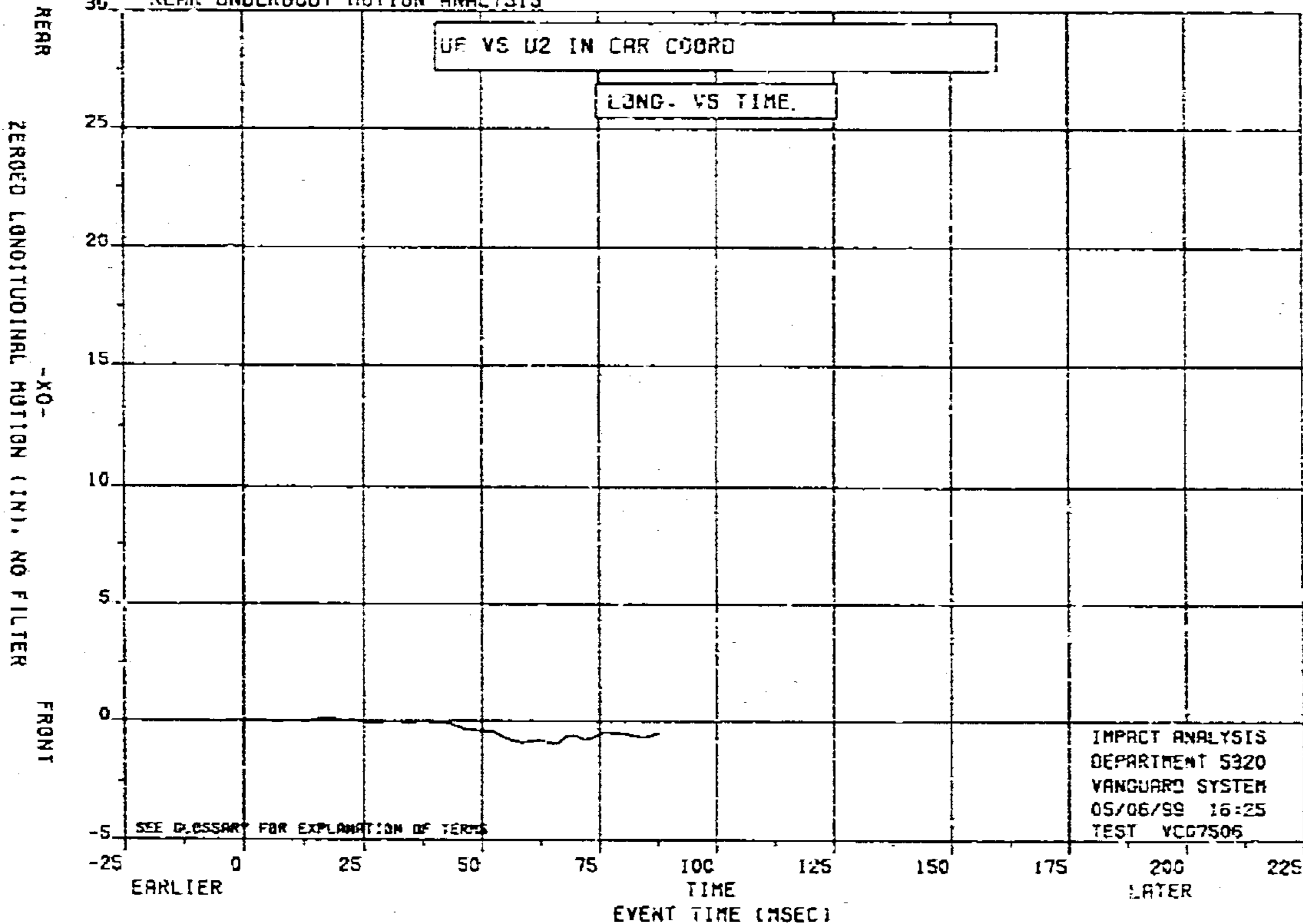


FIGURE 12

VC07506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3589
 2002 MYSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF U5 RELATIVE TO U1 IN CAR COORD
 VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

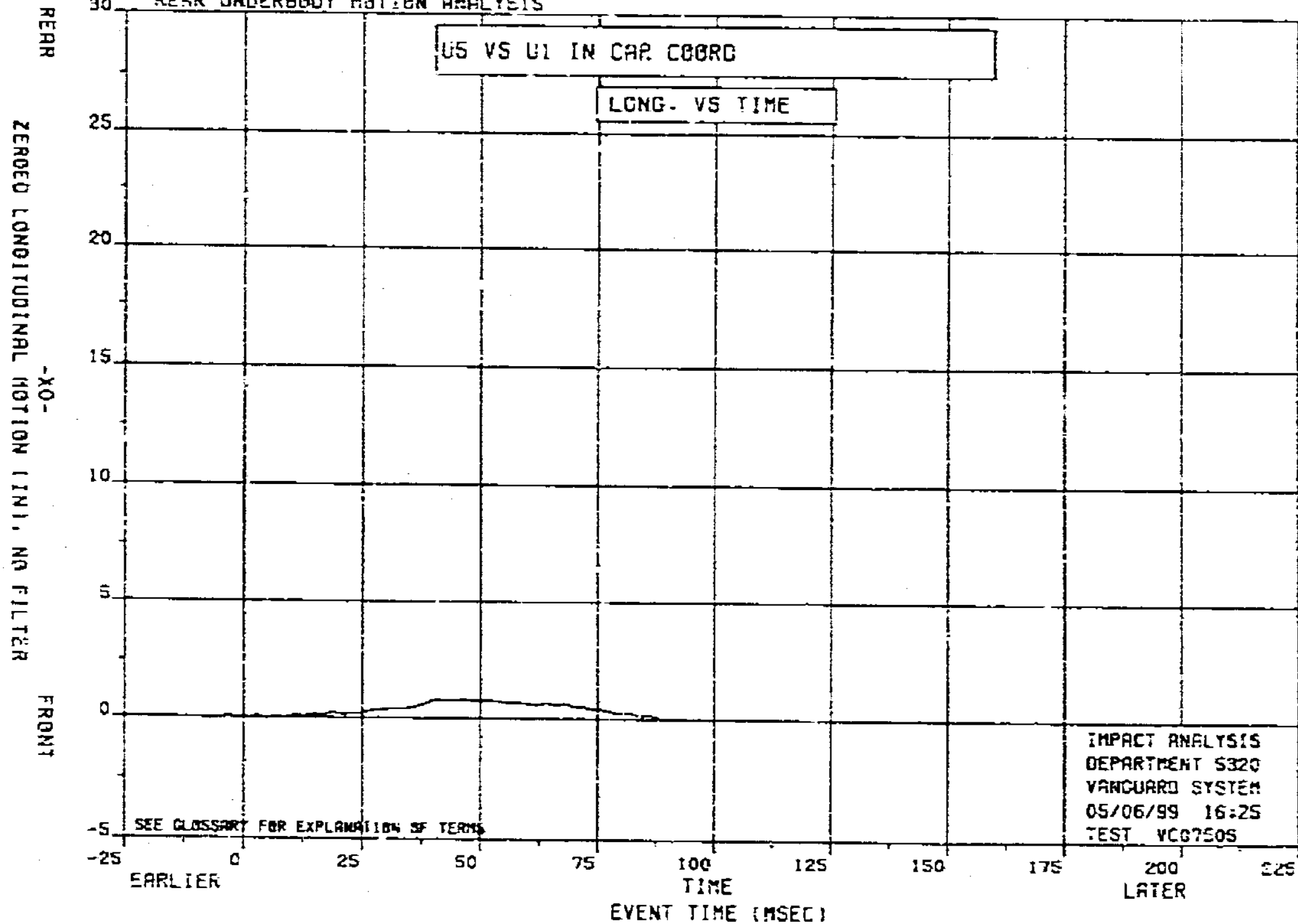


FIGURE 13

VC07506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3583
 2002 MVSS 301 REAR IMPACT DEVELOPMENT.

ZEROED X OF U2 RELATIVE TO U2 IN CAR COORD
 VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

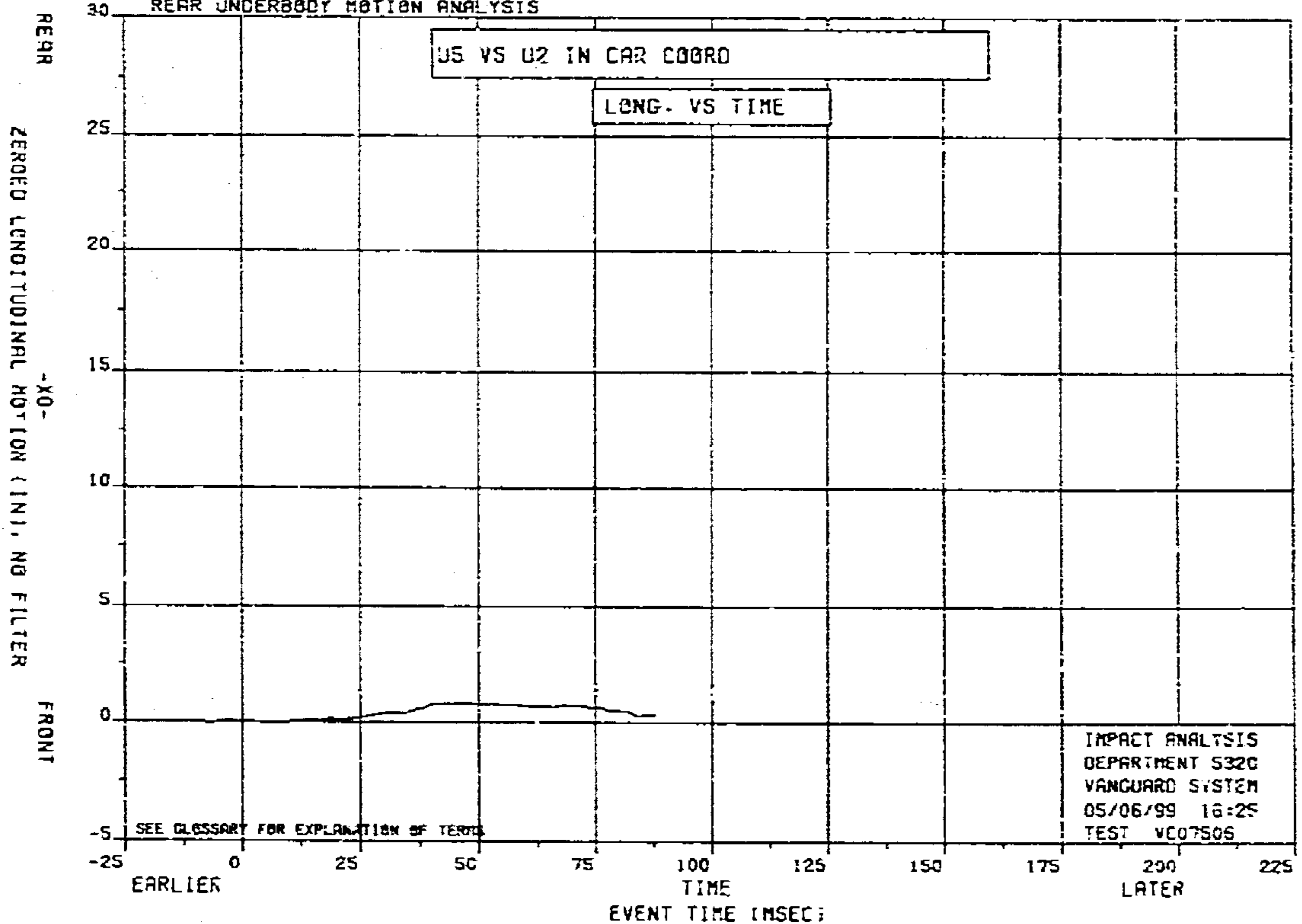


FIGURE 14

VC07506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3589
 2002 MVSS 301 REAR IMPACT DEVELOPMENT.

ZEROED X OF U9 RELATIVE TO U1 IN CAR COORD
 VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

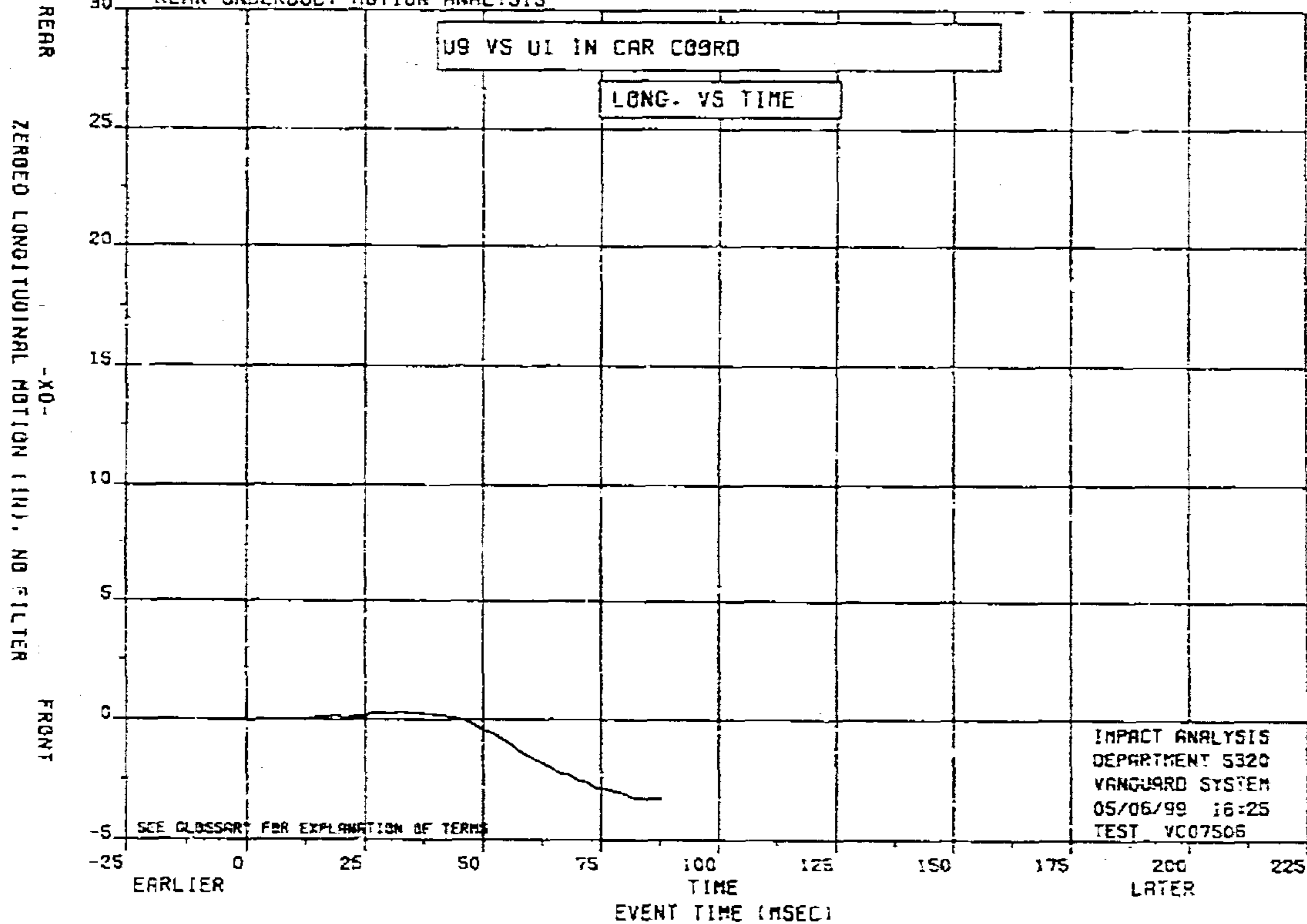


FIGURE 15

VC07505 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF U10 RELATIVE TO U1 IN CAR COORD
VERSUS TIME IN MILLISECBNDS

REAR LONGERBODY MOTION ANALYSIS

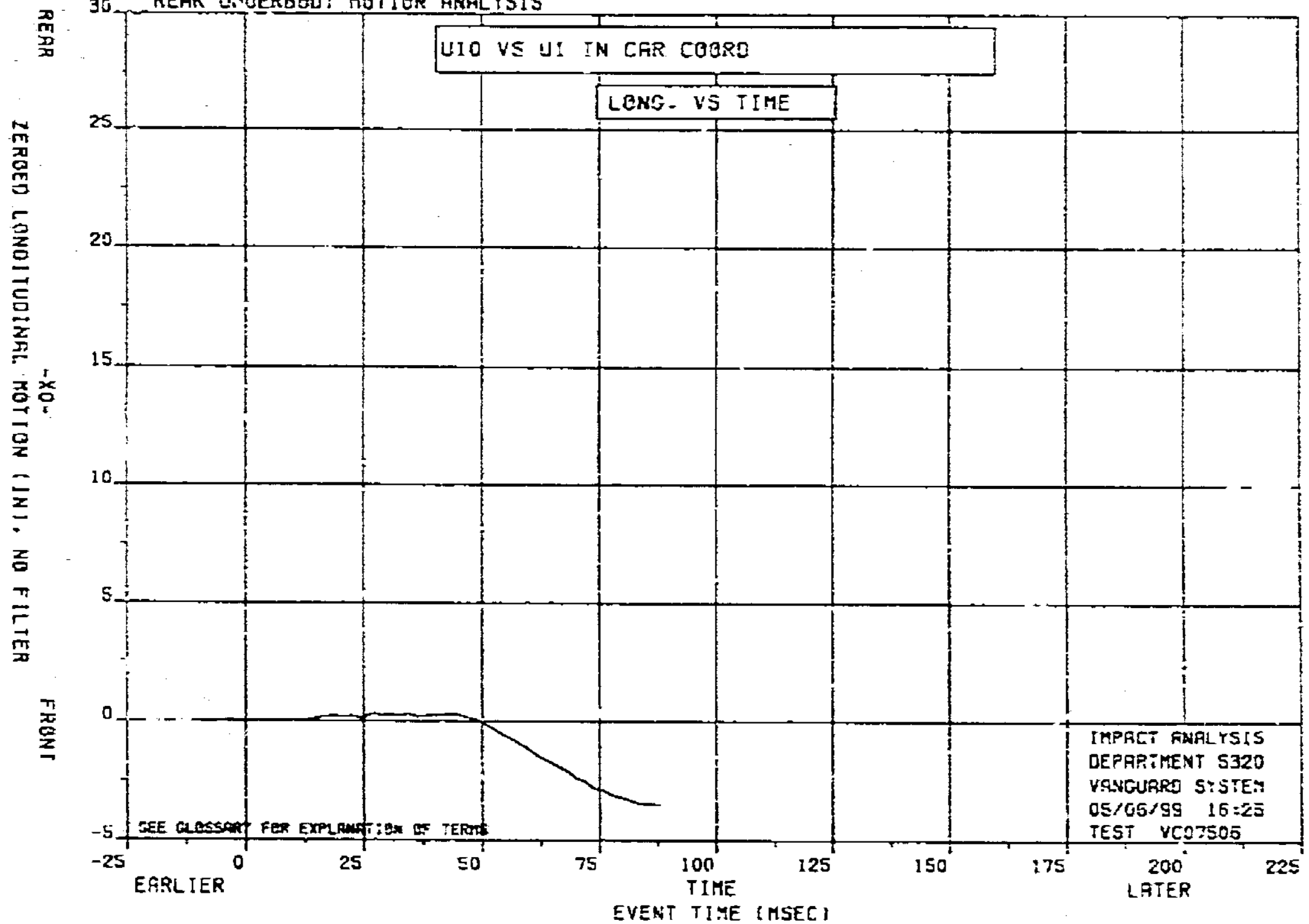


FIGURE 16

VCC7506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3589
 2002 MVSS 301 REAR IMPACT DEVELOPMENT.

ZERGED PITCH OF U10 TO U8 IN CAR COORD SYSTEM
 VERSUS TIME IN MILLISECOND

REAR UNDERBODY MOTION ANALYSIS

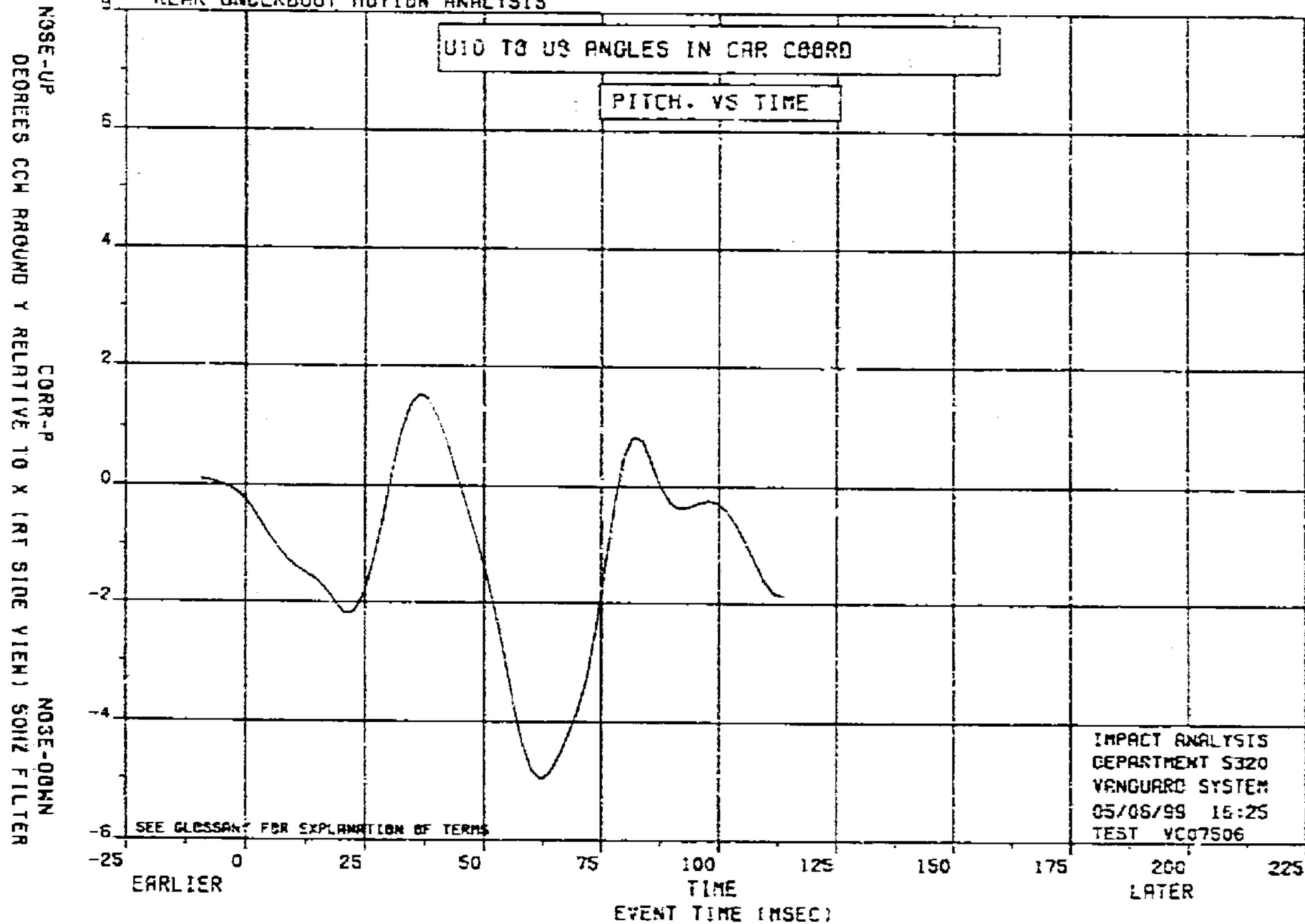


FIGURE 17

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3589
2002 HVSS 201 REAR IMPACT DEVELOPMENT.

ZEROED SEPARATION OF U10 AND U8 (IN)
VERSUS TIME IN MILLISECONDS

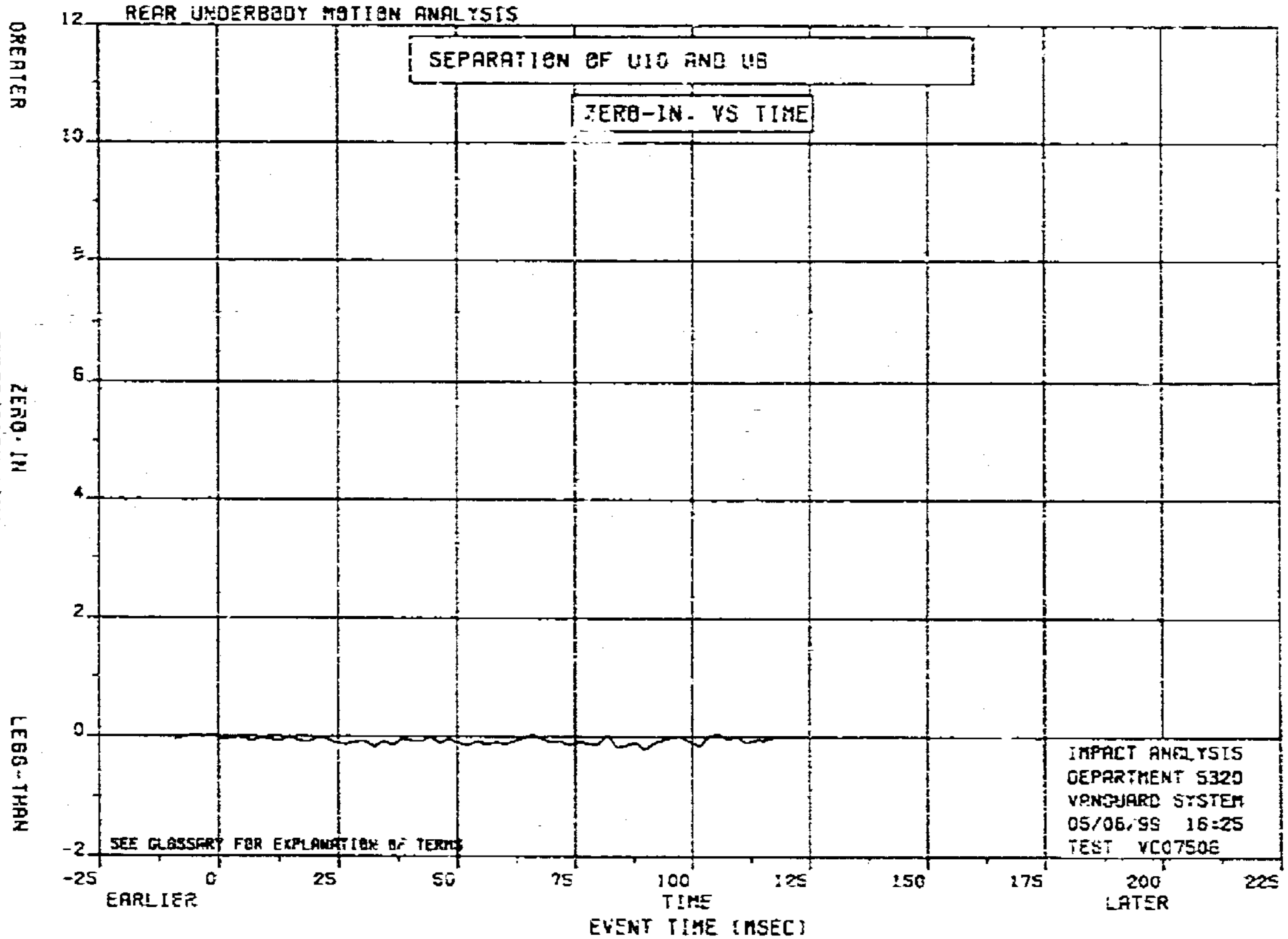


FIGURE 18

VC07505 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3589
 2002 HVSS 301 REAR IMPACT DEVELOPMENT.

ZERCEO PITCH OF U11 TO US IN CAR COORD SYSTEM
 VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

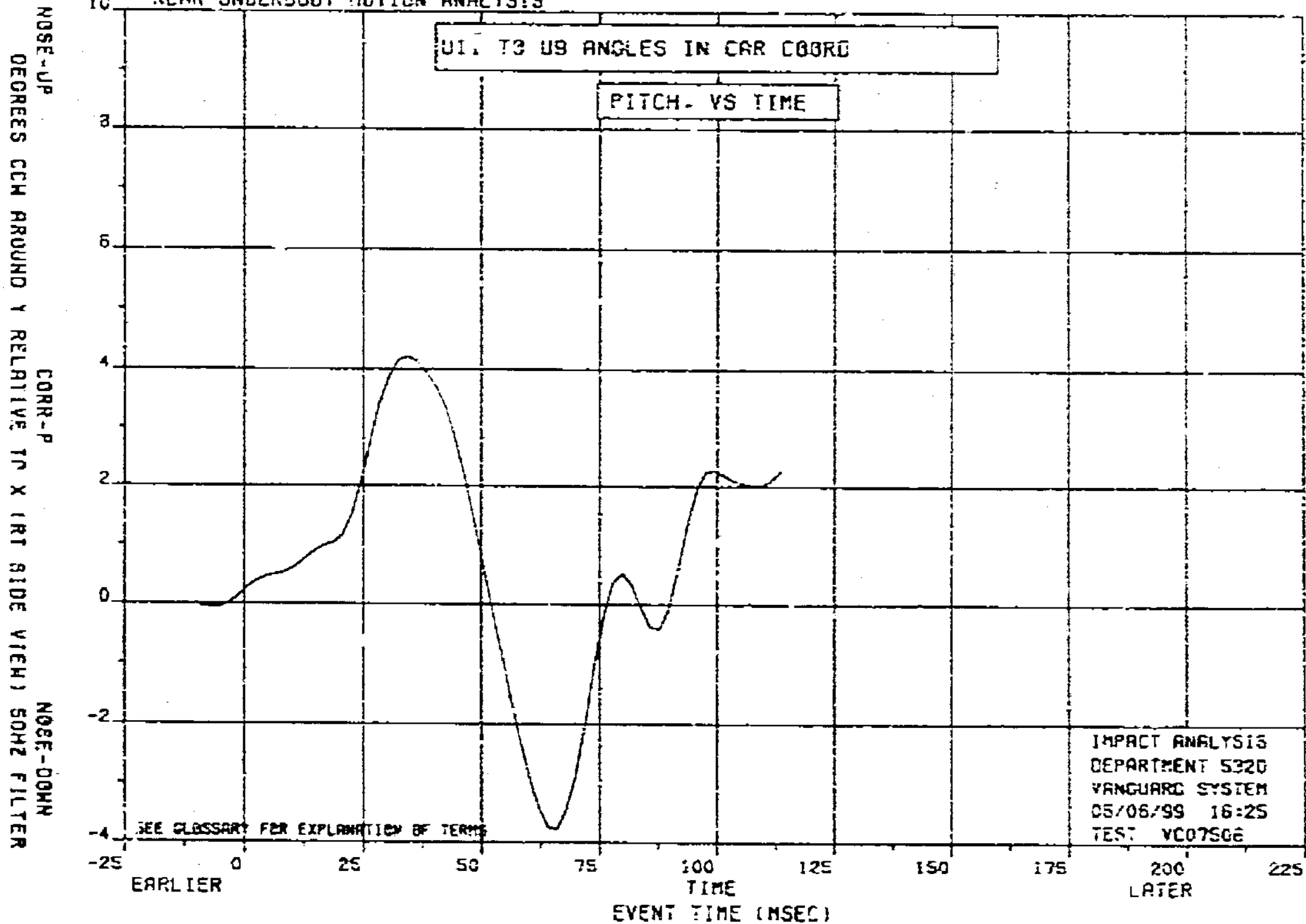


FIGURE 19

VC07506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3569
2002 HVSS 301 REAR IMPACT DEVELOPMENT.

ZEROED SEPARATION OF U11 AND U9 (IN)
VERSUS TIME IN MILLISECONDUS

REAR UNDERBODY MOTION ANALYSIS

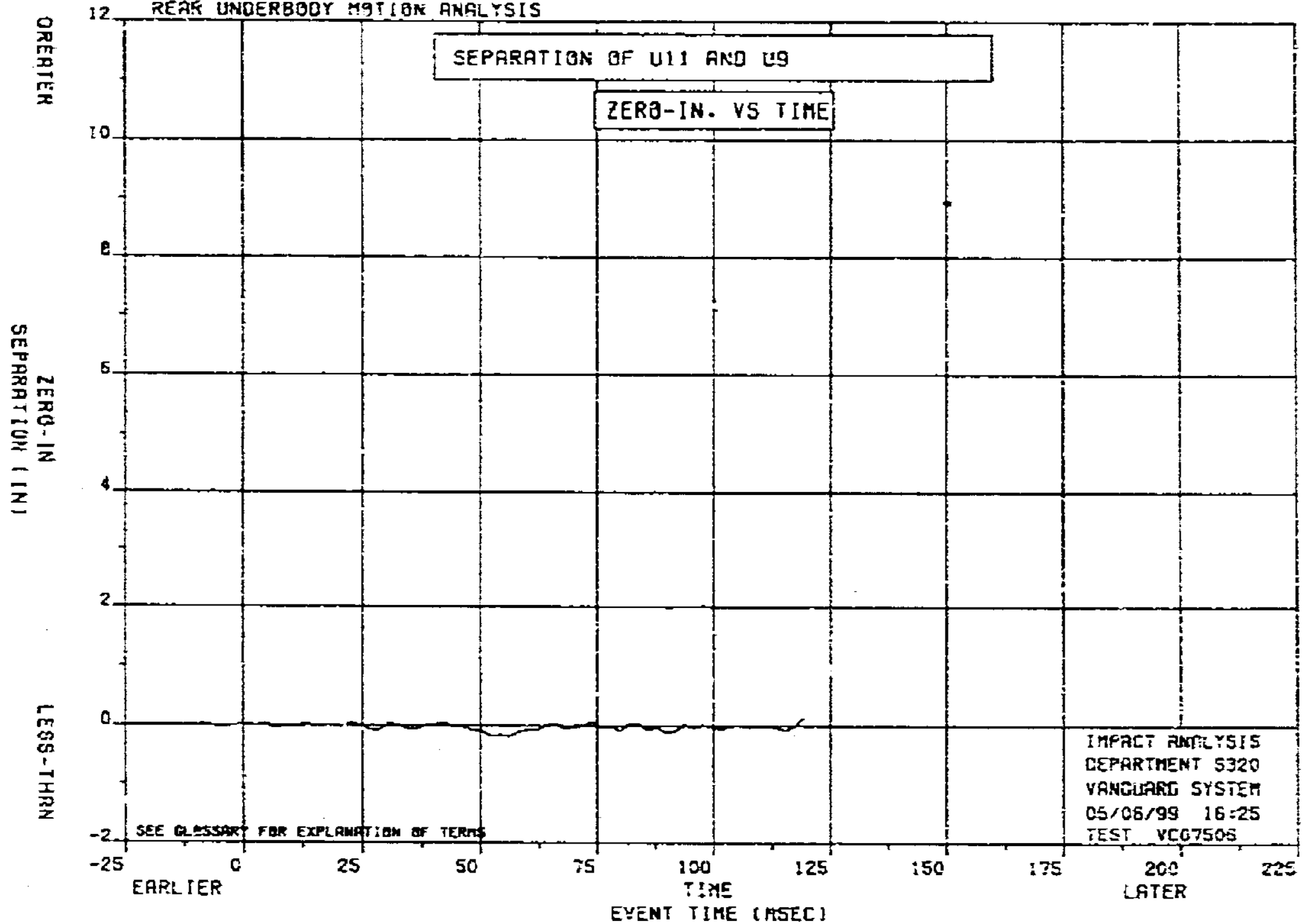


FIGURE 20

VC07506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3529
 2002 MYSS 301 REAR IMPACT DEVELOPMENT.

ZERGED X OF U3 RELATIVE TO U1 IN CAR COORD
 VERSUS TIME IN MILLISECONDS

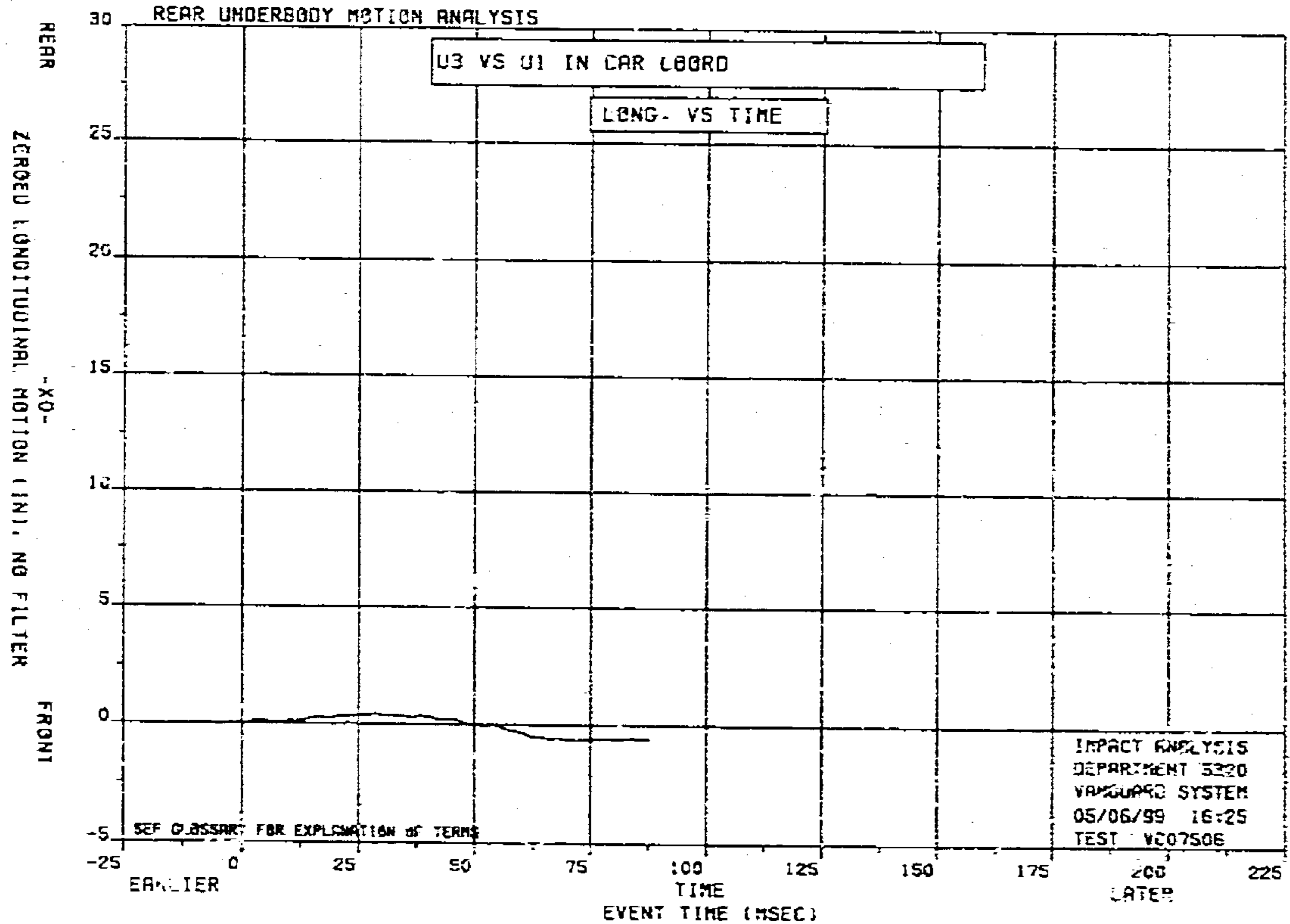


FIGURE 21

V007506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3589
2002 MYSS 301 REAR IMPACT DEVELOPMENT.

ZERGED \dot{X} OF U4 RELATIVE TO U1 IN CAR COORD
VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

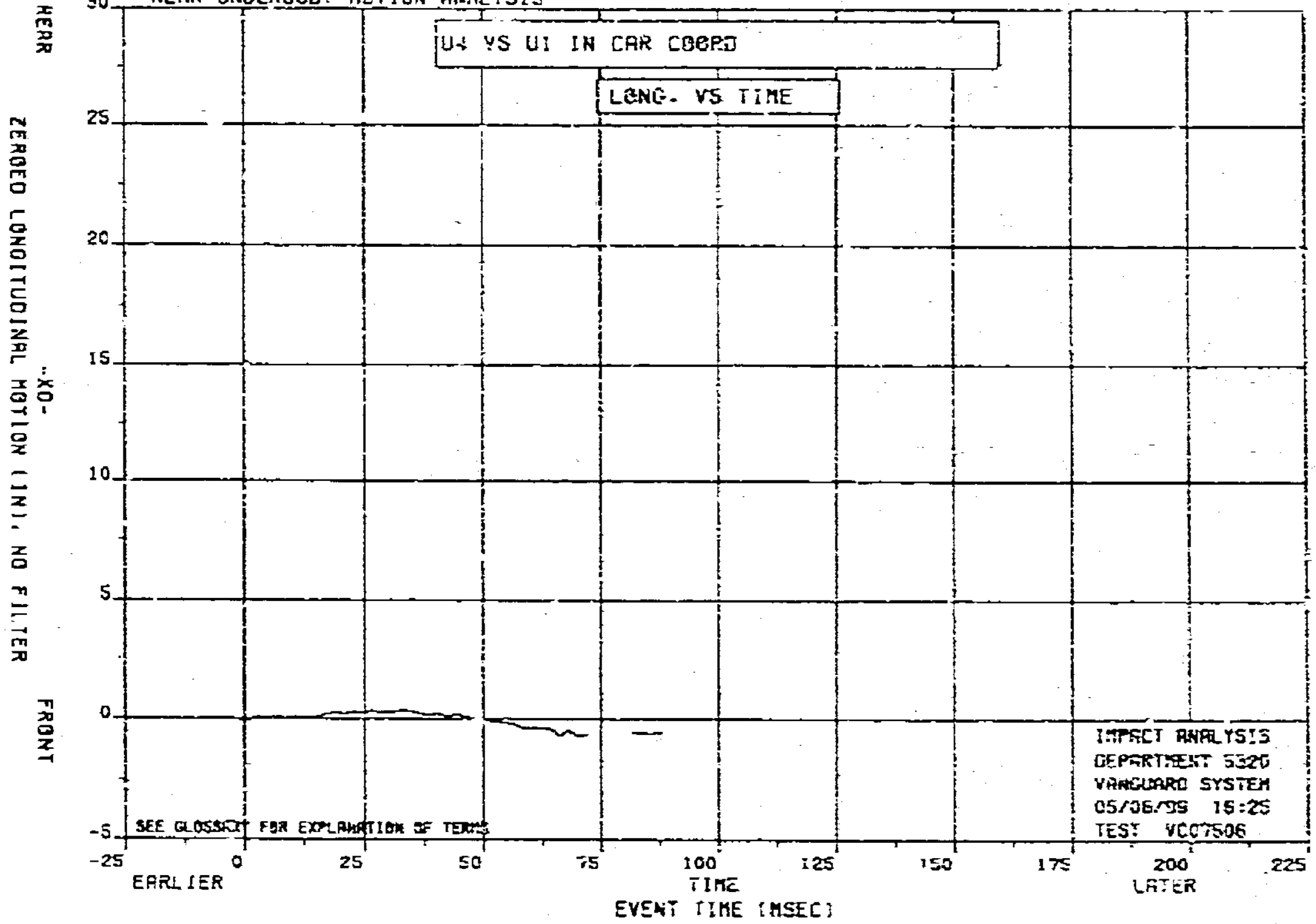


FIGURE 22

VC07506 30-MPH REAR MOVING BARRIER, KJ-J-74 ITEM KJ3563
 2002 MVS3 301 REAR IMPACT DEVELOPMENT.

ZERGED YAW OF U1 TO U2 IN BASE COORD SYSTEM
 VERSUS TIME IN MILLISECONDS

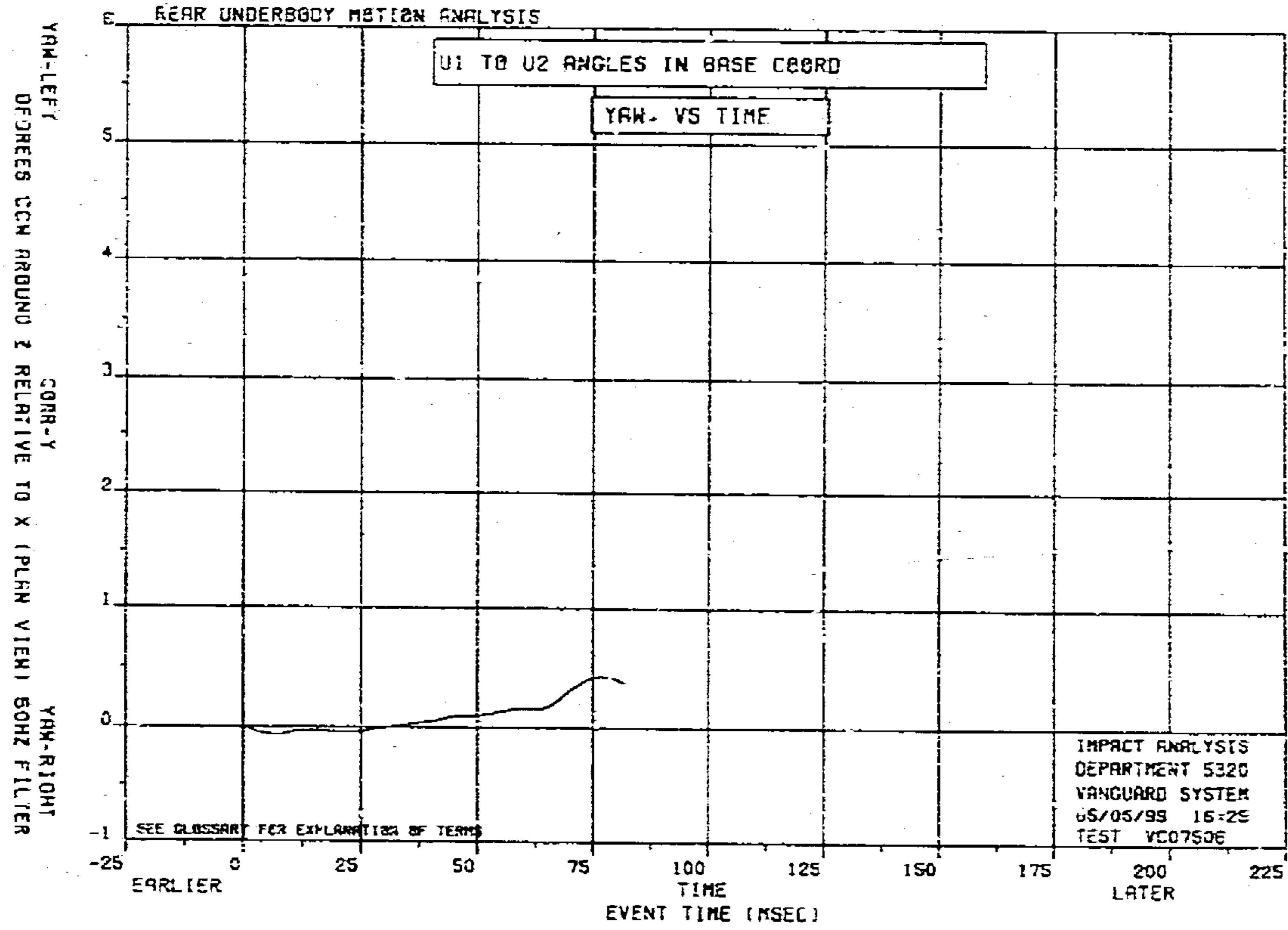


FIGURE 23

VC07506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM NJ3589
 2002 MVSS 301 REAR IMPACT DEVELOPMENT.

MB1 TO MB2 DISTANCE -37.66 INCHES (INITIAL DIST) (IN)
 VERSUS TIME IN MILLISECOND

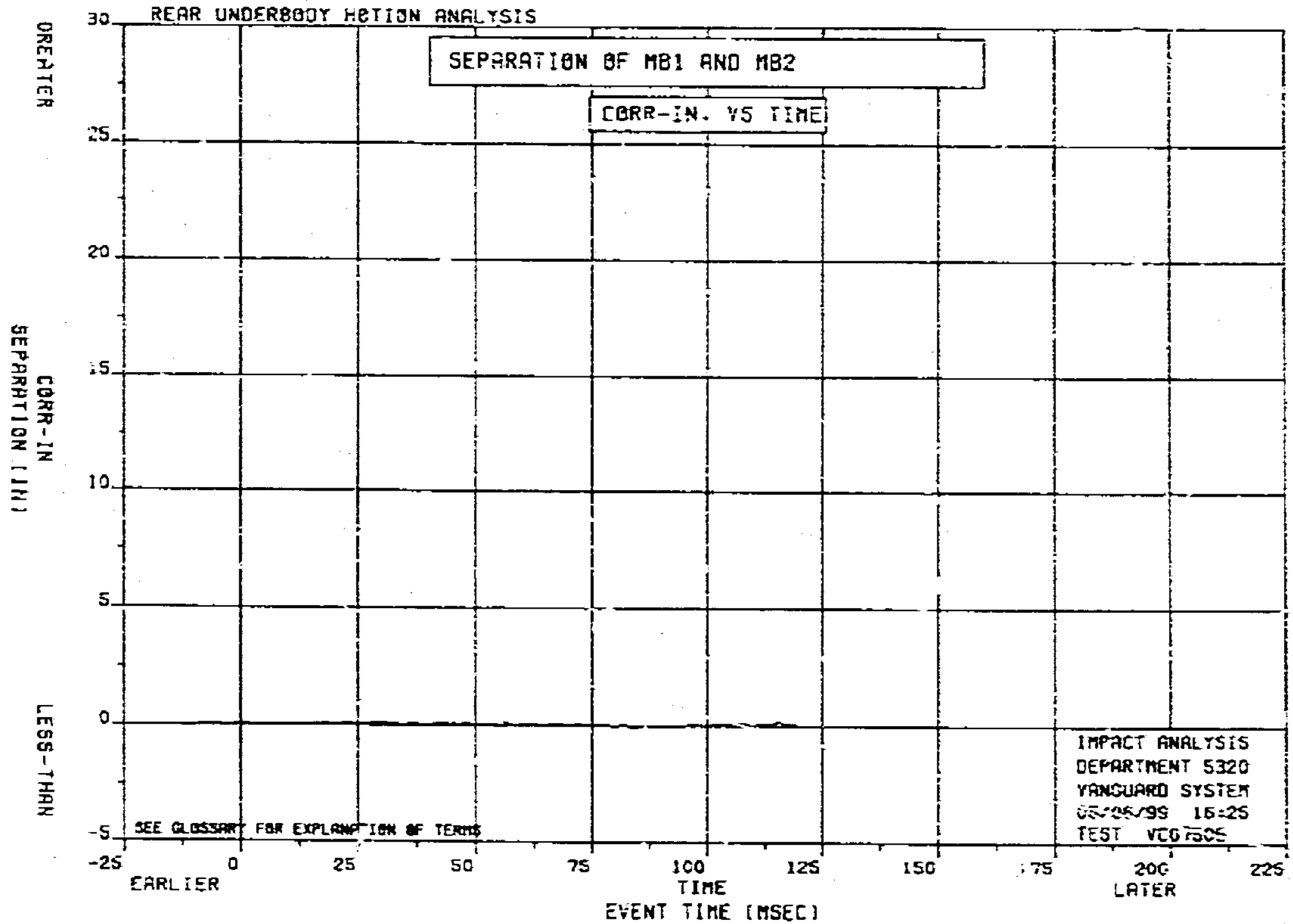


FIGURE 24

VC07506 50-MPH REAR MOVING BARRIER, KJ-3-74 ITEM KJ3589
 2002 MVSS 301 REAR IMPACT DEVELOPMENT.

ZEROED PITCH OF SILL VECTOR IN BASE COORD SYSTEM
 VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

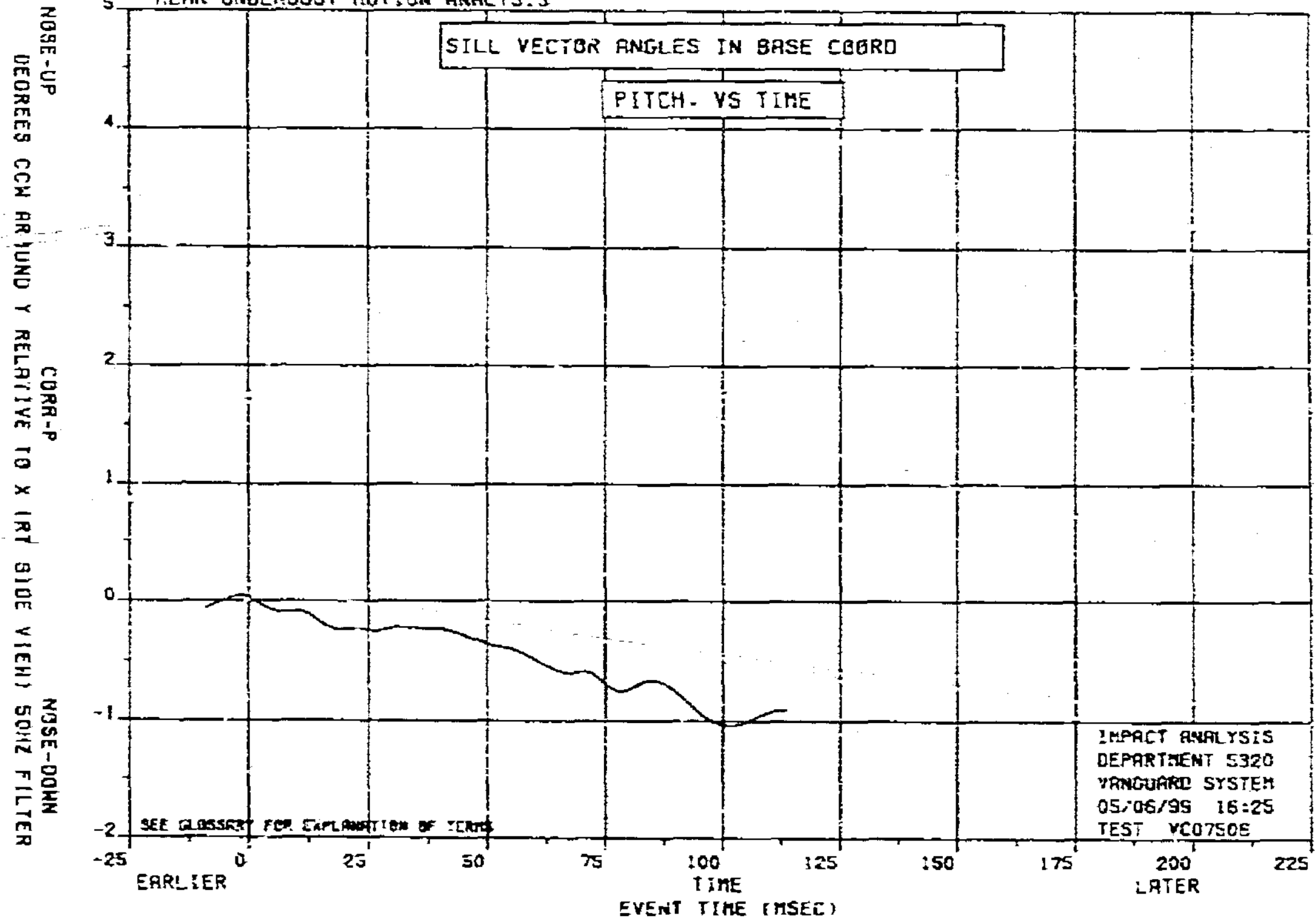


FIGURE 25

VC07506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3589
2002 MVSS 301 REAR IMPACT DEVELOPMENT.

U1 TO U2 DISTANCE -36.63 INCHES (INITIAL DIST) (IN)
VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

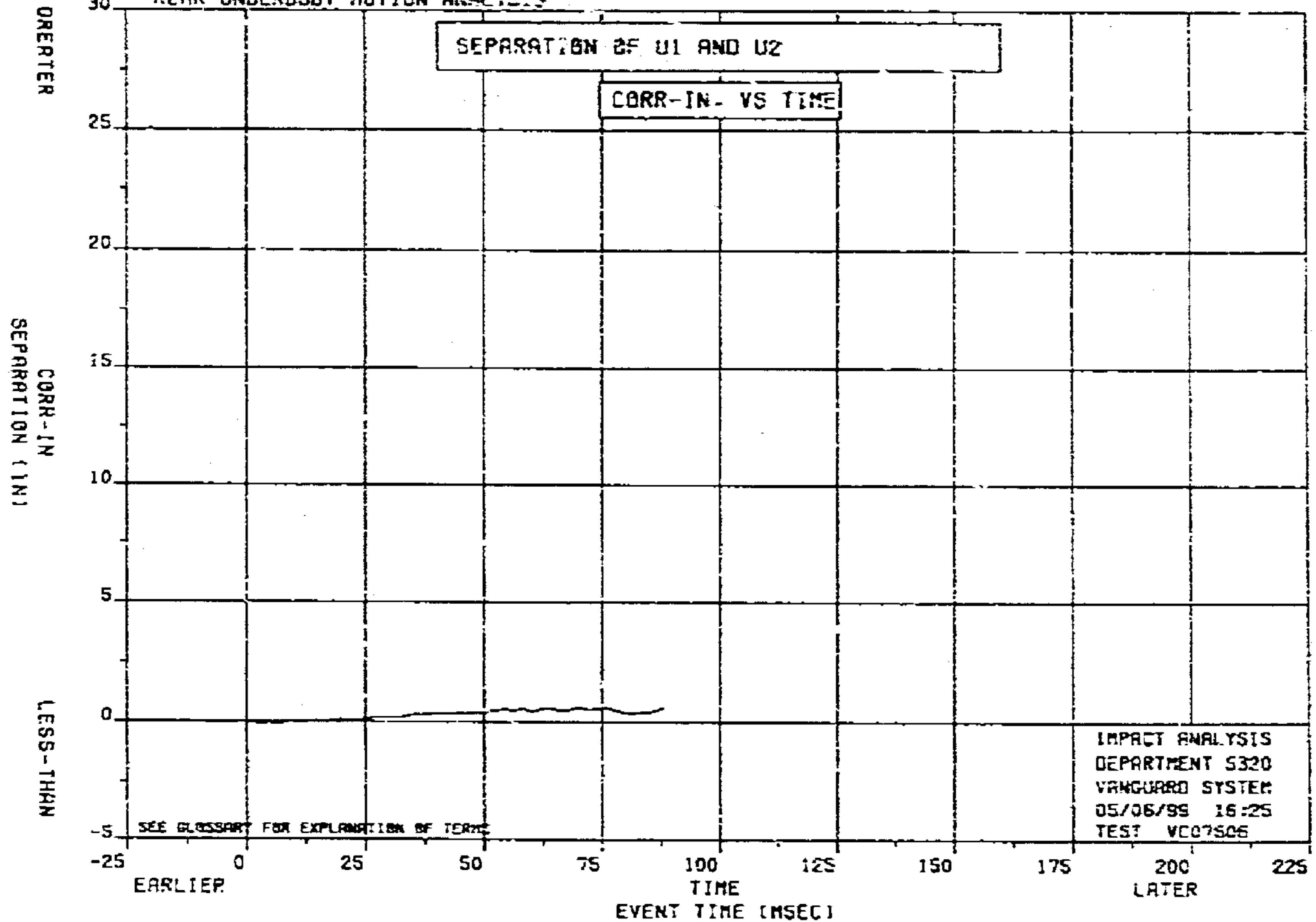


FIGURE 26

VC07506 30-MPH REAR MOVING BARRIER. KJ-J-74 ITEM KJ3589
 2002 MYSS 301 REAR IMPACT DEVELOPMENT.

LFS TO LMS DISTANCE -24.09 INCHES (INITIAL DIST) (IN)
 VERSUS TIME IN MILLISECONDS

REAR UNDERBODY MOTION ANALYSIS

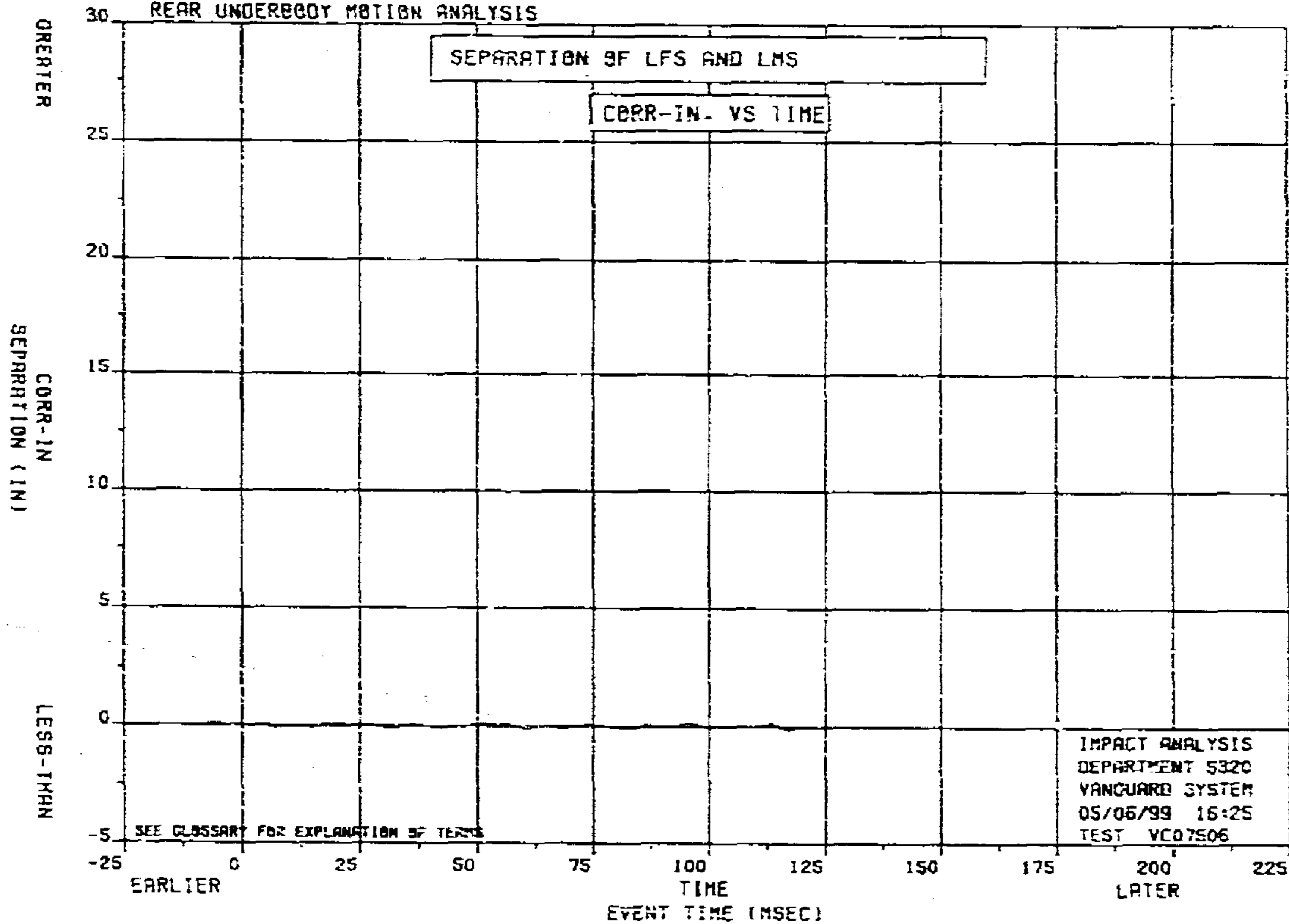
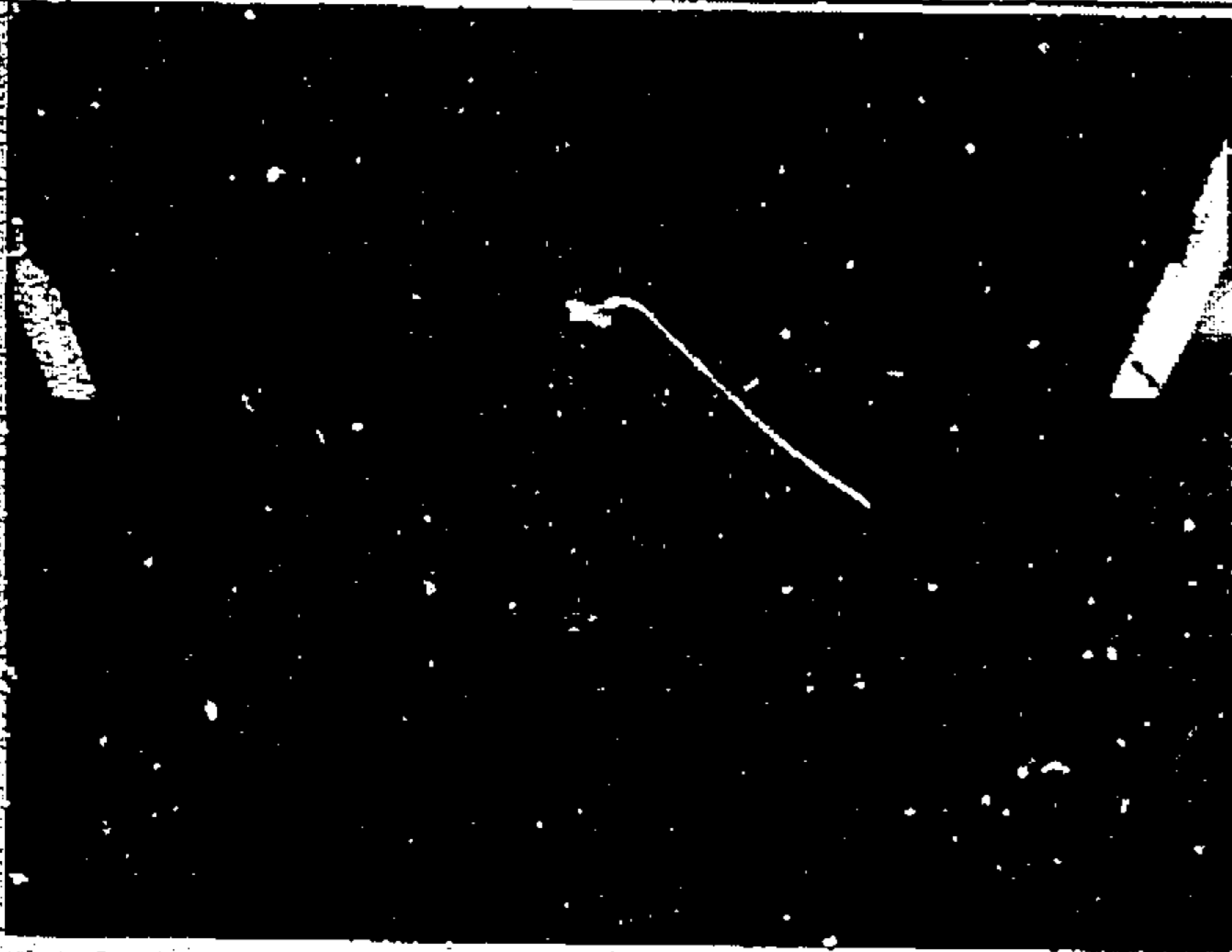
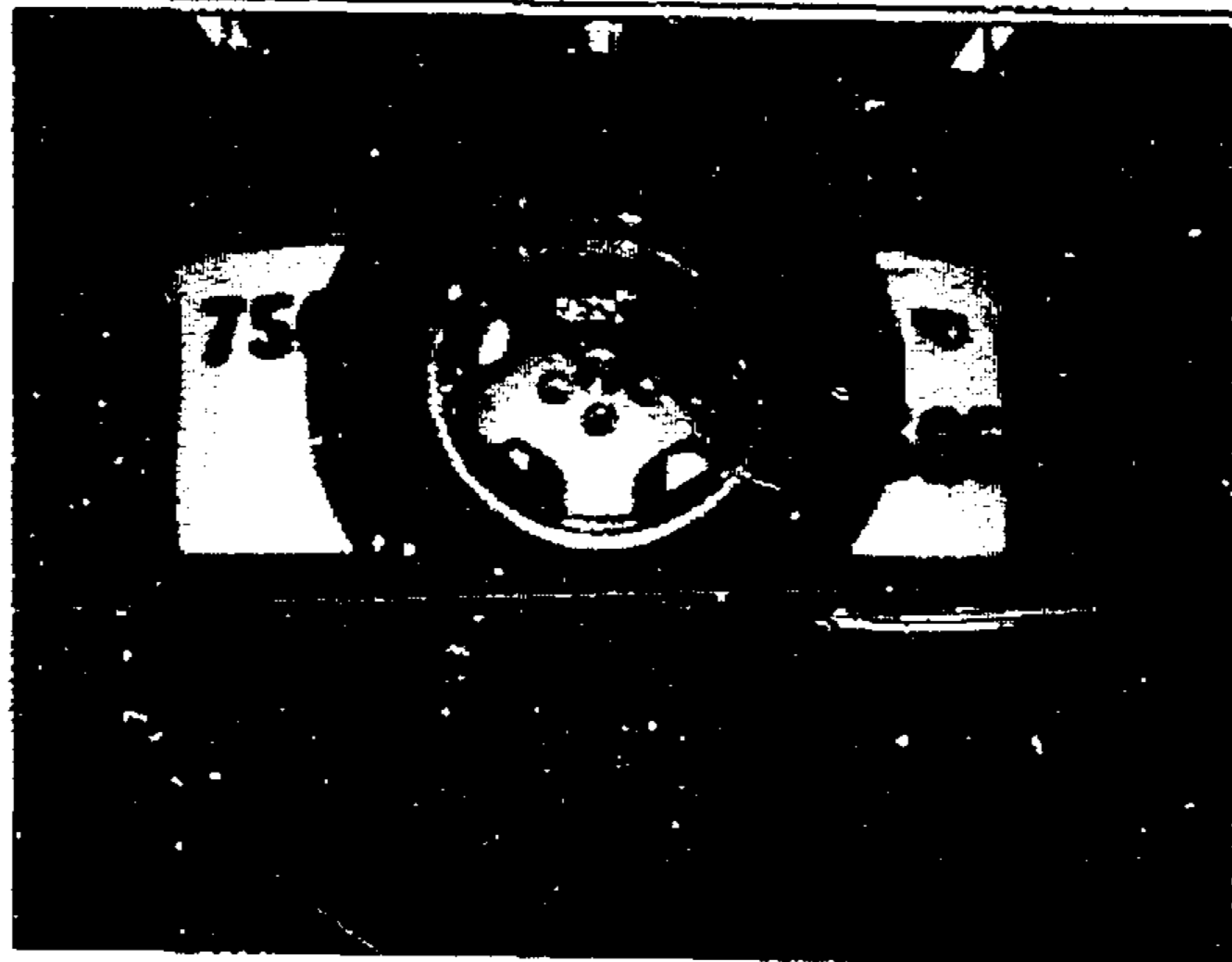


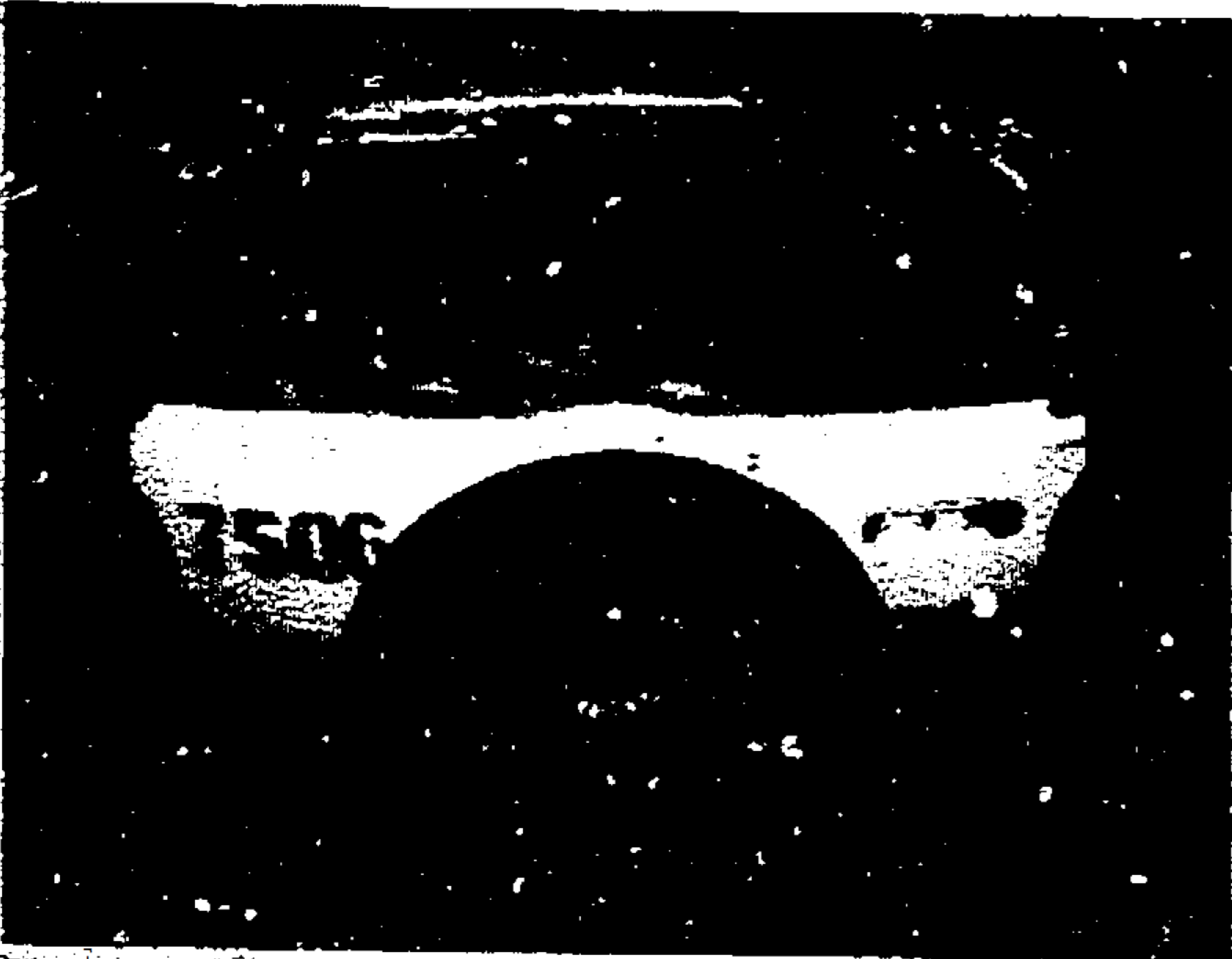
FIGURE 27



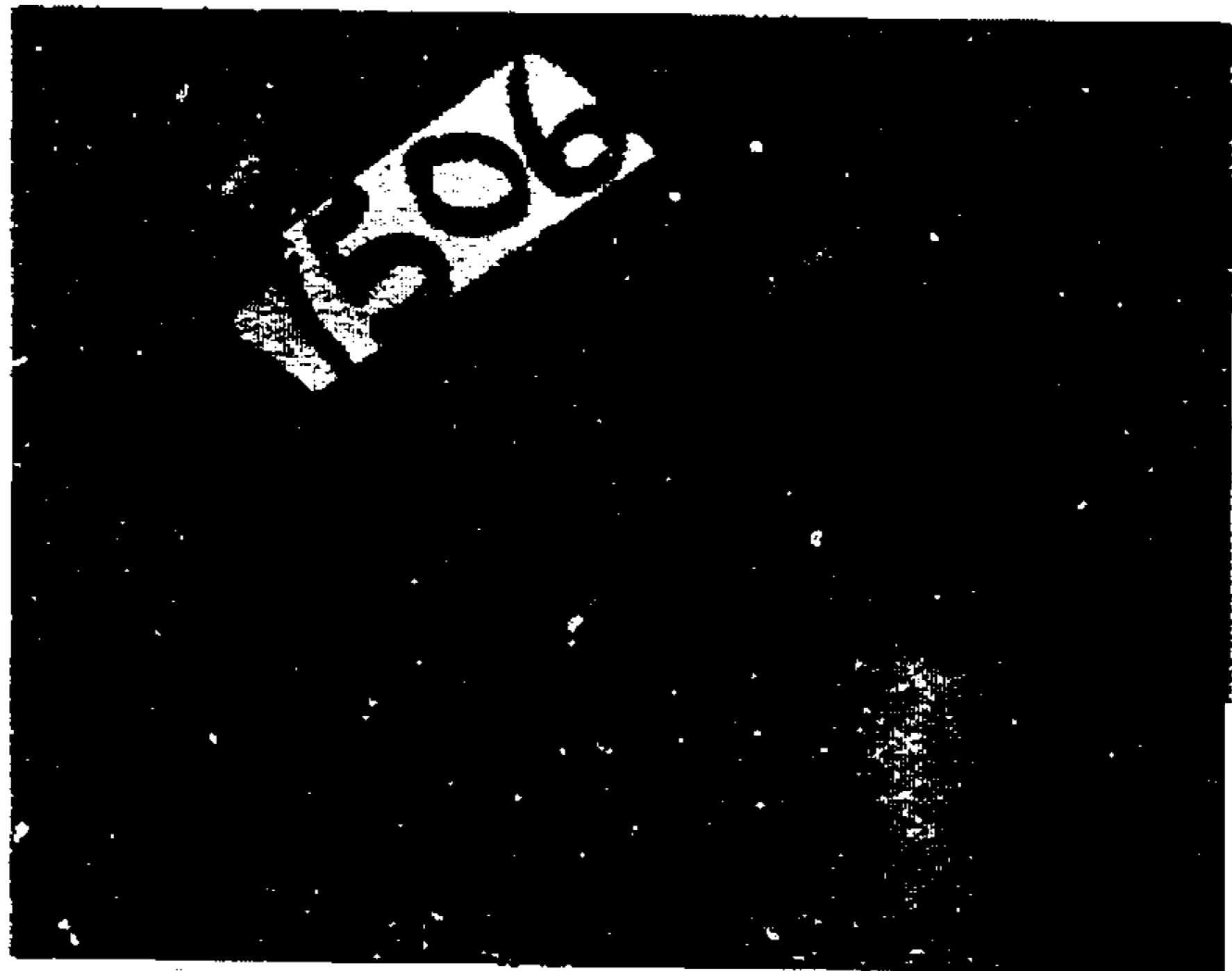
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v0730002.jpg



v0730003.jpg



v0730004.jpg



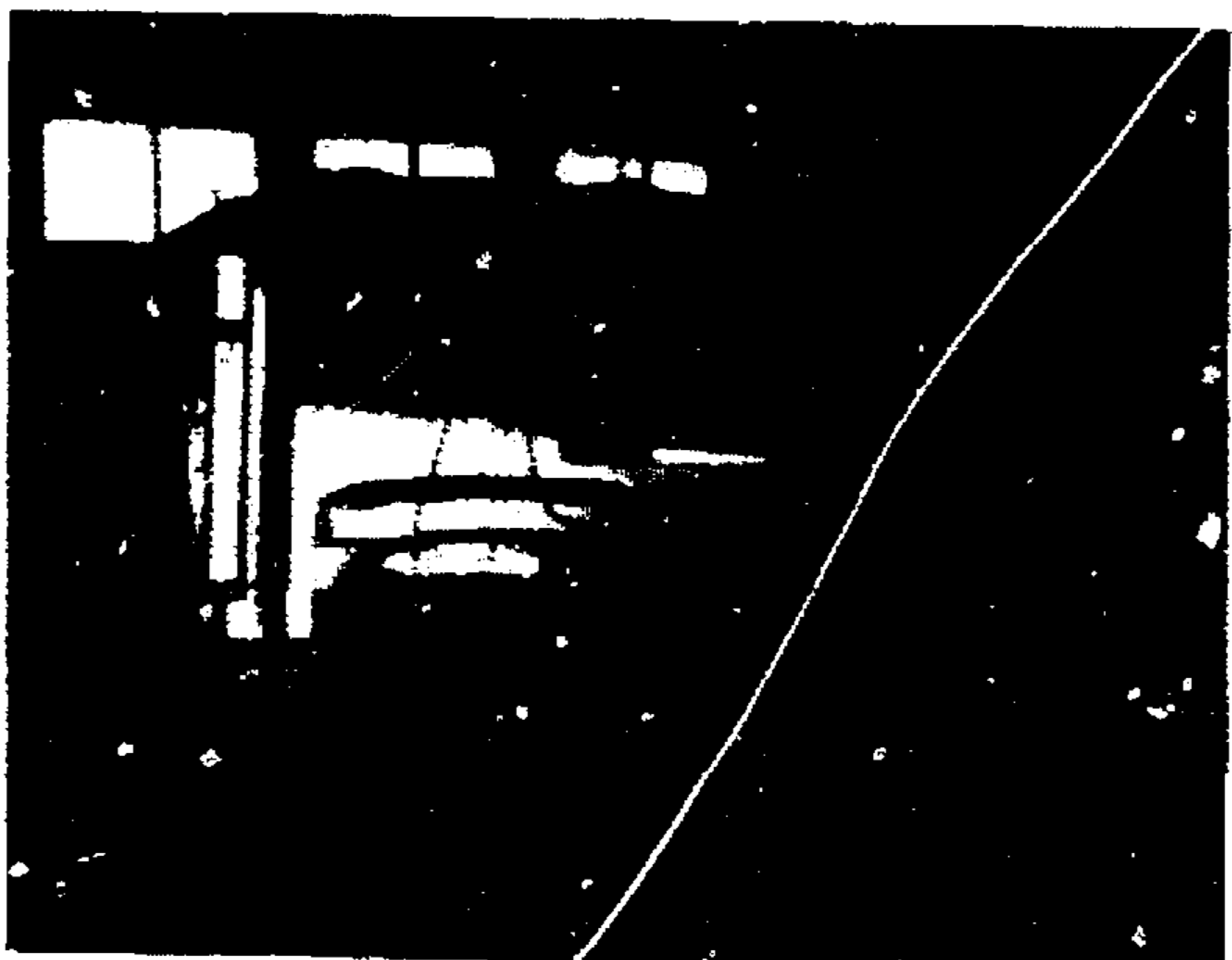
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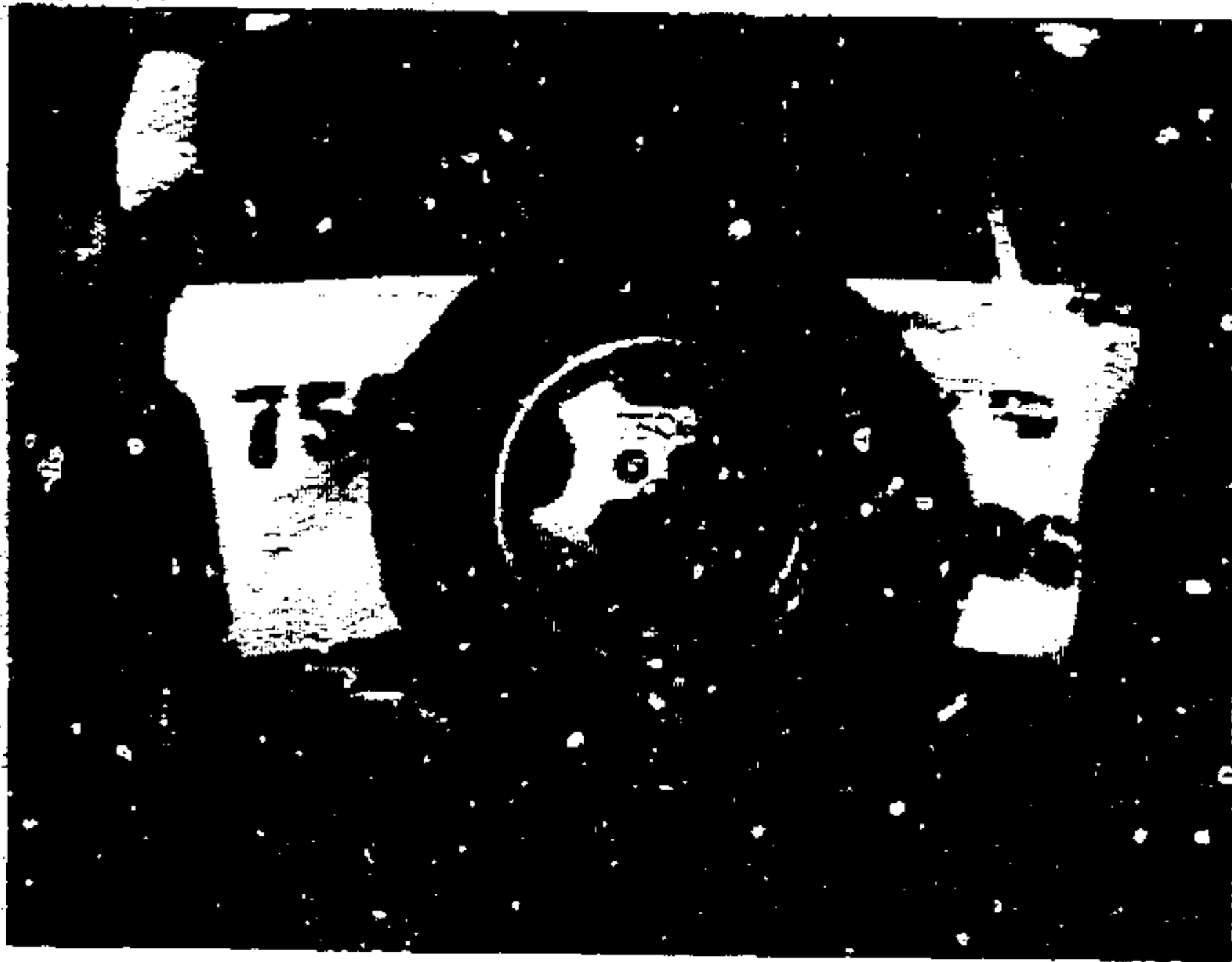
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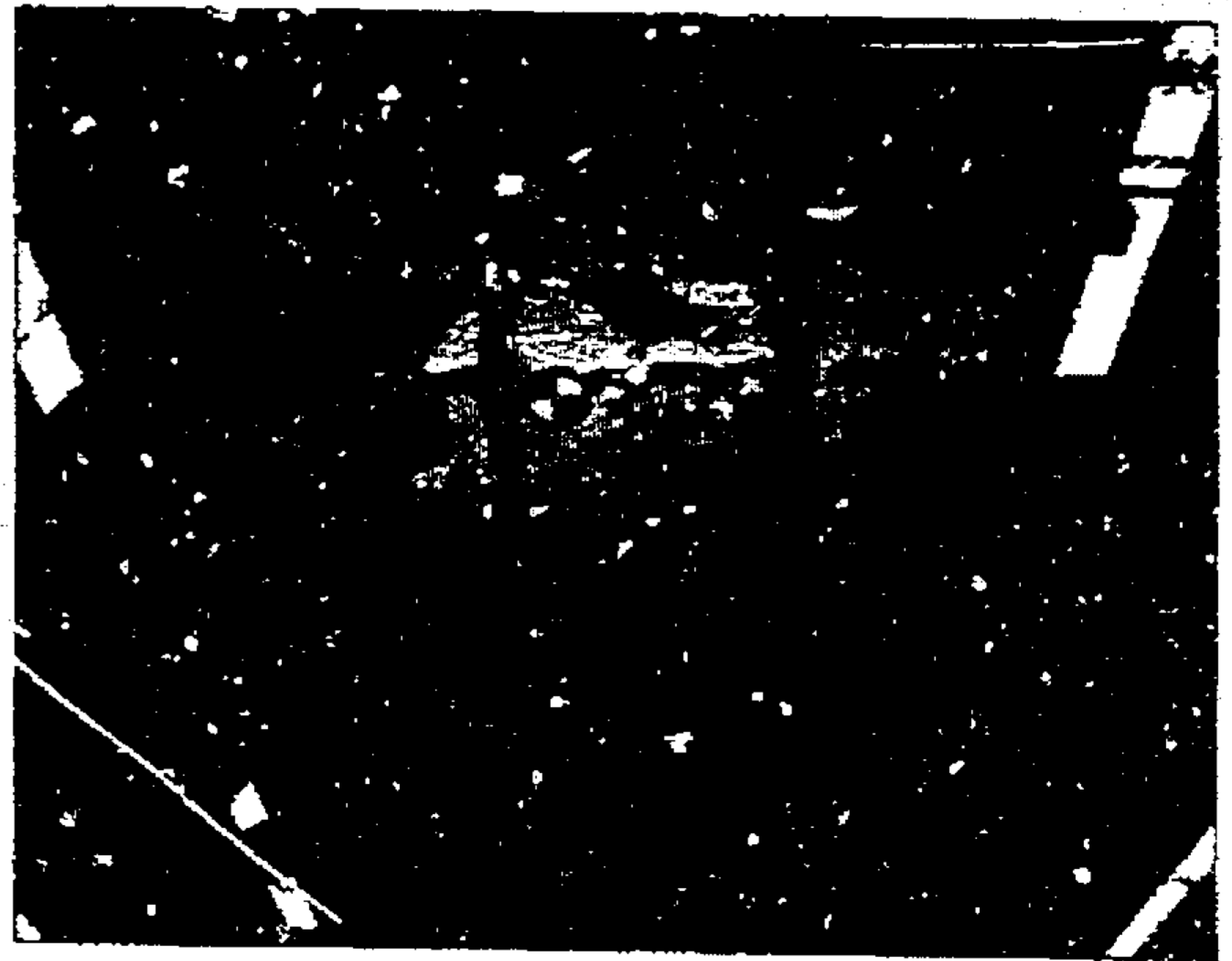
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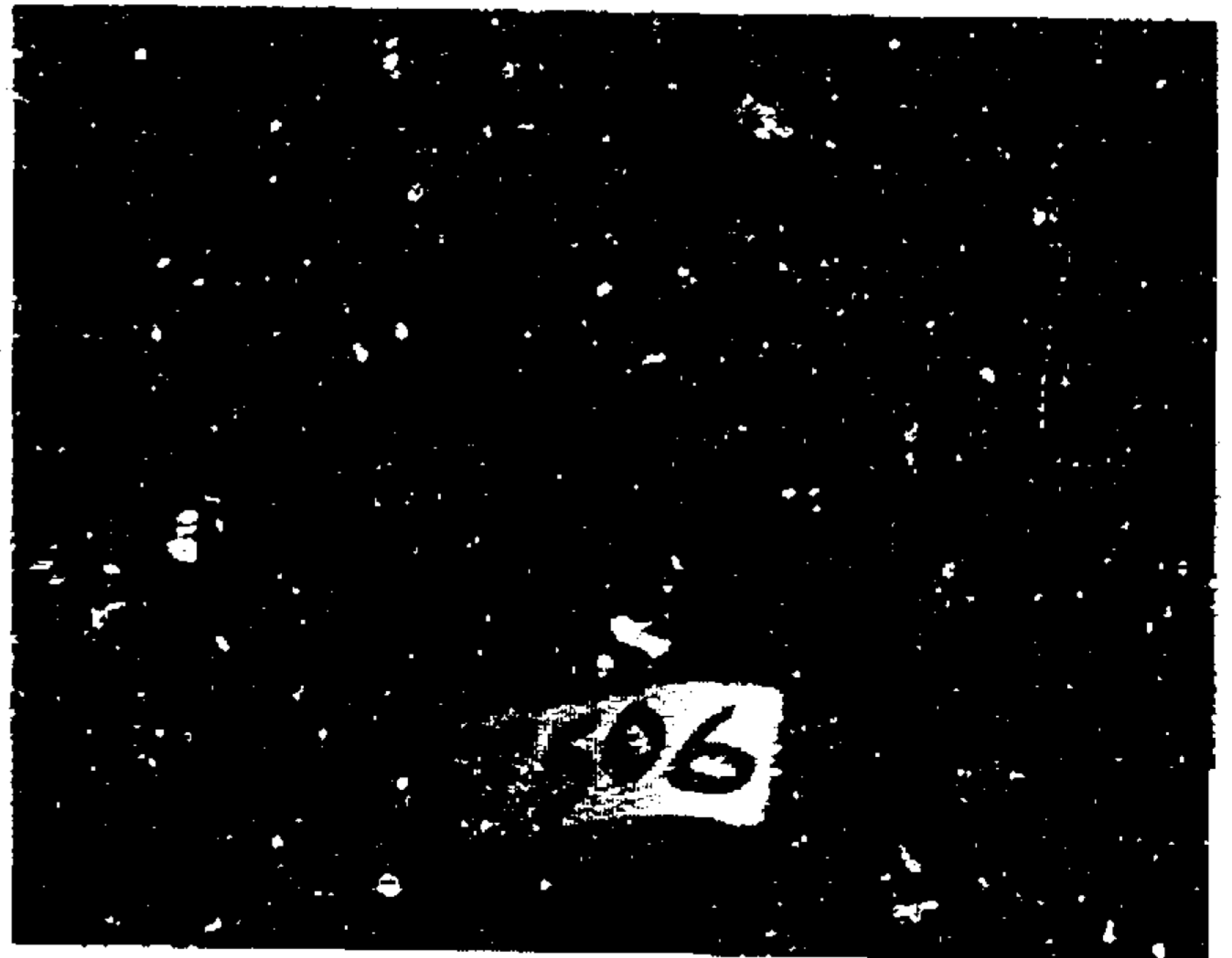
075006f.jpg



075006g.jpg



075006h.jpg



075006i.jpg

Retrieval Methods Inc.
1142 E. Big Beaver Rd.
Troy, MI 48083

Declaration of Intent and Purpose

I Christine Terwin

Employed by Retrieval Methods Inc., do hereby declare that the records microfiched herein are actual records of DaimlerChrysler Corp. created during its normal course of business and that it is the express intent and purpose of this organization to return all original records microphotographed herein.

Date: 02/14/02

Microfiche Operator Christine Terwin