



GE Nuclear Energy

# GERIS 2000 Examination Summary Sheet

R1154

4924

**Project:** TVA, Browns Ferry Nuclear Plant, Unit 3

**System:** Reactor Pressure Vessel

**Weld ID:** C-2-3

**ASME Code Category:** B-A

**Calibration Sheets:** C-004 AND C-003 CATT 1/25/94

**Supporting Data:** Examination Data Sheets E-08-00 thru E-08-26, Indication Data Sheets 08-001 thru 08-110, Indication Evaluation Sheets, Screen Prints, Exam Patch Location Map, Exam Coverage Plots and GERIS 2000 Setup Records.

## Examination Summary

The ultrasonic examination of weld C-2-3 resulted in two (2) recorded indications that exceed the allowable standards of IWB-3500, ASME Section XI, 1986 Edition, No Addenda.

The ASME Section XI required examination volume was examined with the GERIS 2000 System from the RPV inside surface utilizing Procedure No. GE-UT-700, Rev. 2. This examination was limited due to the core spray downcomers and surveillance specimen brackets. The total examination coverage was calculated to be 80%.

The GERIS 2000 utilizes an array of search units arranged to effectively examine the weld and adjacent base material parallel and perpendicular to the weld axis in two directions. The transducer package consisted of 0° longitudinal, 45° and 60° shear wave, and 70° refracted longitudinal (RL) wave search units.

The two (2) unacceptable indications were recorded and sized in accordance with GE-UT-700, Rev. 2 and GE-UT-701, Rev. 2 with the results tabulated below:

Ind. No.	Oriented	Type	X Pos	Y Pos	Z Pos	"S"	T wall	Length	T Meas	a/l	% a/t Calculated	% a/t Allowed
08-026	circ.	subsurface	198.50"	392.42"	1.77"	1.56"	.41"	1.50"	6.60"	.137	3.11	2.79
08-067	circ.	subsurface	558.25"	392.85"	1.65"	1.47"	.37"	1.50"	6.55"	.123	2.82	2.68

Indication 08-026 was sized with 60° shear wave channel 11 utilizing the PATT technique. This indication was also recorded with 70°RL channel 3 as 08-023 and seen with 45° shear wave channel 7.

Indication 08-067 was sized with 70°RL channel 3 utilizing the PATT technique. This indication was also recorded with 45° shear wave channel 7 as 08-073 and seen with 60° shear wave channel 11.

The GERIS 2000 also recorded indications with the 0° weld metal scans, 70°RL, 45° and 60° shear wave scans that were evaluated and found to be acceptable per the referencing Code section.

No manual supplemental examination was performed from the RPV outside surface due to access restrictions.

Fabrication records and previous examination results were reviewed prior to the completion of this examination summary.

GERIS Analyst: *Leesa Kimball*

GE Reviewer: *R.O. Forman*

LEVEL: *III*

DATE: *12-19-93*

LEVEL: *II*

DATE: *12-20-93*

UTILITY Review: *28W wdy*

ANII Review:

TITLE: *IF*

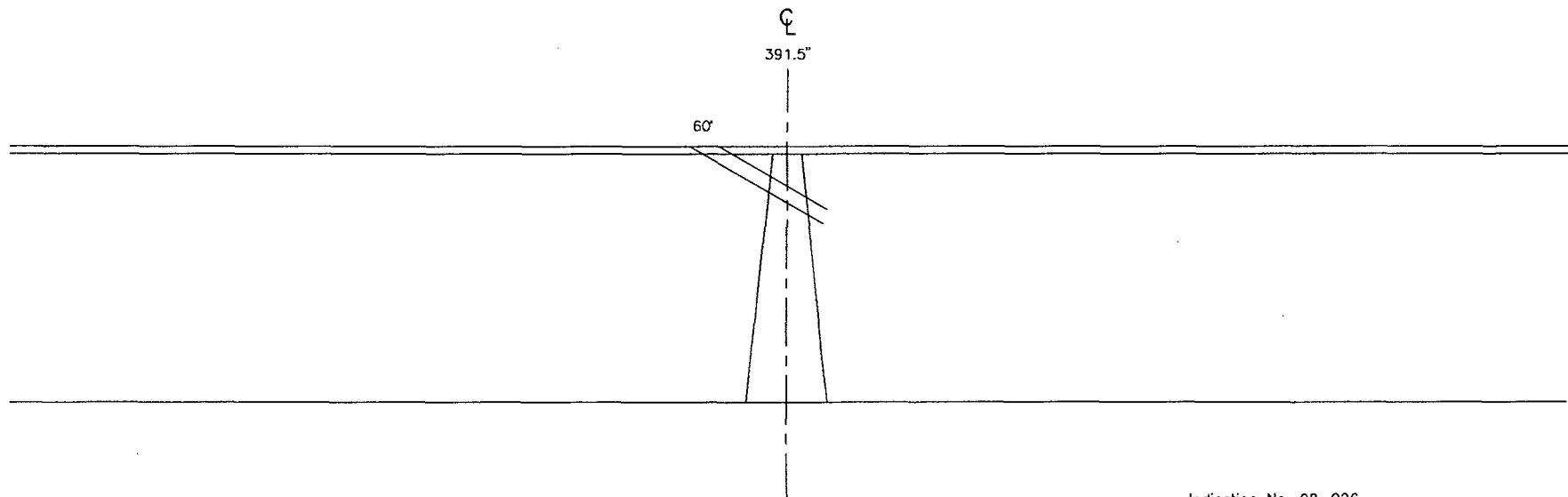
DATE: *1/26/94*

TITLE: *Albert Ladd*

DATE: *7/12/94*

200002

2 OF 276



Nominal Clad T = 3/16"  
Nominal Base Metal T = 6 3/8"

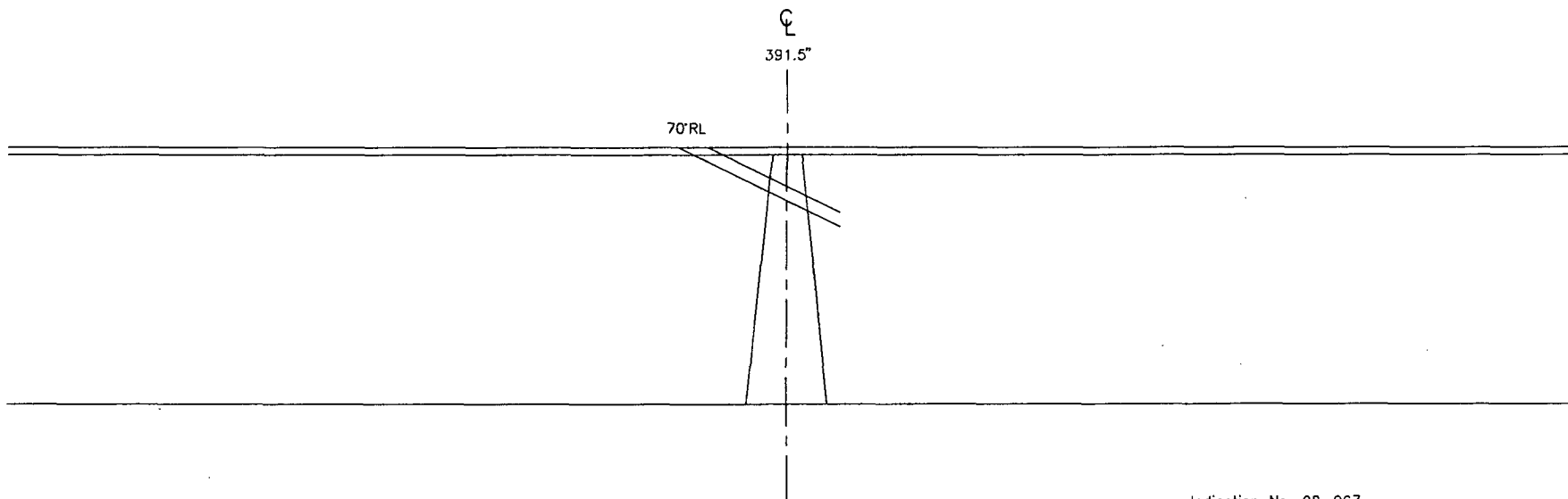
Indication No. 08-026  
Flow "X" location 198.50"  
Flow "Y" location 392.42"  
Flow Thruwall .41"  
Flow Length 1.50"  
"T" Measured 6.60"

This indication confirmed with channels 3 and 7

R1157

GE NUCLEAR ENERGY	BROWNS FERRY UNIT 3	WELD C-2-3 Ind. 08-026	SCALE: NONE	DWG. BF3C23I	REV. 0
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1 00003  
3 OF 276



Nominal Clad T = 3/16"  
Nominal Base Metal T = 6 3/8"

Indication No. 08-067  
Flaw "X" location 558.25"  
Flaw "Y" location 392.85"  
Flaw Thruwall .37"  
Flaw Length 1.50"  
"I" Measured 6.55"

This indication confirmed with channels 7 and 11

R 1154

GE NUCLEAR ENERGY	BROWNS FERRY UNIT 3	WELD C-2-3 Ind. 08-067	SCALE: NONE	DWG. BF3C23I	REV. 0
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R1154



GE Nuclear Energy

# GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3

Weld ID: C-2-3

Exam Data Sheet: C-003 and C-004

Procedure No.: GE-UT-700

Revision No.: 2

FRR No.: N/A

Patch	Data Sh.	Date	Start	Stop	Min X	Max X	Min Y	Max Y	Disk No.	Examiner
BF-073	E-08-01	10/23/93	1119	1135	30.75	53.00	378.00	390.00	91A	ROF
BF-074	E-08-02	9/30/93	1619	1650	78.75	124.00	378.00	390.00	13A	ROF
BF-075	E-08-03	10/2/93	0300	0328	124.25	170.00	378.00	390.00	13A	JCG
BF-076	E-08-04	10/2/93	0406	0435	170.25	216.00	378.00	390.00	13A	JCG
BF-077	E-08-05	10/2/93	0840	0902	216.25	250.25	378.00	390.00	13A	ROF
BF-078	E-08-06	10/23/93	1152	1226	275.50	321.25	378.00	390.00	91A	ROF
BF-079	E-08-07	10/23/93	1407	1433	321.50	363.50	378.00	390.00	91A	ROF
BF-080	E-08-08	10/23/93	1306	1336	425.00	470.75	378.00	390.00	91A	ROF
BF-081	E-08-09	10/23/93	1450	1518	471.00	516.75	378.00	390.00	91A	ROF
BF-082	E-08-10	10/23/93	1533	1608	517.00	562.75	378.00	390.00	91B	ROF
BF-083	E-08-11	10/23/93	1623	1651	563.00	608.75	378.00	390.00	91B	ROF
BF-084	E-08-12	10/23/93	1709	1733	609.00	644.50	378.00	390.00	91B	ROF
BF-085	E-08-13	10/23/93	1746	1817	669.50	715.50	378.00	390.00	91B	ROF
BF-086	E-08-14	10/23/93	1829	1858	715.50	757.50	378.00	390.00	92A	ROF
BF-061	E-08-15	10/25/93	2205	2308	29.00	58.00	382.50	405.75	95A	JCG
BF-062	E-08-16	10/26/93	0003	0201	73.25	133.00	382.50	405.75	95B	JCG
BF-063	E-08-17	10/26/93	0341	0540	133.25	193.00	382.50	405.75	96A	JCG
BF-064	E-08-18	10/26/93	0551	0813	193.25	255.25	382.50	405.75	96B	JCG/ROF
BF-065	E-08-19	10/26/93	0858	1057	270.50	330.25	382.50	405.75	97A	ROF
BF-066	E-08-20	10/26/93	1105	1228	330.50	367.50	382.50	405.75	97B	ROF
BF-067	E-08-21	10/26/93	1413	1609	424.00	479.75	382.50	405.75	100A	ROF
BF-068	E-08-22	10/26/93	1614	1814	480.00	539.75	382.50	405.75	100B	ROF
BF-069	E-08-23	10/26/93	1826	2027	540.00	599.75	382.50	405.75	101A	ROF/JCG
BF-070	E-08-24	10/26/93	2043	2223	600.00	649.50	382.50	405.75	102A	JCG
BF-071	E-08-25	10/27/93	0016	0215	664.50	724.50	382.50	405.75	102B	JCG
BF-072	E-08-26	10/27/93	0230	0345	724.50	760.50	382.50	405.75	101B	JCG

Comments: N/A

Limitations: BF-061, BF-066, BF-067, BF-072, BF-073, BF-079, BF-080 and BF-086 limited due to the Core Spray

Downcomers.

BF-061, BF-062, BF-064, BF-065, BF-070, BF-071, BF-073, BF-074, BF-077, BF-078, BF-084 and

BF-085 limited due to the Surveillance Specimen Brackets.

Analyst:

Ceresa Kimball

Reviewed By:

R.O. Forman

Level:

III

Date:

12-18-93

Level:

II

Date:

12-20-93



R 1154



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# GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-003**

**Exam Data Sheet No.: E-08-01****Patch ID:** BF-073

Ind. Data Sheet Series: 08-XXX

[illegible]

**Comments:** N/A

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Jessa Kimball

**Level:**

Level: III

Date: 12-18-93

Date: 12-18-93

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level:  $\text{II}$

Date: 12-18-93

Date: 12-18-93



GE Nuclear Energy

# GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3

Weld ID: C-2-3

Cal. ID: C-003

Exam Data Sheet No.: E-08-02

Patch ID: BF-074

Ind. Data Sheet Series: 08-XXX

Channel	Angle	Direction	Ind.	Ind. Data Sh.	Ind. Data Sh.	Ind. Data Sh.	Ind. Data Sh.	Ind. Data Sheet
1	0 WM	N/A	NRI	~	~	~	~	~
2	0 WM	N/A	NRI	~	~	~	~	~
3	70 RL	0 UP	NRI	~	~	~	~	~
4	70 RL	90 CW	NRI	~	~	~	~	~
5	70 RL	180 DN	NRI	~	~	~	~	~
6	70 RL	270 CCW	NRI	~	~	~	~	~
7	45 RS	0 UP	NRI	~	~	~	~	~
8	45 RS	90 CW	NRI	~	~	~	~	~
9	45 RS	180 DN	NRI	~	~	~	~	~
10	45 RS	270 CCW	NRI	~	~	~	~	~
11	60 RS	0 UP	NRI	~	~	~	~	~
12	60 RS	90 CW	NRI	~	~	~	~	~
13	60 RS	180 DN	NRI	~	~	~	~	~
14	60 RS	270 CCW	NRI	~	~	~	~	~
15	0 BM	N/A	NRI	~	~	~	~	~
16	0 BM	N/A	NRI	~	~	~	~	~
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Comments: N/A

Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

Analyst:

Deessa Kimball

Reviewed By:

R.O. Forman

Level:

III

Date:

12-18-93

Level:

II

Date:

12-18-93



**GE Nuclear Energy**

# GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-003**

**Exam Data Sheet No.: E-08-03**

**Patch ID:** BF-075

**Ind. Data Sheet Series: 08-XXX**[illegible]

**Comments:** N/A

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Alessa Kimball

**Level:**

Level: III

Date: 12-18-93

Date: 6-18-93

Reviewed By:

Reviewed By: R.O. Fournan

**Level:**

Level: II

Date: 12-18-93

Date: 12-18-93



**GE Nuclear Energy**

# GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-003**

**Exam Data Sheet No.: E-08-04****Patch ID:** BF-076

**Ind. Data Sheet Series: 08-XXX**

[illegible]

**Comments:** N/A

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Deena Kimball

**Level:**

Level: III

Date:

Date: 12-18-93

Reviewed By:

Reviewed By: R.O Forman

**Level:**

Level: III

Date:

Date: 12-18-93

R1154



**GE Nuclear Energy**

# GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-003**

**Exam Data Sheet No.: E-08-05****Patch ID: BF-077**

**Ind. Data Sheet Series: 08-XXX**

[illegible]

**Comments:** N/A

Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Deera Kimball

**Level:**

III

Date: 12-18-93

Reviewed By:

R.O. Form an

**Level:**

 $\pi$ 

Date: 12-18-93

R 1154



**GE Nuclear Energy**

## **GERIS 2000 Examination Data Sheet**

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-003**

**Exam Data Sheet No.: E-08-06****Patch ID:** BF-078

**Ind. Data Sheet Series: 08-XXX**

[illegible]

**Comments:** N/A

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Jessica Kimball

**Level:**

Level: III

Date: 12-18-93

Reviewed By:

Reviewed By: R.O. Forman

Level: II

Level: II Date: 12-18-93

R1154



GE Nuclear Energy

# GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3

Weld ID: C-2-3

Cal. ID: C-003

Exam Data Sheet No.: E-08-07

Patch ID: BF-079

Ind. Data Sheet Series: 08-XXX

Channel	Angle	Direction	Ind.	Ind. Data Sh.	Ind. Data Sh.	Ind. Data Sh.	Ind. Data Sh.	Ind. Data Sheet
1	0 WM	N/A	NRI	~	~	~	~	~
2	0 WM	N/A	NRI	~	~	~	~	~
3	70 RL	0 UP	NRI	~	~	~	~	~
4	70 RL	90 CW	NRI	~	~	~	~	~
5	70 RL	180 DN	NRI	~	~	~	~	~
6	70 RL	270 CCW	NRI	~	~	~	~	~
7	45 RS	0 UP	NRI	~	~	~	~	~
8	45 RS	90 CW	NRI	~	~	~	~	~
9	45 RS	180 DN	NRI	~	~	~	~	~
10	45 RS	270 CCW	NRI	~	~	~	~	~
11	60 RS	0 UP	NRI	~	~	~	~	~
12	60 RS	90 CW	NRI	~	~	~	~	~
13	60 RS	180 DN	NRI	~	~	~	~	~
14	60 RS	270 CCW	NRI	~	~	~	~	~
15	0 BM	N/A	NRI	~	~	~	~	~
16	0 BM	N/A	NRI	~	~	~	~	~
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Comments: N/A

Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

Analyst:

Deena Kimball

Reviewed By:

R.O. Forman

Level:

III

Date:

12-18-93

Level:

II

Date:

12-18-93

R 1154



**GE Nuclear Energy**

# GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-003**

**Exam Data Sheet No.: E-08-08****Patch ID:** BF-080**Ind. Data Sheet Series: 08-XXX**[illegible]

**Comments:** N/A

**Data Sheet Codes:** G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Aeresa Kimball

**Level:**

Level: III Date: 12-18-93

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: II Date: 12-18-93



R1154



**GE Nuclear Energy**

# GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-003**

**Exam Data Sheet No.: E-08-09****Patch ID:** BF-081**Ind. Data Sheet Series: 08-XXX**[illegible]

**Comments:** N/A

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Deesa Kimball

**Level:**

### III

Date:

12-18-93

Reviewed By:

R.O. Forman

**Level:**

II

Date:

12-18-93

R1154



**GE Nuclear Energy**

## **GERIS 2000 Examination Data Sheet**

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-003**

**Exam Data Sheet No.: E-08-10****Patch ID:** BF-082

**Ind. Data Sheet Series: 08-XXX**

[illegible]

**Comments:** N/A

Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Qeresa Kimba 00

**Level:**

III

Date:

12-18-93

Reviewed By:

R. O. Forman

**Level:**

II

Date \_\_\_\_\_

: 12-18-93



# GERIS 2000 Examination Data Sheet

**Ind. Data Sheet Series: 08-XXX**

**Comments:** N/A

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

Date: 12-18-93



# GERIS 2000 Examination Data Sheet

**Ind. Data Sheet Series: 08-XXX**

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**GE Nuclear Energy**

# GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-003**

**Exam Data Sheet No.: E-08-13****Patch ID:** BF-085**Ind. Data Sheet Series: 08-XXX**[illegible]

**Comments:** 5 = Typical non-relevant reflector pattern due to clad surface.

(similar to G-109)

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Jessica Kimball

**Level:**

Level: III Date: 12-18-93

Reviewed By:

Reviewed By: CF M-5

Level: III

Level: III Date: 1/25/94





# GERIS 2000 Examination Data Sheet

**Ind. Data Sheet Series: 08-XXX**

Date: 12-18-93

R1154



**GE Nuclear Energy**

# GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-16****Patch ID:** BF-062

**Ind. Data Sheet Series: 08-XXX**

[illegible]

**Comments:** N/A

**Data Sheet Codes:** G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

Analyst: Quessa Kimball

Level: III

Date: 12-18-93

Reviewed By: B.O. Forman

Level:  $\pi$

Date: 12-18-93





B1154



**GE Nuclear Energy**

## **GERIS 2000 Examination Data Sheet**

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-18****Patch ID: BF-064**

**Ind. Data Sheet Series: 08-XXX**

[illegible]

**Comments:** \* Indication 08-022 also seen with ch. 2.

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

Analyst: Wesley Kimball

Level: III Date: 12-18-93

Reviewed By: R.O. Forman

Level: II Date: 12-18-93



**GE Nuclear Energy**

## GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-19****Patch ID:** BF-065

**Ind. Data Sheet Series: 08-XXX**

[illegible]

**Comments:** N/A

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Dwesa Kimball

**Level:**

Level: II

Date:

Date: 12-18-93

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: II

Date \_\_\_\_\_

Date: 12-18-23



## GERIS 2000 Indication Data Sheet





## GERIS 2000 Indication Data Sheet

**Cal. ID: C-004**

**Ind. Data Sheet No.: 08-002**

**Direction:** 180

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

Analyst: Veronica Kimball

Level: III

Date: 12-18-93

Reviewed By: R.O. Fennan

Level: II

Date: 12-18-93

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-15**

**Patch ID: BF-061**

**Ind. Data Sheet No.: 08-003**

**Indication:** 08-003

**Channel: 9**

**Angle:** 45

**Direction: 180**

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the SPOT technique.

**TW = 0.283**

---

**L = 0.5**

**S = 1.11**

Analyst: Chelsea Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-18-93

Level: IV Date: 12-18-93

R1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-061

Exam Data Sheet No.: E-08-15  
Ind. Data Sheet No.: 08-003  
Indication: 08-003

Flaw Thruwall Dimension = 0.28  
Flaw Length "l" = 0.50  
Separation with clad "S" = N/A  
Surface Separation "S" = 1.11

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	3.63	4.20 Y
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			3.63	4.20

a = 0.142  
a/l value = 0.283  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 4.20%  
a/t = 2.22%

Comments:



R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-15

**Patch ID:** BF-061

Ind. Data Sheet No.: 08-004

**Indication: 08-004**

**Channel: 13**

**Angle:** 60

**Direction:** 180

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the SPOT technique.

**TW = 0.46**

$$L = 0.5$$

**S = 1.51 w/clad**

w/clad

Analyst: (Deesa Kimbo)

Reviewed By: R.O. Forman

Level: III Date: 12-18-93

Level: II Date: 12-18-93





**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-16****Patch ID:** BF-062

Ind. Data Sheet No.: 08-005

**Indication:** 08-005

**Channel: 5**

**Angle:** 70

**Direction: 180**

[illegible]

**Comments:** Same indication recorded with Ch. 11 (08-009) and Ch. 13 (08-013).

Thruwall size was determined by the PATT technique.

**TW = 0.09**

$$L = 2.5$$

**S = 1.134 w/clad**

**Analyst:**

Analyst: Jessie Kimball

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: III

Date: 12-18-93

**Level:**

Level:  $\pi$

Date: 12-18-93

Date: 12-18-93

B1154



**GE Nuclear Energy**

## GERIS 2000 Indication Evaluation Sheet

**Project:** TVA, Browns Ferry Unit 3

**Weld ID:** C-2-3

**Patch: BF-062****Exam Data Sheet No.: E-08-16****Ind. Data Sheet No.: 08-005**

**Indication: 08-005**

**Flaw Thruwall Dimension = 0.09**

**$T_{nominal} = 6.38$**

**Flaw Length "l" = 2.50**

**Clad T nominal = 0.19**

**Separation with clad "S" = 1.13**

**% of Allowable: 0.35**

**Surface Separation "S" = 0.94**

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition**  
**TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	1.90	2.00 Y
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			1.90	2.00

a = 0.045  
a/l value = 0.018  
Y = 1.000

## Flaw is Subsurface

Allowed a/t = 2.00%  
a/t = 0.71%

**Comments:**





## GERIS 2000 Indication Evaluation Sheet

**Exam Data Sheet No.: E-08-16****Ind. Data Sheet No.: 08-006**

**Indication:** 08-006

**$T_{nominal} = 6.38$**

**Clad T nominal = 0.19**

**% of Allowable:** 0.72

**Surface Separation "S" = 2.65**

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition**  
**TABLE IWB-3510-1 for 4" to 12"**

a = 0.156  
a/l value = 0.207  
Y = 1.000

## Flaw is Subsurface

Allowed a/t = 3.37%  
a/t = 2.44%

**Comments:**



## GERIS 2000 Indication Data Sheet

Ind. Data Sheet No.: 08-007

**Direction: 0**

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GE Nuclear Energy

## GERIS 2000 Indication Evaluation Sheet

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-062

**Exam Data Sheet No.:** E-08-16  
**Ind. Data Sheet No.:** 08-007  
**Indication:** 08-007

**Flaw Thruwall Dimension** = 0.22  
**Flaw Length "l"** = 0.75  
**Separation with clad "S"** = 1.31  
**Surface Separation "S"** = 1.12

**T nominal** = 6.38  
**Clad T nominal** = 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	2.48	2.87 Y
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.48	2.87

a = 0.110  
a/l value = 0.147  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 2.87%  
a/t = 1.72%

**Comments:**





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GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-062

Exam Data Sheet No.: E-08-16  
Ind. Data Sheet No.: 08-008  
Indication: 08-008

Flaw Thruwall Dimension = 0.50  
Flaw Length "I" = 0.25  
Separation with clad "S" = 2.34  
Surface Separation "S" = 2.15

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	5.20	7.60 Y
			Allowed	Allowed
			5.20	7.60

a = 0.250  
a/l value = 0.500  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 7.60%  
a/t = 3.92%

Comments:





**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-16****Patch ID:** BF-062

Ind. Data Sheet No.: 08-010

**Indication:** 08-010

**Channel: 11**

**Angle:** 60

**Direction:** 0

[illegible]

**Comments:** Thruwall size was determined by the Reg. Guide 20% beam spread correction method.

Indication has no determinable thruwall and is acceptable to IWB-3510-1.

**TW = 0**

$$L = 1.75$$

**S = 0.598 w/clad**

w/clad

**Analyst:**

Analyst: Quessa Kimball

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: III

Date: 12-18-93

Date: 12-18-93

**Level:**

Level: II

Date: 12-18-93

Date: 12-18-93

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**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-16

**Patch ID:** BF-062**Ind. Data Sheet No.: 08-011**

**Indication:** 08-011

**Channel: 11**

**Angle:** 60

**Direction: 0**

[illegible]

**Comments:** Same indication recorded with Ch. 13 (08-015).

Thruwall size was determined by the ASME 50% method.

**TW= 0.13**

$$L = 2.75$$

**S = 0.90 w/clad**

Analyst: Cheesa Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-18-93

Level: II Date: 12-18-93



GE Nuclear Energy

GERIS 2000 Indication  
Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-062

Exam Data Sheet No.: E-08-16  
Ind. Data Sheet No.: 08-011  
Indication: 08-011

Flaw Thruwall Dimension = 0.13  
Flaw Length "I" = 2.75  
Separation with clad "S" = 0.90  
Surface Separation "S" = 0.71

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	1.90	2.00 Y
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			1.90	2.00

a = 0.063  
a/l value = 0.023  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 2.00%  
a/t = 0.98%

Comments:



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**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-16****Patch ID:** BF-062**Ind. Data Sheet No.: 08-013**

**Indication:** 08-013

**Channel: 13**

**Angle:** 60

**Direction:** 180

[illegible]

**Comments:** Same indication recorded with Ch. 5 (08-005) and Ch. 11 (08-009).

Thruwall size was determined by the ASME 50% method.

**TW = 0.24**

**L = 1.00**

**S = 0.83 w/clad**

w/clad

**Analyst:**

Analyst: Alesia Kimball

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: III Date: 12-18-93

Level:  $\pi$ 

Level:  $\pi$  Date: 12-18-93





GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-062

Exam Data Sheet No.: E-08-16  
Ind. Data Sheet No.: 08-013  
Indication: 08-013

Flaw Thruwall Dimension = 0.24  
Flaw Length "I" = 1.00  
Separation with clad "S" = 0.83  
Surface Separation "S" = 0.64

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	2.32	2.66 Y
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.32	2.66

a = 0.120  
a/l value = 0.120  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 2.66%  
a/t = 1.88%

Comments:





**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-16****Patch ID:** BF-062

**Ind. Data Sheet No.: 08-015**

**Indication: 08-015**

**Channel: 13**

**Angle:** 60

**Direction: 180**

[illegible]

**Comments:** This indication also seen with Ch. 11 (see 08-011).

Indication has no determinable thruwall and is acceptable to IWB-3510-1.

**Analyst:**

Deusa Kimball

**Level:**

III

Date: 12-18-93

Reviewed By:

R.O. Forman

Level: II

Date: 12-18-93





GE Nuclear Energy

**GERIS 2000 Indication  
Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-062

**Exam Data Sheet No.:** E-08-16  
**Ind. Data Sheet No.:** 08-016  
**Indication:** 08-016

**Flaw Thruwall Dimension =** 0.44  
**Flaw Length "l" =** 0.50  
**Separation with clad "S" =** 2.02  
**Surface Separation "S" =** 1.83

**T nominal =** 6.38  
**Clad T nominal =** 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	5.08	6.52 Y
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			5.08	6.52

a = 0.220  
a/l value = 0.440  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 6.52%  
a/t = 3.45%

**Comments:**



## GERIS 2000 Indication Data Sheet



GE Nuclear Energy

## GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-062

Exam Data Sheet No.: E-08-16  
Ind. Data Sheet No.: 08-017  
Indication: 08-017

Flaw Thruwall Dimension = 0.48  
Flaw Length "I" = 0.25  
Separation with clad "S" = 1.91  
Surface Separation "S" = 1.72

T nominal = 6.38  
Clad T nominal = 0.19  
% of Allowable: 0.49

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	5.20	7.60 Y
			Allowed	Allowed
			5.20	7.60

a = 0.240  
a/l value = 0.500  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 7.60%  
a/t = 3.76%

Comments:



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**Ind. Data Sheet No.: 08-018**

**Direction:** 90

**Comments:** This indication evaluated as a laminar reflector and is acceptable in accordance with IWB-3510-2, ASME Section XI, 1986 Edition, No Addenda.

Level: II Date: 12-18-93





## GERIS 2000 Indication Data Sheet

**Direction: 180**

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable thruwall and is acceptable to IWB-3510-1.

Analyst: Quessa Kimball

Level: III Date: 12-18-93

Reviewed By: R.O. Forman

Level: II Date: 12-18-93



## GERIS 2000 Indication Data Sheet

**Cal. ID: C-004**

Ind. Data Sheet No.: 08-020

**Direction:** 0

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable throughwall dimension and is acceptable to IWB-3510-1.

Analyst: Wesley Kimball

Level: III Date: 12-18-93

Reviewed By: R.O. Forman

Level: II Date: 12-18-93

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-17****Patch ID:** BF-063

Ind. Data Sheet No.: 08-021

**Indication:** 08-021

**Channel: 11**

**Angle:** 60

**Direction: 0**

[illegible]

**Comments:** Thruwall size was determined by the Reg. Guide 20% beam spread correction method.

Indication has no determinable thruwall and is acceptable to IWB-3510-1.

**TW = 0.00**

**L = 0.50**

**S = 1.66 w/clad**

w/clad

Analyst: Chelsea Kimball

Reviewed By: R. O. Freeman

Level: III Date: 12-18-93

Level: II Date: 12-18-93



# GERIS 2000 Indication Data Sheet

**Cal. ID: C-004**

**Patch ID:** BF-064

Ind. Data Sheet No.: 08-022

**Indication:** 08-022

**Channel: 1**

**Angle:** 0

**Direction: 0**

[illegible]

**Comments:** This indication also seen with Ch. 2.

**This indication evaluated as a laminar reflector and is acceptable**

in accordance with IWB-3510-2, ASME Section XI, 1986 Edition, No Addenda.

Analyst: Chelsea Kimball

Level: III Date: 12-18-93

Reviewed By: R.O. Forman

Level: II Date: 12-18-93



R1154



**GE Nuclear Energy**

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-064

**Exam Data Sheet No.:** E-08-18  
**Ind. Data Sheet No.:** 08-023  
**Indication:** 08-023

**Flaw Thruwall Dimension =** 0.48  
**Flaw Length "I" =** 1.50  
**Separation with clad "S" =** 1.71  
**Surface Separation "S" =** 1.52

**T measured =** 6.60  
**Clad T nominal =** 0.19

Flaw is unacceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	2.57	2.99 Y
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.57	2.99

a = 0.242  
a/l value = 0.161  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 2.99%  
a/t = 3.66%

**Comments:**

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R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-18****Patch ID:** BF-064

Ind. Data Sheet No.: 08-025

**Indication:** 08-025

**Channel: 7**

**Angle:** 45

**Direction: 0**

[illegible]

**Comments:** No apparent tip signals.

Thruwall size was determined by the Reg. Guide 20% beam spread correction method.

Indication has no determinable thruwall and is acceptable to IWB-3510-1.

**TW = 0.00**

$$L = 0.50$$

**S = 1.39 w/clad**

w/clad

**Analyst:**

Analyst: Jessie Kimball

Reviewed By:

Reviewed By: *R.O. Forman*

**Level:**

Level: III

Date: 12-18-93

Date: 12-18-93

**Level:**

Level: II

Date: 12-18-93

Date: 12-18-93





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**GE Nuclear Energy**

## GERIS 2000 Indication Evaluation Sheet

**Project:** TVA, Browns Ferry Unit 3

**Weld ID: C-2-3**

**Patch: BF-064**

**Exam Data Sheet No.: E-08-18****Ind. Data Sheet No.: 08-026**

**Indication:** 08-026

**Flaw Thruwall Dimension = 0.41**

**$T_{measured} = 6.60$**

**Flaw Length "l" = 1.50**

**Clad T nominal = 0.19**

**Separation with clad "S" = 1.75**

**Surface Separation "S" = 1.56**

Flaw is unacceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition**  
**TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	2.42	2.79 Y
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed 2.42	Allowed 2.79

a = 0.205  
a/l value = 0.137  
Y = 1.000

## Flaw is Subsurface

Allowed a/t = 2.79%  
a/t = 3.11%

**Comments:**

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-18**

**Patch ID: BF-064**

**Ind. Data Sheet No.: 08-027**

**Indication:** 08-027

**Channel: 11**

**Angle:** 60

**Direction: 0**

[illegible]

**Comments:** Thruwall size was determined by the SPOT technique.

**TW = 0.40**

$$L = 0.25$$

**S = 1.99 w/clad**

w/clad

**Analyst:**

Analyst: Doua Kimball

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: III

Date: 12-18-93

**Level:**

Level: II

Date: 12-18-93

Date: 12-18-93



## GERIS 2000 Indication Evaluation Sheet

**Exam Data Sheet No.:** E-08-18  
**Ind. Data Sheet No.:** 08-027  
**Indication:** 08-027

***T nominal*** = 6.38  
***Clad T nominal*** = 0.19

**ASME Section XI, 1986 Edition**  
**TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	5.20	7.60 Y
			Allowed	Allowed
			5.20	7.60

a = 0.200  
a/l value = 0.500  
Y = 1.000

## Flaw is Subsurface

Allowed a/t = 7.60%  
a/t = 3.13%

**Comments:**



GE Nuclear Energy

# GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3

Weld ID: C-2-3

Cal. ID: C-004

Exam Data Sheet No.: E-08-19

Patch ID: BF-065

Ind. Data Sheet No.: 08-028

Indication: 08-028 to 08-032 Channel: 3

Angle: 70

Direction: 0

Amp.	X	20% Min Y	TOF	50% Min Y	TOF	@ Max Y	TOF	50% Max Y	TOF	20% Max Y	TOF	Remarks
13.5%	272.00	~	~	~	~	390.20	20.40	~	~	~	~	08-028
47.2%	272.25	~	~	~	~	389.95	24.24	~	~	~	~	08-028
50.2%	272.50	~	~	~	~	389.95	24.32	~	~	~	~	08-028
36.7%	272.75	~	~	~	~	389.95	24.08	~	~	~	~	08-028
~	~	~	~	~	~	~	~	~	~	~	~	~
11.2%	278.25	~	~	~	~	389.95	24.72	~	~	~	~	08-029
15.3%	278.50	~	~	~	~	389.95	24.32	~	~	~	~	08-029
328.5%	278.75	~	~	~	~	389.95	24.08	~	~	~	~	08-029
18.5%	279.00	~	~	~	~	389.95	23.52	~	~	~	~	08-029
~	~	~	~	~	~	~	~	~	~	~	~	~
14.4%	280.00	~	~	~	~	389.95	23.36	~	~	~	~	08-030
20.9%	280.25	~	~	~	~	389.95	23.36	~	~	~	~	08-030
19.6%	280.50	~	~	~	~	389.95	23.44	~	~	~	~	08-030
~	~	~	~	~	~	~	~	~	~	~	~	~
16.3%	281.75	~	~	~	~	389.95	23.68	~	~	~	~	08-031
26.9%	282.00	~	~	~	~	389.95	23.44	~	~	~	~	08-031
15.3%	282.25	~	~	~	~	389.95	23.68	~	~	~	~	08-031
9.3%	282.50	~	~	~	~	389.95	23.68	~	~	~	~	08-031
~	~	~	~	~	~	~	~	~	~	~	~	~
11.9%	287.00	~	~	~	~	389.70	27.20	~	~	~	~	08-032
16.3%	287.25	~	~	~	~	389.95	24.88	~	~	~	~	08-032
23.7%	287.50	~	~	~	~	389.95	24.88	~	~	~	~	08-032
12.7%	287.75	~	~	~	~	389.95	24.88	~	~	~	~	08-032
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~

Comments: No apparent tip signals.

Indications have no determinable thruwall and are acceptable to IWB-3510-1.

Analyst:

Geresa Kimball

Level:

III

Date:

12-18-93

Reviewed By:

R.O. Fournier

Level:

II

Date:

12-18-93



## GERIS 2000 Indication Data Sheet

**Cal. ID: C-004**

**Ind. Data Sheet No.: 08-033**

**Direction: 0**

8-028.XLS  
8-028



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-19**

**Patch ID:** BF-065

**Ind. Data Sheet No.: 08-035**

**Indication:** 08-035 to 08-037 **Channel:** 5

**Angle:** 70

**Direction:** 180

[illegible]

**Comments:** No apparent tip signals.

Indications have no determinable thruwall and are acceptable to IWB-3510-1.

Analyst: Jessie Kimball

Level: III

Date: 12-18-93

Reviewed By: R. O. Forman

Level:  $II$

Date: 12-18-23

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-19

**Patch ID:** BF-065

Ind. Data Sheet No.: 08-038

**Indication:** 08-038

**Channel: 7**

**Angle:** 45

**Direction: 0**

[illegible]

**Comments:** Same indication recorded with Ch. 9 (08-040), Ch. 11 (08-042) and 13 (08-045).

This indication also seen with Ch. 10 at below recordable levels.

**OD surface geometry.**

7.07 dB below Notch sensitivity.

Analyst: Deresa Kimball

Level: III Date: 12-18-93

Reviewed By: R.D. Forman

Level: II Date: 12-18-93



R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-19

**Patch ID:** BF-065

Ind. Data Sheet No.: 08-039

**Indication:** 08-039

**Channel: 9**

**Angle:** 45

**Direction:** 180

[illegible]

**Comments:** Same indication recorded with Ch. 11 (08-041) and Ch. 13 (08-043).

Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the SPOT technique.

**TW = 0.34**

**L = 0.50**

**S = 2.89 w/clad**

w/clad

Analyst: Jessie Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-18-93

Level: II Date: 12-18-93

R1154



**GE Nuclear Energy**

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-065

**Exam Data Sheet No.:** E-08-19  
**Ind. Data Sheet No.:** 08-039  
**Indication:** 08-039

**Flaw Thruwall Dimension =** 0.34  
**Flaw Length "l" =** 0.50  
**Separation with clad "S" =** 2.89  
**Surface Separation "S" =** 2.70

**T nominal =** 6.38  
**Clad T nominal =** 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	4.28	4.96 Y
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			4.28	4.96

**a =** 0.170  
**a/l value =** 0.340  
**Y =** 1.000

Flaw is Subsurface

**Allowed a/t =** 4.96%  
**a/t =** 2.66%

**Comments:**



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004****Exam Data Sheet No.: E-08-19****Patch ID: BF-065**

**Ind. Data Sheet No.: 08-040**

**Indication:** 08-040

**Channel: 9**

**Angle:** 45

**Direction: 180**

[illegible]

**Comments:** Same indication also recorded with Ch. 7 (08-038), Ch. 11 (08-042) and Ch. 13 (08-045).

This indication also seen with Ch. 10 below recordable levels.

### OD surface geometry.

9.79 dB below Notch sensitivity.

**Analyst:**

Julesa Kimball

**Level:**

III

Date: 12-18-93

Reviewed By:

R.O. Forman

**Level:**

II

Date: 12-18-93



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Exam Data Sheet No.: E-08-19****Patch ID:** BF-065

Ind. Data Sheet No.: 08-041

**Direction: 0**

[illegible]

Thruwall size was determined by the SPOT technique.

**S = 2.39 w/clad**

Level: II Date: 12-18-93

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Evaluation Sheet

**Project:** TVA, Browns Ferry Unit 3

**Weld ID:** C-2-3

**Patch:** BF-065**Exam Data Sheet No.: E-08-19**

**Ind. Data Sheet No.: 08-041**

**Indication:** 08-041

**Flaw Thruwall Dimension = 0.38**

**Flaw Length "l" =** 0.25

**Separation with clad "S" = 2.39**

**Surface Separation "S" = 2.20**

**$T_{nominal} = 6.38$**

**Clad T nominal = 0.19**

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition**  
**TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	5.20	7.60 Y
			Allowed	Allowed
			5.20	7.60

a = 0.190  
a/l value = 0.500  
Y = 1.000

## Flaw is Subsurface

Allowed a/t = 7.60%  
a/t = 2.98%

**Comments:**



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-19**

**Patch ID:** BF-065

Ind. Data Sheet No.: 08-042

**Indication:** 08-042

**Channel: 11**

**Angle:** 60

**Direction: 0**

[illegible]

**Comments:** Same indication recorded with Ch. 7 (08-038), Ch. 9 (08-040) and Ch. 13 (08-045).

This indication also seen with Ch. 10 below recordable levels.

### OD surface geometry.

**1.09 dB below Notch sensitivity.**

**Analyst:**

Analyst: Deena Kimball

**Level:**

Level: III Date: 12-18-93

Reviewed By:

Reviewed By: R.O. Fournier

Level: II

Level: II Date: 12-18-93



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-19****Patch ID:** BF-065

**Ind. Data Sheet No.: 08-043**

**Indication:** 08-043

**Channel: 13**

**Angle:** 60

**Direction:** 180

[illegible]

**Comments:** Same indication recorded with Ch. 9 (08-039) and Ch. 11 (08-041).

Thruwall size was determined by the SPOT technique.

**TW = 0.34**

$$L = 0.50$$

**S = 3.14 w/clad**

w/clad

**Analyst:**

Analyst: Jessica Kimball

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: III

Date: 12-18-93

**Level:**

Level: II

Date: 12-18-93

R1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-065

Exam Data Sheet No.: E-08-19  
Ind. Data Sheet No.: 08-043  
Indication: 08-043

Flaw Thruwall Dimension = 0.34  
Flaw Length "I" = 0.50  
Separation with clad "S" = 3.14  
Surface Separation "S" = 2.95

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	4.28	4.96 Y
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			4.28	4.96

a = 0.170  
a/l value = 0.340  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 4.96%  
a/t = 2.66%

Comments:





**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-19****Patch ID:** BF-065**Ind. Data Sheet No.: 08-044**

**Indication: 08-044**

**Channel: 13**

**Angle:** 60

**Direction: 180**

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the SPOT technique.

**TW = 0.32**

$$L = 0.75$$

**S = 1.56**

**Analyst:**

Analyst: Jessa Kimball

Reviewed By:

Reviewed By: R.D. Forman

**Level:**

Level: III Date: 12-18-93

**Level:**

Level: II Date: 12-18-93

R1154



**GE Nuclear Energy**

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-065

**Exam Data Sheet No.:** E-08-19  
**Ind. Data Sheet No.:** 08-044  
**Indication:** 08-044

**Flaw Thruwall Dimension =** 0.32  
**Flaw Length "I" =** 0.75  
**Separation with clad "S" =** N/A  
**Surface Separation "S" =** 1.56

**T nominal =** 6.38  
**Clad T nominal =** 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	2.93	3.43 Y
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.93	3.43

a = 0.160  
a/l value = 0.213  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.43%  
a/t = 2.51%

**Comments:**

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**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project: TVA, Browns Ferry, Unit 3**

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-19****Patch ID:** BF-065

Ind. Data Sheet No.: 08-045

**Indication:** 08-045

**Channel: 13**

**Angle:** 60

**Direction:** 180

[illegible]

**Comments:** Same indication recorded with Ch. 7 (08-038), Ch. 9 (08-040) and Ch. 11 (08-042).

This indication also recoded with Ch. 10 below recordable levels.

**OD surface geometry.**

**2.17 dB below Notch sensitivity.**

**Analyst:**

Analyst: Jessie Kimball

**Level:**

Level: III

Date: 12-18-93

Date: 12-18-93

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: II

Date: 12-18-93

Date: 12-18-93

B1154



**GE Nuclear Energy**

## GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-20****Patch ID:** BF-066

**Ind. Data Sheet Series: 08-XXX**

[illegible]

**Comments:** 5 = Typical non-relevant reflector pattern due to clad surface.

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Jessie Kimball

**Level:**

Level: III

Date: 12-18-93

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

π

Date:

Date: 12-19-93



GE Nuclear Energy

## GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3

Weld ID: C-2-3

Cal. ID: C-004

Exam Data Sheet No.: E-08-21

Patch ID: BF-067

Ind. Data Sheet Series: 08-XXX

Channel	Angle	Direction	Ind.	Ind. Data Sh.	Ind. Data Sh.	Ind. Data Sh.	Ind. Data Sh.	Ind. Data Sheet
1	0 WM	N/A	NRI	~	~	~	~	~
2	0 WM	N/A	NRI	~	~	~	~	~
3	70 RL	0 UP	1	08-056	08-057	~	~	~
4	70 RL	90 CW	NRI	~	~	~	~	~
5	70 RL	180 DN	NRI	~	~	~	~	~
6	70 RL	270 CCW	NRI	~	~	~	~	~
7	45 RS	0 UP	NRI	~	~	~	~	~
8	45 RS	90 CW	NRI	~	~	~	~	~
9	45 RS	180 DN	NRI	~	~	~	~	~
10	45 RS	270 CCW	NRI	~	~	~	~	~
11	60 RS	0 UP	NRI	~	~	~	~	~
12	60 RS	90 CW	NRI	~	~	~	~	~
13	60 RS	180 DN	1	08-061	08-062	~	~	~
14	60 RS	270 CCW	NRI	~	~	~	~	~
15	0 BM	N/A	NRI	~	~	~	~	~
16	0 BM	N/A	NRI	~	~	~	~	~
~	~	~	~	~	~	~	~	~
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Comments: Indication Data Sheet 08-056 documents indications 08-056 and 08-058 thru 08-060.

Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

Analyst:

Doreen Kimball

Level:

III

Date: 12-18-93

Reviewed By:

R.O. Forman

Level:

II

Date: 12-19-93

R1154



**GE Nuclear Energy**

## **GERIS 2000 Examination Data Sheet**

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-22****Patch ID:** BF-068**Ind. Data Sheet Series: 08-XXX**[illegible]

**Comments:** N/A

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Julesa Kimball

**Level:**

Level: III

Date: 12-19-93

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

II

Date: 12-19-93

Date: 12-19-93

R1154



**GE Nuclear Energy**

# GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-23****Patch ID:** BF-069

Ind. Data Sheet Series: 08-XXX

[illegible]

**Comments:** N/A

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Doreen Kimball

**Level:**

Level: III

Date: 12-19-93

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

II

Date: 12-19-93

R1154



**GE Nuclear Energy**

## GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-24**

**Patch ID:** BF-070

Ind. Data Sheet Series: 08-XXX

[illegible]

**Comments:** N/A

Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Analyst: Ceresa Kimball

**Level:**

Level: III Date: 12-19-93

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: II Date: 12-19-93





## **GERIS 2000 Examination Data Sheet**

**Ind. Data Sheet Series: 08-XXX**[illegible]

\* Pictures only - Reflectors associated with a repair area and documented for information only.

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

Level: II Date: 12-19-23



## **GERIS 2000 Examination Data Sheet**

**Cal. ID: C-004**

Ind. Data Sheet Series: 08-XXX

[illegible]

**Comments:** \* Same indication

**Data Sheet Codes: G-XXX; "G" = Geometry ( may be typical), 6-XXX; "6" = Weld Sequence, XXX = Sheet Number**

Indication Codes: 1 = Flaw, 2 = OD Surface, 3 = OD Attachment, 4 = Nozzle, 5 = Other

**Analyst:**

Greta Kimball

**Level:**

## II

Date: 12-19-93

Reviewed By:

R.O. Forman

**Level:**

II

Date: 12-19-93

R1154



**GE Nuclear Energy**

# GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-20****Patch ID: BF-066**

**Ind. Data Sheet No.: 08-046**

**Indication:** 08-046, 08-047      **Channel:** 3

**Angle:** 70

**Direction: 0**

[illegible]

**Comments:** Clad interface.

**No apparent tip signals.**

Indications have no determinable thruwall and are acceptable to IWB-3510-1.

**Analyst:**

Analyst: Cassia Kimball

**Level:**

Level: III

Date: 12-18-93

Date: 12-18-93

Reviewed By:

Reviewed By: R.D. Forman

**Level:**

Level: II

Date: 12-18-93

Date: 12-18-93

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-20****Patch ID:** BF-066

Ind. Data Sheet No.: 04-048

**Indication:** 08-048, 08-049      **Channel:** 3

**Angle:** 70

**Direction:** 0

[illegible]

**Comments:** No apparent tip signals.

Indications have no determinable thruwall and are acceptable to IWB-3510-1.

Analyst: Cybera Kimball

Level: III Date: 12-18-93

Reviewed By: R.O. Forman

Level: II Date: 12-19-89 93



## GERIS 2000 Indication Data Sheet

**Cal. ID: C-004**

**Ind. Data Sheet No.: 08-050**

**Direction: 0**

Indication has no determinable length or thruwall and is acceptable to IWB-3510-1.

Level:  $\pi$  Date: 12-19-93

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-20****Patch ID: BF-066**

Ind. Data Sheet No.: 08-051

**Indication:** 08-051

**Channel: 9**

**Angle:** 45

**Direction: 180**

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the SPOT technique.

**TW = 0.23**

---

**L = 1.00**

---

**S = 1.18**

Analyst: Jessica Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-18-93

Level: II Date: 12-19-93

R1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-066

Exam Data Sheet No.: E-08-20  
Ind. Data Sheet No.: 08-051  
Indication: 08-051

Flaw Thruwall Dimension = 0.23  
Flaw Length "I" = 1.00  
Separation with clad "S" = N/A  
Surface Separation "S" = 1.18

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	2.29	2.62 Y
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.29	2.62

a = 0.115  
a/l value = 0.115  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 2.62%  
a/t = 1.80%

Comments:

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-20****Patch ID:** BF-066

Ind. Data Sheet No.: 08-052

**Indication:** 08-052

**Channel: 9**

**Angle: 45**

**Direction:** 180

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the SPOT technique.

**TW = 0.20**

---

**L = 0.50**

**S = 2.92**

**Analyst:**

Jessie Kimball

Reviewed By:

R.D. Fisman

**Level:**

### III

Date: 12-18-93

**Level:**

II

Date: 12-19-93



B1154



**GE Nuclear Energy**

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-066

**Exam Data Sheet No.:** E-08-20  
**Ind. Data Sheet No.:** 08-052  
**Indication:** 08-052

**Flaw Thruwall Dimension =** 0.20  
**Flaw Length "l" =** 0.50  
**Separation with clad "S" =** N/A  
**Surface Separation "S" =** 2.92

**T nominal =** 6.38  
**Clad T nominal =** 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	2.80	3.30 Y
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.80	3.30

**a =** 0.100  
**a/l value =** 0.200  
**Y =** 1.000

Flaw is Subsurface

**Allowed a/t =** 3.30%  
**a/t =** 1.57%

**Comments:**

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-20****Patch ID:** BF-066**Ind. Data Sheet No.: 08-053**

**Indication:** 08-053

**Channel: 9**

**Angle:** 45

**Direction: 180**

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the SPOT technique.

**TW = 0.33**

$$L = 0.75$$

**S = 0.91**

**Analyst:**

Analyst: Ceresa Kimball

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: III Date: 12-18-93

**Level:**

Level: II

Date: 12-19-93

Date: 12-19-93


**GE Nuclear Energy**

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3

**Weld ID:** C-2-3

**Patch:** BF-066

**Exam Data Sheet No.:** E-08-20

**Ind. Data Sheet No.:** 08-053

**Indication:** 08-053

**Flaw Thruwall Dimension** = 0.33

**T nominal** = 6.38

**Flaw Length "I"** = 0.75

**Clad T nominal** = 0.19

**Separation with clad "S"** = N/A

**Surface Separation "S"** = 0.91

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	3.00	3.50 Y
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			3.00	3.50

a = 0.165  
 a/l value = 0.220  
 Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.50%  
 a/t = 2.59%

**Comments:**

R 1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-20****Patch ID:** BF-066

**Ind. Data Sheet No.: 08-054**

**Indication:** 08-054

**Channel: 10**

**Angle:** 45

**Direction: 270**

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the PATT technique.

**TW = 0.22**

**L = 0.50**

**S = 2.65 with clad**

**with clad**

Analyst: Jason Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-18-93

Level: II Date: 12-19-93

R1154



GE Nuclear Energy

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-066

**Exam Data Sheet No.:** E-08-20  
**Ind. Data Sheet No.:** 08-054  
**Indication:** 08-054

**Flaw Thruwall Dimension =** 0.22  
**Flaw Length "I" =** 0.50  
**Separation with clad "S" =** 2.65  
**Surface Separation "S" =** 2.46

**T nominal =** 6.38  
**Clad T nominal =** 0.19

Flaw is acceptable by Table IWB-3510-1

## **ASME Section XI, 1986 Edition TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	3.00	3.50 Y
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			3.00	3.50

**a =** 0.110  
**a/l value =** 0.220  
**Y =** 1.000

Flaw is Subsurface

**Allowed a/t =** 3.50%  
**a/t =** 1.72%

**Comments:**

R1154



**GE Nuclear Energy**

## ***GERIS 2000 Indication Data Sheet***

**Project:** TVA, Browns Ferry, Unit 3  
**Weld ID:** C-2-3  
**Cal. ID:** C-004

**Exam Data Sheet No.:** E-08-20  
**Patch ID:** BF-066  
**Ind. Data Sheet No.:** 08-055

**Indication:** 08-055      **Channel:** 10      **Angle:** 45      **Direction:** 270

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.  
Thruwall size was determined by the SPOT technique.

TW = 0.20                      L = 0.50                      S = 2.66      with clad

Analyst: Chelsea Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-18-93

Level:  $\pi$  Date: 12-19-93



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-066

Exam Data Sheet No.: E-08-20  
Ind. Data Sheet No.: 08-055  
Indication: 08-055

Flaw Thruwall Dimension = 0.20  
Flaw Length "I" = 0.50  
Separation with clad "S" = 2.66  
Surface Separation "S" = 2.47

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

## ASME Section XI, 1986 Edition TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	2.79	3.28 Y
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.79	3.28

a = 0.099  
a/l value = 0.198  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.28%  
a/t = 1.55%

Comments:

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R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-21****Patch ID: BF-067****Ind. Data Sheet No.: 08-056**

**Indication:** 08-056 and  
08-058 thru 08-060

**Channel: 3**

**Angle:** 70

**Direction: 0**

[illegible]

**Comments:** No apparent tip signals.

Indications have no determinable thruwall and are acceptable to IWB-3510-1.

Analyst: Jeresa Kimball

Level: III Date: 12-18-93

Reviewed By: R.D. Forman

Level: II Date: 12-19-93



R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-21

**Patch ID:** BF-067**Ind. Data Sheet No.: 08-057**

**Indication:** 08-057

**Channel: 3**

**Angle:** 70

**Direction: 0**

**Comments:** Thruwall size was determined by the PATT technique.

TW = 0.44

**L = 1.00**

**S = 0.85 w/clad**

w/clad

**Analyst:**

Jeresa Kimball

Reviewed By:

R.O. Forman

**Level:**

III

Date: 6-19-93

**Level:**

II

Date: 12.19.93

R1154



**GE Nuclear Energy**

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-067

**Exam Data Sheet No.:** E-08-21  
**Ind. Data Sheet No.:** 08-057  
**Indication:** 08-057

**Flaw Thruwall Dimension** = 0.44  
**Flaw Length "l"** = 1.00  
**Separation with clad "S"** = 0.85  
**Surface Separation "S"** = 0.66

**T nominal** = 6.38  
**Clad T nominal** = 0.19

Flaw is acceptable by Table IWB-3510-1

## **ASME Section XI, 1986 Edition TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	3.00	3.50 Y
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			3.00	3.50

a = 0.220  
a/l value = 0.220  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.50%  
a/t = 3.45%

**Comments:**



**GE Nuclear Energy**

# GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-21****Patch ID:** BF-067

Ind. Data Sheet No.: 08-061

**Indication:** 08-061

**Channel: 13**

**Angle:** 60

**Direction:** 180

**Comments:** No apparent tip signals.

Thruwall size was determined by the ASME 50% method.

**TW = 0.26**

**L = 0.50**

**S = 0.81 with clad**

**with clad**

**Analyst:**

Ausa Kimball

Reviewed By:

R.O. Forman

**Level:**

III

Date: 12-19-93

**Level:**

II

Date: 12-19-93

R1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3

Weld ID: C-2-3

Patch: BF-067

Exam Data Sheet No.: E-08-21

Ind. Data Sheet No.: 08-061

Indication: 08-061

Flaw Thruwall Dimension = 0.26

Flaw Length "I" = 0.50

Separation with clad "S" = 0.81

Surface Separation "S" = 0.62

T nominal = 6.38

Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	3.35	3.86 Y
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			3.35	3.86

a = 0.128

a/l value = 0.255

Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.86%

a/t = 2.00%

Comments:

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-21****Patch ID:** BF-067

Ind. Data Sheet No.: 08-062

**Indication:** 08-062

**Channel: 13**

**Angle:** 60

**Direction: 180**

**Comments:** No apparent tip signals.

Thruwall size was determined by the ASME 50% method.

**TW = 0.13**

**L = 0.50**

**S = 0.75 with clad**

**with clad**

Analyst: Debra Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-19-93

Level: 77 Date: 12-19-93





**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-22

**Patch ID: BF-068**

Ind. Data Sheet No.: 08-063

**Indication:** 08-063

**Channel: 3**

**Angle:** 70

**Direction: 0**

**Comments:** No apparent tip signals.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

**Analyst:**

Alessa Kimball

**Level:**

III

Date: 12-19-93

Reviewed By:

R.O. Forman

**Level:**

$\pi$

Date: 12-19-93



R 1154

**Ind. Data Sheet No.: 08-064**

**Direction: 0**

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

Level: II Date: 12-19-93





## GERIS 2000 Indication Data Sheet

**Cal. ID: C-004**

**Ind. Data Sheet No.: 08-065**

**Direction:** 180

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GE Nuclear Energy

**GERIS 2000 Indication  
Evaluation Sheet**

R1154

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-068

**Exam Data Sheet No.:** E-08-22  
**Ind. Data Sheet No.:** 08-065  
**Indication:** 08-065

**Flaw Thruwall Dimension =** 0.23  
**Flaw Length "I" =** 0.50  
**Separation with clad "S" =** N/A  
**Surface Separation "S" =** 1.72

**T nominal =** 6.38  
**Clad T nominal =** 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	3.06	3.56 Y
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			3.06	3.56

**a =** 0.113  
**a/l value =** 0.226  
**Y =** 1.000

Flaw is Subsurface

**Allowed a/t =** 3.56%  
**a/t =** 1.77%

**Comments:**

R1154



**GE Nuclear Energy**

# GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-22****Patch ID:** BF-068**Ind. Data Sheet No.: 08-066**

**Indication:** 08-066

**Channel: 13**

**Angle:** 60

**Direction:** 180

[illegible]

**Comments:** No apparent tip signals.

Thruwall size was determined by the ASME 50% method.

**TW = 0.11**

---

**L = 0.50**

**S = 0.79 w/clad**

w/clad

Analyst: Delesa Kimball

Reviewed By: R.D. Forman

Level: III Date: 12-19-93

Level: II Date: 12-19-93

R1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3

Weld ID: C-2-3

Patch: BF-068

Exam Data Sheet No.: E-08-21

Ind. Data Sheet No.: 08-066

Indication: 08-066

Flaw Thruwall Dimension = 0.11

Flaw Length "I" = 0.50

Separation with clad "S" = 0.79

Surface Separation "S" = 0.60

T nominal = 6.38

Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	2.26	2.58 Y
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.26	2.58

a = 0.055

a/l value = 0.110

Y = 1.000

Flaw is Subsurface

Allowed a/t = 2.58%

a/t = 0.86%

Comments:

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-23

**Patch ID:** BF-069**Ind. Data Sheet No.: 08-067**

**Indication:** 08-067

**Channel: 3**

**Angle:** 70

**Direction: 0**

[illegible]

**Comments:** This indication also seen with Ch. 7 (see 08-073) and Ch. 11 (not recorded due to less than ASME DAC level and no apparent tip signals).

Thruwall size was determined by the PATT technique.

**TW = 0.369**

$$L = 1.5$$

**S = 1.656 w/clad**

**Analyst:**

Deesa Kimball

Reviewed By:

R.O. Forman

**Level:**

### III

Date: 12-19-93

**Level:**

II

Date: 12-19-93



GE Nuclear Energy

**GERIS 2000 Indication  
Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-068

**Exam Data Sheet No.:** E-08-23  
**Ind. Data Sheet No.:** 08-067  
**Indication:** 08-067

**Flaw Thruwall Dimension =** 0.37  
**Flaw Length "I" =** 1.50  
**Separation with clad "S" =** 1.66  
**Surface Separation "S" =** 1.47

**T measured =** 6.55  
**Clad T nominal =** 0.19

Flaw is unacceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	2.34	2.68 Y
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.34	2.68

**a =** 0.185  
**a/l value =** 0.123  
**Y =** 1.000

Flaw is Subsurface

**Allowed a/t =** 2.68%  
**a/t =** 2.82%

**Comments:**





GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-069

Exam Data Sheet No.: E-08-23  
Ind. Data Sheet No.: 08-068  
Indication: 08-068

Flaw Thruwall Dimension = 0.40  
Flaw Length "I" = 0.75  
Separation with clad "S" = 1.04  
Surface Separation "S" = 0.85

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	3.43	3.96 Y
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			3.43	3.96

a = 0.198  
a/l value = 0.263  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.96%  
a/t = 3.10%

Comments:



R 1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3  
**Weld ID:** C-2-3  
**Cal. ID:** C-004

**Exam Data Sheet No.:** E-08-23  
**Patch ID:** BF-069  
**Ind. Data Sheet No.:** 08-069

**Indication:** 08-069

**Channel: 5**

**Angle:** 70

**Direction:** 180

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

Analyst: Alexa Kimball

Level: III Date: 12-19-93

Reviewed By: R.O. Forman

Level: II Date: 12-19-93

B1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-23****Patch ID:** BF-069**Ind. Data Sheet No.: 08-070**

**Indication:** 08-070

**Channel: 5**

**Angle:** 70

**Direction: 180**

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

Analyst: Jerese Kimball

Level: III Date: 12-19-93

Reviewed By: K.O. Forman

Level: II Date: 12-19-93



## GERIS 2000 Indication Data Sheet

**Cal. ID: C-004**

**Ind. Data Sheet No.: 08-071**

**Direction: 0**

12/19/9308-071.XLS

00119

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GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-069

Exam Data Sheet No.: E-08-23  
Ind. Data Sheet No.: 08-071  
Indication: 08-071

Flaw Thruwall Dimension = 0.23  
Flaw Length "I" = 0.50  
Separation with clad "S" = 2.91  
Surface Separation "S" = 2.72

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	3.06	3.56 Y
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			3.06	3.56

a = 0.113  
a/l value = 0.226  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.56%  
a/t = 1.77%

Comments:



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-23****Patch ID: BF-069****Ind. Data Sheet No.: 08-072**

**Indication:** 08-072

**Channel: 7**

**Angle:** 45

**Direction: 0**

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the SPOT technique.

**TW = 0.33**

$$L = 0.75$$

**S = 0.809**

**Analyst:**

Jeresa Kimball

Reviewed By:

R.O. Forman

**Level:**

### III

Date: 12-19-93

**Level:**

II

Date: 12-19-93

R1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-069

Exam Data Sheet No.: E-08-23  
Ind. Data Sheet No.: 08-072  
Indication: 08-072

Flaw Thruwall Dimension = 0.33  
Flaw Length "I" = 0.75  
Separation with clad "S" = N/A  
Surface Separation "S" = 0.81

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	2.97	3.47 Y
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.97	3.47

a = 0.163  
a/l value = 0.217  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.47%  
a/t = 2.55%

Comments:

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-23****Patch ID:** BF-069

Ind. Data Sheet No.: 08-073

**Indication:** 08-073

**Channel: 7**

**Angle:** 45

**Direction: 0**

[illegible]

**Comments:** Same indication recorded with Ch. 3 (08-067).

Flaw dimensions assigned from Indication Data sheet 08-067.

Thruwall size was determined by the PATT technique.

**TW = 0.369**

**L = 1.50**

**S = 1.656 w/clad**

Analyst: Jessica Kimball

Level: III Date: 12-19-93

Reviewed By: R.O. Forman

Level: II Date: 12-19-93

R1154



GE Nuclear Energy

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-069

**Exam Data Sheet No.:** E-08-23  
**Ind. Data Sheet No.:** 08-073  
**Indication:** 08-073

**Flaw Thruwall Dimension =** 0.37  
**Flaw Length "l" =** 1.50  
**Separation with clad "S" =** 1.66  
**Surface Separation "S" =** 1.47

**T measured =** 6.55  
**Clad T nominal =** 0.19

Flaw is unacceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	2.34	2.69 Y
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.34	2.69

a = 0.185  
a/l value = 0.123  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 2.69%  
a/t = 2.82%

**Comments:** Above flaw dimensions were assigned from Indication Data Sheet 08-067.





**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-23

**Patch ID:** BF-069

Ind. Data Sheet No.: 08-074

**Indication:** 08-074

**Channel: 7**

**Angle:** 45

**Direction: 0**

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the PATT technique.

**TW = 0.56**

**L = 0.50**

---

**S = 3.55**

Analyst: Quessa Kimball

Reviewed By: R.O. Forman

Level: III Date: 12.19.93

Level: II Date: 12-19-93

R1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3

Weld ID: C-2-3

Patch: BF-069

Exam Data Sheet No.: E-08-23

Ind. Data Sheet No.: 08-074

Indication: 08-074

Flaw Thruwall Dimension = 0.56

Flaw Length "l" = 0.50

Separation with clad "S" = N/A

Surface Separation "S" = 3.55

T nominal = 6.38

Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	5.20	7.60 Y
			Allowed	Allowed
			5.20	7.60

a = 0.280  
a/l value = 0.500  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 7.60%  
a/t = 4.39%

Comments:



## GERIS 2000 Indication Data Sheet

**Cal. ID: C-004**

**Ind. Data Sheet No.: 08-075**

**Direction: 0**

[illegible]

Thruwall size was determined by the PATT technique.

**S = 2.48 w/clad**

Level: II Date: 12-19-93

R.1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-069

Exam Data Sheet No.: E-08-23  
Ind. Data Sheet No.: 08-075  
Indication: 08-075

Flaw Thruwall Dimension = 0.39  
Flaw Length "l" = 0.50  
Separation with clad "S" = 2.48  
Surface Separation "S" = 2.29

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	4.88	5.66 Y
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			4.88	5.66

a = 0.195  
a/l value = 0.390  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 5.66%  
a/t = 3.06%

Comments:

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project: TVA, Browns Ferry, Unit 3**

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-23****Patch ID:** BF-069**Ind. Data Sheet No.: 08-076**

**Indication:** 08-076

**Channel: 11**

**Angle:** 60

**Direction: 0**

**Comments:** Same indication recorded with Ch. 7 (08-071).

Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the PATT technique.

**TW = 0.25**

$$L = 0.75$$

**S = 3.06 w/clad**

w/clad

**Analyst:**

Analyst: Jeresa Kimball

Reviewed By:

Reviewed By: R.O. Furman

**Level:**

Level: III

Date: 12-19-93

Date: 12-19-93

**Level:**

Level: II

Date: 12-19-93

Date: 12-19-93



GE Nuclear Energy

**GERIS 2000 Indication  
Evaluation Sheet**

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-069

Exam Data Sheet No.: E-08-23  
Ind. Data Sheet No.: 08-076  
Indication: 08-076

Flaw Thruwall Dimension = 0.25  
Flaw Length "I" = 0.75  
Separation with clad "S" = 3.06  
Surface Separation "S" = 2.87

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	2.60	3.03 Y
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.60	3.03

a = 0.125  
a/l value = 0.167  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.03%  
a/t = 1.96%

Comments:



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-23

**Patch ID:** BF-069

**Ind. Data Sheet No.: 08-077**

**Indication:** 08-077

**Channel: 11**

**Angle:** 60

**Direction:** 0

[illegible]

**Comments:** This indication also seen with Ch. 5 (see 08-069).

Thruwall size was determined by the Reg. Guide 20% beam spread correction method.

Indication has no determinable thruwall and is acceptable to IWB-3510-1.

TW = 0.00

$$L = 0.25$$

S = .8543 w/clad

**Analyst:**

Jeresa Kimball

Reviewed By:

R.O. Forman

**Level:**

### III

Date: 12-19-93

**Level:**

II

Date: 12-19-93



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-23

**Patch ID:** BF-069

Ind. Data Sheet No.: 08-078

**Indication:** 08-078

**Channel: 13**

**Angle:** 60

**Direction:** 180

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the PATT technique.

**TW = 0.40**

$$L = 0.25$$

**S = 1.91 w/clad**

w/clad

Analyst: Debra Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-19-93

Level: II Date: 12-19-93



R1154



GE Nuclear Energy

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-069

**Exam Data Sheet No.:** E-08-23  
**Ind. Data Sheet No.:** 08-078  
**Indication:** 08-078

**Flaw Thruwall Dimension =** 0.40  
**Flaw Length "I" =** 0.25  
**Separation with clad "S" =** 1.91  
**Surface Separation "S" =** 1.72

**T nominal =** 6.38  
**Clad T nominal =** 0.19

Flaw is acceptable by Table IWB-3510-1

## **ASME Section XI, 1986 Edition TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	5.20	7.60 Y
			Allowed	Allowed
			5.20	7.60

**a =** 0.200  
**a/l value =** 0.500  
**Y =** 1.000

Flaw is Subsurface

**Allowed a/t =** 7.60%  
**a/t =** 3.13%

**Comments:**

**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-24****Patch ID:** BF-070**Ind. Data Sheet No.: 08-079**

**Indication:** 08-079

**Channel: 3**

**Angle:** 70

**Direction:** 0

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the PATT technique.

**TW = 0.57**

**L = 0.50**

**S = 0.675 w/clad**

**Analyst:**

Jerusa Kimball

Reviewed By:

R.O. Forman

**Level:**

III

Date: 12-19-93

**Level:**

 $\pi$ 

Date: 12-19-93

R1154



GE Nuclear Energy

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-070

**Exam Data Sheet No.:** E-08-24  
**Ind. Data Sheet No.:** 08-079  
**Indication:** 08-079

**Flaw Thruwall Dimension =** 0.57  
**Flaw Length "l" =** 0.50  
**Separation with clad "S" =** 0.68  
**Surface Separation "S" =** 0.49

**T nominal =** 6.38  
**Clad T nominal =** 0.19

Flaw is acceptable by Table IWB-3510-1

## **ASME Section XI, 1986 Edition TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	5.20	7.60 Y
			Allowed	Allowed
			5.20	7.60

a = 0.285  
a/l value = 0.500  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 7.60%  
a/t = 4.46%

**Comments:**

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**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-24**

**Patch ID:** BF-070

Ind. Data Sheet No.: 08-080

**Indication:** 08-080

**Channel: 3**

**Angle:** 70

**Direction:** 0

[illegible]

**Comments:** Thruwall size was determined by the PATT technique.

TW = 0.31

**L = 1.00**

**S = 1.19 with clad**

**with clad**

Analyst: Chelsea Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-19-93

Level:  $\pi$  Date: 12-19-93

21154



GE Nuclear Energy

## GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3

Weld ID: C-2-3

Patch: BF-070

Exam Data Sheet No.: E-08-24

Ind. Data Sheet No.: 08-080

Indication: 08-080

Flaw Thruwall Dimension = 0.31

Flaw Length "I" = 1.00

Separation with clad "S" = 1.19

Surface Separation "S" = 1.00

T nominal = 6.38

Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	2.53	2.94 Y
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.53	2.94

a = 0.155

a/l value = 0.155

Y = 1.000

Flaw is Subsurface

Allowed a/t = 2.94%

a/t = 2.43%

Comments:

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-24

**Patch ID: BF-070**

Ind. Data Sheet No.: 08-081

**Indication:** 08-081

**Channel: 7**

**Angle:** 45

**Direction: 0**

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the PATT technique.

**TW = 0.30**

$$L = 0.75$$

**S = 2.79 w/clad**

**w/clad**

**Analyst:**

Quesha Kimball

Reviewed By:

R.O. Forman

**Level:**

III

Date: 12-19-93

**Level:**

 $\pi$ 

Date: 12-19-93



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-070

Exam Data Sheet No.: E-08-24  
Ind. Data Sheet No.: 08-081  
Indication: 08-081

Flaw Thruwall Dimension = 0.30  
Flaw Length "I" = 0.75  
Separation with clad "S" = 2.79  
Surface Separation "S" = 2.60

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	2.80	3.30 Y
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.80	3.30

a = 0.150  
a/l value = 0.200  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.30%  
a/t = 2.35%

Comments:



## GERIS 2000 Indication Data Sheet



R1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-070

**Exam Data Sheet No.:** E-08-24  
**Ind. Data Sheet No.:** 08-082  
**Indication:** 08-082

**Flaw Thruwall Dimension** = 0.20  
**Flaw Length "I"** = 0.75  
**Separation with clad "S"** = N/A  
**Surface Separation "S"** = 2.35

**T nominal** = 6.38  
**Clad T nominal** = 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
 TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	2.39	2.76 Y
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.39	2.76

**a** = 0.099  
**a/l value** = 0.132  
**Y** = 1.000

Flaw is Subsurface

**Allowed a/t** = 2.76%  
**a/t** = 1.55%

**Comments:**

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-24

**Patch ID:** BF-070

Ind. Data Sheet No.: 08-083

**Indication: 08-083**

**Channel: 11**

**Angle:** 60

**Direction: 0**

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

This indication also seen with Ch. 13 (not recorded due to less than ACME DAC level and no apparent tip signals).

Thruwall size was determined by the SPOT technique.

**TW = 0.30**

$$L = 0.50$$

**S = 2.56 with clad**

with clad

Analyst: Quessa Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-19-93

Level: II Date: 12-19-93



GE Nuclear Energy

**GERIS 2000 Indication  
Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-070

**Exam Data Sheet No.:** E-08-24  
**Ind. Data Sheet No.:** 08-083  
**Indication:** 08-083

**Flaw Thruwall Dimension =** 0.30  
**Flaw Length "I" =** 0.50  
**Separation with clad "S" =** 2.56  
**Surface Separation "S" =** 2.37

**T nominal =** 6.38  
**Clad T nominal =** 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	3.80	4.40 Y
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			3.80	4.40

**a =** 0.150  
**a/l value =** 0.300  
**Y =** 1.000

Flaw is Subsurface

**Allowed a/t =** 4.40%  
**a/t =** 2.35%

**Comments:**



R.1154

**Ind. Data Sheet No.: 08-084**

**Direction:** 0

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals. Thruwall size was determined by the PATT technique.

TW = 0.23                      L = 1.00                      S = 0.723 w/clad

Level: II Date: 12-19-93



GE Nuclear Energy

**GERIS 2000 Indication  
Evaluation Sheet**

R1154

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-071

**Exam Data Sheet No.:** E-08-25  
**Ind. Data Sheet No.:** 08-084  
**Indication:** 08-084

**Flaw Thruwall Dimension** = 0.23  
**Flaw Length "I"** = 1.00  
**Separation with clad "S"** = 0.72  
**Surface Separation "S"** = 0.53

**T nominal** = 6.38  
**Clad T nominal** = 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	2.30	2.63 Y
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.30	2.63

a = 0.116  
a/l value = 0.116  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 2.63%  
a/t = 1.82%

**Comments:**



R1154

**Ind. Data Sheet No.: 08-085**

**Direction: 0**

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

**Analyst:**

Ceresa Kimball

**Level:**

### III

Date: 12-19-93

Reviewed By:

R.O. Forman

**Level:**

 $\pi$ 

Date: 12-19-93

**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-25**

**Patch ID:** BF-071

**Ind. Data Sheet No.:** 08-086

**Indication:** 08-086

**Channel: 3**

**Angle:** 70

**Direction: 0**

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

Analyst: Jessie Kimball

Level: III Date: 12-19-93

Reviewed By: R.O. Forman

Level: II Date: 12-19-93



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-25****Patch ID:** BF-071

Ind. Data Sheet No.: 08-087

**Indication:** 08-087

**Channel: 7**

**Angle:** 45

**Direction:** 0

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the SPOT technique.

Same indication recorded with Ch. 11 (08-089).

**TW = 0.28**

$$L = 0.50$$

**S = 3.01 w/clad**

**S = 3.01 w/clad**

Analyst: Jessie Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-19-93

Level: II Date: 12-19-93



R1154



GE Nuclear Energy

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-071

**Exam Data Sheet No.:** E-08-25  
**Ind. Data Sheet No.:** 08-087  
**Indication:** 08-087

**Flaw Thruwall Dimension =** 0.28  
**Flaw Length "l" =** 0.50  
**Separation with clad "S" =** 3.01  
**Surface Separation "S" =** 2.82

**T nominal =** 6.38  
**Clad T nominal =** 0.19

Flaw is acceptable by Table IWB-3510-1

## **ASME Section XI, 1986 Edition TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	3.60	4.16 Y
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			3.60	4.16

a = 0.140  
a/l value = 0.280  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 4.16%  
a/t = 2.19%

**Comments:**



## GERIS 2000 Indication Data Sheet

**Ind. Data Sheet No.: 08-088**

**Direction: 0**

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**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-25

**Patch ID:** BF-071

Ind. Data Sheet No.: 08-089

**Indication:** 08-089

**Channel: 11**

**Angle:** 60

**Direction:** 0

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.

Thruwall size was determined by the SPOT technique.

Same indication recorded with Ch. 7 (08-087).

**TW = 0.28**

$$L = 0.25$$

**S = 2.36 with clad**

with clad

Analyst: Dulsa Kimball

Reviewed By: R.O. Forman

Level: III Date: 12-19-93

Level: II Date: 12-19-93

R1154



**GE Nuclear Energy**

# **GERIS 2000 Indication Evaluation Sheet**

**Project:** TVA, Browns Ferry Unit 3  
**Weld ID:** C-2-3  
**Patch:** BF-071

**Exam Data Sheet No.:** E-08-25  
**Ind. Data Sheet No.:** 08-089  
**Indication:** 08-089

**Flaw Thruwall Dimension** = 0.28  
**Flaw Length "l"** = 0.25  
**Separation with clad "S"** = 2.36  
**Surface Separation "S"** = 2.17

**T nominal** = 6.38  
**Clad T nominal** = 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	5.20	7.60 Y
			Allowed	Allowed
			5.20	7.60

**a** = 0.140  
**a/l value** = 0.500  
**Y** = 1.000

Flaw is Subsurface

**Allowed a/t** = 7.60%  
**a/t** = 2.19%

**Comments:**

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## GERIS 2000 Indication Data Sheet



## GERIS 2000 Indication Data Sheet

**Cal. ID: C-004**

**Ind. Data Sheet No.: 08-091**

**Direction: 90**

[illegible]

ASME Section XI, 1986 Edition, no Addenda.

Level: II Date: 12-19-93

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-26****Patch ID:** BF-072**Ind. Data Sheet No.: 08-092**

**Indication:** 08-092

**Channel: 3**

**Angle:** 70

**Direction: 0**

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

**Analyst:**

Jesus Kimball

**Level:**

III

Date: 12-19-93

Reviewed By:

R.O. Forman

**Level:**

7

Date: 12-19-93

12-19-93



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-26****Patch ID:** BF-072**Ind. Data Sheet No.: 08-093**

**Indication:** 08-093

**Channel: 3**

**Angle:** 70

**Direction: 0**

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

**Analyst:**

Analyst: Quesia Kimball

**Level:**

Level: III

Date: 12-19-93

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: II

Date: 12-19-93

Date: 12-19-93





## GERIS 2000 Indication Data Sheet

**Ind. Data Sheet No.: 08-094**

**Direction:** 0

[illegible]

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

Level: II Date: 12-19-93

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-26****Patch ID:** BF-072

Ind. Data Sheet No.: 08-095

**Indication:** 08-095

**Channel: 3**

**Angle:** 70

**Direction: 0**

[illegible]

**Comments:** Thruwall size was determined by the PATT technique.

**TW = 0.34**

---

**L = 1.50**

$S = 0.37 \text{ w/clad}$

Analyst: Veresa Gimball

Reviewed By: R.O. Forman

Level: III Date: 12-19-93

Level: II Date: 12-19-93



GE Nuclear Energy

**GERIS 2000 Indication  
Evaluation Sheet**

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-072

Exam Data Sheet No.: E-08-26  
Ind. Data Sheet No.: 08-095  
Indication: 08-095

Flaw Thruwall Dimension = 0.34  
Flaw Length "l" = 1.50  
Separation with clad "S" = 0.37  
Surface Separation "S" = 0.18

T measured = 6.60  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	2.27	2.60 Y
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.27	2.60

a = 0.168  
a/l value = 0.112  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 2.60%  
a/t = 2.55%

Comments:



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-26****Patch ID:** BF-072**Ind. Data Sheet No.: 08-096**

**Indication:** 08-096

**Channel: 5**

**Angle:** 70

**Direction:** 180

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable thruwall and is acceptable to IWB-3510-1.

Analyst: Quera Kimball

Level: III Date: 12-19-93

Reviewed By: R.O. Forman

Level: II Date: 12-19-93



## GERIS 2000 Indication Data Sheet

Ind. Data Sheet No.: 08-097

**Direction: 180**

Level: II Date: 12-19-93



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-26****Patch ID:** BF-072**Ind. Data Sheet No.: 08-098**

**Indication:** 08-098

**Channel: 5**

**Angle:** 70

**Direction: 180**

[illegible]

**Comments:** No apparent tip signals.

Indication has no determinable thruwall and is acceptable to IWB-3510-1.

Analyst: Debra Kimball

Level: III Date: 12-19-93

Reviewed By: R.O. Forman

Level: II Date: 12-19-93



## GERIS 2000 Indication Data Sheet

**Direction:** 0

[illegible]

**Comments:** Recorded at less than ASME required levels due to apparent tip diffracted signals.  
Thruwall size was determined by the SPOT technique.

**TW = 0.20**

Analyst: Debra Kimball

Reviewed By: R.D. Forman

Level: III Date: 12-19-93

Level: II Date: 12-19-93

R1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3

Weld ID: C-2-3

Patch: BF-072

Exam Data Sheet No.: E-08-25

Ind. Data Sheet No.: 08-099

Indication: 08-099

Flaw Thruwall Dimension = 0.20

Flaw Length "l" = 0.25

Separation with clad "S" = 2.19

Surface Separation "S" = 2.00

T nominal = 6.38

Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

## ASME Section XI, 1986 Edition TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	4.95	5.74 Y
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			4.95	5.74

a = 0.099

a/l value = 0.396

Y = 1.000

Flaw is Subsurface

Allowed a/t = 5.74%

a/t = 1.55%

Comments:





## GERIS 2000 Indication Data Sheet



## GERIS 2000 Indication Data Sheet

**Cal. ID: C-004**

Ind. Data Sheet No.: 08-101

**Direction:** 180

12/18/9308-101.XLS

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-26

**Patch ID: BF-072****Ind. Data Sheet No.: 08-102**

**Indication:** 08-102

**Channel: 9**

**Angle:** 45

**Direction:** 180

[illegible]

**Comments:** No apparent tip signals.

Thruwall size was determined by the Reg. Guide 20% beam spread correction method.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

**TW = 0.0**

$$\underline{L = .75}$$

**S = 1.569 w/clad**

Analyst: Dereka Kimball

Level: III Date: 12-19-93

Reviewed By: K.D. Forman

Level: II Date: 12-19-93

R1154



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID:** C-2-3

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-26****Patch ID:** BF-072

Ind. Data Sheet No.: 08-103

**Indication: 08-103**

**Channel: 11**

**Angle:** 60

**Direction: 0**

[illegible]

**Comments:** No apparent tip signals.

Thruwall size was determined by the ASME 50% method.

TW = .325

L = .75

**S = .67 w/clad**

**Analyst:**

Qayana Kimball

Reviewed By:

R.O. Forman

**Level:**

Π

Date: 12-19-93

**Level:**

77

Date: 12-19-93



GE Nuclear Energy

**GERIS 2000 Indication  
Evaluation Sheet**

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-072

Exam Data Sheet No.: E-08-26  
Ind. Data Sheet No.: 08-103  
Indication: 08-103

Flaw Thruwall Dimension = 0.33  
Flaw Length "l" = 0.75  
Separation with clad "S" = 0.67  
Surface Separation "S" = 0.48

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

**ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"**

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	2.97	3.47 Y
0.25	3.30	3.8	~	~
0.30	3.80	4.4	~	~
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			2.97	3.47

a = 0.163  
a/l value = 0.217  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 3.47%  
a/t = 2.55%

Comments:

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**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

Exam Data Sheet No.: E-08-26

**Patch ID:** BF-072**Ind. Data Sheet No.: 08-104**

**Indication:** 08-104

**Channel: 11**

**Angle:** 60

**Direction: 0**

[illegible]

**Comments:** No apparent tip signals.

Thruwall size was determined by the Reg. Guide 20% beam spread correction method.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

TW = 0.0

L = .50

**S = .875 w/clad**

Analyst: Ceresa Kimball

Level: III Date: 12-19-93

Reviewed By: K.D. Forman

Level: II Date: 12-19-93



## GERIS 2000 Indication Data Sheet

**Ind. Data Sheet No.: 08-105**

**Direction: 0**

**Comments:** Thruwall size was determined by the SPOT technique.

**S = .76 w/clad**

Date: 12-19-93

R1154



GE Nuclear Energy

# GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3  
Weld ID: C-2-3  
Patch: BF-072

Exam Data Sheet No.: E-08-26  
Ind. Data Sheet No.: 08-104  
Indication: 08-104

Flaw Thruwall Dimension = 0.34  
Flaw Length "l" = 0.50  
Separation with clad "S" = 0.76  
Surface Separation "S" = 0.57

T nominal = 6.38  
Clad T nominal = 0.19

Flaw is acceptable by Table IWB-3510-1

ASME Section XI, 1986 Edition  
TABLE IWB-3510-1 for 4" to 12"

a/l	Surface %	Subsurface %	Surface %	Subsurface %
0.00	1.90	2	~	~
0.05	2.00	2.2	~	~
0.10	2.20	2.5	~	~
0.15	2.50	2.9	~	~
0.20	2.80	3.3	~	~
0.25	3.30	3.8	~	~
0.30	3.80	4.4	4.28	4.96 Y
0.35	4.40	5.1	~	~
0.40	5.00	5.8	~	~
0.45	5.10	6.7	~	~
0.50	5.20	7.6	~	~
			Allowed	Allowed
			4.28	4.96

a = 0.170  
a/l value = 0.340  
Y = 1.000

Flaw is Subsurface

Allowed a/t = 4.96%  
a/t = 2.66%

Comments:





**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-26****Patch ID:** BF-072**Ind. Data Sheet No.:** 08-106

**Indication:** 08-106

**Channel: 11**

**Angle:** 60

**Direction: 0**

[illegible]

**Comments:** No apparent tip signals.

Thruwall size was determined by the Reg. Guide 20% beam spread correction method.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

**TW = 0.0**

$$L = 1.0$$

**S = 1.23 w/clad**

**Analyst:**

Analyst: Cora Kimball

Reviewed By:

Reviewed By: R.O. Forman

**Level:**

Level: III Date: 12-19-93

**Level:**

Level: II Date: 12-19-93



## GERIS 2000 Indication Data Sheet

**Exam Data Sheet No.: E-08-26****Patch ID: BF-072**

Ind. Data Sheet No.: 08-107

**Direction: 0**

12/19/9308-107.XLS



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-26****Patch ID:** BF-072**Ind. Data Sheet No.: 08-108**

**Indication:** 08-108

**Channel: 13**

**Angle:** 60

**Direction:** 180

[illegible]

**Comments:** No apparent tip signals.

Thruwall size was determined by the Reg. Guide 20% beam spread correction method.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

**TW = 0.0**

L = .75

---

**S = 1.06**

w/clad

**Analyst:**

Analyst: Quessa Kimball

**Level:**

Level: III

Date: 6-19-93

Date: 12-19-93

Reviewed By:

Reviewed By: F.O. Forman

**Level:**

Level:  $\pi$

Date: 12-19-93

Date: 12-19-93



**GE Nuclear Energy**

## GERIS 2000 Indication Data Sheet

**Project:** TVA, Browns Ferry, Unit 3

**Weld ID: C-2-3**

**Cal. ID: C-004**

**Exam Data Sheet No.: E-08-26****Patch ID: BF-072****Ind. Data Sheet No.: 08-109**

**Indication:** 08-109

**Channel: 13**

**Angle:** 60

**Direction:** 180

[illegible]

**Comments:** No apparent tip signals.

Thruwall size was determined by the Reg. Guide 20% beam spread correction method.

Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

**TW = 0.0**

$$L = .25$$

**S = 1.135 w/clad**

Analyst: Chelsea Kimball

Level: III Date: 12-19-93

Reviewed By: R.D. Forman

Level: II Date: 12-19-93



## GERIS 2000 Indication Data Sheet

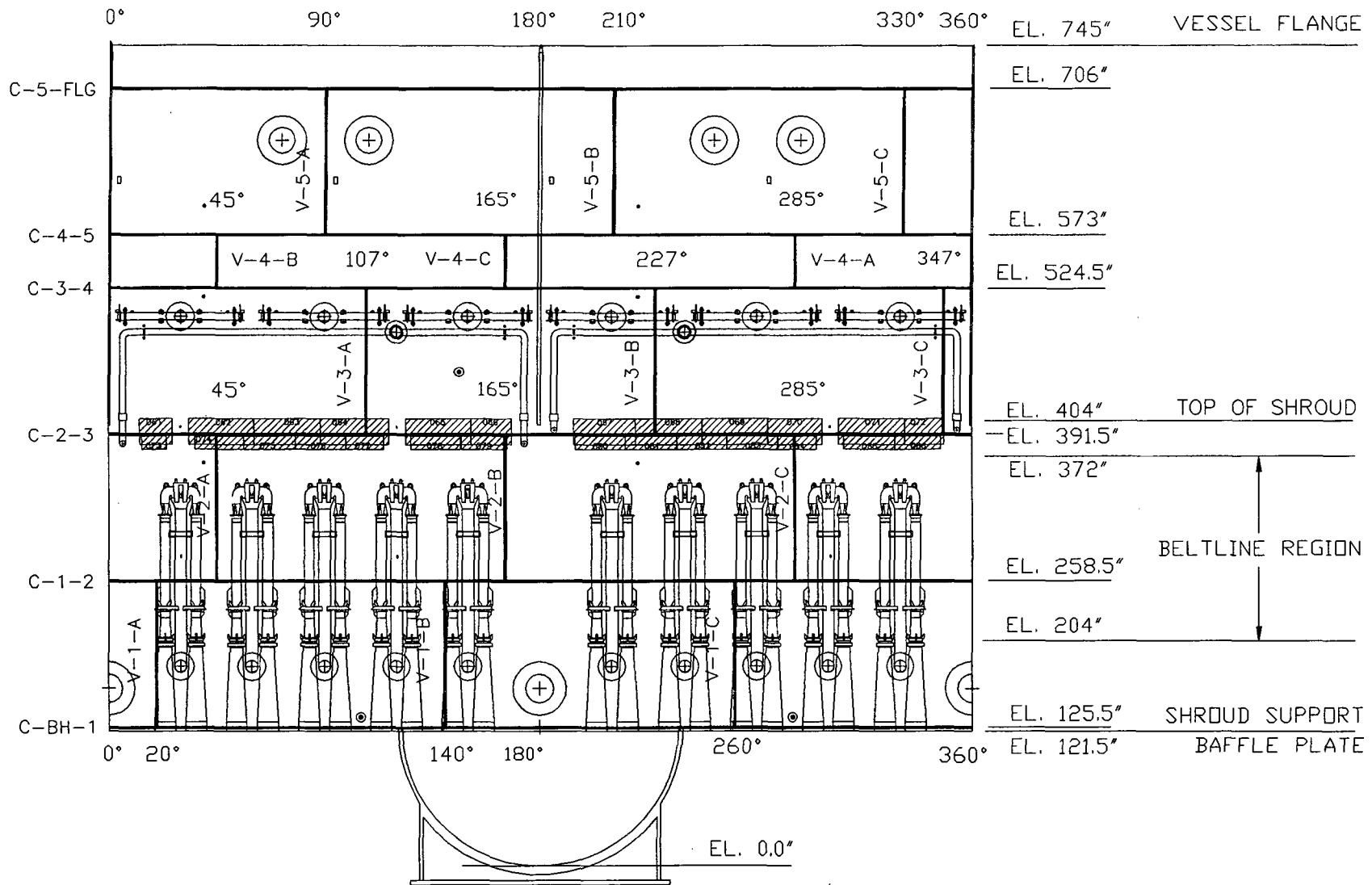
**Ind. Data Sheet No.: 08-110**

**Direction: 180**

00177 177 OF 276



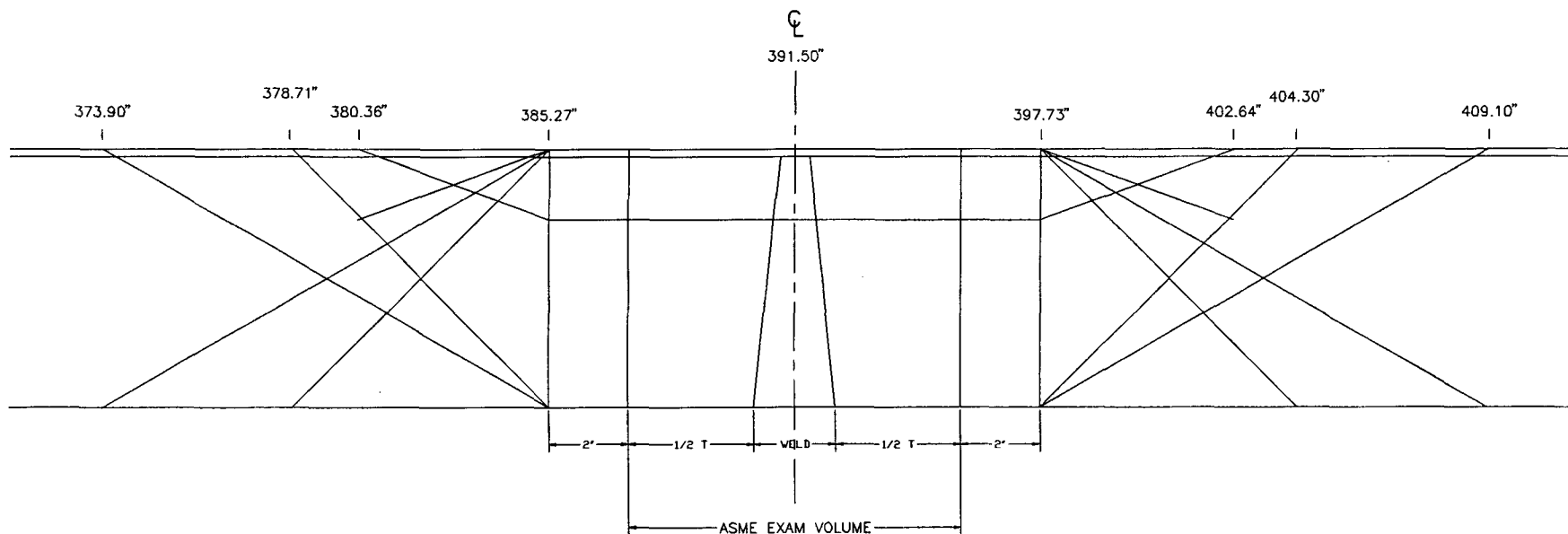
# BROWNS FERRY UNIT-3 WELD LOCATIONS



62100  
179 OF 276

R1154

0000 0179



Nominal Clad T = 3/16"  
Nominal Base Metal T = 6 3/8"

CH.	ANGLE	DIR.	MIN Y	MAX Y
1	0 W	0	385.27	397.73
2	0 W	90	385.27	397.73
3	70 UP	0	380.36	397.73
4	70 CW	90	385.27	397.73
5	70 DN	180	385.27	402.64
6	70 CCW	270	385.27	397.73
7	45 UP	0	378.71	397.73
8	45 CW	90	385.27	397.73
9	45 DN	180	385.27	404.30
10	45 CCW	270	385.27	397.73
11	60 UP	0	373.90	397.73
12	60 CW	90	385.27	397.73
13	60 DN	180	385.27	409.10
14	60 CCW	270	385.27	397.73
15	0 BM	0	385.27	409.10
16	0 BM	90	373.90	397.73

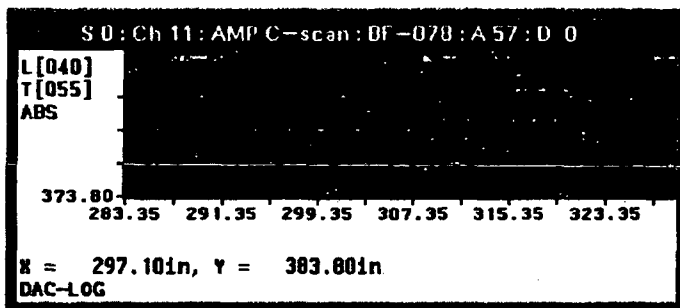


S 0 : Scale

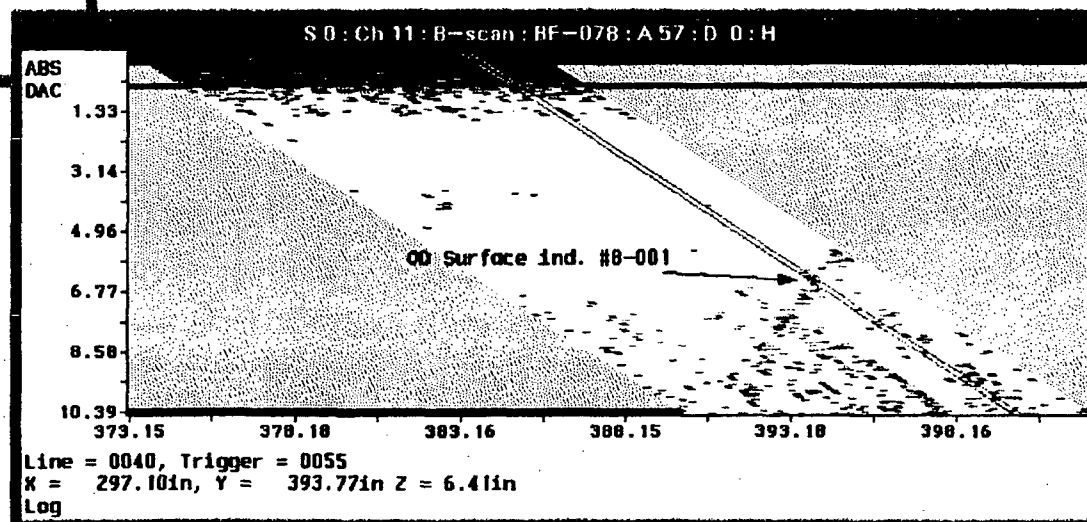
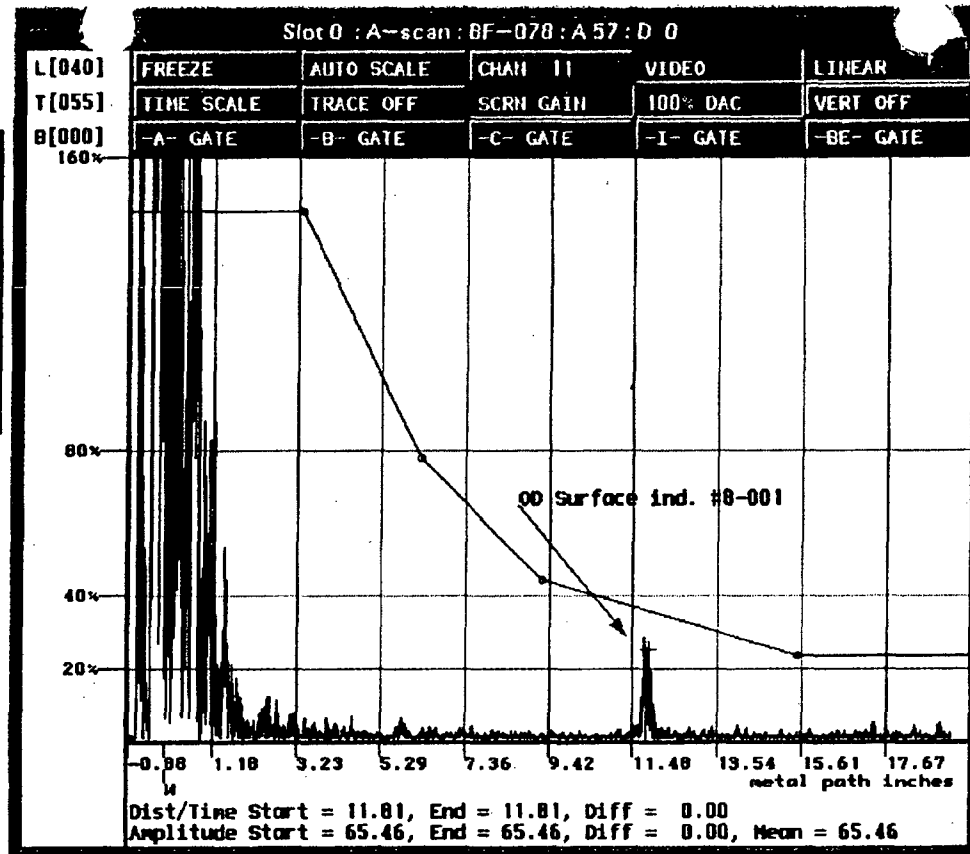
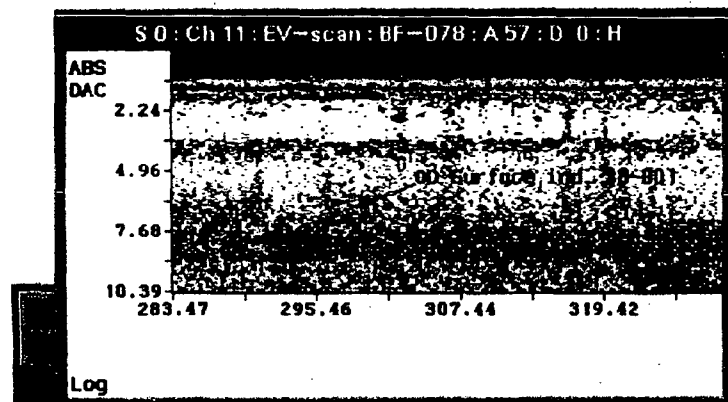
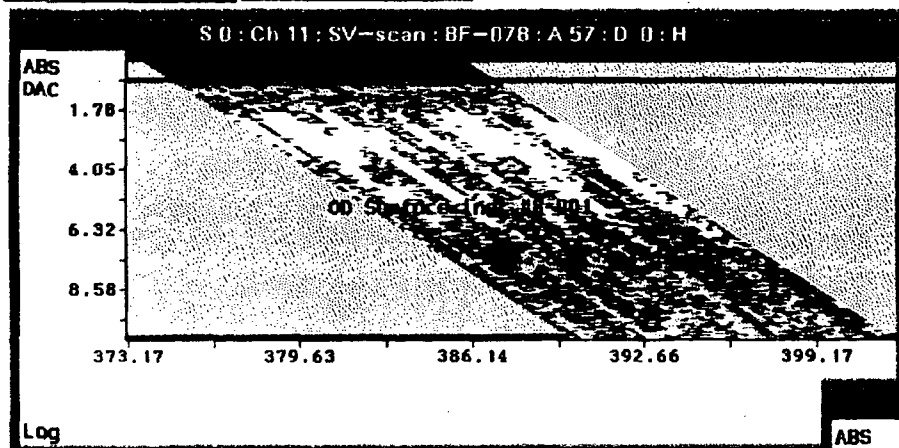
32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC

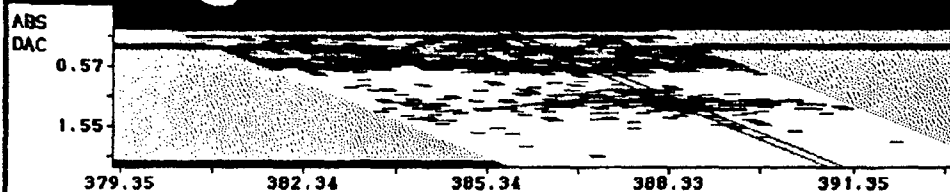


Lower Ten  
001



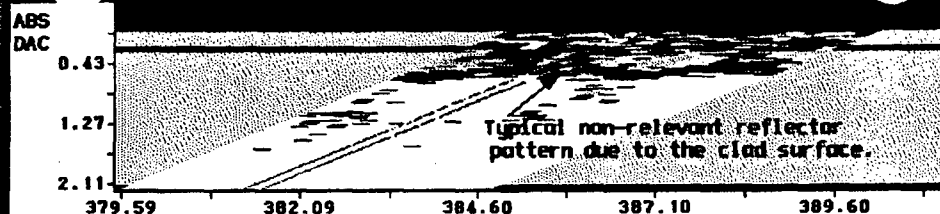
00181  
R 1154  
181 of 276

S 0: Ch 03: SV-scan: BF-084: A 60: D 0: H



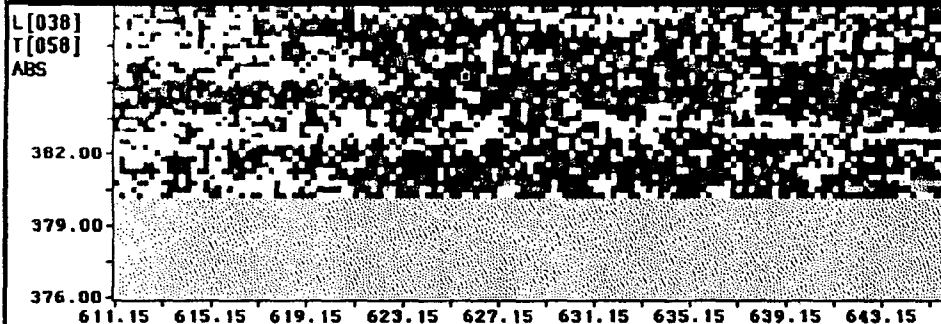
Line = 0038, Trigger = 0058  
 X = 625.65in, Y = 386.54in Z = 0.37in  
 Log

S 1: Ch 05: SV-scan: BF-084: A 68: D 180: H



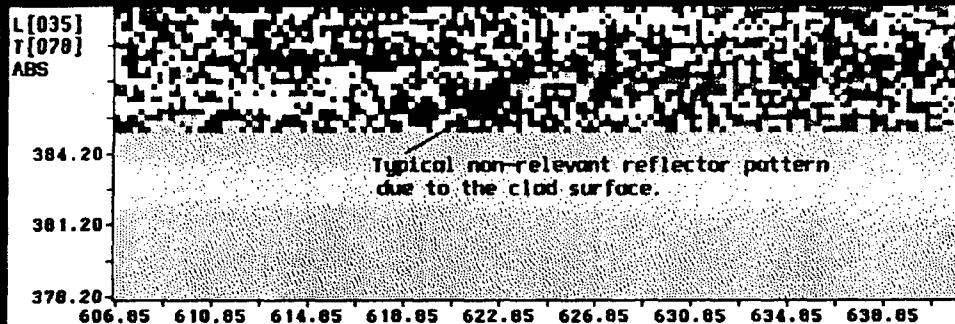
Line = 0035, Trigger = 0078  
 X = 626.35in, Y = 386.13in Z = 0.30in

S 0: Ch 03: AMP C-scan: BF-084: A 80: D 0



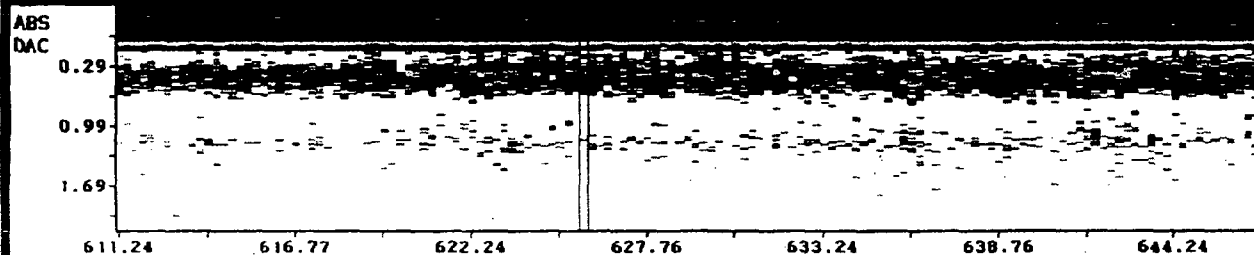
X = 625.65in, Y = 385.50in  
 DAC-LOG

S 1: Ch 05: AMP C-scan: BF-084: A 68: D 180



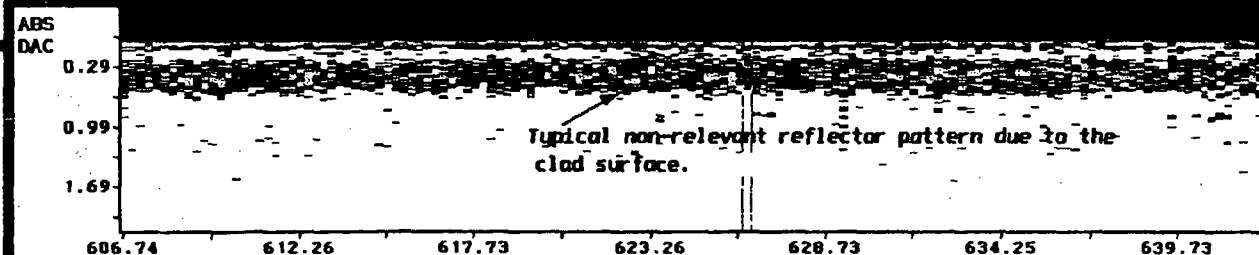
X = 626.35in, Y = 386.95in  
 DAC-LOG

S 0: Ch 03: EV-scan: BF-084: A 60: D 0: H



Line = 0038, Trigger = 0058

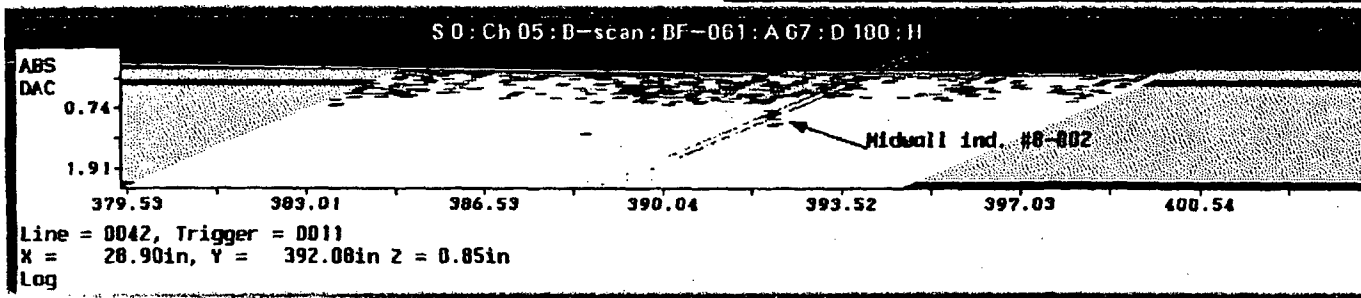
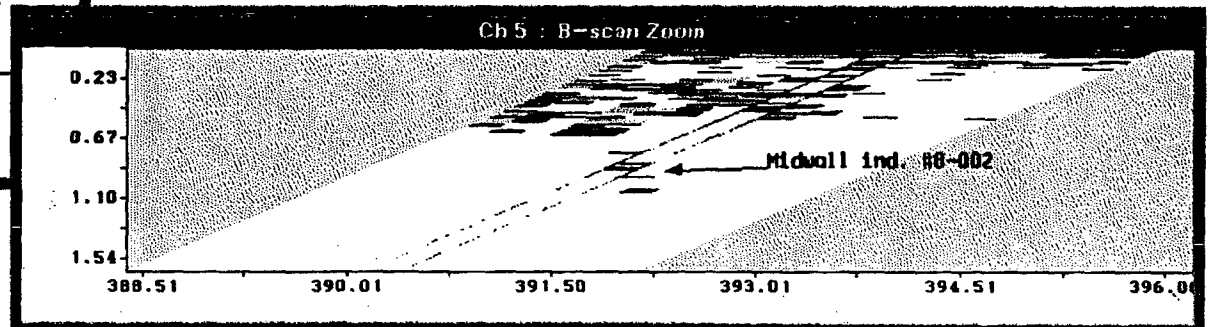
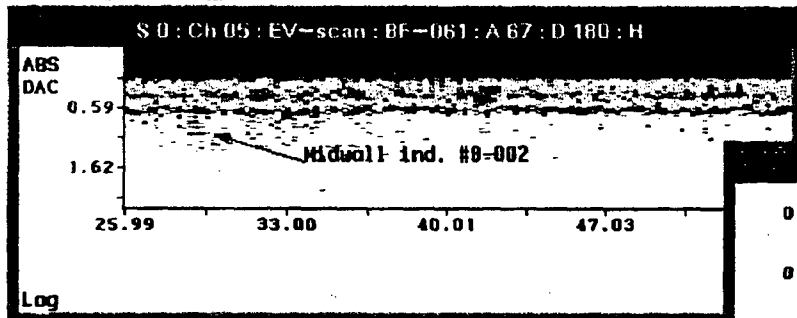
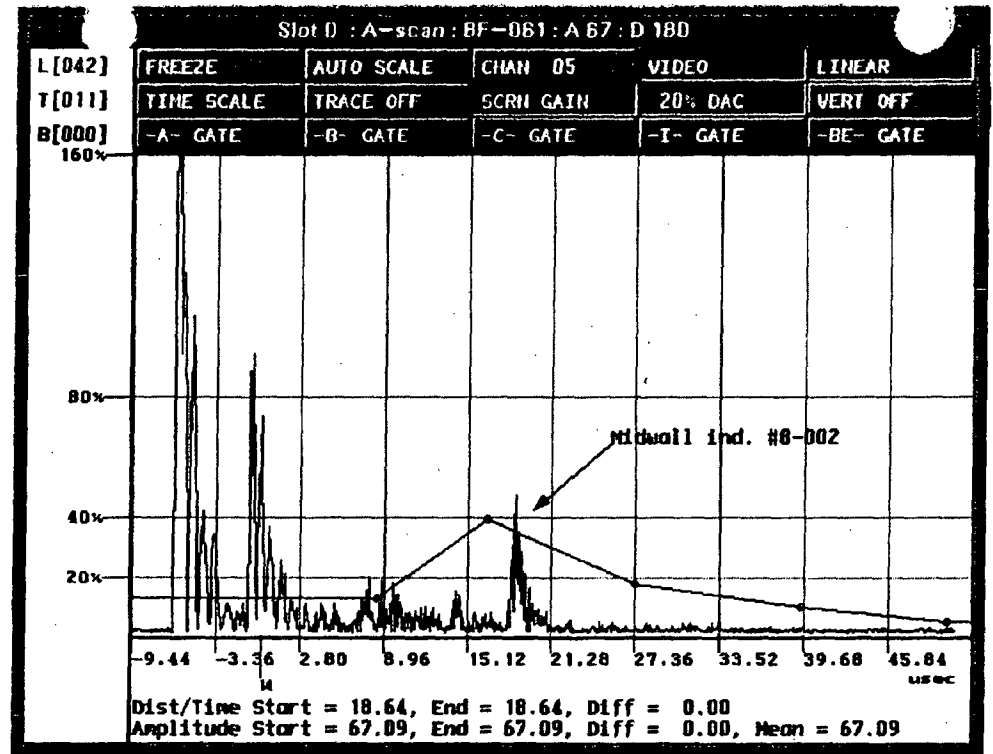
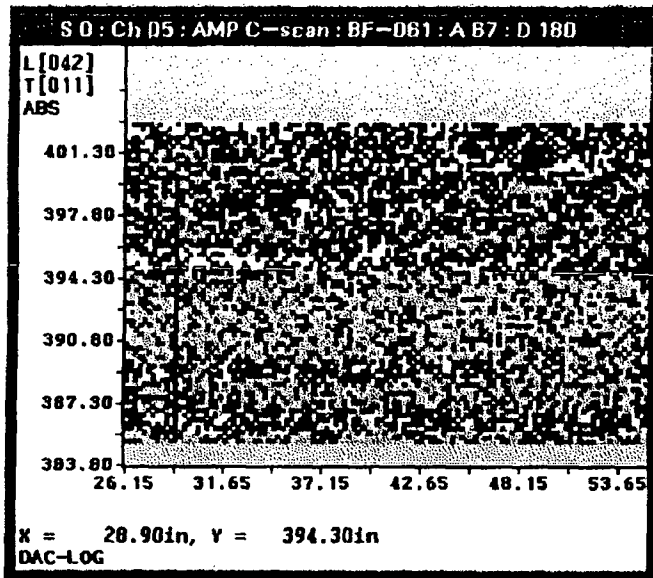
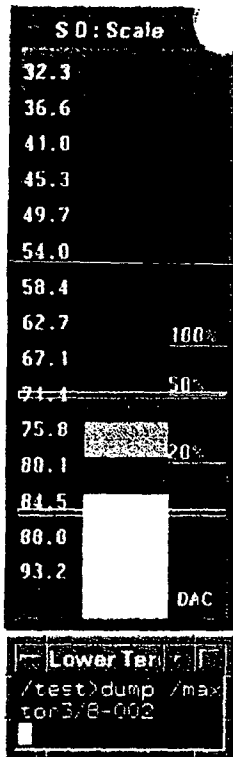
S 1: Ch 05: EV-scan: BF-084: A 68: D 180: H



Line = 0035, Trigger = 0078

Lower Tor  
 /test>dump /max  
 tor3/G-109

00182  
 R1154  
 182 of 276



00000 00000

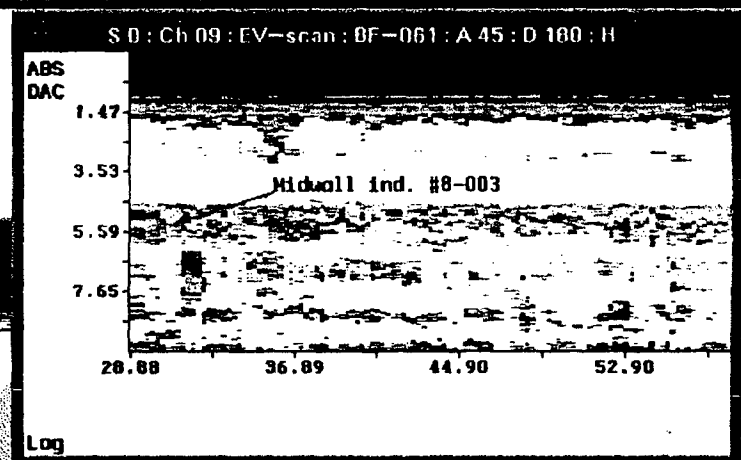
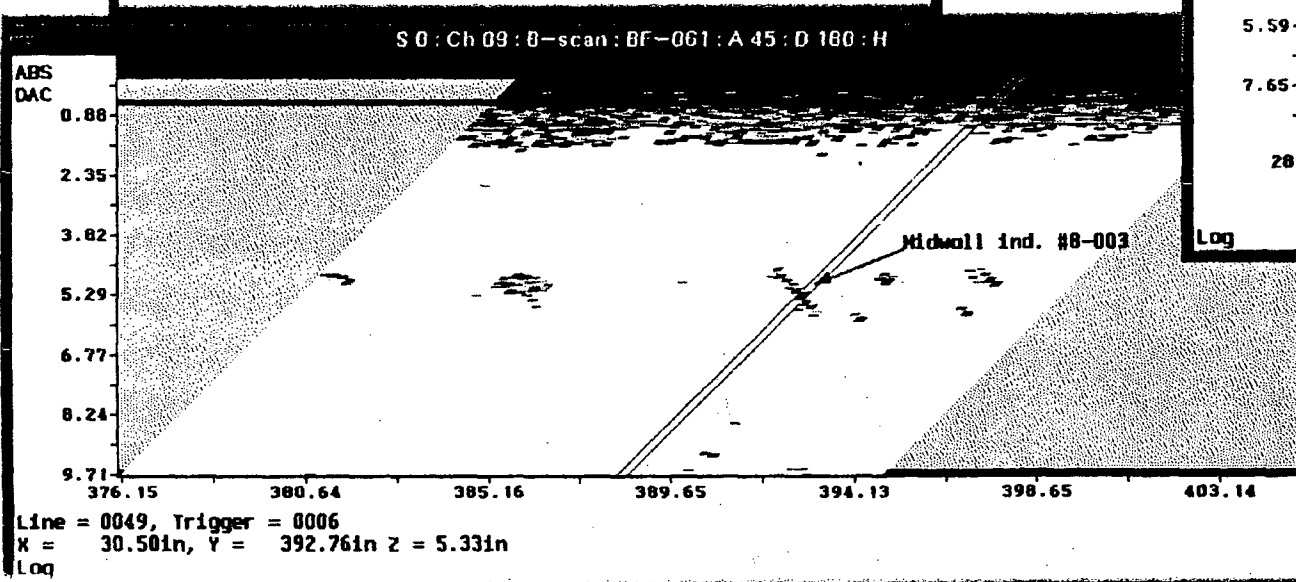
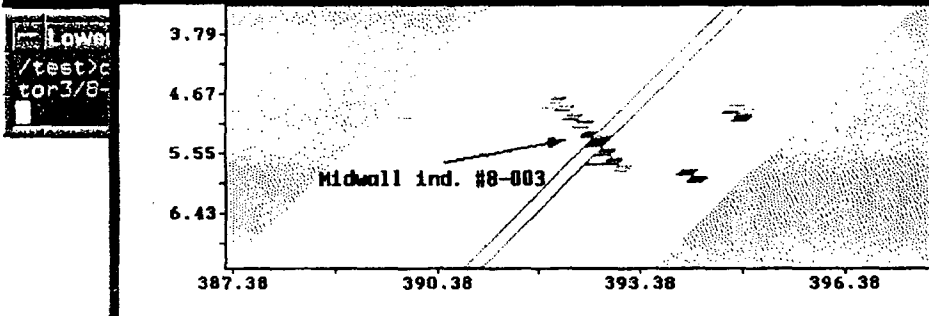
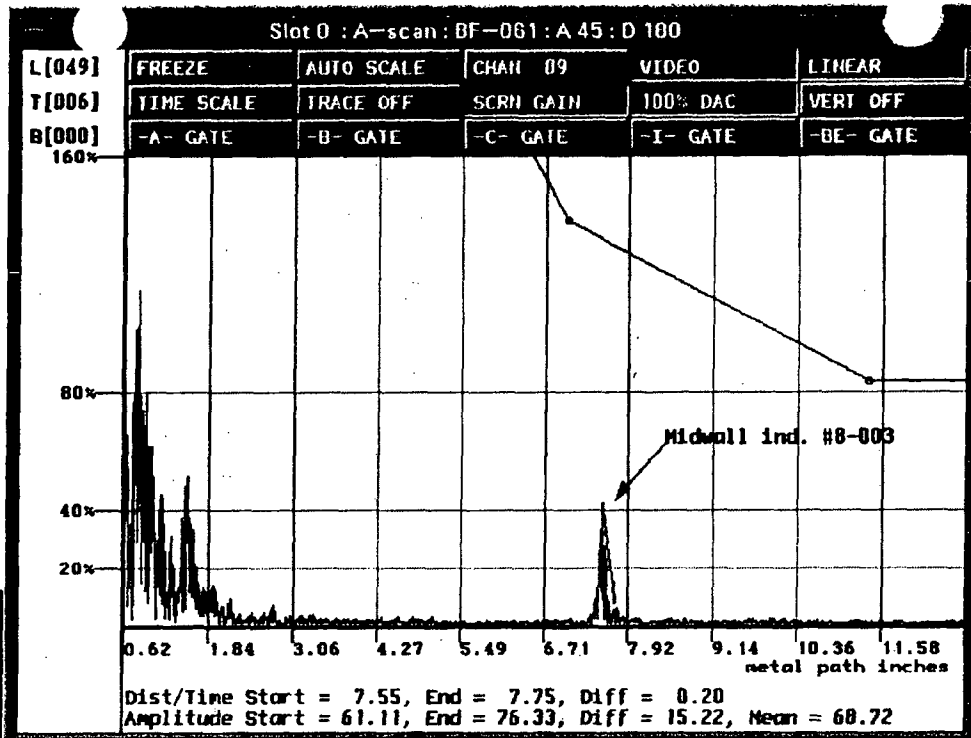
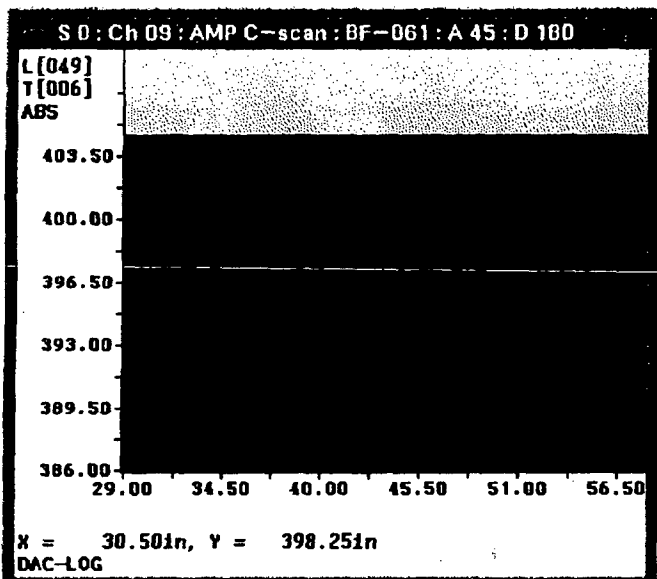
21154  
183 OF 276

00183

S D : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%



00184

184 of 276  
R 1154

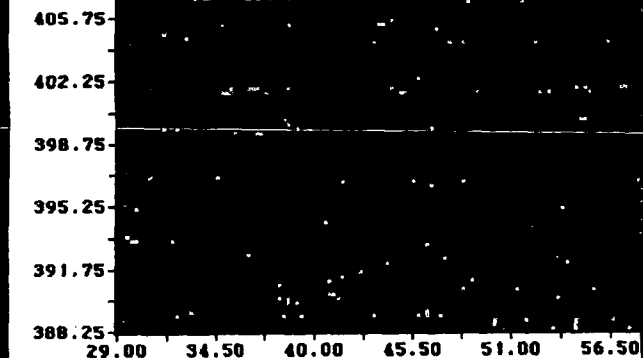
S 1: Scale

32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0 50%  
58.4  
62.7 20%  
67.1  
71.4  
75.8  
80.1  
84.5  
88.0  
93.2

DAC

S 1: Ch 13: AMP C-scan: BF-061: A 57: D 180

L[029]  
T[039]  
ABS

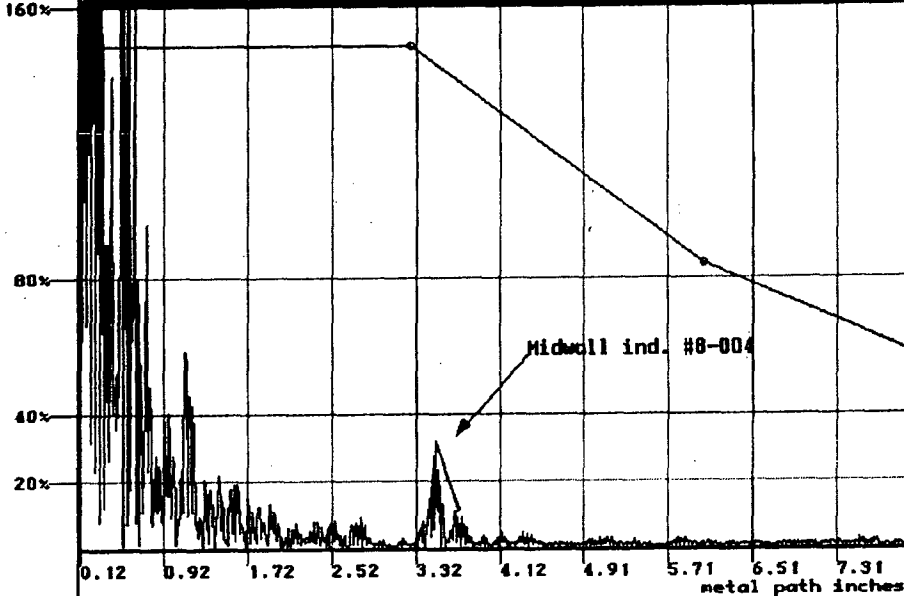


X = 38.75in, Y = 395.50in  
DAC-LOG

Slot 1: A-scan: BF-061: A 57: D 180

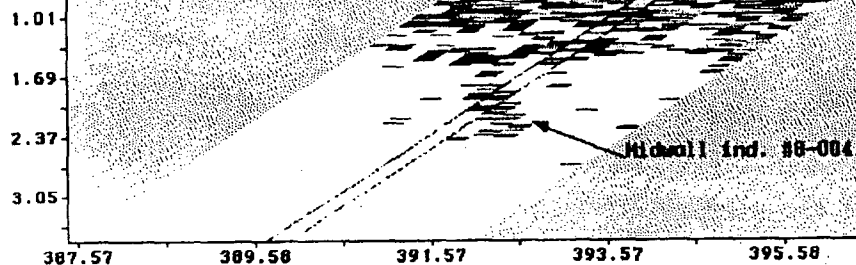
L[029]  
T[039]  
B[000]

FREEZE	AUTO SCALE	CHAN 13	VIDEO	LINEAR
TIME SCALE	TRACE OFF	SCRN GAIN	100% DAC	VERT OFF
-A- GATE	-B- GATE	-C- GATE	-I- GATE	-BE- GATE



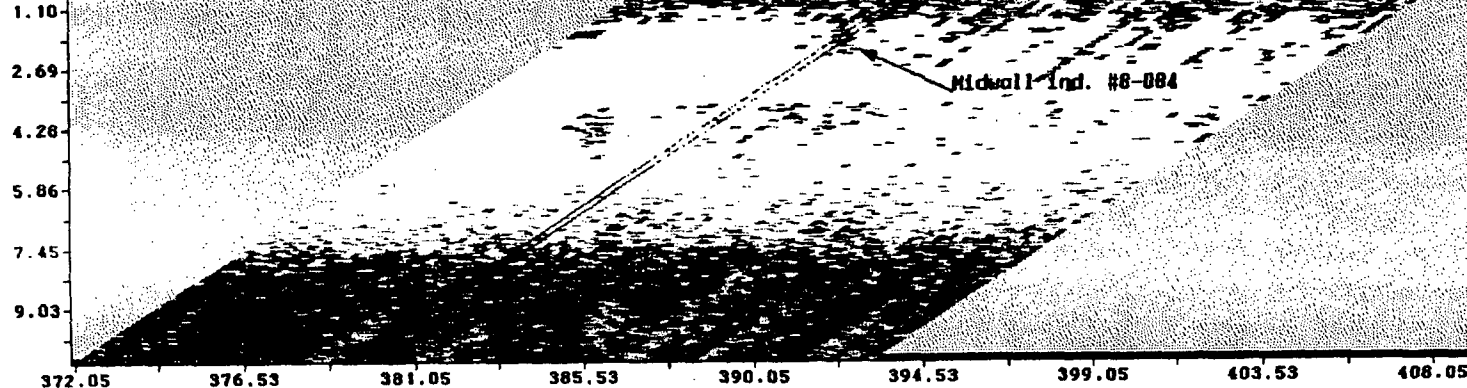
Dist/Time Start = 3.50, End = 3.73, Diff = 0.23  
Amplitude Start = 62.74, End = 71.98, Diff = 9.24, Mean = 67.36

Ch 13: B-scan Zoom



S 1: Ch 13: B-scan: BF-061: A 57: D 100: H

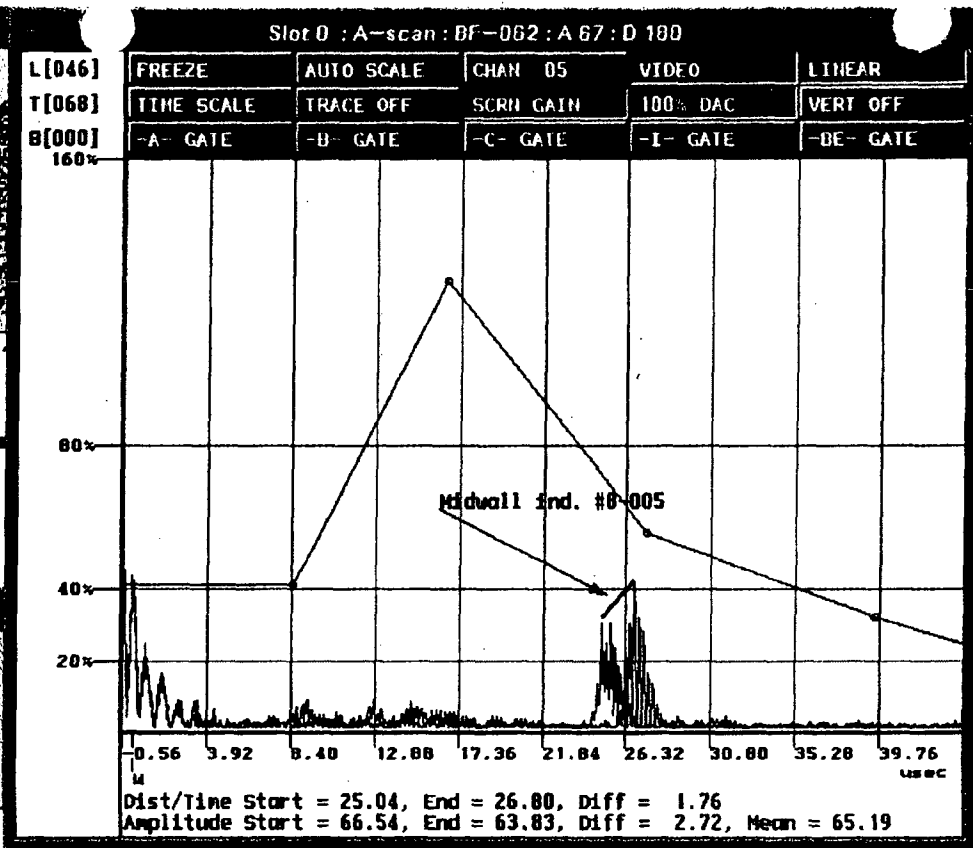
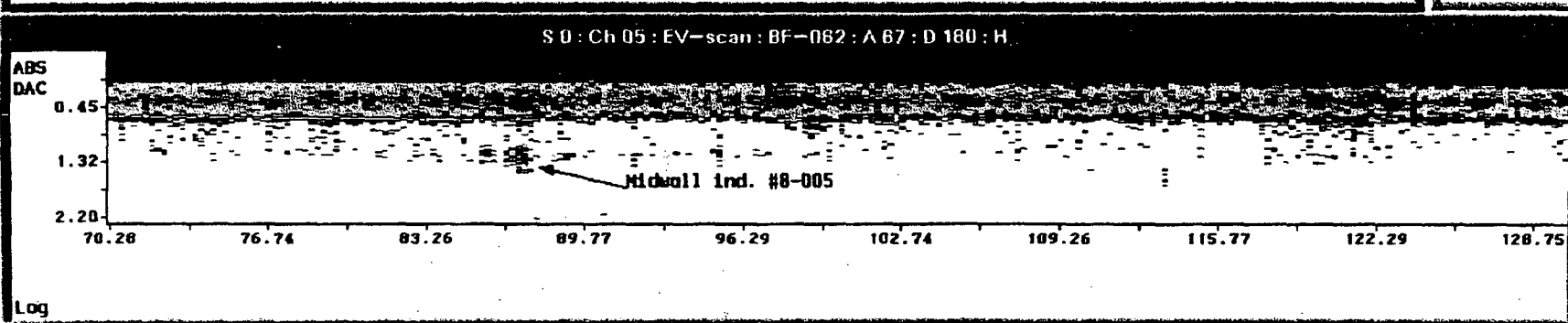
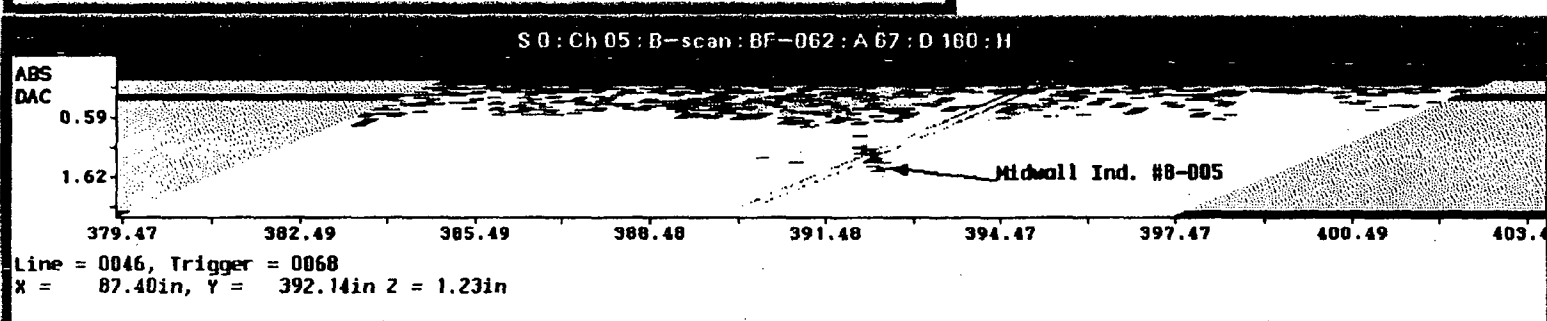
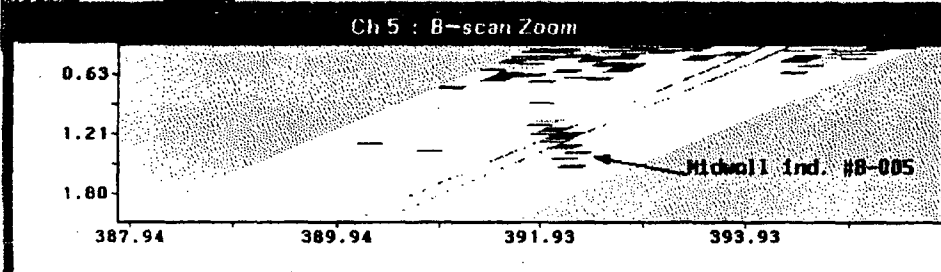
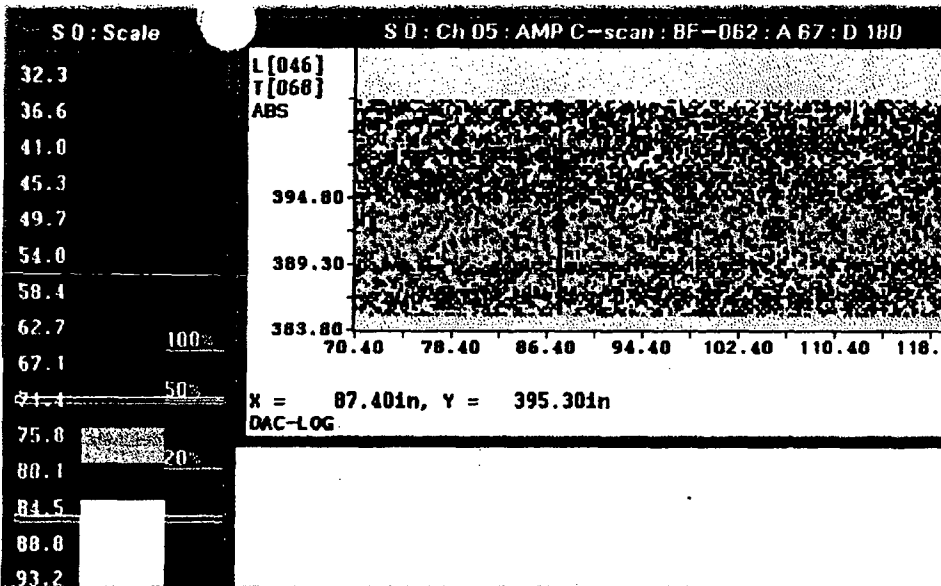
ABS  
DAC



Line = 0029, Trigger = 0039  
X = 38.75in, Y = 392.31in Z = 1.93in  
Log

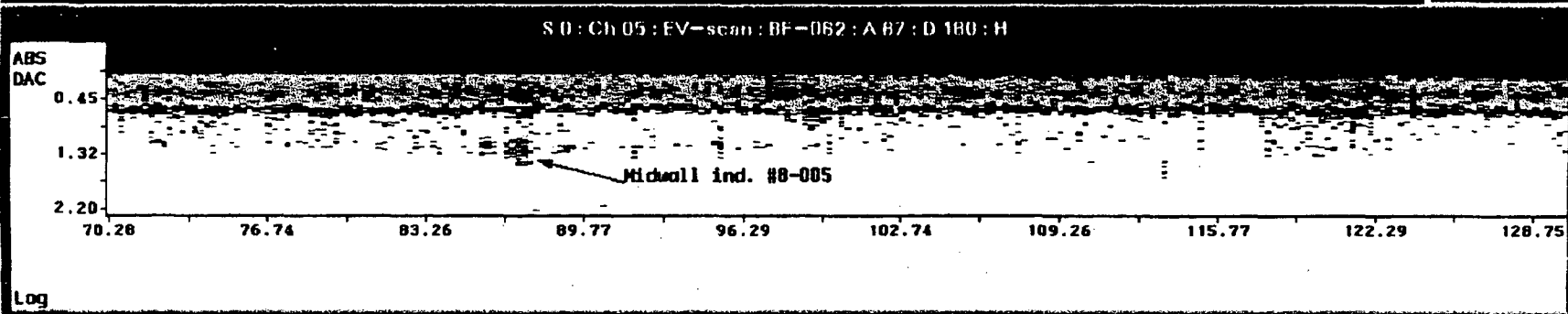
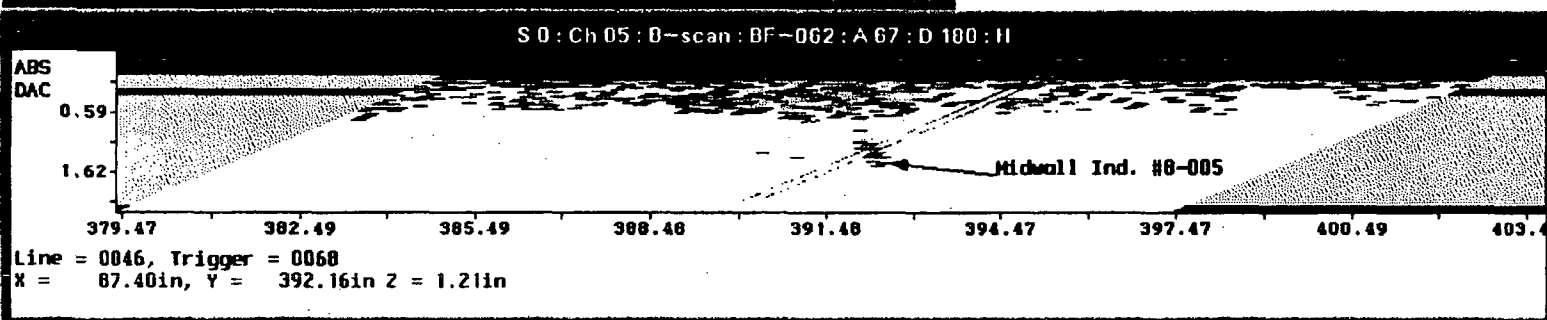
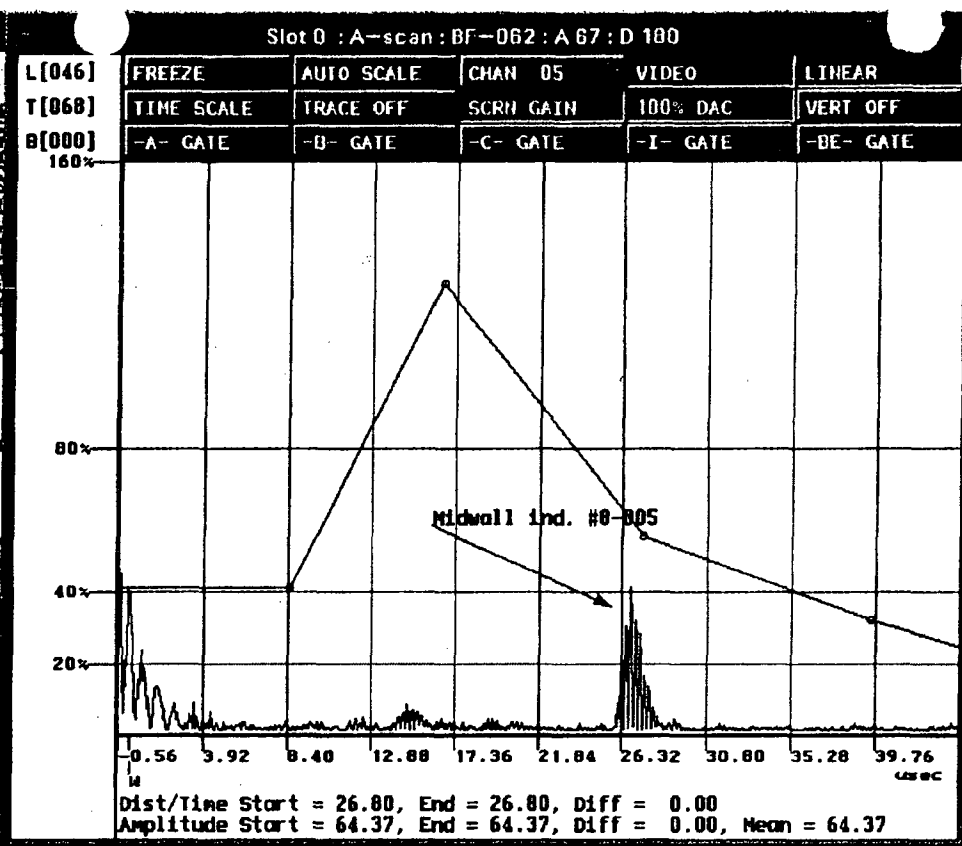
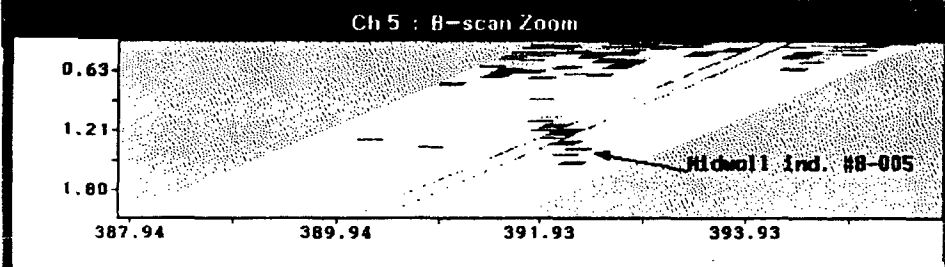
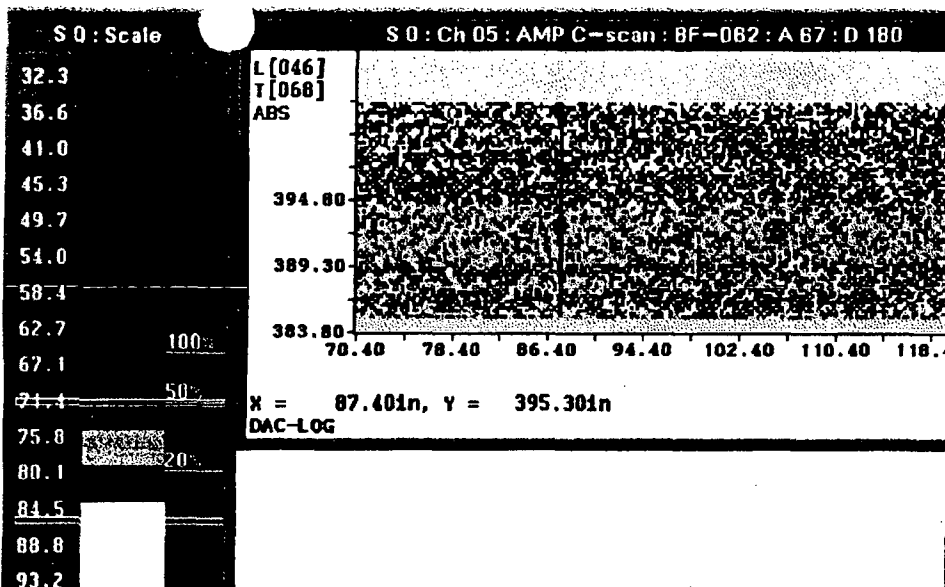
Lower Ten  
/test>dump /max  
tor3/8-004

R1154  
185 of 276  
00185



Lower Ter  
/test>dump /max  
tor3/8-005

21154  
186 of 274  
00186



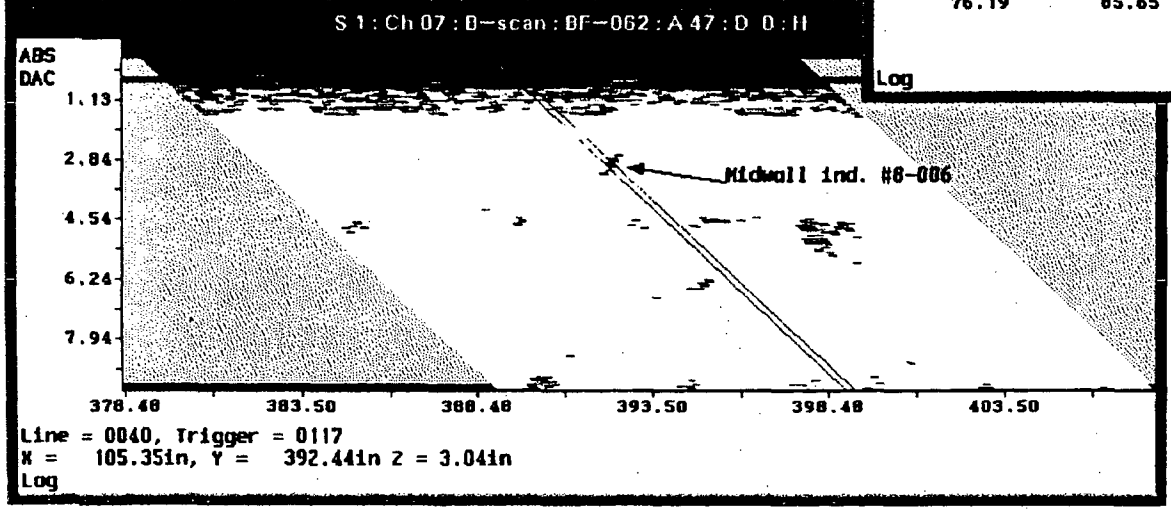
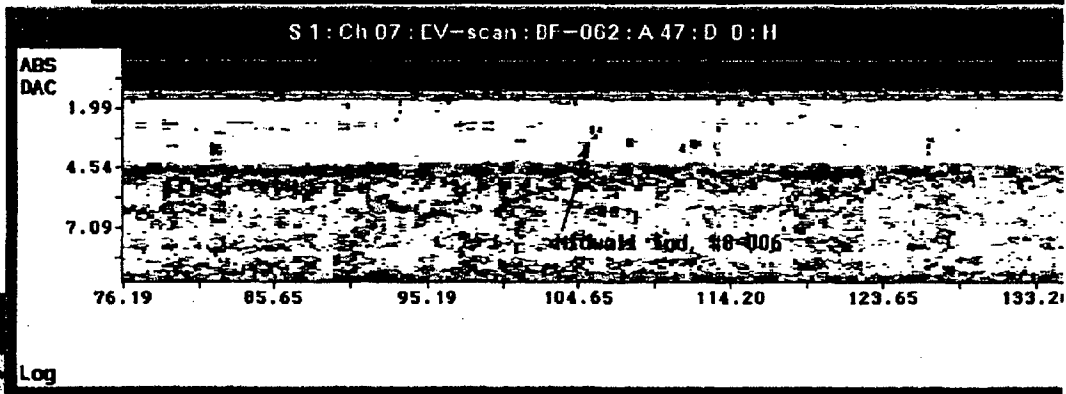
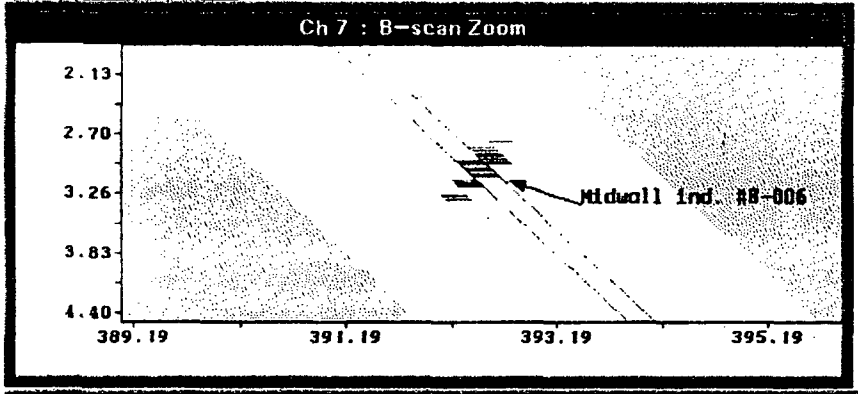
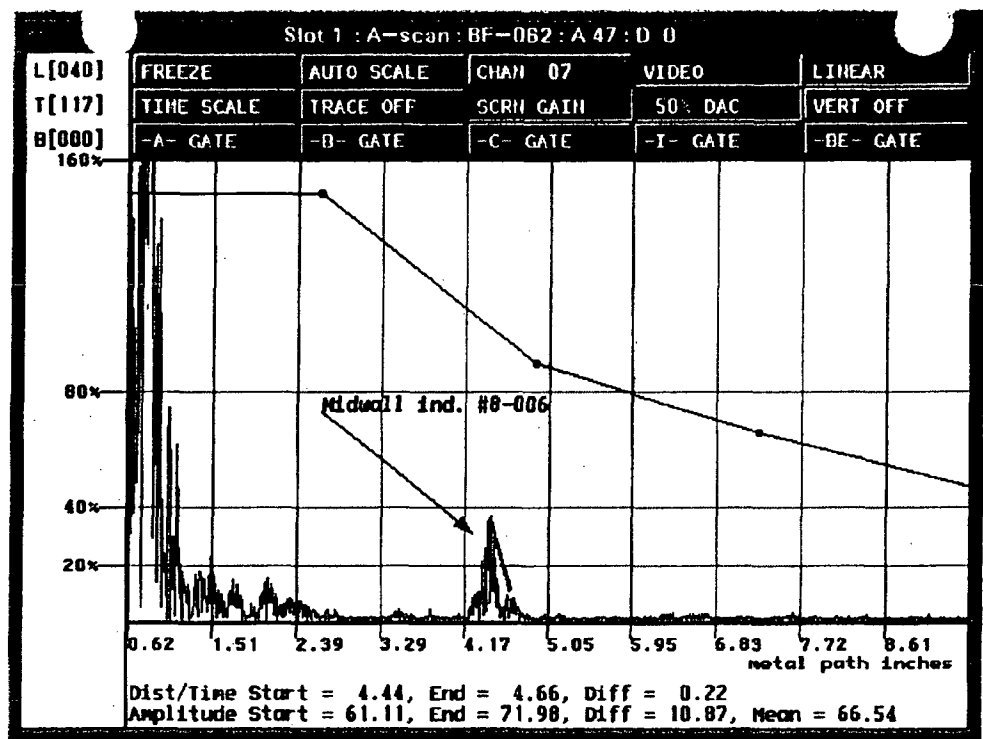
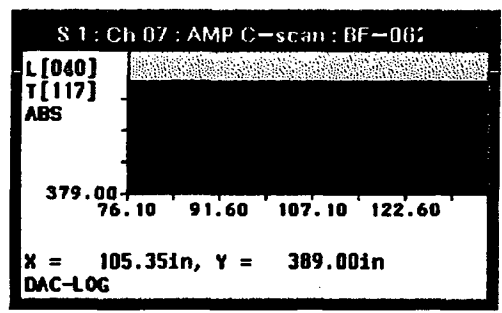
21154  
187 OF 276  
00187

S 1: Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.0  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC



Lower Ten  
/test>dump /max  
tor3/8-006

R1154  
188 of 274  
00188



S 1: Scale

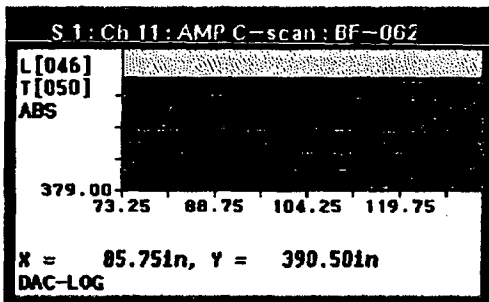
32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%

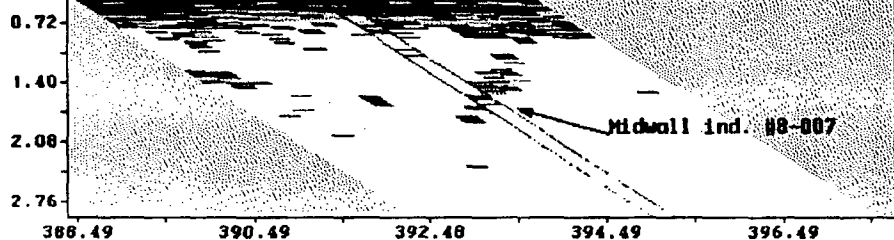
50%

20%

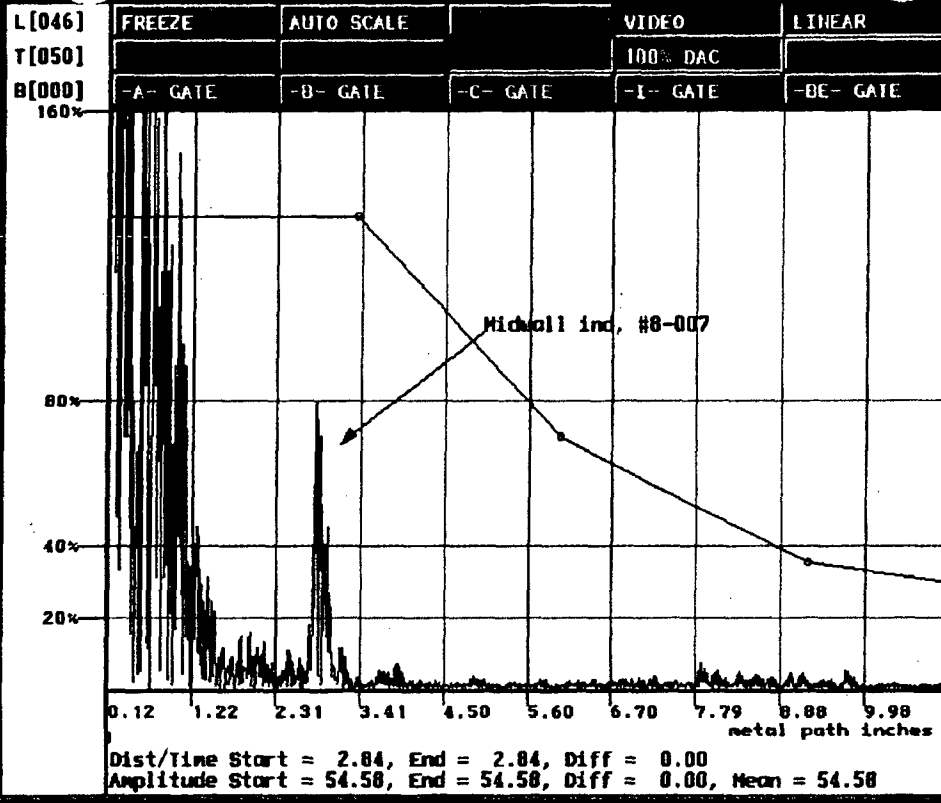
DAC



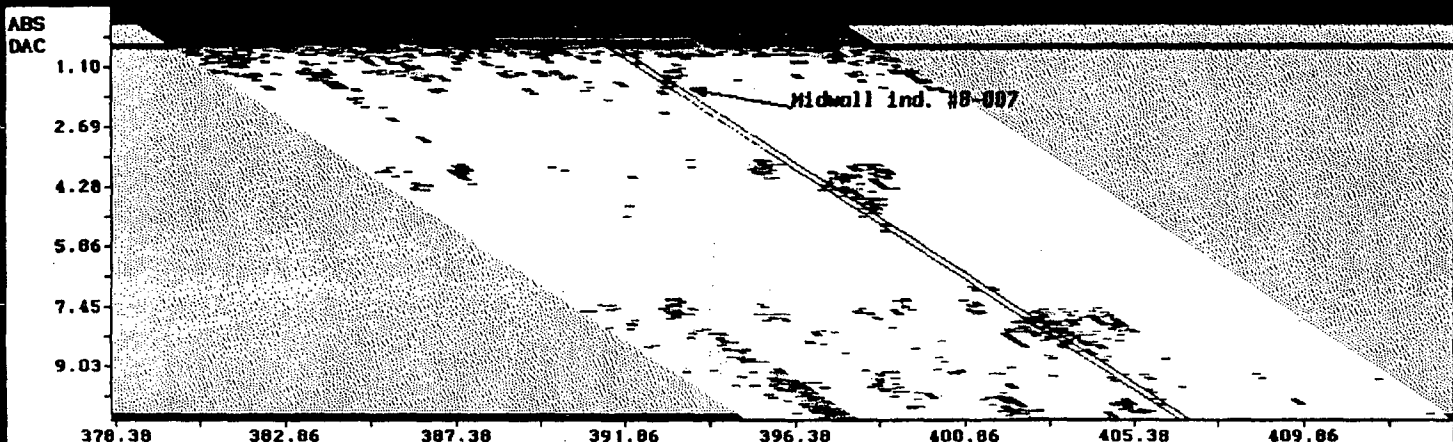
Ch 11: B-scan Zoom



Slot 1: A-scan: BF-062: A 57: D 0



S 1: Ch 11: B-scan: BF-062: A 57: D 0: H



Line = 0046, Trigger = 0050

Lower Ten  
/test>dump /max  
top3/B-007

00189

R1154  
189 of 276

S 1 : Scale

32.3
36.6
41.0
45.3
49.7
54.0
58.4
62.7
67.1
71.4
75.8
80.1
84.5
88.8
93.2

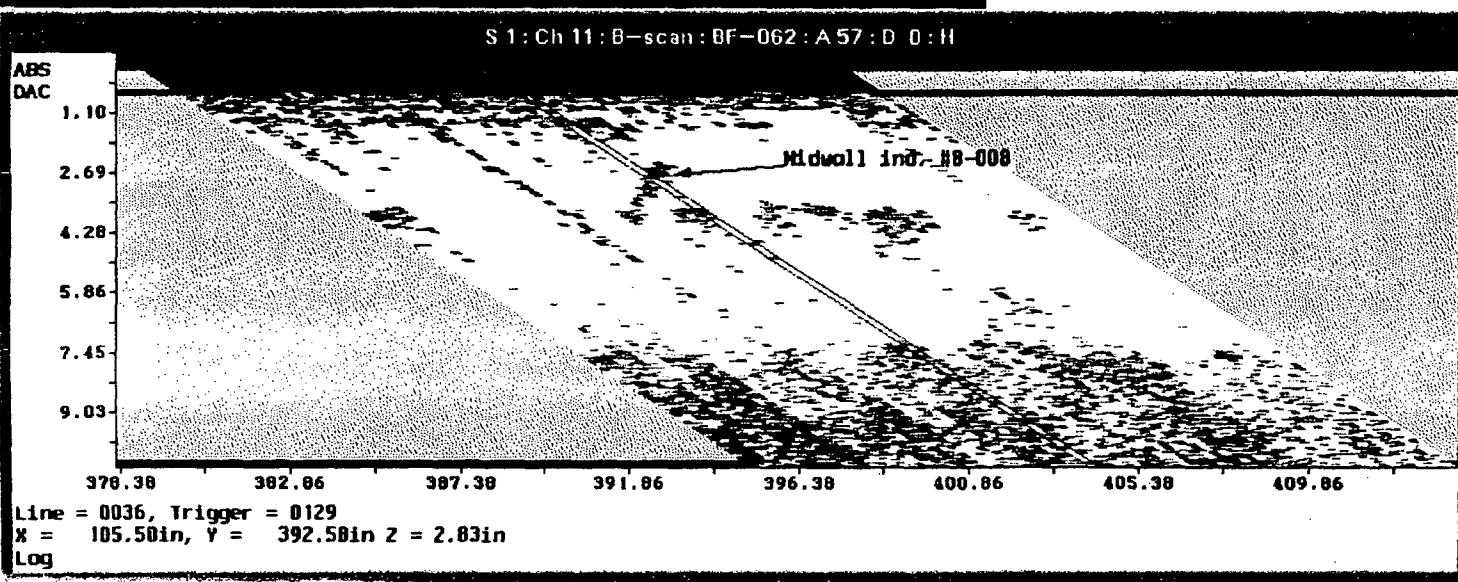
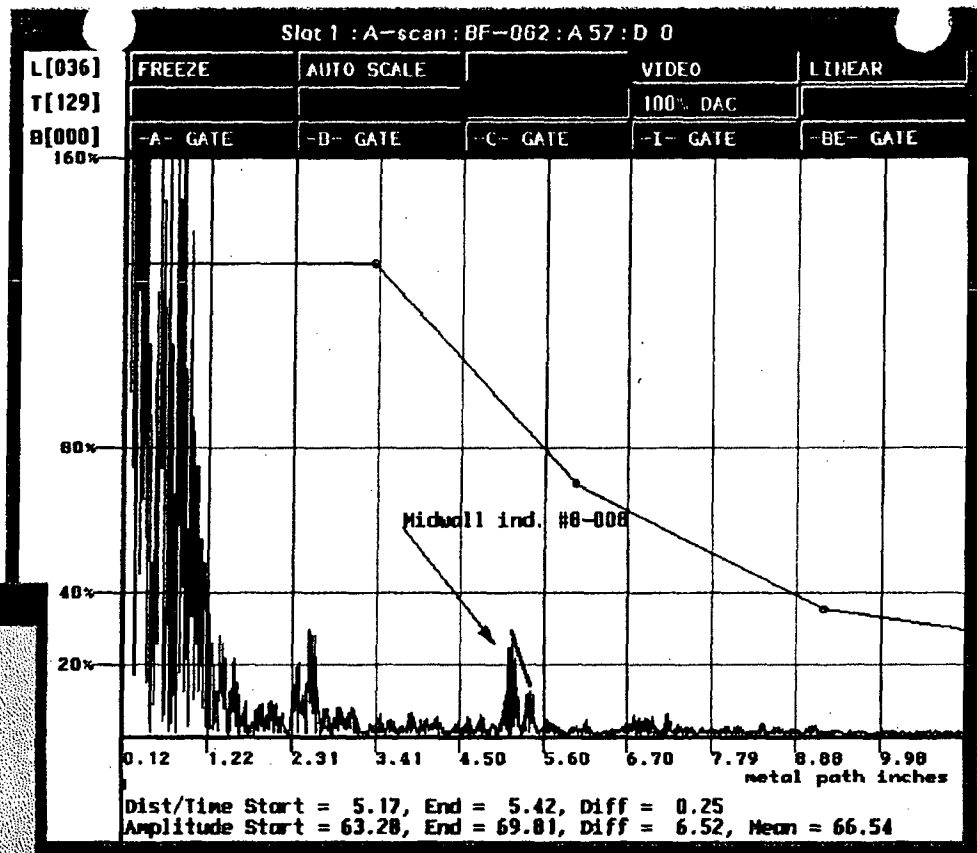
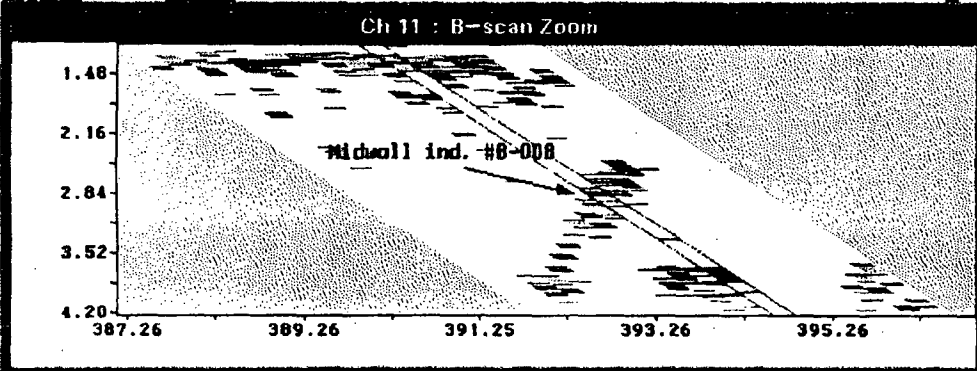
100%  
50%  
20%

S 1 : Ch 11 : AMP C-scan : BF-062

L[036]  
T[129]  
ABS

379.00  
73.25 88.75 104.25 119.75

X = 105.50in, Y = 388.00in  
DAC-LOG

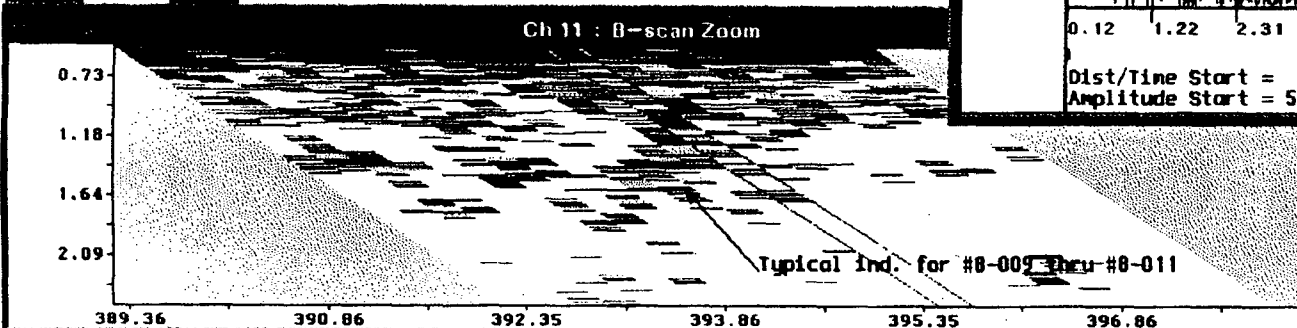
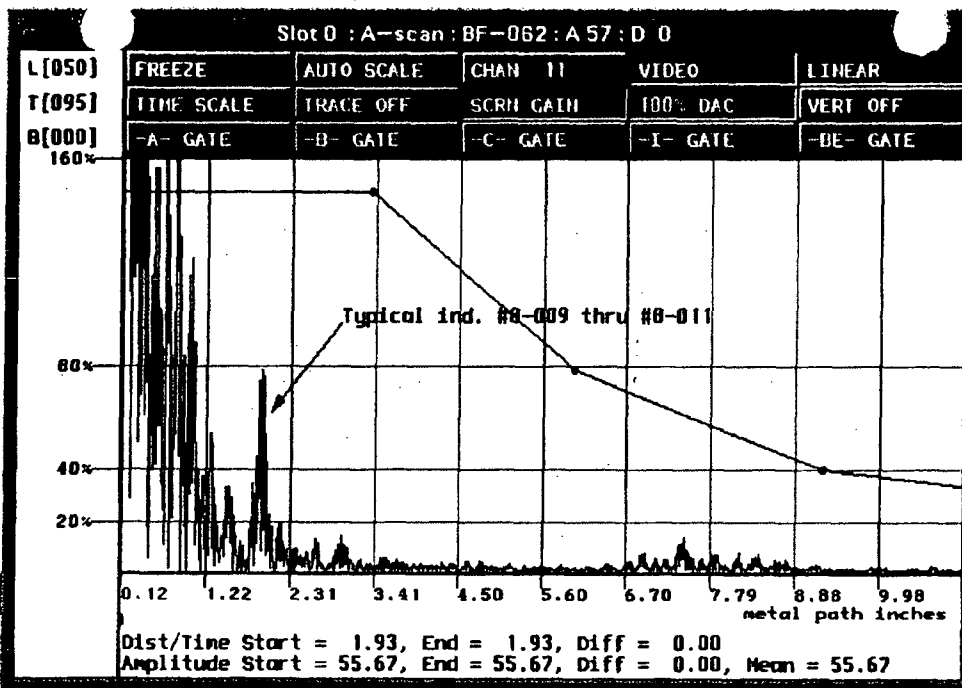
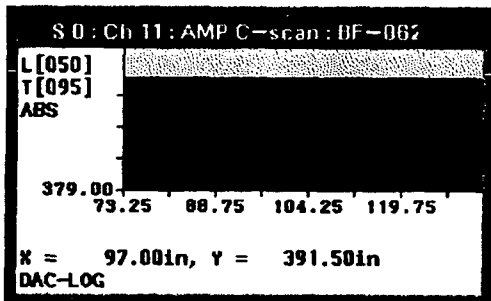


Lower Tern  
/test>dump /max  
tor3/B-008

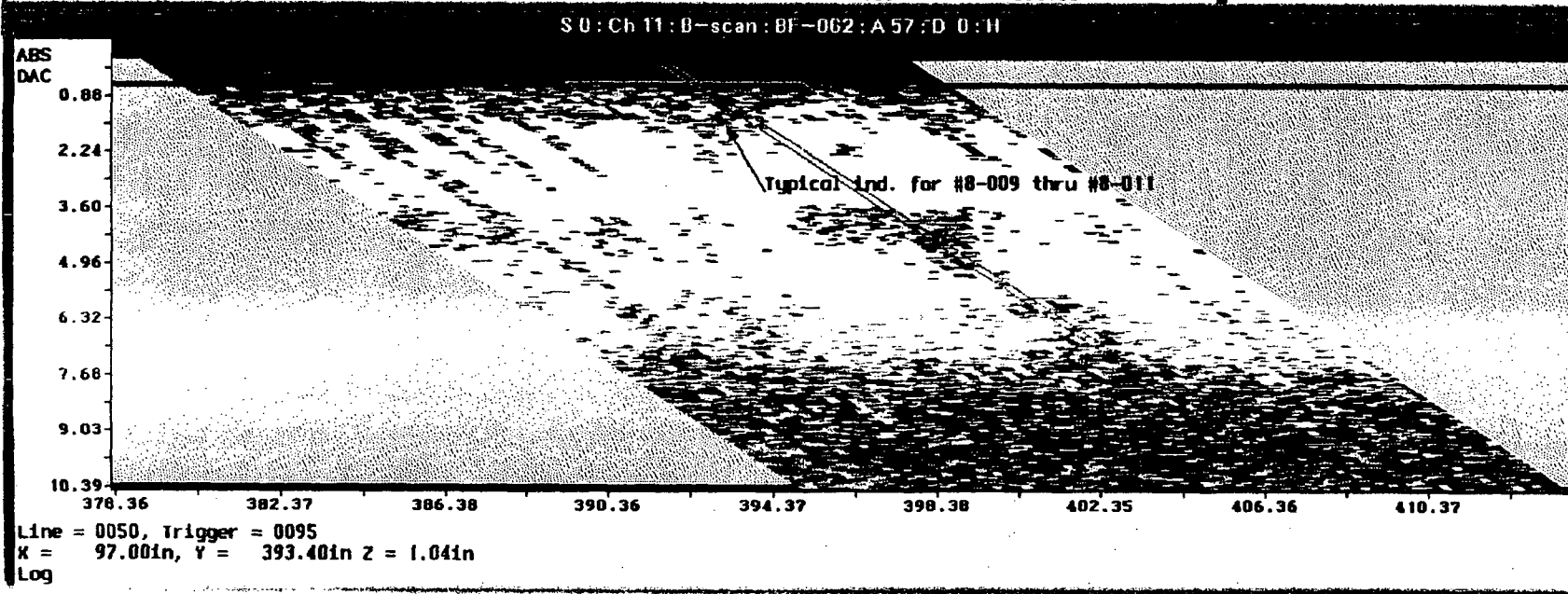
R1154  
190 OF 276  
00190

S0: Scale

32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0 50%  
58.4  
62.7 20%  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8



Lower Termi

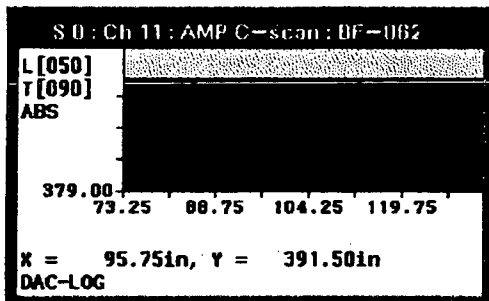


21154  
191 OF 276  
00191

S0: Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.0  
80.1  
84.5  
88.0

100%  
50%  
20%



Ch 11: B-scan Zoom

0.73  
1.18  
1.64  
2.09

389.36 390.86 392.35 393.86 395.35 396.86

Typical ind. #8-009 thru #8-011

S0: Ch 11: B-scan: BF-062: A 57: D 0: H

ABS  
DAC

0.88  
2.24  
3.60  
4.96  
6.32  
7.68  
9.03  
10.39

378.36 382.37 386.38 390.36 394.37 398.38 402.35 406.36 410.37

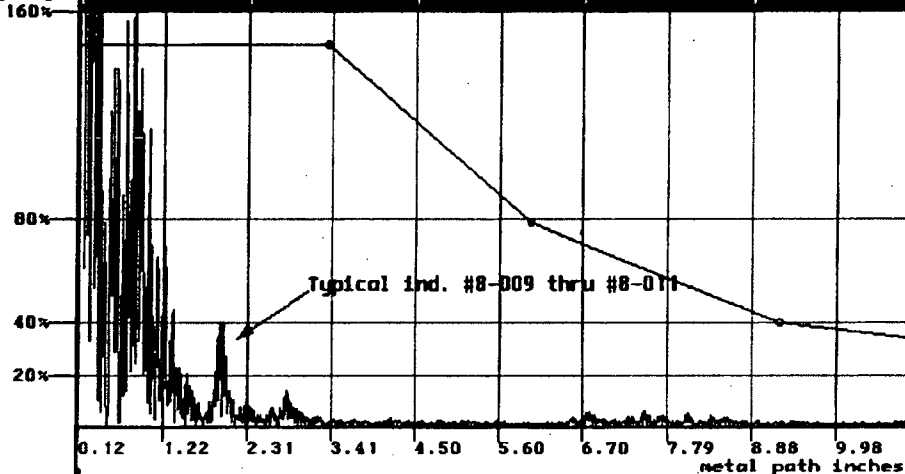
Typical ind. #8-009 thru #8-011

Line = 0050, Trigger = 0090  
X = 95.75in, Y = 393.47in Z = 1.08in  
Log

Slot 0: A-scan: BF-062: A 57: D 0

L[050]  
T[090]  
B[000]

FREEZE	AUTO SCALE	CHAN 11	VIDEO	LINEAR
TIME SCALE	TRACE OFF	SCRN GAIN	100% DAC	VERT OFF
-A- GATE	-B- GATE	-C- GATE	-I- GATE	-DE- GATE



Lower Termin  
or 3/8-011a

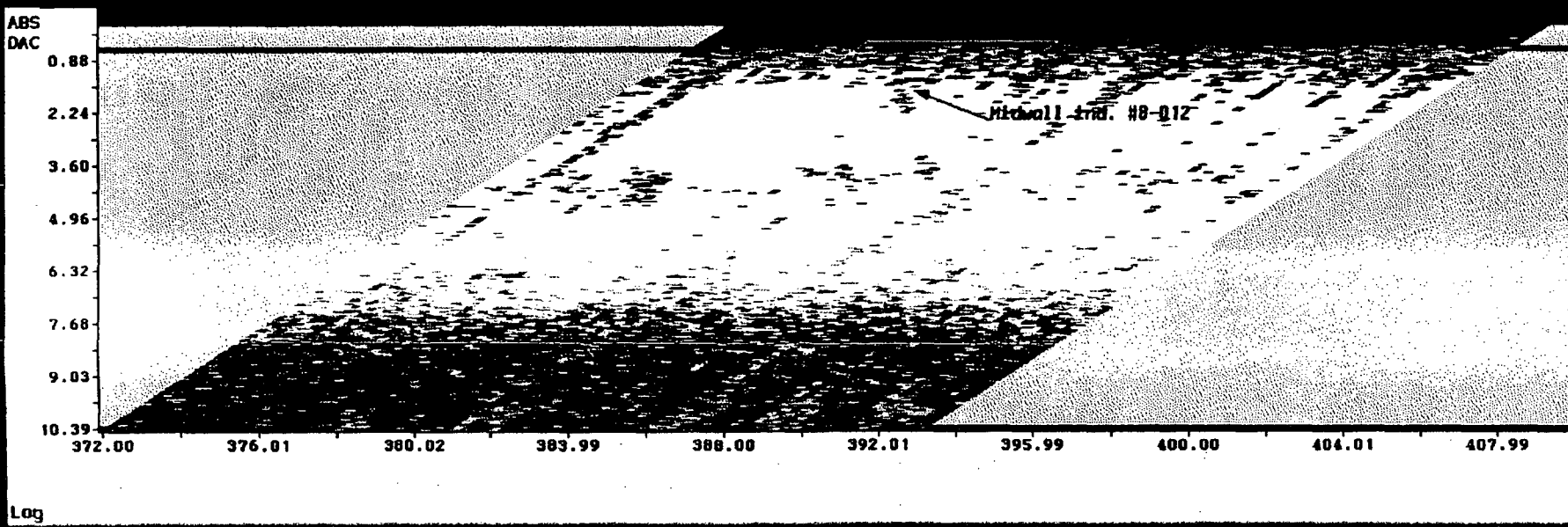
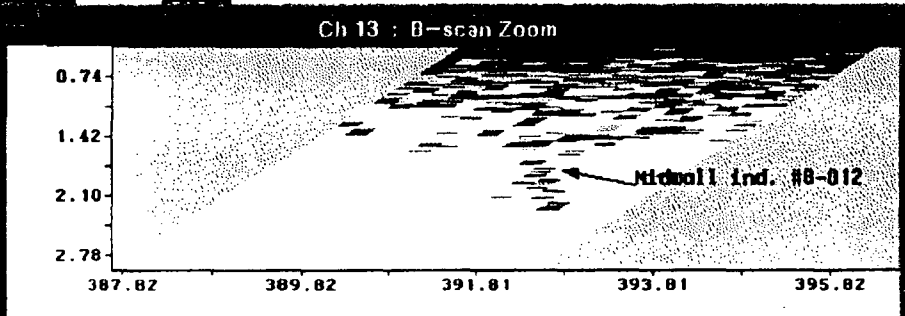
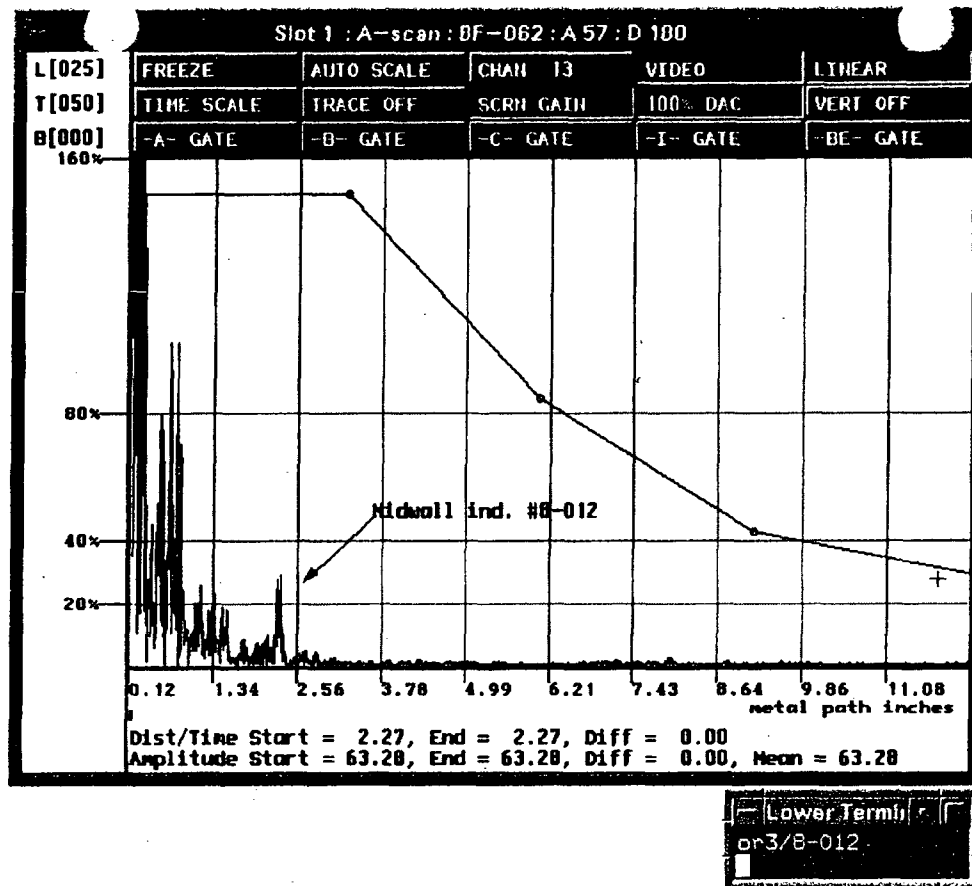
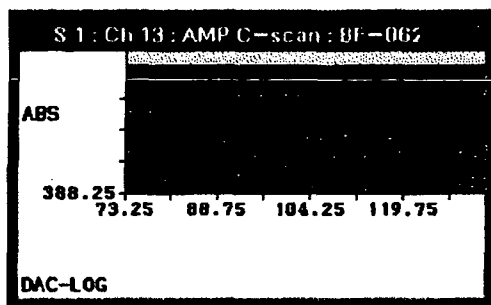
00192

192 of 276

21154

S 1 : Scale

32.3	
36.6	
41.0	
45.3	
49.7	100%
54.0	50%
58.4	
62.7	20%
67.1	
71.4	
75.8	
80.1	
84.5	
88.8	
93.2	



21154  
193 OF 276  
: 00193

S 1: Scale

32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0 50%  
58.4  
62.7 20%  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

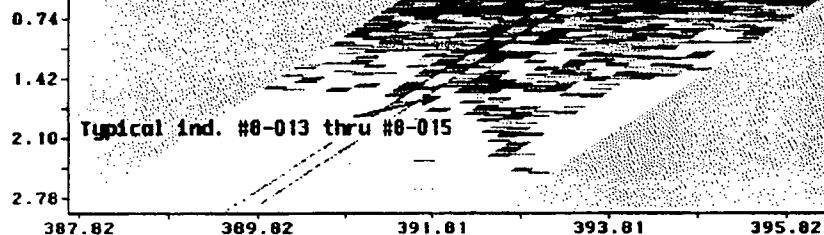
S 1: Ch 13: AMP C-scan: BF-062

L[024]  
T[056]  
ABS

388.25 73.25 88.75 104.25 119.75

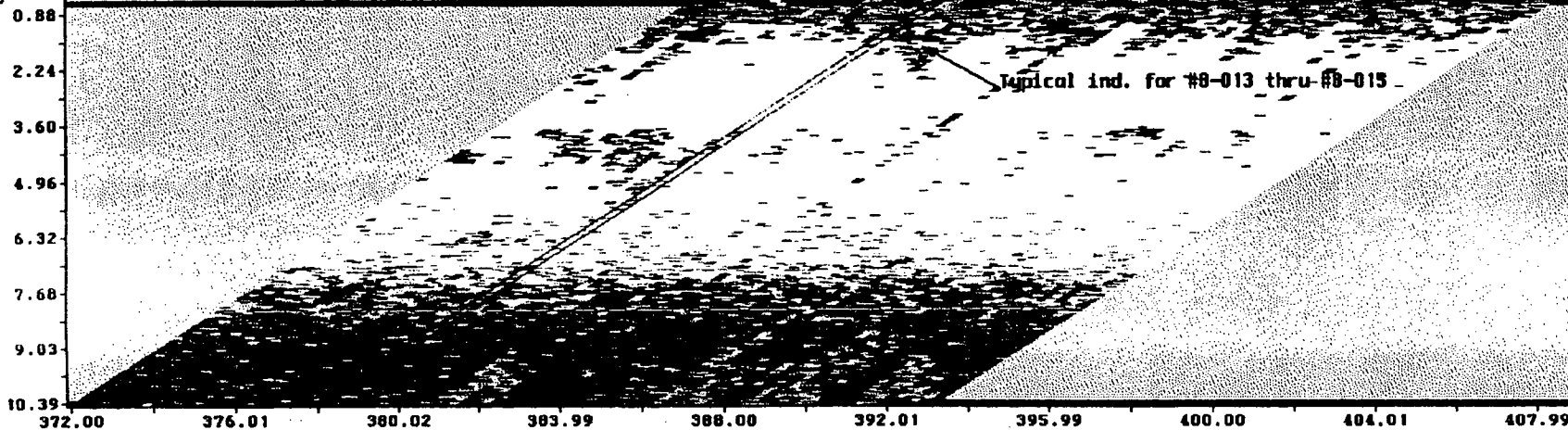
X = 87.25in, Y = 394.25in  
DAC-LOG

Ch 13: B-scan Zoom



002: A 57: D 100: H

ABS  
DAC

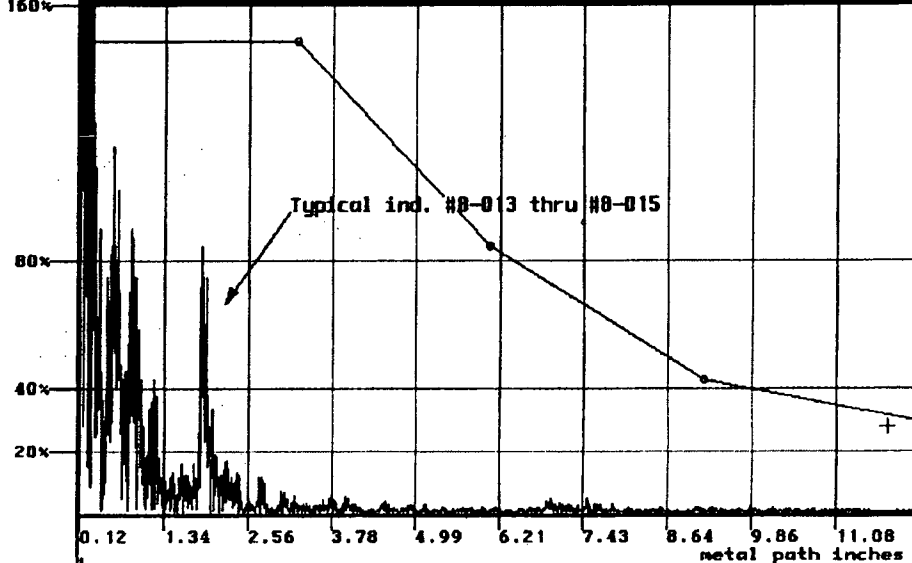


Line = 0024, Trigger = 0056  
X = 87.25in, Y = 392.42in Z = 1.05in  
Log

Slot 1: A-scan: BF-062: A 57: D 100

L[024]  
T[056]  
B[000]  
160%

FREEZE	AUTO SCALE	CHAN 13	VIDEO	LINEAR
TIME SCALE	TRACE OFF	SCRN GAIN		VERT OFF
-A- GATE	-B- GATE	-C- GATE	-I- GATE	-BE- GATE



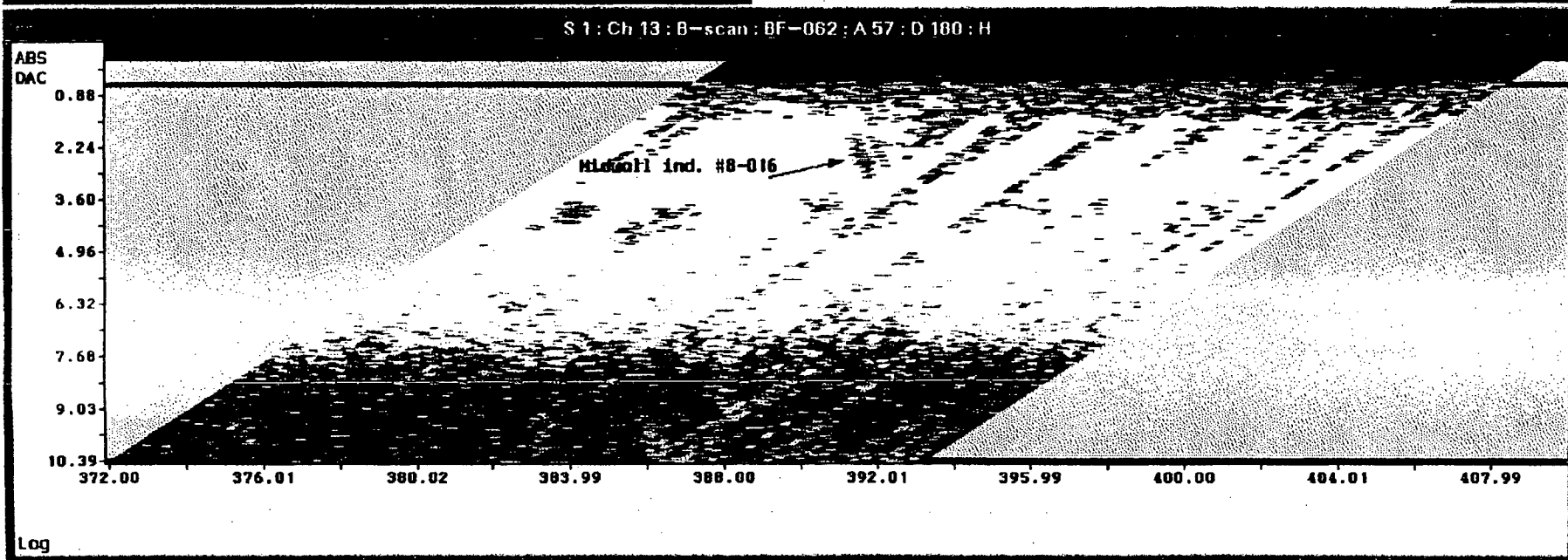
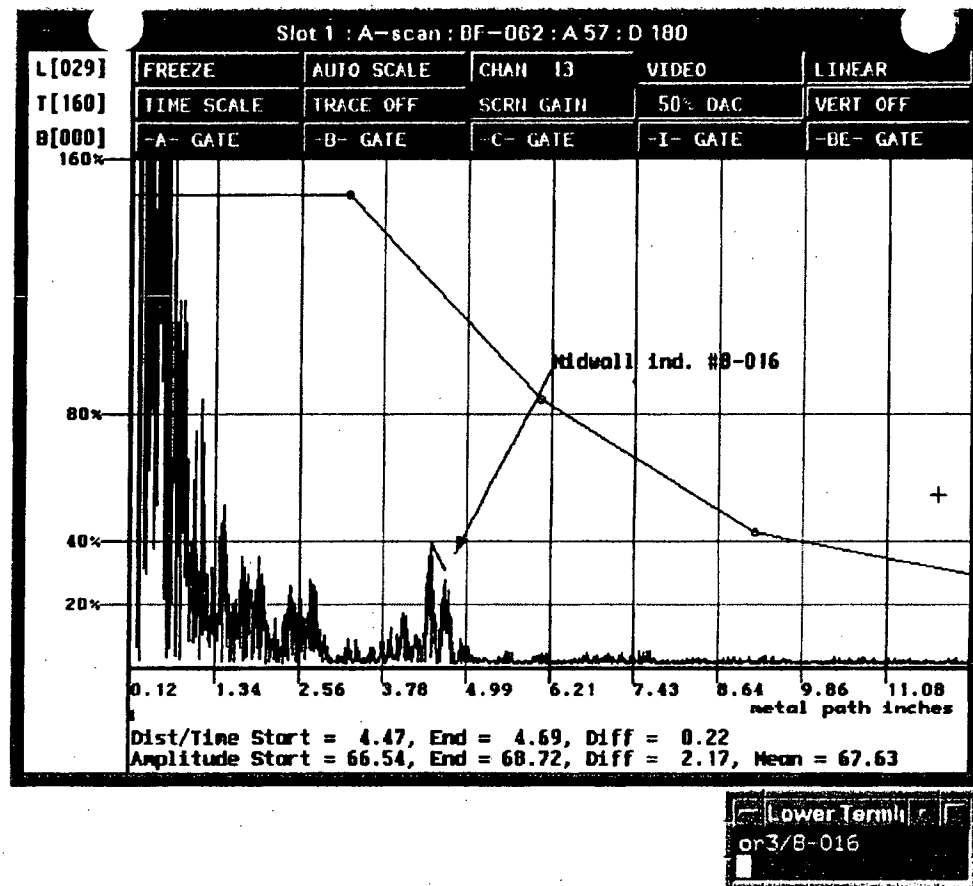
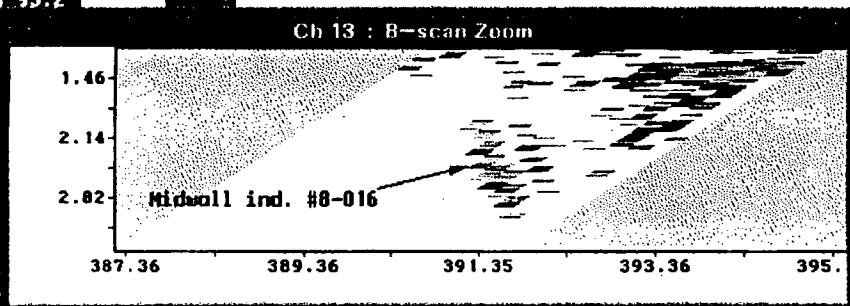
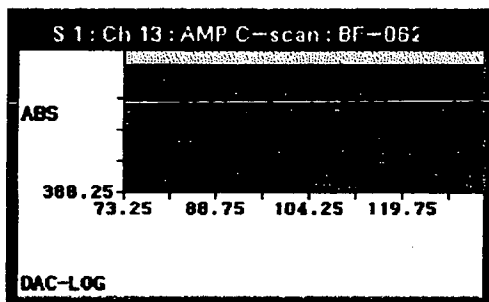
Dist/Time Start = 1.90, End = 1.90, Diff = 0.00  
Amplitude Start = 54.04, End = 54.04, Diff = 0.00, Mean = 54.04

Lower Termi  
or 3/8-015

21154  
194 of 276  
00194

S 1 : Scale

32.3
36.6
41.0
45.3
49.7
54.0
58.4
62.7
67.1
71.4
75.8
80.1
84.5
88.8
93.2



R1154

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00195

S 1 : Scale

32.3

36.6

41.0

45.3

49.7 100%

54.0 50%

58.4

62.7 20%

67.1

71.4

75.8

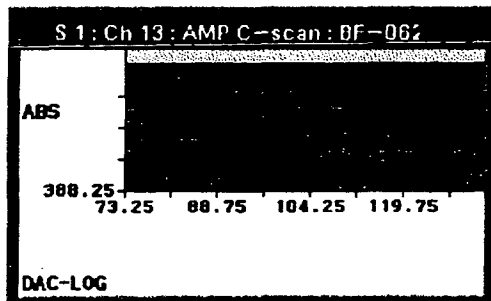
80.1

84.5

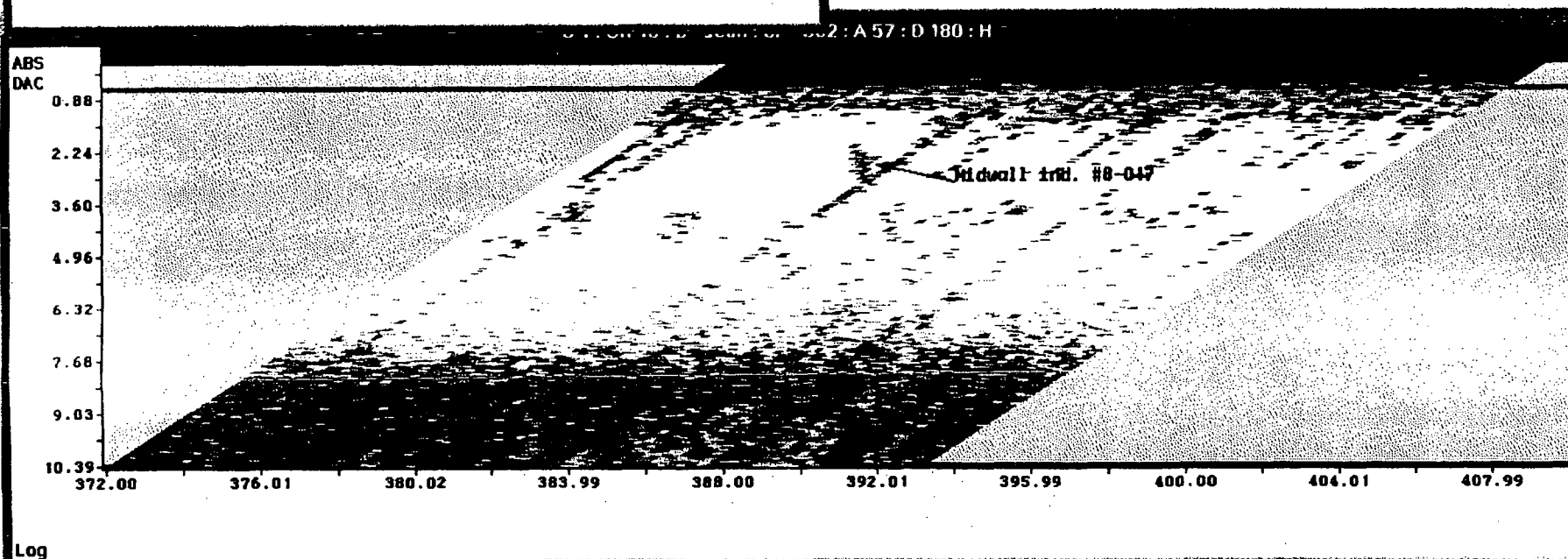
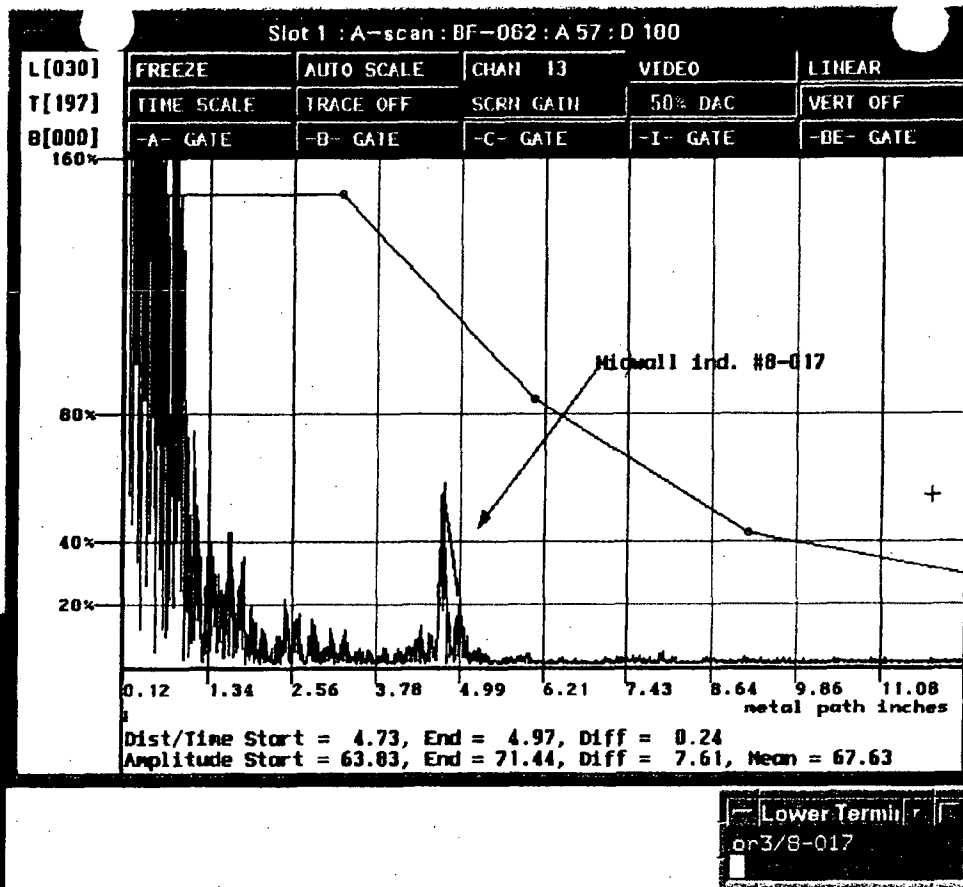
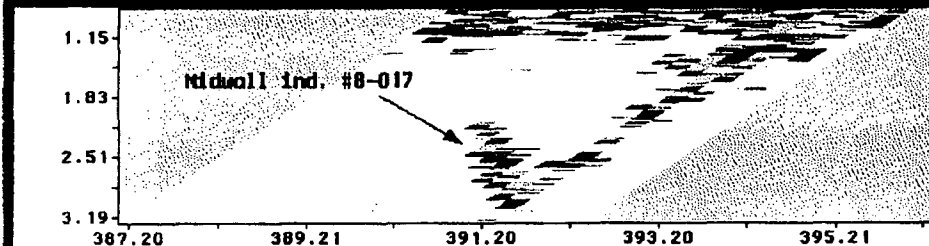
88.8

93.2

DAC

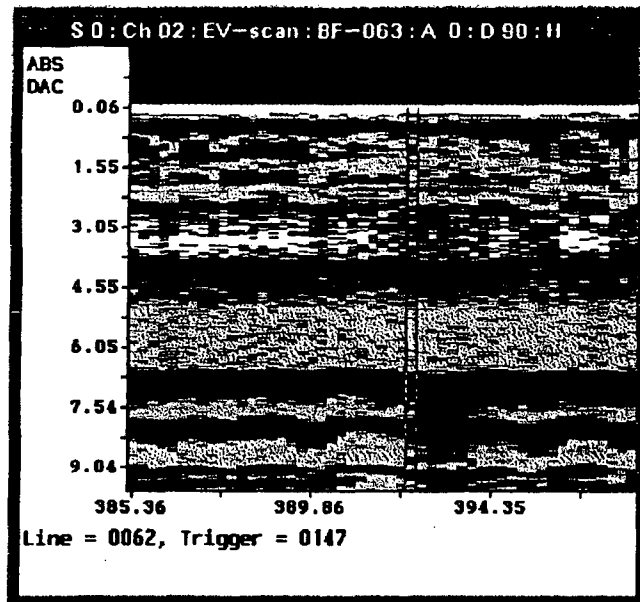
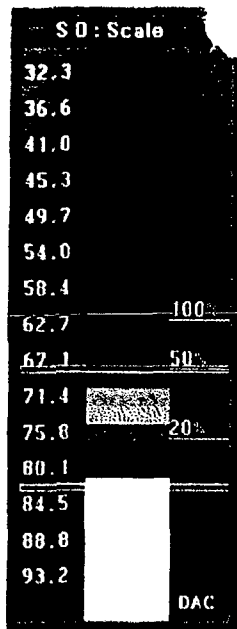


Ch 13 : B-scan Zoom



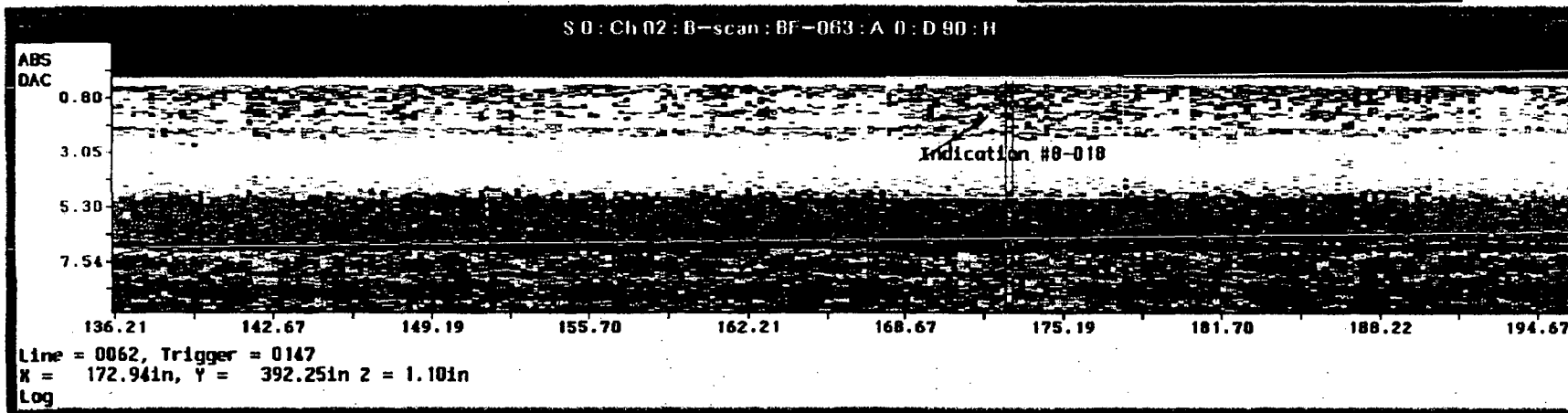
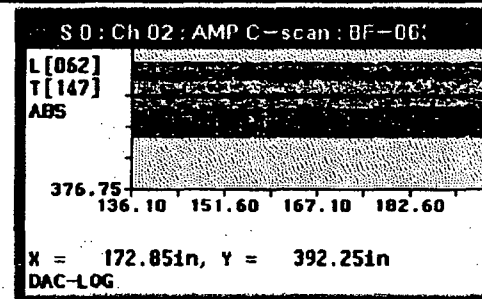
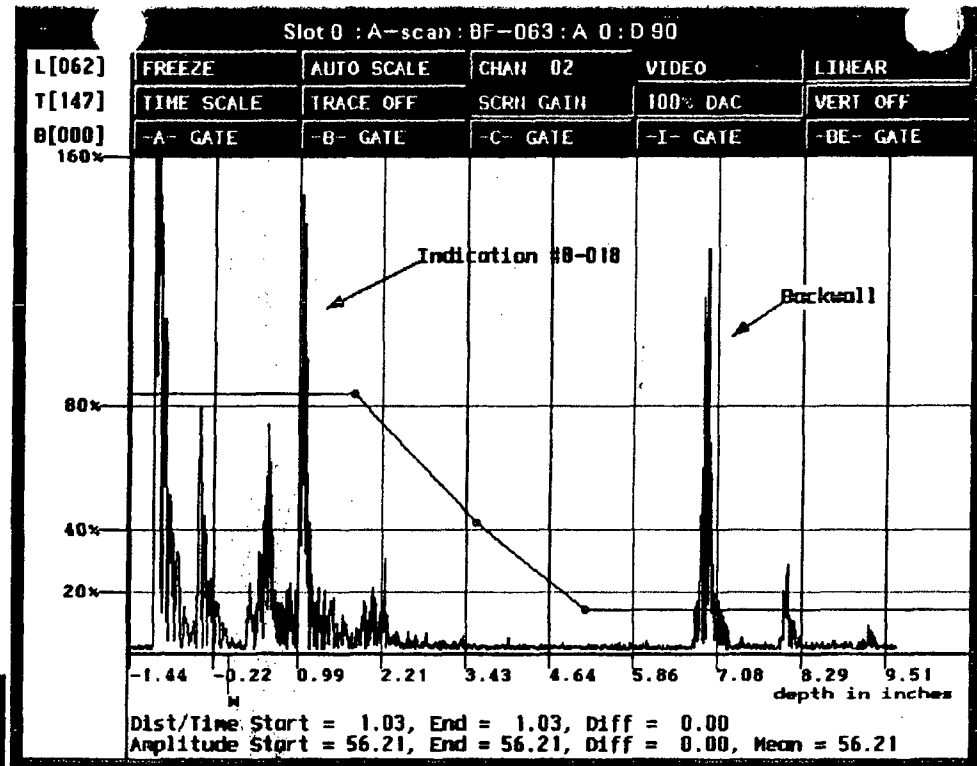
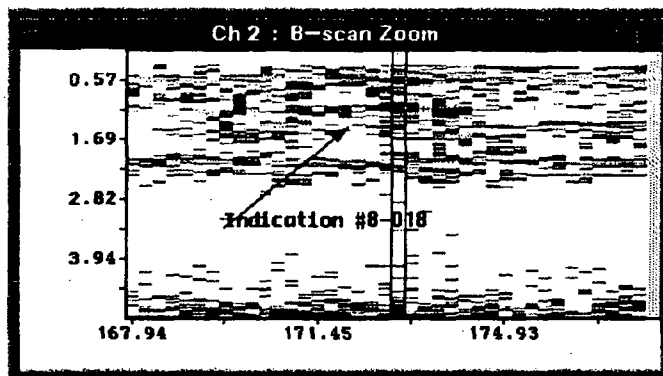
21154  
194 of 276  
00196





Lower (a)

l/test>dump /ma  
xtor3/B-018



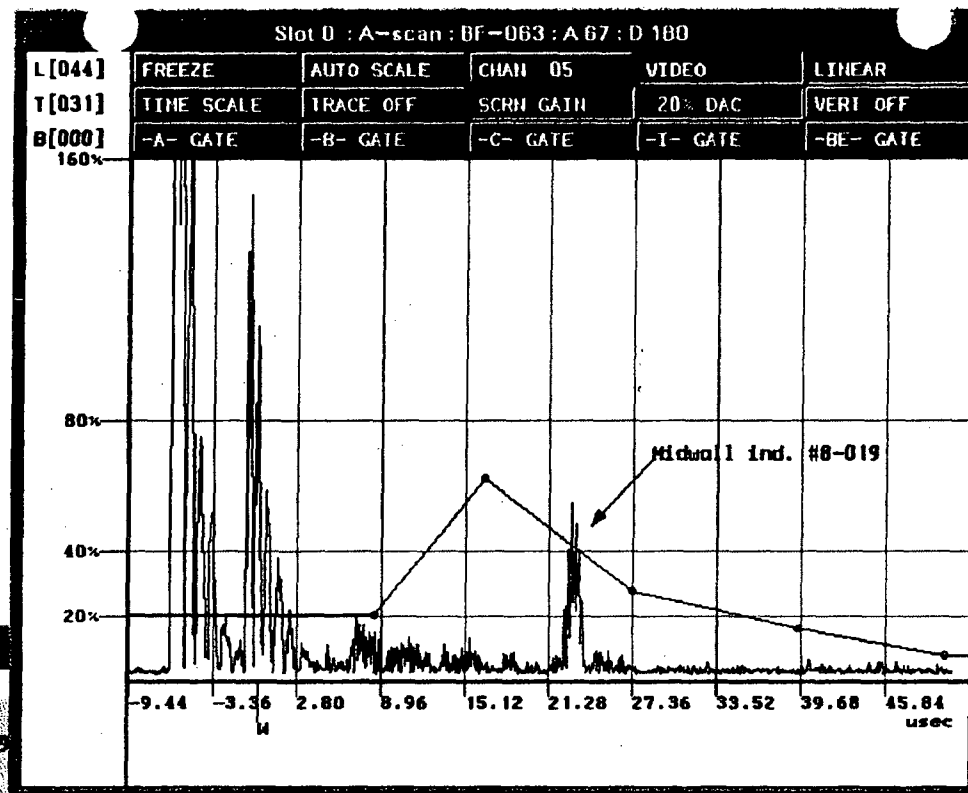
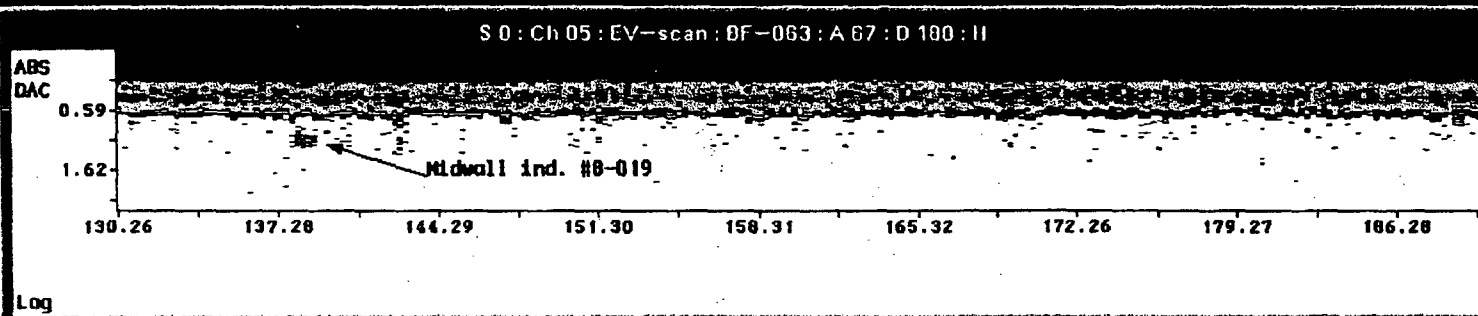
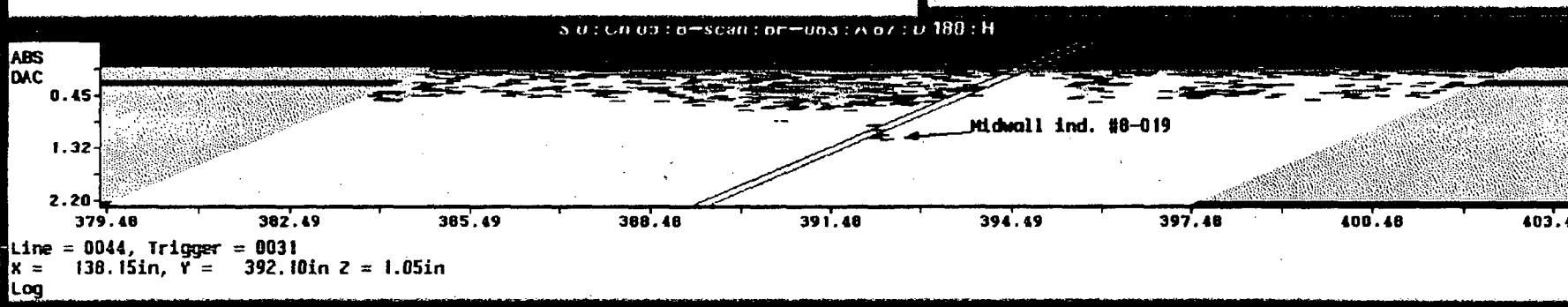
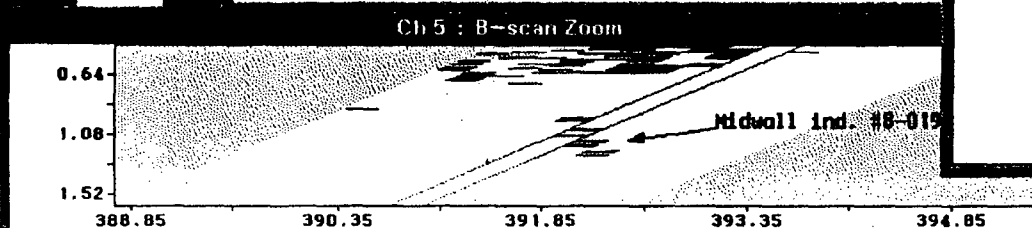
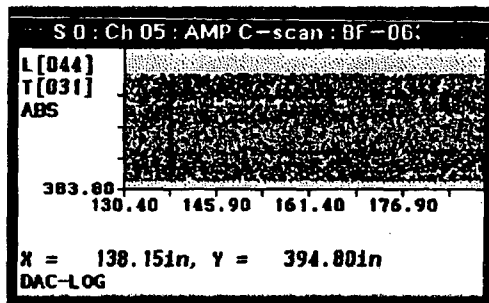
R1154  
197 OF 276  
00197

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.0  
93.2

100%  
50%  
20%

DAC



Lower Tor  
/test>dump /max  
tor3/8-019

R1154  
198 OF 276  
00198

S D : Scale

32.3

36.6

41.0

45.3

49.7

54.0

58.4

62.7

67.1

71.4

75.8

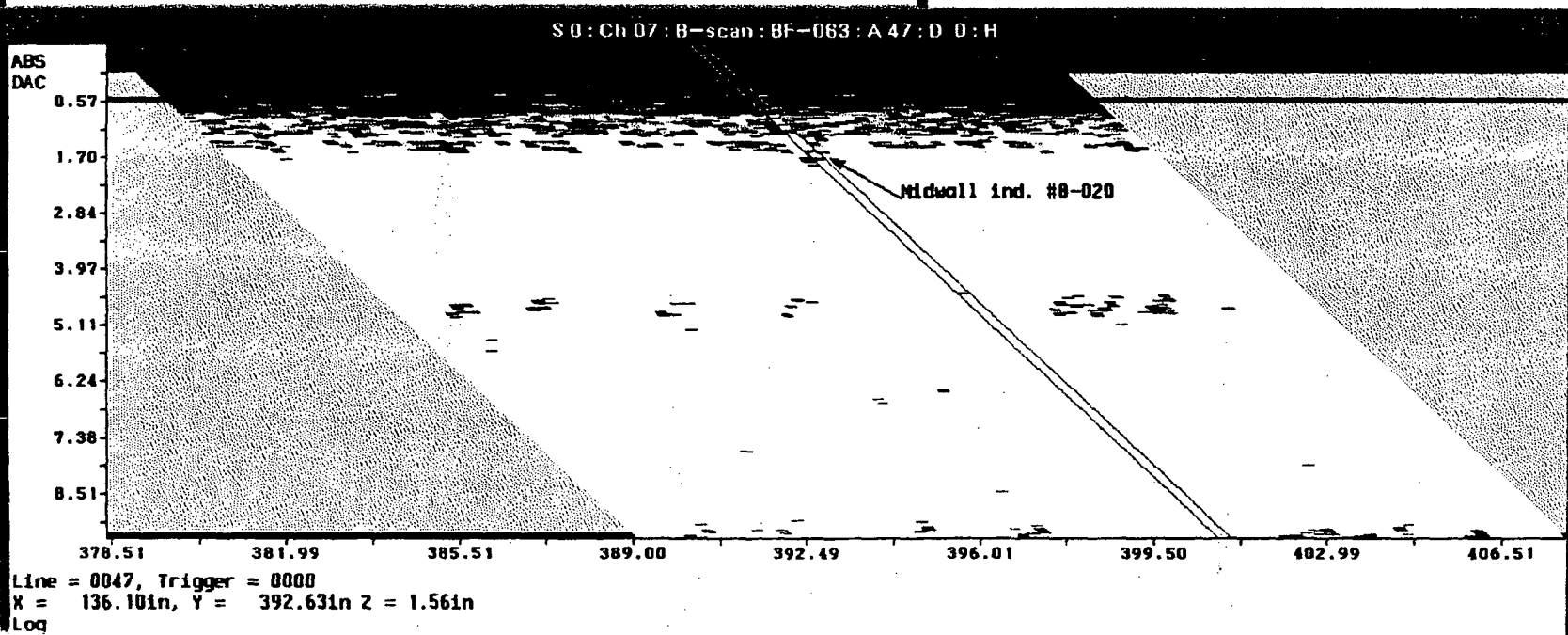
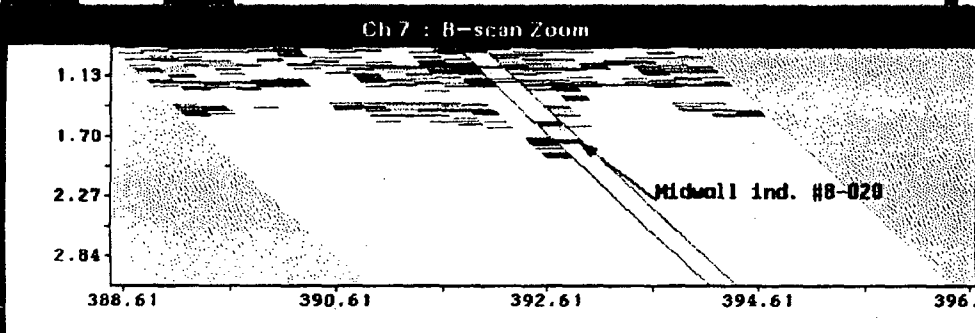
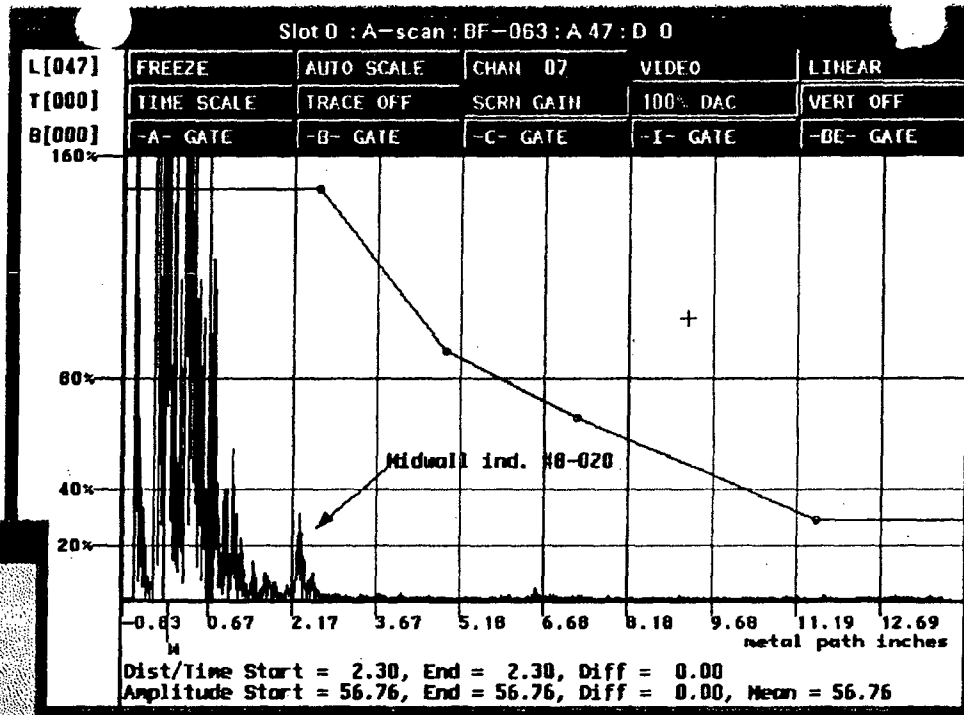
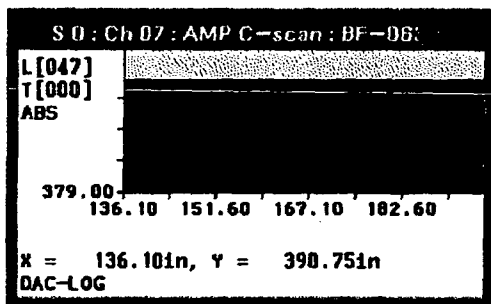
80.1

84.5

100%

50%

20%



Lower Ten

/test>dump /max

tor3/8-020

00199

199 OF 276

R1154

S 0 : Scale

32.3

36.6

41.0

45.3

49.7 100%

54.0 50%

58.4

62.7 20%

67.1

71.4

75.0

80.1

84.5

88.0

93.2

DAC

S 0 : Ch 11 : AMP C-scan : BF-063

L[043]

T[117]

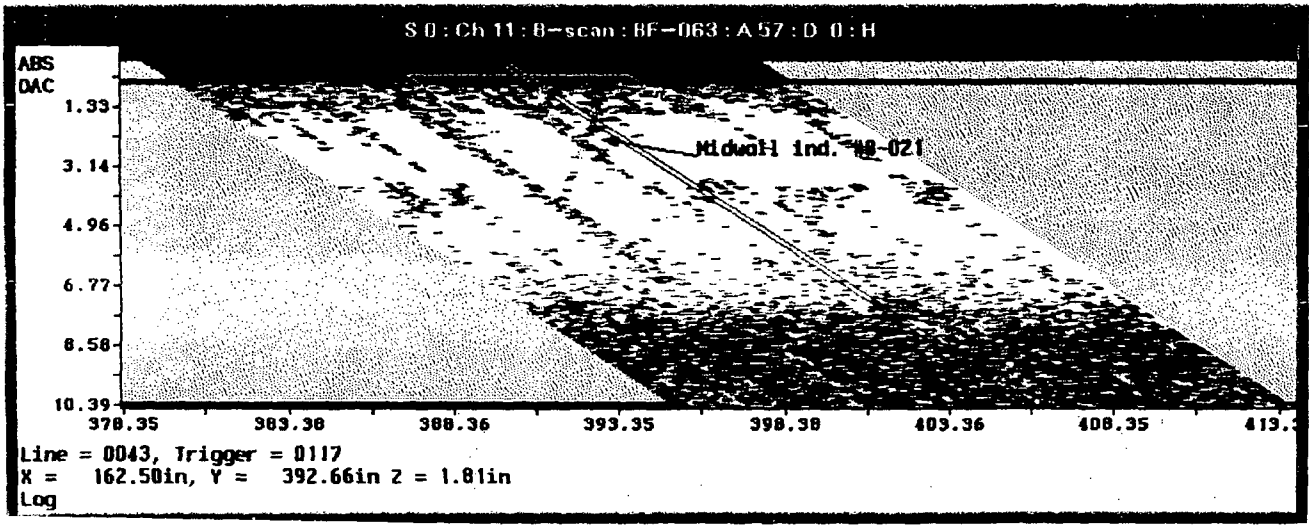
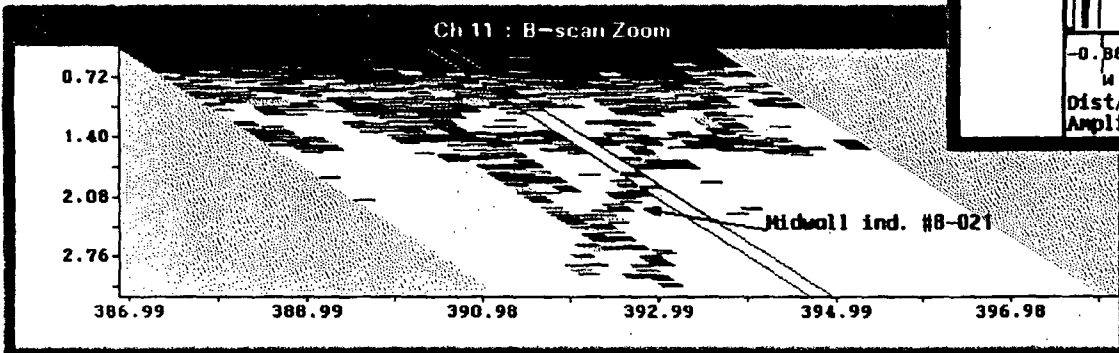
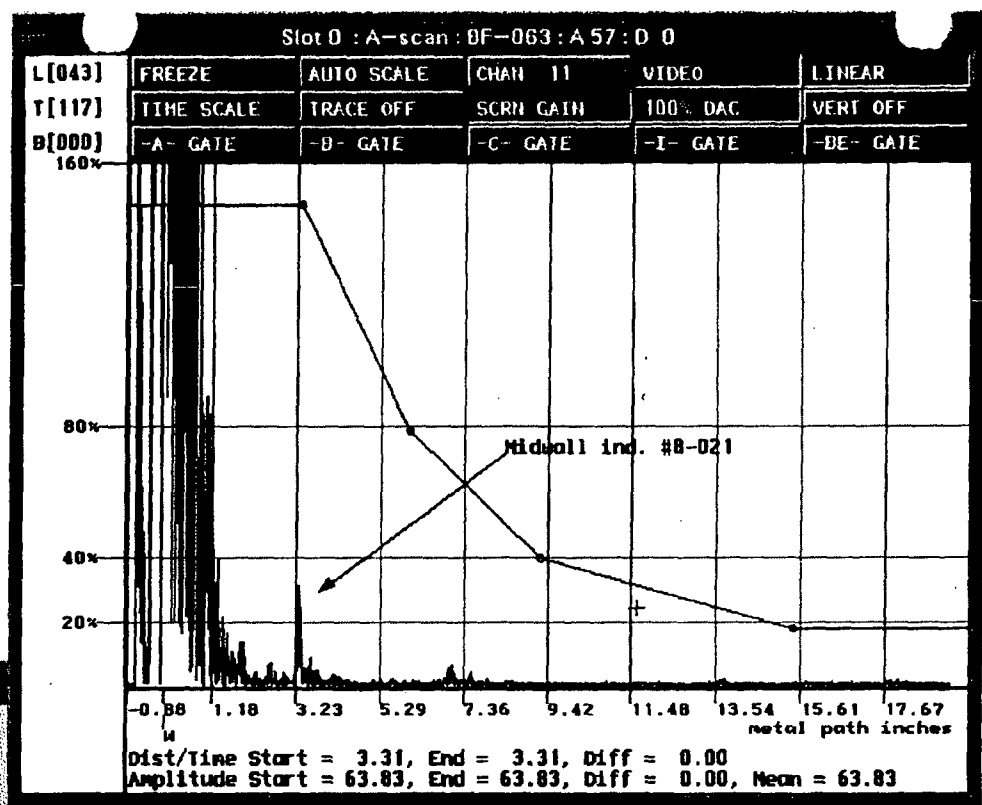
ABS

379.00

133.25 148.75 164.25 179.75

X = 162.50in, Y = 389.75in

DAC-LOG



Lower Tan

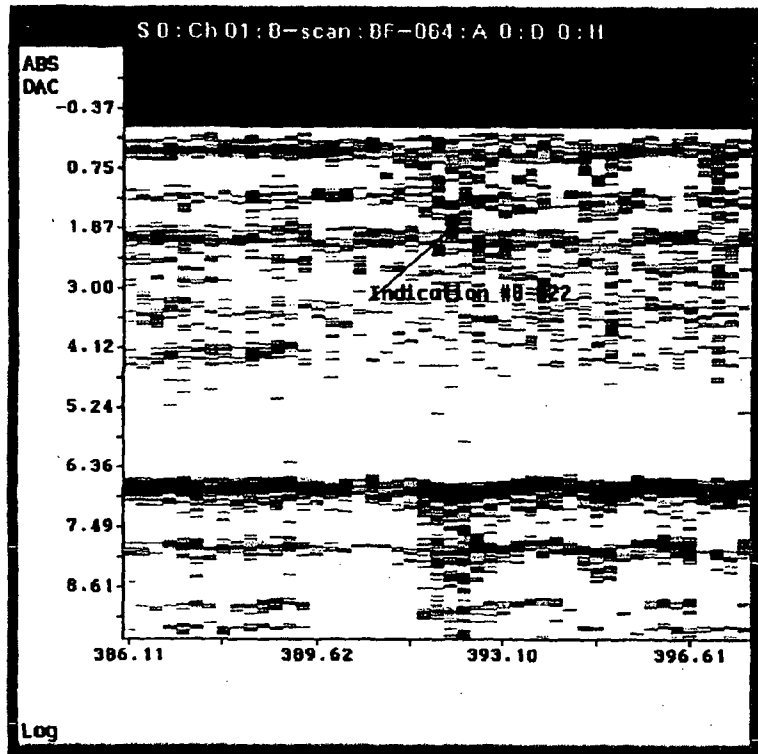
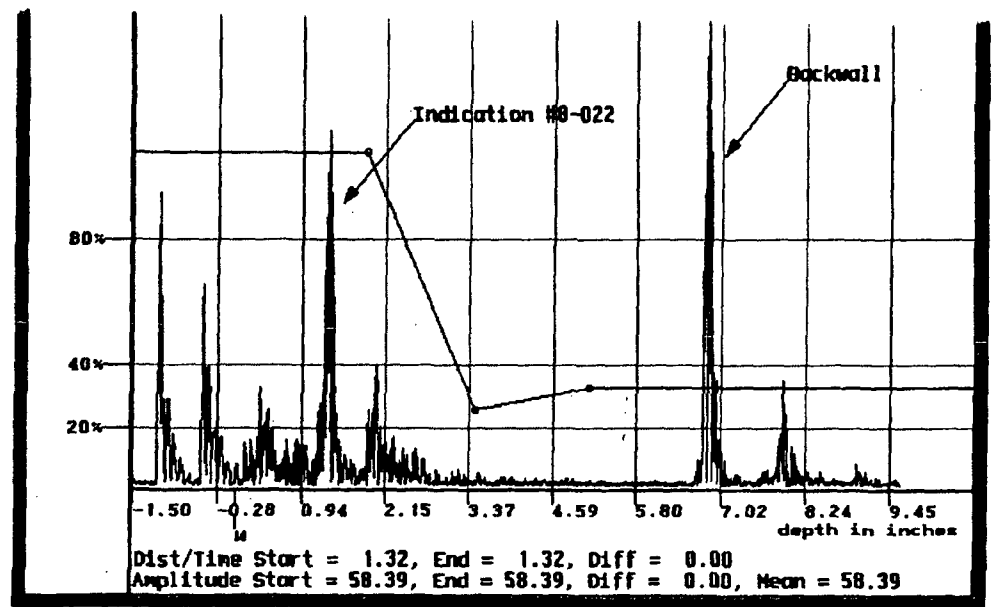
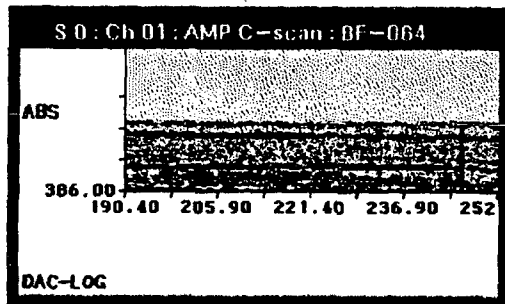
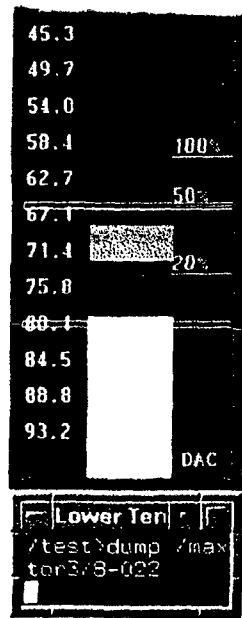
/test>dump /max

tor3/8-021

00200

R1154

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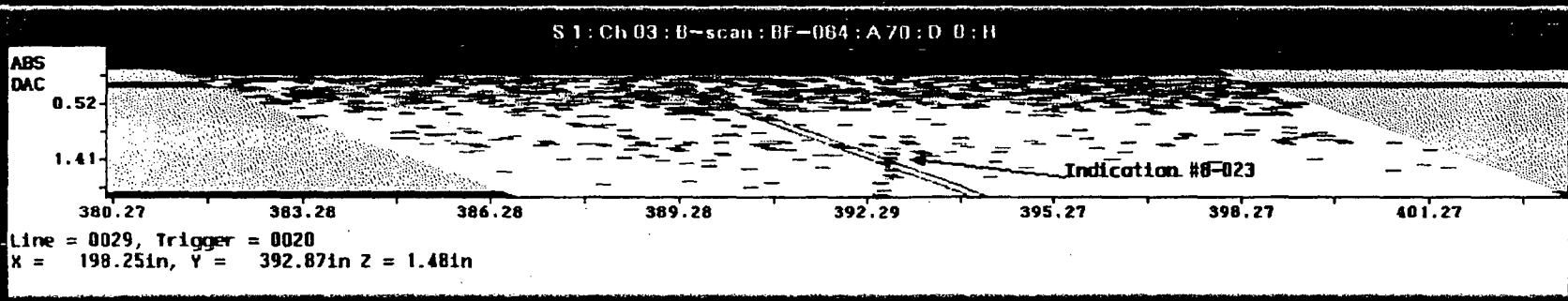
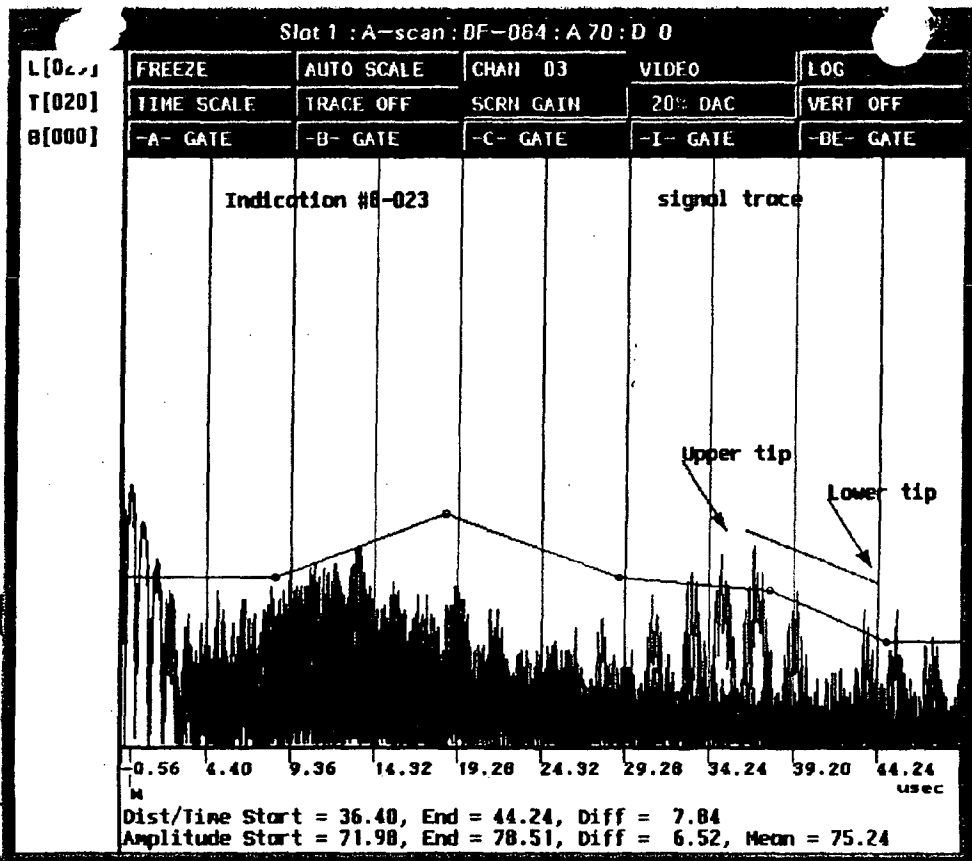
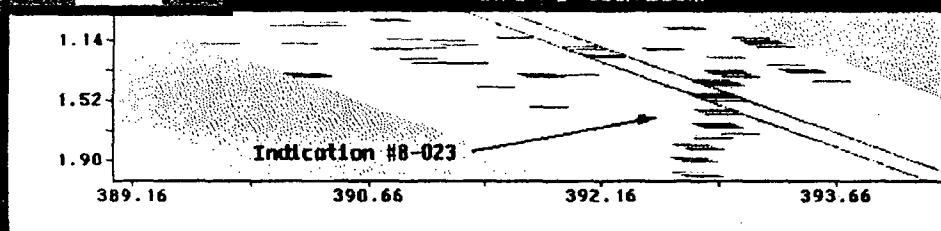
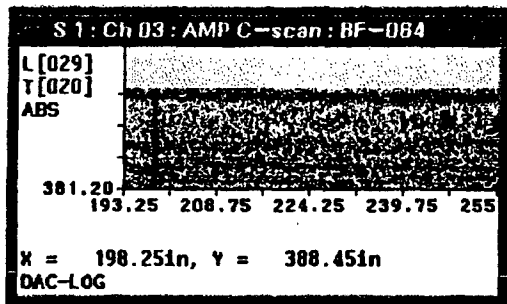
201 OF 276  
00201

S 1 : Scale

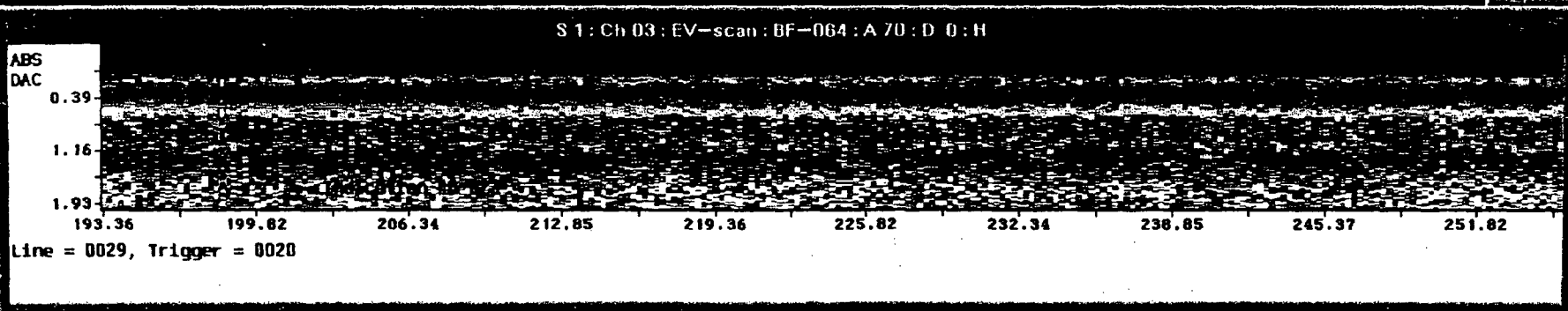
32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

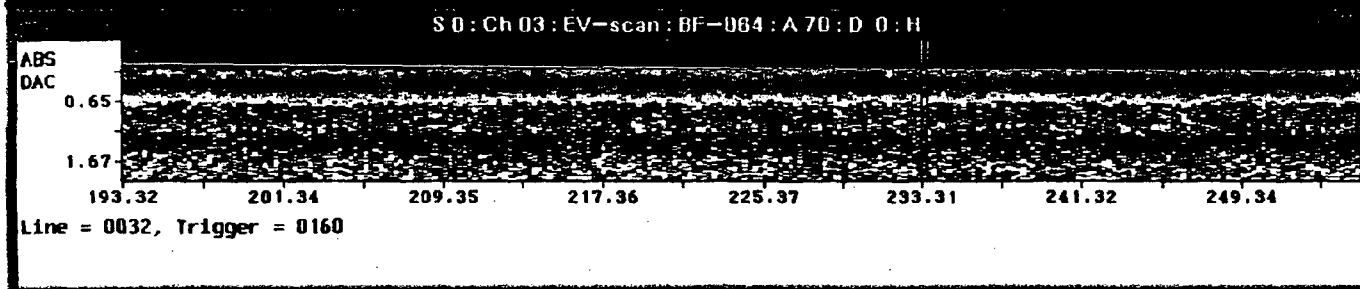
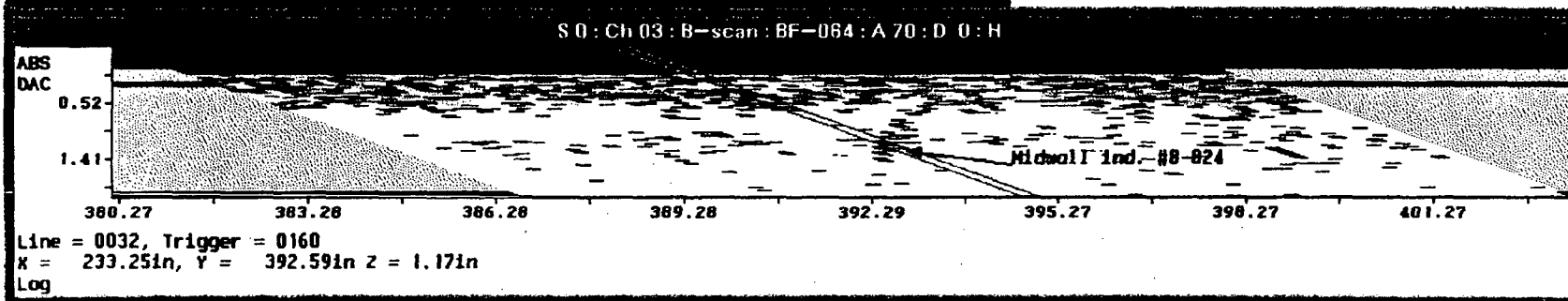
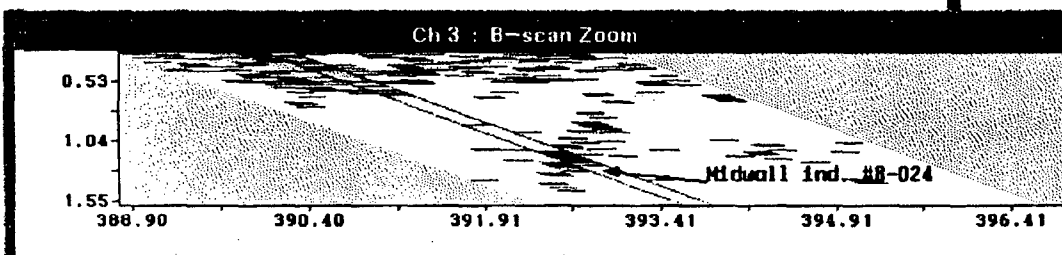
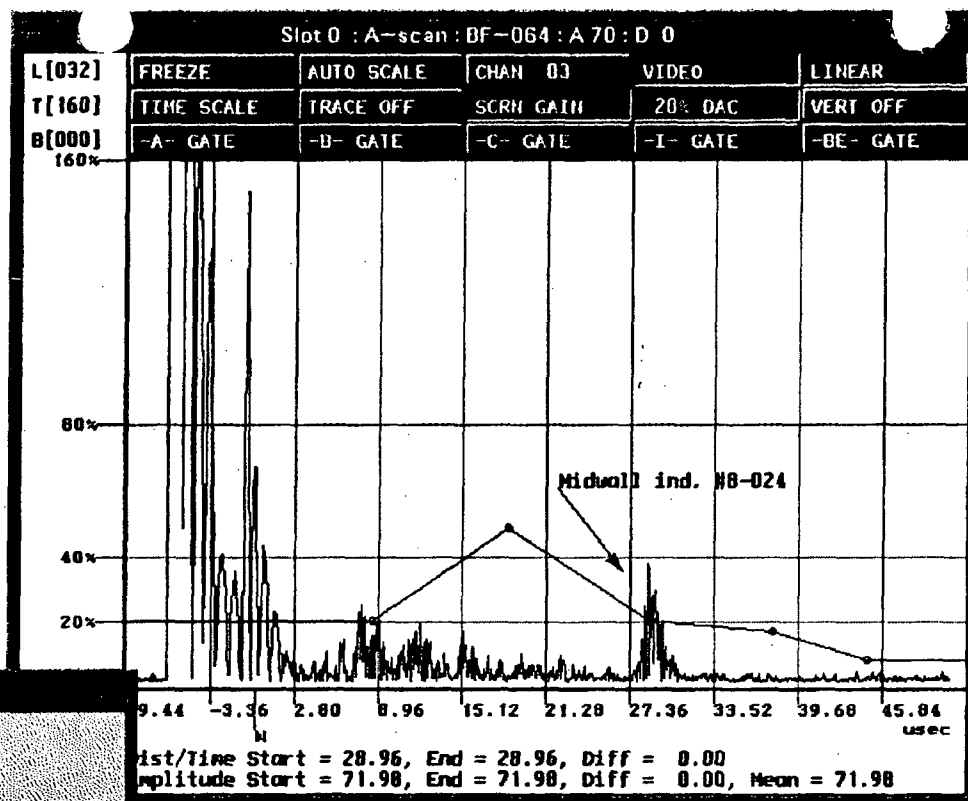
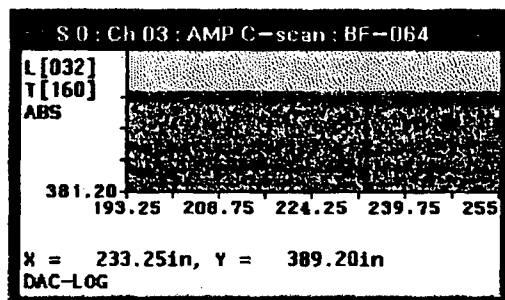
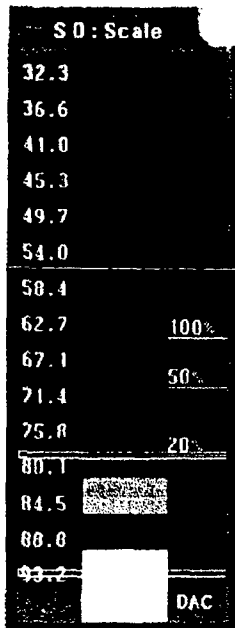
DAC



Lower Ten  
curly[geris]/lo  
/test>dump



21154  
202 OF 276  
00202



Lower Ten  
/test>dump /max  
tor3/B-024

00203

R1154  
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S O : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

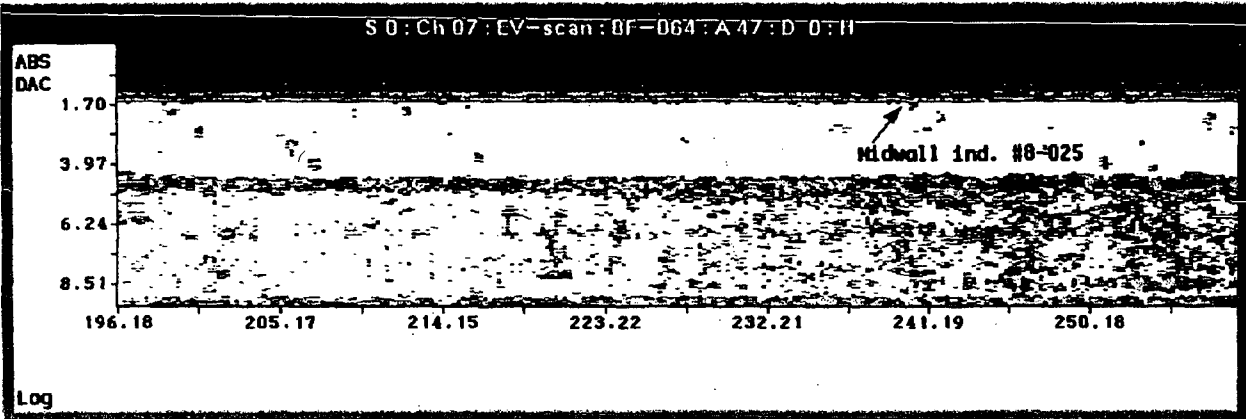
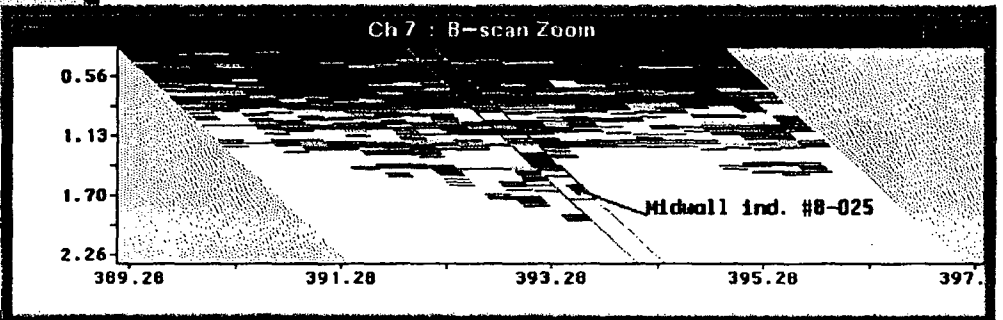
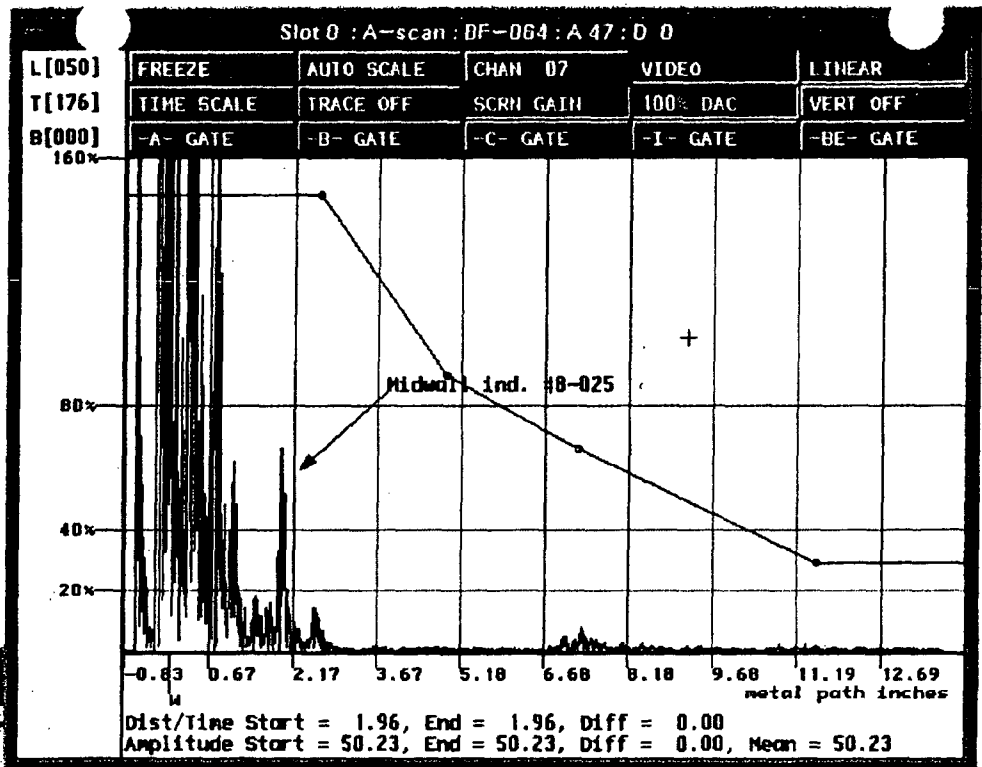
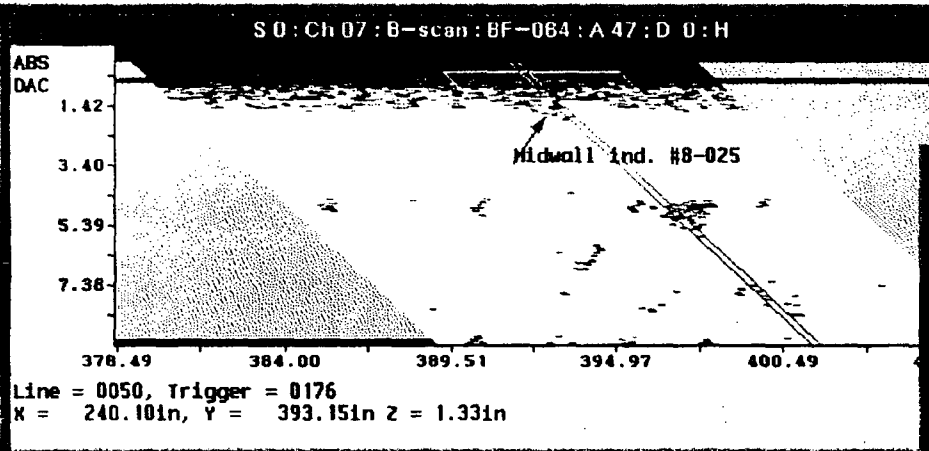
DAC

S O : Ch 07 : AMP C-scan : BF-064

L[050]  
T[176]  
ABS

379.00  
196.10 211.60 227.10 242.60 258

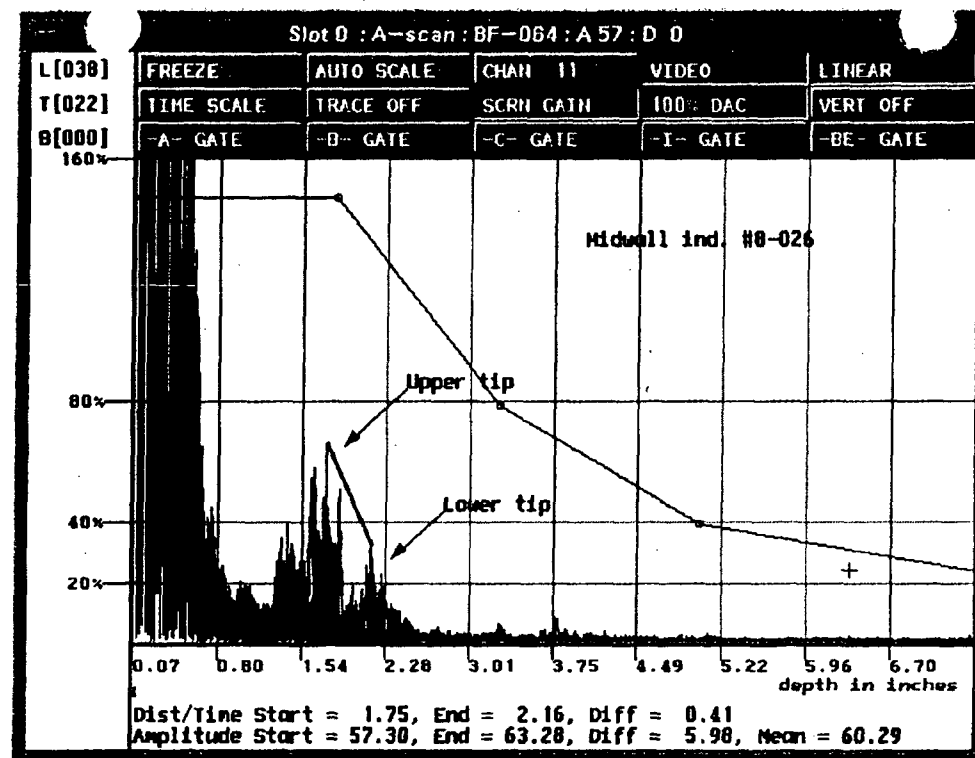
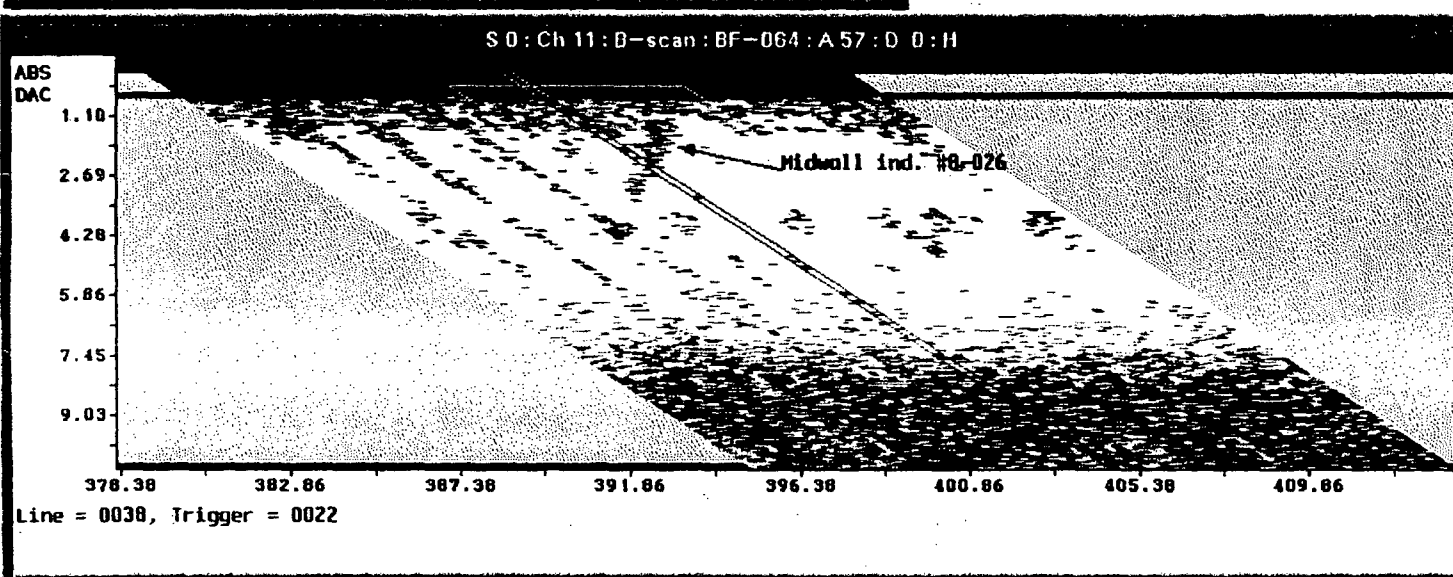
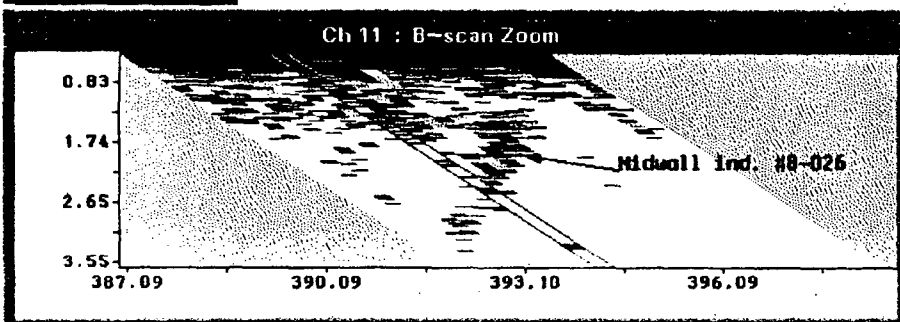
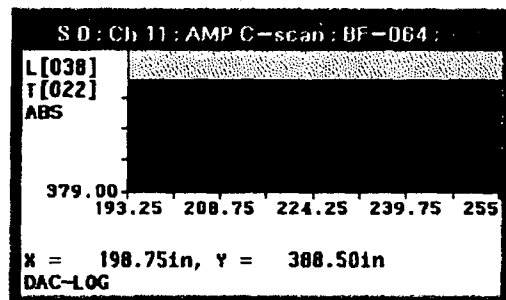
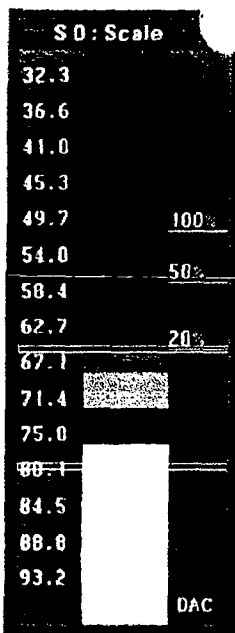
x = 240.10in, y = 391.50in  
DAC-LOG



Lower Term  
ump / mator3/8-0  
25

21154  
204 OF 276  
00204





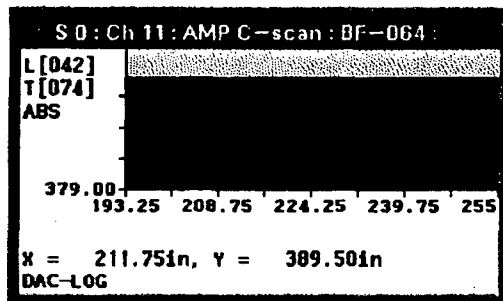
Lower Term  
/test>dump /maxt  
or 3/8-026

21154  
205 of 276  
00205

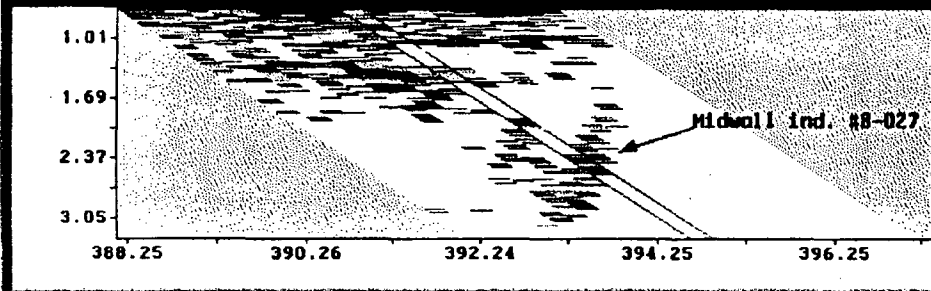
S0: Scale

32.3
36.6
41.0
45.3
49.7
54.0
58.4
62.7
67.1
71.4
75.8
80.1
84.5
88.8
93.2

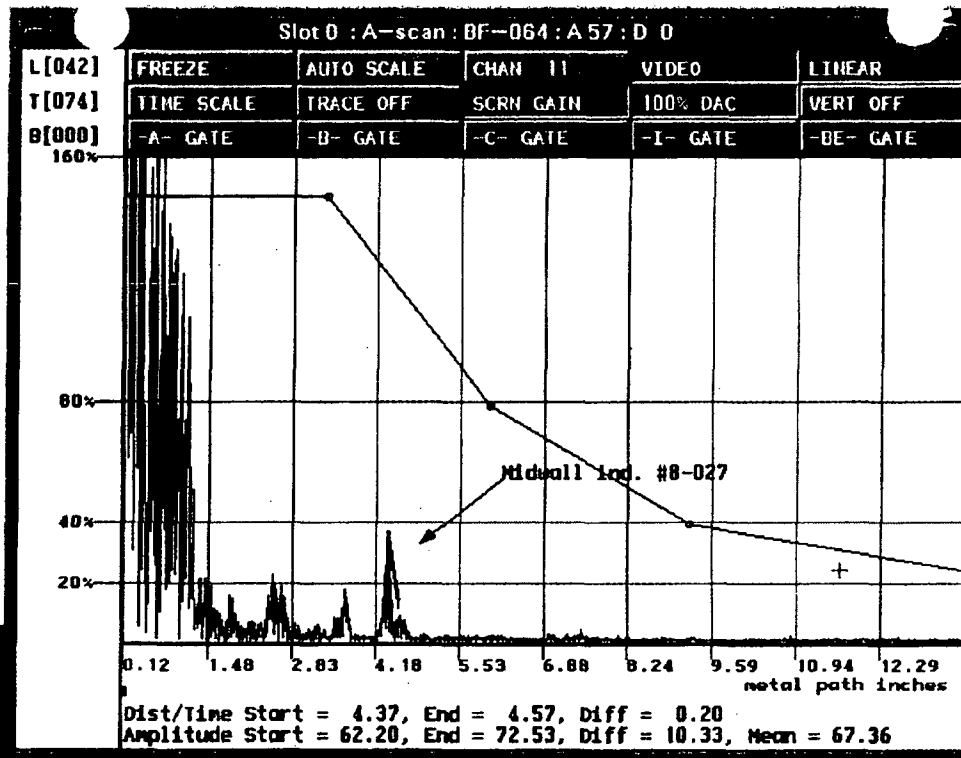
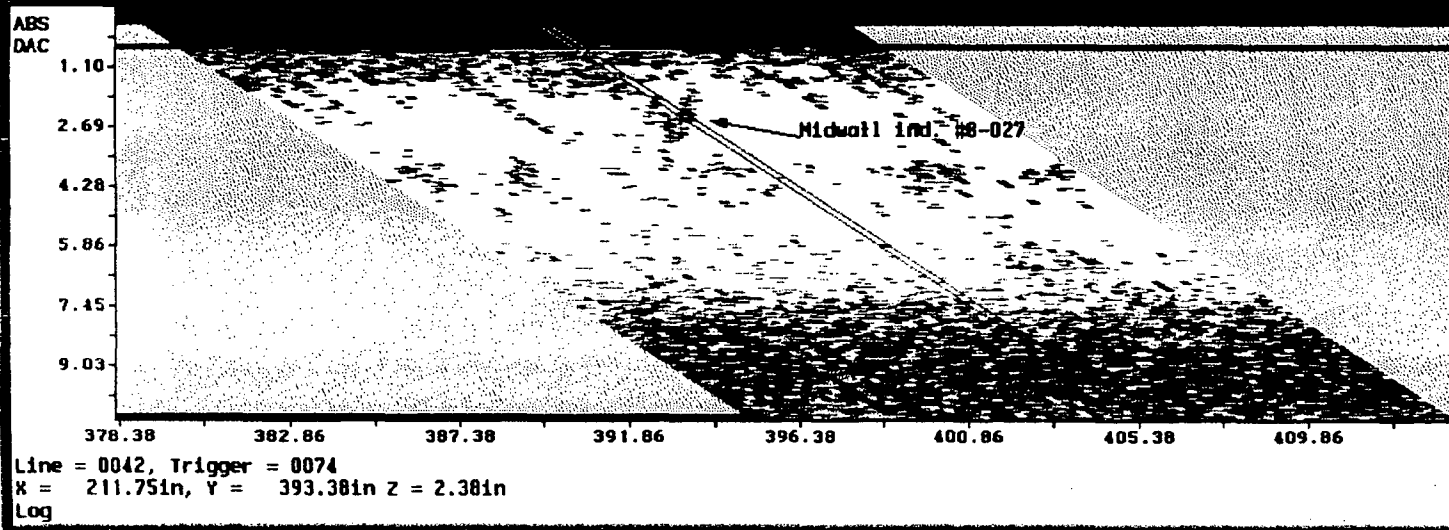
DAC



Ch 11: B-scan Zoom



S0: Ch 11: B-scan: BF-064: A 57: D 0: H



Lower Term  
/test>dump /maxt  
or 3/8-027

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00206  
R1154

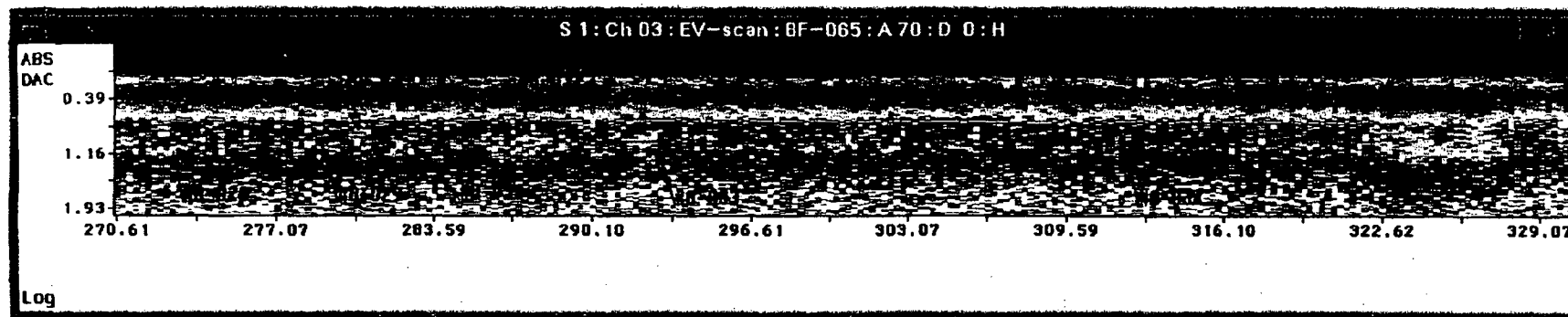
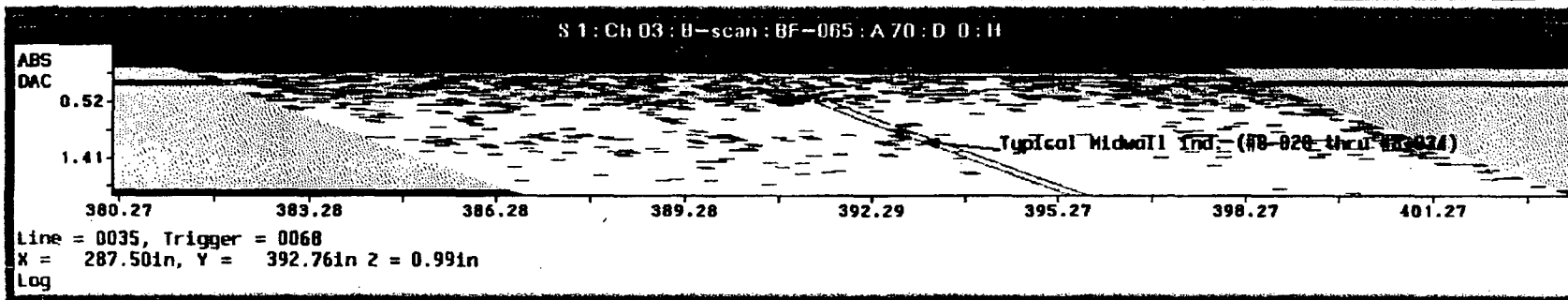
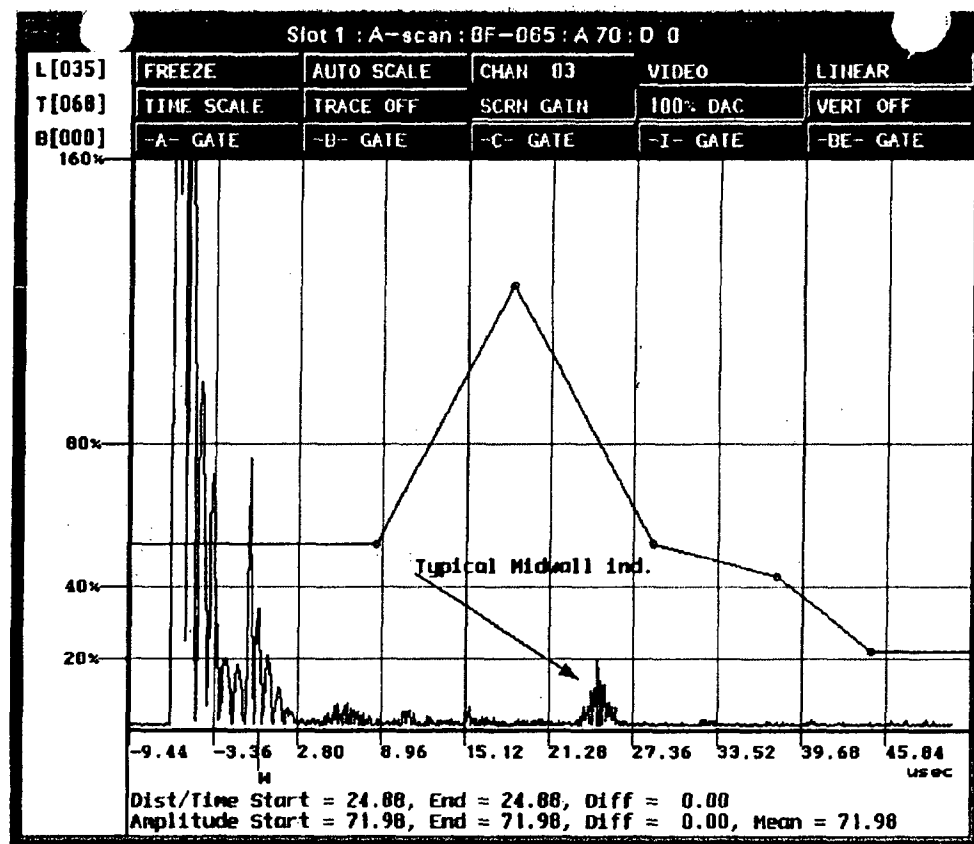
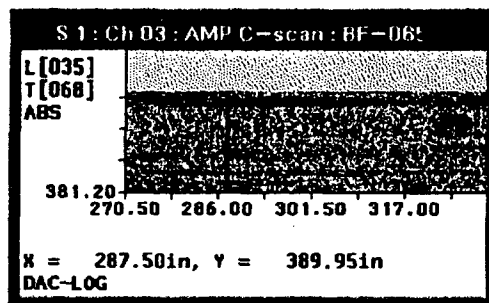
**S 1: Scale**

32.3	
36.6	
41.0	
45.3	
49.7	
54.0	
58.4	
62.7	100%
67.1	50%
71.4	
75.8	20%
80.1	
84.5	
88.8	
93.2	

DAC

**Lower Ten**

/test>dump /max  
tor3/8-028



21154  
207 of 276  
00207

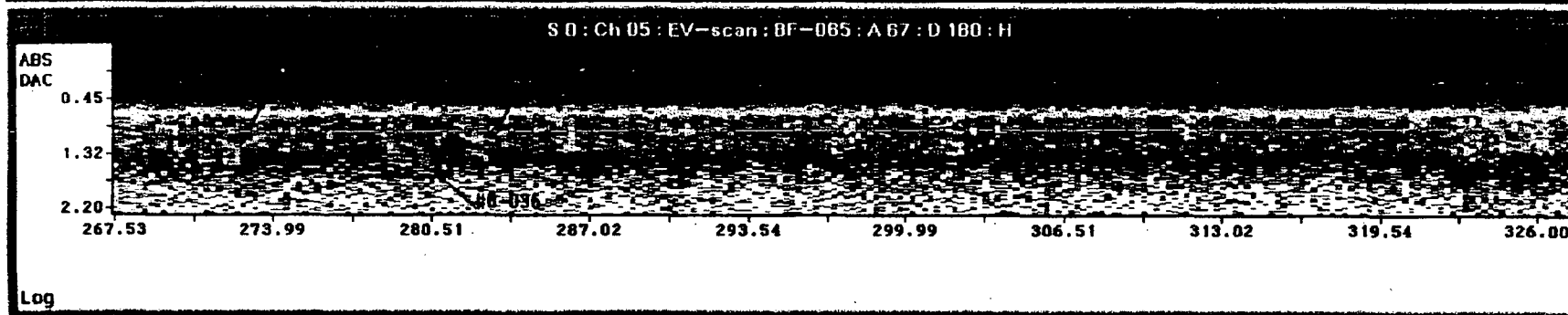
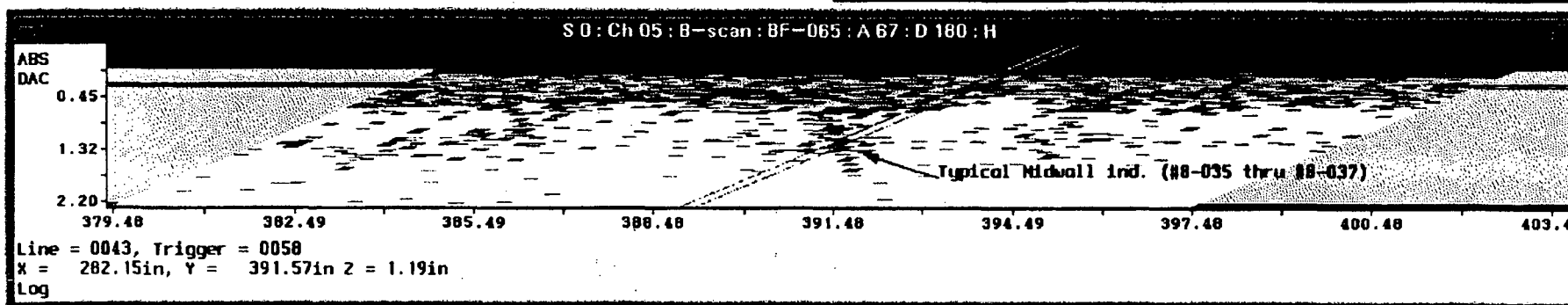
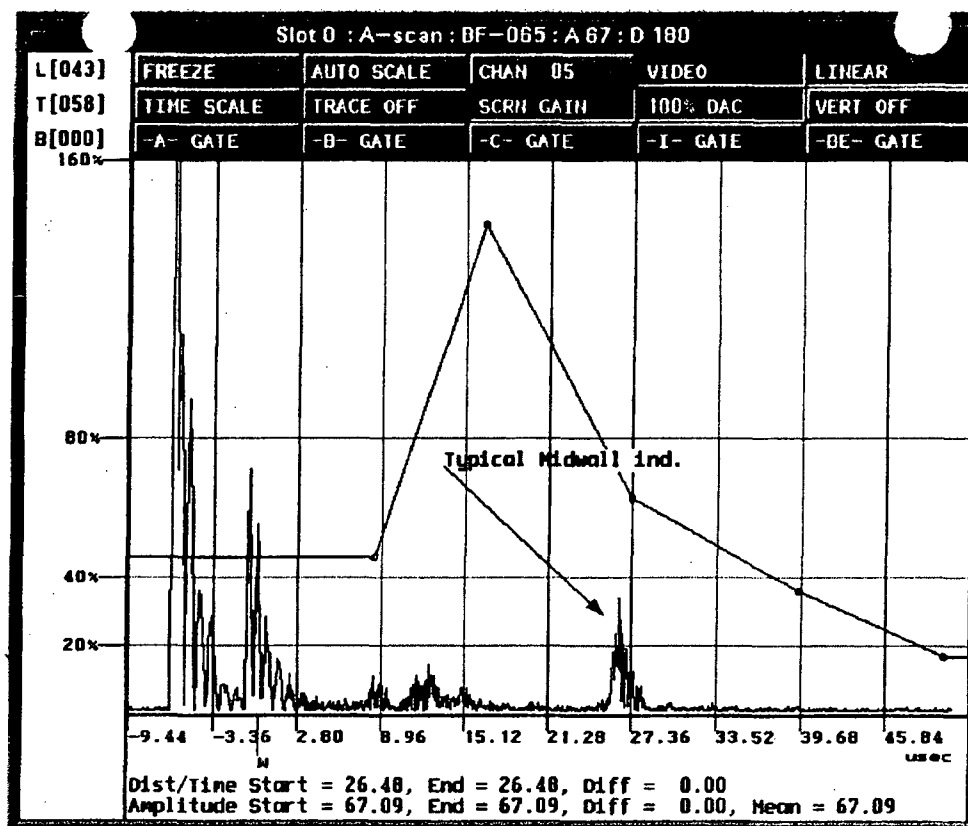
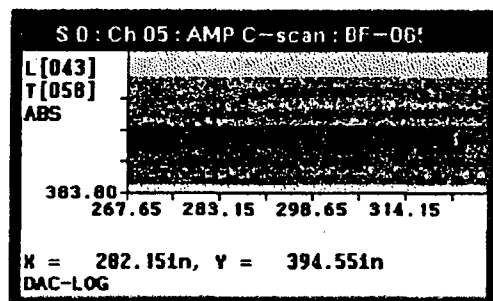
S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC

Lower Ten  
/test>dump /max  
tor3/8-035

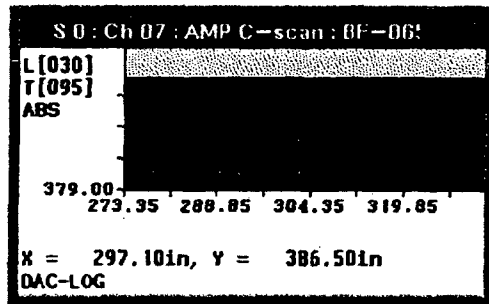


21154  
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00208

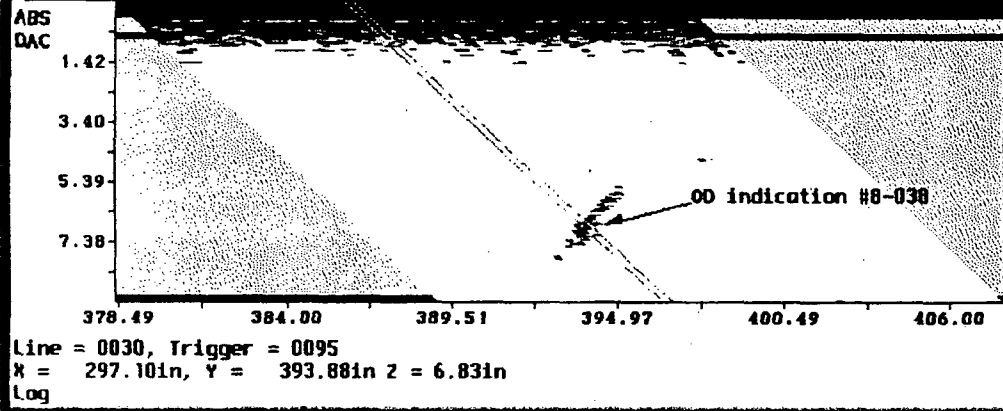
S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.0

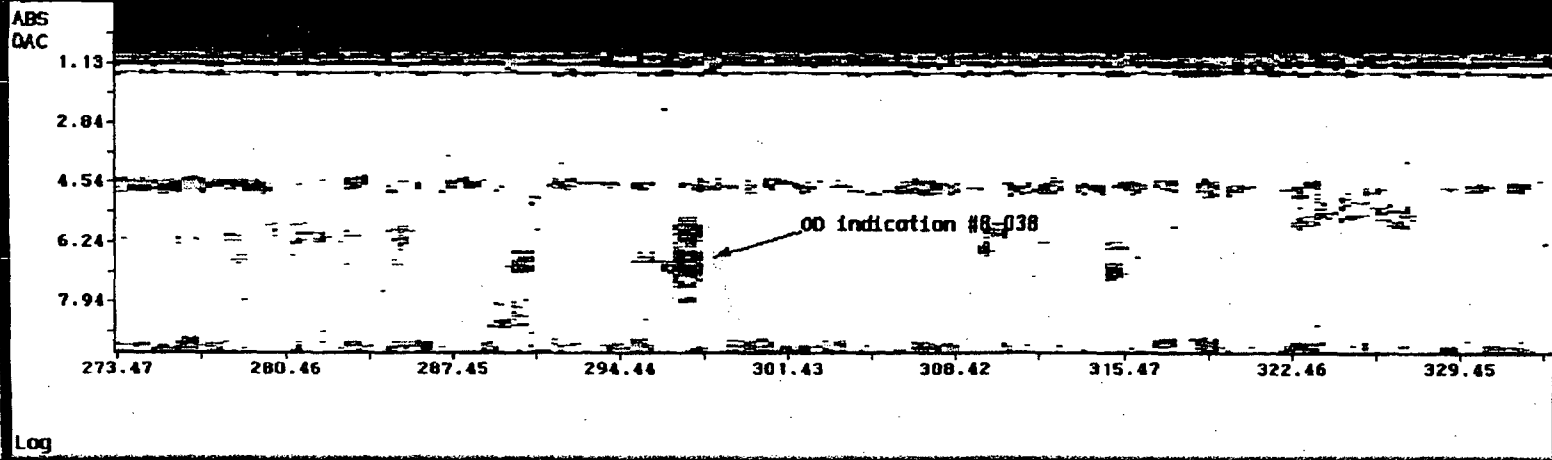
100%  
50%  
20%



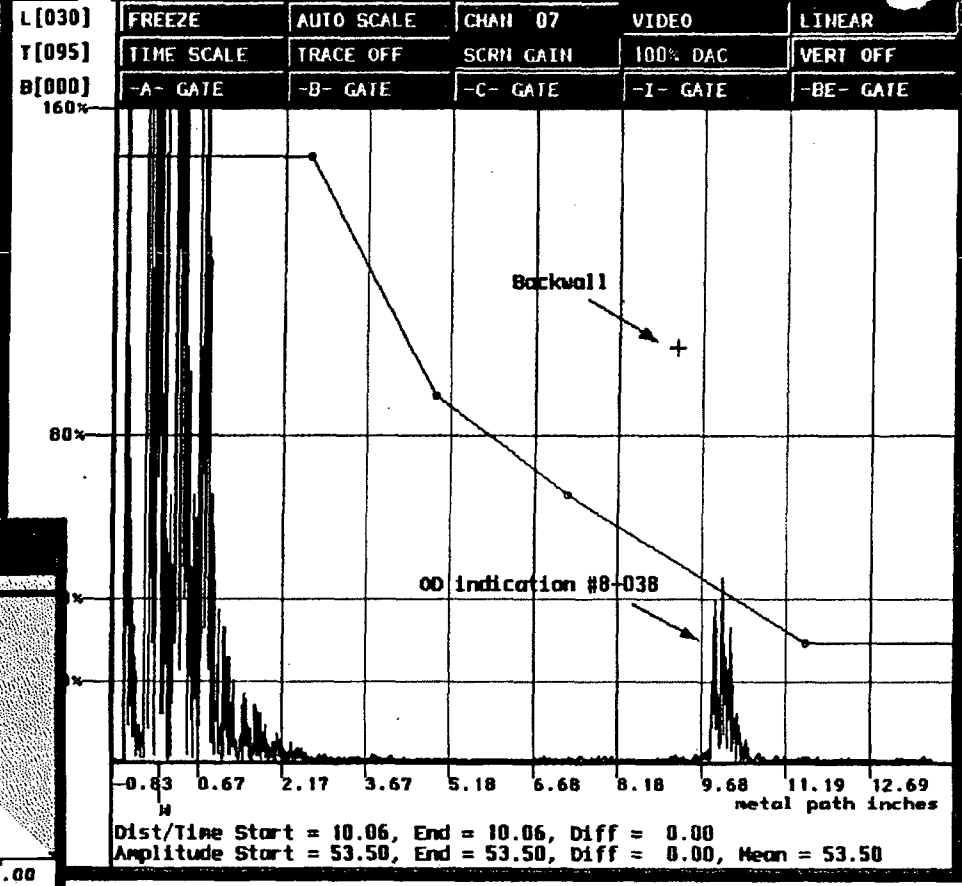
S 0 : Ch 07 : B-scan : BF-065 : A 47 : D 0 : H



S 0 : Ch 07 : EV-scan : BF-065 : A 47 : D 0 : H

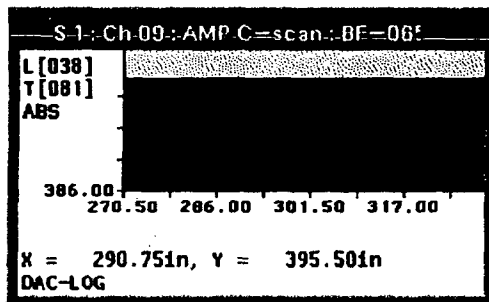
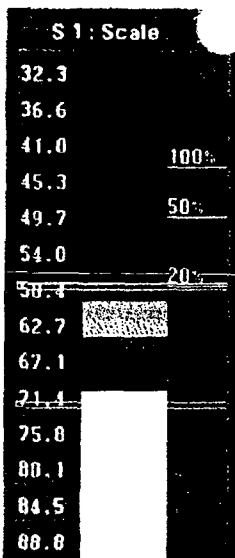


Slot 0 : A-scan : BF-065 : A 47 : D 0

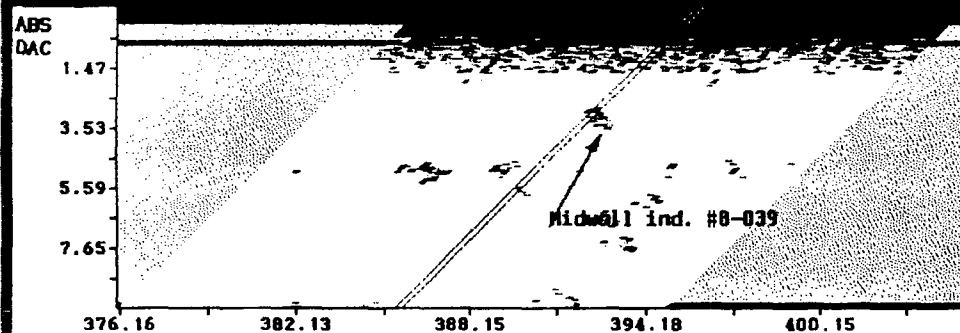


Lower Ten  
/test>dump /max  
tor3/8-038

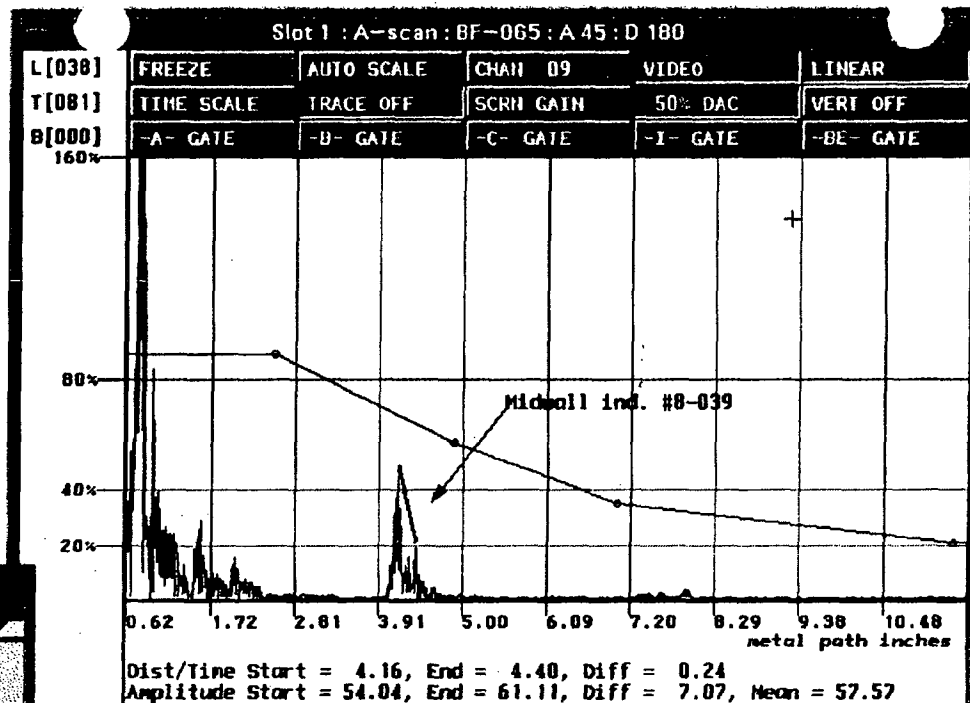
00209  
209 of 276  
R 1154



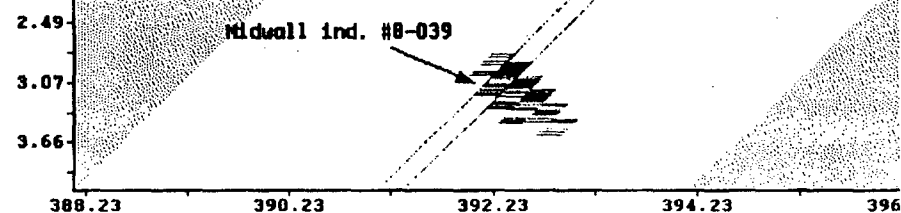
S 1: Ch 09: B-scan: BF-065: A 45: D 180: H



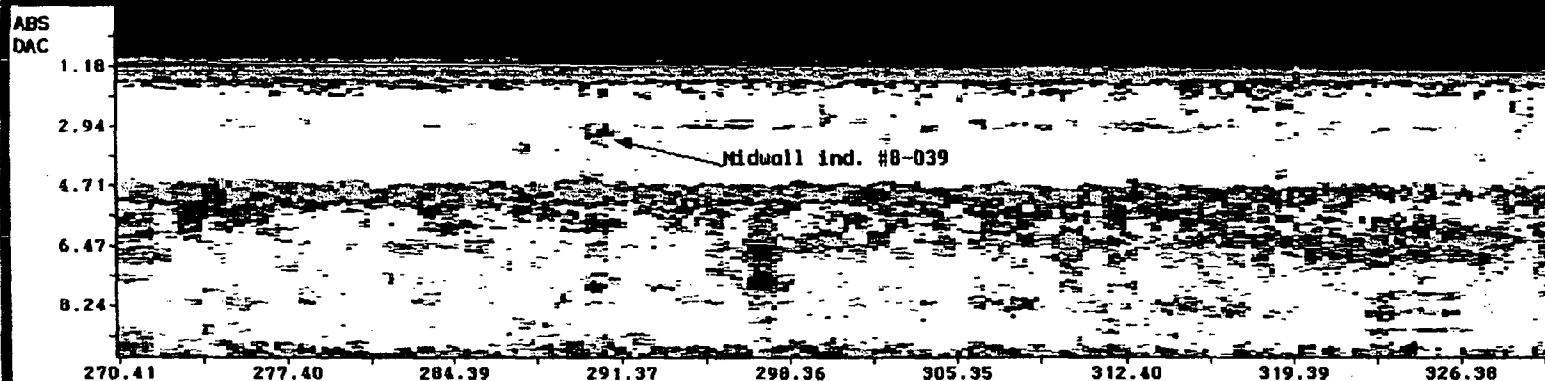
Line = 0038, Trigger = 0081  
X = 290.75in, Y = 392.39in Z = 2.93in



Ch 9: B-scan Zoom



S 1: Ch 09: EV-scan: BF-065: A 45: D 180: H



Log

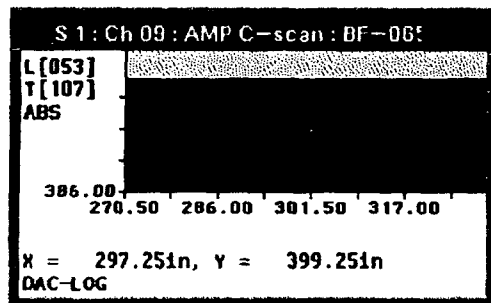
Lower Tor  
/test>dump /max  
tor3/8-039

R1154  
210 OF 276  
00210

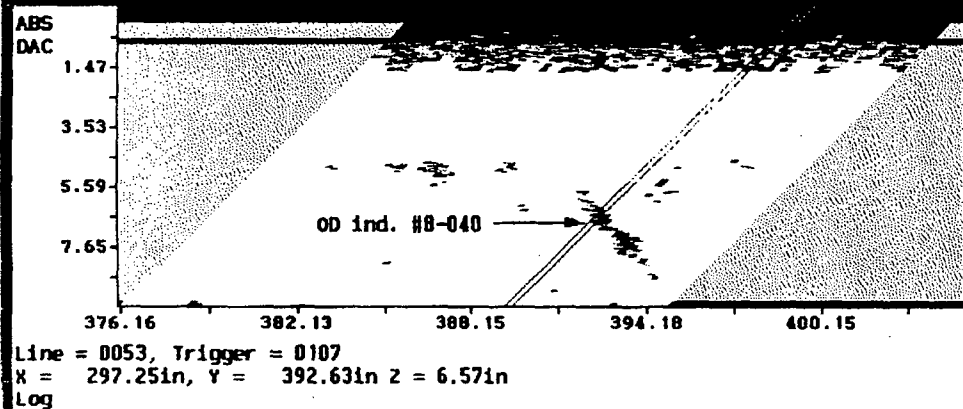
S 1: Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

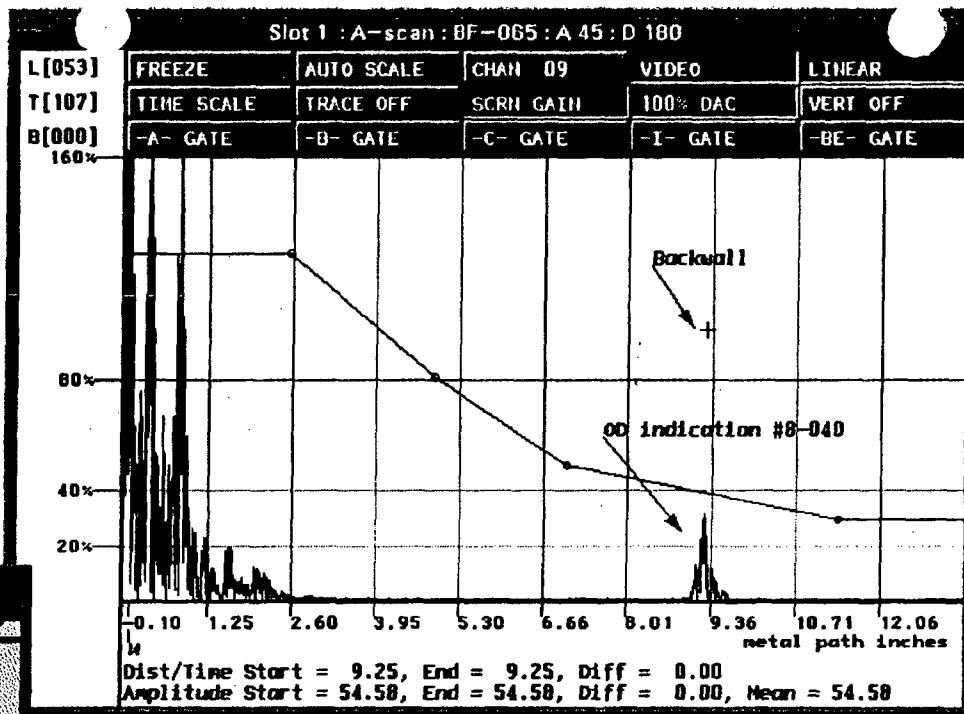
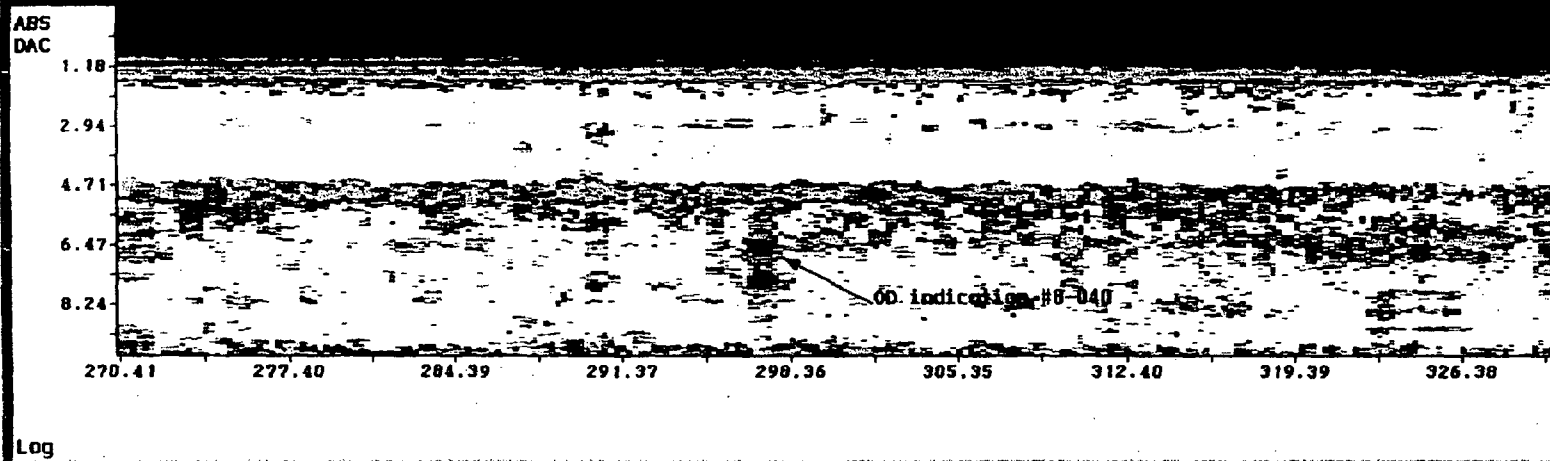
100%  
50%  
20%



S 1: Ch 09: 8-scan: BF-065: A 45: D 180: H



S 1: Ch 09: EV-scan: BF-065: A 45: D 180: H



Lower Ten  
/test>dump /max  
tor3/8-040

00211

R 1154  
211 05 276

S 0 : Scale

32.3

36.6

41.0

45.3

49.7 100%

54.0 50%

58.4

62.7 20%

67.1

71.4

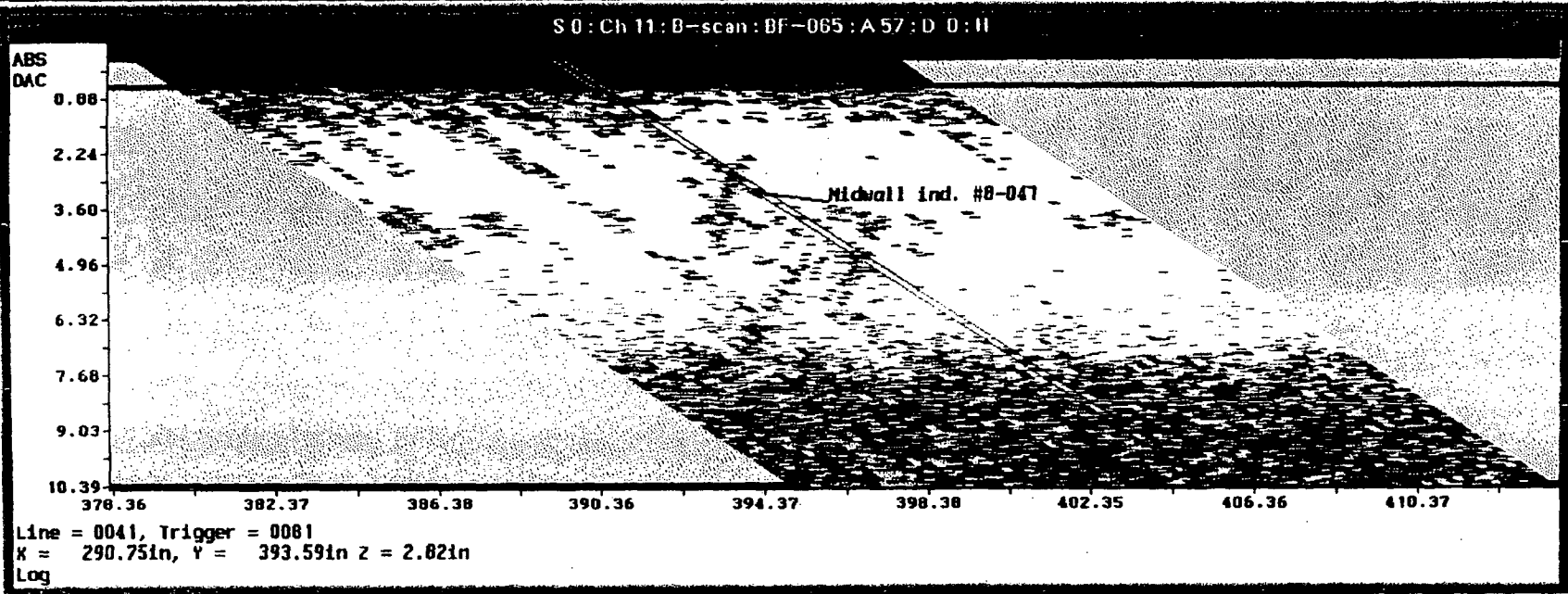
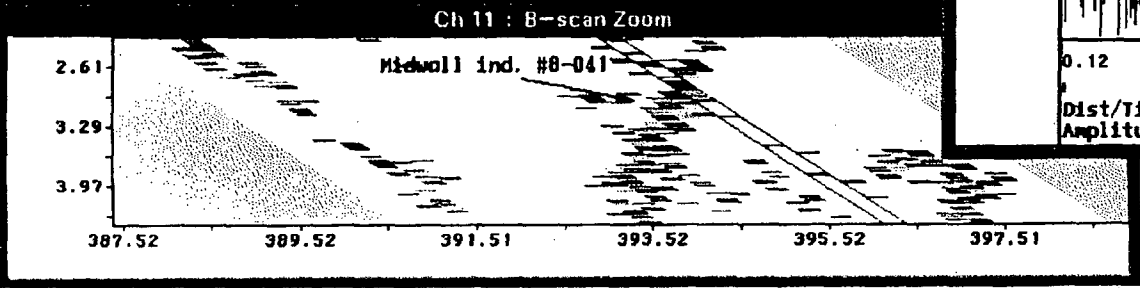
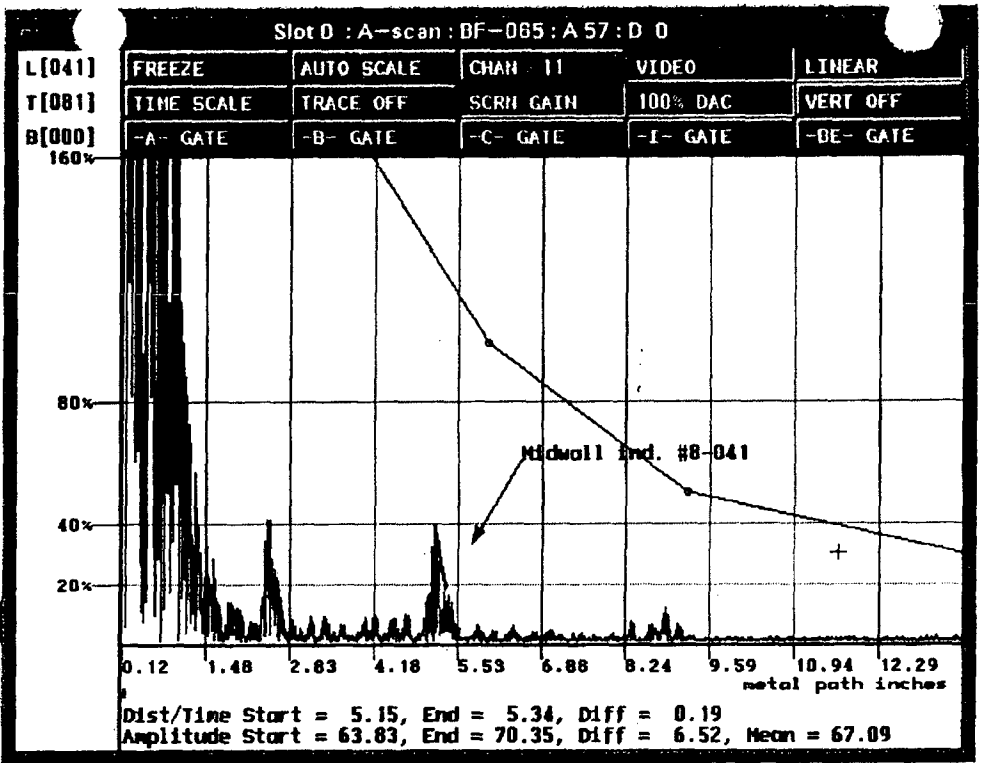
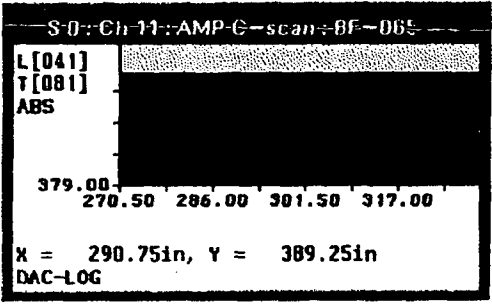
75.8

80.1

84.5

88.8

93.2

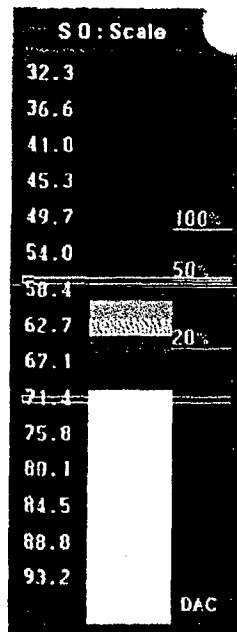


00212

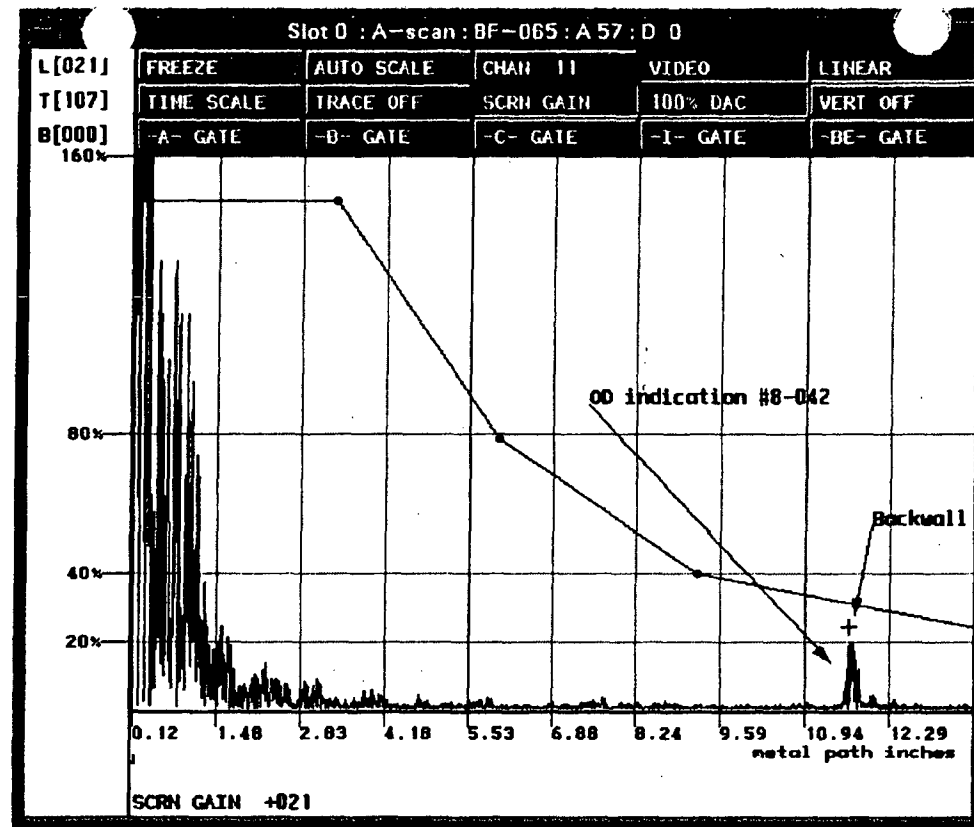
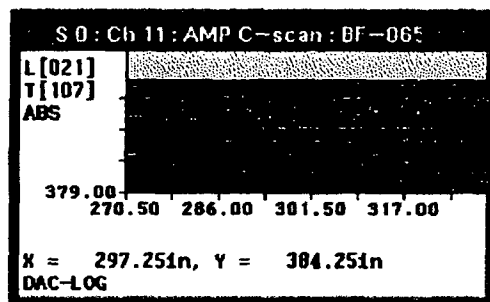
212 OF 276

R1154

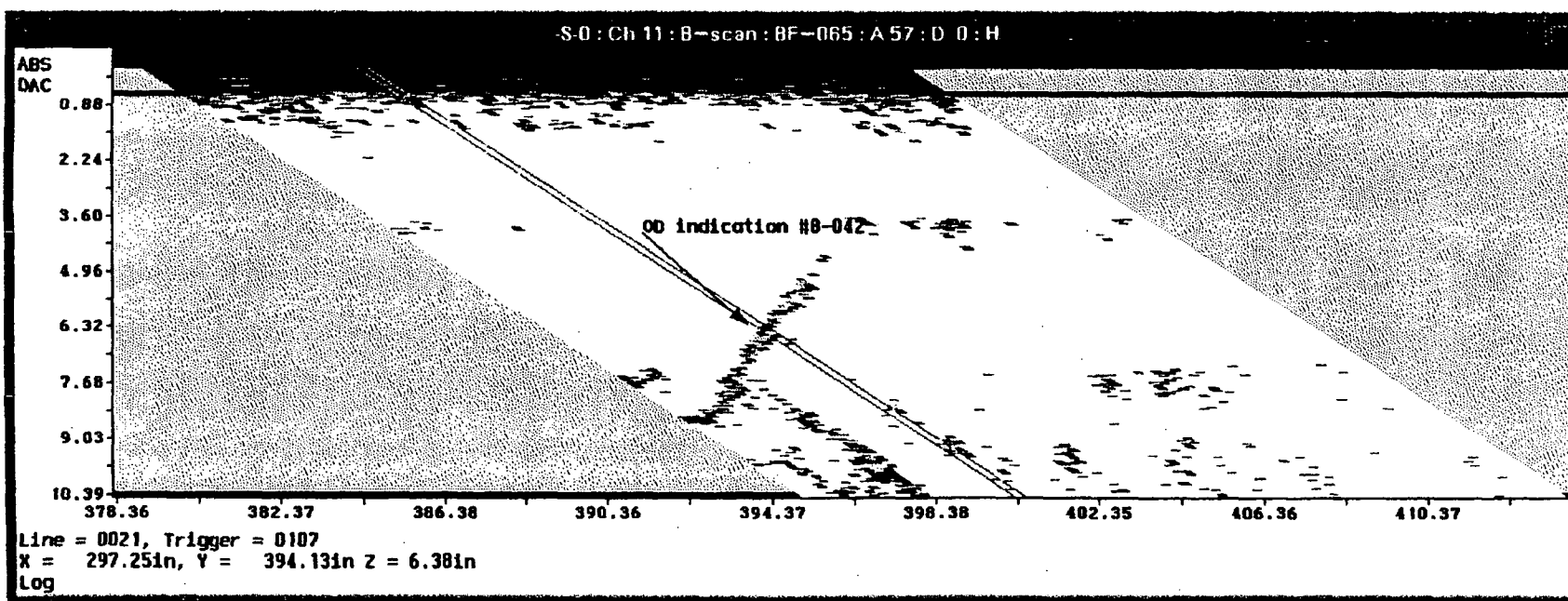




Lower Ten  
/test>dump /max  
tor3/8-042



00000 00213

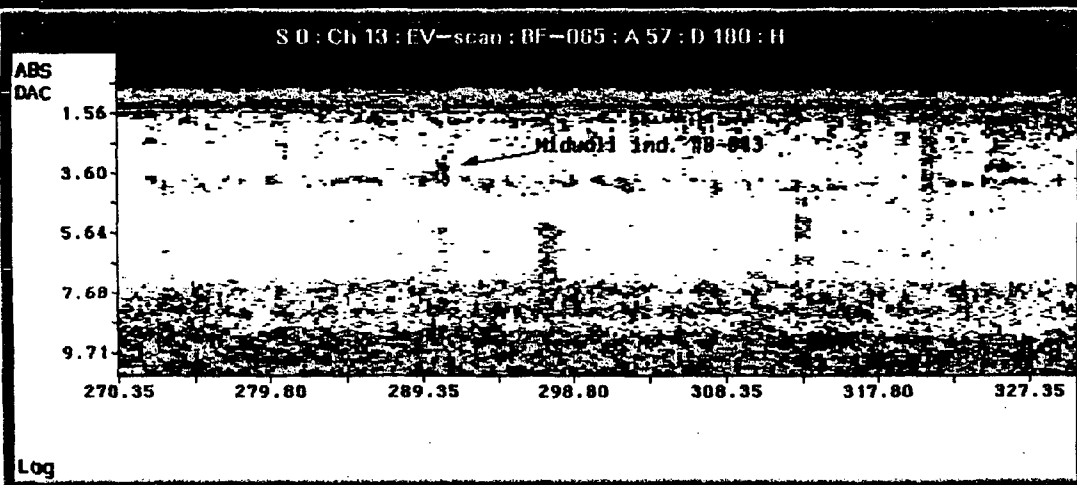
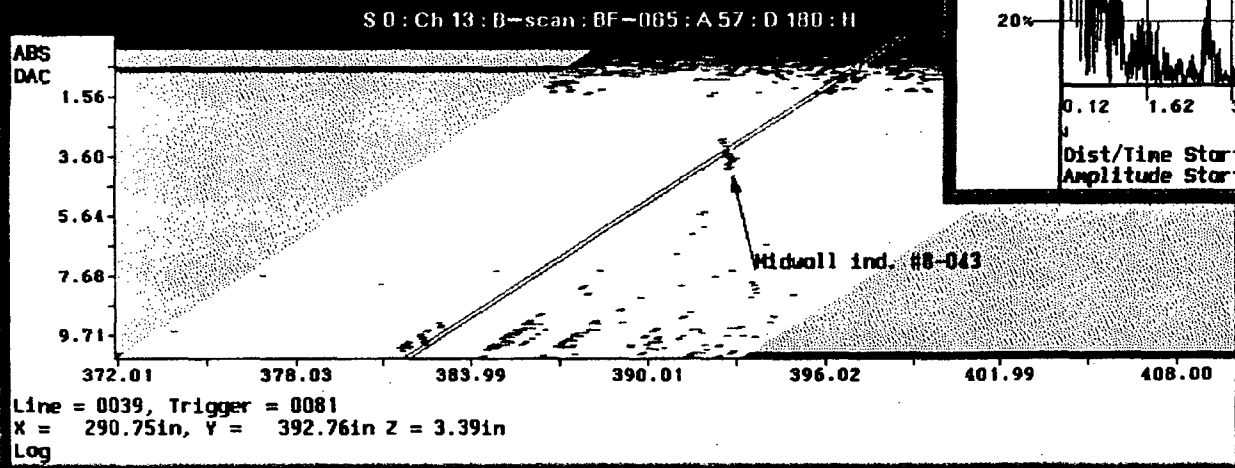
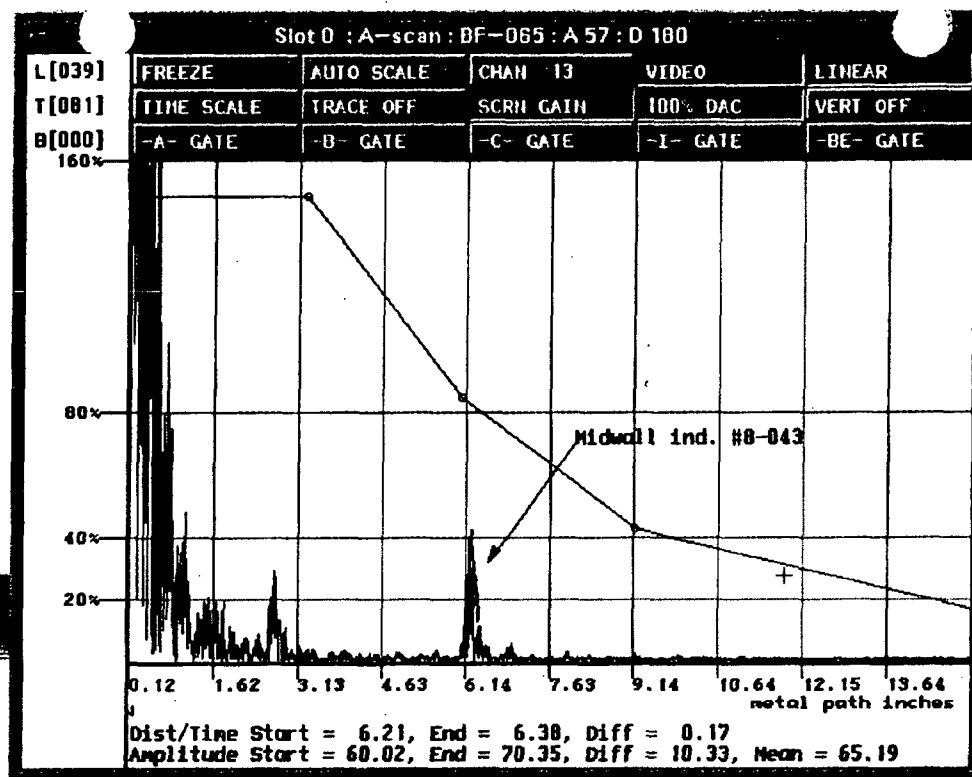
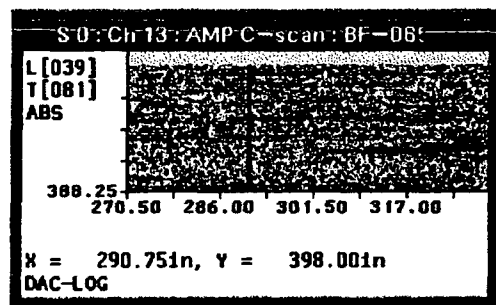


R1154  
213 of 276  
00213

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.0

100%  
50%  
20%

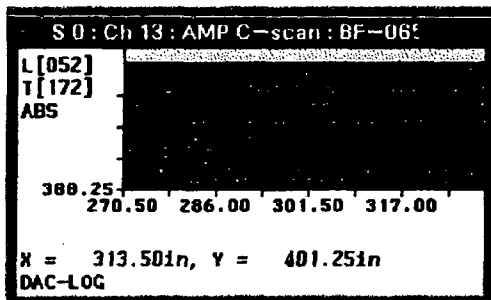


Lower Ter  
/test>dump /max  
tor3/B-043

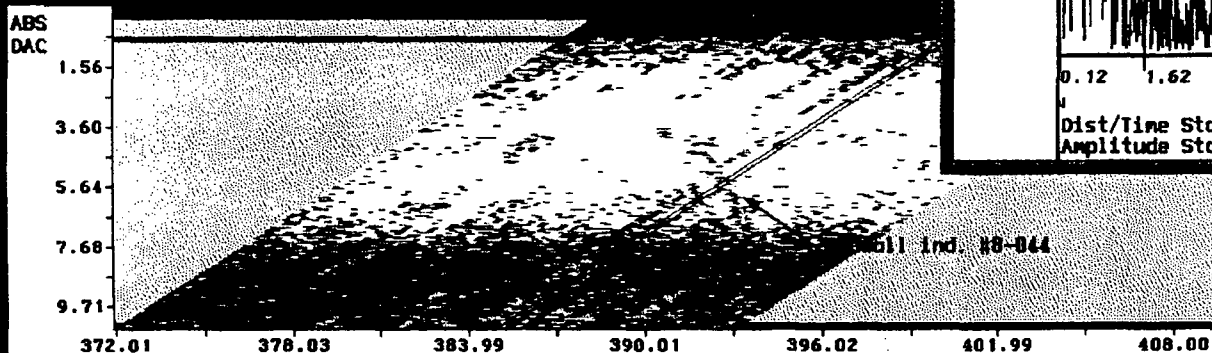
214 OF 276  
00214  
R1154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0 50%  
58.4  
62.7 20%  
67.1  
71.4  
75.0  
80.1  
84.5  
88.0

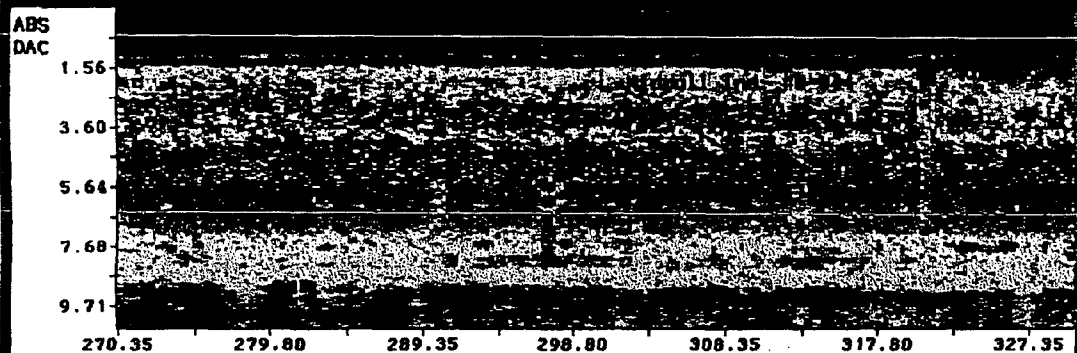


S 0 : Ch 13 : B-scan : BF-065 : A 57 : D 100 : H

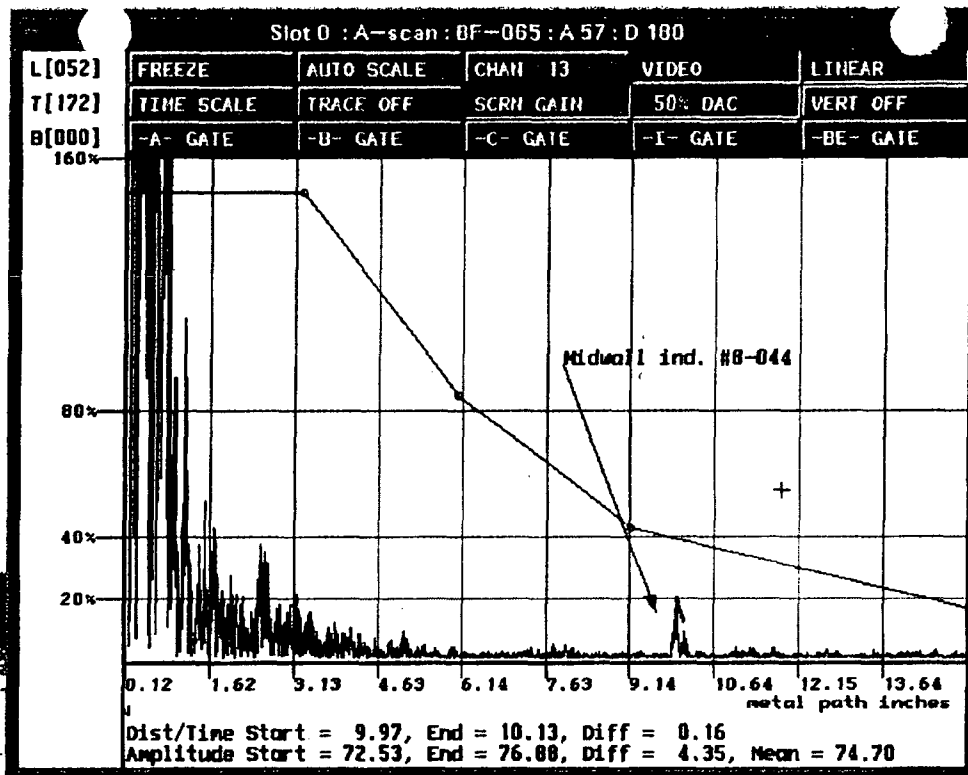


Line = 0052, Trigger = 0172  
X = 313.50in, Y = 392.76in Z = 5.43in  
Log

S 0 : Ch 13 : EV-scan : BF-065 : A 57 : D 100 : H



Log

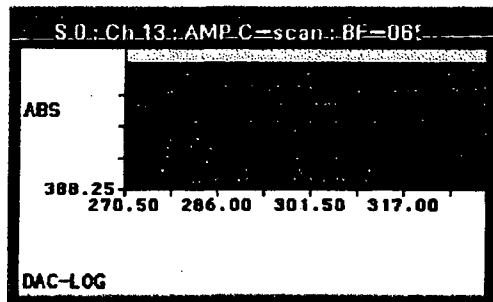


Lower Ten  
/test>dump /max  
tor3/B-044

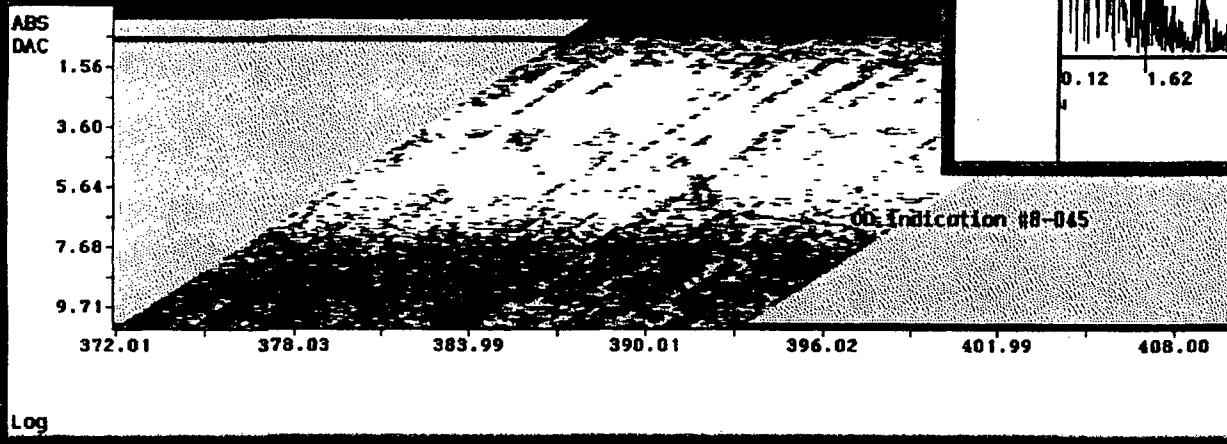
215 of 276  
R1154  
00215

S 0 : Scale

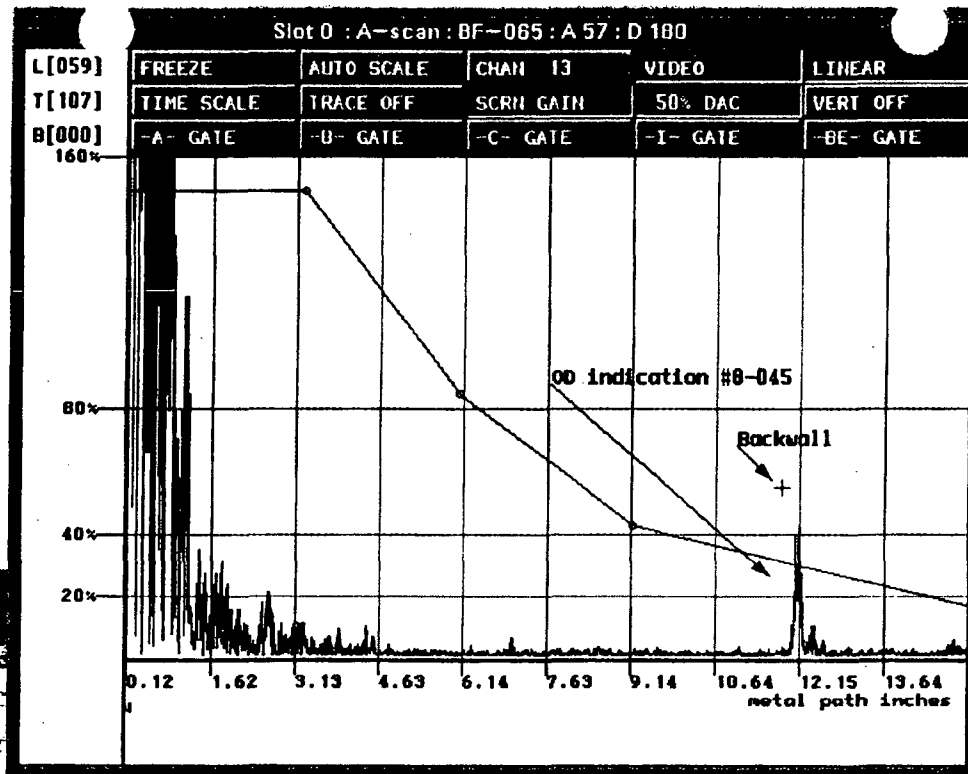
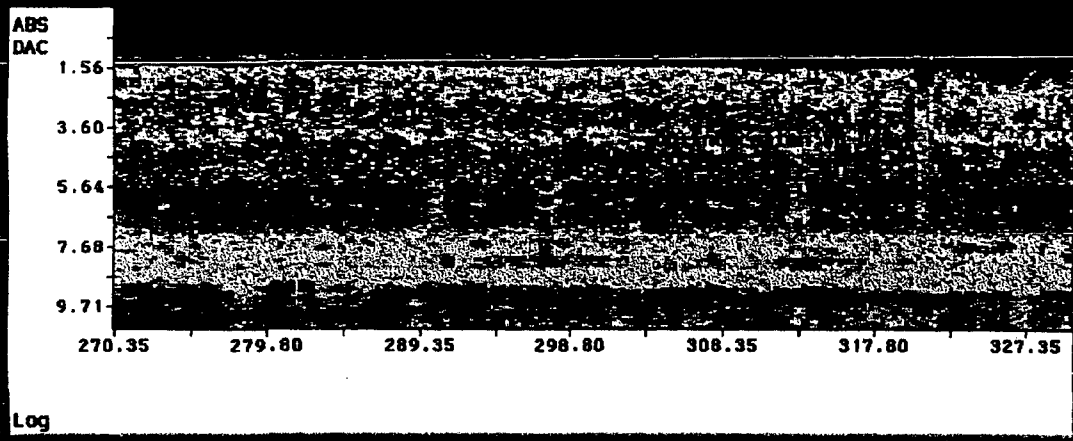
32.3	
36.6	
41.0	
45.3	
49.7	100%
54.0	50%
58.4	
62.7	20%
67.1	
71.4	
75.8	
80.1	
84.5	
88.8	



S 0 : Ch 13 : B-scan : BF = 065 : A 57 : D 180 : H



S 0 : Ch 13 : EV-scan : BF = 065 : A 57 : D 180 : H



Lower Ten

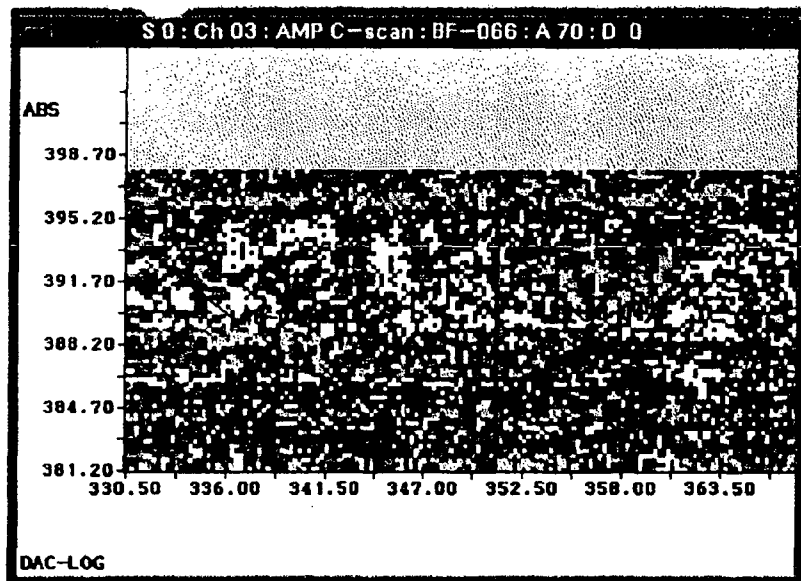
/test>dump /max

tor3/B-045

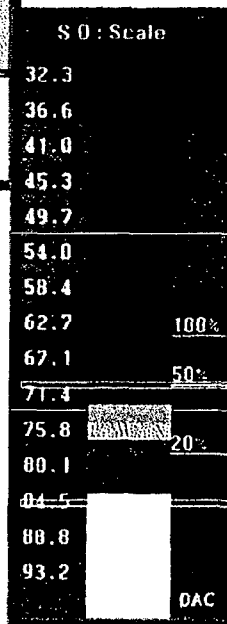
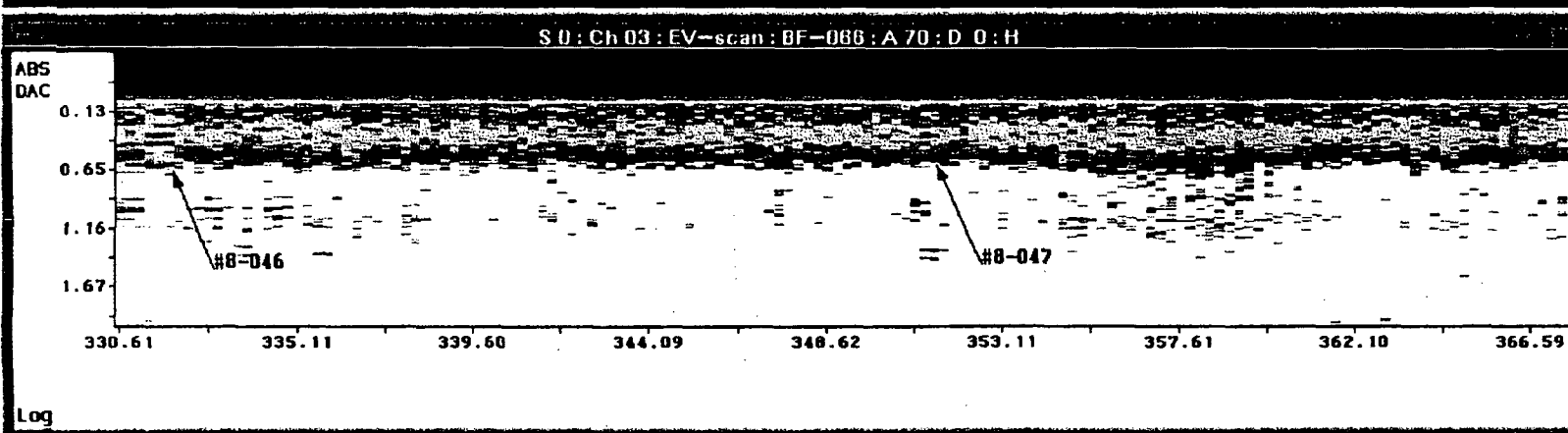
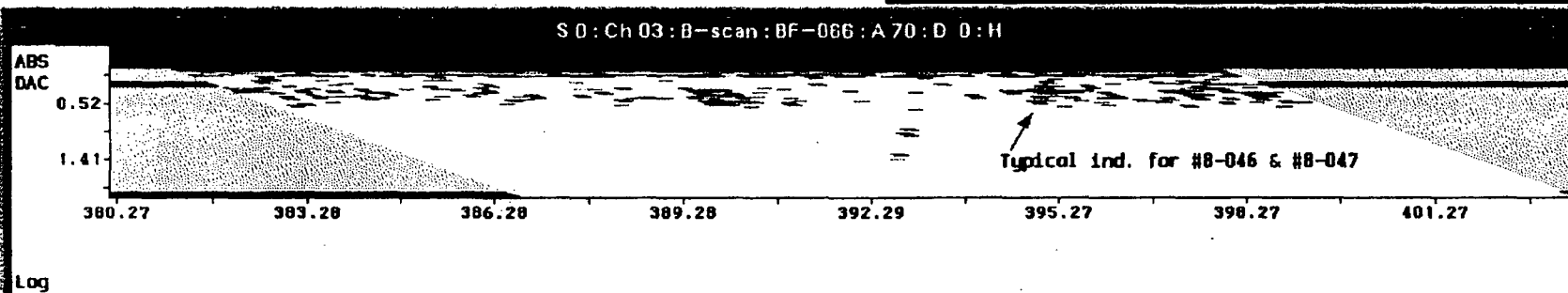
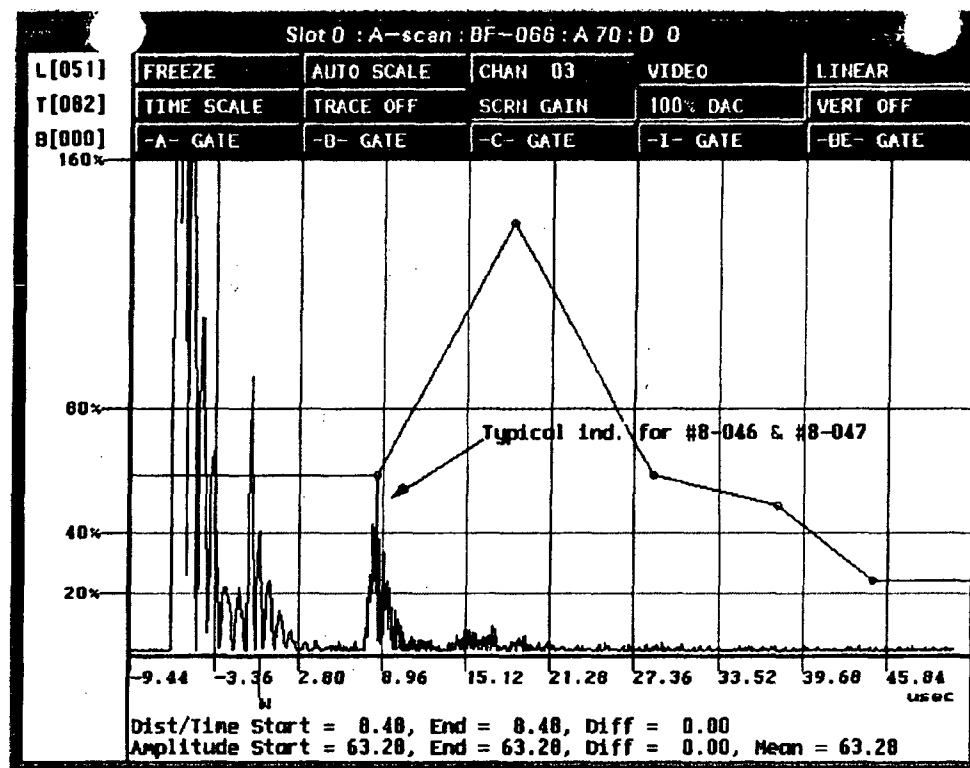
R1154

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00216



Lower Ten  
/test>dump /max  
tor3/B-046

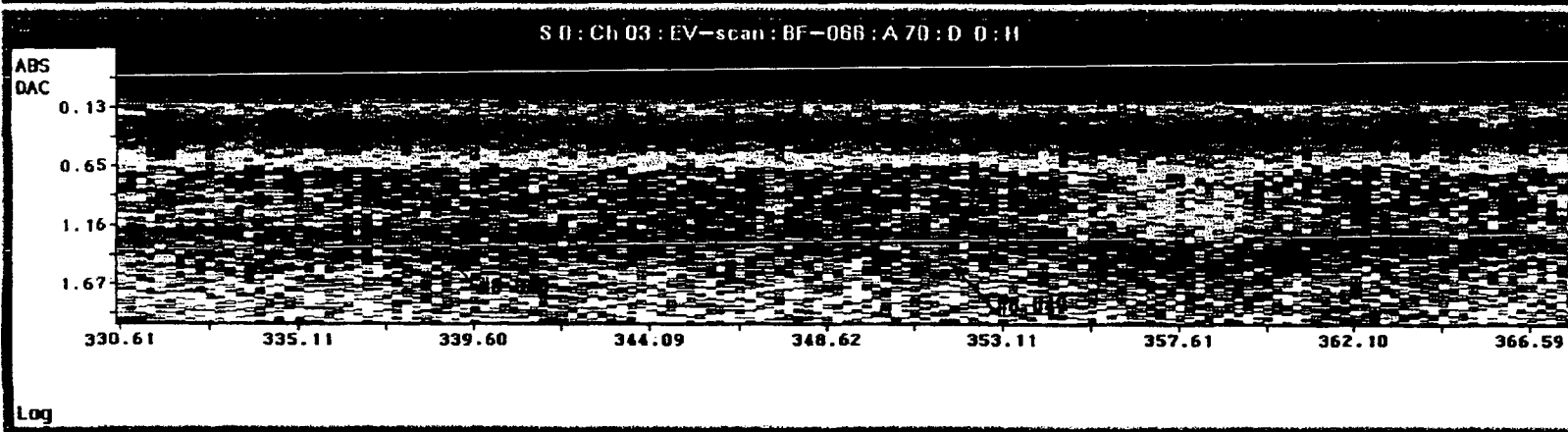
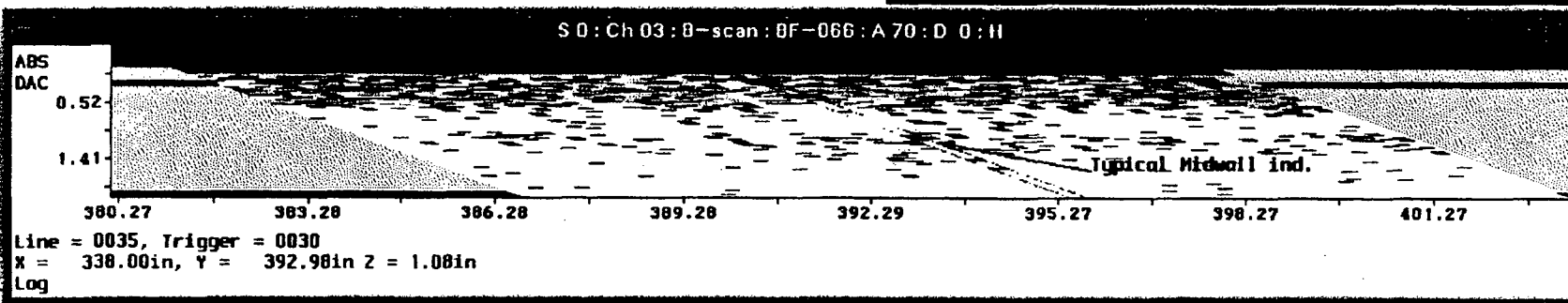
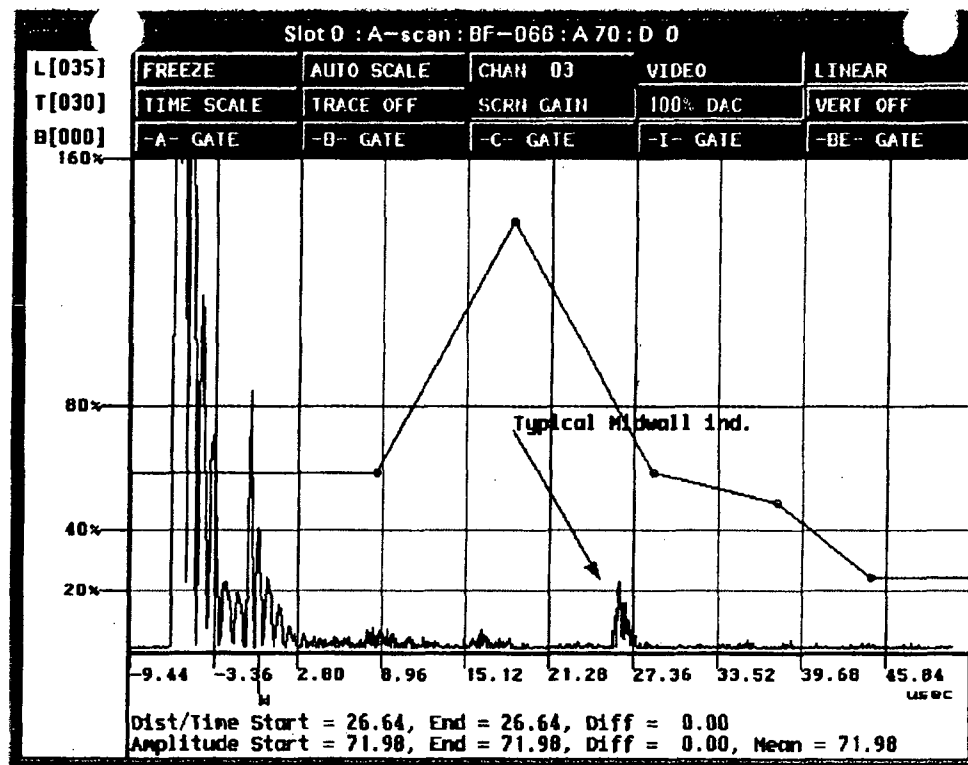
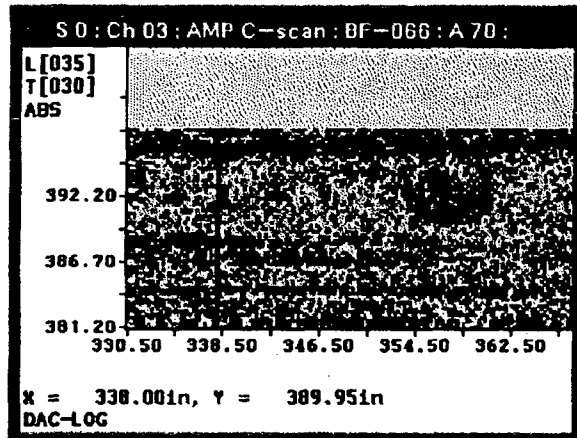


R 1154  
217 of 276  
00217

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7 100%  
67.1 50%  
71.4  
75.8 20%  
80.1  
84.5  
88.8  
93.2  
DAC

Lower Ter  
ump /maxton3/8-  
048



R 1154  
218 of 276  
00218

**S O: Scale**

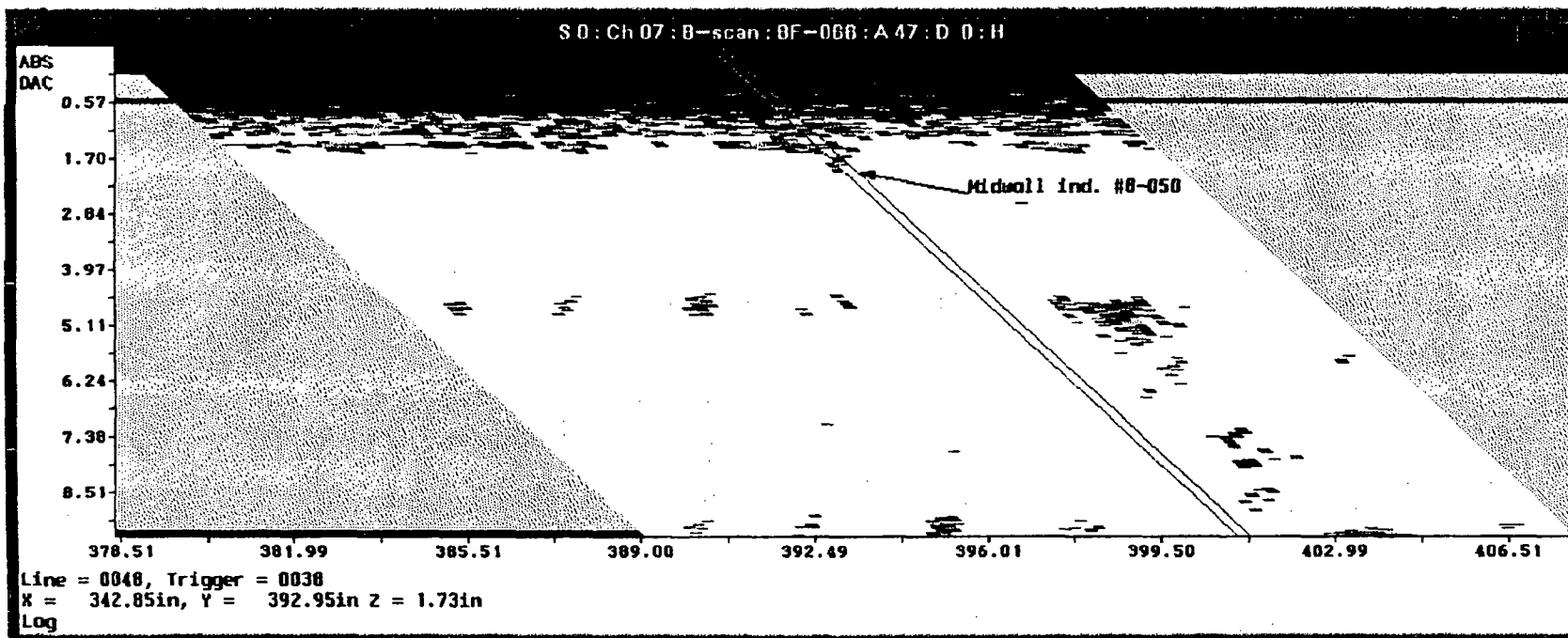
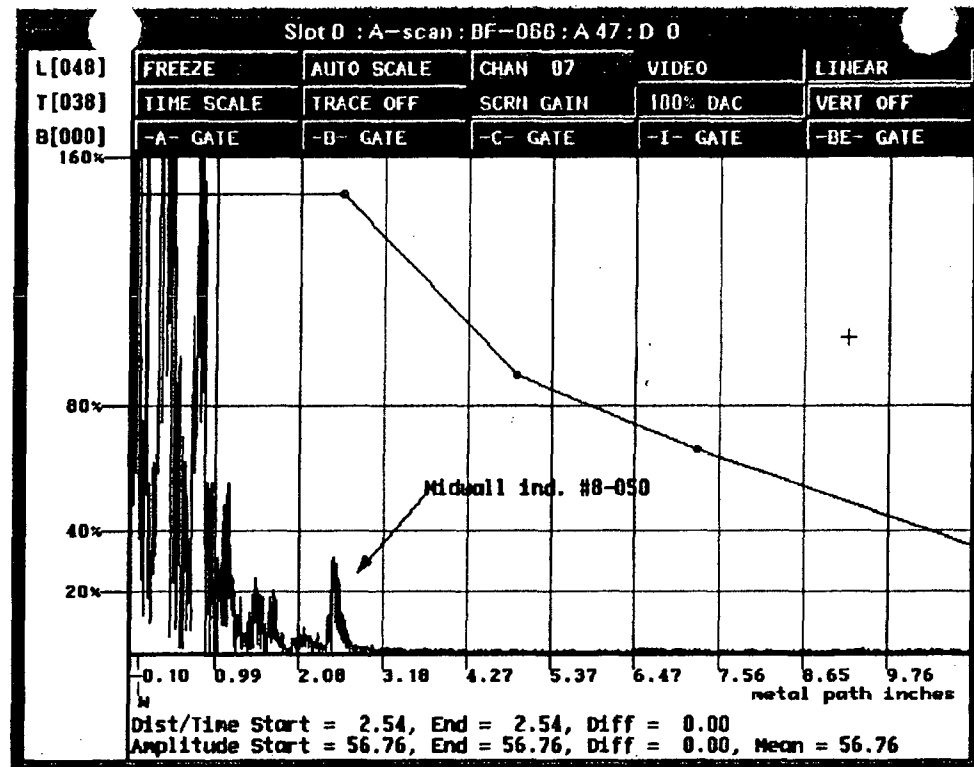
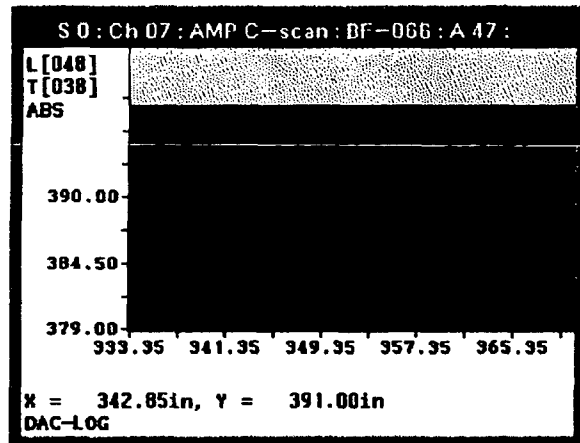
32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

**DAC**

**Lower Tern**

/test>dump /max  
tor3/B-050

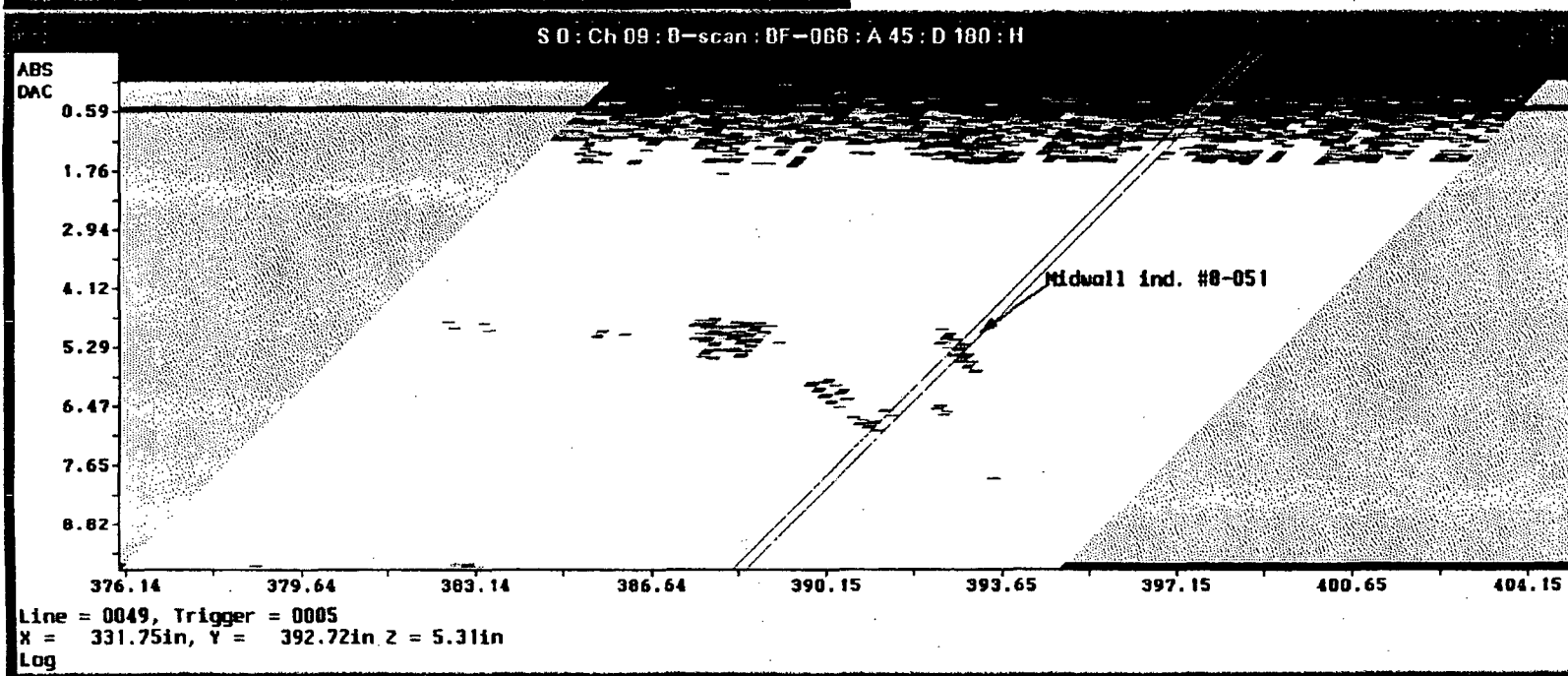
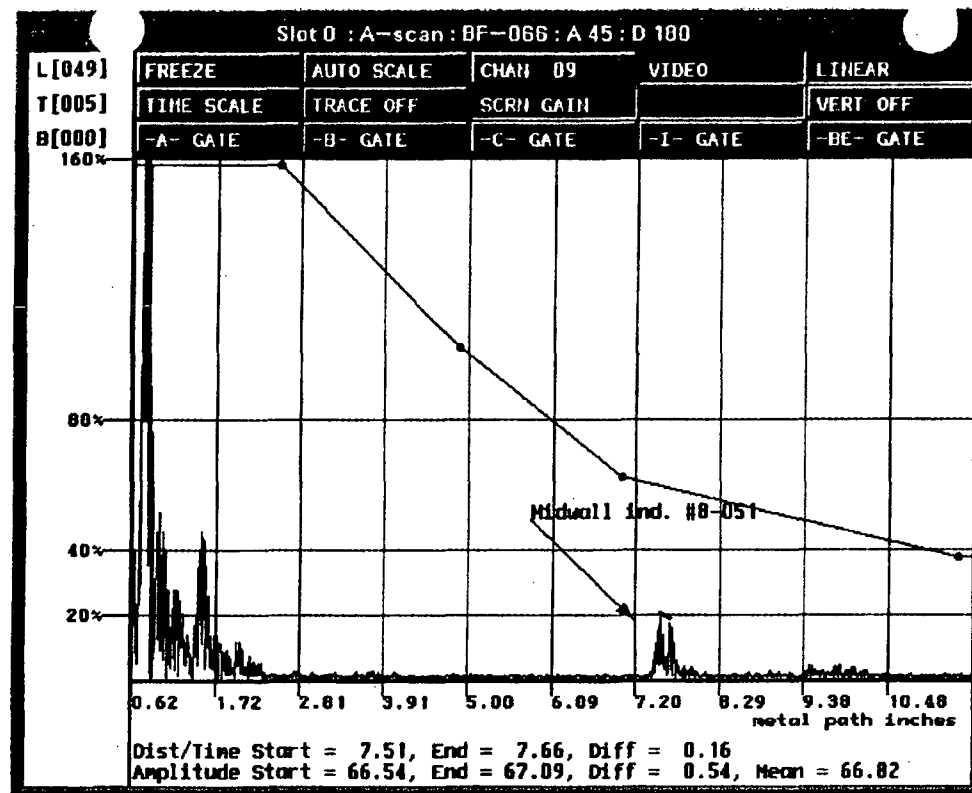
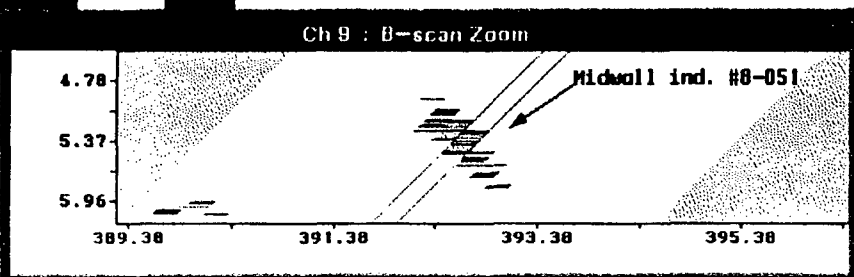
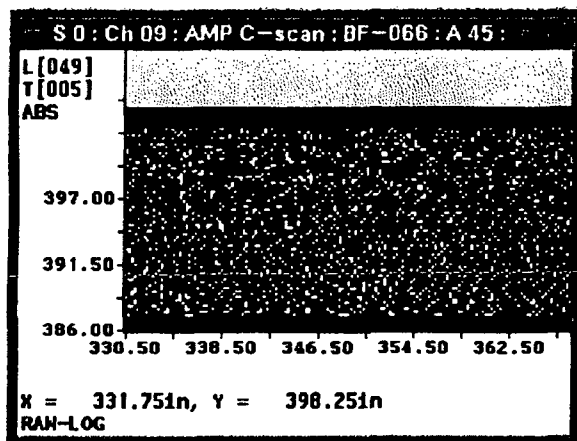


R 1154  
219 OF 276  
00219

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

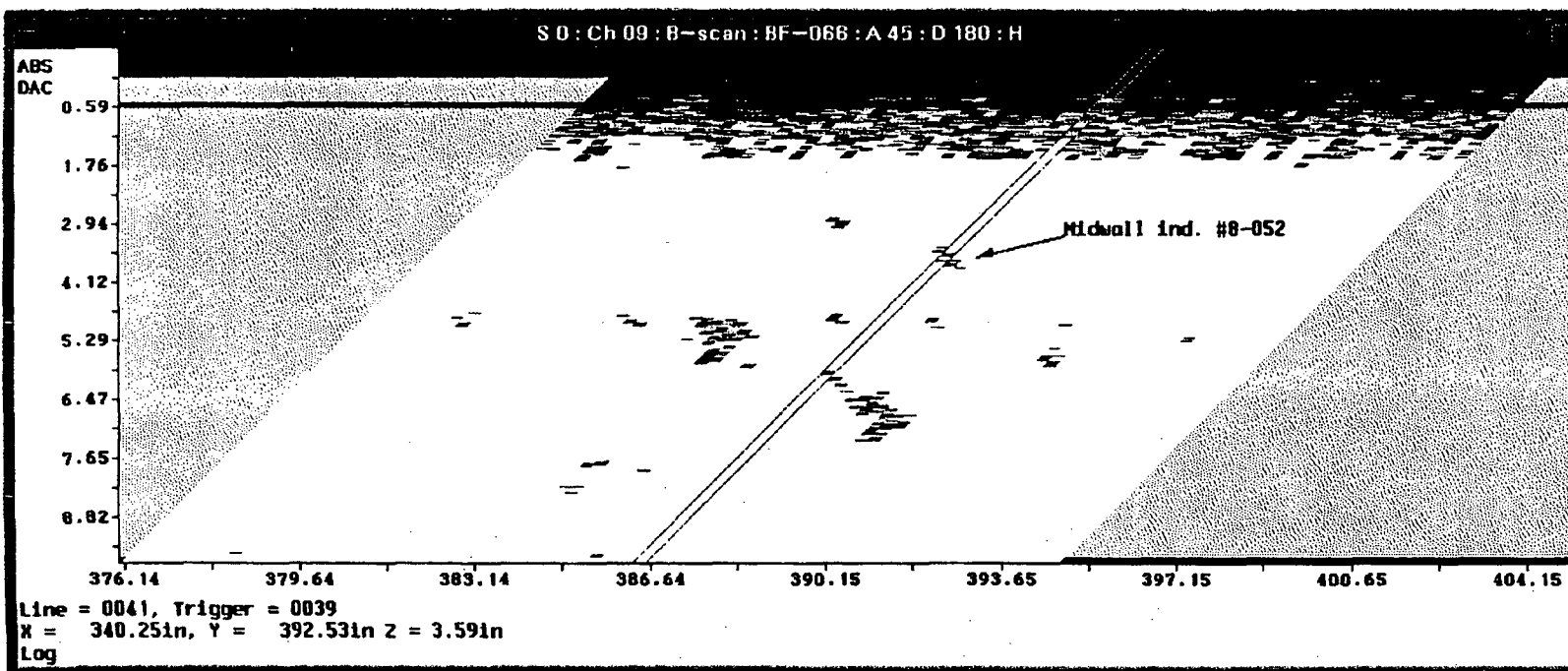
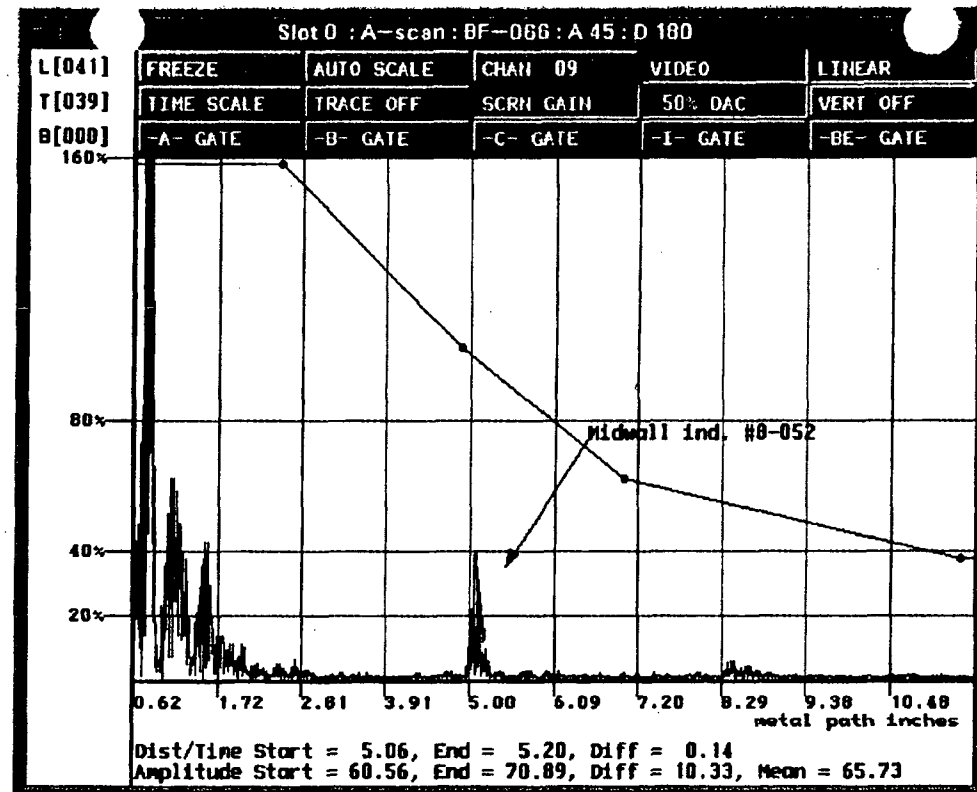
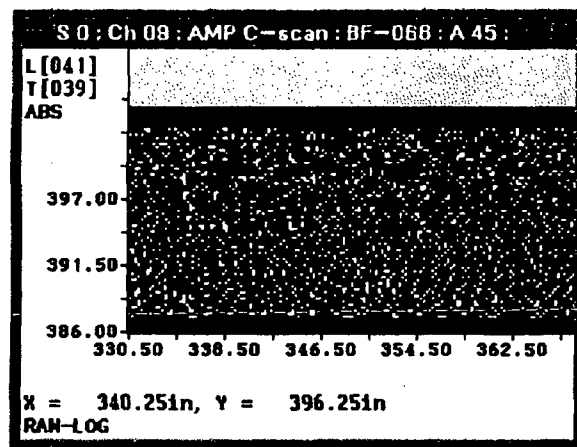
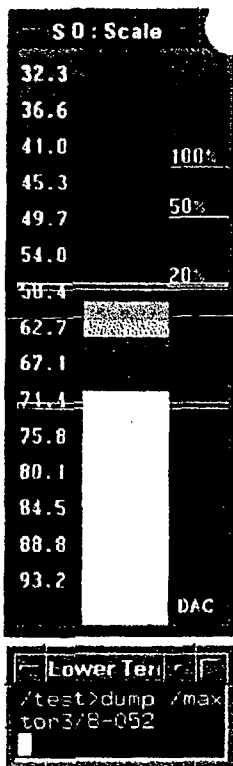
100%  
50%  
20%



Lower Ten  
ump /maxtor3/8-  
051

R1154  
220 OF 276  
00220



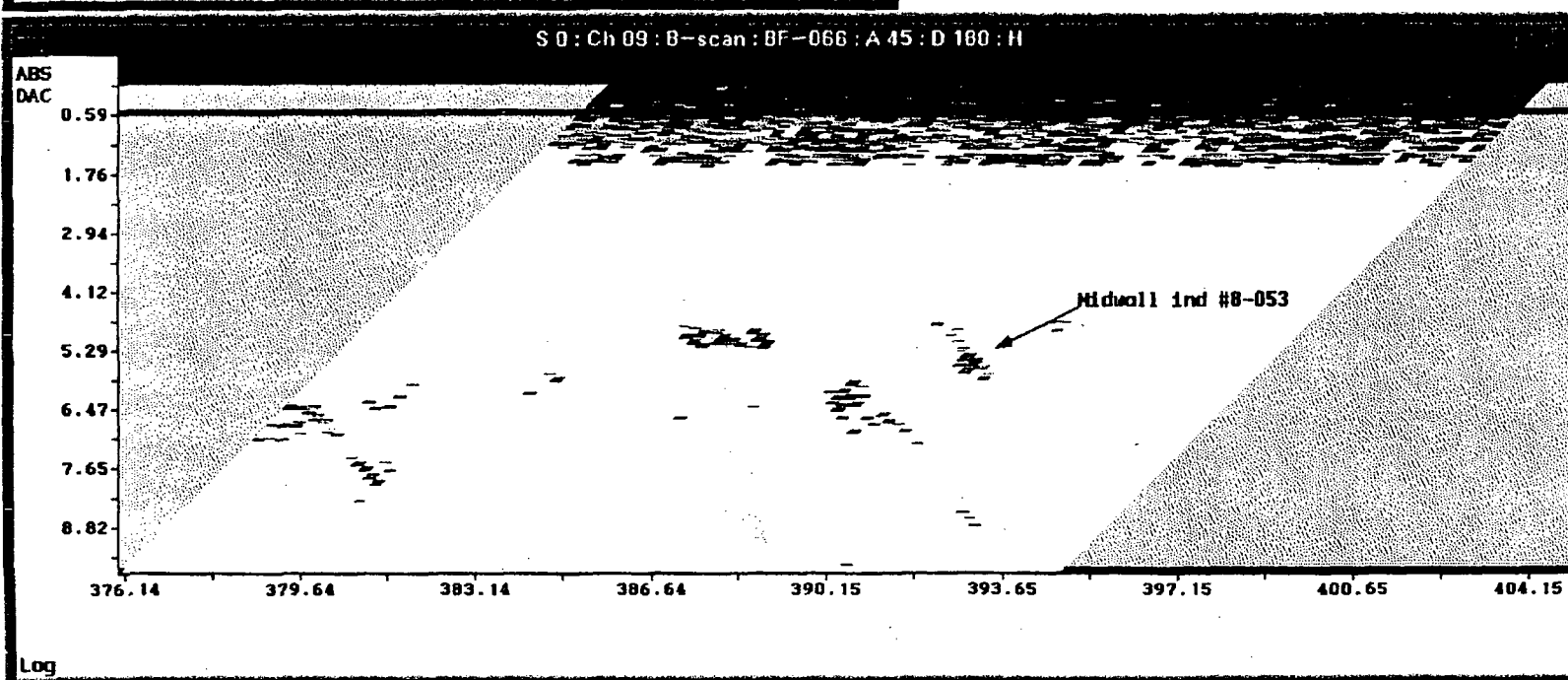
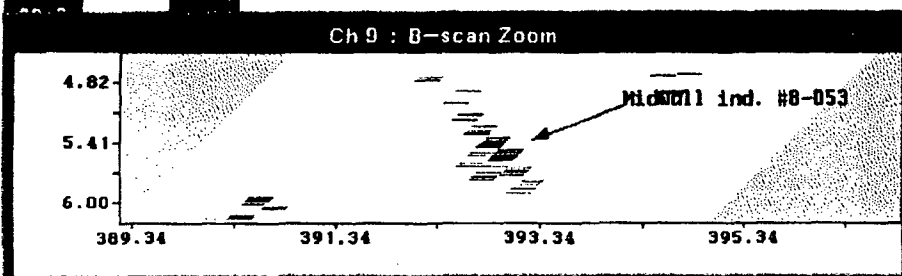
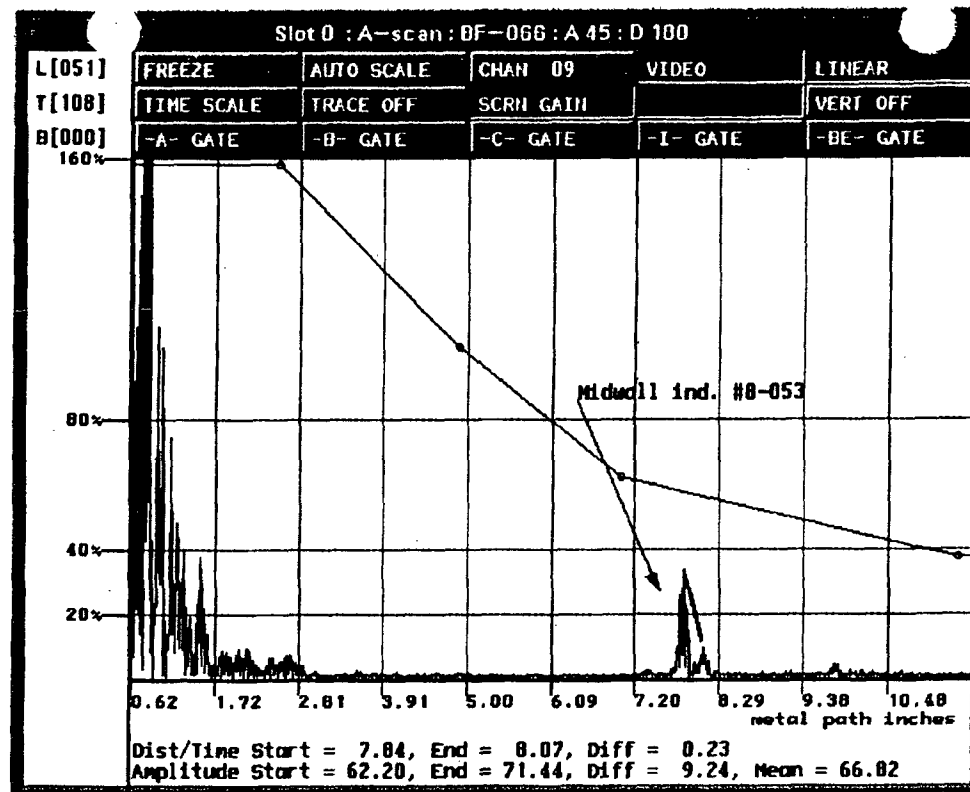
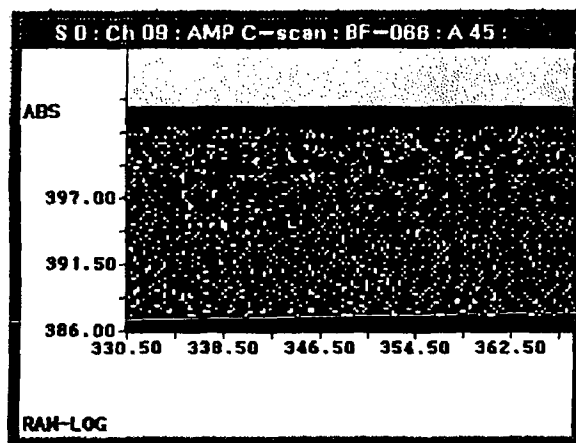


R1154  
221 OF 276  
00221

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.1  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

100%  
50%  
20%



Lower Ten  
ump /maxtor3/B-  
053

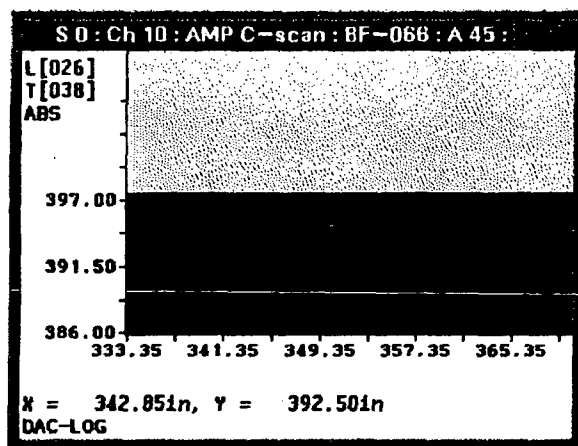
R 1154  
222 OF 276  
00222

S 0 : Scale

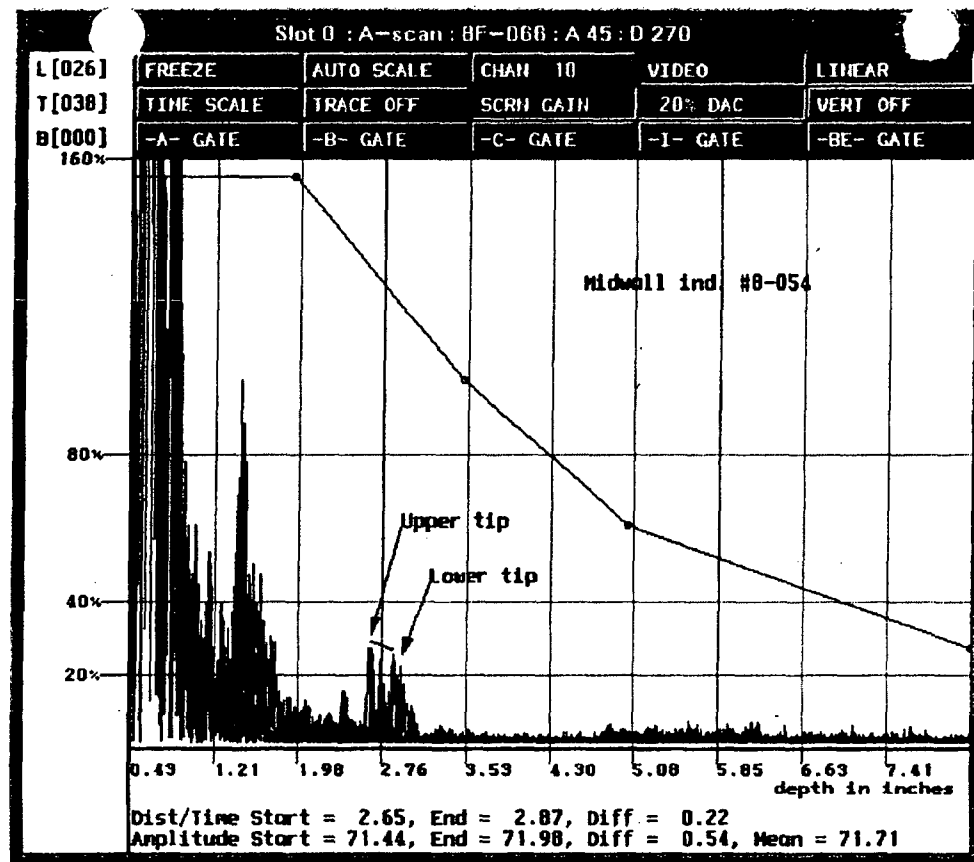
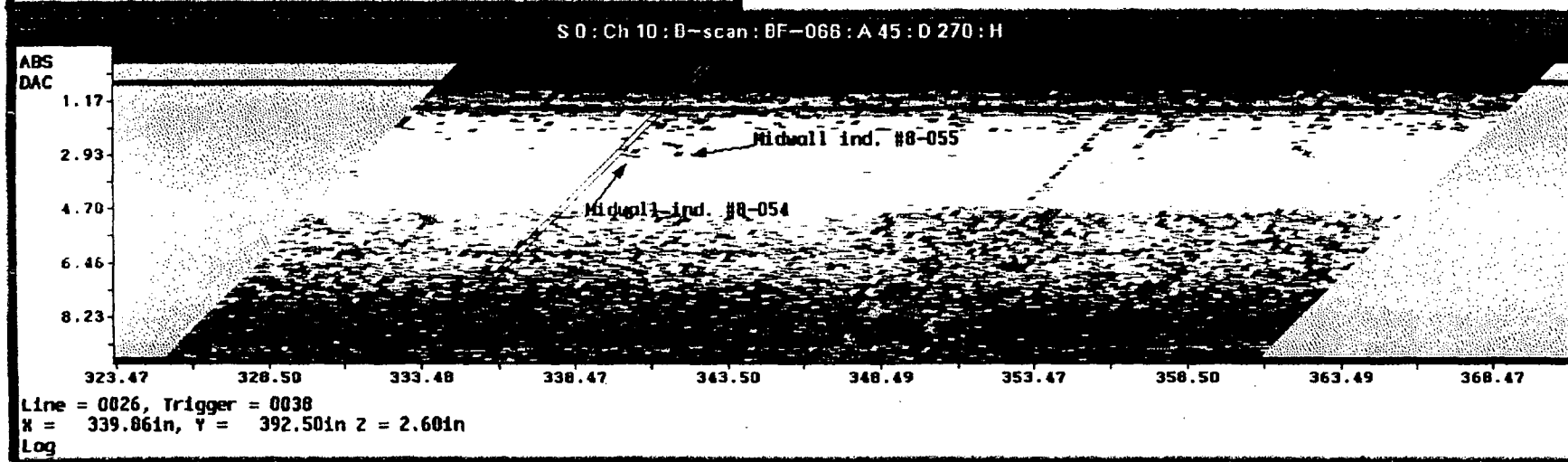
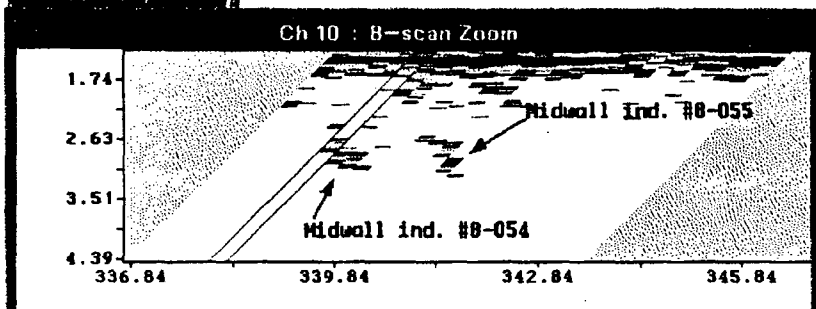
32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC



Lower Ten  
/test>dump /max

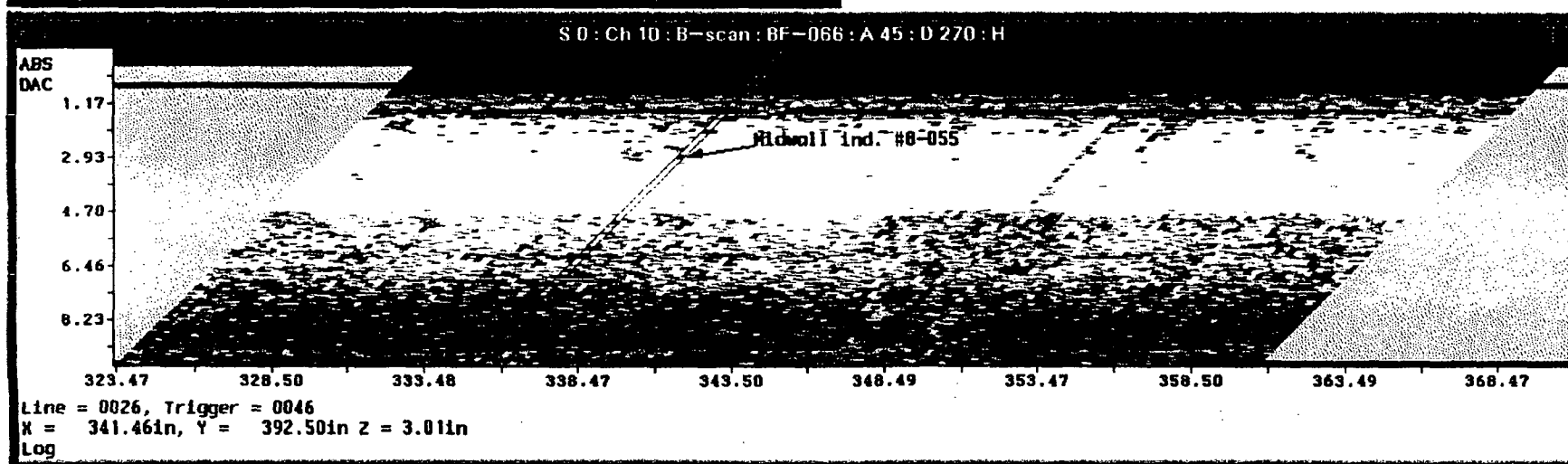
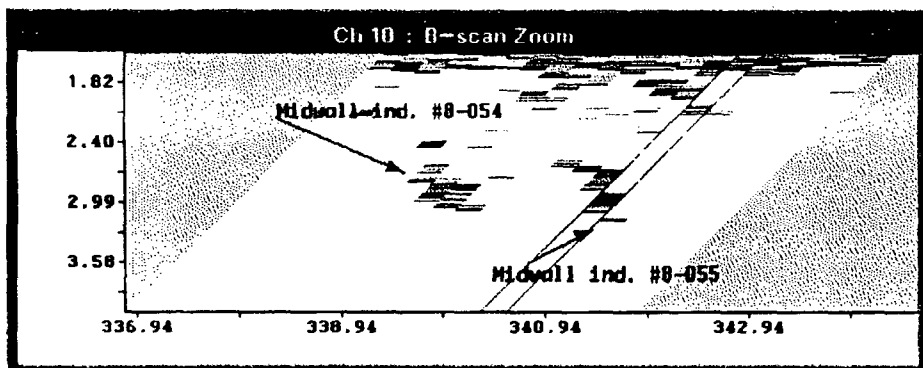
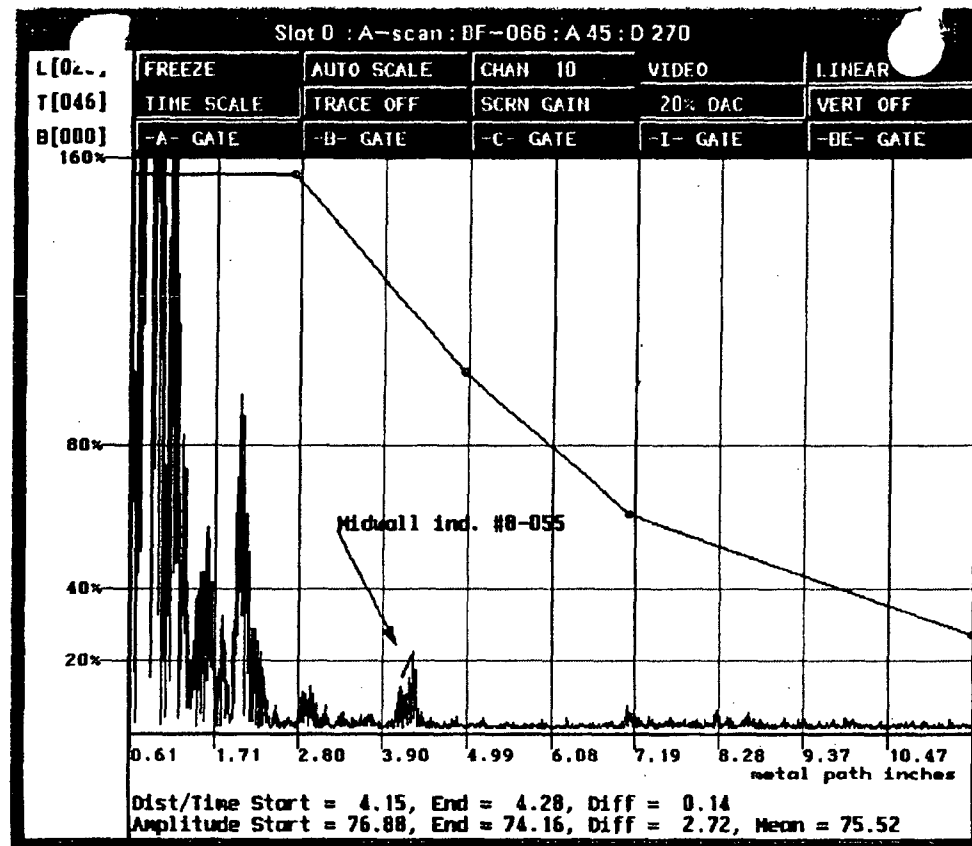
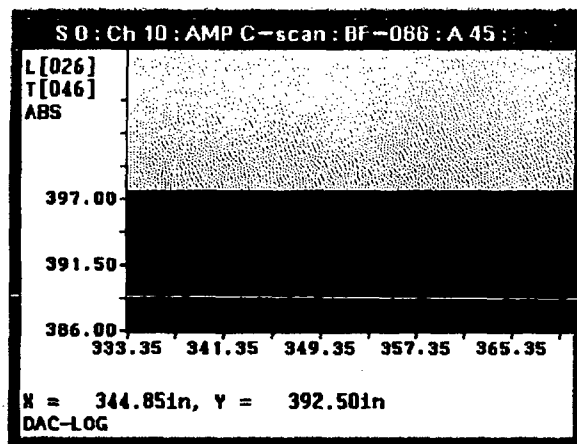


223 of 276  
00223  
21154

S 0 : Scale

32.3	
36.6	
41.0	100%
45.3	
49.7	50%
54.0	
58.4	20%
62.7	
67.1	
71.4	
75.8	
80.1	
84.5	
88.0	
93.2	

DAC

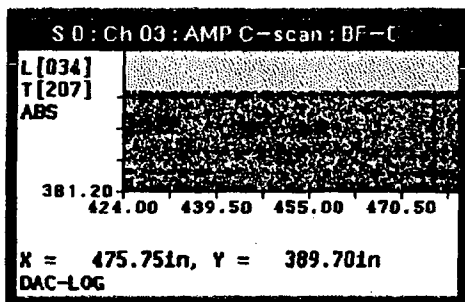


00224

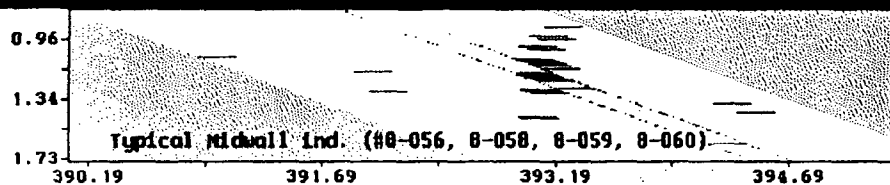
121154  
224 OF 276

S 0 : Scale

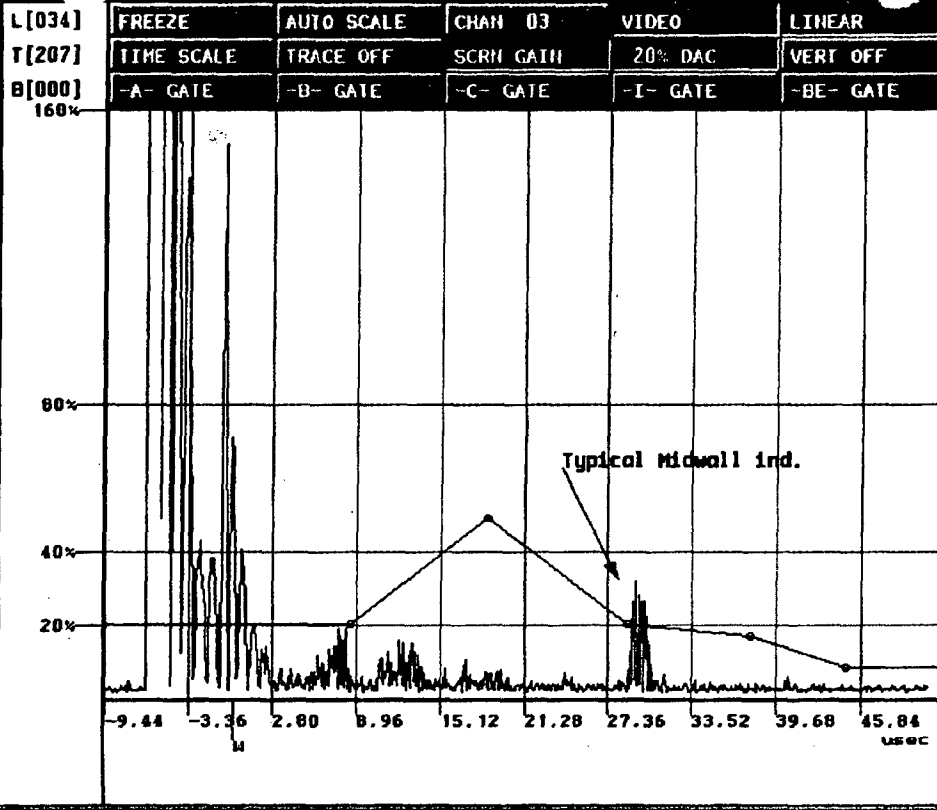
32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7 100%  
67.1 50%  
71.4  
75.0 20%  
80.1  
84.5  
88.8  
93.2  
DAC



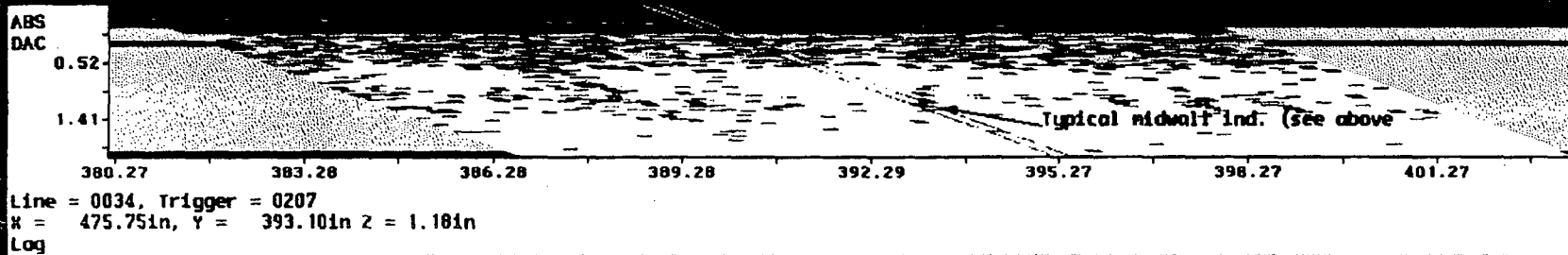
Ch 3 : B-scan Zoom



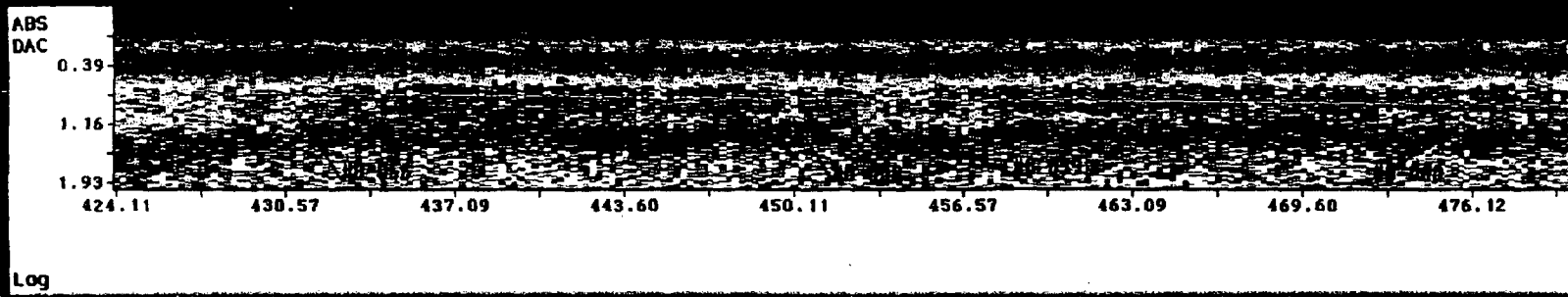
Slot 0 : A-scan : BF-067 : A 70 : D 0



S 0 : Ch 03 : B-scan : BF-067 : A 70 : D 0 : H



S 0 : Ch 03 : EV-scan : BF-067 : A 70 : D 0 : H



Lower Ten  
ump /maxon3/8-  
056

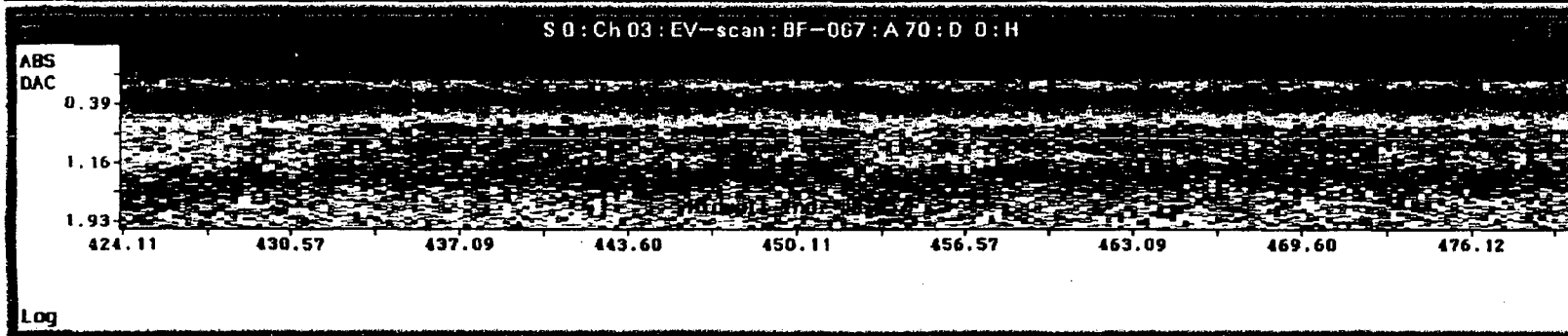
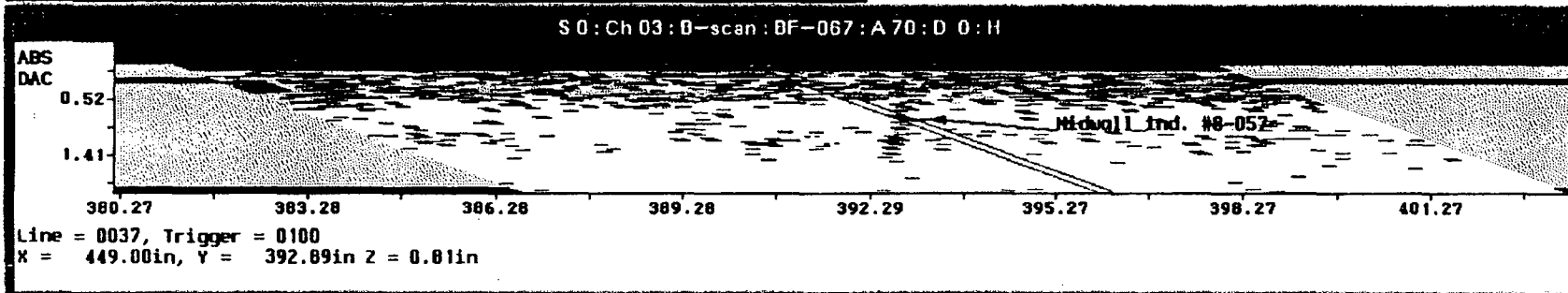
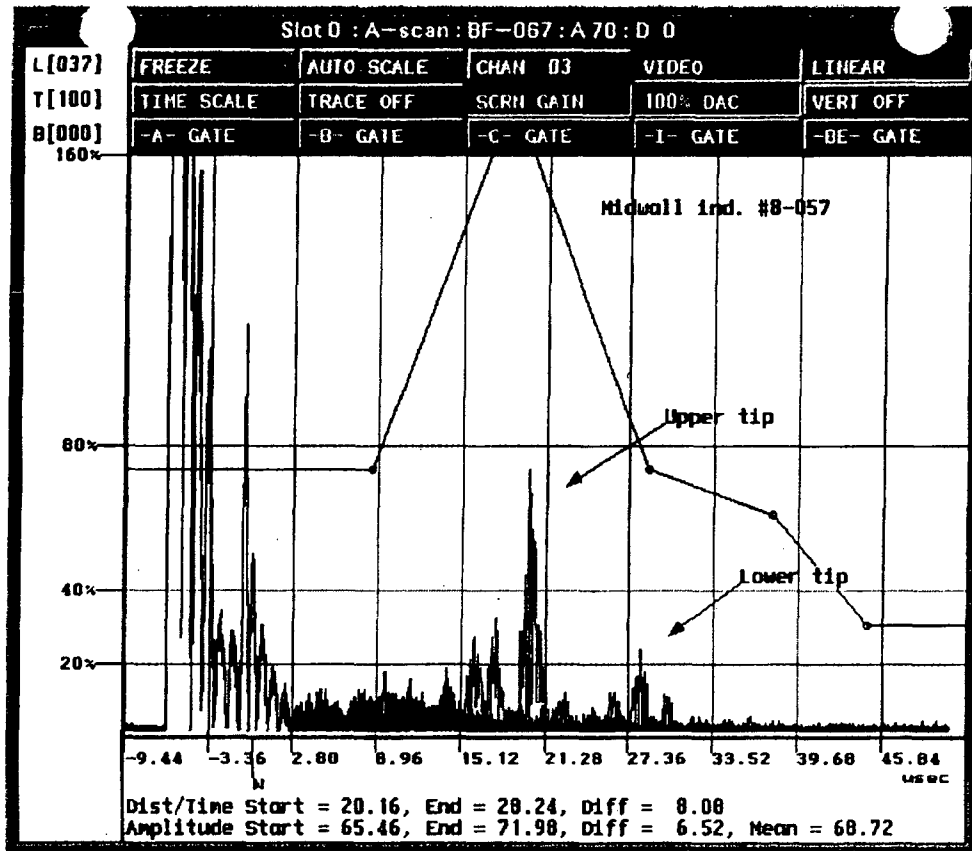
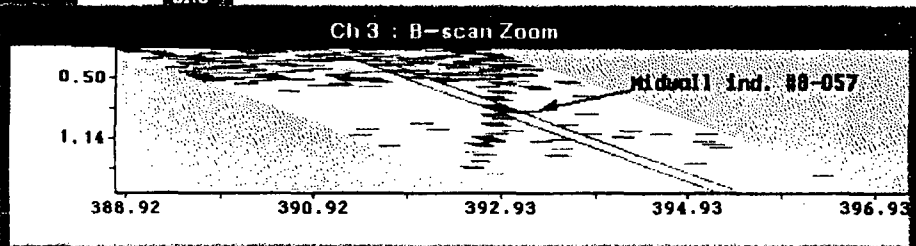
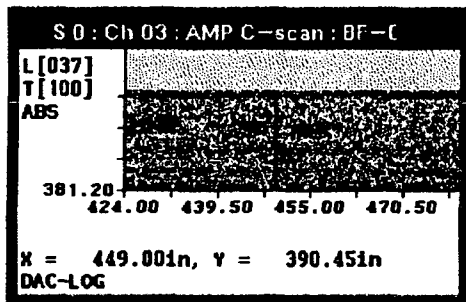
R 1154  
225 OF 276  
00225

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC



Lower Ten  
/test>dump /max  
tor3/8-057

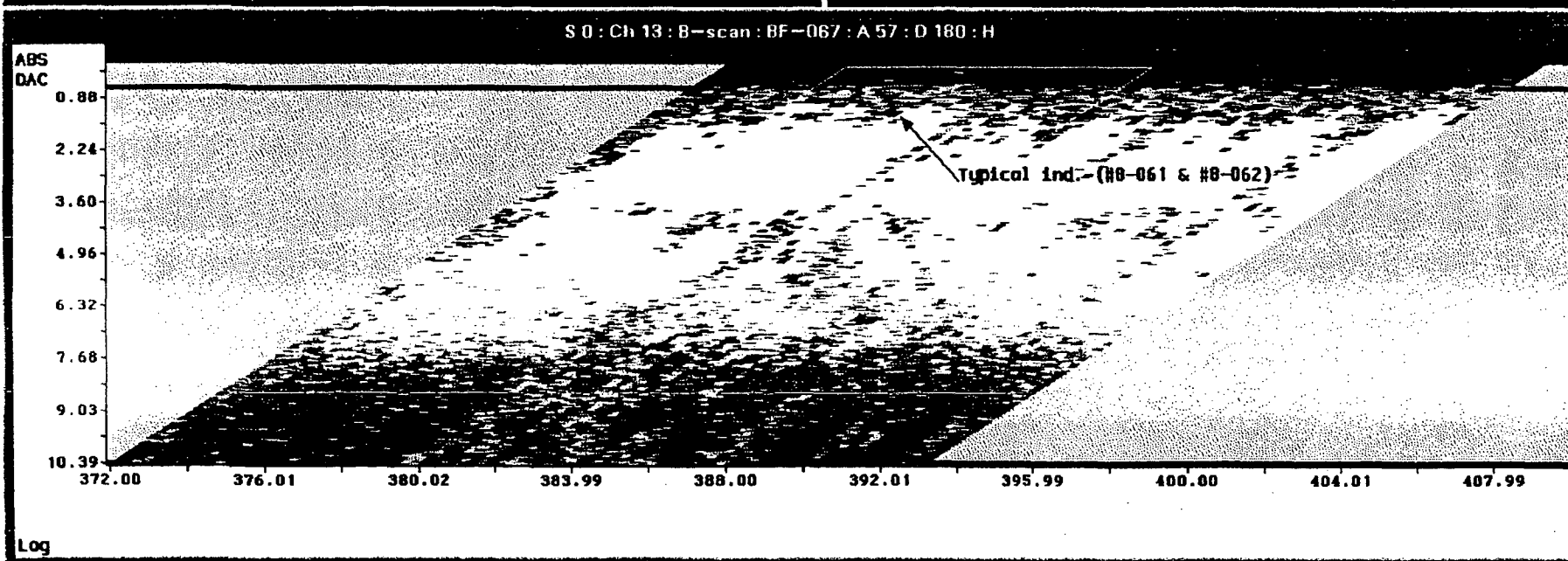
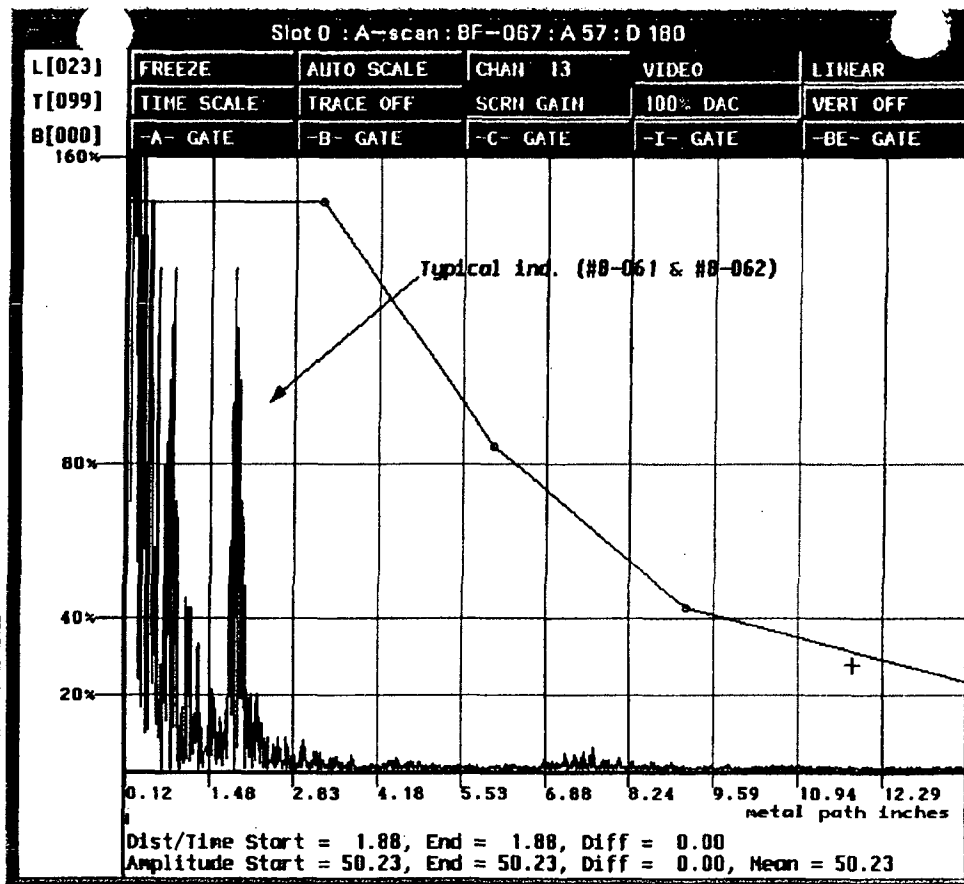
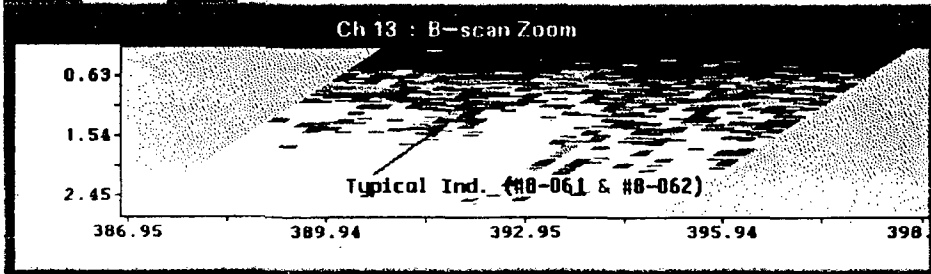
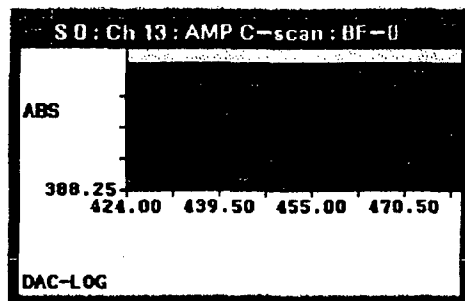
21154  
220 OF 276  
002226

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC



en  
DeskJe  
isl/lq

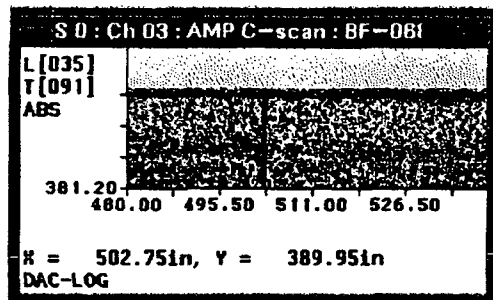
121154  
227 of 276  
00227

S 0 : Scale

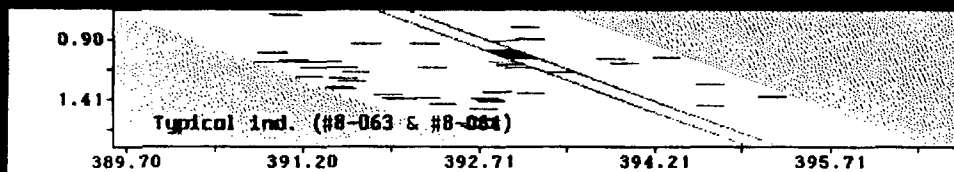
32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

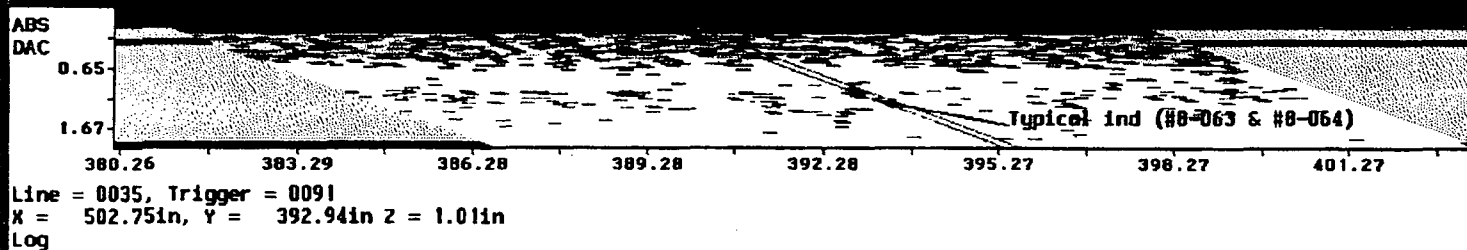
DAC



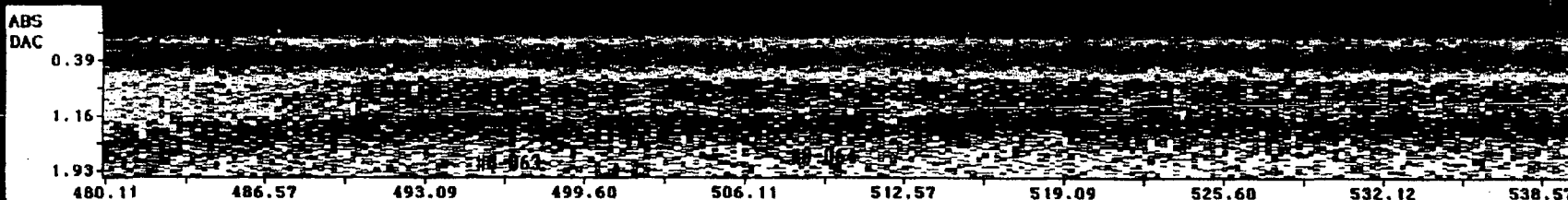
Ch 3 : B-scan Zoom



S 0 : Ch 03 : B-scan : BF-088 : A 70 : D 0 : H

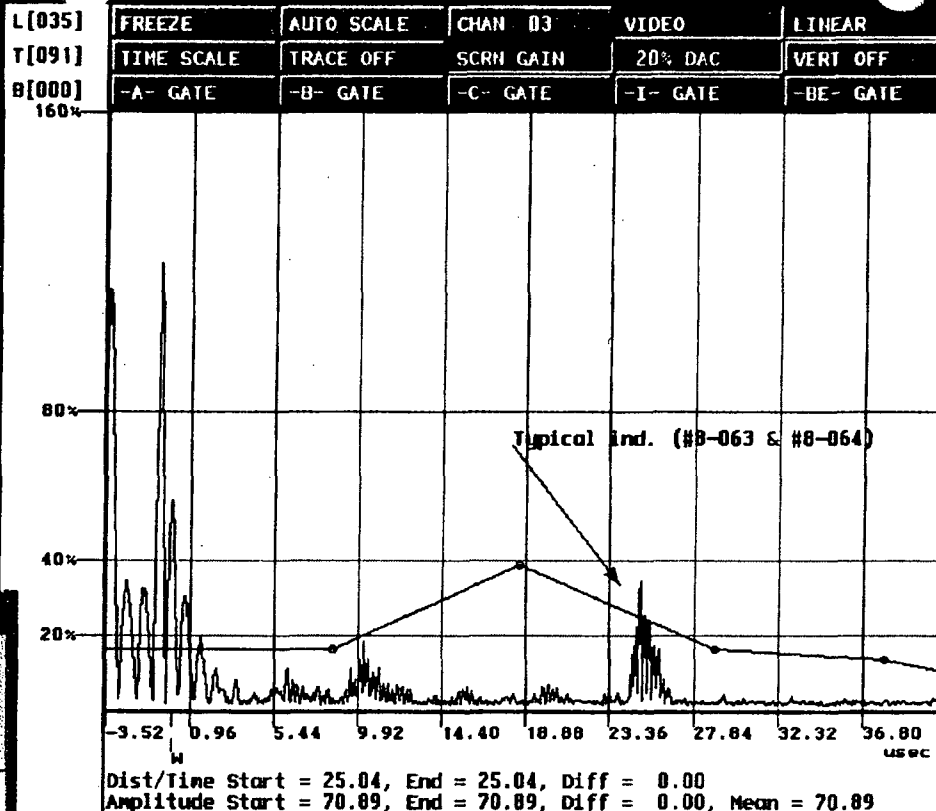


S 0 : Ch 03 : EV-scan : BF-068 : A 70 : D 0 : H



Log

Slot 0 : A-scan : BF-068 : A 70 : D 0



R1154  
228 of 276  
00228

Lower Ten  
3 /maxtor3/B-



S D : Scale

32.3

36.6

41.0

45.3

49.7

54.0

58.4

62.7

67.1

71.4

75.8

80.1

84.5

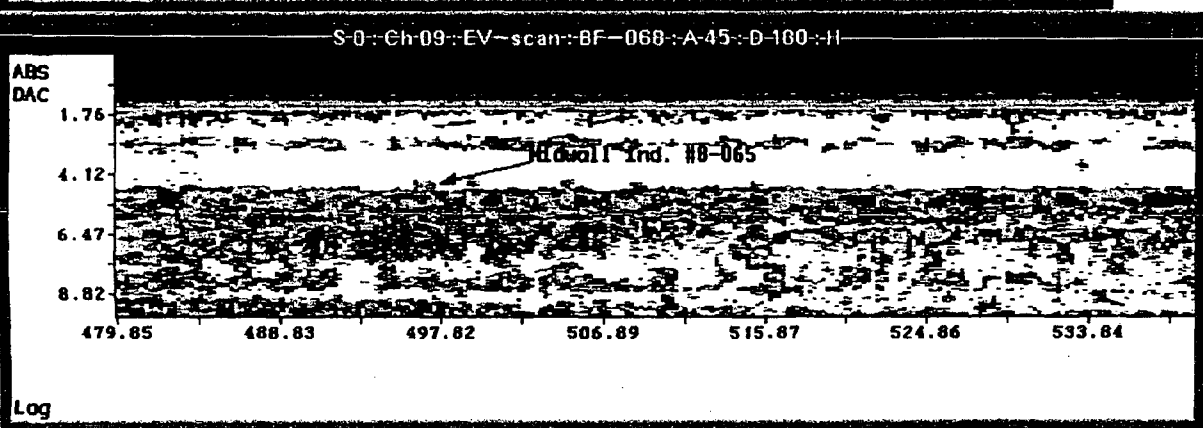
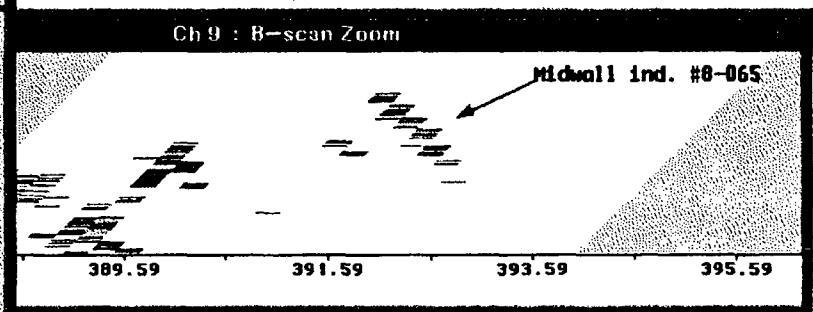
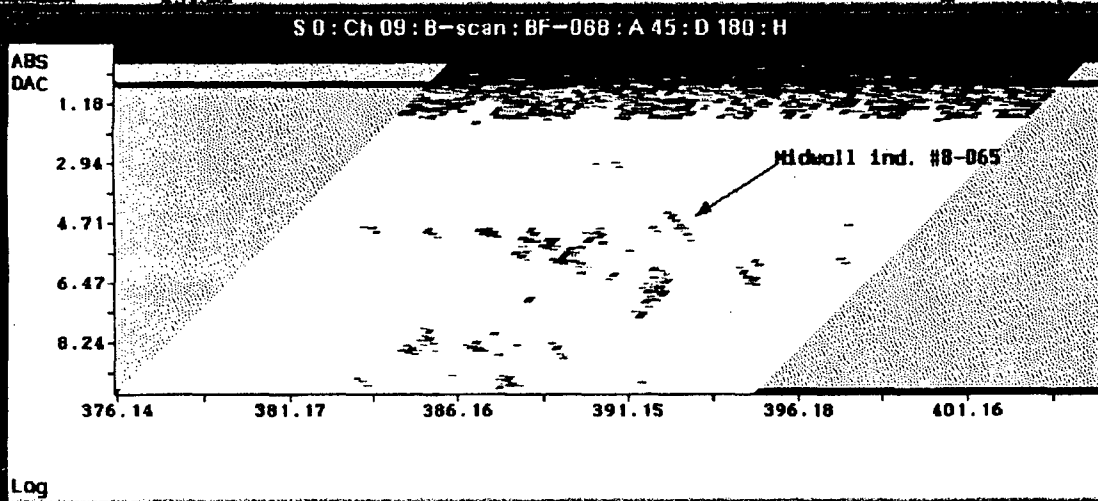
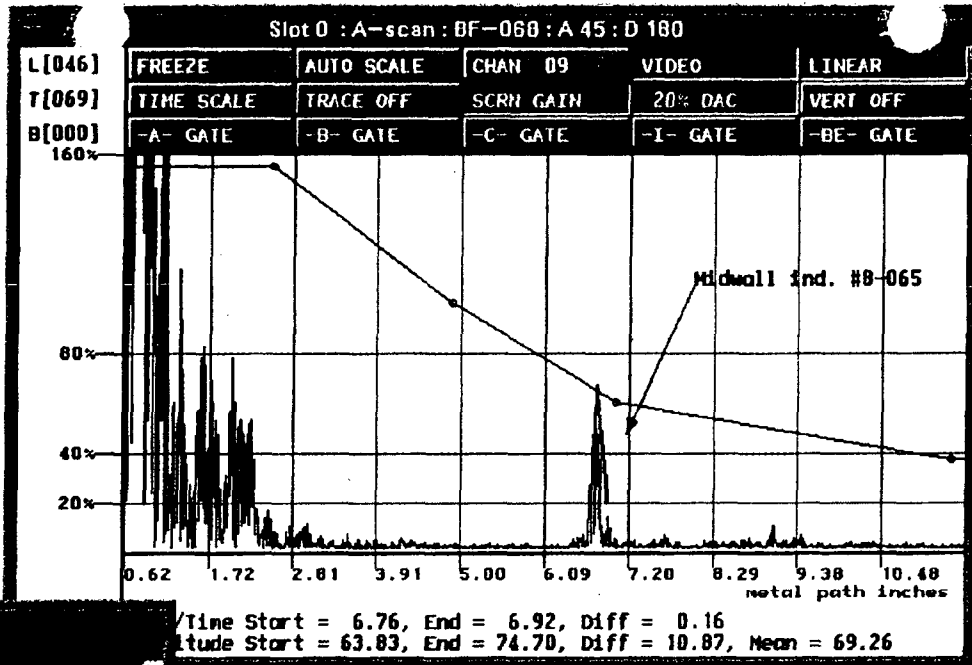
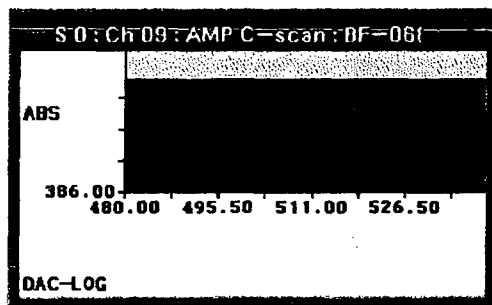
88.8

93.2

100%

50%

20%



Lower Ten

/test>dump /max

tor3/8-065

R1154

229 OF 276

002229

S 0 : Scale

32.3

36.6

41.0

45.3

49.7 100%

54.0 50%

58.4

62.7 20%

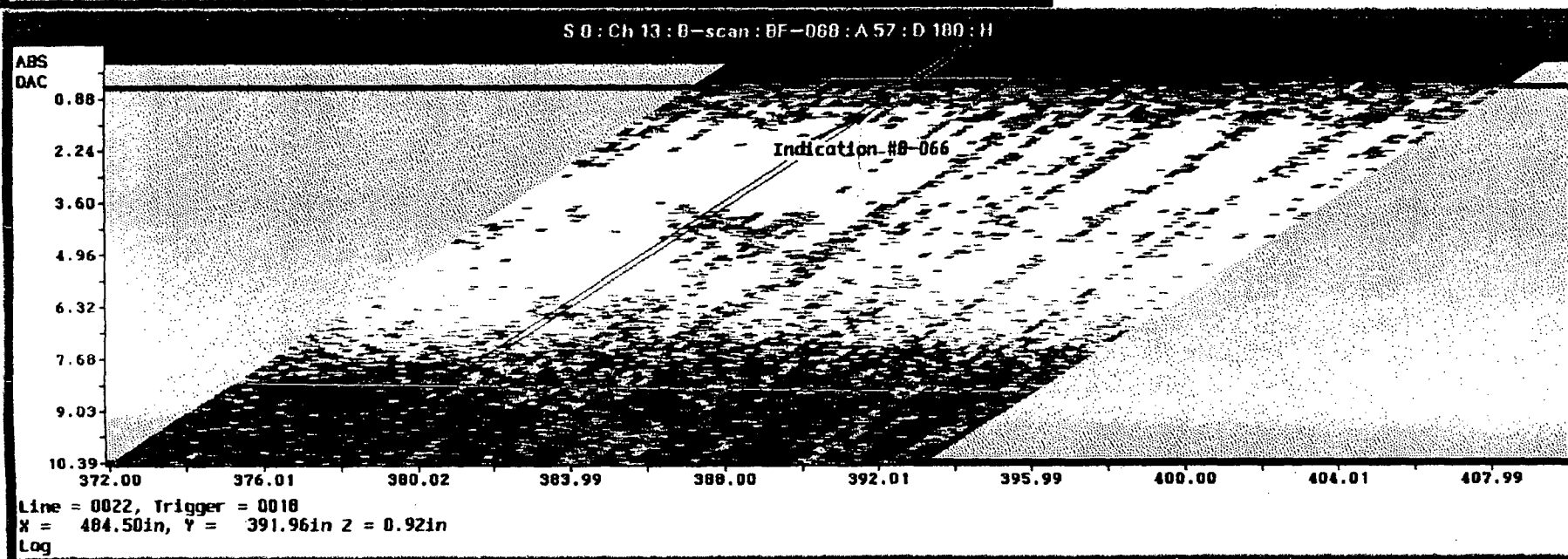
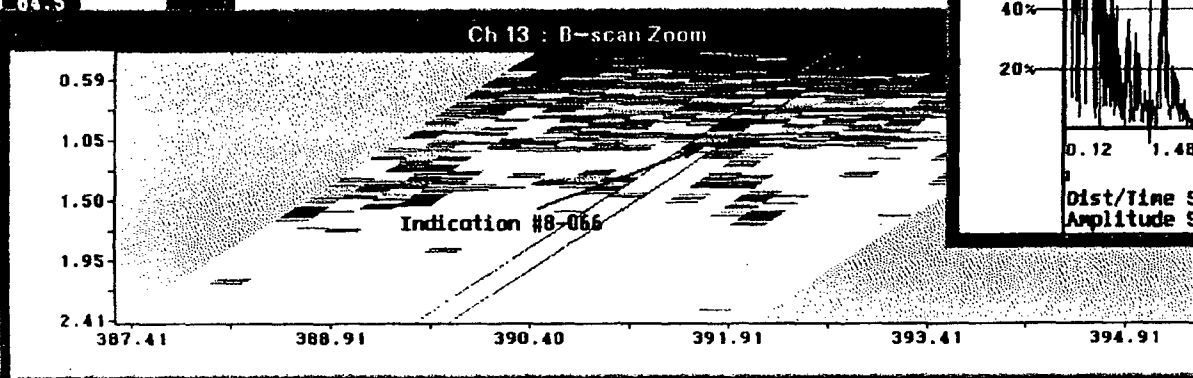
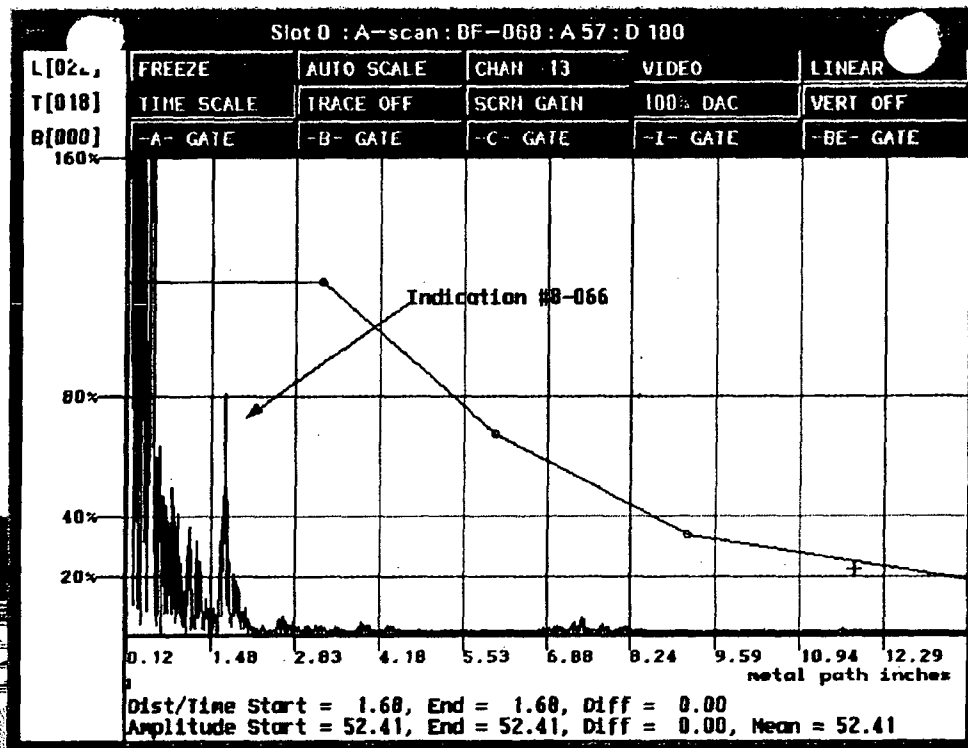
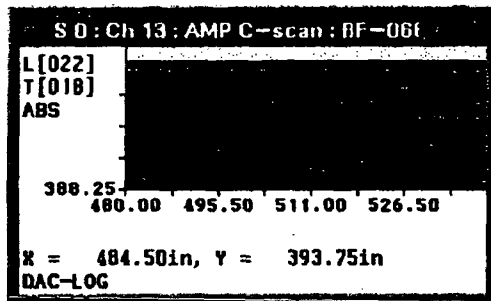
67.1

71.4

75.8

80.1

84.5



00230

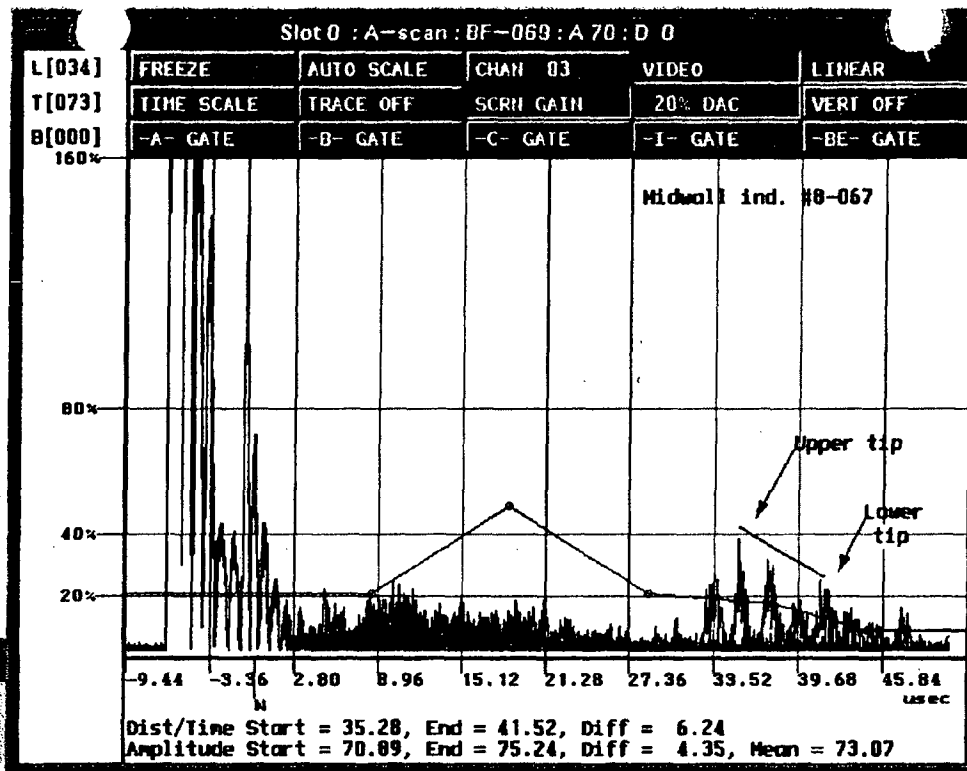
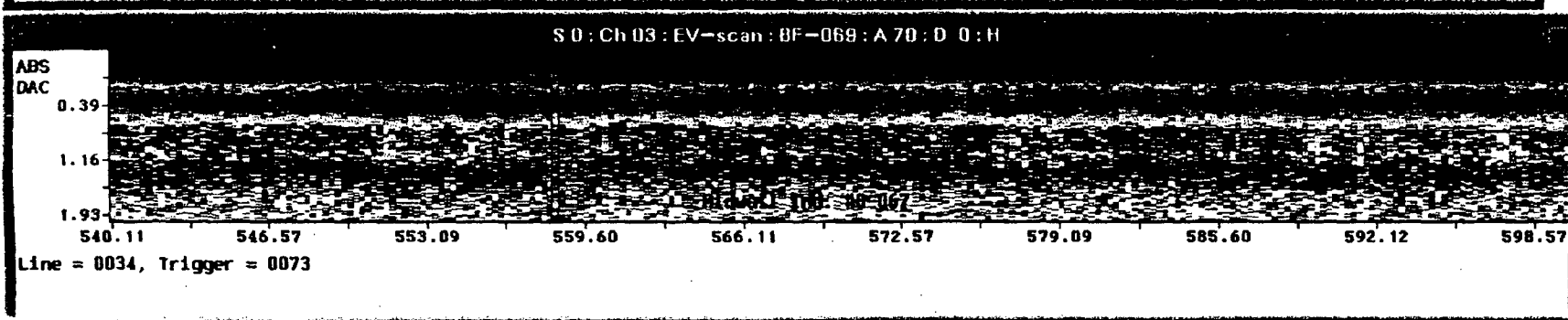
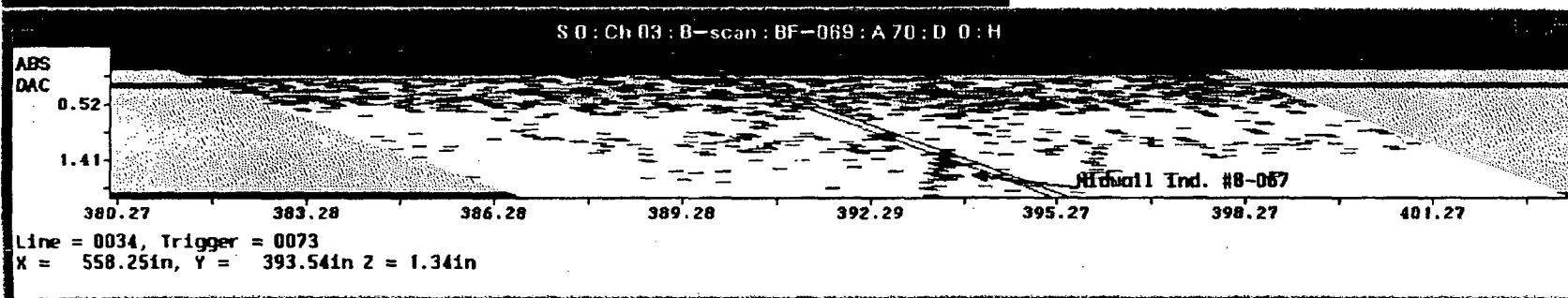
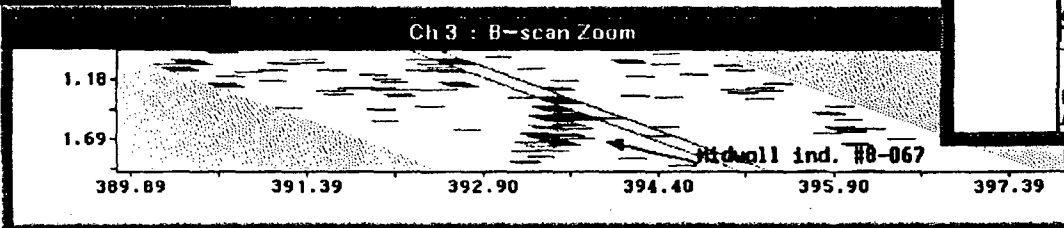
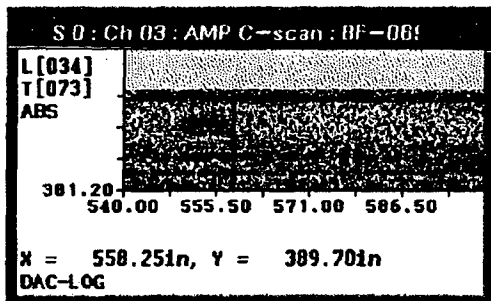
230 of 276

R1154

S0: Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7 100%  
67.1 50%  
71.4  
75.8 20%  
80.1  
84.5  
88.8  
93.2

DAC

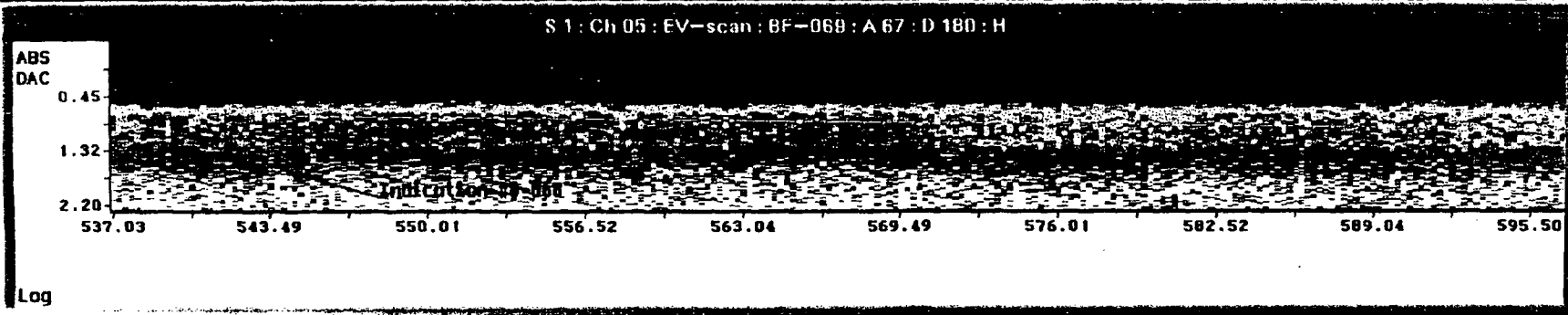
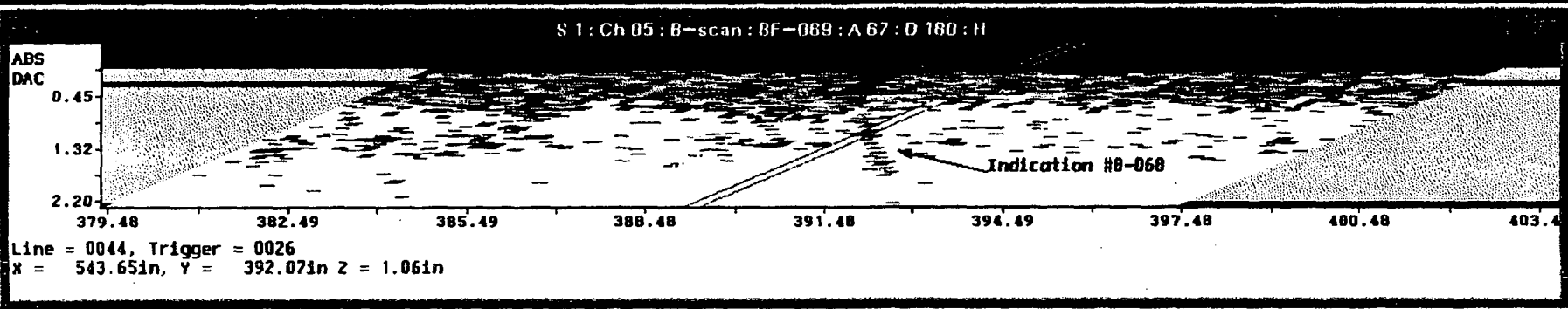
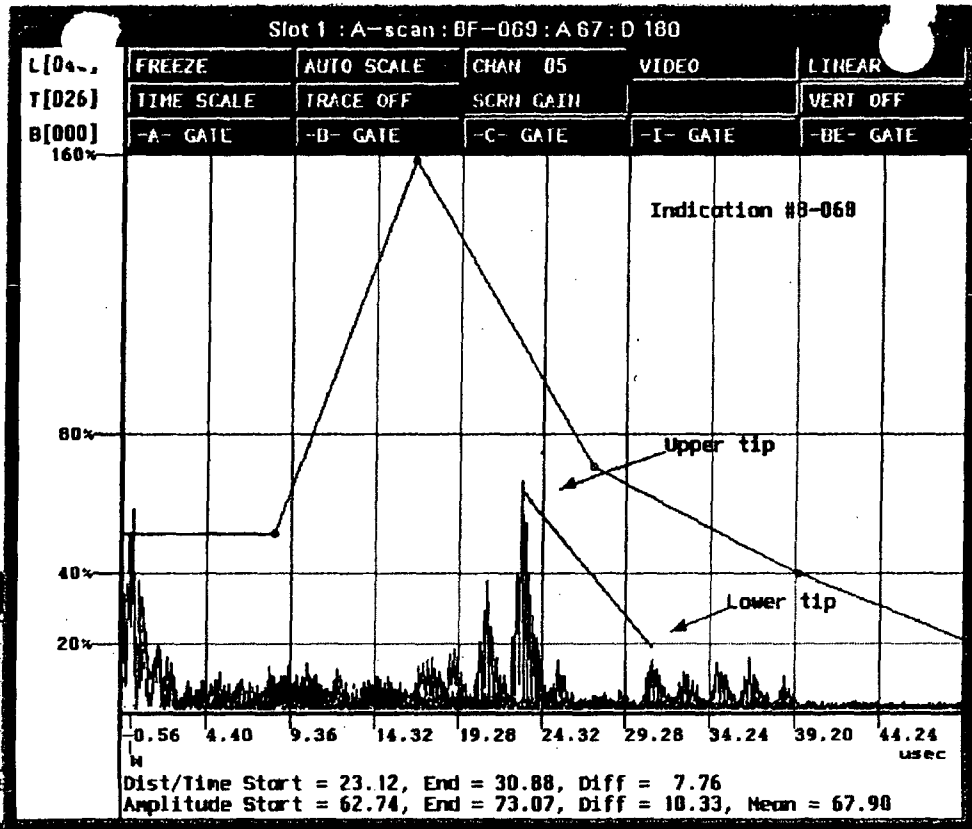
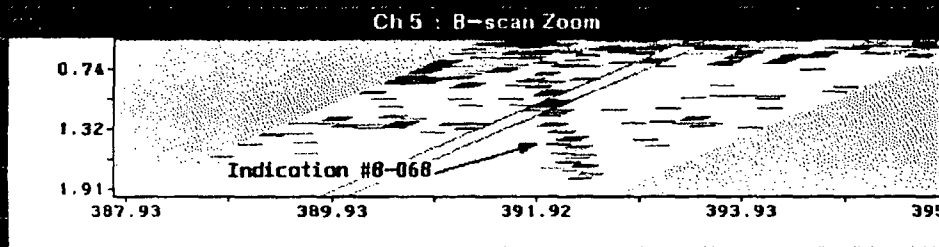
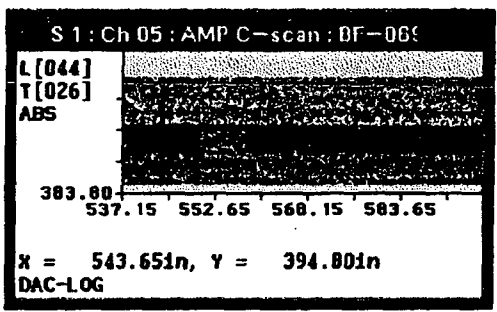


00231  
231 OF 276  
R1154

S 1: Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.0  
80.1  
84.5  
88.0

100%  
50%  
20%



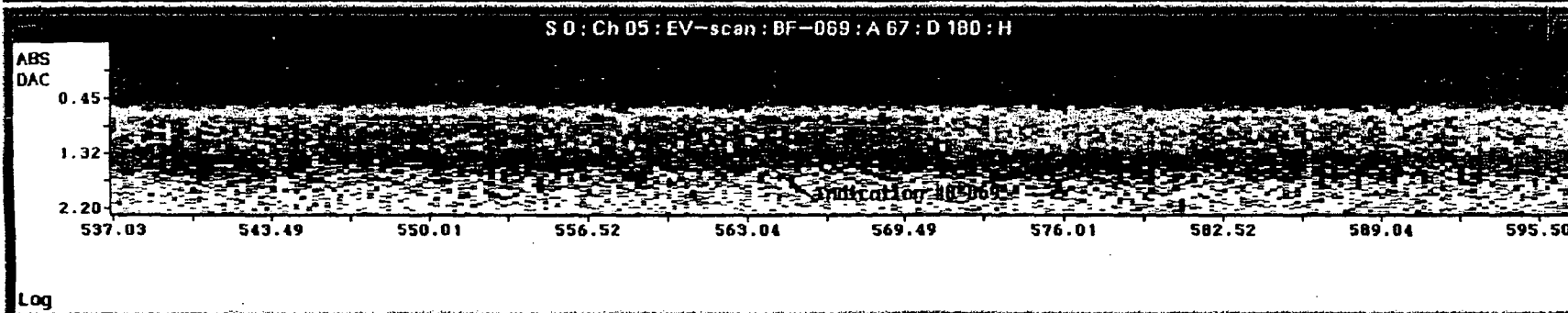
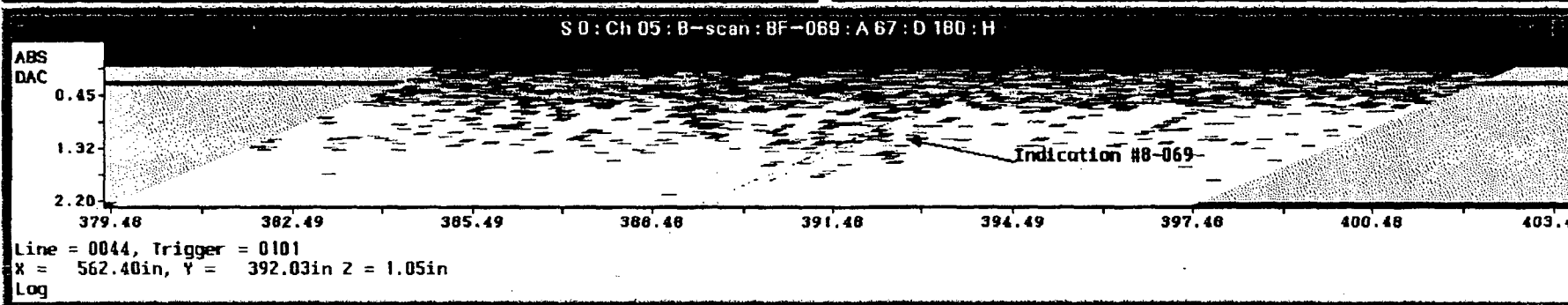
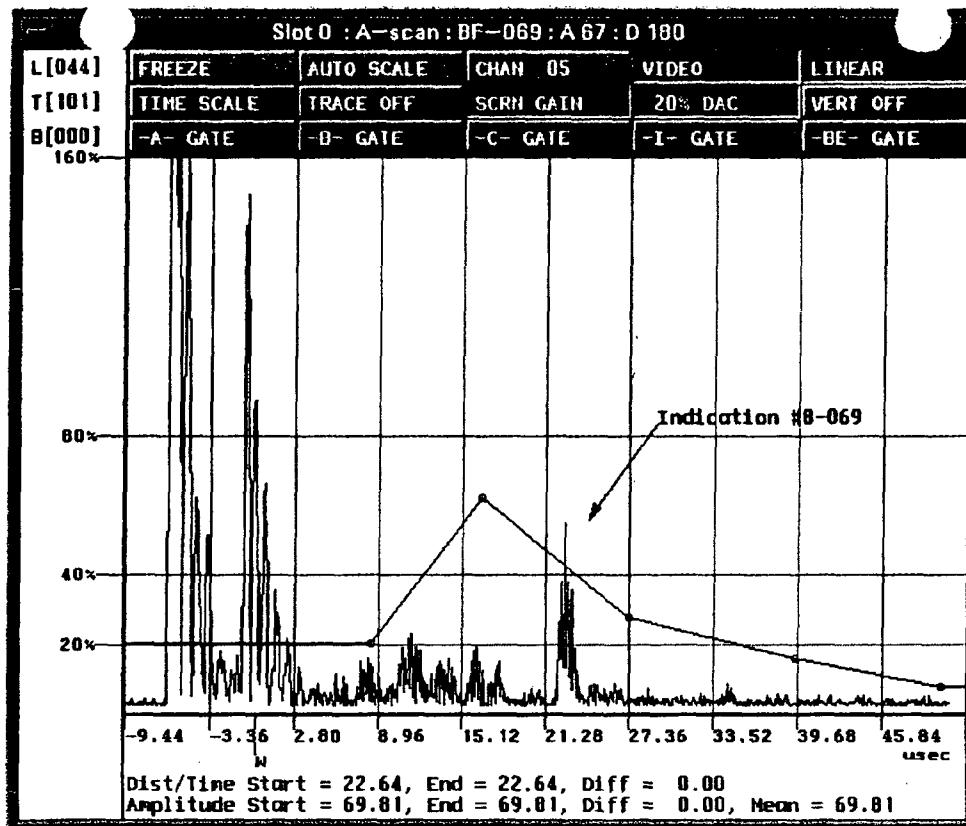
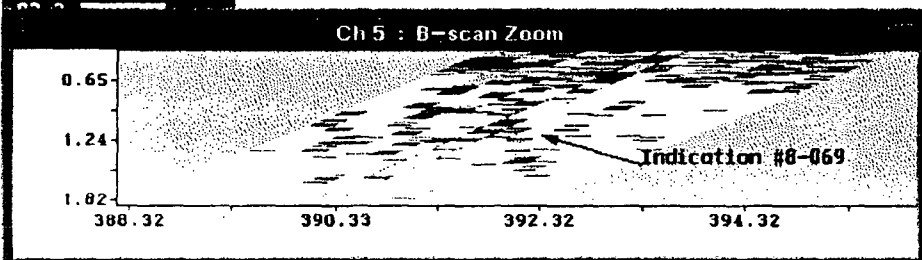
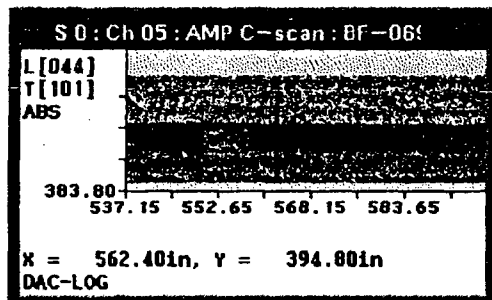
Lower Ten  
st>dump /max  
3/8-068

00232  
21154  
232 OF 276

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

100%  
50%  
20%



Lower Ten  
/maxtor3/8-  
3

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00233

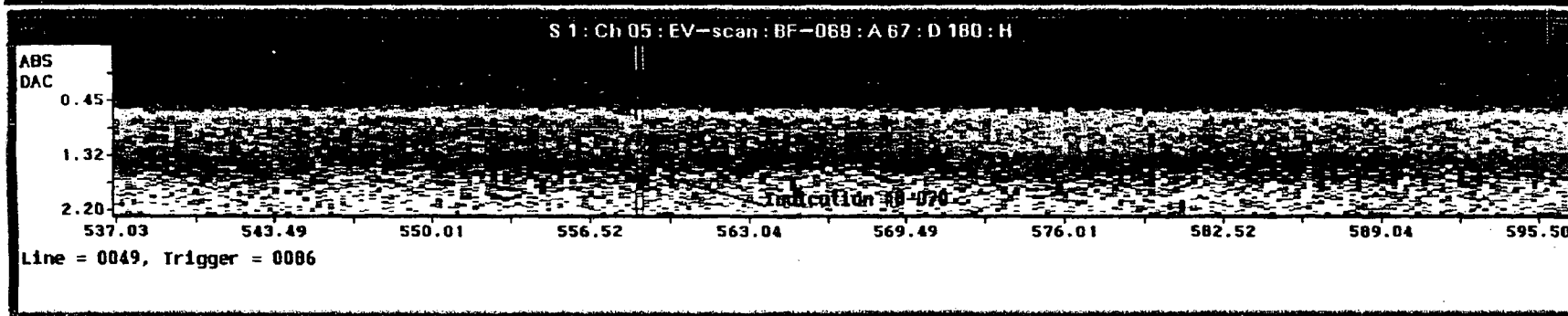
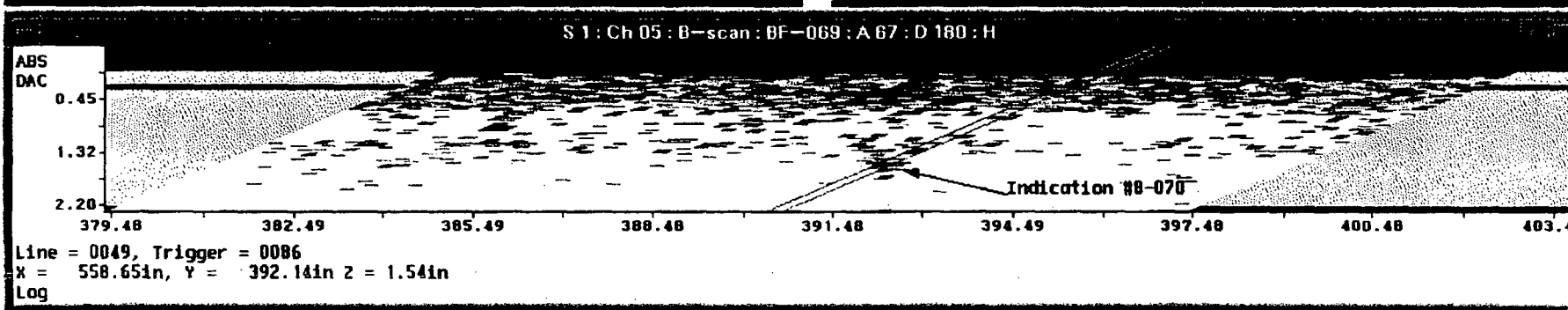
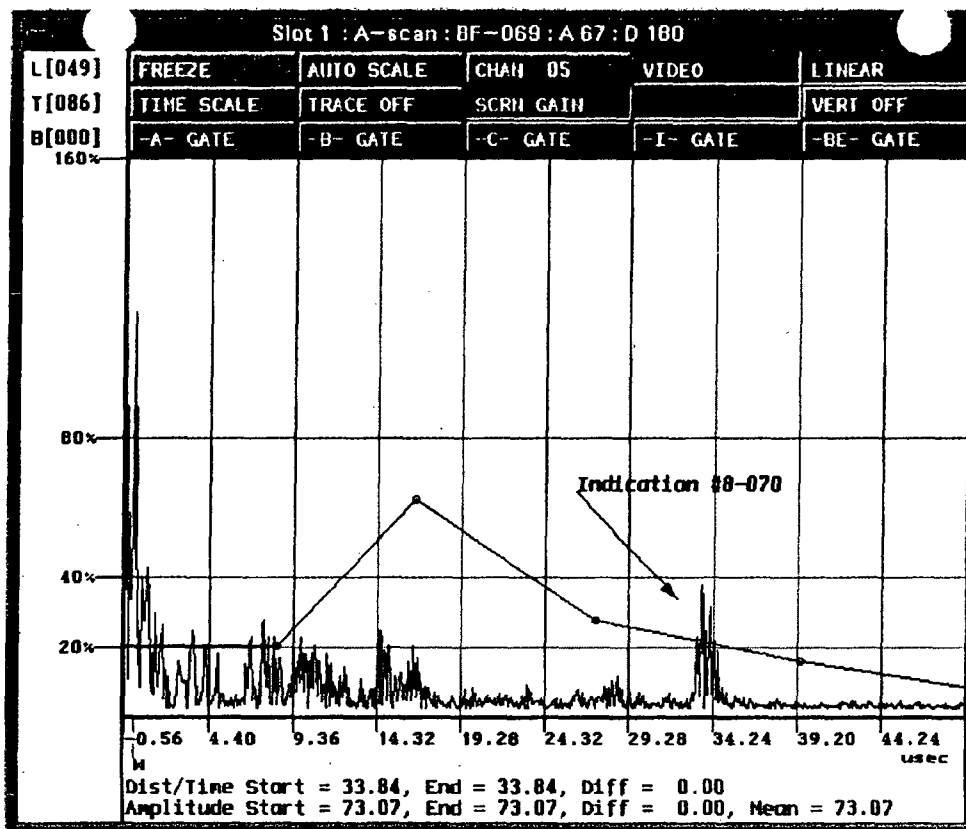
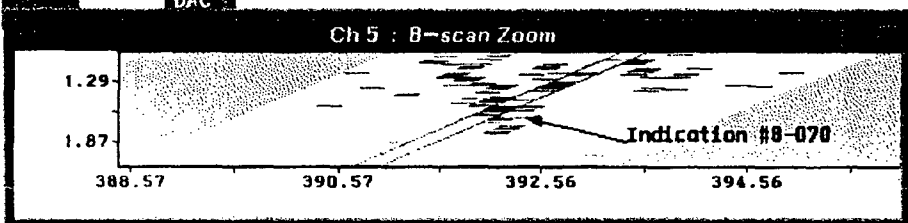
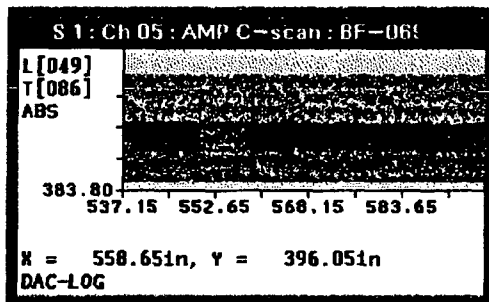
00000

S 1 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
50.4  
62.7  
67.1  
71.4  
75.0  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC



Lower Tern  
est dump / max  
3/8-070

00234

234 of 276

K1154

S0: Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.0

100%

50%

20%

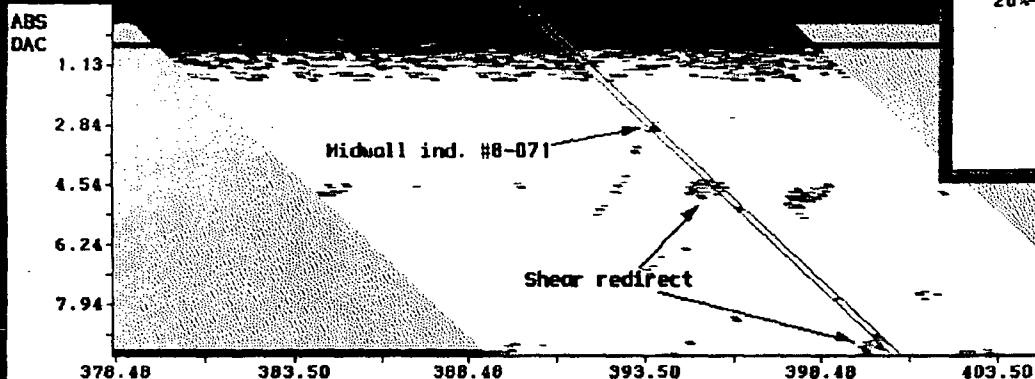
S0: Ch 07: AMP C-scan: BF-069

L[046]  
T[022]  
ABS

-3.50 2.05 18.35 33.85 49.35

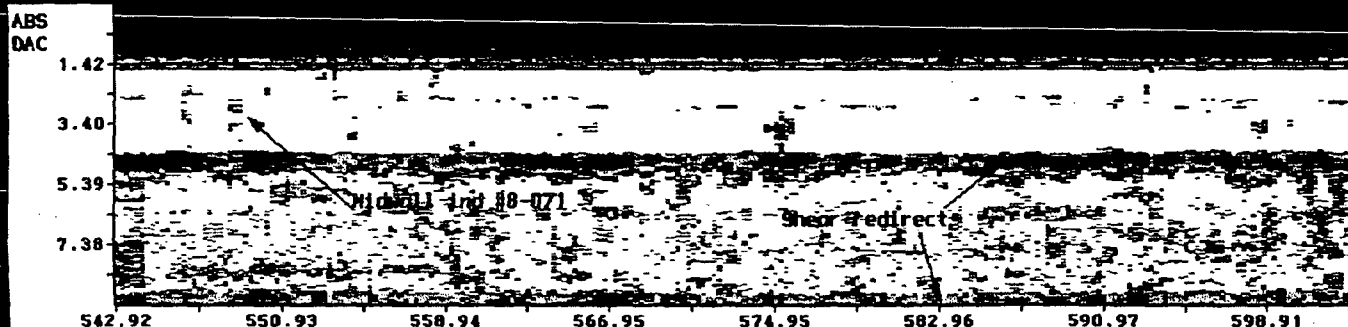
X = 548.35in, Y = 390.50in  
DAC-LOG

S0: Ch 07: B-scan: BF-069: A 47: D 0: H



Line = 0046, Trigger = 0022  
X = 548.35in, Y = 393.94in Z = 2.89in  
Log

S0: Ch 07: EV-scan: BF-069: A 47: D 0: H

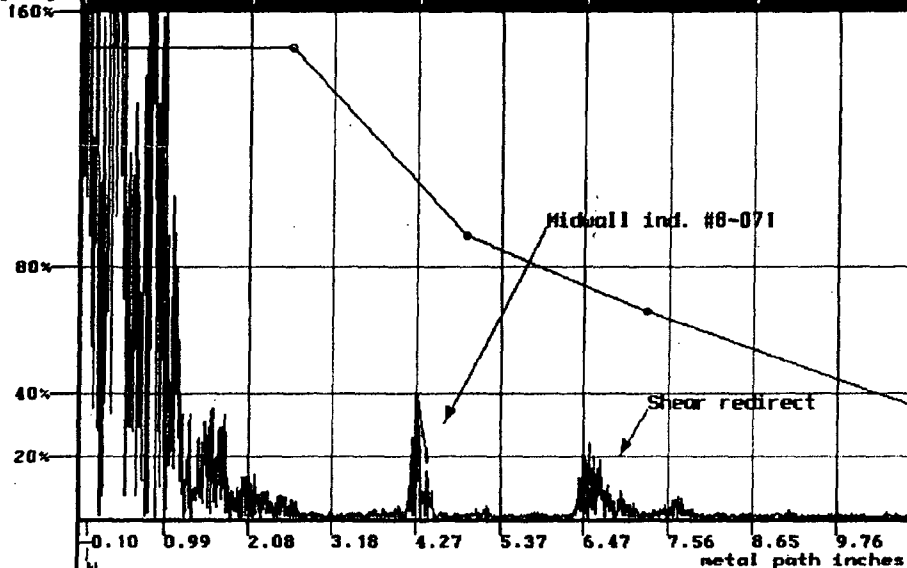


Log

Slot 0: A-scan: BF-069: A 47: D 0

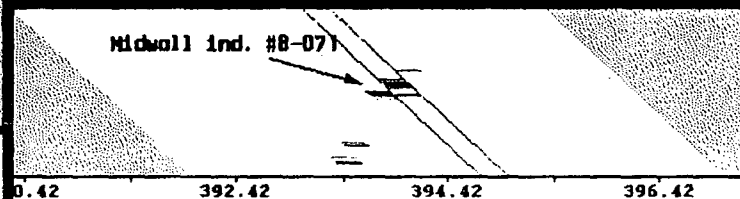
L[046]  
T[022]  
B[000]  
160%

FREEZE	AUTO SCALE	CHAN 07	VIDEO	LINEAR
TIME SCALE	TRACE OFF	SCRN GAIN	50% DAC	VERT OFF
-A- GATE	-B- GATE	-C- GATE	-I- GATE	-BE- GATE



Dist/Time Start = 4.27, End = 4.43, Diff = 0.16  
Amplitude Start = 60.56, End = 67.63, Diff = 7.07, Mean = 64.10

Ch 7: B-scan Zoom



Lower Ten  
/test/dump /max  
tor3/B-071

00235

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21127

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

100%  
50%  
20%

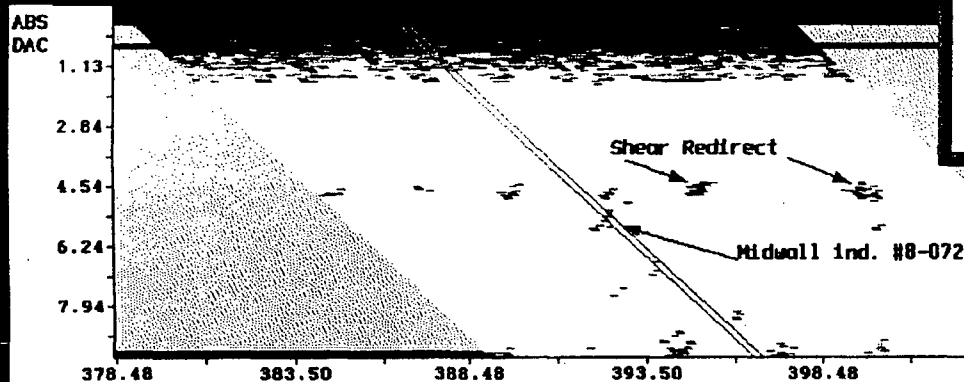
S 0 : Ch 07 : AMP C-scan : BF-069

L[030]  
T[034]  
ABS

379.00  
542.85 558.35 573.85 589.35

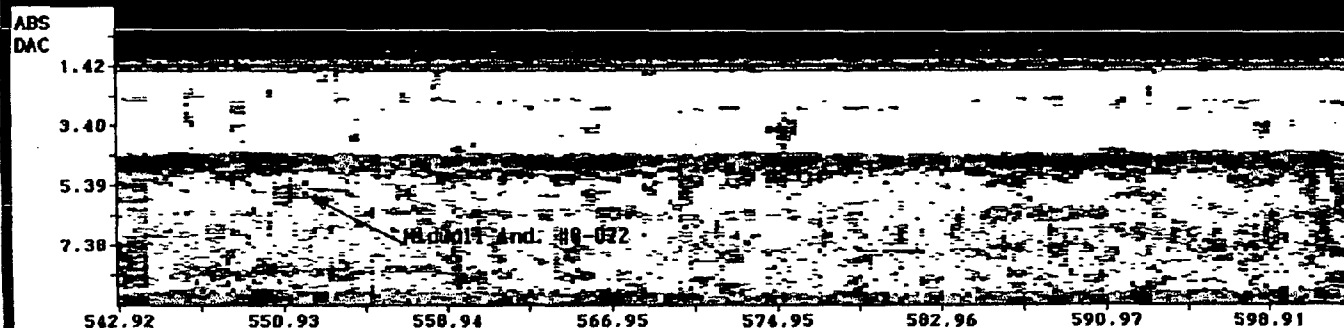
X = 551.35in, Y = 386.50in  
DAC-LOG

S 0 : Ch 07 : B-scan : BF-069 : A 47 : D 0 : H



Line = 0030, Trigger = 0034  
X = 551.35in, Y = 392.42in Z = 5.42in  
Log

S 0 : Ch 07 : EV-scan : BF-069 : A 47 : D 0 : H

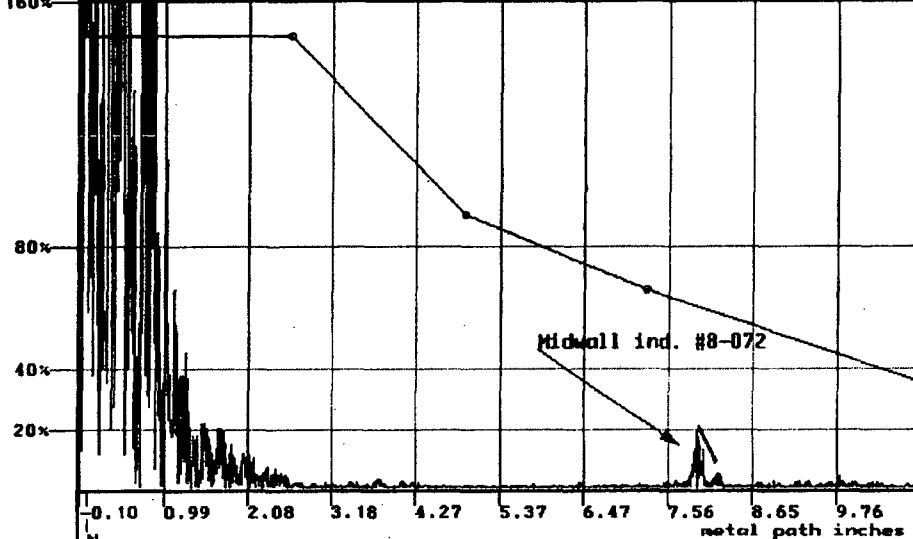


Log

Slot 0 : A-scan : BF-069 : A 47 : D 0

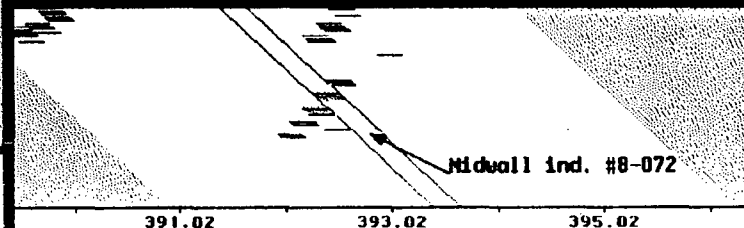
L[030]  
T[034]  
B[000]  
160%

FREEZE	AUTO SCALE	CHAN 07	VIDEO	LINEAR
TIME SCALE	TRACE OFF	SCRN GAIN	50% DAC	VERT OFF
-A- GATE	-B- GATE	-C- GATE	-I- GATE	-BE- GATE



Dist/Time Start = 7.96, End = 8.18, Diff = 0.23  
Amplitude Start = 66.00, End = 73.61, Diff = 7.61, Mean = 69.81

Ch 7 : B-scan Zoom



00236

Lower Ten  
/test>dump /max  
tor3/8-072

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K1154



S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.6

100%

50%

20%

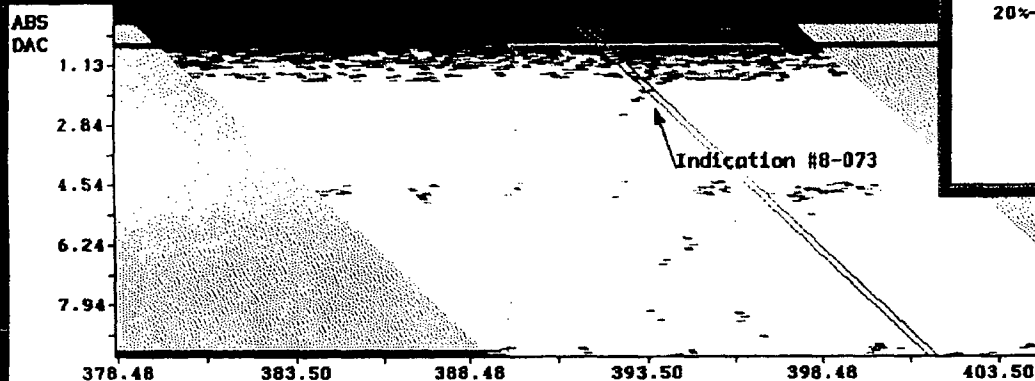
S 0 : Ch 07 : AMP C-scan : BF-069

L[050]  
T[061]  
ABS

379.00  
542.85 558.35 573.85 589.35

X = 558.10in, Y = 391.50in  
DAC-LOG

S 0 : Ch 07 : B-scan : BF-069 : A 47 : D 0 : H

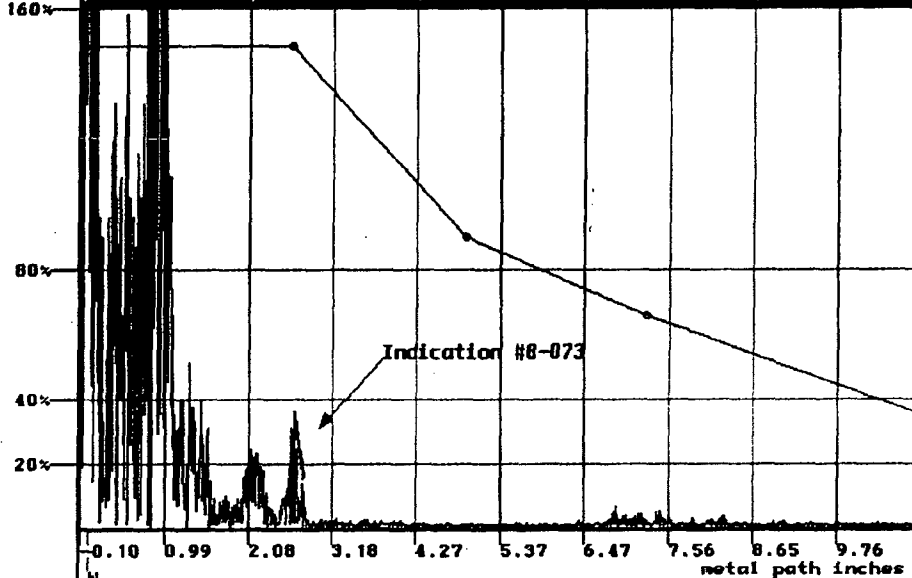


Line = 0050, Trigger = 0061  
X = 558.10in, Y = 393.71in Z = 1.79in  
Log

Slot 0 : A-scan : BF-069 : A 47 : D 0

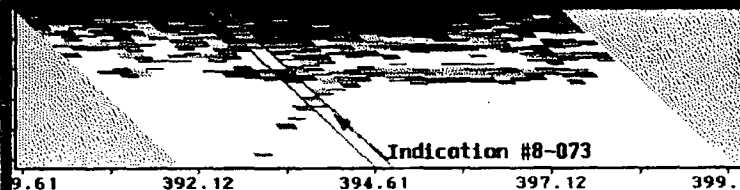
L[050]  
T[061]  
B[000]

FREEZE	AUTO SCALE	CHAN 07	VIDEO	LINEAR
TIME SCALE	TRACE OFF	SCRN GAIN	50% DAC	VERT OFF
-A- GATE	-B- GATE	-C- GATE	-I- GATE	-BE- GATE

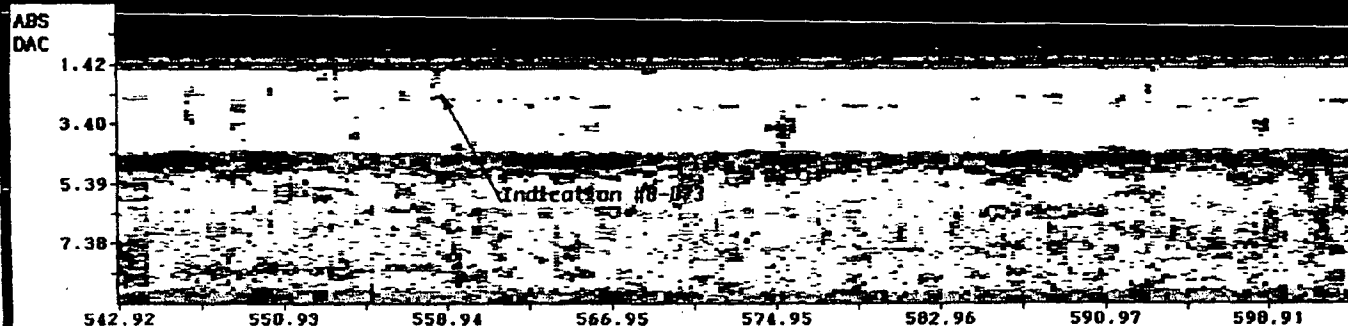


Dist/Time Start = 2.67, End = 2.81, Diff = 0.14  
Amplitude Start = 61.65, End = 68.72, Diff = 7.07, Mean = 65.19

Ch 7 : B-scan Zoom



S 0 : Ch 07 : EV-scan : BF-069 : A 47 : D 0 : H



Log

Lower Ten  
/test>dump /max  
ton3/8-073

00237

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K1134

S 0 : Scale

32.3	
36.6	
41.0	100%
45.3	
49.7	50%
54.0	
58.4	20%
62.7	
67.1	
71.4	
75.8	
80.1	
84.5	
88.8	

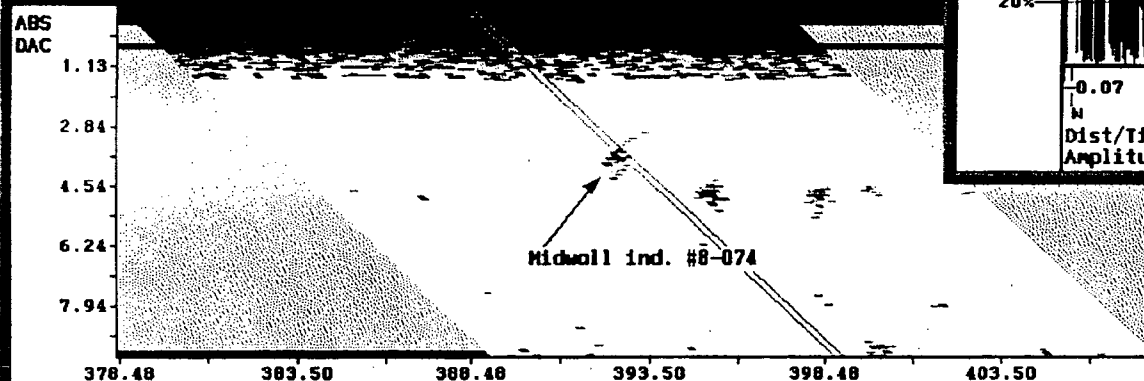
S 0 : Ch 07 : AMP C-scan : BF-069

L[039]  
T[129]  
ABS

379.00  
542.85 558.35 573.85 589.35

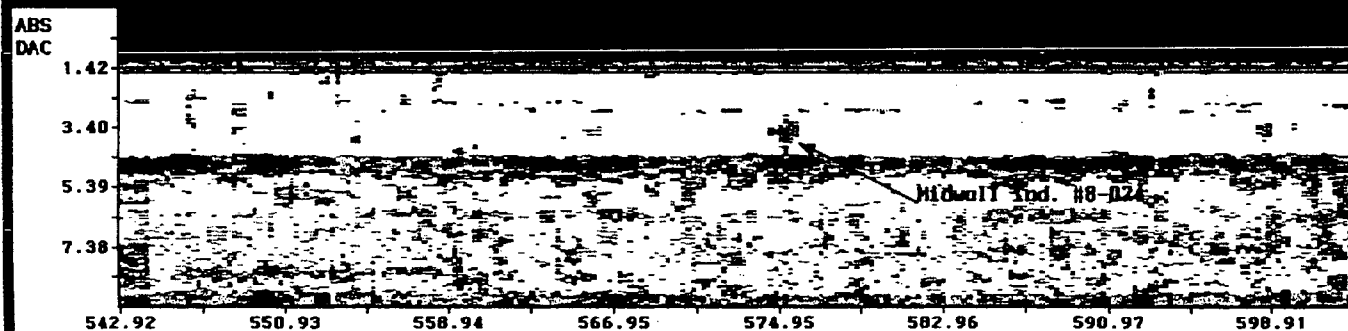
x = 575.10in, y = 388.75in  
DAC-LOG

S 0 : Ch 07 : B-scan : BF-069 : A 47 : D 0 : H

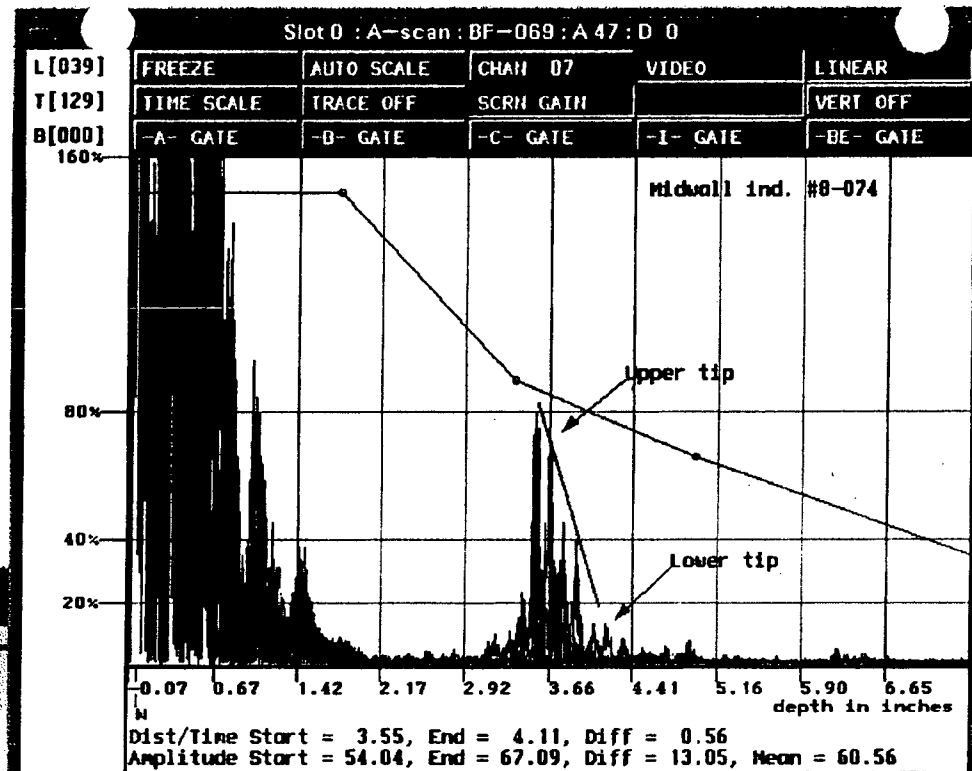


Line = 0039, Trigger = 0129  
x = 575.10in, y = 392.71in z = 3.52in

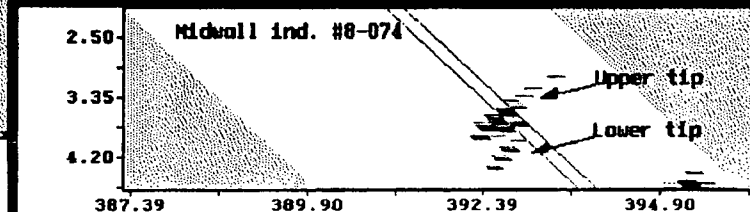
S 0 : Ch 07 : EV-scan : BF-069 : A 47 : D 0 : H



Log



Ch 7 : B-scan Zoom



Lower Ten  
/test>dump /max  
tor3/B-074

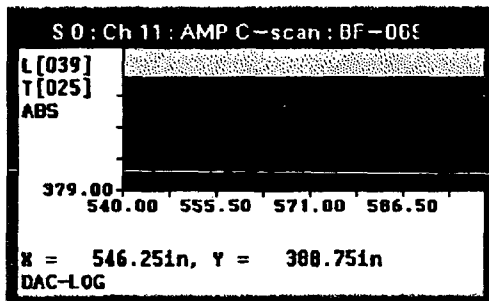
00238

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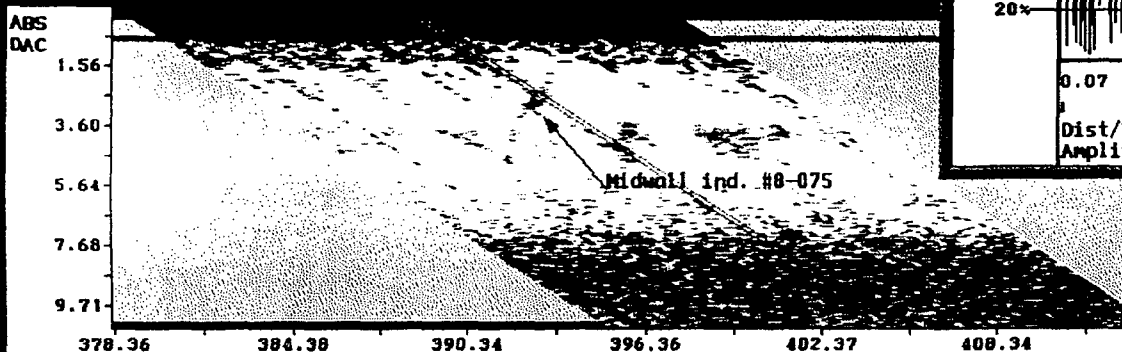
R1154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0  
58.4 50%  
62.7  
67.1 20%  
71.4  
75.8  
80.1

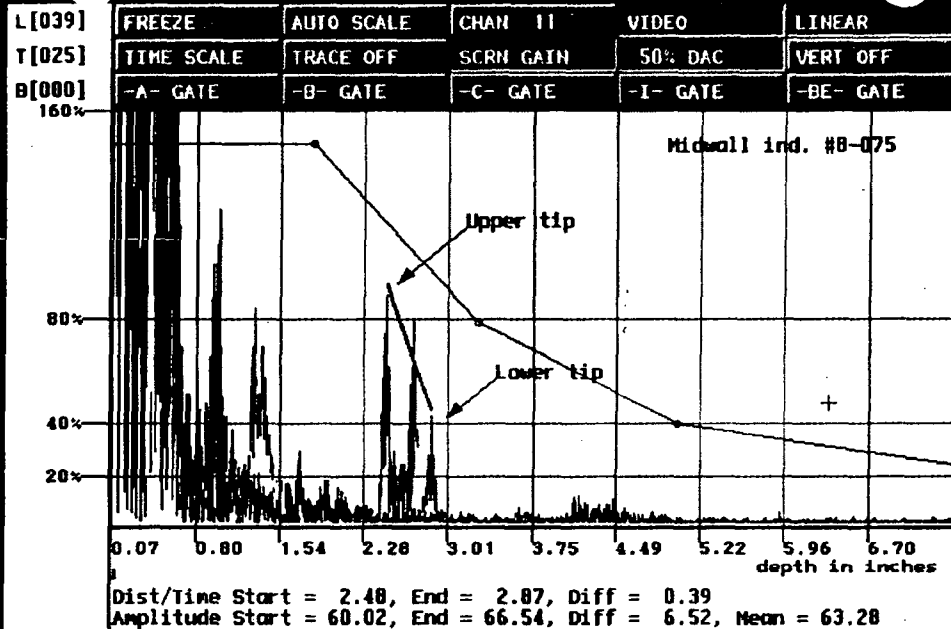


S 0 : Ch 11 : B-scan : BF-069 : A 57 : D 0 : H

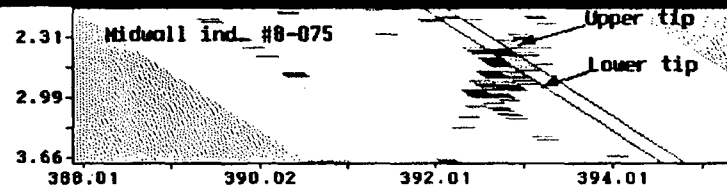


Line = 0039, Trigger = 0025  
X = 546.25in, Y = 392.77in Z = 2.48in

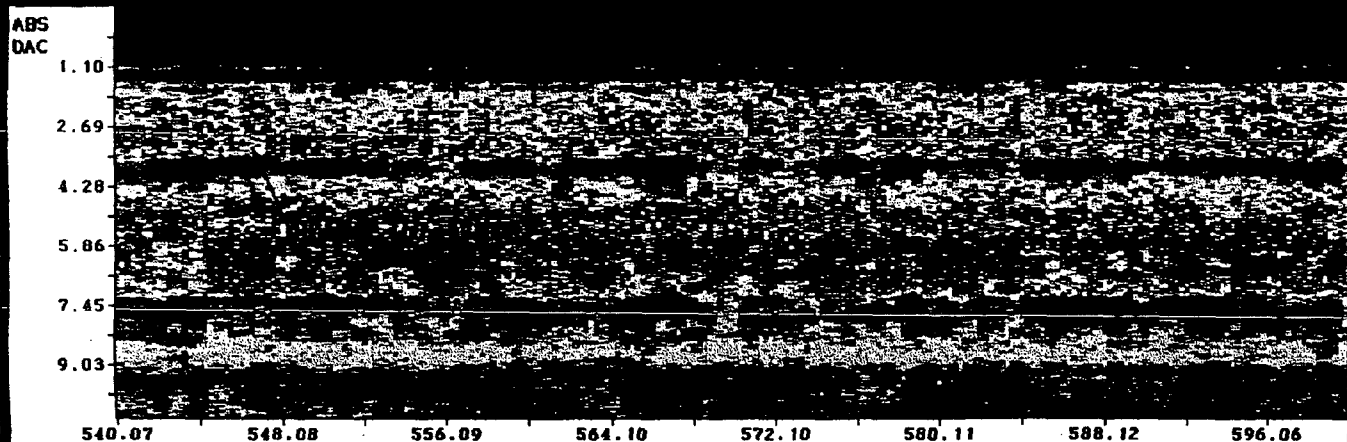
Slot 0 : A-scan : BF-069 : A 57 : D 0



Ch 11 : B-scan Zoom



S 0 : Ch 11 : EV-scan : BF-069 : A 57 : D 0 : H



Log

Lower Ten  
/test>dump /max  
ton3/8-075

002339

21154  
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S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0  
58.4 50%  
62.7  
67.1 20%  
71.4  
75.8  
80.7

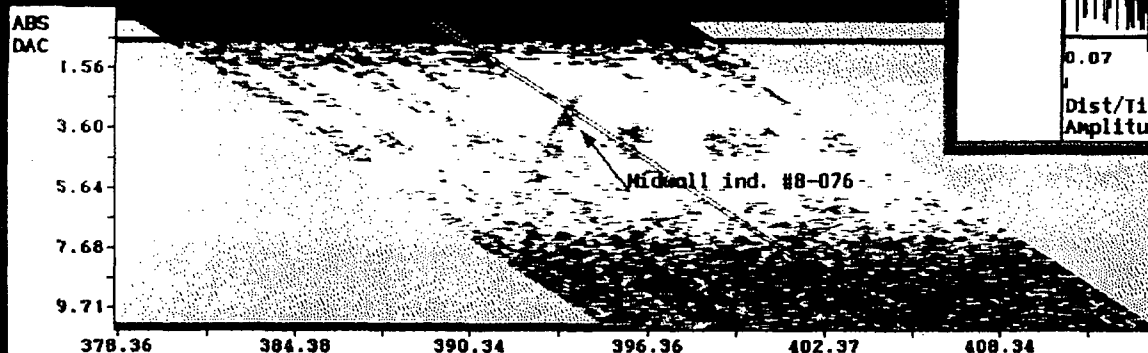
S 0 : Ch 11 : AMP C-scan : BF-069

L[040]  
T[034]  
ABS

379.00  
540.00 555.50 571.00 586.50

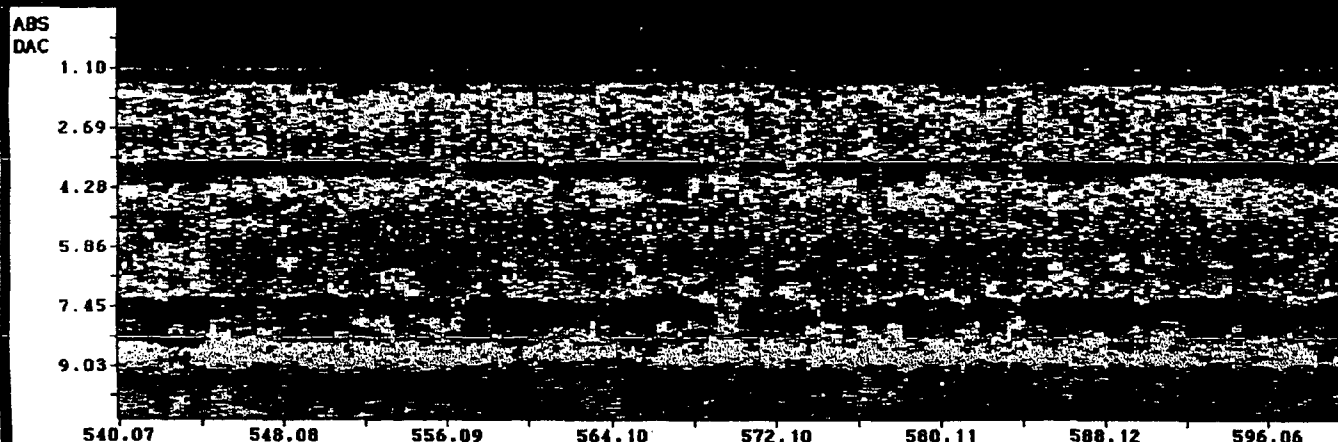
X = 548.50in, Y = 389.00in  
DAC-LOG

S 0 : Ch 11 : B-scan : BF-069 : A 57 : D 0 : H

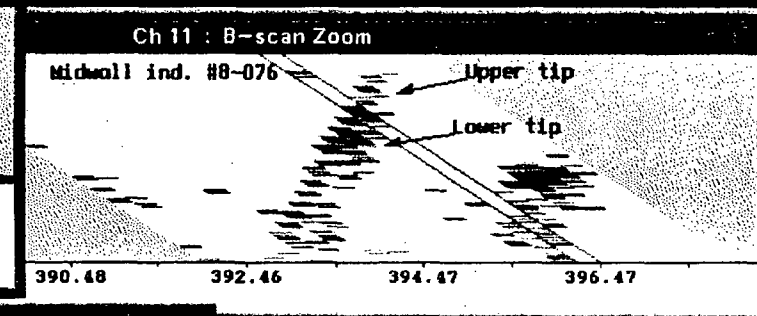
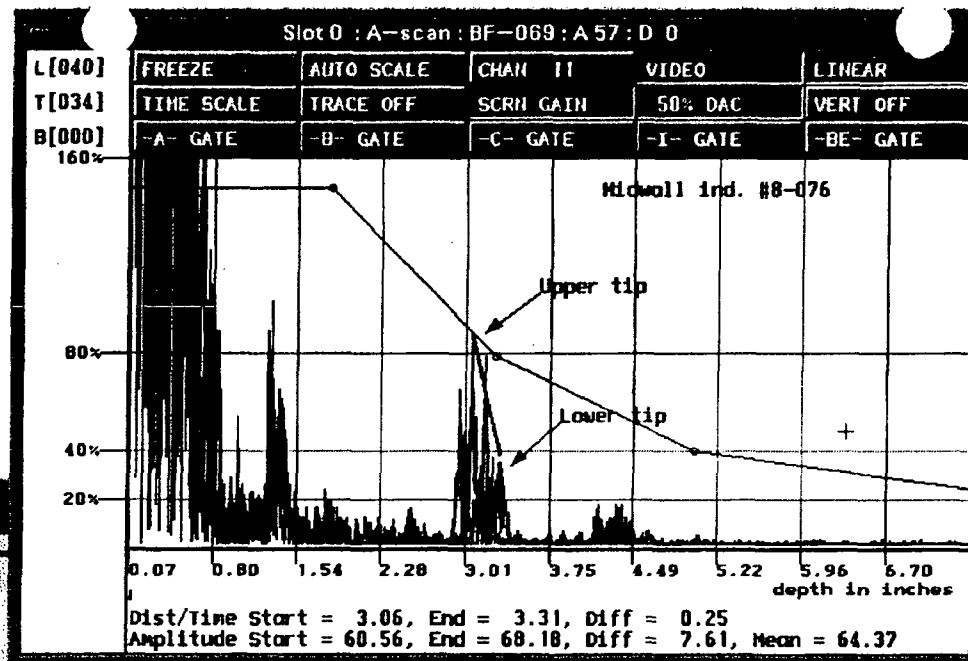


Line = 0040, Trigger = 0034  
X = 548.50in, Y = 393.76in Z = 3.00in

S 0 : Ch 11 : EV-scan : BF-069 : A 57 : D 0 : H



Log



Lower Ten  
/test>dump /max  
tor3/8-076

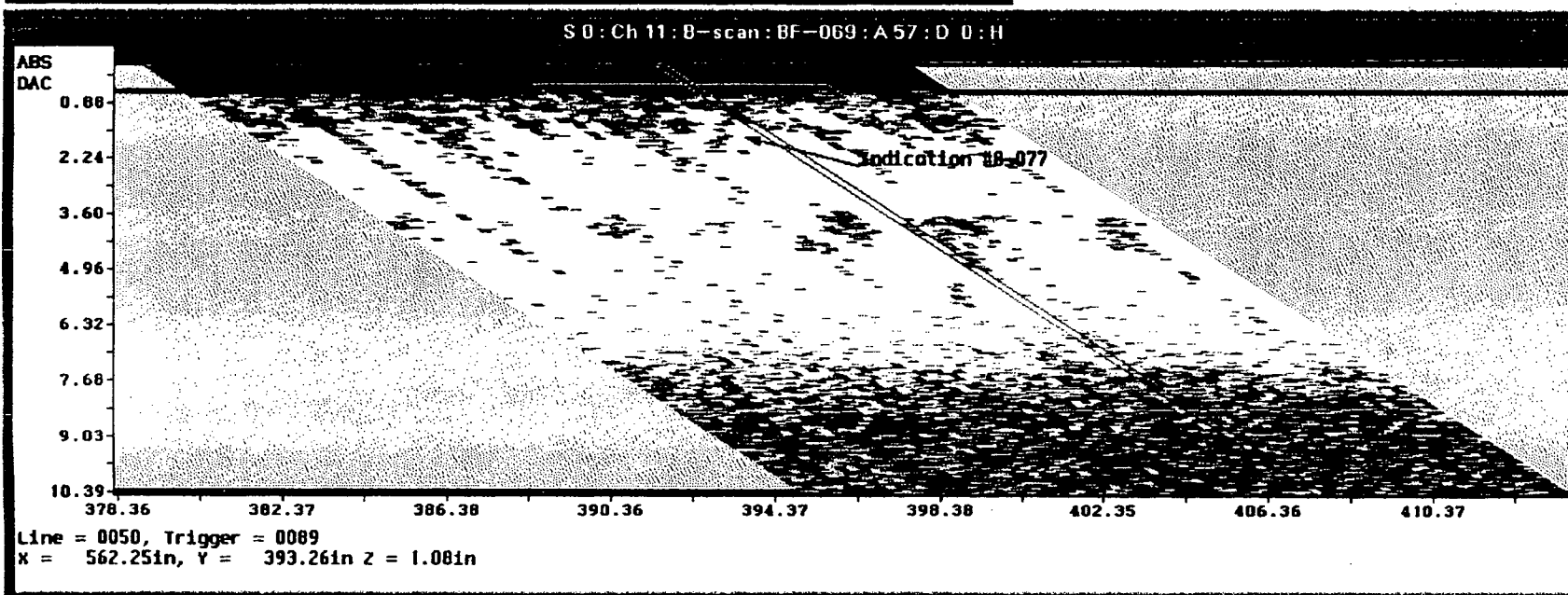
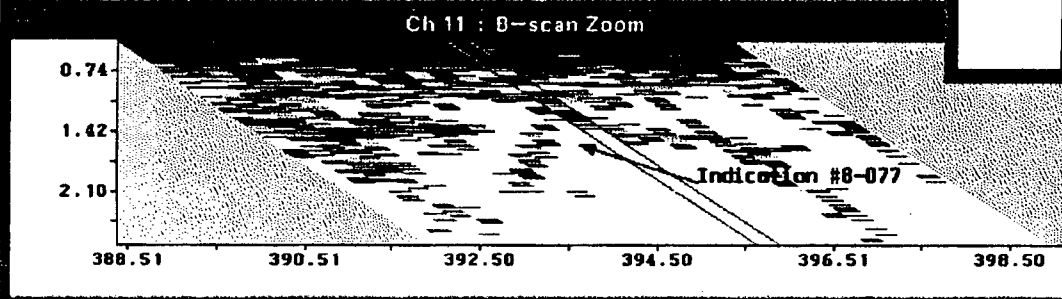
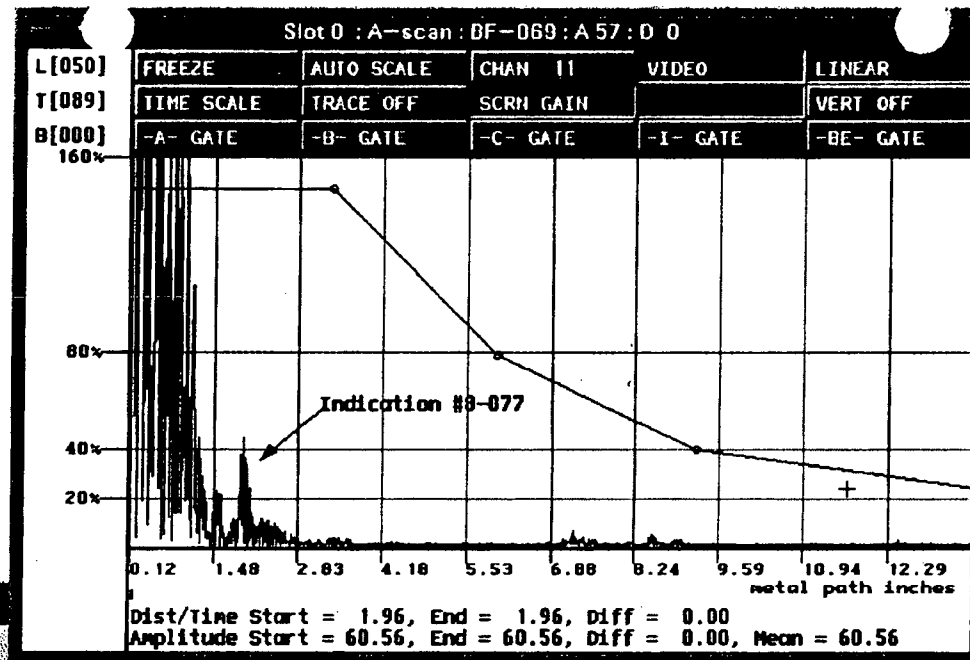
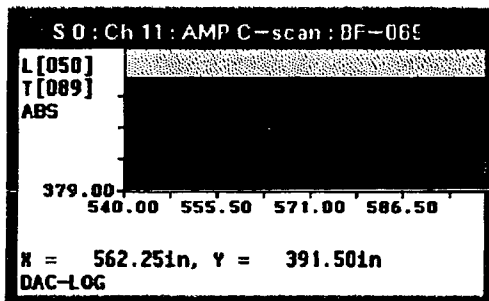
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21154

00240

S 0 : Scale

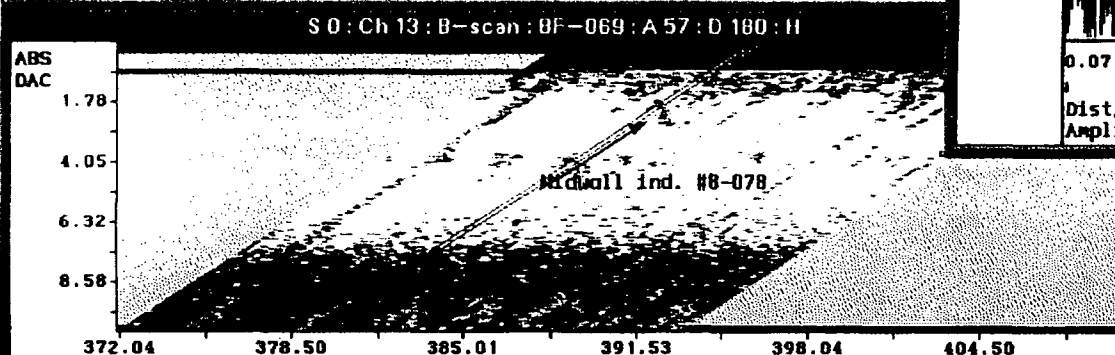
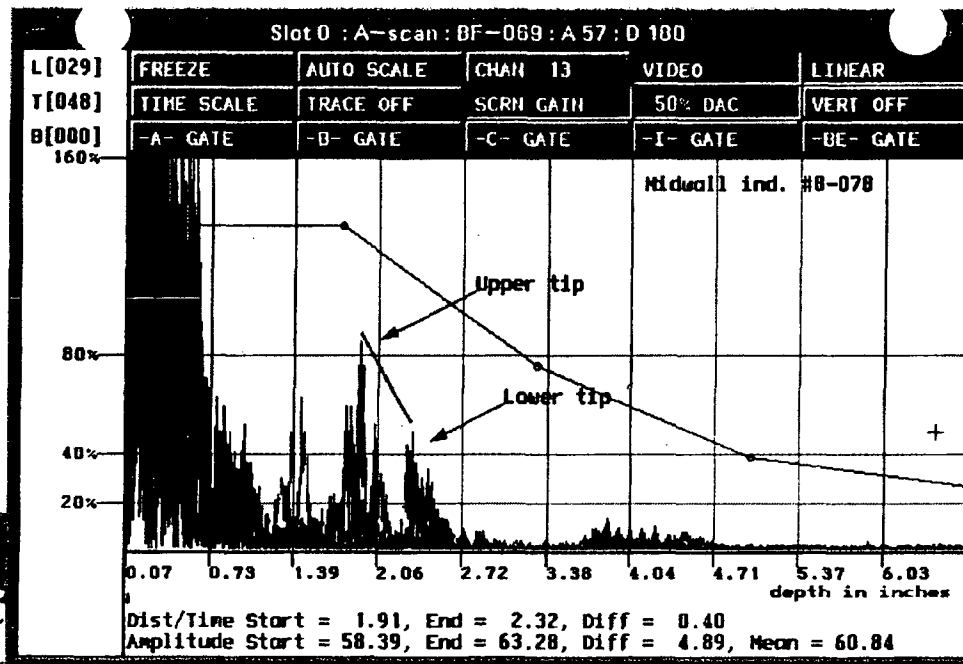
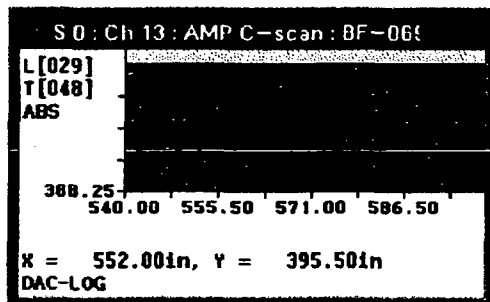
32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0 50%  
58.4  
62.7 20%  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2



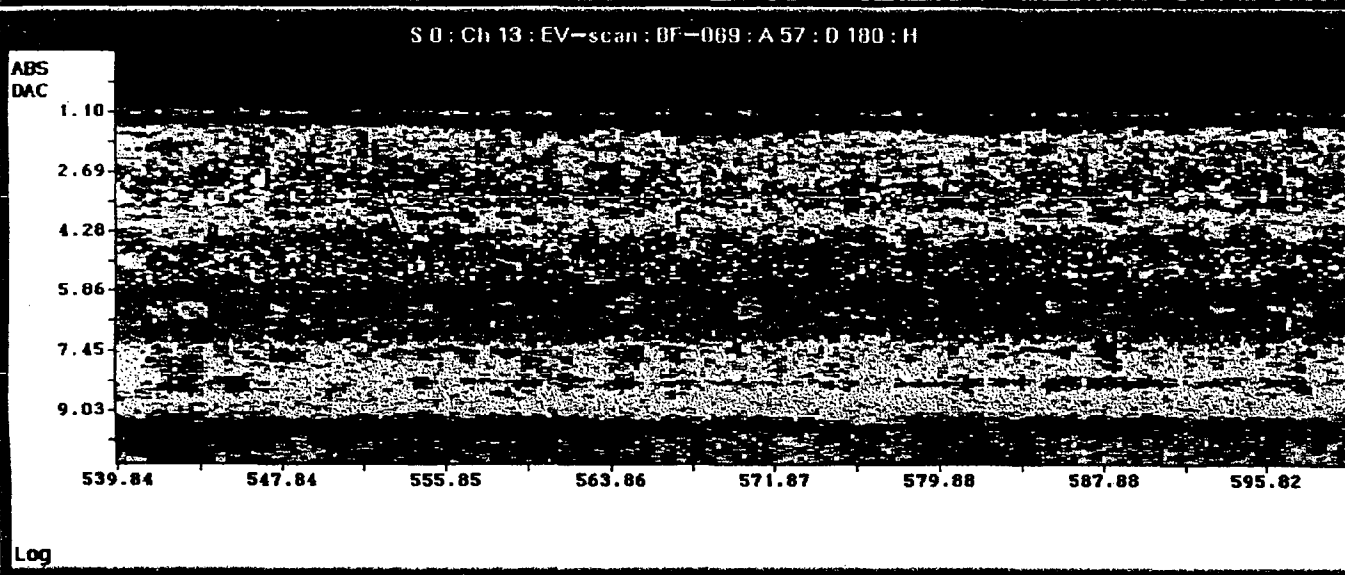
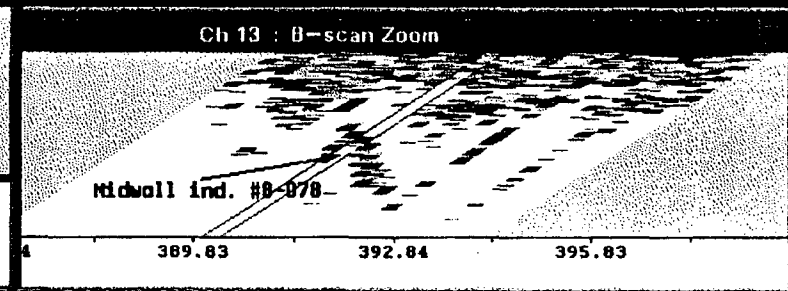
21154  
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60241

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0 50%  
58.4  
62.7 20%  
67.1  
71.4  
75.8  
80.1  
84.5



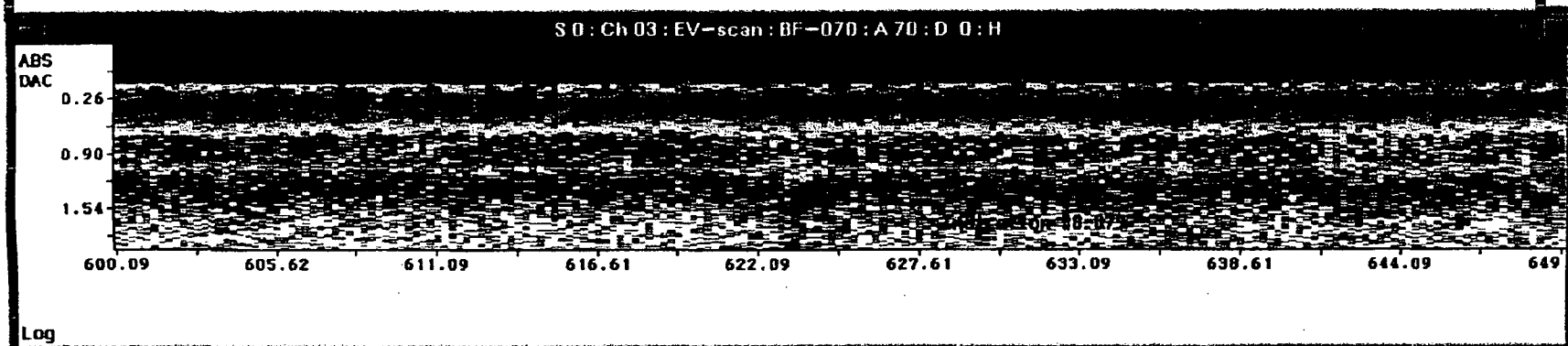
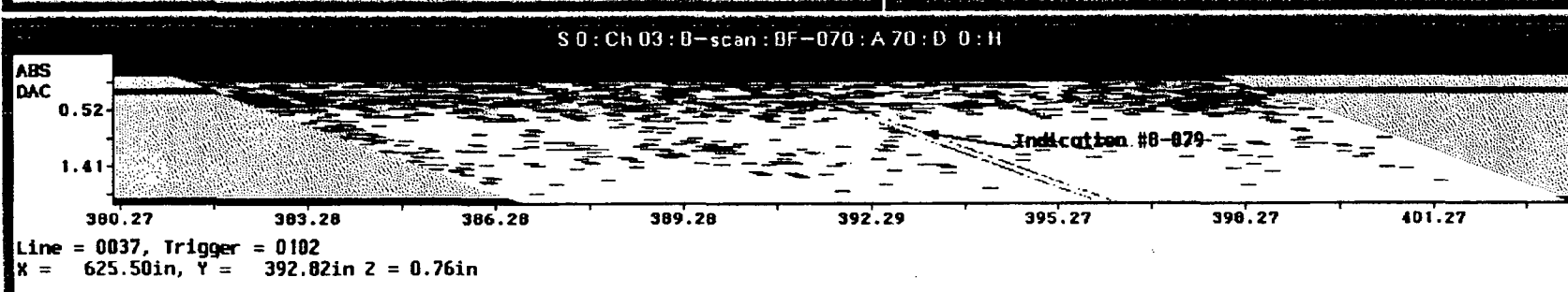
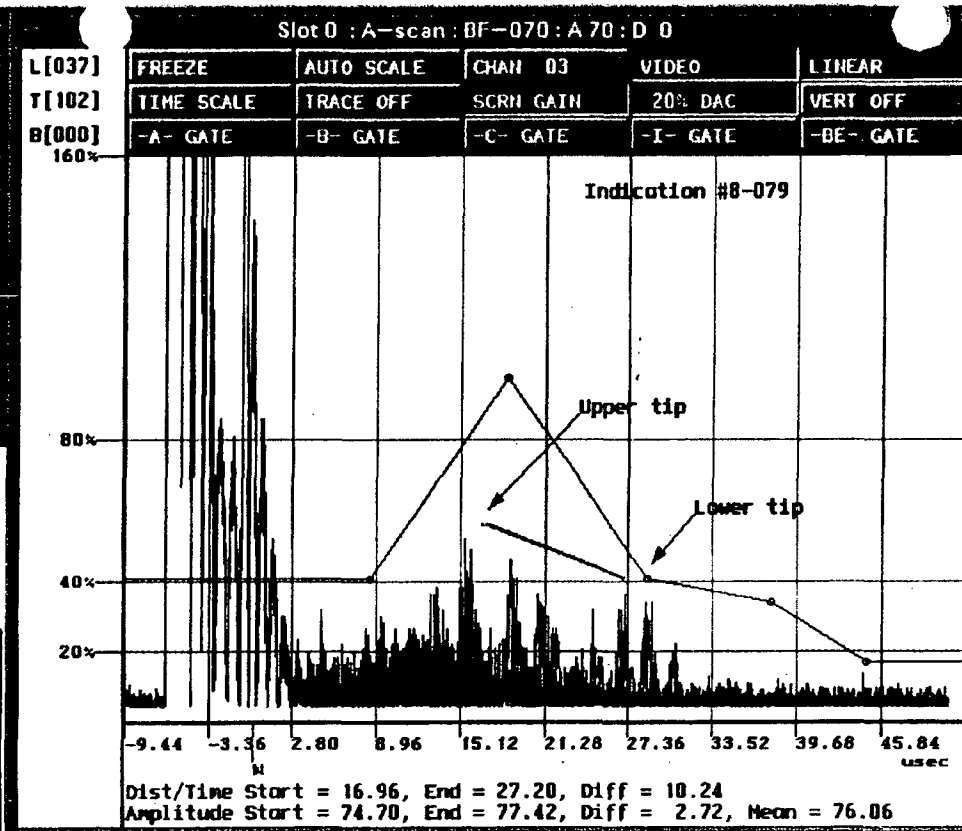
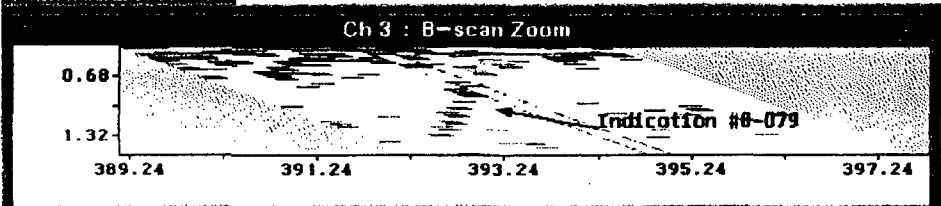
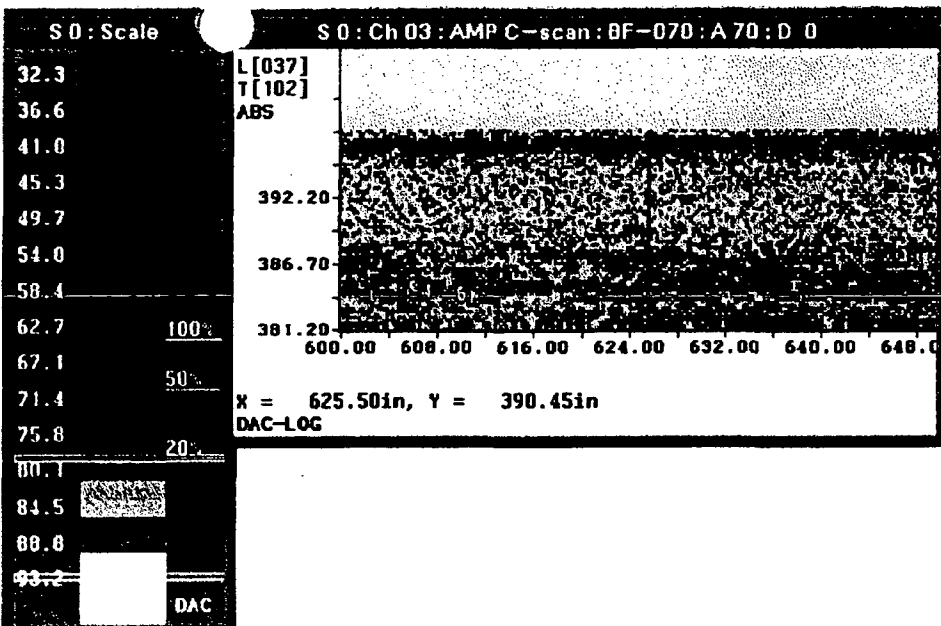
Line = 0029, Trigger = 0048  
X = 552.00in, Y = 392.32in Z = 1.91in



Lower Tern  
/test>dump /max  
ton3/B-078

21154  
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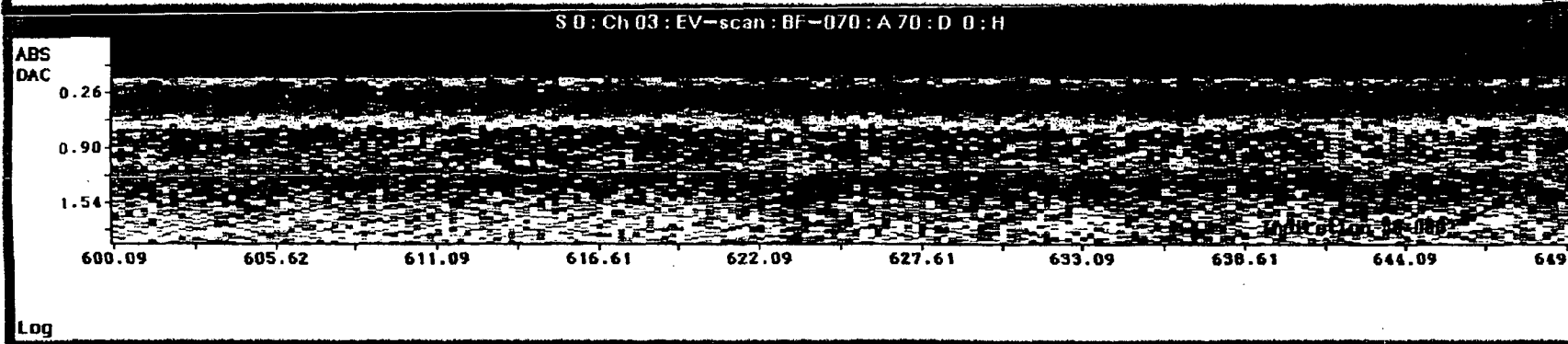
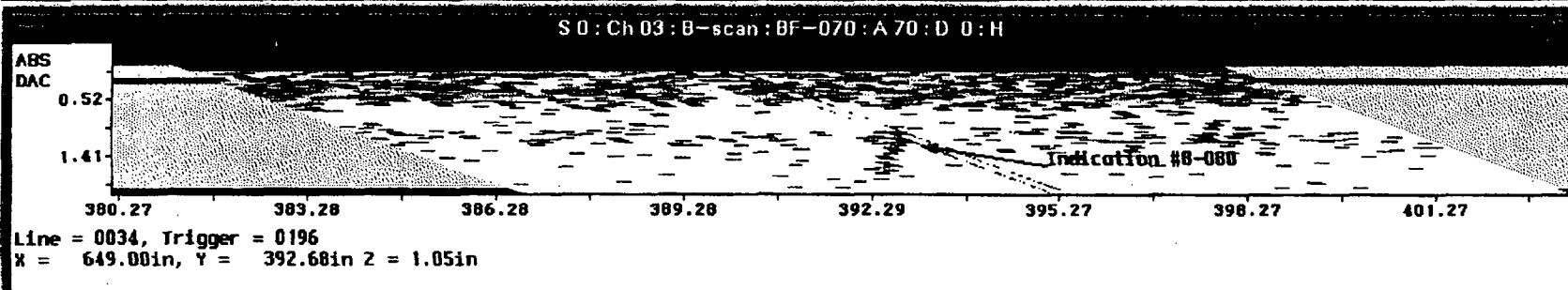
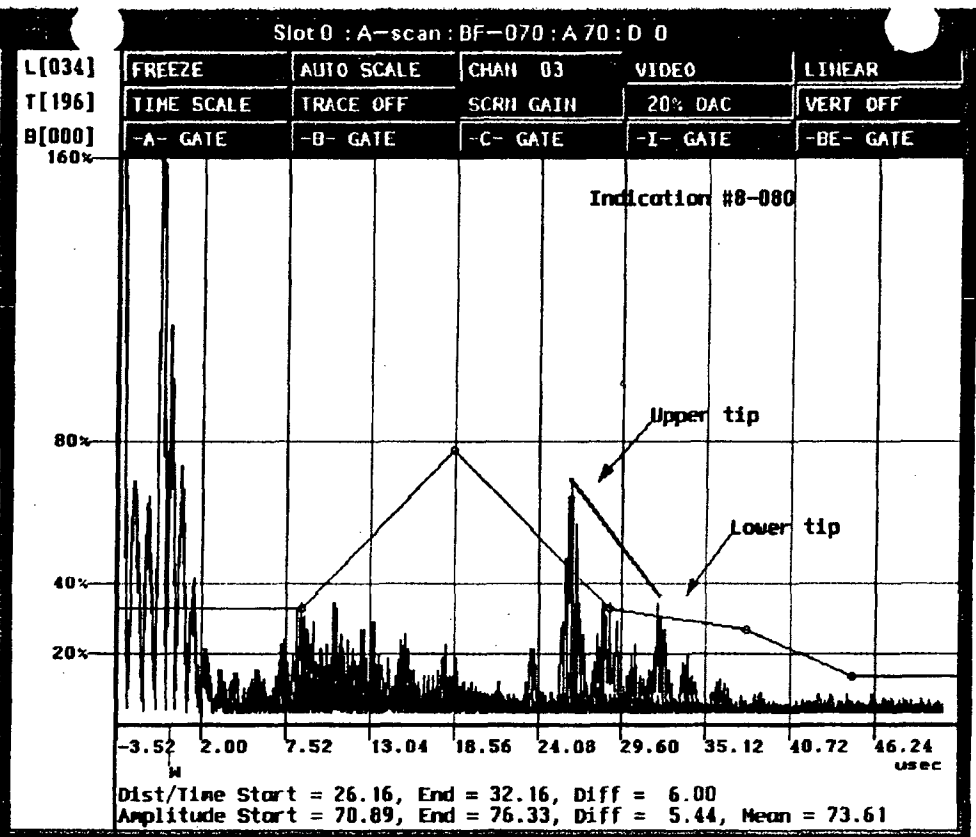
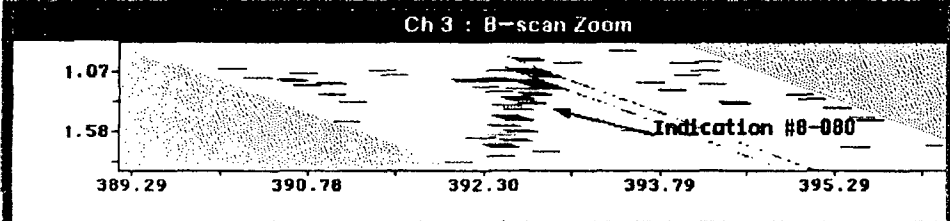
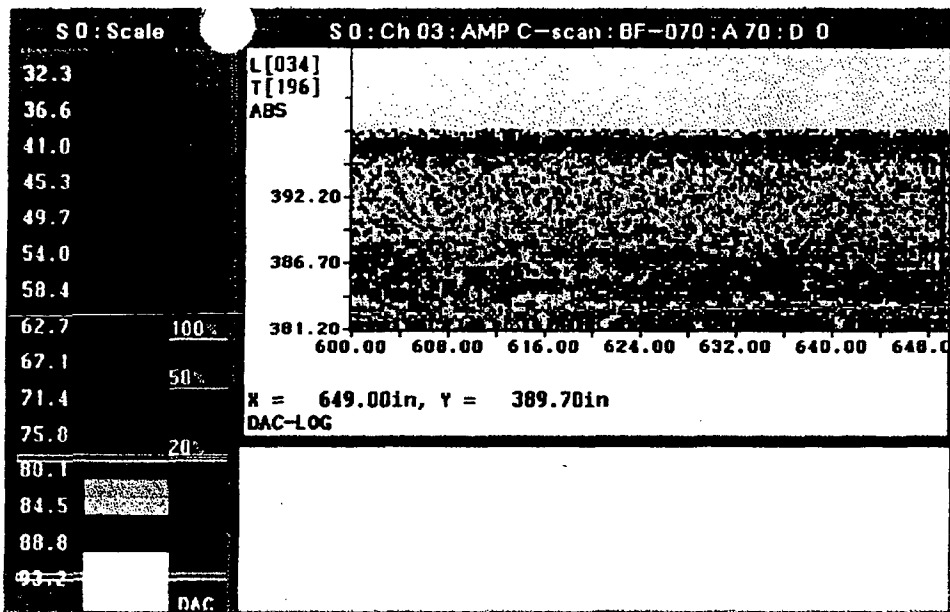
002242



Lower Ten  
/maxtor3/8-  
3

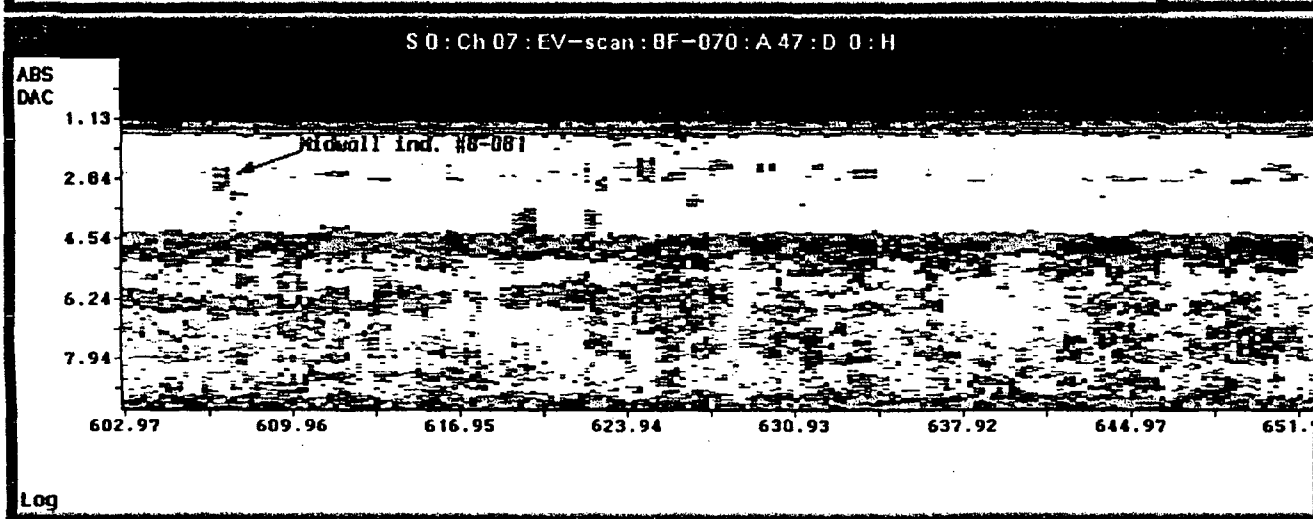
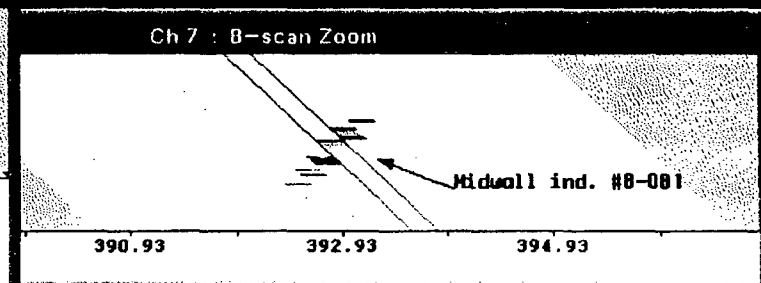
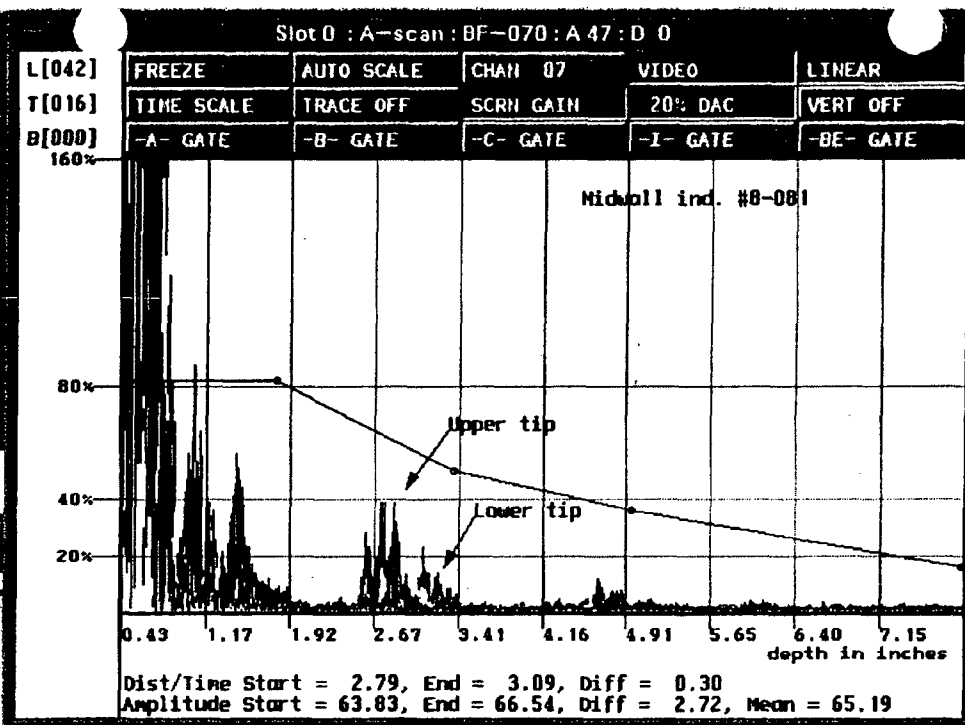
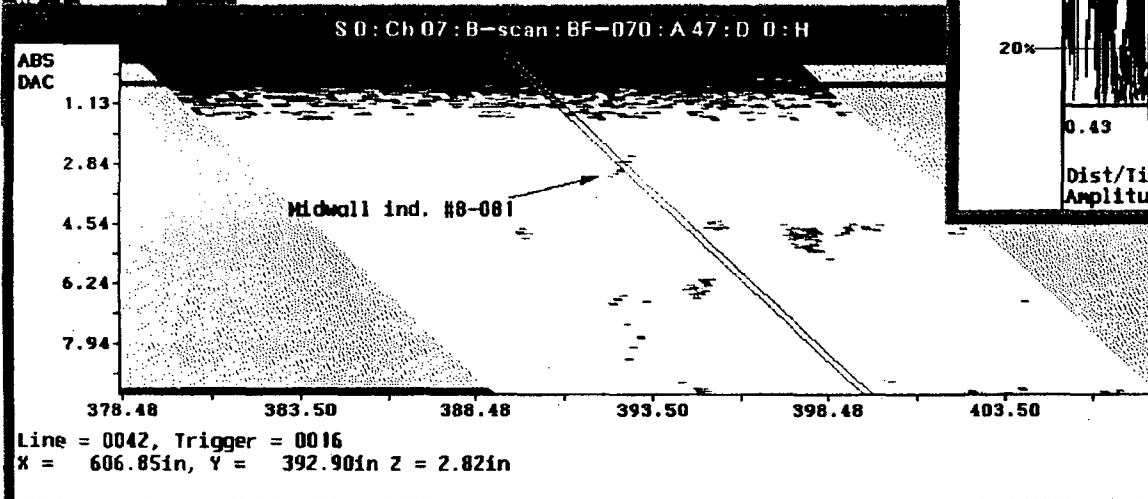
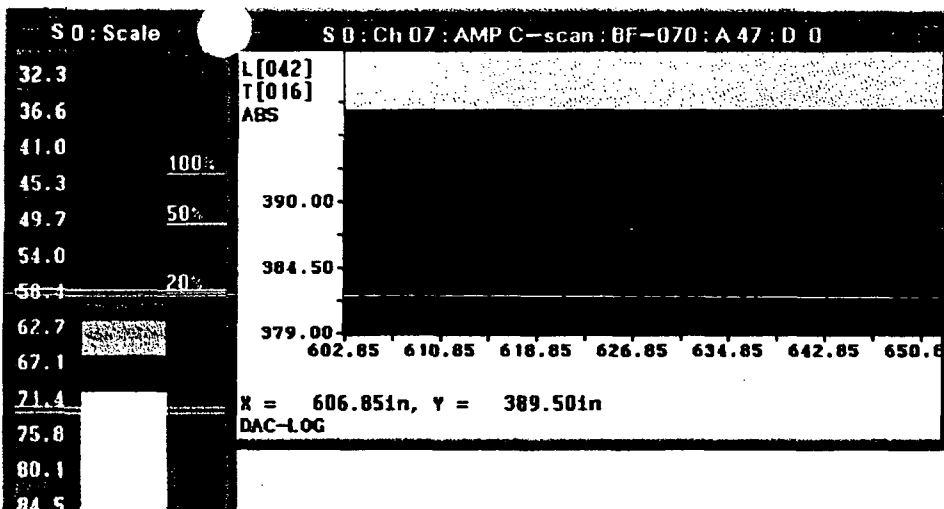
21154  
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00243



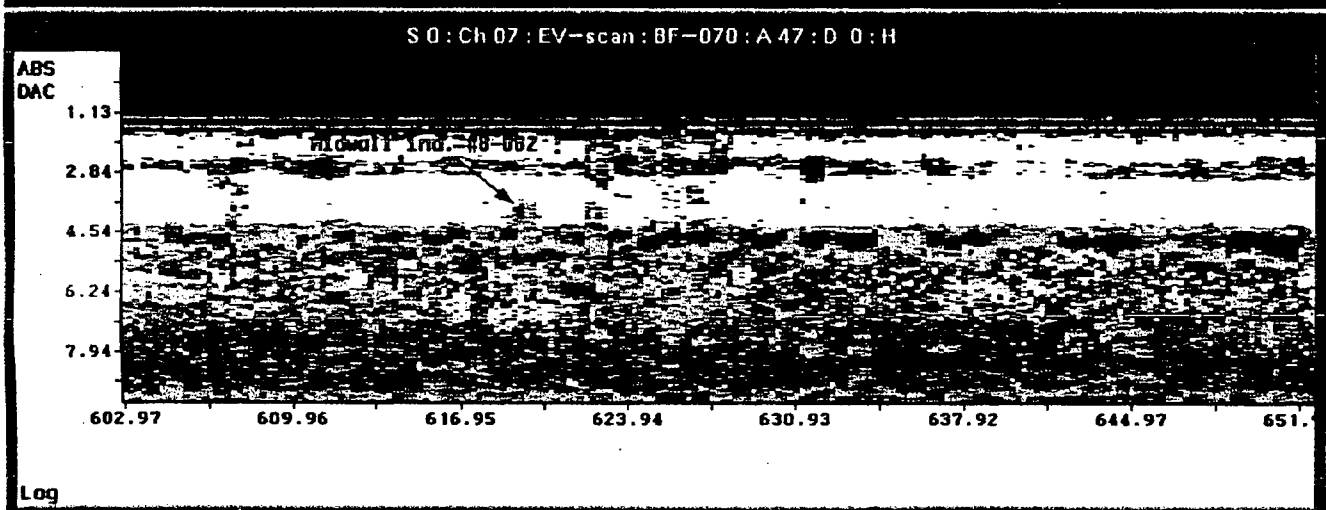
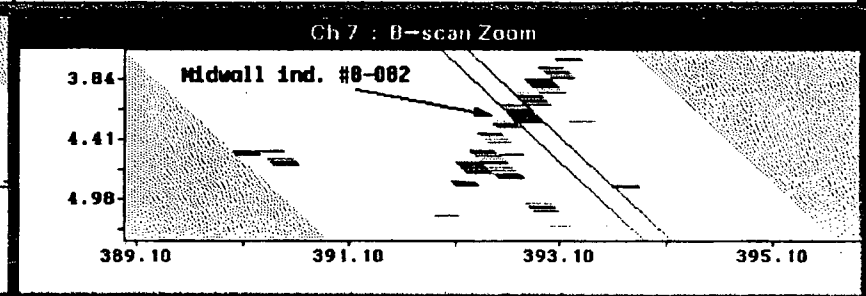
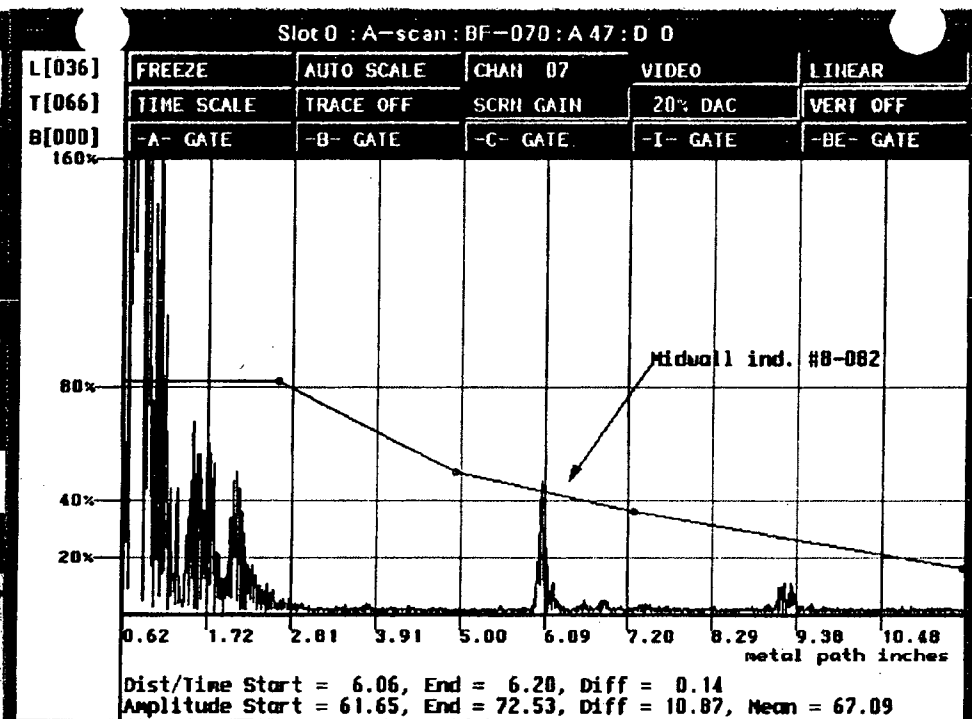
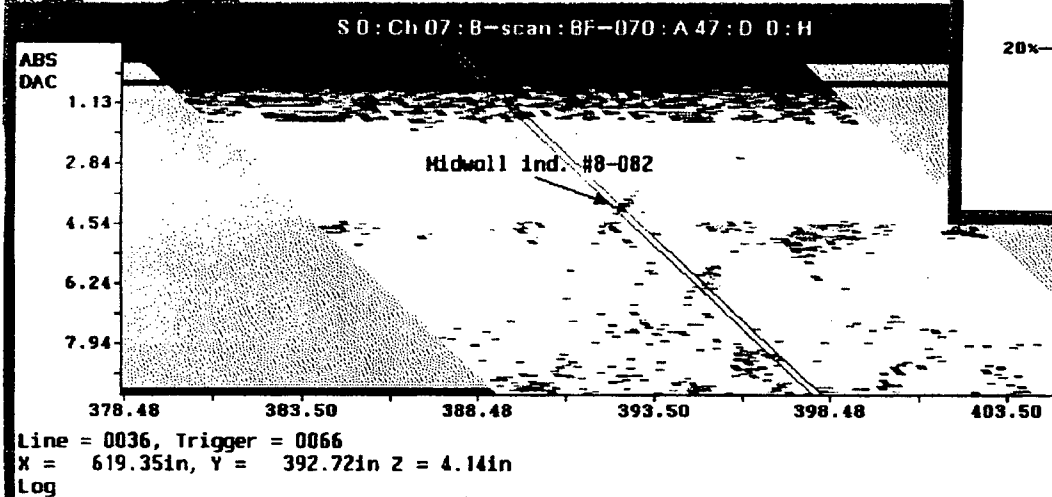
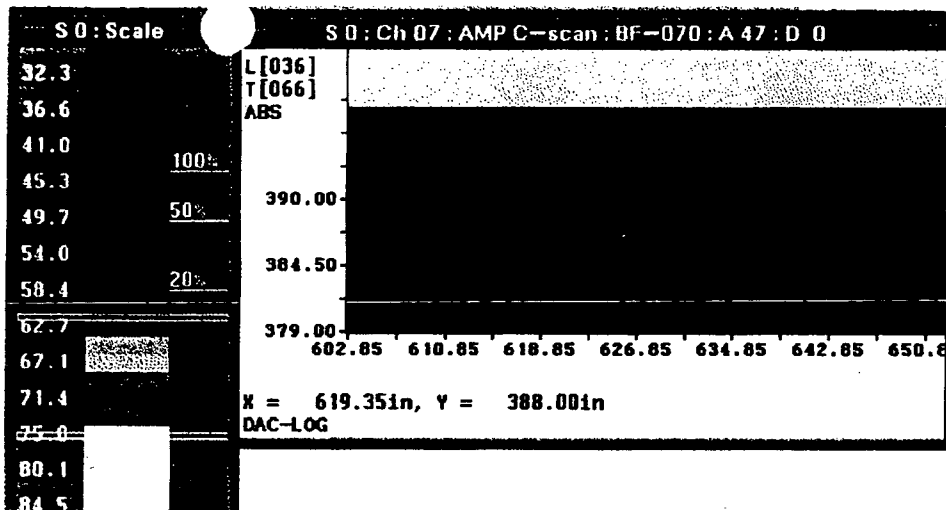
00244  
244 OF 276  
R1154





Lower Terminal  
ris1/local/invesel  
or3/B-081

R1154  
24505276  
00245

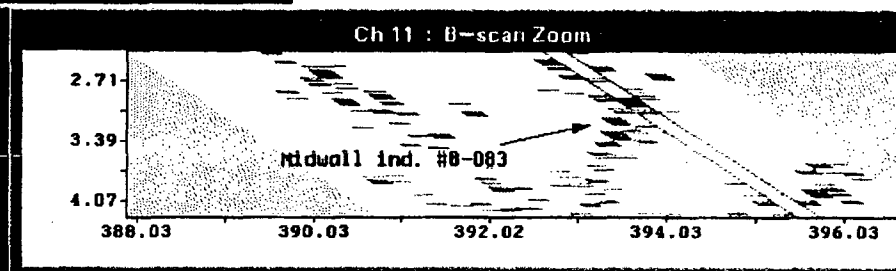
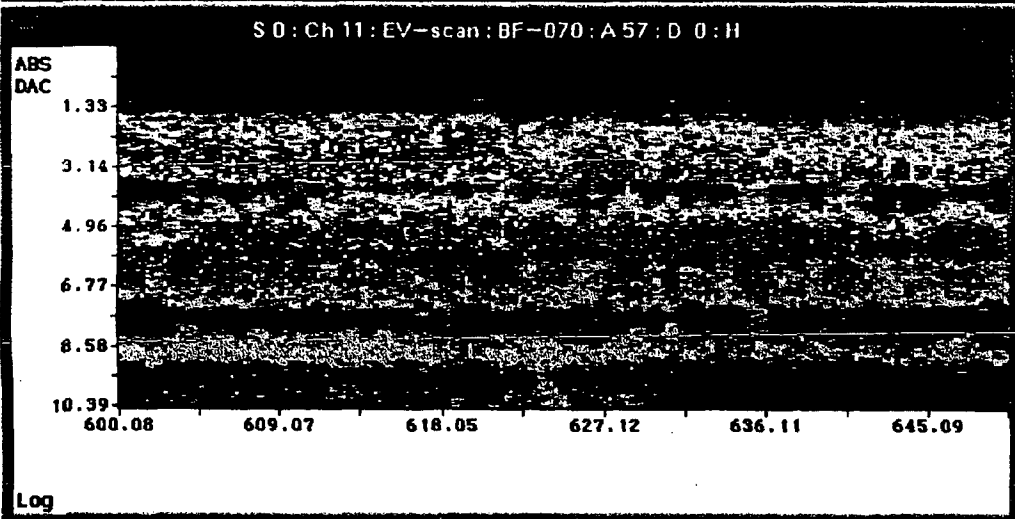
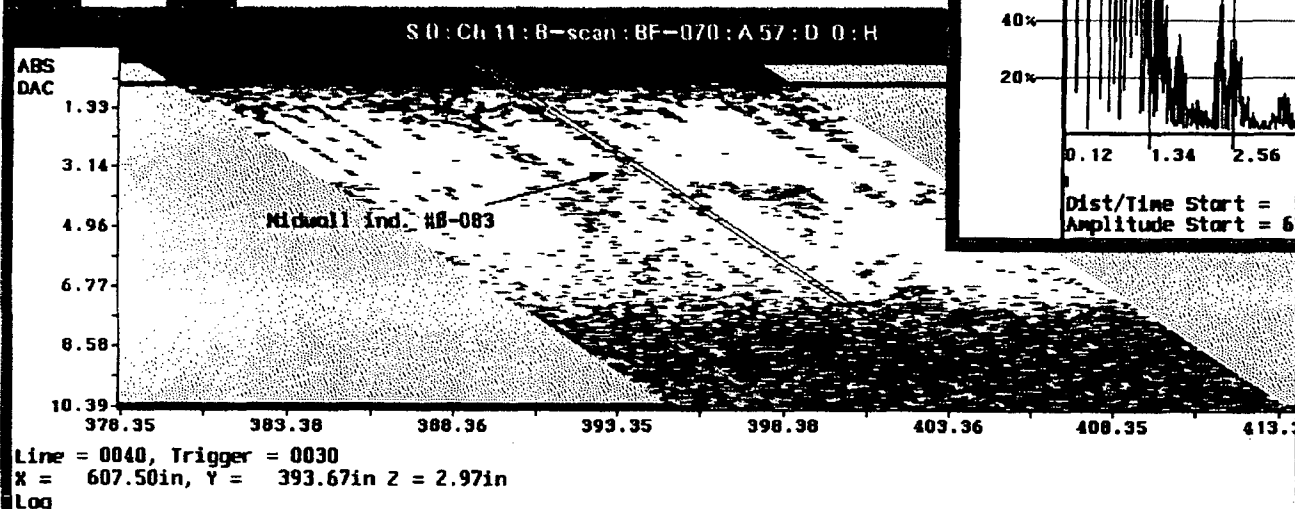
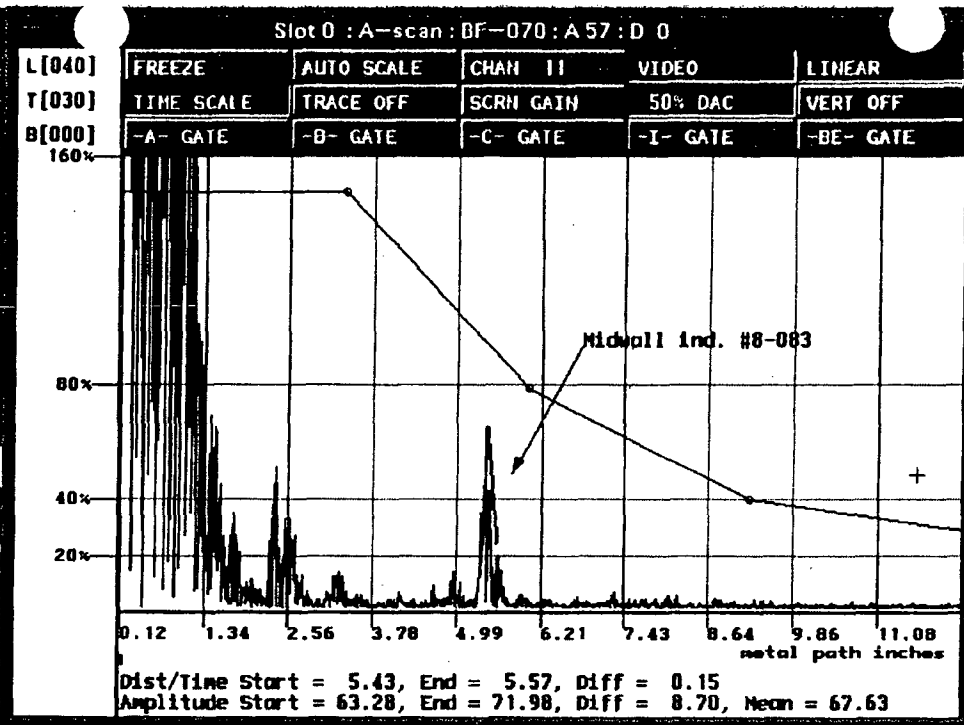
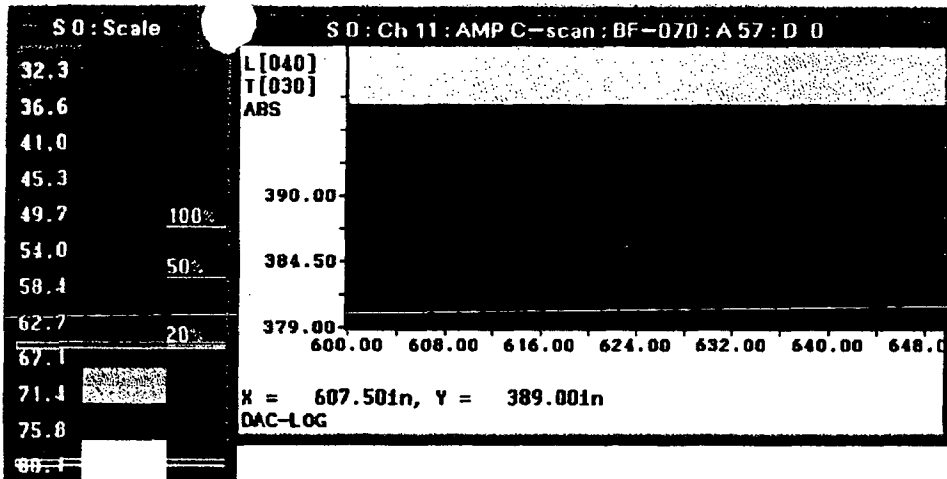


Lower Terminal  
sel/test>dump /maxt  
or3/8-082

00246

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R1154



Lower Terminal  
sel/test>dump /mnt  
or3/8-083

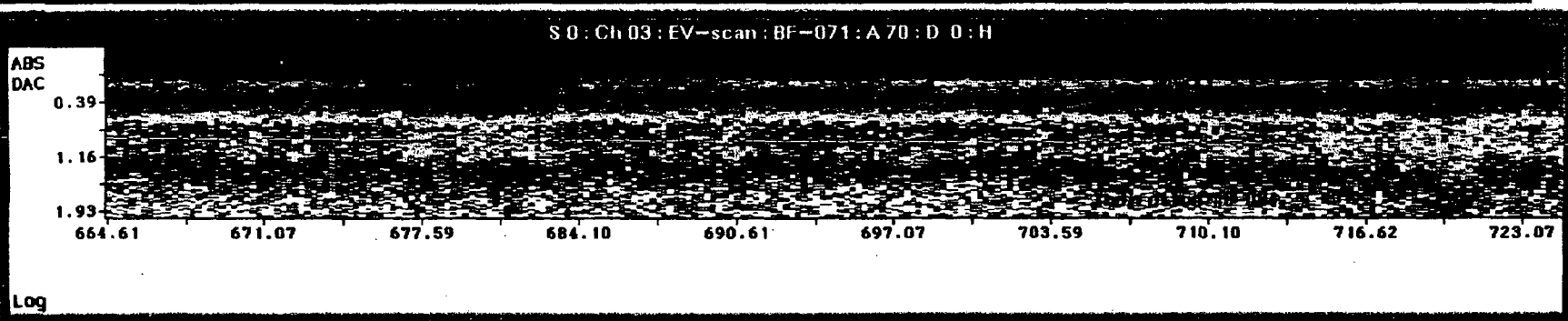
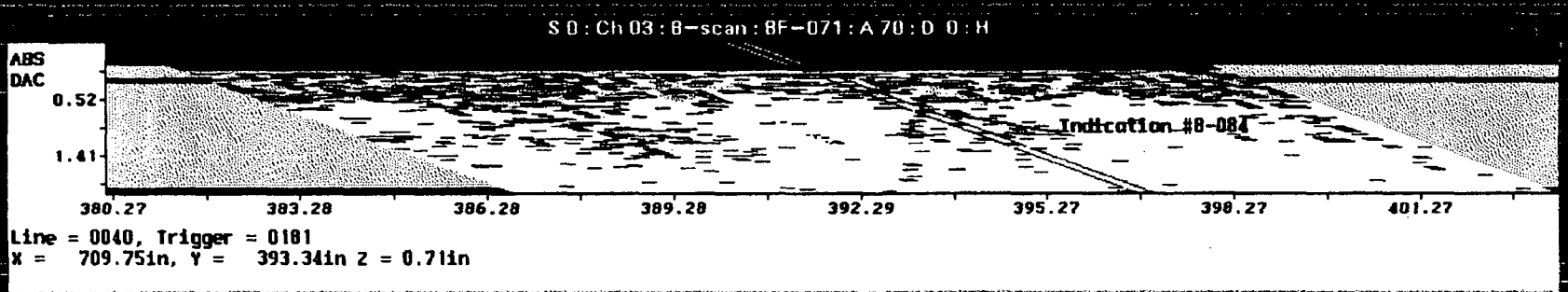
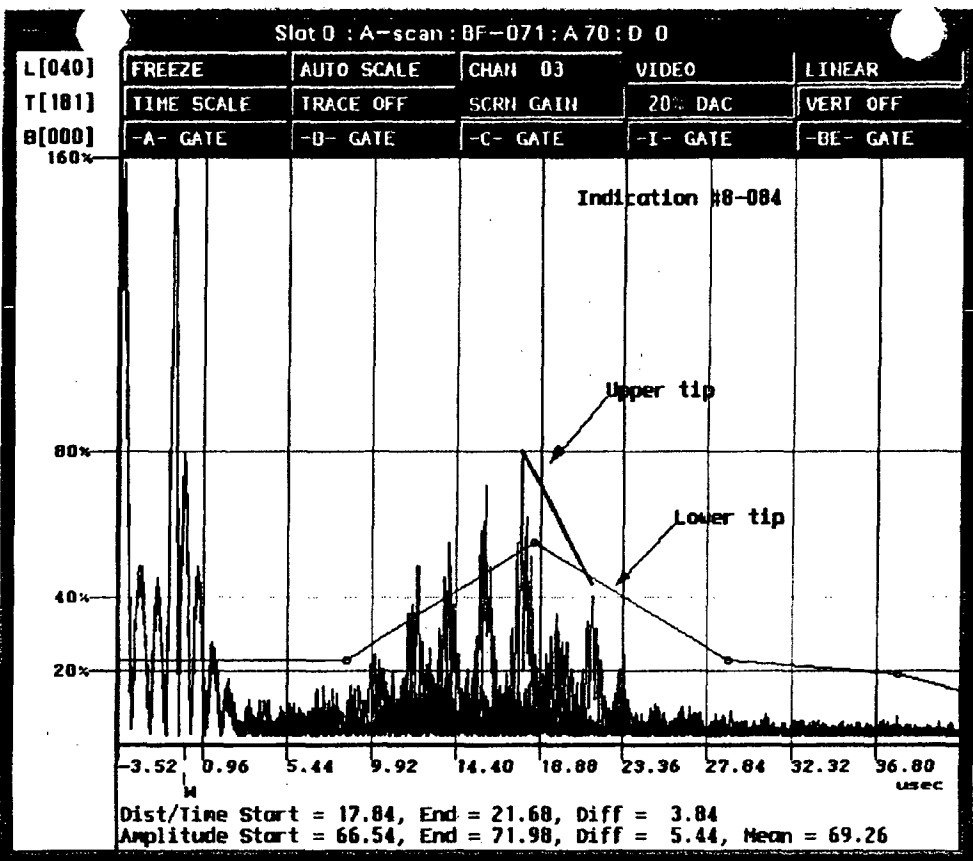
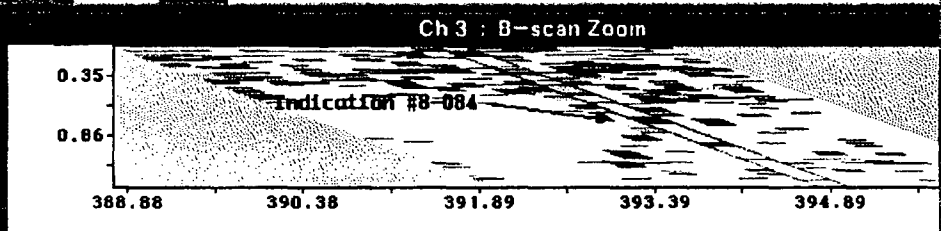
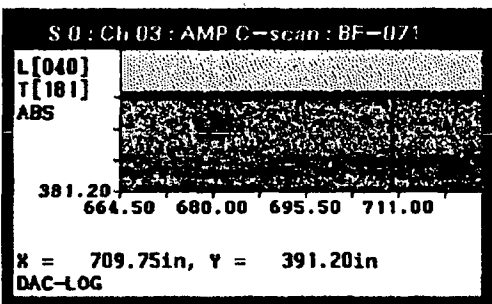
21154  
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00247

S 0 : Scale

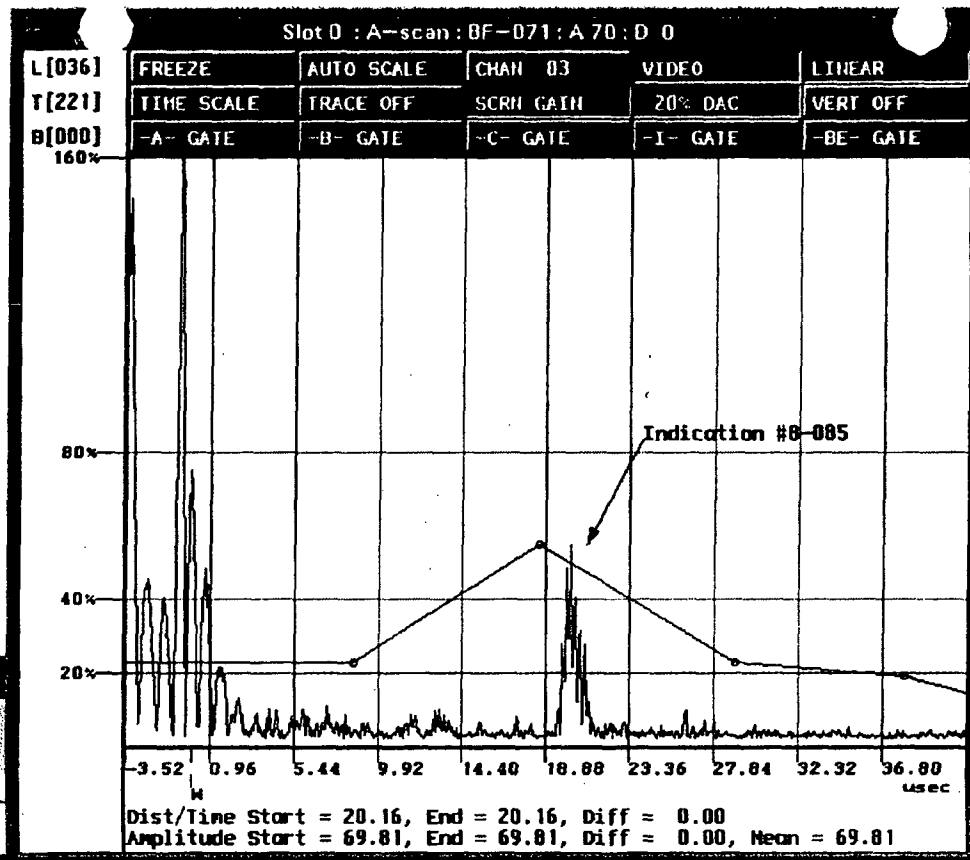
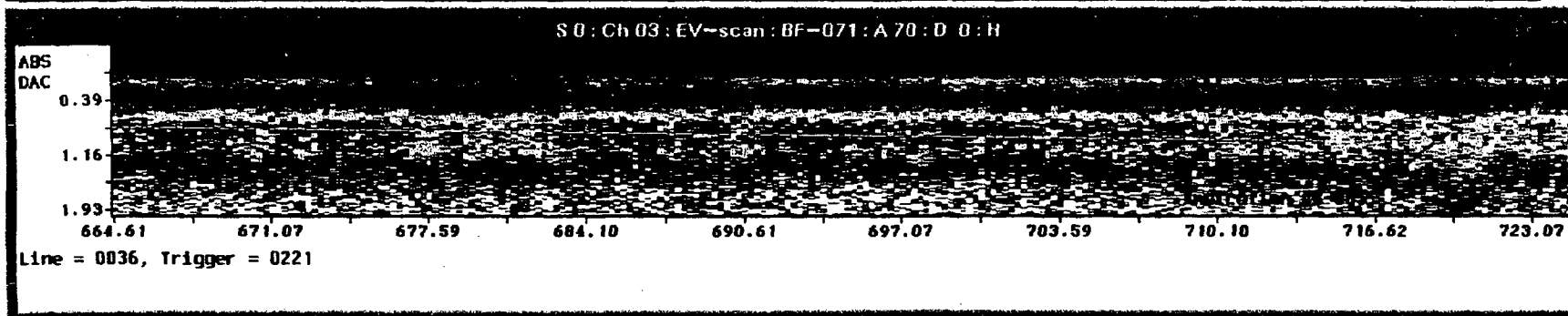
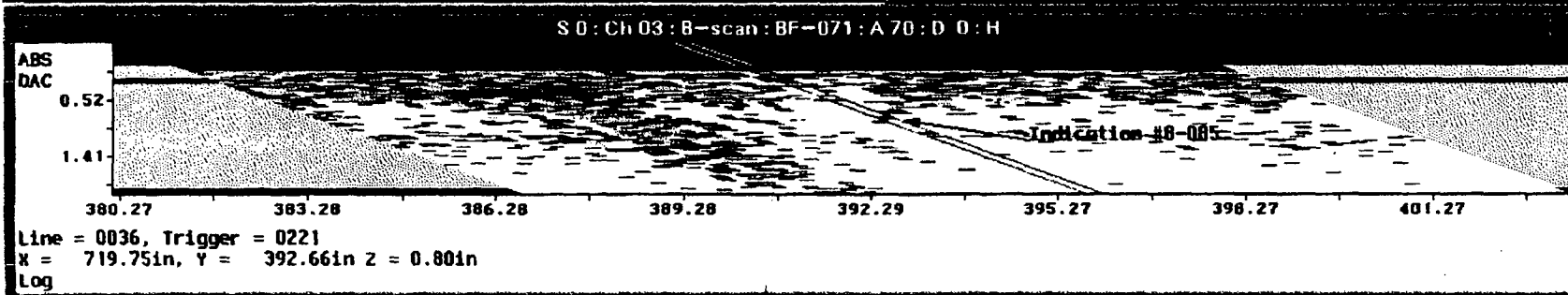
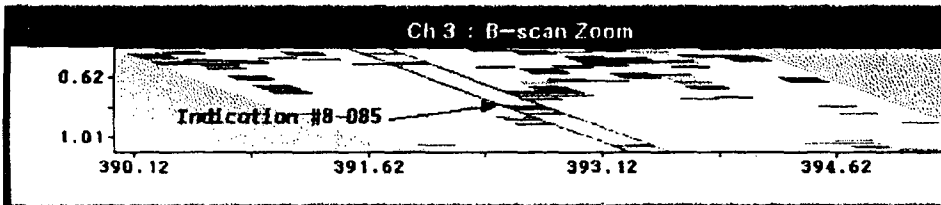
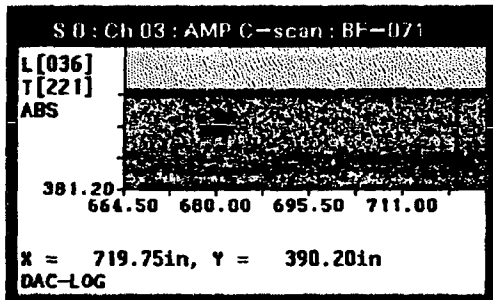
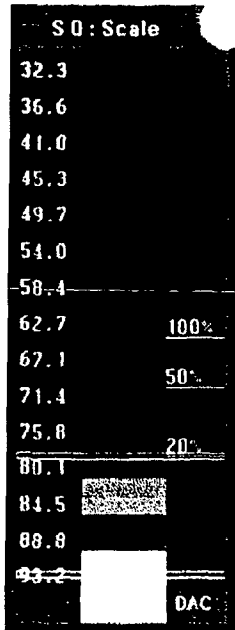
32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC



21154  
248 of 276  
00248



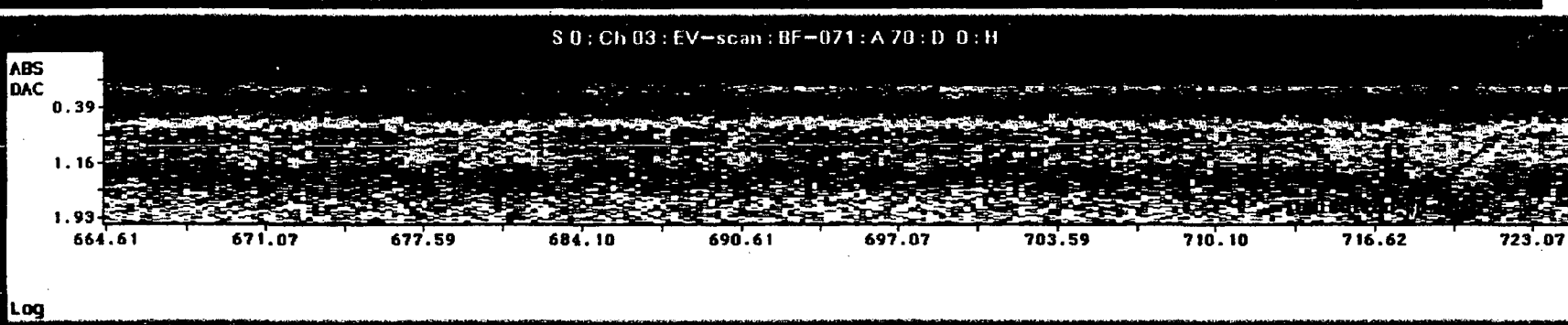
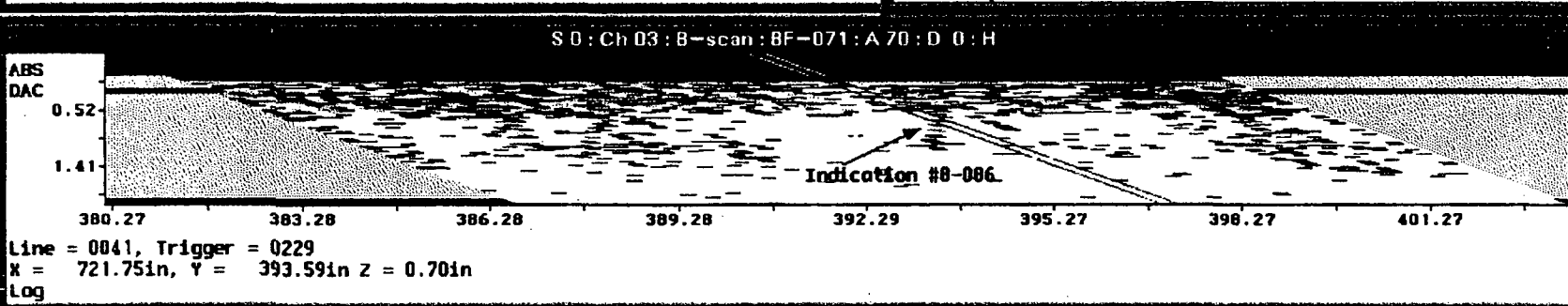
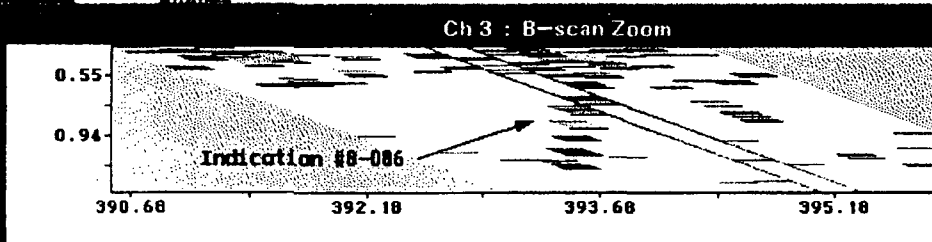
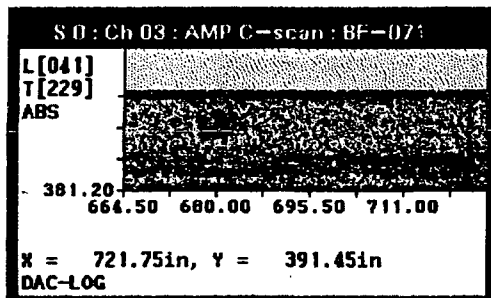
00249

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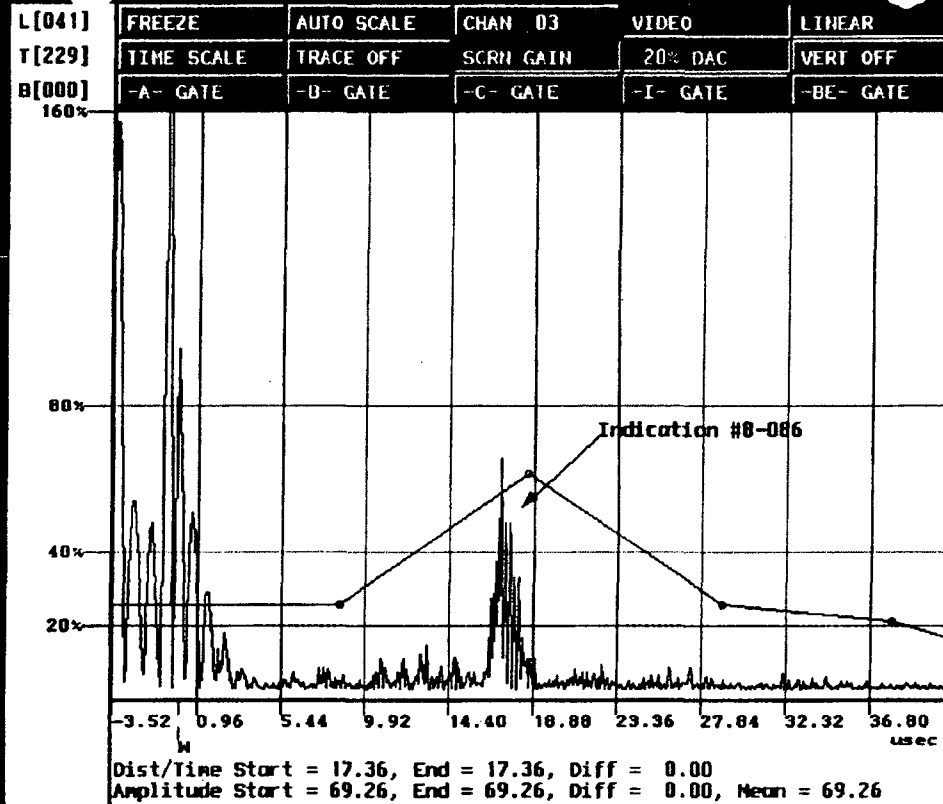
21154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7 100%  
67.1 50%  
71.4  
75.8 20%  
80.1  
84.5  
88.8  
93.2  
DAC



Slot 0 : A-scan : BF-071 : A 70 : D 0



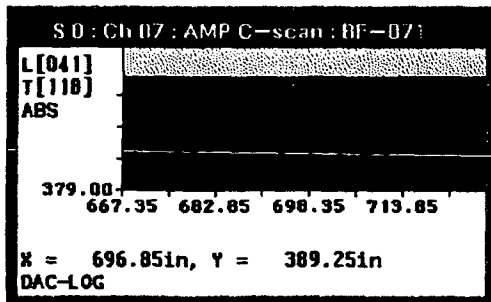
ower Ter  
st>dump /max  
3/8-086

21154  
250 of 276  
00250

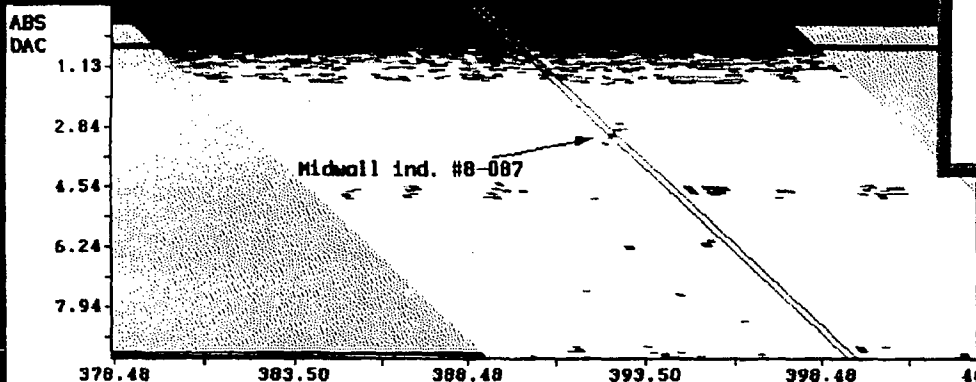
S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

100%  
50%  
20%

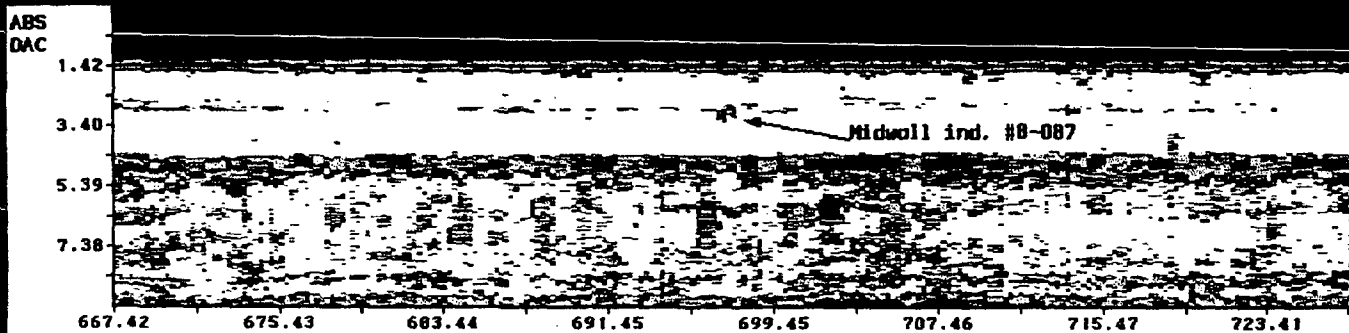


S 0 : Ch 07 : B-scan : BF-071 : A 47 : D 0 : H



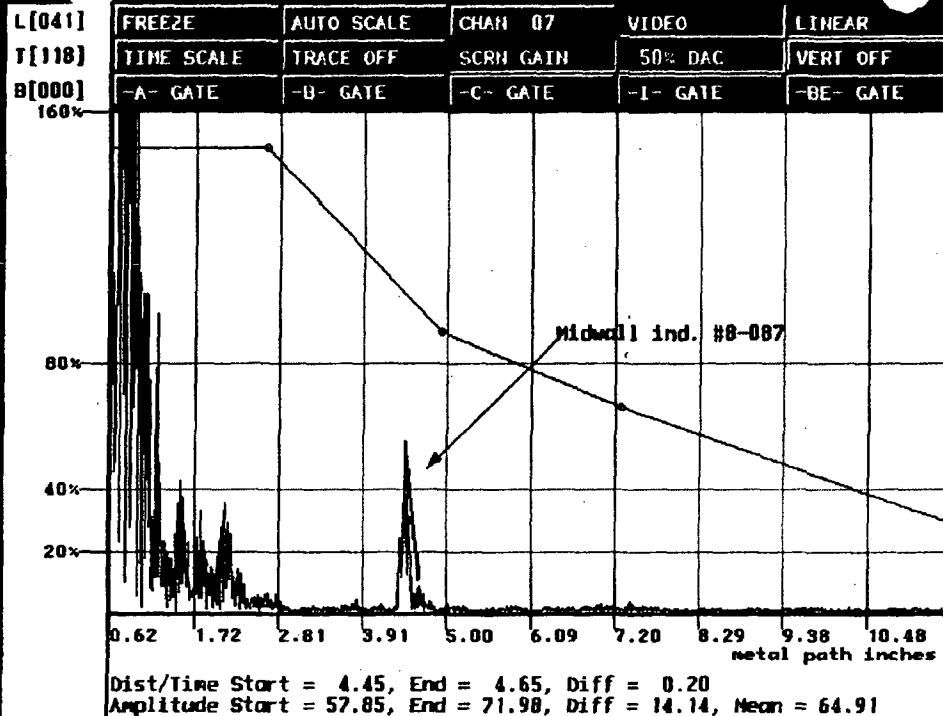
Line = 0041, Trigger = 0118  
X = 696.85in, Y = 392.68in Z = 3.05in  
Log

S 0 : Ch 07 : EV-scan : BF-071 : A 47 : D 0 : H

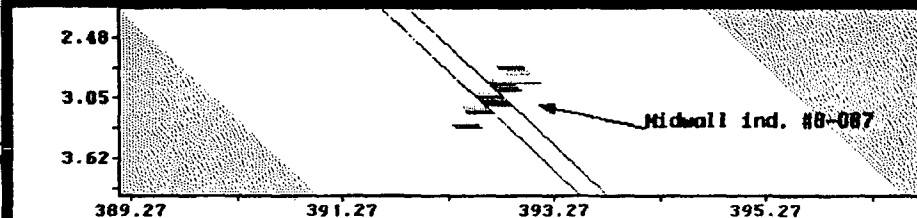


Log

Slot 0 : A-scan : BF-071 : A 47 : D 0



Ch 7 : B-scan Zoom



R1154  
251 OF 276  
00251

Lower Ten  
/test>dump /max  
tor3/8-087

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

100%

50%

20%

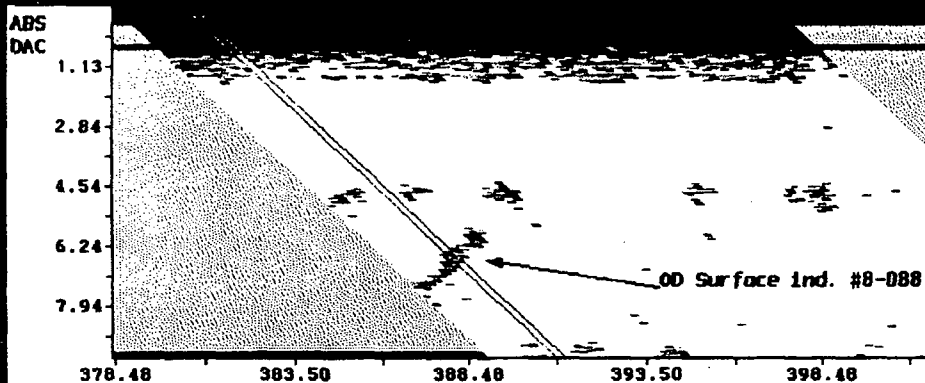
S 0 : Ch 07 : AMP C-scan : BF-071

L[000]  
T[114]  
ABS

379.00  
667.35 682.85 698.35 713.85

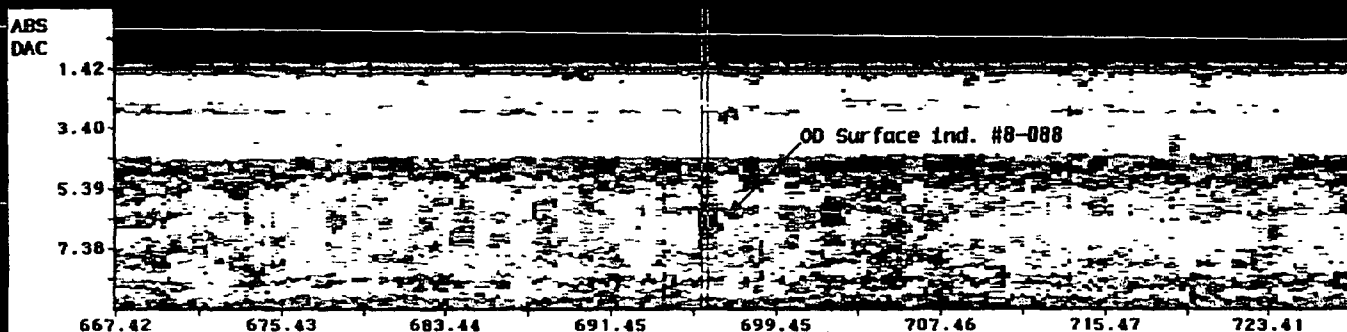
X = 695.85in, Y = 381.00in  
DAC-LOG

S 0 : Ch 07 : B-scan : BF-071 : A 47 : D 0 : H



Line = 0008, Trigger = 0114  
X = 695.85in, Y = 388.01in Z = 6.50in  
Log

S 0 : Ch 07 : EV-scan : BF-071 : A 47 : D 0 : H

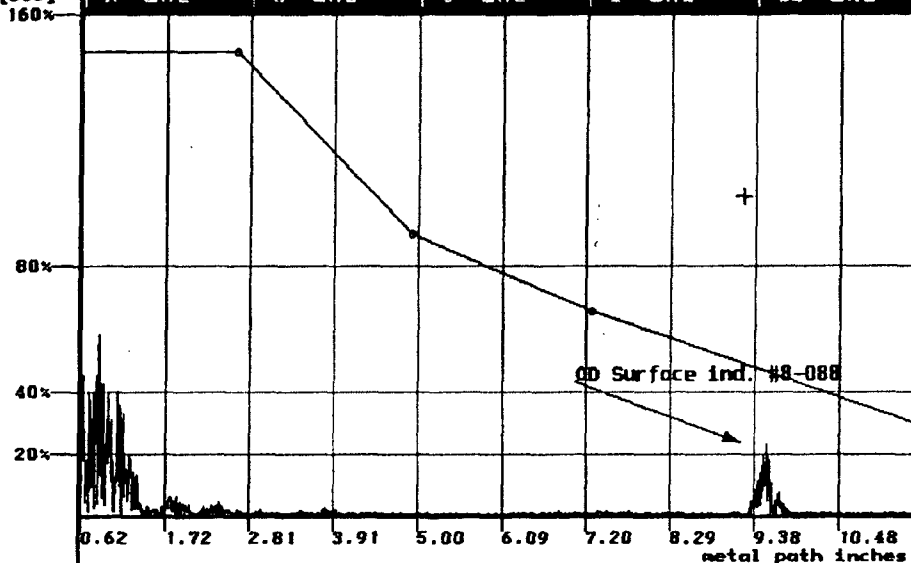


Line = 0008, Trigger = 0114

Slot 0 : A-scan : BF-071 : A 47 : D 0

L[000]  
T[114]  
B[000]

FREEZE	AUTO SCALE	CHAN 07	VIDEO	LINEAR
TIME SCALE	TRACE OFF	SCRN GAIN	100% DAC	VERT OFF
-A- GATE	-B- GATE	-C- GATE	-I- GATE	-DE- GATE



00252

R1154  
252 of 276

Lower Ten  
/test>dump /max  
tor3/8-088



S 1: Scale

32.3

36.6

41.0

45.3

49.7

54.0

58.4

62.7

67.1

71.4

75.8

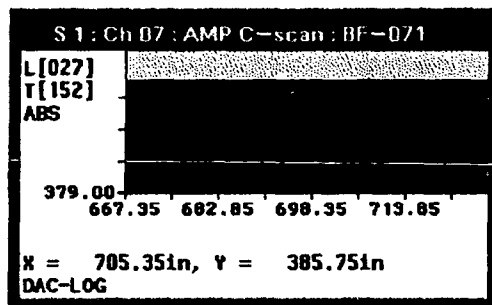
80.1

84.5

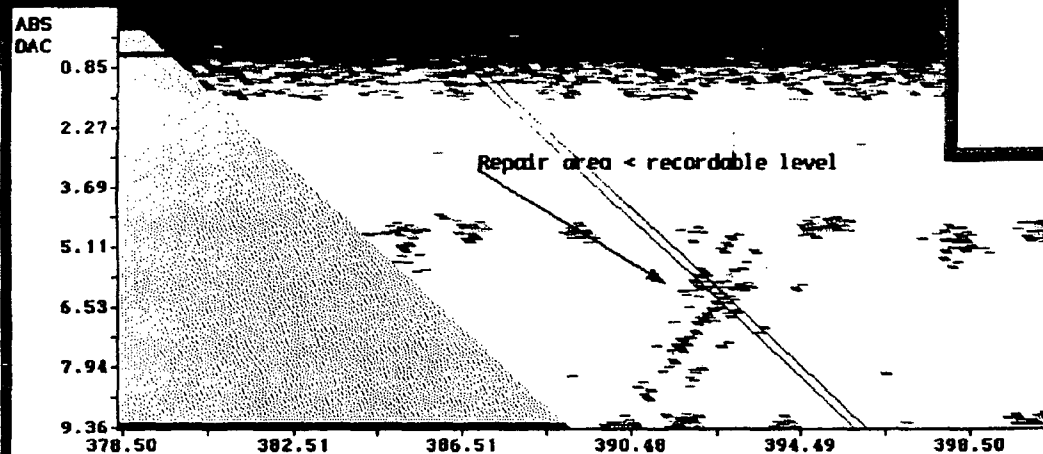
100%

50%

20%

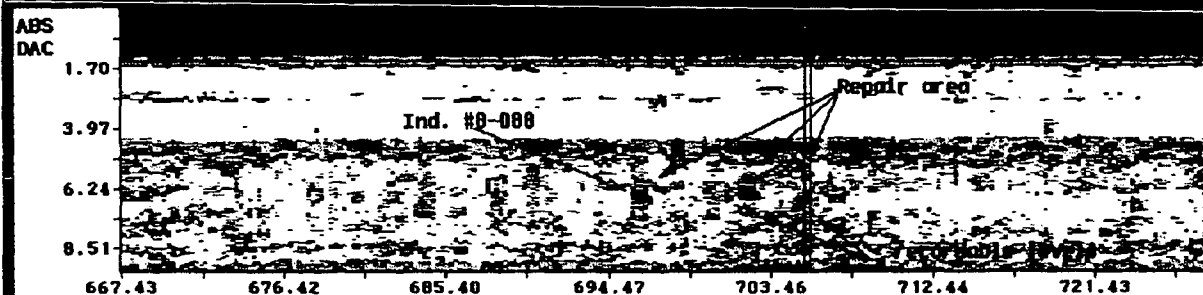


S 1: Ch 07: D-scan: BF-071: A 47: D 0: H

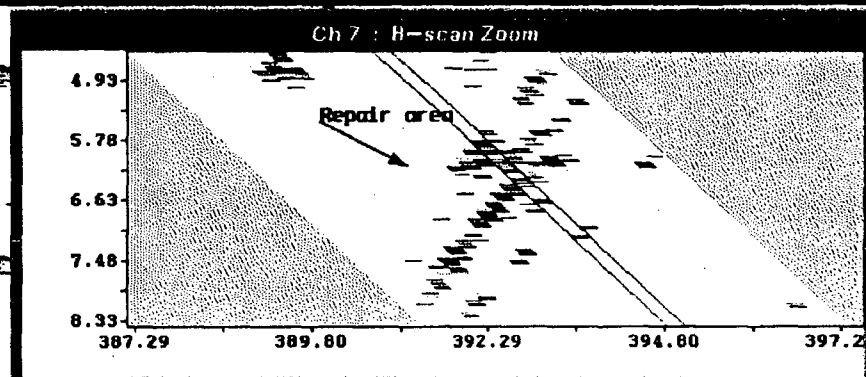
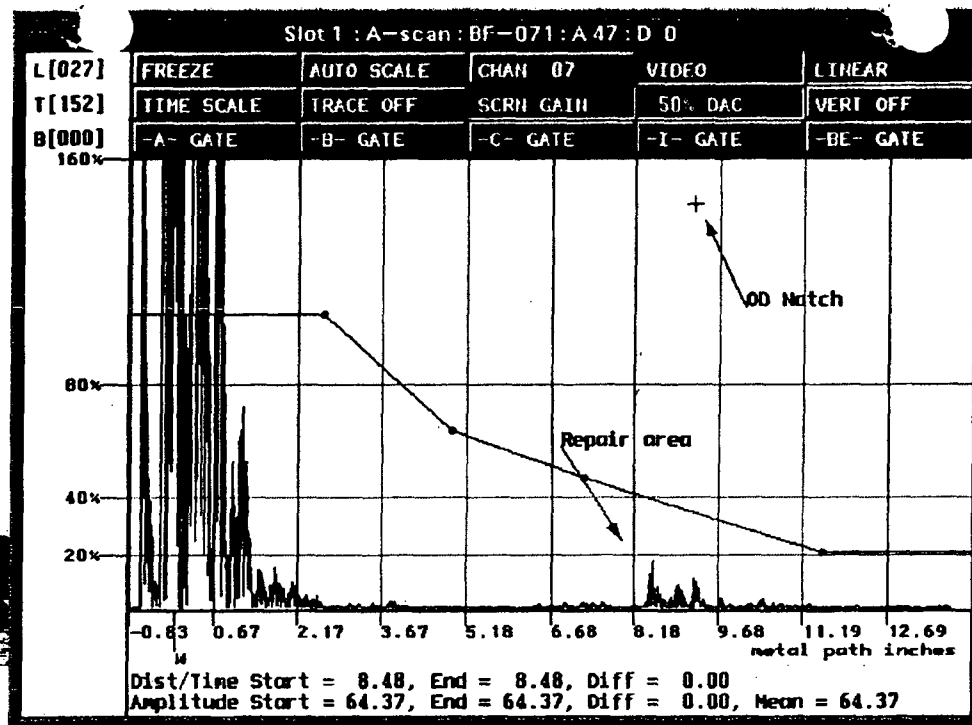


Line = 0027, Trigger = 0152  
X = 705.35in, Y = 392.21in Z = 5.80in  
Log

S 1: Ch 07: EV-scan: BF-071: A 47: D 0: H



Line = 0027, Trigger = 0152



PRINT \* G-110

00253

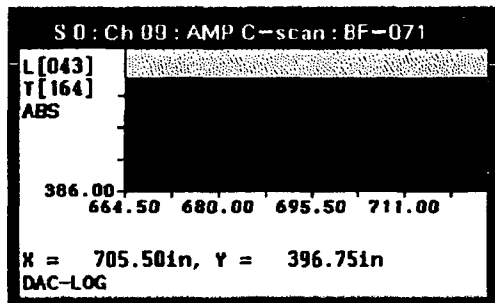
Lower Ter  
/test>dump /max  
tor3/G-110

R1154  
253 of 276

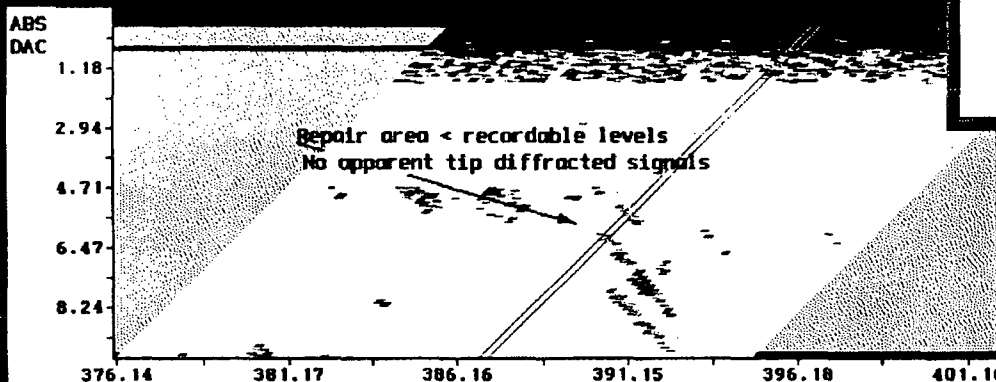
S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

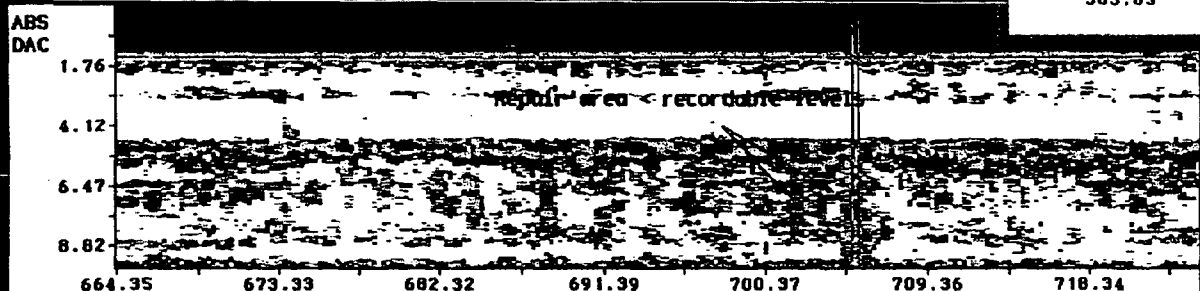


S 0 : Ch 09 : B-scan : BF-071 : A 45 : D 180 : H



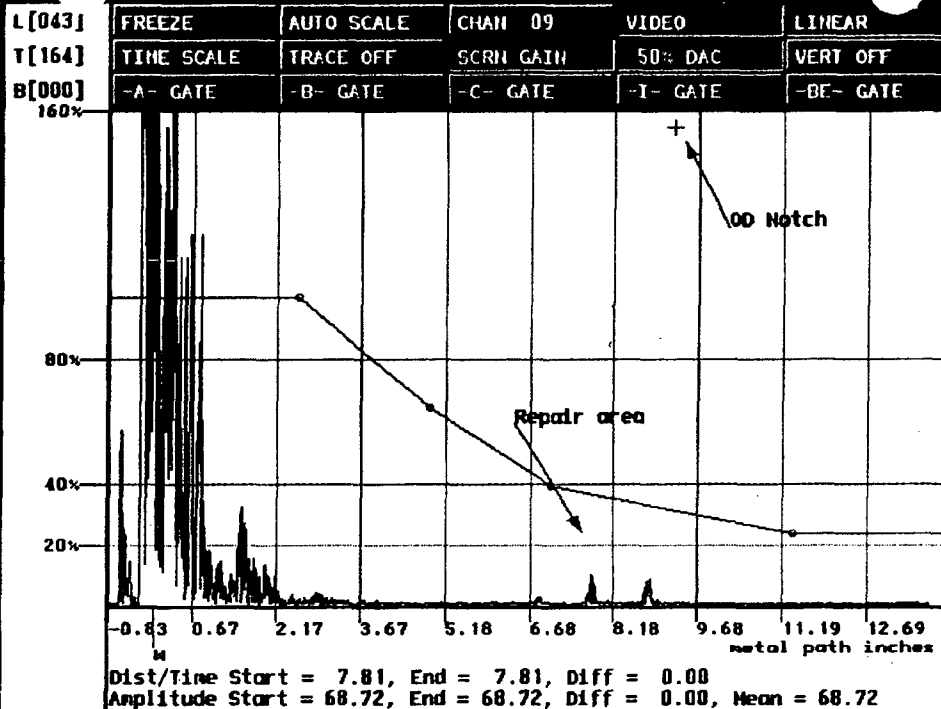
Line = 0043, Trigger = 0164  
X = 705.50in, Y = 390.97in Z = 5.50in

S 0 : Ch 09 : EV-scan : BF-071 : A 45 : D 180 : H

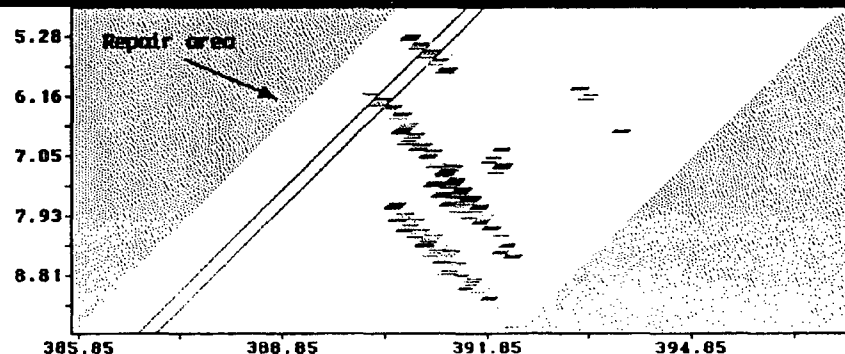


Line = 0043, Trigger = 0164

Slot 0 : A-scan : BF-071 : A 45 : D 180



Ch 9 : D-scan Zoom



PRINT \* G-111

Lower Ten  
/test>dump /max  
ton3/G-111

00254

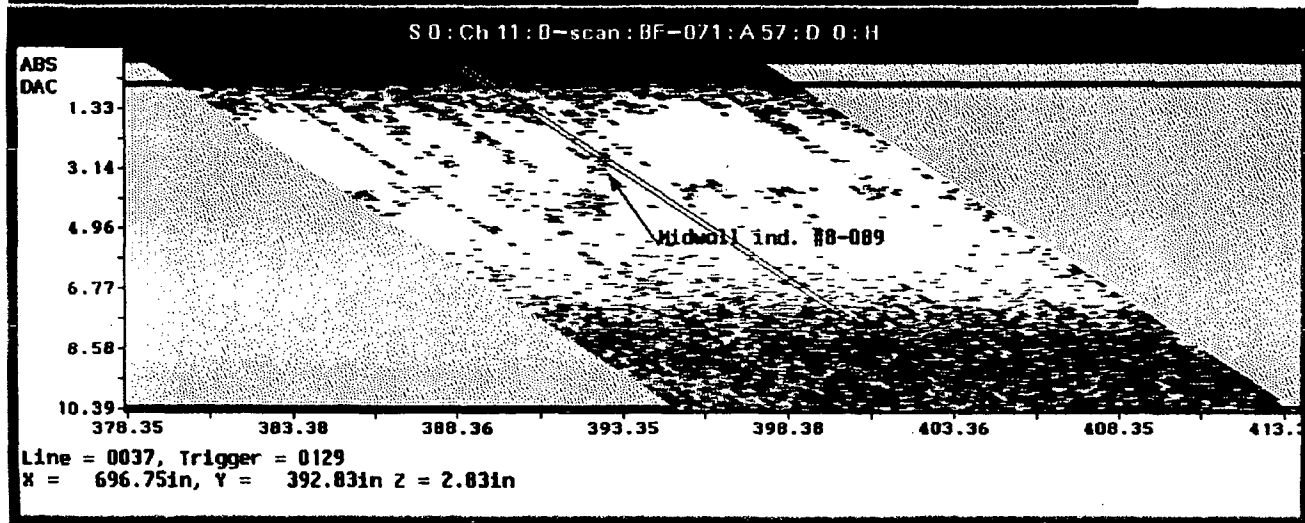
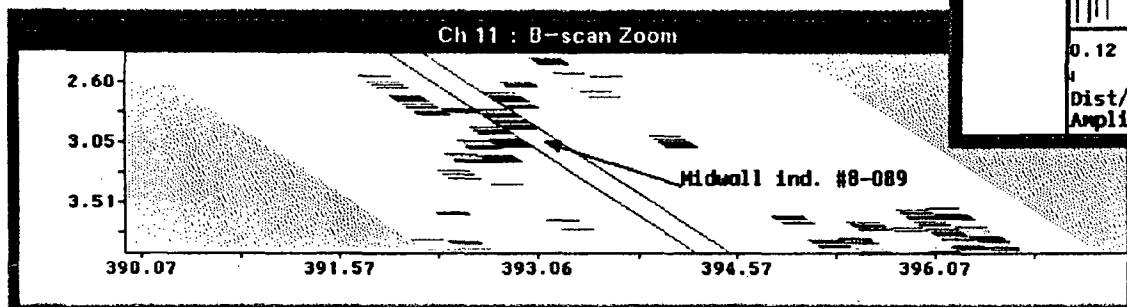
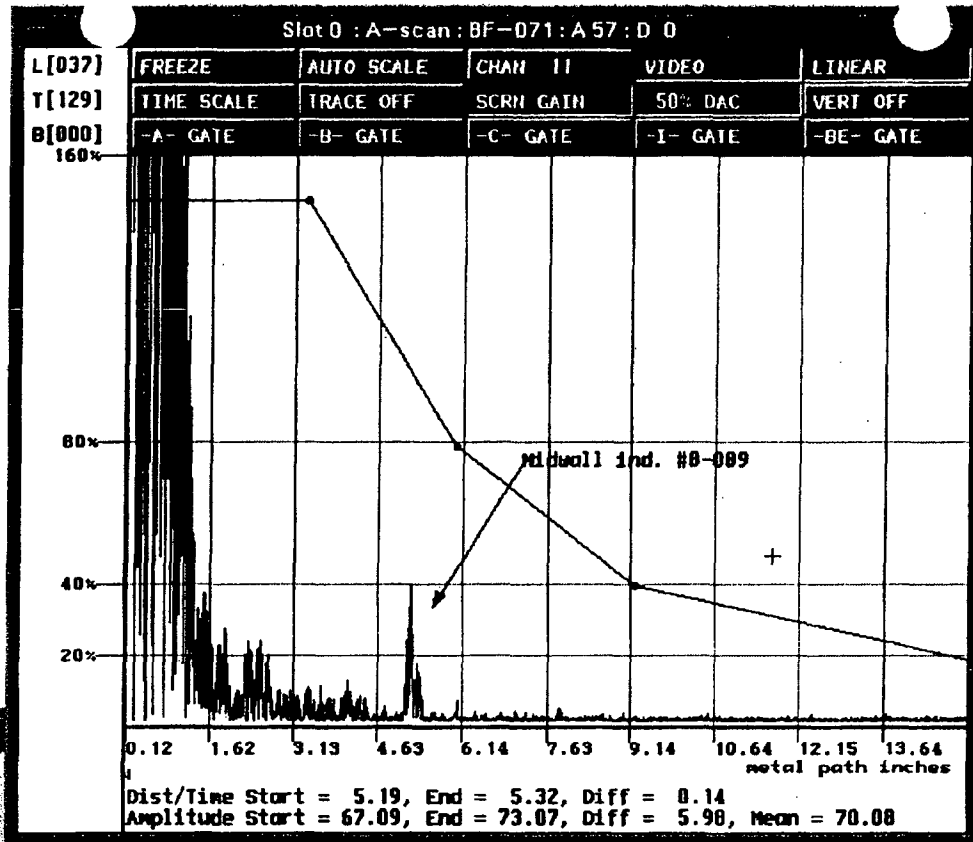
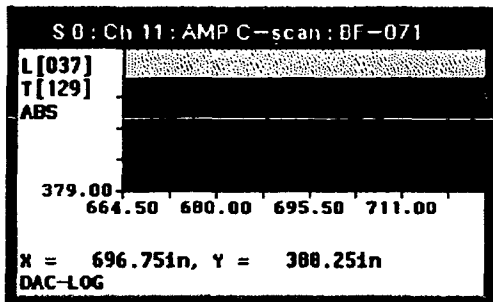
254 of 276

R1154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0 50%  
58.4  
62.7 20%  
67.1  
71.4  
75.8  
80.1  
84.5  
88.0  
93.2

DAC



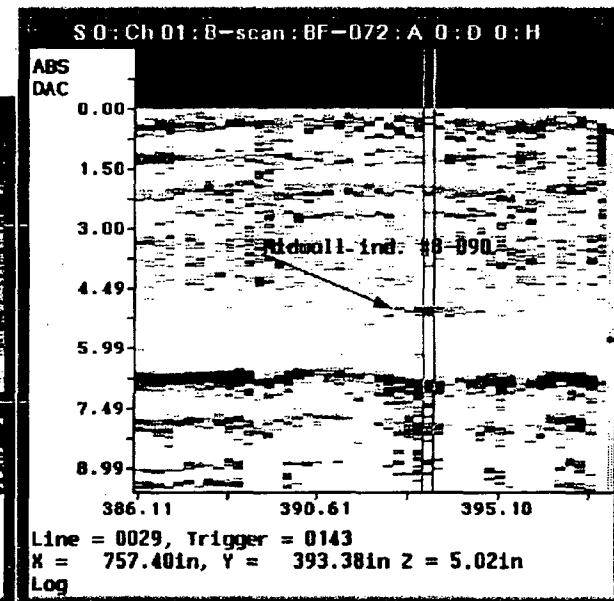
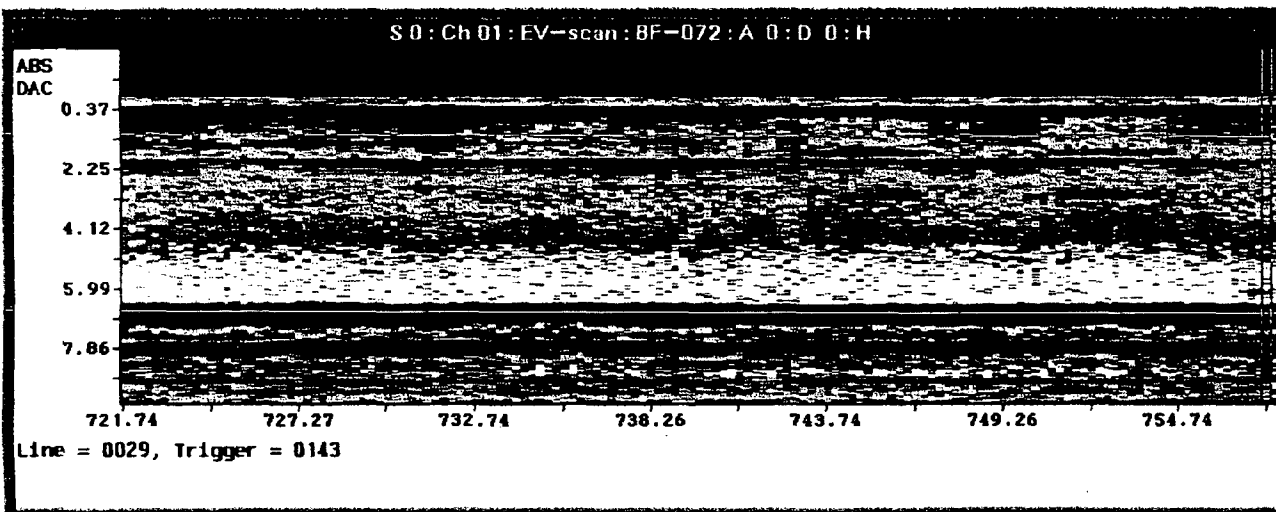
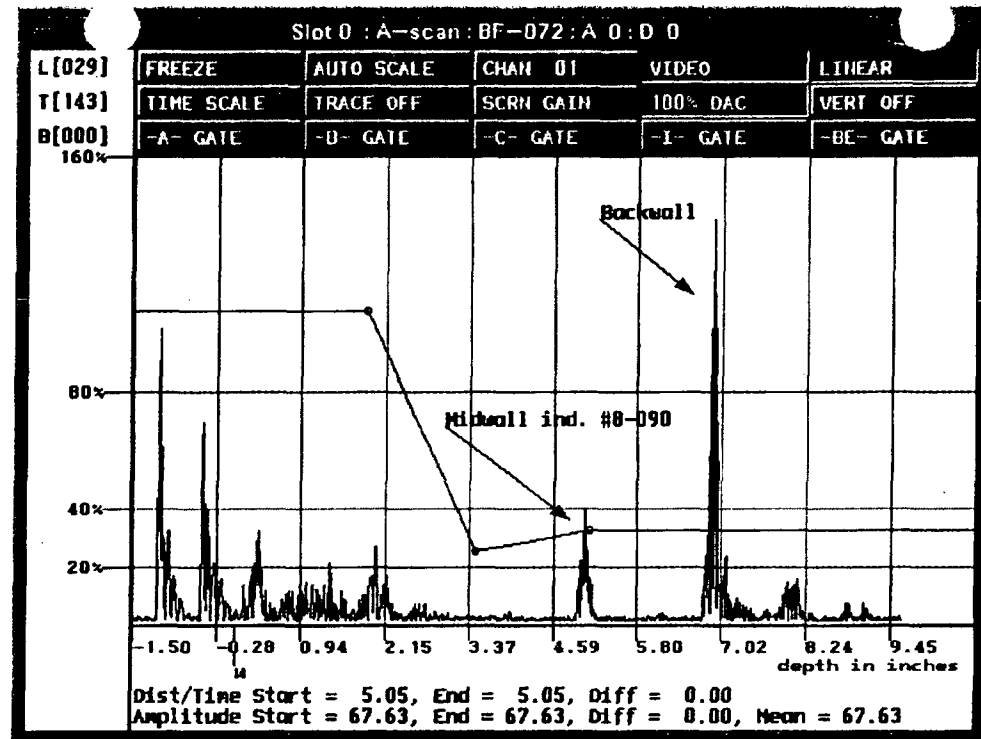
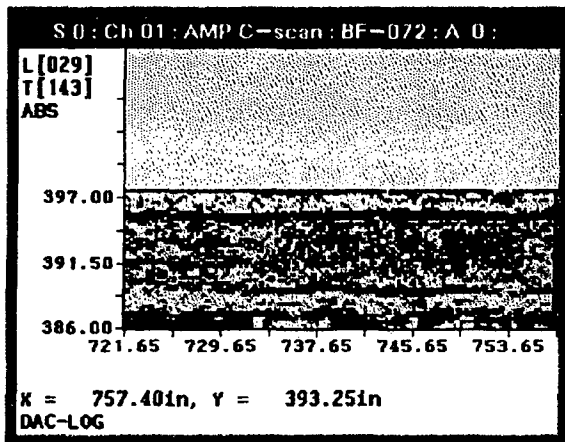
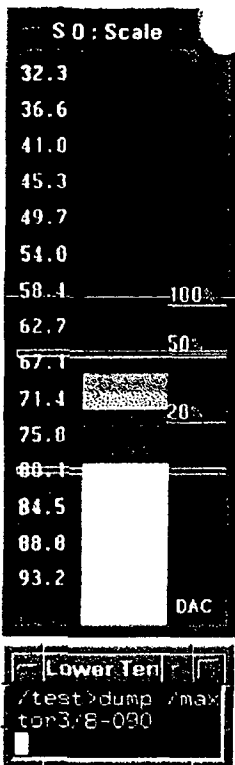
Lower Ten  
/test>dump /max  
tor3/8-089

00255

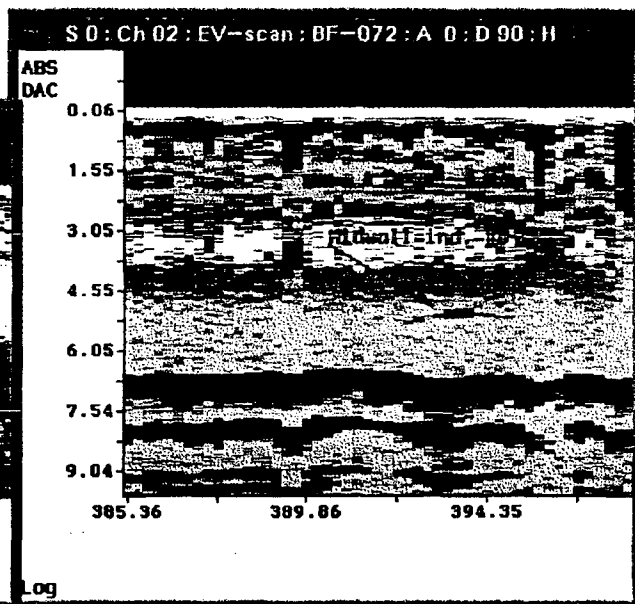
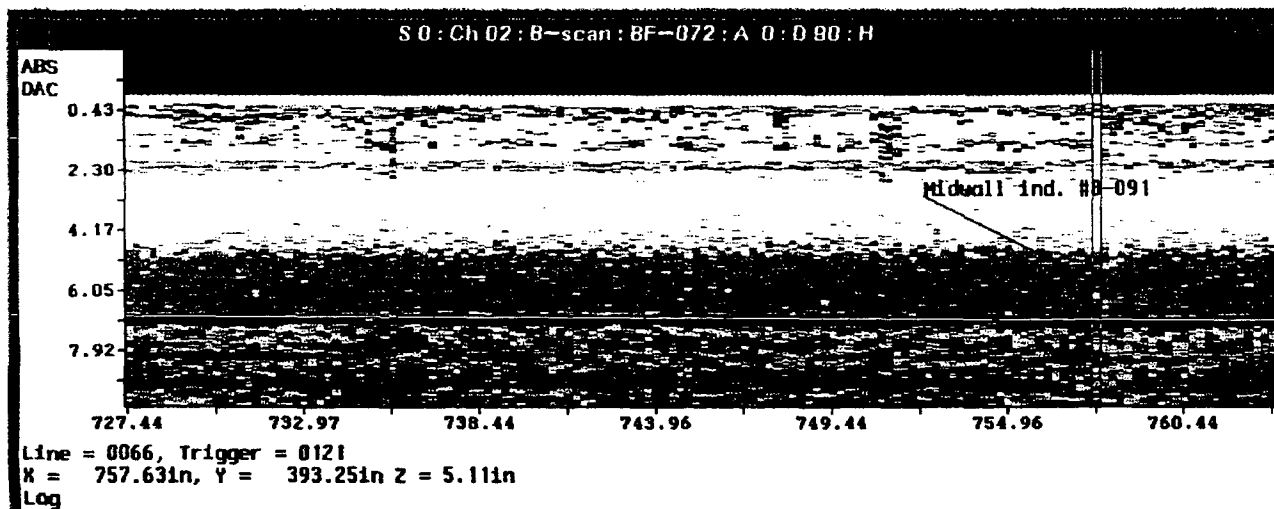
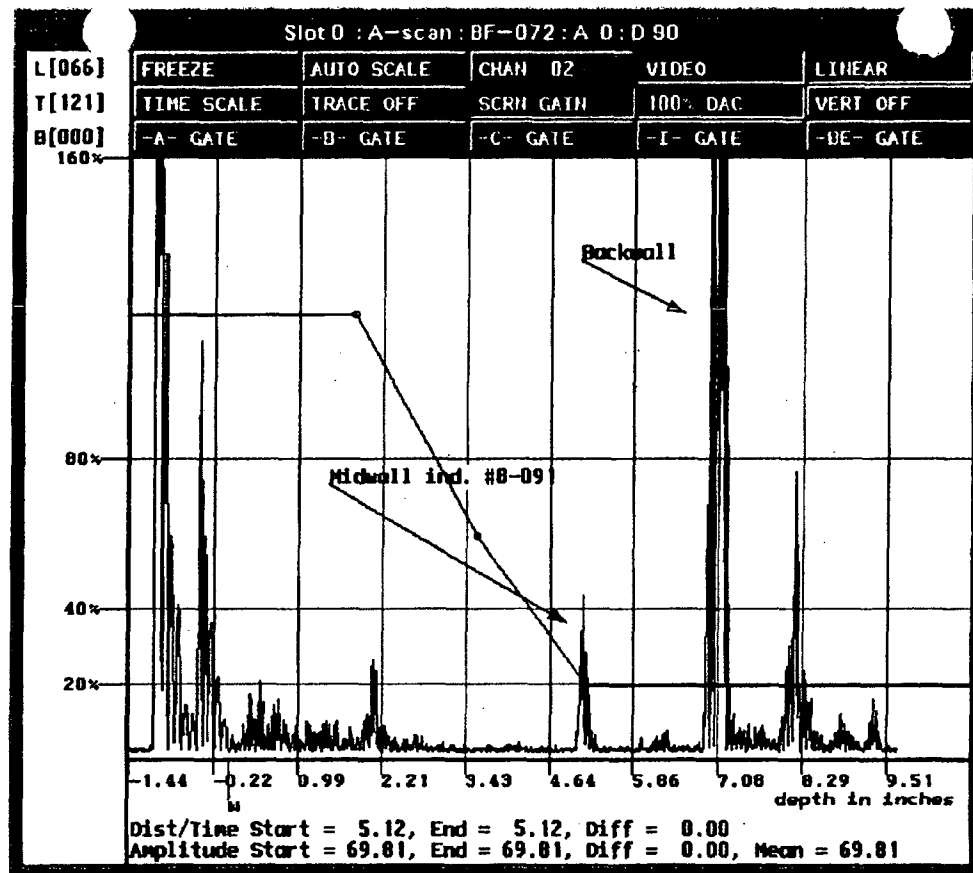
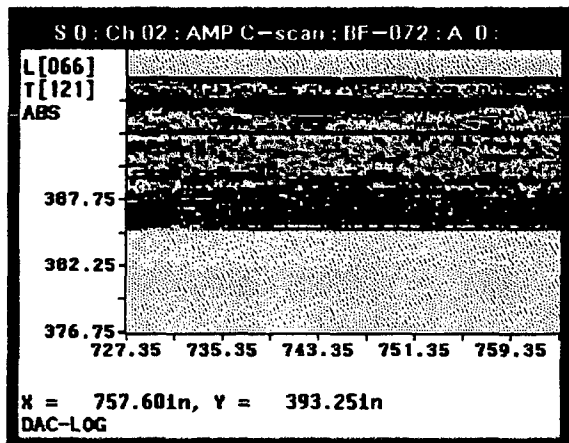
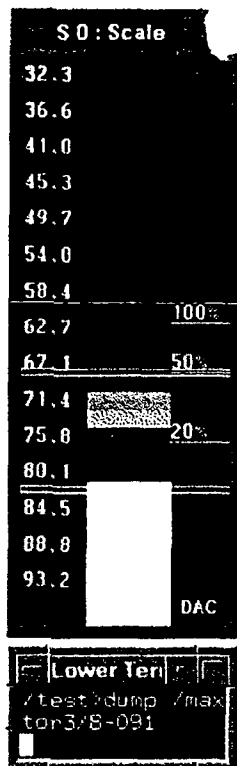
255 OF 276

21154

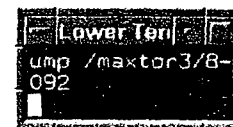
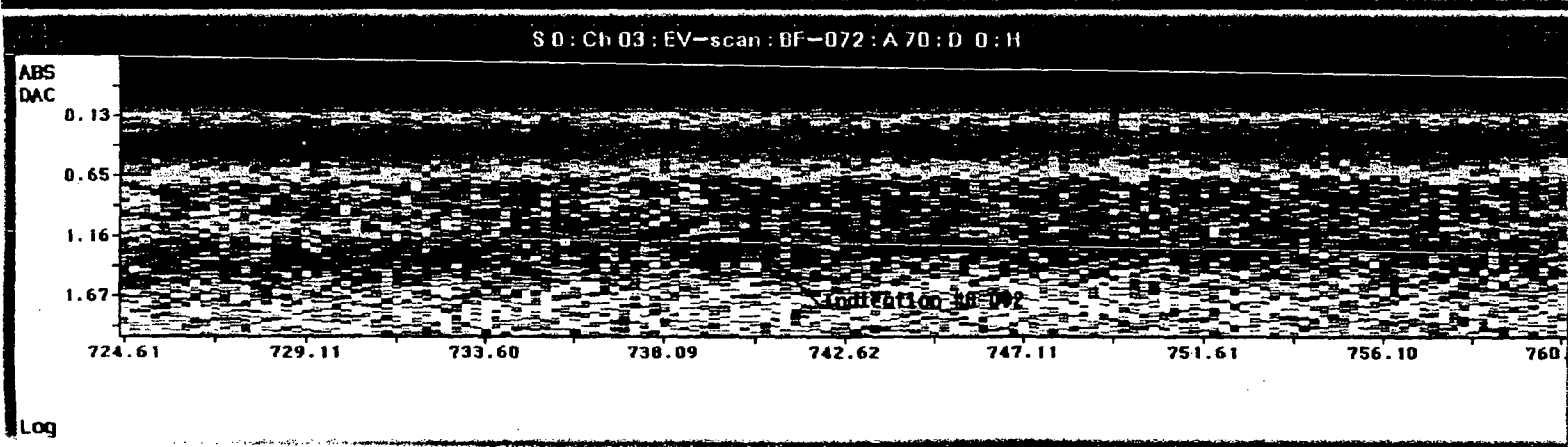
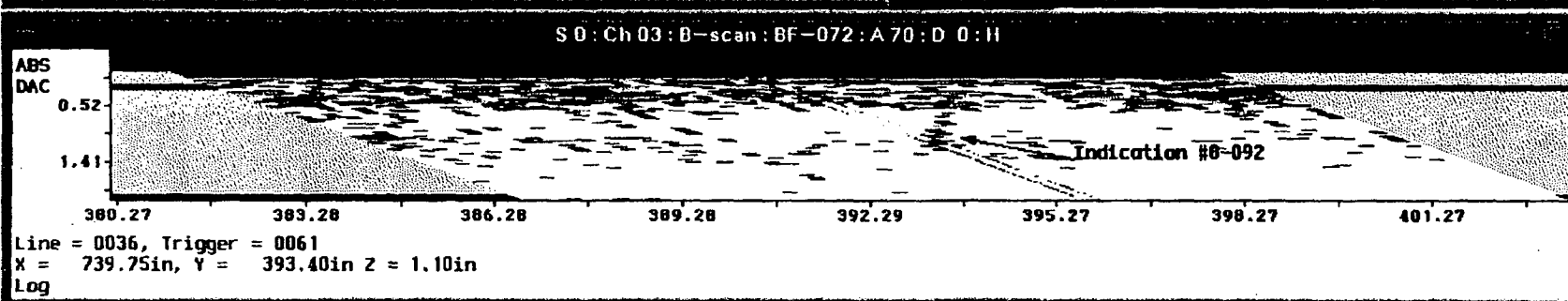
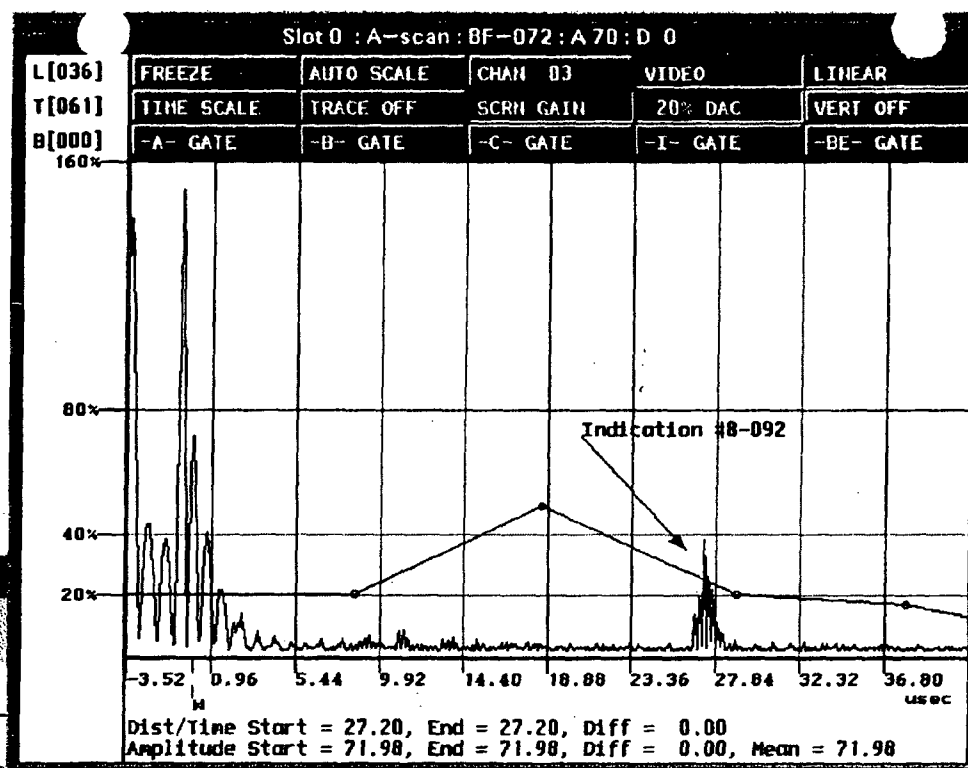
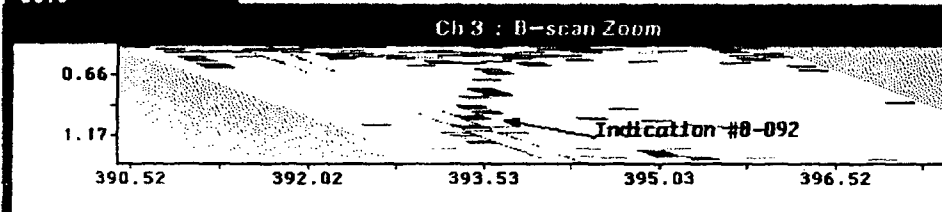
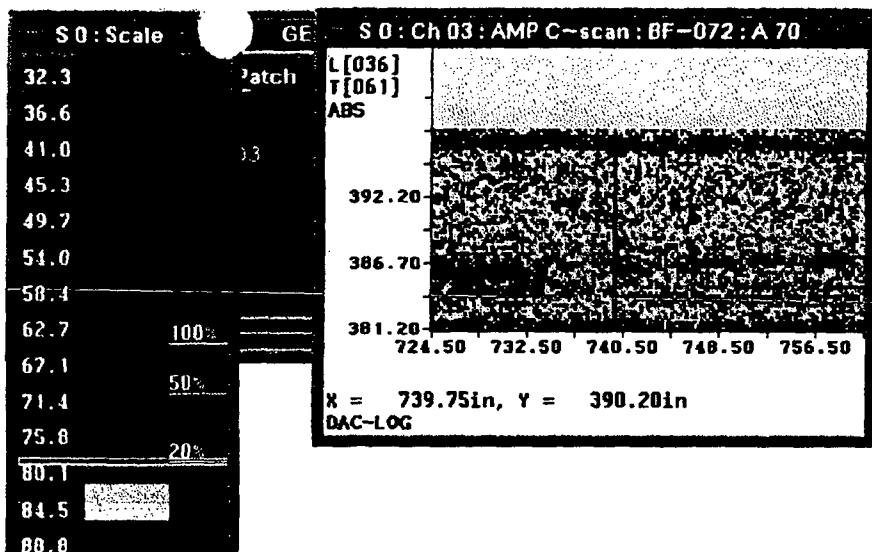
0000 0000



256 of 276  
R1154  
00256



R1154  
257 OF 276  
00257

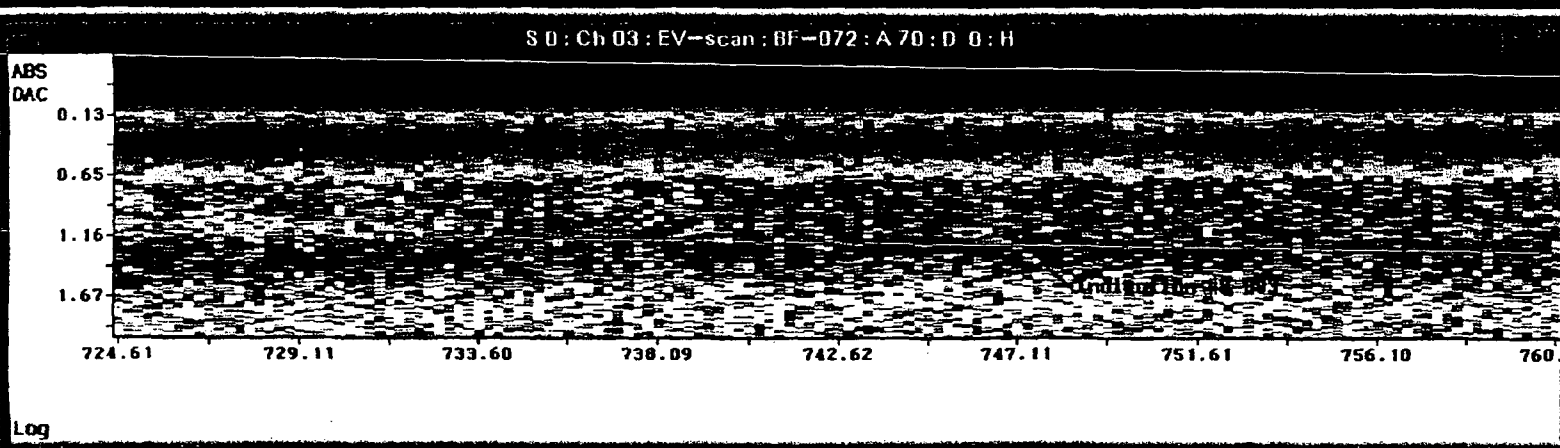
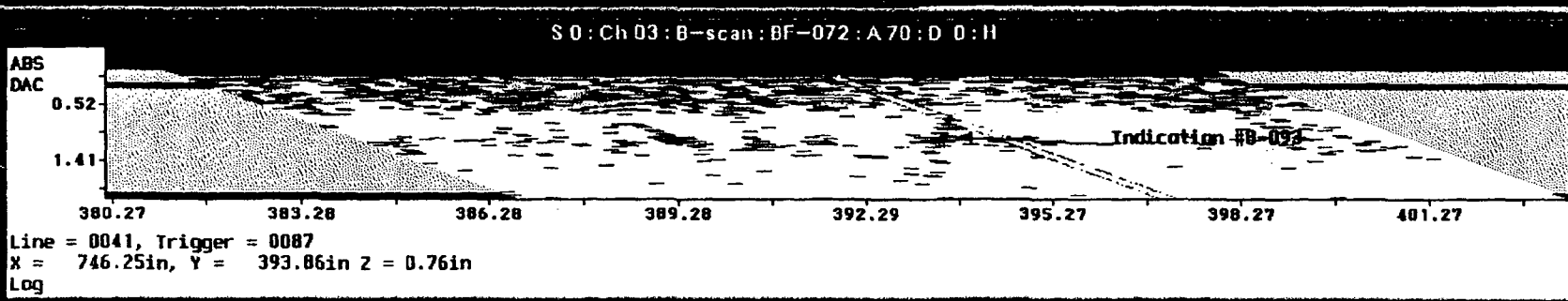
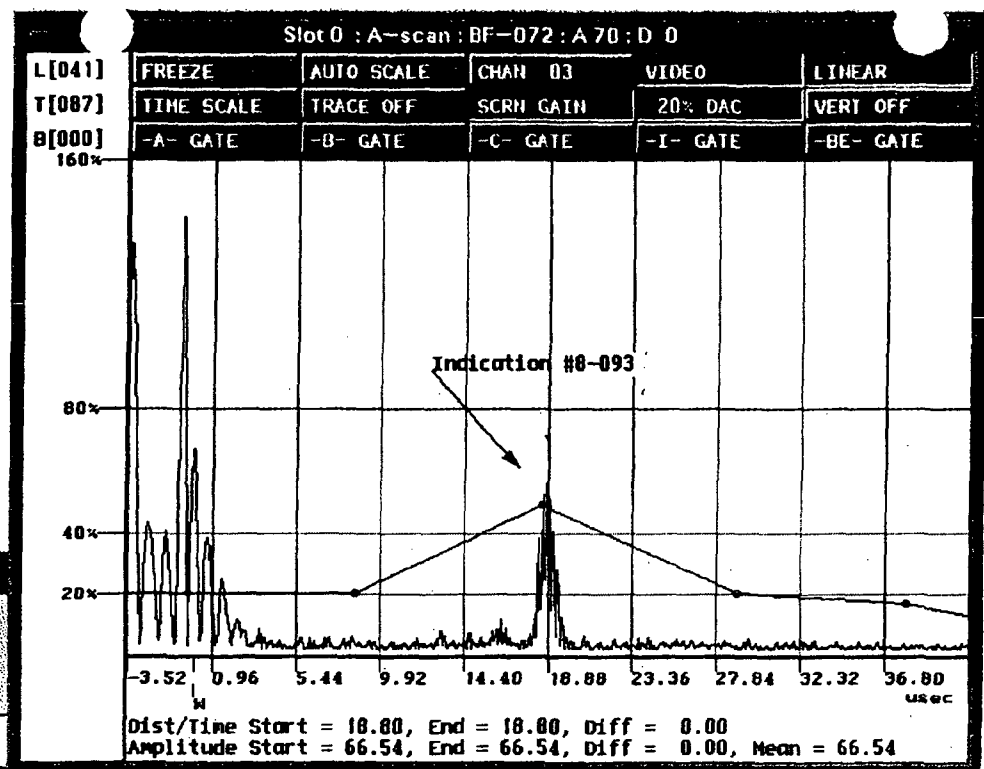
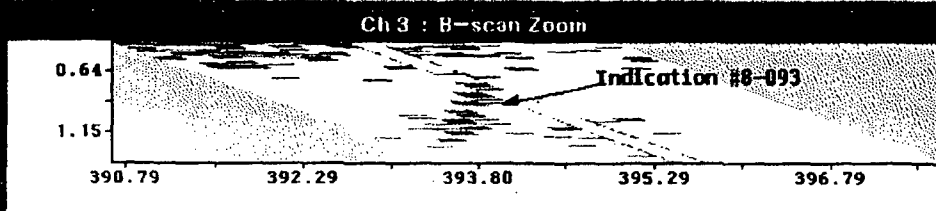
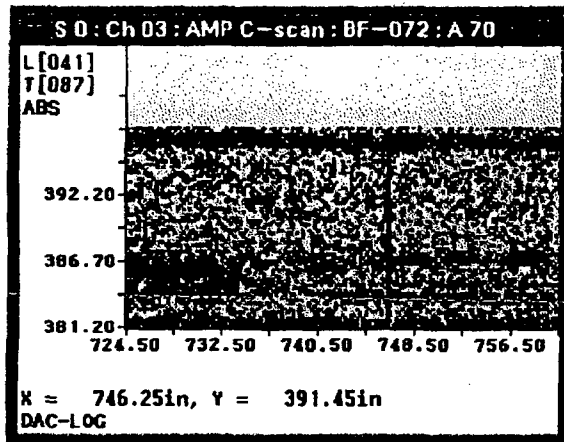


00258  
258 of 276  
R1154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

100%  
50%  
20%



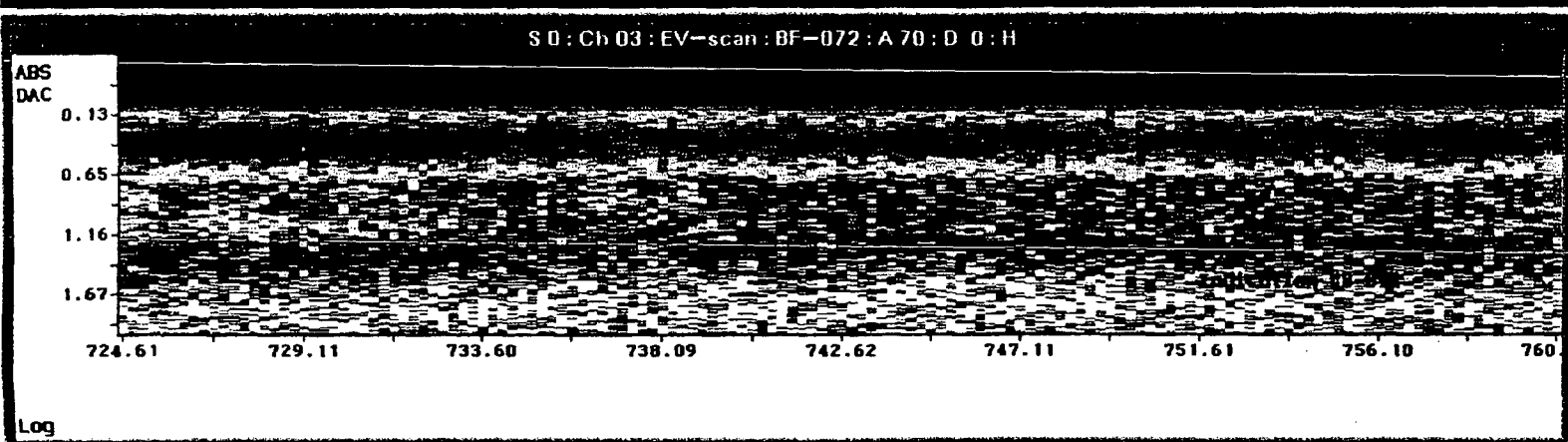
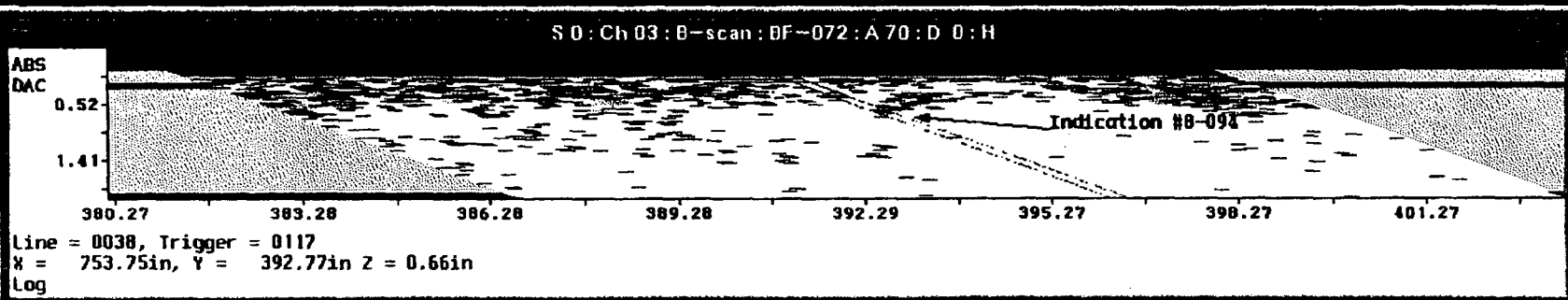
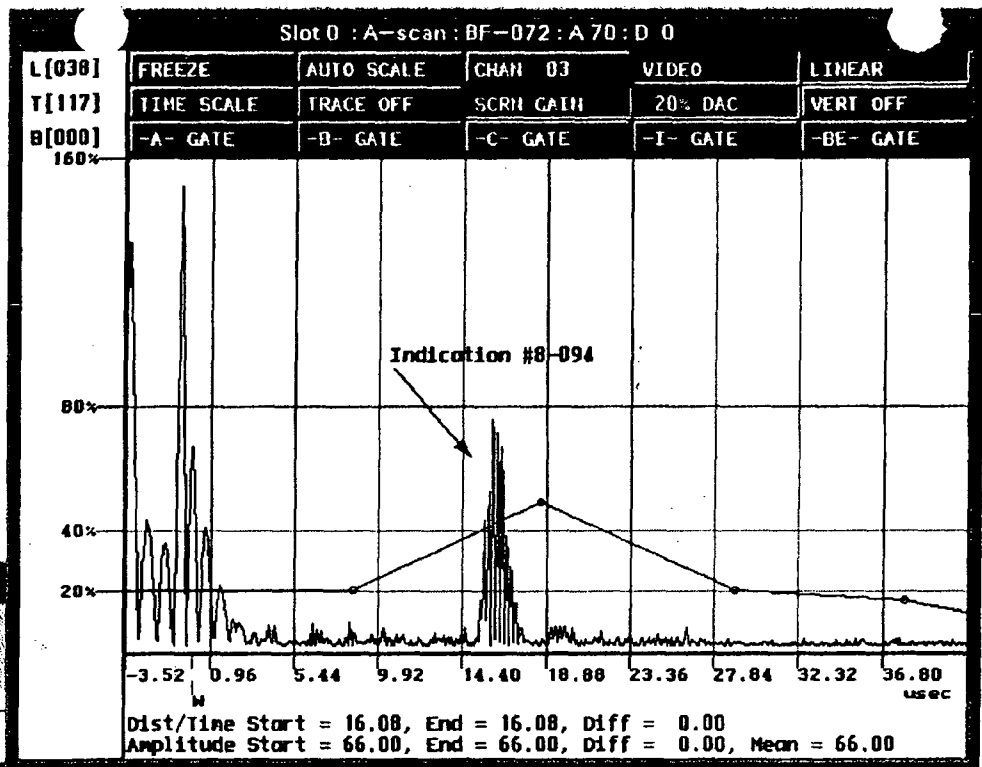
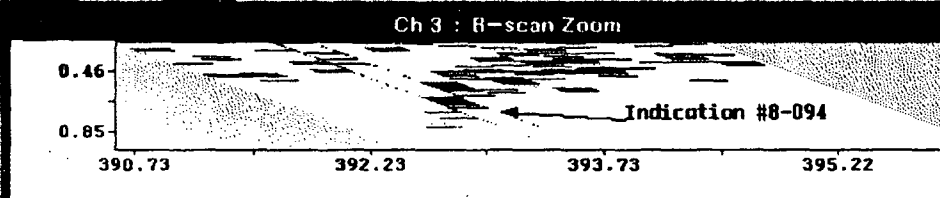
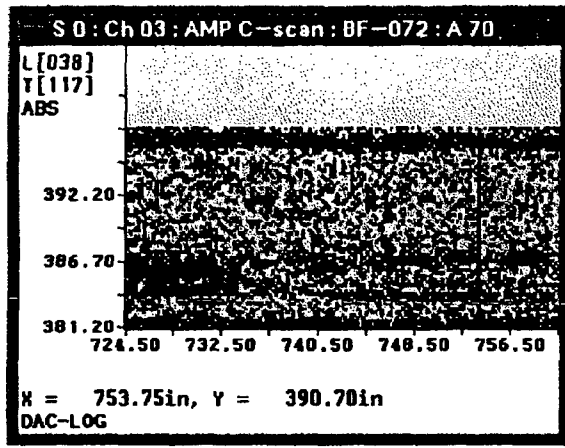
Lower Tor  
/test/dump /max  
tor3/8-093

00259  
259 of 276  
R1154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.0  
80.1  
84.5  
88.0

100%  
50%  
20%



Lower Ten  
/test>dump /max  
tor3/B-094

R1154  
260 OF 276  
00260

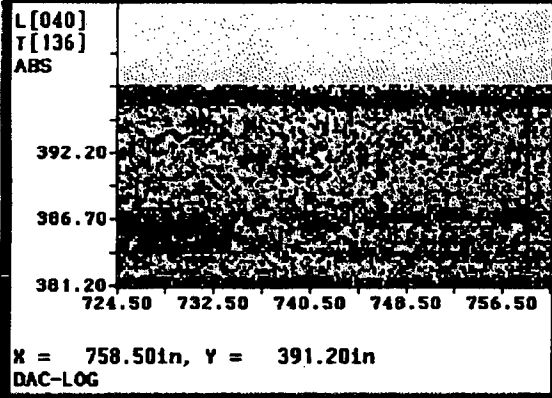


S O : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

100%  
50%  
20%

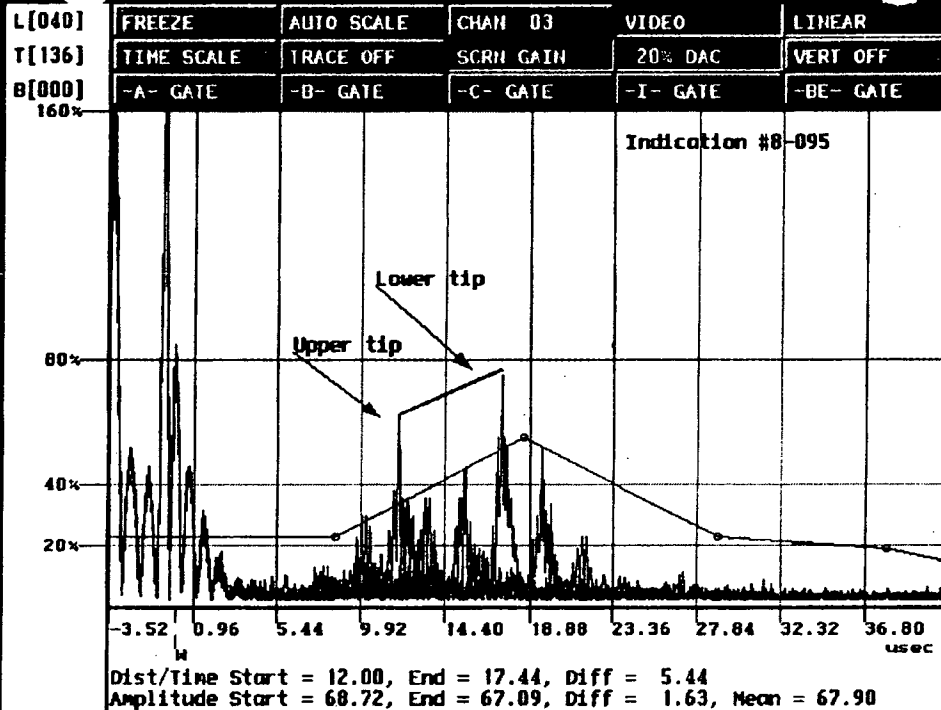
S O : Ch 03 : AMP C-scan : BF-072 : A 70



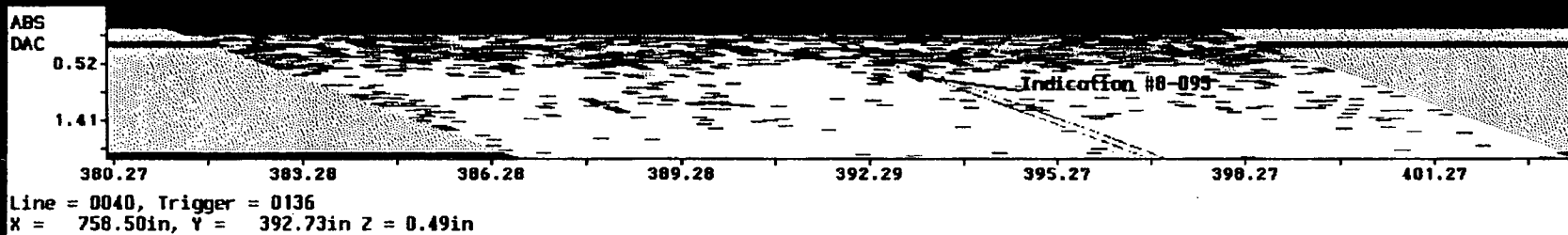
Ch 3 : B-scan Zoom



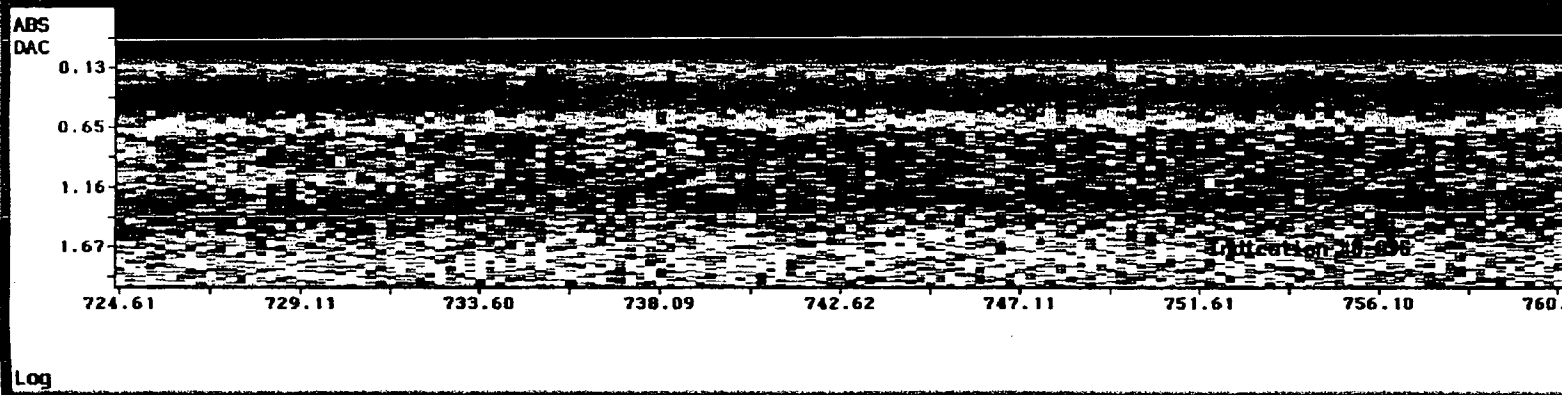
Slot 0 : A-scan : BF-072 : A 70 : D 0



S O : Ch 03 : B-scan : BF-072 : A 70 : D 0 : H



S O : Ch 03 : EV-scan : BF-072 : A 70 : D 0 : H



Lower Ten  
/test>dump /max  
tor3/B-095

00261

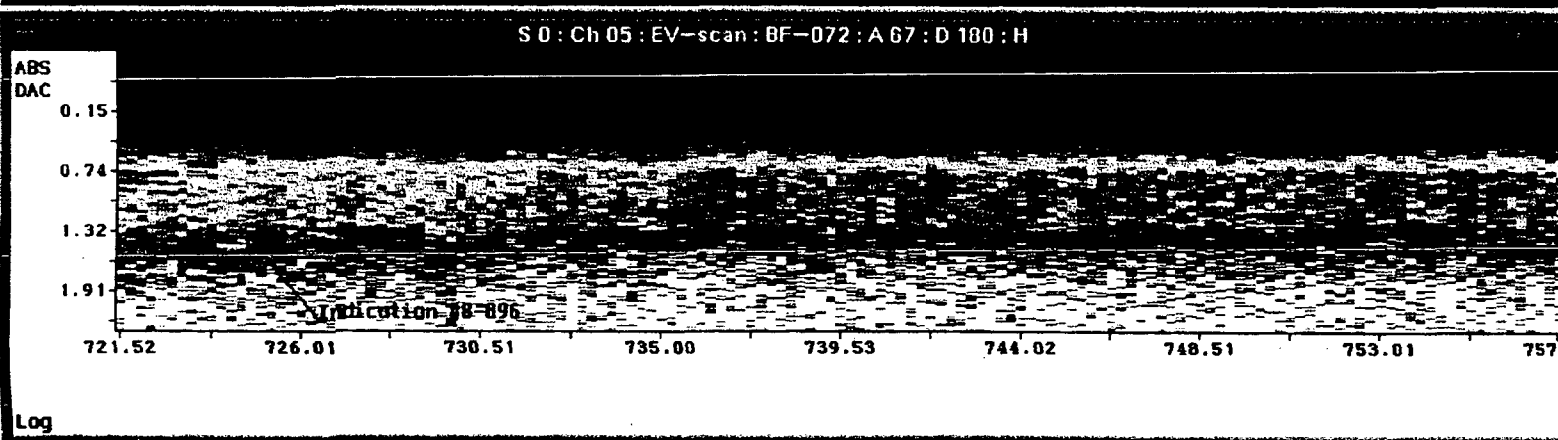
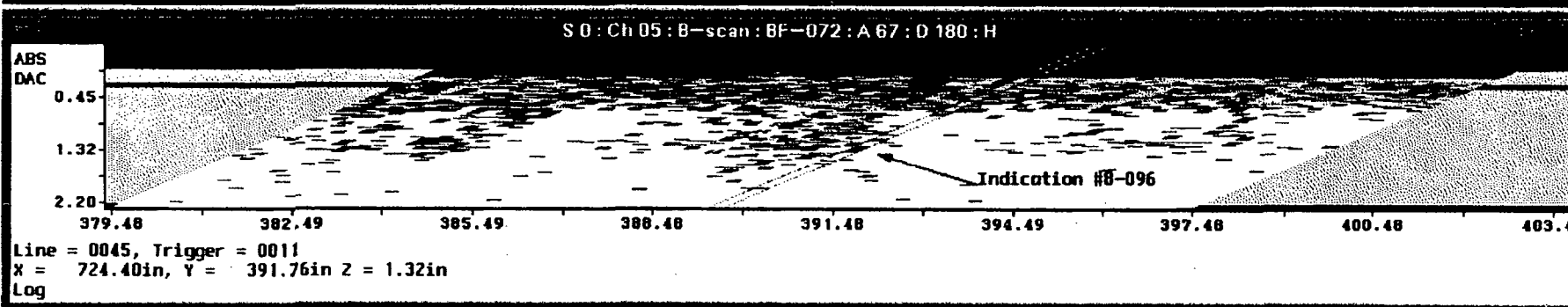
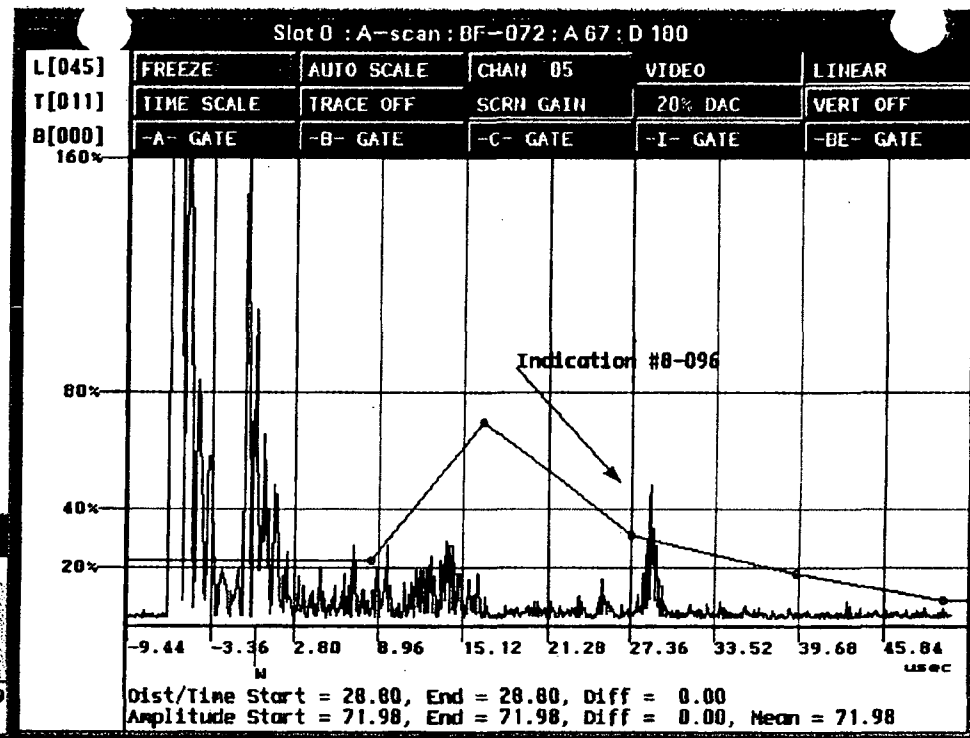
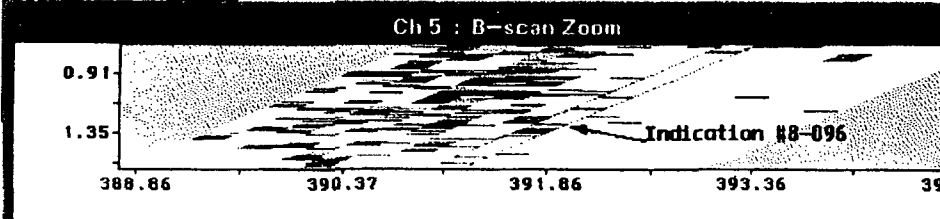
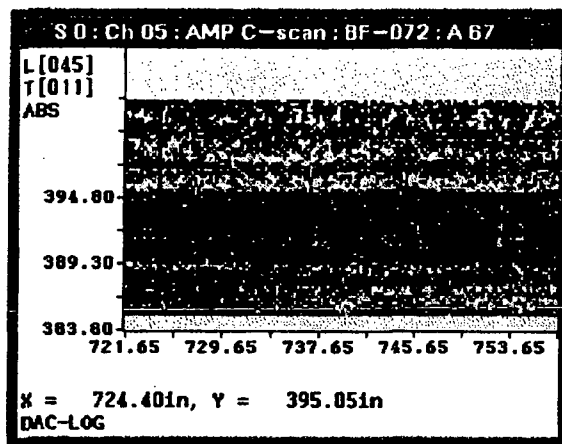
261 OF 276

21154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5

100%  
50%  
20%



Lower Ten  
/test>dump /max  
tor3/B-096

00262

262 of 276

R1154

S 0 : Scale

32.3

36.6

41.0

45.3

49.7

54.0

58.4

62.7

67.1

71.4

75.8

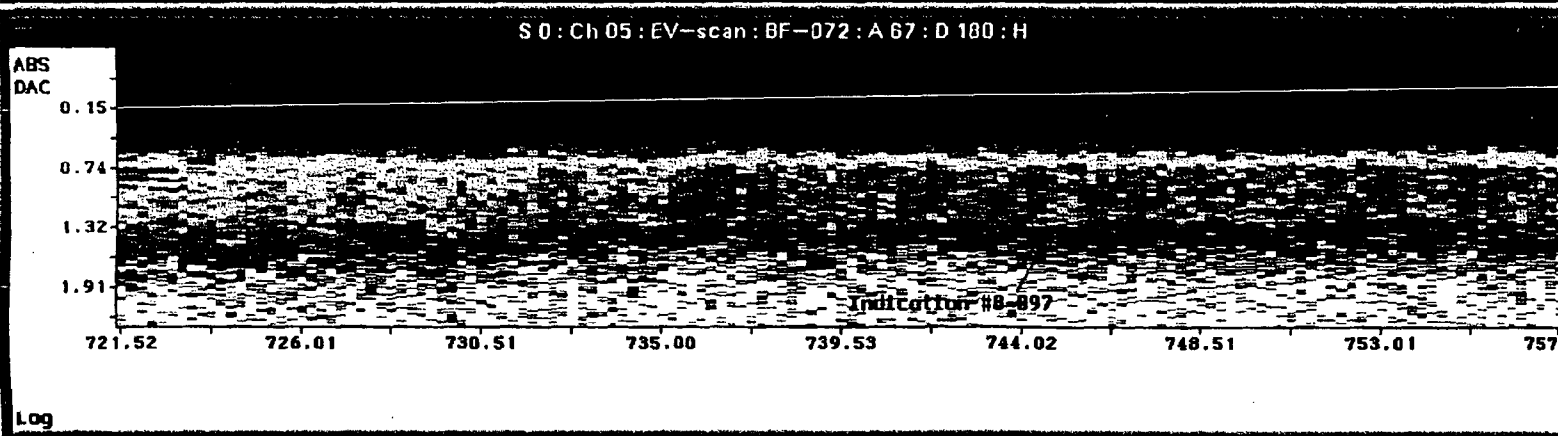
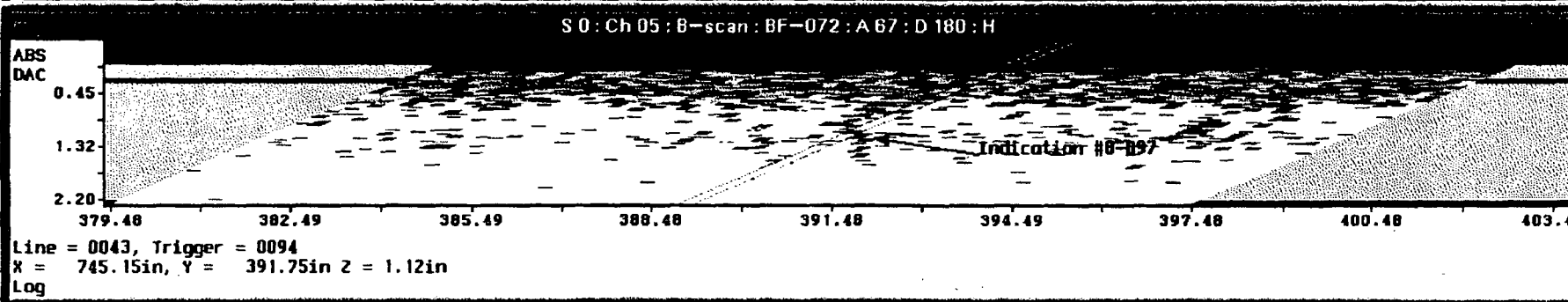
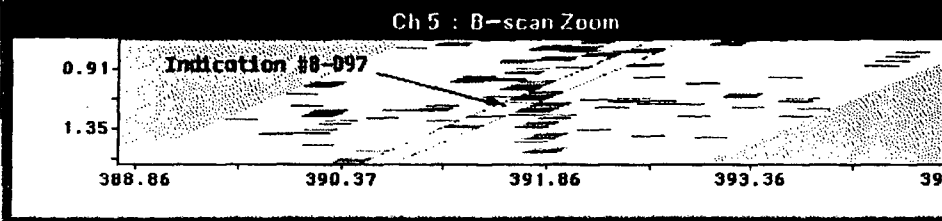
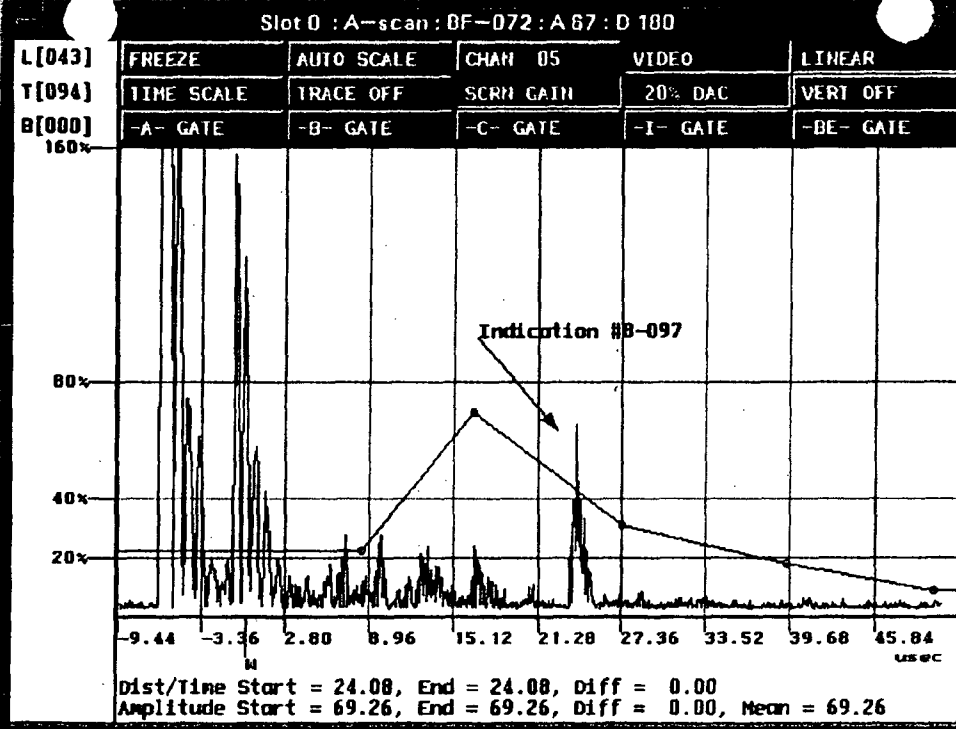
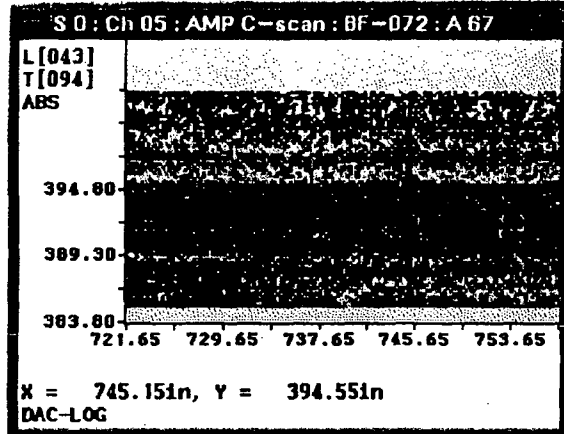
80.1

84.5

100%

50%

20%



Lower Ten

/test>dump /max

tor3/8-097

00263

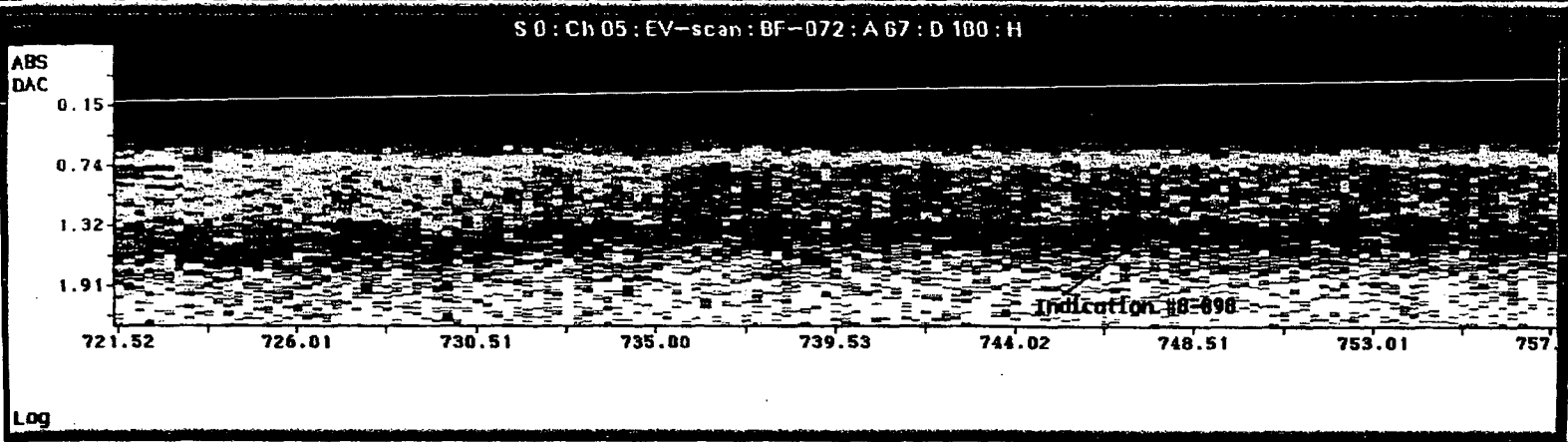
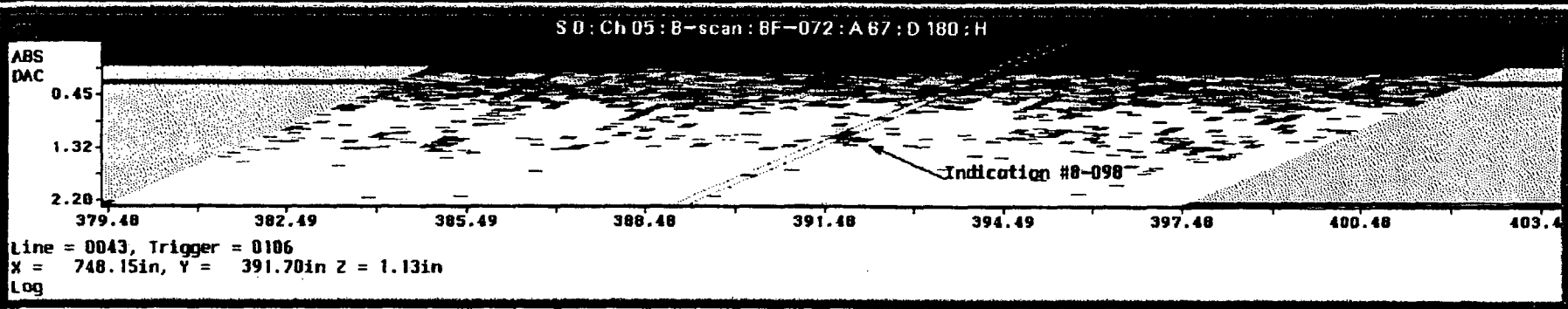
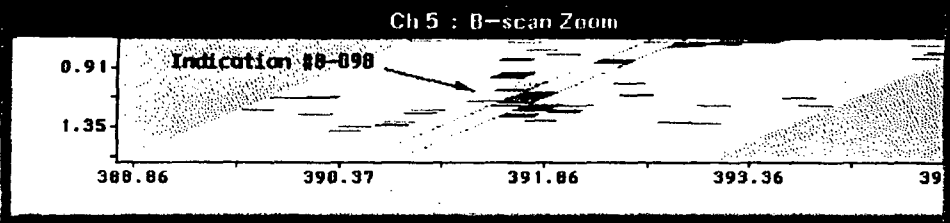
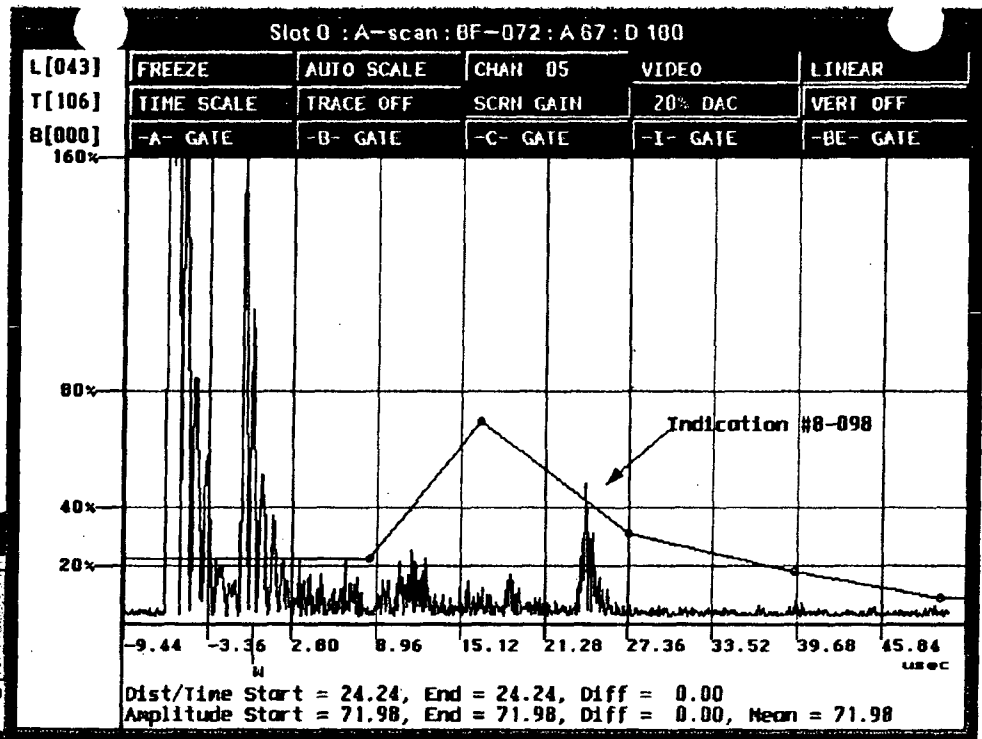
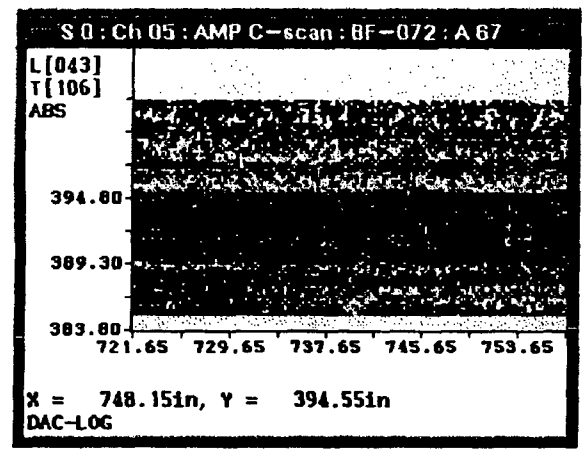
263 OF 276

R1154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5

100%  
50%  
20%



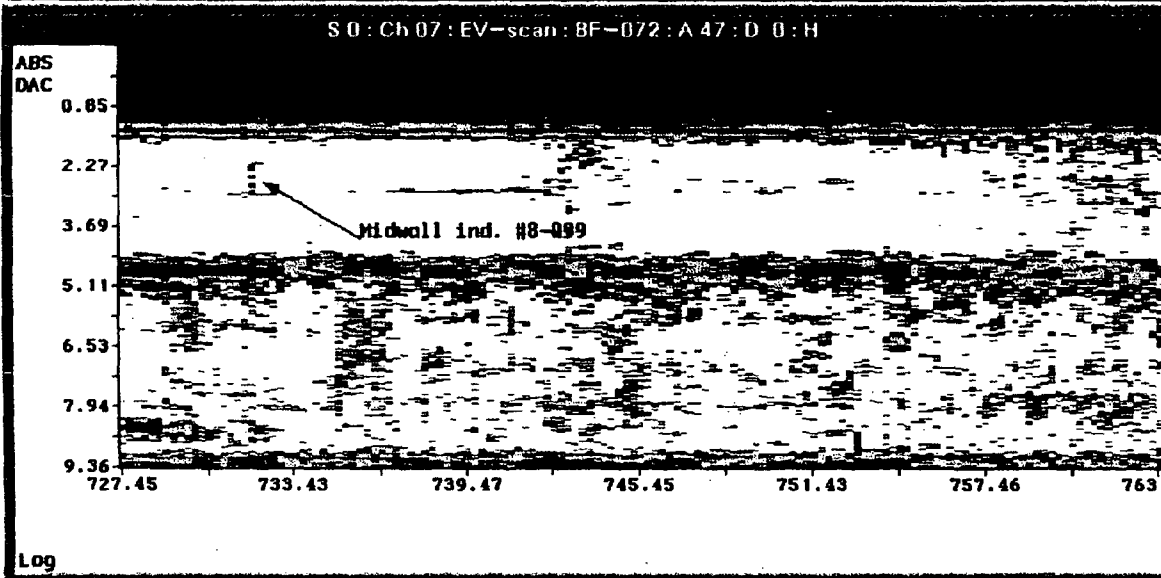
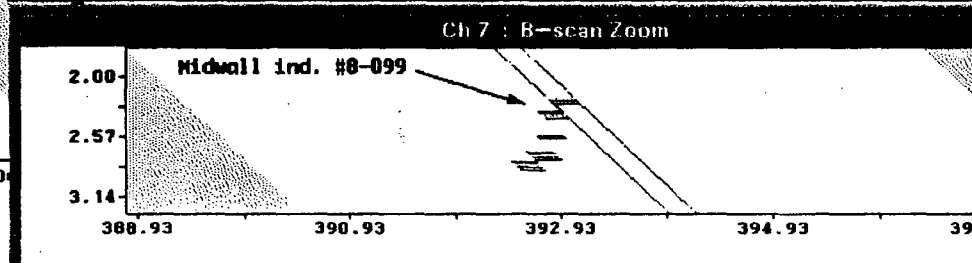
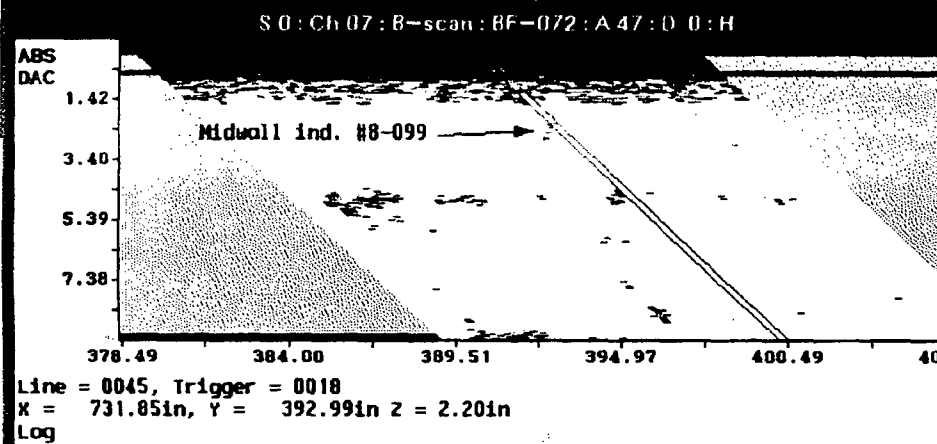
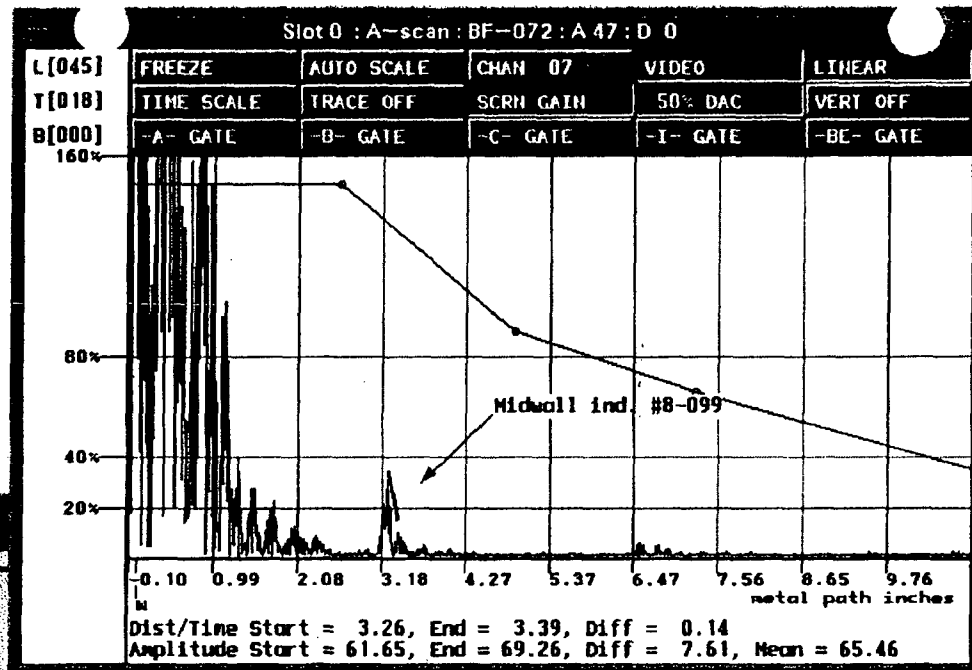
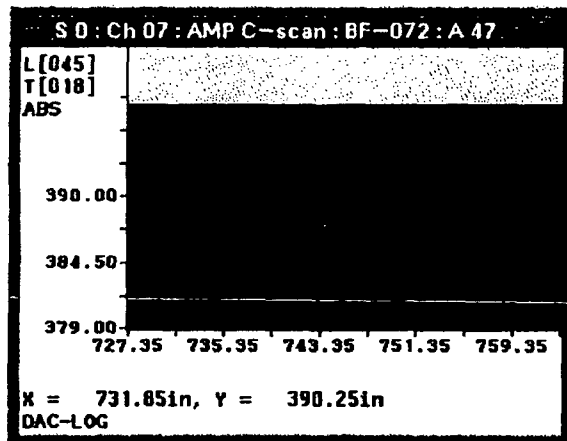
Lower Tern  
/test>dump /max  
tor3/B-098

00264  
264 OF 276  
R1154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1

100%  
50%  
20%



Lower Tern  
/test>dump /max  
tor3/8-099

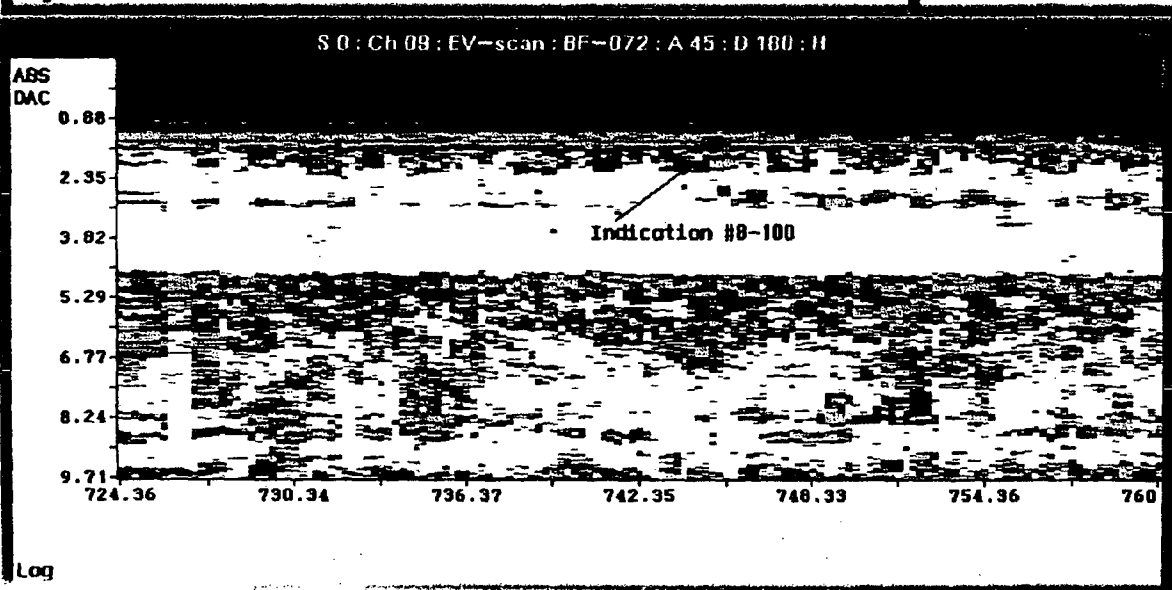
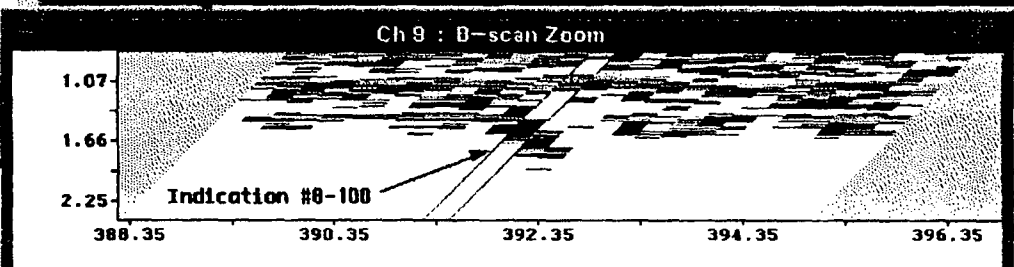
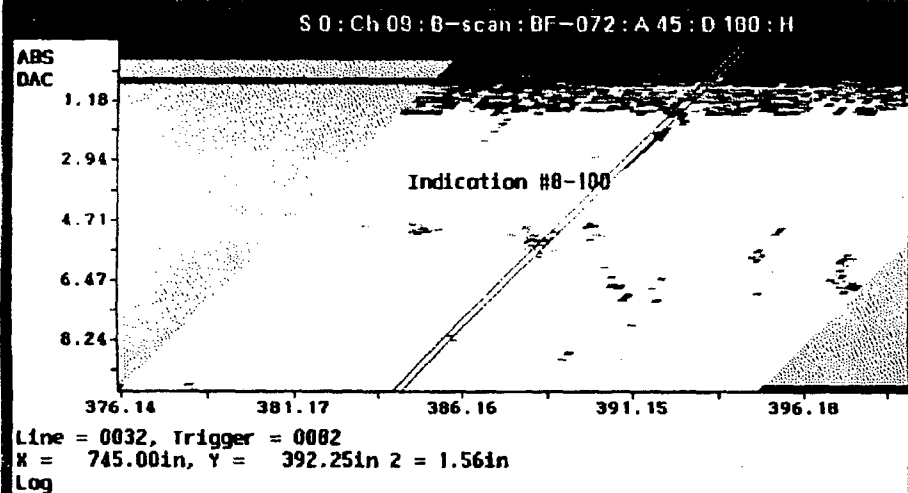
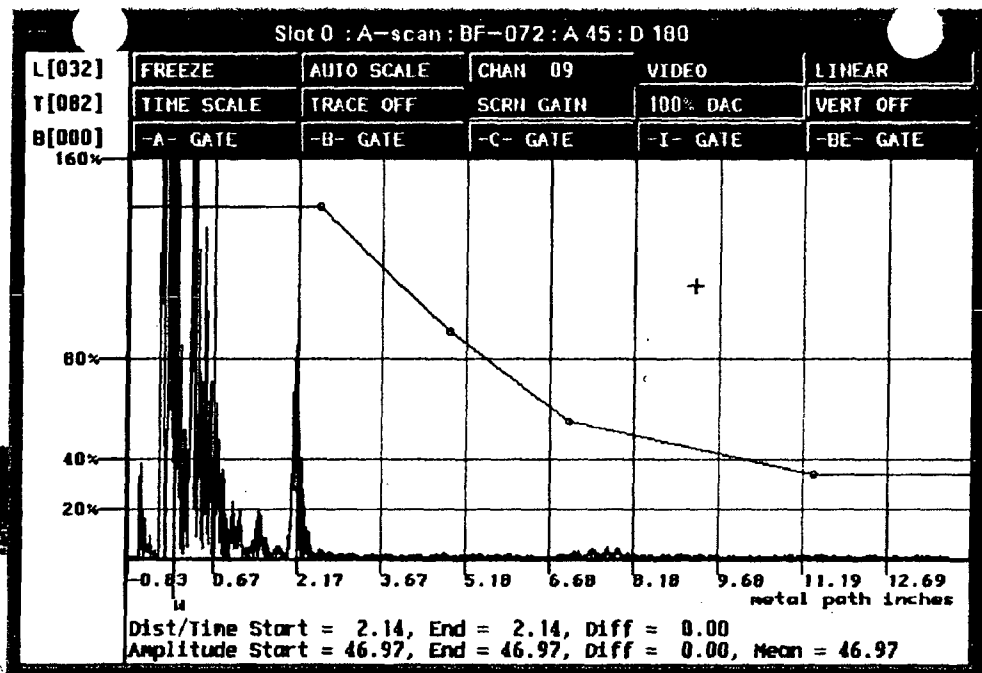
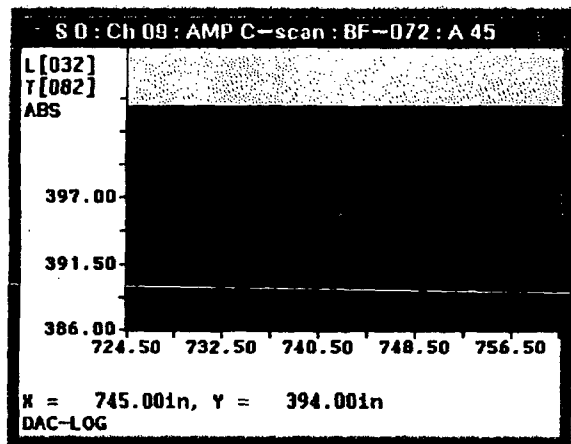
00265

R1154  
2650E 274

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8

100%  
50%  
20%



Lower Ten  
/test>dump /max  
ton3/B-100

00266

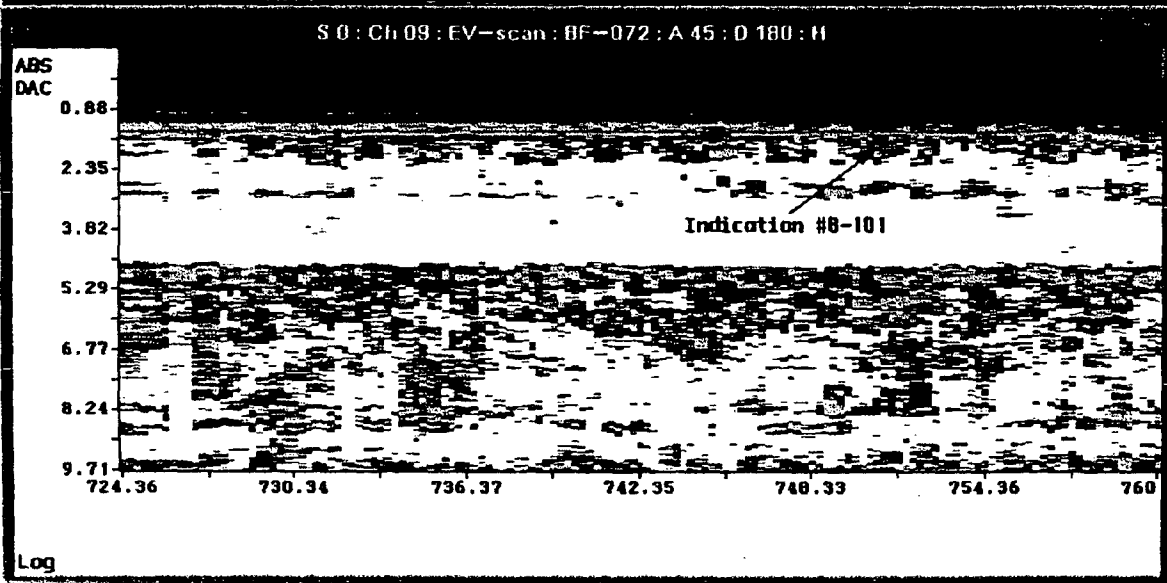
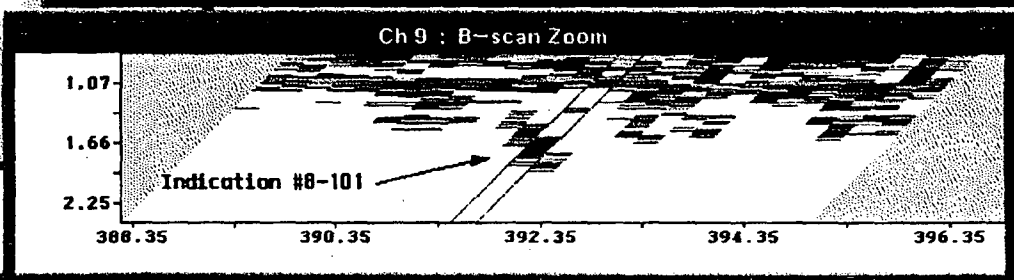
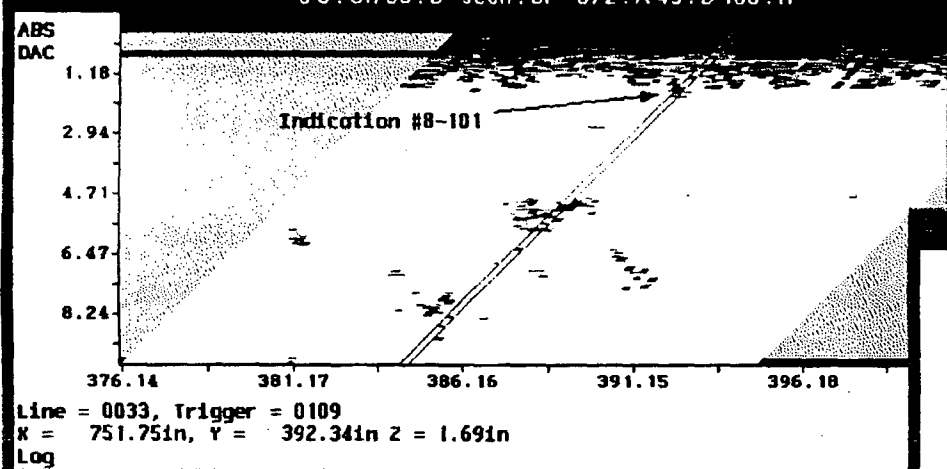
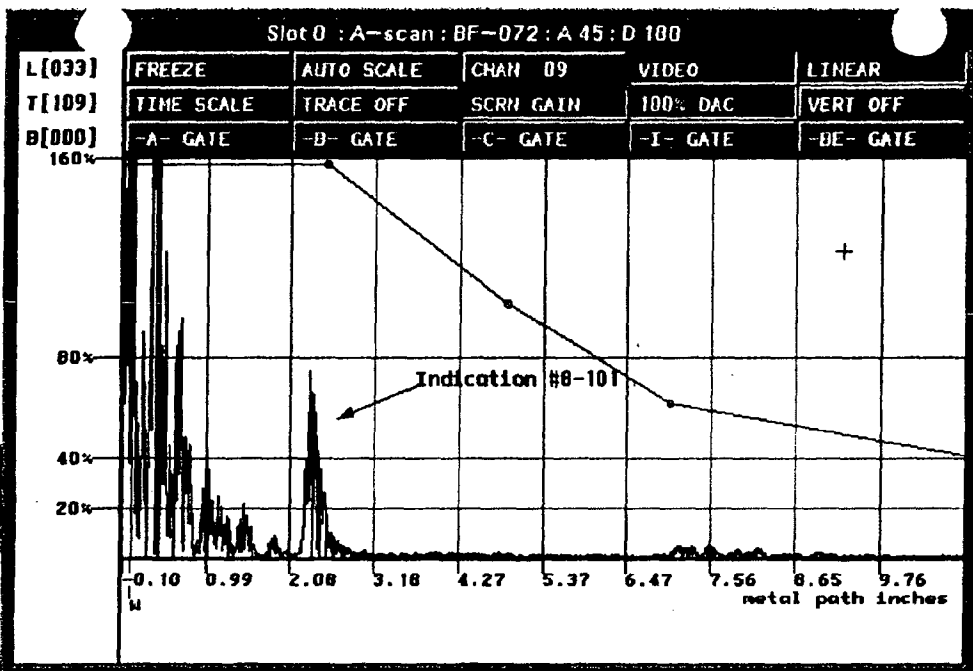
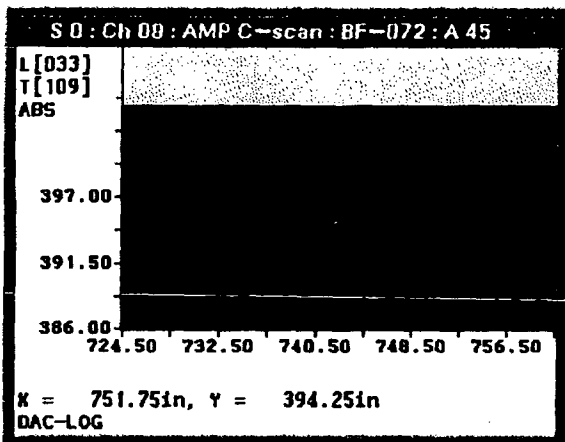
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R1154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8

100%  
50%  
20%



Lower Ten  
/test>dump /max  
ton3/B-101

00267

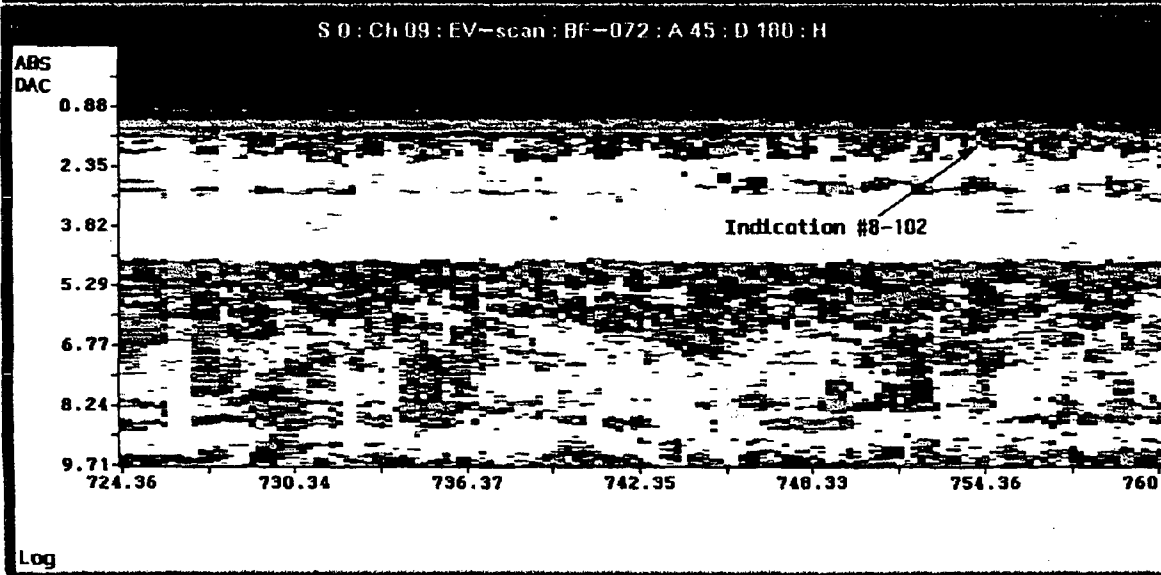
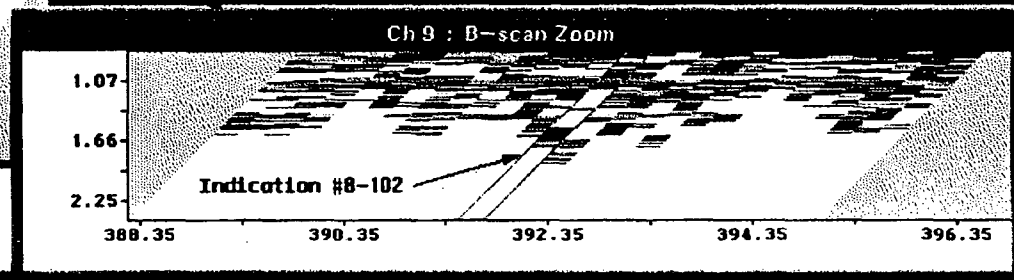
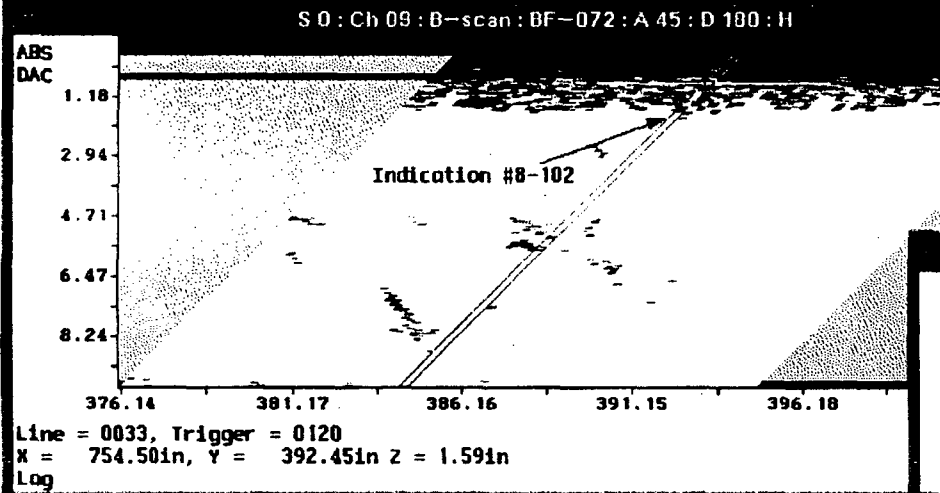
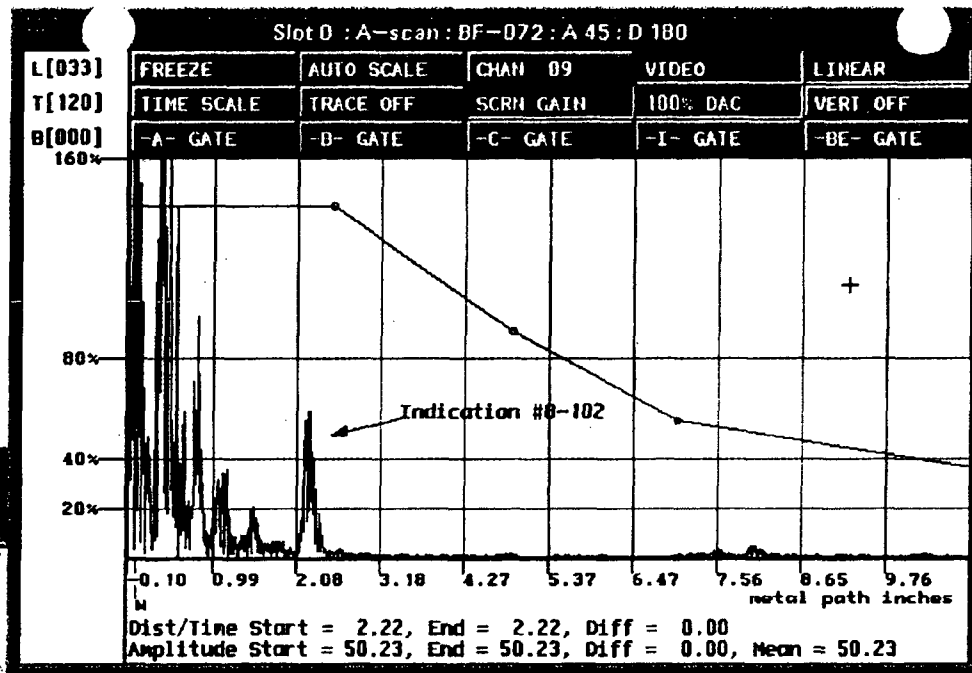
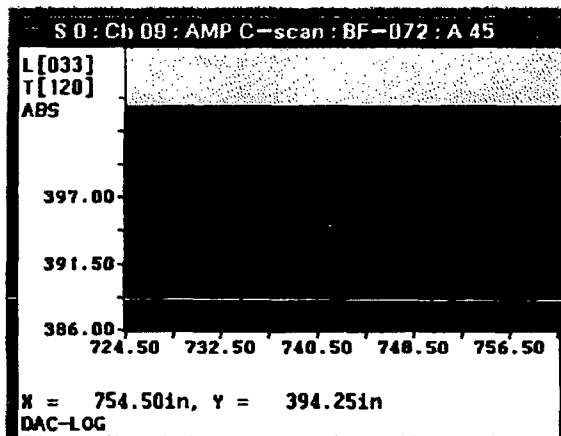
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R1154

S D : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8

100%  
50%  
20%



Lower Tern  
/test>dump /max  
tor3/8-102

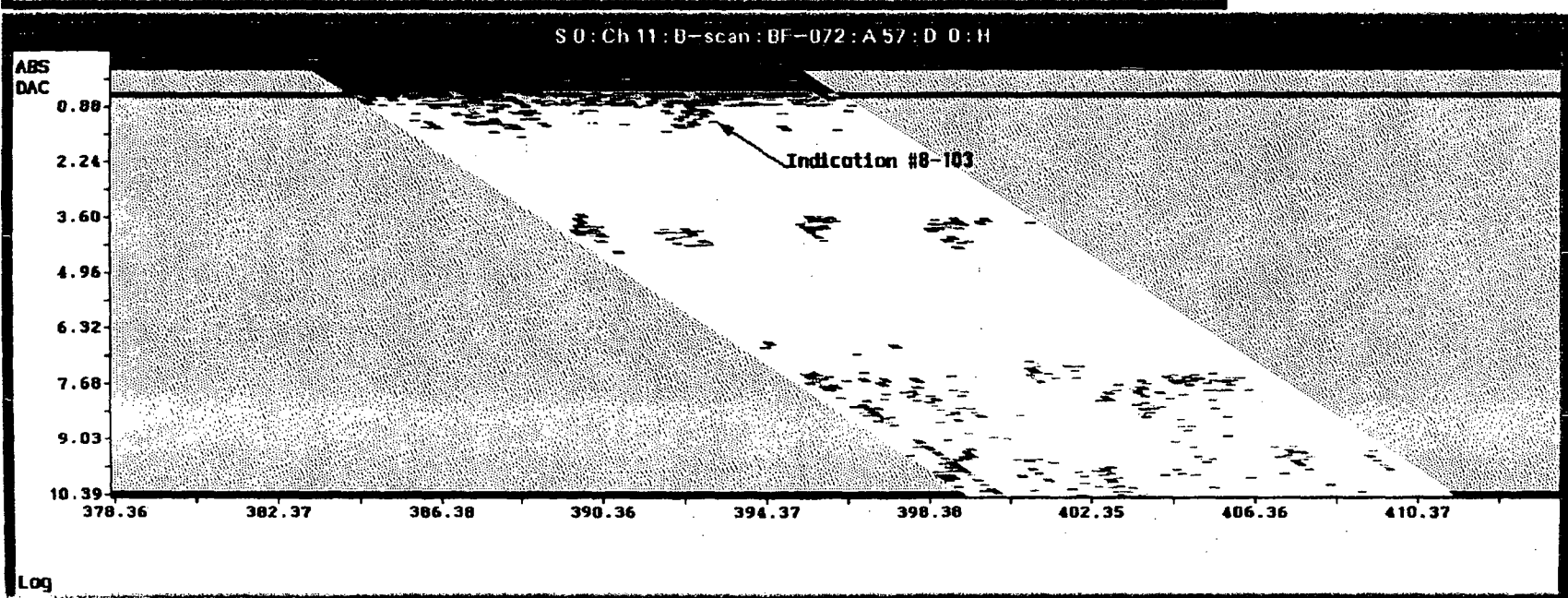
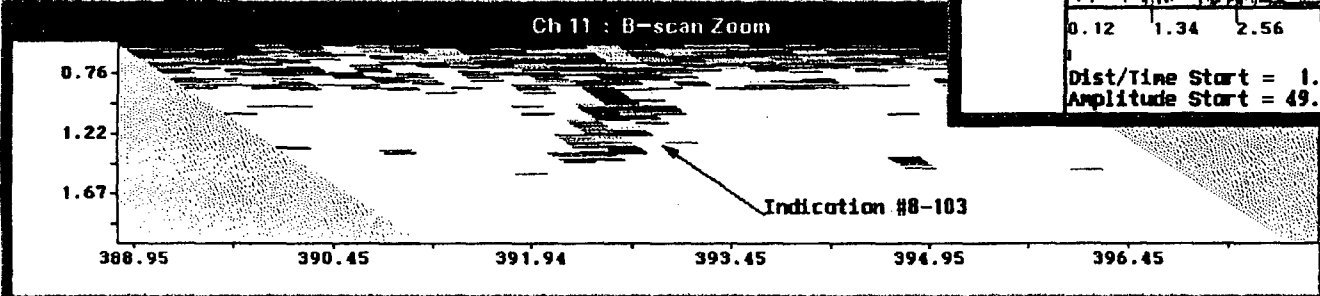
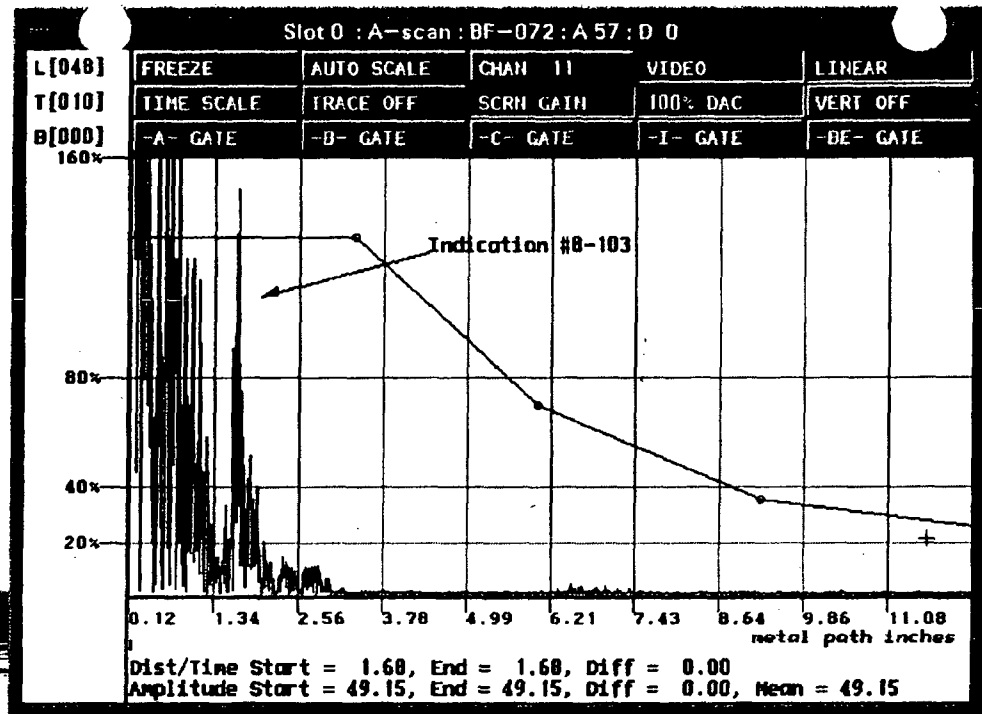
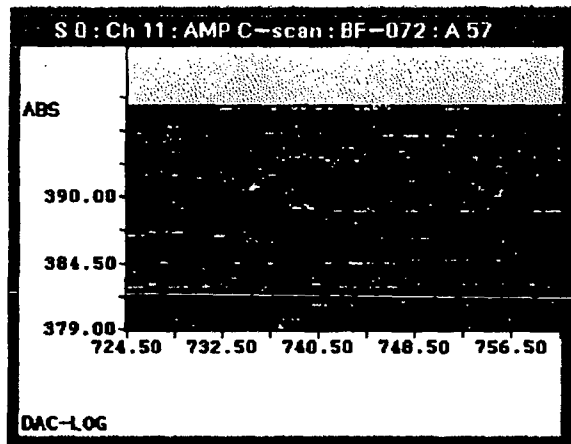
121154  
268 of 276  
00268



S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%



Lower Tor  
/test>dump /max  
tor3/B-103

00269

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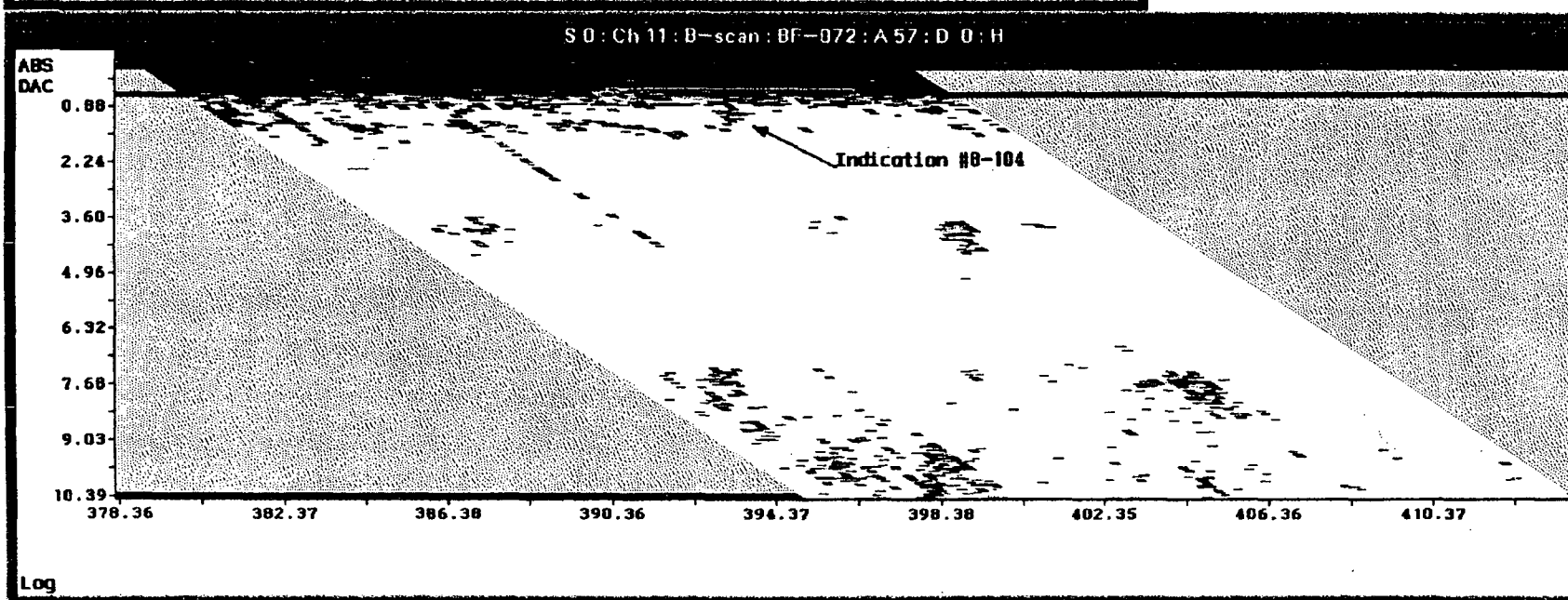
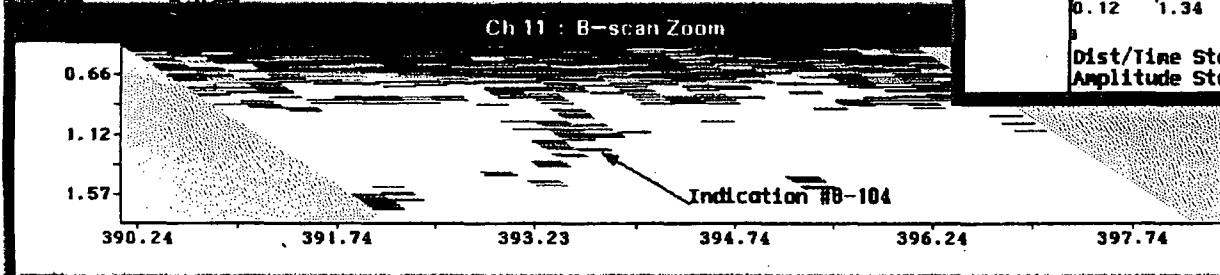
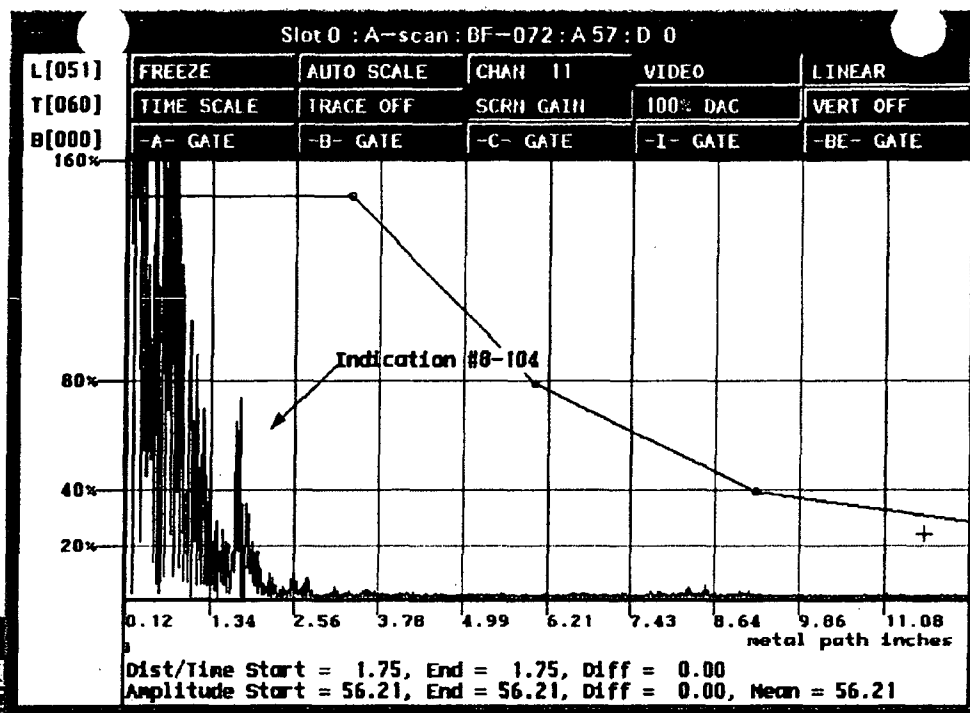
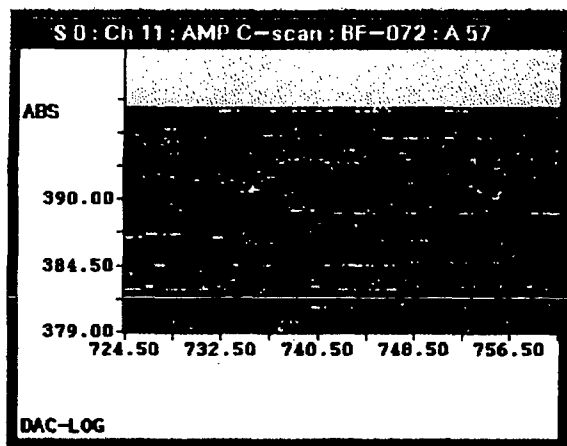
R1154

S0: Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC



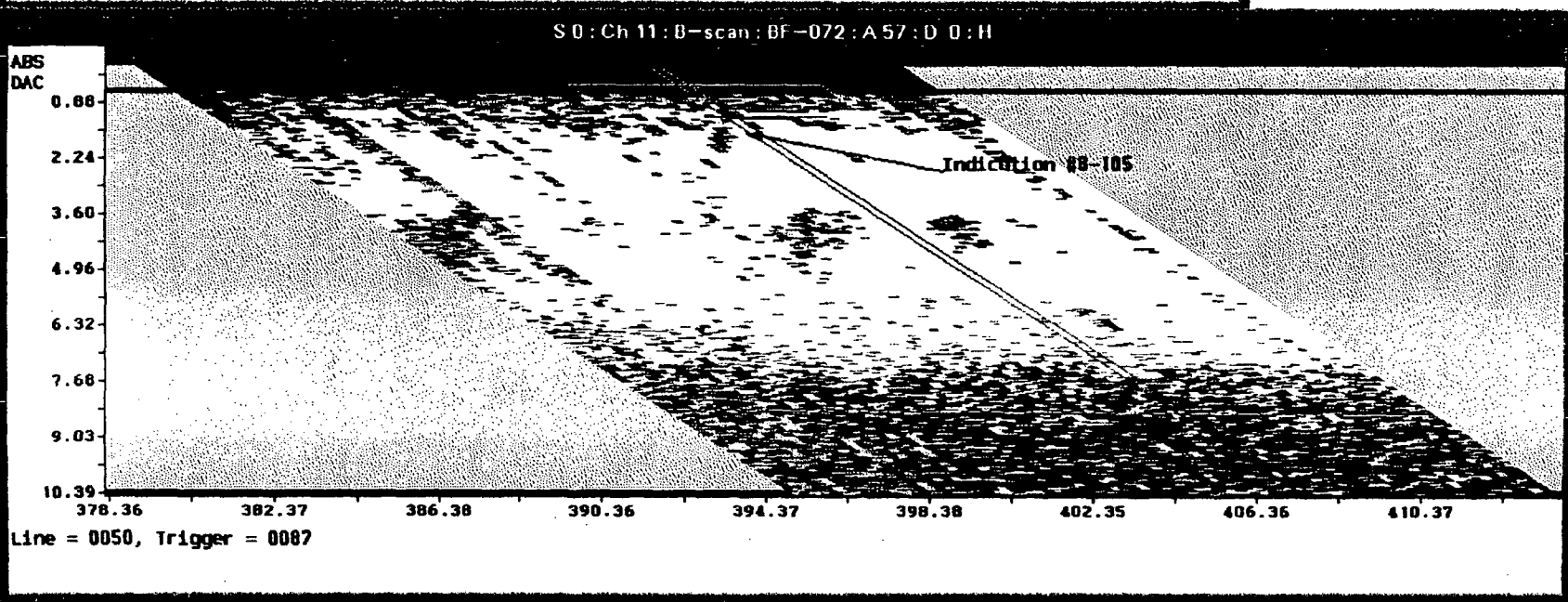
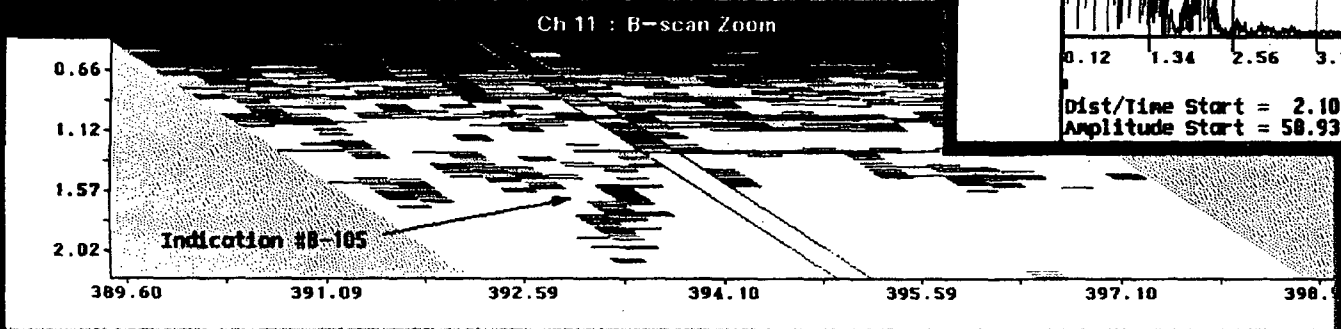
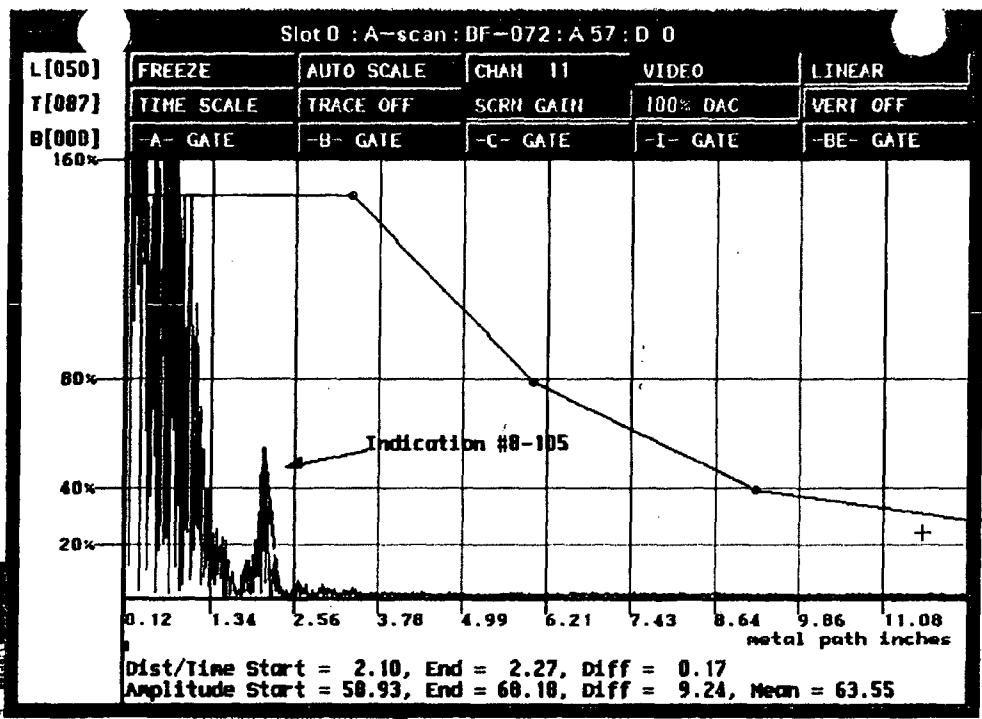
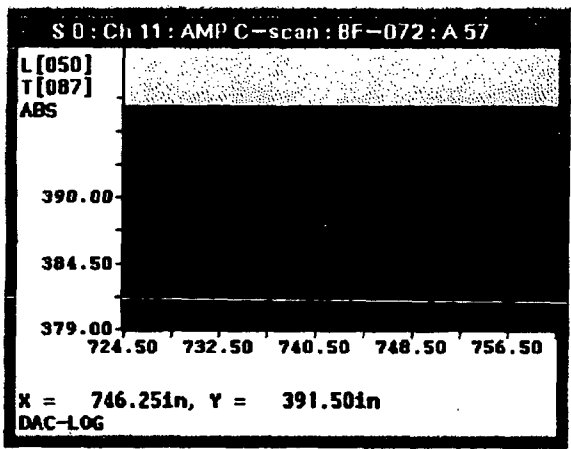
00270

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R1154

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

100%  
50%  
20%



Lower Ton  
/test>dump /max  
ton3/8-105

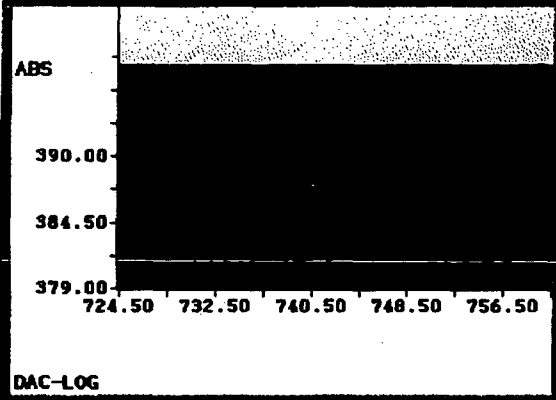
00271

21154  
271 OF 276

S 0 : Scale

32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0 50%  
58.4  
62.7 20%  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8

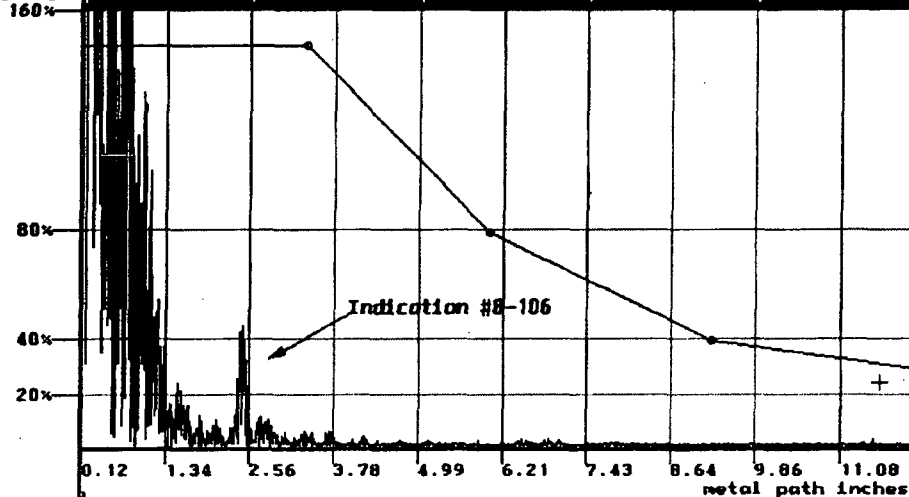
S 0 : Ch 11 : AMP C-scan : BF-072 : A 57



Slot 0 : A-scan : BF-072 : A 57 : D 0

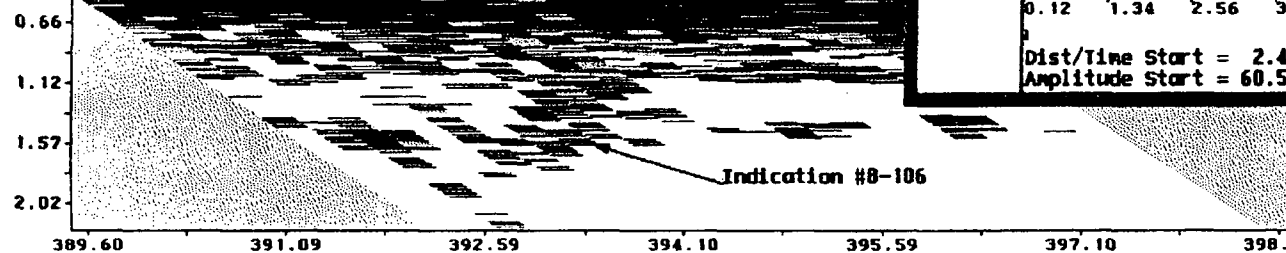
L[047]  
T[106]  
B[000]

FREEZE	AUTO SCALE	CHAN 11	VIDEO	LINEAR
TIME SCALE	TRACE OFF	SCRN GAIN		VERT OFF
-A- GATE	-B- GATE	-C- GATE	-I- GATE	-BE- GATE

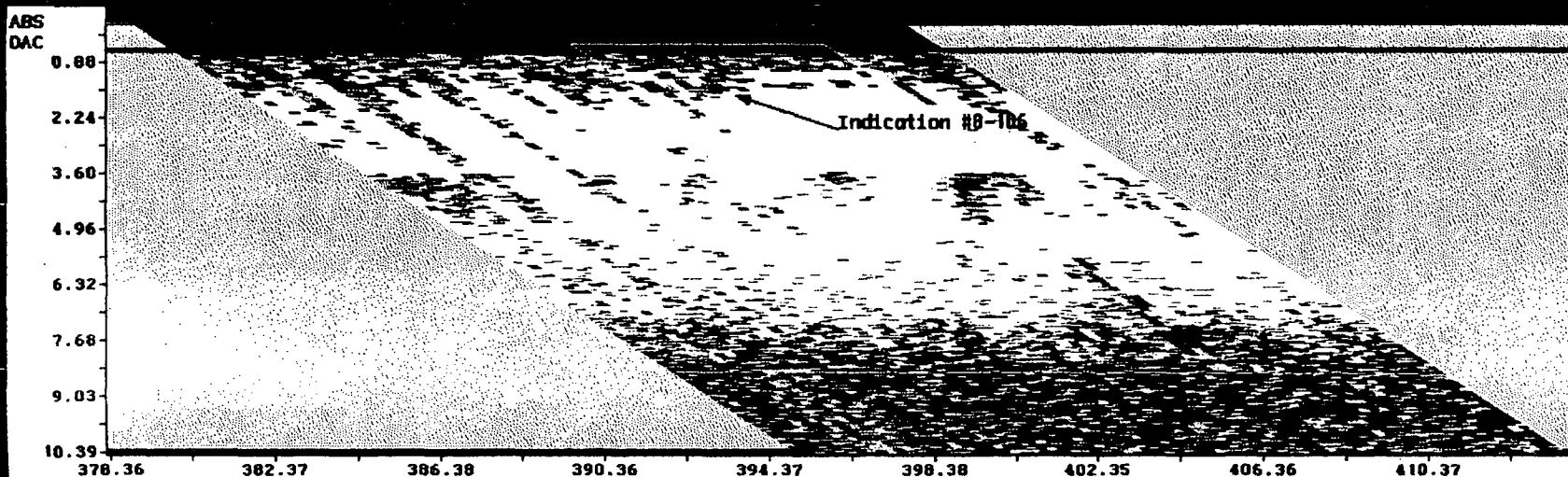


Dist/Time Start = 2.46, End = 2.46, Diff = 0.00  
Amplitude Start = 60.56, End = 60.56, Diff = 0.00, Mean = 60.56

Ch 11 : B-scan Zoom



S 0 : Ch 11 : B-scan : BF-072 : A 57 : D 0 : H



Lower Ten  
/test>dump /max  
tor3/8-106

00272

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21154

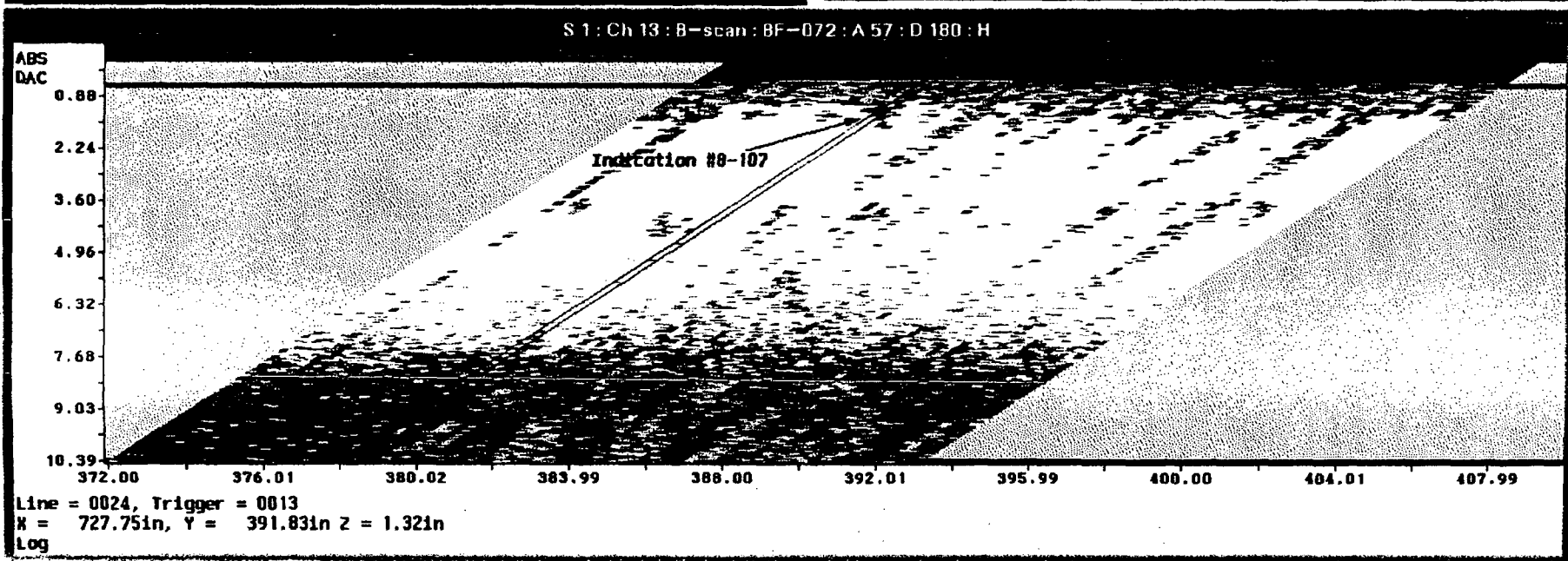
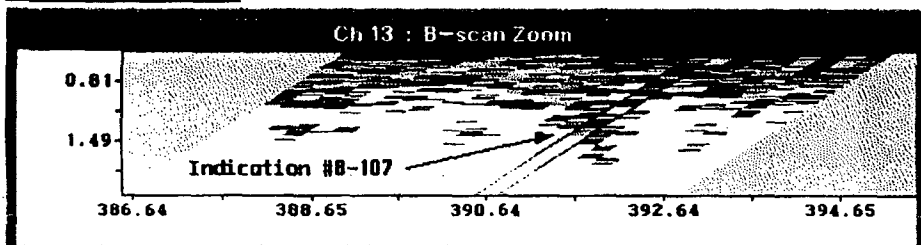
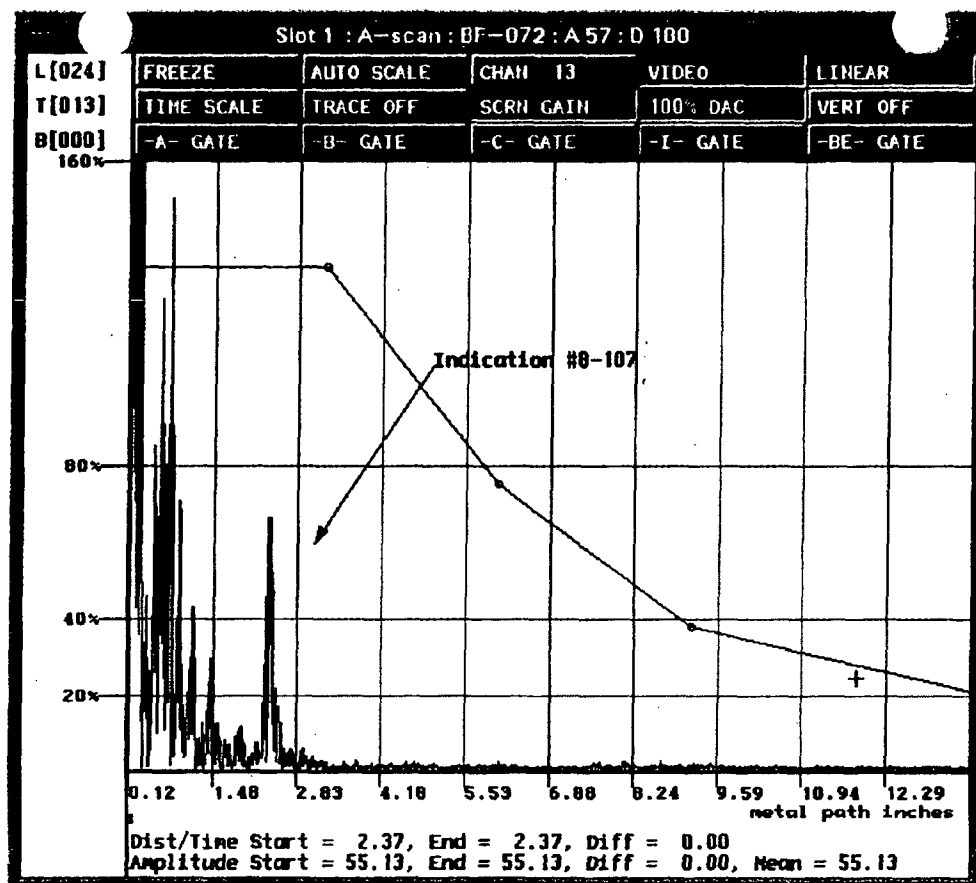
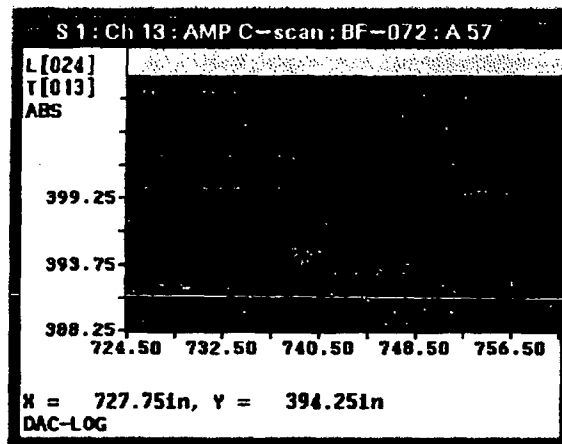
Log

S 1: Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC



00273

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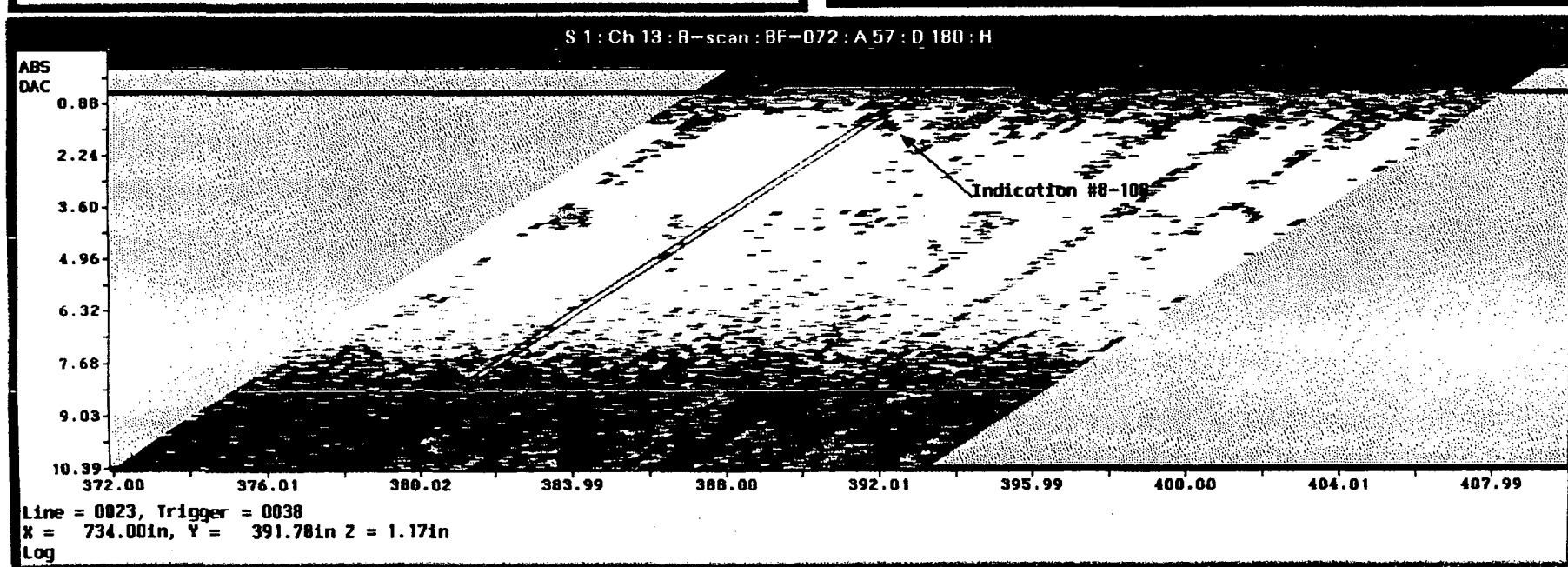
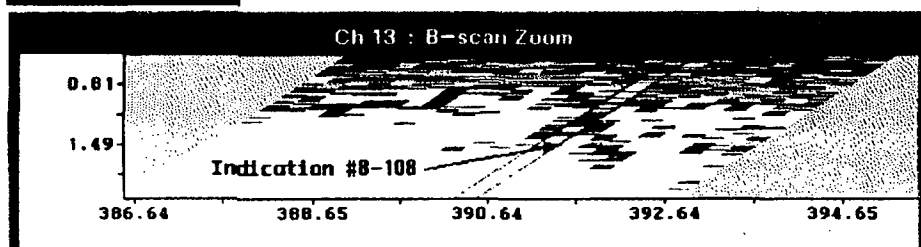
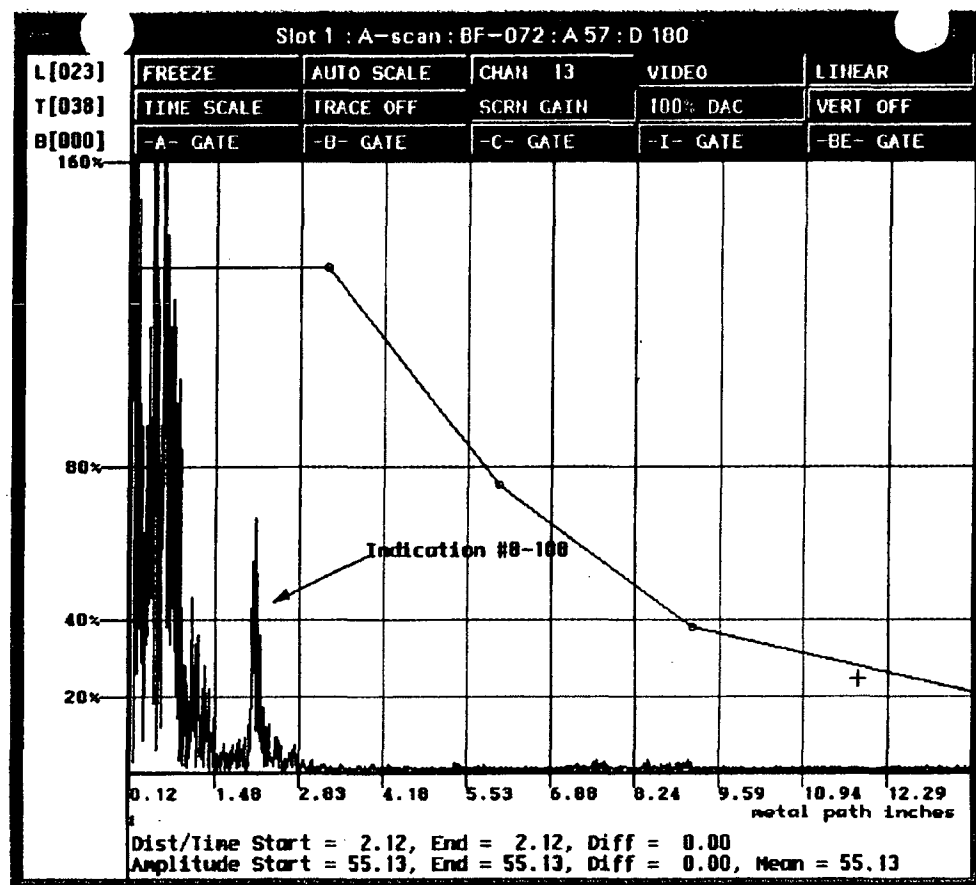
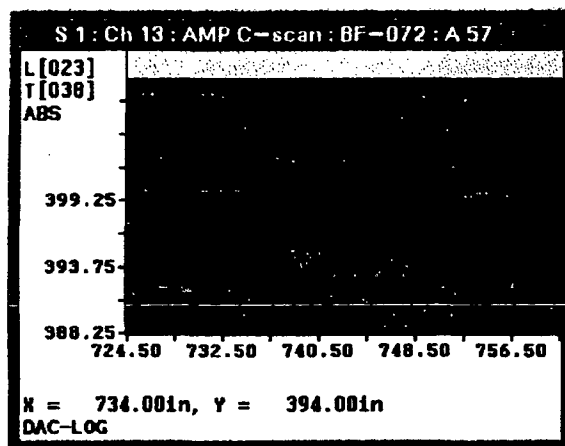
21154

S 1: Scale

32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.0  
80.1  
84.5  
88.8  
93.2

100%  
50%  
20%

DAC



en  
ip /max  
08

00274

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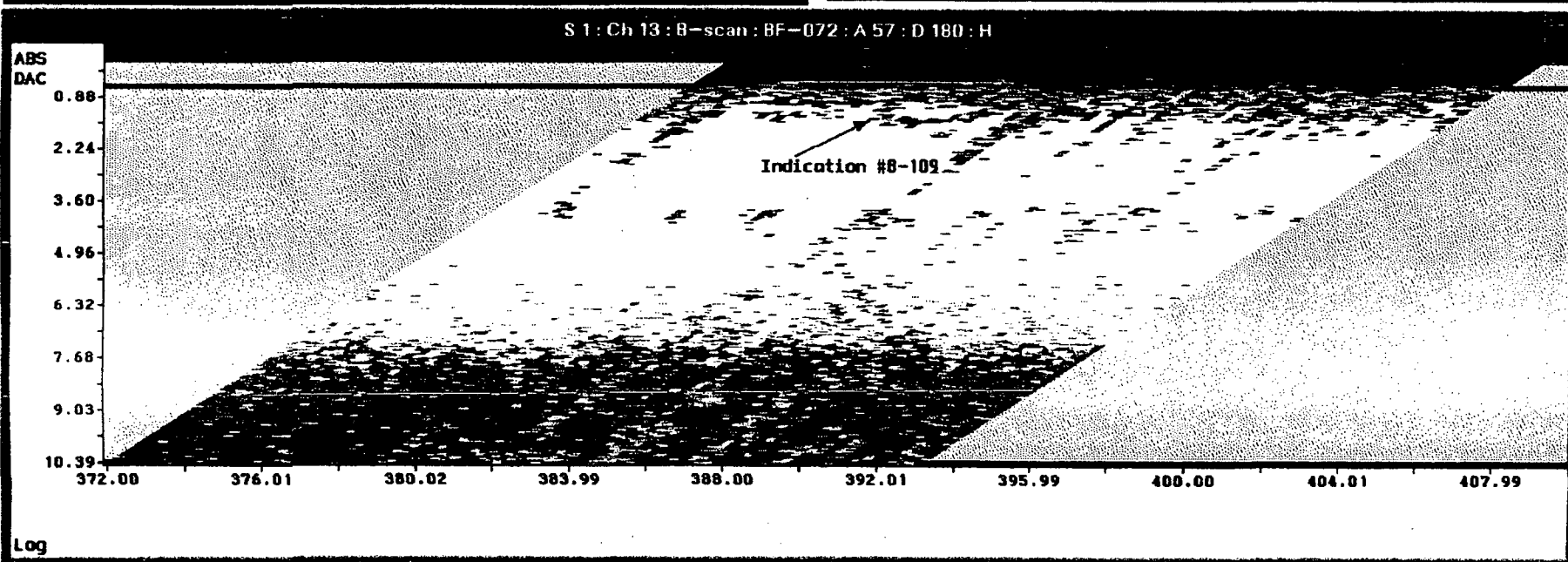
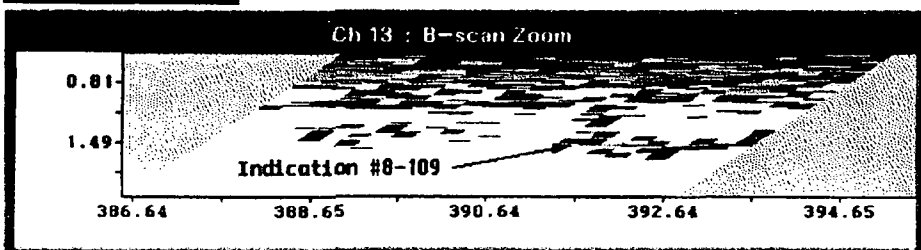
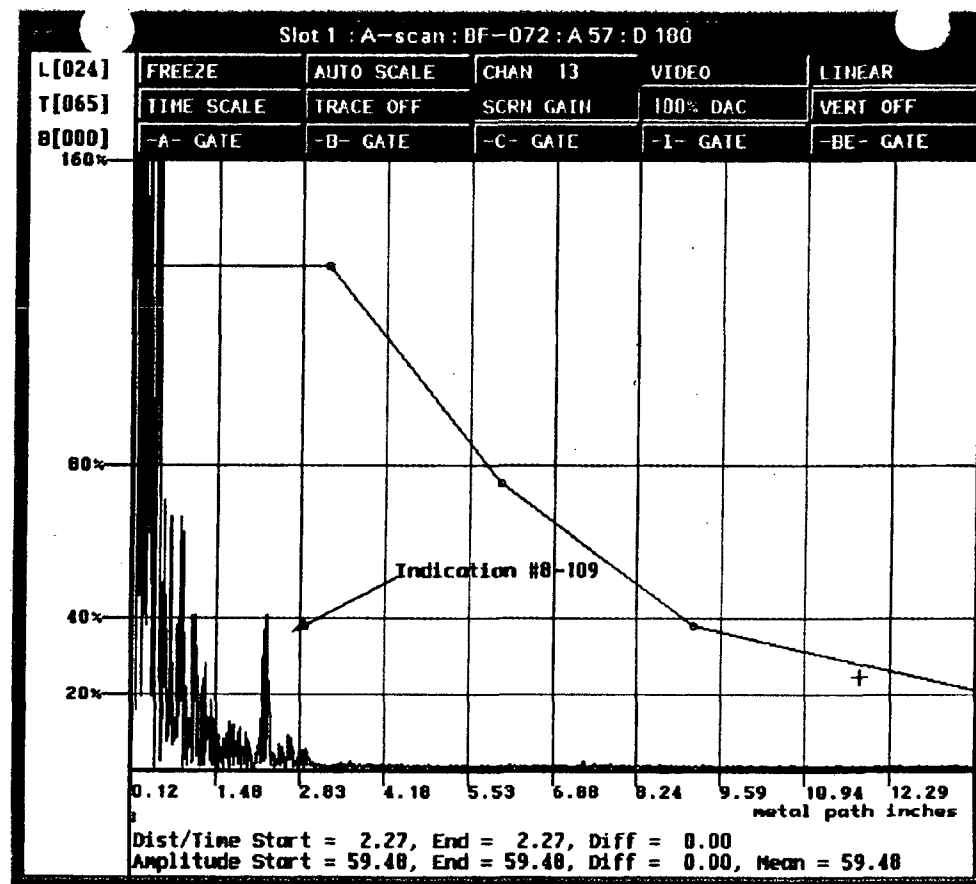
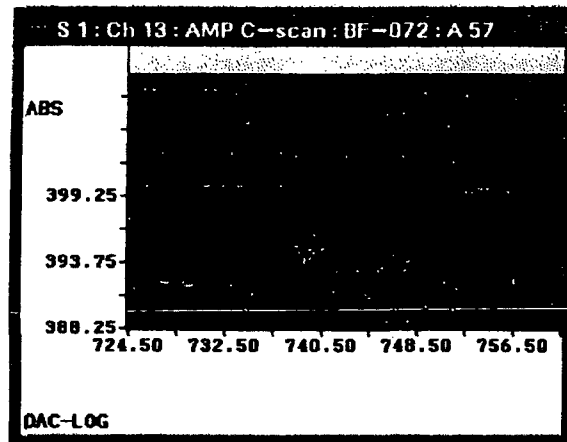
21154

0000 0070

S 1 : Scale

32.3
36.6
41.0
45.3
49.7
54.0
58.4
62.7
67.1
71.4
75.8
80.1
84.5
88.8
93.2

DAC



en

np /max

09

R1154

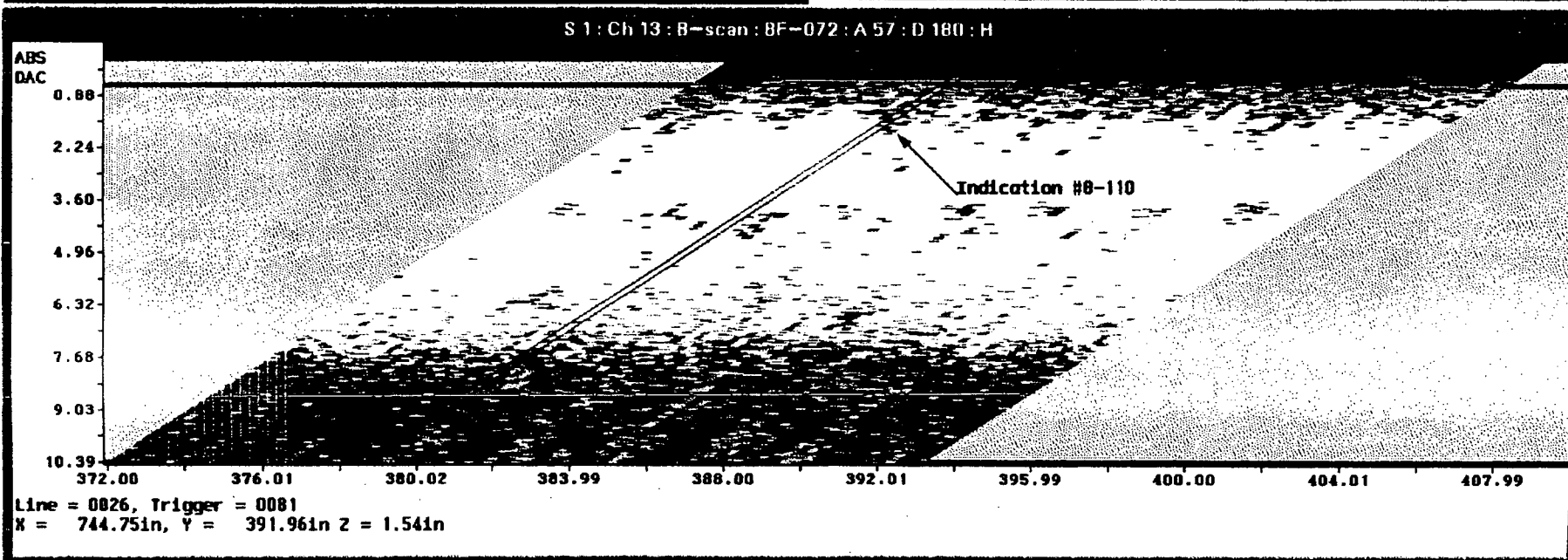
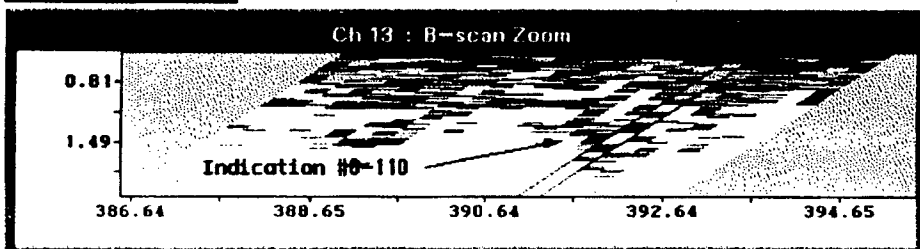
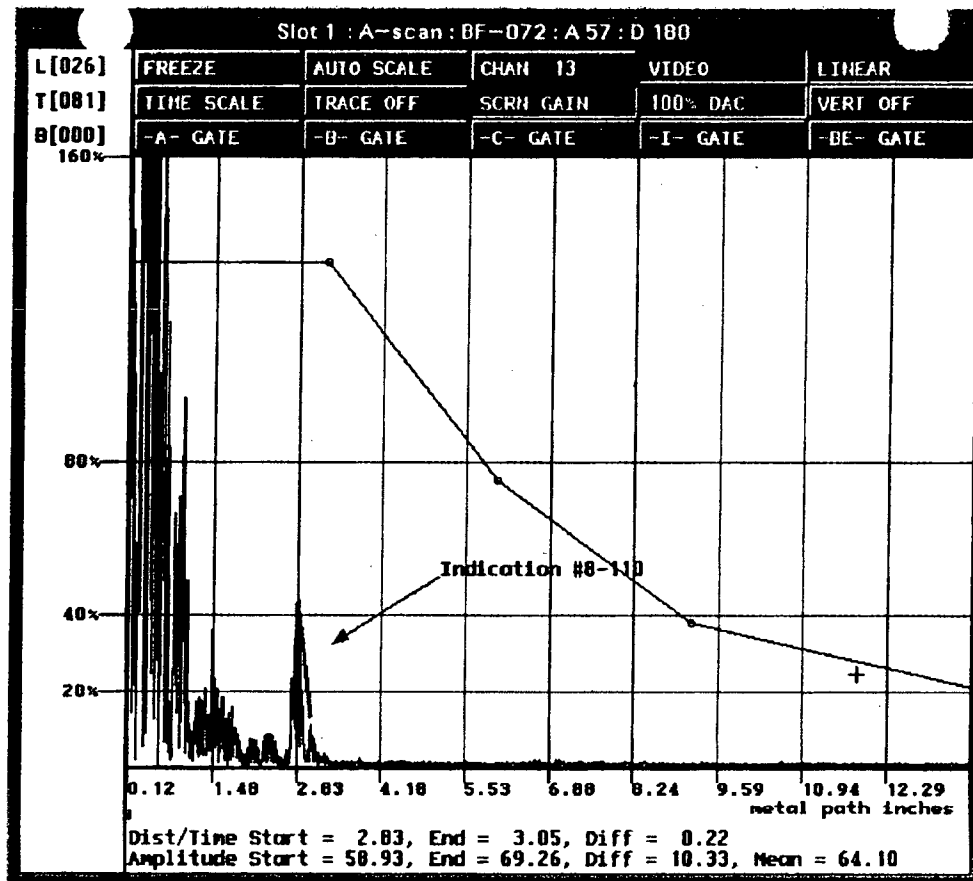
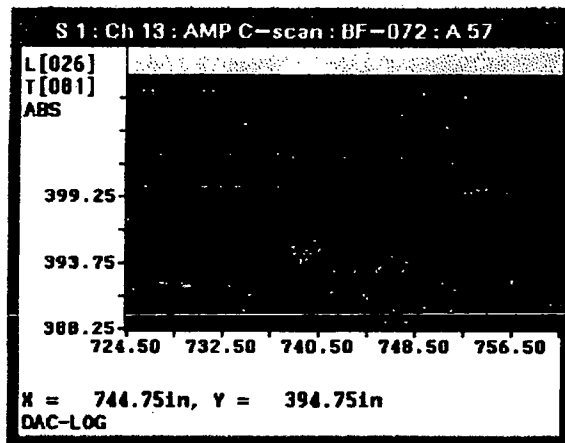
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00275

S 1 : Scale

32.3  
36.6  
41.0  
45.3  
49.7 100%  
54.0 50%  
58.4  
62.7 20%  
67.1  
71.4  
75.8  
80.1  
84.5  
88.8  
93.2

DAC



en  
10 /max  
10

00276

21154  
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