

EA03-014

**FORD 12/11/03
LETTER TO ODI**

ATTACHMENT G

BOOK 6 OF 10

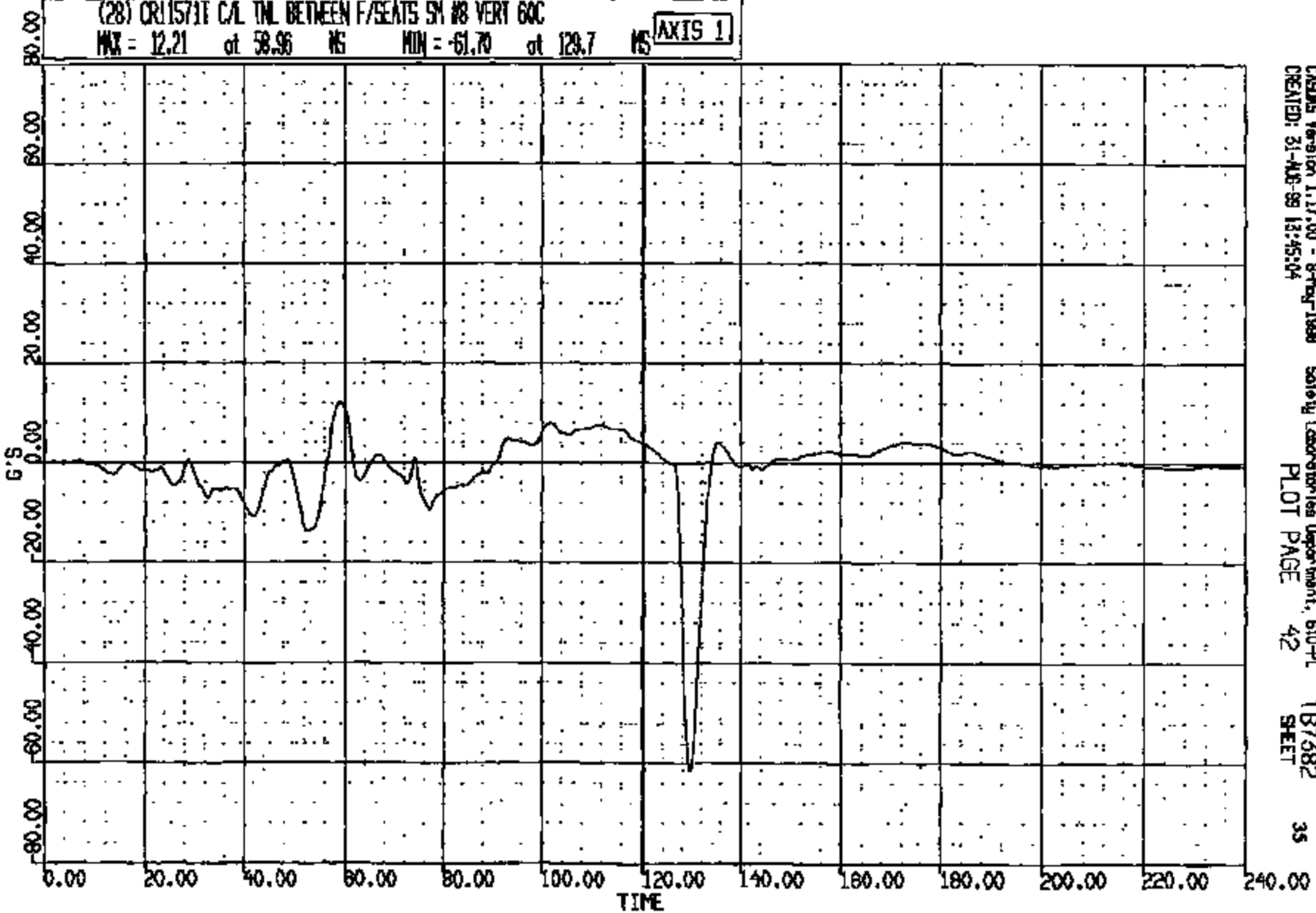
PART 3 OF 4

CR R: 11571 TO: TB7582 DATE: 990831 13:21:11
2000.5 FN-145

(28) CR11571T C/L TNL BETWEEN F/SEATS SN #8 VERT 60C

MAX = 12.21 at 58.96 MS MIN = -61.70 at 129.7 MS

AXIS 1



CADDS Version 1.17.00 - 8-Aug-1999
CREATED: 31-AUG-99 13:45:04

Safety Laboratories Department, 610-PL
PLOT PAGE 42

TB7582
SHEET 35

ENTIRE PAGE CONFIDENTIAL

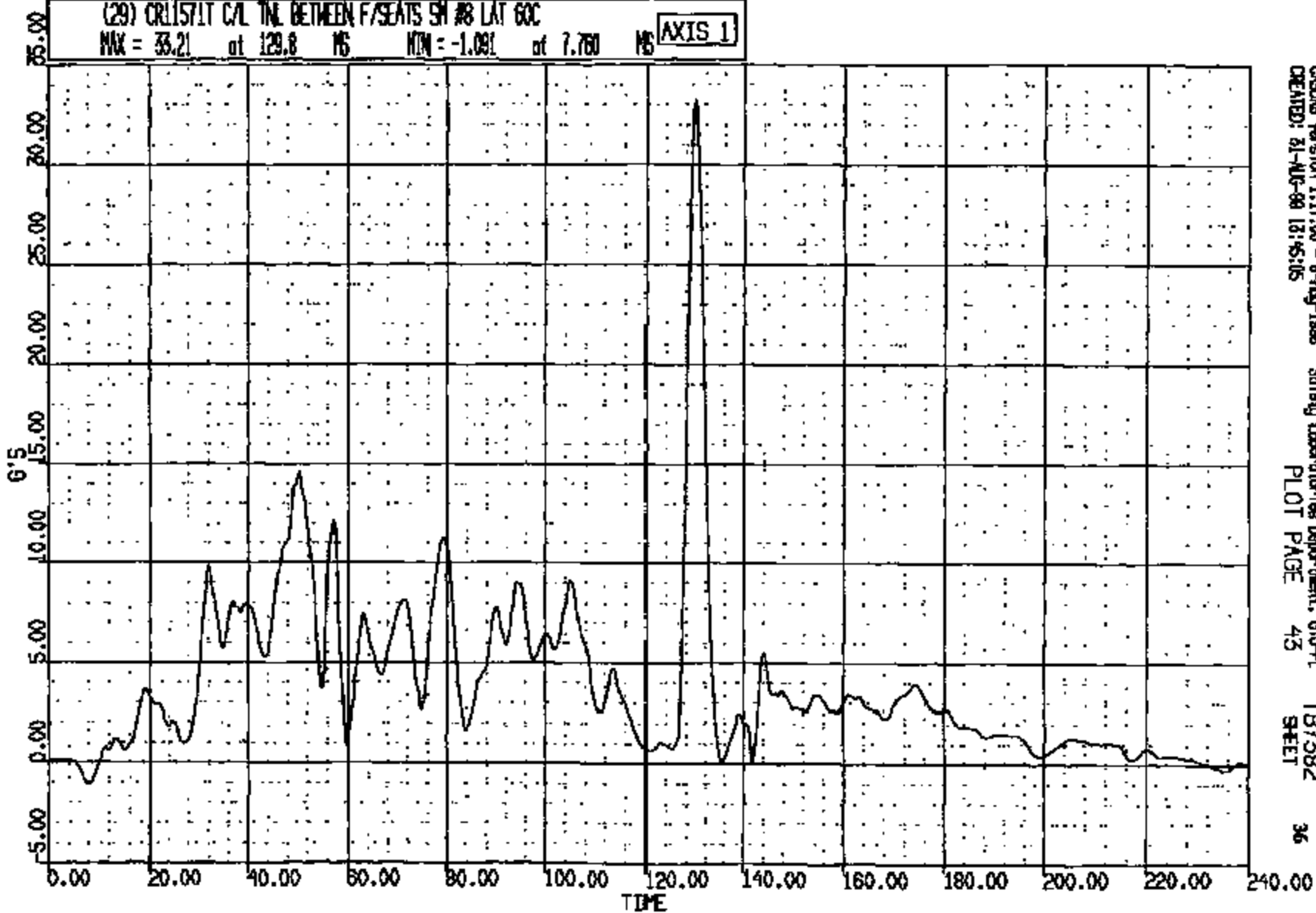
CRTS 0011571

CR R: 11571 TO: TB7382 DATE: 880831 13:21:11
2000.5 FN-145

(29) CR1571T C/L TNL BETWEEN F/SEATS SH #8 LAT 60C

MAX = 33.21 at 129.8 MS MIN = -1.081 at 7.760 MS

AXIS 1



CASIS Version 1.17.00 - 8-May-1988
CREATED: 81-AUG-88 13:45:05

Safety Laboratories Department, 610-Pl
PLOT PAGE 43

TB7382
SHEET 36

ENTIRE PAGE CONFIDENTIAL

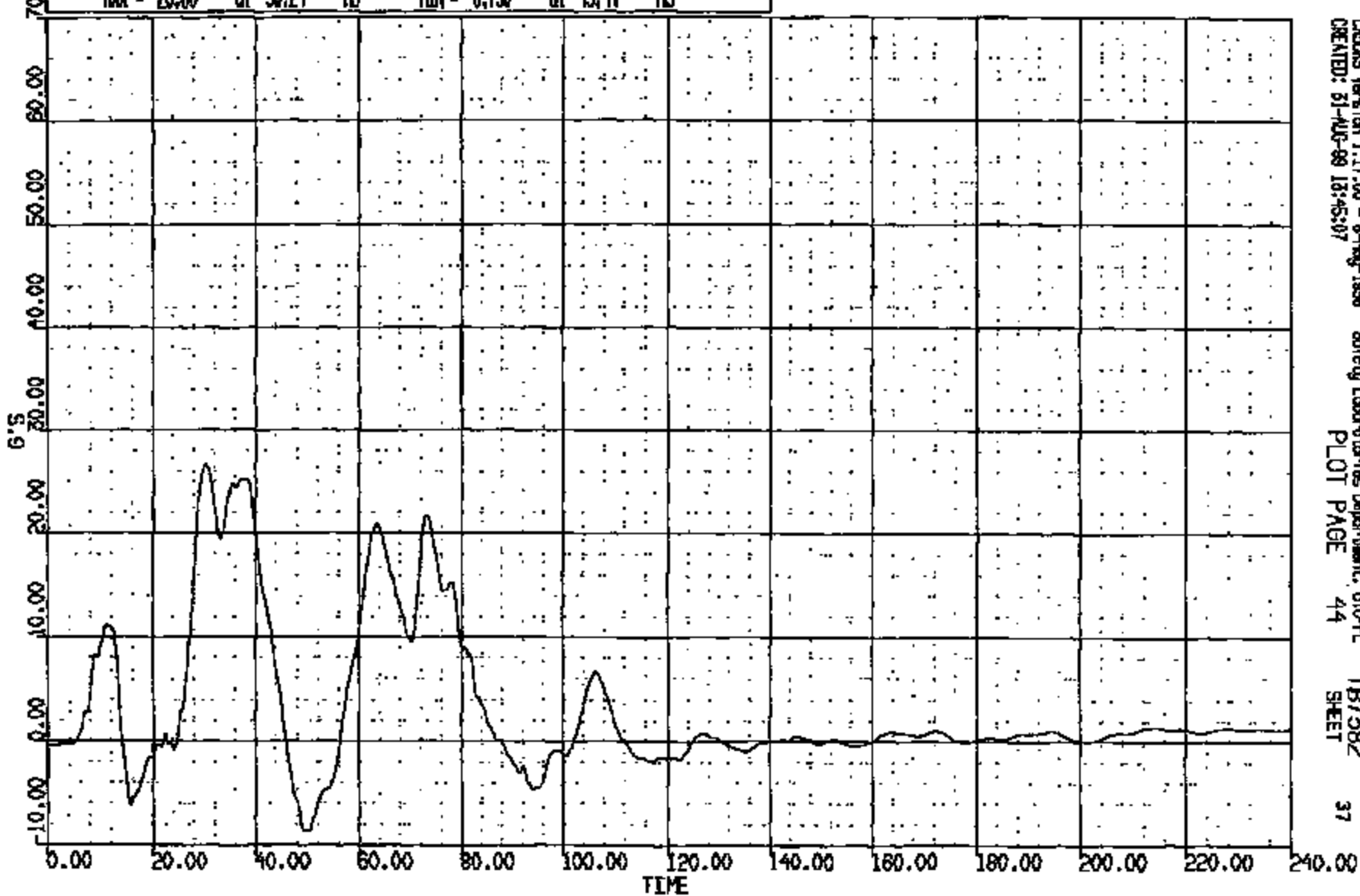
CRIS 0011571

CR R: 11571 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-145

(30) CR11571T L/B-PLR INSIDE @ ROOF LAT 60C

MAX = 26.60 at 30.24 MS MIN = -8.790 at 49.44 MS

AXIS 1



CRTS 0011571

CADDS Version 1.17.00 - 8-May-1999
CREATED: 91-AUG-99 13:45:07

Safety Laboratories Department, 610-PL
PLOT PAGE 44

TB7382
SHEET 37

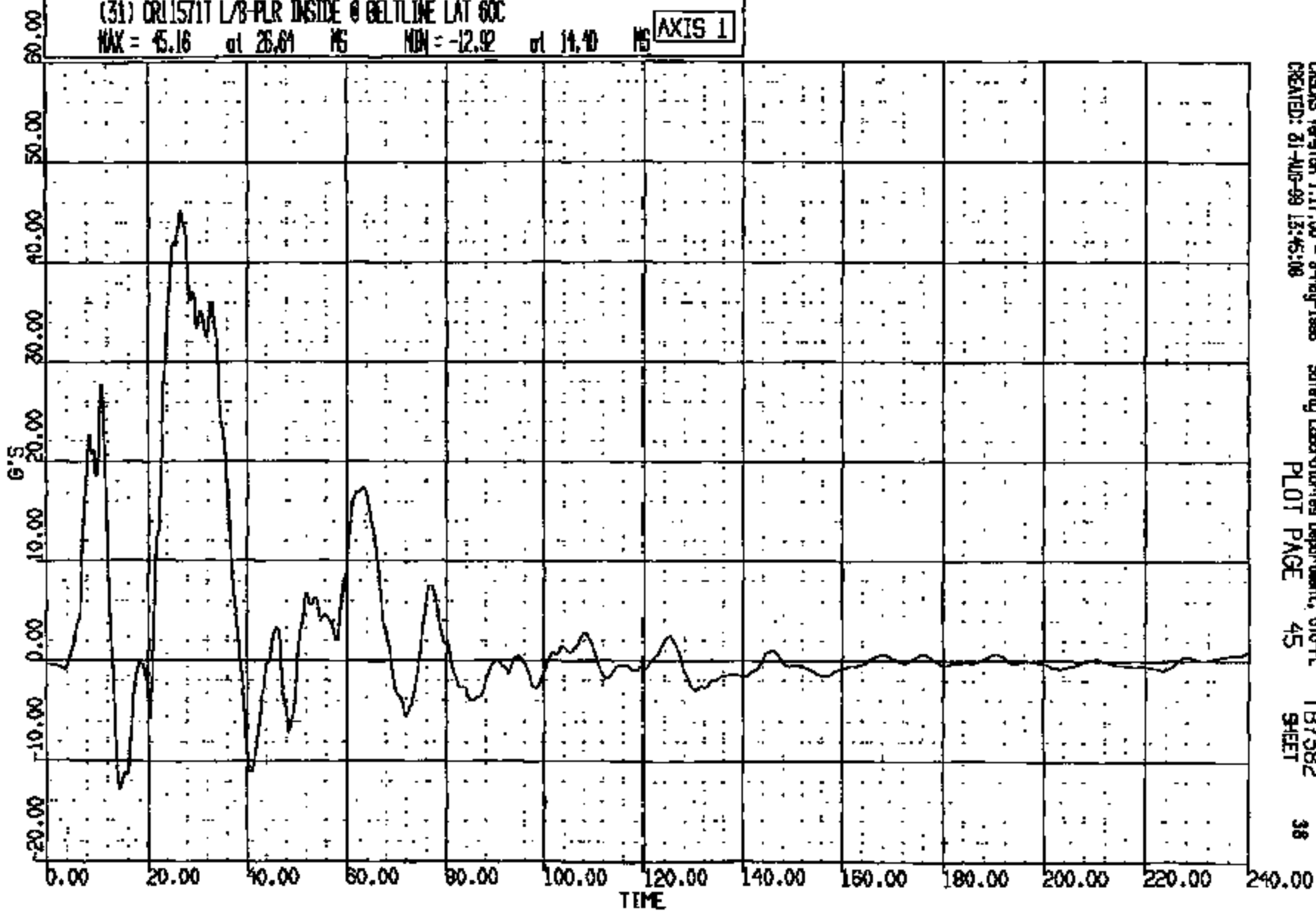
ENTIRE PAGE CONFIDENTIAL

CR R: 11571 TO: TB7382 DATE: 890831 13:21:11
2000.5 FN-145

(31) CR1571T L/B-PLR INSIDE @ BELTLINE LAT 60C

MAX = 45.16 at 26.61 MS MIN = -12.92 at 14.40 MS

AXIS 1



CASIS Version 1.17.00 - 8-May-1988
CREATED: 31-AUG-88 13:45:08

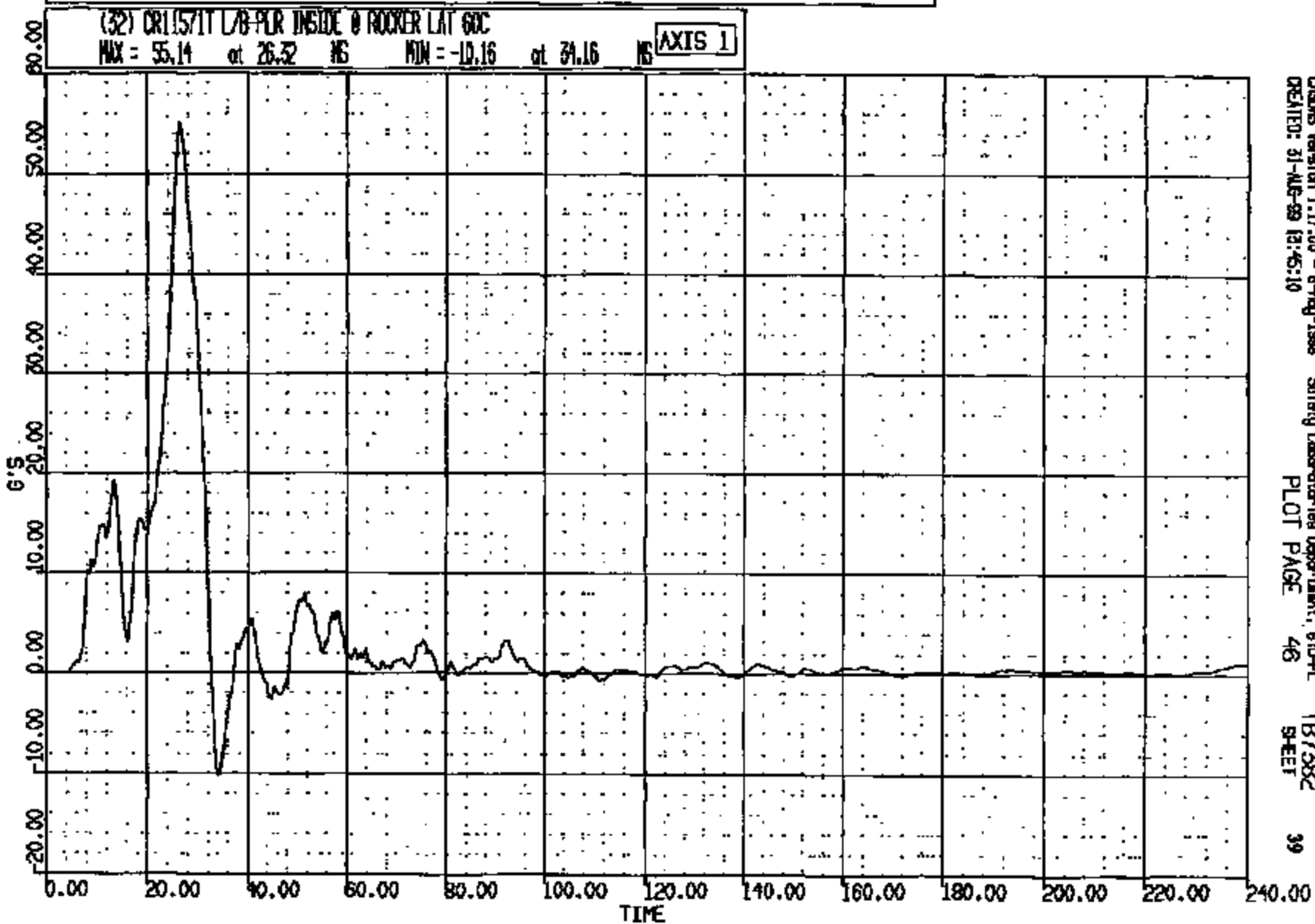
Safety Laboratories Department, 610 PL
PLOT PAGE 45

TB7382
SHEET 38

ENTIRE PAGE CONFIDENTIAL

CRTS 0011571

CR R: 11571 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-145



CASMS Version 1.17.00 - 8-May-1998
CREATED: 31-AUG-99 12:45:10

Safety Laboratories Department, STD-PL
PLOT PAGE 46

TB7382
SHEET 39

ENTIRE PAGE CONFIDENTIAL

CRIS 0011571

CR R: 11571 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-145

(33) CRT11571 L/R DOOR @ BELTLINE MID LAT 60C

MAX = 24.09 at 30.72 MS MIN = -5.489 at 76.88 MS

AXIS 1



CASIMS Version 1.17.00 - 8-Aug-1998
CREATED: 31-AUG-99 13:45:11

Safety Laboratories Department, GPO-PL
PLOT PAGE 47

TB7382
SHEET 40

ENTIRE PAGE CONFIDENTIAL

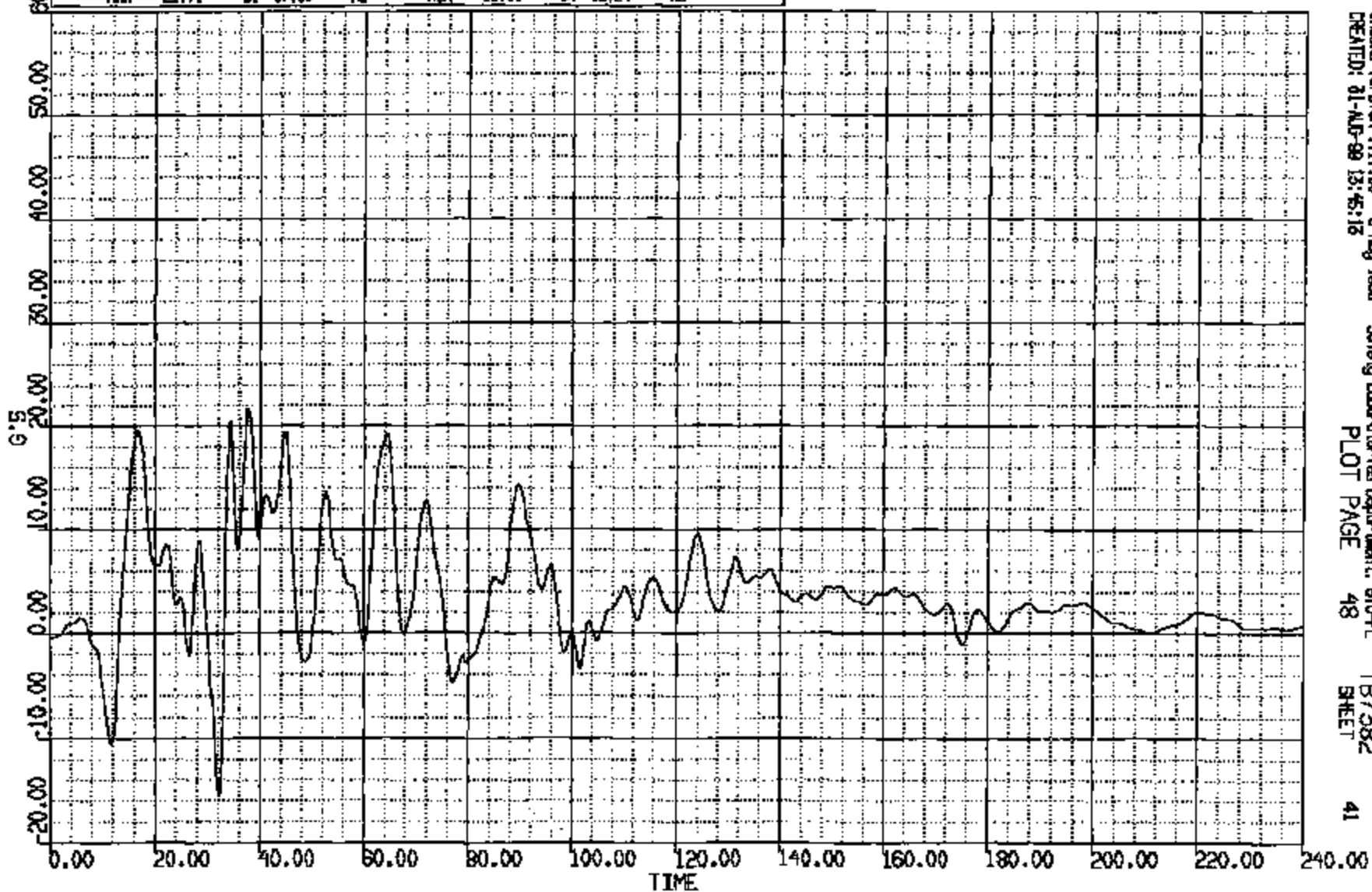
CRTS 0011571

CR R: 11571 TO: T87382 DATE: 990831 13:21:11
2000-5 FN-145

(34) CR11571 L/R DOOR OVER ARREST LAT 60C

MAX = 21.71 at 37.68 MS MIN = -15.51 at 32.24 MS

AXIS 1



CRTS 0011571

CASMS Version 1.17.00 - 8-Aug-1999
CREATED: 01-AUG-99 13:45:12

Safety Laboratories Department, G10-PL
PLOT PAGE 48

T87382
SHEET 41

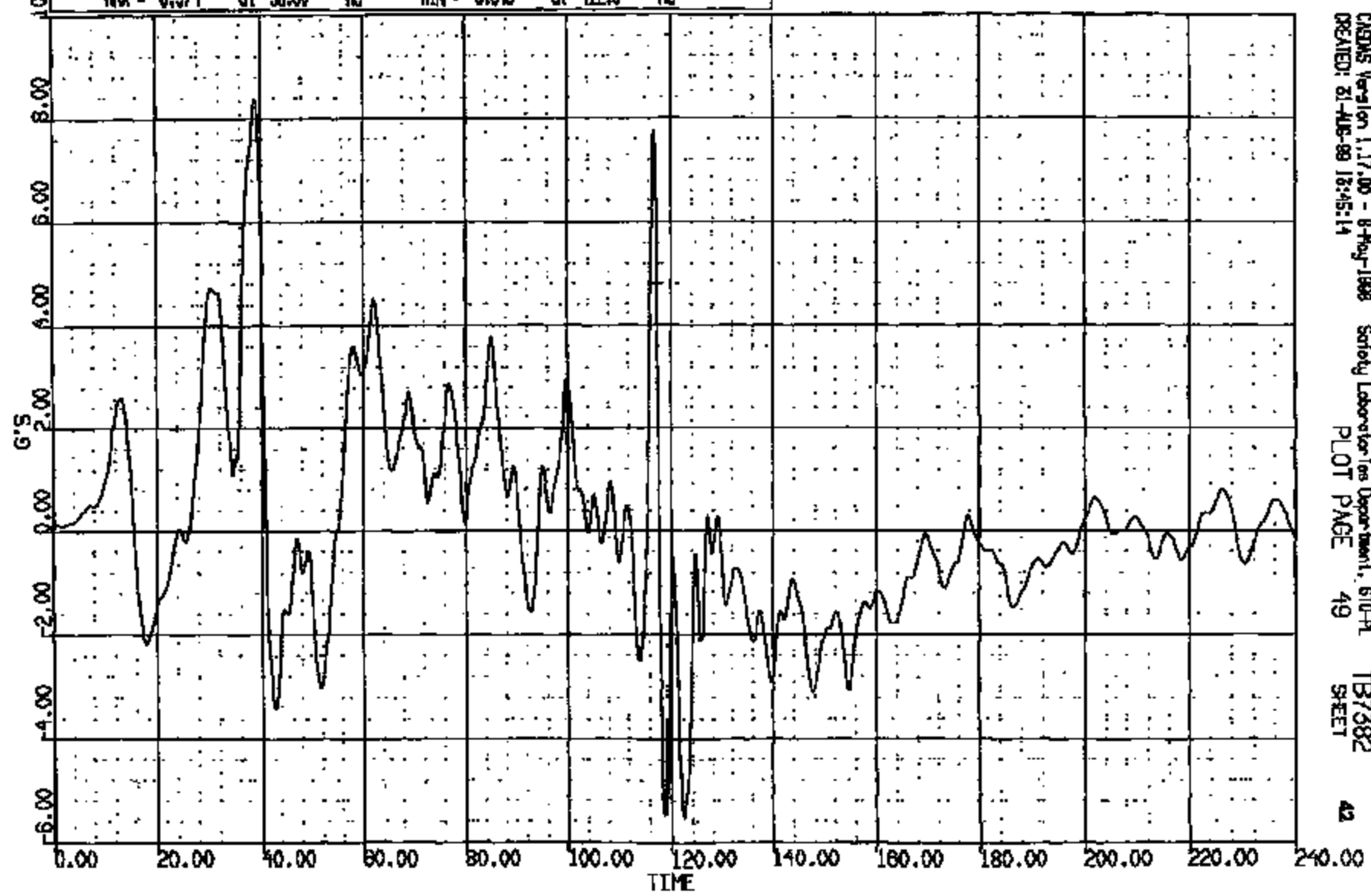
ENTIRE PAGE CONFIDENTIAL

CR R: 11571 TO: T87382 DATE: 990831 13:21:11
2000.5 FN-145

(35) CR11571 L/TANK NEXT TO FUEL INERTIA SN LONG 60C

MAX = 8.374 at 38.80 MS MIN = -5.549 at 122.3 MS

AXIS 1

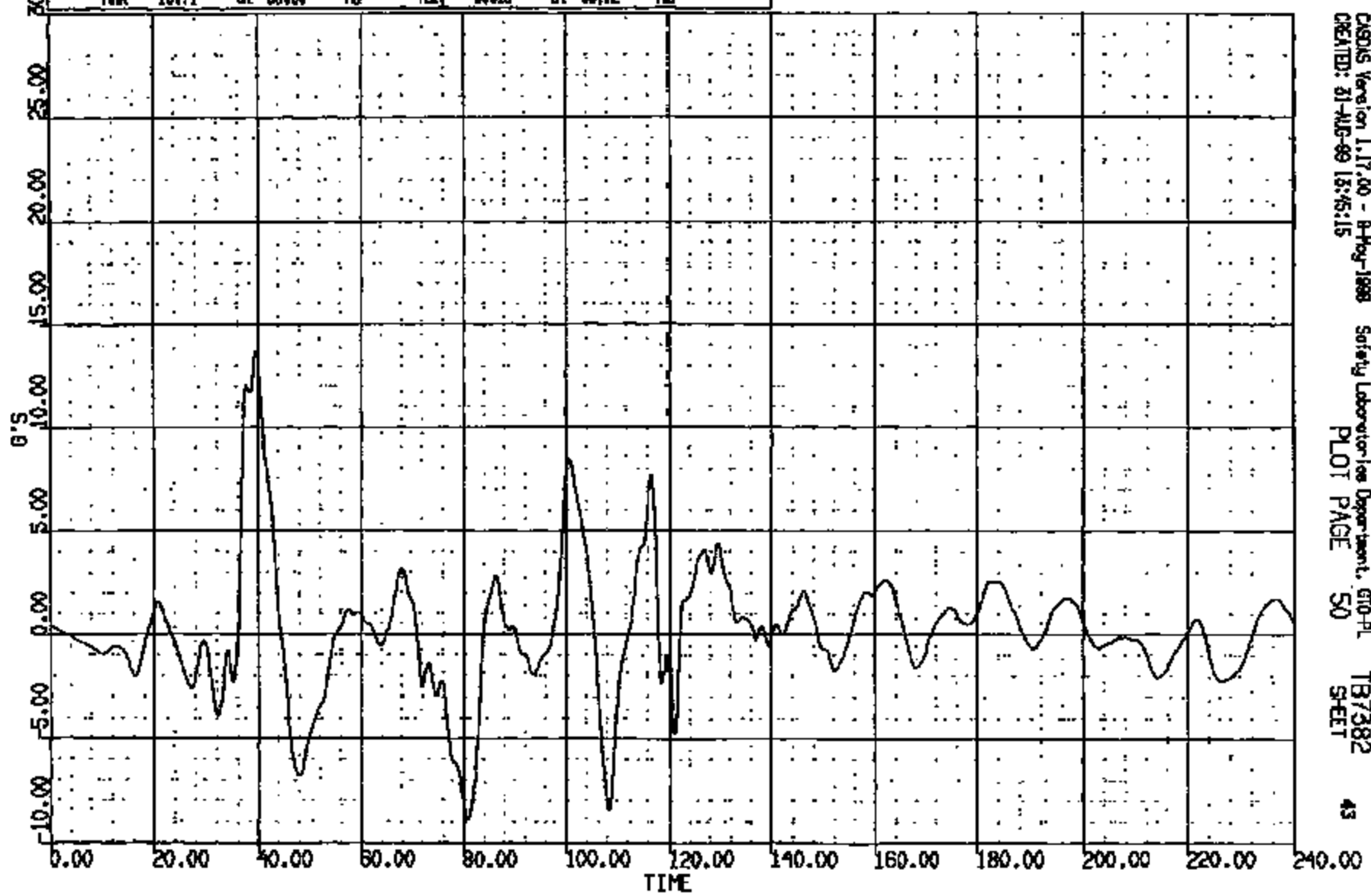


CR R: 11571 TO: TB7382 DATE: 990881 15:21:11
2000.5 FZ-143

(36) OR11571 L/THK NEXT TO FUEL INERTIA SW VERT 60C

MAX = 13.71 at 39.60 MS MIN = -8.915 at 90.72 MS

AXIS 1



CASDS Version 1.17.00 - 8-May-1988
CREATED: 31-AUG-89 15:45:15

Safety Laboratories Department, GPO-PL
PLOT PAGE 50

TB7382
SHEET

43

ENTIRE PAGE CONFIDENTIAL

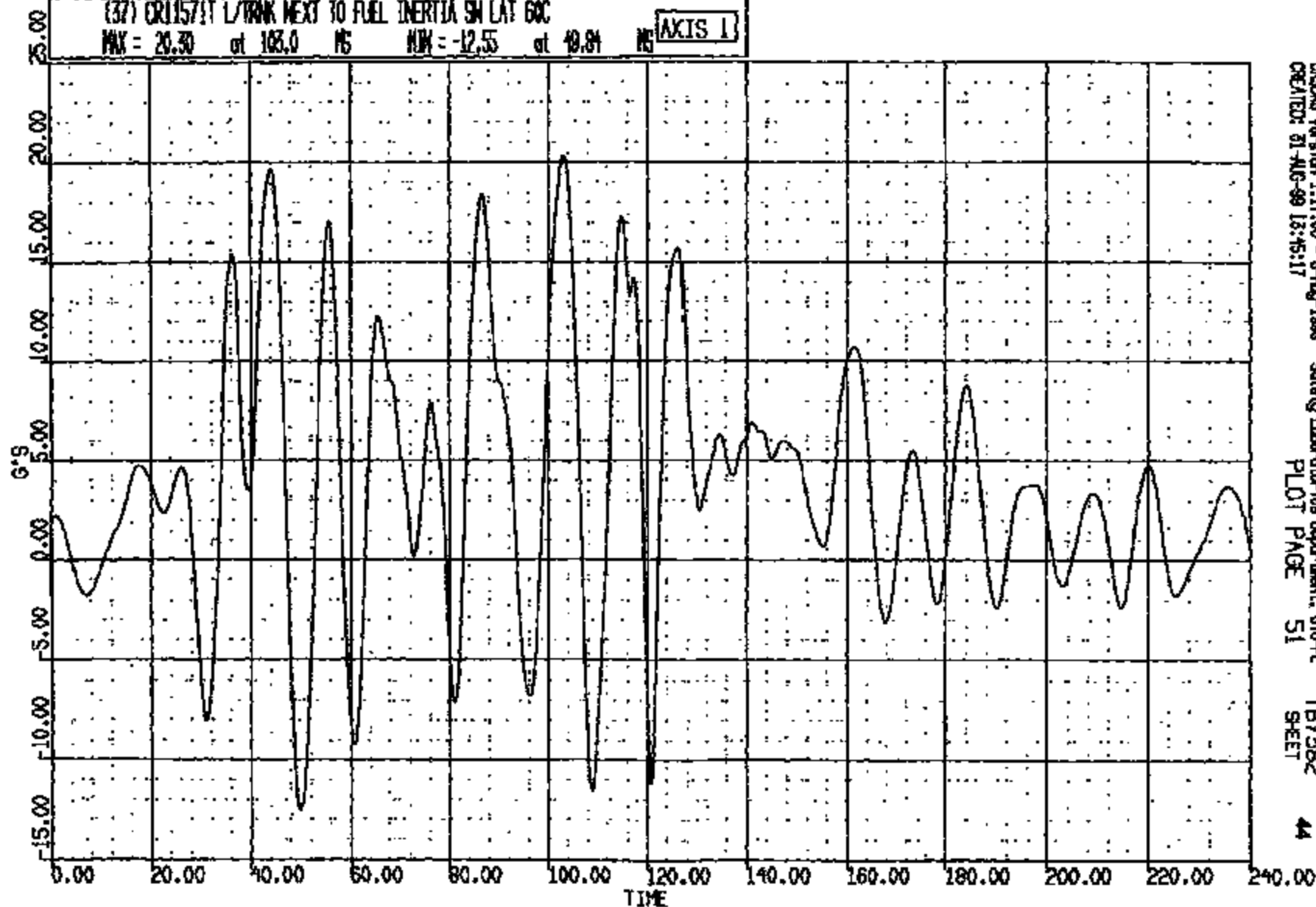
CRTS 0011571

CR R: 11571 TO: TB7382 DATE: 090831 13:21:11
2000.5 FN-145

(37) CR11571 L/TRNK NEXT TO FUEL INERTIA SM LAT 60C

MAX = 20.30 at 103.0 MS MIN = -12.55 at 10.84 MS

AXIS 1



CASDS Version 1.17.00 - 8-May-1998
CREATED: 31-AUG-99 13:45:17

Safety Laboratory Department, 510-PL
PLOT PAGE 51

TB7382
SHEET 44

ENTIRE PAGE CONFIDENTIAL

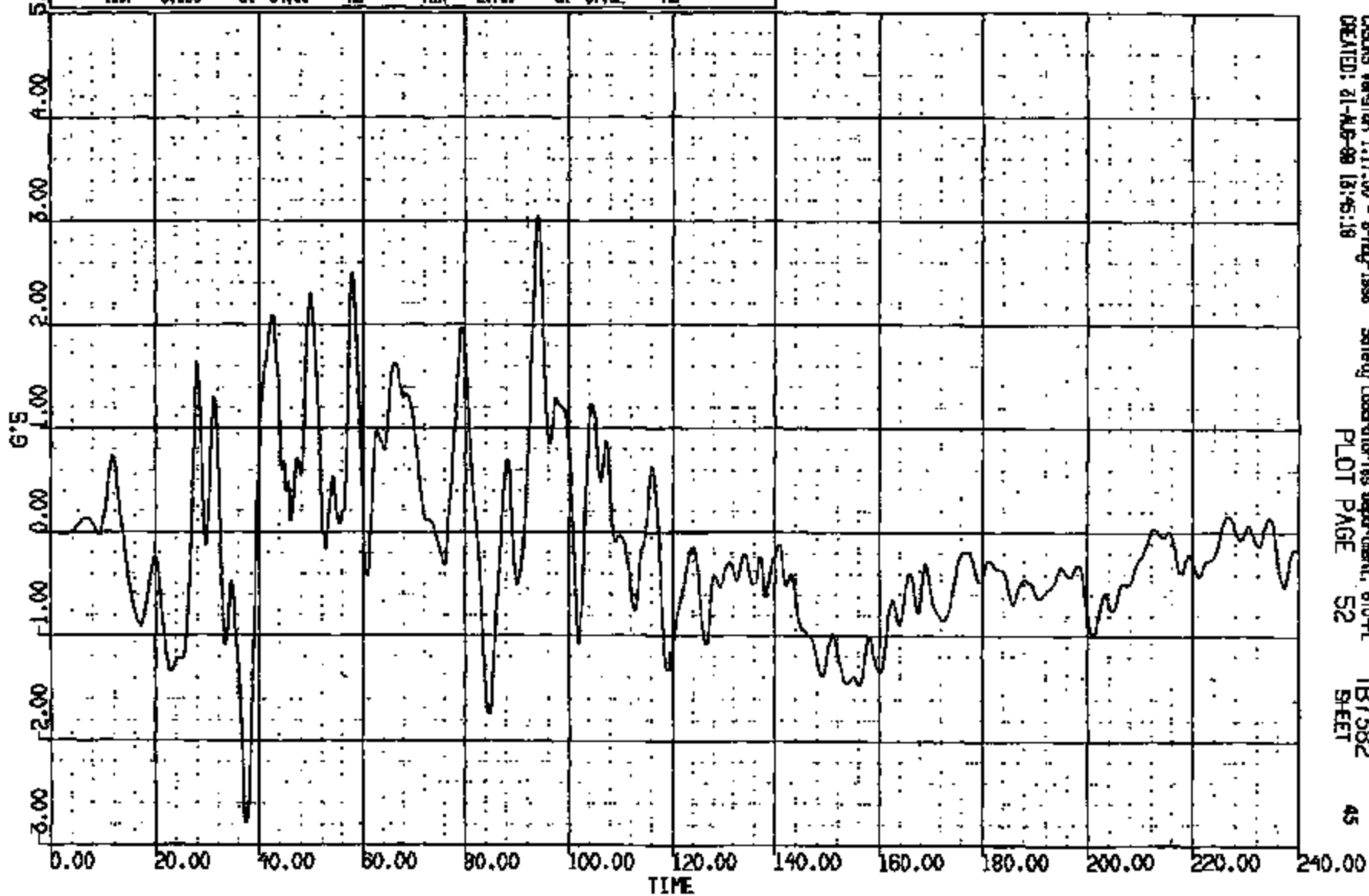
CRIS 0011571

CR R: 11571 TO: T87382 DATE: 990831 15:21:11
2000.5 FN-145

(38) CR11571T R/A-PLR IN @ RCR BKT #13 LONG SOC

MAX = 3.056 at 94.00 MS MIN = -2.790 at 37.52 MS

AXIS 1



CASMS Version 1.17.00 - 8-May-1998
CREATED: 21-AUG-98 13:45:18

Safety Laboratories Department, 610-PL
PLOT PAGE 52

T87382
SHEET

45

ENTIRE PAGE CONFIDENTIAL.

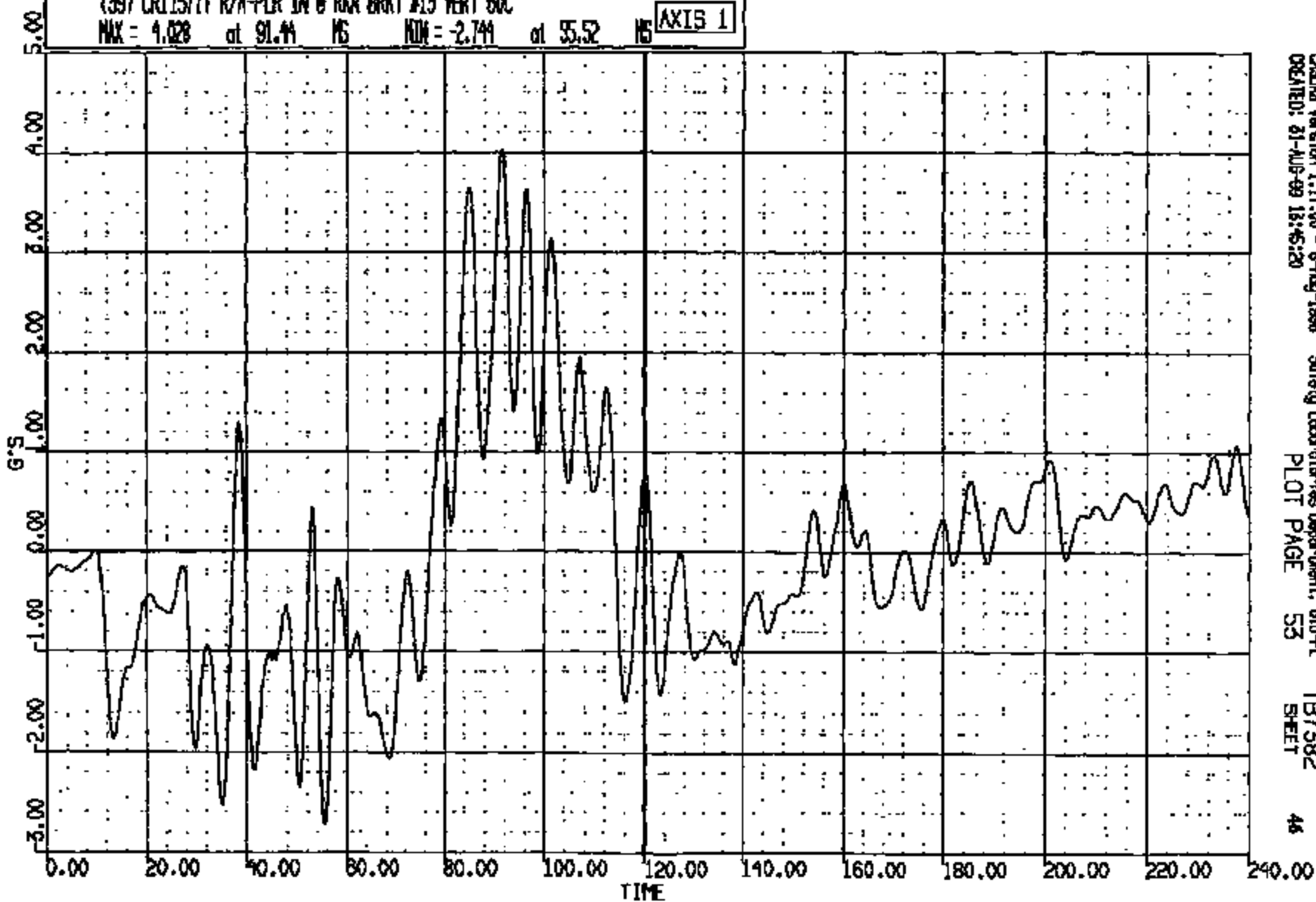
CRIS 0011571

CR R: 11571 TO: T87582 DATE: 080821 13:21:11
2000.S FN-145

(39) CR11571T R/A-PLR IN @ ROR BORT #13 VERT GOC

MAX = 4.028 at 91.44 MS MIN = -2.744 at 55.52 MS

AXIS 1



CASMS Version 1.17.00 - 8-May-1998
CREATED: 21-AUG-99 13:45:20

Safety Laboratories Department, 610-PL
PLOT PAGE 53

T87582
SHEET

46

ENTIRE PAGE CONFIDENTIAL

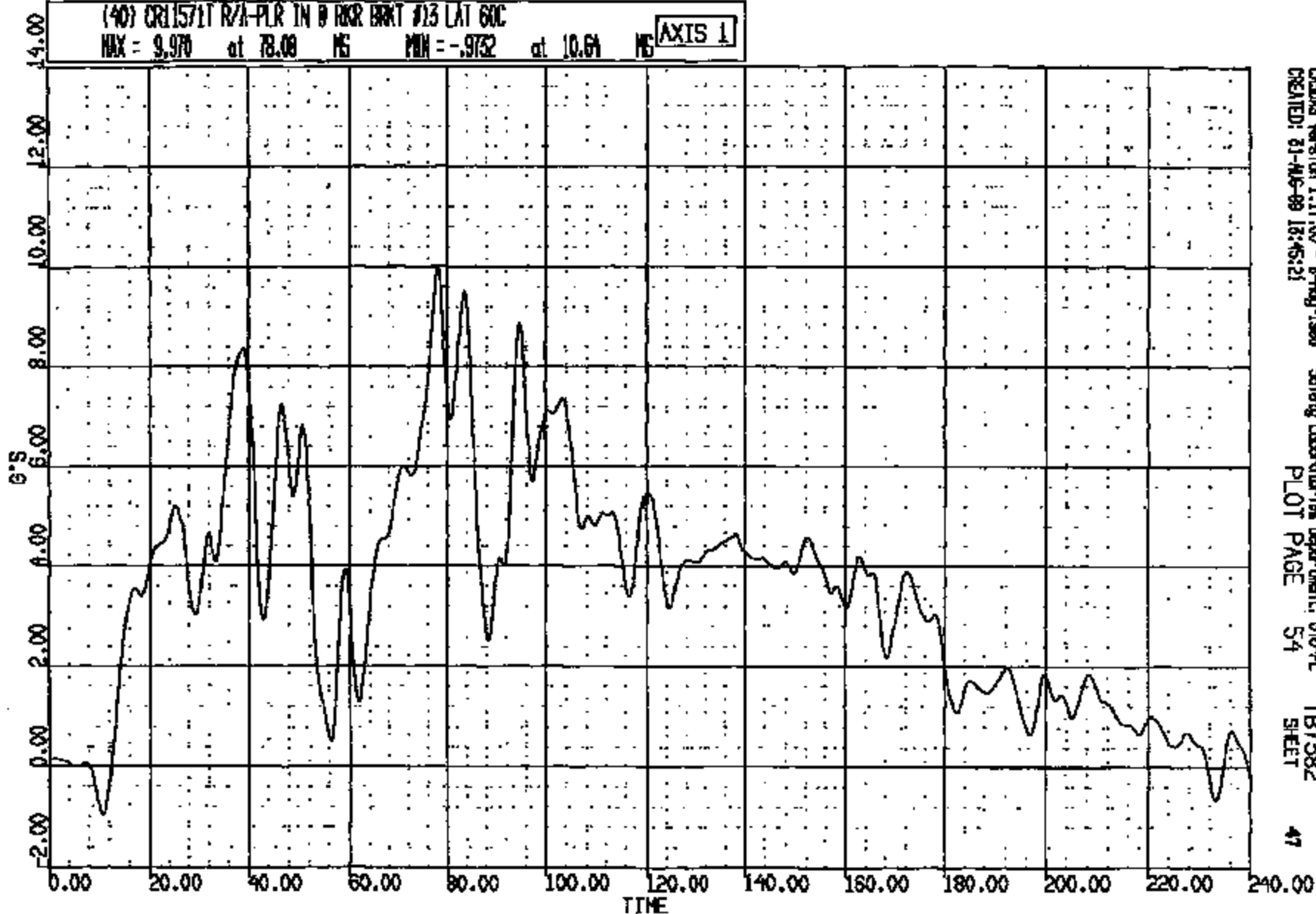
CRTS 0011571

CR R: 11571 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-148

(40) CR11571T R/A-PLR IN @ ROR BRKT #13 LAT 60C

MAX = 9.970 at 78.08 MS MIN = -9.932 at 10.64 MS

AXIS 1



CRIS 0011571

CASIS Version 1.17.00 - 8-May-1998
CREATED: 81-MAY-99 13:45:21

Safety Laboratories Department, 610 PL
PLOT PAGE 54

TB7382
SHEET 47

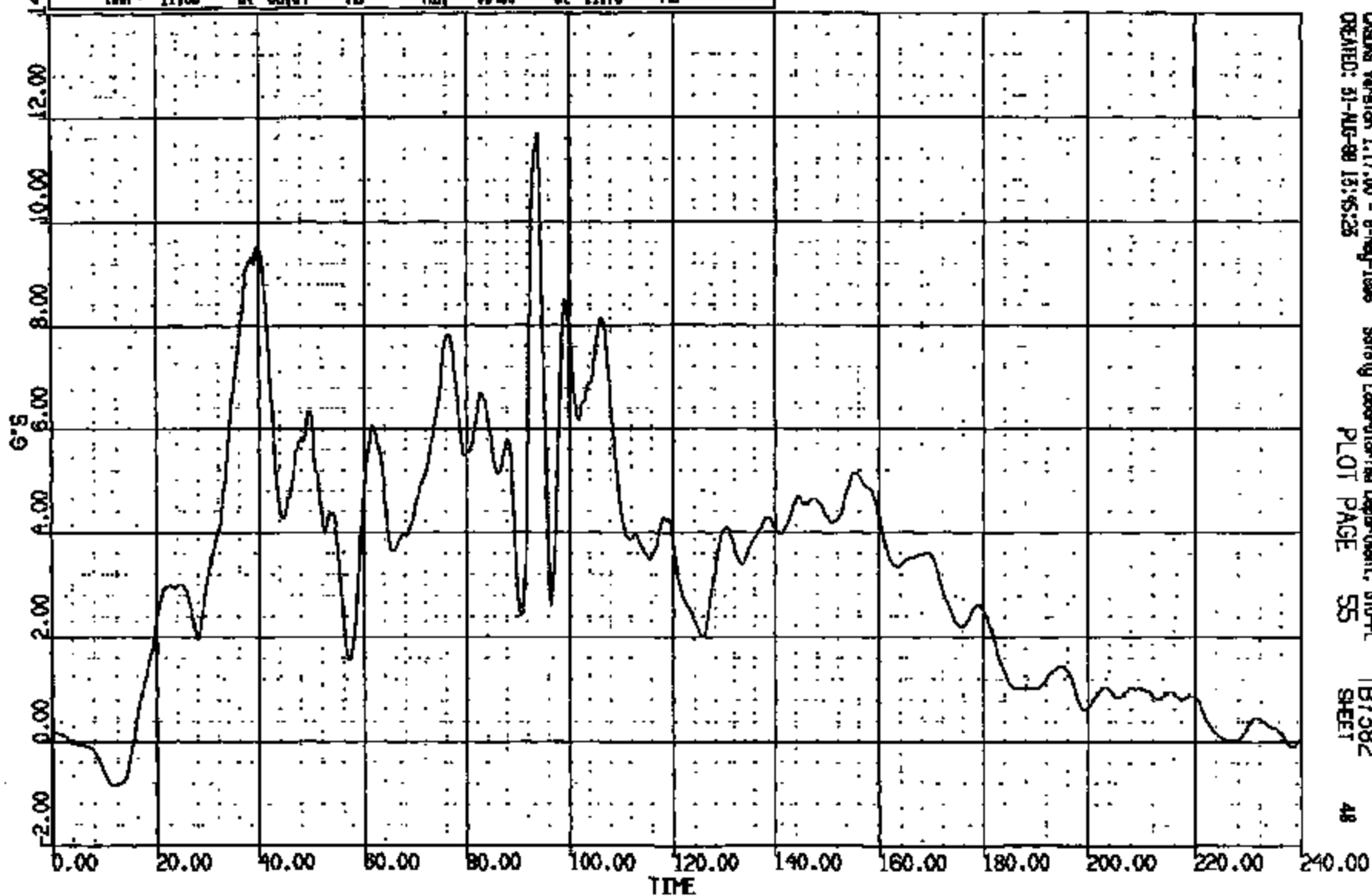
ENTIRE PAGE CONFIDENTIAL

CR R: 11571 TO: TB7382 DATE: 990851 15:21:11
2000.5 FN-145

(41) CR11571T R/B-PLR IN @ ROR SA #14 LAT 60C

MAX = 11.69 at 93.84 MS MIN = -0.8408 at 11.76 MS

AXIS 1



CRIS 0011571

CADDS Version 1.17.00 - 8-May-1999
CREATED: 91-AUG-89 15:45:25

Safety Laboratory Department, GPO-PL
PLOT PAGE 55

TB7382
SHEET 48

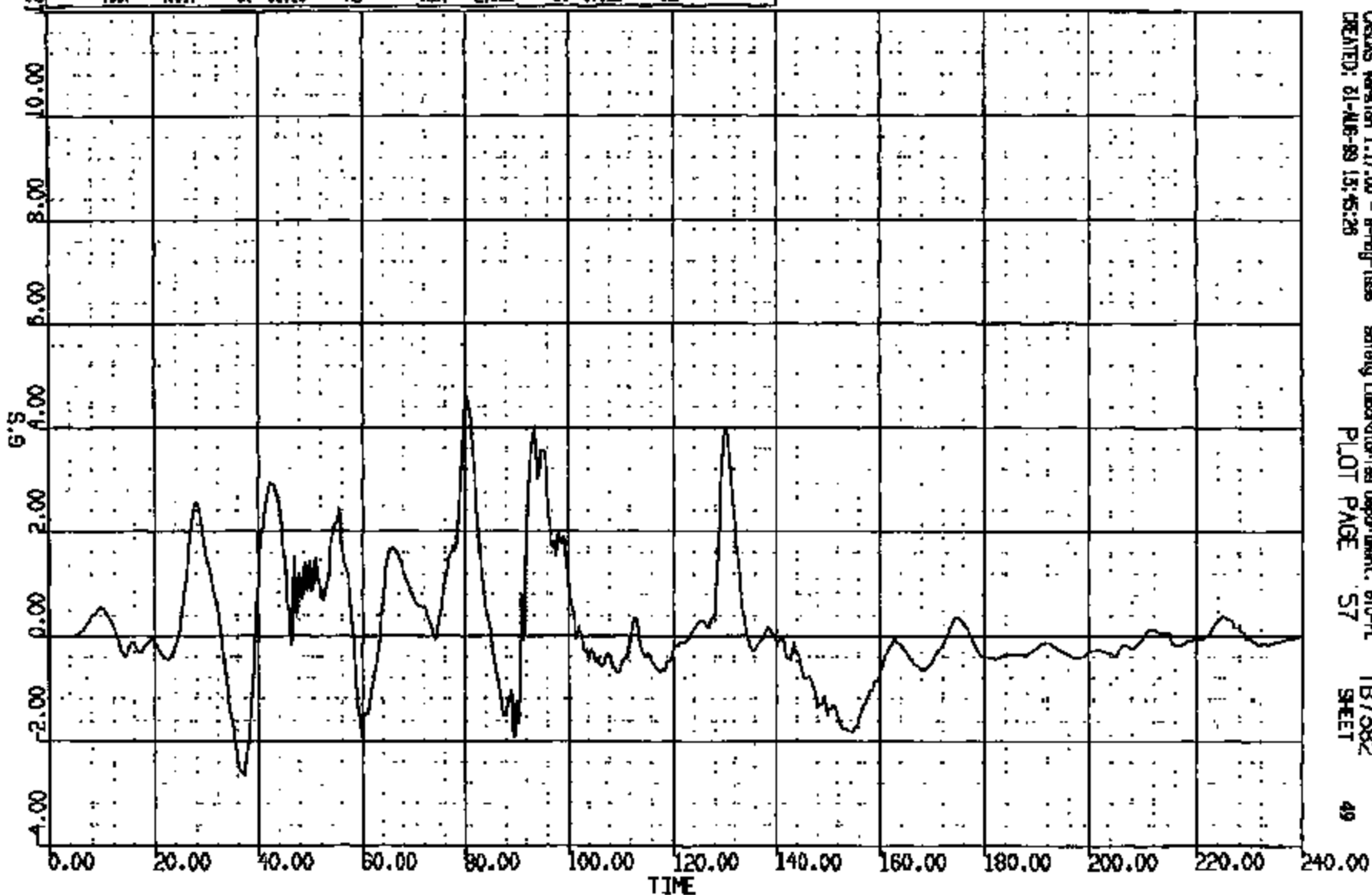
ENTIRE PAGE CONFIDENTIAL

CR R: 11571 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-145

(43) CRL1571T RFLRPN @ #2 XMR CTR #10 LONG 60C

MAX = 4.617 at 80.16 MS MIN = -2.652 at 37.12 MS

AXIS 1



CASOS Version 1.17.00 - 8-May-1998
CREATED: 81-MAR-99 13:45:28

Safety Laboratories Department, 610-PL
PLOT PAGE 57

TB7382
SHEET 49

ENTIRE PAGE CONFIDENTIAL

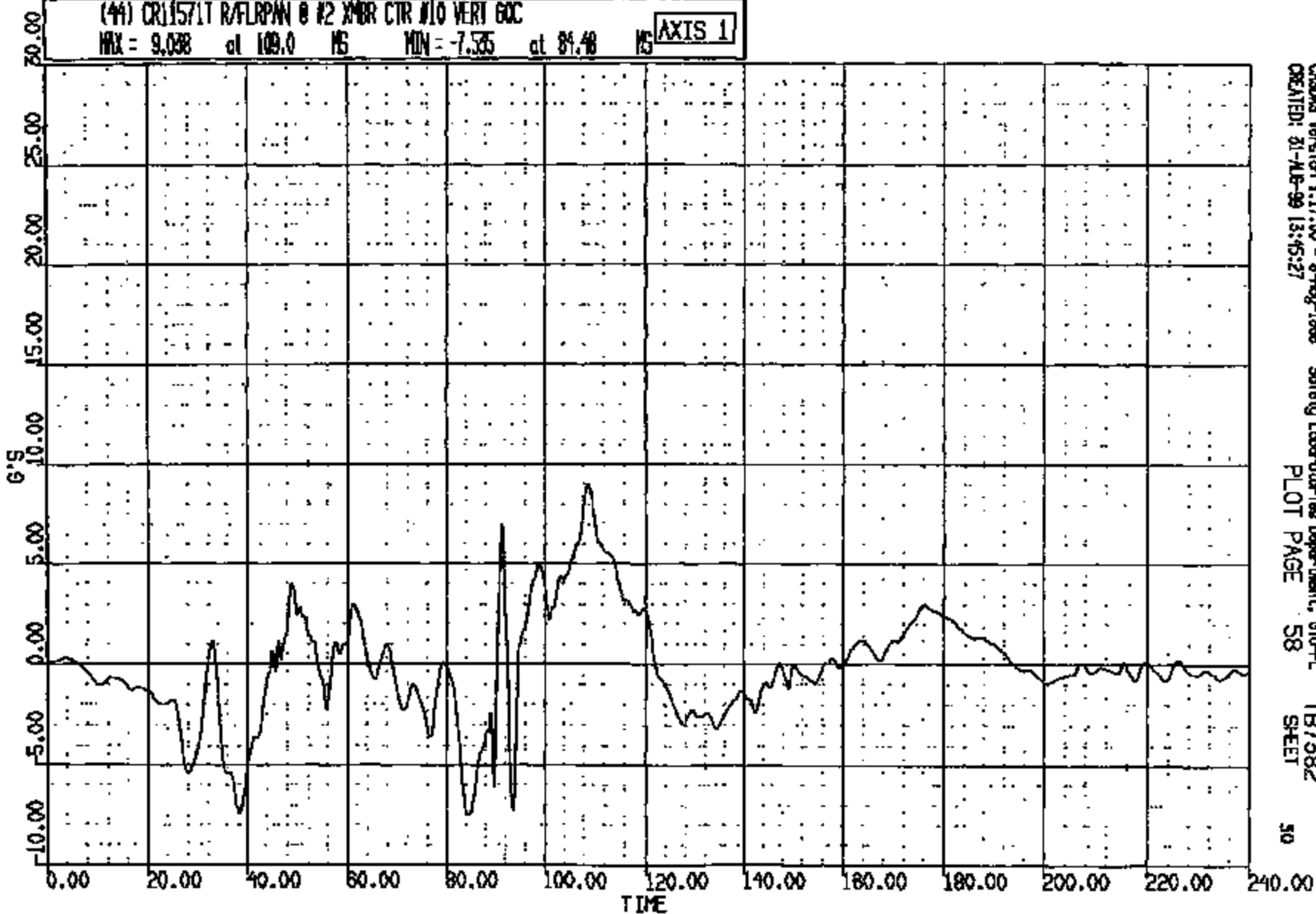
CRTS 0011571

CR R: 11571 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-145

(44) CR11571T R/FLRPM @ #2 XMR CTR #10 VERT GOC

MAX = 9.038 at 109.0 MS MIN = -7.535 at 84.48 MS

AXIS 1



CRIS 0011571

CHSWS Version 1.17.00 - 8-May-1998
CREATED: 31-AUG-99 13:45:27

Safety Laboratories Department, GTO-PL
PLOT PAGE 58

TB7382
SHEET 50

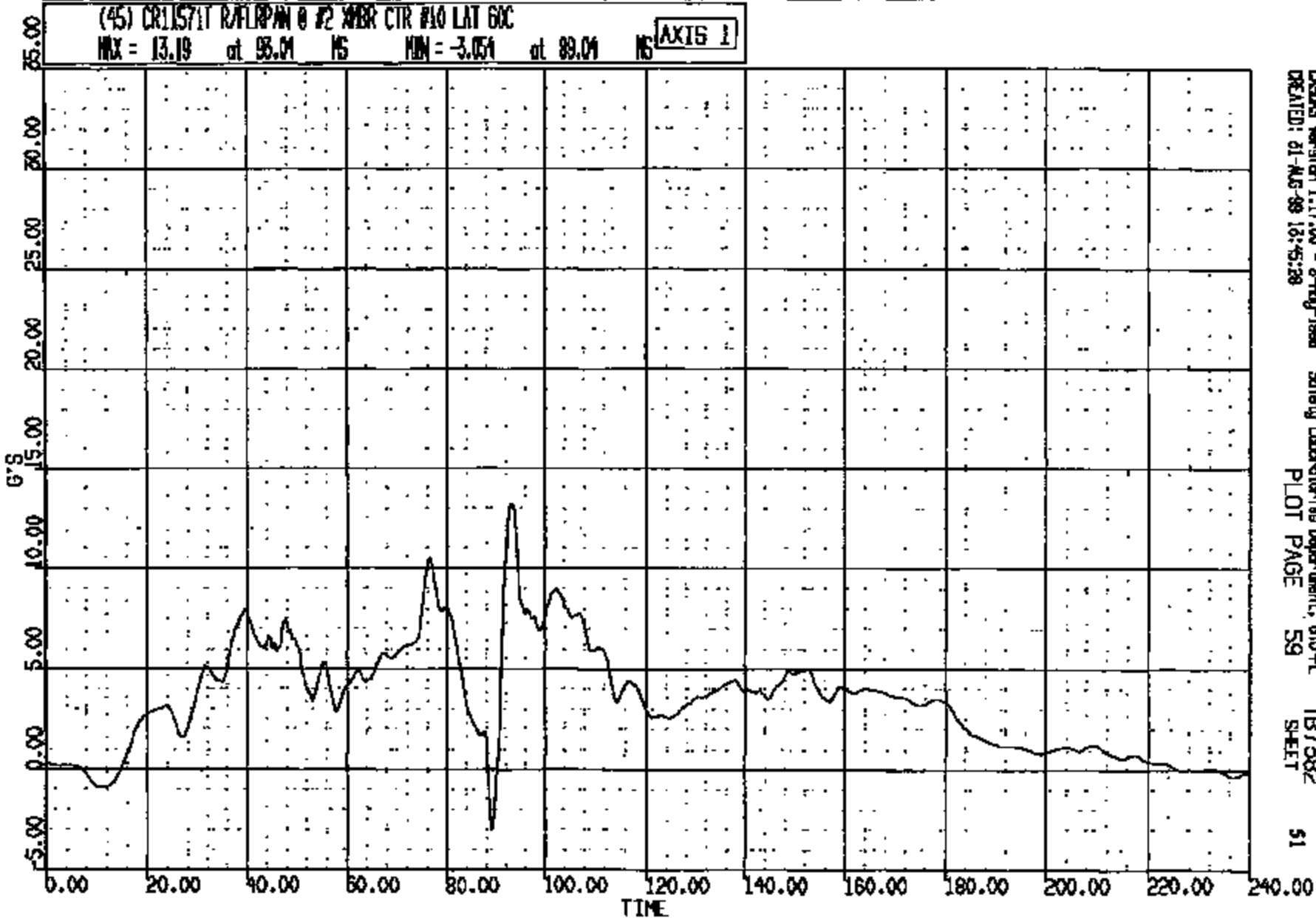
ENTIRE PAGE CONFIDENTIAL

CR R: 11571 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-145

(45) CR11571T RFLRPM #2 XMR CTR #10 LAT 60C

MAX = 13.19 at 93.01 MS MIN = -3.054 at 89.01 MS

AXIS 1



CRIS 0011571

CADMS Version 1.17.00 - 8-May-1998
CREATED: 31-AUG-99 13:45:28

Safety Laboratory Department, 610-PL
PLOT PAGE 59

TB7382
SHEET

51

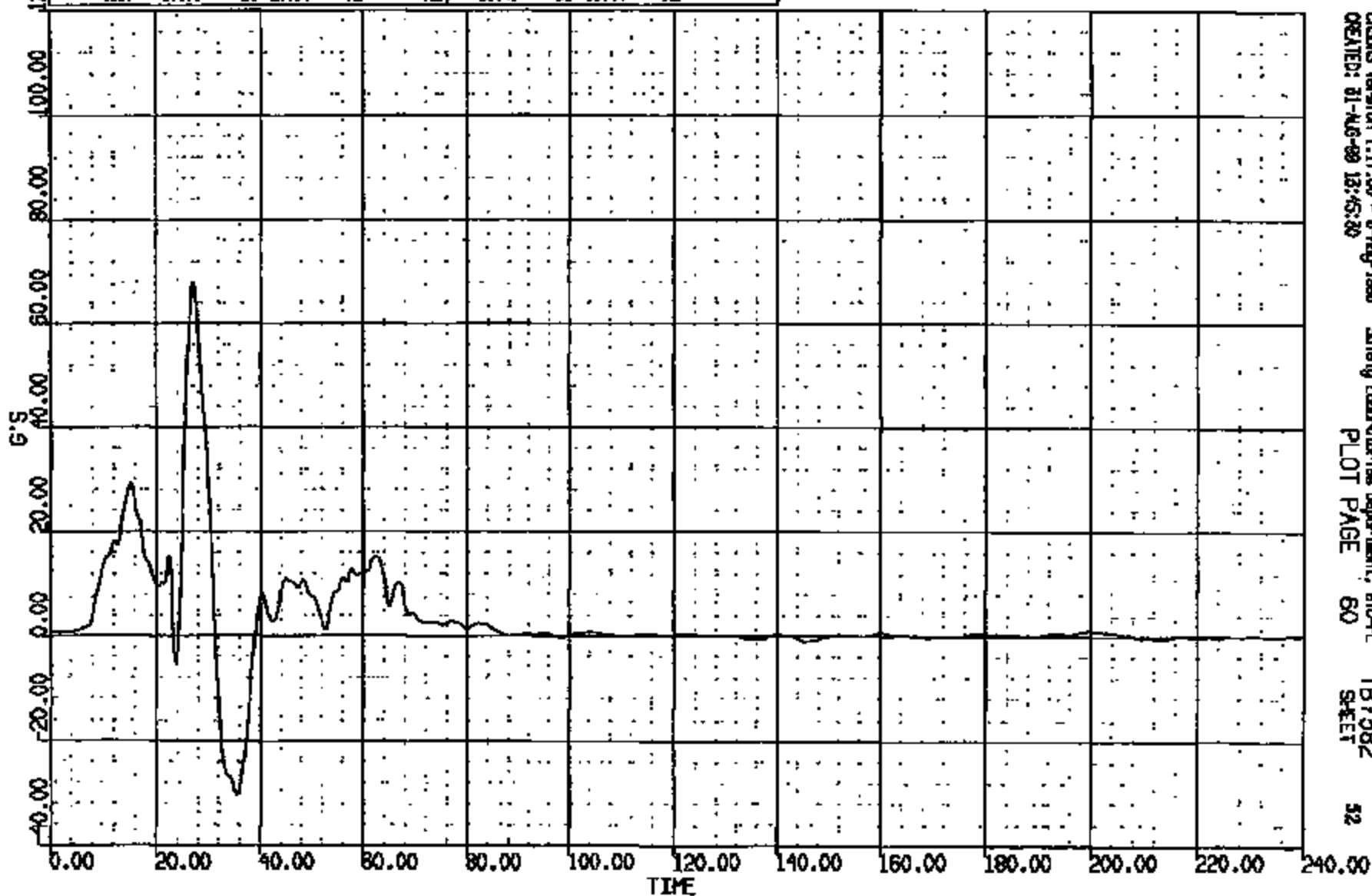
ENTIRE PAGE CONFIDENTIAL

CR R: 11571 TO: TB7382 DATE: 990831 15:21:11
2000.5 FN-145

(46) CR11571T L/ROCKER @ FRONT SEAT MID LAT 80C

MAX = 67.76 at 27.04 MS MIN = -30.49 at 35.44 MS

AXIS 1



CADDS Version 1.17.00 - 8-May-1998
CREATED: 31-AUG-99 12:45:30

Safety Laboratories Department, 810-PL
PLOT PAGE 60

TB7382
SHEET 52

ENTIRE PAGE CONFIDENTIAL

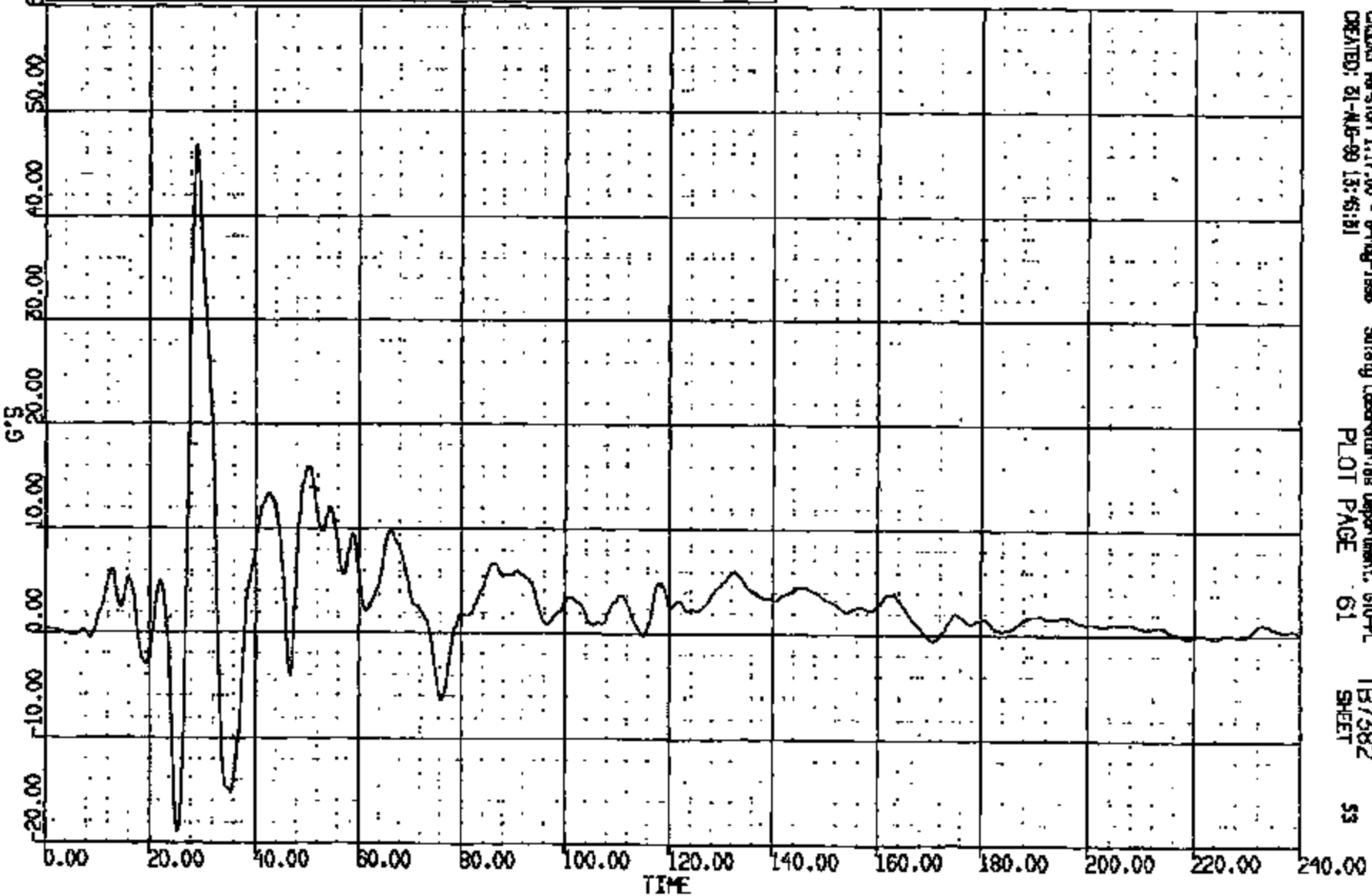
CRIS 0011571

CR R: 11671 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-145

(47) CR11571T L/ROCKER @ REAR SEAT MID LAT 60C

MAX = 46.67 at 28.96 MS MIN = -18.99 at 25.52 MS

AXIS 1



CASAS Version 1.17.00 - 8-May-1998
CREATED: 81-MAY-99 13:45:31

Safety Laboratories Department, GPO-PL
PLOT PAGE 61

TB7382
SHEET 53

ENTIRE PAGE CONFIDENTIAL

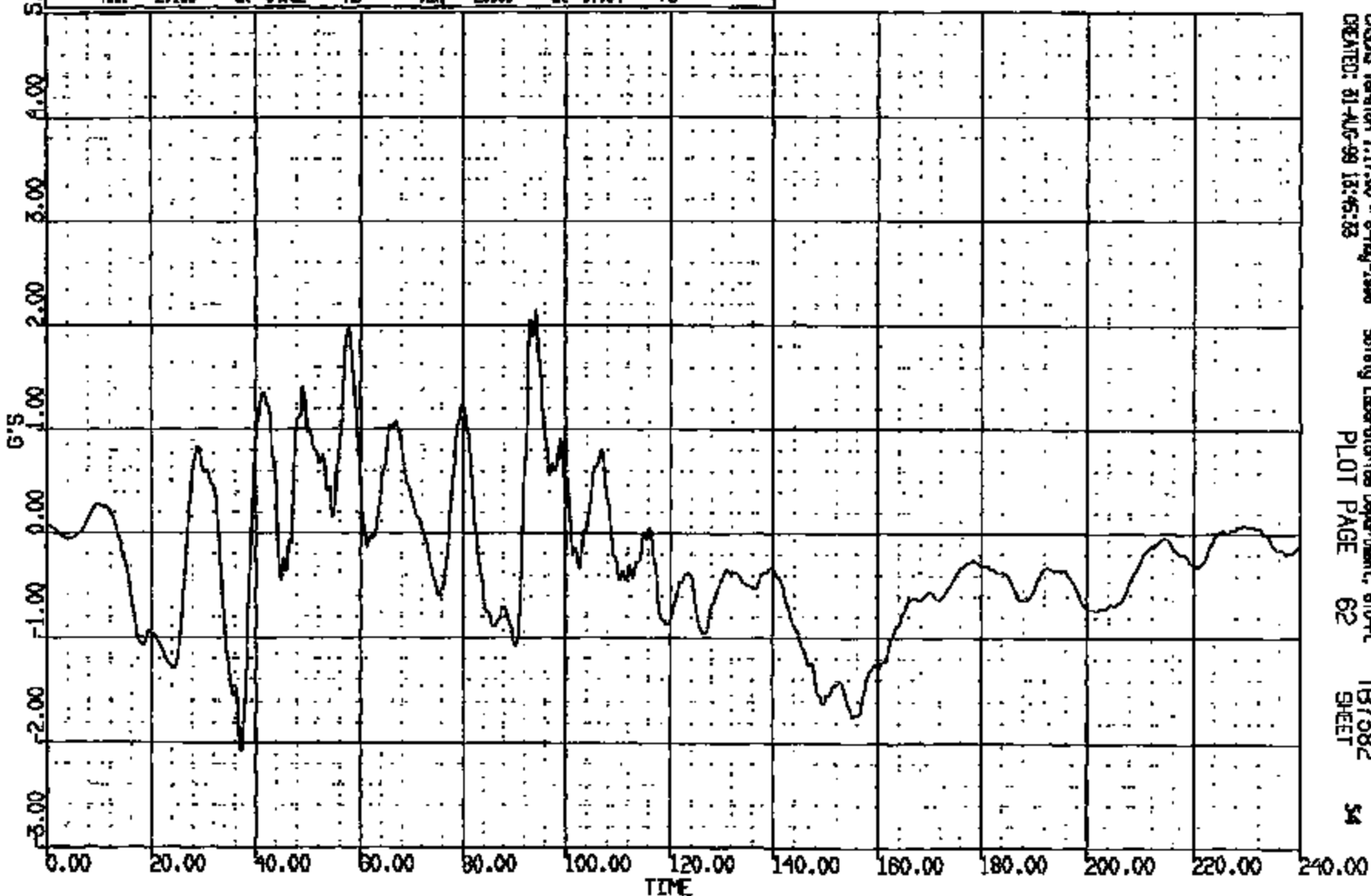
CRIS 0011571

CR R: 11571 TD: TB7382 DATE: 090821 13:21:11
2000.S FN-145

(48) CR11571T R/ROCKER @ FRONT SEAT ROD LONG 60C

MAX = 2.139 at 94.32 MS MIN = -2.095 at 37.04 MS

AXIS 1



CRSIS Version 1.17.00 - 8-May-1998
CREATED: 01-AUG-99 13:45:33

Safety Laboratories Department, 610-PL
PLOT PAGE 62

TB7382
SHEET 54

ENTIRE PAGE CONFIDENTIAL

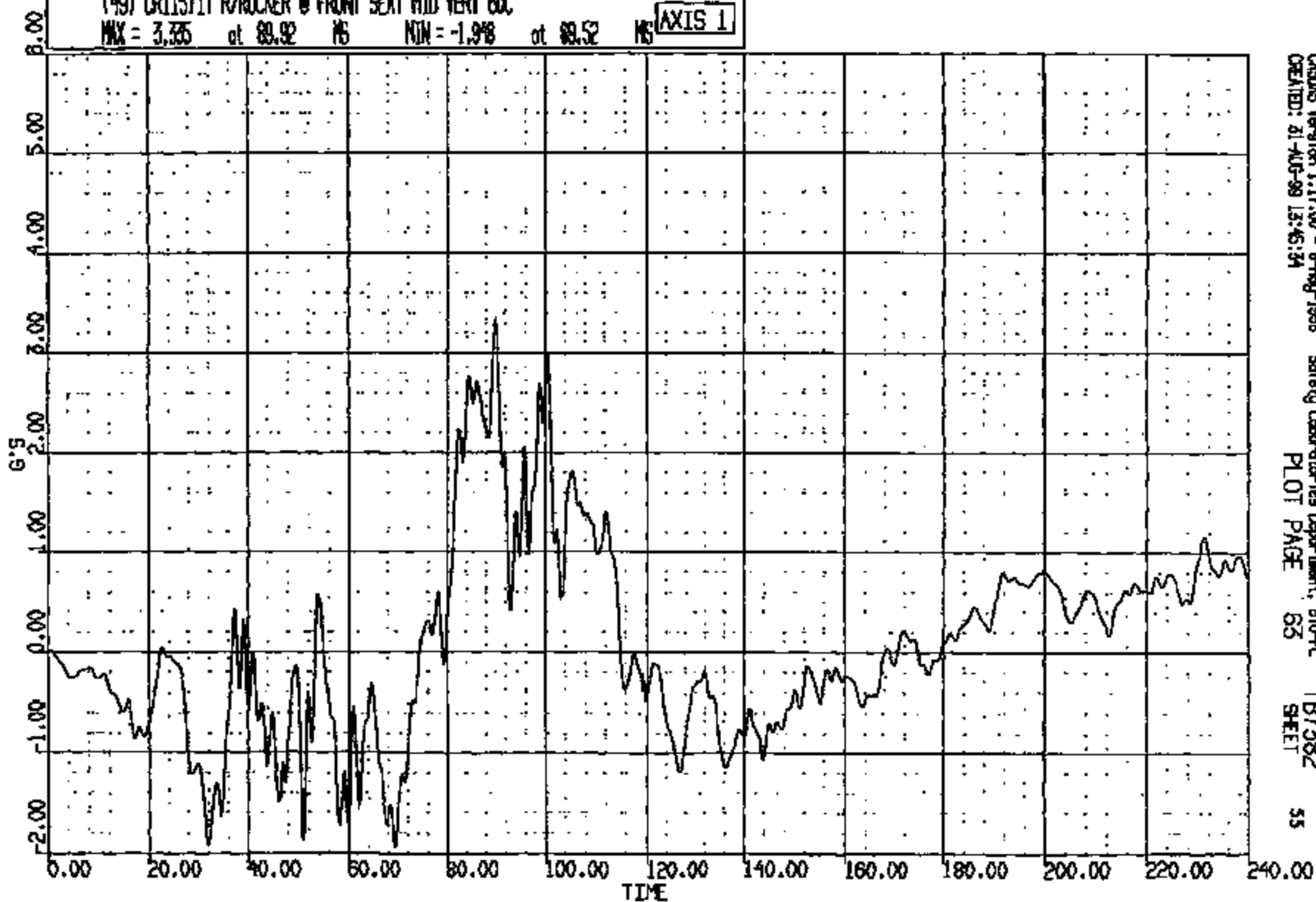
CRIS 0011571

CR R: 11571 TO: TB7382 DATE: 990921 15:21:11
2000.5 FN-145

(49) CR11571T R/ROCKER @ FRONT SEAT MID VERT 60C

MAX = 3.335 at 89.92 MS MIN = -1.948 at 89.52 MS

AXIS 1



CASDS Version 1.17.00 - 6-May-1998
CREATED: 21-AUG-99 15:45:34

Safety Laboratories Department, ETO-PL
PLOT PAGE 63

TB7382
SHEET 55

ENTIRE PAGE CONFIDENTIAL

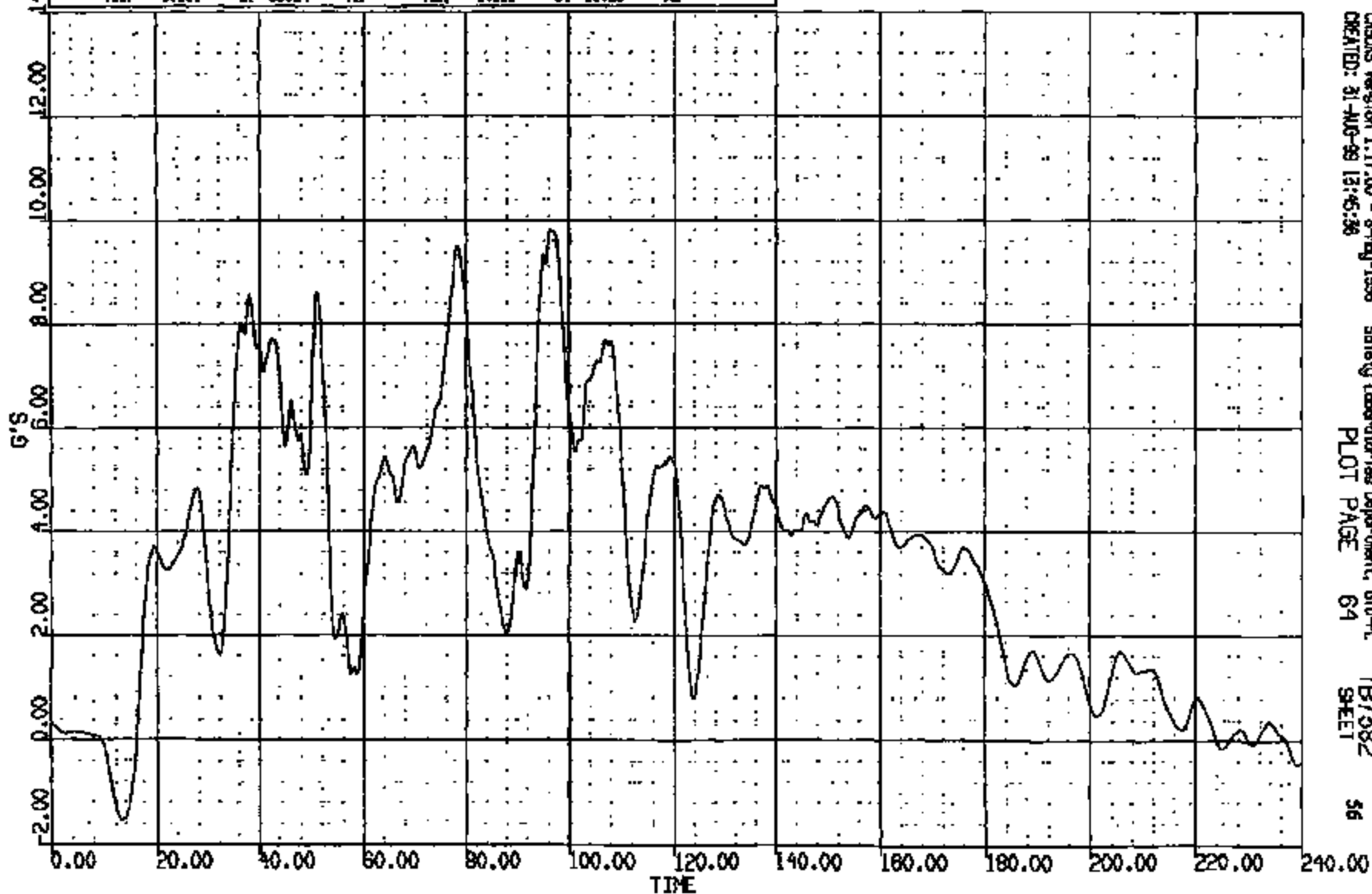
CRIS 0011571

CR R: 11571 TO: TB7382 DATE: 990831 15:21:11
2000.6 FN-145

(50) CR11571T R/ROCKER @ FRONT SEAT MID LAT 60C

MAX = 9.830 at 95.24 MS MIN = -1.556 at 13.28 MS

AXIS 1



CADDS Version 1.17.00 - 8-May-1998
CREATED: 31-AUG-99 13:45:38

Safety Laboratories Department, GID-PL
PLOT PAGE 64

TB7382
SHEET 56

ENTIRE PAGE CONFIDENTIAL

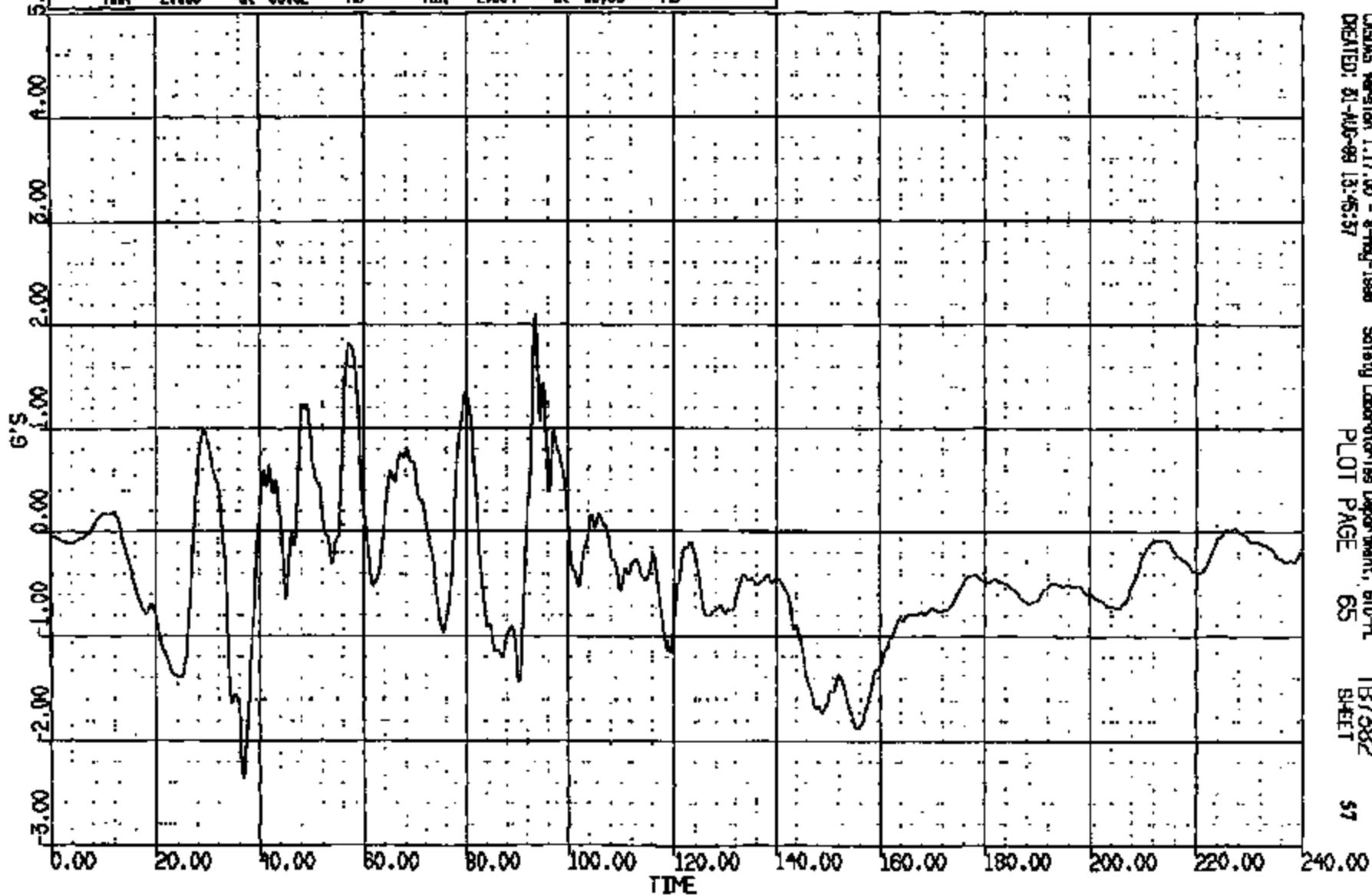
CRIS 0011571

CR R: 11571 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-145

(51) CR11571T R/ROCKER @ REAR SEAT MID LONG GXC

MAX = 2.088 at 93.52 MS MIN = -2.364 at 36.08 MS

AXIS 1



CASIS Version 1.17.00 - 8-May-1998
CREATED: 31-AUG-99 13:45:57

Safety Laboratories Department, 610-A
PLOT PAGE 65

TB7382
SHEET 57

ENTIRE PAGE CONFIDENTIAL

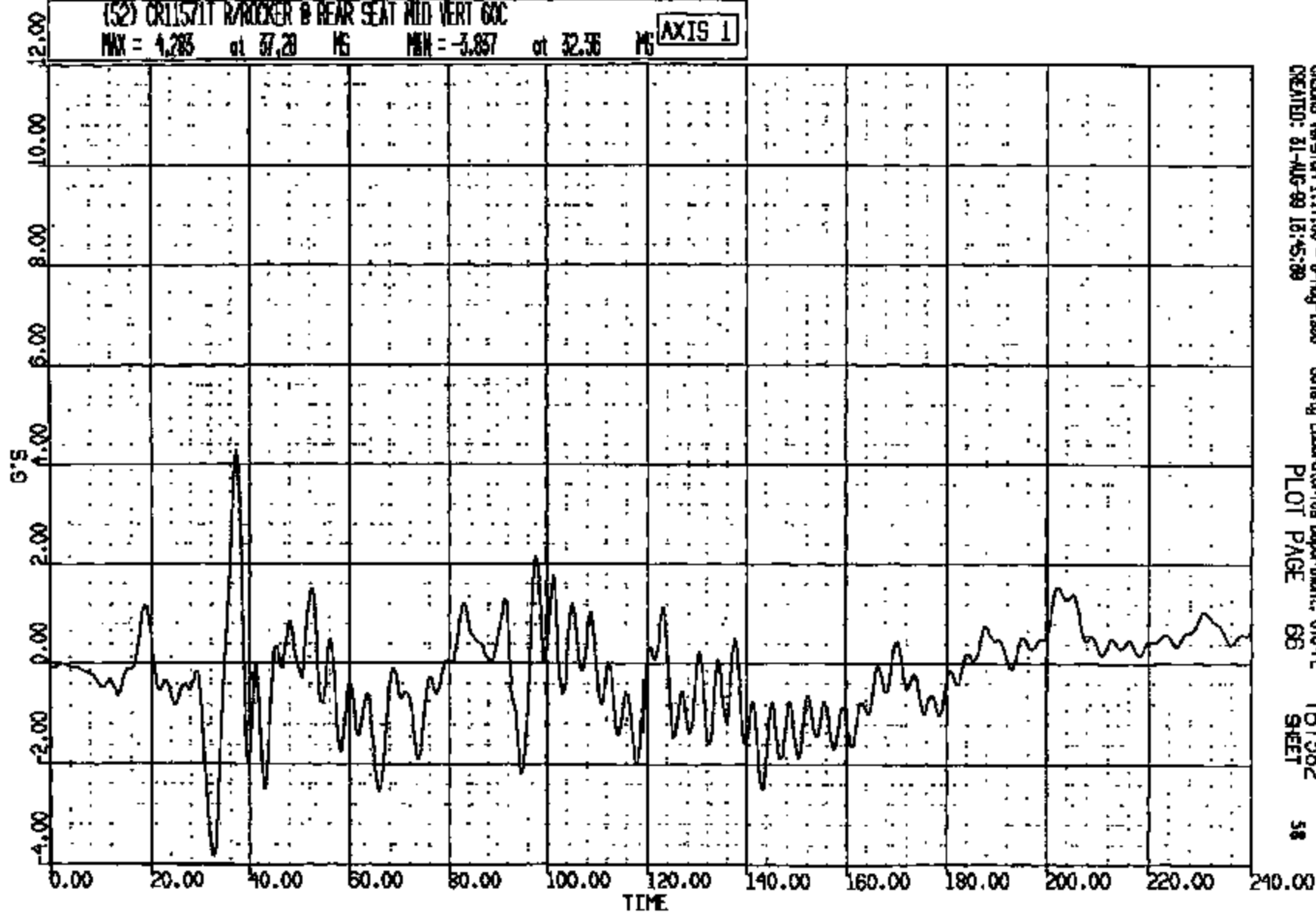
CRIS 0011571

CR R: 11871 TO: TB7382 DATE: 890831 13:21:11
2000.5 FN-145

(52) CR11571T R/ROCKER B REAR SEAT MID VERT GOC

MAX = 4.285 at 37.28 MS MIN = -3.887 at 32.35 MS

AXIS 1



CASAS Version 1.17.00 - 8-May-1988
CREATED: 81-AUG-89 16:45:59

Safety Laboratories Department, 610-A
PLOT PAGE 66

TB7382
SHEET 58

ENTIRE PAGE CONFIDENTIAL

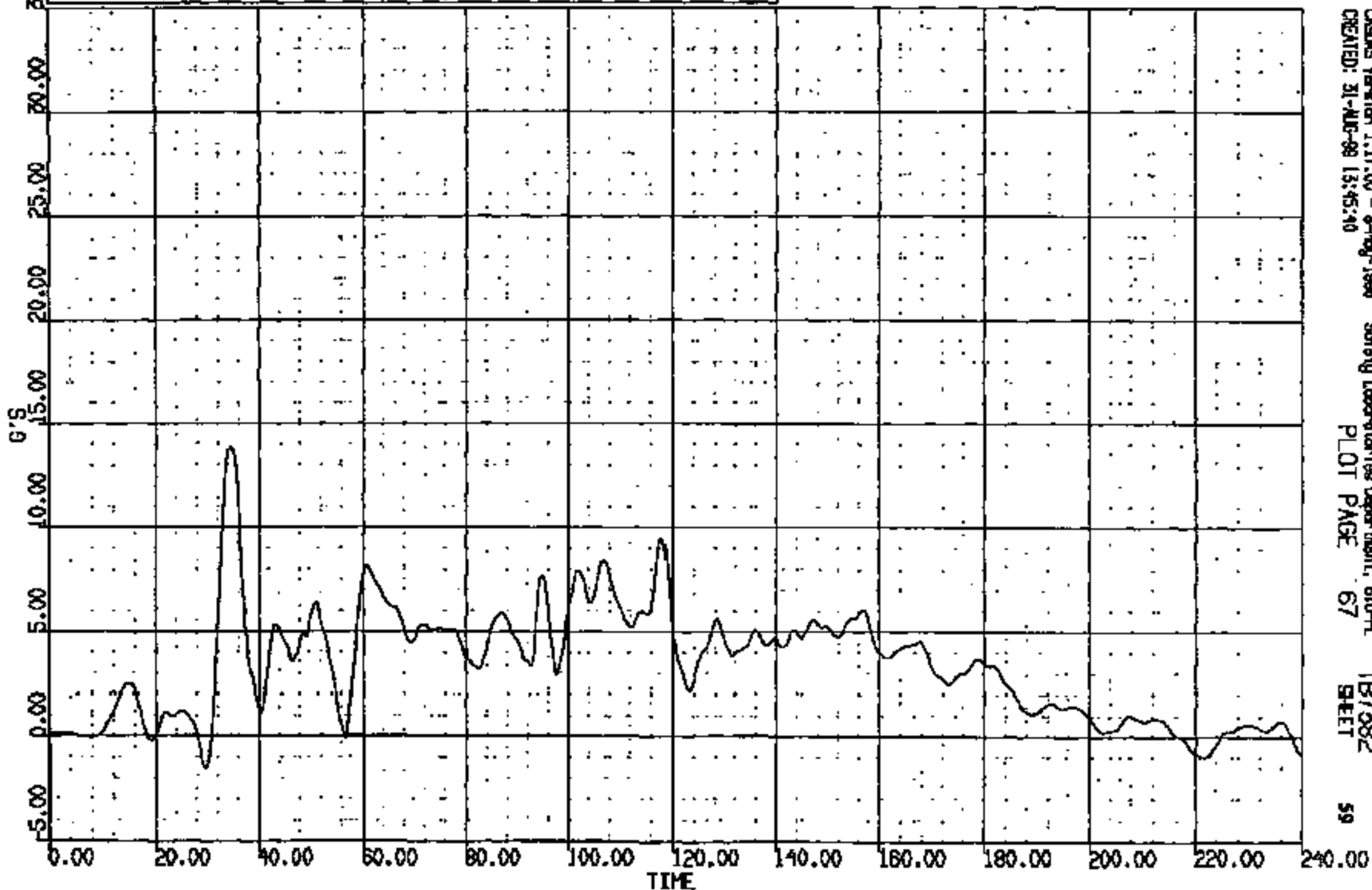
CRIS 0011571

CR R: 11571 TO: T87382 DATE: 990831 15:21:11
2000.5 FN-145

(53) CR11571T R/ROCKER @ REAR SEAT MID LAT 60C

MAX = 13.82 at 34.40 MS MIN = -1.527 at 29.00 MS

AXIS 1



CR15 0011571

CHS Version 1.17.00 - 8-May-1999
CREATED: 31-MAR-99 13:45:40

Safety Laboratories Department, 610-PL
PLOT PAGE 67

T87382
SHEET 59

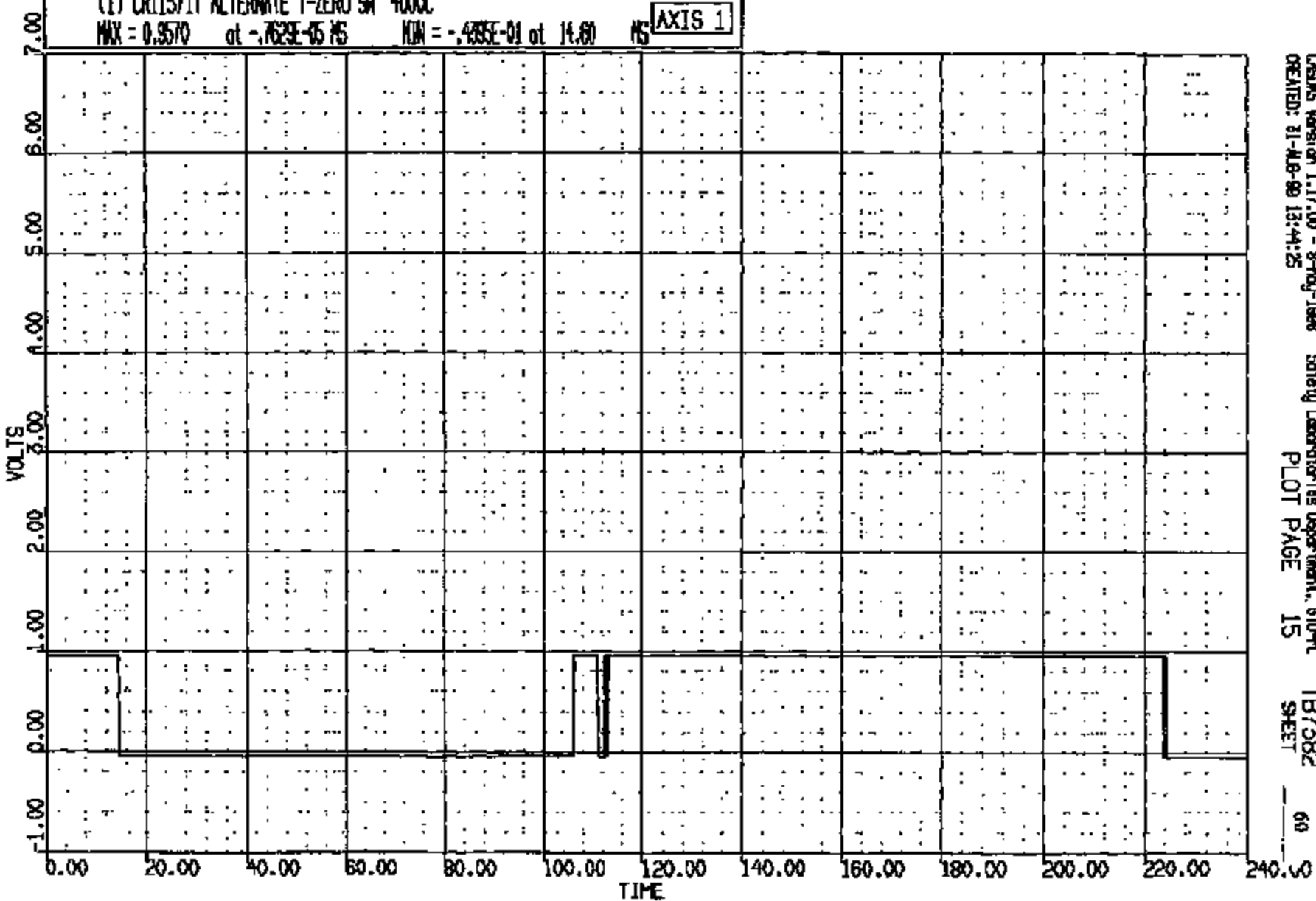
ENTIRE PAGE CONFIDENTIAL

CR R: 11571 YO: TB7382 DATE: 990881 15:21:11
2000.5 FN-145

(1) CR11571T ALTERNATE T-ZERO SN 4000C

MAX = 0.9570 at -.7623E-05 MS MIN = -.4035E-01 at 14.60 MS

AXIS 1



CRSMS Version 1.17.00 - 8-May-1988
CREATED: 81-MAR-90 13:44:25

Safety Laboratories Department, 610-PL
PLOT PAGE 15

TB7382
SHEET

60

ENTIRE PAGE CONFIDENTIAL.

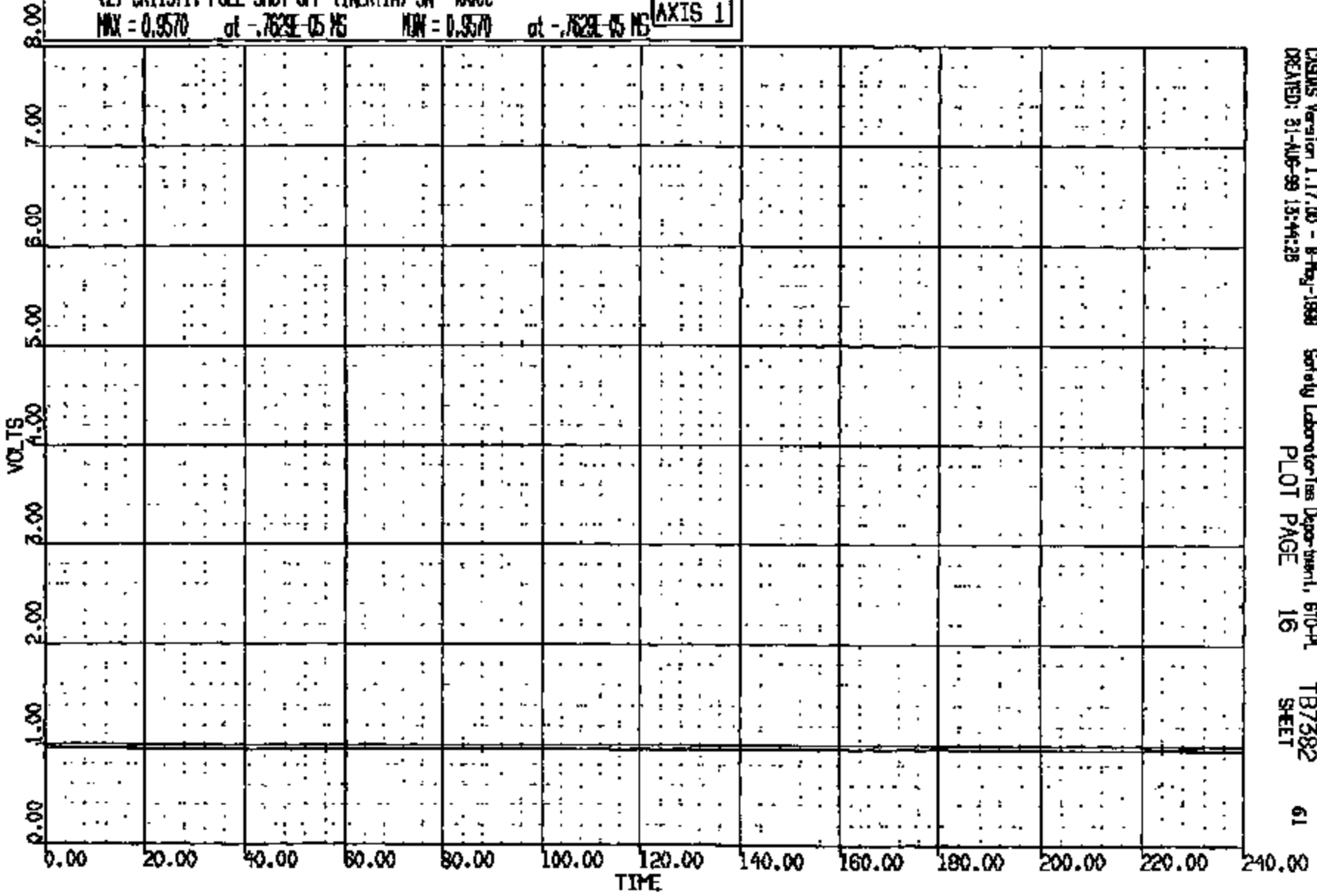
CRIS 0011571

CR R: 11571 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-146

(2) CR11571 FUEL SHUT OFF (INERTIA) SN 4000C

MAX = 0.9570 at -.7629E-05 MS MIN = 0.9570 at -.7629E-05 MS

AXIS 1



CASUS Version 1.17.00 - 8-May-1998
CREATED: 31-AUG-99 13:44:28

Safety Laboratories Department, 610-PL
PLOT PAGE 16

TB7382
SHEET

61

ENTIRE PAGE CONFIDENTIAL

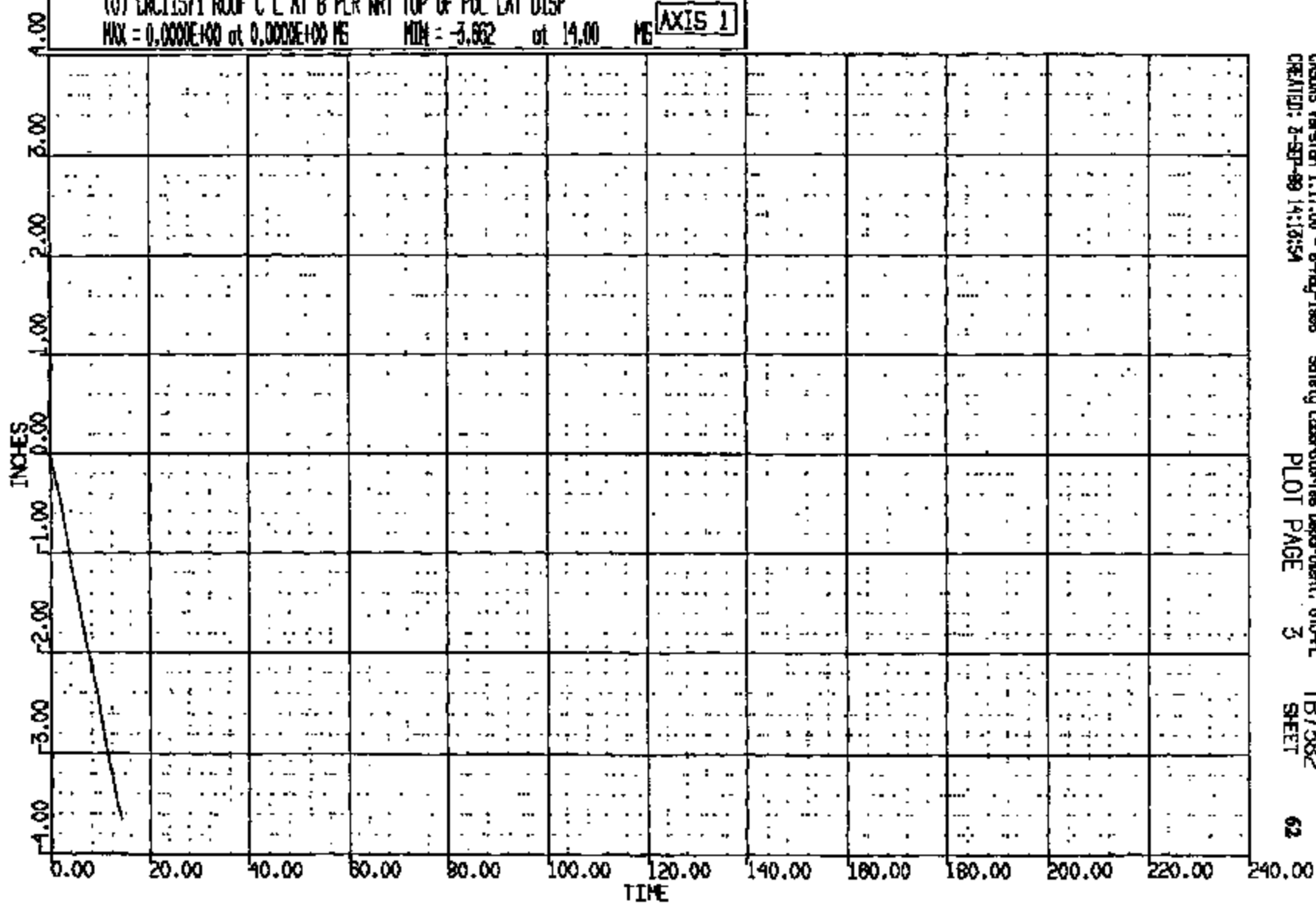
CRIS 0011571

CR R: 11571 TO: 187382 DATE: 880831 18:21:11
2000.5 FN-145

(0) CR11571 ROOF C L AT B PLR WRT TOP OF POL LAT DISP

MAX = 0.0000E+00 at 0.0000E+00 MS MIN = -3.862 at 14.00 MS

AXIS 1



CASINS Version 1.17.00 - 8-May-1988
CREATED: 8-SEP-88 14:10:54

Safety Laboratories Department, 610-4L
PLOT PAGE 3

187382
SHEET 62

ENTIRE PAGE CONFIDENTIAL

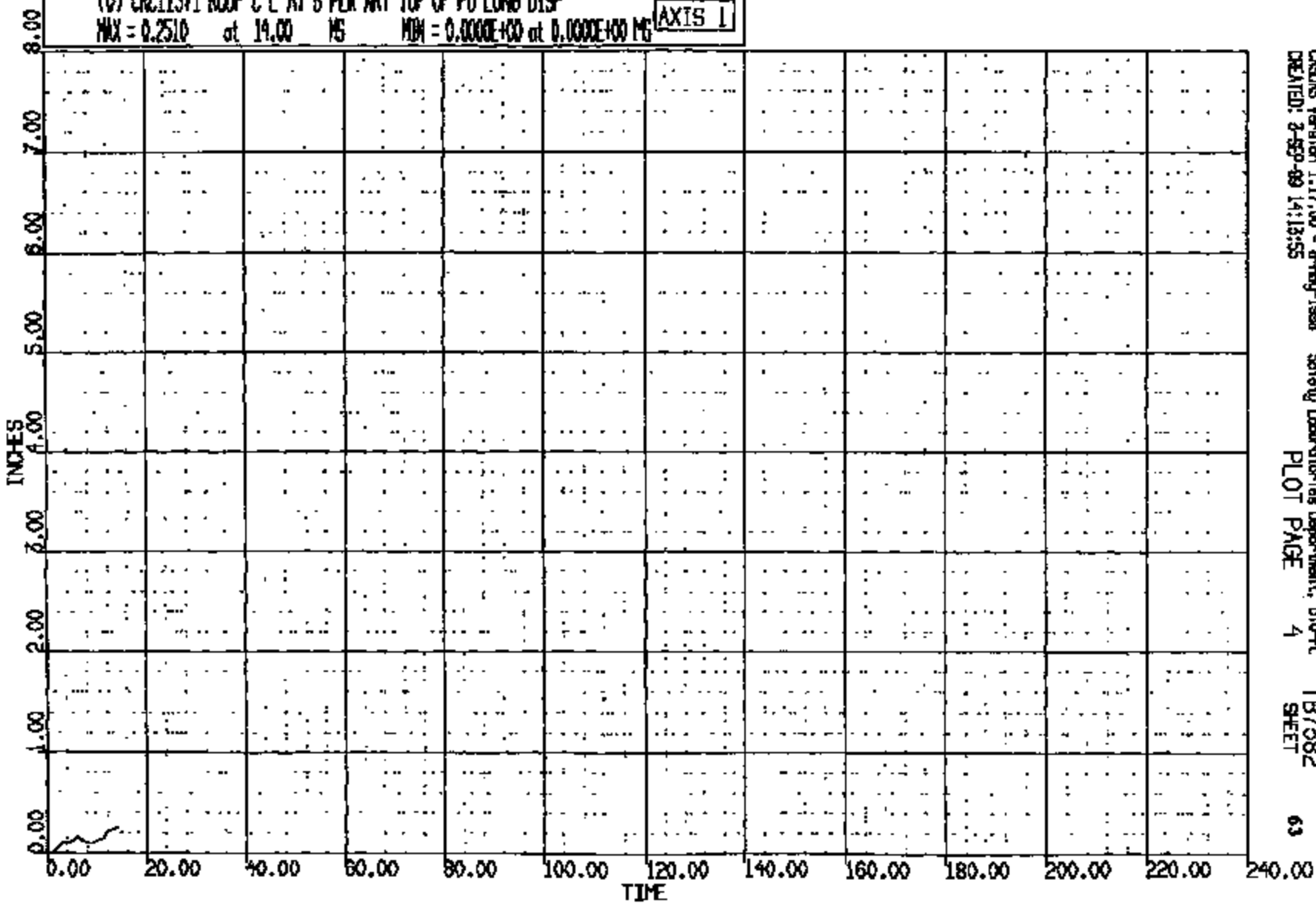
CRIS 0011571

CR R: 11571 TO: TB7382 DATE: 990831 13:21:11
2000.5 FN-145

(0) CR11571 ROOF CL AT 8 PLR WRT TOP OF PO LONG DISP

MAX = 0.2510 at 14.00 MS MIN = 0.0000E+00 at 0.0000E+00 MS

AXIS 1



CRTS 0011571

CAS/AS Version 1.17.00 - 8-May-1998
CREATED: 2-SEP-99 14:13:55

Safety Laboratories Department, 610-PL
PLOT PAGE 4

TB7382
SHEET

63

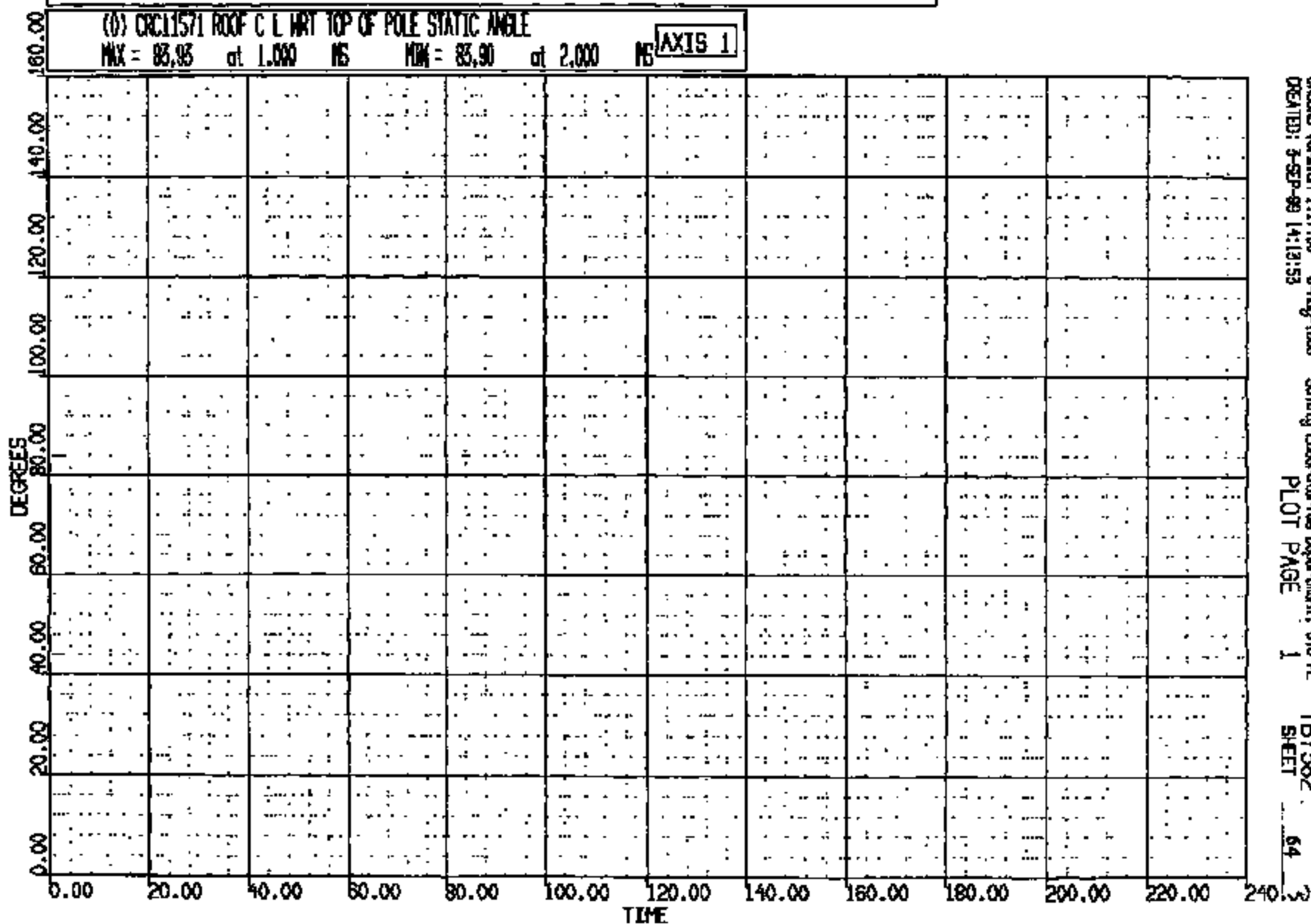
ENTIRE PAGE CONFIDENTIAL

CR R: 11571 TO: T87382 DATE: 220921 15:21:11
2000.5 FN-145

(1) CRCL1571 ROOF C L WRT TOP OF POLE STATIC ANGLE

MAX = 83.93 at 1.000 NS MIN = 83.90 at 2.000 NS

AXIS 1



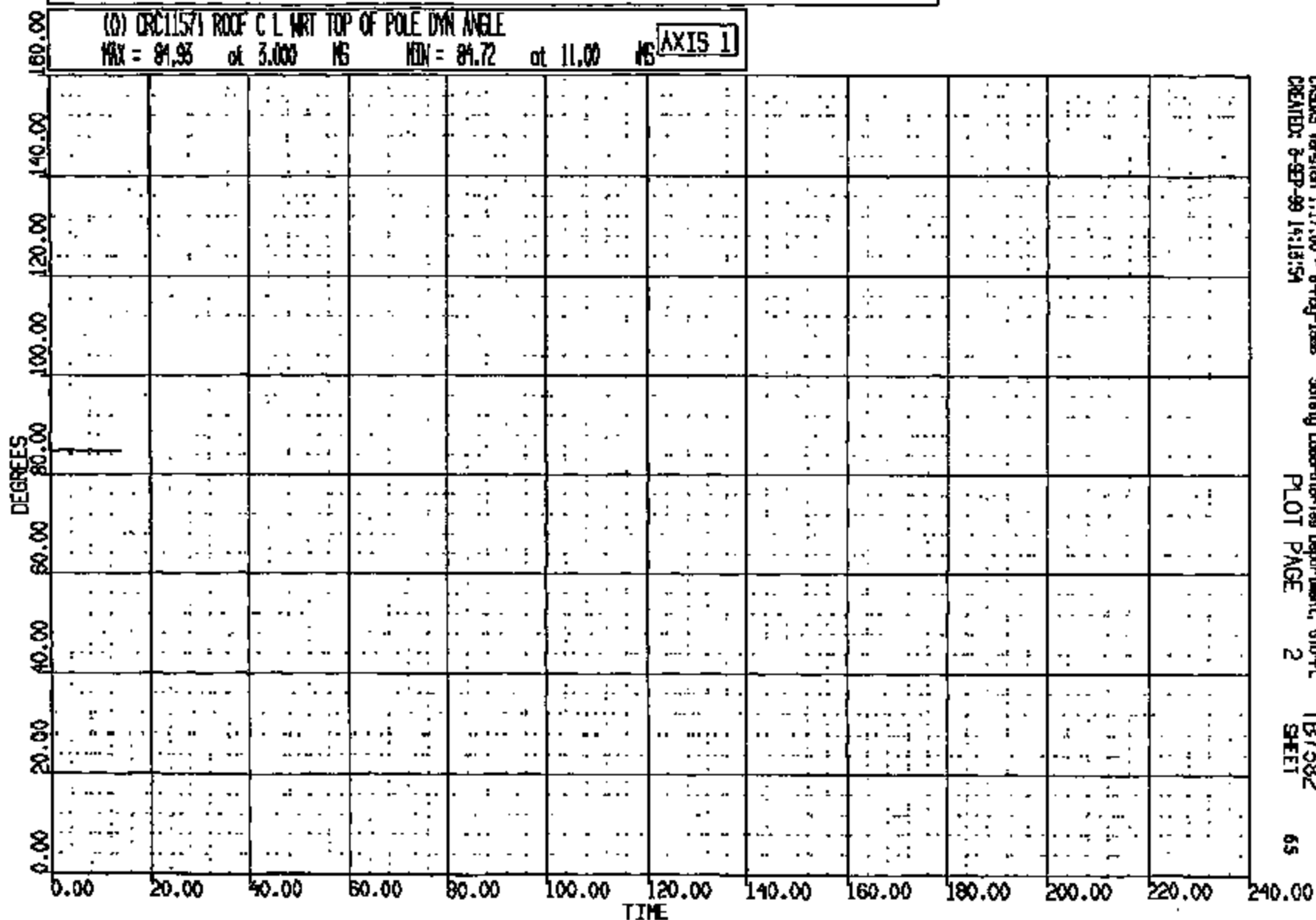
CRIS 0011571

CASIMS Version 1.17.00 - 8-Aug-1988 Safety Laboratories Department, 610-A
CREATED: 3-SEP-89 14:12:53 PLOT PAGE 1

T87382
SHEET 64

ENTIRE PAGE CONFIDENTIAL

CR R: 11571 TO: TB7382 DATE: 960831 13:21:11
8000.5 FN-146



CASINS Version 1.17.00 - 8-May-1998
CREATED: 8-SEP-99 14:13:54

Safety Laboratories Department, 610-P
PLOT PAGE 2

TB7382
SHEET 65

ENTIRE PAGE CONFIDENTIAL

CRIS 0011571

ASC TO #: T- TB7382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

VEHICLE INFORMATION

TEST DESCRIPTION: 90 DEG. LEFT SIDE FIXED POLE
VEHICLE PROGRAM YEAR: 2000.5
VEHICLE MODEL NAME: FT-145
VEHICLE PROGRAM NAME: FT-145
VEHICLE ID NUMBER: 305W668
CERTIFICATION VEHICLE CODE: IV
REQUESTOR NAME: J. WOZNIAK
TEST ENGINEER NAME:

TIME AND DATE OF REPORT: 16-SEP-99 06:09:39

CRIS 0011571

ASC TO #: T- TB7382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** POINT COORDINATES **

UNIT NO	SIDE	PNT NO	DESCRIPTION		INCHES			INCHES CHANGED			
					LONG X	LAT Y	VERT Z	X	Y	Z	D
071			MISCELLANEOUS / SIDED								
	L	07	CONTROL NOTCH/HOLE C/L SET DR/SIDE MEAS./PASS.	REF AFT	124.49	-30.25	14.81				
074			CRM POSITIONING REF.								
		43	CRM FRONT DOOR A PILLAR ROCKER SSIDE OF IMPACT	REF AFT	101.69	-32.88	19.12				
		44	CRM FRONT DOOR ROCKER ON PILLAR SSIDE OF IMP.	REF AFT	122.23	-32.99	18.68				
		53	CRM FRONT DOOR A PILLAR ROCK SSIDE OPPOSITE IMP	REF AFT	101.12	32.79	19.94				
		54	CRM FRONT DOOR A PILLAR ROCK SSIDE OPPOSITE IMP	REF AFT	121.98	32.13	19.52				
090			M/CONT. NOTCH & PTS/FI								
		22	FRONT ALIGNMENT POINT "E"	REF AFT	64.24 63.92	35.91 35.80	39.56 39.51	-0.32	-0.11	-0.05	0.34
		23	REAR ALIGNMENT POINT "B"	REF AFT	189.78 189.93	35.94 35.78	40.56 40.39	0.15	-0.16	-0.17	0.28
095			CONTROL ROW SIDED								
		09	LEFT FRONT FRAME SET-UP HEIGHT (INRD. OF SILL)	REF AFT	99.94	-28.04	13.97				
		10	LEFT REAR FRAME SET-UP HEIGHT (INRD. OF SILL)	REF AFT	146.70	-28.16	13.77				
		14	RIGHT FRONT FRAMES-UP HEIGHT (INRD. OF SILL)	REF AFT	100.36	28.39	14.57				

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 16-SEP-99 06:09:39

PAGE 1

CRIS 0011571

ASC TO #: T- TB7382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** POINT COORDINATES **

UNIT NO	SLIDE	PNT NO	DESCRIPTION		INCHES			INCHES CHANGED			
					LONG X	LAT Y	VERT Z	X	Y	Z	D
		15	RIGHT REAR FRAME SET-UP HEIGHT (INRD. OF SILL)	BEF AFT	147.63	27.72	14.24				
411			TOP (BODY) NON SIDED								
		01	EXTRA SET UP POINT (LEFT FOREMOST FRAME)	BEF AFT	36.84 38.83	-21.50 -22.96	22.84 22.83	1.99	-1.46	-0.01	2.47
		02	EXTRA SET UP POINT (RIGHT FOREMOST FRAME)	BEF AFT	37.53	23.77	23.44				
		03	EXTRA SET UP POINT (LEFT REARMOST FRAME)	BEF AFT	232.20	-26.46	20.61				
		04	EXTRA SET UP POINT (RIGHT REARMOST FRAME)	BEF AFT	232.95	24.45	21.25				
		26	"H" POINT LOCATION ON OUTER FET/OCCUPANT DOOR	BEF AFT	120.35	-38.87	28.47				
		04	"W.R.T." ON ROCKER SIDE OPPOSITE OF IMPACT	BEF AFT	130.07 130.07	32.85 32.85	17.98 17.98	0.00	0.00	0.00	0.00
650			BLANK UNIT POINTS								
		01	1 SEE COMMENTS PAGE	BEF AFT	99.50	-30.01	15.20				
		02	2 SEE COMMENTS PAGE	BEF AFT	147.03	-30.21	14.71				
		03	3 SEE COMMENTS PAGE	BEF AFT	100.15 100.10	30.23 30.67	15.81 15.80	-0.05	0.44	-0.01	0.44
		04	4 SEE COMMENTS PAGE	BEF AFT	147.33 147.62	29.35 28.88	15.28 15.25	0.29	-0.47	-0.02	0.55

* VALUE WAS TRANSLATED

TIME AND DATE OF REPORT: 16-SEP-99 06:09:41

PAGE 2

CRIS 0011571

68

T-B7382

ENTIRE PAGE CONFIDENTIAL

ABC TO #: T- TB7382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONALS **

UNIT NO	SECTN NO	SIDE	SEQ NO	NAME AND CRASH STATUS
------------	-------------	------	-----------	-----------------------

X	Y	Z
---	---	---

421 S1

ROOF LINE EXTERIOR SECT

1	AFTER	94.95	-32.59	45.30
2	AFTER	114.93	-22.11	61.19
3	AFTER	119.61	-20.02	62.94
4	AFTER	132.79	-16.40	63.56
5	AFTER	137.11	-16.29	64.22
6	AFTER	160.71	-21.36	64.09
7	AFTER	172.94	-22.37	62.09
8	AFTER	180.85	-26.82	58.67
9	AFTER	186.55	-32.36	50.91
10	AFTER	188.04	-35.63	45.71

423 S1

BASELINE EXTERIOR SECT

1	AFTER	69.29	-33.86	41.33
2	AFTER	91.90	-34.72	41.38
3	AFTER	93.37	-35.30	41.35
4	AFTER	100.98	-33.22	41.69
5	AFTER	110.10	-28.11	41.96
6	AFTER	118.52	-22.67	42.24
7	AFTER	120.68	-21.28	42.24
8	AFTER	121.57	-20.84	42.26

TIME AND DATE OF REPORT: 16-SEP-95 06:09:40

PAGE 1

CRIS 0011571

69

T-B7382

ENTIRE PAGE CONFIDENTIAL

ASC TO #: T- T87382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONALS **

UNT NO	SECTN NO	SIDE	REQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			9	AFTER	126.22	-20.82	42.43
			10	AFTER	128.38	-22.80	42.49
			11	AFTER	129.20	-23.83	42.59
			12	AFTER	130.86	-24.96	42.63
			13	AFTER	131.34	-25.23	41.90
			14	AFTER	146.96	-29.87	42.37
			15	AFTER	161.14	-33.76	42.79
			16	AFTER	167.97	-35.52	42.87
			17	AFTER	178.46	-38.20	43.13
			18	AFTER	180.16	-35.88	42.72
			19	AFTER	184.50	-36.39	43.01

425 31

MIDLINE EXTERIOR SECT

1	AFTER	77.74	-36.82	31.45
2	AFTER	84.24	-36.87	31.56
3	AFTER	90.11	-37.01	31.52
4	AFTER	92.24	-37.63	31.33
5	AFTER	105.91	-30.46	31.79
6	AFTER	115.70	-24.74	32.00
7	AFTER	118.68	-22.52	32.08
8	AFTER	120.67	-21.33	32.09

TIME AND DATE OF REPORT: 16-SEP-99 05:09:40

PAGE 2

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
T-87382
70

ASC TO #: T- 1B7382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONS **

UNIT NO	SCIN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			9	AFTER	122.50	-20.62	32.18
			10	AFTER	123.92	-20.52	32.22
			11	AFTER	125.29	-20.96	32.30
			12	AFTER	126.16	-21.49	32.31
			13	AFTER	128.08	-23.16	32.43
			14	AFTER	129.25	-24.64	32.52
			15	AFTER	130.17	-26.32	32.18
			16	AFTER	130.82	-27.17	32.20
			17	AFTER	130.97	-27.30	32.19
			18	AFTER	146.36	-32.23	32.58
			19	AFTER	159.34	-43.33	34.22
			20	AFTER	161.54	-36.39	32.94
			21	AFTER	169.79	-38.49	33.27
			22	AFTER	171.82	-37.77	32.75
			23	AFTER	175.87	-38.47	32.81
			24	AFTER	171.70	-37.75	32.68
			25	AFTER	175.82	-38.45	32.81
427	81			CHARACTER LINE EXT SECT			
			1	AFTER	82.06	-36.30	23.60
			2	AFTER	90.57	-36.29	23.63

TIME AND DATE OF REPORT: 16-SEP-99 06:09:40

PAGE 3

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
 1-B7382
 71

ASC TO #1 T- TB7382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONALS **

UNT NO	SCEN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			3	AFTER	92.48	-35.80	23.46
			4	AFTER	103.53	-32.23	23.76
			5	AFTER	112.17	-27.99	23.99
			6	AFTER	116.29	-24.55	24.26
			7	AFTER	119.24	-22.31	24.26
			8	AFTER	121.80	-21.20	24.27
			9	AFTER	123.91	-20.99	24.32
			10	AFTER	125.79	-21.61	24.31
			11	AFTER	127.94	-23.25	24.46
			12	AFTER	129.92	-25.12	24.54
			13	AFTER	129.62	-26.70	24.33
			14	AFTER	142.28	-30.40	24.55
			15	AFTER	157.34	-34.51	24.98
			16	AFTER	163.53	-36.16	25.21
			17	AFTER	165.87	-36.73	25.14
			18	AFTER	166.90	-37.06	24.96
			19	AFTER	169.16	-37.31	24.86
429	51			BOTTOM OF DOOR EXT SECT			
			1	AFTER	93.00	-32.92	16.13
			2	AFTER	108.08	-29.33	16.02

TIME AND DATE OF REPORT: 16-SEP-99 06:09:40

PAGE 4

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
T-B7382
72

ASC TO #: T- TB7382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONALS **

UNIT NO	SCIN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			3	AFTER	117.31	-25.54	15.96
			4	AFTER	119.18	-23.82	15.88
			5	AFTER	120.73	-21.78	15.83
			6	AFTER	122.65	-21.11	15.79
			7	AFTER	125.49	-21.61	15.88
			8	AFTER	128.53	-23.18	16.02
			9	AFTER	130.90	-24.48	16.36
			10	AFTER	131.07	-24.99	16.17
			11	AFTER	140.05	-27.38	16.45
			12	AFTER	149.57	-30.00	16.70
			13	AFTER	165.81	-34.60	17.12

435 81

BELT LINE INTERIOR SECT

1	BEFORE	100.45	-32.26	42.46
1	AFTER	104.06	-29.15	43.61
2	BEFORE	107.39	-32.21	42.40
2	AFTER	111.45	-24.34	43.11
3	BEFORE	125.54	-32.43	42.91
3	AFTER	118.19	-20.78	43.38
4	BEFORE	129.58	-32.65	42.98
4	AFTER	122.15	-19.51	43.50
5	BEFORE	131.17	-30.86	42.31
5	AFTER	125.44	-18.75	43.91
6	BEFORE	135.52	-30.81	42.38
6	AFTER	129.50	-19.75	42.43

TIME AND DATE OF REPORT: 16-SEP-99 06:09:40

PAGE 5

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
1-B7282
73

** SECTIONALS **

UNIT NO	SCIN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			7	BEFORE	137.32	-32.73	42.89
			7	AFTER	131.23	-19.10	42.42
			8	BEFORE	144.59	-32.67	42.94
			8	AFTER	135.08	-19.94	42.53
			9	BEFORE	145.44	-32.14	42.73
			9	AFTER	136.96	-22.32	43.37
			10	BEFORE	151.80	-32.17	42.68
			10	AFTER	143.34	-24.07	42.84
			11	BEFORE	174.38	-32.18	42.75
			11	AFTER	144.80	-23.77	43.25
			12	AFTER	150.80	-25.53	43.44
			13	AFTER	165.92	-30.10	44.12
			14	AFTER	171.96	-31.93	44.29

437 S1

HIP INTERIOR SECTION

1	BEFORE	94.91	-31.77	27.72
1	AFTER	99.54	-28.90	25.60
2	BEFORE	107.75	-31.98	27.72
2	AFTER	109.77	-25.06	27.76
3	BEFORE	115.71	-32.04	27.72
3	AFTER	116.30	-21.36	28.40
4	BEFORE	126.77	-31.88	27.72
4	AFTER	126.98	-18.99	28.16
5	BEFORE	128.41	-30.76	27.72
5	AFTER	129.06	-18.27	28.02
6	BEFORE	134.96	-30.84	27.72
6	AFTER	135.86	-20.54	28.17

TIME AND DATE OF REPORT: 14-SEP-88 06:09:40

PAGE 6

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
74
T-B7382

ABC TO #: T- TW7382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONALS **

DEPT NO	SECTN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			7	BEFORE	136.22	-31.97	27.72
			7	AFTER	136.21	-21.86	28.53
			8	BEFORE	148.67	-32.08	27.72
			8	AFTER	148.01	-25.15	28.49
			9	BEFORE	155.06	-32.34	27.72
			9	AFTER	154.17	-27.29	29.55
			10	BEFORE	164.78	-32.09	27.72
			10	AFTER	163.66	-29.65	28.78
438	81			1ST 50 FWD/HINGE PLANE			
			1	AFTER	94.52	-34.10	16.63
			2	AFTER	94.84	-34.95	18.86
			3	AFTER	94.82	-35.14	19.60
			4	AFTER	94.86	-35.03	19.32
			5	AFTER	94.97	-35.85	23.67
			6	AFTER	95.22	-36.41	26.87
			7	AFTER	95.17	-36.50	27.77
			8	AFTER	95.14	-36.33	29.28
			9	AFTER	94.91	-36.14	32.04
			10	AFTER	94.77	-36.22	35.19
			11	AFTER	94.55	-35.96	38.63
			12	AFTER	94.24	-35.23	41.19
			13	AFTER	93.93	-33.90	43.64

TIME AND DATE OF REPORT: 16-SEP-99 06:09:40

PAGE 7

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL
T-B7382
75

ASC TO #: T- 757382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONS **

UNIT NO	SCIN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			14	AFTER	93.34	-32.81	44.33
			15	AFTER	93.42	-31.85	45.41
439	51			SECT @ 2500 BODY LINE			
			1	AFTER	101.98	-31.48	16.15
			2	AFTER	102.24	-32.25	17.73
			3	AFTER	102.26	-32.51	19.97
			4	AFTER	102.34	-32.79	23.88
			5	AFTER	102.39	-33.16	27.60
			6	AFTER	102.40	-33.10	28.64
			7	AFTER	102.35	-32.78	29.83
			8	AFTER	102.00	-32.46	31.71
			9	AFTER	101.69	-32.01	33.69
			10	AFTER	101.77	-32.69	38.58
			11	AFTER	101.76	-32.86	41.69
			12	AFTER	101.66	-32.82	42.92
			13	AFTER	101.56	-32.99	43.85
439	52			SECT @ 2500 BODY LINE			
			1	BEFORE	98.43	-31.22	21.33
			2	BEFORE	98.43	-32.19	43.24

TIME AND DATE OF REPORT: 15-SEP-99 06:09:40

PAGE 8

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
T-87382
76

ASC TO #: T- 117382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONALS **

UNIT NO	SECTN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
------------	-------------	------	-----------	-----------------------	---	---	-------------

440 81

VERT SECT. 20" FWD I/CL

1	AFTER	122.35	-21.18	15.91
2	AFTER	122.33	-21.13	20.05
3	AFTER	122.19	-21.11	25.98
4	AFTER	122.14	-21.20	29.71
5	AFTER	122.13	-20.80	30.49
6	AFTER	121.96	-20.75	34.52
7	AFTER	121.95	-20.74	37.19
8	AFTER	121.92	-20.76	37.95
9	AFTER	121.82	-20.54	38.71
10	AFTER	121.68	-20.72	41.21
11	AFTER	121.73	-20.78	41.96
12	AFTER	121.67	-20.80	43.38
13	AFTER	121.69	-21.05	45.28
14	AFTER	121.94	-19.83	62.18

TIME AND DATE OF REPORT: 16-SEP-99 06:09:40

PAGE 9

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
T-B7382
77

ASC TO #: T- TB7382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONALS **

UNT NO	SECTN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			15	AFTER	122.13	-19.78	64.17
			16	AFTER	122.19	-19.37	63.61
			17	AFTER	121.93	-18.36	65.01
440	S2			VERT SECT. 20" FWD I/CL			
			1	BEFORE	121.65	-31.31	21.11
			1	AFTER	122.15	-20.05	22.15
			2	BEFORE	121.65	-32.40	39.99
			2	AFTER	121.30	-19.29	38.86
			3	BEFORE	121.65	-32.20	40.68
			3	AFTER	121.46	-19.28	40.63
			4	BEFORE	121.65	-32.65	42.97
			4	AFTER	121.57	-19.19	41.37
			5	AFTER	121.83	-19.64	43.58
441	S1			VERT SECT. @ IMPACT C/L			
			1	AFTER	129.84	-24.01	16.28
			2	AFTER	129.36	-24.52	17.51
			3	AFTER	129.26	-24.51	20.20
			4	AFTER	129.16	-24.36	25.66
			5	AFTER	129.07	-24.25	29.13
			6	AFTER	128.94	-24.04	30.71
			7	AFTER	128.88	-24.00	35.62
			8	AFTER	128.81	-24.01	36.15

TIME AND DATE OF REPORT: 16-SEP-99 06:09:40

PAGE 10

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
T-B7382
78

ASC TO #: T- 197382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONALS **

INT NO	SECT NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
	9		AFTER		128.98	-23.81	36.97
	10		AFTER		128.84	-23.60	39.79
	11		AFTER		128.76	-23.77	38.13
	12		AFTER		128.81	-23.36	42.71
	13		AFTER		128.87	-23.23	44.00
	14		AFTER		128.93	-23.01	44.37
	15		AFTER		129.19	-22.56	45.54
	16		AFTER		130.12	-18.50	62.80
	17		AFTER		129.95	-18.24	64.61
	18		AFTER		130.17	-17.04	64.27
	19		AFTER		130.09	-15.82	65.36

441 B2

VERT SECT. @ IMPACT C/L

1	BEFORE	129.90	-30.68	20.62
1	AFTER	130.21	-18.95	21.12
2	BEFORE	129.90	-30.91	37.80
2	AFTER	130.01	-18.82	37.92
3	BEFORE	131.33	-30.77	42.75
3	AFTER	131.10	-19.18	42.93
4	BEFORE	133.00	-28.90	49.09
4	AFTER	132.91	-17.97	49.69
5	BEFORE	134.58	-25.77	54.68
5	AFTER	134.56	-16.29	55.82
6	BEFORE	135.42	-24.11	57.64
6	AFTER	135.26	-15.33	58.93

TIME AND DATE OF REPORT: 14-SEP-99 06:09:40

PAGE 11

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
T-B7382
79

ASC TO #: T- TR7382

DIMENSIONAL ANALYSIS REPORT

CRASH #: 11571

** SECTIONALS **

UNIT NO	SECTN NO	SIDE	SEQ NO	NAME AND CRASH STATUS	X	Y	INCHES Z
			7	BEFORE	135.37	-23.15	58.54
			7	AFTER	135.13	-14.76	60.03
442	S2			VERT SECT 20" AFT I/C.			
			1	BEFORE	167.85	-32.17	42.62
			2	BEFORE	167.85	-32.28	40.01
			3	BEFORE	167.85	-32.31	38.39
			4	BEFORE	167.85	-32.37	35.85
			5	BEFORE	167.85	-32.12	29.94

TIME AND DATE OF REPORT: 16-SEP-99 06:09:41

PAGE 12

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
F-87382
80

** COMMENTS **

ANY AUTOMATICALLY GENERATED COMMENTS APPEAR IN THIS BOX:

*** THIS DIMENSION SYSTEM UTILIZES THE RIGHT HAND RULE ***
 from Front of Vehicle FACING REARWARD
 * = Rearward, Up, & Left (AMERICAN PASSENGER SIDE)
 [Lateral Zero is Centerline of Vehicle]

**** THE "D" DIMENSION UNDER "INCHES CHANGED X Y Z" ****
 *** IS THE SCALAR (TRUE VALUE) DISTANCE CHANGE OF THE POINT ***

REMINDER::: Paint a C/L stripe on tunnel from front seat to end
 including rear seat where applicable.

*** If this is a POLE IMPACT TEST, do NOT scribe cart edges. ***

ON SIDE IMPACTS FOR VEHICLES WITH A WHEELBASE OF 114 inches or less
 SCRIBE (4) VERTICAL LINES on side of impact from ROCKER TO BELT LINE @:
 (1) WHEELBASE C/L (2) 37" FORWARD OF WHEELBASE C/L
 (3) 4" FORWARD OF WHEELBASE C/L (4) 29" REARWARD OF WHEELBASE C/L

ON SIDE IMPACTS FOR VEHICLES WITH A WHEEL BASE GREATER THAN 114 INCHES
 SCRIBE (4) VERTICAL LINES on side of impact from ROCKER TO BELT LINE @:
 (1) 20" (2) 33" (3) 86" REARWARD OF FRONT AXLE CENTER LINE
 (4) @ WHEELBASE CENTER LINE

BELT LINE (EXTERIOR SECTION) LOCATED @ 1st INCREMENTED 50mm BODY
 LINE BELOW GLASS/WEATHERSTRIP

MID LINE (EXTERIOR SECTION) LOCATED @ _____mm BODY LINE

CHARACTER LINE (EXTERIOR SECTION) LOCATED @ _____mm BODY LINE

ROCKER LINE (EXTERIOR SECTION) LOCATED @
 1st INCREMENTED 10mm BODY LINE BELOW DOOR OPENING

SCRIBE A LONGITUDINAL C/L ALONG THE ENTIRE EXTERNAL BODY
 (USE TAPE OR PAINT ON THE WINDSHIELD & BACKLIGHT)

SCRIBE A LONGITUDINAL C/L IN THE INTERIOR ON THE ROOF, TUNNEL/CONSOLE
 AND OR SEATS

MARK A LONGITUDINAL C/L ON THE OCCUPANT FRONT & REAR SEATS

SCRIBE A VERTICAL LINE ON THE LEFT & RIGHT ROOF TARGET 27.00" REARWARD
 OF THE FRONT EDGE OF THE MASTER CONTROL NOTCH OR CONTROL HOSE CENTER-

TIME AND DATE OF REPORT: 18-SEP-99 06:03:41

PAGE 1

CRIS 0011571

81

T-B7382

ENTIRE PAGE CONFIDENTIAL

** COMMENTS **

LINE. ALSO, SCRIBE A HORIZONTAL LINE ON THE TARGETS 46.00" ABOVE THE
TOP OF THE MASTER CONTRA NOTCH OR CONTROL HOLE CENTERLINE.

ANY COMMENTS ENTERED BY OPERATORS APPEAR BELOW THIS LINE:

UNIT 550 POINT DESCRIPTIONS ARE AS FOLLOWS:

01. L/FRONT SILL SET-UP POINT.
02. L/REAR SILL SET-UP POINT.
03. R/FRONT SILL SET-UP POINT.
04. R/REAR SILL SET-UP POINT.

POST CRASH NOTE:

UNIT 431 ROCKER SECTION: UNABLE TO MEASURE DO TO CRUSH ON ROCKER COVER.
UNIT 4382 2500MM SECTION INTERIOR: UNABLE TO MEASURE DO TO CRUSH.

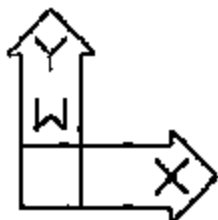
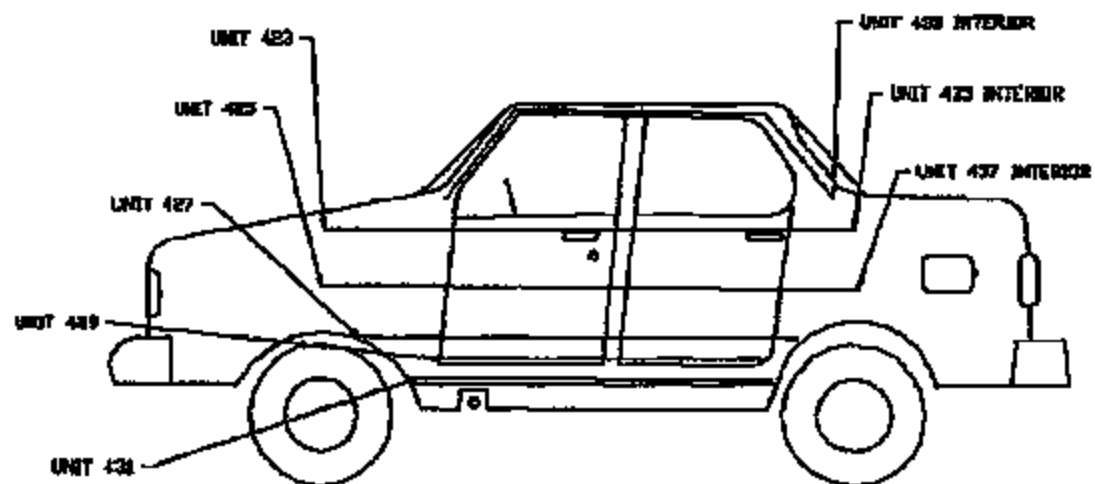
TIME AND DATE OF REPORT: 16-SEP-99 06:09:41

PAGE 2

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL
T-B7382
82

EXTERIOR & INTERIOR HURZ. SECTIONALS SIDE IMPACT
REQUEST 423,425,427,429,431,433,435,437

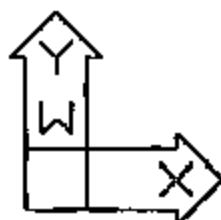
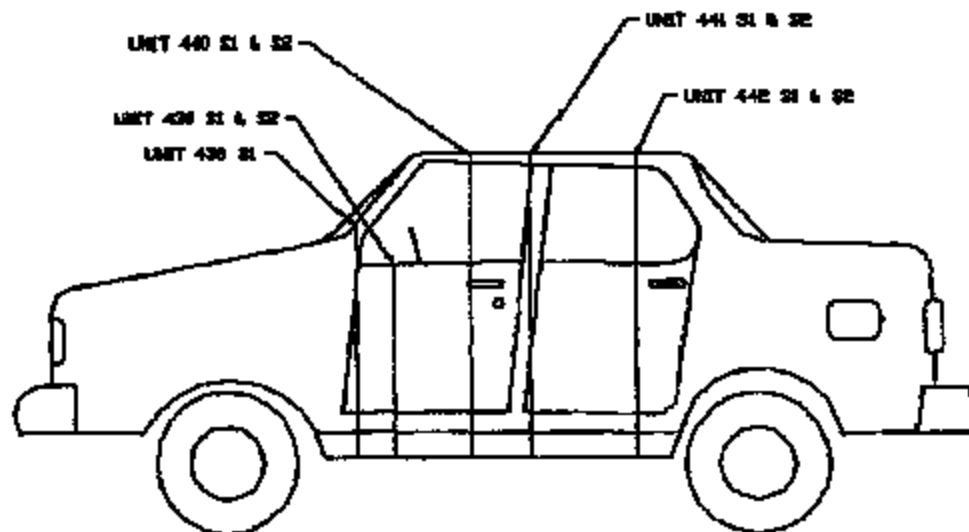


REQUEST 423,425,427,429,431,433,435,437 UPIC 977 10/96

BEDWELL

CRTS 0011571

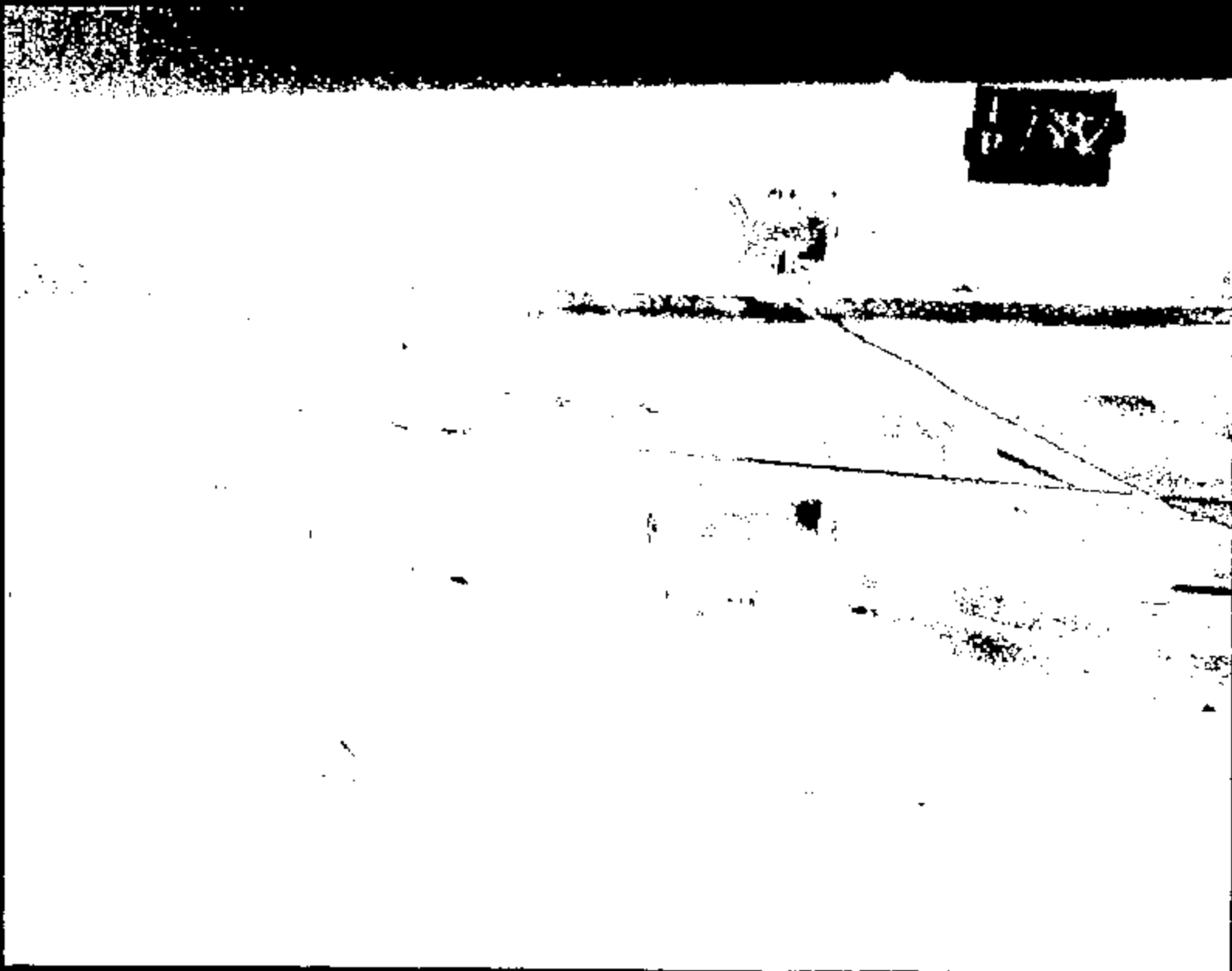
REQUEST 438 - 442 VERT. SECTIONS SIDE IMPACT
 LIMITS 438 S1, 439 - 442 S1 & S2
 S1 SECTIONS ARE EXTERIOR, S2 SECTIONS ARE INTERIOR



REQUEST 438 - 442 UPR 979 10/96

INCHES

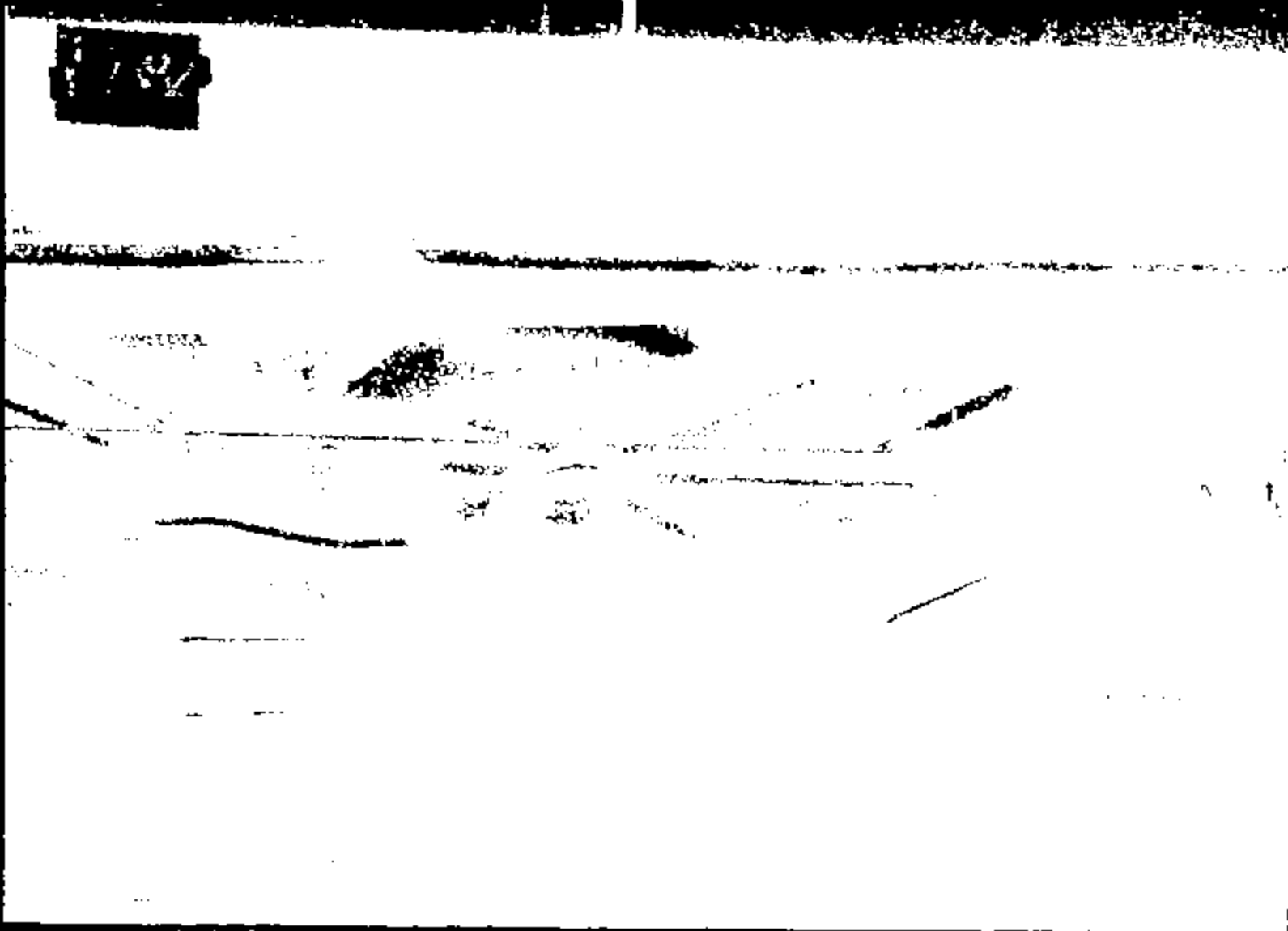
CRIS 0011571



Name:

11571001.jpg

CRTS 001571

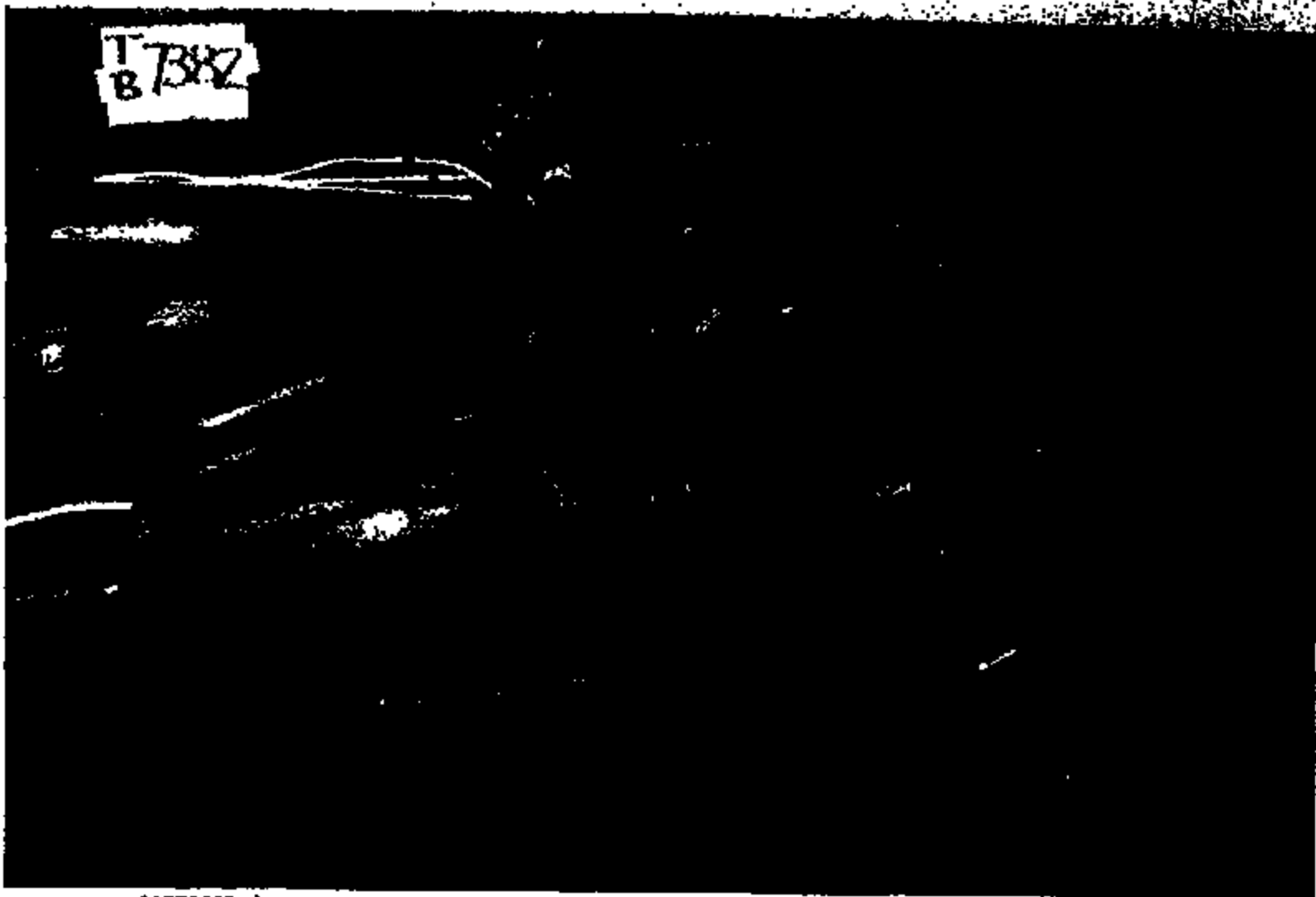


Name :

11571002.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL.



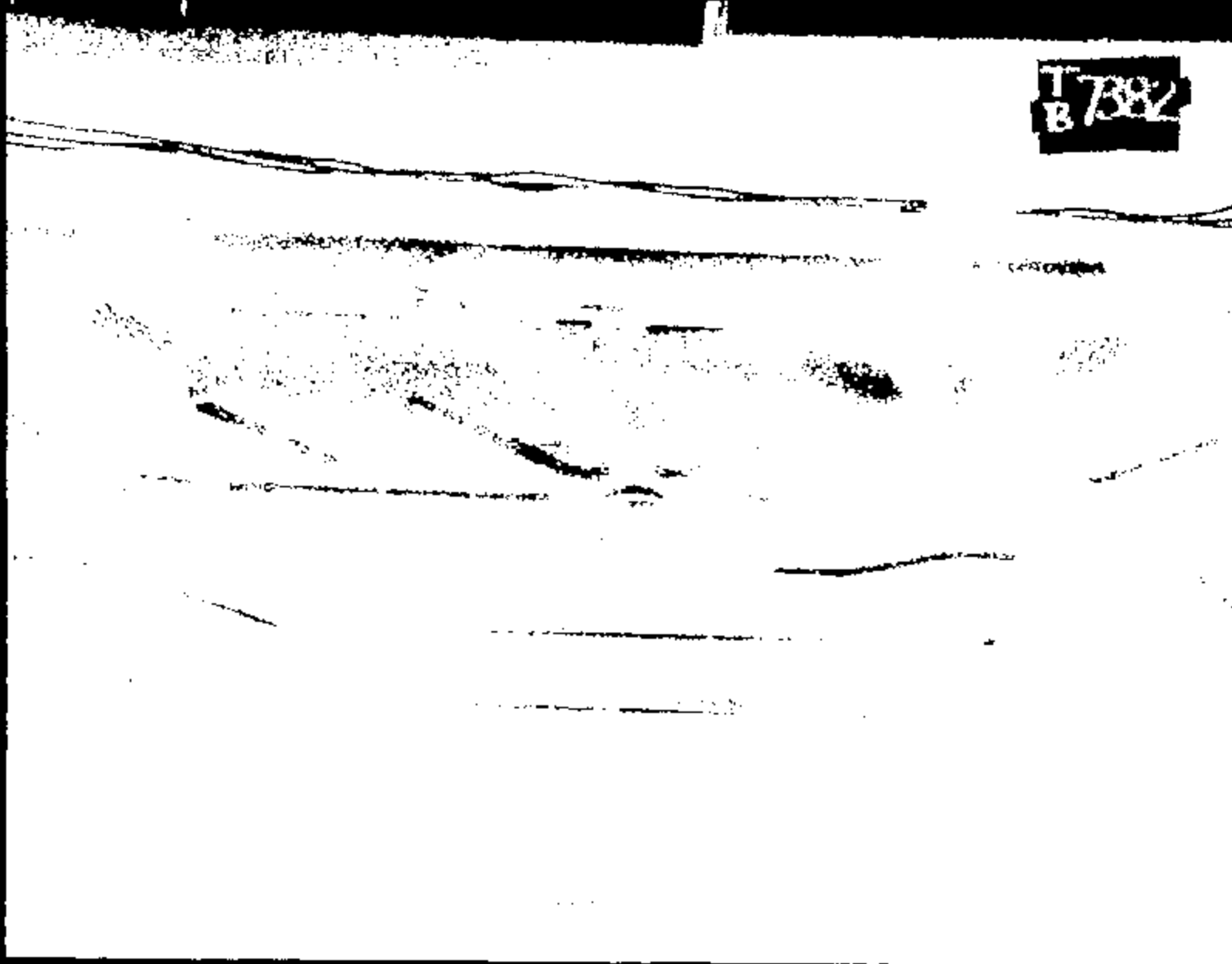
Name:

11571003.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL

T
B 7382



Name:

11571004.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL

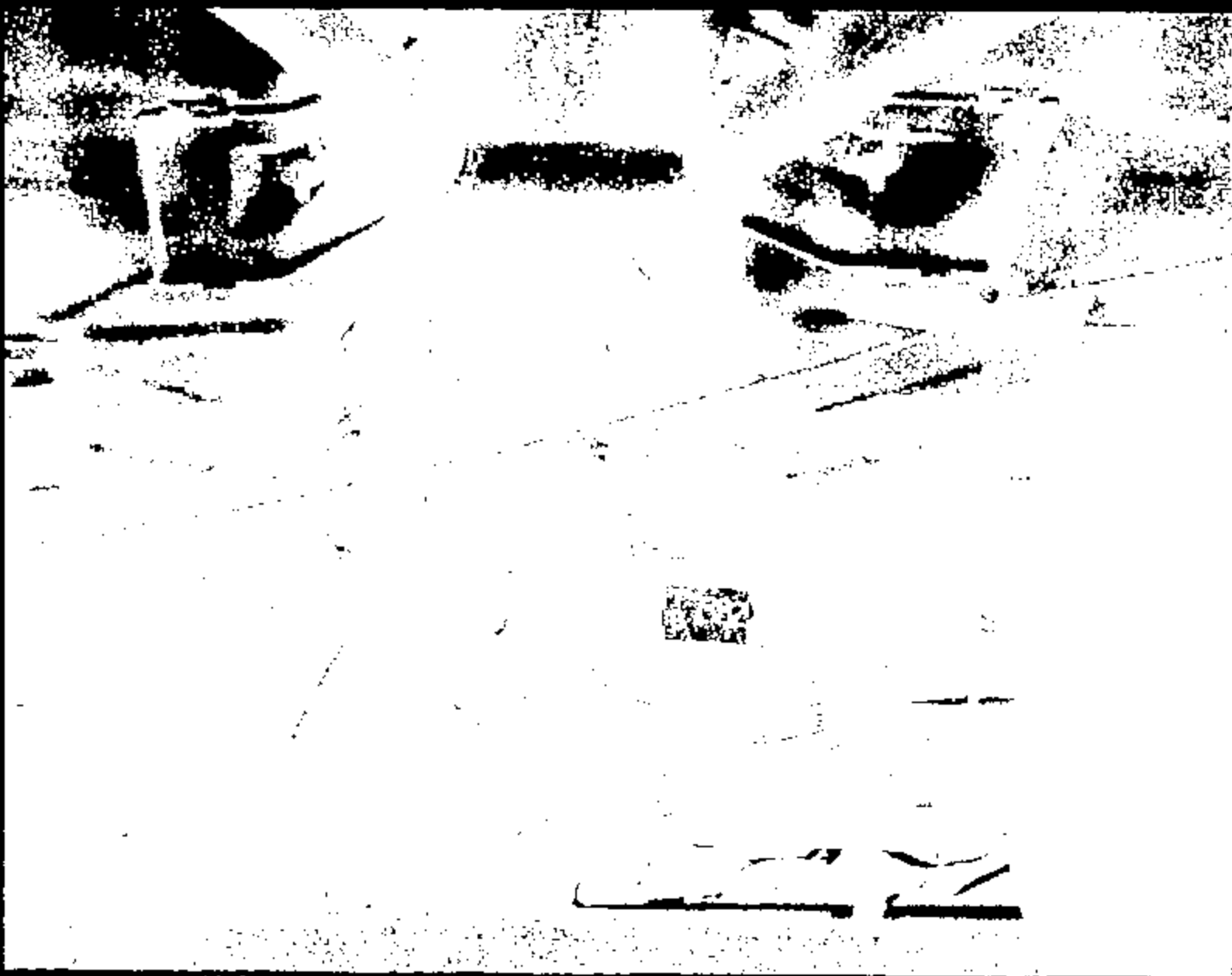


Name:

11571005.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL

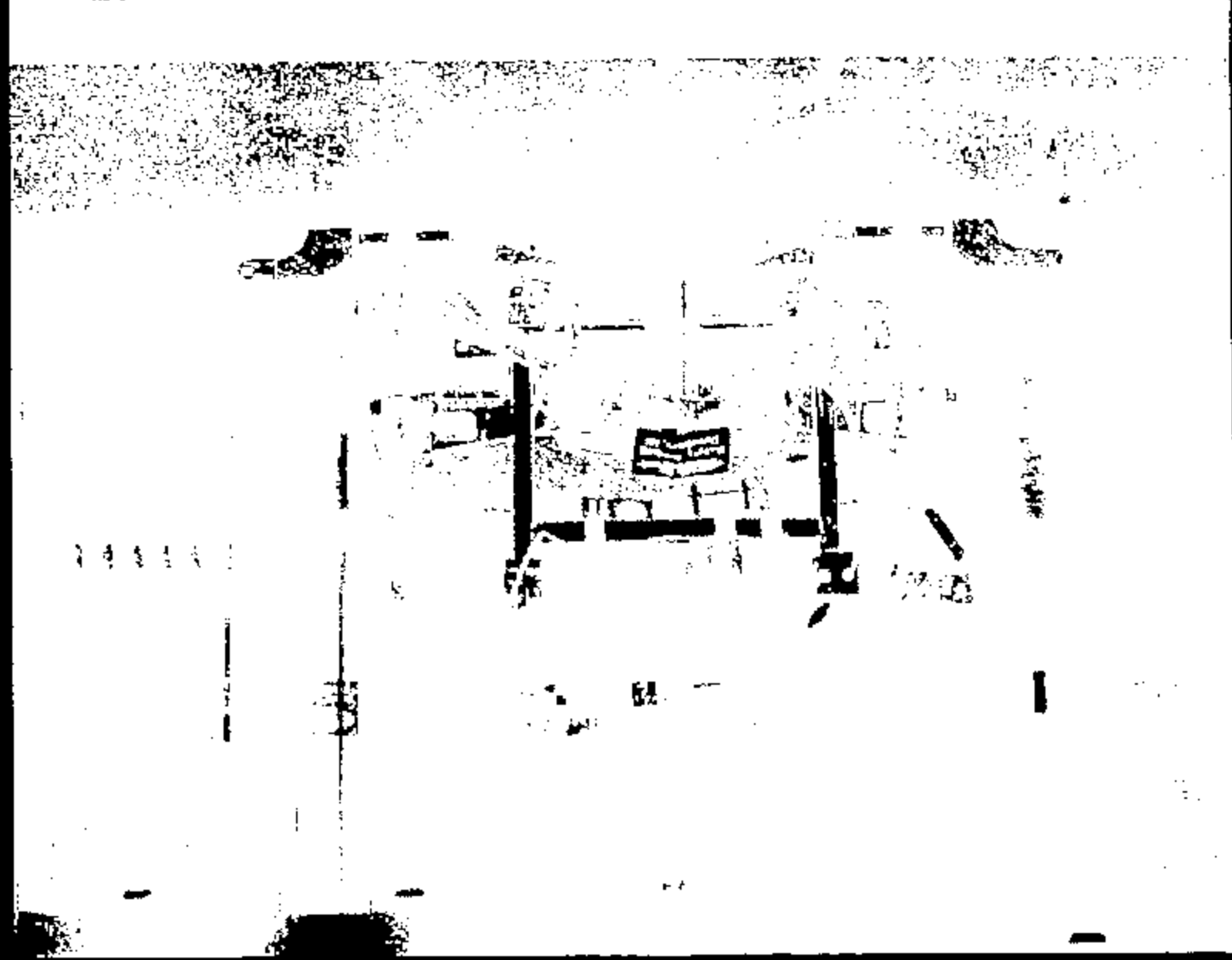


Name :

11571006.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL.



11571007.Jpg

Image :

CRTS 0011571

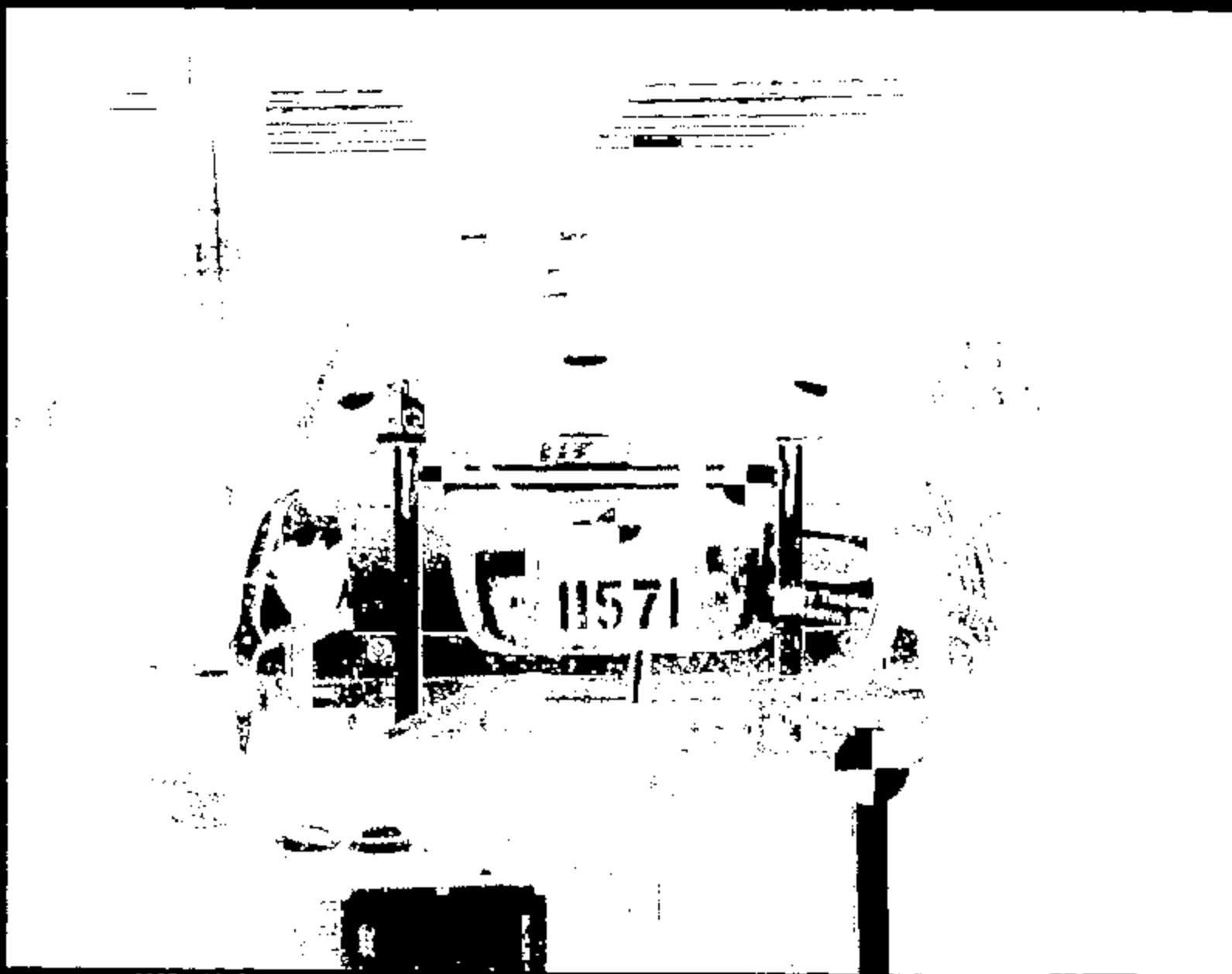


Name:

11571008.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL



Name:

11571009.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL



Name:

11571010.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL

Reaper :

11571011.jpg

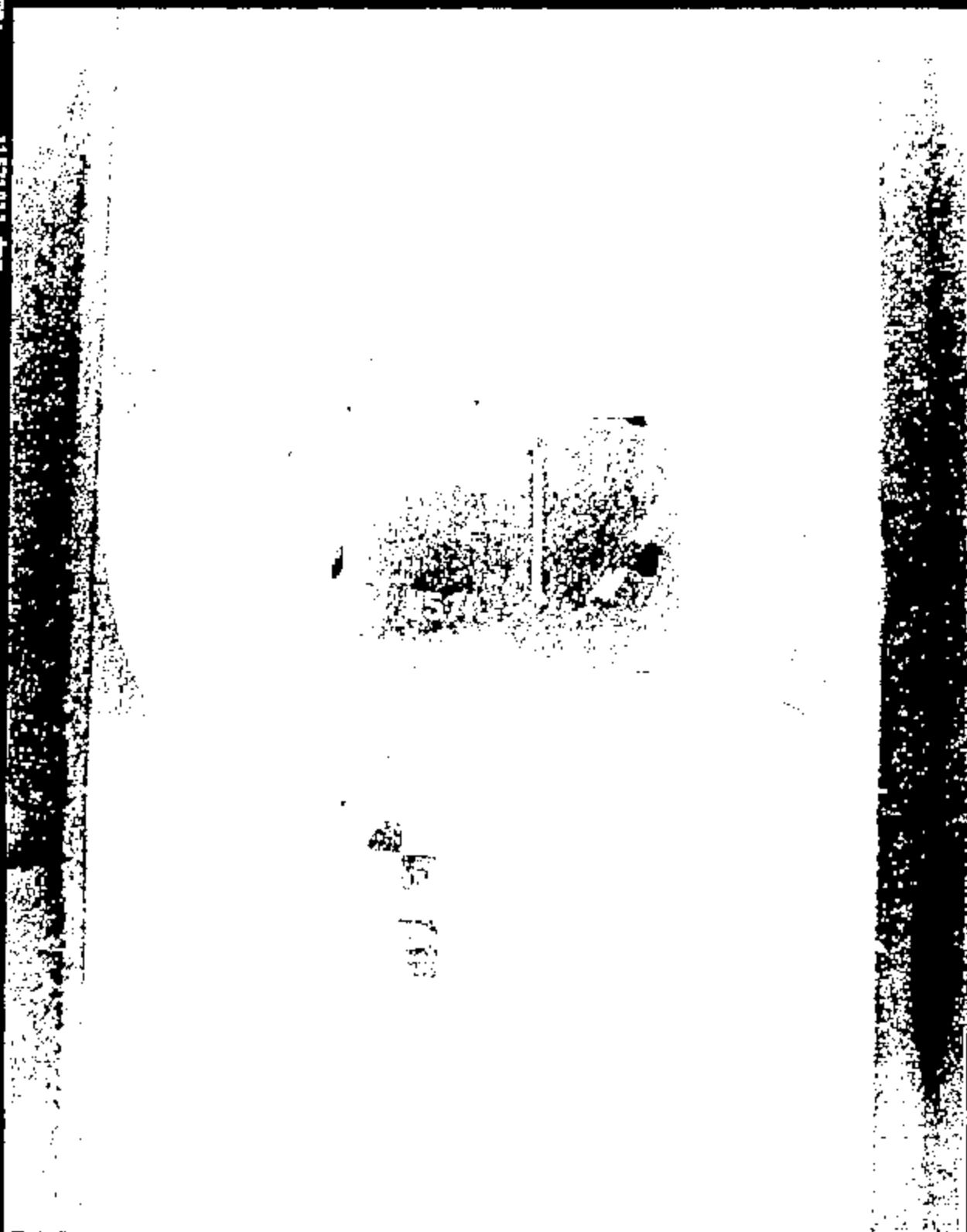
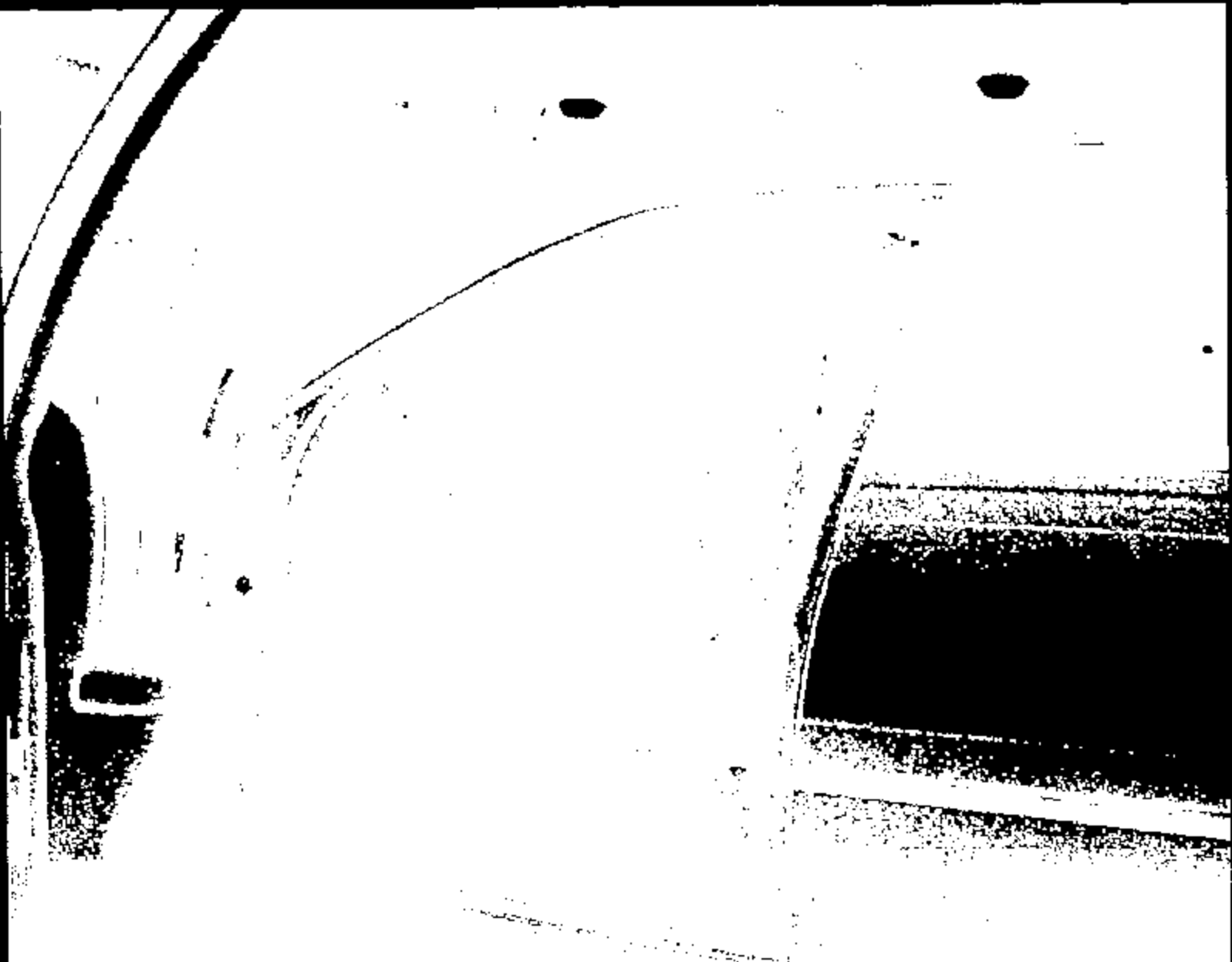


Image:

11571012.jpg





Name:

11571013.jpg

CRTS 0011571

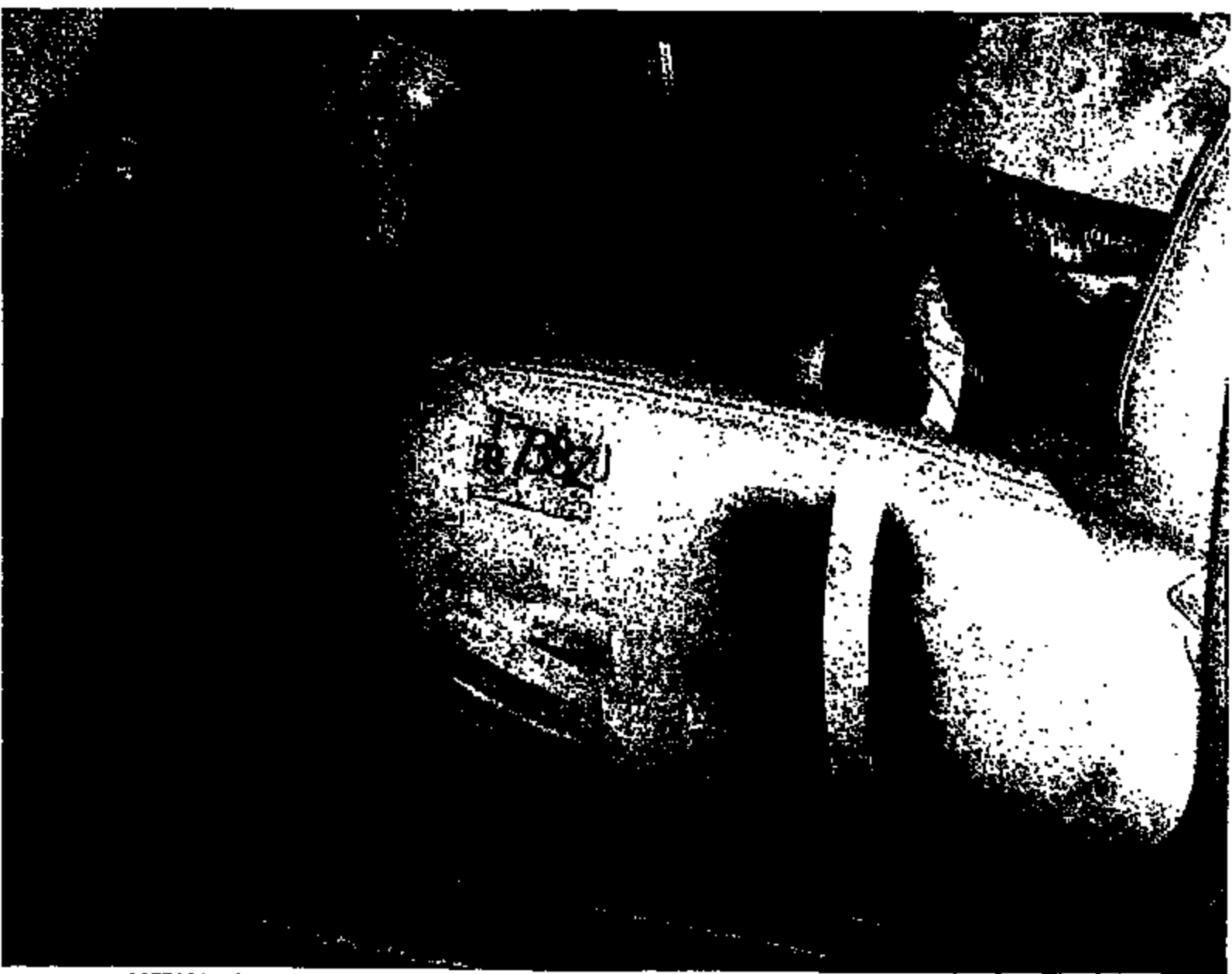


Name:

11571014.jpg

CRTS 0011571

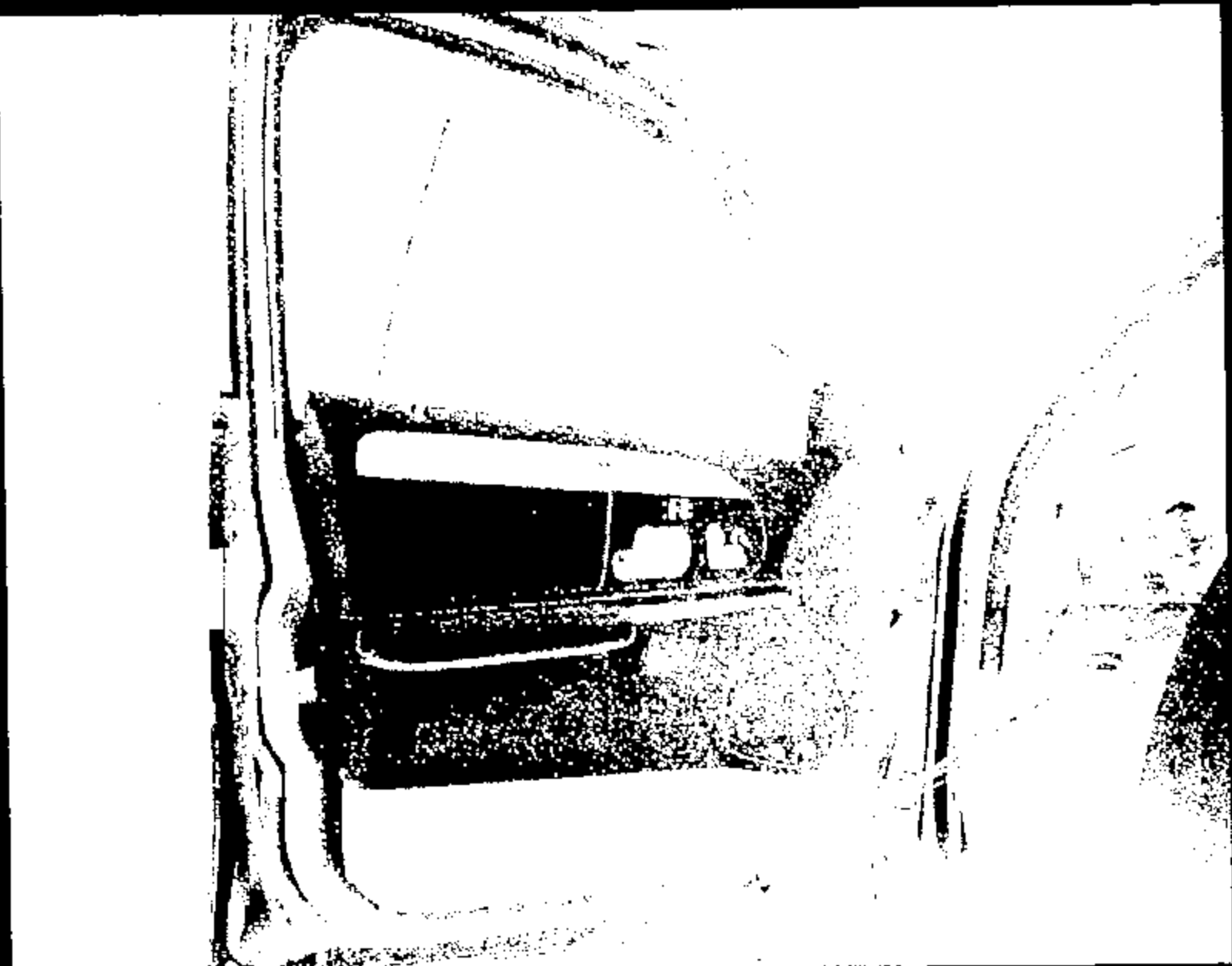
ENTIRE PAGE CONFIDENTIAL



11571015.jpg

Name :

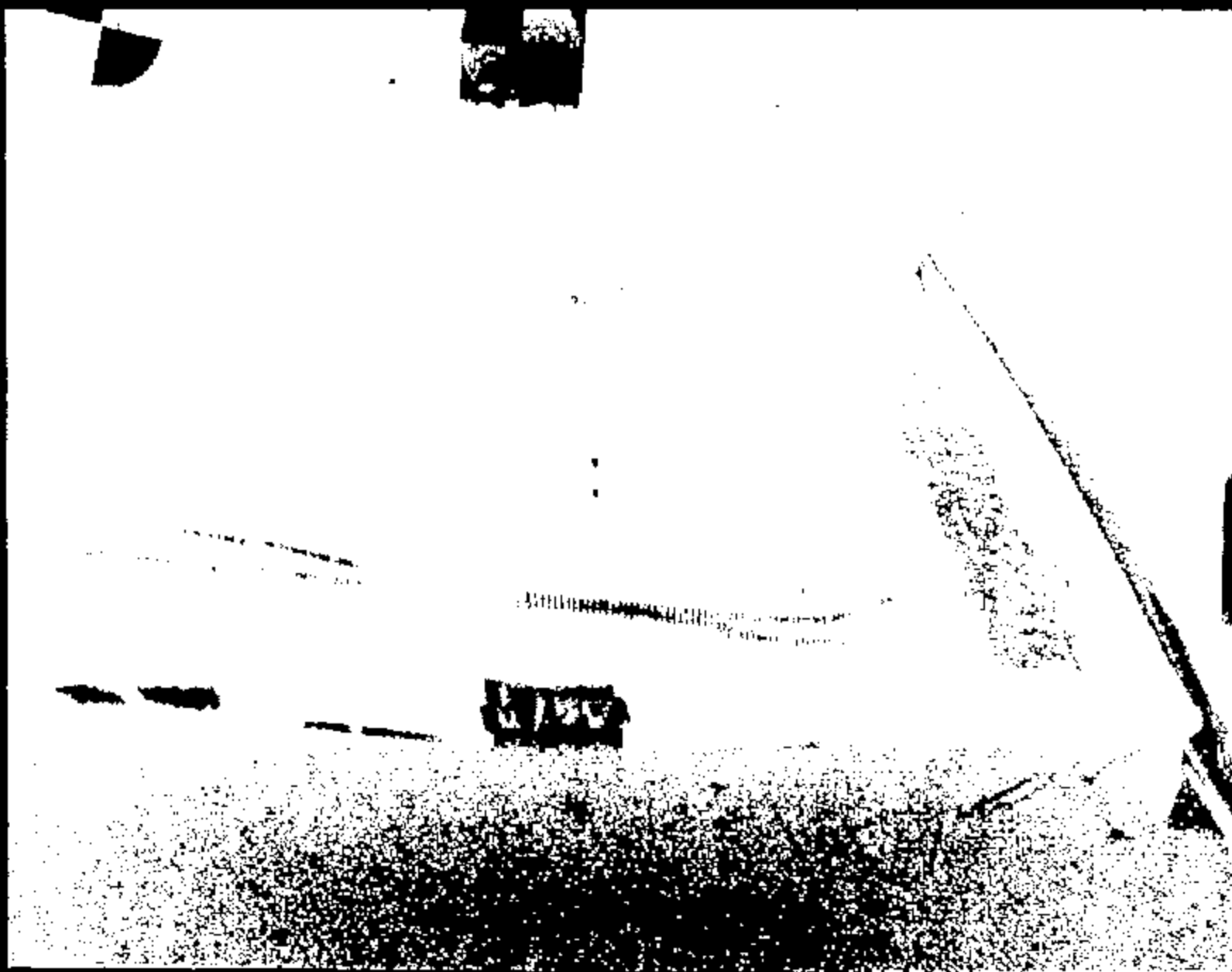
CRTS 0011571



Name :

11571016.jpg

CRTS 0011571



Name:

11571017.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL

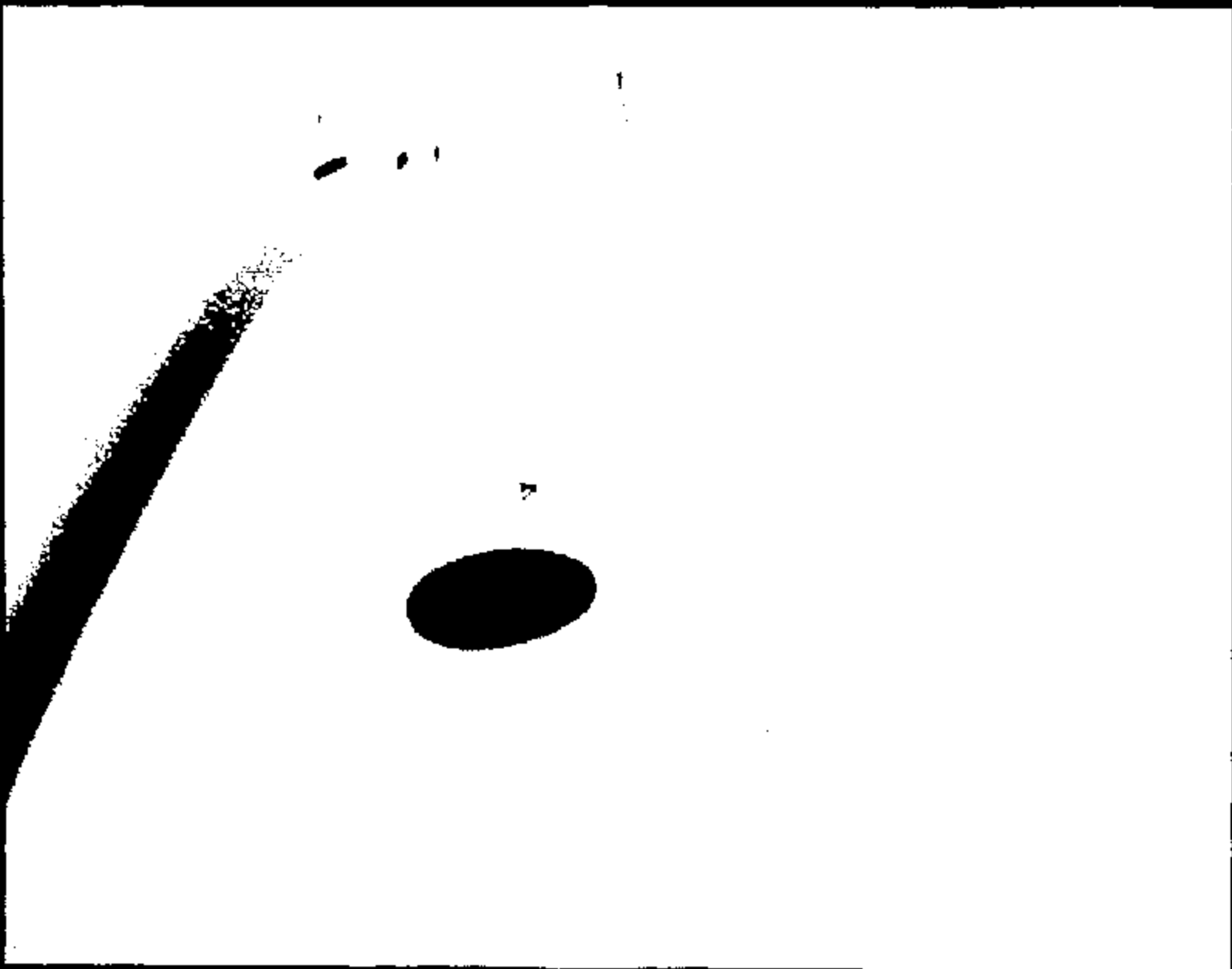


Name:

11571018.jpg

CRTS 0011571

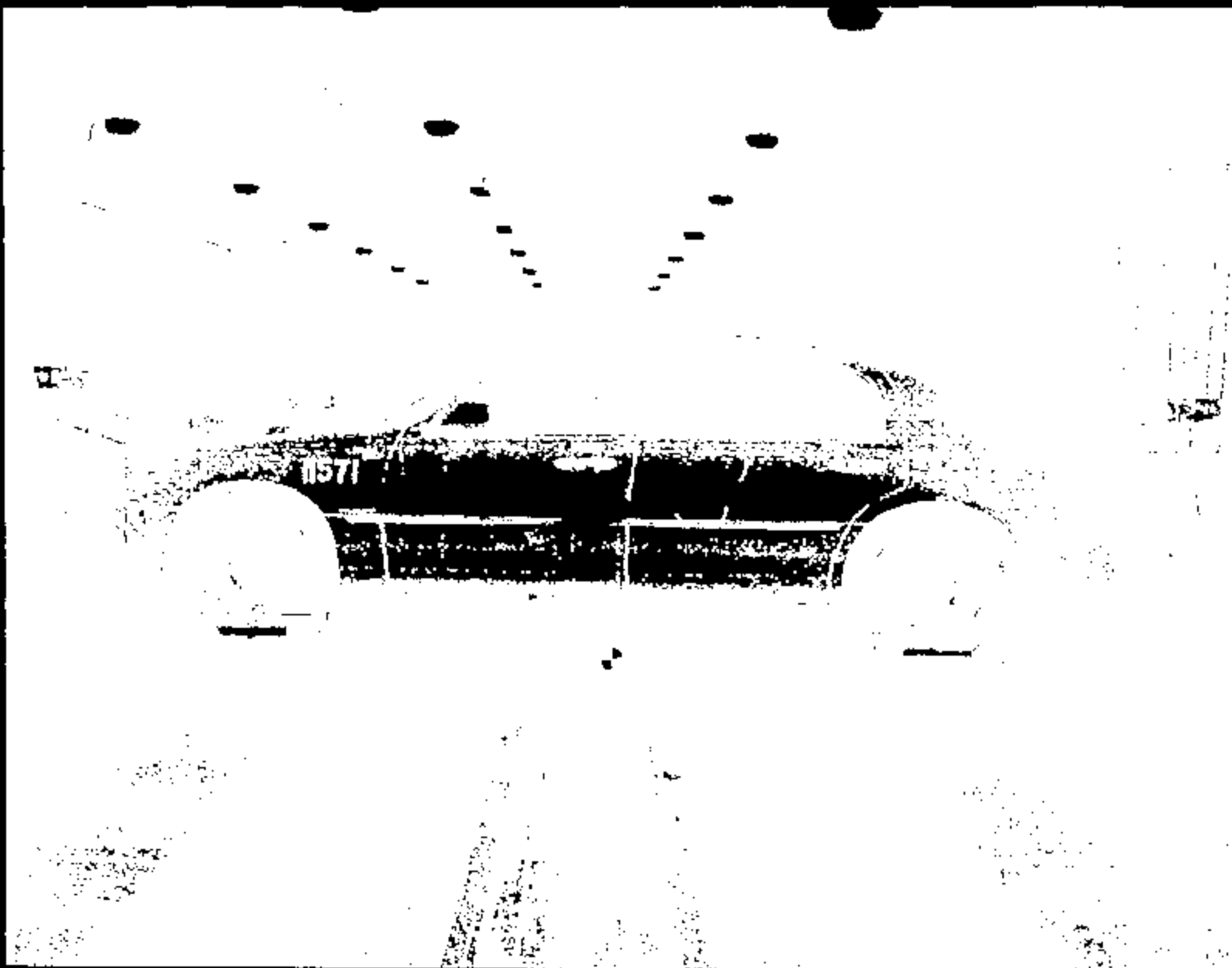
ENTIRE PAGE CONFIDENTIAL



Name:

11571019.jpg

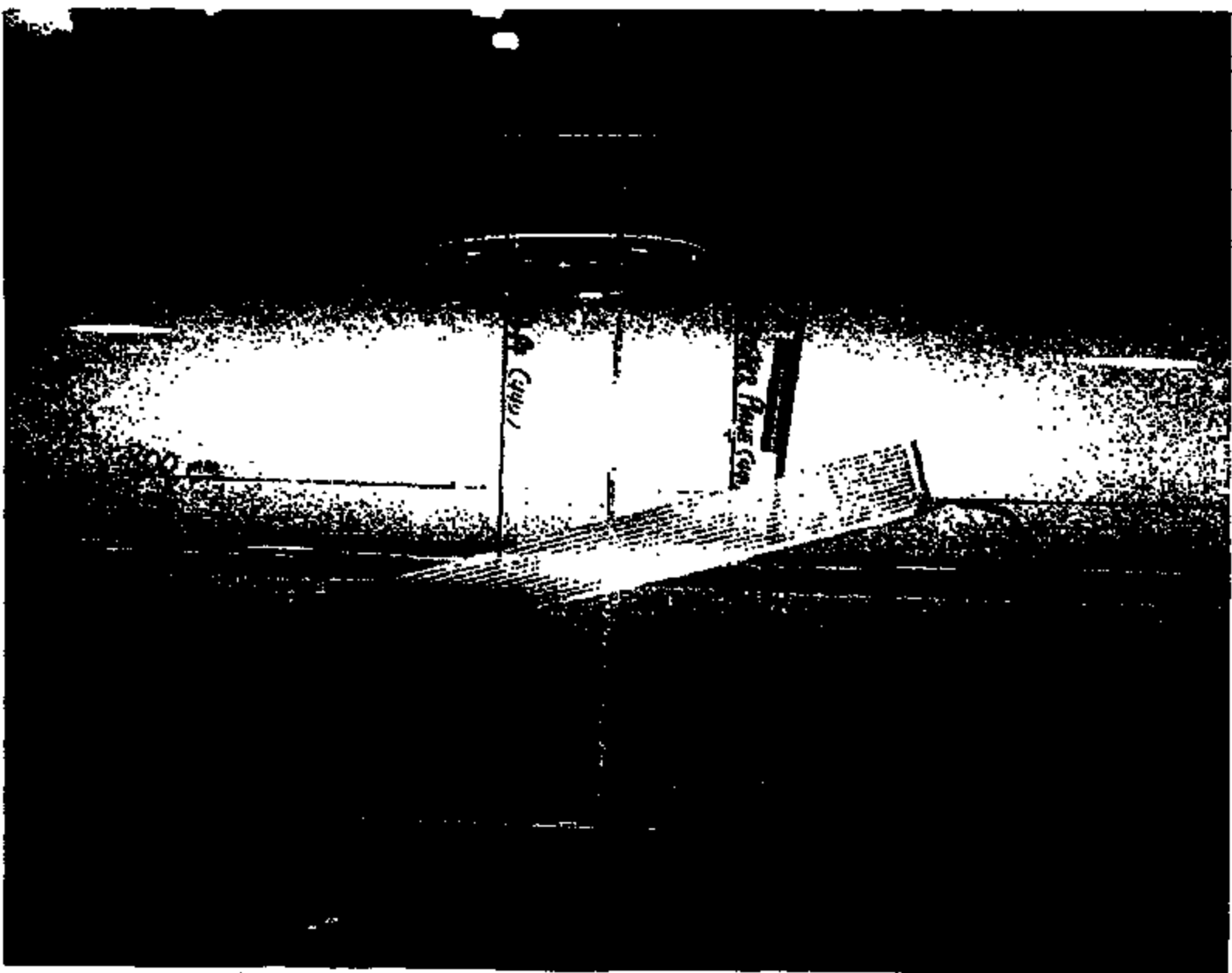
CRTS 0011571



Name: 11571020.jpg

CRJS 0011571

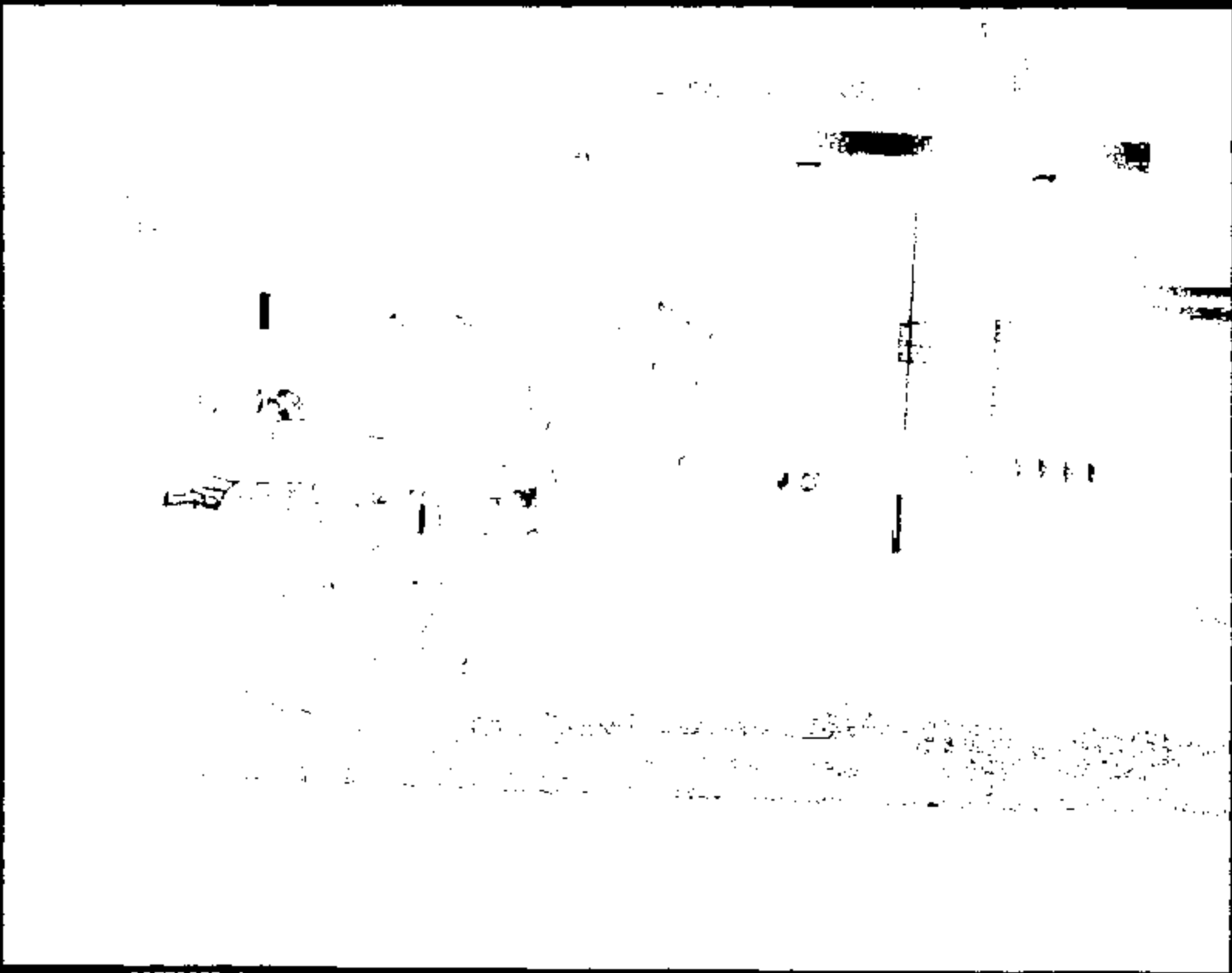
ENTIRE PAGE CONFIDENTIAL



11571021.jpg

Name:

CRTS 0011571

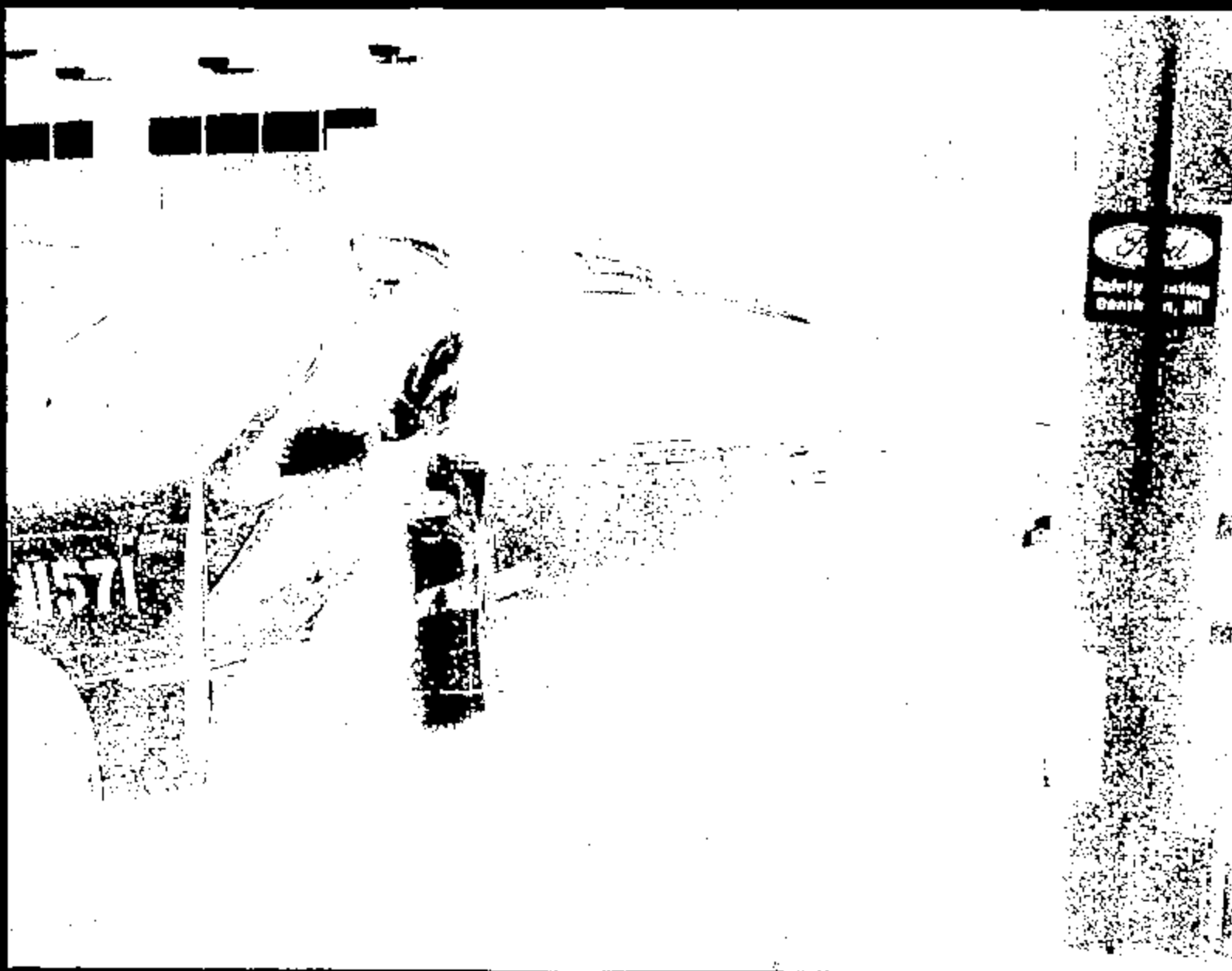


Name:

11571022.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL.



Name:

11571023.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL

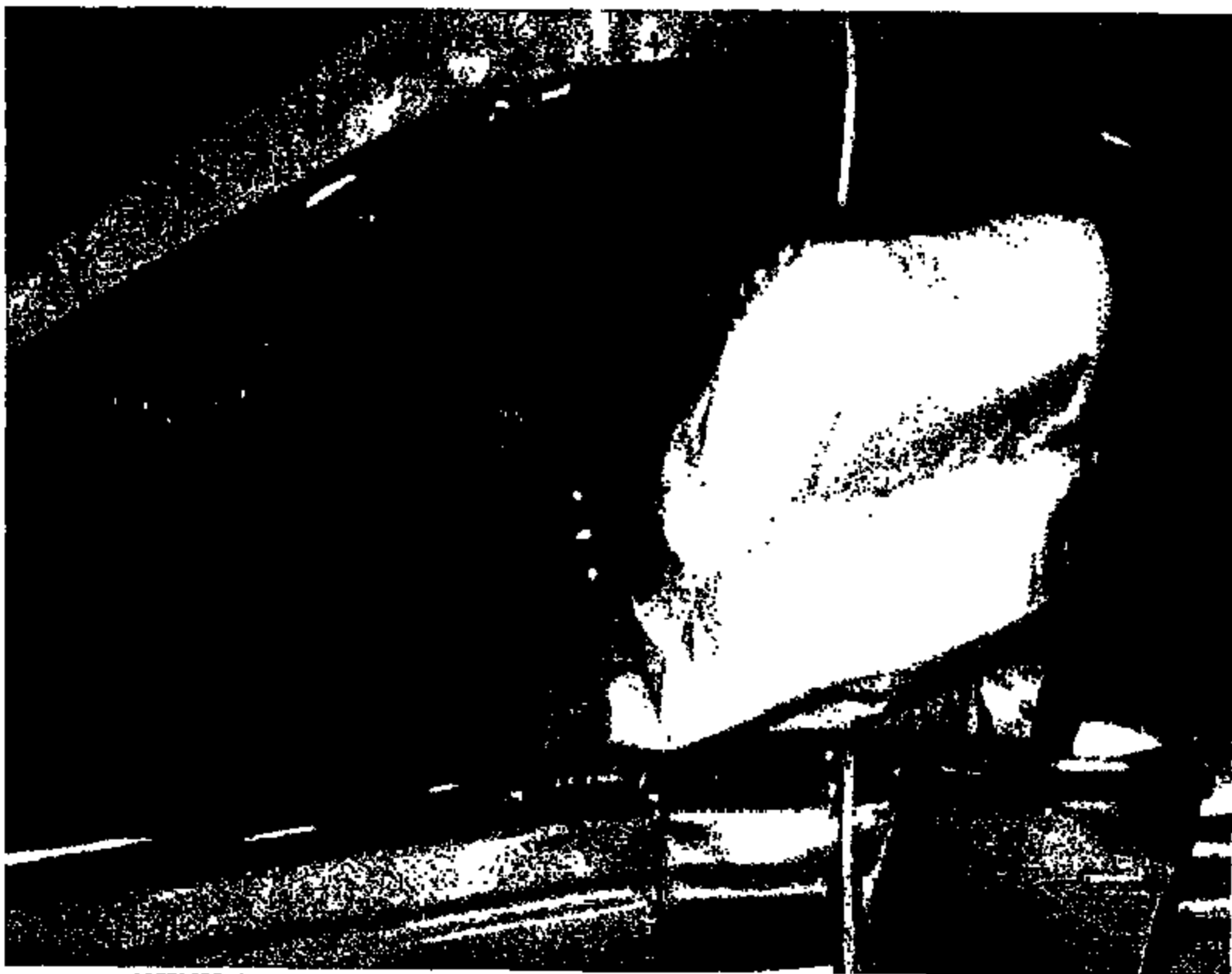


Name:

11571024.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL



Name:

11571025.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL



Name:

11571026.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL

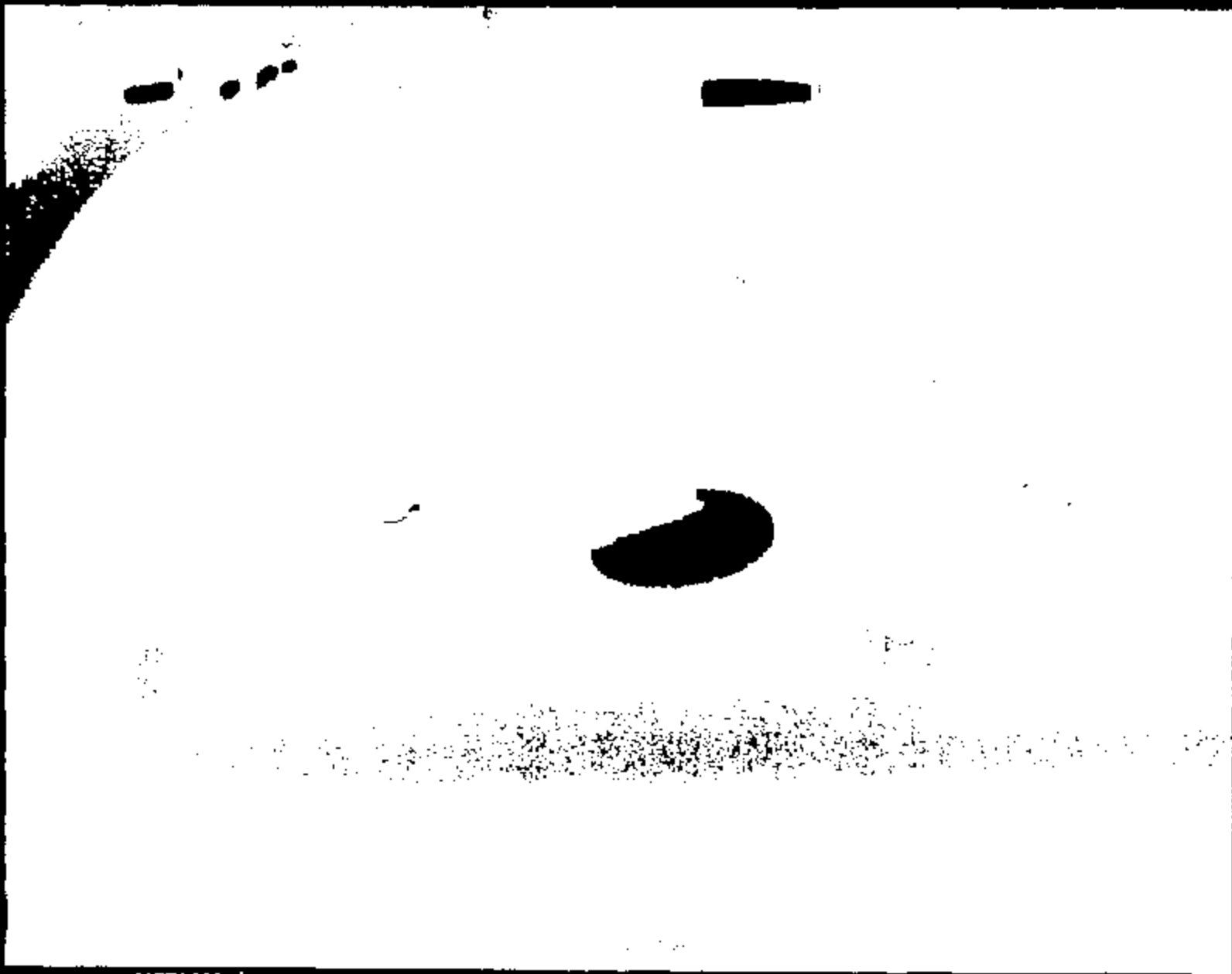


Name:

11571027.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL



Name :

11571028.jpg

CRTS 6011571

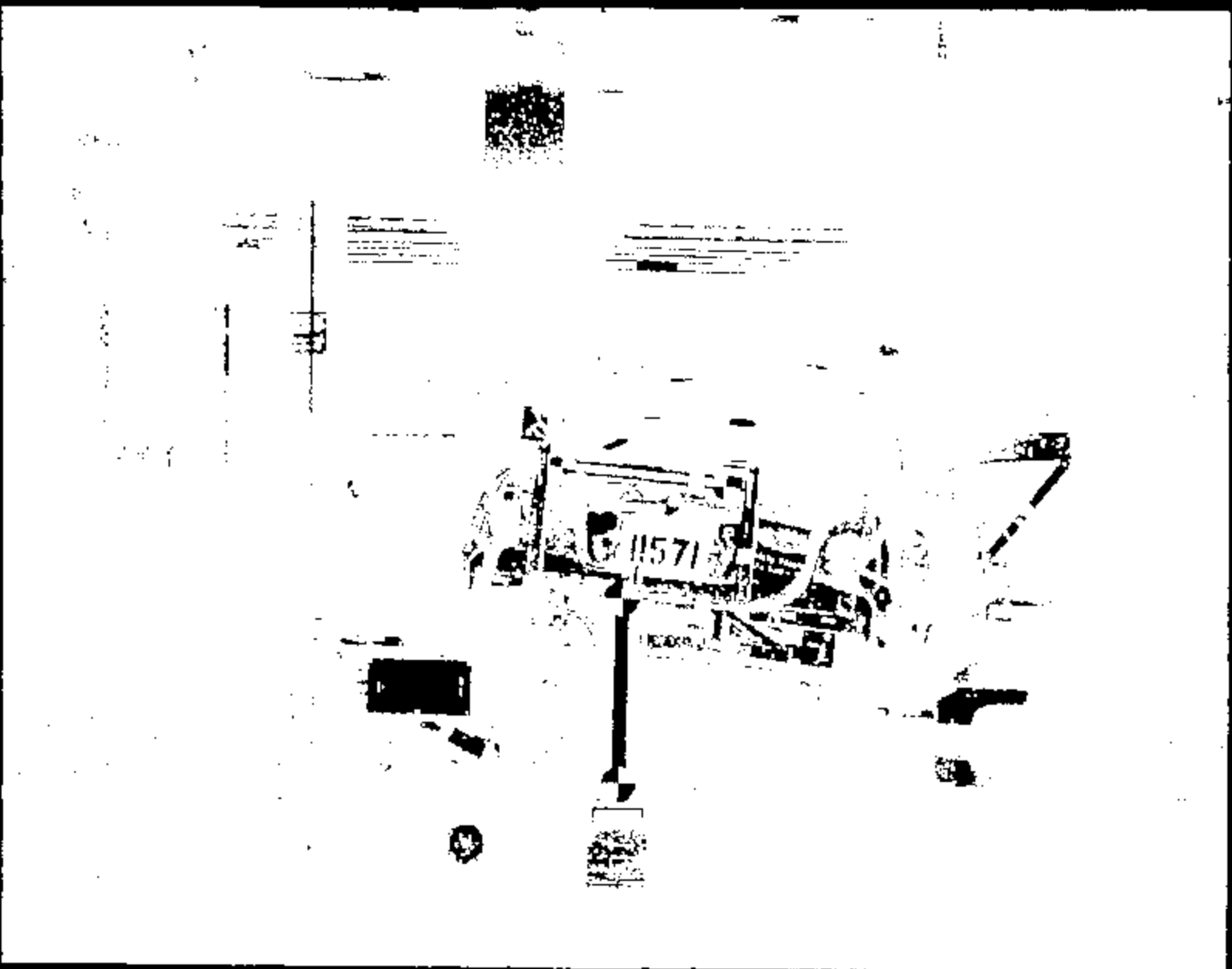


Image : 11571029.jpg

CRTS 0011571



11571030.jpg

Name :

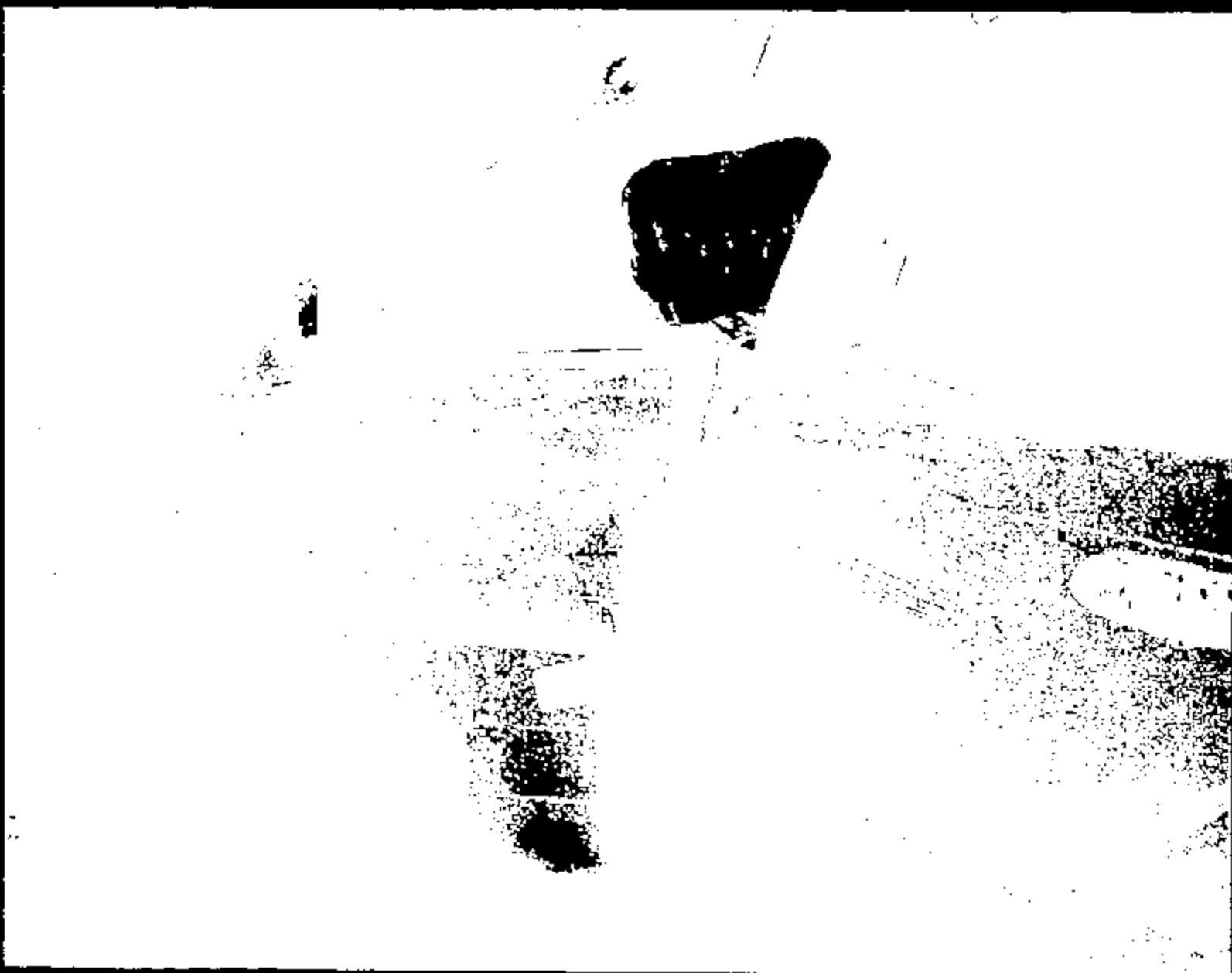
CRTS 0011571



Name:

11571031.jpg

CRTS 0011571

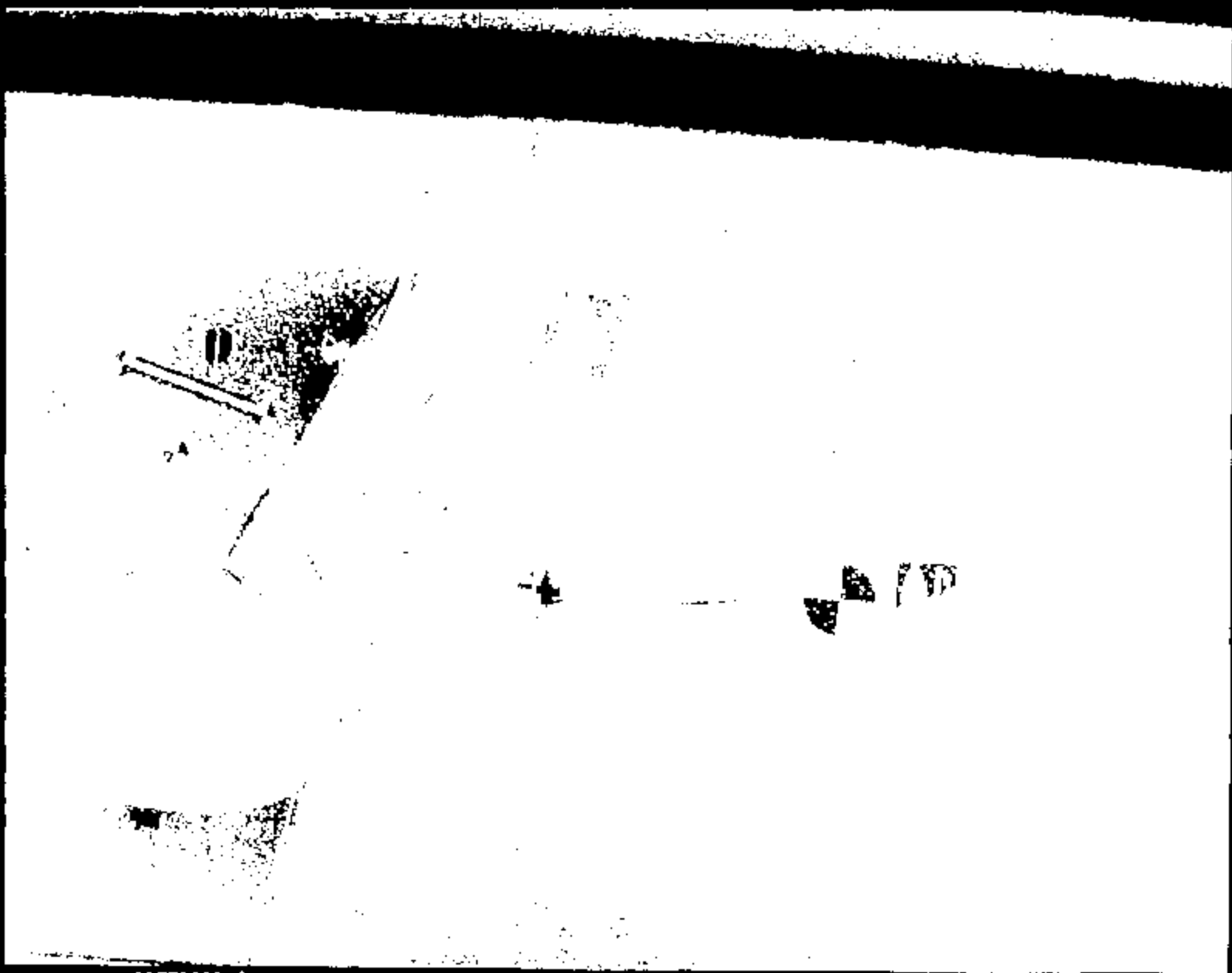


Name :

11571032.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL

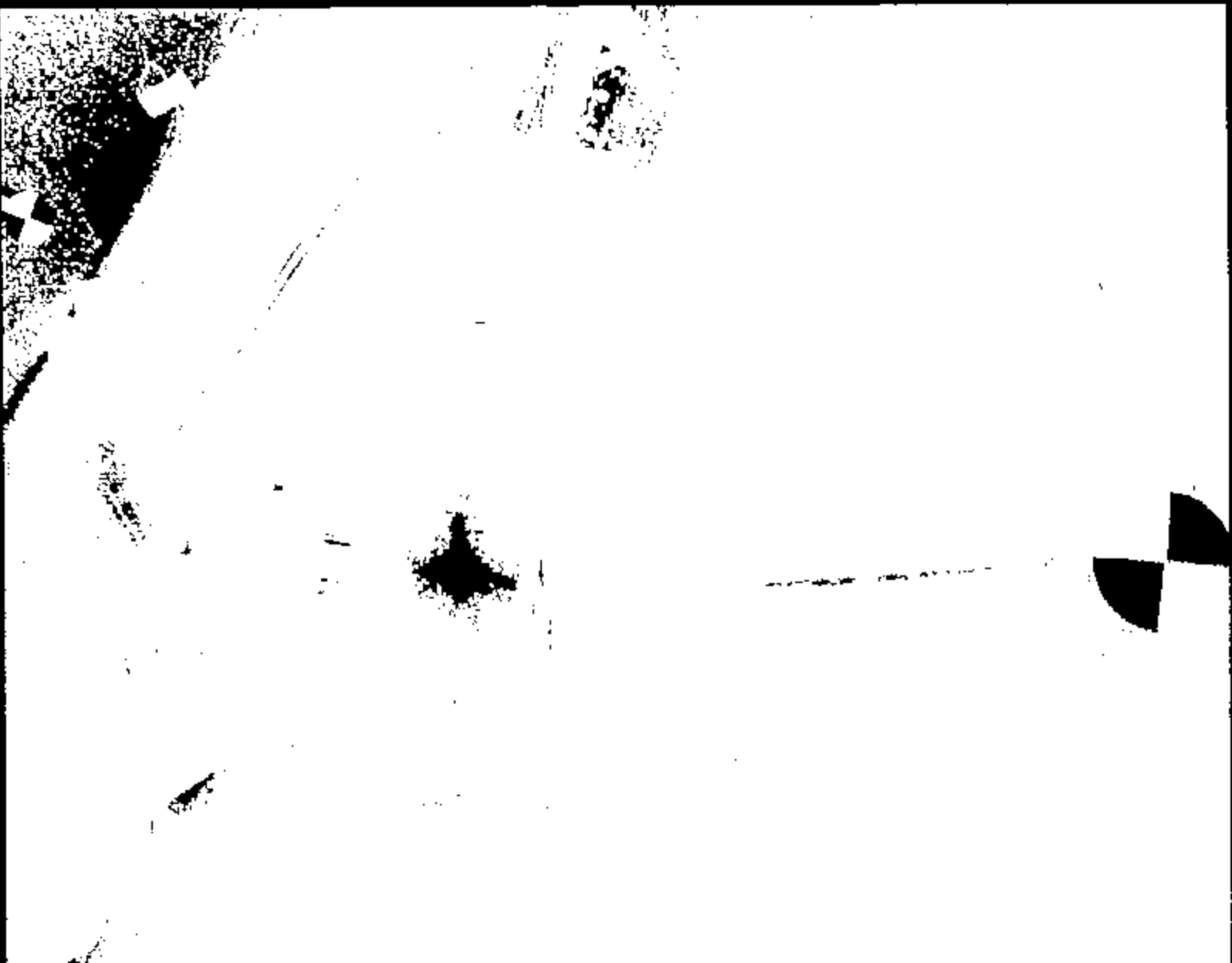


Name:

11571033.jpg

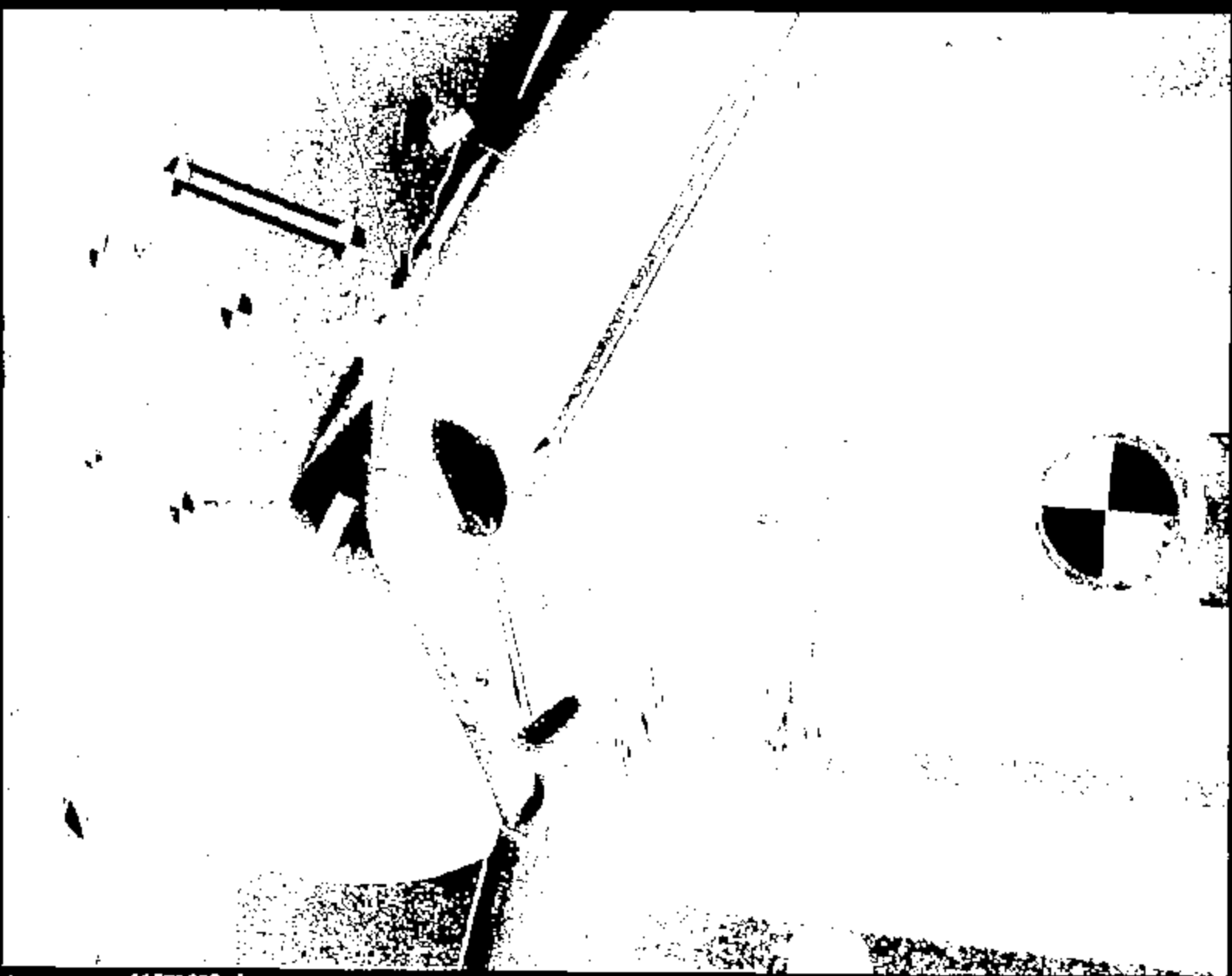
CRTS 0011571

ENTIRE PAGE CONFIDENTIAL



Name: . 11571034.jpg

CRIS 0011571



Name:

11571035.jpg

CRTS 0011571



Name:

11571036.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL

ENTIRE PAGE CONFIDENTIAL



11571037.jpg

Name:

CRTS 0011571



Name:

11571038.jpg

CRTS 0011571



Name:

11571039.jpg

CRTS 0011571

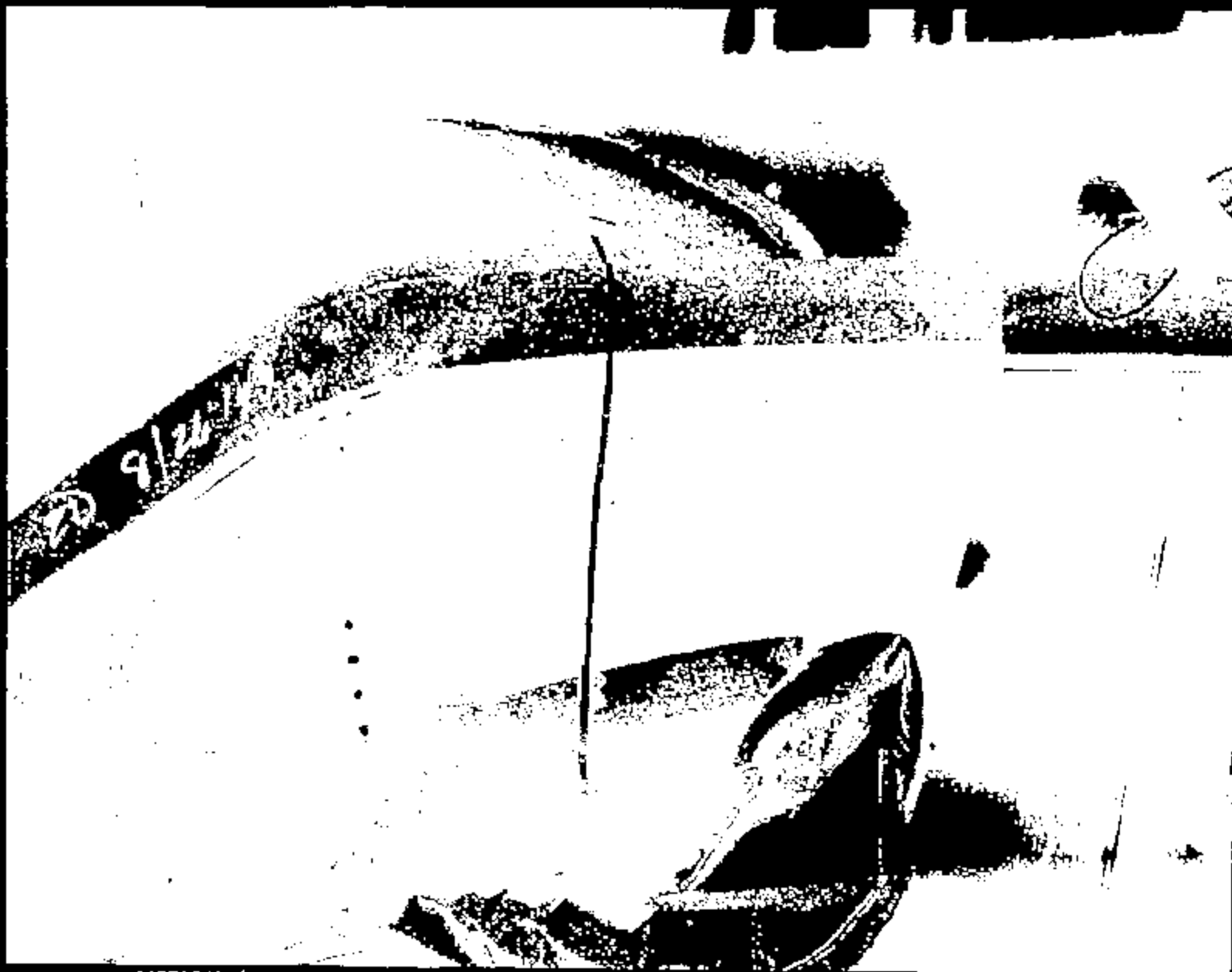


Name:

11571040.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL



Name:

11371041.jpg

CRIS 0011571

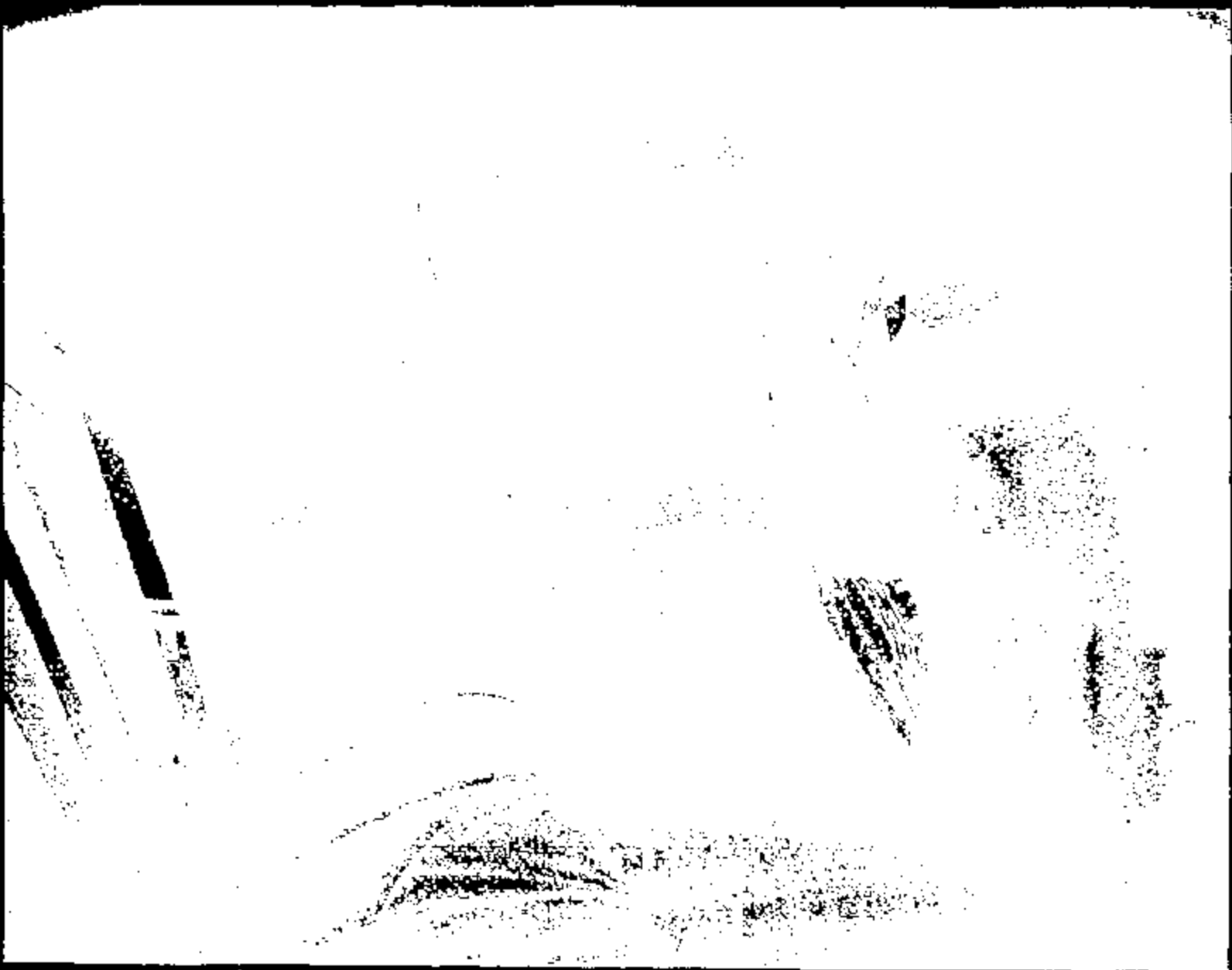
ENTIRE PAGE CONFIDENTIAL



11571042.jpg

Name :

CRIS 0011571



Number:

11571043.jpg

CRTS 0011571



Name:

11571044.jpg

CRTS 0011571

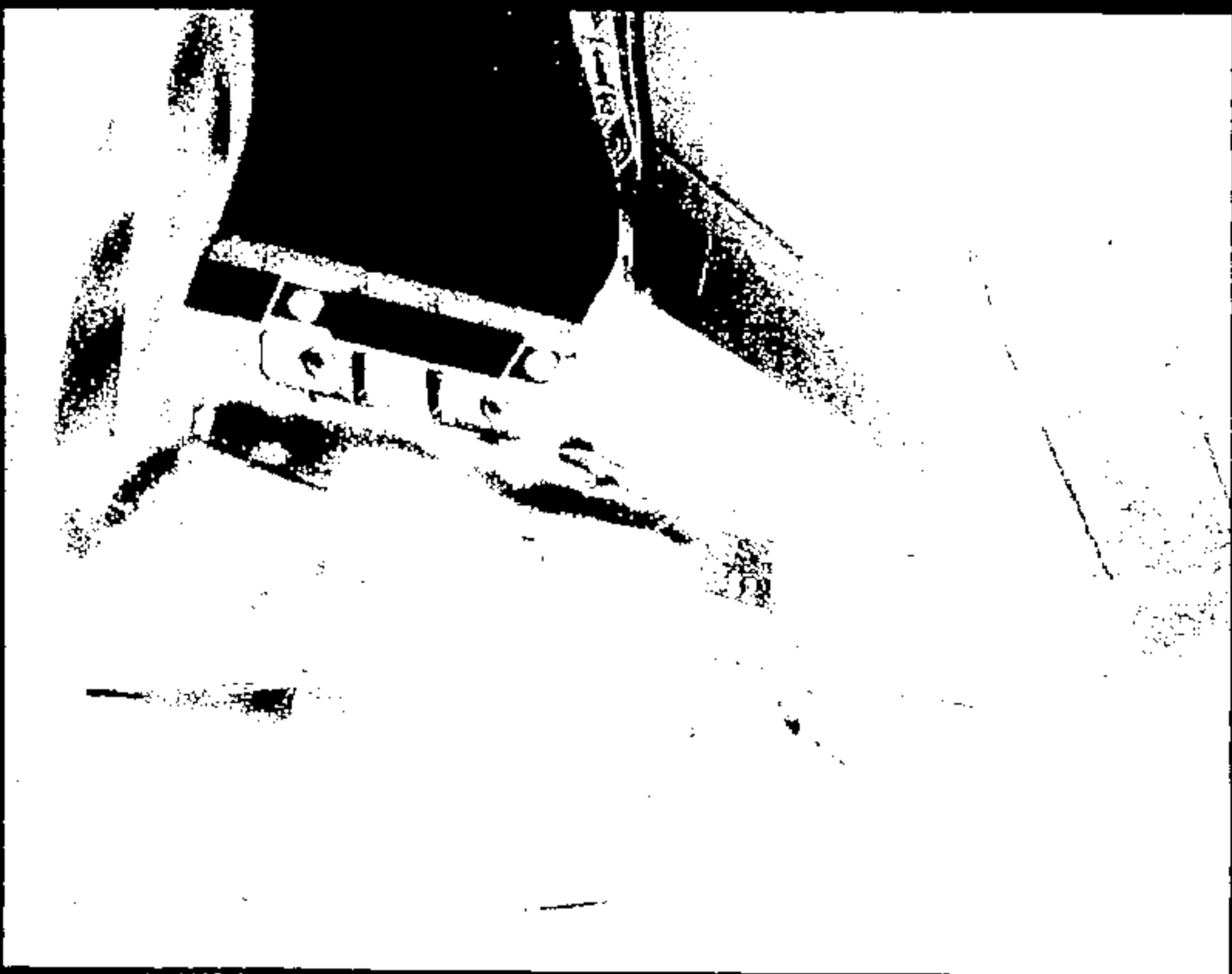
ENTIRE PAGE CONFIDENTIAL



11571045.jpg

Image 1

CRIS 0011571

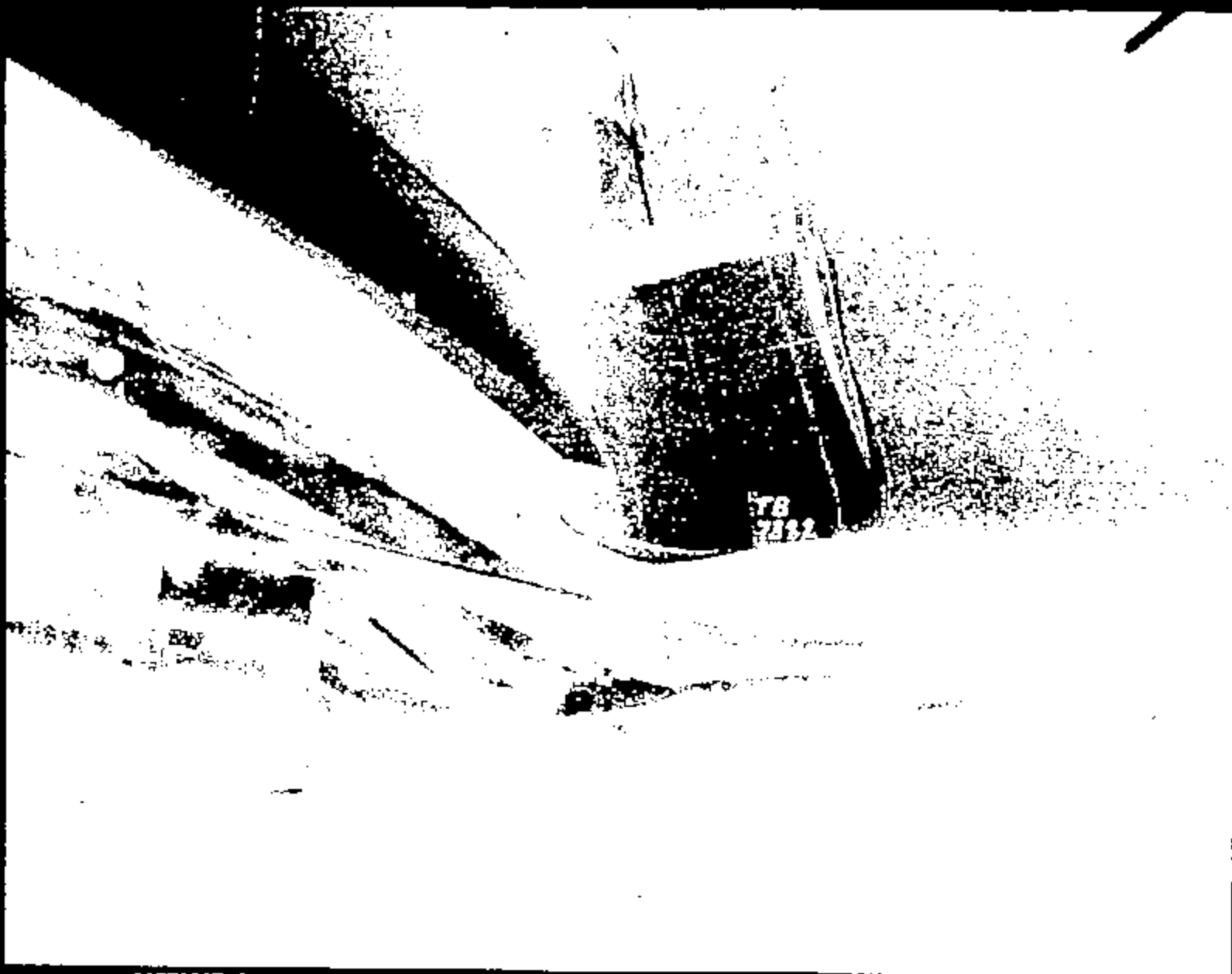


Normal :

11571046.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL.



Name:

11571047.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL

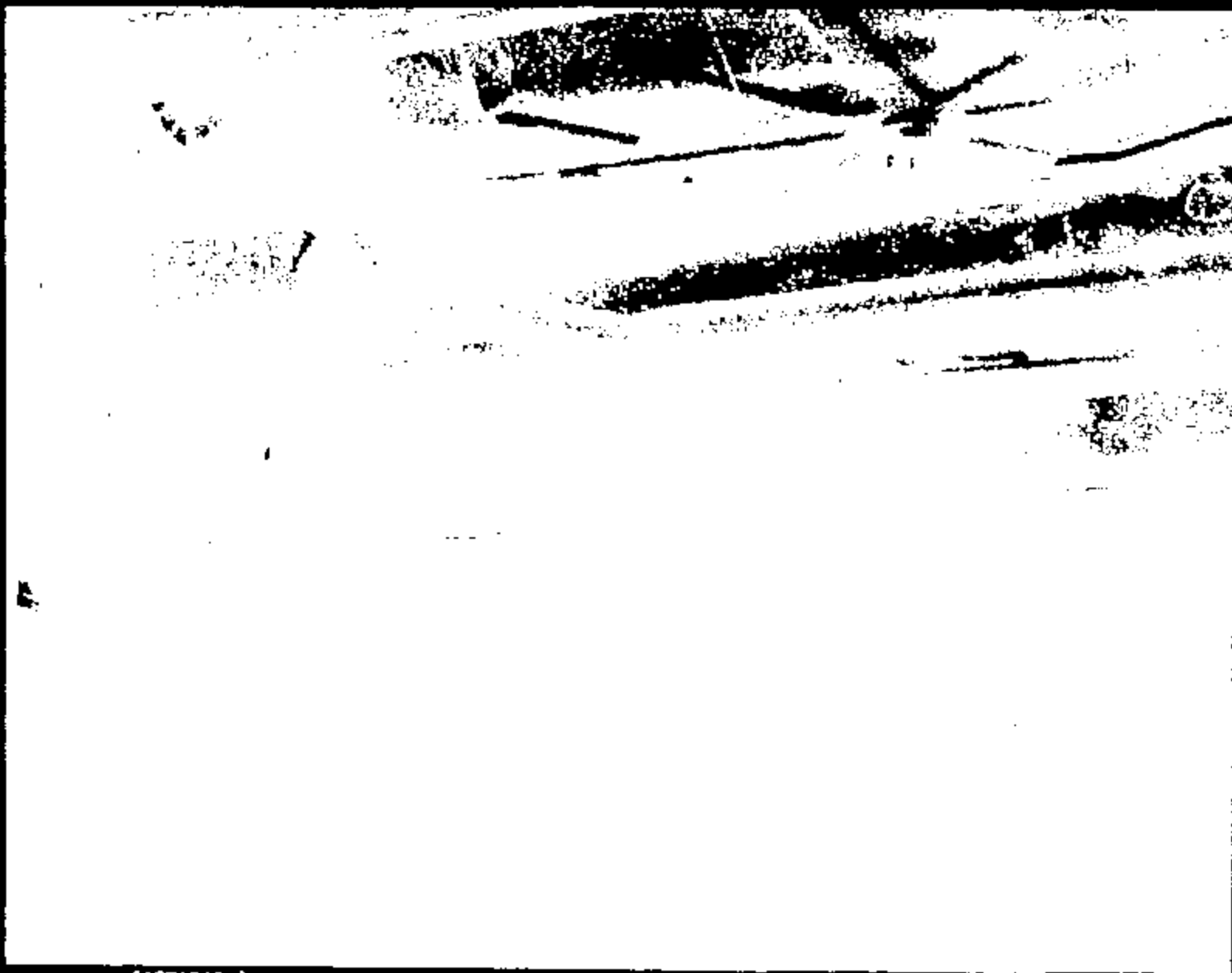


Name:

11571048.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL

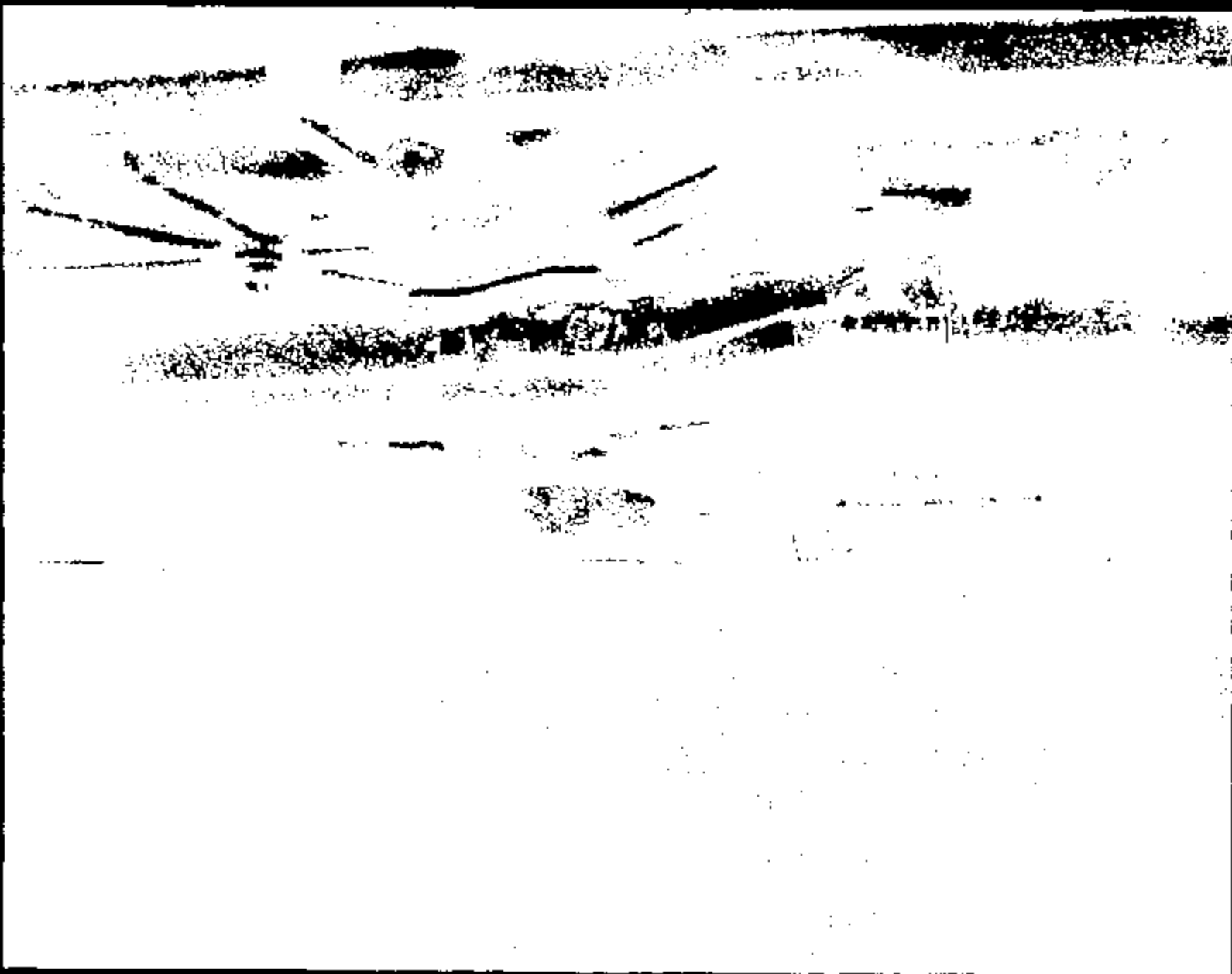


Name:

11571049.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL



Name:

11571050.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL

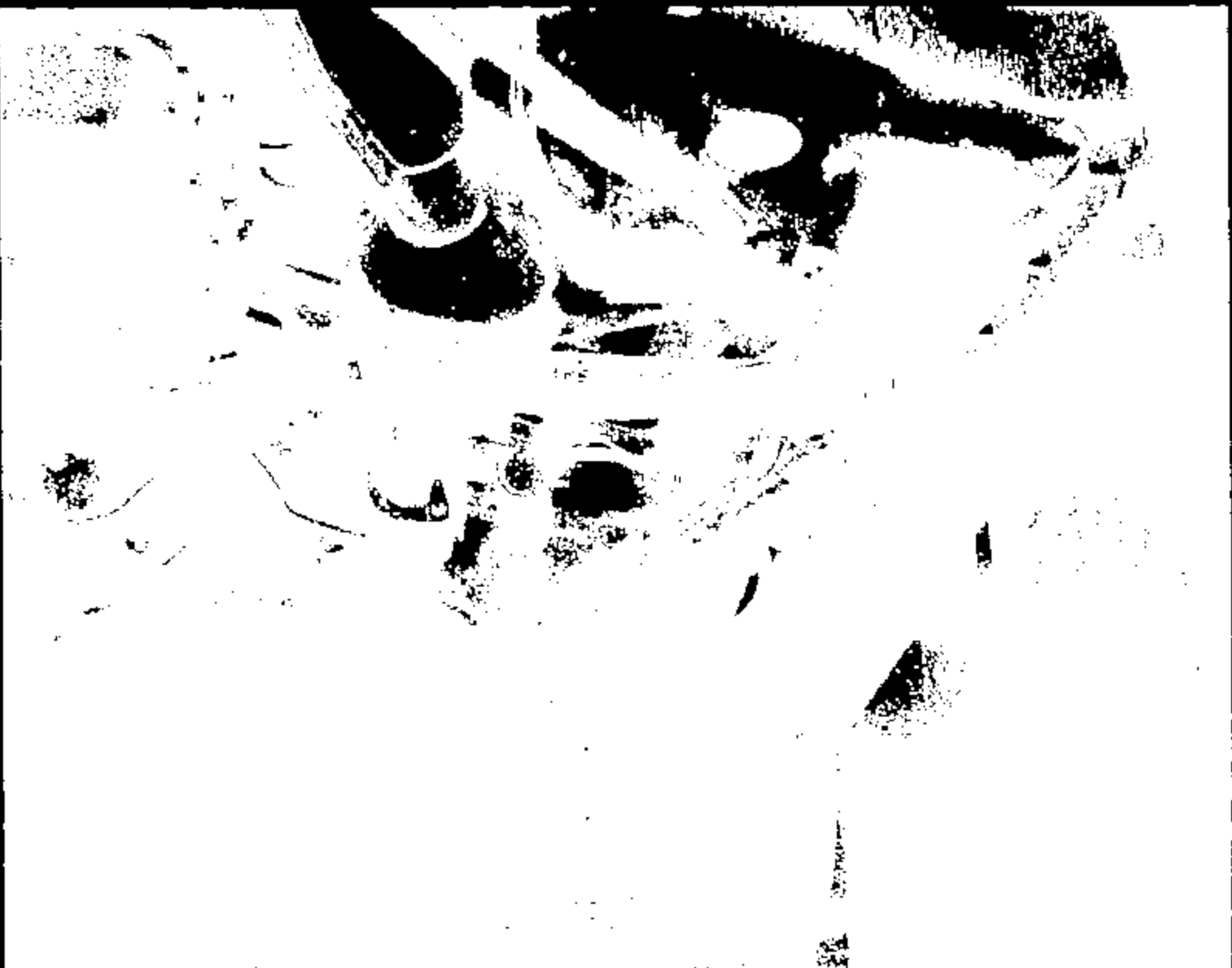


Name:

11571051.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL



11571052.jpg

Name:

CRIS 0011571



11571053.jpg

Name:

CRTS 0011571



Name:

11571054.jpg

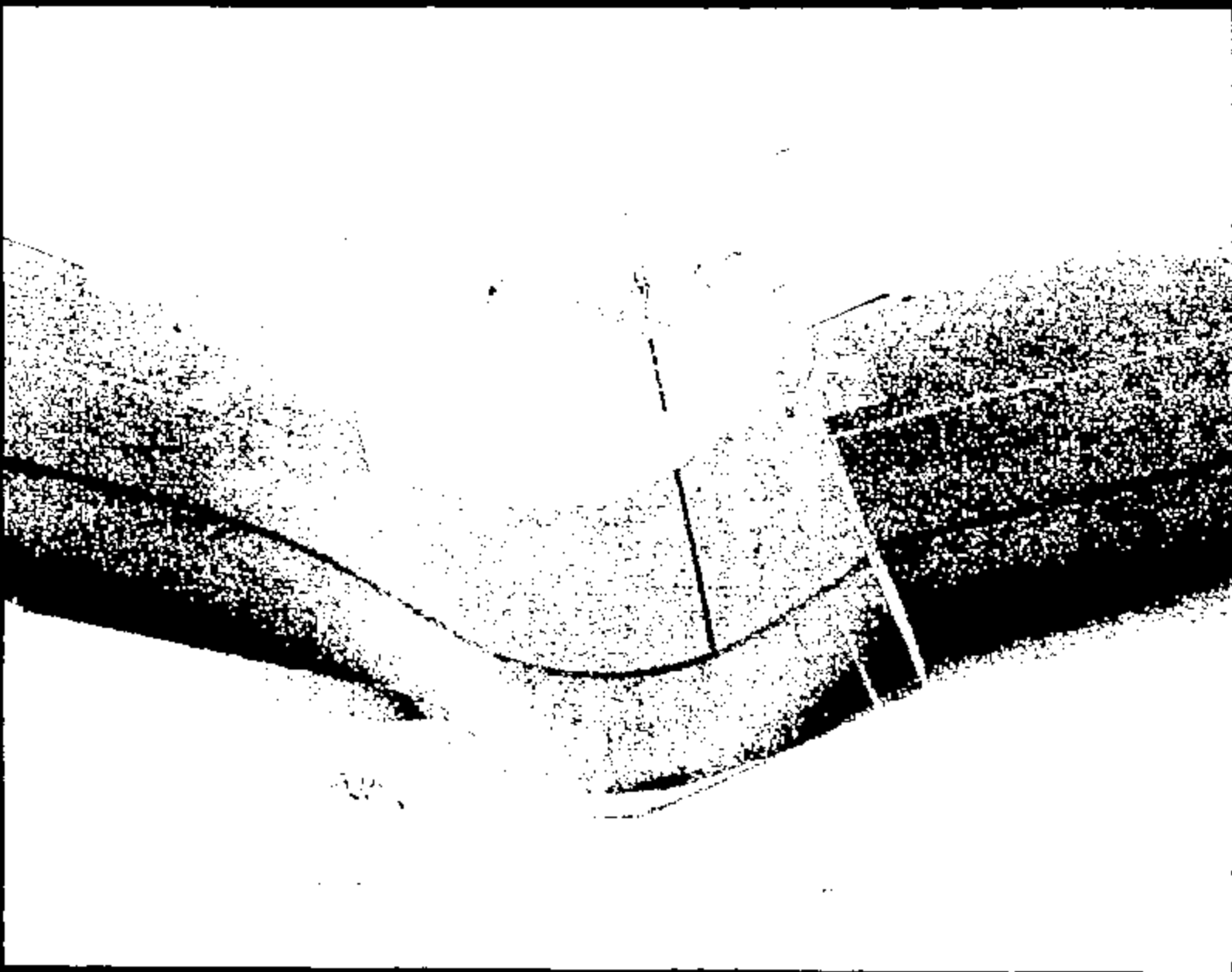
CRIS 0011571



11571055.jpg

Name:

CRTS 0011571

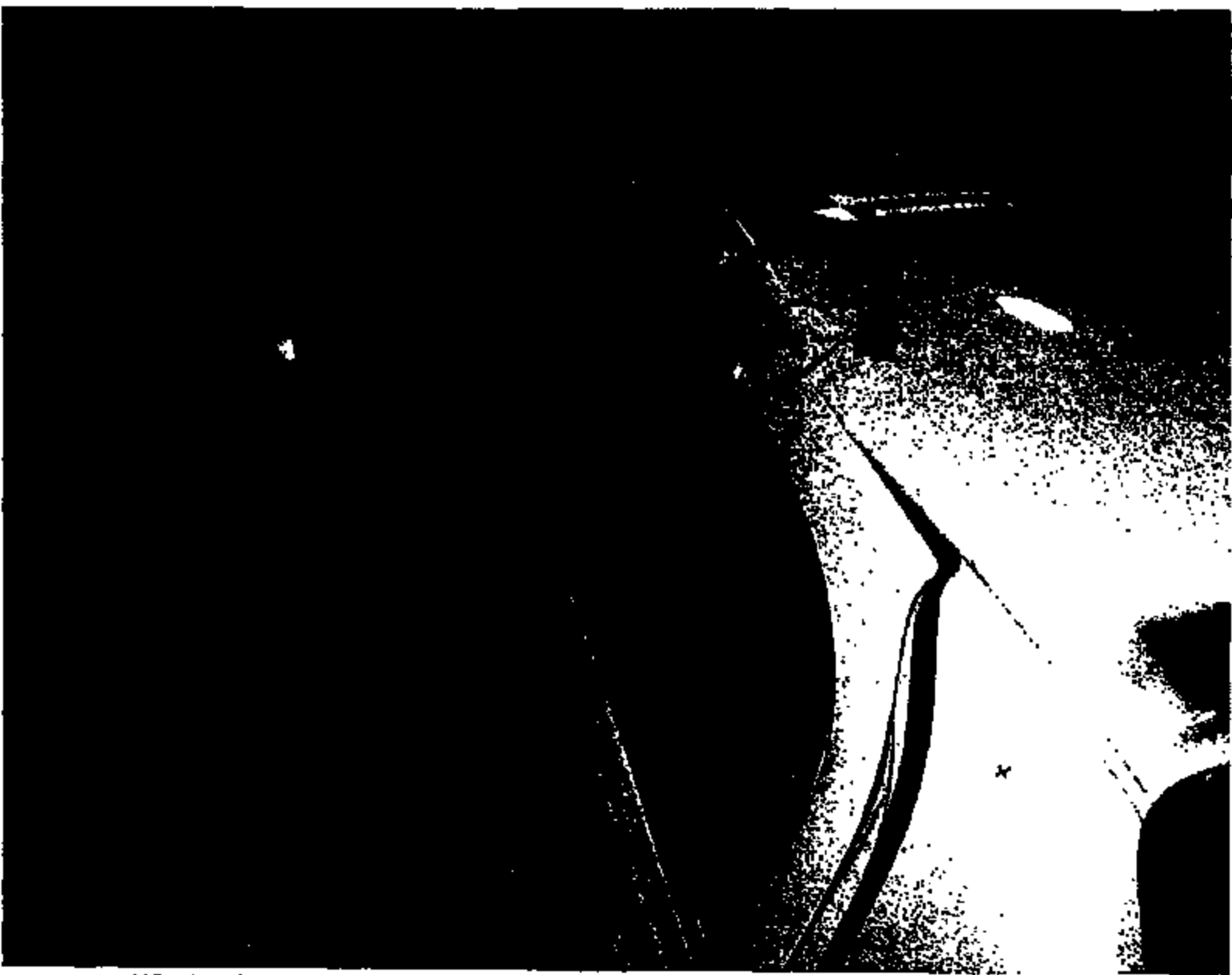


Name:

11571056.jpg

CRIS 0011571

ENTIRE PAGE CONFIDENTIAL



Name :

11571057.jpg

CRTS 0011571



Name :

11571058.jpg

CRTS 0011571



Name:

11571059.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL



Name: 11571060.jpg

CRTS 0011571

ENTIRE PAGE CONFIDENTIAL



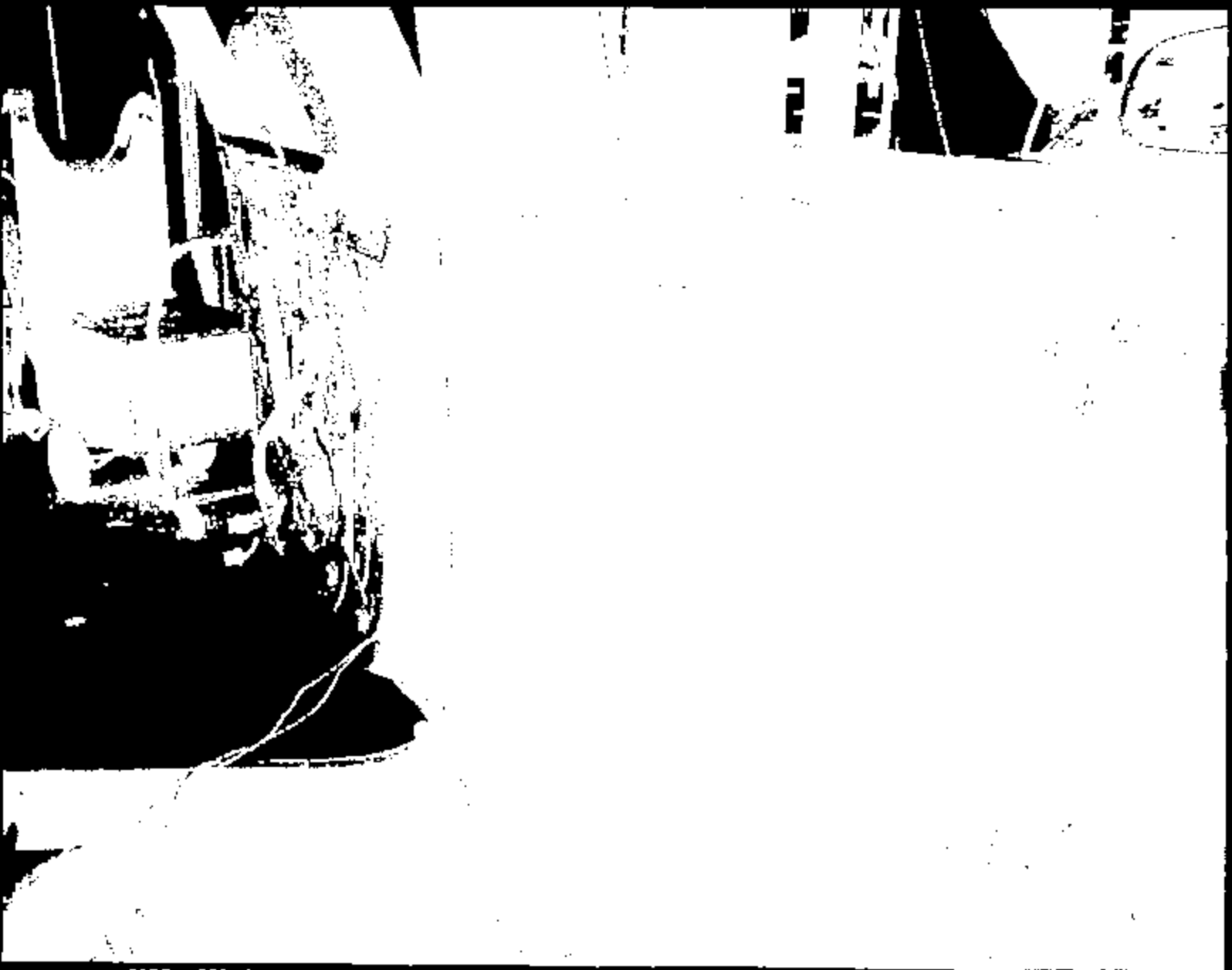
Name: CARRON001.jpg



CARRON003.jpg

Name:

CRIS 0011571



CARROW003.jpg

Source:



CARRON004.jpg

Name:

CRTS 0011571

TEST AUTHORIZATION				TEST AUTHORIZATION NUMBER: TB7382			
TO: Safety Lab Department				REQUEST DATE: 8/1/89		REQUESTED COMPLETION DATE: 8/16/89	
CC: K. Arthur				REQUEST NUMBER: n/a		PROBLEM NUMBER: n/a	
				REQUESTING ACTIVITY: Vehicle Crash Safety			
TITLE OF TEST: (speed) (test description) 2000.5 FN145 LWB 15mph LH Side Pole (350 mm) Use Rollers				PARTS DUE DATE: n/a			
TYPE OF TEST: ☒ VEHICLE ☐ BENCH ☐ LABORATORY ☐ OTHER		VIN # or IDENTIFICATION VC040001-R - 2000005 1LNH1603WXXV867085		VEHICLE MODEL & YEAR: 2000.5 FN145 LWB		PROD. OR ENG. LETTER: n/a	
ENGINE NO. DISPL. CARB: 4.9L 2V		TRANS / DRIVETRAIN: 4R70W		AXLE RATIO: n/a		TEST CONDUCTED TO CERTIFY CONTROL ITEM COMPLIANCE WITH GOV. REGULATIONS: Yes X No	
TYPE OF FUEL: None		CONVERTER: n/a		IGNITION TIMING: n/a		DISPOSITION OF PARTS: n/a PROCUREMENT REQ? ☐ YES ☐ NO IF YES, GIVE CODE	
CRANKCASE OIL AND CAPACITY (L): n/a		TIRE SIZE AND RY RATING: P225/60R16		REPORT CATEGORIES: ☒ ENGINEERING ☒ DATA ☒ RAWDATA		MAIL REPORT TO: BLDG: 2 MAIL DROP: 1225 ADDRESS: 22408	
VEHICLE TEST WEIGHT: FRONT 2424 REAR 2911 TOTAL 4735		TIRE PRESSURE (psi): FRONT 32 REAR 32					
1. OBJECT OF TEST 2. TEST PROCEDURE 3. ITEMS TO BE TESTED (NAME, NUMBER, QUANTITY)							
"RECORD COPY" Schedule No. <u>7-7-12</u> Retain Until <u>2019</u> 1) Conduct: (speed) (year) (vehicle) (level) 15mph 2000.5 FN145 LWB CP (mode) LH Side Pole (350 mm) Use Rollers 2) Velocity At Impact: 15mph Remote Fire Time: Positioning procedure: <i>ST-15 940 8/2/89</i> 3) Vehicle Year: 2000.5 Vehicle Line: FN145 LWB Vehicle Level: CP Test Requester: (name) J. Wozniak (phone) 24-84541 (pager number) JWOZ Build Coordinator: E. Malar 84-57842 EMBL Additional Contacts: Estimated test cost = \$30,000.00 Test Dev. Engineer <i>J. Wozniak</i>							
REQUESTING SECT. NO: TB71	WORK ORDER/ WORK TASK JWBK	ISSUED REQUESTED BY: J. Wozniak	PHONE: 24-84541	APPROVAL: K. Arthur	TEST TYPE: n/a	RISK: n/a	SIGN OFF DATE: n/a
COMPLETE THE FOLLOWING TWO QUESTIONS AS INDICATED: (Check appropriate boxes)							
1 - Rational for not replacing this test by CAE analysis: ☐ No CAE Methodology or process available ☐ No CAE Correlation ☐ Insufficient confidence in CAE ☐ To obtain basis data for CAE ☐ Replacement or Improvement of existing Test ☐ Testing is Quicker ☐ Mandatory or Regulatory Certification ☐ Development test for FSB ☐ Not applicable ☒ Other: <u>Sensor Development</u>				2 - What is the expected Test Outcome? ☒ Results will meet DPM/PCR requirements. ☐ System Component will not meet Test specification. ☐ Unknown. ☐ Above is Based on CAE? ☒ Other: <u>Sensor Development</u>			

General Request Information

ENTIRE PAGE CONFIDENTIAL

TAM: TB7382

Test Mode

15mph
LH Side Pole (350 mm) Use Rollers

Test Objectives: Cert (C) Verif (V) Dev (D) Audit (A)

REGULATORY:

☐ FMVSS 204 - Steering Wheel Displacement
☐ FMVSS 208 - Frontal Occupant Protection
☐ FMVSS 212 - Wind Shield Retention
☐ FMVSS 214 - Side Impact Protection
☐ FMVSS 216 - Windshield Zone Intrusion
☐ Film Analysis
☐ Template
☐ FMVSS 801 - Fuel System Integrity
☐ Rollover
☐ Pressure Check
☐ FMVSS 803 - NGV Fuel System Integrity
☐ ECE 12 (74/297/EEC) - Protection of the Driver Against Steering Mechanism
☐ ECE 32 Rear Impact - Structural Performance
☐ ECE 38 Frontal Impact - Structural Performance
☐ ECE 34 Fuel System Integrity
☐ ECE 94 Step II Frontal Offset - Occupant Performance
☐ ECE 96 Step II 300mm Barrier Side Impact - Occupant Performance
☐ 80/78/EC - Frontal Offset
☐ 88/27/EC - Side Impact

FORD AUTOMOTIVE OPERATIONS SAFETY DESIGN GUIDELINES:

☐ Front Impact FAO Safety Design Guidelines
☐ Offset Frontal FAO Safety Design Guidelines
☐ Side Impact Protection FAO Safety Design Guidelines
☐ Rear Impact Fuel System Performance FAO Safety Design Guidelines

OTHER:

☐ D Sensor Development Non REGULATORY CLASS TESTS PROCEDURE 1.2.16
☐ Other, Specify: _____

Primary Test Vehicle Information

Use (Target/Bullet):	BULLET
Model Year:	2000.5
Vehicle Program:	FN145 LWB
Vehicle Name:	LINCOLN
Body / Cab Style:	BEDAN
Build Number:	V004001-R
Tag Number:	808W888
VIN Number:	1LNHMB8W0CY687088
Fuel System Rated Capacity (Gals):	16
Prototype Level:	CP
Drive Side:	LH

CRTS 0011571

Special Prep/Build Instructions Primary Vehicle

TA#: TB7382

Special Build Instructions

- ☐ Remove Side View Mirrors
- ☐ Remove Headrests
- ☐ Remove Hood
- ☐ Remove Arm rest
- ☐ Remove Bottom of Bumper Cover
- ☐ Cut Off Brake & Clutch Pedal
- ☐ Color Contrast Under Hood Components

Other, Specify:

- ☒ Install Takata RCM bracket and RCM
- ☒ Replace Siemens BCS module

Pyro Restraints Usage

- ☐ Left Front Air Bag
- ☐ Right Front Air Bag
- ☒ Left Front Side Air Bag
- ☐ Right Front Side Air Bag
- ☐ Left Rear Side Air Bag
- ☐ Right Rear Side Air Bag
- ☐ Left Pyro Retractor
- ☐ Left Pyro Buckle
- ☐ Right Pyro Retractor
- ☐ Right Pyro Buckle

Other, Specify:

- ☐ Remote Fire Time:
(No fire time listed if sensor fired OR if no pyro restraints are used)
- ☐ Remote back-up Fire Time:

Special Pre-Test Preparation

Other, Specify:

Occupant / ATD Request Primary Vehicle

TA#: TB7382

	Occupant 1	Occupant 2
Type	<u>BIOID</u>	<u>N/A</u>
Instrumentation Level*	<u>Uninstrumented</u>	<u>N/A</u>
In-Vehicle Location	<u>Left Front</u>	<u>N/A</u>
Verify: Seat Position Long	<u>Mid Track Travel</u>	<u>N/A</u>
Seat Position Vert	<u>Full Down</u>	<u>N/A</u>
Seat Back Angle	<u>28 degrees</u>	<u>N/A</u>
Positioning Procedure	<u>5'15" 37-44</u>	<u>N/A</u>
Use Foot Rest	<u>Yes</u>	<u>N/A</u>
Take Seat Track Video	<u>N/A</u>	<u>N/A</u>
Special Positioning Instructions		
Dummy Adjustment (arm angle)	<u>N/A</u>	<u>N/A</u>
Occupant Belted	<u>YES</u>	<u>N/A</u>

*See instrumentation request for detailed instrumentation information.

Test Conditions - Final Prep

TAM: TB7662

Final Prep Contacts

ONE of these MUST be present during weigh-up & final prep

Test Engineer	Request Engineer	Build Coordinator
Name: _____	J. Wozniak	E. Meyer
Phone: _____	24-8454-1	84-577442
Pager: _____	JWOZ	EME

Test Weight

Minimum Option Weight	GVWR: _____
☒ 33% Option Weight	Wheelbase: <u>123.7"</u>
Maximum Option Weight	

Tire Pressure

Front: <u>32 psi</u>	Rear: <u>32 psi</u>
----------------------	---------------------

Fuel System

Fuel Tank & System to Contain: None

<u>0</u> gallons	=	<u>0</u> %	x	<u>18.0</u> gallons
Fill Level	=	%	x	Capacity

Weight Targets

If required weight distribution is UNACHIEVABLE, please note allowable variances.

Curb Weight	Requested Test Weight	Acceptable Test Weight Variance		Actual Test Weight
		High (+)	Low (-)	
Front: _____	<u>2,424 lbs</u>	Front: <u>13 lbs</u>	<u>0 lbs</u>	Front: <u>2,429</u>
Rear: _____	<u>2,311 lbs</u>	Rear: <u>10 lbs</u>	<u>0 lbs</u>	Rear: <u>2,314</u>
Total: _____	<u>4,735 lbs</u>	Total: <u>23 lbs</u>	<u>0 lbs</u>	Total: <u>4,743</u>

Rated Luggage Load: 300 lbs

Target Test weight is 4735lbs including centers.

CONTACT REQUESTER IF TARGET WEIGHT CANNOT BE ACHIEVED!

Simulate/Verify at Weigh-Up

Dummy Weight

On Board Camera Count

Weight Addition (Restrictions)

Do NOT place any weight in the following locations:

☐ Air Cleaner	☐ Engine	☒ Doors
☐ Battery	☐ Fan Box/Shroud	☒ Foot Wells - Front
☐ Bottle - Coolant	☐ Headlamp Oings	☒ Foot Wells - Rear
☐ Bottle - Washer	☐ Radiator	☐ Quarter Panels
		☐ Trunk Floor

Other: _____

Ride Heights

Measure @ Test Weight

Front: <u>718 mm</u>
Rear: <u>707 mm</u>

Measure

From: <u>Wheel lip</u>
To: <u>Ground</u>

Additional Remarks

DO NOT fill tank with stockard until weigh-up

Dimensional Analysis Request Primary Vehicle

TA# TB7882

Vehicle Impacts

PRE POST

		404	Control Points (CAR)	Exterior
		405	Control Points (TRUCK)	Exterior
		409	Body Targets & Orientation Points (Wheel Lips)	Exterior
		411	A.B.C. Pillars	Interior
		417	Pre-Crash Lateral Seat CL's, H-Pts, etc	Exterior/Interior
		418	NHTSA Barrier face Profiles (Mid-Bumper, Mid-Stack Top of Barrier)	Exterior
		419	European Barrier face Profiles (Mid-Bumper, Mid-Stack Top of Barrier)	Exterior
	X	421	Roof line exterior section	Exterior
	X	423	Beltsline exterior section (1st 50mm Body line below glass/weather strip)	Exterior
	X	425	Mid-line exterior section (plan view @ 800 mm Body line)	Exterior
	X	427	Character line exterior section (plan view @ 600 mm Body line)	Exterior
	X	429	Bottom of door exterior section	Exterior
	X	431	Rockers line exterior section (1st 10 mm Body line below door opening)	Exterior
		433	Roof line interior section	Interior
	X	435	Beltsline interior section	Interior
	X	437	Hip line interior section	Interior
	X	438	Hinge Pillar exterior section (1st 50mm Body line forward of Hinge plane)	Exterior
	X	439	2800 mm Body line interior and exterior sections	Exterior/Interior
	X	440	Front H-Point Mid-Seat Location interior and exterior sections (per package)	Exterior/Interior
	X	441	B-Pillar interior and exterior sections (1st 50mm Body line rearward of striker p	Exterior/Interior
		442	Rear H-Point Location interior and exterior sections (per package)	Exterior/Interior
			MD6: Position MD6 centerline at left front seat CGRP (X = 3048mm)	
			Strike windshield & backline @ left front seat centerline (Y = -370mm)	
			Mark left front seat frame pivot point	
		650	Pre-crash accelerometer locations	
		650	Scribe Impact reference line	
			Mark OSCAR & EuroSID H-points on exterior of left front door	

CRTS 0011571

Film Analysis & Photographic Services RequestTA#: TB7882**Side Impact Film Analysis**

- ☒ Impact Speed
- ☒ Impact Angle
- ☒ Dummy Head wrt Vehicle Lateral
- ☒ Dummy Head wrt Vehicle Vertical
- ☒ Dummy Head wrt Vehicle Resultant
- ☒ Car wrt Vehicle Impact Point
- ☒ Dummy Chest wrt Vehicle
- ☒ Car wrt Vehicle Intrusion (overhead)
- ☒ Vehicle wrt Pole Intrusion (overhead)
- ☒ Dummy Head wrt Pole

Other, Specify:

Still Photography

- ☐ Copies of Still Photo Proof Sheets Required
- ☐ Copies of Still Photos (4X5) Required
- ☒ Pre Test Documentation Photographs
- ☒ Post Test Documentation Photographs

High Speed Photographic Requirements

- ☐ 1 Copies of High Speed Film Required
- ☐ Copies of High Speed Film Required in VHS Format
- ☒ Digitization of Driver/ Passenger Kinematics
- ☐ Format

High Speed Cameras for Side Impact**On-Board Vehicle**

- ☒ Front Dummy from Vehicle Hood
- ☐ Front Dummy from Vehicle Hood (Low)
- ☒ Front Dummy from Opposite Window Opening
- ☐ Rear Dummy from Opposite Window Opening
- ☐ Rear Dummy from Trunk
- ☐ Front Dummy Over Shoulder from Decklid (right)
- ☐ Front Dummy Over Shoulder from Decklid (left)
- ☒ View of Front Seat to Show Dummy Interaction w/Trim from Front (Fiber optic)
- ☒ View of Front Seat to Show Dummy Interaction w/Trim from Rear (trunk left)

TAF: TE7382**Floor Coverage**

X Full Left View of Impact
X Full Right View of Impact
X Front 3/4 View of Impact
X Rear 3/4 View of Impact
 _____ View of Cart for Velocity determination

PR Coverage

_____ Cart contact - view of impacted side of vehicle with cart contact
 _____ Cart contact - overlap view of impacted side of vehicle with cart contact
X View of impacted side of vehicle with pole

Overhead Coverage

_____ Overall view of impacted vehicle side including cart
 _____ View of impacted vehicle side focus on front door opening area
X Overall view of impacted vehicle side including pole

All Other High Speed Photography

Instrumentation and Data Processing Request

TA#: TB7382

Primary Vehicle Structural Instrumentation - Side Impact

ACCELEROMETERS:

	Long	Vert	Lat
___ L/ A-PILLAR_INSIDE @ ROCKER	___	___	___
___ L/ A-PILLAR_INSIDE @ HINGE	___	___	___
___ RV A-PILLAR_INSIDE @ HINGE	___	___	___
X L/ F_DOOR @ BELTLINE_MID	___	___	X
X L/ F_DOOR_OVER ARMREST	___	___	X
X L/ F_DOOR_REAR_OF_SEAT_H-PT	___	___	X
X L/ F_DOOR_SPEAKER_HOLE	___	___	X
X L/ B-PILLAR_INSIDE @ ROOF	___	___	X
X L/ B-PILLAR_INSIDE @ BELTLINE	___	___	X
X L/ B-PILLAR_INSIDE @ ROCKER	___	___	X
X L/ R_DOOR @ BELTLINE_MID	___	___	X
X L/ R_DOOR_OVER ARMREST	___	___	X
X L/ ROCKER @ FRONT_SEAT_MID	___	___	X
X L/ ROCKER @ REAR_SEAT_MID	___	___	X
X RV ROCKER @ FRONT_SEAT_MID	X	X	X
X RV ROCKER @ REAR_SEAT_MID	X	X	X
___ FRONT_FLOOR_PAN @ CL	___	___	___
___ FLOOR_XMBR @ LF_SEAT_CL	___	___	___
___ FLOOR_XMBR @ RVF_SEAT_CL	___	___	___
___ CL_TUNNEL @ FRONT_SEAT	___	___	___
___ REAR_FLOOR_PAN ABOVE AXLE	___	___	___
X NEAR FUEL INERTIA SWITCH	X	X	X

OTHER STRUCTURAL ACCELS:

	Long	Vert	Lat
___ L/A-PILLAR @ FUEL INERTIA SWITCH	___	___	___
___ L/B-PILLAR INSIDE @ HARNESS	___	___	___
___ L/B-PILLAR INSIDE @ Z-650mm	___	___	___
___ RV/B-PILLAR INSIDE @ ROCKER	___	___	___
___	___	___	___
___	___	___	___

Primary Vehicle Systems InstrumentationTA#: TB7382**SENSOR ACCELS:**☒ See Sensor Map

Long

Vert

Lat

_____**MONITOR AIR BAG SENSORS:**

- ☐ See Sensor Map
☐ Monitor Closure of Each Specified Sensor
☐ Monitor Closure of Single Pt Elect Sensor

RESTRAINT LOADS:

- ☐ Left Belt Tongue - Strain Gaged
☐ Left Pyro-Technic Buckle Squib Voltage
☐ Left Pyro-Technic Buckle Squib Current
☐ Right Belt Tongue - Strain Gaged
☐ Right Pyro-Technic Buckle Squib Voltage
☐ Right Pyro-Technic Buckle Squib Current
☐ Left Lap Belt at Anchor Load
☐ Left Torso Belt at Retractor Load
☐ Left Torso Belt at D-ring Load
☐ Right Lap Belt at Anchor Load
☐ Right Torso Belt at Retractor Load
☐ Right Torso Belt at D-ring Load

MONITOR AIR BAGS STATUS:

- ☒ Driver Side Airbag Squib Voltage
☒ Driver Side Airbag Squib Current
☐ Driver Squib Voltage
☐ Driver Squib Current
☐ Driver Bag Pressure
☐ Passenger Squib Voltage
☐ Passenger Squib Current
☐ Passenger Bag Pressure
☐ Passenger Inflator Pressure

STEERING COLUMN:

- ☐ Stroke Break Wires
☐ Tilt Mechanism Break Wires
☐ String Pot
☐ Load Cell (5 Axis)

SWITCHES:

- ☐ Engine to Rad Support left
☐ Engine to Rad Support center
☐ Engine to Rad Support right
☐ Brake booster to shock tower

FUEL SYSTEM:

- ☒ Inertia Fuel System Cut-Off Switch

List of Test Contacts

TA#: TB7382

	Last name	Phone	Pager	Profs
Requestor	J. Wozniak	24-84541	JWOZ	JWOZNA1
Approving supervisor	K. Arthurs	39-05188	KART	KARTHURS
Build coordinator	E. Moler	84-57542	EME1	EMEIER
Test Engineer				
Senior Engineer	Kennitz, Erich	24-51602	EKEN	EKENNITZ
Testers	McHale, Mike	32-38521	595-2869	MMCHALE

	Last name	Phone	Pager	Profs
Seats				
Instrument panel				
Restraints				
Air bag (driver)				
Air bag (passenger)				
Steering column				

CRTS 0011571

Regulated/Classified: JWOZNA1
 Printed: 04/09 Phillipa Rector
 Printing Prod. Control

Contact List Attachment
 Page 11 of 13

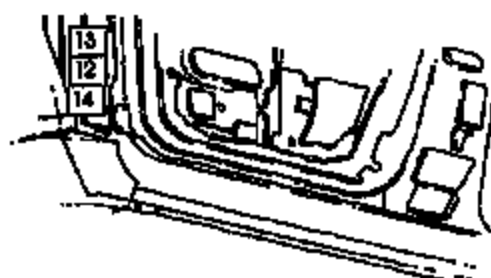
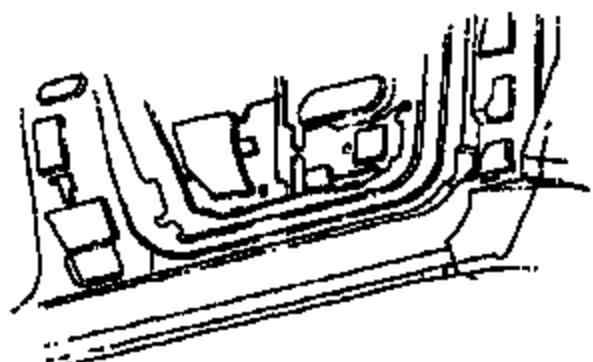
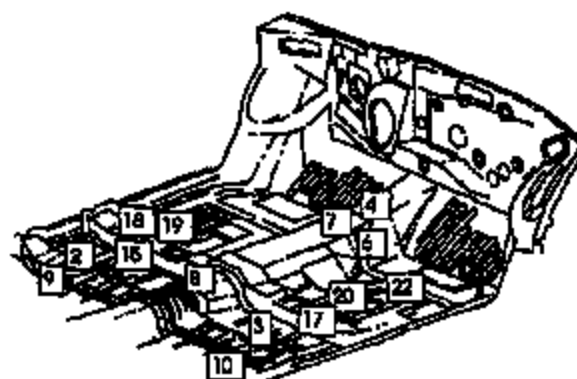
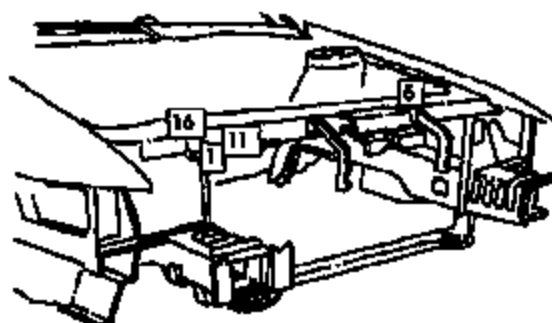
Ver: 2.0.0.0 Printed: 04/09, 10:00
 Author: ObovNig/Pageset/Kit

ENTIRE PAGE CONFIDENTIAL

Program: 2000.5 LWB
 Vehicle ID: 306W865 - R
 Build level: FN146 Side
 Test Mode: 15mph LH Pole

SENSOR MAP

Engineer: Erich Kammitz
 Phone #: 248-1602
 Date: 08/05/1999
 Time: 9:30 AM



Location Name	Type	Output	Sensor Channels only		
			Nominal (+/-)	Max/Min	Serial #
1 R/C/Front RAD SUPPORT_TAK		Sensor	Takata FCS No ODAS output		FCS-GEN-A??
2 L/F FLOOR PAN @ #2 XMBR CTR_SE		Sensor	Siemens SCB No ODAS output (AD sense)		
3 R/F FLOOR PAN @ #2 XMBR CTR_SE		Sensor	Siemens SCB No ODAS output		
4 CTR TUNNEL @ DASH_SM	accel	TRIAx	Near RCM		
5 L/C/Front RAD SUPPORT_SM	accel	LONG			
6 CTR TUNNEL @ DASH_RCM	accel	TRIAx	On RCM		RCM-GEN-A??
7 CTR TUNNEL @ DASH_TAK1	TAKATA RCM1	Sensor	2.5v (+/- 200mV)	10 / 0V	ST001
CTR TUNNEL @ DASH_TAK2	TAKATA RCM2		2.5v (+/- 200mV)	10 / 0V	ST001
CTR TUNNEL @ DASH_TAK3	TAKATA RCM3		2.5v (+/- 200mV)	10 / 0V	ST001
CTR TUNNEL @ DASH_TAK4	TAKATA RCM4		2.5v (+/- 200mV)	10 / 0V	ST001
8 C/L TAIL BETWEEN SEATS_SM	accel	TRIAx			
9 L/F FLOOR PAN @ #2 XMBR CTR_SM	accel	TRIAx	Near Siemens SCB Sensor		
10 R/F FLOOR PAN @ #2 XMBR CTR_SM	accel	TRIAx	Near Siemens SCB Sensor		
11 R/C/Front RAD SUPPORT_FCS	accel	LONG	On FCS sensor		
12 R/A-PLR_IN @ R/R_BRI	Siemens RCM		Siemens RCM No ODAS output		
13 R/A-PLR_IN @ R/R_BRKT	accel	TRIAx	On RCM		
14 R/A-PLR_IN @ R/R_SM	accel	TRIAx	On SM near RCM		
15 L/F FLOOR PAN @ #1 XMBR CTR_SE			Siemens SCB (FMI) ride along		
16 R/C/Front RAD SUPPORT_SM	accel	LONG			
17 L/F FLOOR PAN @ #1 XMBR CTR_TAK		Sensor	Takata SCB No ODAS output		
18 R/F FLOOR PAN @ #1 XMBR CTR_TAK		Sensor	Takata SCB No ODAS output		
19 L/F FLOOR PAN @ #1 XMBR CTR_SCB	accel	LAT	On Takata SCB Sensor		SCB-GEN-A??
20 R/F FLOOR PAN @ #1 XMBR CTR_SCB	accel	LAT	On Takata SCB Sensor		SCB-GEN-A??
21 L/F FLOOR PAN @ #1 XMBR CTR_SM	accel	LAT	in air space Siemens SCB		
22 R/F FLOOR PAN_SM	Sensor		RCM Mount on floorpan		

Contacts: Ford: Erich Kammitz 248-1602

Takata: Miles Kohnle 321-8621

Siemens: Todd Clark 248-253-2704, 298-1824

NOTE: Serial numbers will be updated as parts arrive.

Erich Kammitz 2481602
 AVT Restrictions

Page 1 of 1

Rev. date: 08/05/1999
 LWB_306W865R_15MPH_Pole_LH

CRTS 0011571

Side Impact Barrier Test Data Sheet

TB7382

T.O. D

Crash Number 11571Test Date 8/31/99MDB Tire
Pressure

Vehicle Weight

Impact Velocity 0 MPH

Barrier Lot #

LF RF
LR RRLF + RF = 2429
LR + RR = 2319
Total 4743

Occupant/Vehicle Data

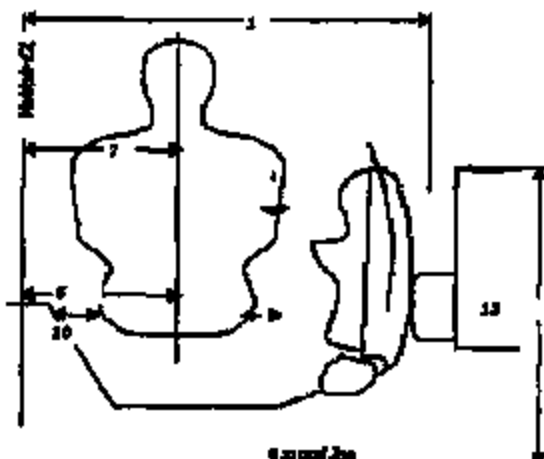
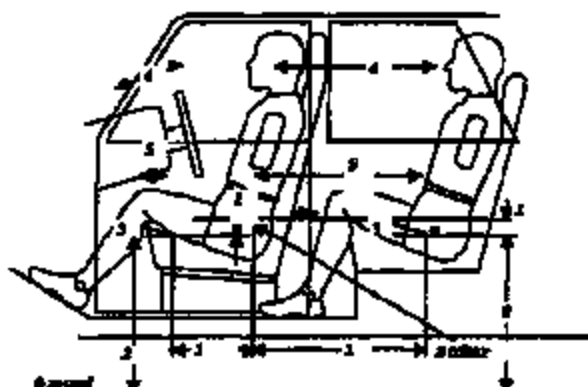
Front

Rear

Dummy Serial Number		
Seatback Angle - Barrier Measurement (DA)	17.8 + 6	
Dummy to Interior/door H-point (+/- 0.5 inch required)	Vertical 0.3	
Above/Forward (+) Below/Rearward (-)	Longitudinal + 0.1	
1. H-Point to Door Striker	Vertical 3.8	
Above/Forward (+) Below/Rearward (-)	Longitudinal 9.1	
2. H-Point to Ground (Vertical)	24.5	
3. Pelvic Angle		
4. Nose to Upper Steering/Headrest (shortest)	15.0	
5. Abdomen to lower steering/seatback (horizontal)		
6. Pelvis centerline to Vehicle centerline (lateral)		
7. Chest centerline to Vehicle centerline (lateral)		
Seat centerline to Vehicle centerline (lateral) (DA)		
8. Chest to Beltline (lateral, shortest)		
9. Pelvis to H-Point (lateral)		
10. Pelvis to nearest inboard hard point (lateral)		
Left Wheel to height (vertical to ground)		
Right Wheel to height (vertical to ground)		
11. Vehicle centerline to barrier face (lateral)		
12. Barrier Top to Ground @ Fullback (Vertical)		
Impact Mark relative to Target		

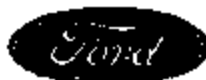
+ above/two
- below/one

385mm



Note:

Vehicle impact with respect to the c/l of the pole (which is also the dummy CG) is 4" rear of the H-point or 4" forward of the Striker.



ENTIRE PAGE CONFIDENTIAL	
"RECORD COPY"	
Schedule No.	<u>7-7-12</u>
Retain Until	<u>2020</u>

FINAL TEST REPORT**CONFIDENTIAL****Global Test Operations
Research and Vehicle Technology****TO:** M. Wroten

Test Order No.	T-B9669
Work Task W. O. No.	J18
Test Date	12/10/99
Date Reported	2/21/00
Sheet	1 of 87

SUBJECT: Crash Test 11699 (90° Left Side Fixed Pole Impact at 14.5 ± 0.4 mph, 23.3 ± 0.6 km/h) – 2001 Lincoln Town Car (FN-145) Long Wheel Base 4-Door Sedan**REQUESTED BY:** Vehicle Crash Safety Department, Research and Vehicle Technology – M. Wroten**OBJECT:** To obtain development data relative to air bag system sensors.**SUMMARY OF
TEST RESULTS:** See Section 1.0 for air bag system sensor data.

M. L. Foster
M. Foster
Test Development Engineer

S. Lesh
Conor: S. Lesh
Section Supervisor
Operations Engineering Section

CRTS 0011699

VEHICLE DATA:

Make and Model	2001 Lincoln Town Car (PN-145) Long Wheel Base 4-Door Sedan (Confirmation Prototype)	
ID Numbers	1LNHM82W5XY711384, 311-W-380, VC190014	
Power Train	4.6L, EFI, Automatic (4R70W) Transmission	
Fuel Tank(s)	Usable Capacity: 19.0 gal. (71.9L) Test Condition: Empty	
Front Seat(s)	Type: Bucket Cover: Leather Tracks/Position: 6-Way Power/Mechanical Mid and Down Seat Backs/Position: Adjustable/29.0° Rear of Vertical Head Restraints/Position: Adjustable/Down	
Restraint System	LF: 3-Point Continuous Loop Active Belt and Seat Back Side Air Bag	
Occupants	LF: BIO-SID Uninstrumented Dummy	
Test Weight	Front: 2362 lb (1071 kg) Rear: 2243 lb (1017 kg) Total: 4605 lb (2089 kg)	
Tires	Front: P225/60R16 Rear: P225/60R16 Spare: Removed	32 psi (221 kPa) 32 psi (221 kPa)
Significant Content or Accessories:	Air Conditioning, Power Steering, Power Brakes, Tilt Steering Wheel	

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

The test was performed according to the following Corporate test procedure(s):

- Side Impact Occupant Crash Protection, ST-15 dated March 19, 1998.
- Proposed non-regulator crash test procedure.

1.1 Vehicle Alignment

The test vehicle impacted an 350 mm 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, GTO. 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 11699001 through 11699051 and CARRON01 through CARRON03.

TEST RESULTS:**1.0 Sensor Development**

Time histories of the dummy dynamic displacements obtained from Film Analysis are included in this report.

Time histories of the air bag/sensor(s) are included in this report.

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

2.0 Vehicle Crush, Film Analysis and/or Instrumentation Data

Time histories of the vehicle accelerations and other instrumentation are included in this report.

Time histories of vehicle dynamic displacements obtained from Film Analysis are included in this report.

Static displacements of various body points obtained by Dimensional Analysis are included in this report.

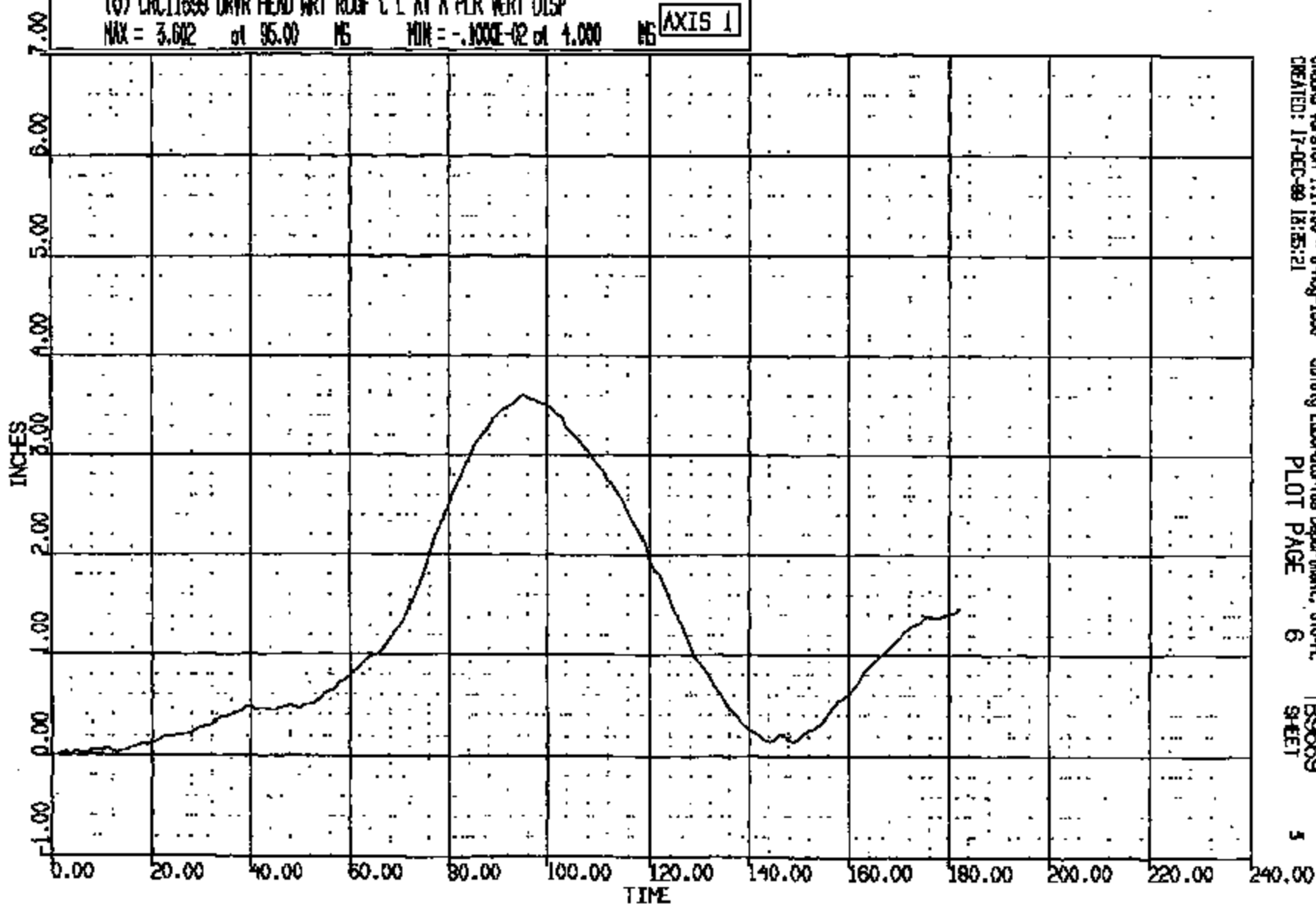
Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.

CR R: 11699 TO: TB9669 DATE: 991210 10:58:49
2001 FN-145LWB

(0) CRCL1699 DRVR HEAD WRT ROOF C L AT A PLR VERT DISP

MAX = 3.002 at 95.00 MS MIN = -.000E-02 at 4.000 MS

AXIS 1



CASAS Version 1.17.00 - 8-May-1998
CREATED: 17-DEC-99 18:55:21

Safety Laboratories Department, 510-A,
PLOT PAGE 6

TB9669
SHEET

5

ENTIRE PAGE CONFIDENTIAL

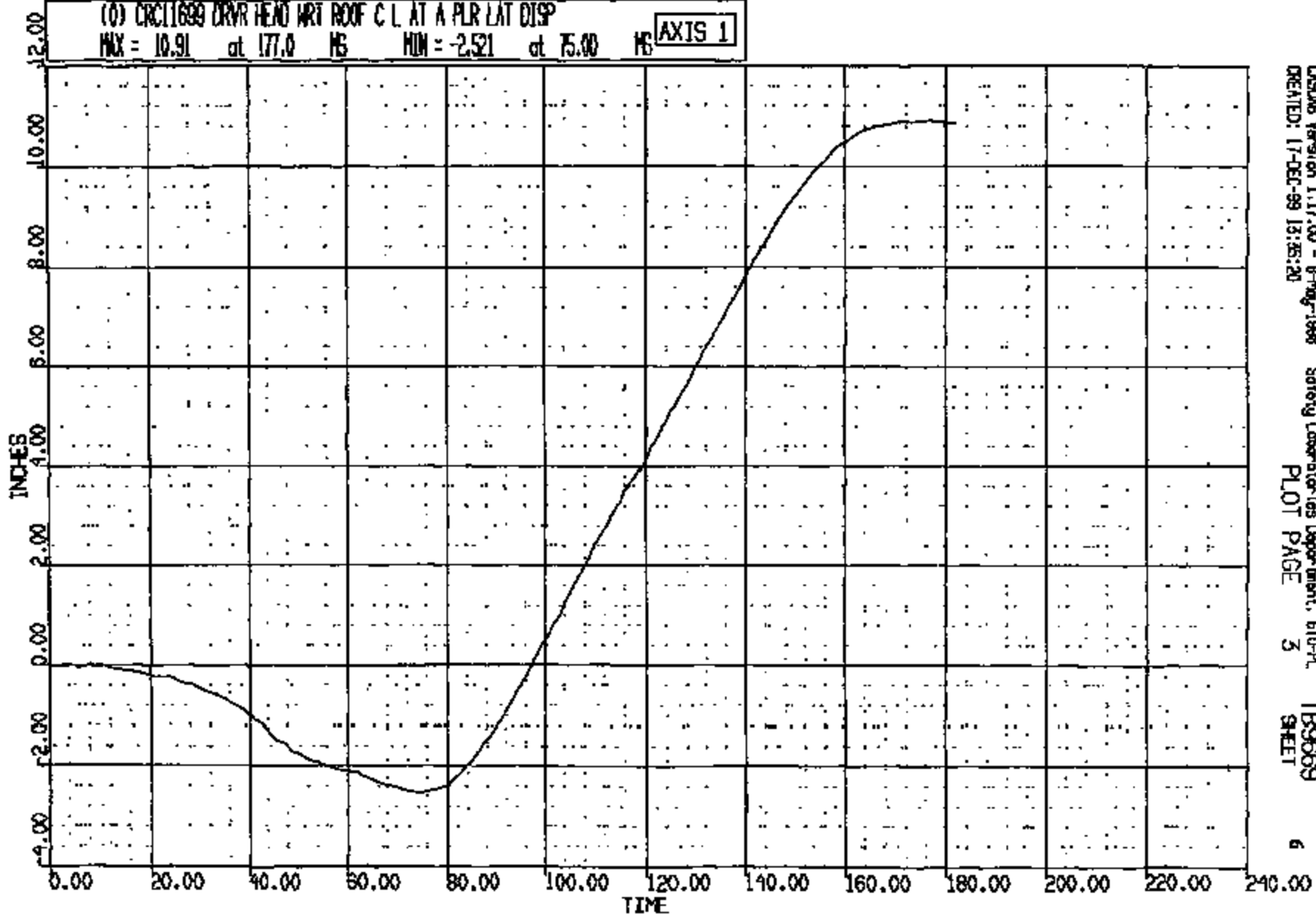
CRIS 0011699

CR R: 11699 TO: TB9669 DATE: 891210 10:55:48
2001 FN-145LWB

(0) CRCL1699 CRVR HEAD WRT ROOF C L AT A PLR LAT DISP

MAX = 10.91 at 177.0 MS MIN = -2.521 at 75.00 MS

AXIS 1



CASAB Version 1.17.00 - 8-May-1988
CREATED: 17-DEC-89 13:35:20

Safety Laboratories Department, EIO-PL
PLOT PAGE 3

TB9669
SHEET 6

ENTIRE PAGE CONFIDENTIAL

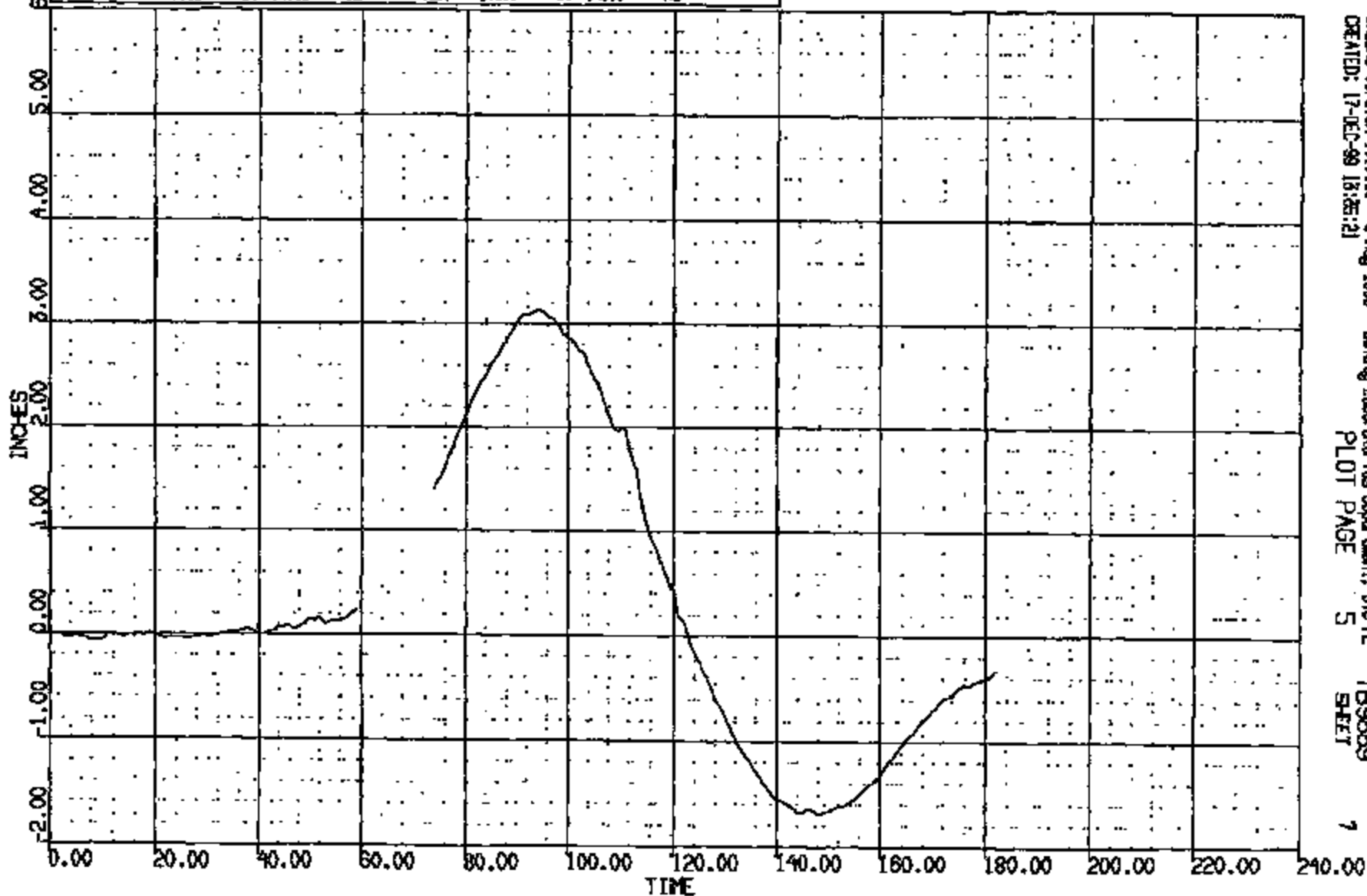
CRIS 0011699

CR R: 11699 TO: TB9669 DATE: 991210 10:58:49
2001 FN-145LWB

(0) CR11699 DRVR HEAD MPT POLE VERT DISP

MAX = 3.131 at 94.00 NS MIN = -1.690 at 148.0 NS

AXIS 1



CASIMS Version 1.17.00 - 8-Aug-1998
CREATED: 17-DEC-99 18:25:21

Safety Laboratories Department, 670-PL
PLOT PAGE 5

TB9669
SHEET

7

ENTIRE PAGE CONFIDENTIAL

CRIS 0011699

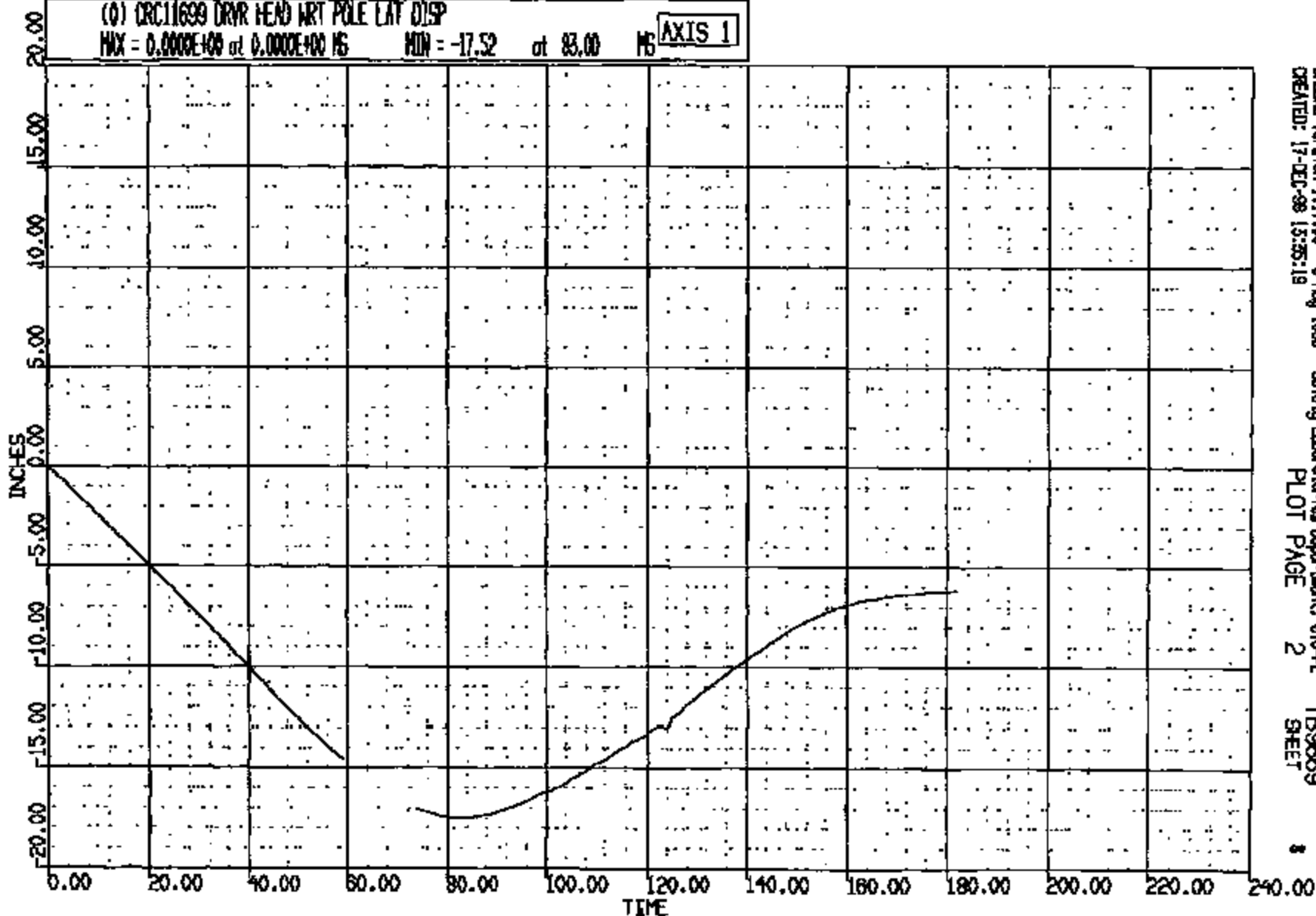
CR R: 11699 TO: T89669 DATE: 991210 10:28:49
2001 FN-145LWB

(0) CRC11699 DRYR HEAD WRT POLE LAT DISP

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

MIN = -17.52 at 83.00 MS

AXIS 1



CASIS Version 1.17.00 - 8-May-1998
CREATED: 17-DEC-98 15:25:18

Safety Laboratories Department, 610-PL
PLOT PAGE 2

T89669
SHEET

8

ENTIRE PAGE CONFIDENTIAL

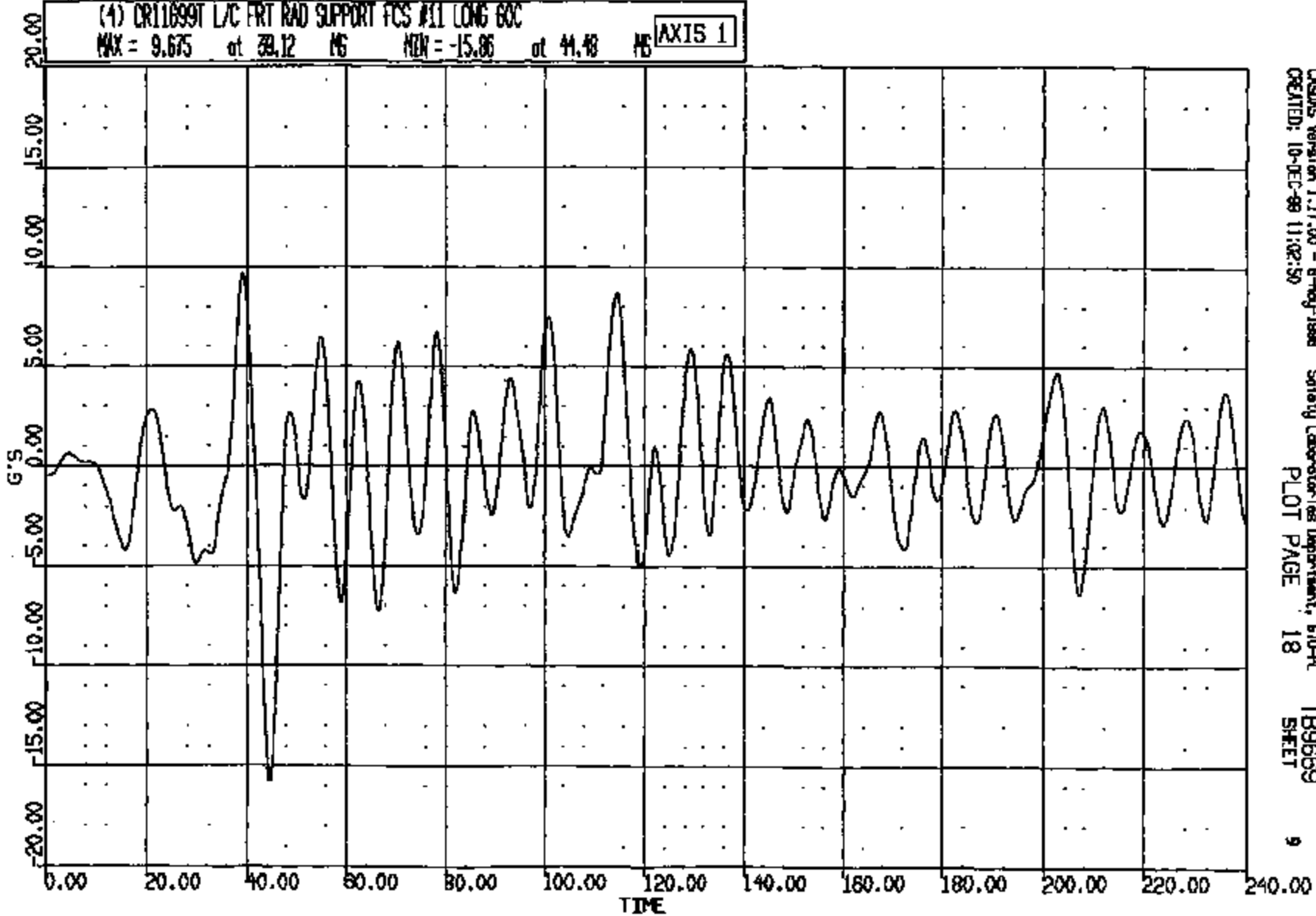
CRTS 0011699

CR R: 11699 TO: TB9669 DATE: 991210 10:39:49
2001 FN-148LWB

(4) CR11699T L/C FRT RAD SUPPORT FCS #11 LONG 60C

MAX = 9.675 at 39.12 MG MIN = -15.86 at 41.48 MG

AXIS 1



CASAS Version 1.17.00 - B-Mag-1999
CREATED: 10-DEC-99 11:02:50

Safety Laboratories Department, 510-R
PLOT PAGE 18

TB9669
SHEET

9

ENTIRE PAGE CONFIDENTIAL

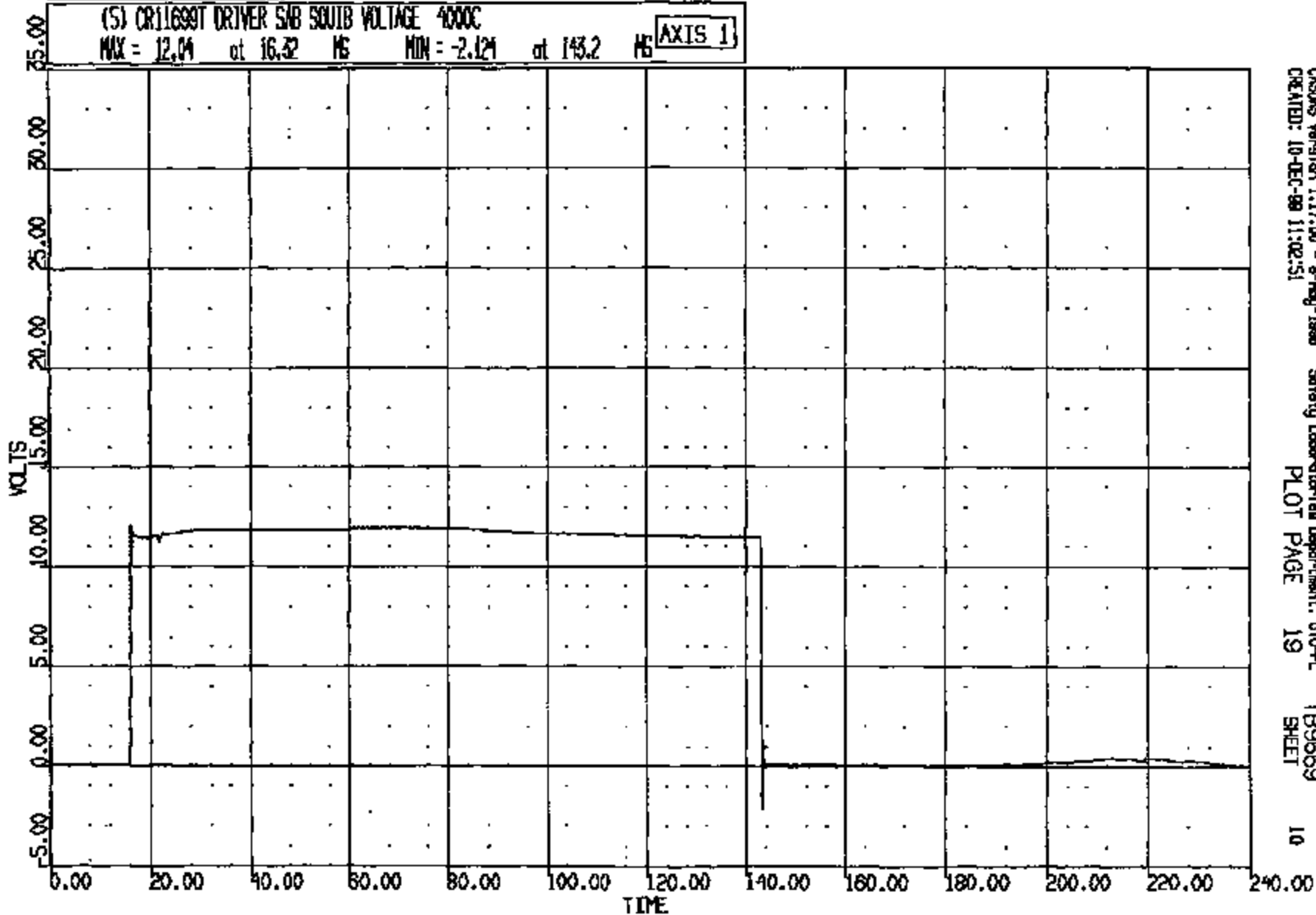
CRTS 0011699

CR R: 11888 TO: TB9669 DATE: 991210 10:38:49
2001 FN-145LWB

(S) CR11699T DRIVER SIB SQUIB VOLTAGE 4000C

MAX = 12.04 at 16.32 MS MIN = -2.124 at 143.2 MS

AXIS 1



CASDAS Version 1.17.00 - 8-May-1999
CREATED: 10-DEC-99 11:02:51

Safety Laboratories Department, CTO-PL
PLOT PAGE 19

TB9669
SHEET 10

ENTIRE PAGE CONFIDENTIAL

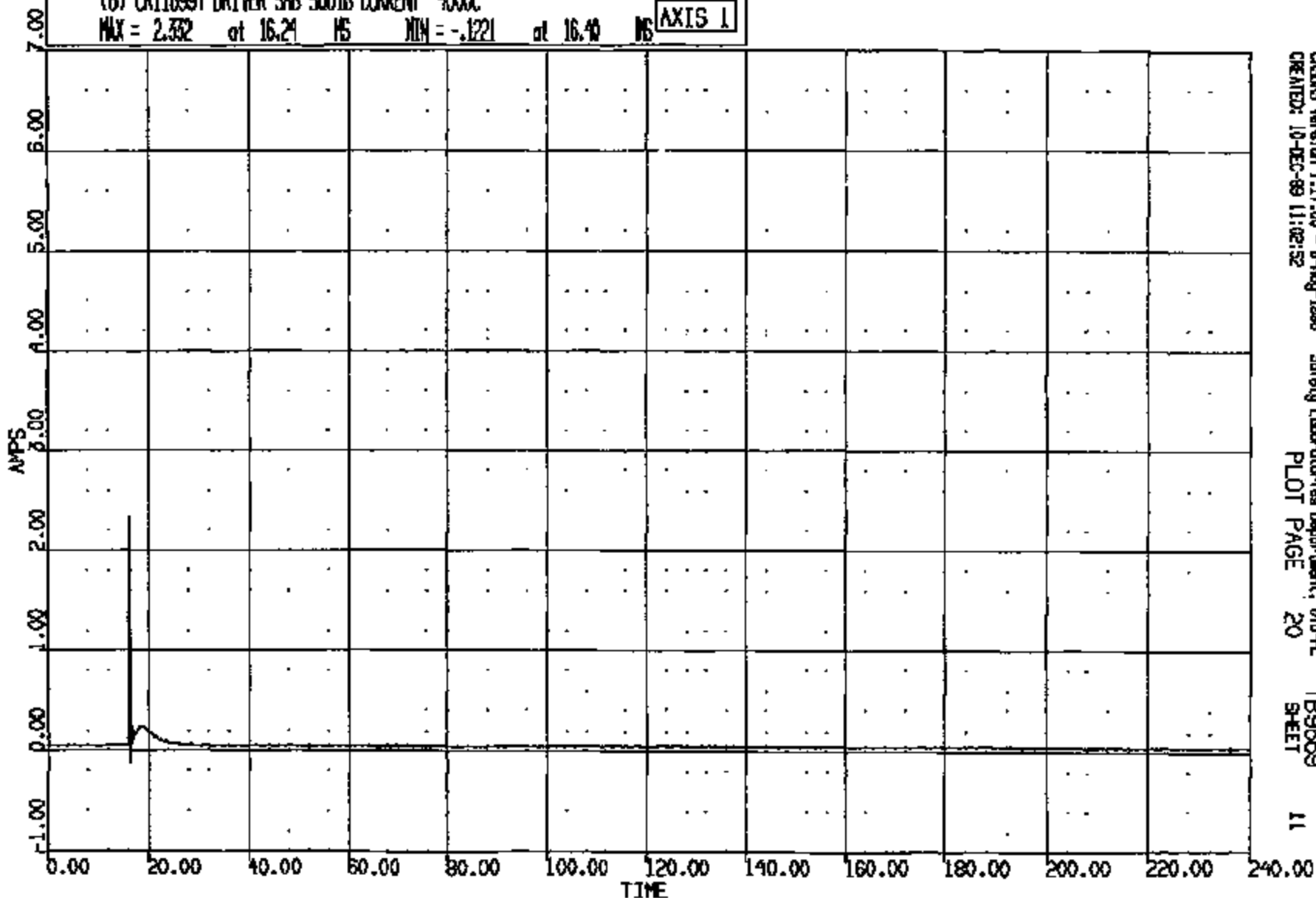
CRTS 0011699

CR R: 11699 TO: TB9899 DATE: 991210 10:38:48
2001 FN-146LWB

(6) CR11699T DRIVER SAB SOUTH CURRENT 4000C

MAX = 2.332 at 16.21 MS MIN = -.1221 at 16.40 MS

AXIS 1



CASINS Version 1.17.00 - 8-Aug-1998
CREATED: 10-DEC-99 11:02:52

Safety Laboratories Department, 610 PL
PLOT PAGE 20

TB9899
SHEET 11

ENTIRE PAGE CONFIDENTIAL

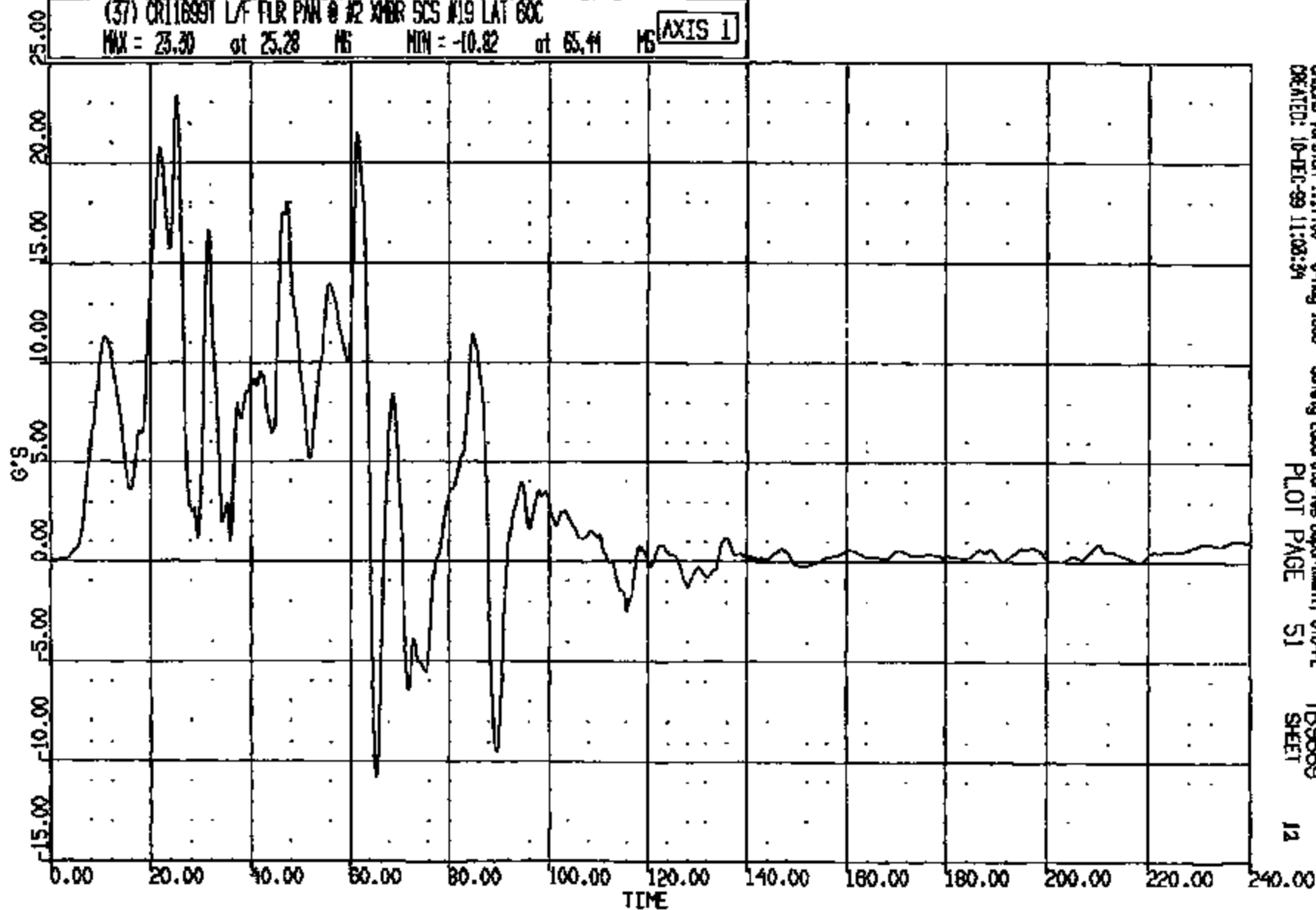
CRTS 0011699

CR R: 11899 TO: TB9669 DATE: 991210 10:58:40
2001 FZ-14SLWB

(37) CR118991 L/F FLR PWN @ #2 XMR SCS #19 LAT 60C

MAX = 23.30 at 25.28 MS MIN = -10.82 at 65.44 MS

AXIS 1



CASAS Version 1.17.00 - 8-May-1988
CREATED: 10-DEC-99 11:03:34

Safety Laboratories Department, 610-PL
PLOT PAGE 51

TB9669
SHEET 12

ENTIRE PAGE CONFIDENTIAL

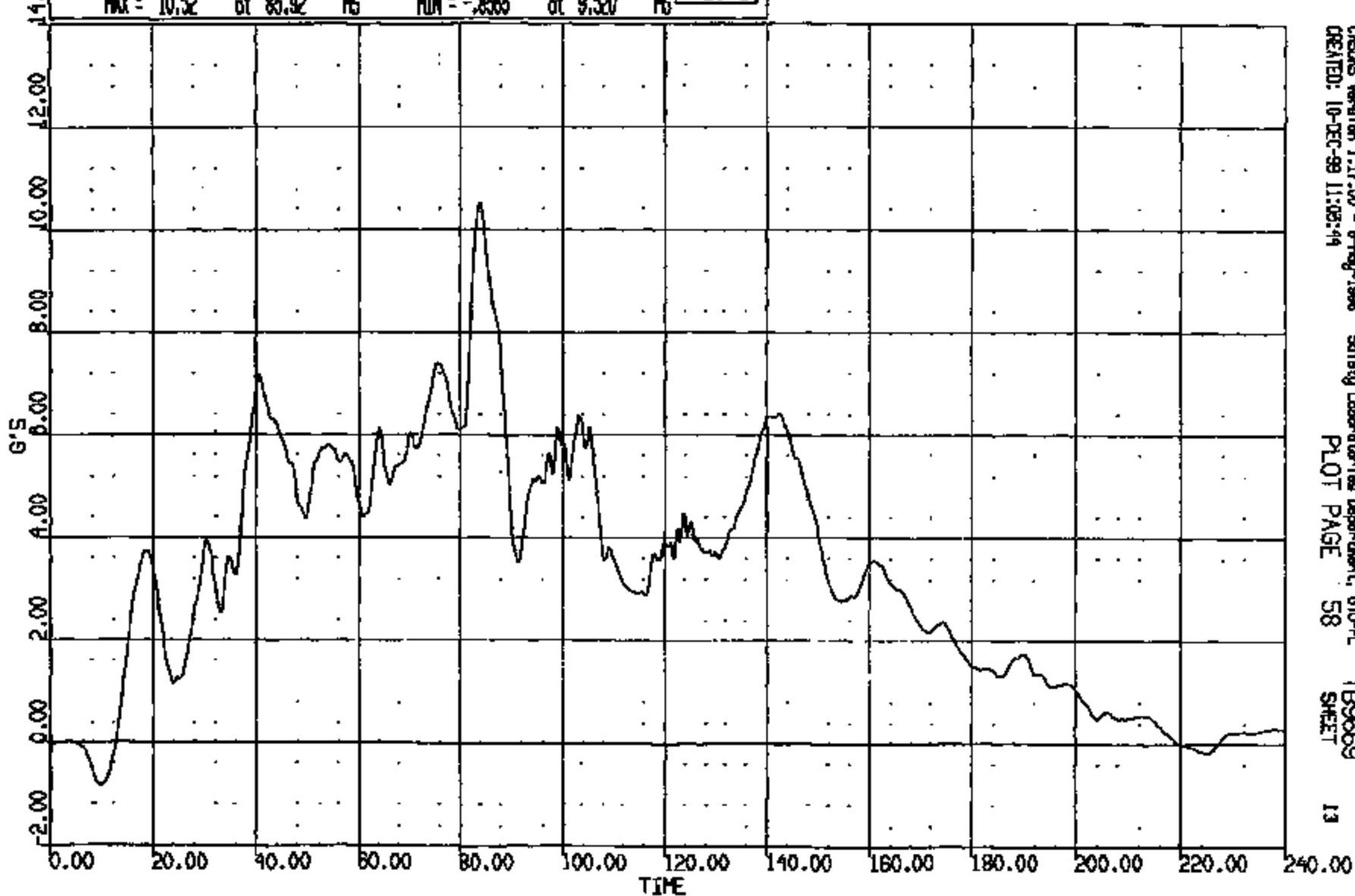
CRIS 0011699

OR R: 11899 TO: TB9669 DATE: 991210 10:39:49
2001 FN-146LWB

(44) CR116991 R/F FLR PAN 0 #2 XMR SCS #20 LAT 60C

MAX = 10.52 at 83.92 MS MIN = -.8963 at 9.520 MS

AXIS 1



CASINS Version 1.17.00 - 8-Aug-1998
CREATED: 10-DEC-99 11:03:14

Safety Laboratories Department, 610-PL
PLOT PAGE 58

TB9669
SHEET 13

ENTIRE PAGE CONFIDENTIAL

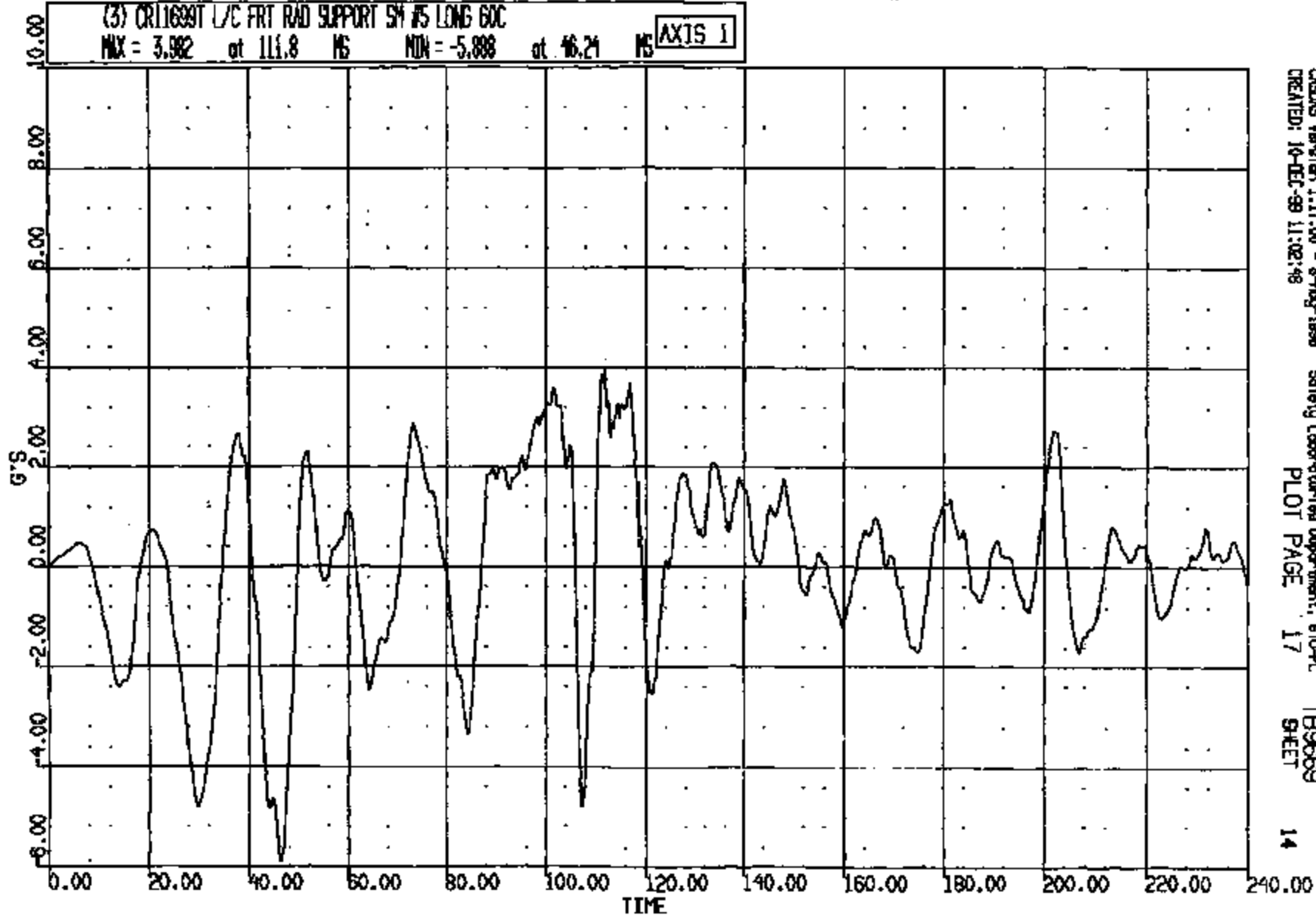
CRTS 0011699

CR R: 11699 TO: TB9689 DATE: 991210 10:58:49
2001 FN-146LWB

(3) CR11699T L/C FRT RAD SUPPORT SH #5 LONG 60C

MAX = 3.982 at 111.8 MS MIN = -5.888 at 106.24 MS

AXIS 1



CASINS Version 1.17.00 - 8-May-1999
CREATED: 10-DEC-99 11:02:48

Safety Laboratories Department, 610-PL
PLOT PAGE 17

TB9689
SHEET

14

ENTIRE PAGE CONFIDENTIAL

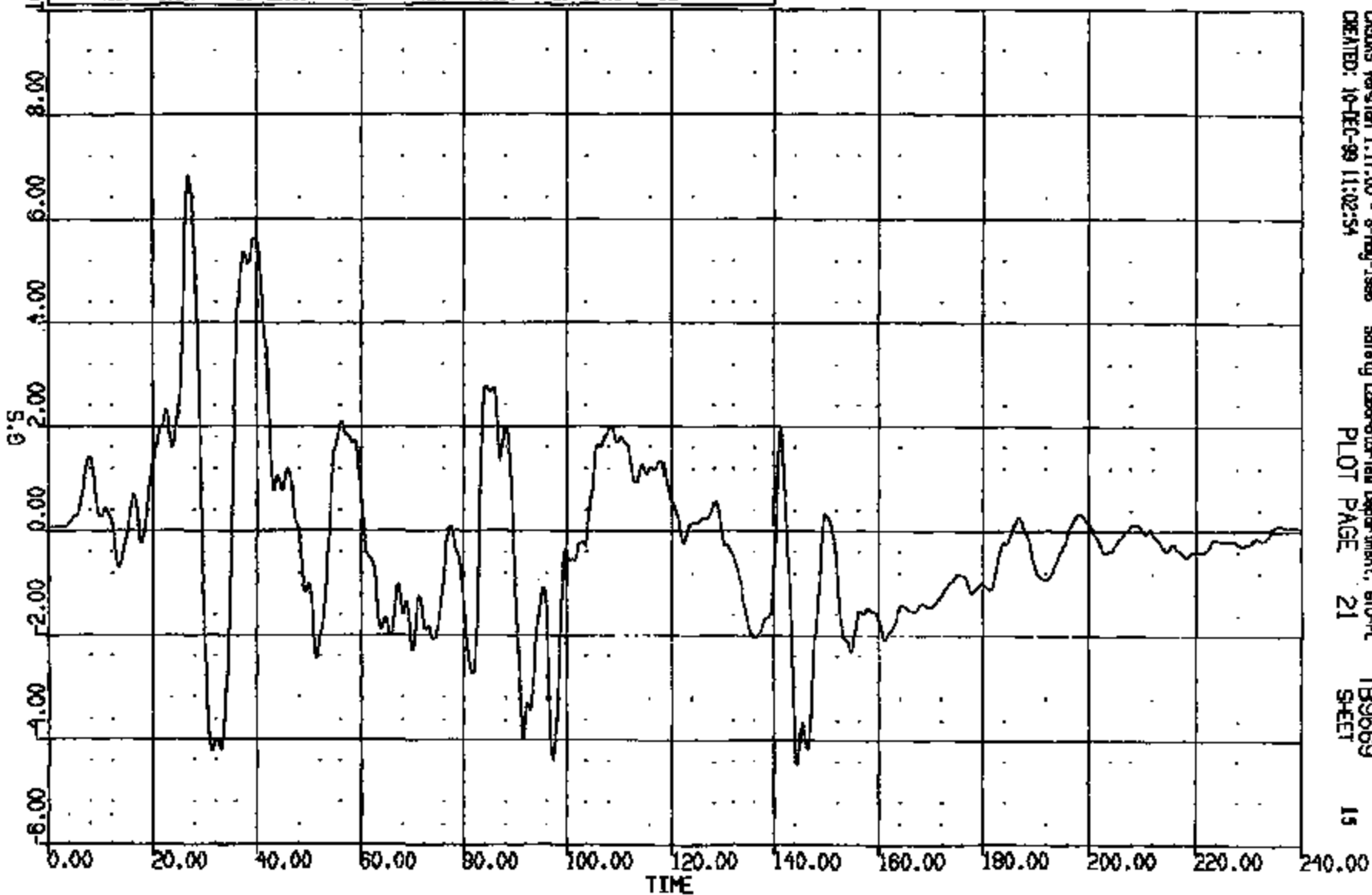
CRIS 0011699

CR R: 11699 TO: TB9669 DATE: 991210 10:59:49
2001 FN-145LWB

(7) CR11699T C/L TUNNEL @ DASH SP #1 LONG 60C

MAX = 6.017 at 26.88 NS MIN = -4.514 at 144.5 NS

AXIS 1



CADDS Version 1.17.00 - 8-May-1999
CREATED: 10-DEC-99 11:02:54

Safety Laboratory Department, ETD-PL
PLOT PAGE 21

TB9669
SHEET 15

ENTIRE PAGE CONFIDENTIAL

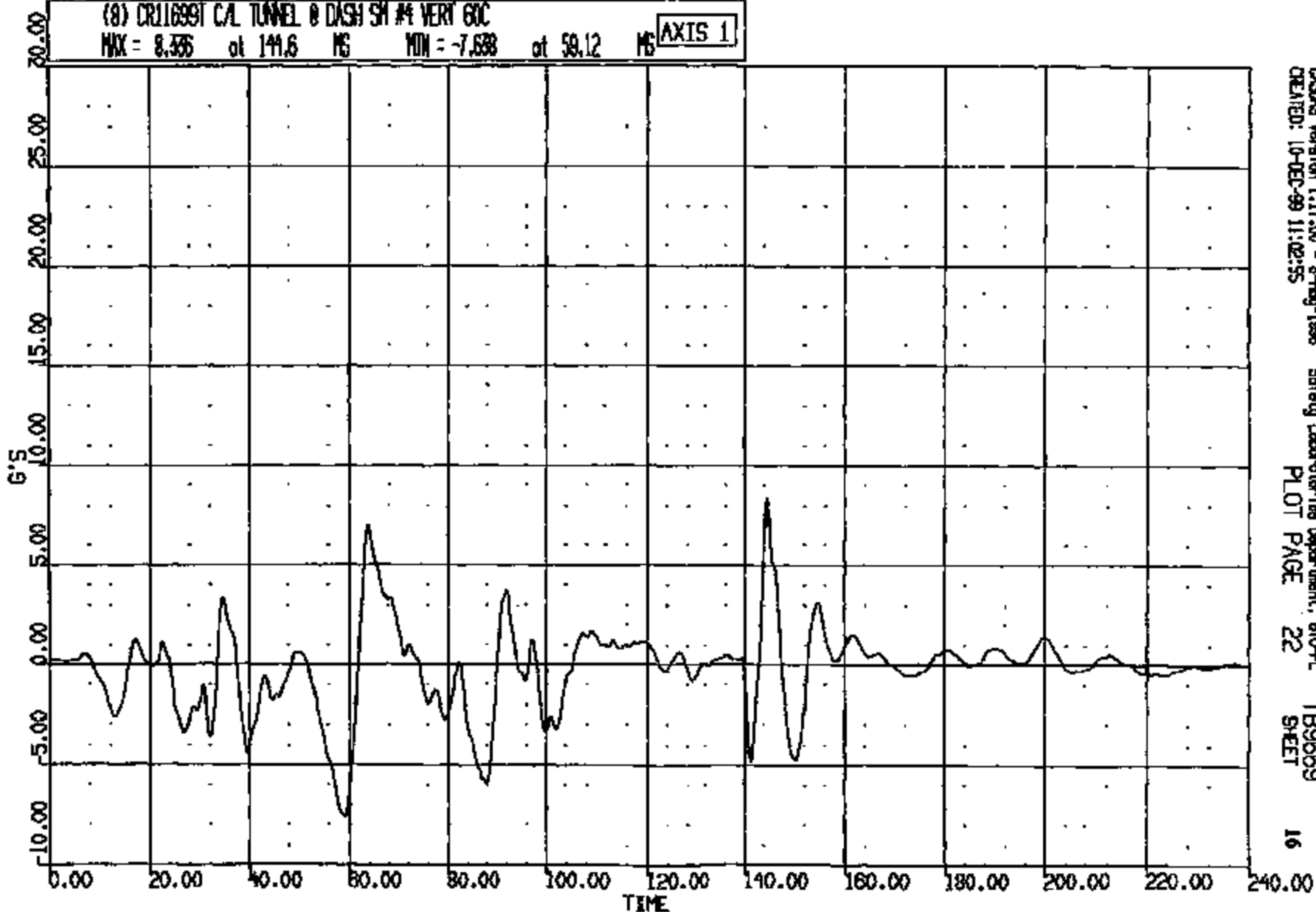
CRTS 0011699

CR R: 11699 TO: TB9669 DATE: 991210 10:38:49
2001 FN-145LWB

(8) CR11699T CAL TUNNEL @ DASH SH #4 VERT 60C

MAX = 8.335 at 144.6 MS MIN = -7.638 at 59.12 MS

AXIS 1



CASAS Version 1.17.00 - 8-May-1998
CREATED: 10-DEC-99 11:02:55

Safety Laboratories Department, 610-PL
PLOT PAGE 22

TB9669
SHEET

16

ENTIRE PAGE CONFIDENTIAL

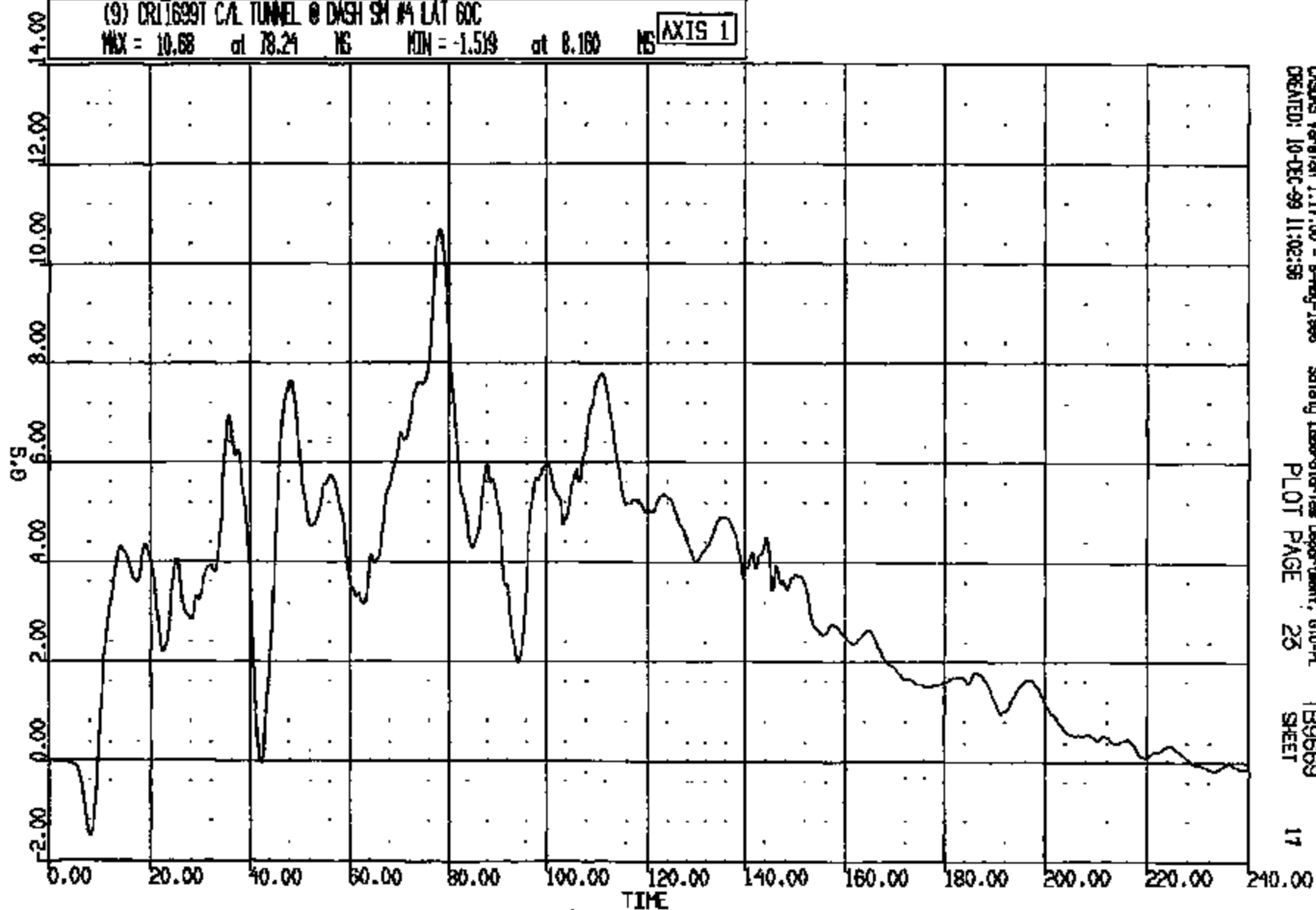
CRIS 0011699

CR R: 11699 TO: TB9669 DATE: 991210 10:38:49
2001 FN-145LWS

(9) CR11699T C/L TUNNEL @ DASH SH #4 LAT 60C

MAX = 10.68 at 78.24 NS MIN = -1.519 at 8.160 NS

AXIS 1



CASINS Version 1.17.00 - 8-May-1998
CREATED: 10-DEC-99 11:02:56

Safety Laboratories Department, G10-R
PLOT PAGE 25

TB9669
SHEET

17

ENTIRE PAGE CONFIDENTIAL

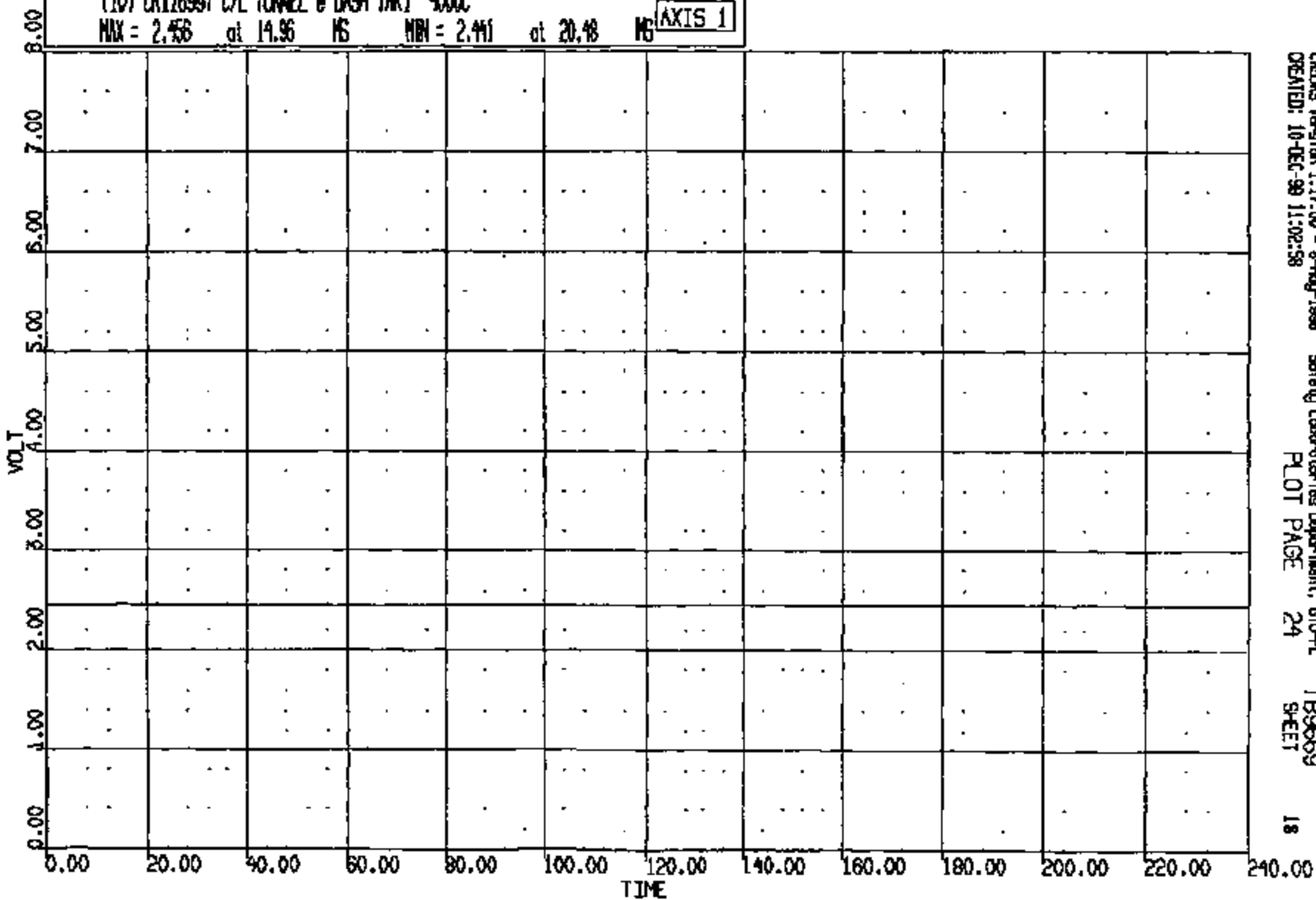
CRIS 0011699

CR R: 11699 TD: T89669 DATE: 991210 10:58:49
2001 FN-145LWB

(10) CR11699T C/L TUNNEL @ DASH TAK 4000C

MAX = 2.55 at 14.95 MS MIN = 2.41 at 20.48 MS

AXIS 1



CADMS Version 1.17.00 - 8-May-1999
CREATED: 10-DEC-99 11:02:58

Safety Laboratories Department, G10-PL
PLOT PAGE 24

T89669
SHEET 18

ENTIRE PAGE CONFIDENTIAL

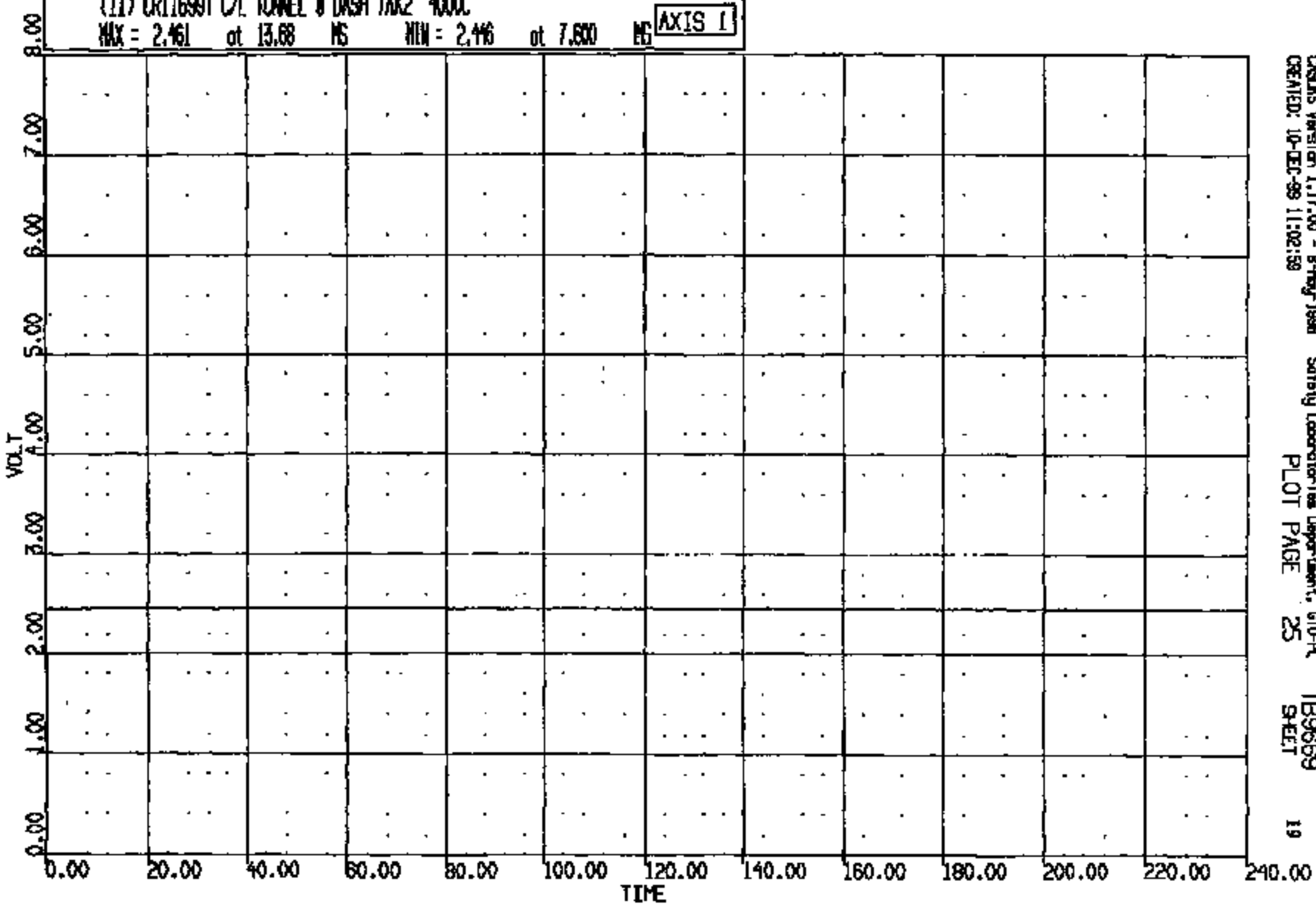
CRIS 0011699

CR R: 11699 TO: T89669 DATE: 991210 10:38:49
2001 FN-145LWB

(11) CR11699T C/L TUNNEL 8 DASH TAK2 4000C

MAX = 2.461 at 13.68 MS MIN = 2.446 at 7.600 MS

AXIS 1



CRIS 0011699

CASIS Version 1.17.00 - 8-May-1998
CREATED: 10-DEC-99 11:02:59

Safety Laboratories Department, STD-R,
PLOT PAGE 25

T89669
SHEET

19

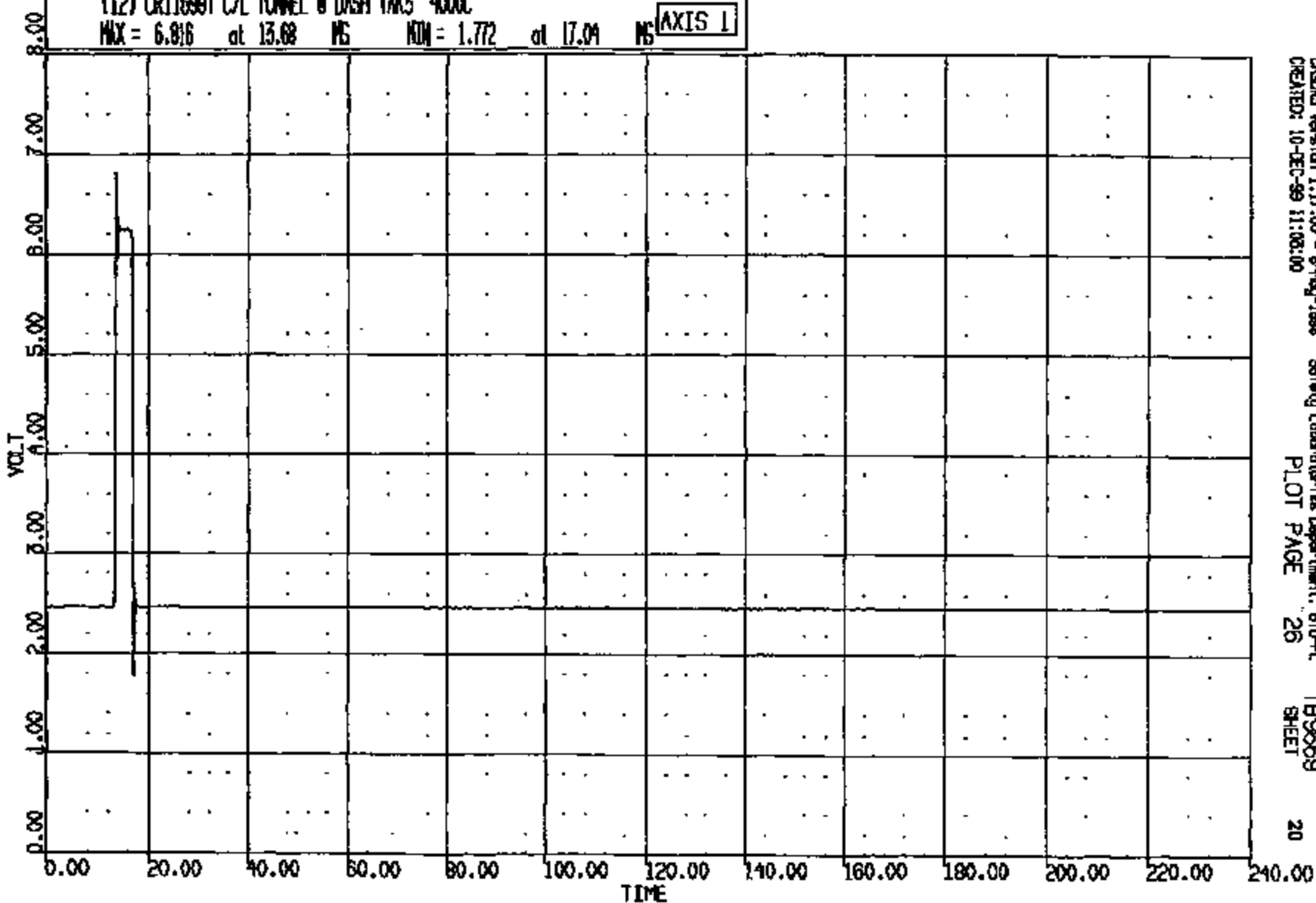
ENTIRE PAGE CONFIDENTIAL

CR R: 11699 TO: TB9669 DATE: 991210 10:58:49
2001 FN-145LWB

(12) CR11699T C/L TUNNEL @ DASH TAK3 4000C

MAX = 6.816 at 13.68 MS MIN = 1.772 at 17.04 MS

AXIS 1



CRTS 0011699

CASING Version 1.17.00 - 8-May-1998
CREATED: 10-DEC-99 11:08:00

Safety Laboratories Department, 610-A
PLOT PAGE 26

TB9669
SHEET 20

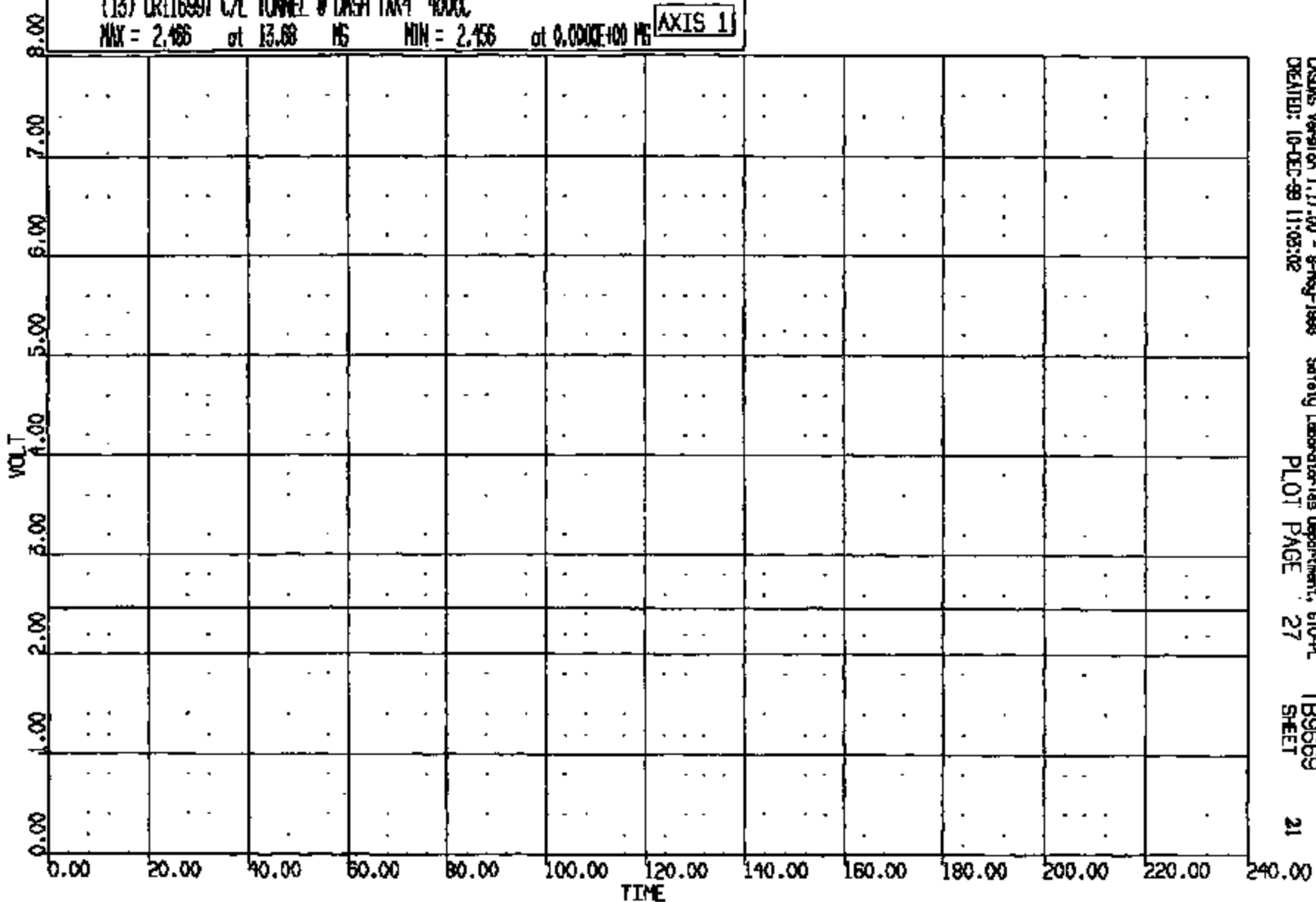
ENTIRE PAGE CONFIDENTIAL

CR R: 11699 TO: TB9669 DATE: 991210 10:58:49
2001 FN-146LWB

(13) CR11699T C/L TUNNEL @ DASH TAKA 4000C

MAX = 2.466 at 13.88 MS MIN = 2.456 at 0.000E+00 MS

AXIS 1



CADMS Version 1.17.00 - 8-May-1999
CREATED: 10-DEC-99 11:05:02

Safety Laboratories Department, 610-PL
PLOT PAGE 27

TB9669
SHEET

21

ENTIRE PAGE CONFIDENTIAL.

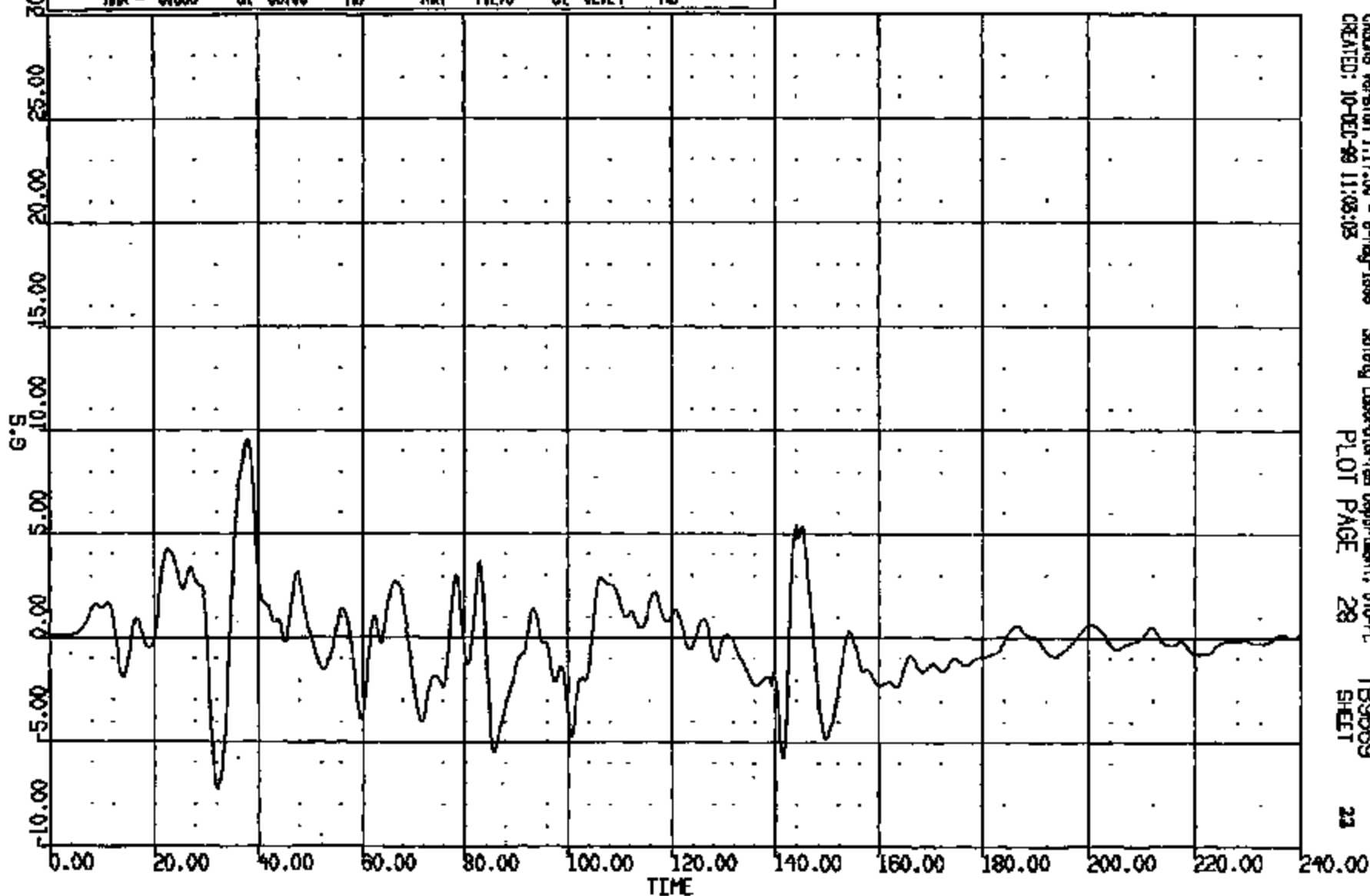
CRTS 0011699

CR R: 11899 TO: T89669 DATE: 991210 10:38:49
2001 FN-145LWB

114) CR11899T C/L TUNNEL @ DASH RCH #6 LONG 60C

MAX = 9.563 at 38.00 MS MIN = -7.279 at 32.24 MS

AXIS 1



CASINS Version 1.17.00 - 8-May-1998
CREATED: 10-DEC-99 11:03:03

Safety Laboratory Department, GTO-PL
PLOT PAGE 28

T89669
SHEET

23

ENTIRE PAGE CONFIDENTIAL

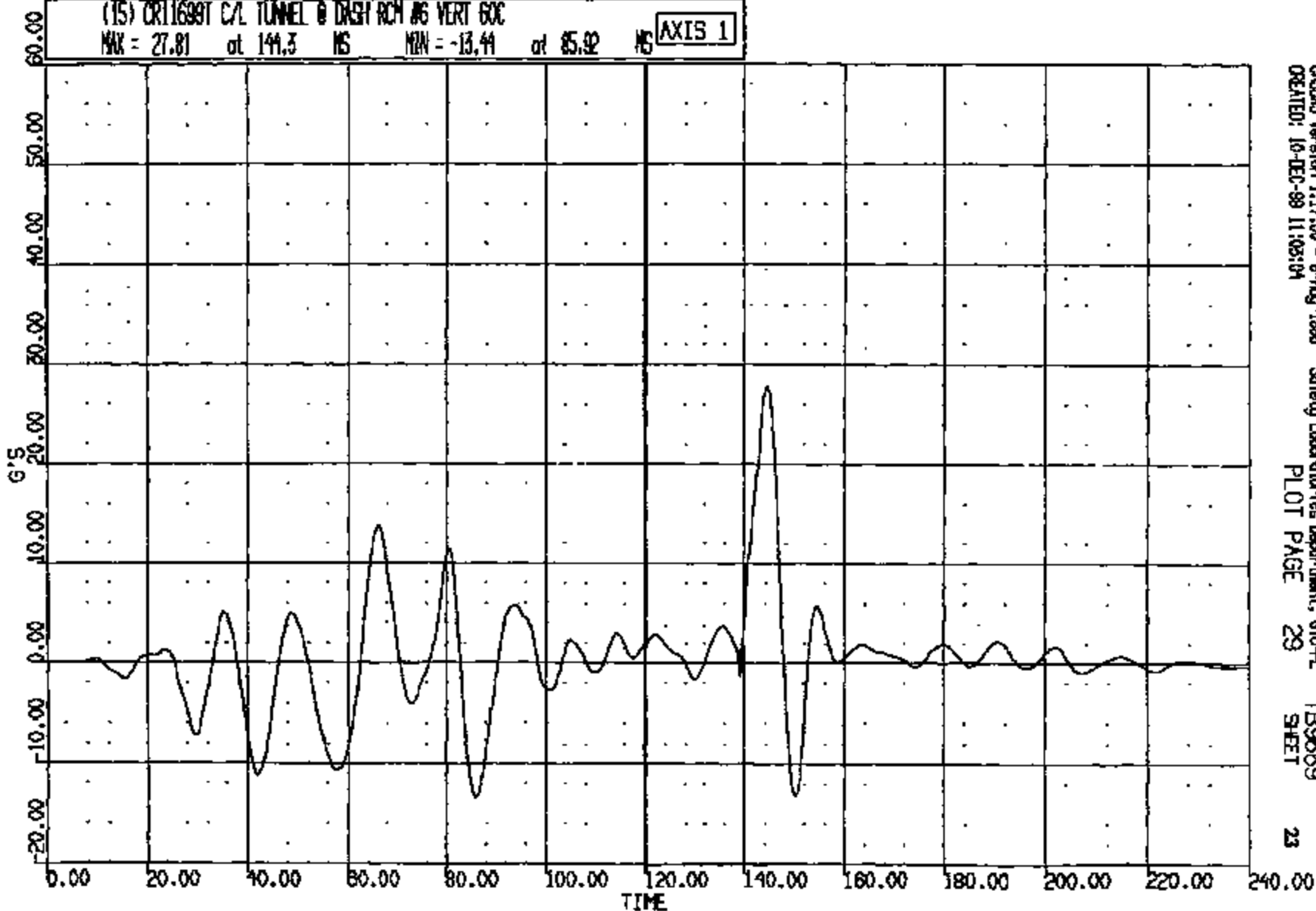
CRIS 0011699

CR #: 11888 TO: TB9669 DATE: 991210 10:58:49
2001 FN-14SLWB

(15) CRT1699T C/L TUNNEL @ DASH RCH #6 VERT 60C

MAX = 27.81 at 144.3 MS MIN = -13.44 at 85.92 MS

AXIS 1



CASAS Version 1.17.00 - 8-May-1999
CREATED: 10-DEC-99 11:03:04

Safety Laboratories Department, GTO-FL
PLOT PAGE 29

TB9669
SHEET

23

ENTIRE PAGE CONFIDENTIAL

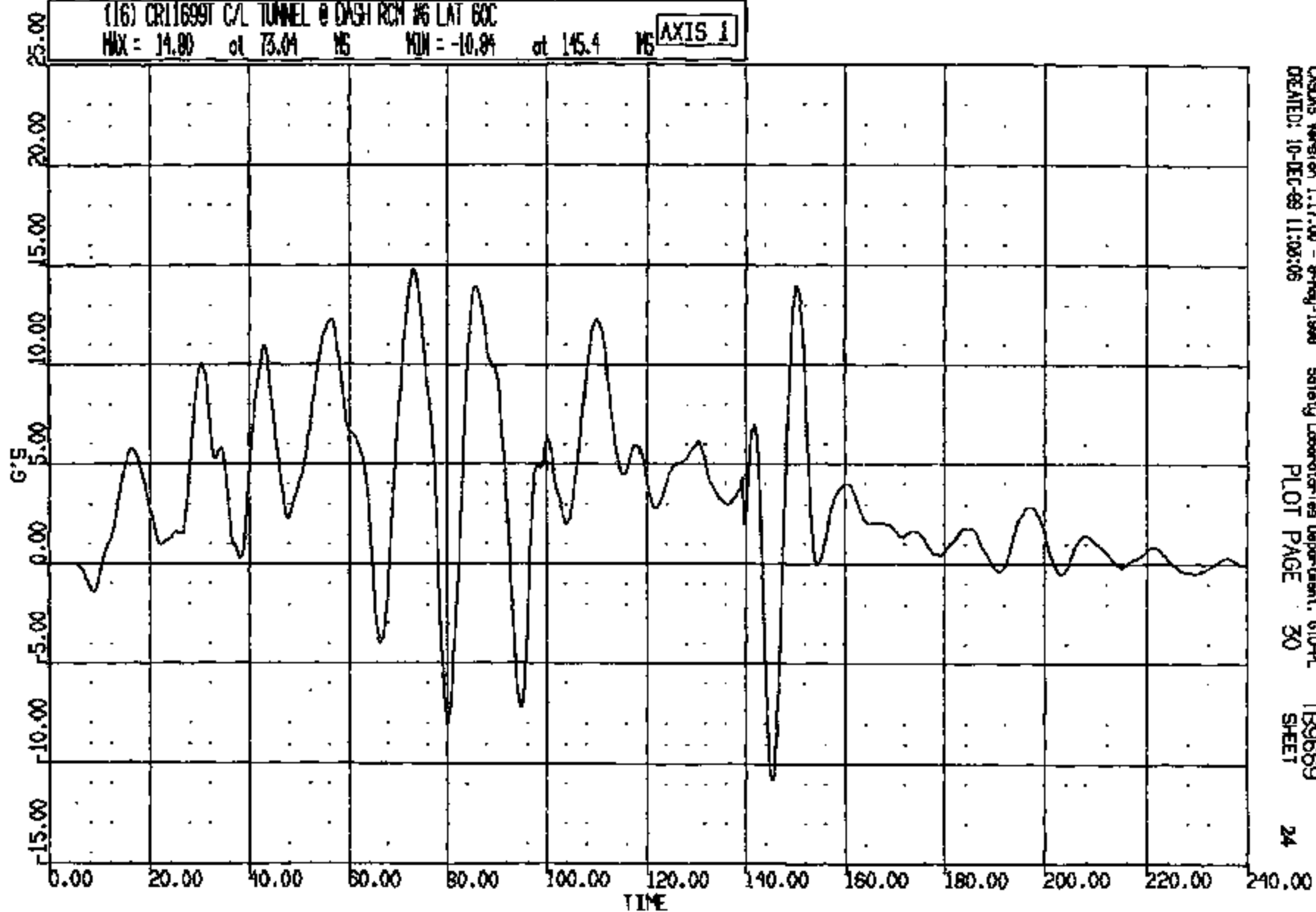
CRTS 0011699

CR R: 11699 TO: TB9689 DATE: 991210 10:38:49
R001 FN-145LWB

(16) CR11699T C/L TUNNEL @ DASH RCH #6 LAT 60C

MAX = 14.80 at 73.04 MS MIN = -10.84 at 145.4 MS

AXIS 1



CASAS Version 1.17.00 - 8-May-1990
CREATED: 10-DEC-99 11:03:06

Safety Laboratories Department, GTD-PL
PLOT PAGE 30

TB9689
SHEET

24

ENTIRE PAGE CONFIDENTIAL.

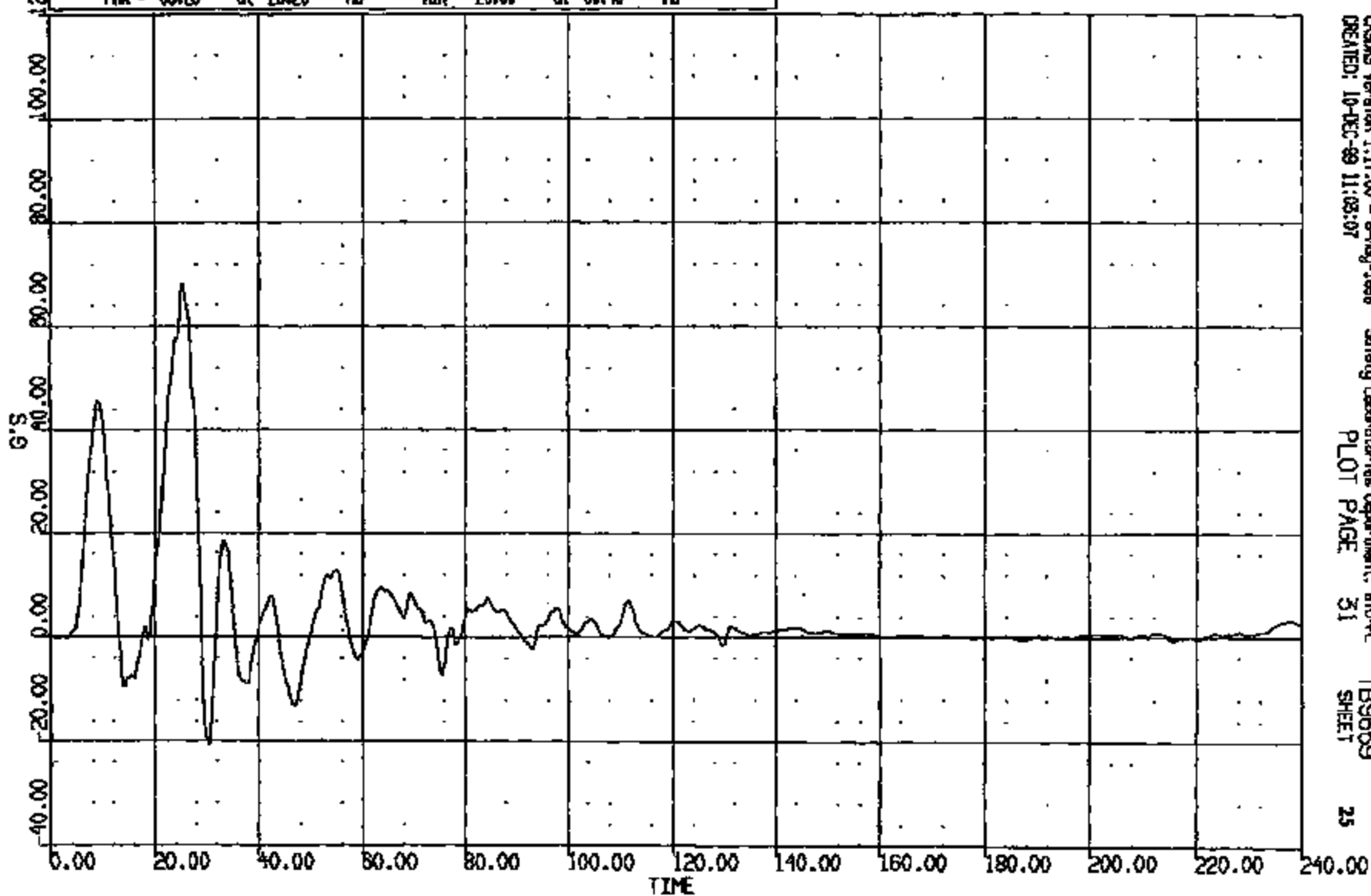
CRTS 0011699

OR R: 11699 TO: TB9669 DATE: 991210 10:39:49
2001 FN-145LWB

(17) CR11699 L/F DOOR @ BELTLINE MID LAT 60C

MAX = 68.26 at 25.20 MS MIN = -20.90 at 30.48 MS

AXIS 1



CRTS 0011699

CASMS Version 1.17.00 - 8-May-1998
CREATED: 10-DEC-99 11:03:07

Safety Laboratories Department, 610-PL
PLOT PAGE 31

TB9669
SHEET

25

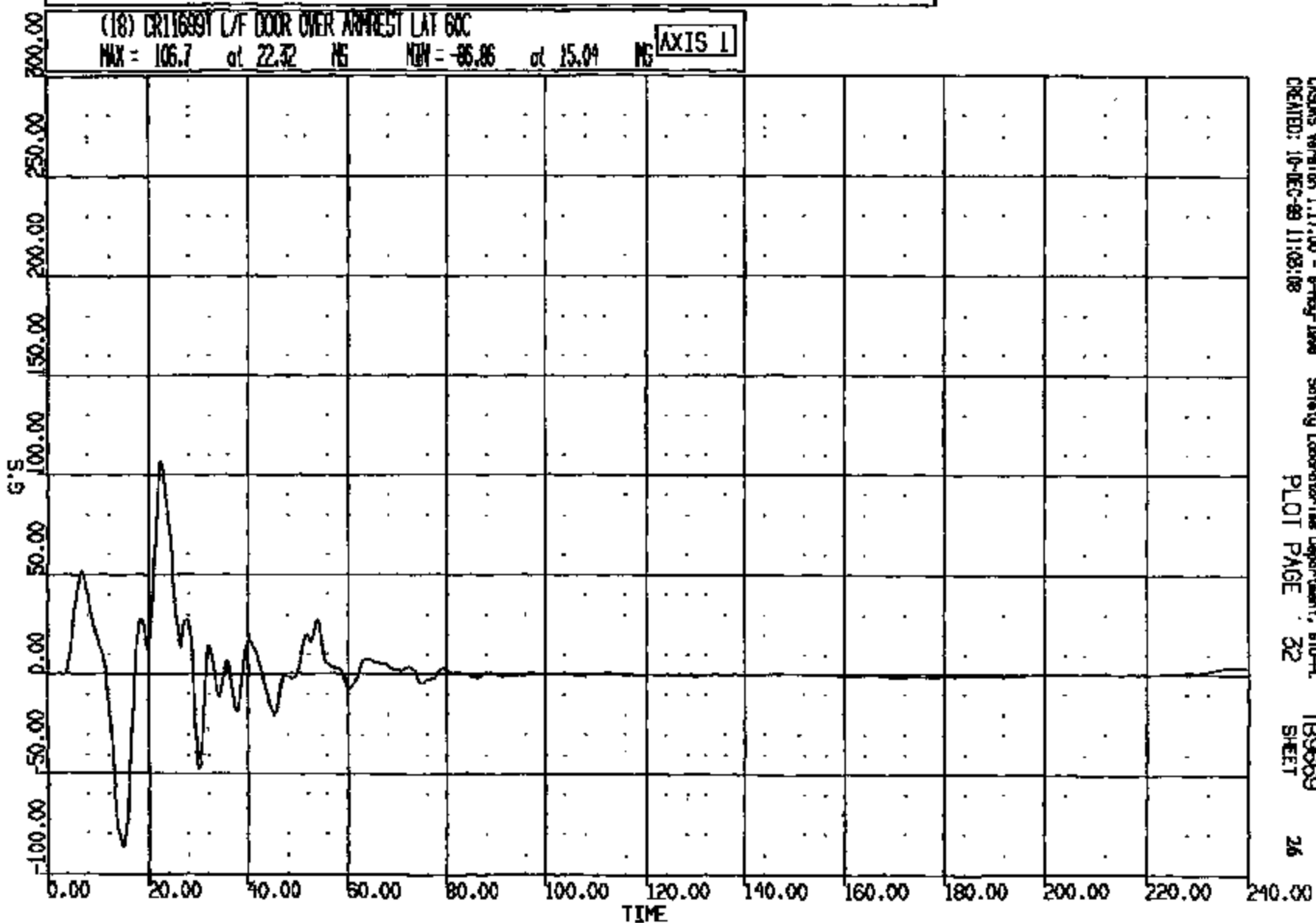
ENTIRE PAGE CONFIDENTIAL

CR R: 11699 TO: TB9669 DATE: 991210 10:38:49
2001 FN-146LWB

(18) CR11699 L/F DOOR OVER ARREST LAT 60C

MAX = 106.7 at 22.32 NS MIN = -86.86 at 15.04 NS

AXIS 1



CASMS Version 1.17.00 - 8-May-1998
CREATED: 10-DEC-99 11:03:08

Safety Laboratories Department, 610-FL
PLOT PAGE 32

TB9669
SHEET

26

ENTIRE PAGE CONFIDENTIAL

CRIS 0011699

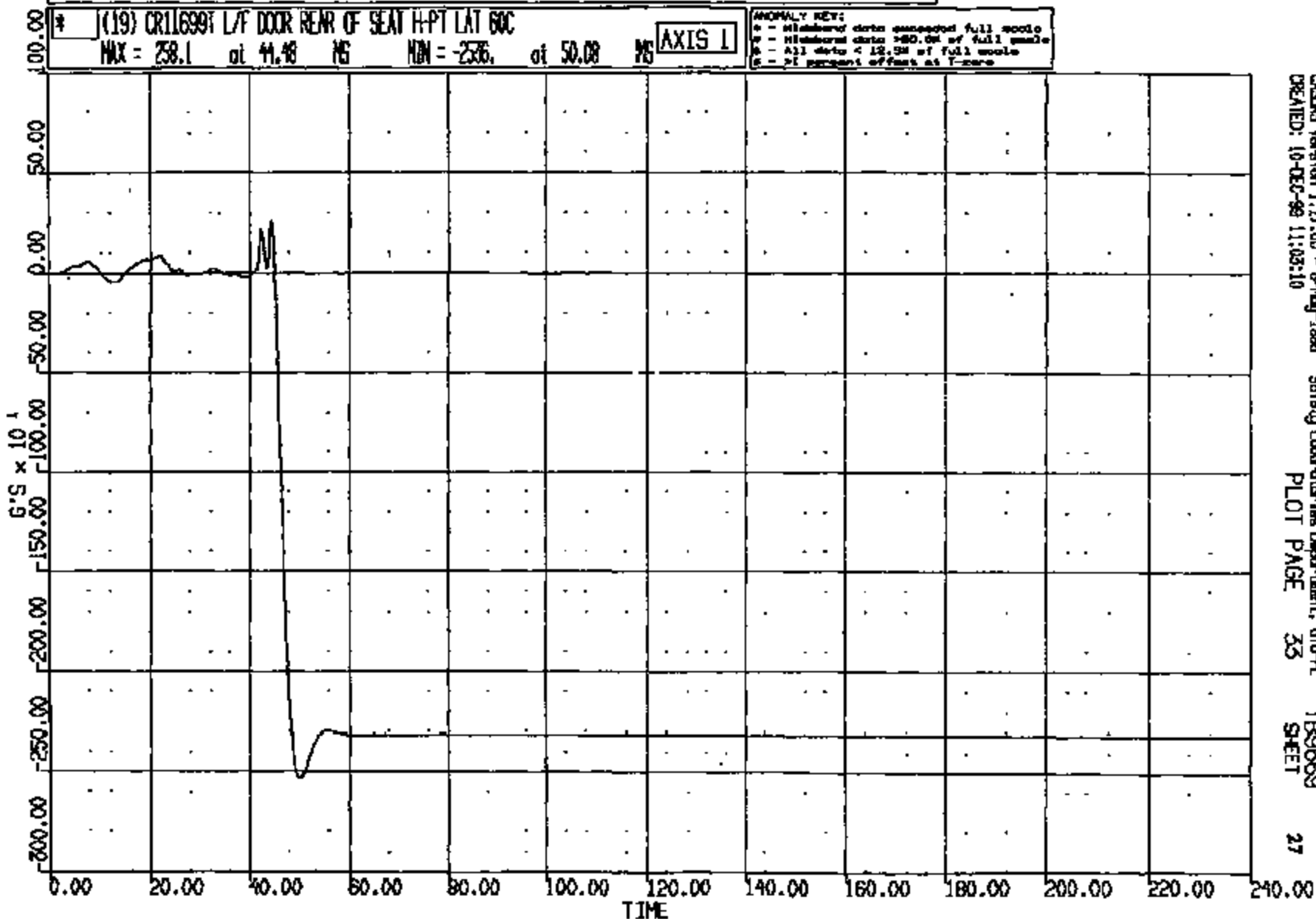
CR R: 11889 TO: TB9669 DATE: 991210 10:58:49
2001 FN-145LWB

(19) CR11699T L/F DOOR REAR OF SEAT H-PT LAT 60C

MAX = 258.1 at 44.46 MS MIN = -236. at 50.08 MS

AXIS 1

ANOMALY KEY:
* - standard data exceeded full scale
- standard data >80.0% of full scale
+ - All data < 12.5% of full scale
- - 21 percent offset at 1-zero



CADDS Version 1.17.00 - 8-May-1999
CREATED: 10-DEC-99 11:03:10

Safety Laboratories Department, G10-PL
PLOT PAGE 33

TB9669
SHEET 27

ENTIRE PAGE CONFIDENTIAL

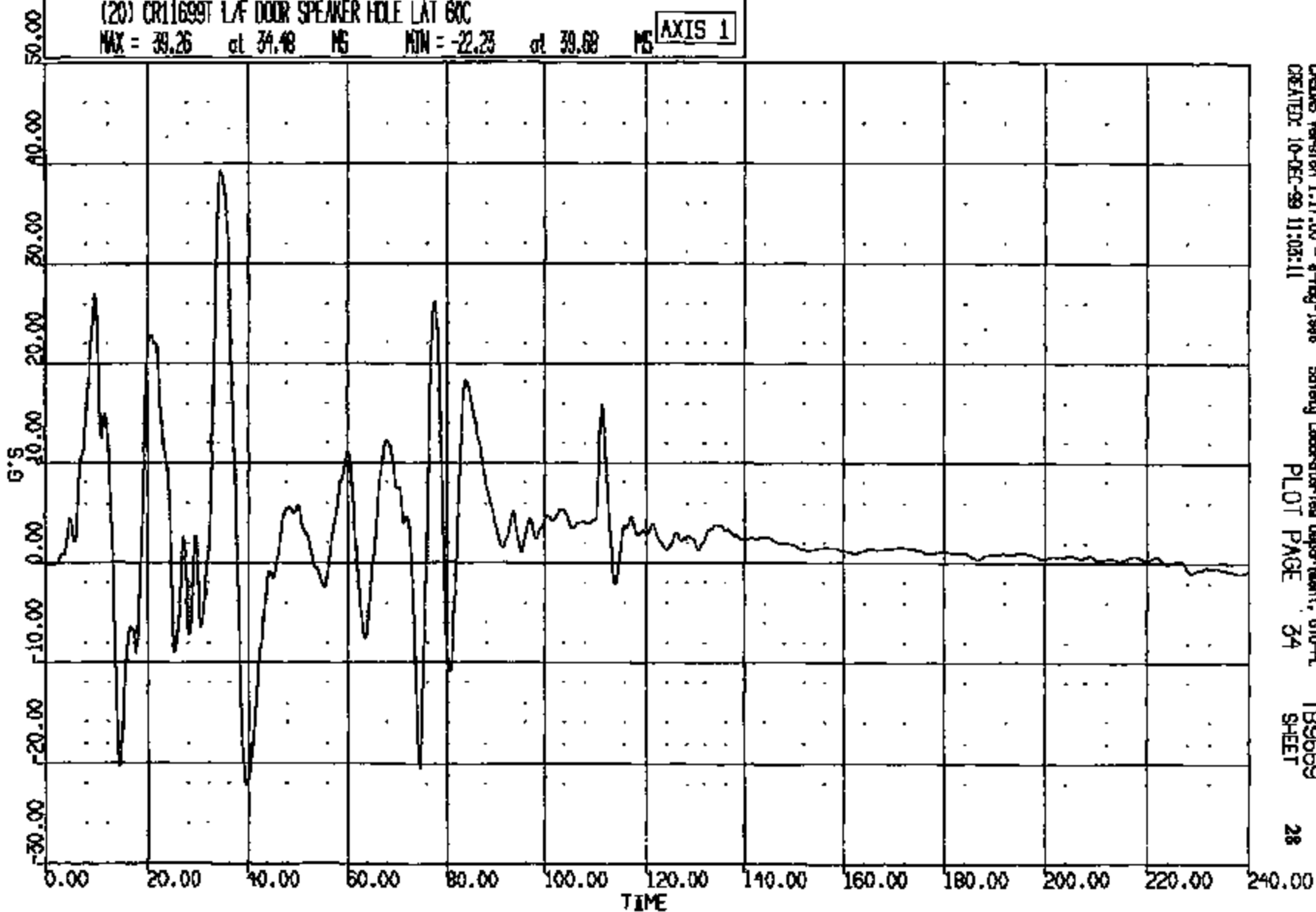
CRIS 0011699

CR R: 11699 TO: T89669 DATE: 001210 10:38:40
2001 FN-145LWB

(20) CR11699 LAF DOOR SPEAKER HOLE LAT 60C

MAX = 39.26 at 34.48 MS MIN = -22.23 at 39.68 MS

AXIS 1



CASINS Version 1.17.00 - 8-Aug-1988
CREATED: 10-DEC-99 11:03:11

Safety Laboratories Department, 610-A
PLOT PAGE 34

T89669
SHEET 28

ENTIRE PAGE CONFIDENTIAL

CRTS 0011699