

"RECORD COPY"Schedule No. 7-7-12Retain Until 2023**FINAL TEST REPORT****CONFIDENTIAL****Vehicle Evaluation and Verification
Research and Vehicle Technology****TO:****R. Frank**

Test Order No.	J-87966
Work Task W.O. No.	XQ007
Test Dates	10/2/02
Date Reported	3/14/03
Sheet	1 of 4

SUBJECT:Crash Test 13143 (90° Left Side Fixed Pole Impact at 12.5 ± 0.4 mph, 20.6 ± 0.6 km/h) - 2003 Crown Victoria (BN-114) 4-Door Sedan**REQUESTED BY:**

Vehicle Crash Safety Department, Research and Vehicle Technology - R. Frank

OBJECT:

To obtain development data relative to air bag system sensors.

**SUMMARY OF
TEST RESULTS:**

See Section I for air bag system sensor data.


 R. Olin
 Engineering Technologist


 Chester I. Ng
 Section Supervisor
 Operations Engineering Section

CRTS 0013143

J-87965

C-13143

Sheet 2

VEHICLE DATA

Make and Model	2003 Crown Victoria (EN-114) 4-Door Sedan (Production Vehicle)	
ID Number	ZFAHP74W23X151522, 313-H-653	
Power Train	4.6L, EFI, Automatic (4R70W) Transmission	
Fuel Tank(s)	Usable Capacity: 19.0 gal. (71.9L) Test Condition: Filled with water for ballast.	
Front Seat(s)	Type: Split Bench Cover: Cloth Tracks/Position: Power/Mechanical Mid and Down Seat Back/Position: Adjustable/13.7° Rear of Vertical at Headrest Head Restraints/Position: Adjustable/Up	
Restraint System	LF: 3-Point Continuous Loop Active Belt and Seat Back Side Air Bag Seatbelt remains latched during impact.	
Occupants	LF: SIDA/Hybrid III Instrumented Dummy	
Test Weight	Front: 2314 lb (1050 kg) Rear: 2360 lb (1070 kg) Total: 4674 lb (2120 kg)	
Tires	Front: P225/60R16 Rear: P225/60R16 Spare: Removed	32 psi (221 kPa) 32 psi (221 kPa)
Significant Content or Accessories	Power Steering, Power Brakes, Tilt Steering Wheel	

CRTS 0013143

GENERAL TEST COMMENTS:**1. Test Procedure**

The test was performed according to the following regulations, test protocols and the Corporate test procedure's:

- . Non-regulator crash test procedure, CBP-3 dated April 16, 1998.
- . FMVSS 201 Occupant Protection in Interior Impact, dated December 14, 1999.

1.1 Decisions

The fuel system did not contain standard.

1.2 Vehicle Alignment

The test vehicle impacted an 10 inch diameter steel pole structure, rigidly attached to the barrier face. The vertical steel pole was aligned so that the point of vehicle impact was near the test dummy's left front head center of gravity.

2. Remarks

Crash movies, pre- and post- crash still images of the test vehicle and copies of this report are available through the Operations Engineering Section, Safety Laboratories Department, VEV. The crash still images are stored and archived on CD ROMs. The file names of the still images are listed under crash number and a three digit sequence number which are 13143001 through 13143039.

I-57966

C-13143

Sheet 4

TEST RESULTS:**1. Occupant Protection in Exterior Impact****L.H. Dummy****Head Injury Criteria (HIC)**Interval 11
2165
73 ms
96 ms

Time histories of the dummy instrumentation are archived on a storage media under the crash number and/or the test authorization number.

Time histories of the air bag/sensor(s) are archived on a storage media under the crash number and/or the test authorization number.

Time histories of the dummy dynamic displacements obtained from Film Analysis are archived on a storage media under the crash number and/or the test authorization number.

Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.

2. Vehicle Displacement and Instrumentation Data

Time histories of the vehicle accelerations and other instrumentation are archived on a storage media under the crash number and/or the test authorization number.

Time histories of the vehicle dynamic displacements obtained from Film Analysis are archived on a storage media under the crash number and/or the test authorization number.

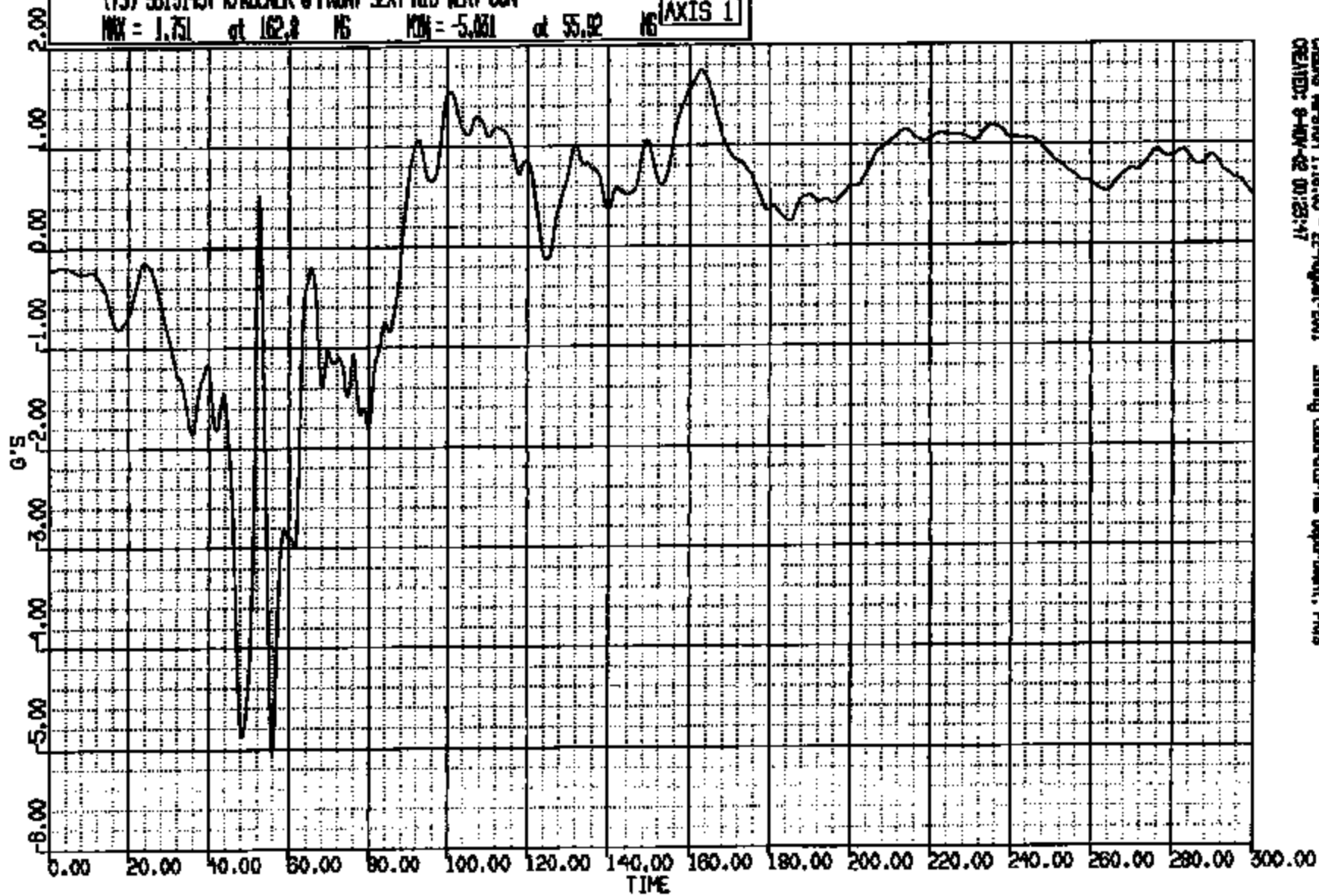
Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.

SB R: 15145 TO: J87986 DATE: 02-OCT-2002 10:42:34
2008 EN114

(75) SB131431 R/ROCKER @ FRONT SEAT MID VERT GCM

MAX = 1.751 at 162.8 MS MIN = -5.031 at 55.02 MS

AXIS 1



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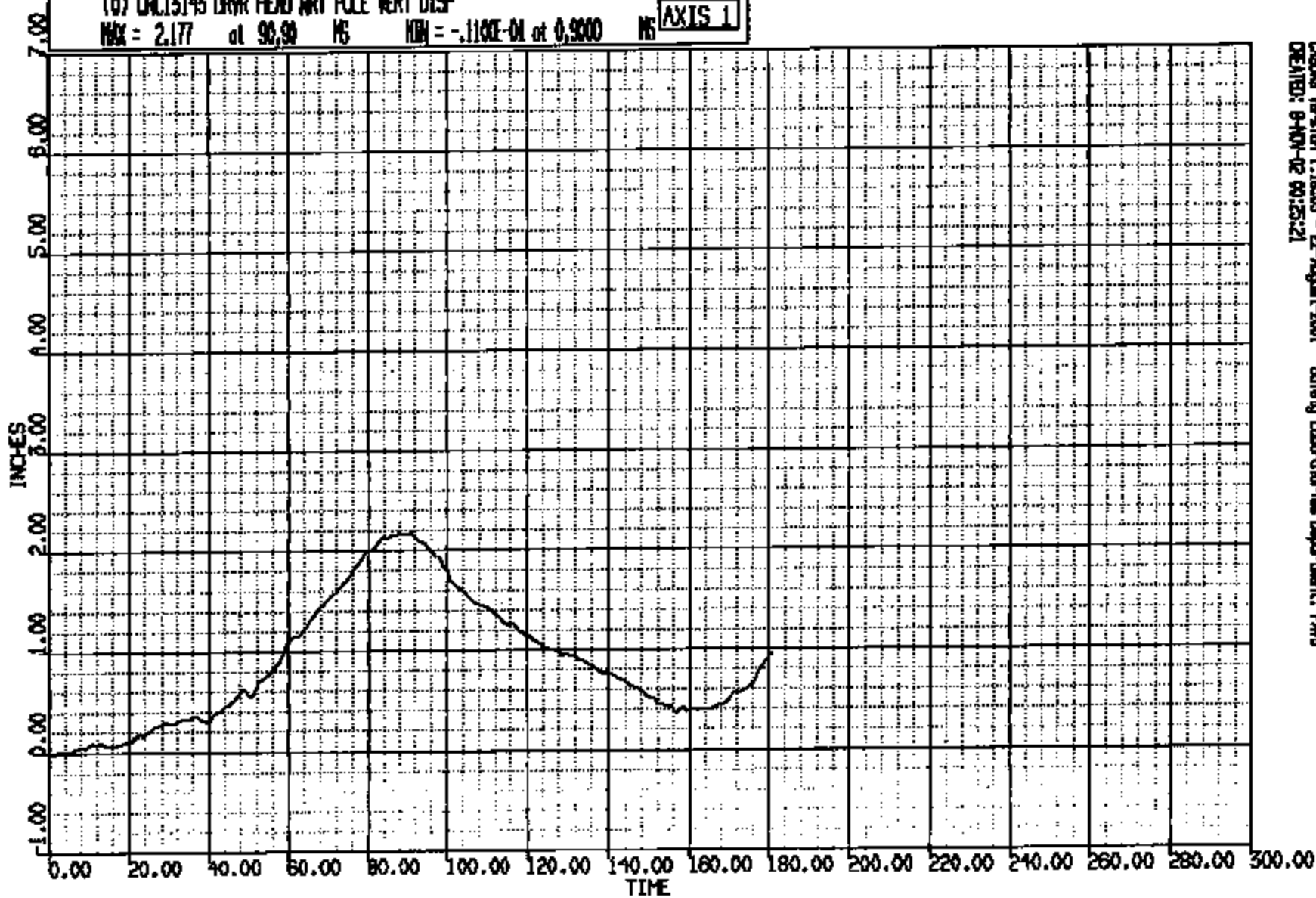
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(0) CMC13143 DNR HEAD ART POLE VERT DISP

MAX = 2.177 at 90.90 MS MIN = -.110E-01 at 0.9000 MS

AXIS 1



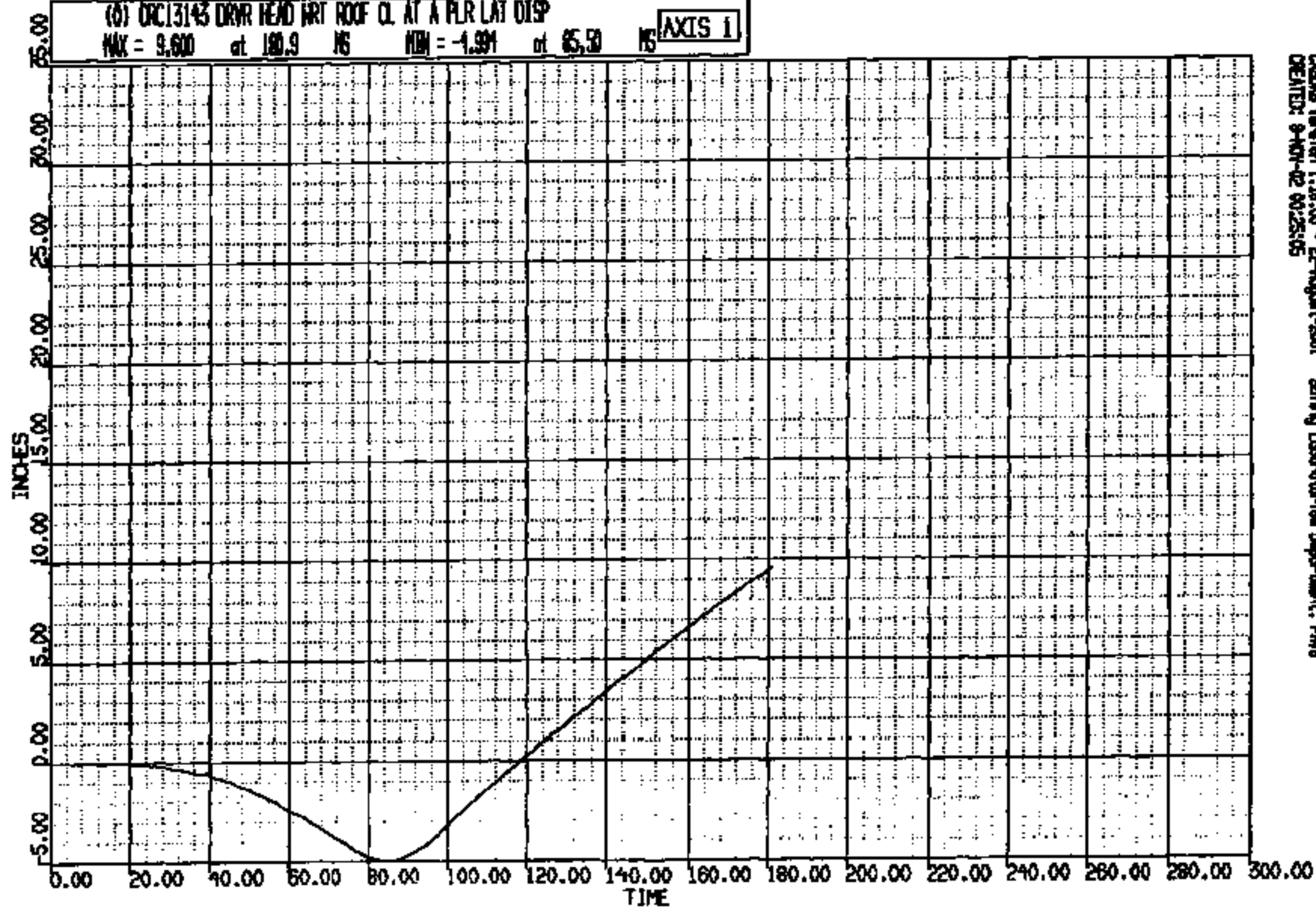
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SB #: 15145 TO: JB7986 DATE: 02-OCT-2002 10:42:54
2002 EN114

(6) ORC13143 DWR HEAD WRT ROOF CL AT A PLR LAT DISP

MAX = 9.600 at 180.9 MS MIN = -1.991 at 85.50 MS

AXIS 1



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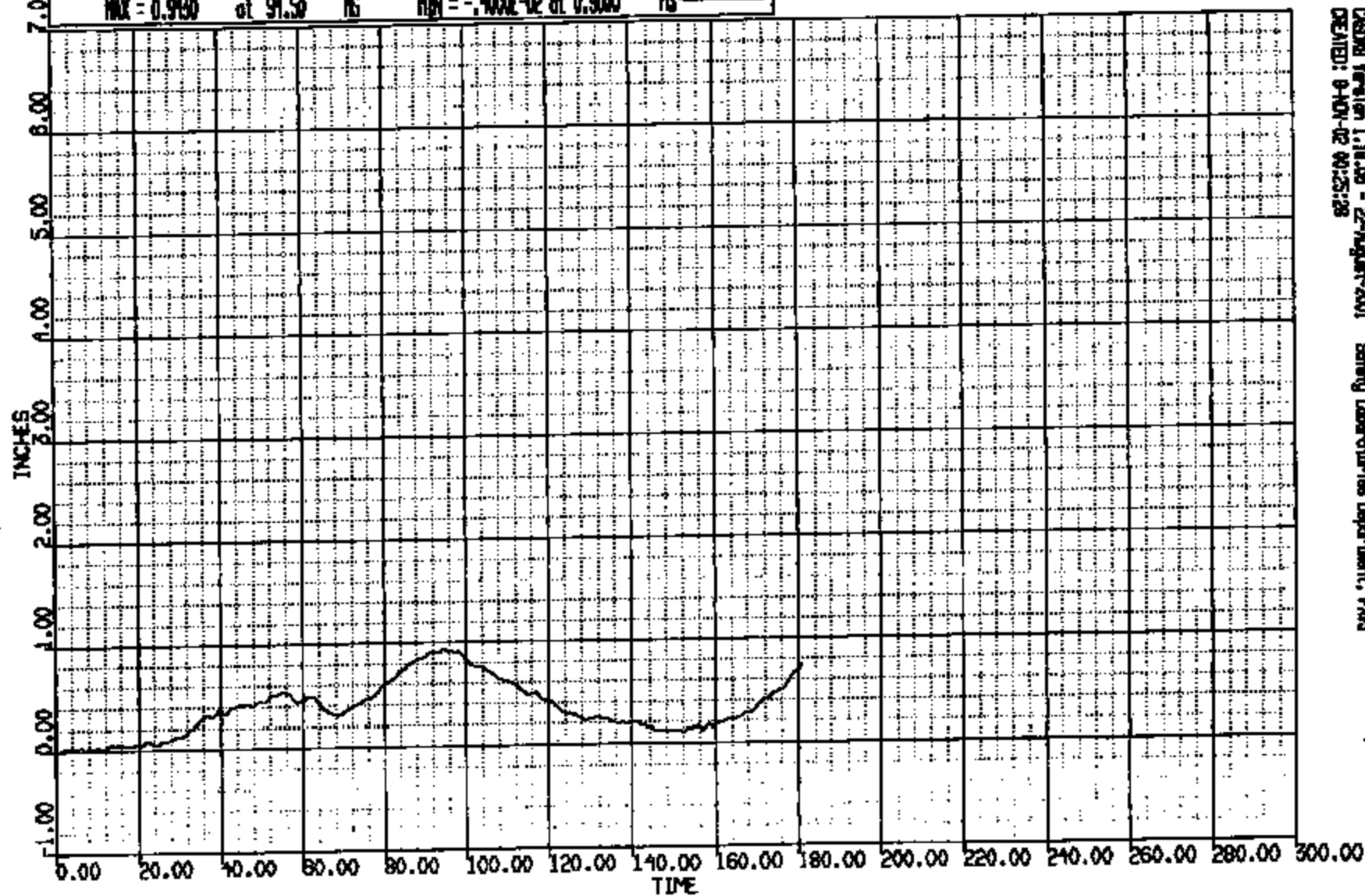
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SB R: 13143 TO: J87968 DATE: 02-OCT-2002 10:42:24
2008 EN114

(0) CR13143 DRVR HEAD WRT ROOF CL AT A PLR VERT DISP

MAX = 0.9930 at 91.50 MS MIN = -.400E-02 at 0.000 MS

MS **AXIS 1**



CR13 0013143

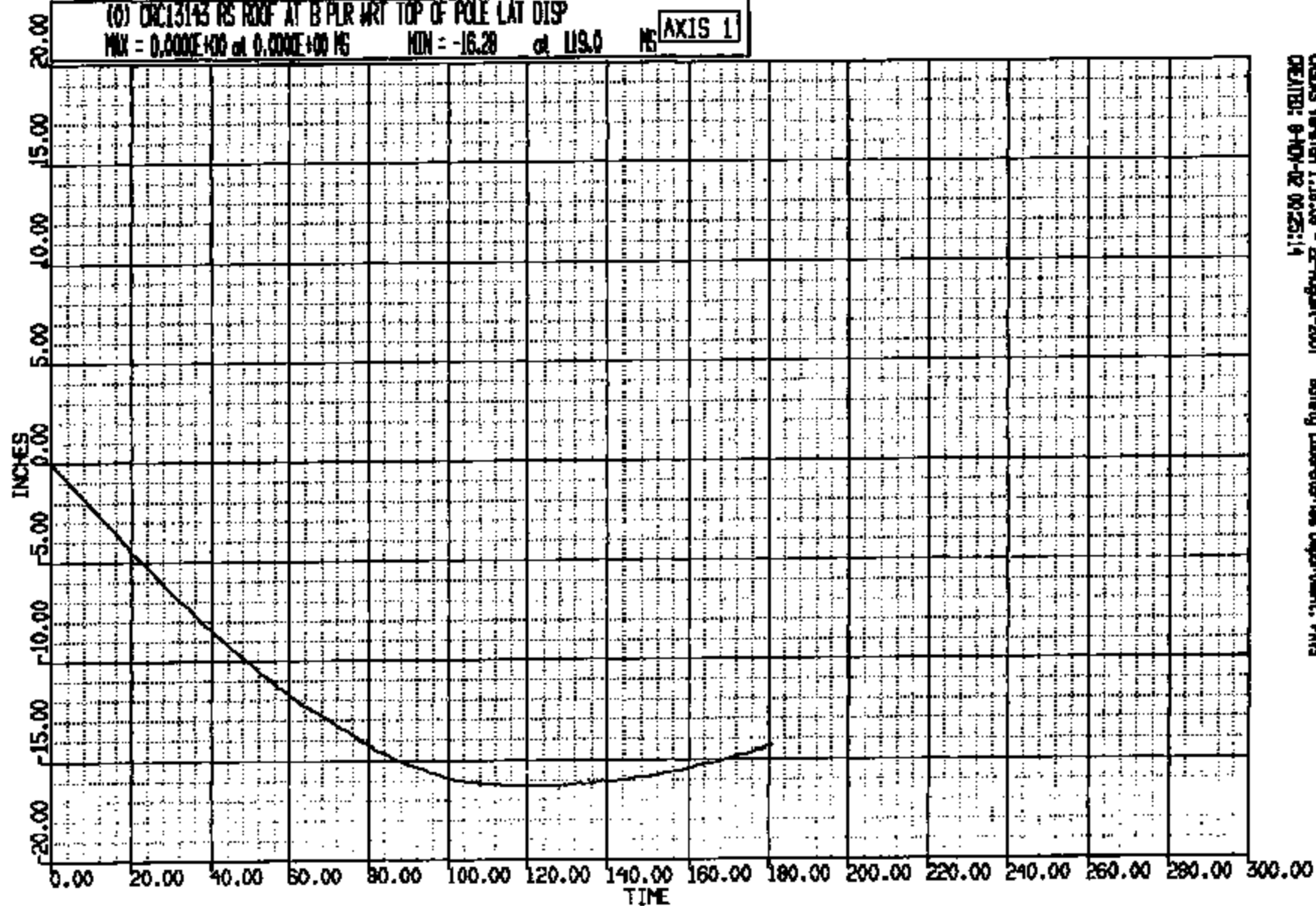
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(0) CRIC13143 RS ROOF AT B PLR WRT TOP OF POLE LAT DISP

MAX = 0.000E+00 at 0.000E+00 MS

MIN = -16.28 at 119.0

MS **AXIS 1**



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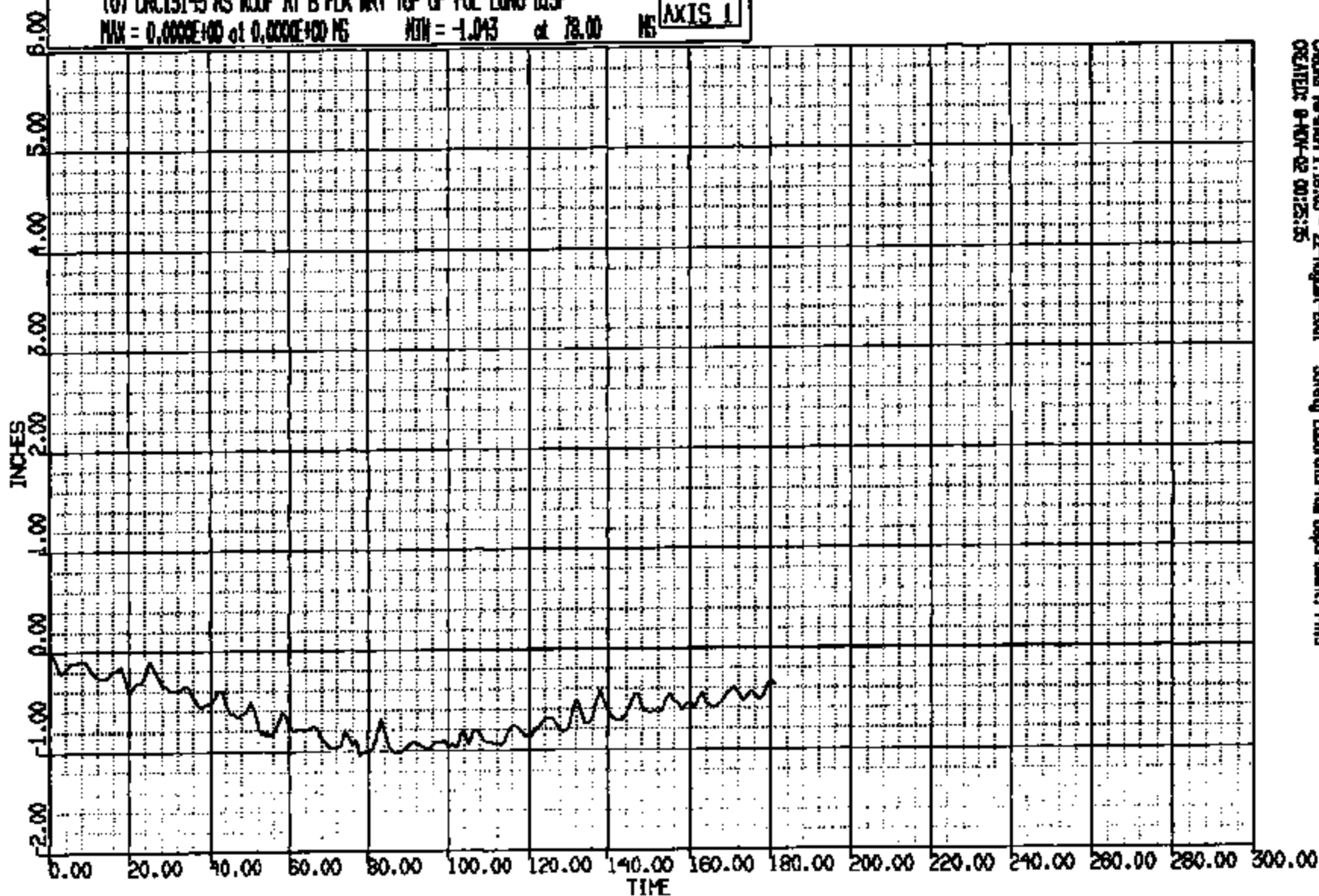
(6) CRCT13143 PS ROOF AT B PLR WRT TOP OF POL LONG DISP

MAX = 0.000E+00 at 0.000E+00 MS

MIN = -1.043

at 78.00

MS **AXIS 1**



CHRON Version 1.18.05 - 22-August-2001 Safety Laboratories Department, PMS
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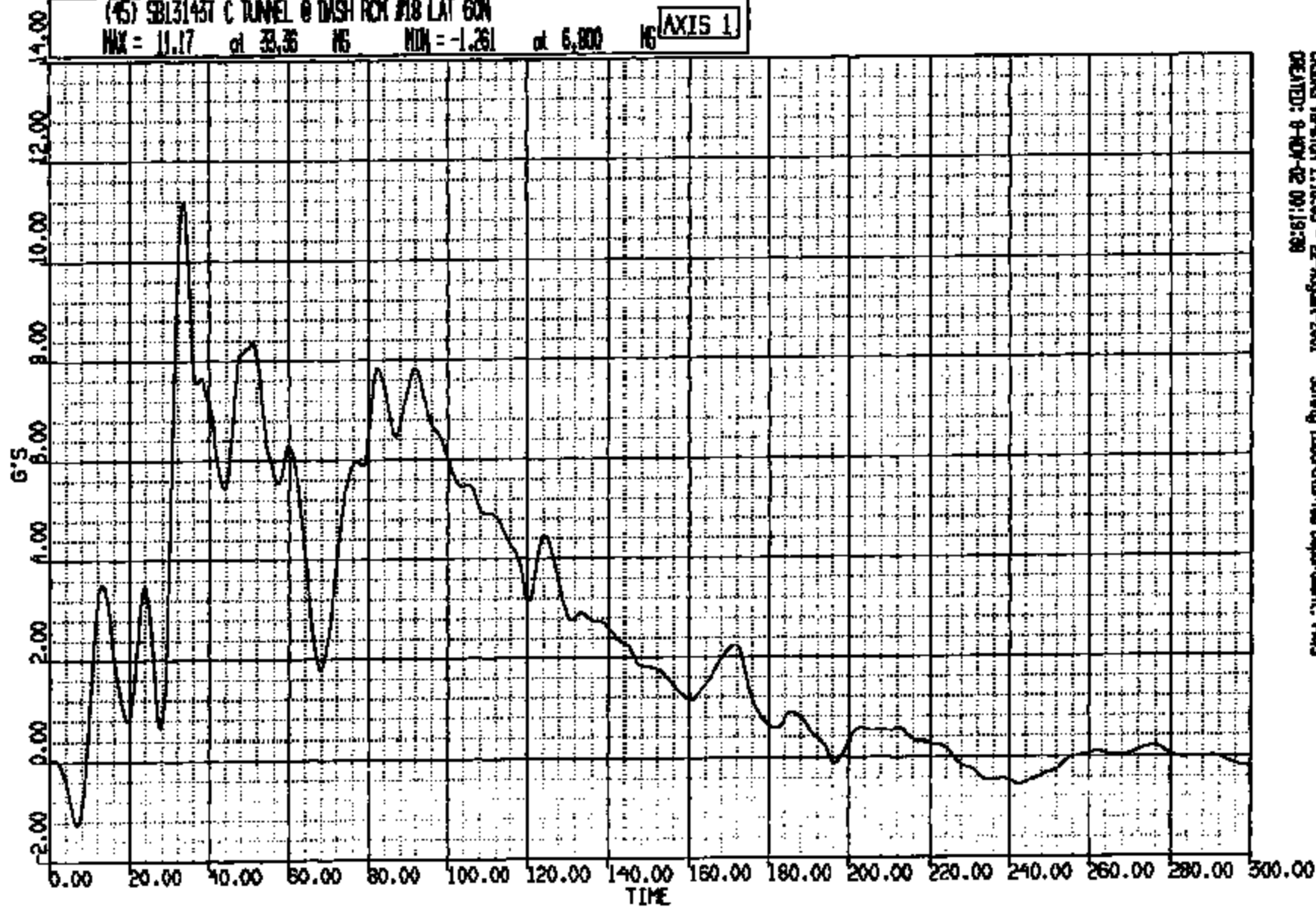
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SS R: 13143 TO: J97968 DATE: 02-OCT-2002 10:42:34
2002 EN114

(45) SBL31437 C TUNNEL @ DASH RCM #18 LAT 60N

MAX = 11.17 at 33.35 NS MIN = -1.261 at 5.800 NS

AXIS 1



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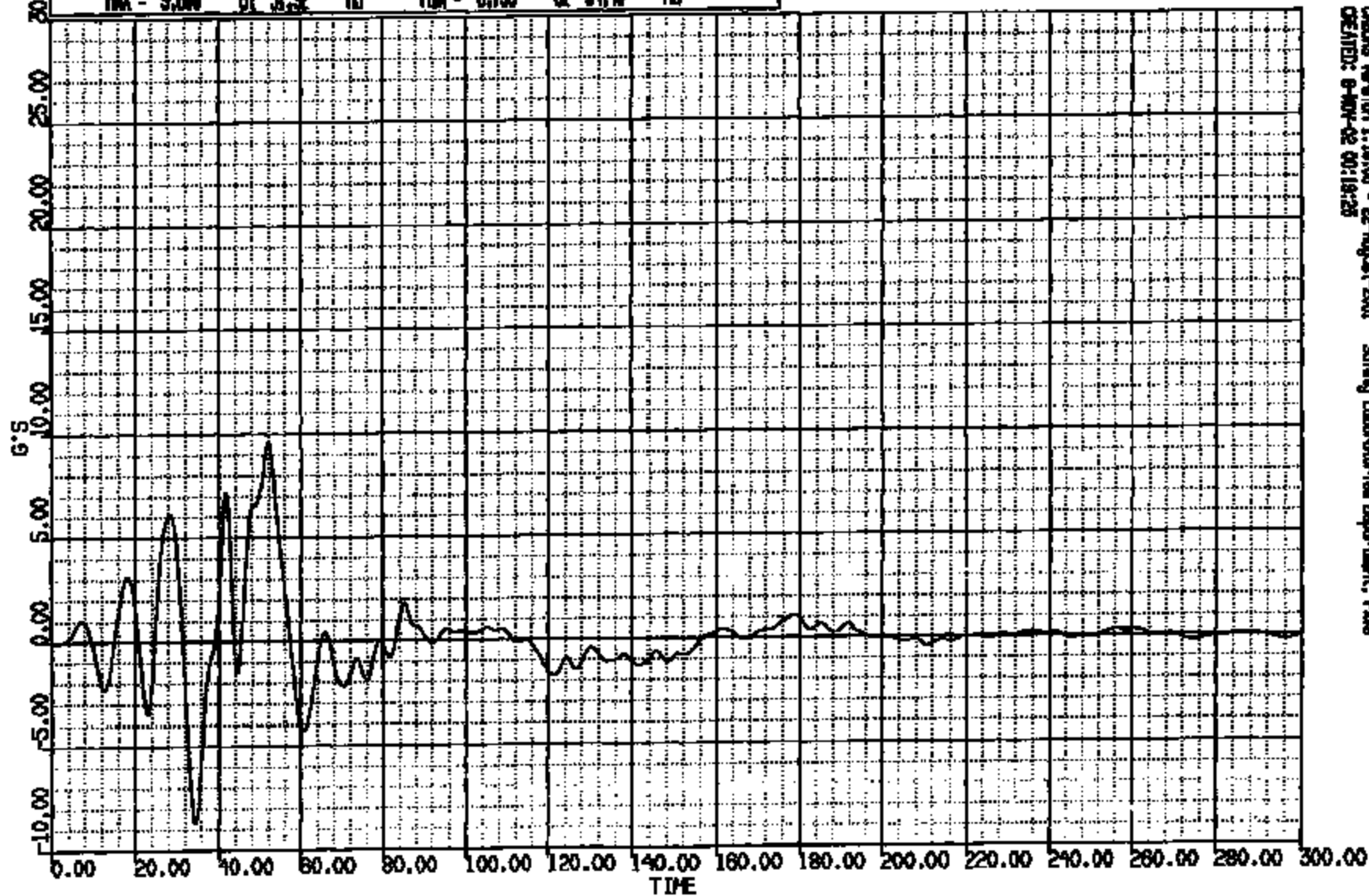
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BB R: 13143 TO: JB7988 DATE: 02-OCT-2002 10:42:54
2003 EN114

(43) SBL3143T C TUNNEL @ DASH RCH #18 LONG 60M

MAX = 9.696 at 51.92 MS MIN = -8.735 at 31.10 MS

AXIS 1



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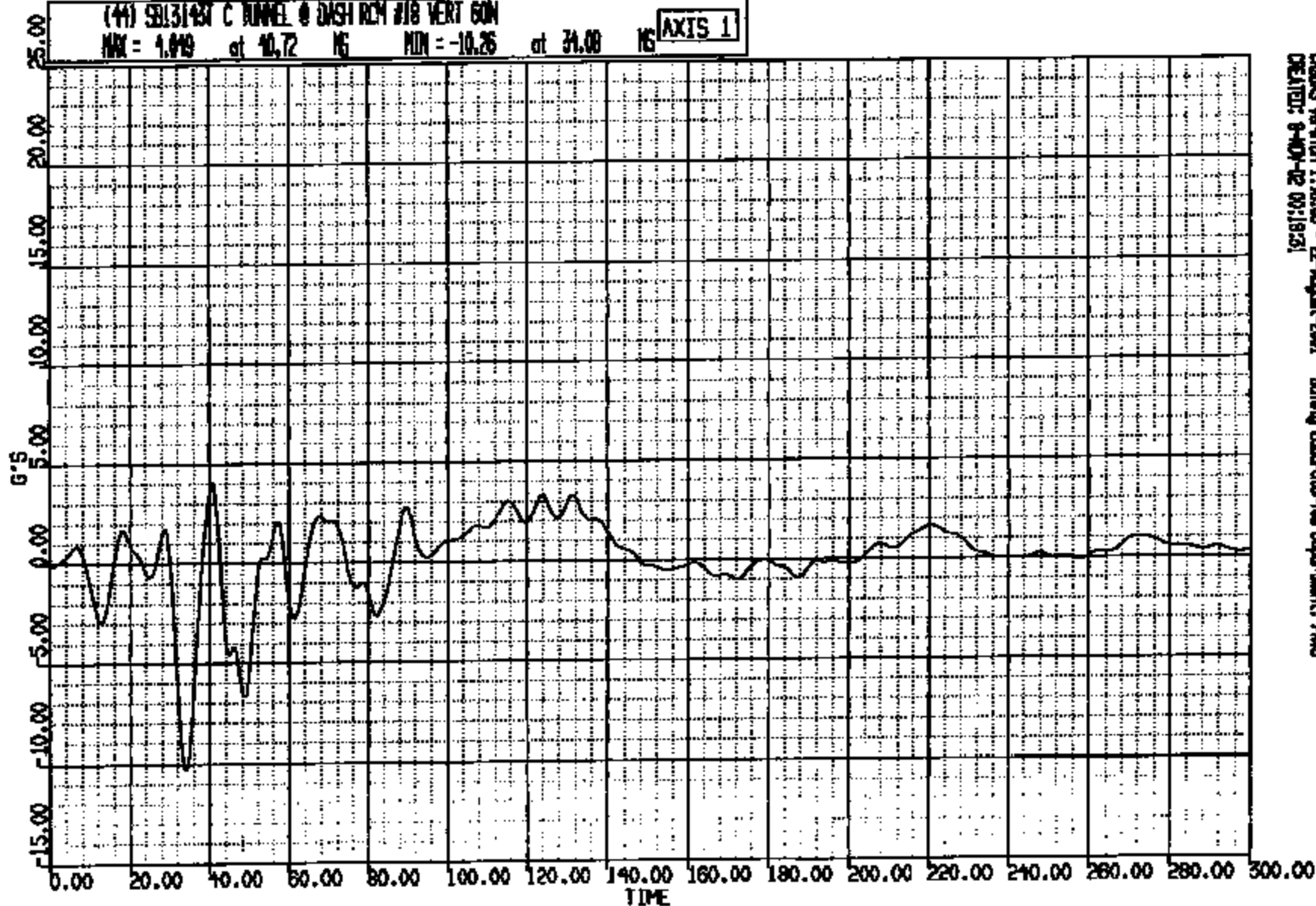
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SB R: 15143 TO: J87888 DATE: 02-OCT-2002 10:42:24
2002 EN114

(44) SB131437 C TUNNEL @ DASH RCM #18 VERT 60M

MAX = 1.049 at 40.72 NS MIN = -10.26 at 34.00 NS

AXIS 1

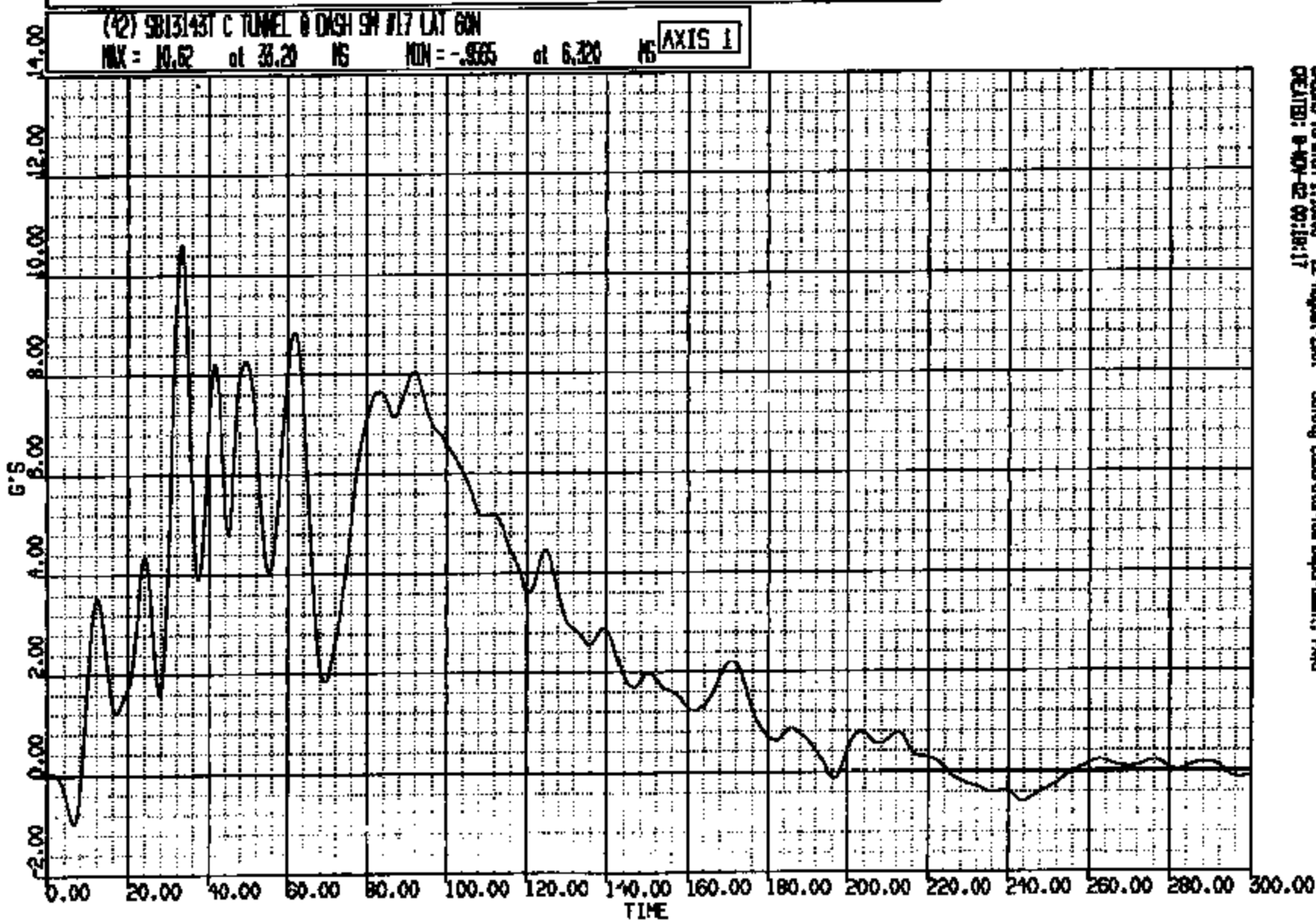


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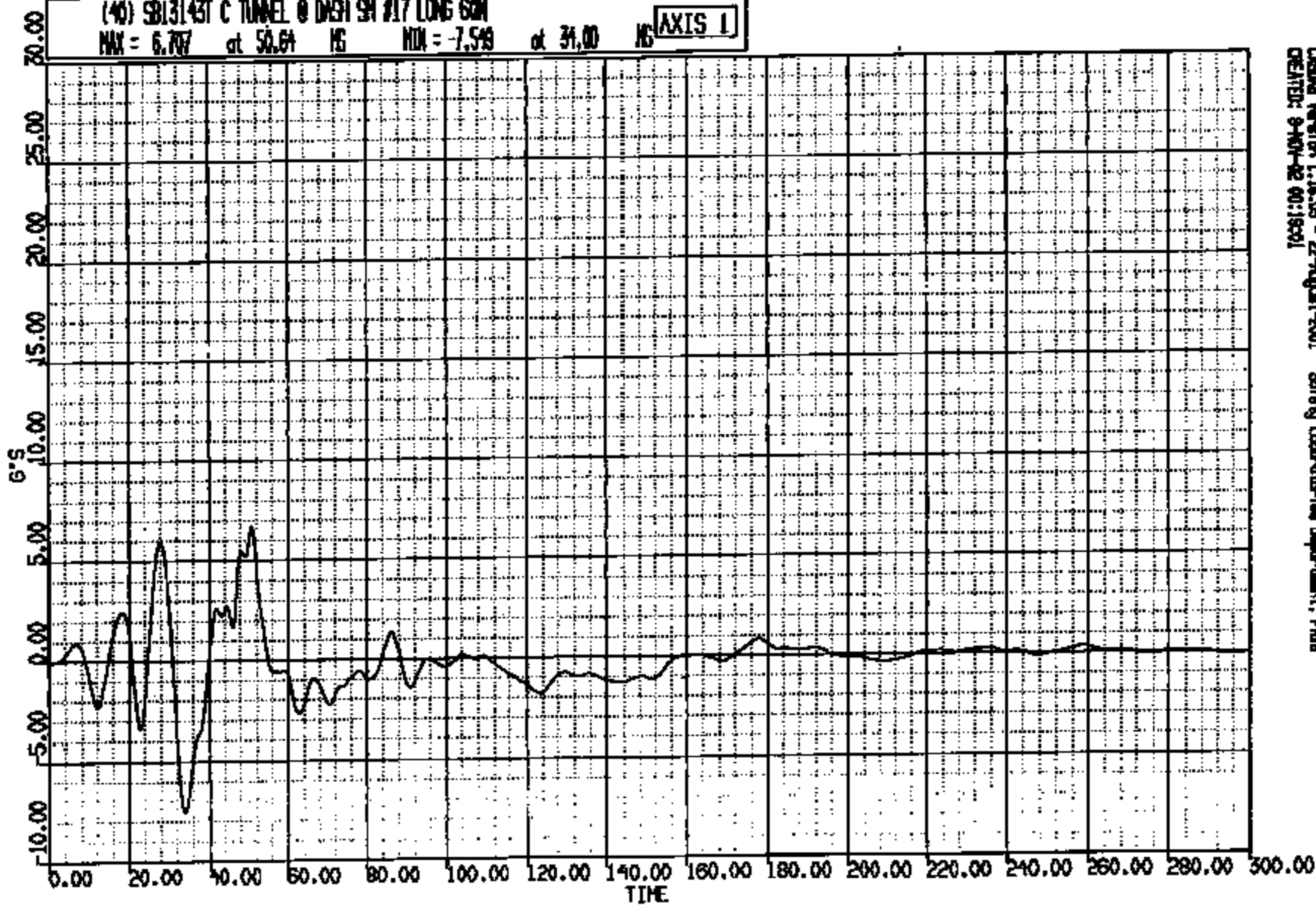
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82 RI 15142 TO: J87968 DATE: 02-OCT-2002 10:42:34
2005 EN114

(40) SBL3143T C TUNNEL @ DASH SH #17 LONG 62M

MAX = 6.707 at 50.64 MS MIN = -7.549 at 31.00 MS

AXIS 1



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SB R: 13143 TO: JB7955 DATE: 02-OCT-2002 10:42:34
2002 EN114

(41) 9913143T C TUNNEL @ DASH SH #17 VERT 60W

PKK = 5.920 at 40.64 MS MIN = -12.23 at 31.08 MS

AXIS 1



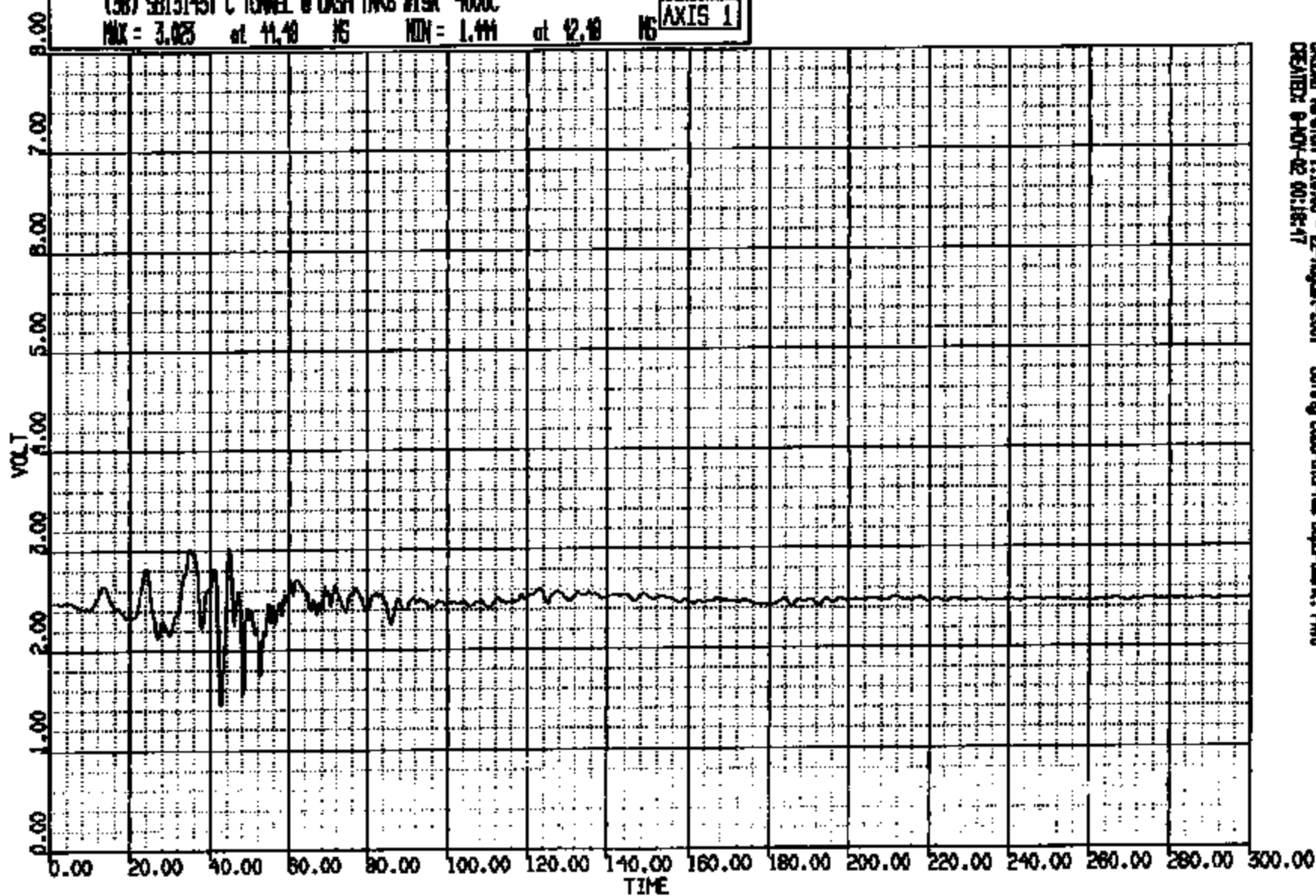
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SB R: 13143 TO: J87008 DATE: 02-OCT-2002 10:42:54
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(38) SB13143T C TUNNEL @ DASH TAGS #19A 4000C

MAX = 3.025 at 41.40 MS MIN = 1.444 at 12.40 MS

AXIS 1

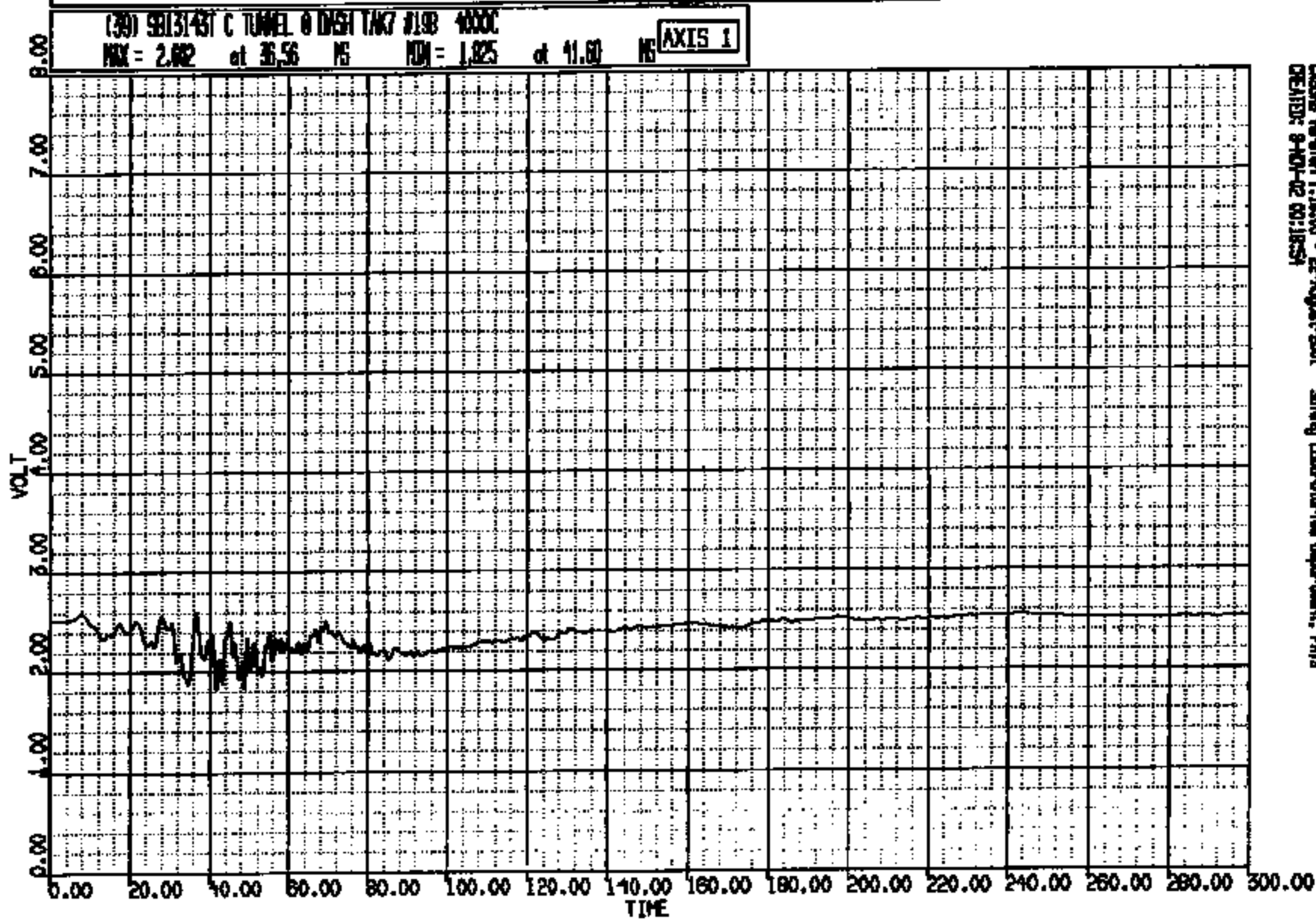


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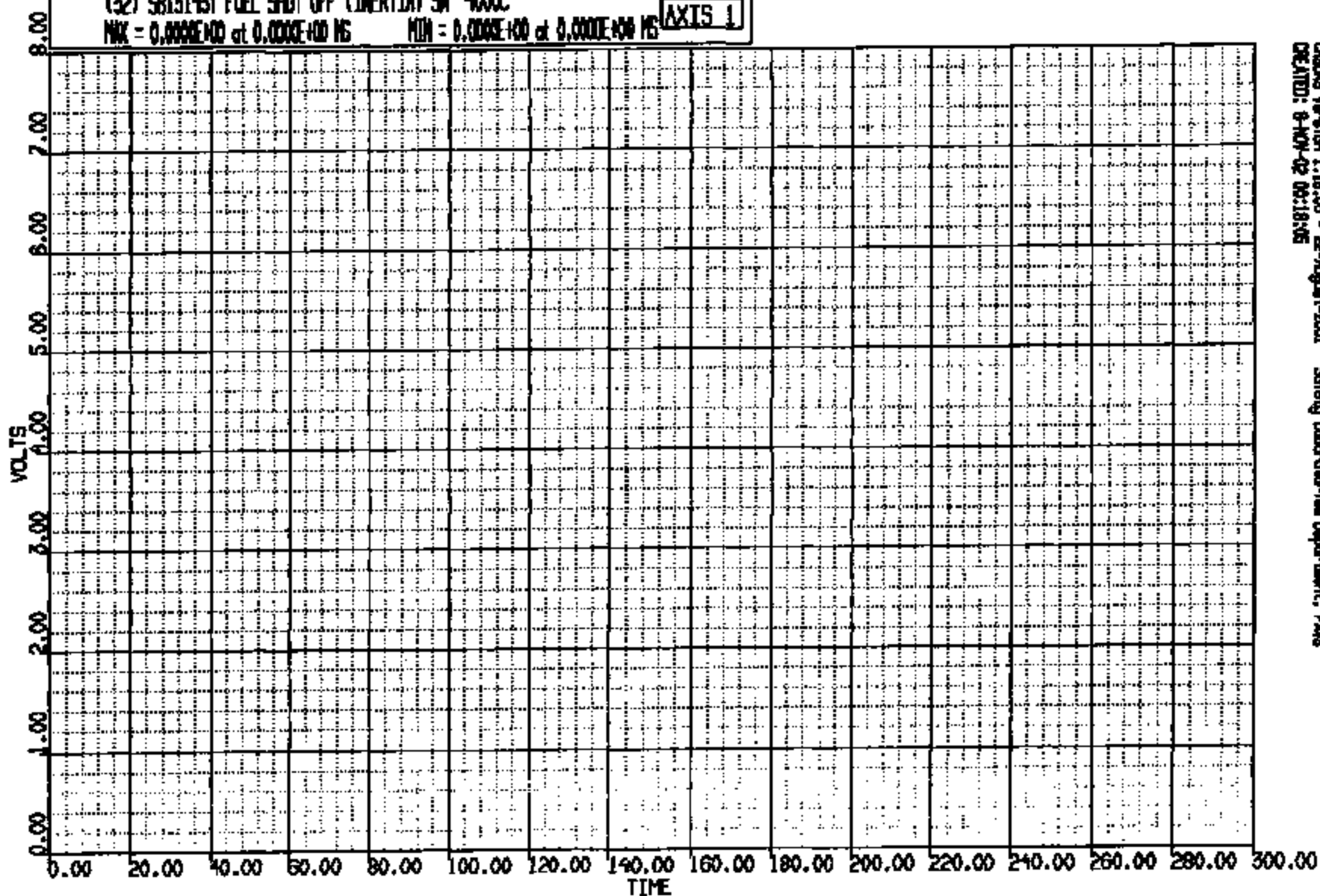
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SB #: 18143 TO: JB7226 DATE: 02-OCT-2002 10:42:54
2003 EN114

(32) 58131431 FUEL SHUT OFF (INERTIA) SW 4000C

MAX = 0.0000E+00 at 0.0000E+00 MS MIN = 0.0000E+00 at 0.0000E+00 MS

AXIS 1



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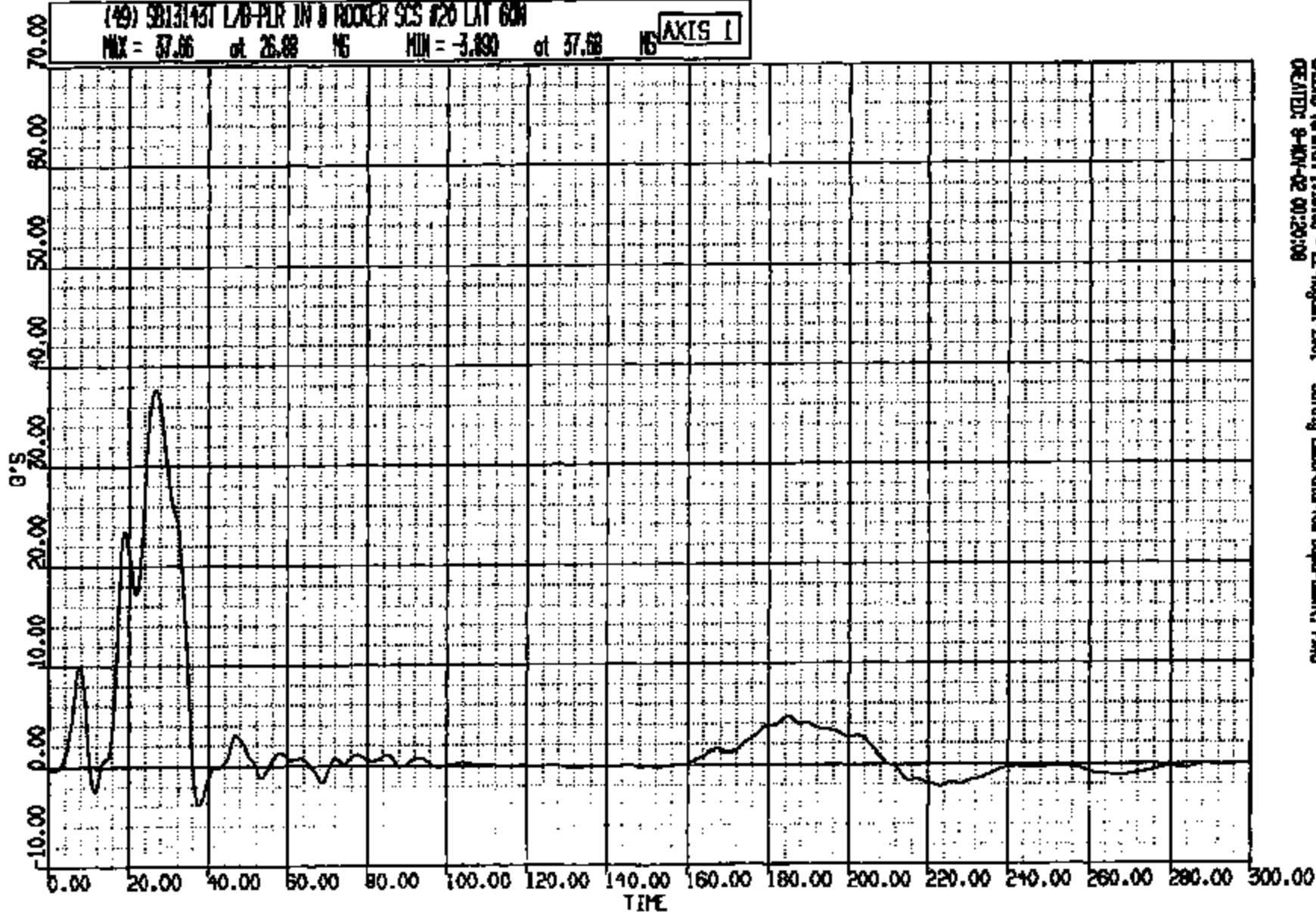
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SB R: 13143 TD: J97966 DATE: 02-OCT-2002 10:42:34
2005 EN114

(49) SB13143T LAD-PLR IN 8 ROCKER SES #20 LAT 60N

MAX = 37.66 at 26.88 NS MIN = -3.890 at 37.68 NS

AXIS 1



CRTS 0013143

OSGAS Version 1.19.06 - 22-August-2001 Safety Laboratory Department, PMS
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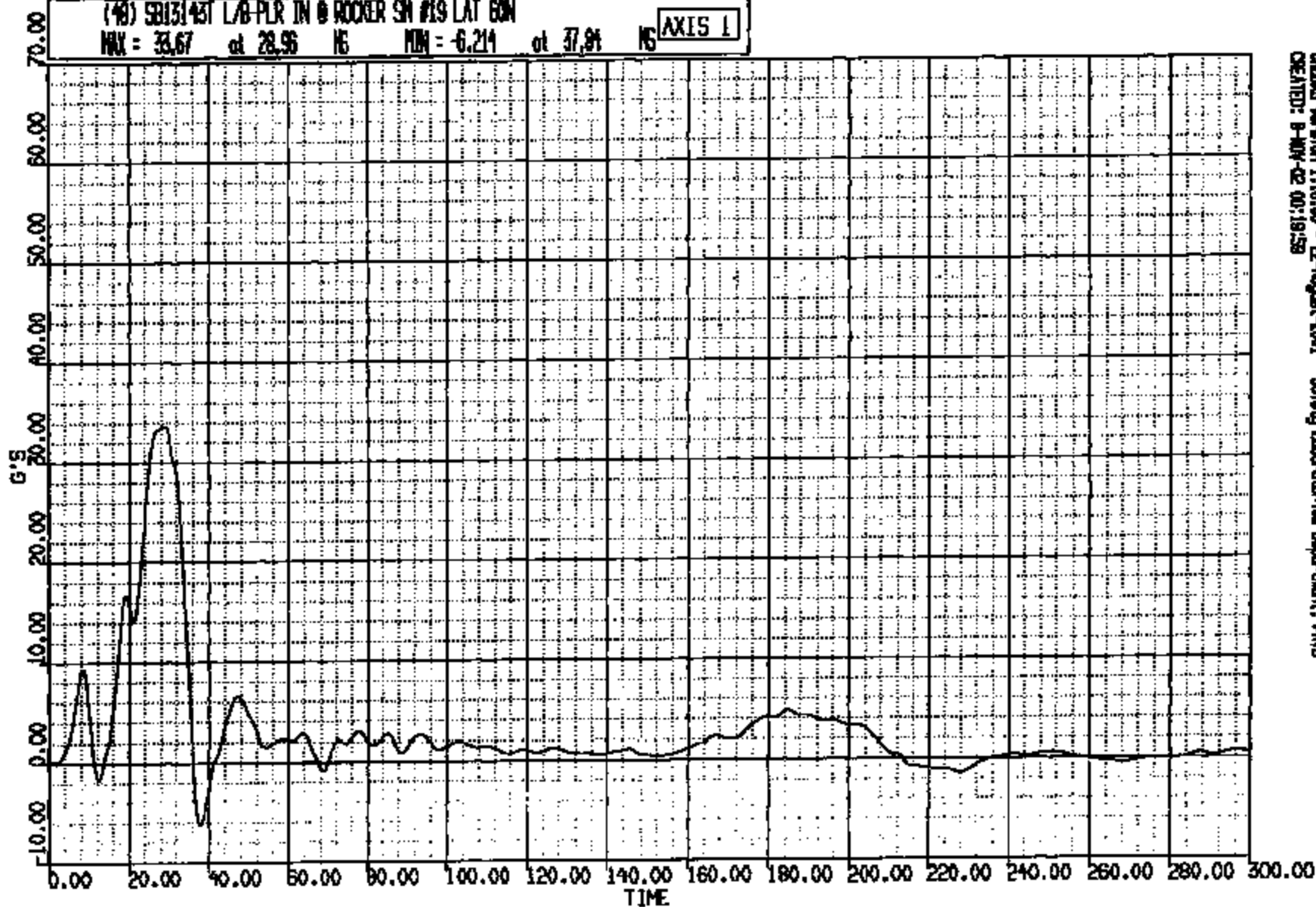
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BB R: 13143 TC: JB7988 DATE: 02-OCT-2002 10:42:34
2008 EN114

(49) SB131437 L/R PLR IN @ ROCKER SN #19 LAT 60N

MAX = 33.67 at 28.96 NS MIN = -6.214 at 37.91 NS

AXIS 1



CASMS Version 1.18.05 - 22-August-2001 Safety Laboratory/In Department, PMS
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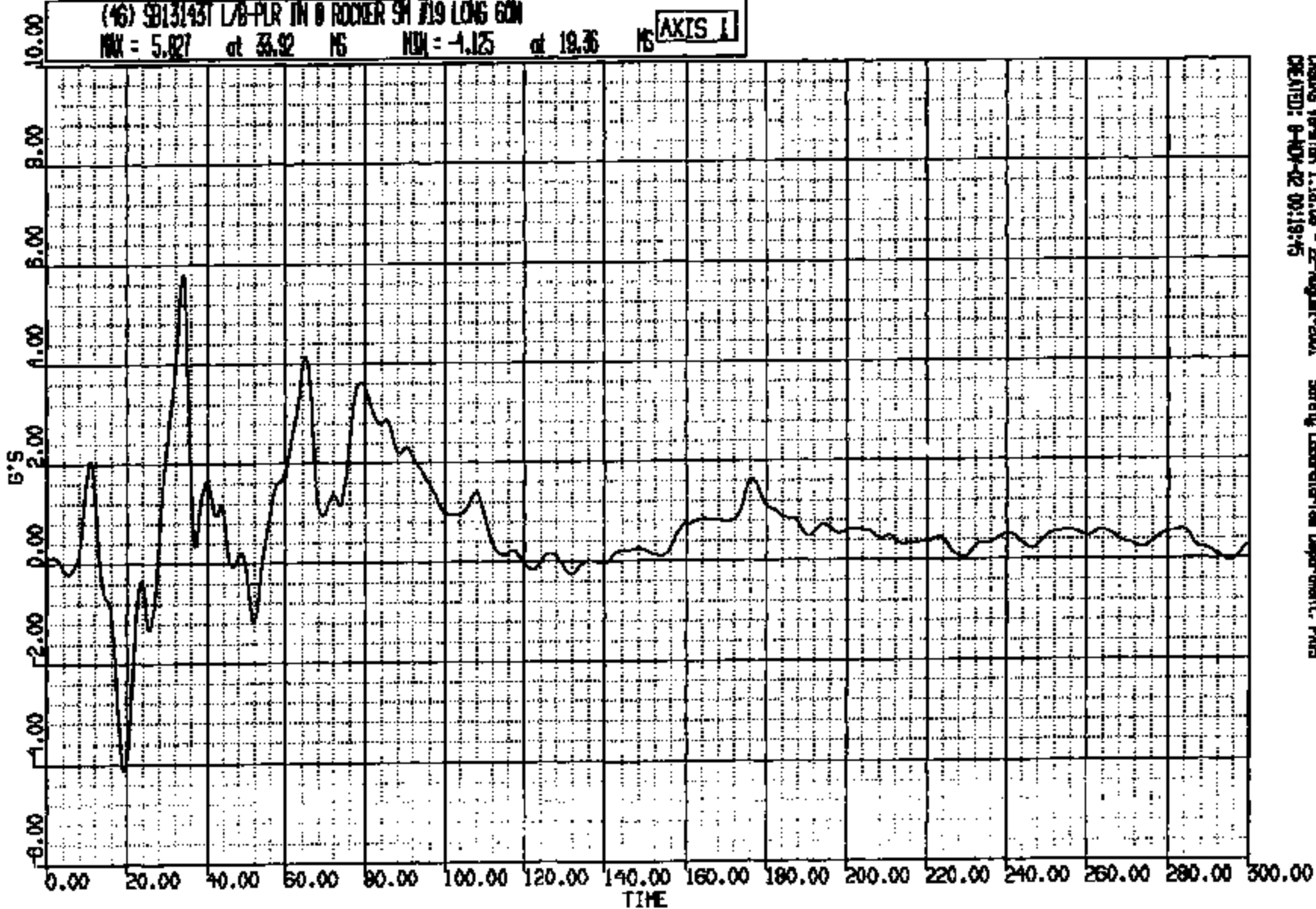
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2003 EN114

(46) SB13143T L/B-PLR IN @ ROCKER SH #19 LONG 60N

MM = 5.827 at 33.92 MS MM = -4.125 at 19.36 MS

AXIS 1



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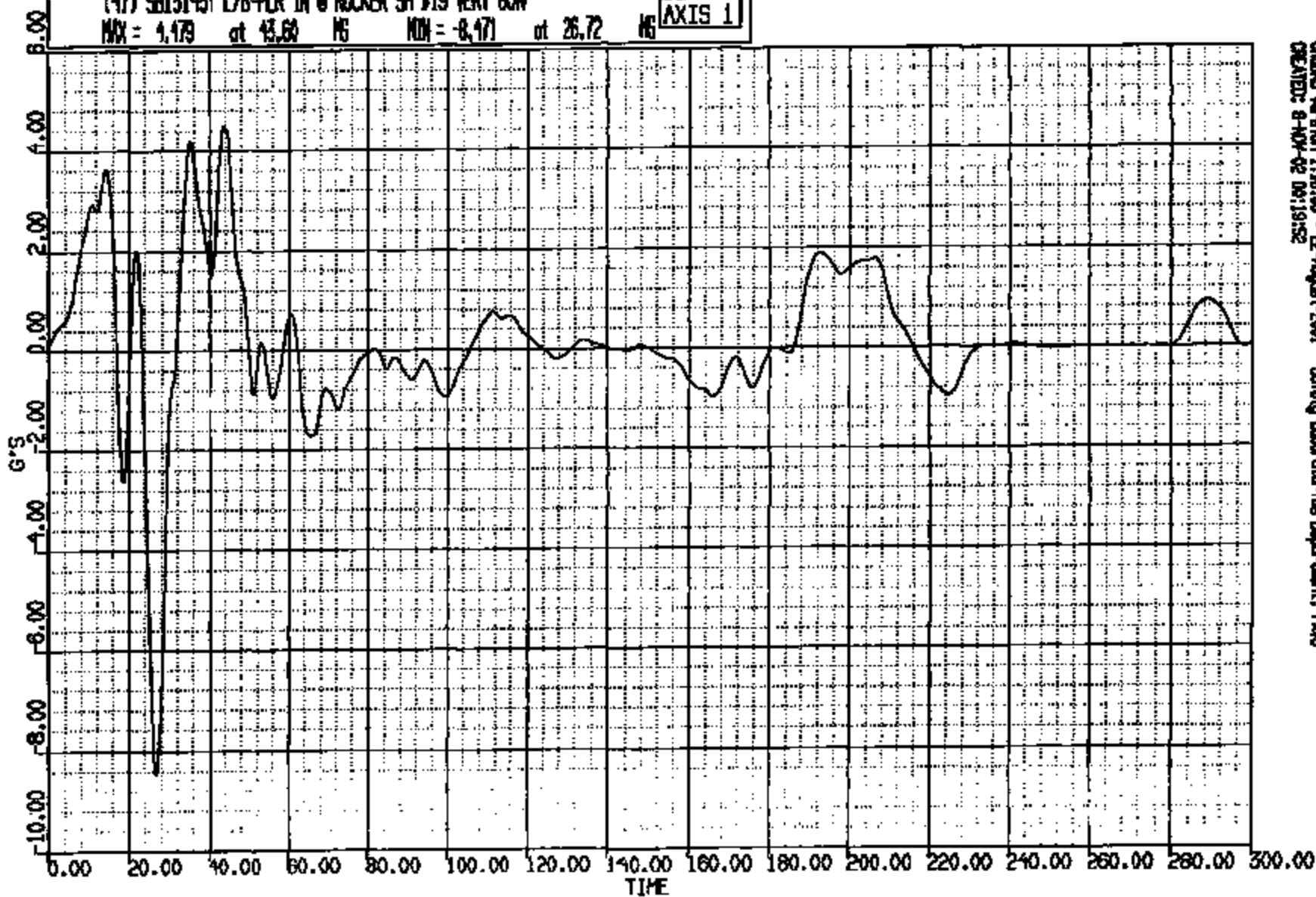
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SB R: 13143 TO: J87988 DATE: 02-OCT-2002 10:42:34
2003 EN114

(47) SB13143T L/B-PLR IN @ ROCKER SH #19 VERT 60W

MAX = 1.179 at 43.60 MS MIN = -8.471 at 26.72 MS

AXIS 1



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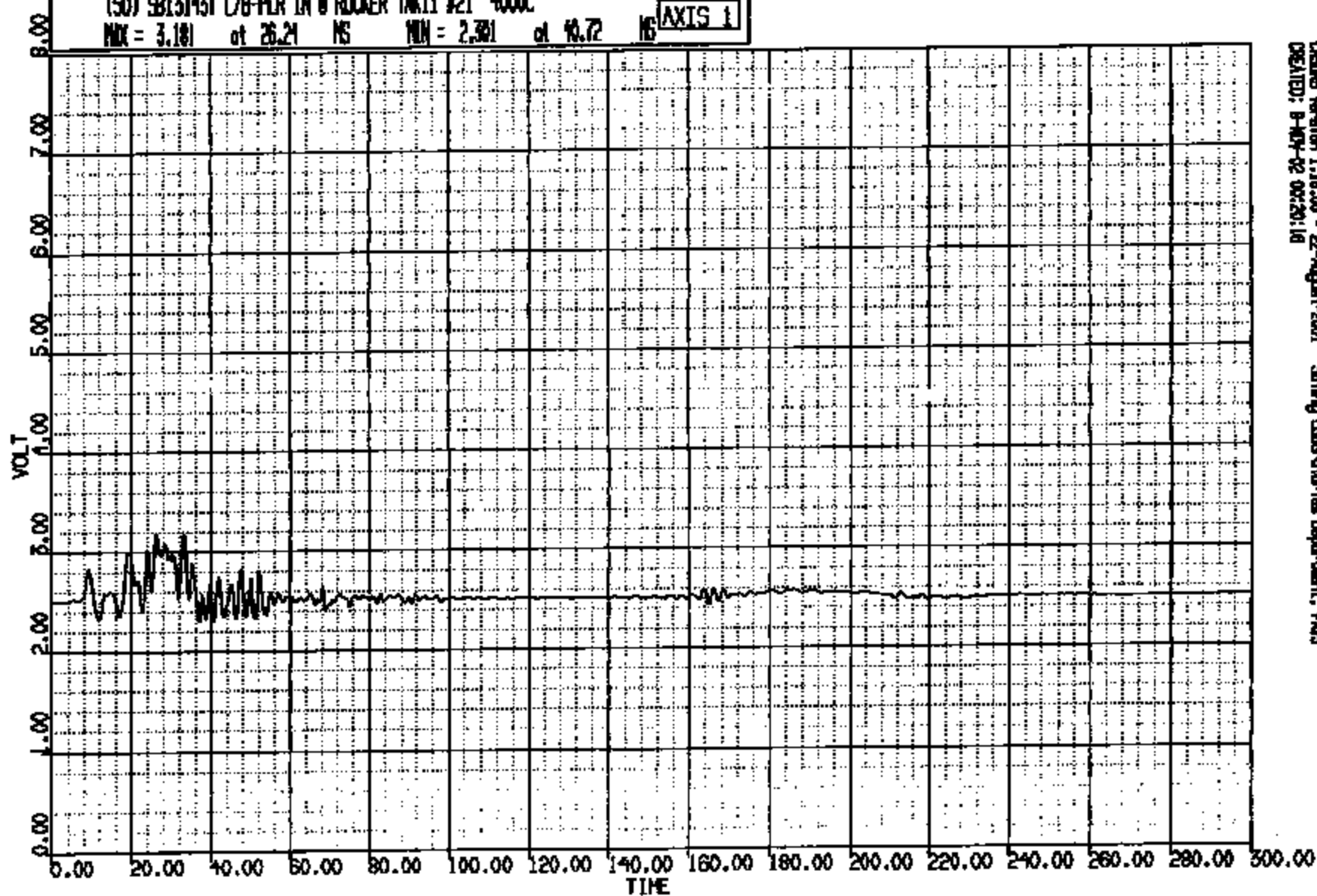
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BB R: 13143 TO: JB7955 DATE: 02-OCT-2002 10:42:34
2003 EN114

(50) 9313143T L/R-FLR IN @ ROCKER TAIL #21 4000C

MAX = 3.181 at 26.21 MS MIN = 2.381 at 10.72 MS

AXIS 1



CRAMS Version 1.18.05 - 22-August-2001 Safety Laboratories Department, PWS
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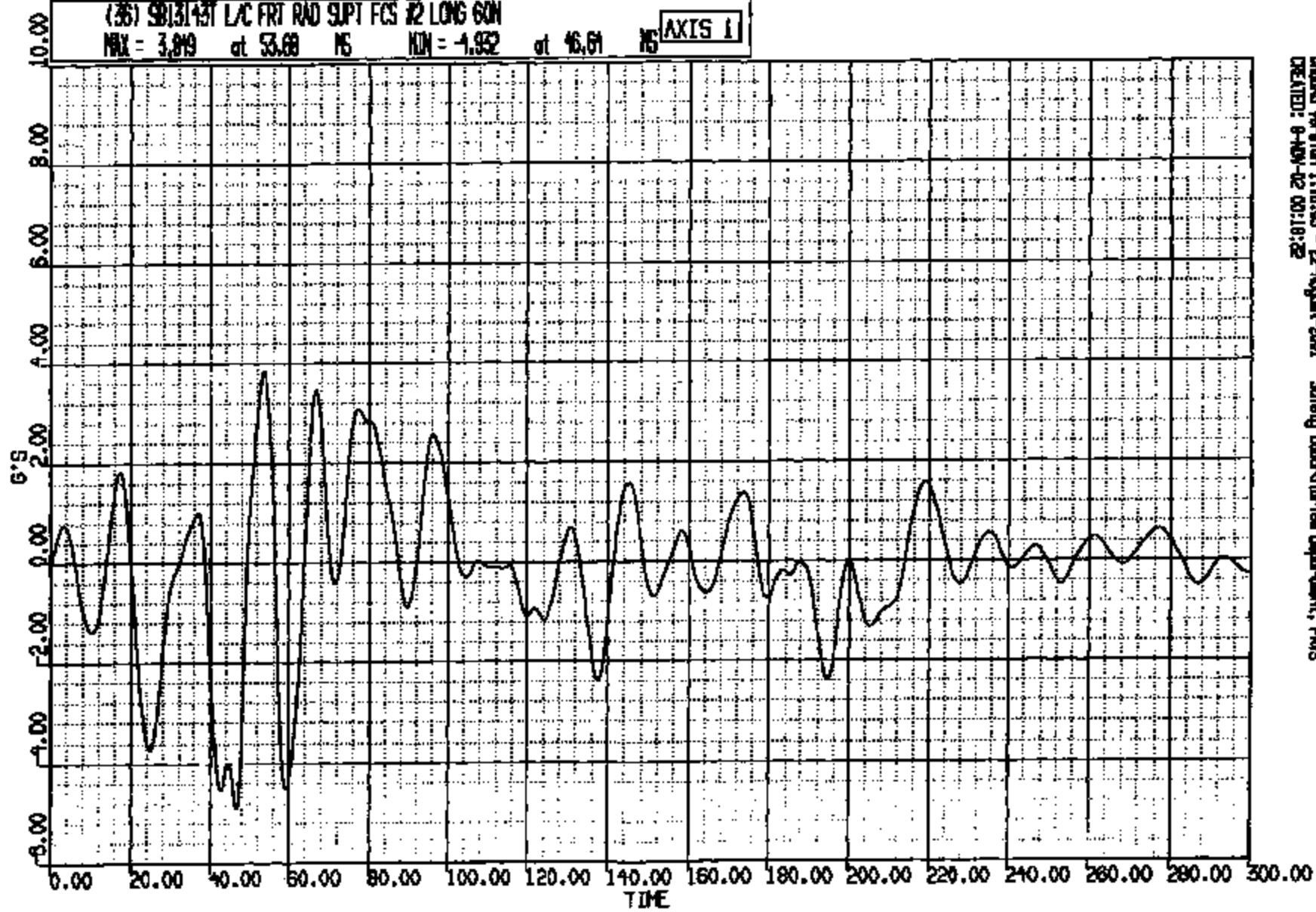
CRTS 0013143

SE R: 15145 TO: J87966 DATE: 08-OCT-2002 10:42:34
2002 EN114

(35) S0131437 L/C FRT RAD SUPT FCS #2 LONG 60N

MAX = 3.819 at 53.68 NS MIN = -4.932 at 46.61 NS

AXIS 1



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SB R: 15143 TO: J27966 DATE: 02-OCT-2002 10:42:34
2005 EN114

(35) SB131431 L/C TRF RAD SPT SH #1 LONG 60N

MAX = 3.483 at 00.40 MS MIN = -5.067 at 46.40 MS

AXIS 1



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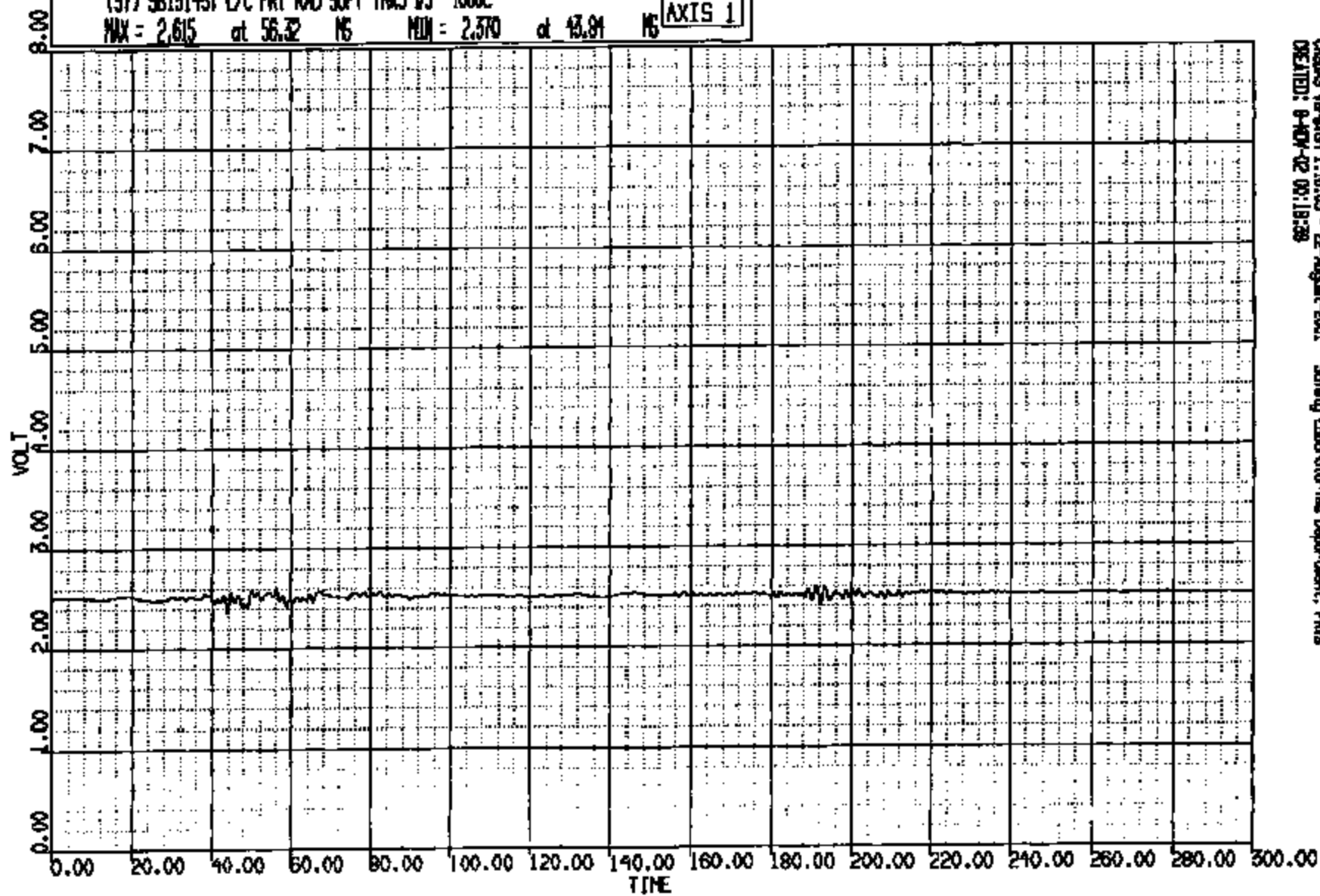
CRIS 0013143

SB R: 13143 TD: JB7268 DATE: 02-OCT-2002 10:42:34
2003 EN114

(37) SB131431 L/C FRT RAD SPT TMS #3 4000C

MAX = 2.615 at 56.32 MS MIN = 2.570 at 13.81 MS

AXIS 1

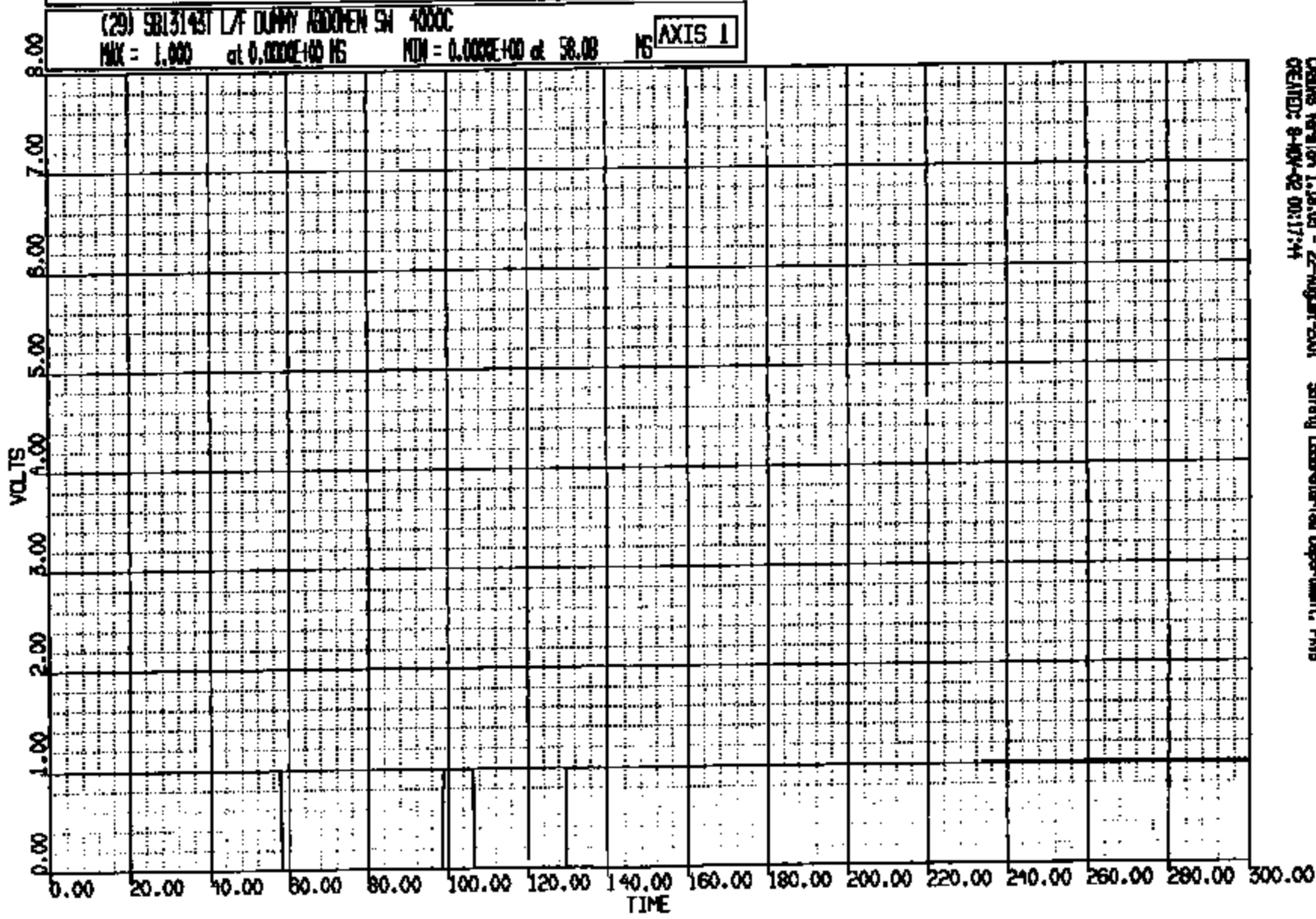


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SB R: 13143 TO: J27988 DATE: 02-OCT-2002 10:42:54
2008 EN114



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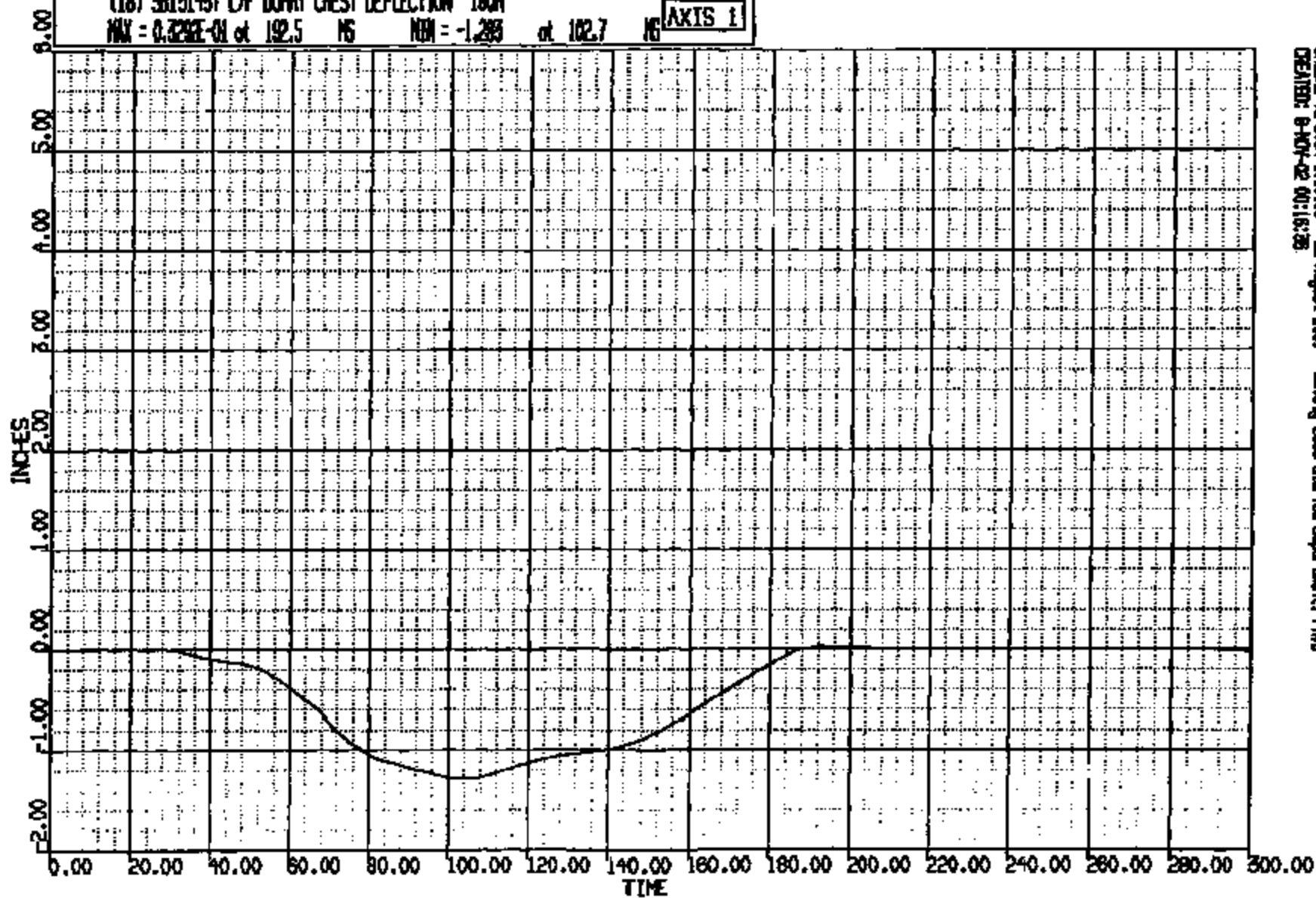
CRIBS 0013143

SE R: 15145 TO: J97988 DATE: 02-OCT-2002 10:12:34
2005 EN114

(18) SH13143T LAF DUMMY CHEST DEFLECTION 180N

MAX = 0.3294E-01 at 192.5 MS MIN = -1.285 at 102.7 MS

AXIS 1



CHDMS Version 1.18-05 - 22-August-2001 Safety Laboratories Department, PMS
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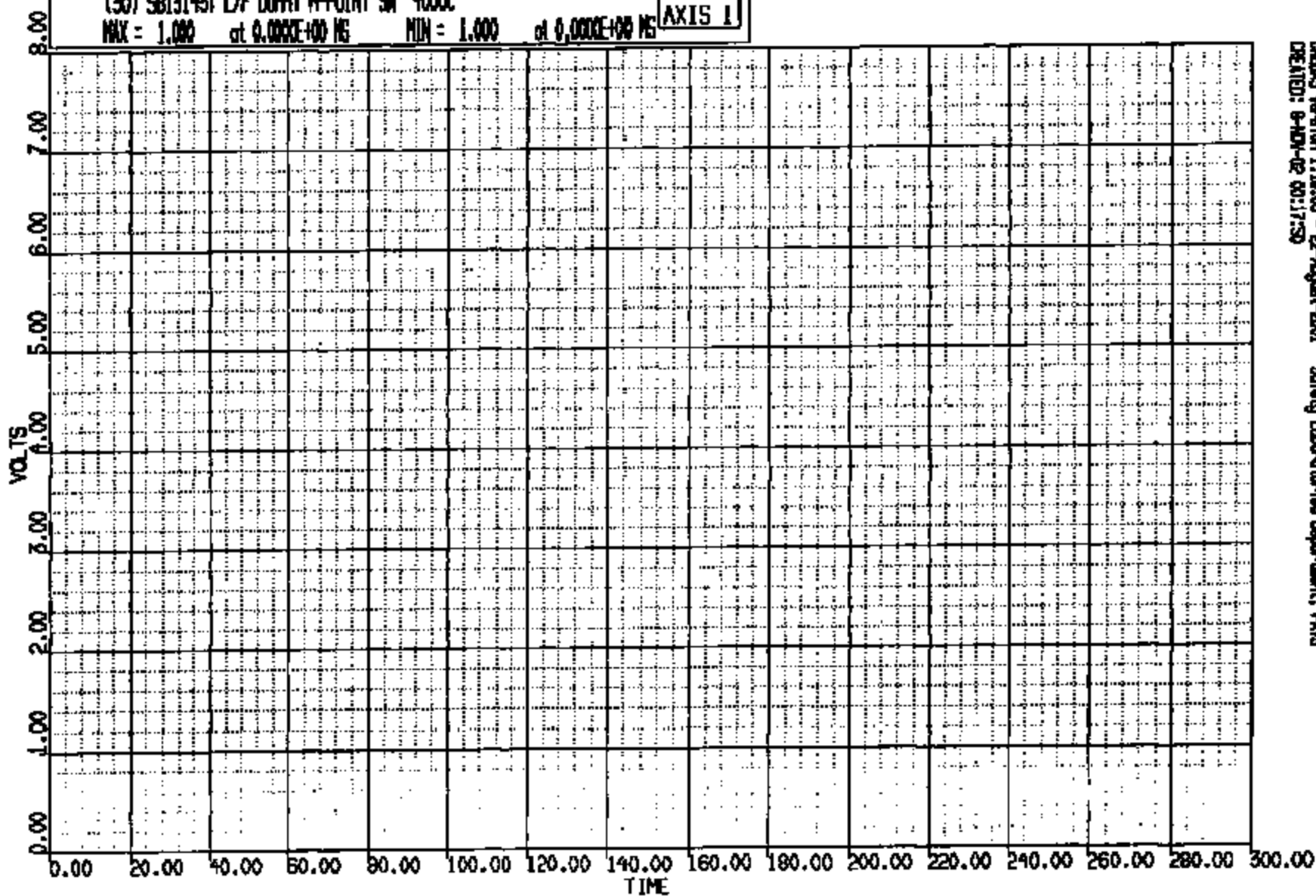
CRTS 0013143

SB R: 15143 TO: J87955 DATE: 02-OCT-2002 10:42:34
2005 EN114

(30) SBI3143 L/F DUMMY H-POINT SM 4000C

MAX = 1.000 at 0.000E+00 MS MIN = 1.000 at 0.000E+00 MS

AXIS 1



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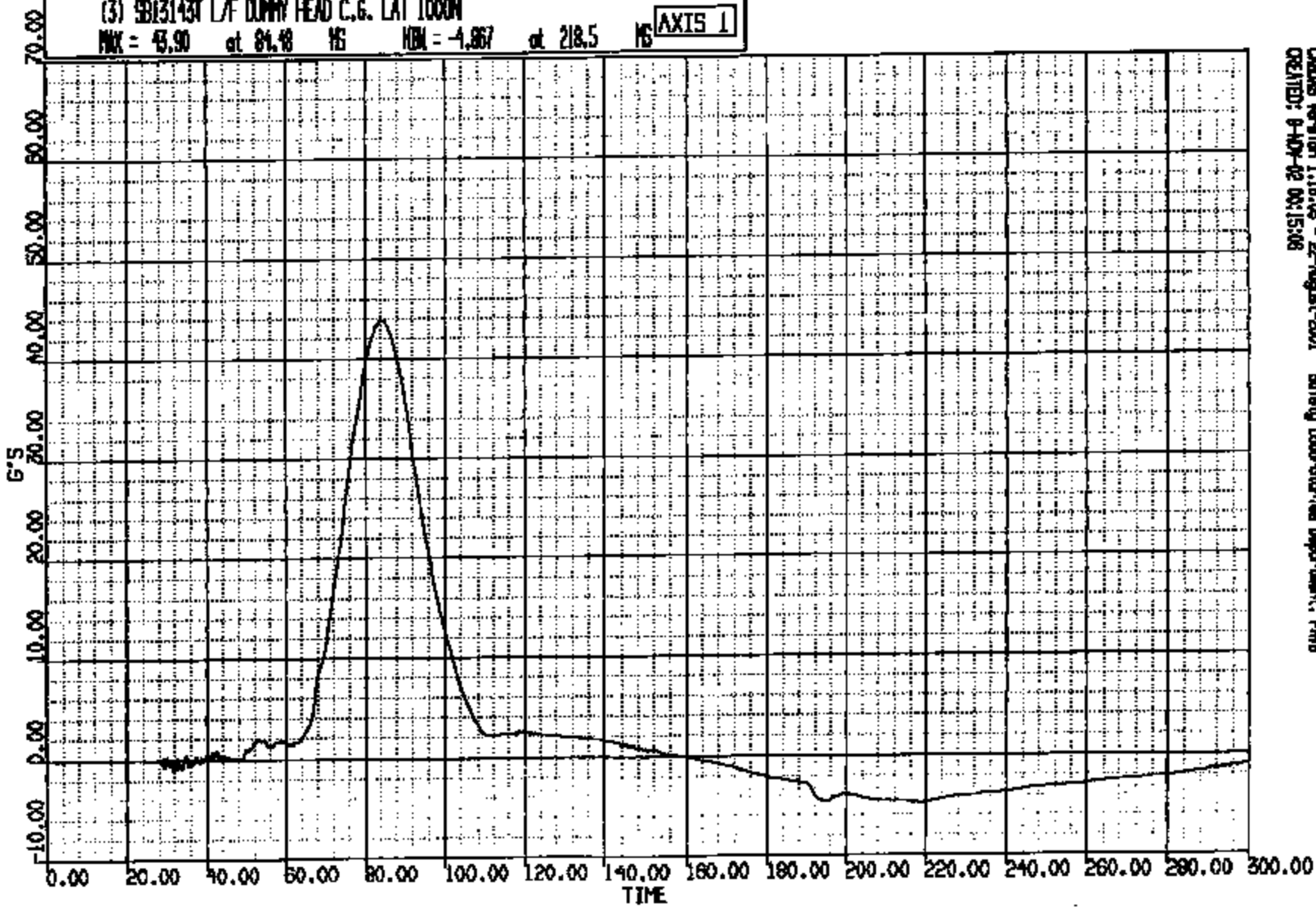
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SB R: 15143 TO: JB7955 DATE: 02-OCT-2002 10:42:54
2003 EN114

(3) 5813143T L/F DUNNY HEAD C.G. LAT 1000N

MAX = 43.90 at 84.48 MS MIN = -4.867 at 218.5 MS

AXIS 1



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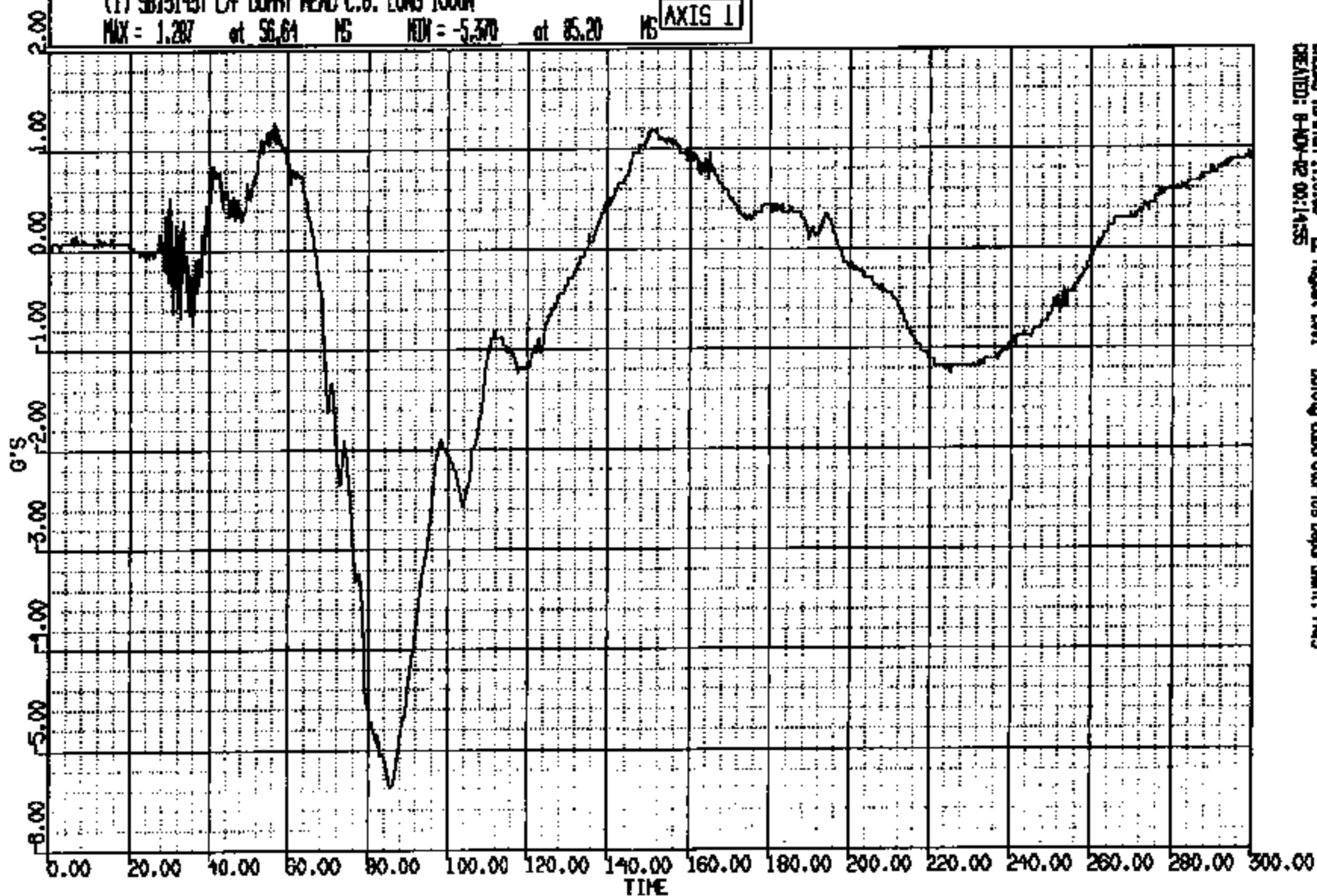
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2002 EN114

(1) SB13143T L/F DUMMY HEAD C.G. LONG 1000N

MAX = 1.207 at 56.64 MS MIN = -5.570 at 85.20 MS

AXIS 1



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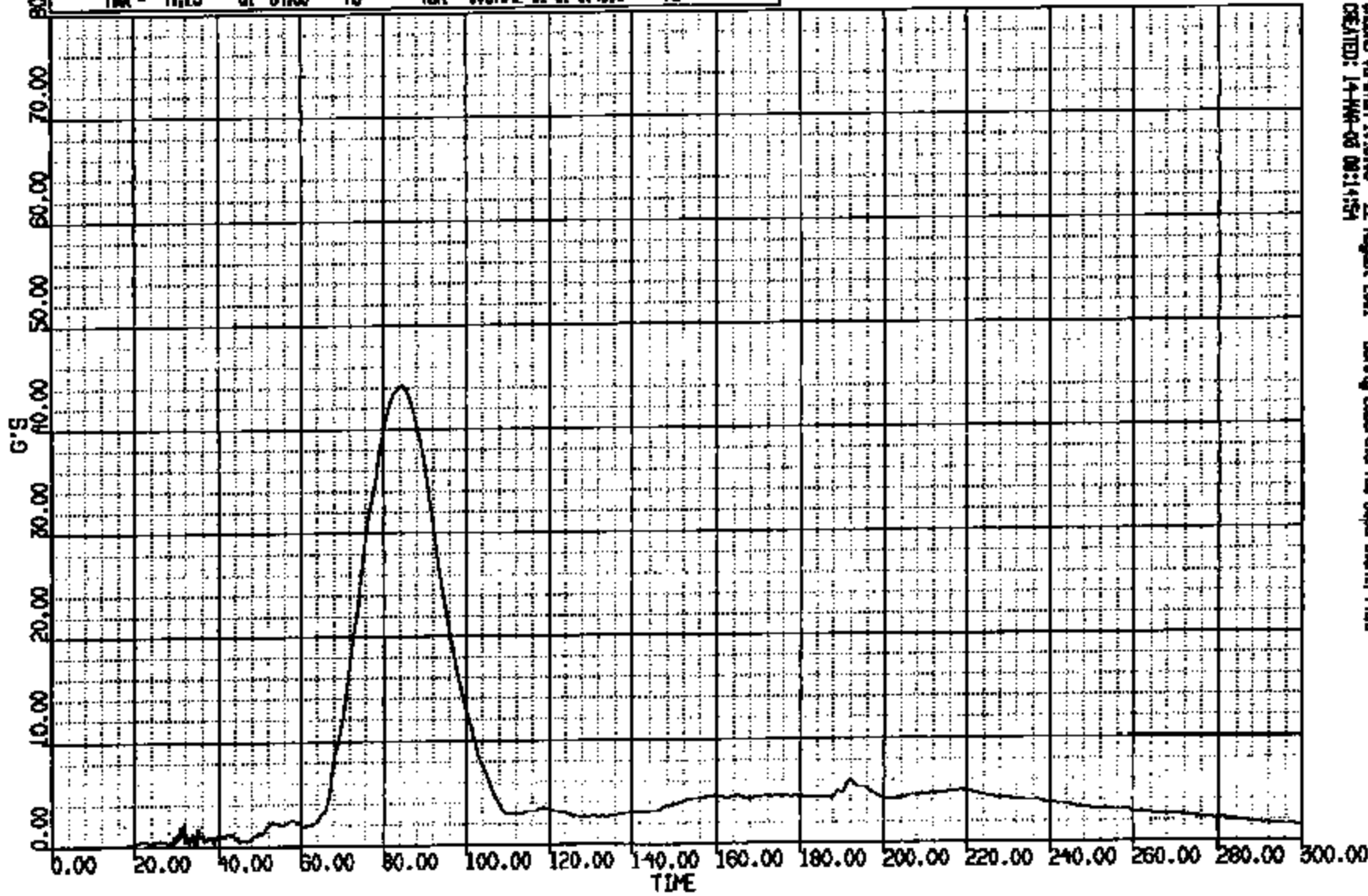
CRIS 0013143

R: 15143 TO: JB7955 DATE: 02-OCT-2002 10:42:34
 EN114
 DUR: 240.0 T1/T2: 75.7 / 85.7
 DUR: 55.0 T1/T2: 75.7 / 85.7
 DUR: 15.0 T1/T2: 75.7 / 85.7

(1001) SB13143T L/F DUMPY HEAD C.G. RES 1000N

MAX = 41.23 at 81.56 MS MIN = 0.370E-01 at 0.400 MS

AXIS 1

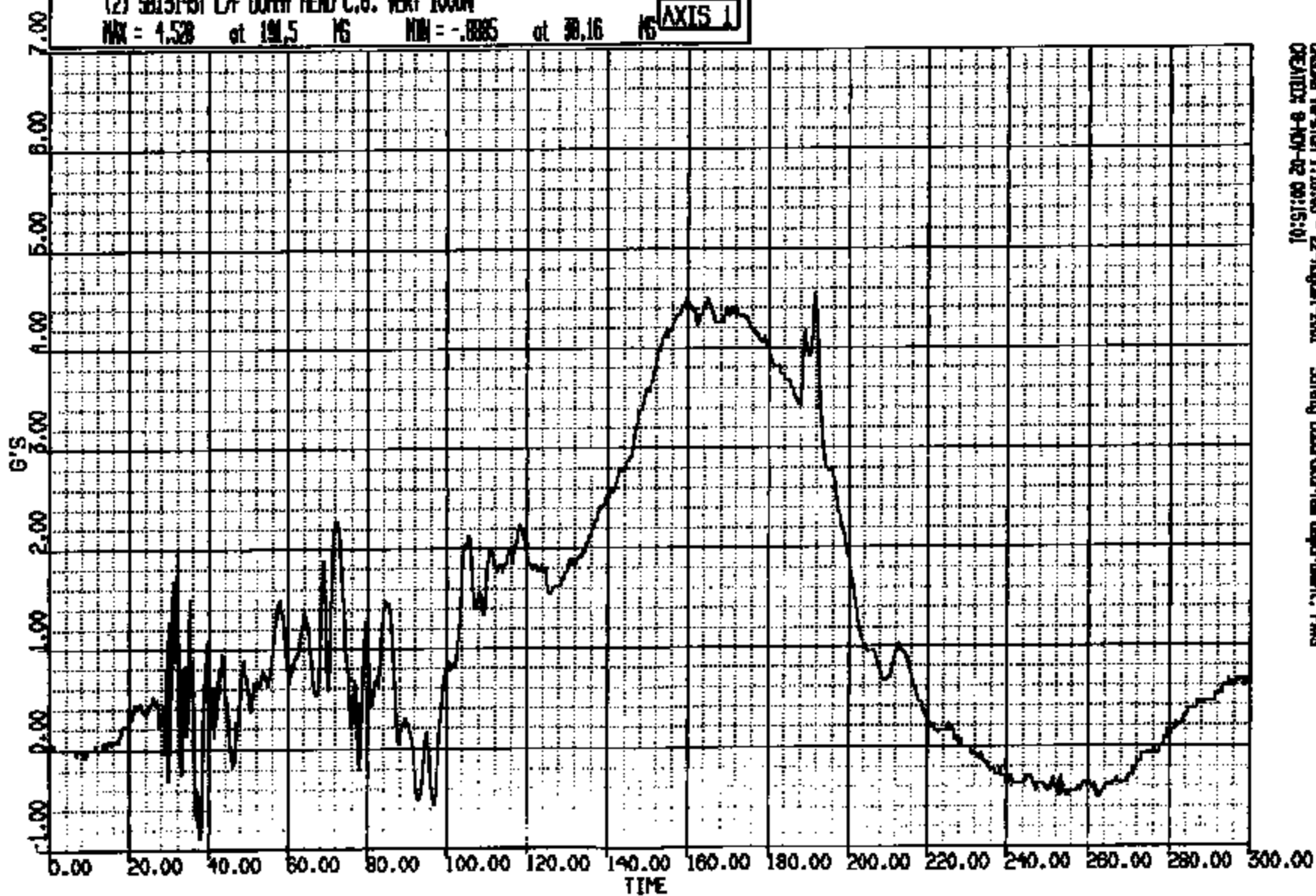


CRIS 0013143

SB R: 15143 TO: JB7986 DATE: 02-OCT-2002 10:42:24
2005 EN114

(2) 5013143T LAF DUMP HEAD C.G. VERT 1000N

MAX = 4.528 at 191.5 MS MIN = -.8885 at 30.16 MS **AXIS 1**



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SB R: 13143 TO: JB7999 DATE: 02-OCT-2002 10:42:54
2002 EN114

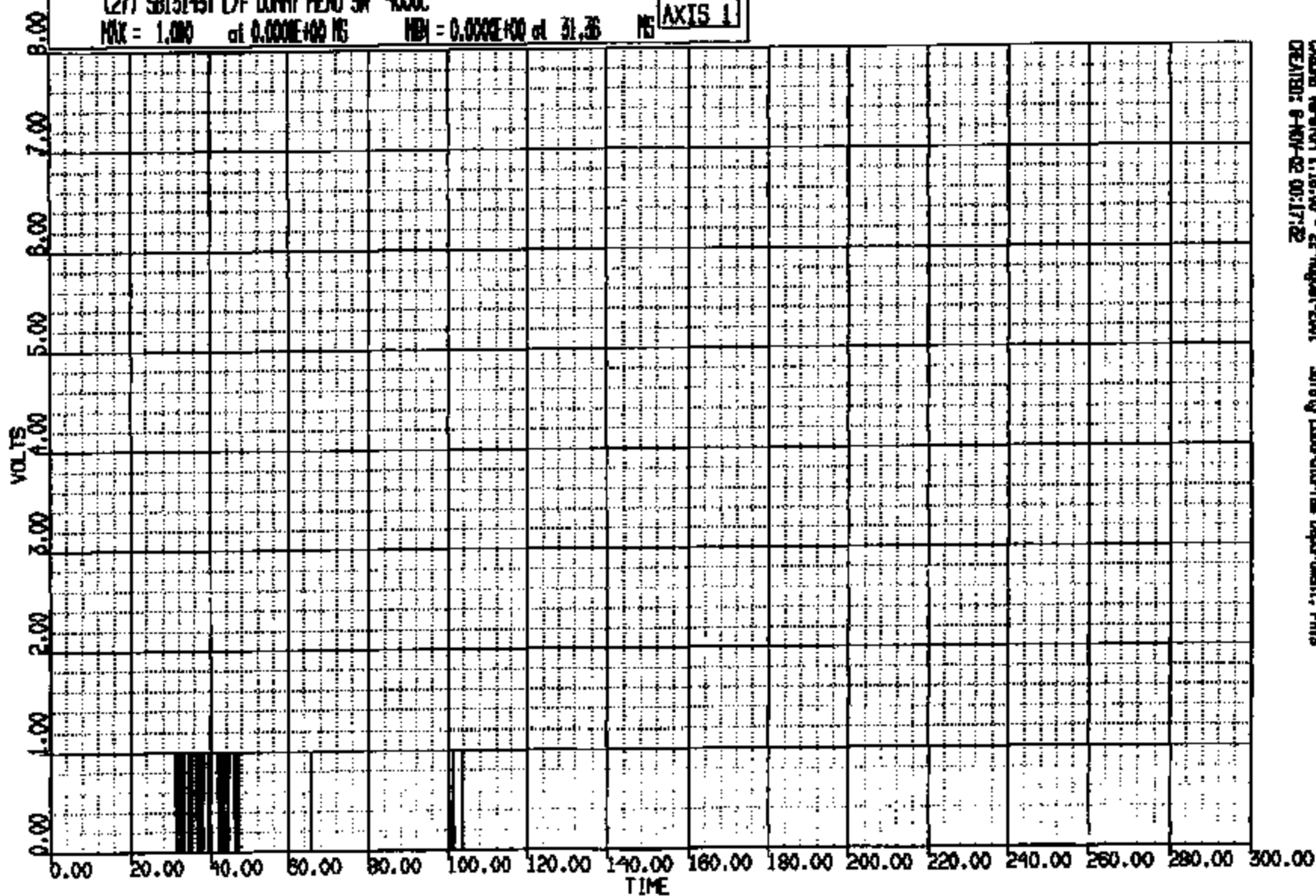
(27) SBI3143T L/F DUNNY HEAD SW 4000C

MAX = 1.000 at 0.000E+00 NS

MIN = 0.000E+00 at 31.35

NS

AXIS 1



CADDS Version 1.18.03 - 22-August-2001 Safety Laboratories Department, PHS
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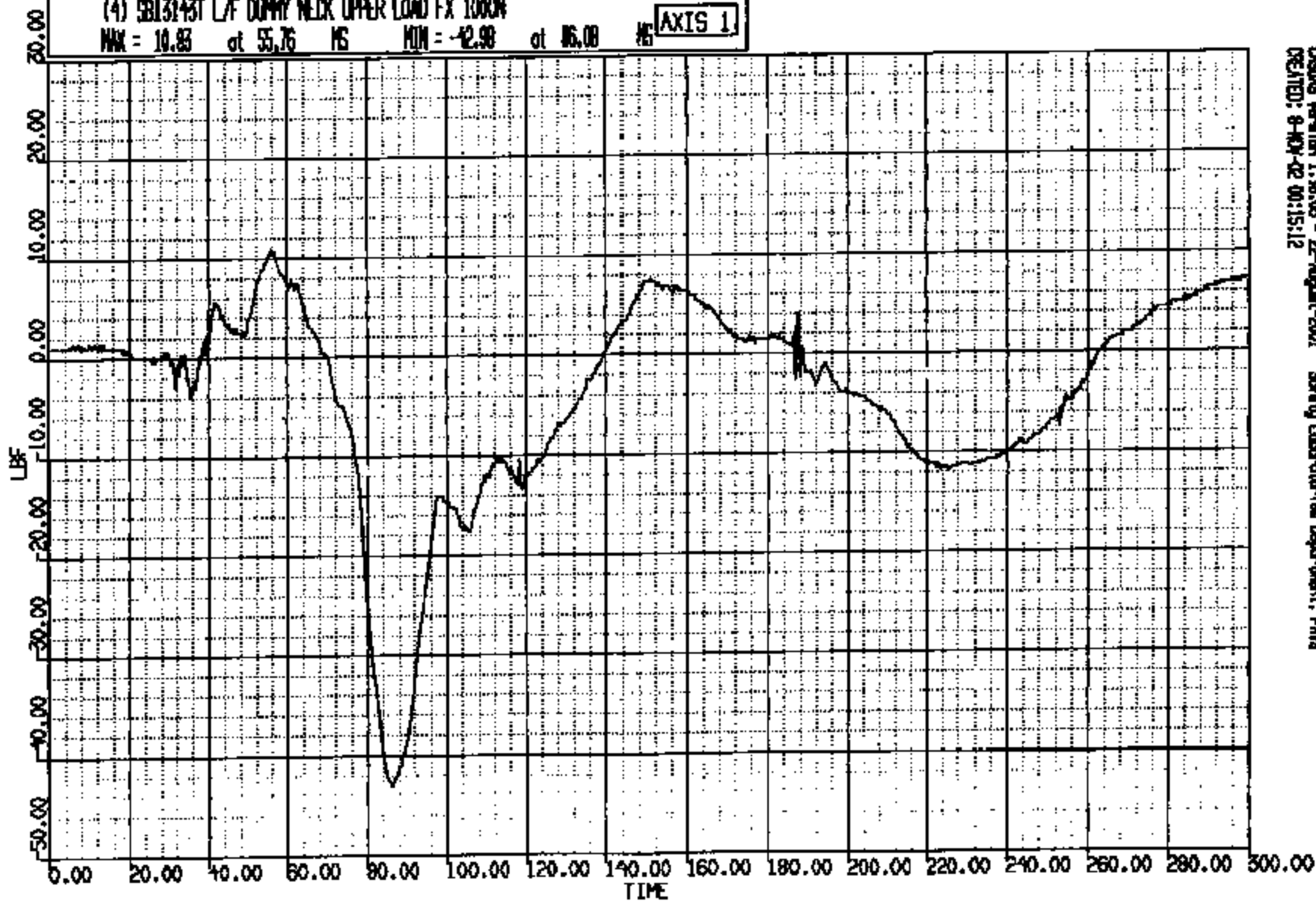
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SE R: 15145 TO: J97958 DATE: 02-OCT-2002 10:42:34
2002 EN114

(4) S813143T L/F DUMMY NECK UPPER LOAD FX 1000N

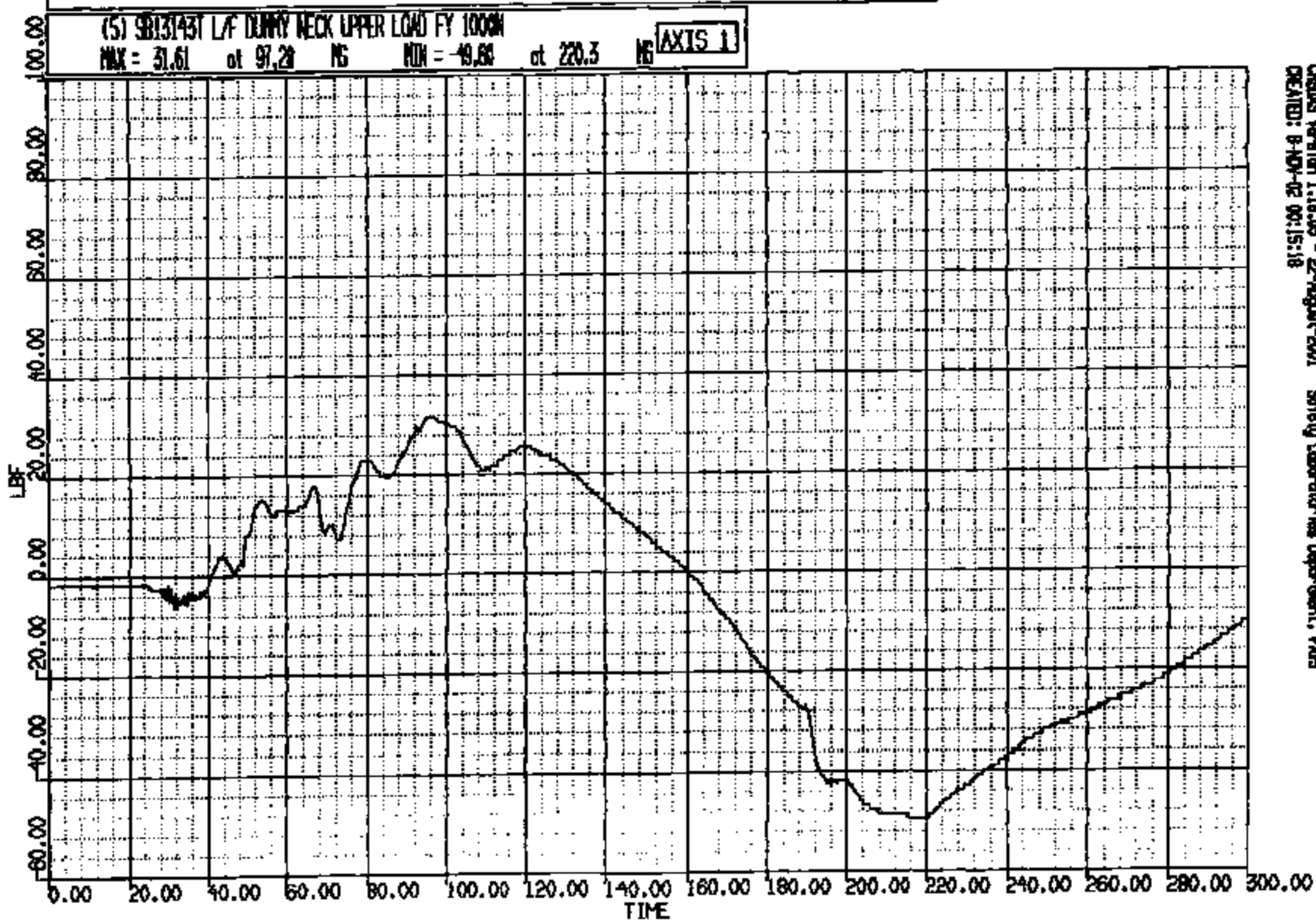
MAX = 10.83 at 55.76 MS MIN = -42.98 at 86.00 MS

AXIS 1



CRIS 0013143

SB R: 13143 TO: J87988 DATE: 02-OCT-2002 10:42:54
2002 EN114



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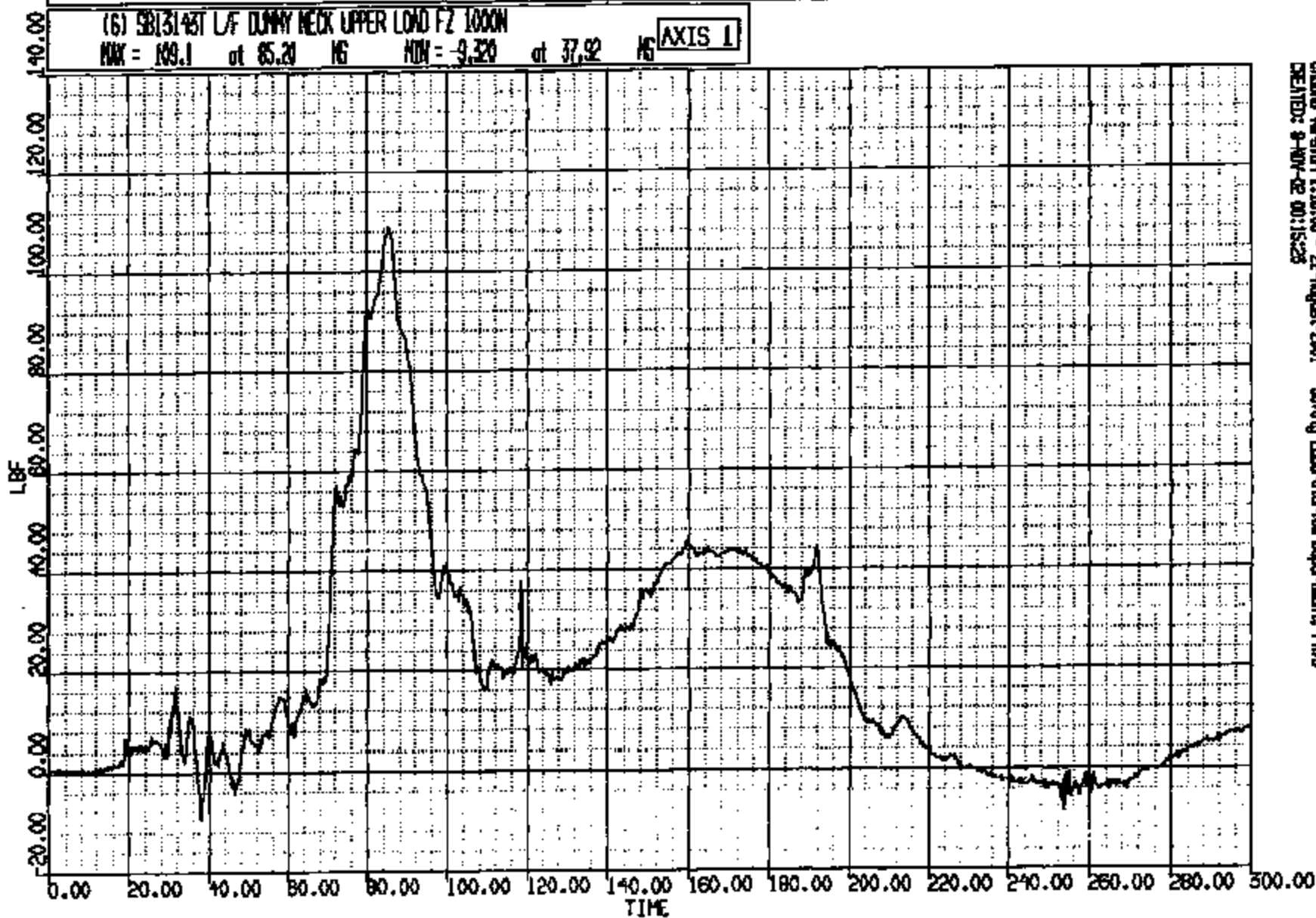
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SB #: 13143 TO: JB7986 DATE: 02-OCT-2002 10:42:34
2003 EN114

(6) SB13143T L/F DUMMY NECK UPPER LOAD FZ 1000N

MAX = 109.1 at 85.20 MS MIN = -9.320 at 37.92 MS

AXIS 1



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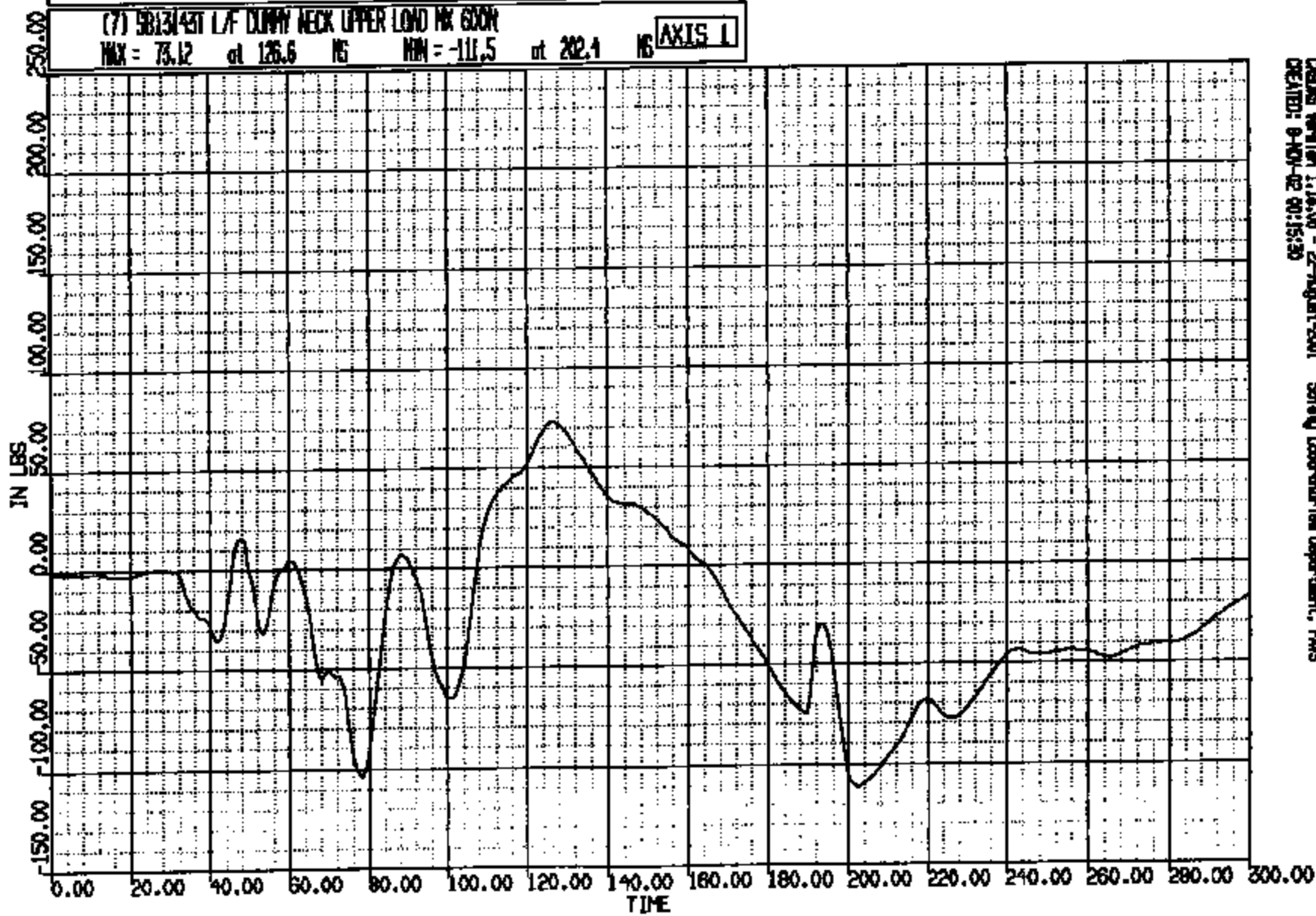
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SR R: 13143 TO: J87888 DATE: 02-OCT-2002 10:42:54
2003 EN114

(7) 58131431 L/F DUMMY NECK UPPER LOAD MAX GCON

MAX = 73.12 at 126.6 MS MIN = -111.5 at 202.1 MS

AXIS 1



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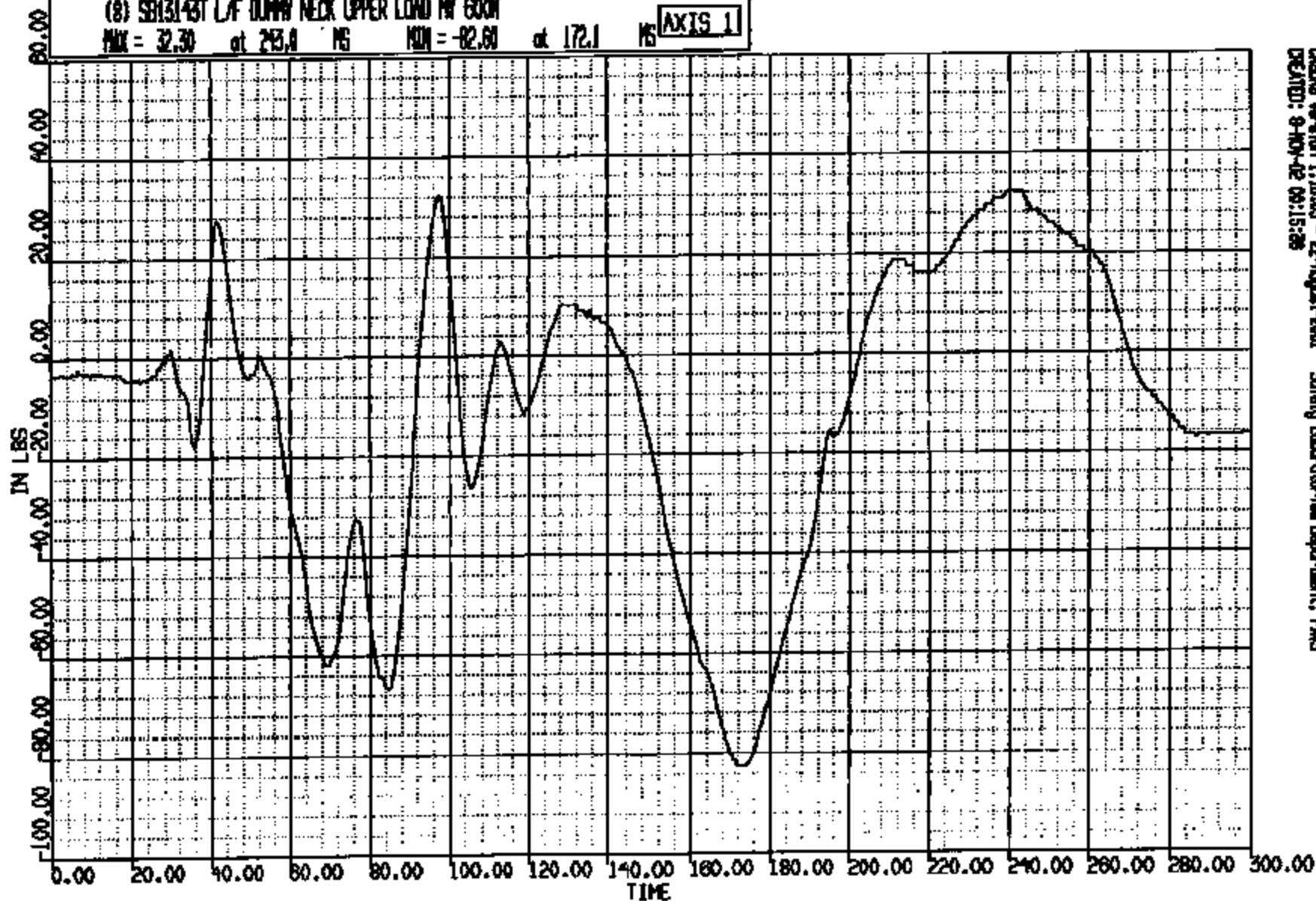
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SB R: 13143 TO: JBT988 DATE: 02-OCT-2002 10:42:24
2002 EN114

(8) SB13143T L/F DUMMY NECK UPPER LOAD HW 600M

MAX = 32.30 at 293.4 MS MIN = -82.60 at 172.1 MS

AXIS 1



CRS Version 1.18.05 - 22-August-2001 Safety Laboratory Department, PMS
CREATED: 9-MAY-02 09:15:28

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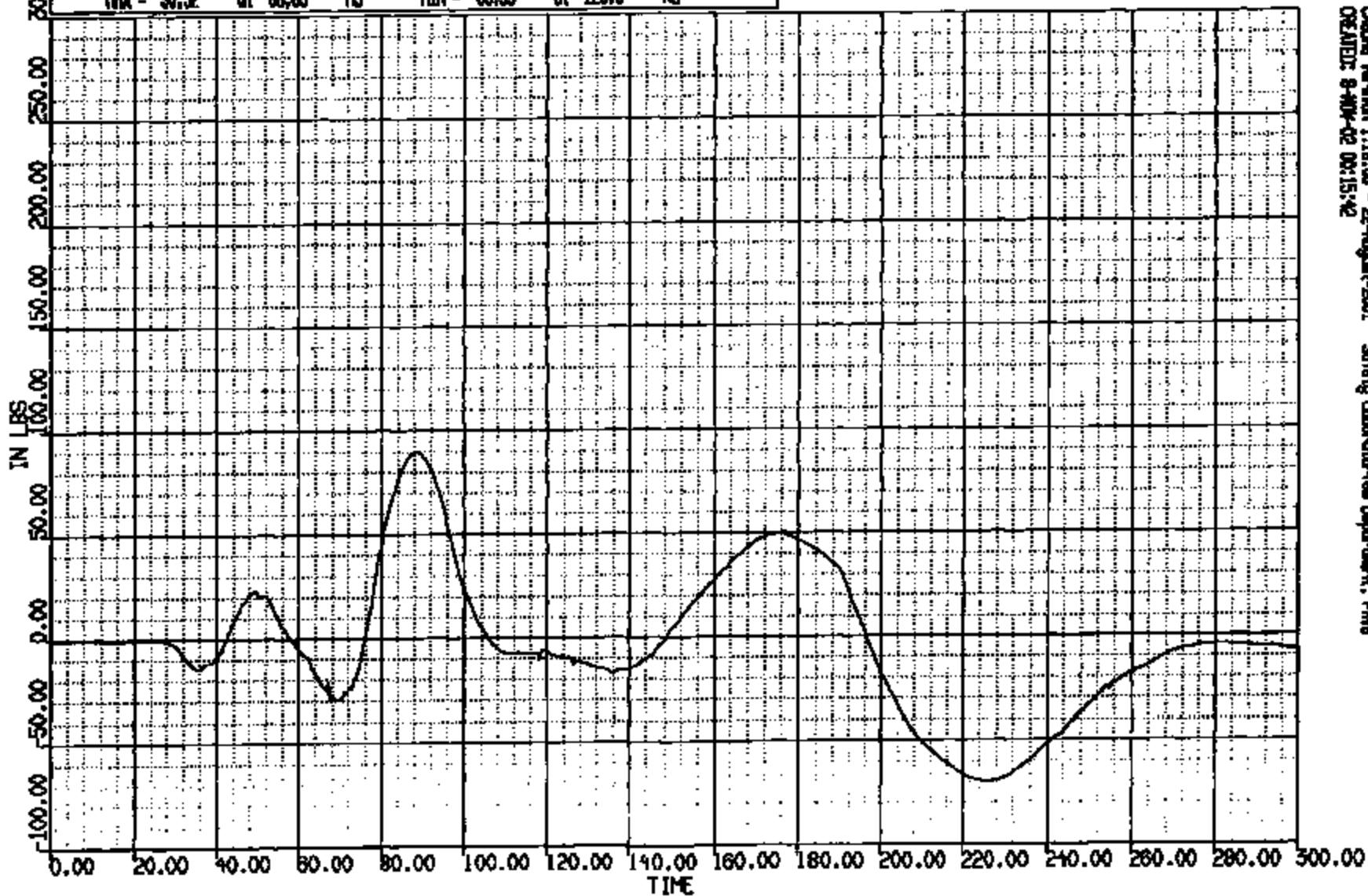
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SD RI 13143 TO: JB7988 DATE: 02-OCT-2002 10:42:34
2005 EN114

(9) 5913143T L/T DUMMY NECK UPPER LOAD WZ 600N

MAX = 90.32 at 88.88 MS MIN = -69.99 at 226.6 MS

AXIS 1



CRIS 0013143

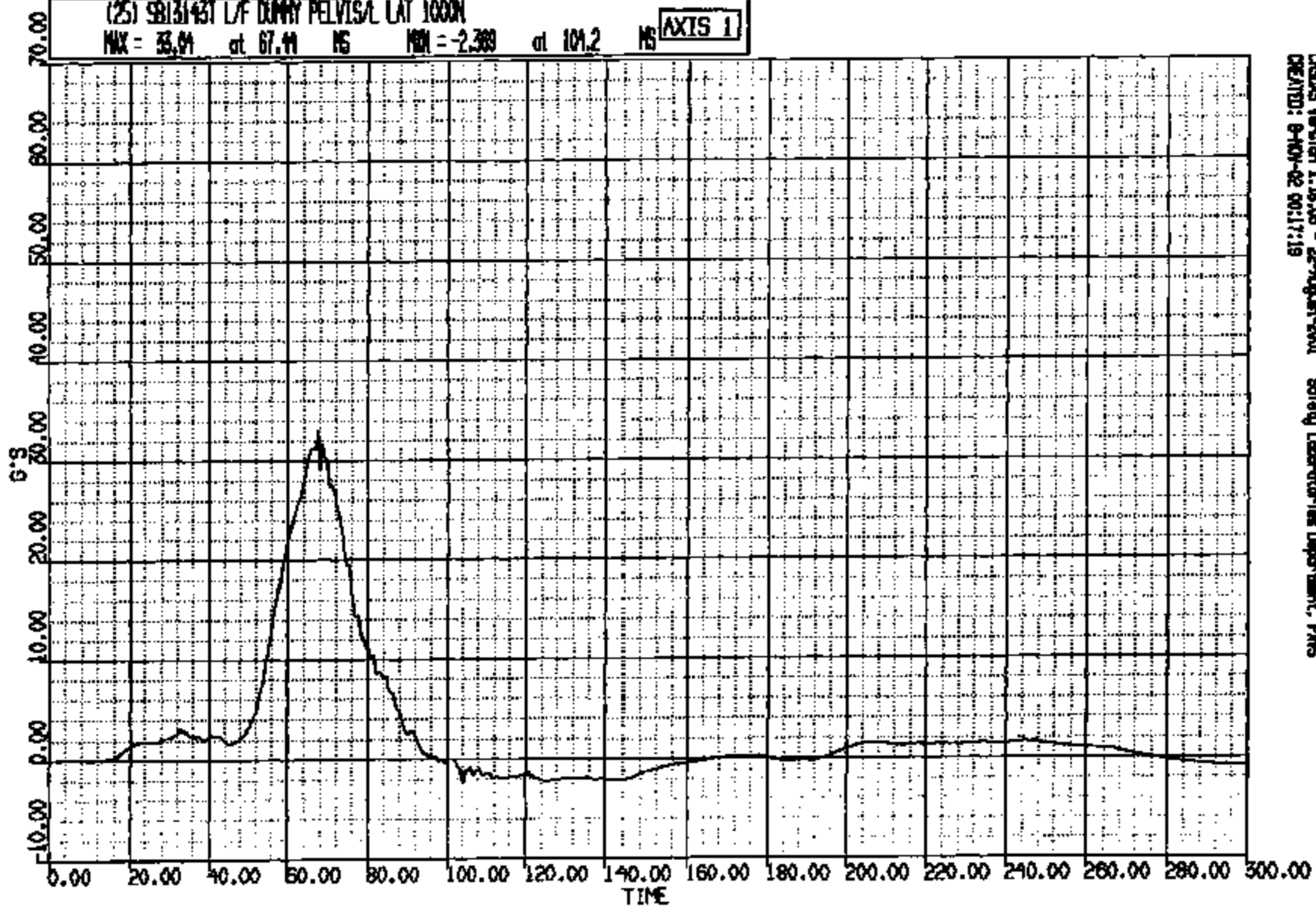
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BB RI: 13148 TO: J97988 DATE: 02-OCT-2002 10:42:34
2005 EN114

(25) 58131431 L/F DUNNY PELVISA LAT 1000N

MAX = 33.04 at 67.44 MS MIN = -2.300 at 104.2 MS

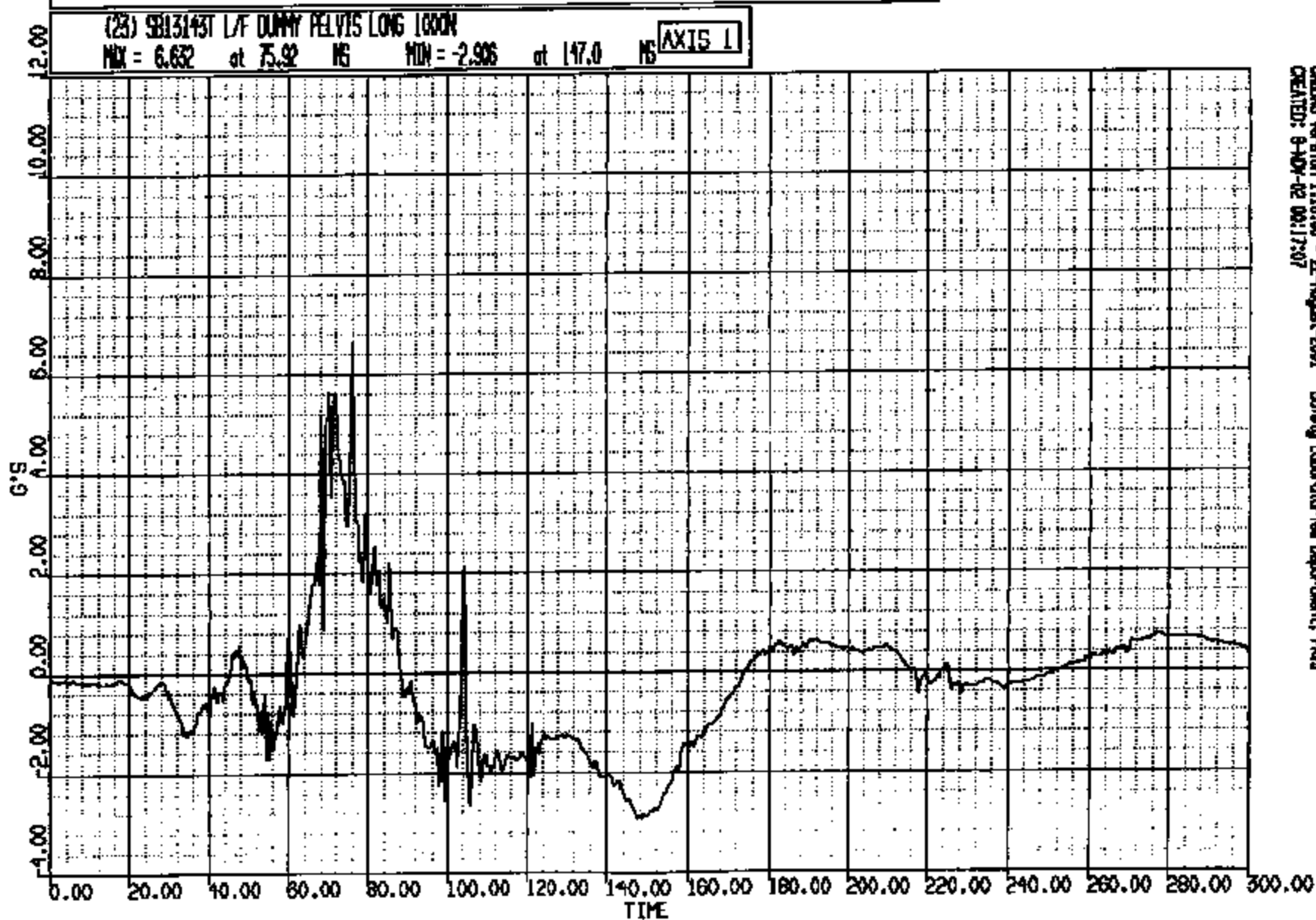


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Society Laboratories Department, PMS
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CRTS 0013143

SB R: 12142 TO: J87988 DATE: 02-OCT-2002 10:42:54
2002 EN114



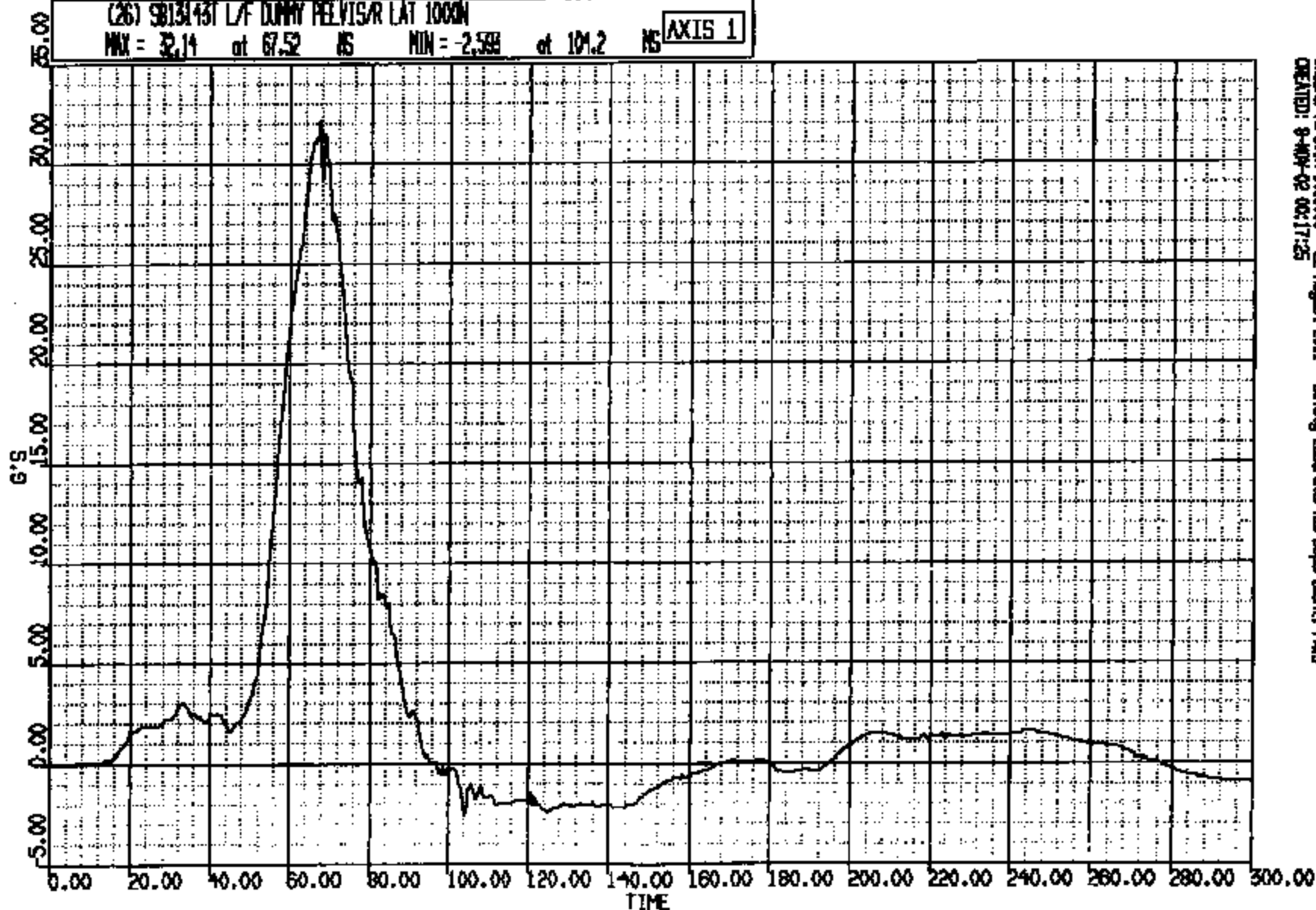
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SS R: 13143 TD: J87986 DATE: 02-OCT-2002 10:42:34
2005 EN114

(26) SB131431 L/F DUMBY PELVIS/R LAT 1000M

MAX = 32.14 at 67.52 NS MIN = -2.588 at 104.2 NS

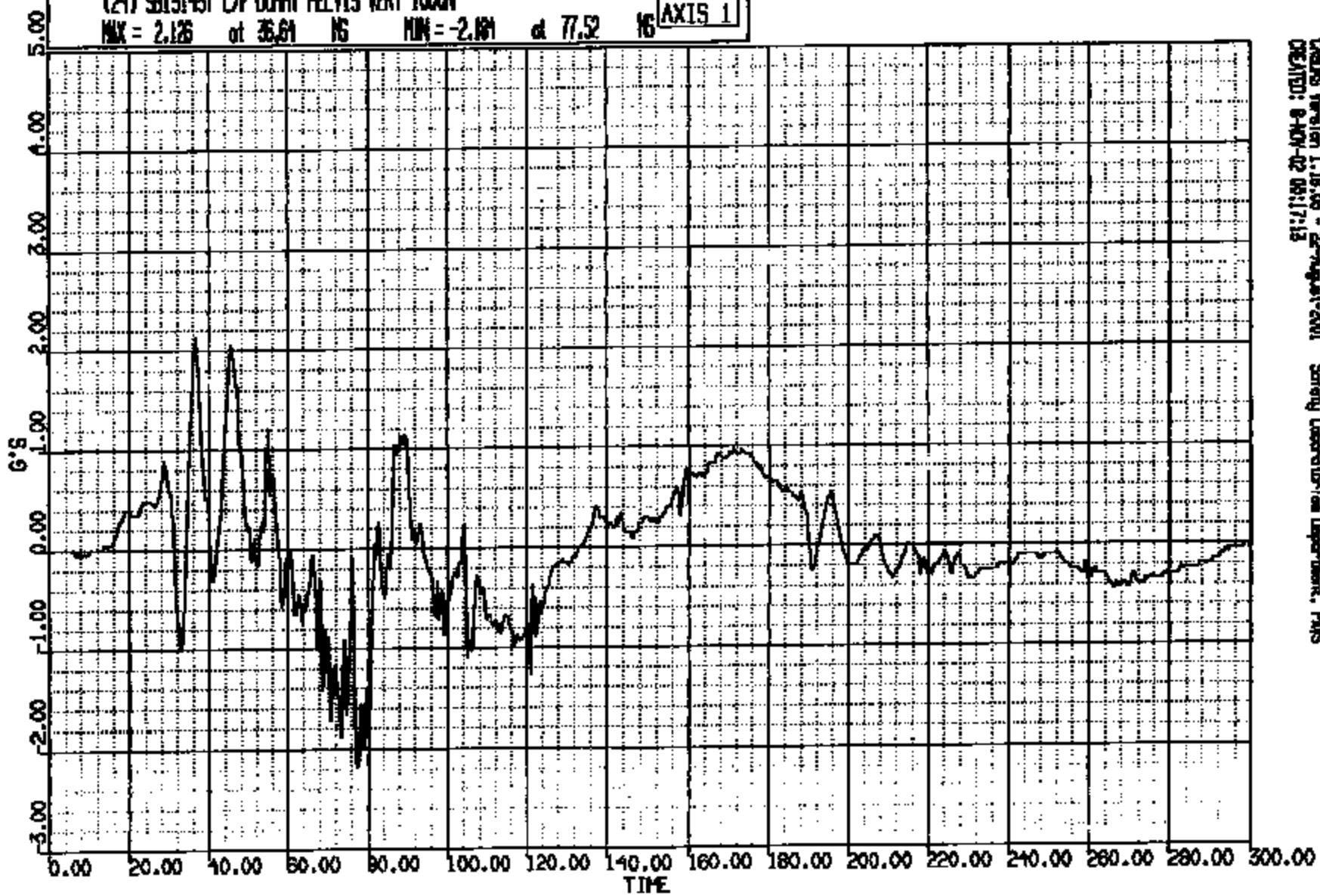
AXIS 1



CRIS 0013143

SE R: 13145 TO: JB7866 DATE: 02-OCT-2002 10:42:34
2003 EN114

(24) SBI3143T LF DUMMY PELVIS WERT 1000N

MAX = 2.126 at 35.61 NS MIN = -2.181 at 77.52 NS AXIS 1

CHANDS Version 1.18.05 ~ 22-August-2001 Safety Laboratories Department, PAKS
CREATED: 8-NOV-02 09:17:13

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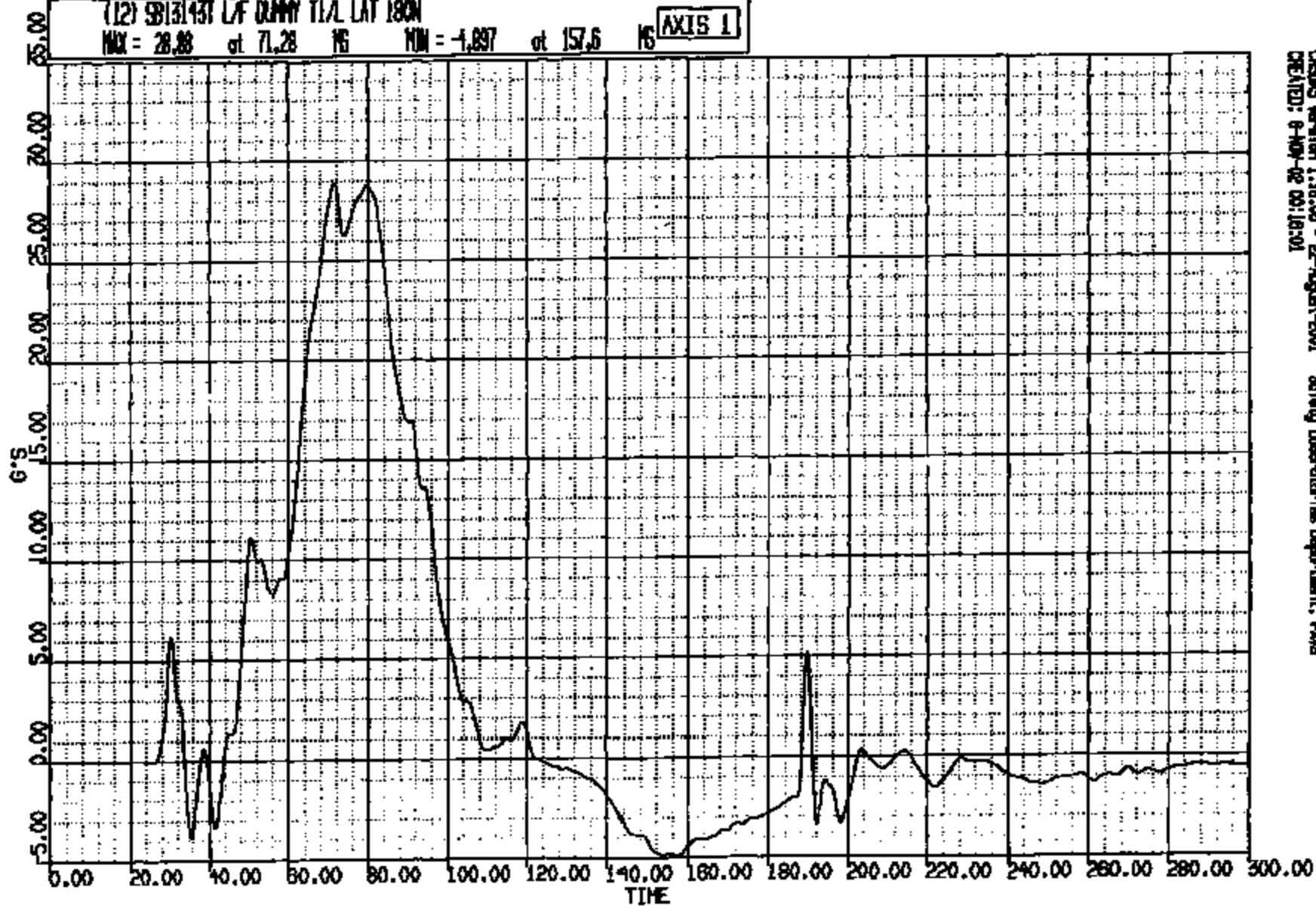
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SE R: 13143 TO: J97988 DATE: 02-OCT-2002 10:42:54
2003 EN114

(12) 98131431 LAF DUMMY TLA LAT 180W

MAX = 28.88 at 71.28 16 MIN = -1.897 at 157.6 16

AXIS 1

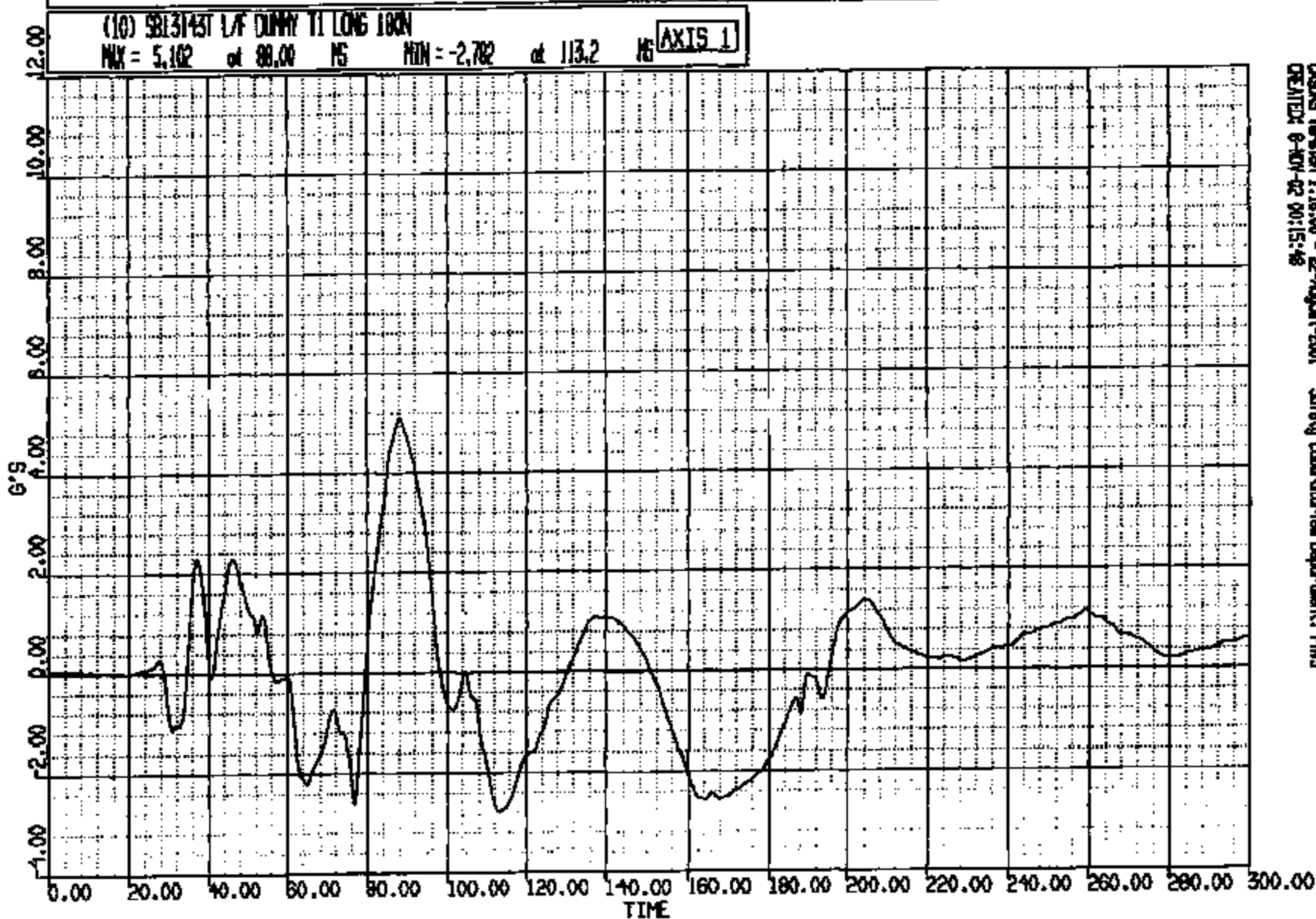


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2003 EN114

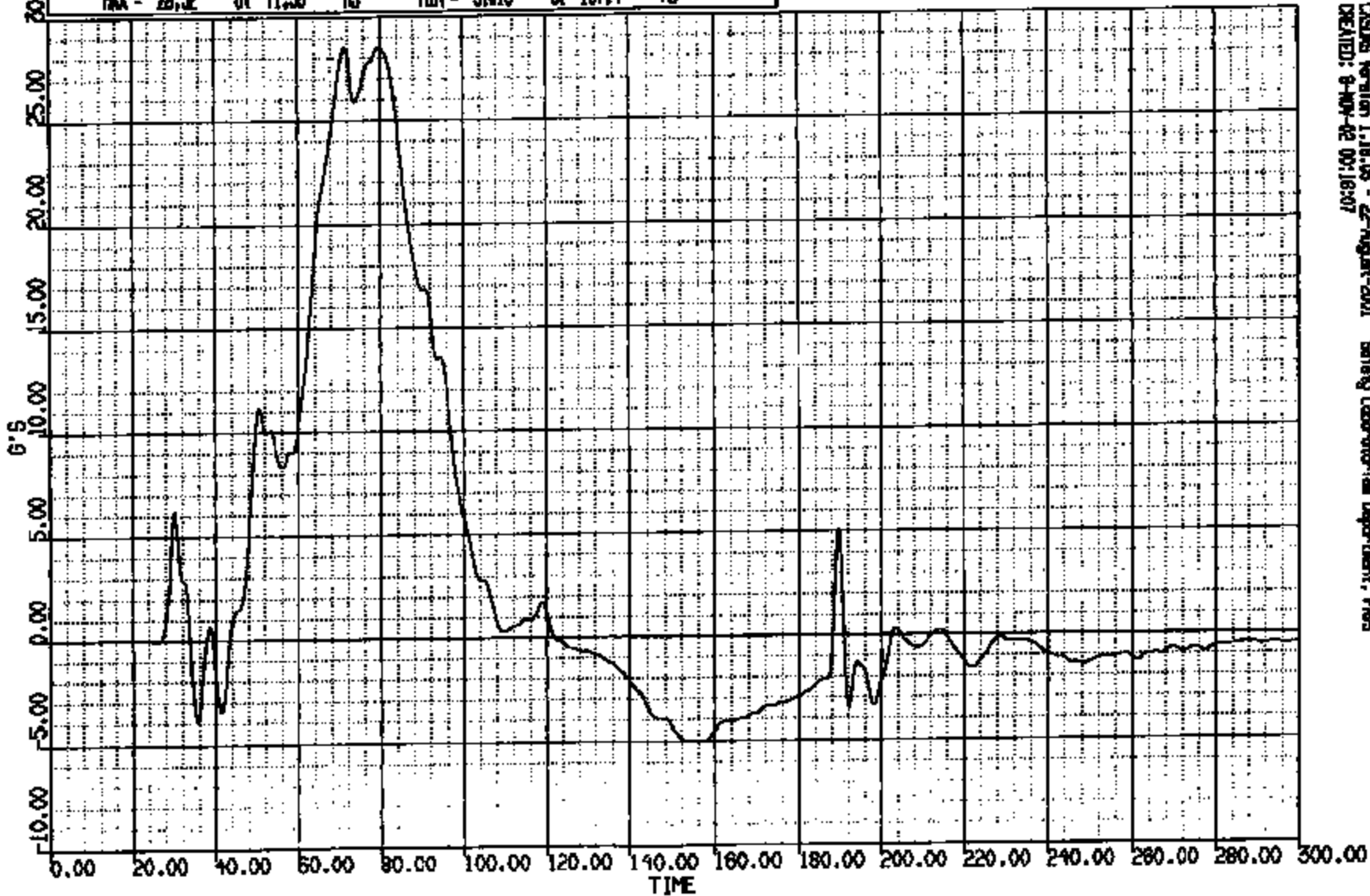


CRTS 0013143

BB R: 15145 TO: JB7686 DATE: 02-OCT-2002 10:42:54
2003 EN114

(13) SB13143T L/F DUMMY TL/R LAT 180N

MAX = 28.52 at 71.36 NS MIN = -5.019 at 157.4 NS



CRIS 0013143

CUSDBS Version 1.18.05 - 22-August-2001 Safety Laboratories Department, PHS
 CREATED: 8-MAY-02 00:16:07

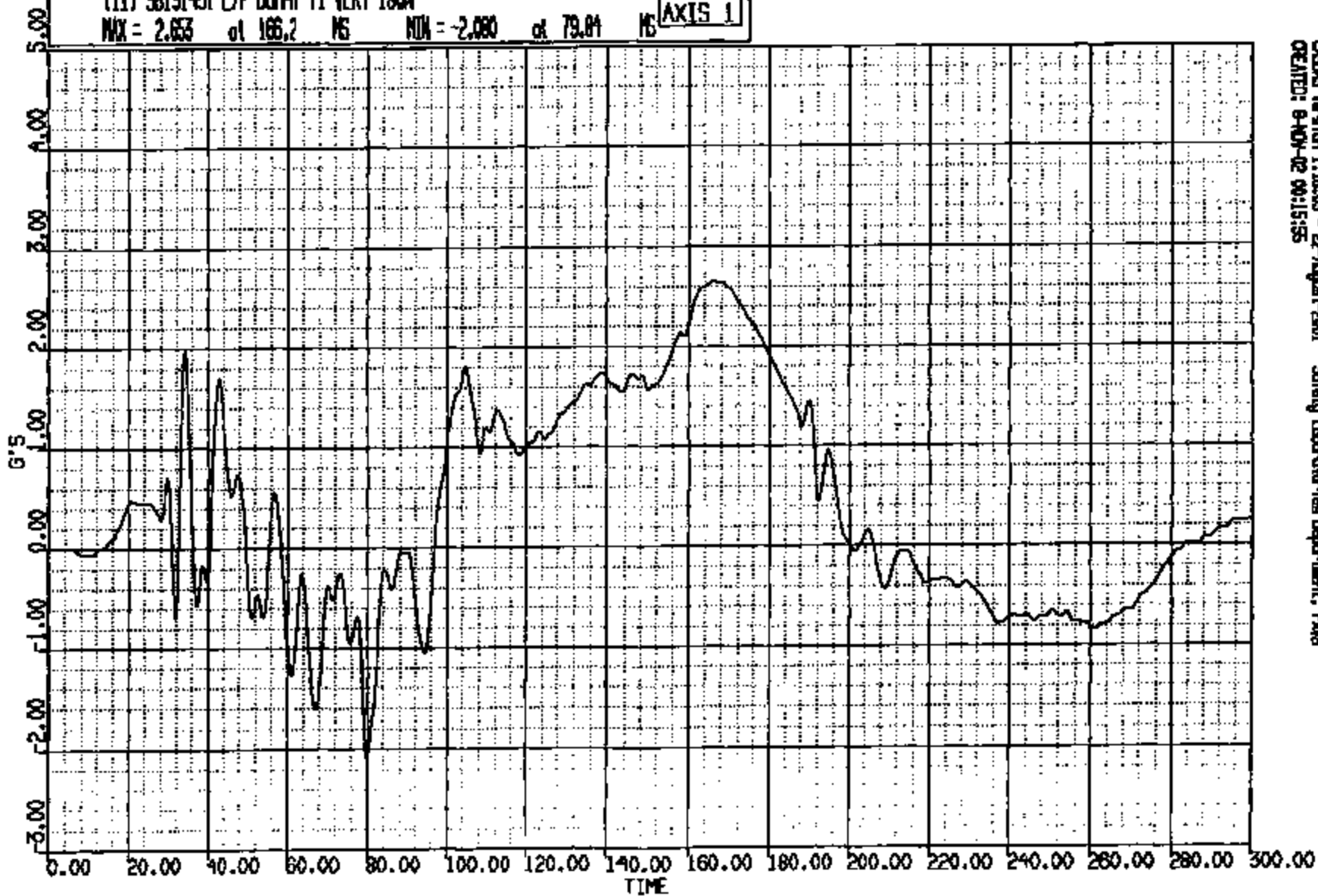
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SB R: 13143 TO: JB7066 DATE: 02-OCT-2002 10:42:54
2003 EN114

(11) 98131431 L/F DUMMYY T1 VERT 1800A

MAX = 2.653 at 166.2 MS MIN = -2.080 at 79.04 MS

AXIS 1



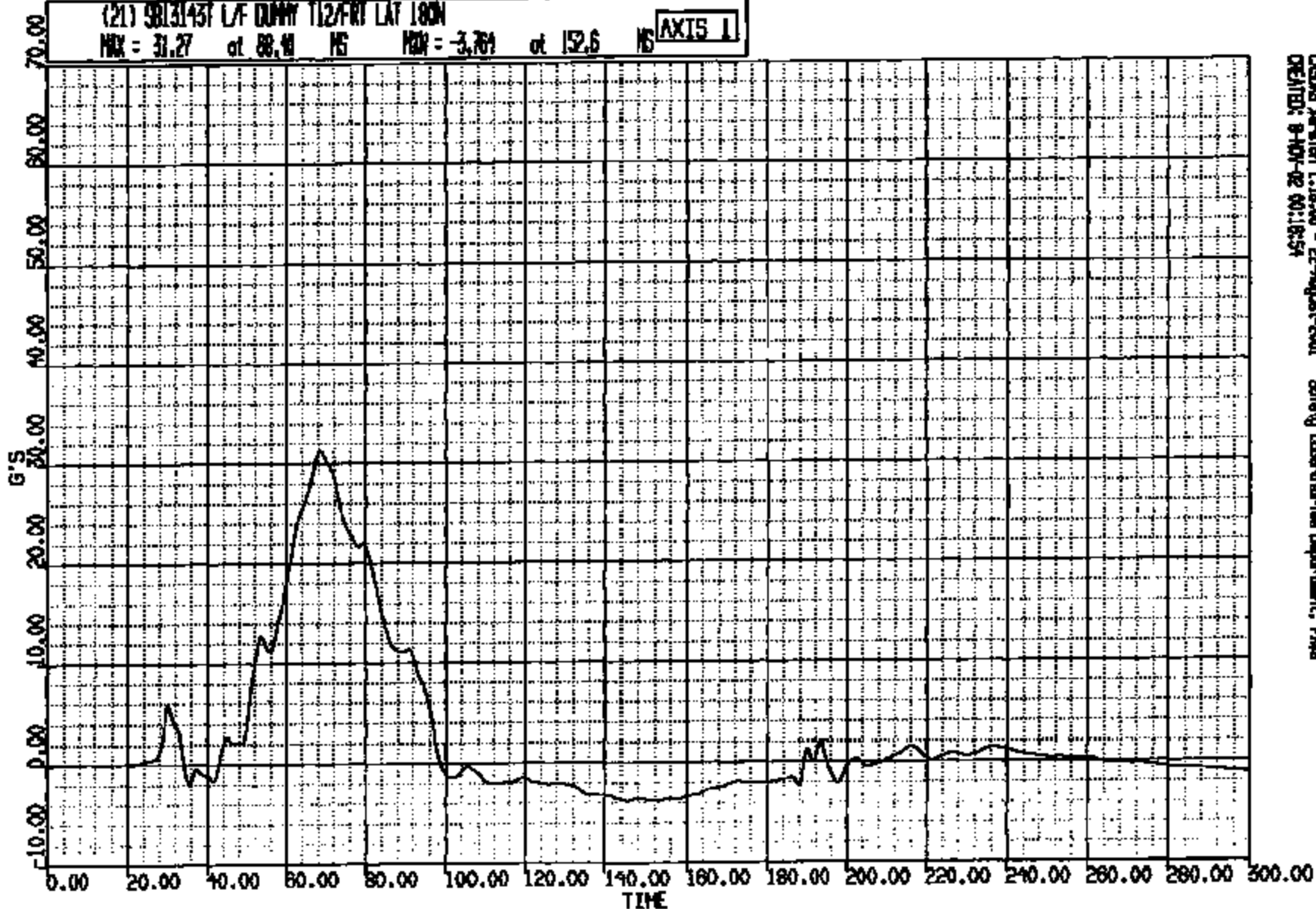
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BB #: 12143 TO: J27888 DATE: 02-OCT-2002 10:42:24
2002 EN114

(21) 5813143T L/F DUNNY T12/FRT LAT 180N

MAX = 31.27 at 88.41 MS MIN = -3.761 at 152.6 MS

AXIS 1



CRDS Xenon L18.05 - 22-August-2001 Safety Laboratories Department, PMS
CREATED: 8-101-02 00:18:54

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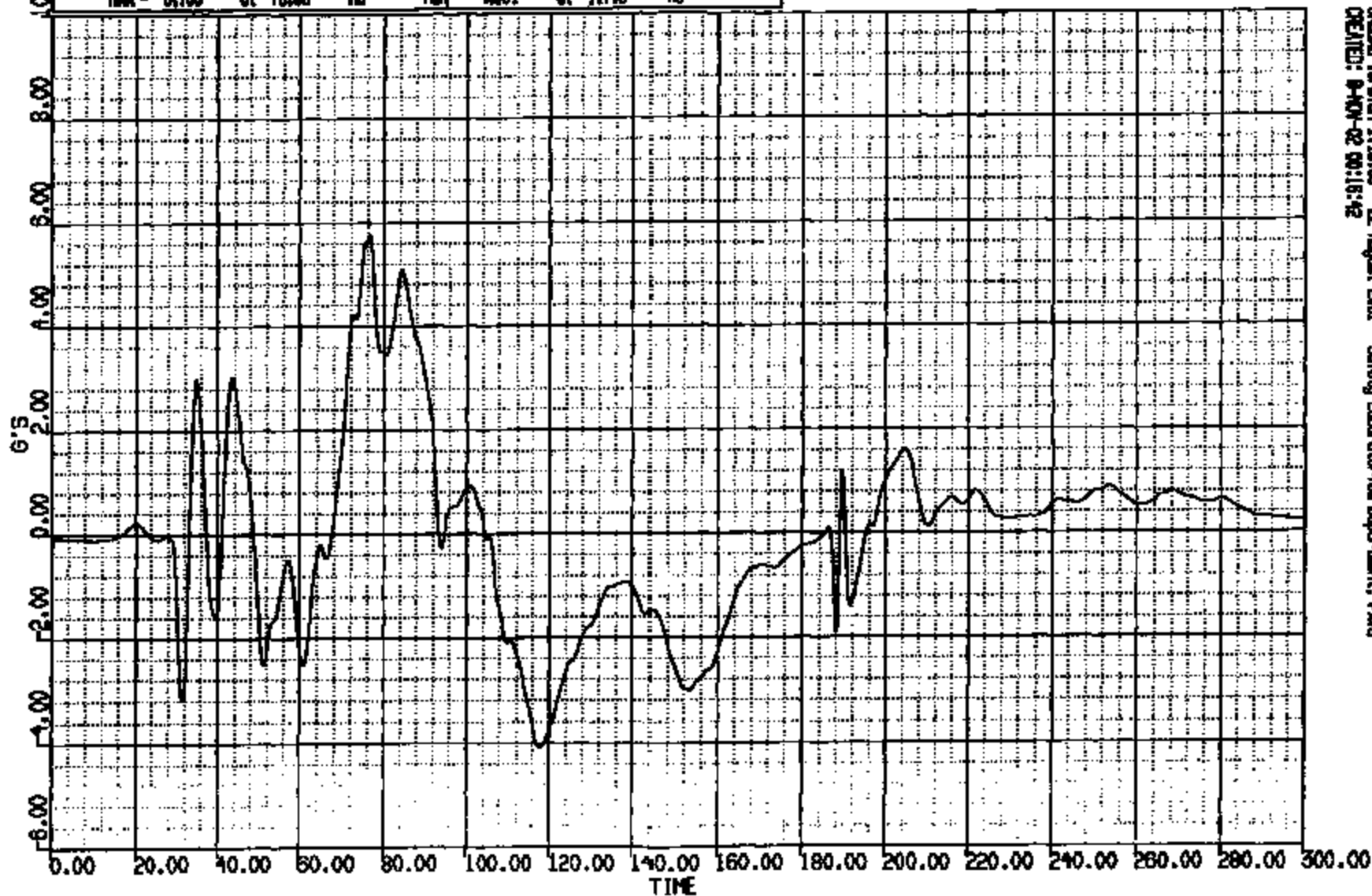
CRIS 0013143

BB R: 18148 TD: JB7988 DATE: 02-OCT-2002 10:42:54
2005 EN114

(19) 98131431 LAF DUFFY T12 LONG 180W

MAX = 5.769 at 76.56 NS MIN = -4.001 at 117.8 NS

AXIS 1

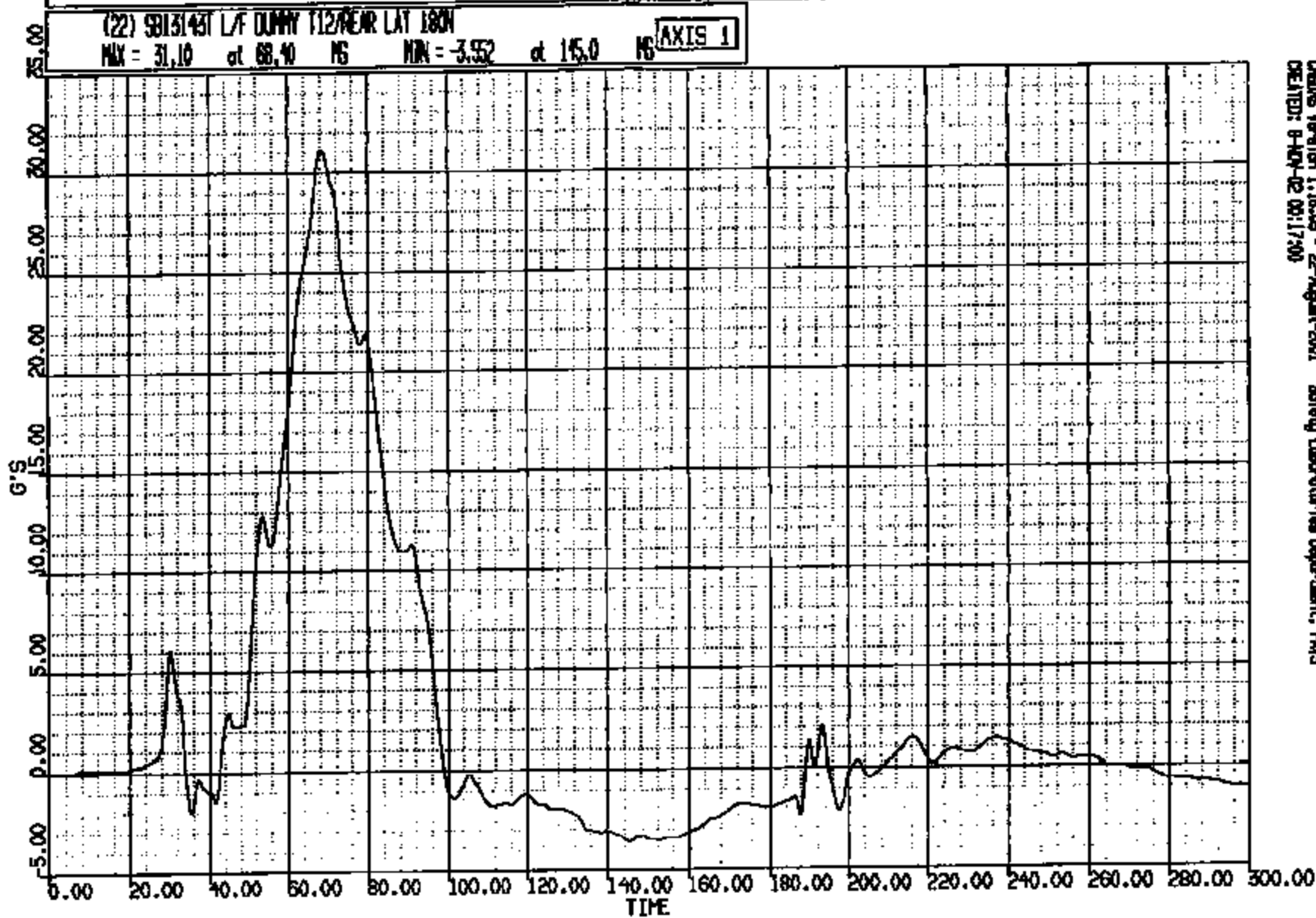


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CRIS 0013143

BB R: 13143 TO: JB7988 DATE: 02-OCT-2002 10:42:34
8008 EN114



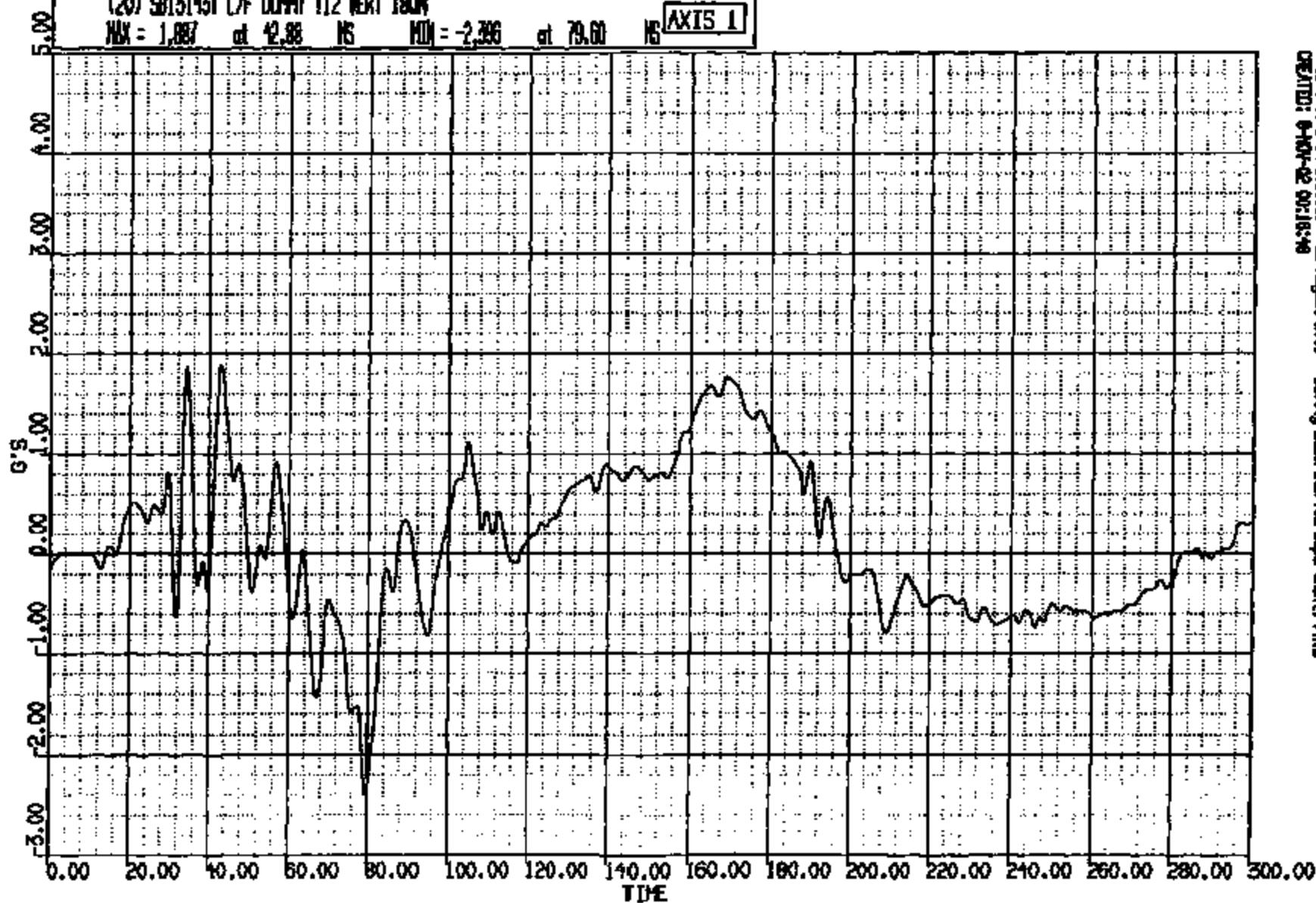
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SB R: 15143 TO: JB7866 DATE: 02-OCT-2002 10:42:54
2003 EN114

(20) SB13143T L/F DUMPT T12 VERT 180W

MAX = 1.887 at 42.88 NS MIN = -2.396 at 79.60 NS

AXIS 1



CRS015 Version 1.18.05 - 22-August-2001 Safety Laboratory on Display Unit, PMS
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CRIS 0013143

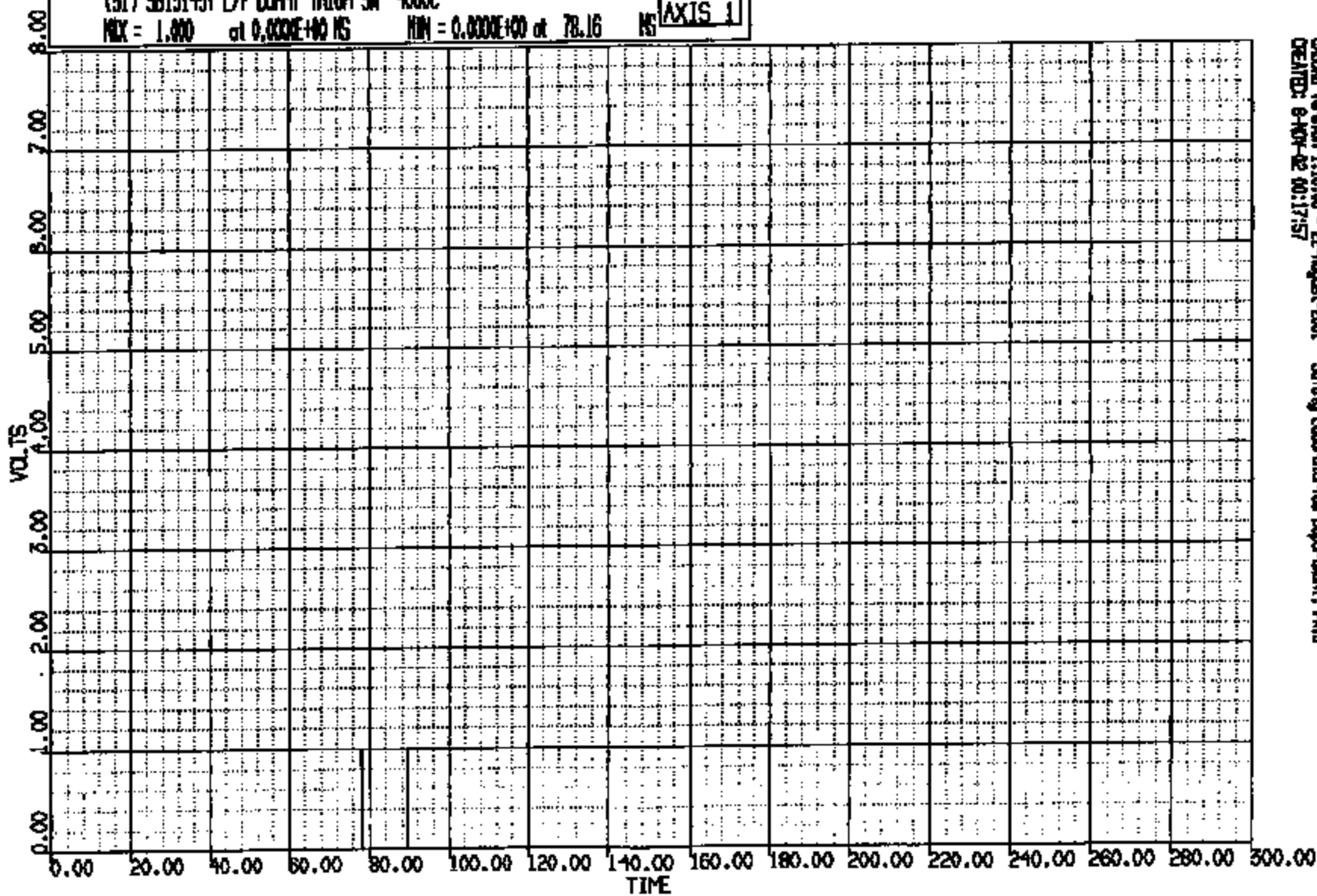
SB R: 13143 TO: J27228 DATE: 02-OCT-2002 10:42:34
2003 EN114

(31) SB131437 L/F DUNNY THIGH SM 4000C

MAX = 1.000 at 0.000E+00 NS

MIN = 0.000E+00 at 78.16

NS **AXIS 1**

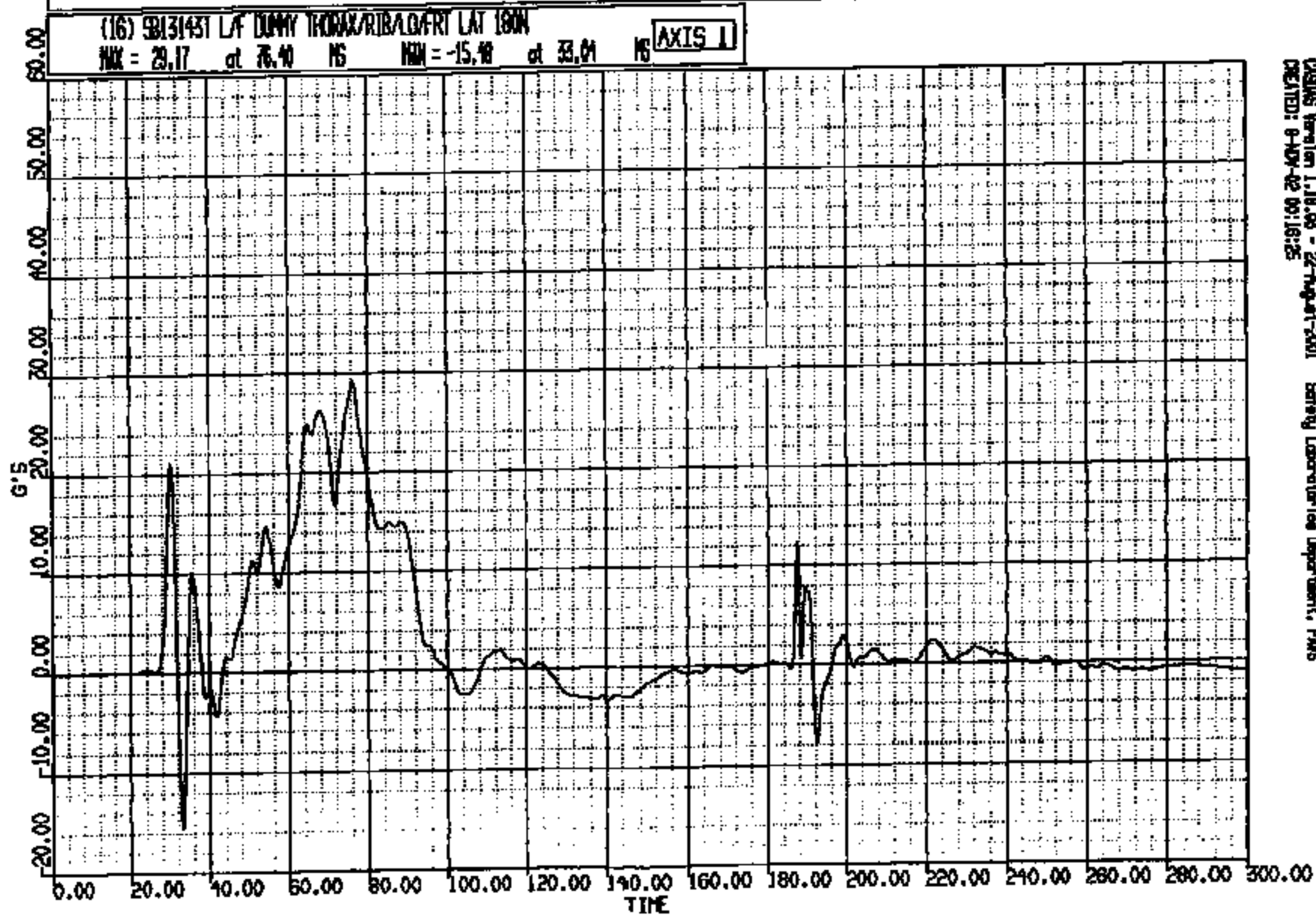


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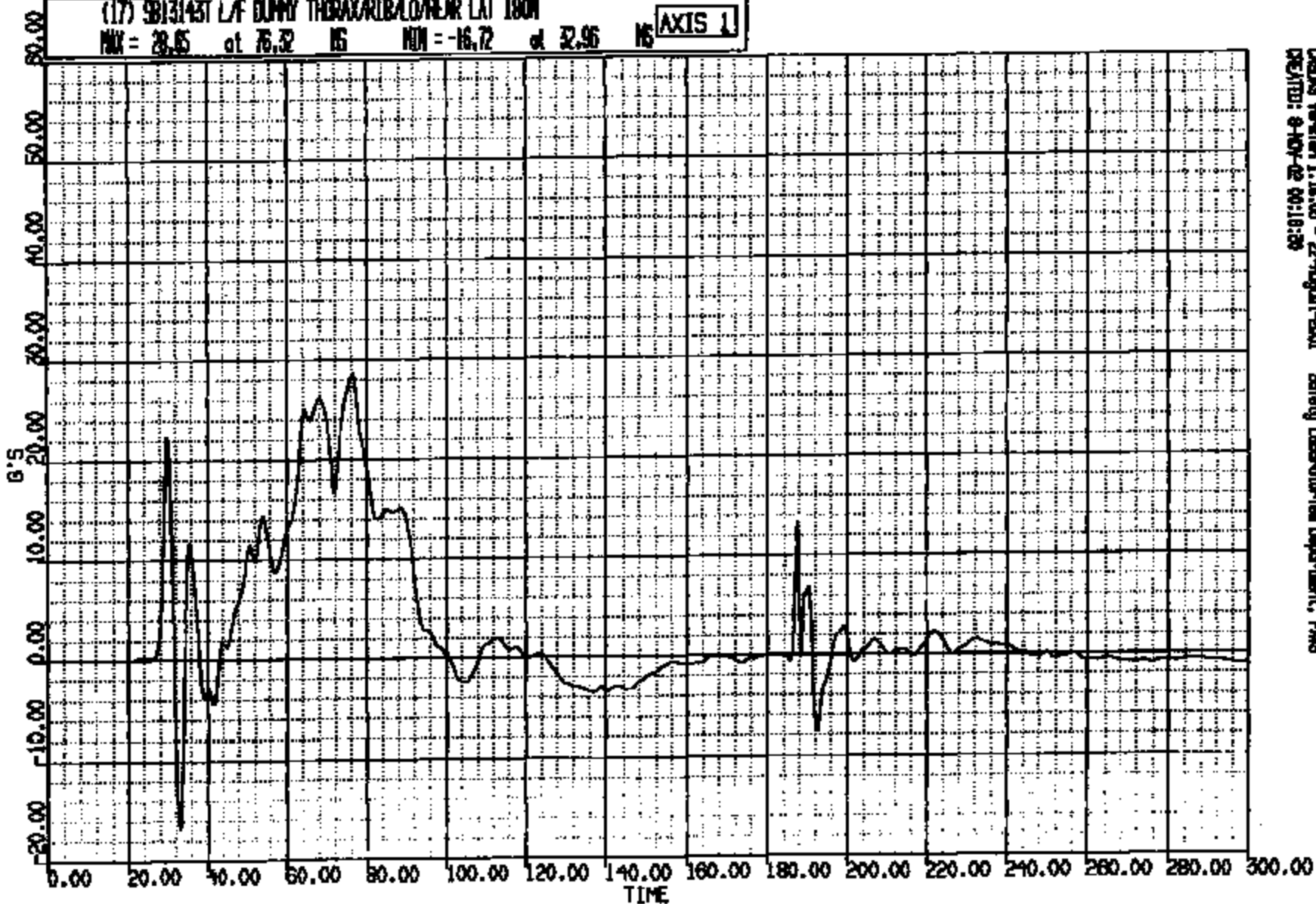
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SB R: 15143 TO: J87988 DATE: 02-OCT-2002 10:42:24
2008 EN114

(17) 5813143T LAF DUMMY THORAX/HEAD/NEAR LAT 180M

MAX = 28.85 at 76.32 MS MIN = -16.72 at 32.96 MS

AXIS 1



CRSIS Version 1.18.05 - 22-August-2001 Safety Laboratory Department, PHS
REVISED: 8-MAY-02 00:10:38

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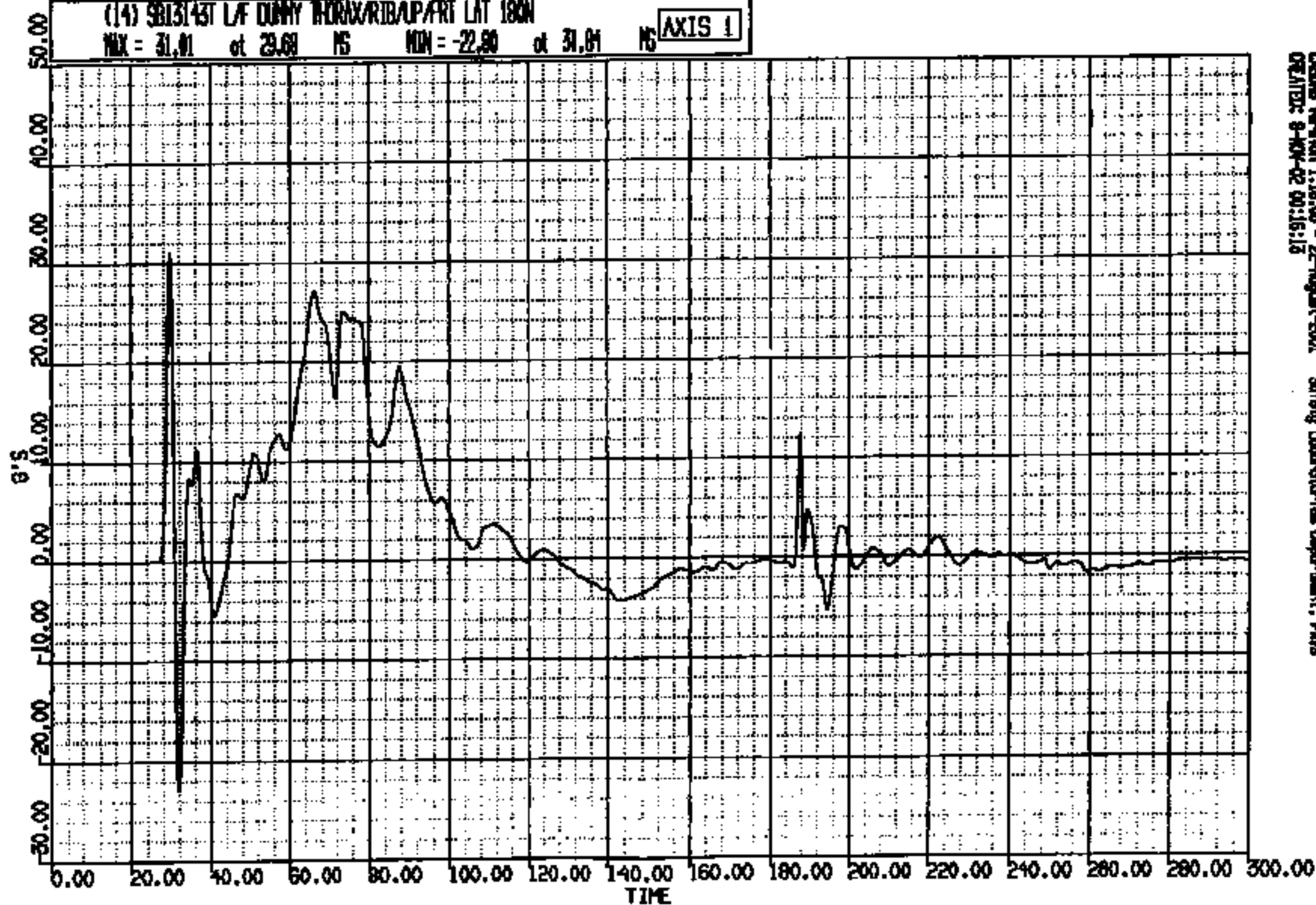
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SR: 13143 TO: J27226 DATE: 02-OCT-2002 10:42:34
2003 EN114

(14) SBI3143T LF DUNY HONX/RIBAP/RT LAT 180N

MAX = 31.01 at 29.00 NS MIN = -22.00 at 31.01 NS

AXIS 1



CRIS 0013143

CRIS Version 1.18.08 - 22-August-2001 Safety Laboratory Department, PHS
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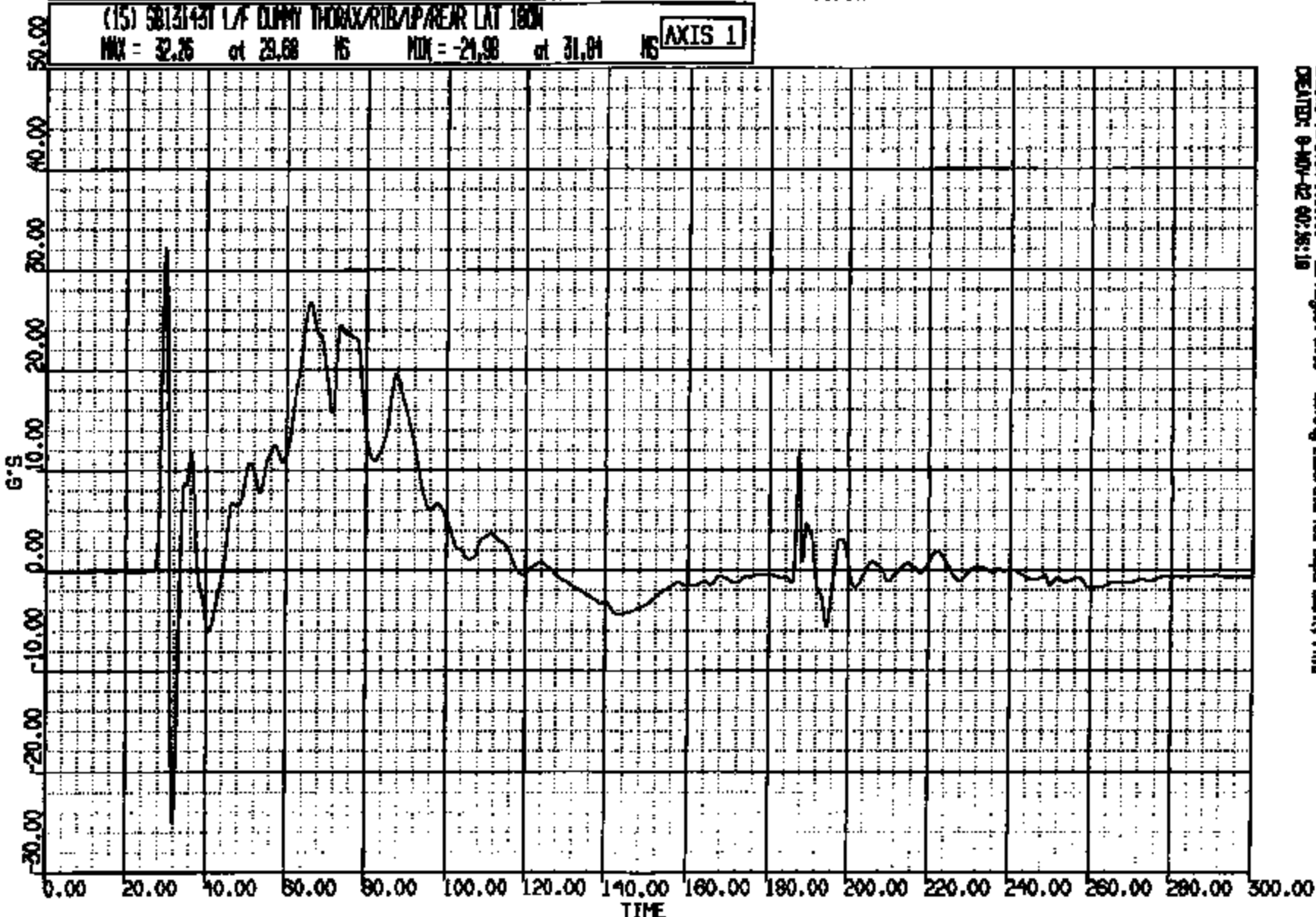
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GB R: 15145 TO: J87988 DATE: 02-OCT-2002 10:42:34
2005 EN114

(15) 58131431 L/F CUMY THORAX/RIB/P/PEAR LAT 180A

MAX = 32.25 at 29.68 NS MIN = -21.98 at 31.81 NS

AXIS 1



CHSAS Version 1.18.08 - 22-August-2001 Safety Laboratories Department, PHS
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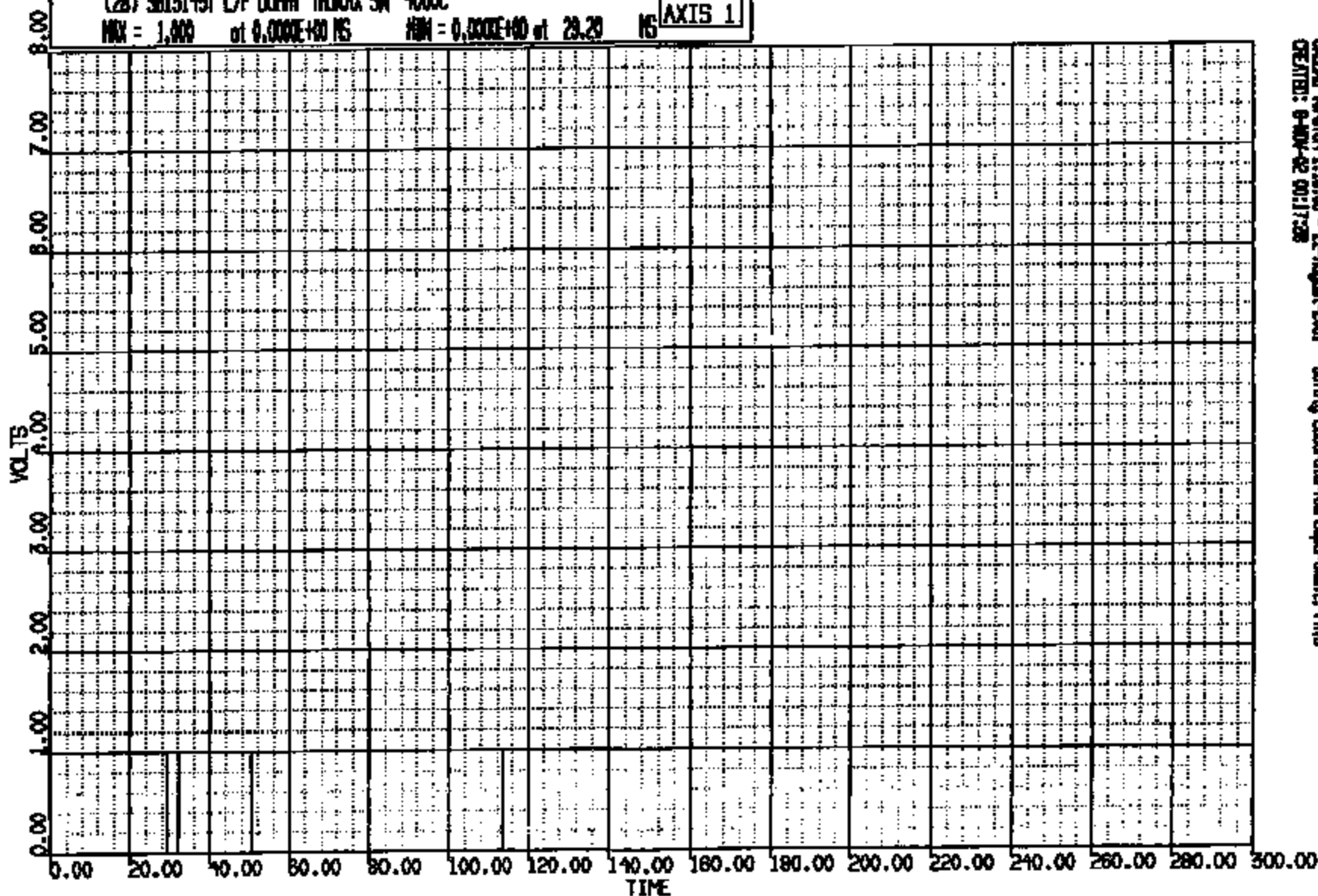
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SE R: 12148 TO: J87266 DATE: 02-OCT-2002 10:42:54
2003 EN114

(28) SRI3143T L/F DUMMY THORAX SN 4000C

MAX = 1.000 at 0.000E+00 NS MIN = 0.000E+00 at 29.29 NS

AXIS 1



CRS045 Version 1.18.05 - 22-August-2001 Safety Laboratory/Force Department, PHS
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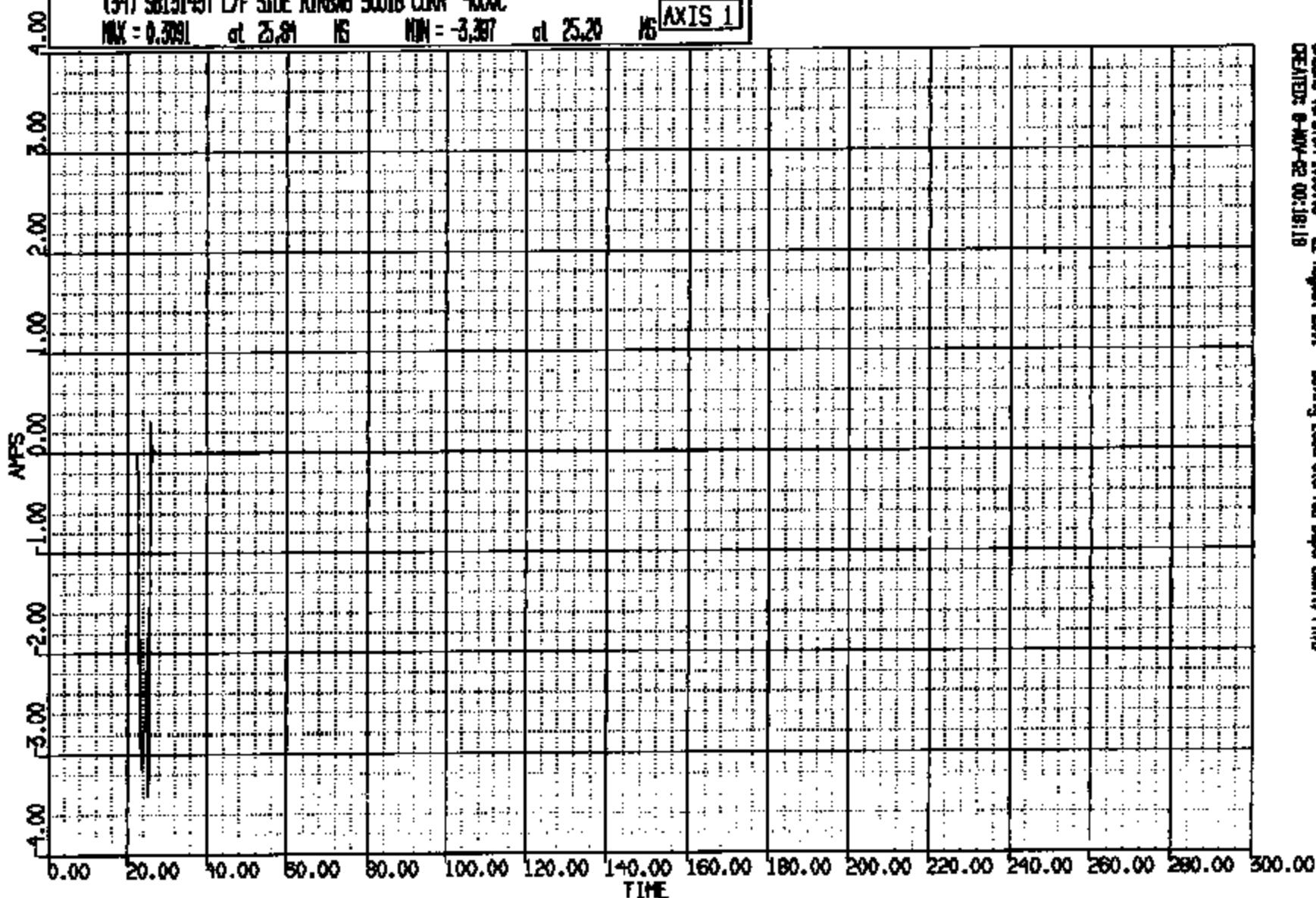
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SB R1 15143 TO: J97986 DATE: 02-OCT-2002 10:42:54
2003 EN114

(34) SB13143T L/F SIDE AIRBAG SCOUT CURR 400AC

MAX = 0.3091 at 25.81 MS MIN = -3.367 at 25.20 MS

AXIS 1



CHSAS Version 1.18.03 - 22-August-2001 Safety Laboratories Department, PHB
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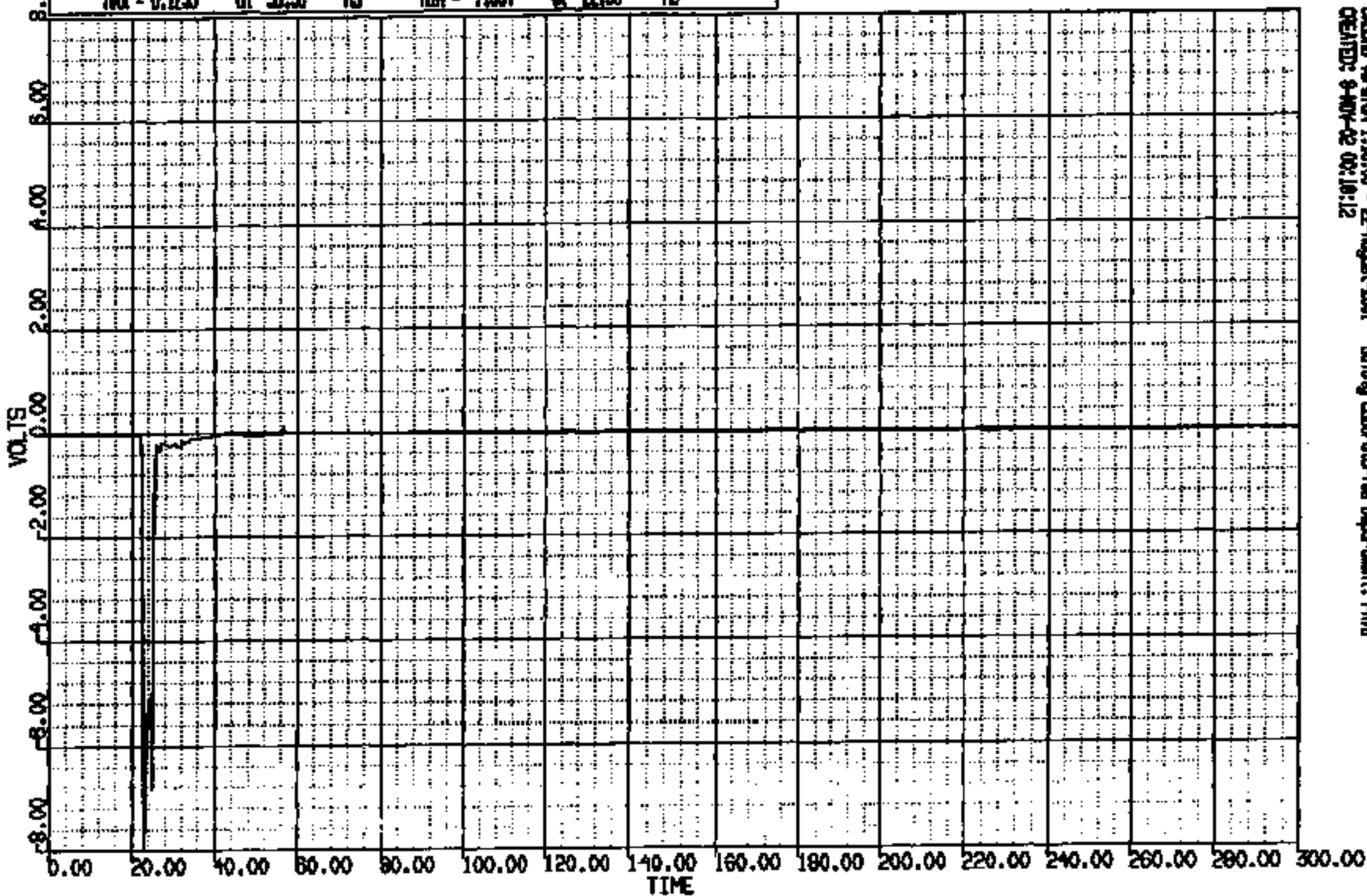
CRTS 0013143

SE R: 12143 TO: JB7266 DATE: 02-OCT-2002 10:42:34
2002 EN114

(33) 5813143 L/F SIDE AIRBAG SQUIB VOLT 4000C

MAX = 0.1233 at 56.56 MS MIN = -7.991 at 22.96 MS

AXIS 1

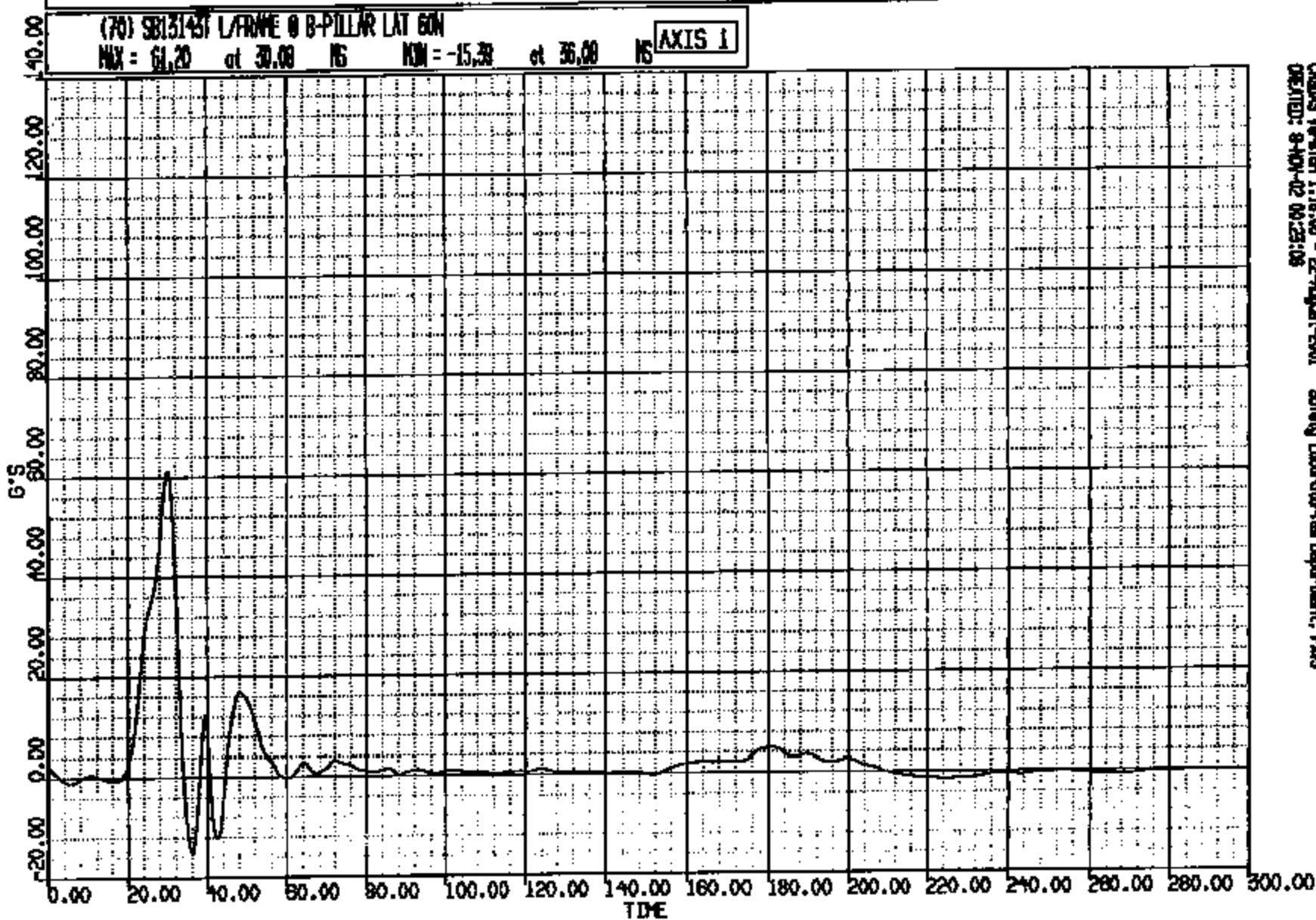


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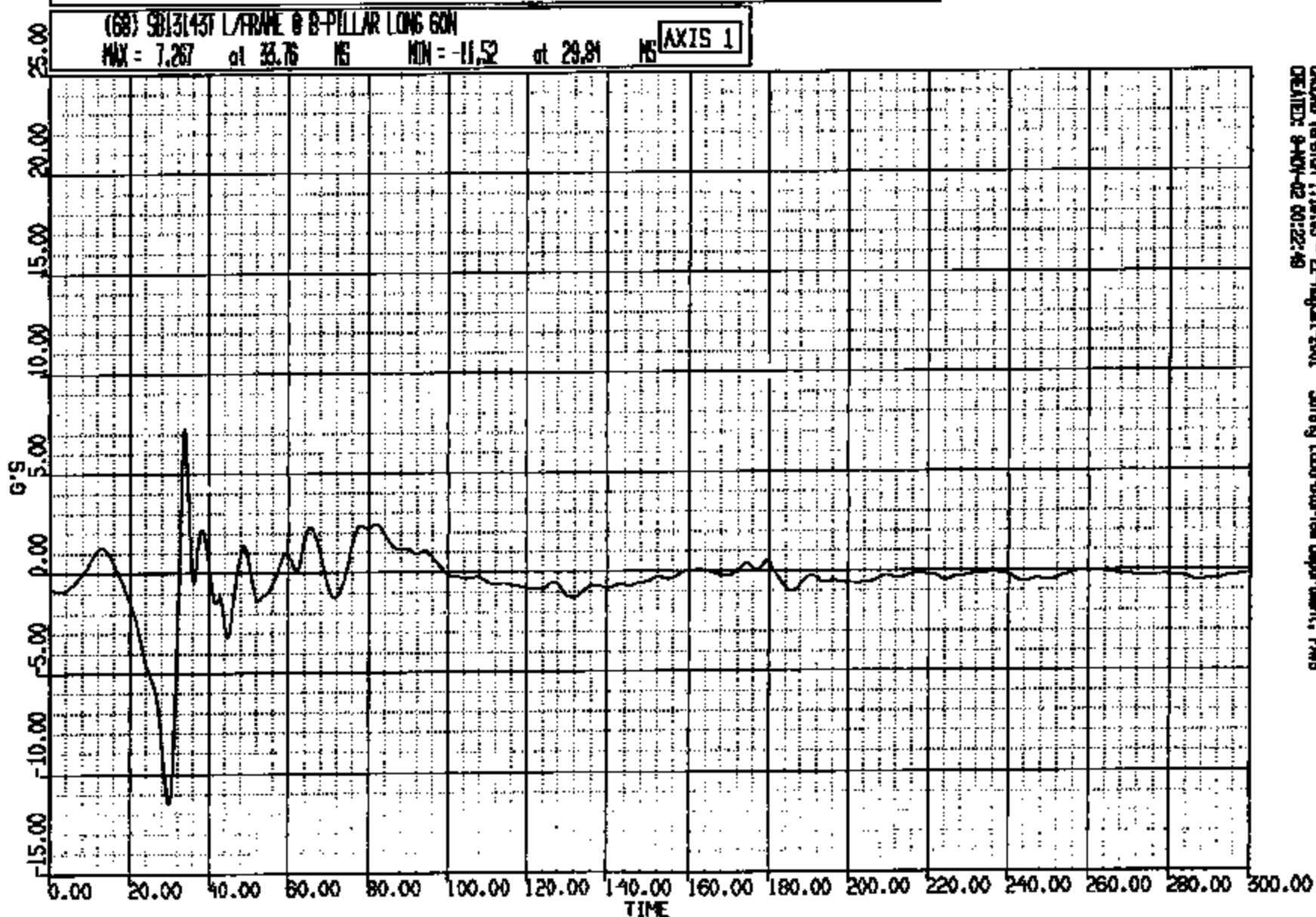
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SR R: 13143 TO: J87988 DATE: 02-OCT-2002 10:42:34
2003 EN114



CRIS 0013143

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2002 EN114

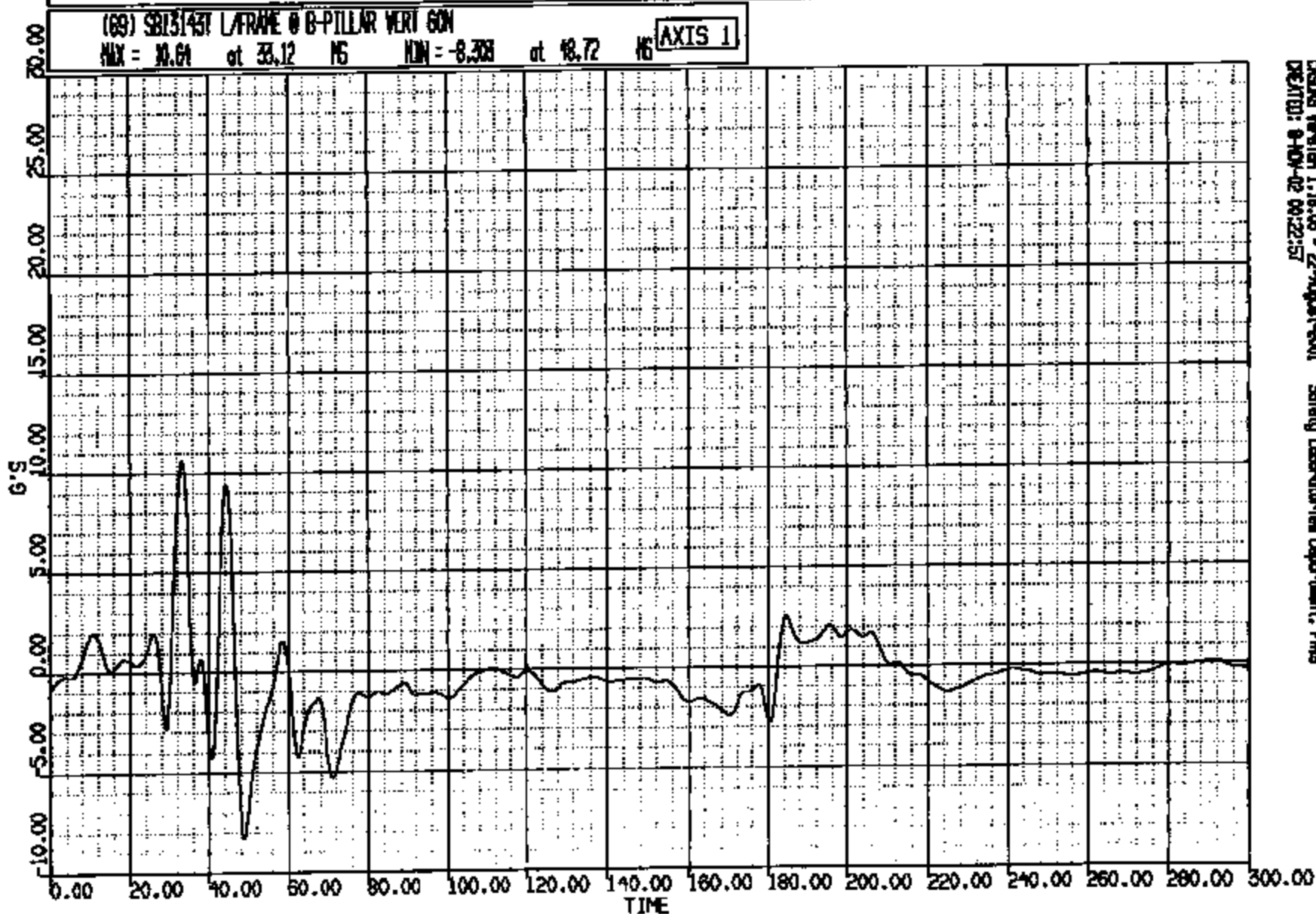


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CRIS 0013143

SB R: 13143 TQ: J57226 DATE: 02-OCT-2002 10:42:34
2002 EN114



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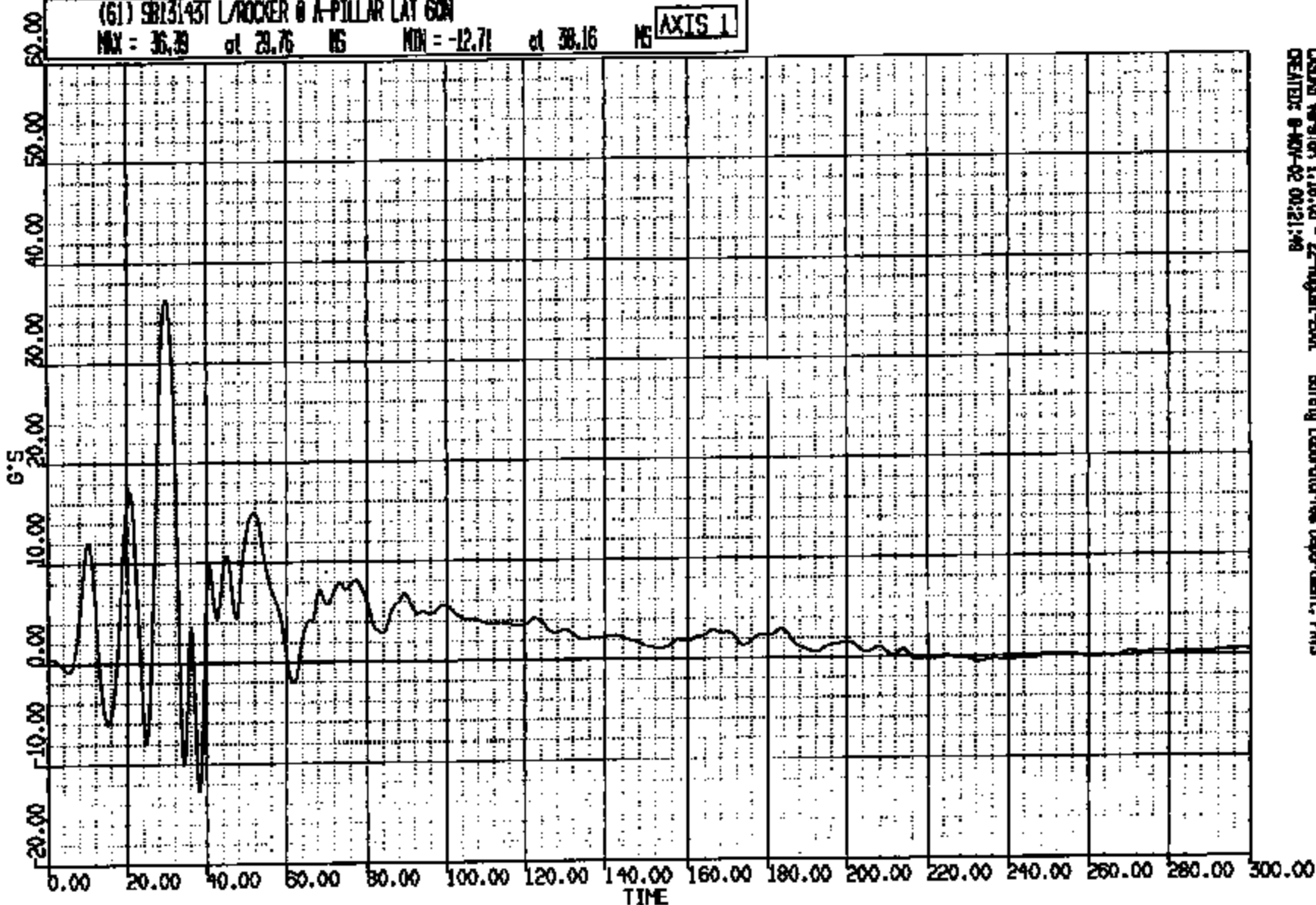
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SE R: 13143 TO: J27956 DATE: 02-OCT-2002 10:42:34
2002 EN114

(61) SRI3143T L/ROCKER @ A-PILLAR LAT 60N

MAX = 36.39 at 29.76 MS MIN = -12.71 at 38.16 MS

AXIS 1



CRISM Version 1.10.03 - 22 August 2001 Safety Laboratories Department, PHS
CREATED: 8-NOV-02 00:21:49

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CRIS 0013143

BB #: 13143 TO: J87988 DATE: 02-OCT-2002 10:42:34
2003 EN114

(59) 58131431 LADDER @ A-PILLAR LONG 60N

MAX = 3.681 at 34.21 MS MIN = -7.085 at 28.00 MS

AXIS 1



CHS Version 1.18.08 - 22-August-2001 Safety Laboratories Department, PHS
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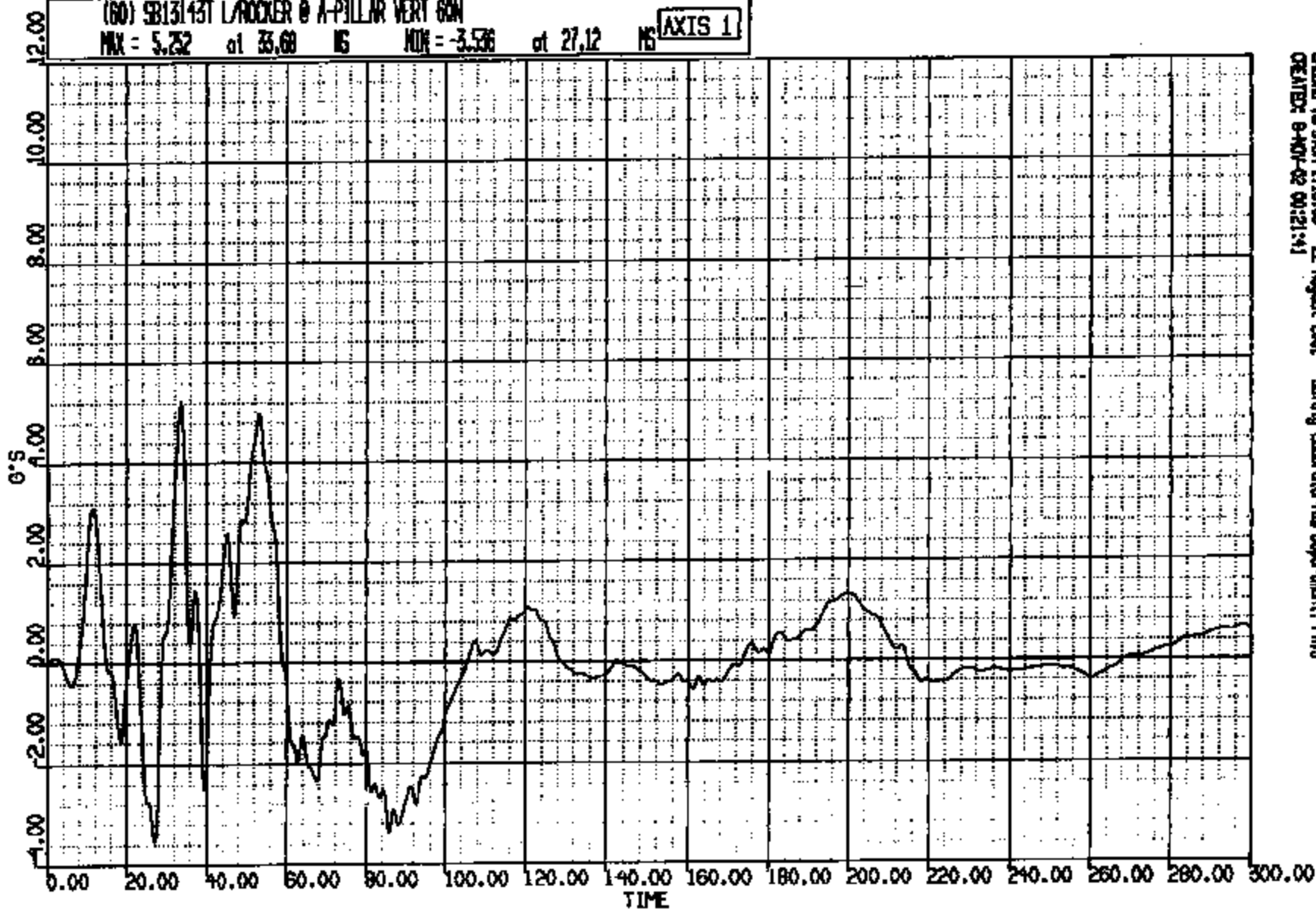
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SB R: 13143 TO: J27968 DATE: 02-OCT-2002 10:42:34
2005 EN114

(60) SB131431 L/ROCKER @ A-PILLAR VERT GON

MAX = 5.252 at 33.60 NS MIN = -3.536 at 27.12 NS

AXIS 1



CRSAS Version 1.18.05 - 22-August-2001 Safety Laboratories Department, PHS
CREATED 8-NOV-02 00:21:41

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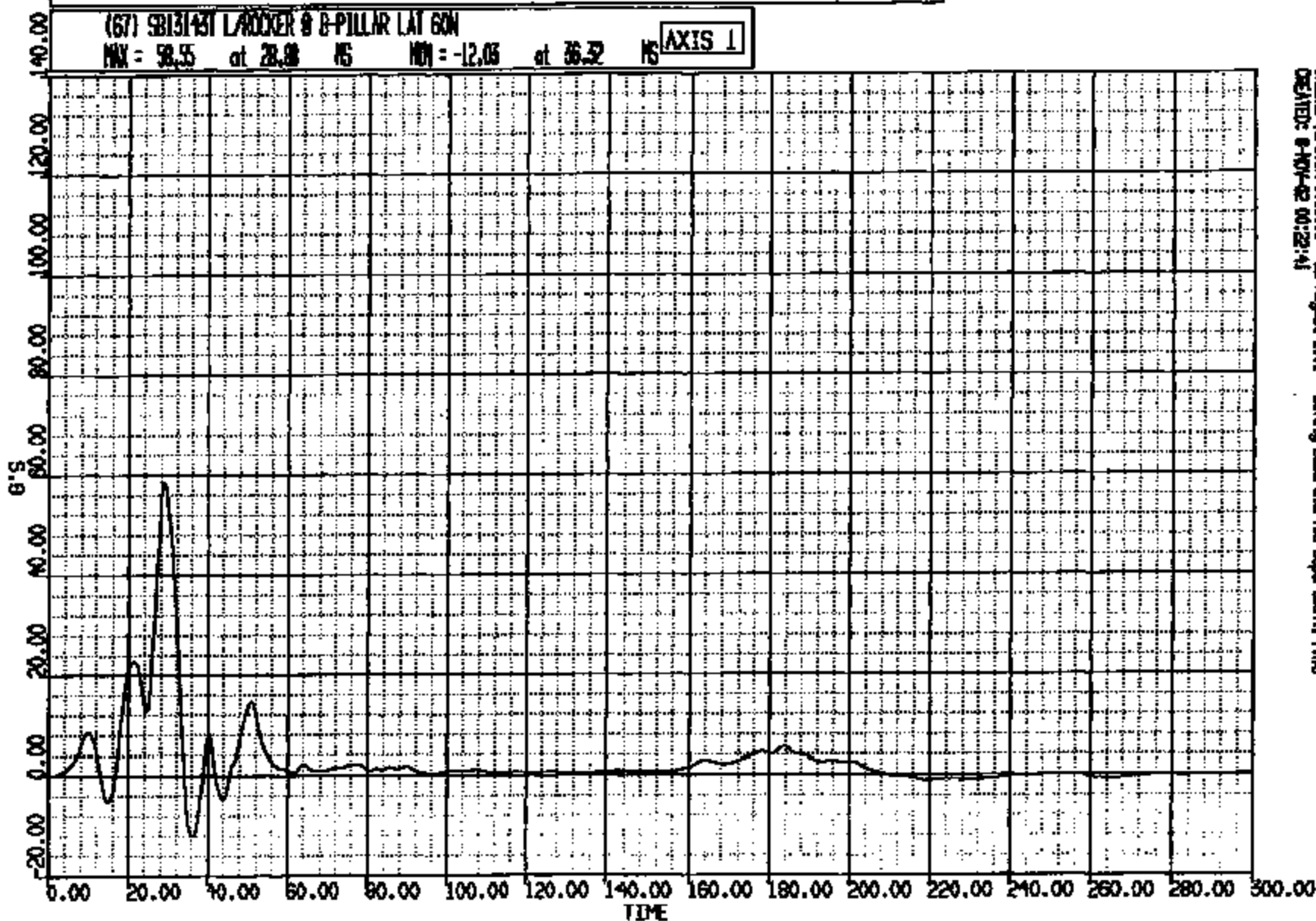
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SE R: 18143 TO: J27988 DATE: 02-OCT-2002 10:42:54
2002 EN114

(67) SBI31431 L/ROCKER 8 B-PILLAR LAT 60N

MAX = 58.55 at 28.88 MS MIN = -12.05 at 36.32 MS

AXIS 1



CASAS Version 1.18.00 - 22-August-2001 Safety Laboratory Inc Department, PHS
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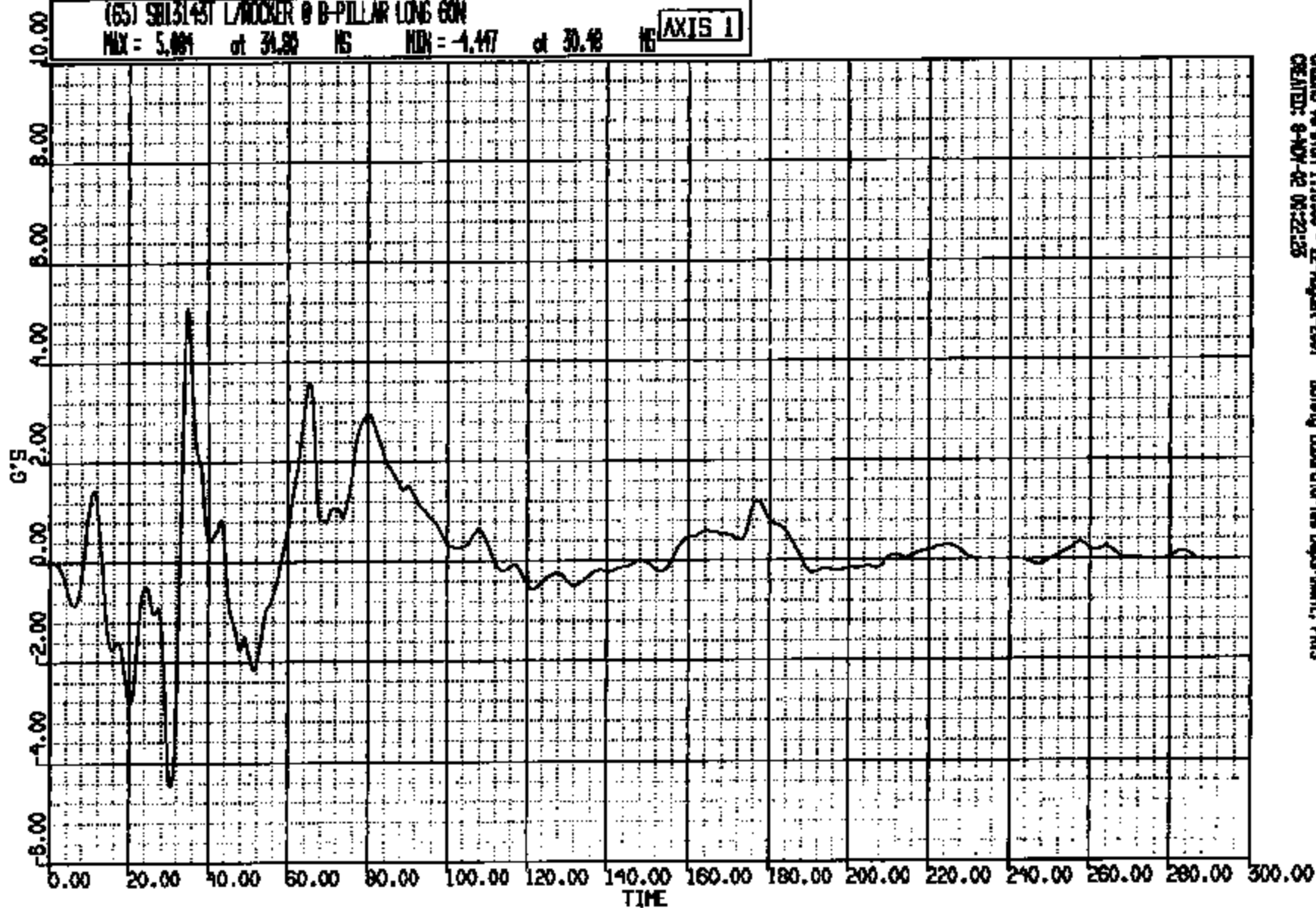
CRIS 0013143

SB R: 13143 TO: JBT688 DATE: 02-OCT-2002 10:42:24
2003 EN114

(65) SB131431 L/ROCKER @ B-PILLAR LONG GRN

MAX = 5.001 at 34.85 NS MIN = -4.447 at 30.48 NS

AXIS 1

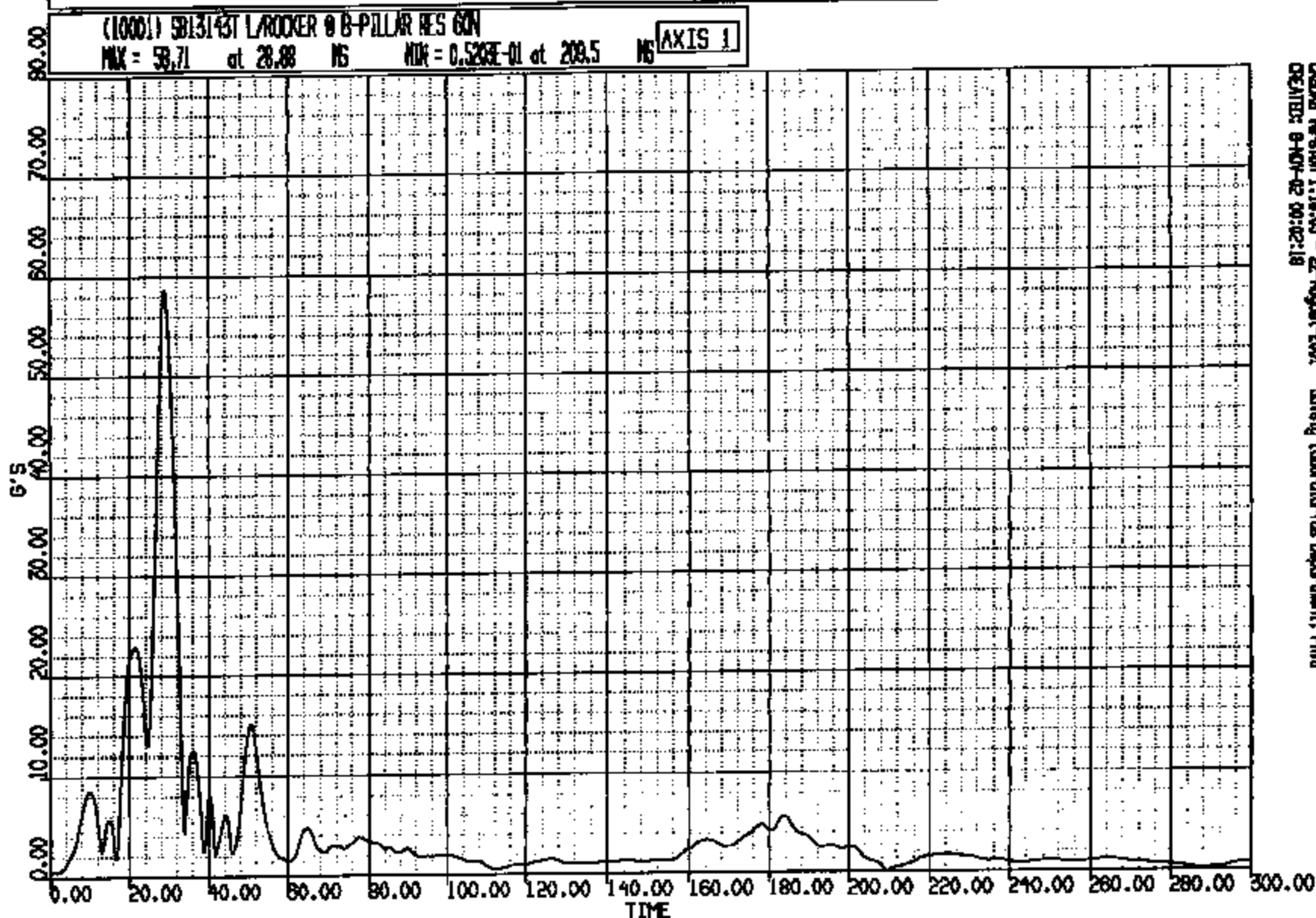


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2003 EN114

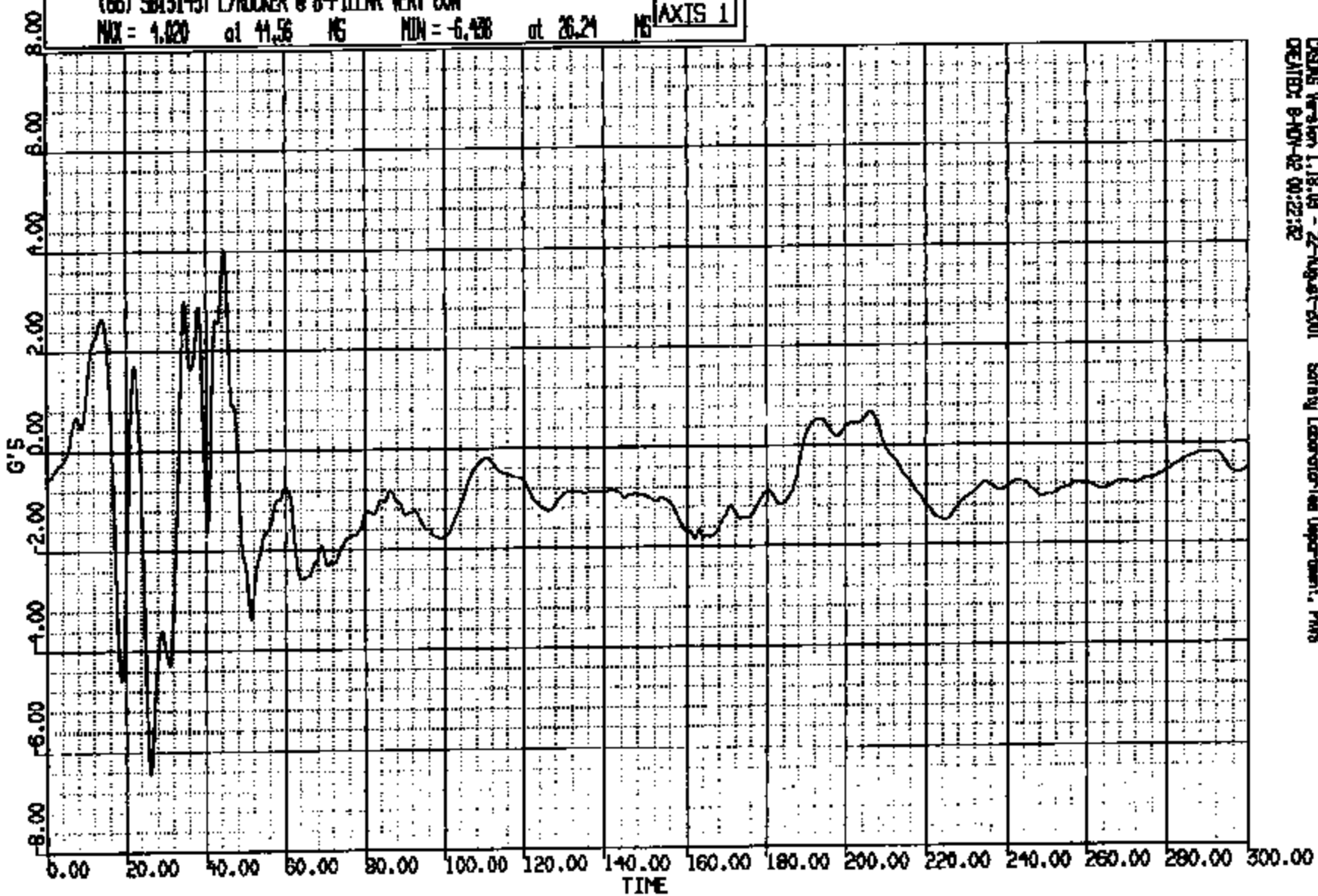


CRTS 0013143

SB R: 13143 TO: JB7868 DATE: 02-OCT-2002 10:42:34
2003 EN114

(66) 9843143T L/ROCKER @ B-PILLAR WRT GUN

MAX = 4.020 at 44.56 NS MIN = -6.438 at 26.24 NS



CSHAS Worksheet 1.18.03 - 22-August-2001 Safety Laboratory/see Department., PH8
CREATED: 8-MAY-02 00:22:32

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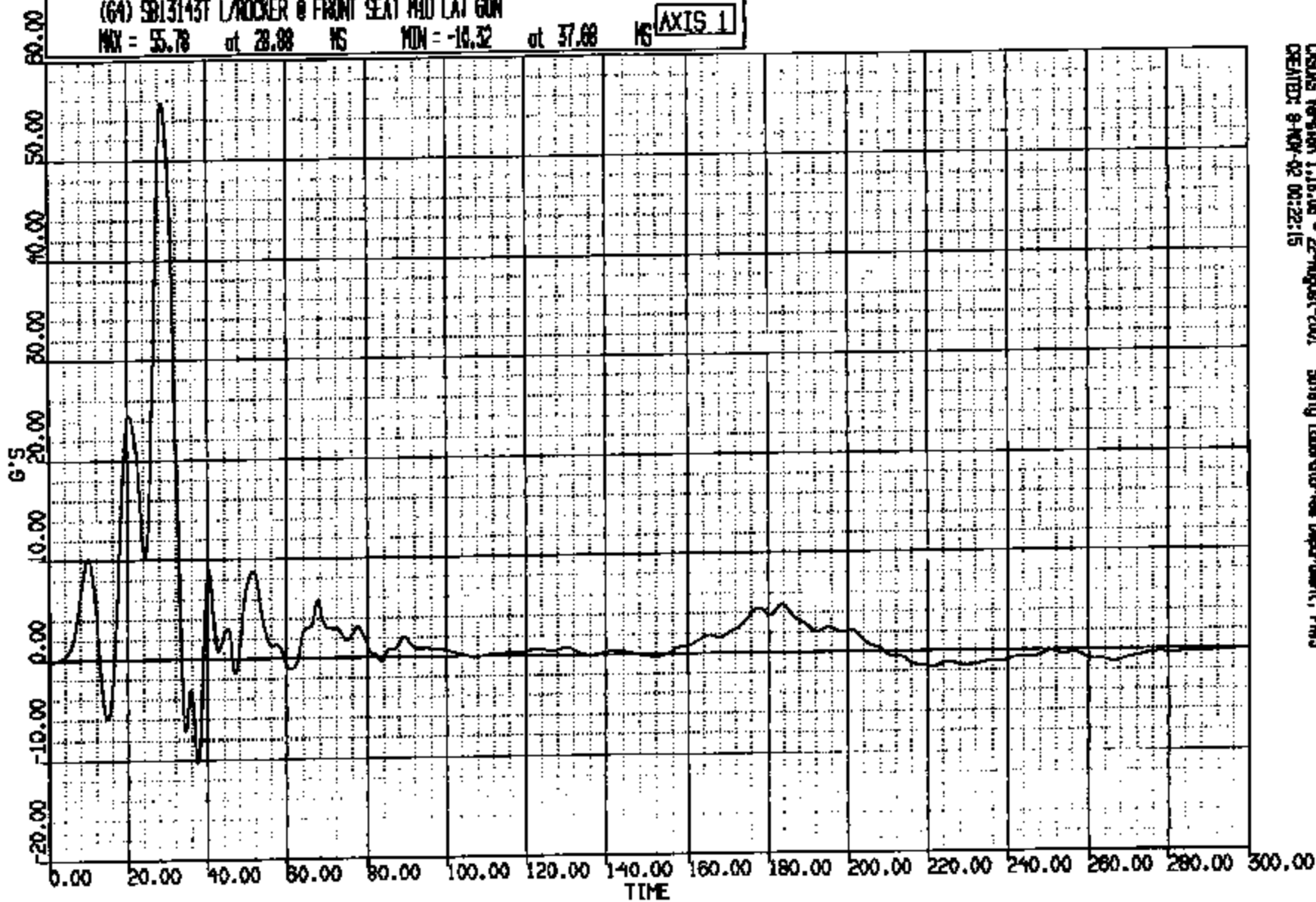
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SB #: 15143 TO: J57266 DATE: 02-OCT-2002 10:42:54
2002 EN114

(64) SB13143T L/ROCKER @ FRONT SEAT MID LAT GON

MAX = 55.78 at 28.08 MS MIN = -14.32 at 37.68 MS

AXIS 1



CRS05 Version 1.18.05 - 22-August-2001 Safety Laboratories Department, PMS
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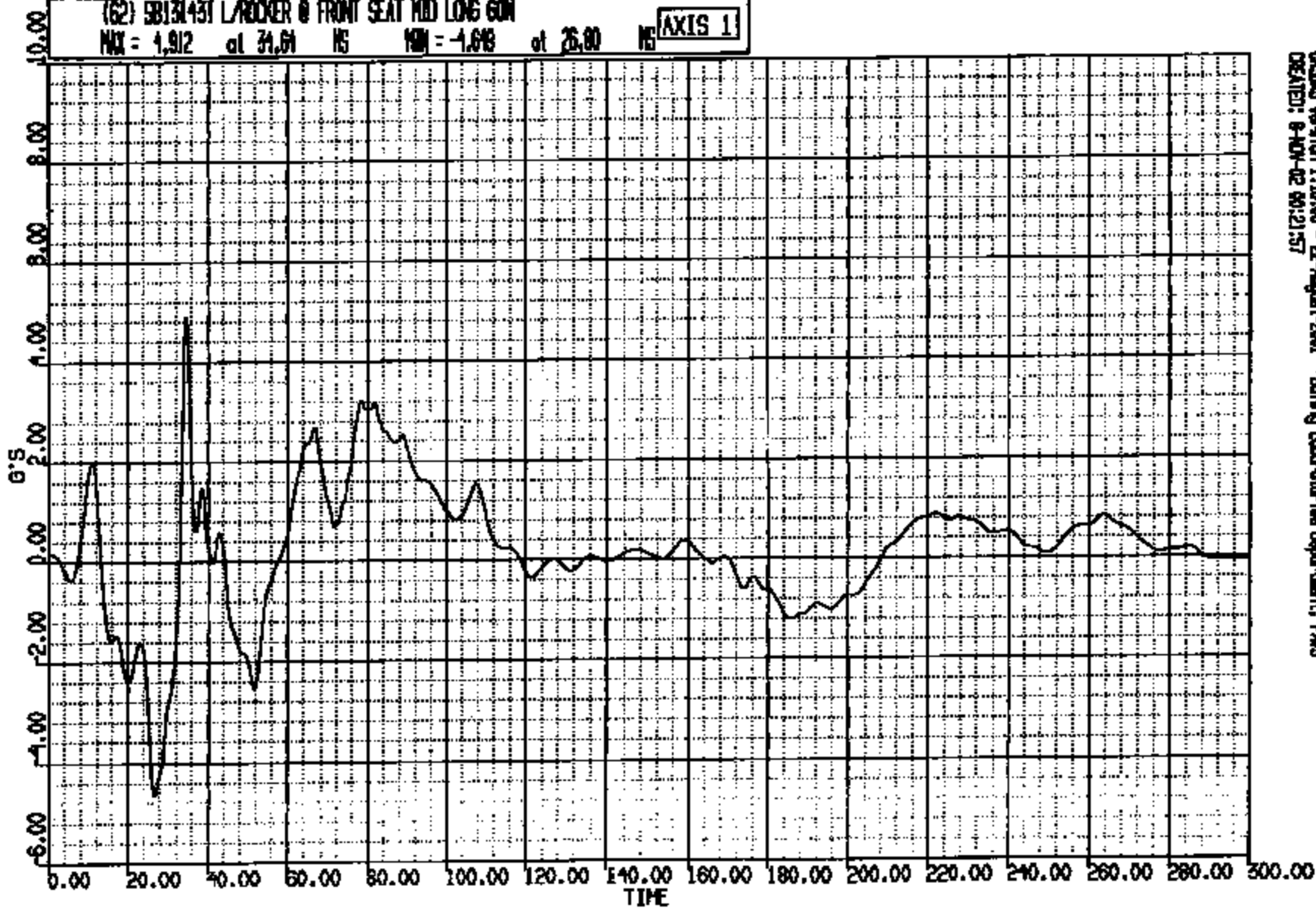
CRIS 0013143

SR R: 15143 TO: JB7966 DATE: 02-OCT-2002 10:42:54
2005 EN114

(62) 58131431 L/ROCKER @ FRONT SEAT MID LONG GUN

MAX = 1.912 at 31.01 MS MIN = -1.648 at 26.00 MS

AXIS 1



CASING Version 1.18.08 - 22-August-2001
CREATED: 8-NOV-02 00:21:57
Bert's Laboratory Inc Department, PWS

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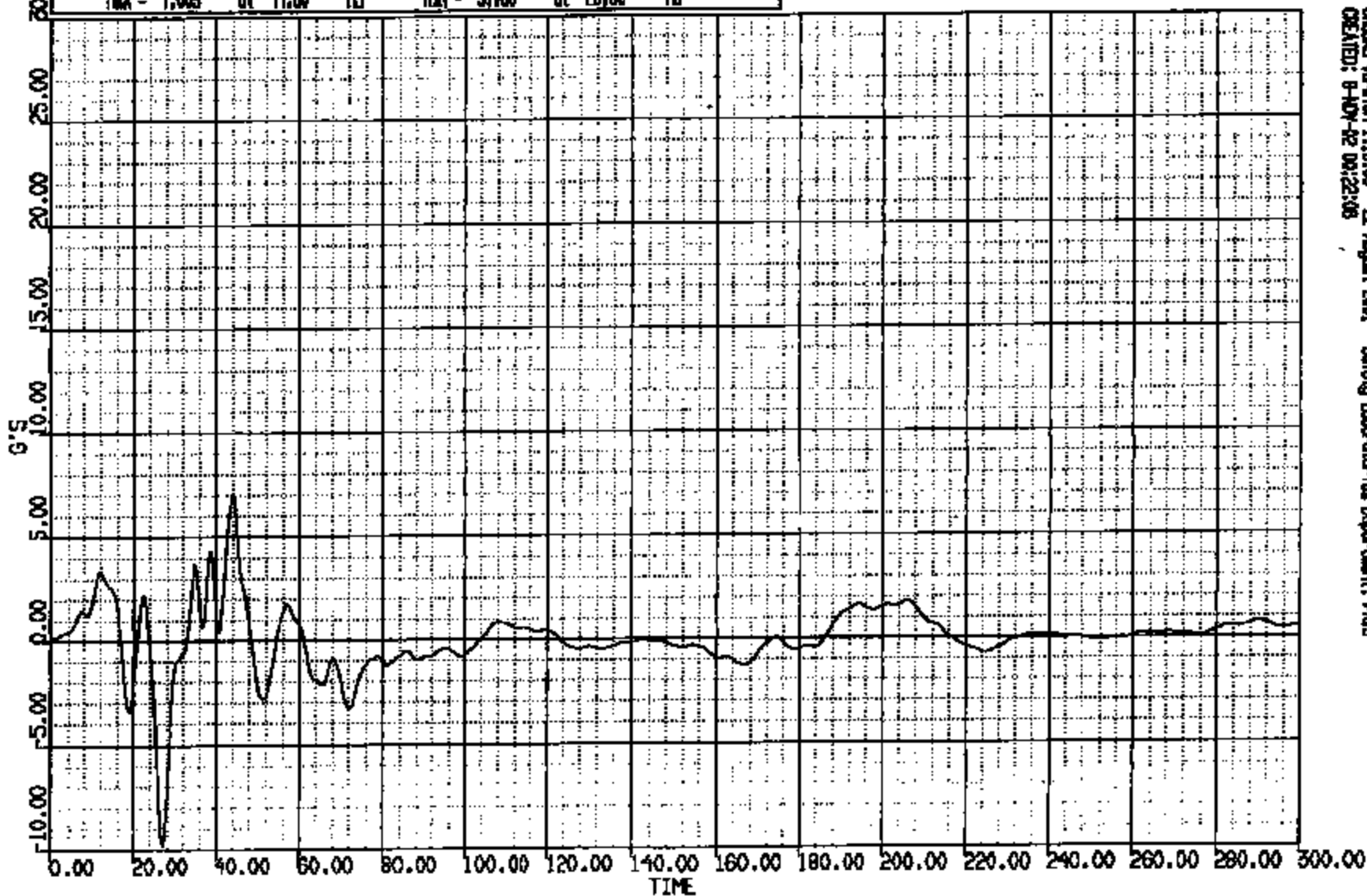
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SB R: 13143 TO: JB7988 DATE: 02-OCT-2002 10:42:34
2003 EN114

(63) SB13143T L/ROCKER @ FRONT SEAT MID VERT GCM

MAX = 7.009 at 44.00 NG MIN = -9.786 at 26.80 NG

AXIS 1



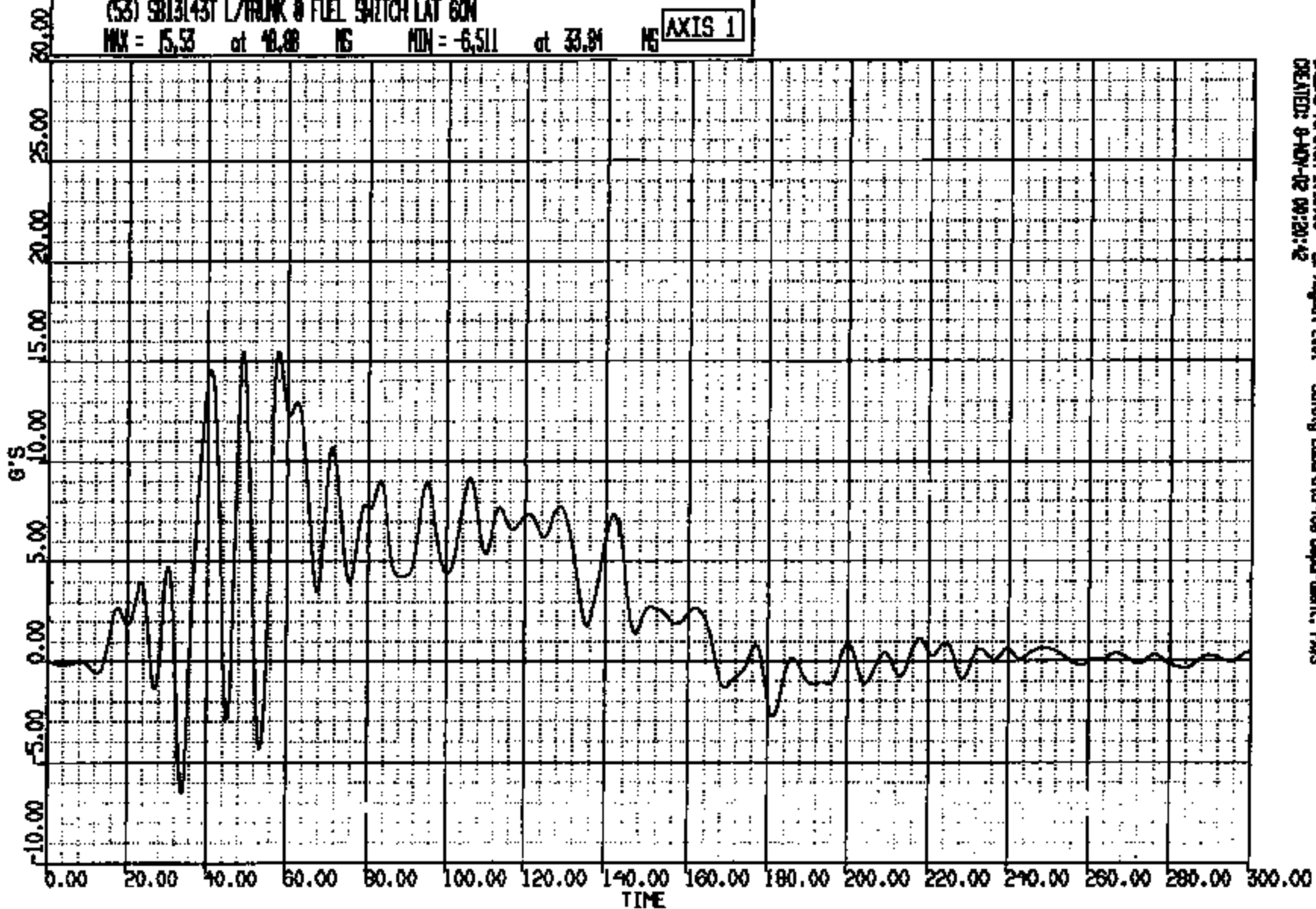
CRIS 0013143

BB R: 12145 TO: J87988 DATE: 02-OCT-2002 10:42:34
2005 EN114

(53) SBI3143T L/FRNK 8 FUEL SWITCH LAT 60N

MAX = 15.53 at 40.88 NS MIN = -6.511 at 33.84 NS

AXIS 1

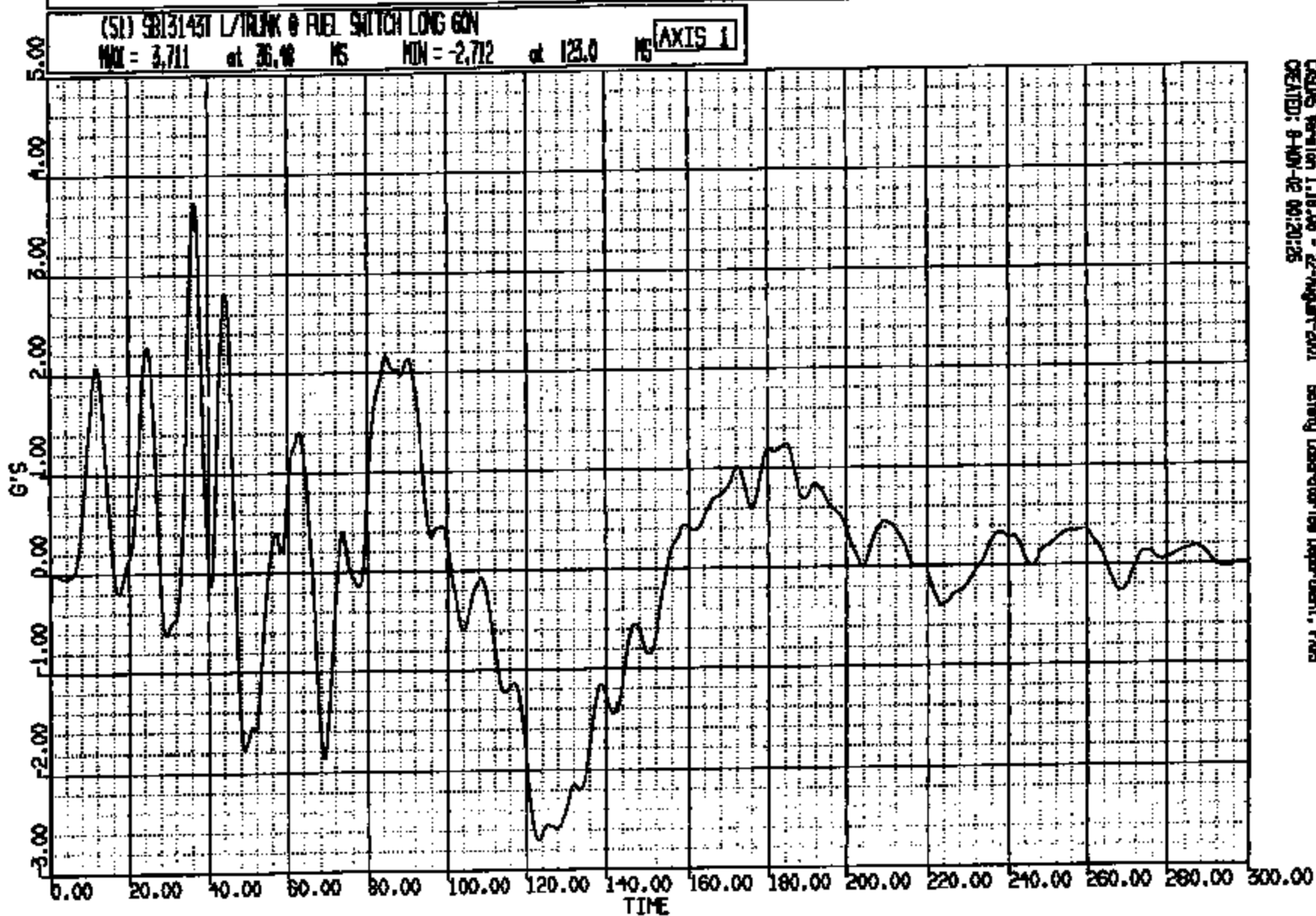


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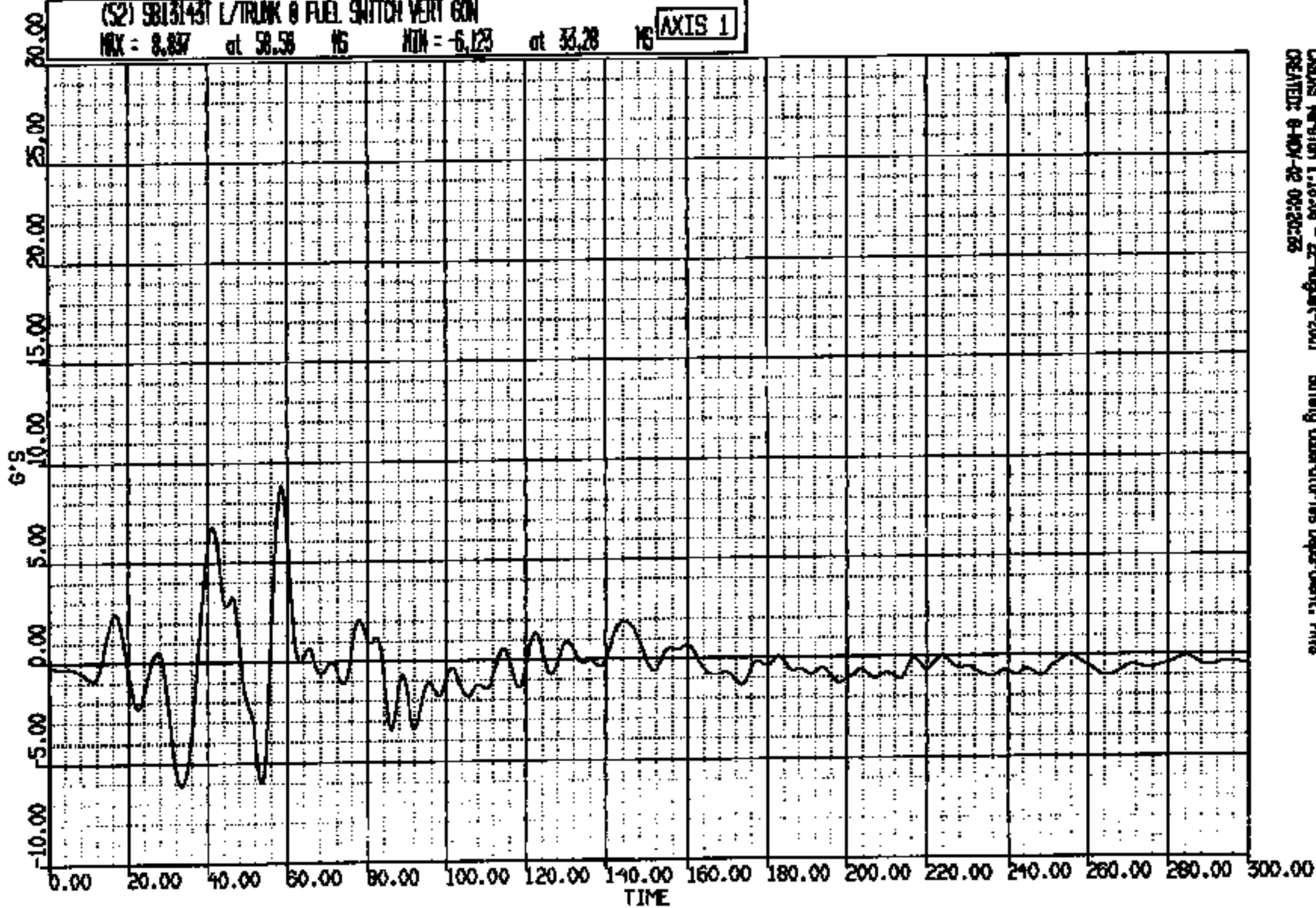
CRIS 0013143

ENTIRE PAGE CONFIDENTIAL

88 R: 15143 TO: J27966 DATE: 02-OCT-2002 10:42:54
8005 EN114

(S2) 98131431 L/TRUNK @ FUEL SWITCH VERT GON

MAX = 8.837 at 58.56 HS MIN = -6.123 at 33.28 HS



CHS/MS Version 1.18.03 - 22-August-2001 Bailey Laboratories Department, PARS
CREATED: 8-MAY-02 09:20:55

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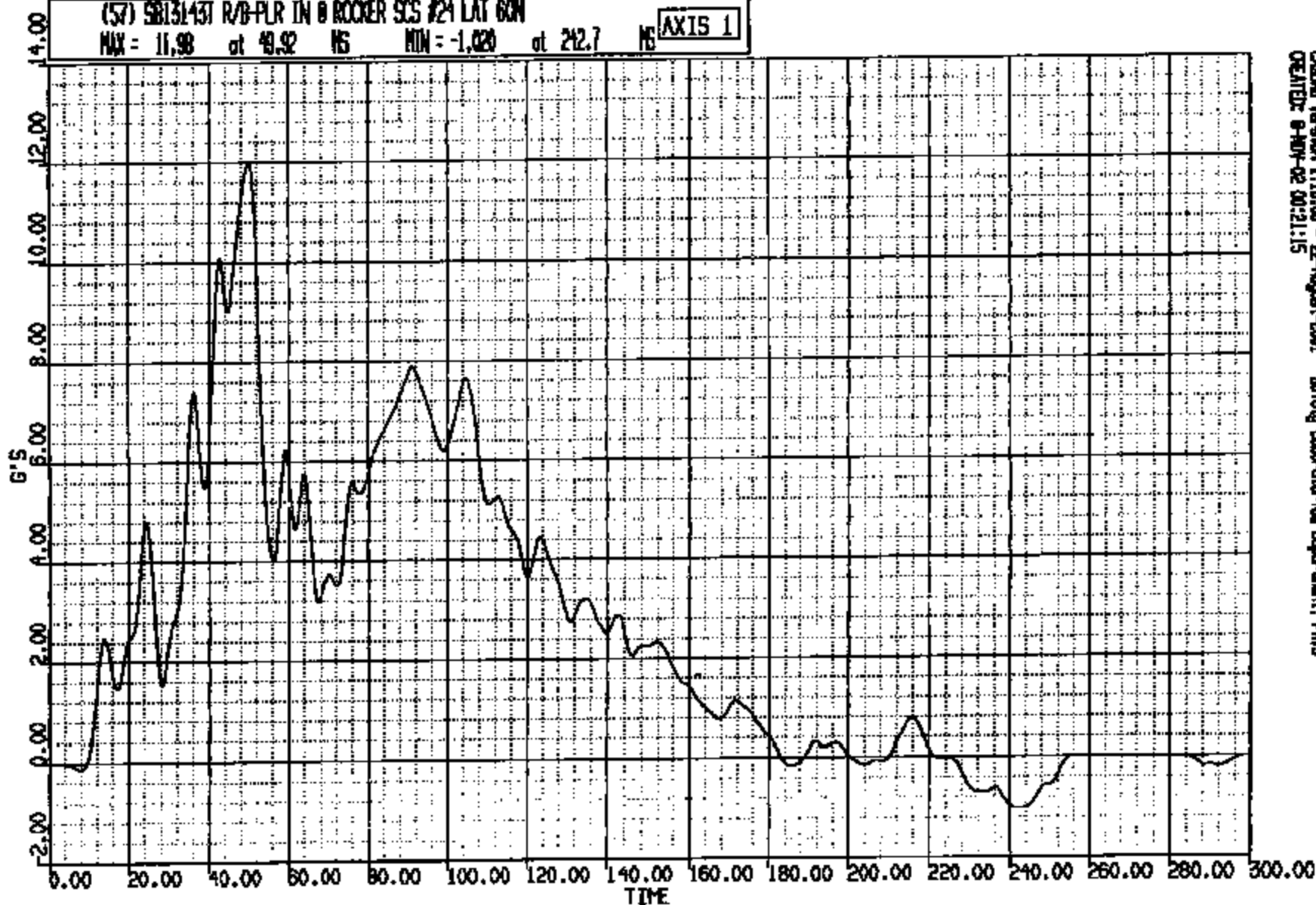
CRIS 0013143

SE R: 13143 TO: J87666 DATE: 02-OCT-2002 10:42:34
2003 EN114

(57) 58131437 R/D-PLR IN 8 ROCKER SCS #24 LAT 60N

MAX = 11.98 at 49.92 NS MIN = -1.020 at 242.7 NS

AXIS 1



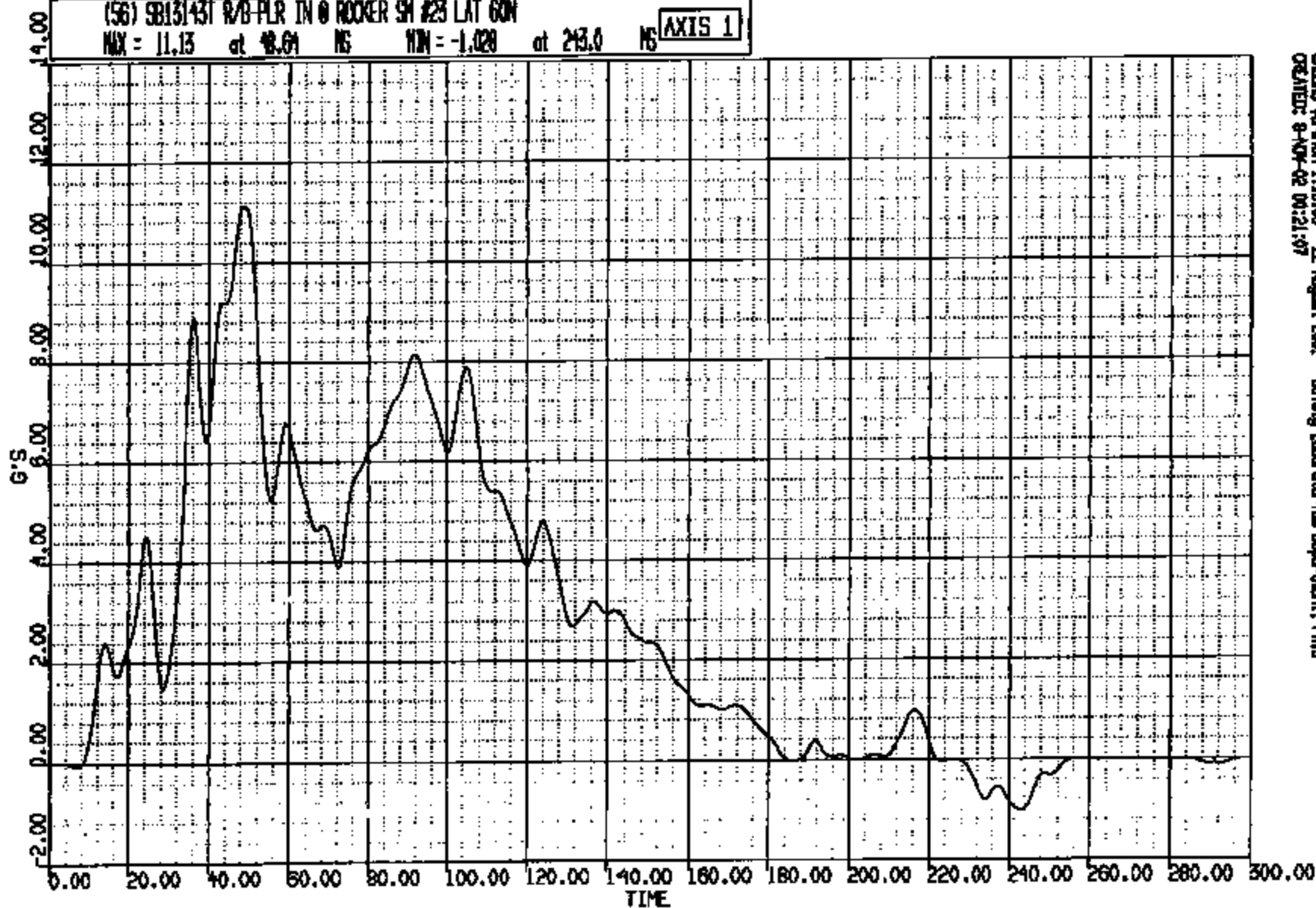
CRTS 0013143

SB R: 13143 TO: J27228 DATE: 02-OCT-2002 10:42:54
2005 EN114

(56) SB13143T R/B-PLR IN @ ROCKER SH #23 LAT 60N

MAX = 11.13 at 48.61 NS MIN = -1.020 at 243.0 NS

AXIS 1



CRITS Version 1.1B.05 - 22-August-2001 Safety Laboratories Department, PAIS
CREATED: 8-NOV-02 00:21:07

ENTIRE PAGE CONFIDENTIAL

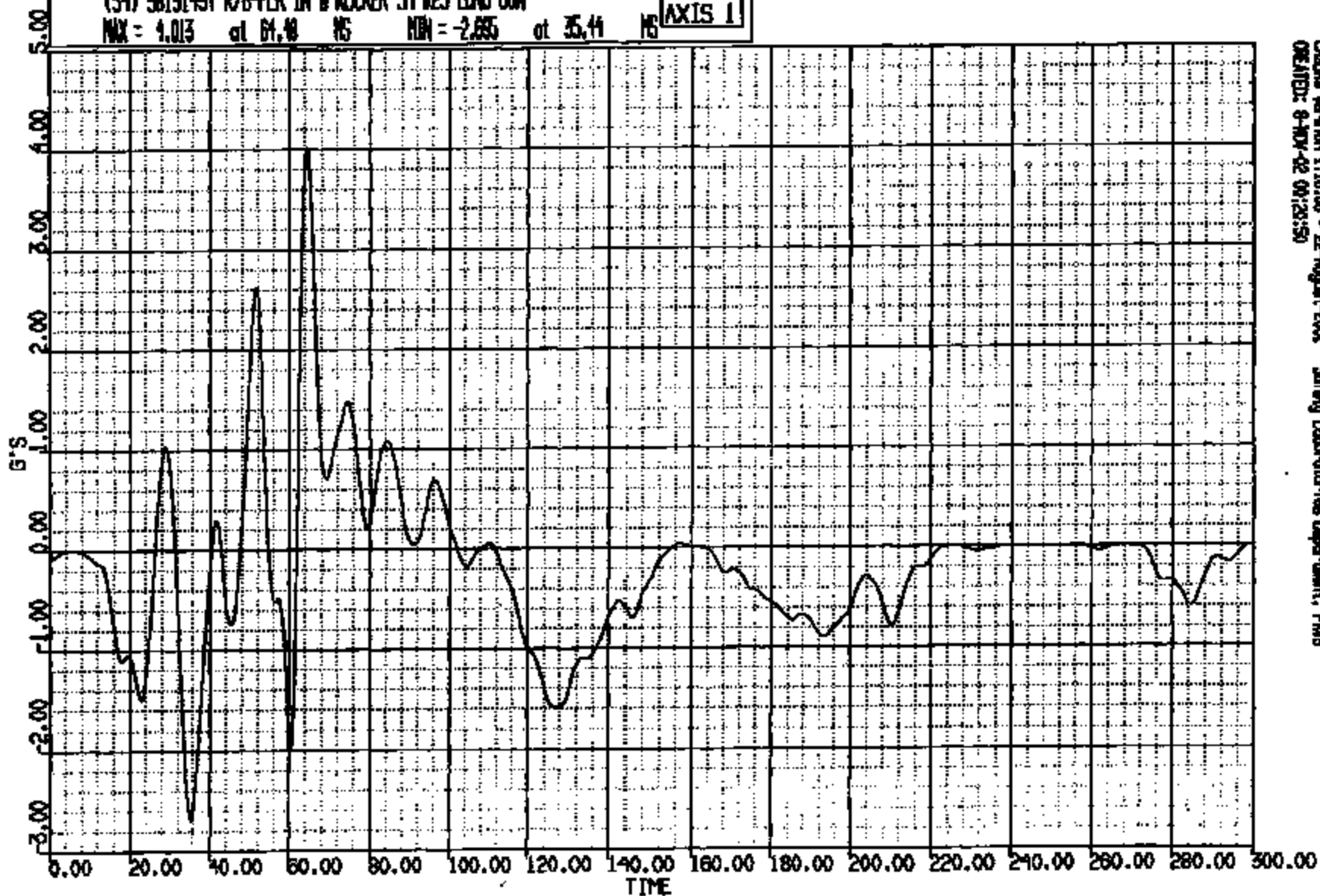
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22 R: 13143 T0: J07926 DATE: 02-OCT-2002 10:42:34
2003 EN114

(54) 5813143T R/G-PLR IN @ ROOPER SN #23 LONG GUN

MAX = 4.013 at 61.4 MS MIN = -2.655 at 35.44 MS

AXIS 1



CRSAS Version 1.18.08 - 22-August-2003 Safety Laboratories Department, PMS
CREATED: 8-MAY-02 09:28:50

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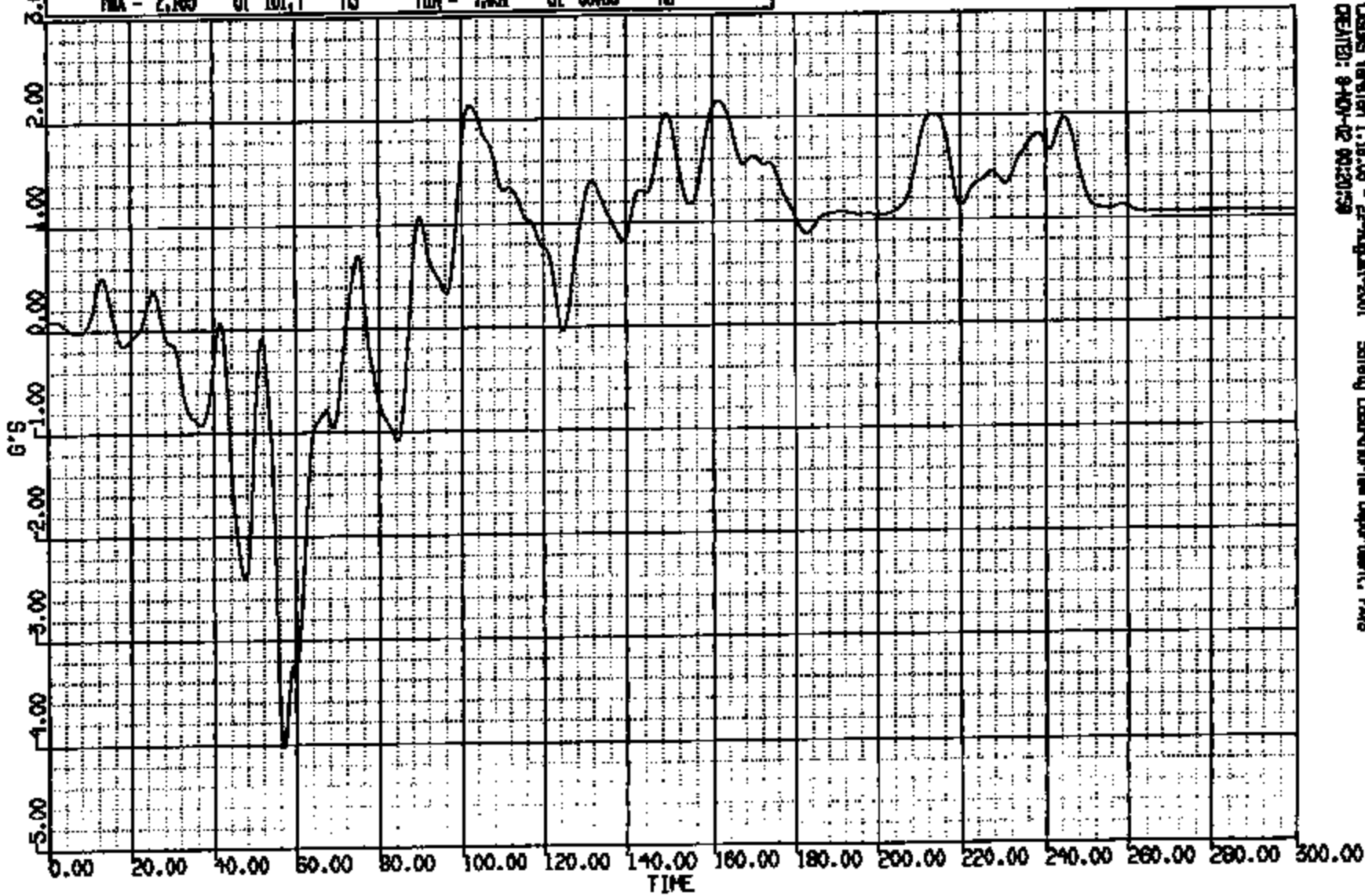
CRIS 0013143

BB R: 13143 TO: JB7966 DATE: 02-OCT-2002 10:42:34
2003 EN114

(55) 5813143T R/A-PLR IN @ ROCKER SH #23 VERT 60M

MAX = 2.863 at 161.1 MS MIN = -4.081 at 56.88 MS

AXIS 1



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CREATED: 8-10-02 09:20:59

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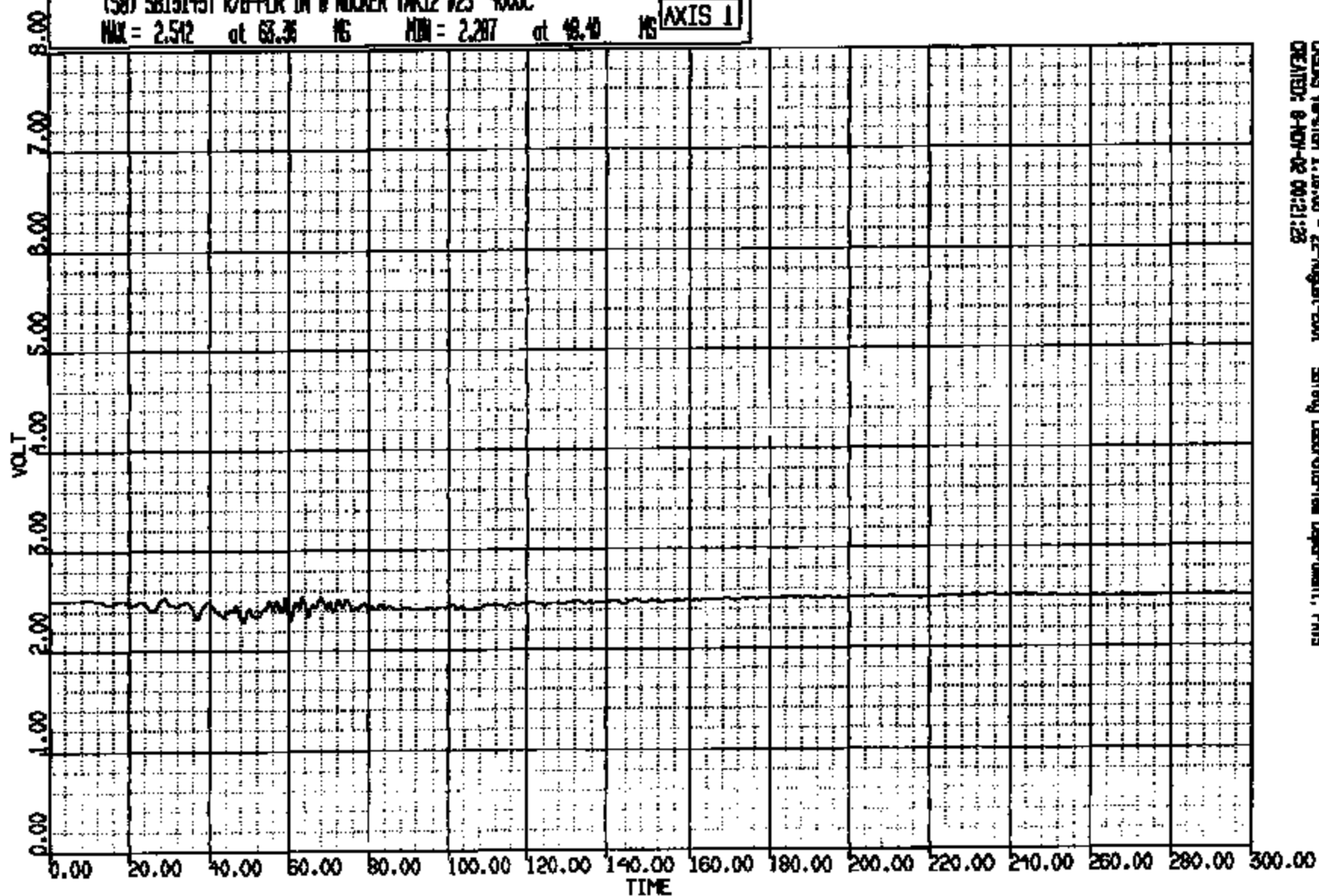
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SE R: 13143 TO: J87988 DATE: 02-OCT-2002 10:42:34
2005 EN114

(58) 58131431 R/V-PLR IN @ ROCKER TAK12 #25 4000C

MAX = 2.512 at 63.36 MS MIN = 2.287 at 48.40 MS

AXIS 1



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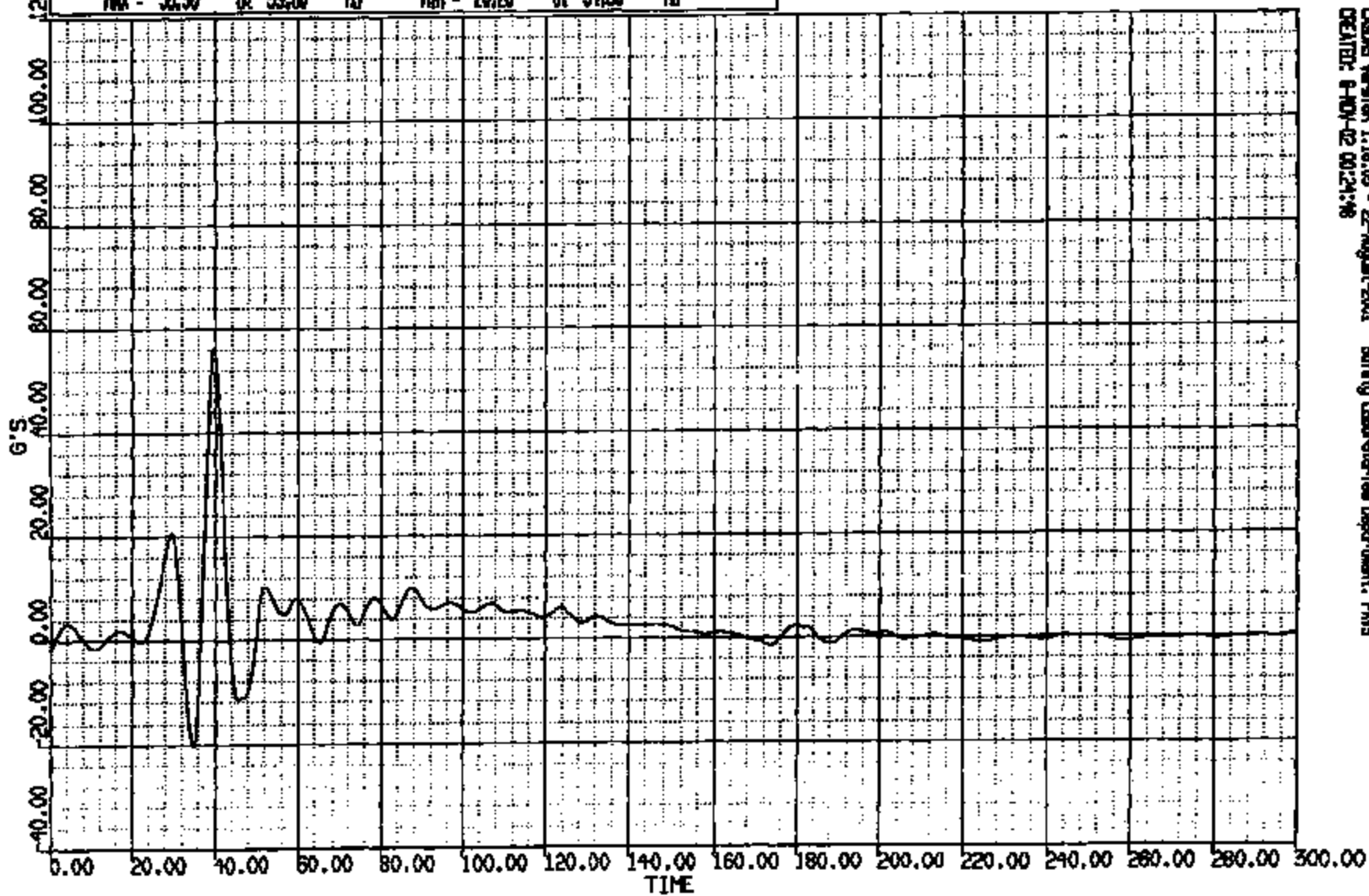
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2003 EN114

(82) SB13143T R/FRAVE @ B-PILLAR LAT 60N

MAX = 56.30 at 39.60 MS MIN = -20.26 at 31.80 MS

AXIS 1



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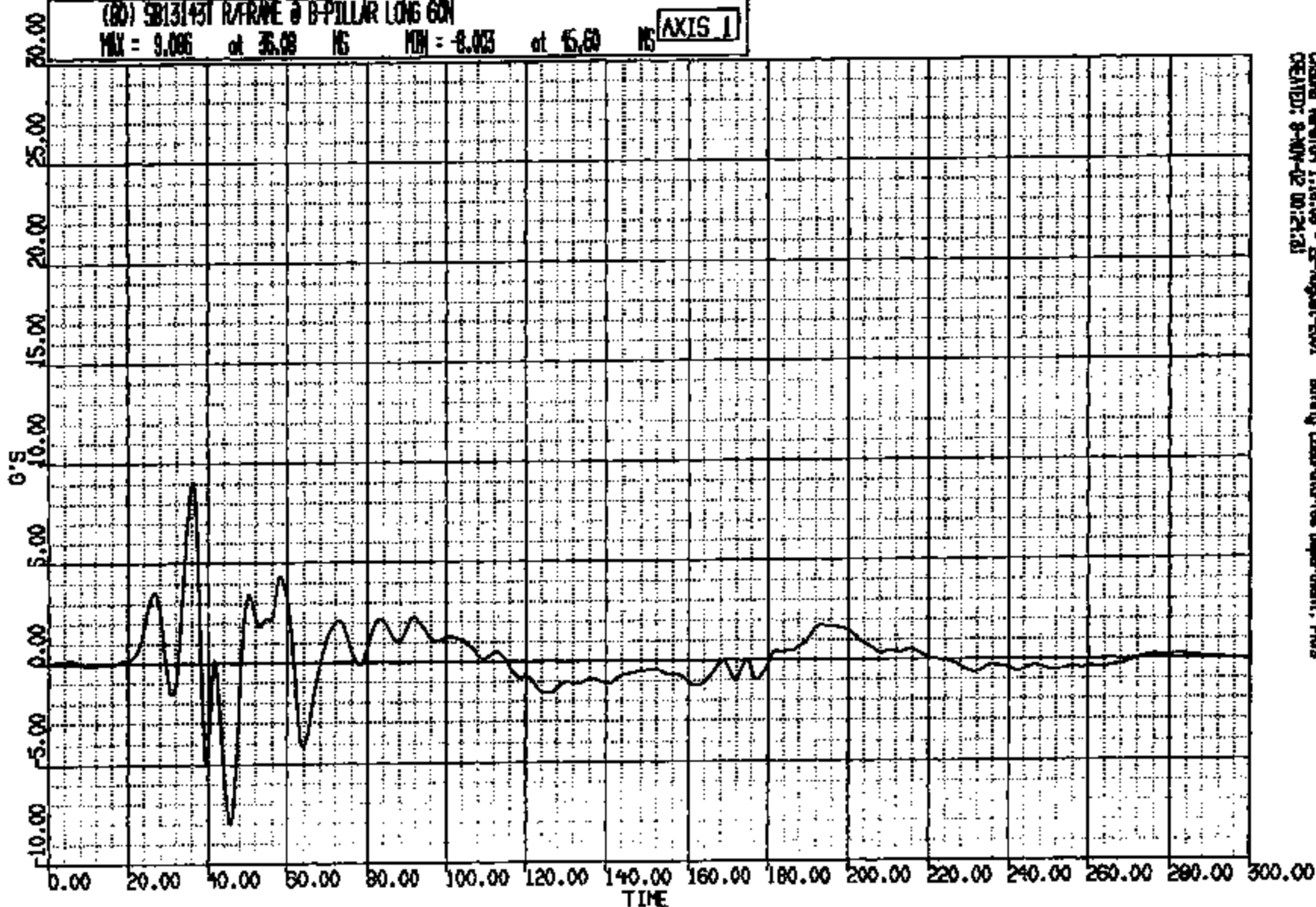
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BB R: 13143 TO: J87988 DATE: 02-OCT-2002 10:42:34
2008 EN114

(80) SB131431 R/FRAVE @ B-PILLAR LONG 60N

MAX = 9.086 at 35.00 NS MIN = -8.003 at 45.00 NS

AXIS 1



CRTS 0013143

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