R1170

GE Nuclear Energy

GERIS 2000 Examination Summary Sheet

Project: TVA, Browns Ferry Nuclear Plant, Unit 3
System: Reactor Pressure Vessel
Weld ID: V-5-B **ASME Code Category:** B-A

Calibration Sheets: C-004

Supporting Data: Examination Data Sheets E-18-00 thru E-18-04, Indication Data Sheets 18-001 thru 18-016, G-112, Indication Evaluation Sheets, Screen Prints, Exam Patch Location Map, Exam Coverage Plots, and GERIS 2000 Setup Records.

Examination Summary

The ultrasonic examination of weld V-5-B resulted in no 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 N12-B Nozzle at 220°. The total examination coverage was calculated to be 99%.

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 GERIS 2000 recorded indications with the 70° RL, 45° and 60° shear wave scans that were evaluated and found to be acceptable per the referencing Code section. Geometric indications from the flange radius were recorded with the 60° shear wave scans.

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

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

GERIS Analyst: Teresa Kimball	GE Reviewer: R.O. Zuman
LEVEL: III DATE: 12-15-93	LEVEL: II DATE: 12-15-93
UTILITY Review: [illegible]	ANII Review:
TITLE: TL DATE: 1/26/94	TITLE Albert Ladd DATE: 9/8/94

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GE Nuclear Energy

GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Exam Data Sheet: E-18-00

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-042R	E-18-01	10/16/93	0202	0241	445.75	473.75	566.00	590.00	58A	JCG
BF-043R	E-18-02	10/16/93	0250	0315	445.75	469.00	590.25	607.50	58A	JCG
BF-044R	E-18-03	10/16/93	0456	0614	445.75	473.75	607.75	656.00	59A	JCG
BF-045R	E-18-04	10/16/93	0626	0804	445.75	473.75	656.00	717.00	59B	JCG/ROF
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Comments: N/A

Limitations: Instrumentation Nozzle N12-B at 220°

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R. O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-01
Patch ID: BF-042R
Ind. Data Sheet Series: 18-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	1	18-001	~	~	~	~
8	45 RS	90 CW	1	18-002	~	~	~	~
9	45 RS	180 DN	NRI	~	~	~	~	~
10	45 RS	270 CCW	NRI	~	~	~	~	~
11	60 RS	0 UP	1	18-003	~	~	~	~
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: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R. O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-02
Patch ID: BF-043R
Ind. Data Sheet Series: 18-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	2	18-004	~	~	~	~
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: Teresa Kimball
Level: II Date: 12-14-93

Reviewed By: Randall O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-03
Patch ID: BF-044R
Ind. Data Sheet Series: 18-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: Laura Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet Series: 18-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	18-012	18-013	~	~	~
4	70 RL	90 CW	NRI	~	~	~	~	~
5	70 RL	180 DN	1	18-014	18-015	18-016	~	~
6	70 RL	270 CCW	NRI	~	~	~	~	~
7	45 RS	0 UP	NRI	~	~	~	~	~
8	45 RS	90 CW	NRI	~	~	~	~	~
9	45 RS	180 DN	1	18-005	~	~	~	~
10	45 RS	270 CCW	NRI	~	~	~	~	~
11	60 RS	0 UP	NRI	~	~	~	~	~
12	60 RS	90 CW	NRI	~	~	~	~	~
13	60 RS	180 DN	1, 5	18-006	18-007	18-008	18-009	18-010
				18-011	G-112	~	~	~
14	60 RS	270 CCW	NRI	~	~	~	~	~
15	0 BM	N/A	NRI	~	~	~	~	~
16	0 BM	N/A	NRI	~	~	~	~	~
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Comments: 5 = Flange radius geometry

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: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-01
Patch ID: BF-042R
Ind. Data Sheet No.: 18-001

Indication: 18-001 **Channel:** 7 **Angle:** 45 **Direction:** 0

Amp.	X	20% Min Y	MP	50% Min Y	MP	@ Max Y	MP	50% Max Y	MP	20% Max Y	MP	Remarks
19.6%	461.96	~	~	569.30	4.97	570.05	4.38	570.55	4.07	~	~	~
23.7%	462.21	~	~	569.05	5.17	569.80	4.58	570.55	4.09	~	~	~
23.7%	462.46	~	~	569.05	5.24	569.80	4.60	570.30	4.28	~	~	~
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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 = 3.14 with clad

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R. O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3
Weld ID: V-5-B
Patch: BF-042R

Exam Data Sheet No.: E-18-01
Ind. Data Sheet No.: 18-001
Indication: 18-001

Flaw Thruwall Dimension =	0.20
Flaw Length "l" =	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	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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GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-01
Patch ID: BF-042R
Ind. Data Sheet No.: 18-002

Indication: 18-002 **Channel:** 8 **Angle:** 45 **Direction:** 90

Amp.	Y	20% Min X	MP	50% Min X	MP	@ Max X	MP	50% Max X	MP	20% Max X	MP	Remarks
10.5%	573.55	~	~	~	~	451.29	7.34	~	~	~	~	~
18.5%	573.80	~	~	451.29	7.50	451.54	7.30	452.04	6.94	~	~	~
25.2%	574.05	~	~	451.04	7.52	451.54	7.17	452.04	6.79	~	~	~
30.4%	574.30	~	~	451.29	7.47	451.79	7.09	452.54	6.55	~	~	~
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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 = 0.75 S = 1.47

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R. O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3
Weld ID: V-5-B
Patch: BF-42R

Exam Data Sheet No.: E-18-01
Ind. Data Sheet No.: 18-002
Indication: 18-002

Flaw Thruwall Dimension =	0.23
Flaw Length "l" =	0.75
Separation with clad "S" =	N/A
Surface Separation "S" =	1.47

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	2.52	2.93 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
			2.52	2.93

a =	0.115
a/l value =	0.153
Y =	1.000

Flaw is Subsurface

Allowed a/t =	2.93%
a/t =	1.80%

Comments:

R1170

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-01
Patch ID: BF-042R
Ind. Data Sheet No.: 18-003

Indication: 18-003 **Channel:** 11 **Angle:** 60 **Direction:** 0

Amp.	X	20% Min Y	MP	50% Min Y	MP	@ Max Y	MP	50% Max Y	MP	20% Max Y	MP	Remarks
47.2%	462.10	~	~	~	~	566.55	7.22	~	~	~	~	~
50.2%	462.35	~	~	~	~	566.55	7.24	~	~	~	~	~
39.1%	462.60	~	~	~	~	566.80	7.03	~	~	~	~	~
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Comments: No apparent tip signals.
Indication has no determinable thruwall and is acceptable to IWB-3510-1.

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

R1170

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-02
Patch ID: BF-043R
Ind. Data Sheet No.: 18-004

Indication: 18-004 **Channel:** 10 **Angle:** 45 **Direction:** 270

Amp.	Y	20% Min X	MP	50% Min X	MP	@ Max X	MP	50% Max X	MP	20% Max X	MP	Remarks
57.0%	593.00	~	~	~	~	465.46	9.15	~	~	~	~	~
26.9%	593.25	~	~	~	~	465.21	8.90	~	~	~	~	~
77.9%	593.50	~	~	464.71	8.66	465.21	9.04	465.71	9.36	~	~	~
73.1%	593.75	~	~	464.96	8.69	465.46	9.15	465.71	9.34	~	~	~
50.2%	594.00	~	~	~	~	465.21	9.04	465.46	9.20	~	~	~
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Comments: OD surface geometry.
Evaluated to notch sensitivity.
9.79 dB below notch sensitivity.

TW = 0.13 L = 1.00 S = 0.00

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3
Weld ID: V-5-B
Patch: BF-043R

Exam Data Sheet No.: E-18-02
Ind. Data Sheet No.: 18-004
Indication: 18-004

Flaw Thruwall Dimension =	0.13
Flaw Length "l" =	1.00
Separation with clad "S" =	0.00
Surface Separation "S" =	0.00

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	2.36	2.72 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
			2.36	0.00

a =	0.127
a/l value =	0.127
Y =	0.000

Flaw is Surface

Allowed a/t =	2.36%
a/t =	1.99%

Comments: Evaluated to notch sensitivity assigned thruwall dimension = 2%T.

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-005

Indication: 18-005 **Channel:** 9 **Angle:** 45 **Direction:** 180

Amp.	X	20% Min Y	MP	50% Min Y	MP	@ Max Y	MP	50% Max Y	MP	20% Max Y	MP	Remarks
30.4%	460.90	707.50	2.06	~	~	707.90	2.22	~	~	~	~	~
23.7%	461.15	~	~	~	~	707.75	2.22	~	~	~	~	~
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Comments: Recorded at 20% level required by Reg. Guide 1.150 due to location, inner 1/4T.
Thruwall size was determined by the SPOT technique.

TW = 0.17 L = 0.25 S = 1.48 with clad

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3
Weld ID: V-5-B
Patch: BF-045R

Exam Data Sheet No.: E-18-04
Ind. Data Sheet No.: 18-005
Indication: 18-005

Flaw Thruwall Dimension =	0.17	***T nominal =***	6.38
Flaw Length "l" =	0.25	***Clad T nominal =***	0.19
Separation with clad "S" =	1.48	***% of Allowable:***	0.27
Surface Separation "S" =	1.29		

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 =	0.085
a/l value =	0.340
Y =	1.000

Flaw is Subsurface

Allowed a/t =	4.96%
a/t =	1.33%

Comments:

R1170

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-006

Indication: 18-006 **Channel:** 13 **Angle:** 60 **Direction:** 180

Amp.	X	20% Min Y	MP	50% Min Y	MP	@ Max Y	MP	50% Max Y	MP	20% Max Y	MP	Remarks
20.9%	457.79	~	~	~	~	709.95	3.64	~	~	~	~	~
32.4%	458.04	~	~	~	~	709.70	3.42	~	~	710.45	4.10	~
47.2%	458.29	708.70	2.70	~	~	709.95	3.74	~	~	710.95	4.64	~
60.6%	458.54	708.70	2.72	~	~	709.70	3.53	710.45	4.17	710.95	4.61	~
41.6%	458.79	708.95	2.82	~	~	709.70	3.49	~	~	710.70	4.32	~
23.7%	459.04	709.20	3.04	~	~	709.70	3.45	~	~	710.45	4.15	~
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Comments: Thruwall size was determined by the SPOT technique.
This Indication is located at the intersection of the C-5-FLG circumferential weld.

TW = 0.34 L = 1.25 S = 1.60 with clad

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R. O. Zuman
Level: II Date: 12-15-93

EXAM-DS3 V.2 10/22/93

12/13/9318-006.XLS

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R1170

GE Nuclear Energy

GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3
Weld ID: V-5-B
Patch: BF-045R

Exam Data Sheet No.: E-18-04
Ind. Data Sheet No.: 18-006
Indication: 18-006

Flaw Thruwall Dimension =	0.34
Flaw Length "l" =	1.25
Separation with clad "S" =	1.60
Surface Separation "S" =	1.41

T nominal =	6.38
Clad T nominal =	0.19
% of Allowable:	0.96

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	2.42	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	Allowed
			2.42	2.79

a =	0.170
a/l value =	0.136
Y =	1.000

Flaw is Subsurface

Allowed a/t =	2.79%
a/t =	2.66%

Comments:

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-007

Indication: 18-007 **Channel:** 13 **Angle:** 60 **Direction:** 180

Amp.	X	20% Min Y	MP	50% Min Y	MP	@ Max Y	MP	50% Max Y	MP	20% Max Y	MP	Remarks
60.6%	459.54	708.45	2.36	~	~	708.95	2.85	~	~	710.45	4.17	~
100.0%	459.79	~	~	708.45	2.39	708.95	2.82	710.20	3.89	710.70	4.30	~
94.0%	460.04	708.45	2.36	~	~	708.70	2.63	710.20	3.89	710.70	4.32	~
53.5%	460.29	708.45	2.39	~	~	708.70	2.65	709.20	3.07	710.70	4.32	~
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Comments: Thruwall size was determined by the SPOT technique.
This Indication is located at the intersection of the C-5-FLG circumferential weld.

TW = 0.34 L = 0.75 S = 1.24 with clad

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R. O. Forman
Level: II Date: 12-15-93

R1170

GE Nuclear Energy

GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3
Weld ID: V-5-B
Patch: BF-045R

Exam Data Sheet No.: E-18-04
Ind. Data Sheet No.: 18-007
Indication: 18-007

Flaw Thruwall Dimension =	0.34	*T nominal =*	6.38
Flaw Length "l" =	0.75	*Clad T nominal =*	0.19
Separation with clad "S" =	1.24	*% of Allowable:*	0.75
Surface Separation "S" =	1.05		

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	3.07	3.57 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
			3.07	3.57

a =	0.170
a/l value =	0.227
Y =	1.000

Flaw is Subsurface

Allowed a/t =	3.57%
a/t =	2.66%

Comments:

R1170

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-008

Indication: 18-008 **Channel:** 13 **Angle:** 60 **Direction:** 180

Amp.	X	20% Min Y	MP	50% Min Y	MP	@ Max Y	MP	50% Max Y	MP	20% Max Y	MP	Remarks
32.4%	461.04	707.70	2.36	~	~	707.95	2.51	~	~	708.20	2.78	~
30.4%	461.29	707.70	2.29	~	~	707.95	2.51	~	~	708.20	2.78	~
20.9%	461.54	~	~	~	~	708.20	2.70	~	~	~	~	~
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Comments: No apparent tip signals.
This Indication is located at the intersection of the C-5-FLG circumferential weld.
Thruwall size was determined by the Reg.Guide 20% beam spread correction method.

TW = 0.00 L = 0.50 S = 1.26 with clad

Analyst: Teresa Kimball
Level: III Date: 12-15-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

EXAM-DS3 V.2 10/22/93

12/15/9318-008.XLS

R1170

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-009

Indication: 18-009 **Channel:** 13 **Angle:** 60 **Direction:** 180

Amp.	X	20% Min Y	MP	50% Min Y	MP	@ Max Y	MP	50% Max Y	MP	20% Max Y	MP	Remarks
30.4%	462.79	708.70	2.56	~	~	709.45	3.21	~	~	710.45	4.08	~
36.7%	463.04	~	~	~	~	708.70	2.51	~	~	709.95	3.69	~
19.6%	463.29	~	~	~	~	709.20	2.85	~	~	~	~	~
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Comments: Thruwall size was determined by the SPOT technique.
This Indication is located at the intersection of the C-5-FLG circumferential weld.

TW = 0.34 L = 0.50 S = 1.09 with clad

Analyst: Deesa Kimball
Level: III Date: 12-14-93

Reviewed By: R. O. Forman
Level: II Date: 12-15-93

EXAM-DS3 V.2 10/22/93

12/13/9318-009.XLS

00283

GE Nuclear Energy

GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3
Weld ID: V-5-B
Patch: BF-045R

Exam Data Sheet No.: E-18-04
Ind. Data Sheet No.: 18-009
Indication: 18-009

Flaw Thruwall Dimension =	0.34
Flaw Length "l" =	0.50
Separation with clad "S" =	1.09
Surface Separation "S" =	0.90

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:

R1170

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-010

Indication: 18-010 **Channel:** 13 **Angle:** 60 **Direction:** 180

Amp.	X	20% Min Y	MP	50% Min Y	MP	@ Max Y	MP	50% Max Y	MP	20% Max Y	MP	Remarks
53.5%	465.79	708.95	2.70	709.45	3.14	709.95	3.57	~	~	710.20	3.82	~
44.3%	466.04	708.95	2.67	~	~	709.70	3.33	~	~	710.45	4.00	End of scan
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Comments: Thruwall size was determined by the SPOT technique.
This Indication is located at the intersection of the C-5-FLG circumferential weld.

TW = 0.28 L = 0.25 S = 1.65 with clad

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

EXAM-DS3 V.2 10/22/93

12/13/9318-010.XLS

00285

GE Nuclear Energy

GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3
Weld ID: V-5-B
Patch: BF-045R

Exam Data Sheet No.: E-18-04
Ind. Data Sheet No.: 18-010
Indication: 18-010

Flaw Thruwall Dimension =	0.28	***T nominal =***	6.38
Flaw Length "l" =	0.25	***Clad T nominal =***	0.19
Separation with clad "S" =	1.65	***% of Allowable:***	0.29
Surface Separation "S" =	1.46		

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:

R1170

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-011

Indication: 18-011 **Channel:** 13 **Angle:** 60 **Direction:** 180

Amp.	X	20% Min Y	MP	50% Min Y	MP	@ Max Y	MP	50% Max Y	MP	20% Max Y	MP	Remarks
47.2%	463.79	708.95	2.80	~	~	709.45	3.21	~	~	710.45	4.10	~
47.2%	464.04	708.70	2.60	~	~	709.70	3.47	~	~	710.70	4.32	~
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Comments: Thruwall size was determined by the SPOT technique.
This Indication is located at the intersection of the C-5-FLG circumferential weld.

TW = 0.34 L = 0.25 S = 1.23 with clad

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3
Weld ID: V-5-B
Patch: BF-045R

Exam Data Sheet No.: E-18-04
Ind. Data Sheet No.: 18-011
Indication: 18-011

Flaw Thruwall Dimension =	0.34
Flaw Length "l" =	0.25
Separation with clad "S" =	1.44
Surface Separation "S" =	1.25

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 =	0.170
a/l value =	0.500
Y =	1.000

Flaw is Subsurface

Allowed a/t =	7.60%
a/t =	2.66%

Comments:

R1170

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-013

Indication: 18-013 **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
17.3%	460.65	~	~	~	~	704.00	21.12	~	~	~	~	~
60.6%	460.90	~	~	~	~	704.00	21.12	~	~	~	~	~
77.9%	461.15	~	~	~	~	704.00	21.12	~	~	~	~	~
64.5%	461.40	~	~	~	~	704.00	21.12	~	~	~	~	~
41.6%	461.65	~	~	~	~	704.00	21.12	~	~	~	~	~
17.3%	461.90	~	~	~	~	704.00	21.12	~	~	~	~	~
22.3%	462.15	~	~	~	~	704.00	21.44	~	~	~	~	~
26.9%	462.40	~	~	~	~	704.25	19.68	~	~	~	~	~
57.0%	462.65	~	~	~	~	704.25	19.68	~	~	~	~	~
34.5%	462.90	~	~	~	~	704.25	19.68	~	~	~	~	~
57.0%	463.15	~	~	~	~	704.25	19.52	~	~	~	~	~
30.4%	463.40	~	~	~	~	704.25	19.68	~	~	~	~	~
15.3%	463.65	~	~	~	~	704.00	21.60	~	~	~	~	~
11.2%	463.90	~	~	~	~	703.75	23.92	~	~	~	~	~
13.5%	464.15	~	~	~	~	704.00	21.68	~	~	~	~	~
36.7%	464.40	~	~	~	~	703.75	23.68	~	~	~	~	~
39.1%	464.65	~	~	~	~	704.00	21.44	~	~	~	~	~
18.5%	464.90	~	~	~	~	703.75	23.68	~	~	~	~	~
13.5%	465.15	~	~	~	~	704.00	21.60	~	~	~	~	~
11.9%	465.40	~	~	~	~	704.25	19.20	~	~	~	~	~
11.9%	465.65	~	~	~	~	704.00	21.36	~	~	~	~	~
15.3%	465.90	~	~	~	~	703.75	23.68	~	~	~	~	~
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Comments: No apparent tip signals.
This indication also seen with Ch. 5 (see 18-015 and 18-016) and 13 (see 18-007 thru 18-011).
Indication has no determinable thruwall and is acceptable to IWB-3510-1.

Analyst: Teresa Kimball
Level: III Date: 12-15-93

Reviewed By: R.O. Forman
Level: III Date: 12-15-93

R1170

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-013

Indication: 18-013 **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
17.3%	460.65	~	~	~	~	704.00	21.12	~	~	~	~	~
60.6%	460.90	~	~	~	~	704.00	21.12	~	~	~	~	~
77.9%	461.15	~	~	~	~	704.00	21.12	~	~	~	~	~
64.5%	461.40	~	~	~	~	704.00	21.12	~	~	~	~	~
41.6%	461.65	~	~	~	~	704.00	21.12	~	~	~	~	~
17.3%	461.90	~	~	~	~	704.00	21.12	~	~	~	~	~
22.3%	462.15	~	~	~	~	704.00	21.44	~	~	~	~	~
26.9%	462.40	~	~	~	~	704.25	19.68	~	~	~	~	~
57.0%	462.65	~	~	~	~	704.25	19.68	~	~	~	~	~
34.5%	462.90	~	~	~	~	704.25	19.68	~	~	~	~	~
57.0%	463.15	~	~	~	~	704.25	19.52	~	~	~	~	~
30.4%	463.40	~	~	~	~	704.25	19.68	~	~	~	~	~
15.3%	463.65	~	~	~	~	704.00	21.60	~	~	~	~	~
11.2%	463.90	~	~	~	~	703.75	23.92	~	~	~	~	~
13.5%	464.15	~	~	~	~	704.00	21.68	~	~	~	~	~
36.7%	464.40	~	~	~	~	703.75	23.68	~	~	~	~	~
39.1%	464.65	~	~	~	~	704.00	21.44	~	~	~	~	~
18.5%	464.90	~	~	~	~	703.75	23.68	~	~	~	~	~
13.5%	465.15	~	~	~	~	704.00	21.60	~	~	~	~	~
11.9%	465.40	~	~	~	~	704.25	19.20	~	~	~	~	~
11.9%	465.65	~	~	~	~	704.00	21.36	~	~	~	~	~
15.3%	465.90	~	~	~	~	703.75	23.68	~	~	~	~	~
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Comments: No apparent tip signals.
This indication also seen with Ch. 5 (see 18-015 and 18-016) and 13 (see 18-007 thru 18-011).
Indication has no determinable thruwall and is acceptable to IWB-3510-1.

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-014

Indication: 18-014 **Channel:** 5 **Angle:** 70 **Direction:** 180

Amp.	X	20% Min Y	TOF	50% Min Y	TOF	@ Max Y	TOF	50% Max Y	TOF	20% Max Y	TOF	Remarks
22.3%	456.60	~	~	~	~	710.45	36.32	~	~	~	~	~
20.9%	456.85	~	~	~	~	710.20	34.08	~	~	~	~	~
19.6%	457.10	~	~	~	~	709.95	31.92	~	~	~	~	~
16.3%	457.35	~	~	~	~	710.20	34.16	~	~	~	~	~
12.7%	457.60	~	~	~	~	709.95	32.48	~	~	~	~	~
25.2%	457.85	~	~	~	~	709.95	32.24	~	~	~	~	~
36.7%	458.10	~	~	~	~	710.20	33.76	~	~	~	~	~
44.3%	458.35	~	~	~	~	710.45	35.92	~	~	~		Peak @ scan end
47.2%	458.60	~	~	~	~	710.20	34.08	~	~	~	~	~
23.7%	458.85	~	~	~	~	710.20	33.68	~	~	~	~	~
39.1%	459.10	~	~	~	~	710.45	35.84	~	~	~		Peak @ scan end
25.2%	459.35	~	~	~	~	709.95	32.32	~	~	~	~	~
36.7%	459.60	~	~	~	~	709.95	32.08	~	~	~	~	~
100.0%	459.85	~	~	~	~	710.20	33.84	~	~	~	~	~
68.7%	460.10	~	~	~	~	710.20	33.84	~	~	~	~	~
18.5%	460.35	~	~	~	~	710.20	33.44	~	~	~	~	~
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Comments: No apparent tip signals.
Indication has no determinable thruwall and is acceptable to IWB-3510-1.

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-015

Indication: 18-015 **Channel:** 5 **Angle:** 70 **Direction:** 180

Amp.	X	20% Min Y	TOF	50% Min Y	TOF	@ Max Y	TOF	50% Max Y	TOF	20% Max Y	TOF	Remarks
17.3%	460.60	~	~	~	~	709.70	35.76	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
17.3%	461.10	~	~	~	~	708.95	30.48	~	~	~	~	~
22.3%	461.35	~	~	~	~	709.20	32.24	~	~	~	~	~
20.9%	461.60	~	~	~	~	709.70	35.52	~	~	~	~	~
19.6%	461.85	~	~	~	~	709.70	35.60	~	~	~	~	~
36.7%	462.10	~	~	~	~	709.95	37.36	~	~	~	~	~
23.7%	462.35	~	~	~	~	709.45	33.52	~	~	~	~	~
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Comments: No apparent tip signals.
Indication has no determinable thruwall and is acceptable to IWB-3510-1.

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

R1170

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: 18-016

Indication: 18-016 **Channel:** 5 **Angle:** 70 **Direction:** 180

Amp.	X	20% Min Y	TOF	50% Min Y	TOF	@ Max Y	TOF	50% Max Y	TOF	20% Max Y	TOF	Remarks
20.9%	462.60	~	~	~	~	709.95	32.00	~	~	~	~	~
23.7%	462.85	~	~	~	~	709.45	27.20	~	~	~	~	~
25.2%	463.10	~	~	~	~	709.20	25.52	~	~	~	~	~
32.4%	463.35	~	~	~	~	709.95	32.08	~	~	~	~	~
25.2%	463.60	~	~	~	~	709.70	30.16	~	~	~	~	~
57.0%	463.85	~	~	~	~	709.95	31.92	~	~	~	~	~
47.2%	464.10	~	~	~	~	710.20	33.76	~	~	~	~	~
18.5%	464.35	~	~	~	~	710.20	33.76	~	~	~	~	~
18.5%	464.60	~	~	~	~	709.20	25.44	~	~	~	~	~
19.6%	464.85	~	~	~	~	709.20	25.52	~	~	~	~	~
13.5%	465.10	~	~	~	~	709.95	32.08	~	~	~	~	~
23.7%	465.35	~	~	~	~	709.95	31.36	~	~	~	~	~
50.2%	465.60	~	~	~	~	709.95	31.20	~	~	~	~	~
68.8%	465.85	~	~	~	~	709.95	31.04	~	~	~	~	End of scan
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
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~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~

Comments: No apparent tip signals.
Indication has no determinable thruwall and is acceptable to IWB-3510-1.

Analyst: Teresa Kimball
Level: III Date: 12-15-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-B
Cal. ID: C-004

Exam Data Sheet No.: E-18-04
Patch ID: BF-045R
Ind. Data Sheet No.: G-112

Indication: G-112 **Channel:** 13 **Angle:** 60 **Direction:** 180

Amp.	X	20% Min Y	MP	50% Min Y	MP	@ Max Y	MP	50% Max Y	MP	20% Max Y	MP	Remarks
255.9%	459.04	~	~	~	~	717.20	12.54	~	~	~	~	End of scan
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
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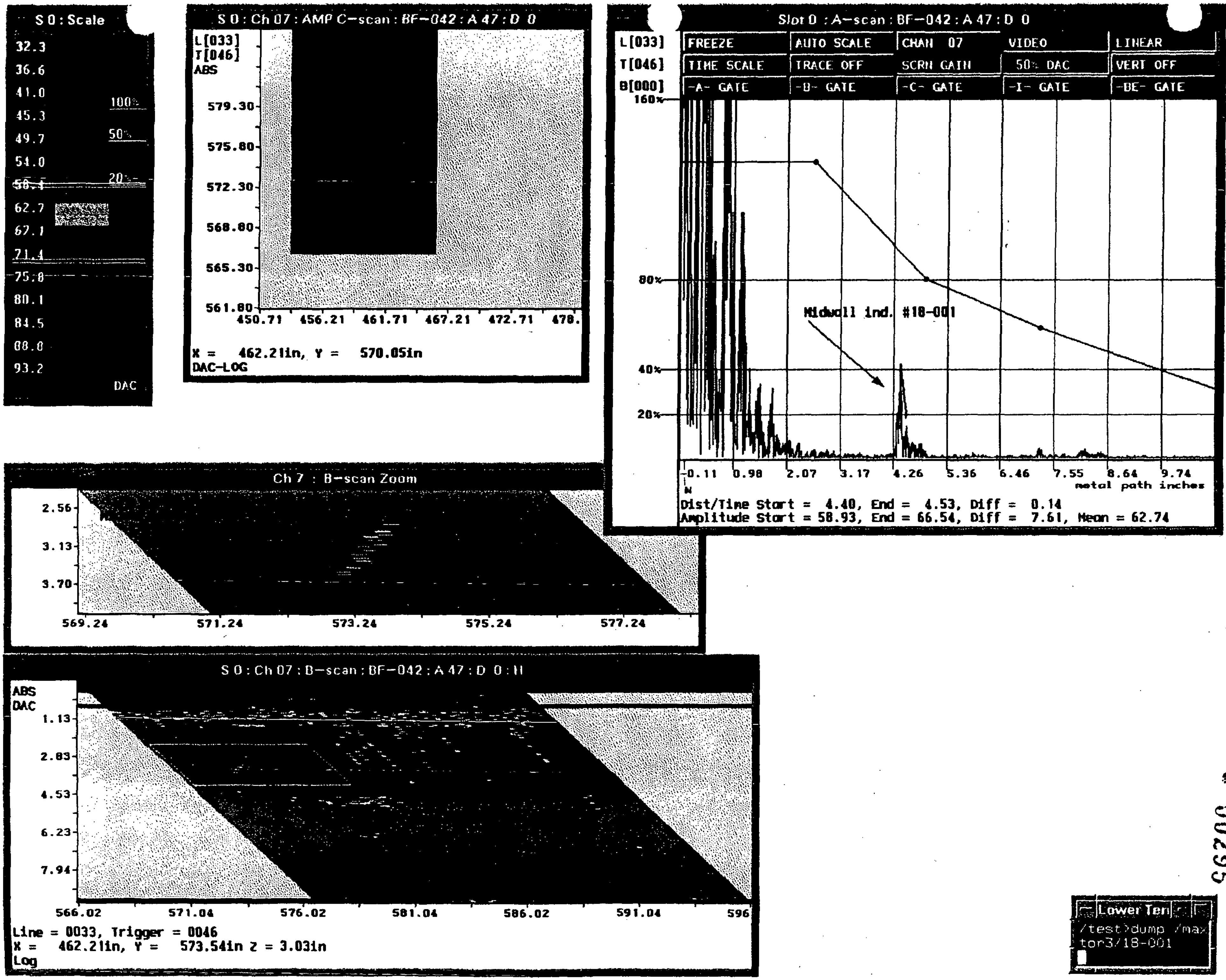
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~

Comments: Geometric indication due to flange radius.

Analyst: Teresa Kimball
Level: III Date: 12-14-93

Reviewed By: R.O. Forman
Level: II Date: 12-15-93



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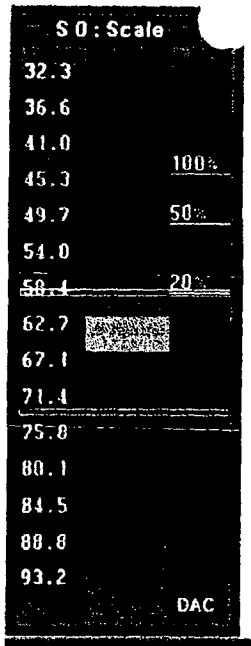
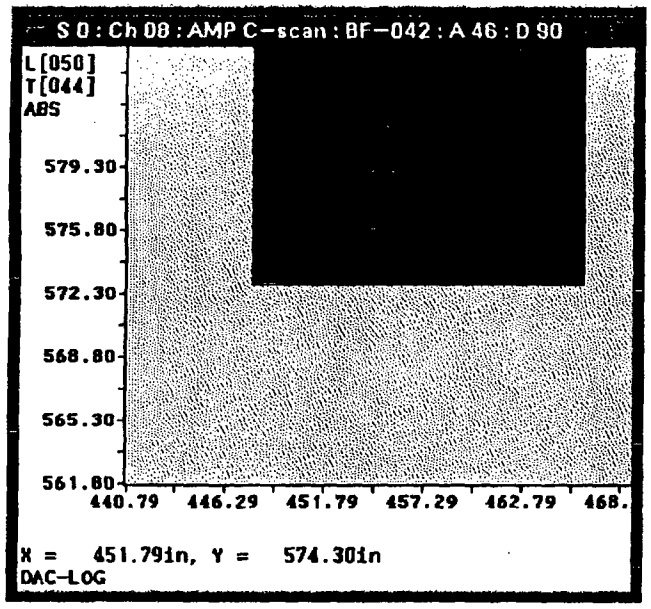
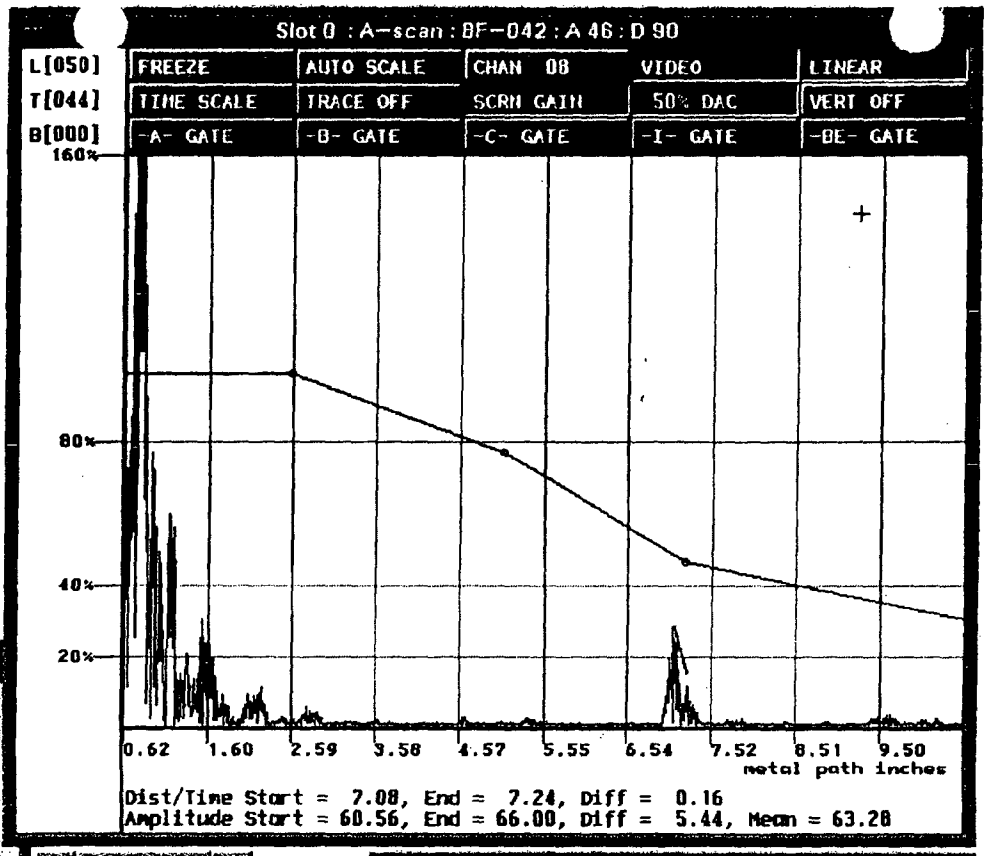
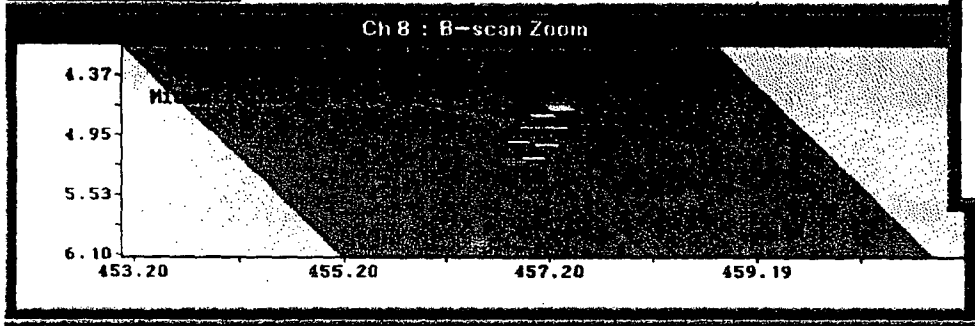
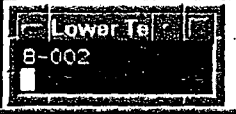
00295

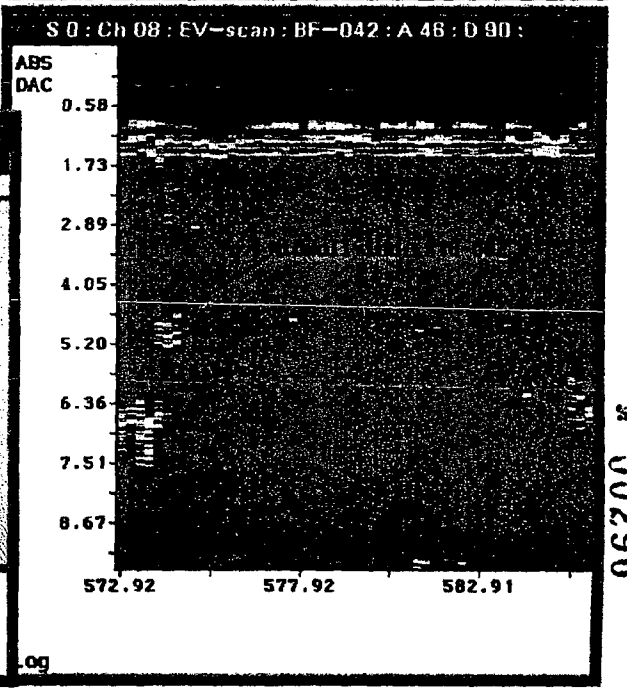


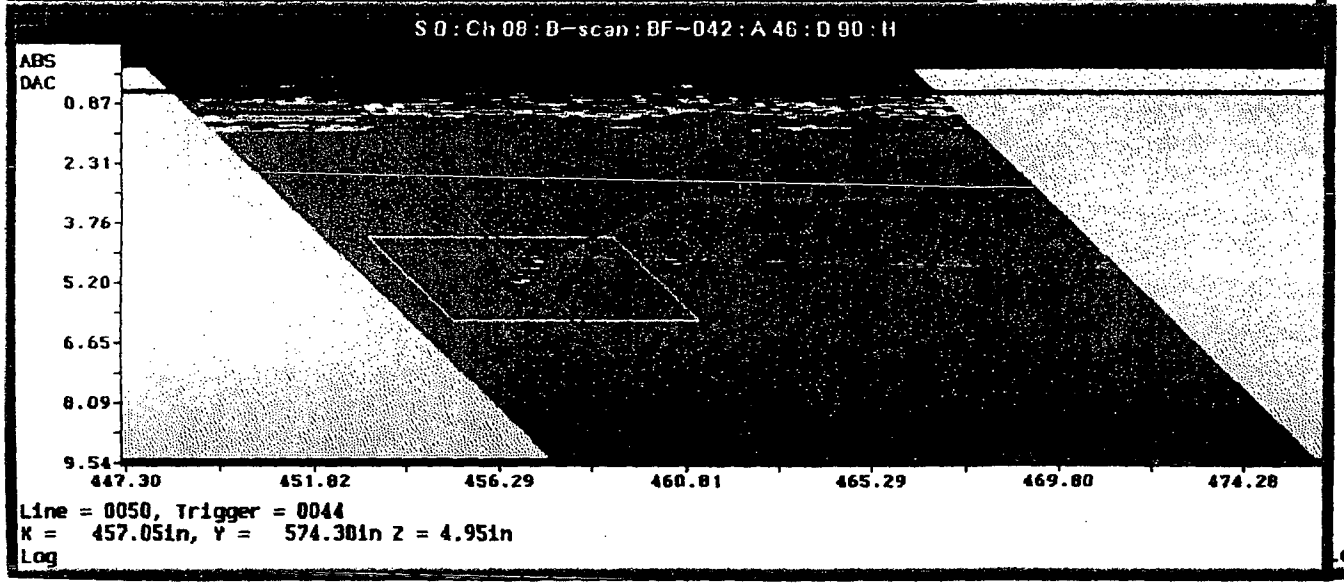


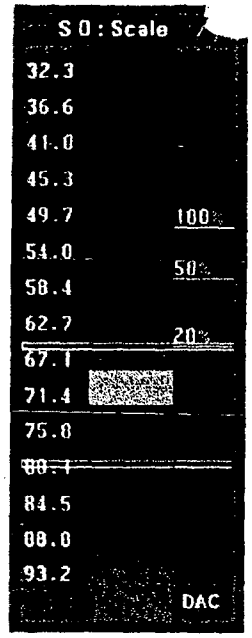


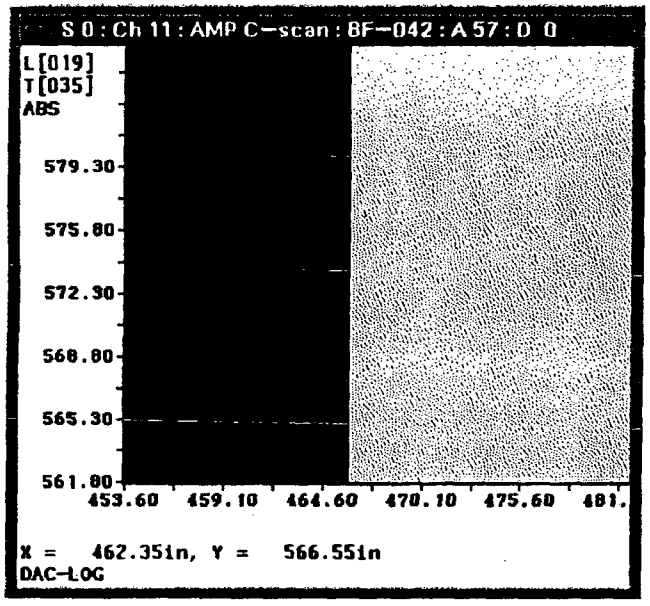


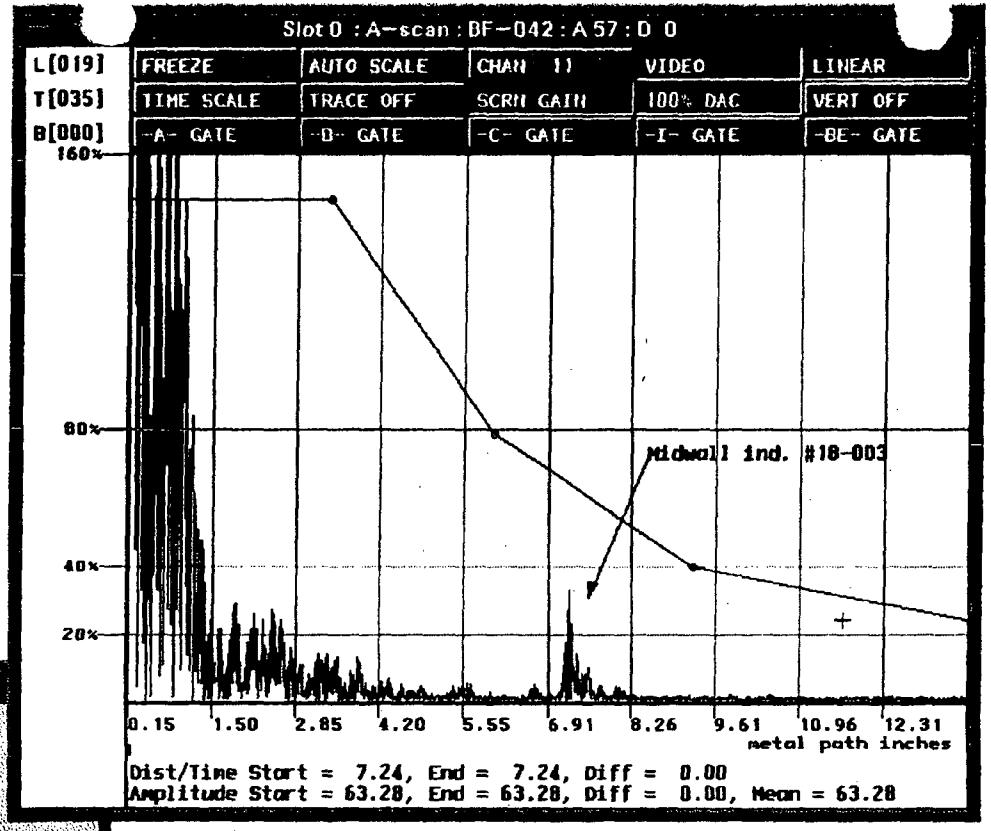


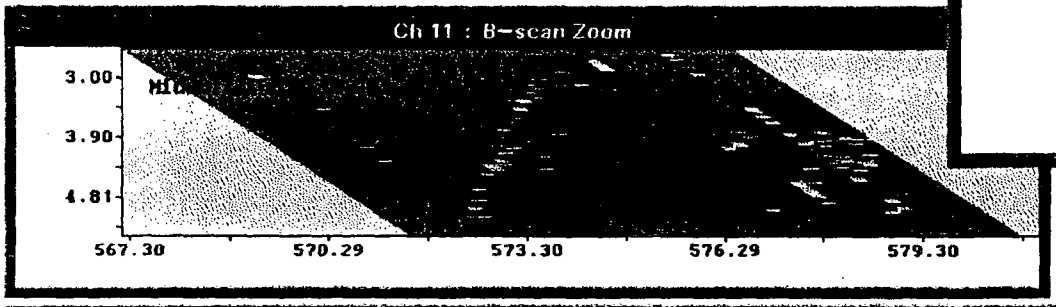


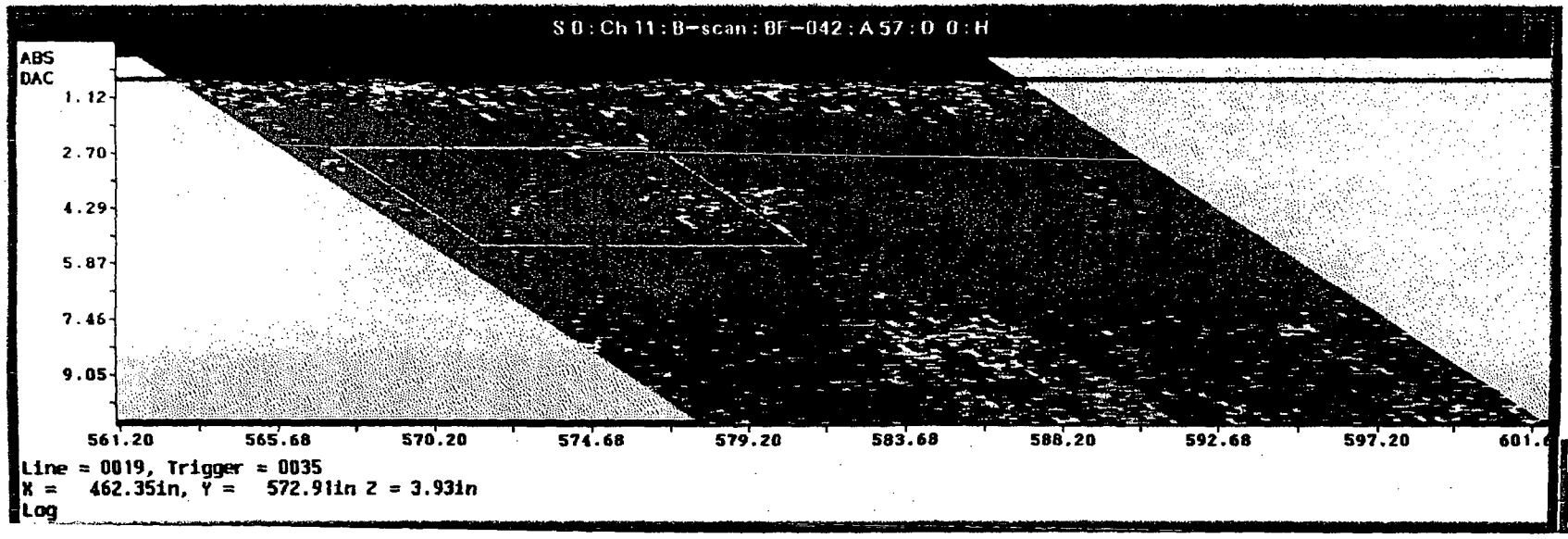


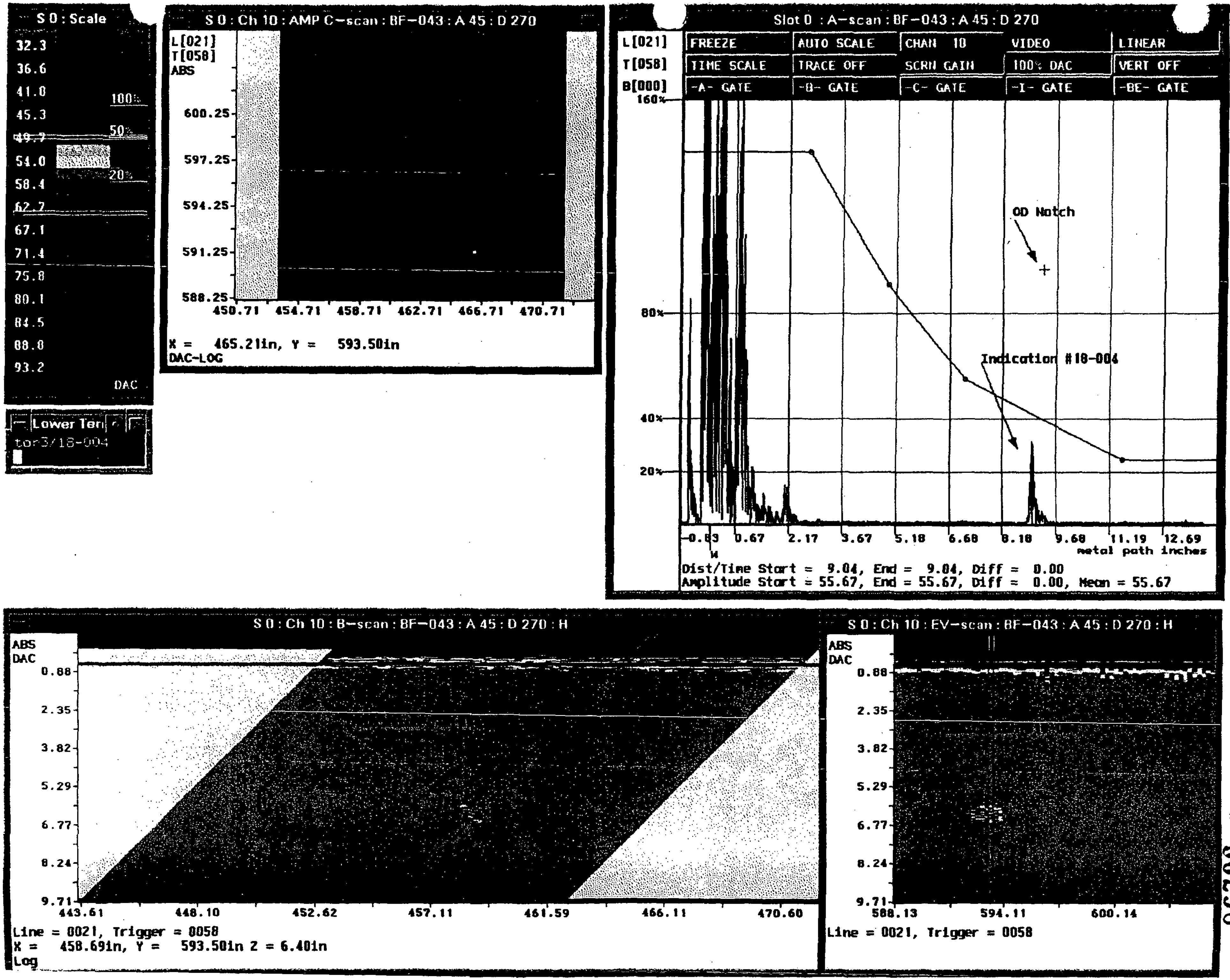












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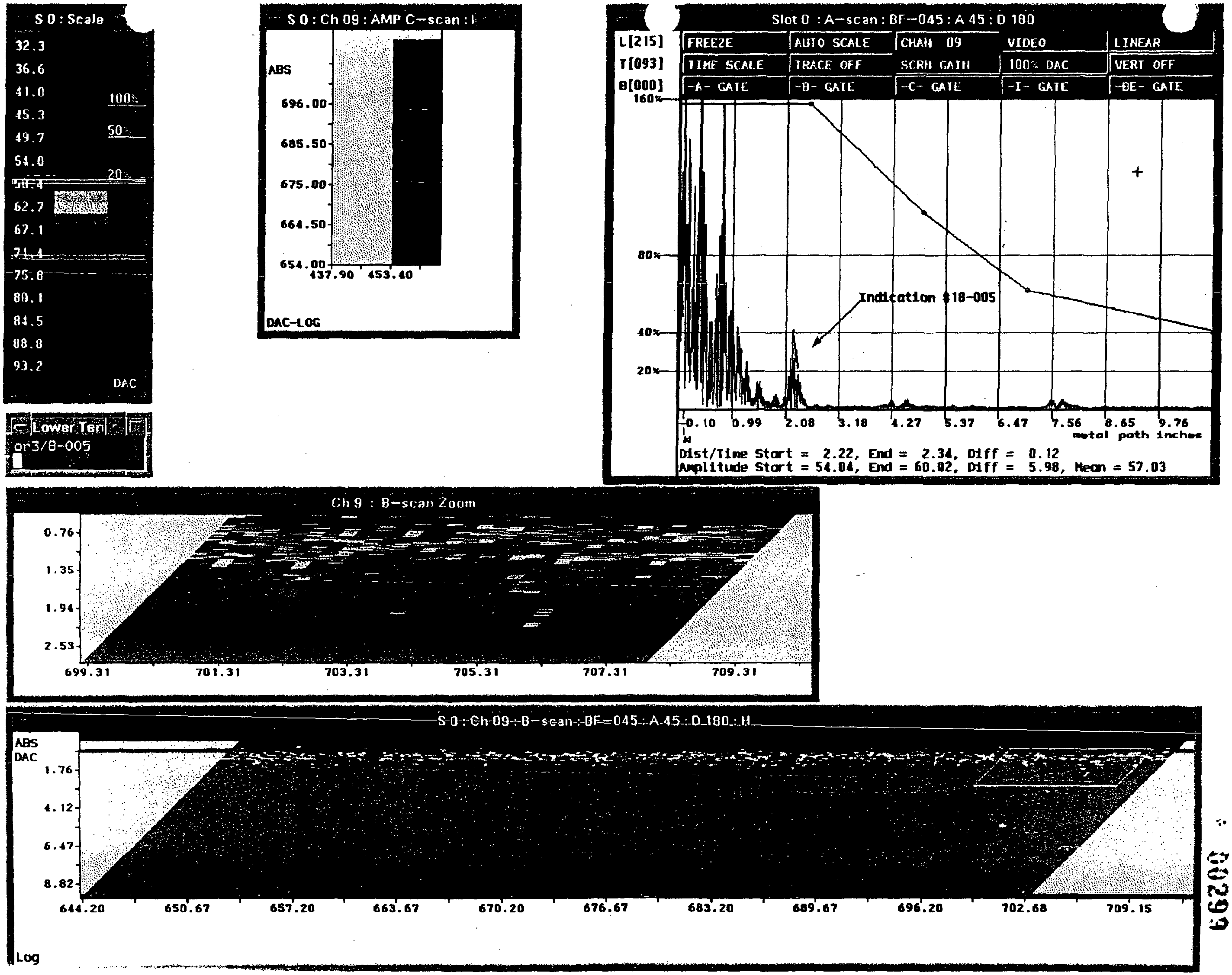
00298



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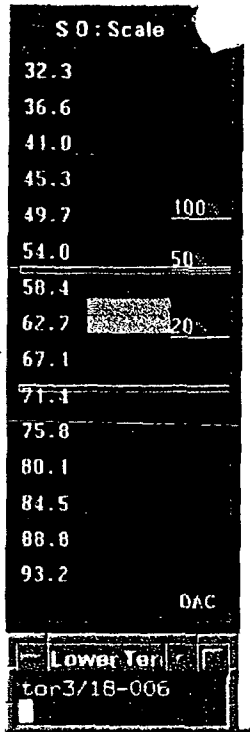
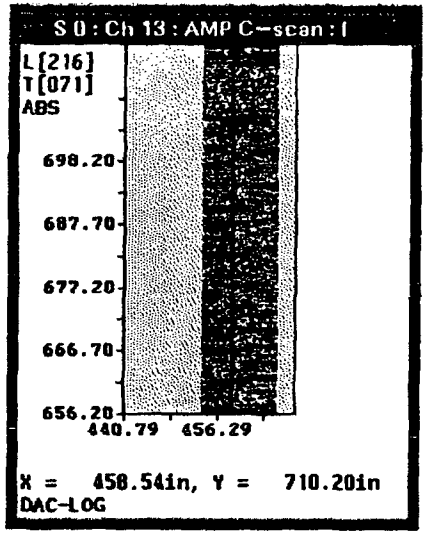
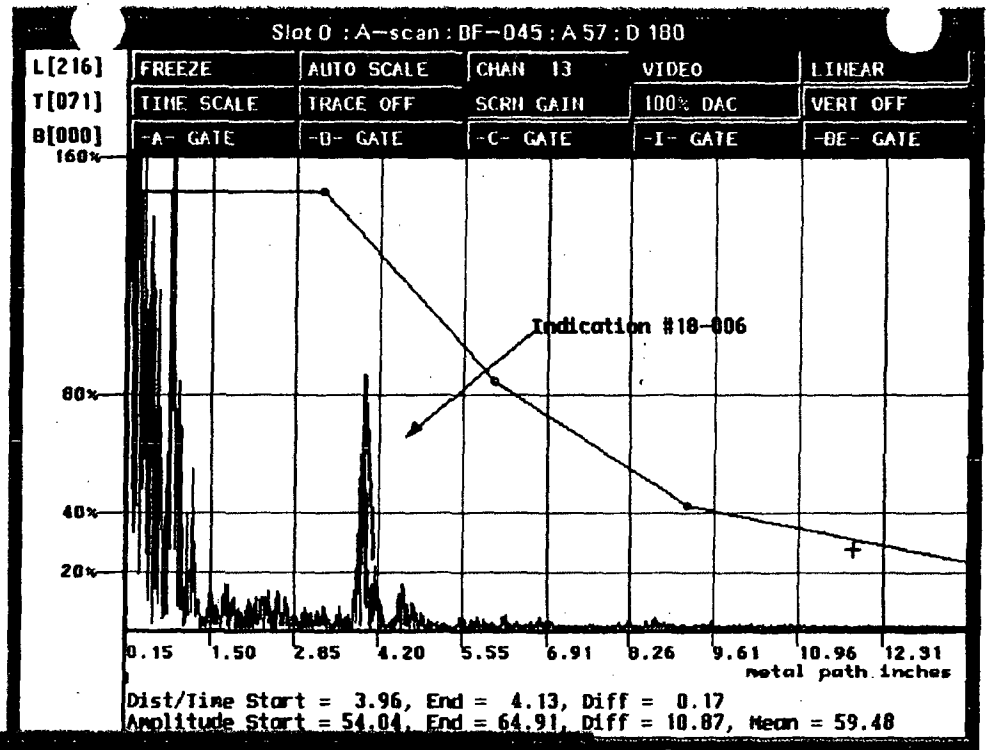
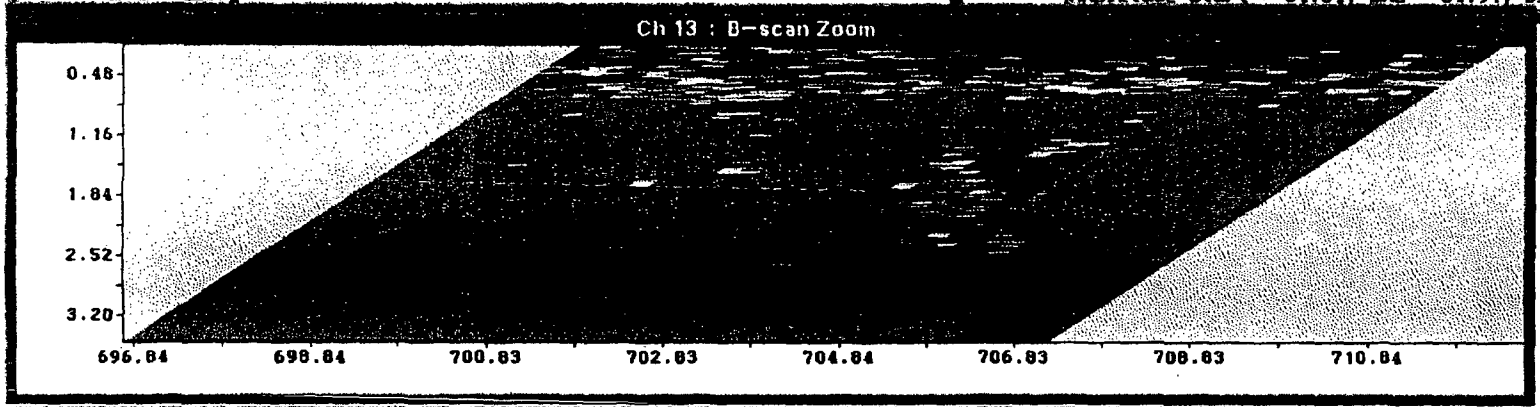
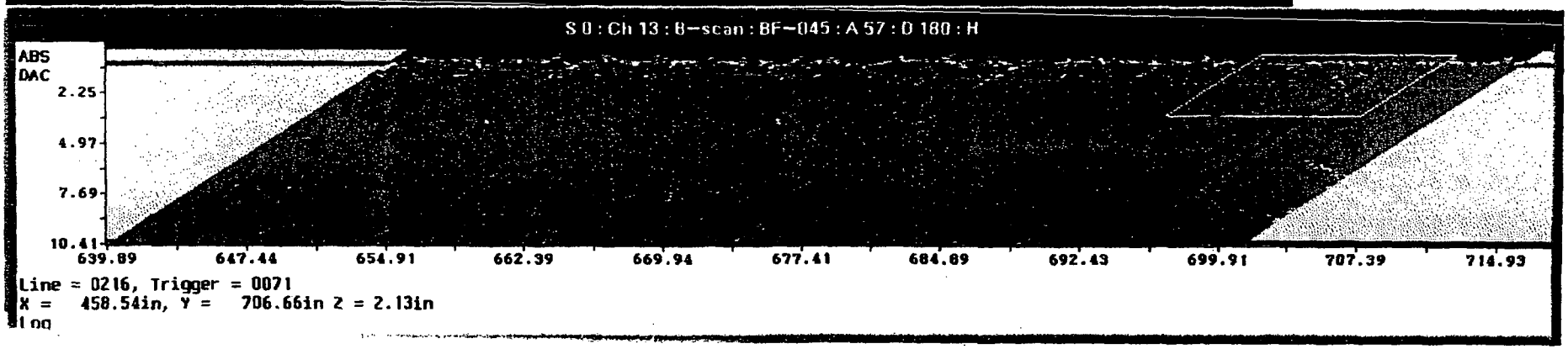
00299

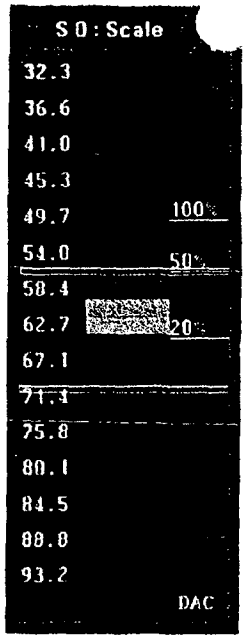


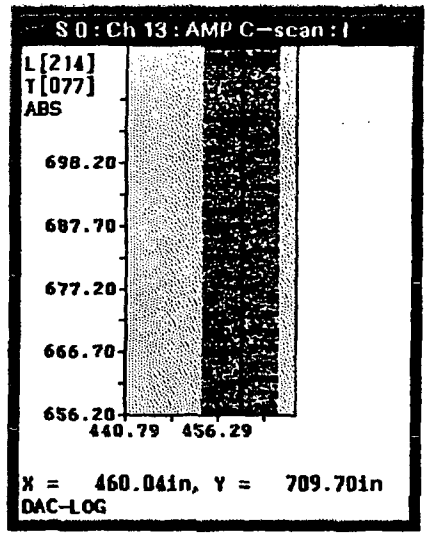


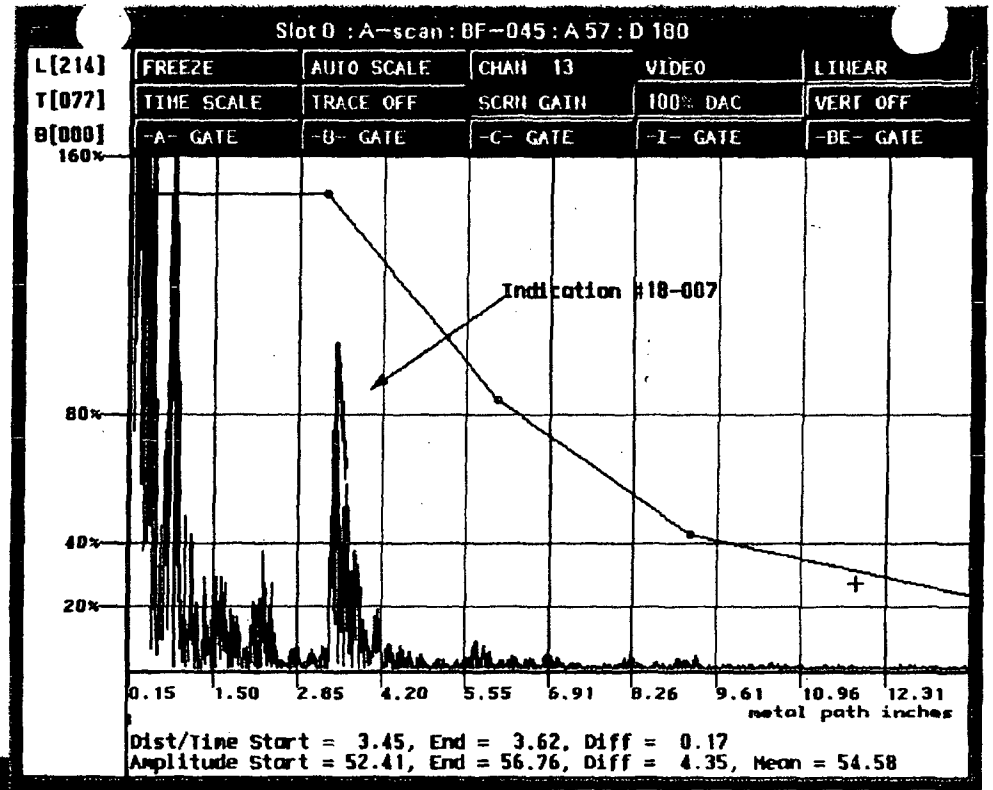


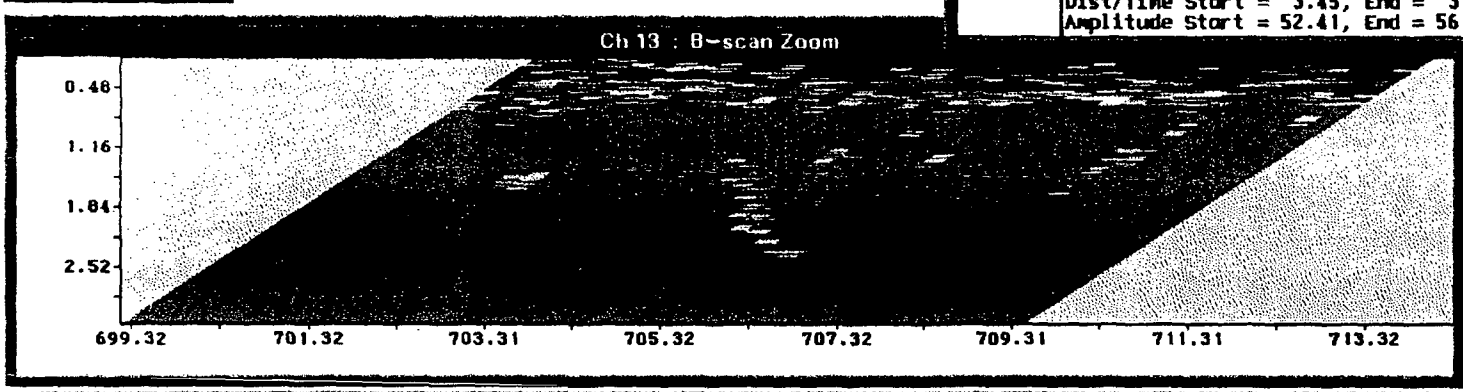


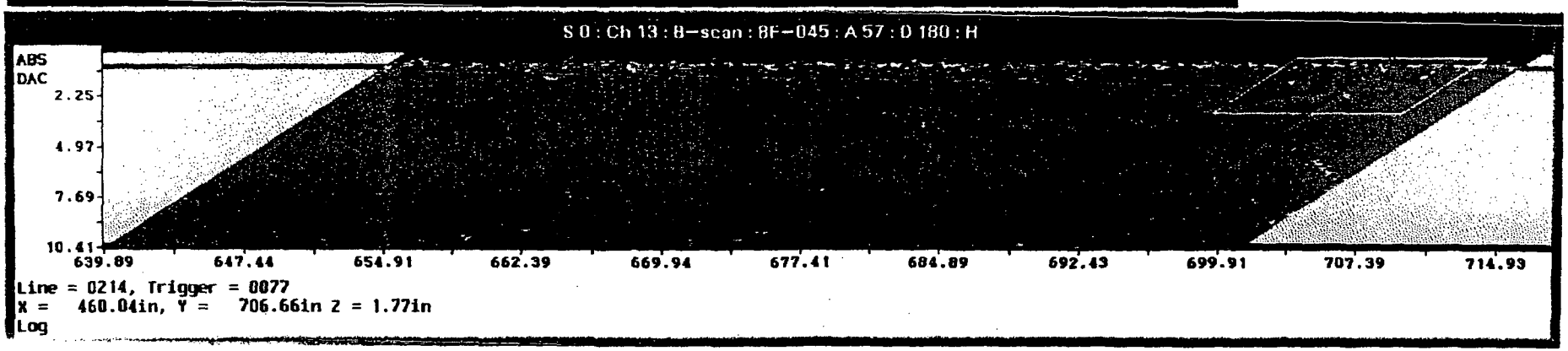


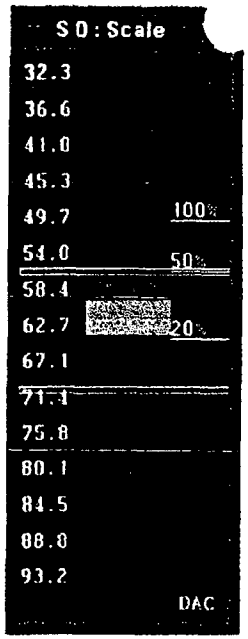




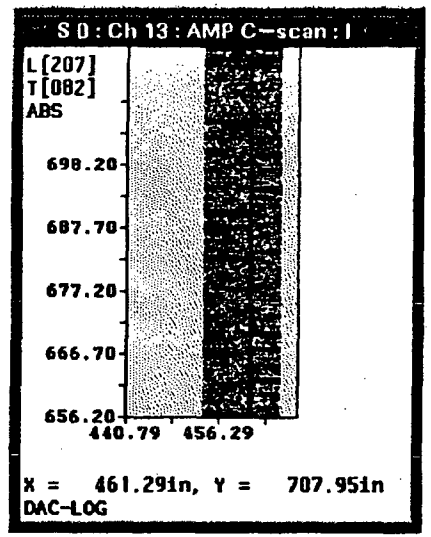


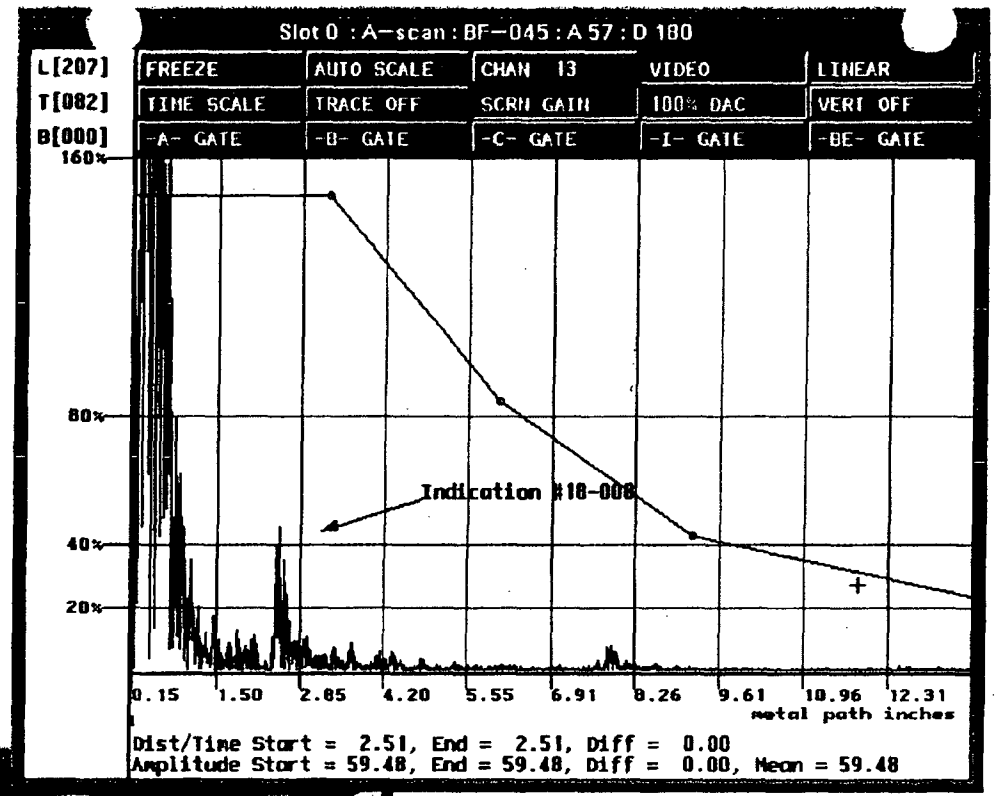


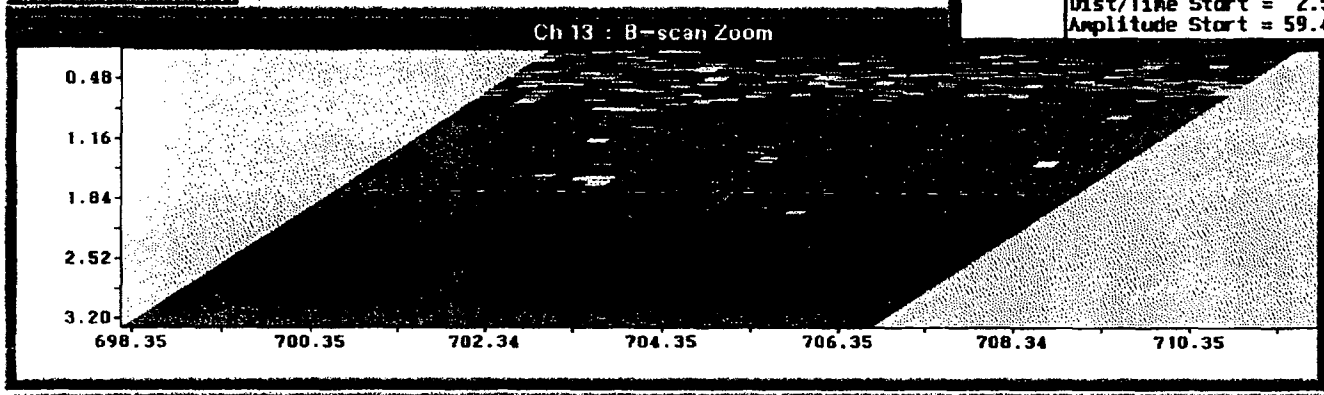


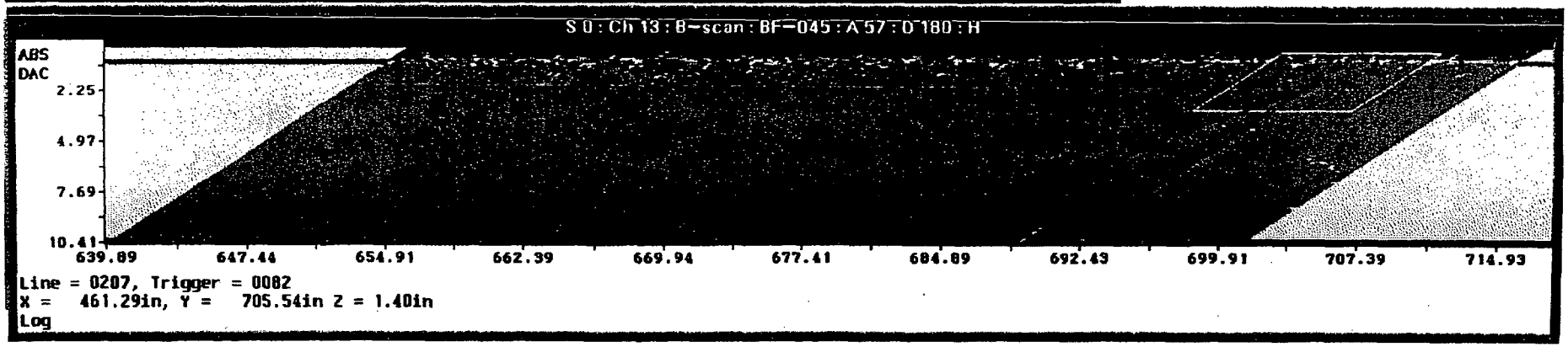

S 0 : Scale
32.3
36.6
41.0
45.3
49.7
100%
54.0
50%
58.4
62.7
20%
67.1
71.4
75.8
80.1
84.5
88.8
93.2
DAC

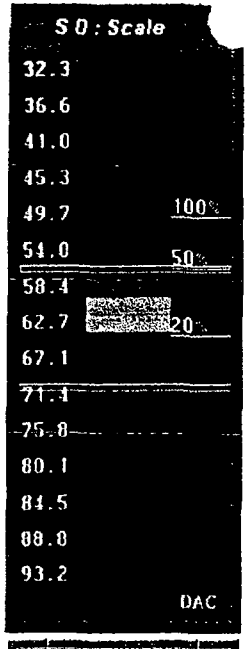

Lower Ter
tor3/18-008

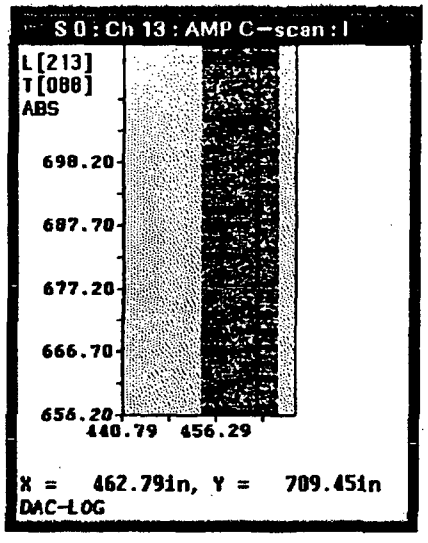

S 0 : Ch 13 : AMP C-scan : I
L[207]
T[082]
ABS
698.20
687.70
677.20
666.70
656.20
440.79
456.29
X = 461.29in, Y = 707.95in
DAC-LOG

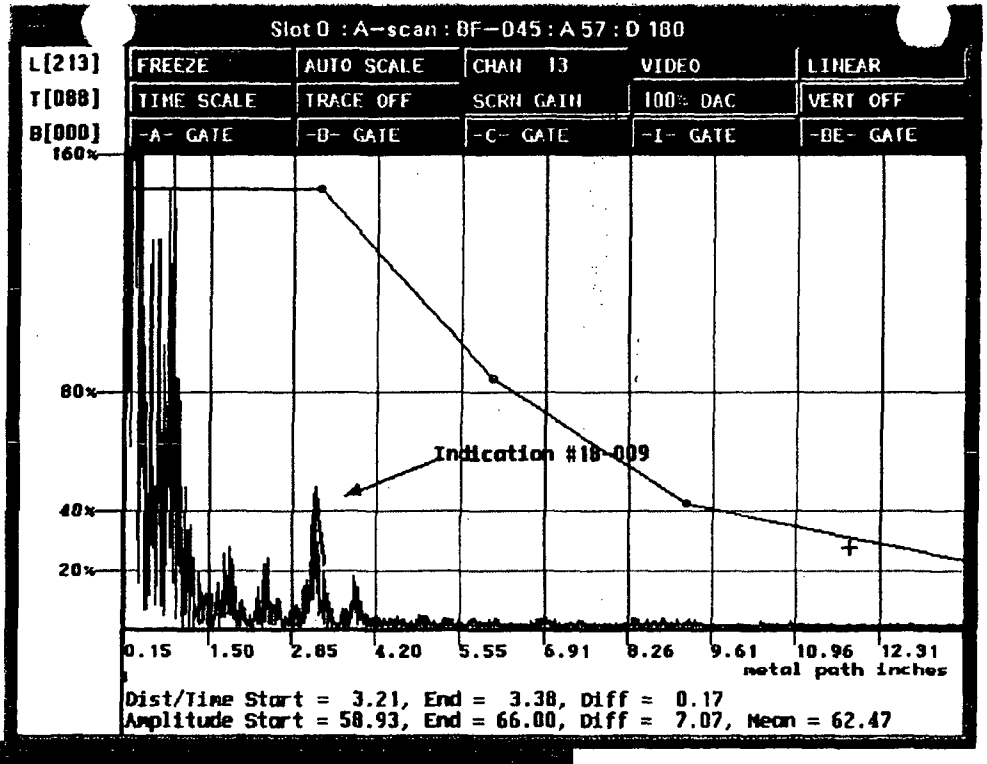

Slot 0 : A-scan : BF-045 : A 57 : D 180
L[207]
T[082]
B[000]
FREEZE
AUTO SCALE
CHAN 13
VIDEO
LINEAR
TIME SCALE
TRACE OFF
SCRN GAIN
100% DAC
VERT OFF
-A- GATE
-B- GATE
-C- GATE
-I- GATE
-BE- GATE
160%
80%
40%
20%
Indication #18-008
0.15
1.50
2.85
4.20
5.55
6.91
8.26
9.61
10.96
12.31
metal path inches
Dist/Time Start = 2.51, End = 2.51, Diff = 0.00
Amplitude Start = 59.48, End = 59.48, Diff = 0.00, Mean = 59.48

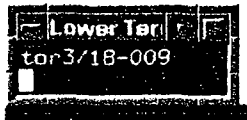

Ch 13 : B-scan Zoom
0.48
1.16
1.84
2.52
3.20
698.35
700.35
702.34
704.35
706.35
708.34
710.35

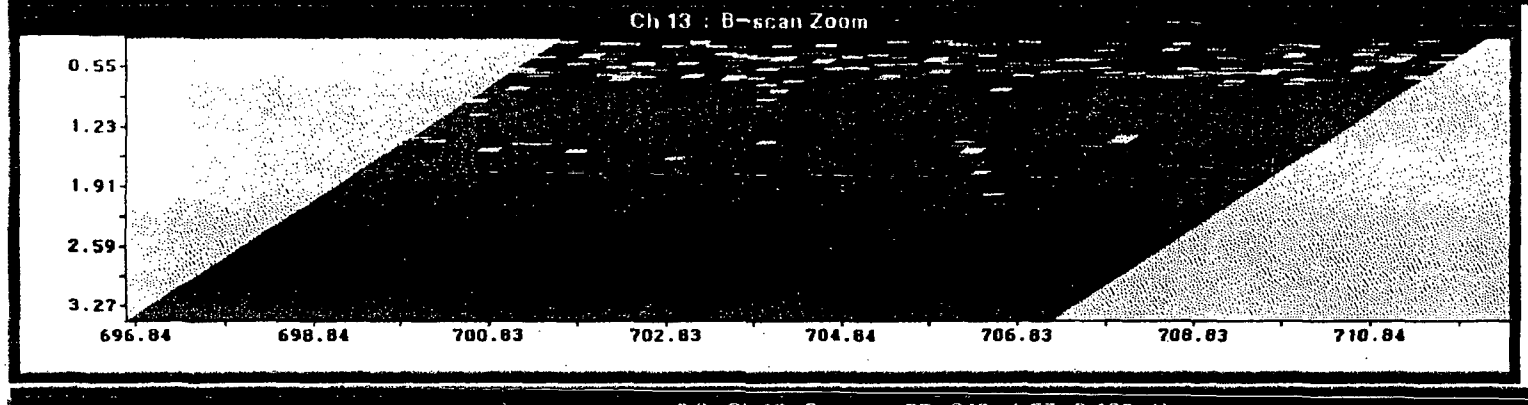

S 0 : Ch 13 : B-scan : BF-045 : A 57 : D 180 : H
ABS
DAC
2.25
4.97
7.69
10.41
639.89
647.44
654.91
662.39
669.94
677.41
684.89
692.43
699.91
707.39
714.93
Line = 0207, Trigger = 0082
X = 461.29in, Y = 705.54in Z = 1.40in
Log

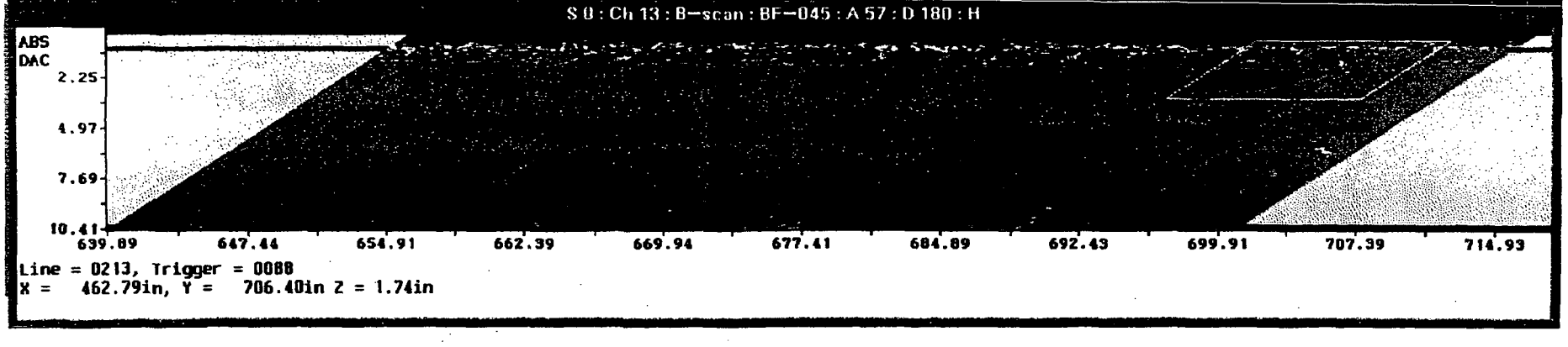


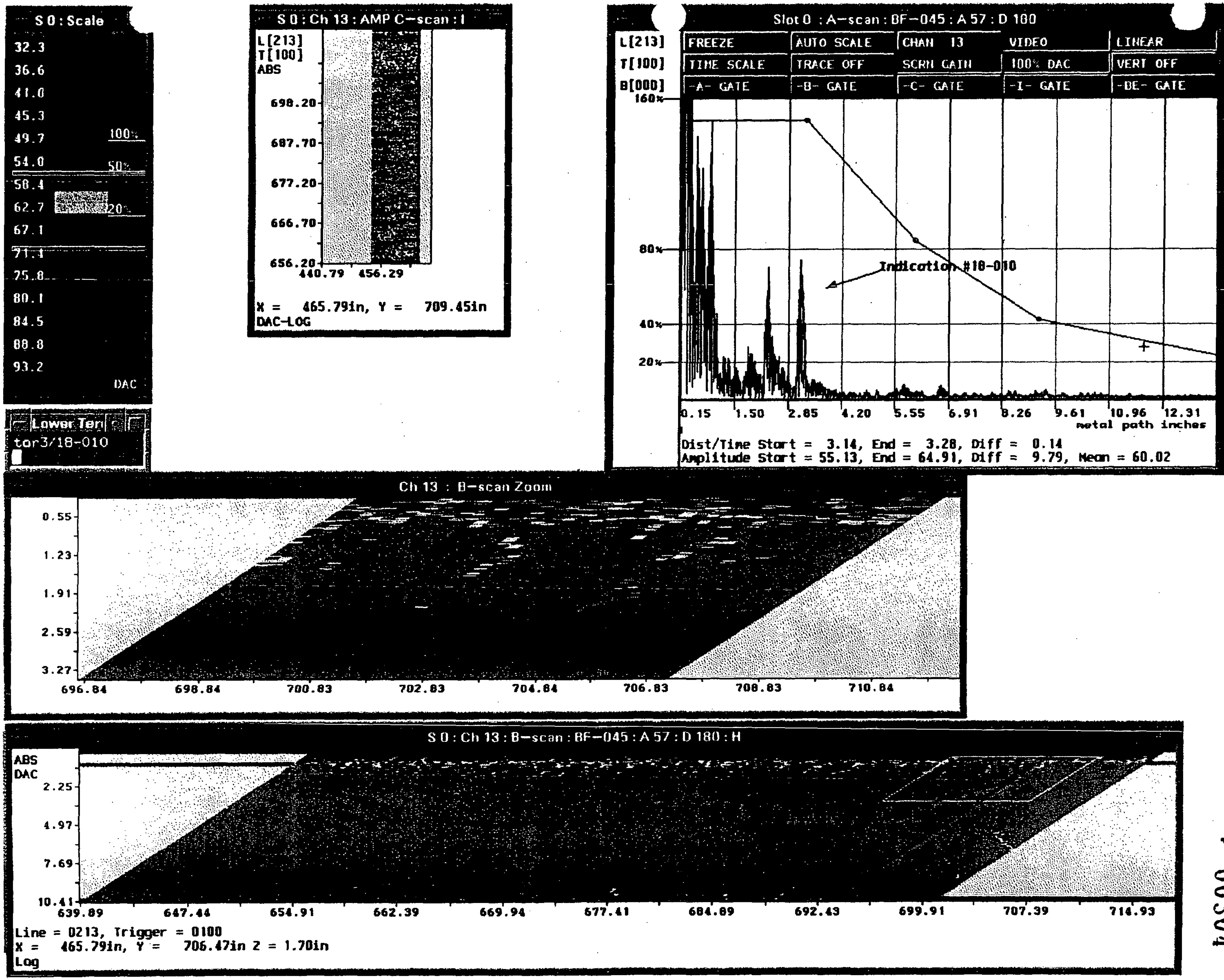


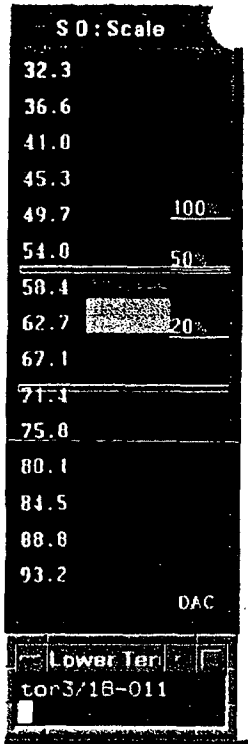


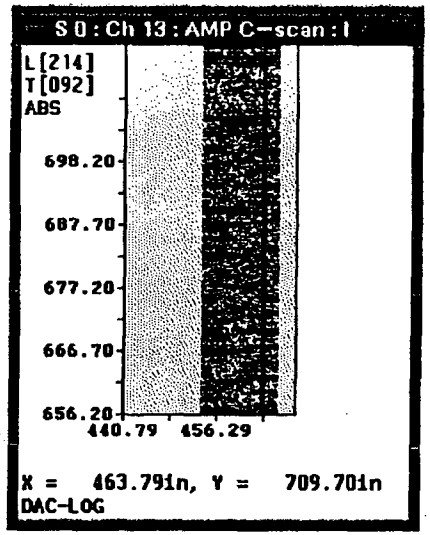


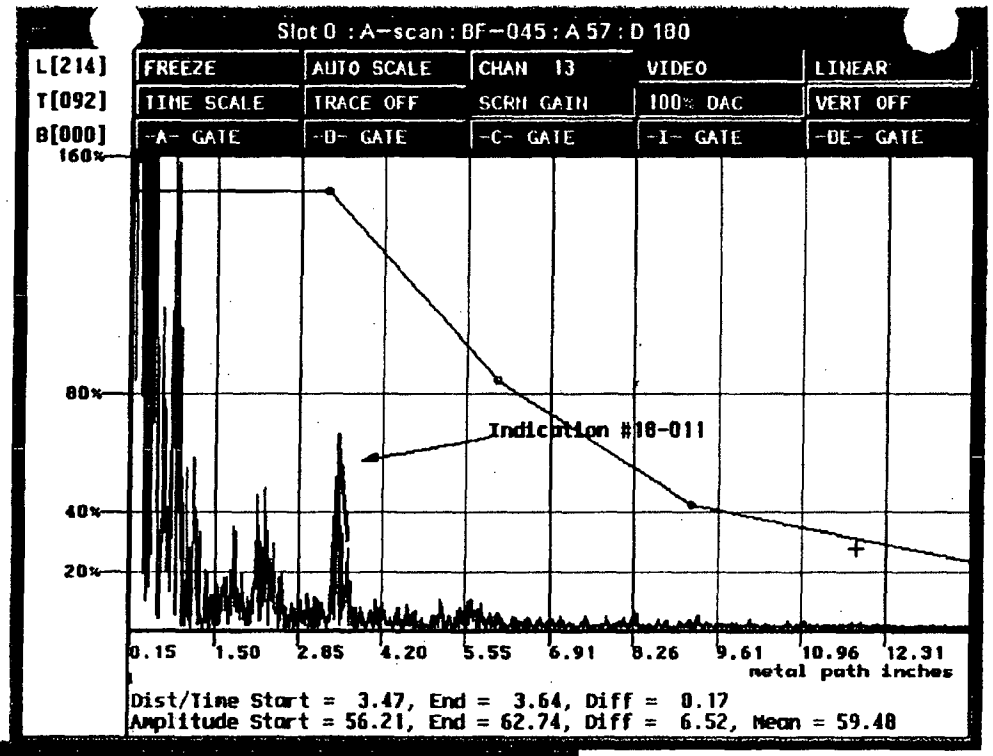


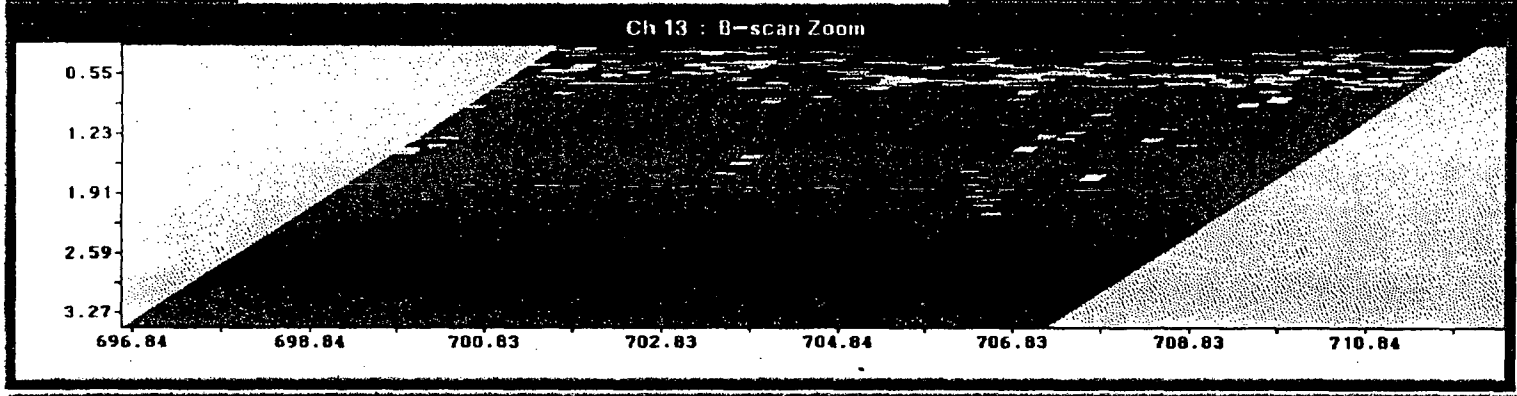


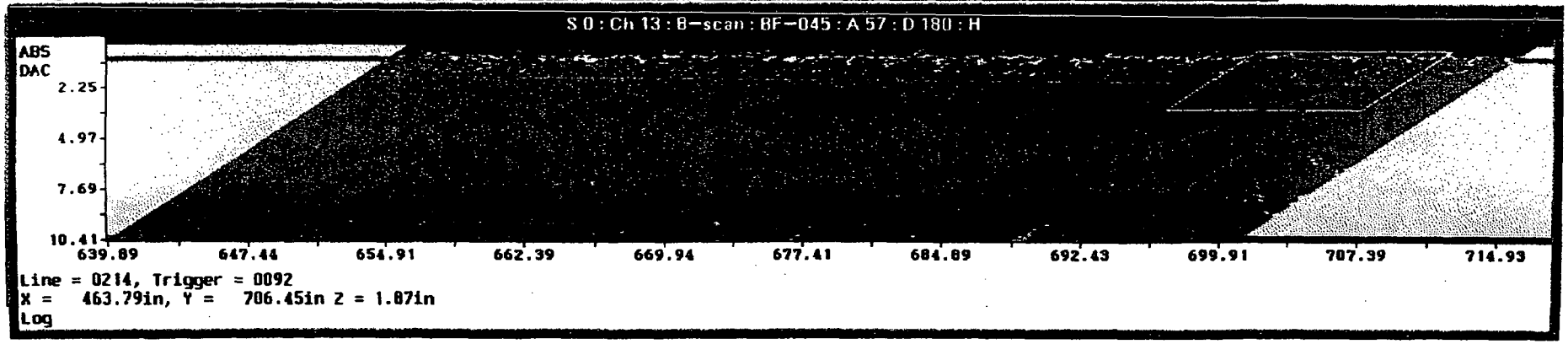

S 0 : Scale
DAC
Lower Ter
tor3/18-010
S 0 : Ch 13 : AMP C-scan : I
L[213]
T[100]
ABS
X = 465.79in, Y = 709.45in
DAC-LOG
Slot 0 : A-scan : BF-045 : A 57 : D 180
FREEZE
AUTO SCALE
CHAN 13
VIDEO
LINEAR
TIME SCALE
TRACE OFF
SCRN GAIN
100% DAC
VERT OFF
-A- GATE
-B- GATE
-C- GATE
-I- GATE
-BE- GATE
Indication #18-010
metal path inches
Dist/Time Start = 3.14, End = 3.28, Diff = 0.14
Amplitude Start = 55.13, End = 64.91, Diff = 9.79, Mean = 60.02
Ch 13 : B-scan Zoom
S 0 : Ch 13 : B-scan : BF-045 : A 57 : D 180 : H
ABS
DAC
Line = 0213, Trigger = 0100
X = 465.79in, Y = 706.47in Z = 1.70in
Log

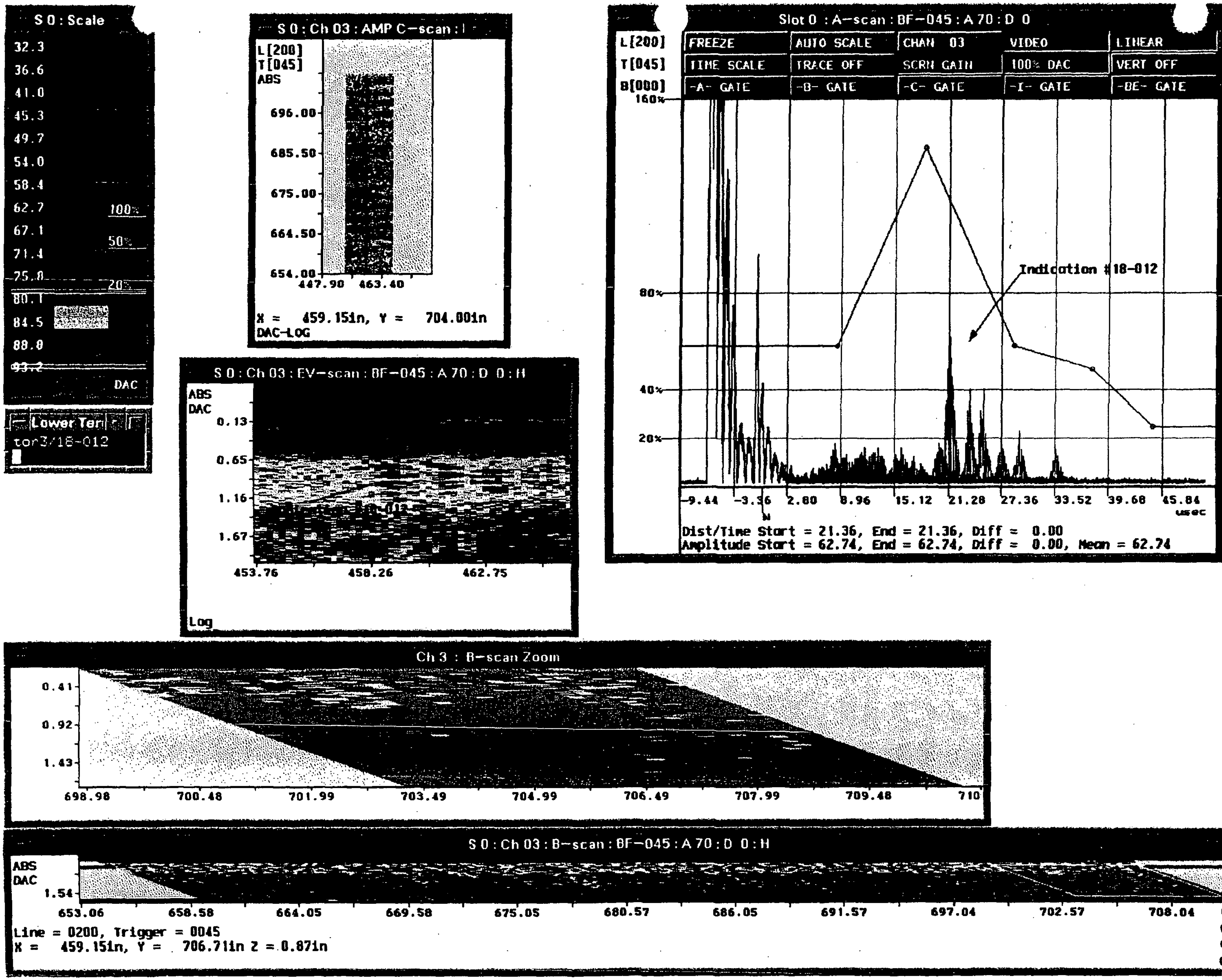












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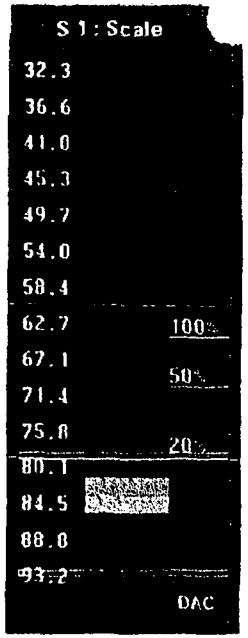
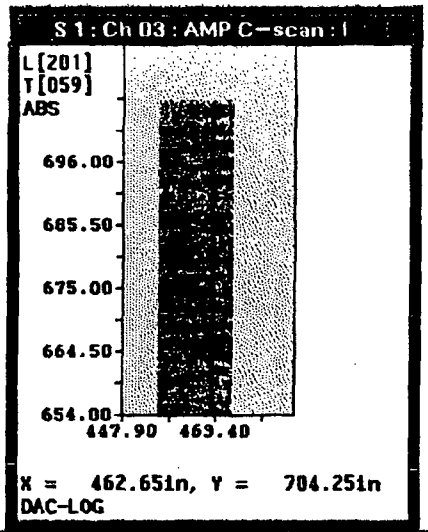
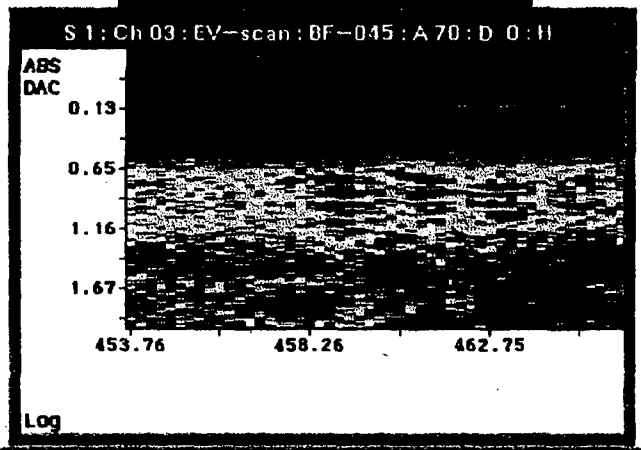
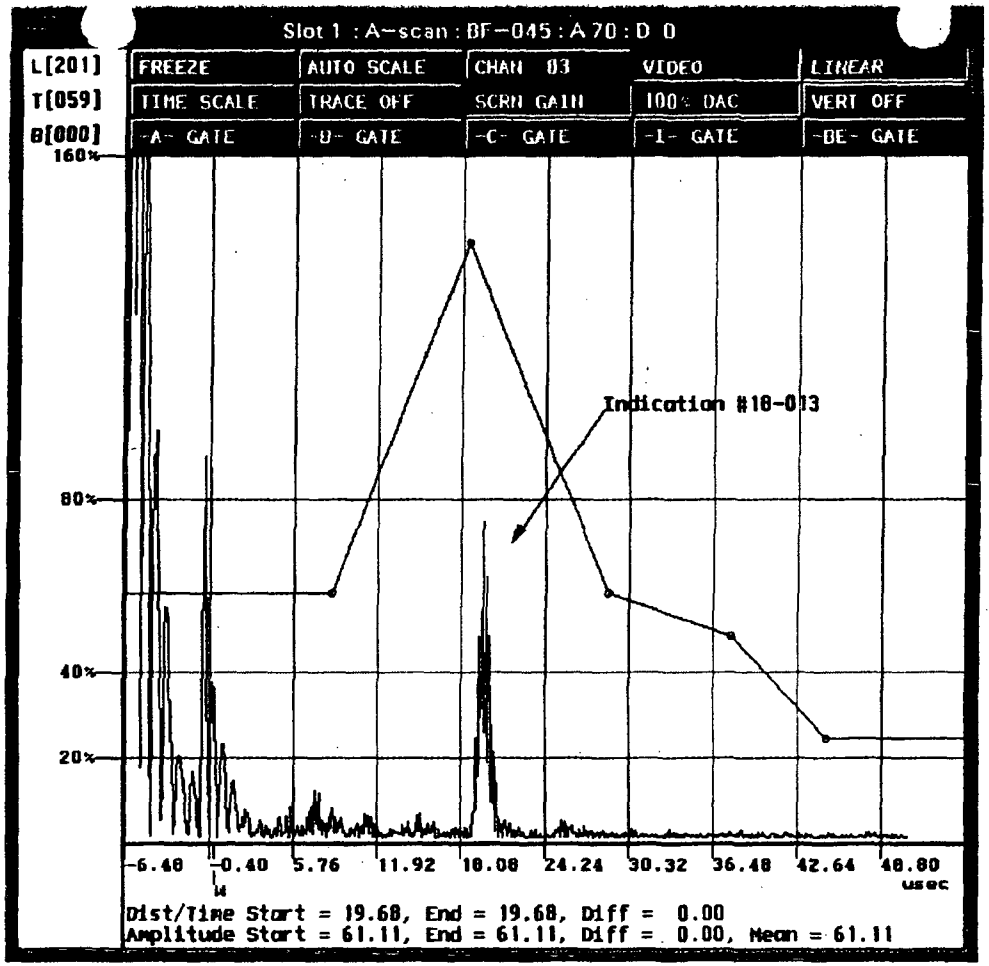
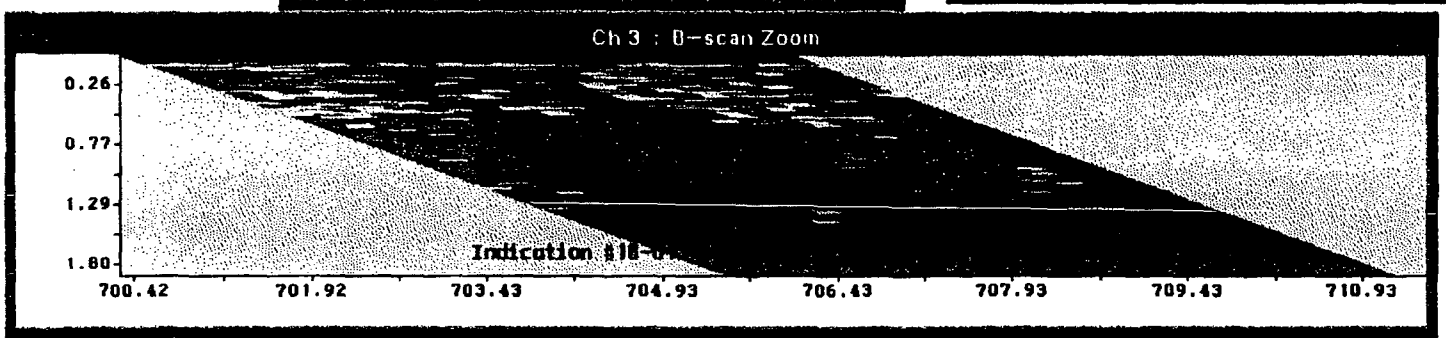
00306

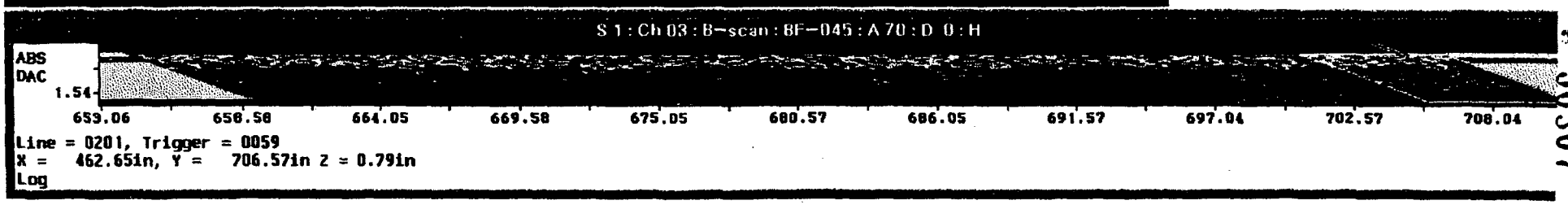


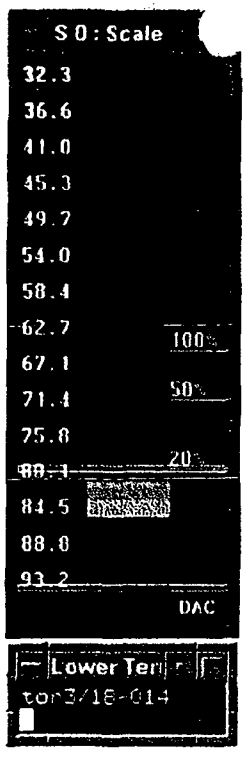


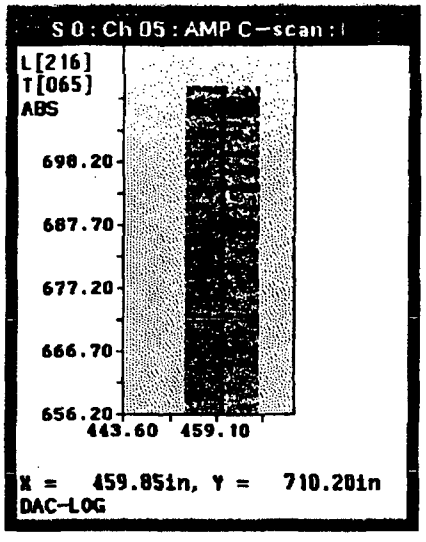


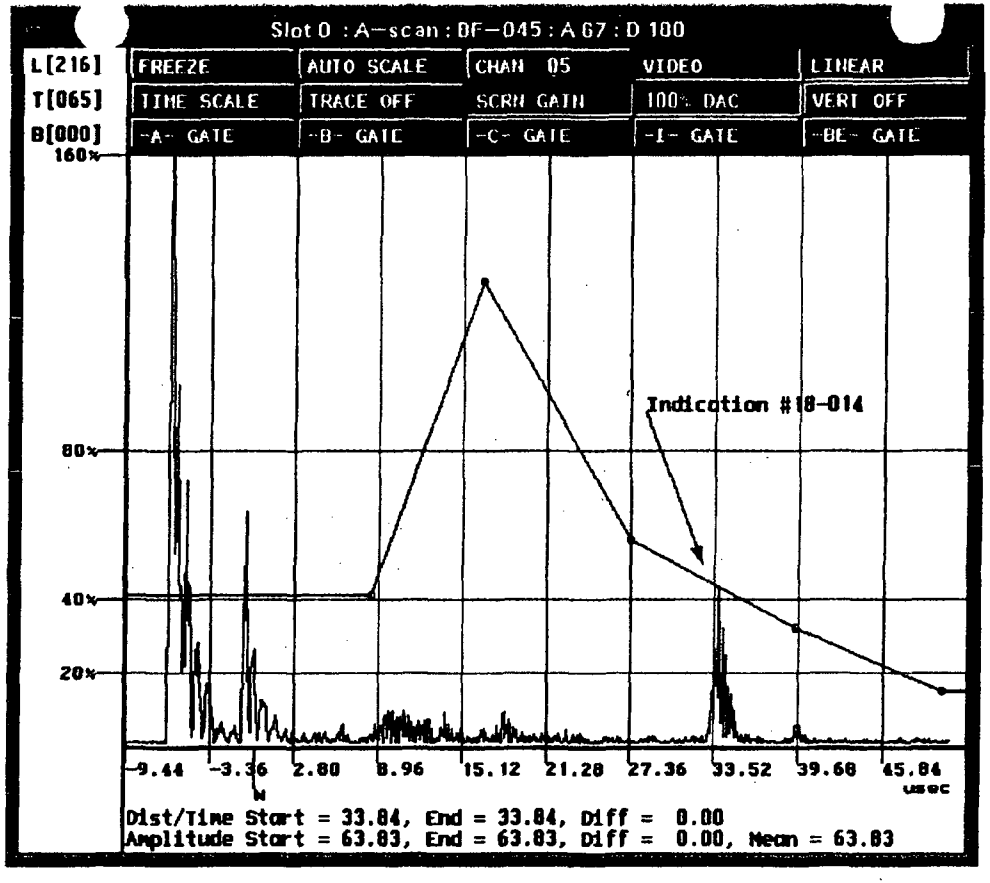


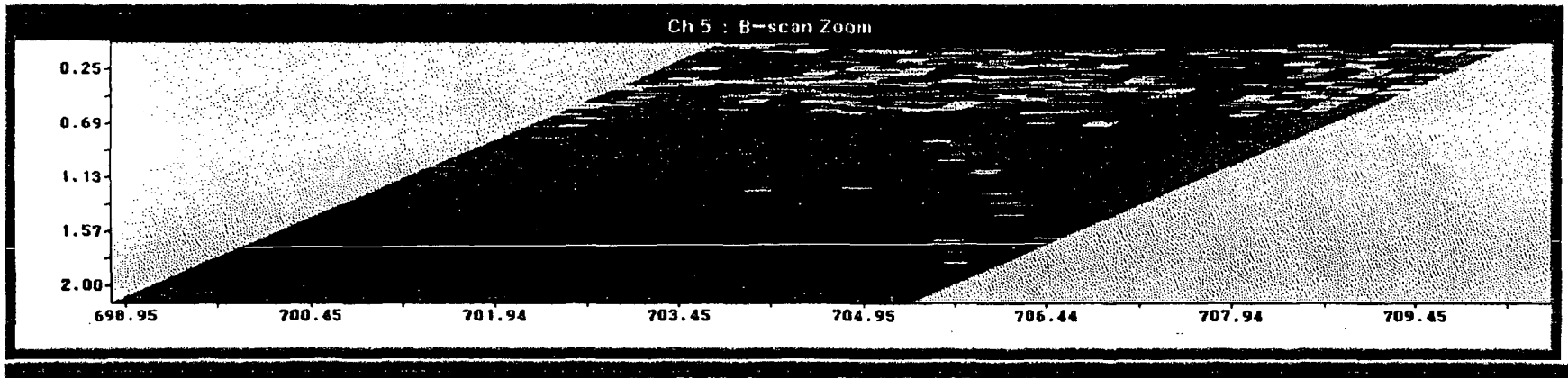


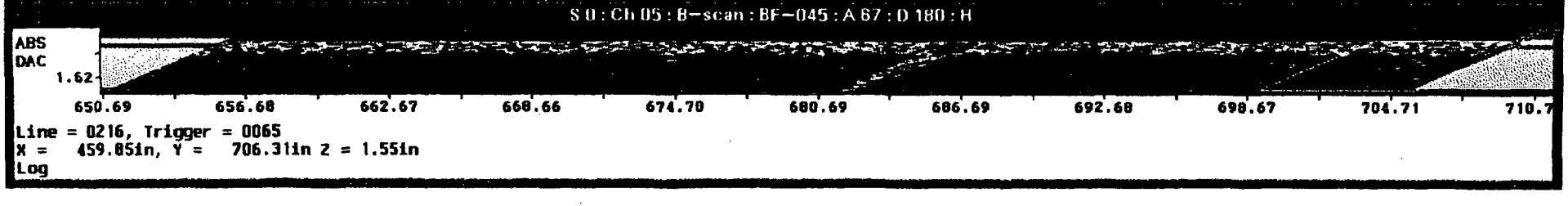


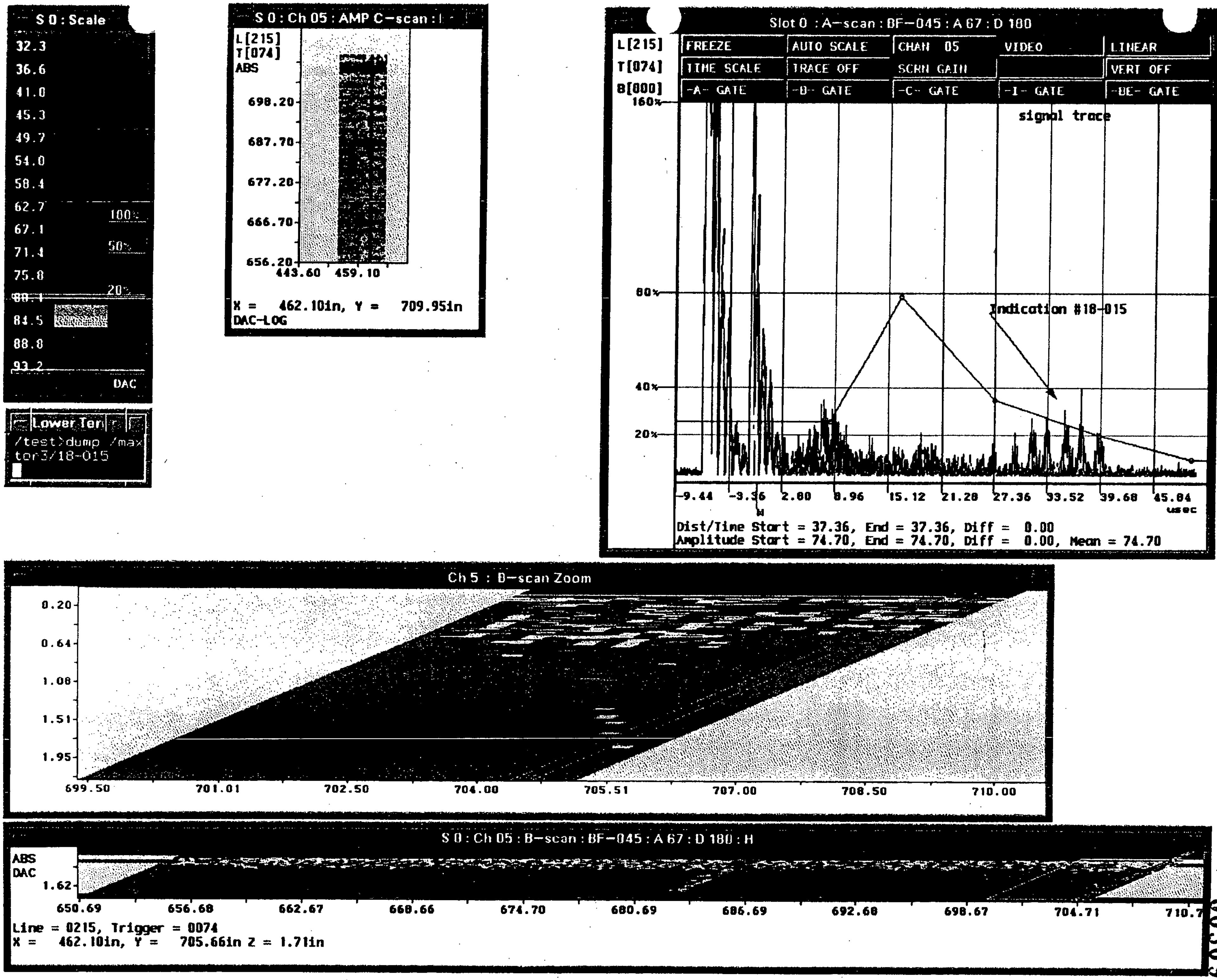


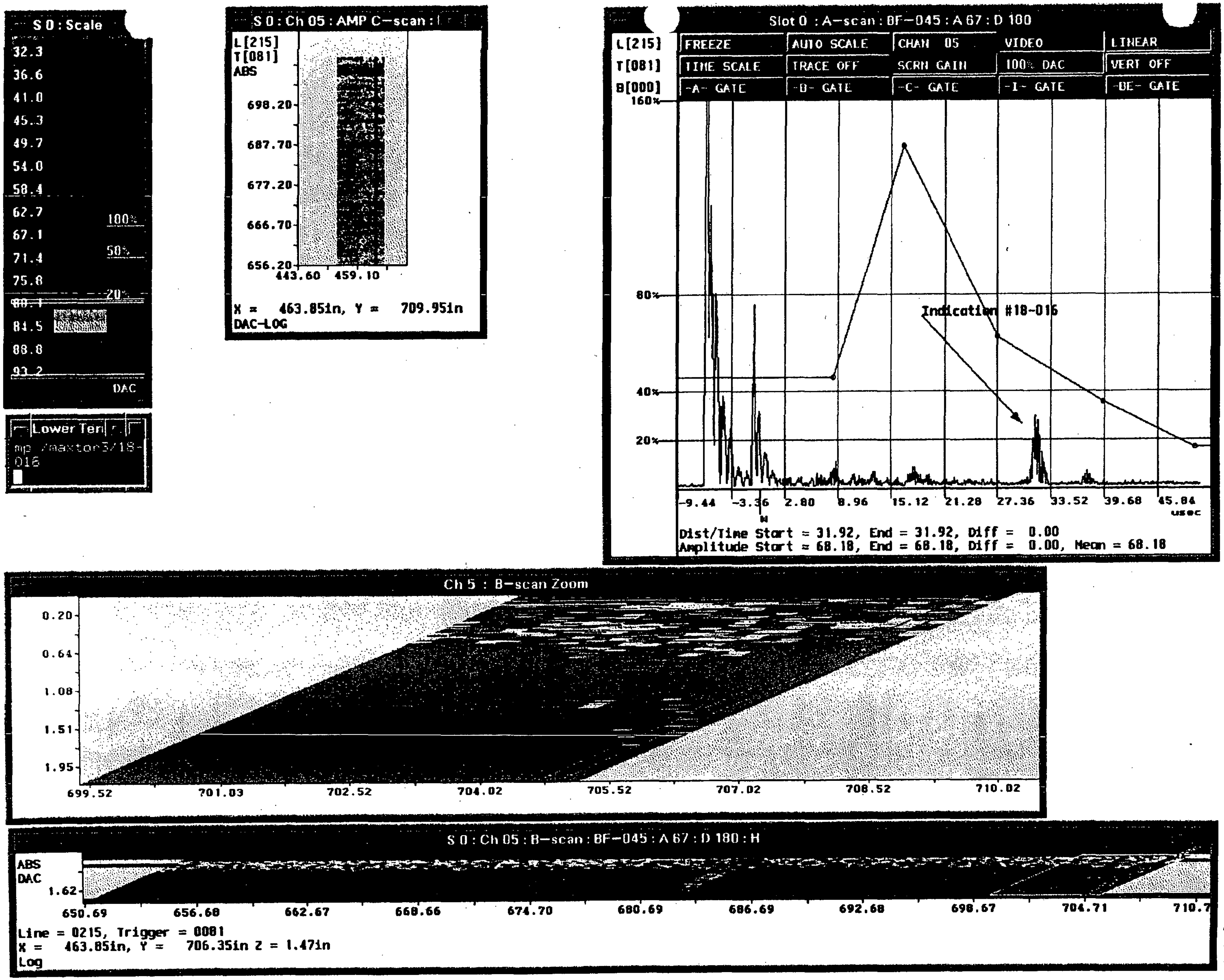









S 0 : Scale
32.3
36.6
41.0
45.3
49.7
54.0
58.4
62.7
67.1
71.4
75.8
84.5
88.8
100%
50%
20%
DAC
Lower Ter
/test>dump /max
tor3/18-015
S 0 : Ch 05 : AMP C-scan
L[215]
T[074]
ABS
698.20
687.70
677.20
666.70
656.20
443.60
459.10
X = 462.10in, Y = 709.95in
DAC-LOG
Slot 0 : A-scan : BF-045 : A 67 : D 180
L[215]
T[074]
B[000]
FREEZE
AUTO SCALE
CHAN 05
VIDEO
LINEAR
TIME SCALE
TRACE OFF
SCRN GAIN
VERT OFF
-A- GATE
-B- GATE
-C- GATE
-I- GATE
-BE- GATE
160%
80%
40%
20%
signal trace
Indication #18-015
-9.44
-3.36
2.80
8.96
15.12
21.28
27.36
33.52
39.68
45.84
usec
Dist/Time Start = 37.36, End = 37.36, Diff = 0.00
Amplitude Start = 74.70, End = 74.70, Diff = 0.00, Mean = 74.70
Ch 5 : B-scan Zoom
0.20
0.64
1.08
1.51
1.95
699.50
701.01
702.50
704.00
705.51
707.00
708.50
710.00
S 0 : Ch 05 : B-scan : BF-045 : A 67 : D 180 : H
ABS
DAC
1.62
650.69
656.68
662.67
668.66
674.70
680.69
686.69
692.68
698.67
704.71
710.7
Line = 0215, Trigger = 0074
X = 462.10in, Y = 705.66in Z = 1.71in



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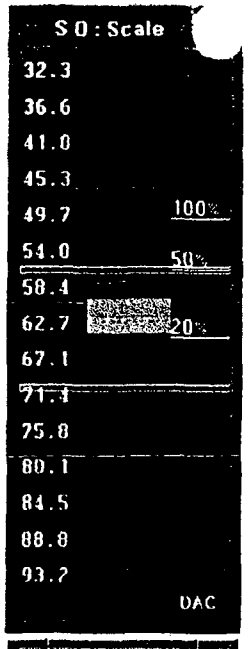
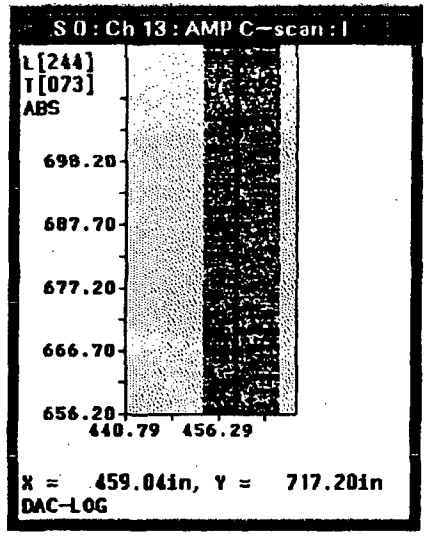
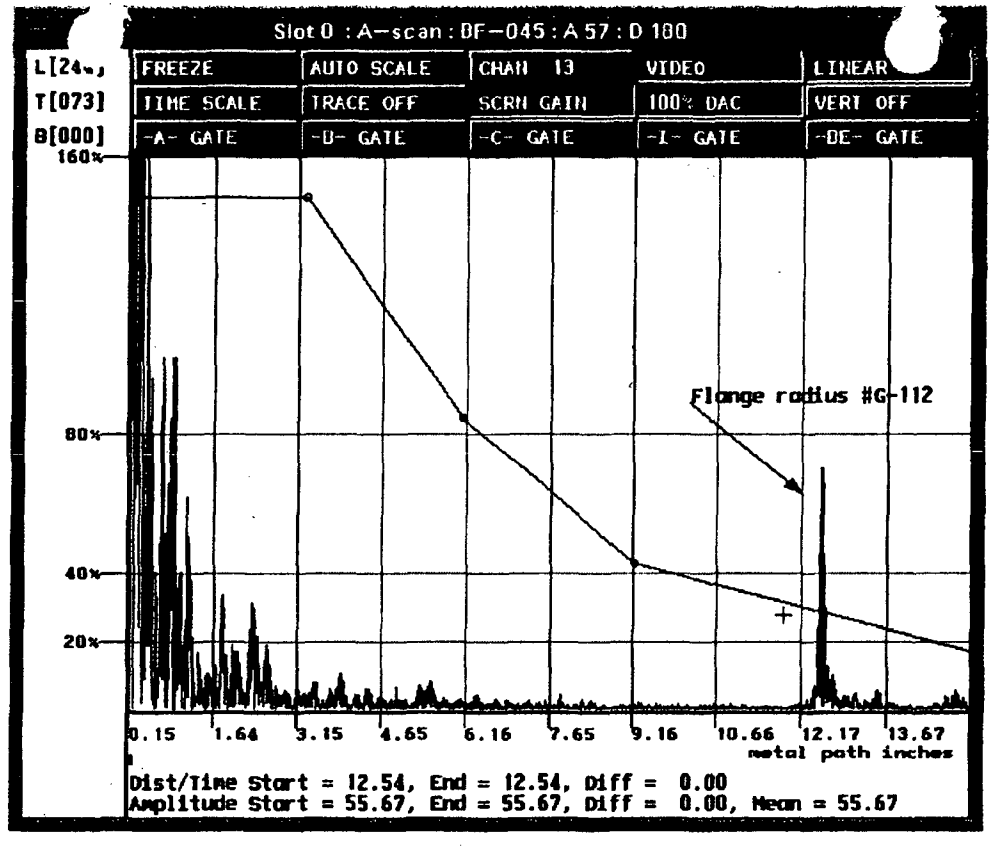
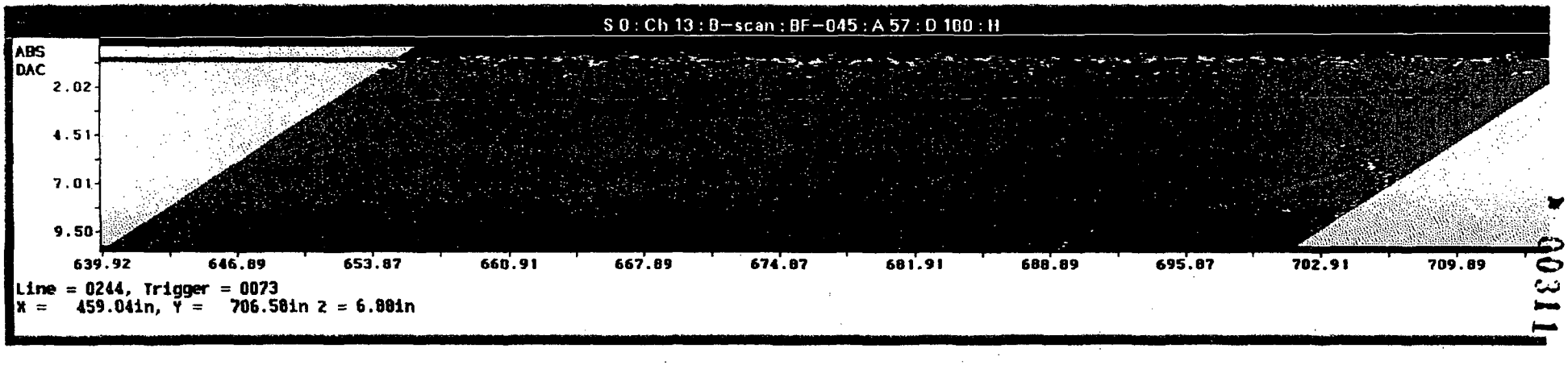
00310

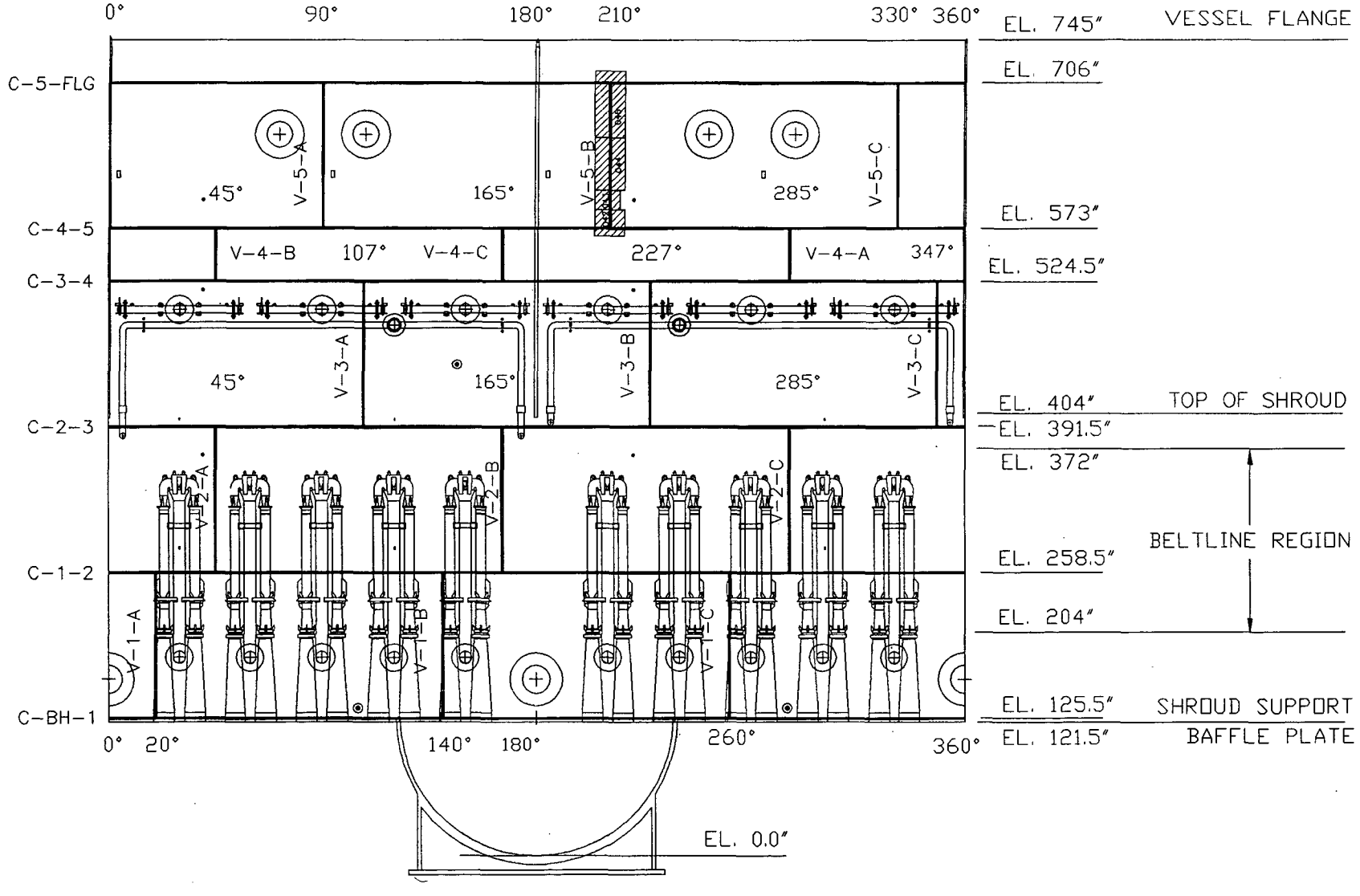




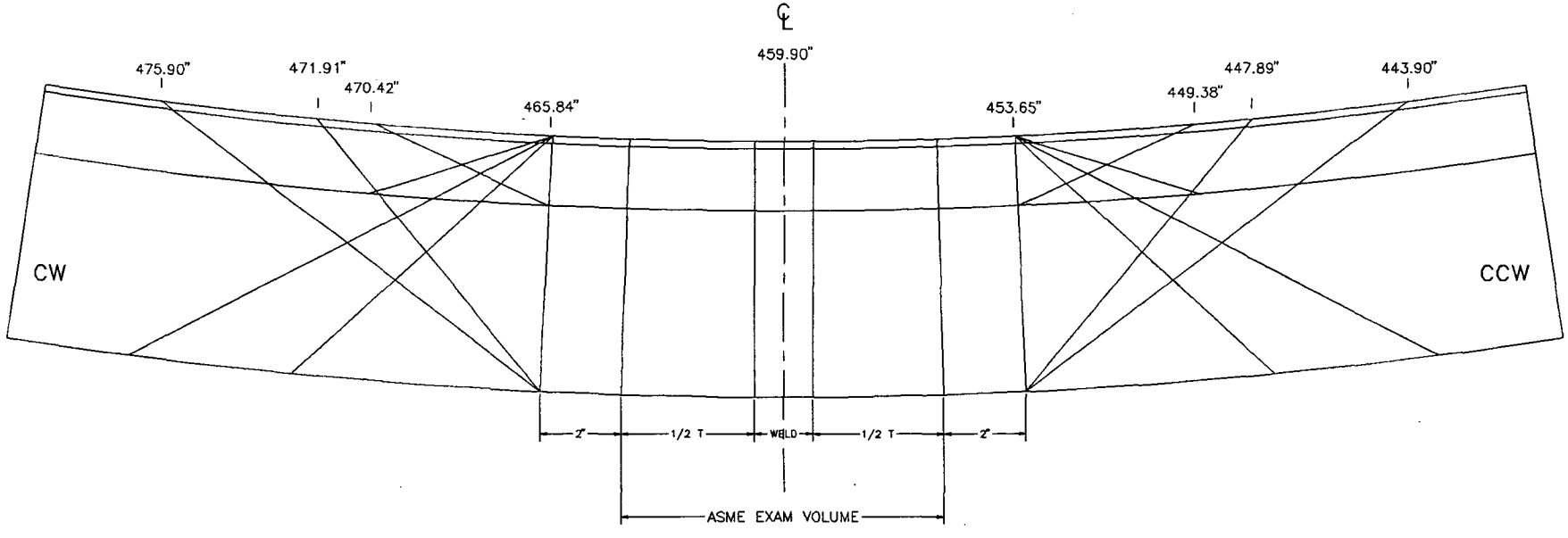




BROWNS FERRY UNIT-3 WELD LOCATIONS



GE NUCLEAR ENERGY	BROWNS FERRY UNIT 3	VESSEL ROLLOUT & AS SCANNED PATCH LOCATIONS	BF-3-VMA	REV 0



Nominal Clad T = 3/16"
Nominal Base Metal T = 6 3/8"
1 Degree = 2.19"

CH.	ANGLE	DIR.	MIN X	MAX X
1	0 W	0	453.65	465.84
2	0 W	90	453.65	465.84
3	70 UP	0	453.65	465.84
4	70 CW	90	449.38	465.84
5	70 DN	180	453.65	465.84
6	70 CCW	270	453.65	470.42
7	45 UP	0	453.65	465.84
8	45 CW	90	447.89	465.84
9	45 DN	180	453.65	465.84
10	45 CCW	270	453.65	471.91
11	60 UP	0	453.65	465.84
12	60 CW	90	443.90	465.84
13	60 DN	180	453.65	465.84
14	60 CCW	270	453.65	475.90
15	0 BM	0	453.65	475.90
16	0 BM	90	443.90	465.84

GE NUCLEAR ENERGY	BROWNS FERRY UNIT 3	WELD V-5-B EXAM VOLUME	SCALE: NONE	DWG. BF3-VERT	REV. 0

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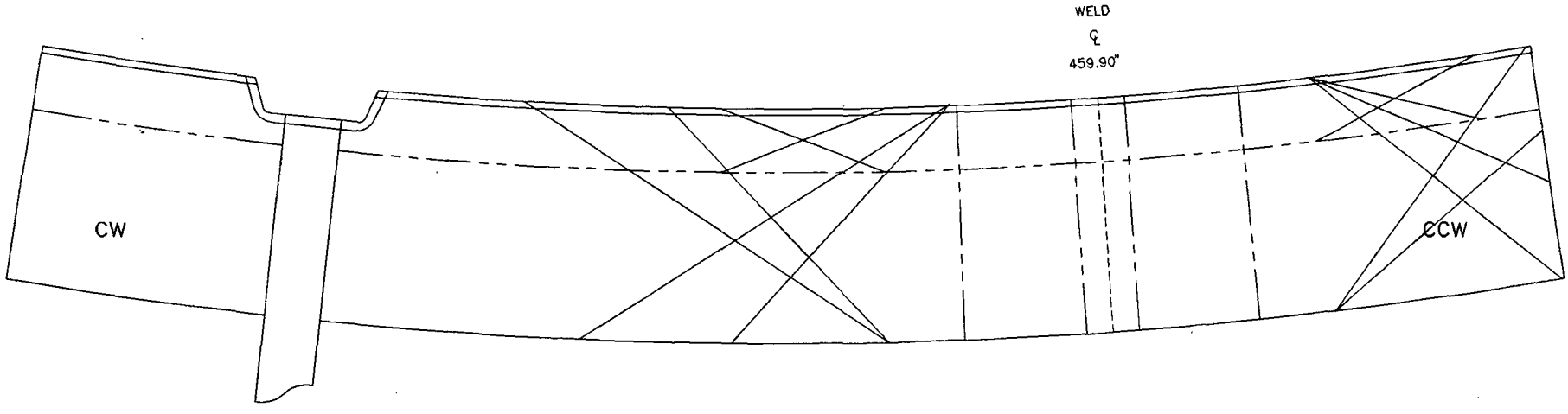

Nominal Clad T = 3/16"
Nominal Base Metal T = 6 3/8"
1 Degree = 2.19"

GE NUCLEAR ENERGY	BROWNS FERRY UNIT 3	N12B NOZ. AUTOMATED SCAN LIMIT	SCALE: NONE	DWG. V-5BN12B	REV. 0