R1169

GE Nuclear Energy

GERIS 2000 Examination Summary Sheet

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

Calibration Sheets: C-001, C-104, C-105, C-106

Supporting Data: Examination Data Sheets E-17-00 thru E-17-03, Indication Data Sheets 17-001 , G-020 thru G-024, Indication Evaluation Sheets, Screen Prints, Exam Patch Location Map, Exam Coverage Plots, GERIS 2000 Setup Records and Manual Examination Data Sheets D-003, D-004, D-005, D-006.

Examination Summary

The ultrasonic examination of weld V-5-A 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 steam dryer support bracket at 94°. Areas that could not be examined using the GERIS 2000 and accessible from the outside were examined with manual technique utilizing Procedure No. GE-UT-300 Rev. 6 with FRR-004. The total examination coverage was calculated to be 100%.

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 one (1) indication with the 45° shear wave scans that was evaluated and found to be acceptable per the referencing Code section. Geometric indications from the stabilizer bracket and flange radius were recorded with the 45° and 60° shear wave scans.

The manual technique utilized 0° longitudinal, 45° and 60° shear wave search units both parallel and perpendicular to the weld axis in two directions to effectively examin the weld and adjacent base material.

One (1) geometric indication from the steam dryer support bracket was recorded manually with the 0° scans.

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

GERIS Analyst: [signature]	GE Reviewer: R.O. Forman
LEVEL: II DATE: 12/15/93	LEVEL: II DATE: 12-15-93
UTILITY Review: [signature]	ANII Review:
TITLE: III DATE: 1/26/94	TITLE: Albert Todd DATE: 7/13/94

GE Nuclear Energy

GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-A
Cal. ID: C-001

Exam Data Sheet No.: E-17-03
Patch ID: BF-041
Ind. Data Sheet Series: 17-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	2	G-020	~	~	~	~
10	45 RS	270 CCW	1	17-001	~	~	~	~
11	60 RS	0 UP	NRI	~	~	~	~	~
12	60 RS	90 CW	NRI	~	~	~	~	~
13	60 RS	180 DN	2	G-021	~	~	~	~
14	60 RS	270 CCW	NRI	~	~	~	~	~
15	0 BM	N/A	NRI	~	~	~	~	~
16	0 BM	N/A	NRI	~	~	~	~	~
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Comments: Geometric indications recorded on G-020 and G-021 due to Flange Radius.

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: [signature] Level: III Date: 12/14/93

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

R1169

GE Nuclear Energy

GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-A
Cal. ID: C-001

Exam Data Sheet No.: E-17-01
Patch ID: BF-039
Ind. Data Sheet Series: 17-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	3	G-022	~	~	~	~
8	45 RS	90 CW	NRI	~	~	~	~	~
9	45 RS	180 DN	NRI	~	~	~	~	~
10	45 RS	270 CCW	NRI	~	~	~	~	~
11	60 RS	0 UP	3	G-023	~	~	~	~
12	60 RS	90 CW	NRI	~	~	~	~	~
13	60 RS	180 DN	3	G-024	~	~	~	~
14	60 RS	270 CCW	NRI	~	~	~	~	~
15	0 BM	N/A	NRI	~	~	~	~	~
16	0 BM	N/A	NRI	~	~	~	~	~
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Comments: Geometric indications recorded on G-022, G-023 and G-024 due to Stabilizer Bracket at 90°.

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: [signature]
Level: II
Date: 12/14/93

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

R1169

GE Nuclear Energy

GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-A
Cal. ID: C-001

Exam Data Sheet No.: E-17-02
Patch ID: BF-040
Ind. Data Sheet Series: 17-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	No Exam	~	~	~	~	~
3	70 RL	0 UP	NRI	~	~	~	~	~
4	70 RL	90 CW	NRI	~	~	~	~	~
5	70 RL	180 DN	No Exam	~	~	~	~	~
6	70 RL	270 CCW	NRI	~	~	~	~	~
7	45 RS	0 UP	NRI	~	~	~	~	~
8	45 RS	90 CW	NRI	~	~	~	~	~
9	45 RS	180 DN	No Exam	~	~	~	~	~
10	45 RS	270 CCW	NRI	~	~	~	~	~
11	60 RS	0 UP	NRI	~	~	~	~	~
12	60 RS	90 CW	NRI	~	~	~	~	~
13	60 RS	180 DN	No Exam	~	~	~	~	~
14	60 RS	270 CCW	NRI	~	~	~	~	~
15	0 BM	N/A	NRI	~	~	~	~	~
16	0 BM	N/A	NRI	~	~	~	~	~
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Comments: No exam channels 2, 5, 9 and 13 due to scan limitation, Steam Dryer Support Lug @ 94°.

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: [signature] Level: III Date: 12/14/93

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

0459 0000 0734

R1169

GE Nuclear Energy

GERIS 2000 Examination Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-A
Exam Data Sheet: E-17-00

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-039	E-17-01	10/3/93	0020	0135	183.25	211.25	566.00	612.50	18A	JCG
BF-040	E-17-02	10/3/93	0154	0212	183.25	192.75	612.75	635.50	18A	JCG
BF-041	E-17-03	10/3/93	0230	0442	183.75	210.00	635.75	717.00	18B/19A	JCG
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Comments: N/A

Limitations: BF-040 limited due to Steam Dryer Support Bracket at 94°.

Analyst: [signature]
Level: III   Date: 12/12/93

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

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GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-A
Cal. ID: C-001

Exam Data Sheet No.: E-17-03
Patch ID: BF-041
Ind. Data Sheet No.: 17-001

Indication: 17-001 **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
1.3%	701.25	~	~	~	~	199.46	3.08	~	~	~	~	~
6.2%	701.50	~	~	~	~	199.46	3.26	~	~	~	~	~
8.3%	701.75	~	~	~	~	199.46	3.11	~	~	~	~	SPOT
1.5%	702.00	~	~	~	~	199.46	3.20	~	~	~	~	~
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Comments: Thruwall size was determined by the SPOT technique.

TW = 0.28 L = 0.75 S = 2.05 with clad

Analyst: [signature] Level: III Date: 12/12/93

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

R1169

GE Nuclear Energy

GERIS 2000 Indication Evaluation Sheet

Project: TVA, Browns Ferry Unit 3
Weld ID: V-5-A
Patch: C-001

Exam Data Sheet No.: E-17-03
Ind. Data Sheet No.: BF-041
Indication: 17-001

Flaw Thruwall Dimension =	0.28
Flaw Length "l" =	0.75
Separation with clad "S" =	2.05
Surface Separation "S" =	1.86

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	2.73	3.20 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
			2.73	3.20

a =	0.141
a/l value =	0.188
Y =	1.000

Flaw is Subsurface

Allowed a/t =	3.20%
a/t =	2.21%

Comments:

R1169

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-A
Cal. ID: C-001

Exam Data Sheet No.: E-17-03
Patch ID: BF-041
Ind. Data Sheet No.: G-020

Indication: G-020 **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
> 100	197.90	~	~	~	~	711.50	9.04	~	~	~	~	Geometry
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Comments: Geometric indication from Flange Radius.

Analyst: [signature]
Level: III
Date: 12/12/93

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

R1169

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-A
Cal. ID: C-001

Exam Data Sheet No.: E-17-03
Patch ID: BF-041
Ind. Data Sheet No.: G-021

Indication: G-021 **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
> 100	197.29	~	~	~	~	716.45	12.24	~	~	~	~	Geometry
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Comments: Geometric indication from Flange Radius.

Analyst: [illegible signature]
Level: III Date: 12/12/93

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

R1169

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-A
Cal. ID: C-001

Exam Data Sheet No.: E-17-01
Patch ID: BF-039
Ind. Data Sheet No.: G-022

Indication: G-022 **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
> 100	196.21	~	~	~	~	567.80	8.04	~	~	~	~	Geometry
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Comments: Geometric indication from Stabilizer Bracket at 90°.

Analyst: [signature] Level: III Date: 12/12/93

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

R1169

GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-A
Cal. ID: C-001

Exam Data Sheet No.: E-17-01
Patch ID: BF-039
Ind. Data Sheet No.: G-023

Indication: G-023 **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
> 100	196.85	~	~	~	~	562.05	12.10	~	~	~	~	Geometry
~	~	~	~	~	~	~	~	~	~	~	~	~
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Comments: Geometric indication from Stabilizer Bracket at 90°.

Analyst: CQ M[illegible]
Level: III Date: 12/12/93

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

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GE Nuclear Energy

GERIS 2000 Indication Data Sheet

Project: TVA, Browns Ferry, Unit 3
Weld ID: V-5-A
Cal. ID: C-001

Exam Data Sheet No.: E-17-01
Patch ID: BF-039
Ind. Data Sheet No.: G-024

Indication: G-024 **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
> 100	196.54	~	~	~	~	573.20	15.63	~	~	~	~	Geometry
~	~	~	~	~	~	~	~	~	~	~	~	~
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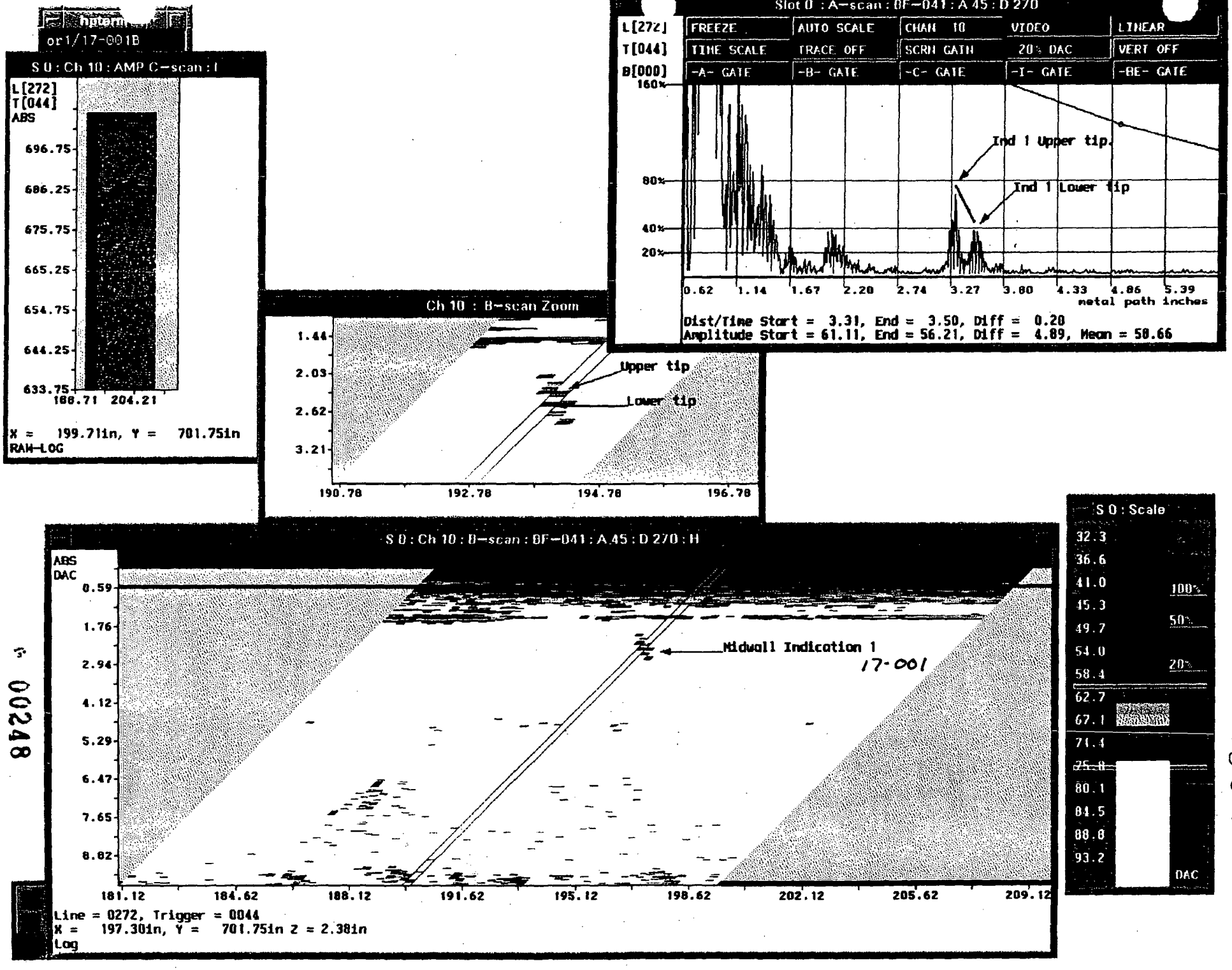
Comments: Geometric indication from Stabilizer Bracket at 90°.

Analyst: [signature]
Level: III Date: 12/12/93

Reviewed By: R. O. Forman
Level: II Date: 12



00248

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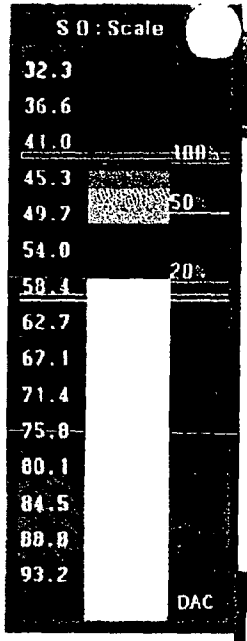
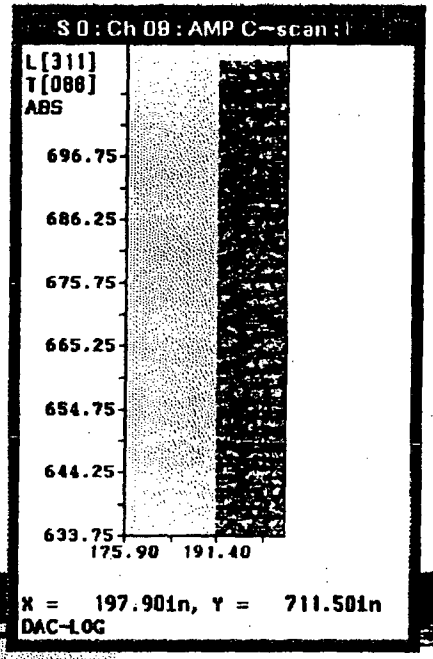
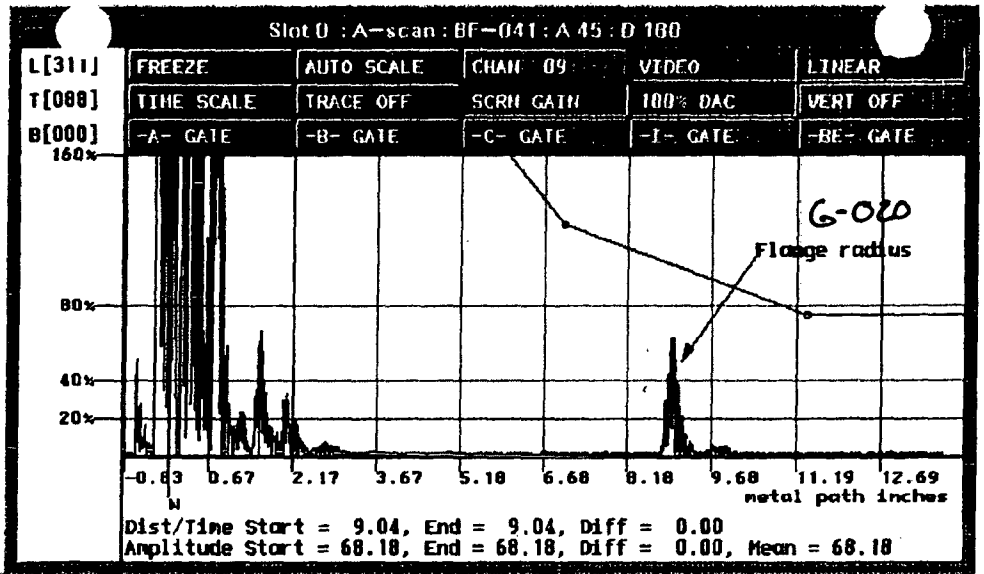
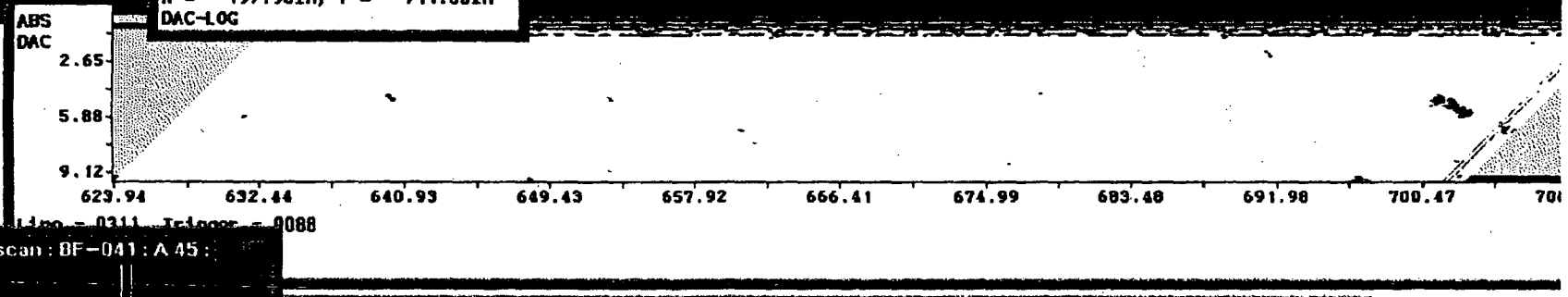
13 OF 27









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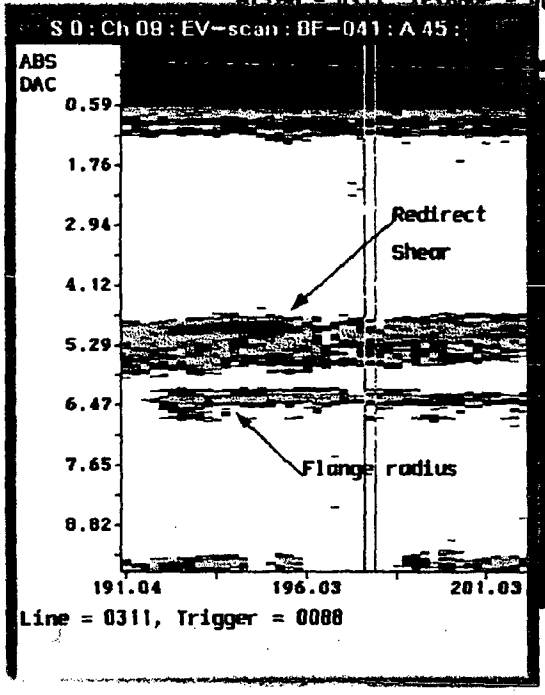

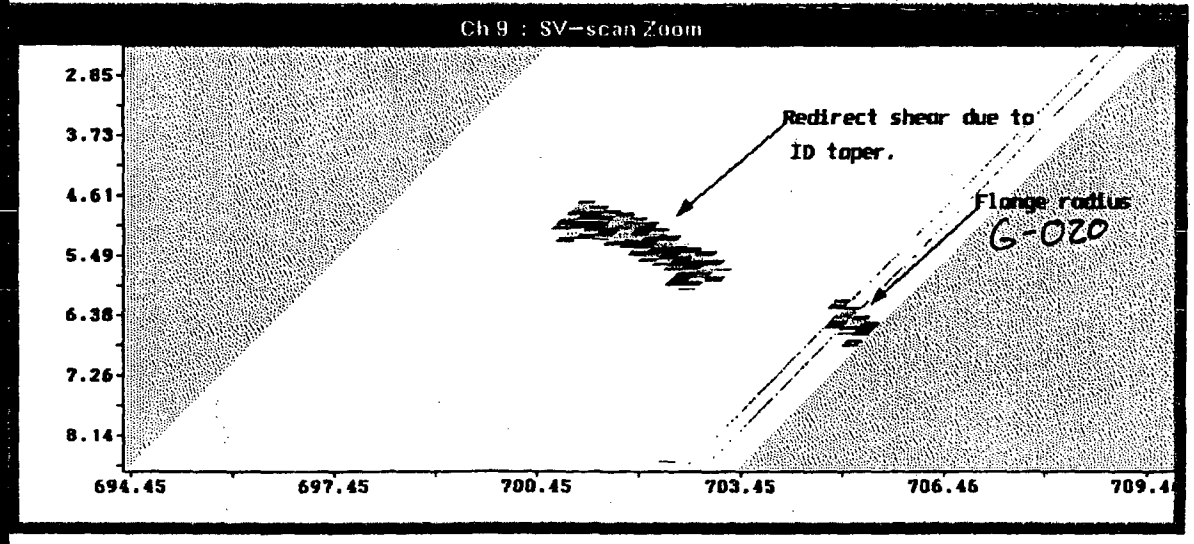

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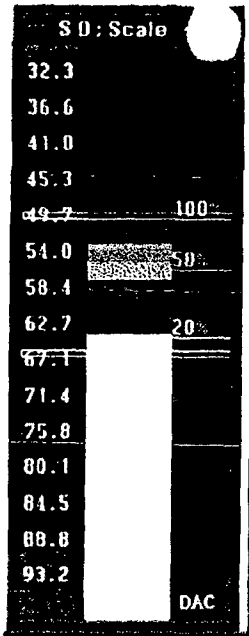
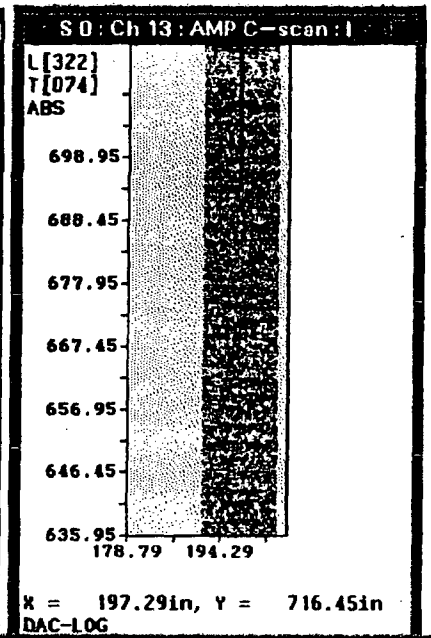
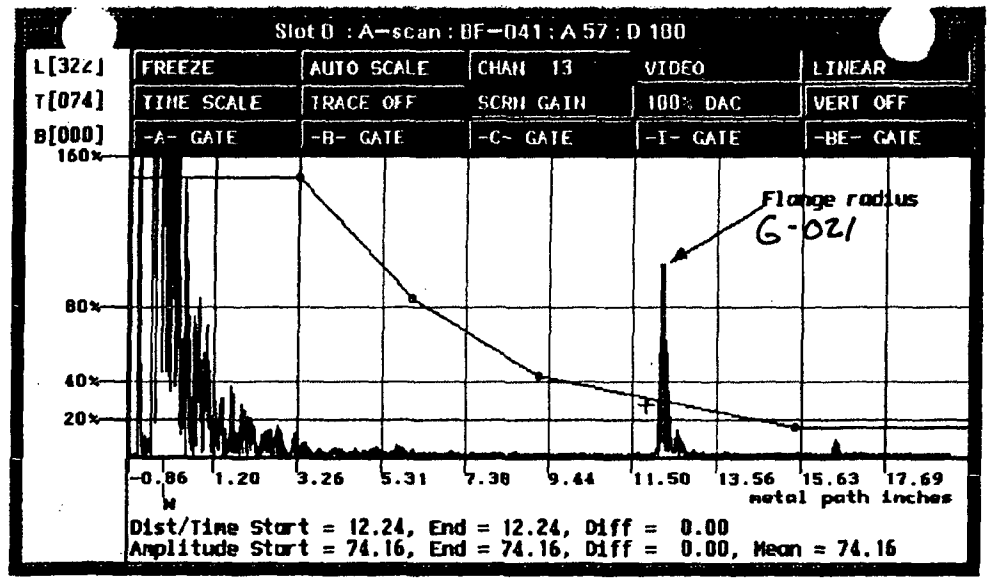
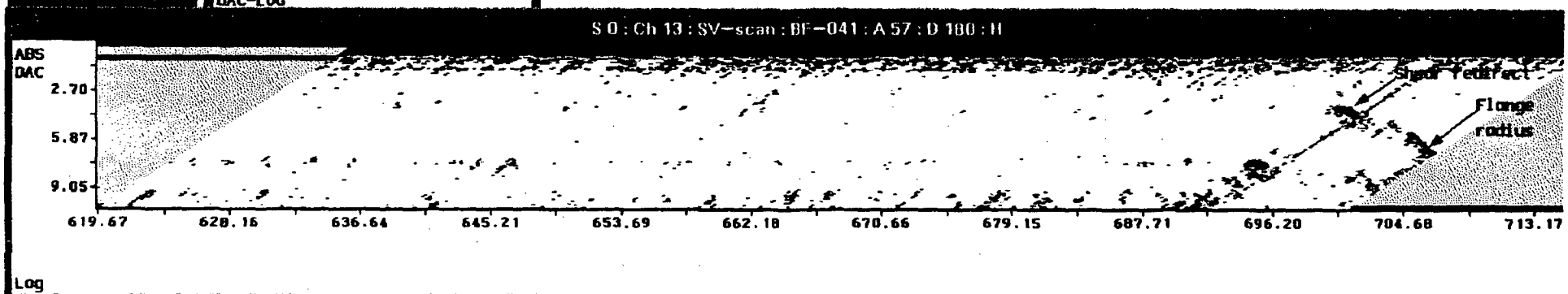
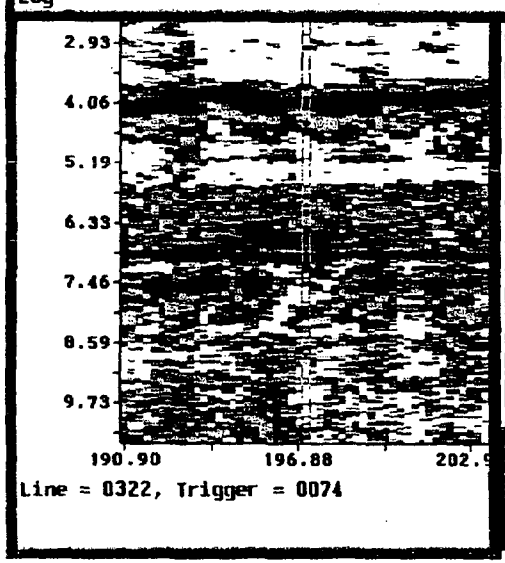

S 0 : Scale
32.3
36.6
41.0
45.3
49.7
54.0
58.4
62.7
67.1
71.4
75.8
80.1
84.5
88.8
93.2
100%
50%
20%
DAC

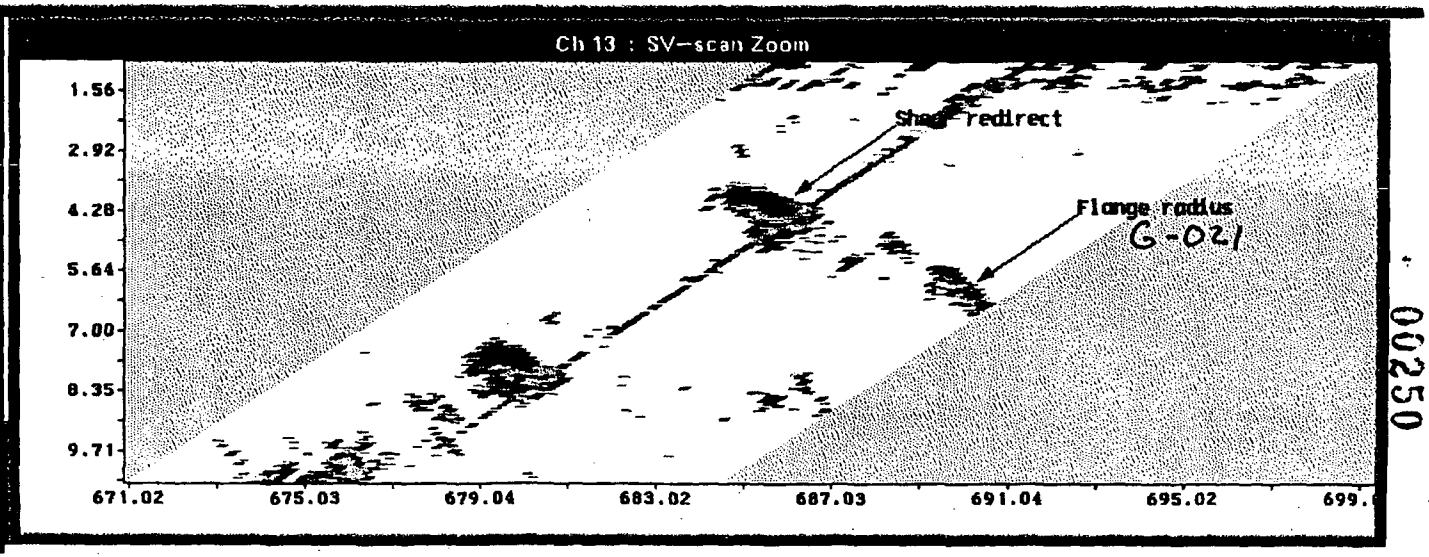

S 0 : Ch 13 : AMP C-scan : I
L[322]
T[074]
ABS
698.95
688.45
677.95
667.45
656.95
646.45
635.95
178.79
194.29
X = 197.29in, Y = 716.45in
DAC-LOG

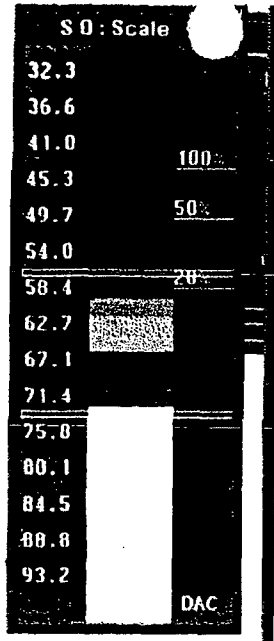

hpte

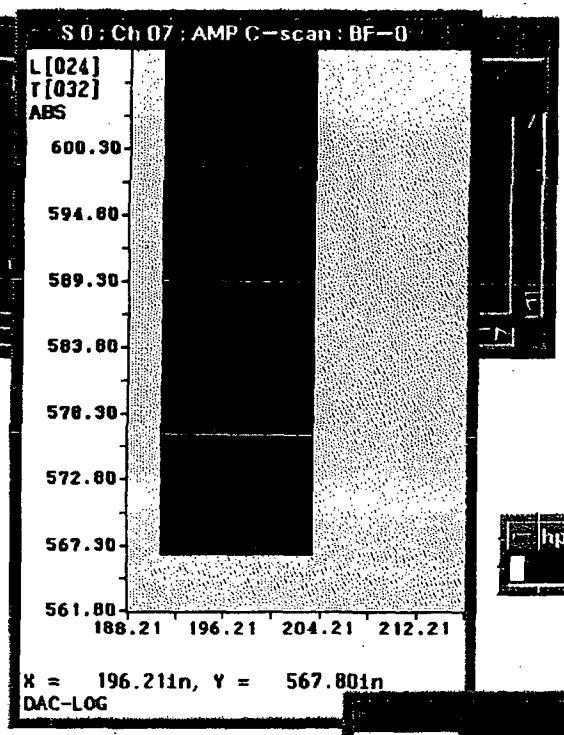

Slot 0 : A-scan : BF-041 : A 57 : D 180
L[322]
T[074]
B[000]
FREEZE
AUTO SCALE
CHAN 13
VIDEO
LINEAR
TIME SCALE
TRACE OFF
SCRN GAIN
100% DAC
VERT OFF
-A- GATE
-B- GATE
-C- GATE
-I- GATE
-BE- GATE
160%
80%
40%
20%
Flange radius
G-021
-0.86
1.20
3.26
5.31
7.38
9.44
11.50
13.56
15.63
17.69
metal path inches
Dist/Time Start = 12.24, End = 12.24, Diff = 0.00
Amplitude Start = 74.16, End = 74.16, Diff = 0.00, Mean = 74.16


S 0 : Ch 13 : SV-scan : BF-041 : A 57 : D 180 : H
ABS
DAC
2.70
5.87
9.05
Shear redirect
Flange radius
619.67
628.16
636.64
645.21
653.69
662.18
670.66
679.15
687.71
696.20
704.68
713.17

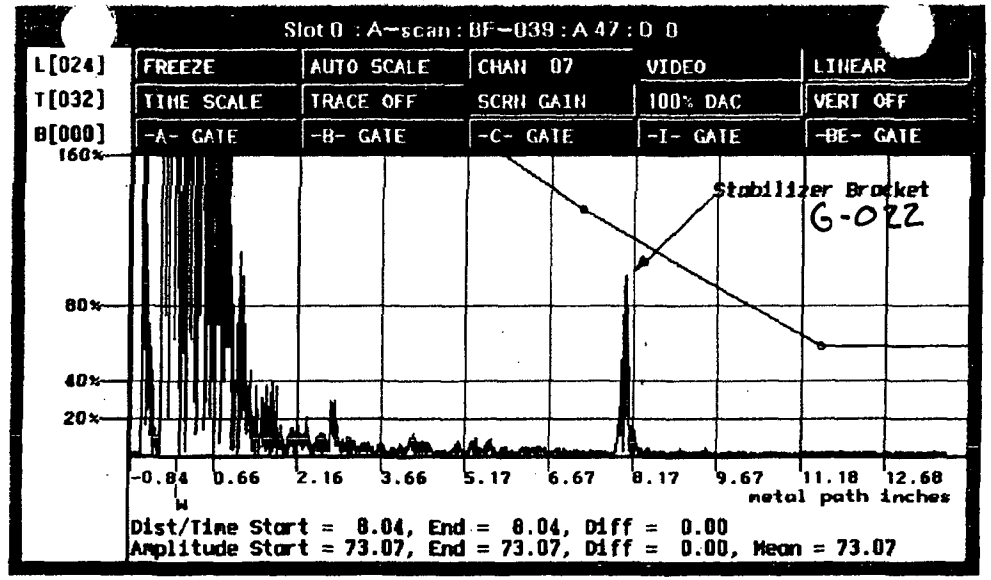

Log
2.93
4.06
5.19
6.33
7.46
8.59
9.73
190.90
196.88
Line = 0322, Trigger = 0074

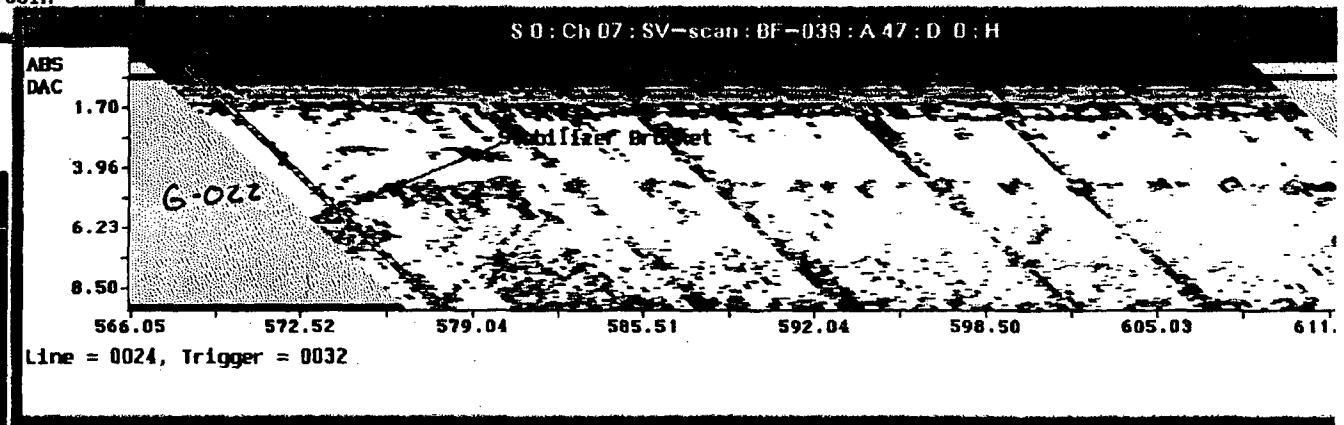

Ch 13 : SV-scan Zoom
1.56
2.92
4.28
5.64
7.00
8.35
9.71
Shear redirect
Flange radius
G-021
671.02
675.03
679.04
683.02
687.03
691.04
695.02

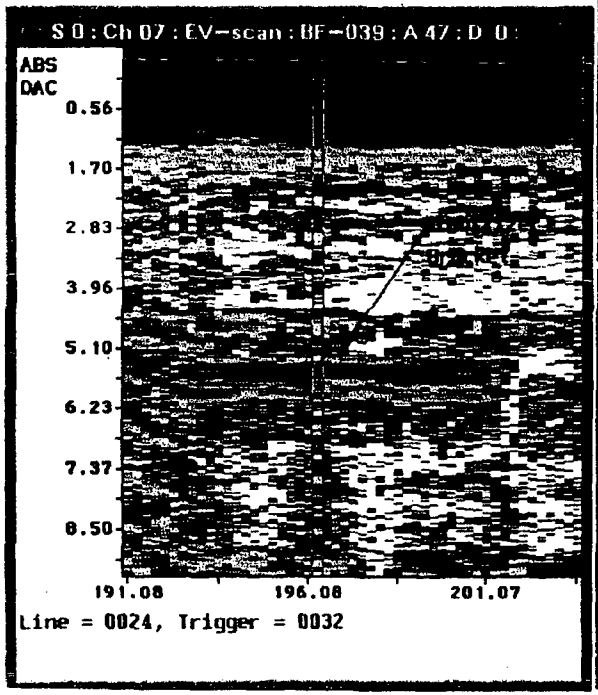

S 0 : Scale
32.3
36.6
41.0
45.3
49.7
54.0
58.4
62.7
67.1
71.4
75.8
80.1
84.5
88.8
93.2
100%
50%
20%
DAC

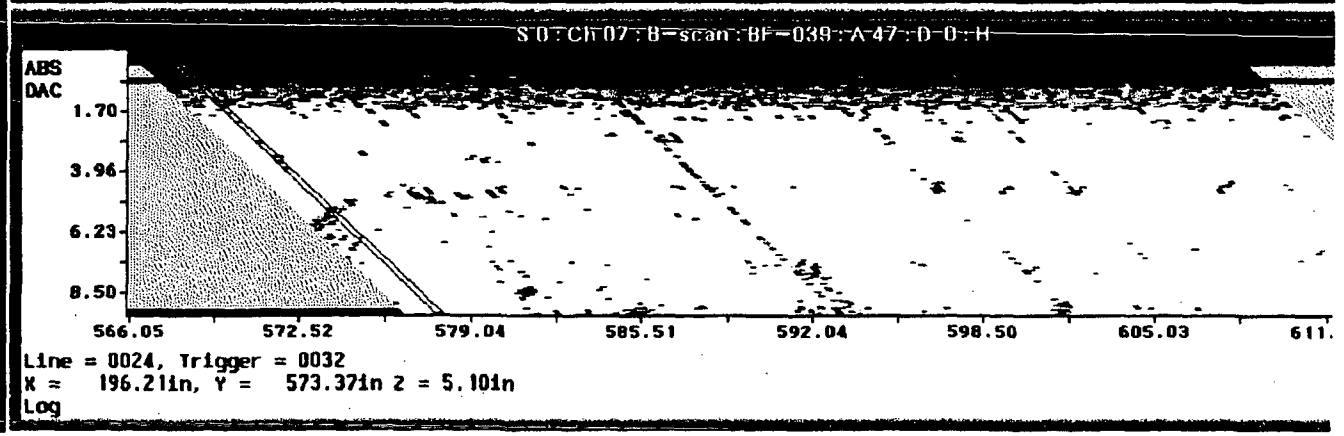

S 0 : Ch 07 : AMP C-scan : BF-0
L[024]
T[032]
ABS
600.30
594.80
589.30
583.80
578.30
572.80
567.30
561.80
188.21
196.21
204.21
212.21
X = 196.21in, Y = 567.80in
DAC-LOG

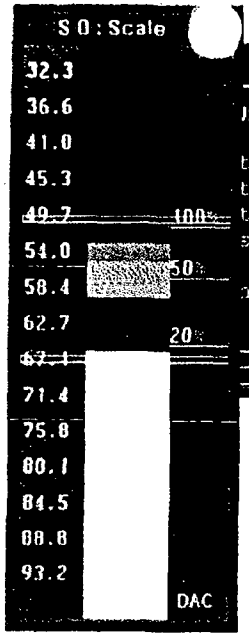

hpte

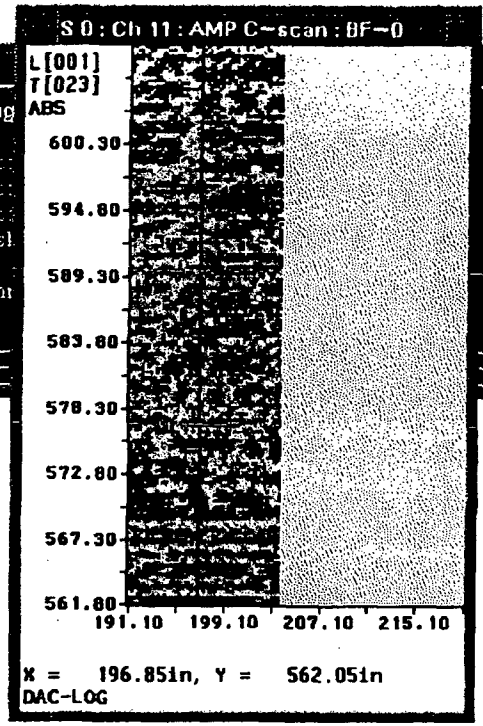

Slot 0 : A-scan : BF-039 : A 47 : D 0
L[024]
T[032]
B[000]
FREEZE
AUTO SCALE
CHAN 07
VIDEO
LINEAR
TIME SCALE
TRACE OFF
SCRN GAIN
100% DAC
VERT OFF
-A- GATE
-B- GATE
-C- GATE
-I- GATE
-BE- GATE
160%
80%
40%
20%
Stabilizer Bracket
G-022
-0.84
0.66
2.16
3.66
5.17
6.67
8.17
9.67
11.18
12.68
metal path inches
Dist/Time Start = 8.04, End = 8.04, Diff = 0.00
Amplitude Start = 73.07, End = 73.07, Diff = 0.00, Mean = 73.07

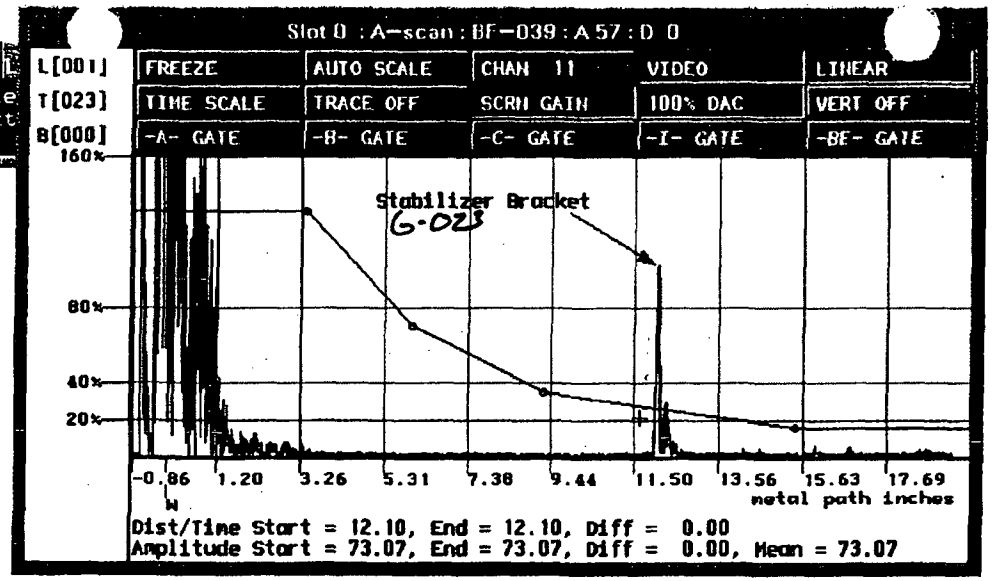

S 0 : Ch 07 : SV-scan : BF-039 : A 47 : D 0 : H
ABS
DAC
1.70
3.96
6.23
8.50
G-022
566.05
572.52
579.04
585.51
592.04
598.50
605.03
Line = 0024, Trigger = 0032

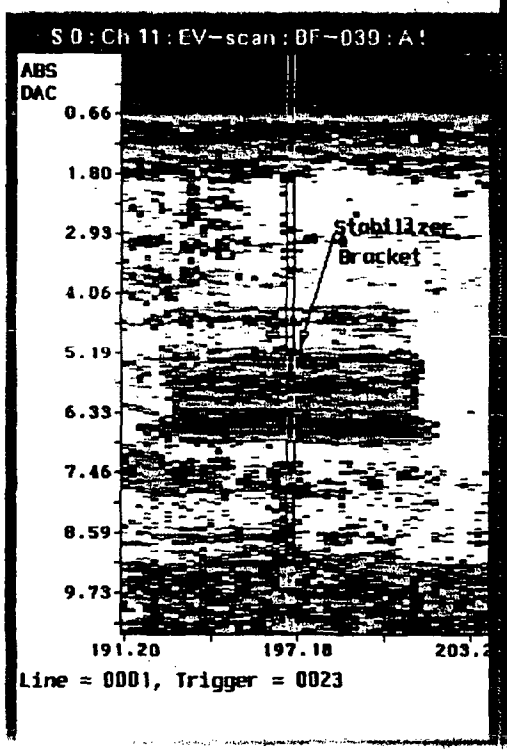

S 0 : Ch 07 : EV-scan : BF-039 : A 47 : D 0
ABS
DAC
0.56
1.70
2.83
3.96
5.10
6.23
7.37
8.50
191.08
196.08
201.07
Line = 0024, Trigger = 0032

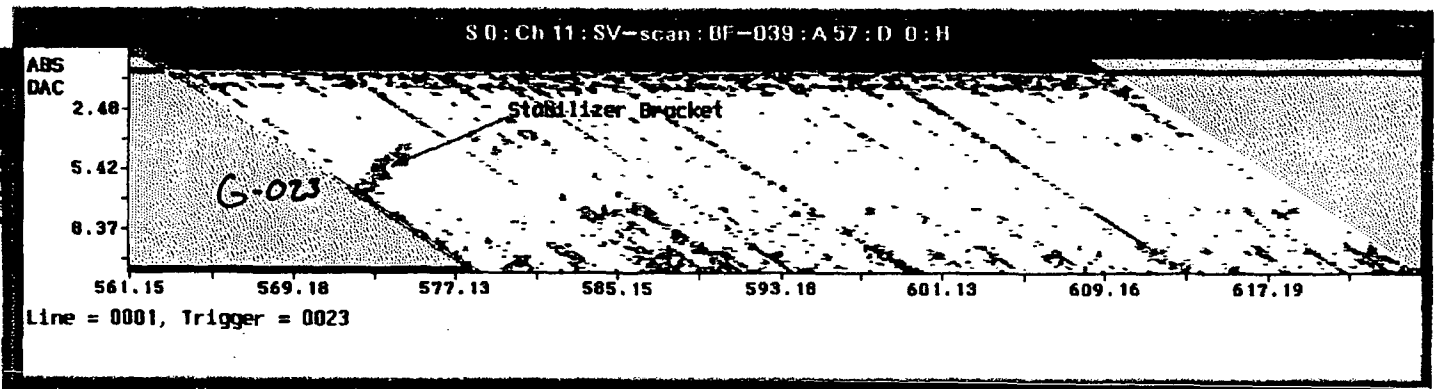

S 0 : Ch 07 : B-scan : BF-039 : A 47 : D 0 : H
ABS
DAC
1.70
3.96
6.23
8.50
566.05
572.52
579.04
585.51
592.04
598.50
605.03
Line = 0024, Trigger = 0032
X = 196.21in, Y = 573.37in Z = 5.10in
Log

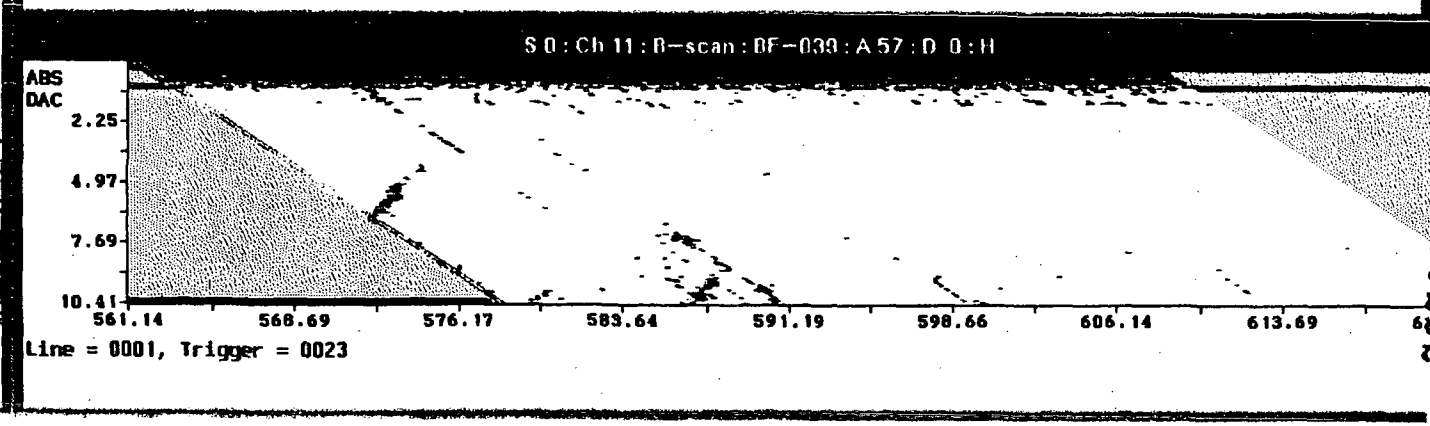


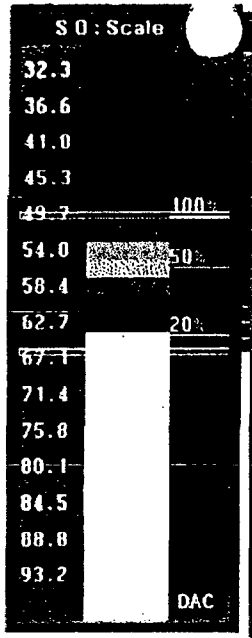


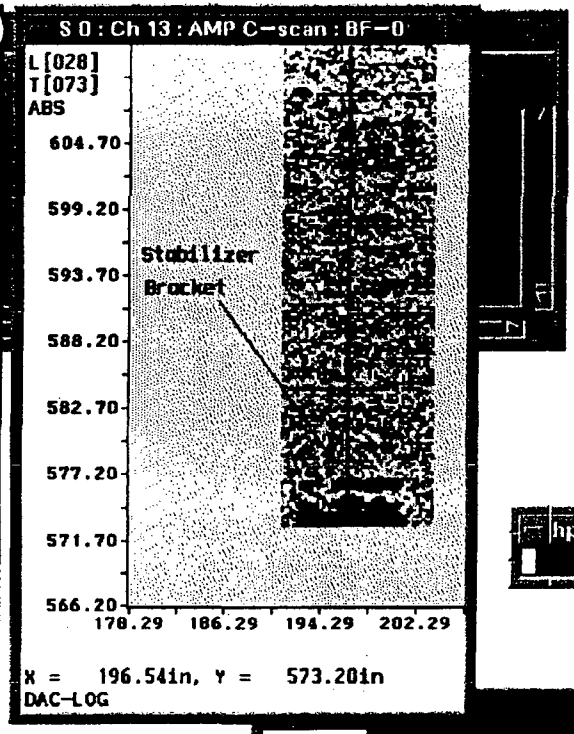


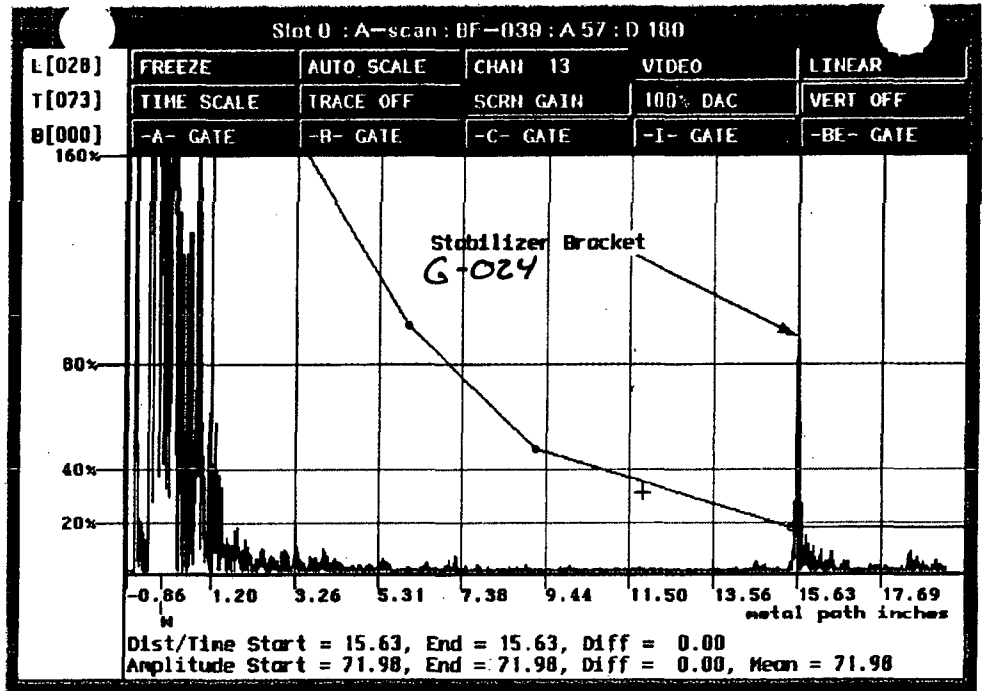


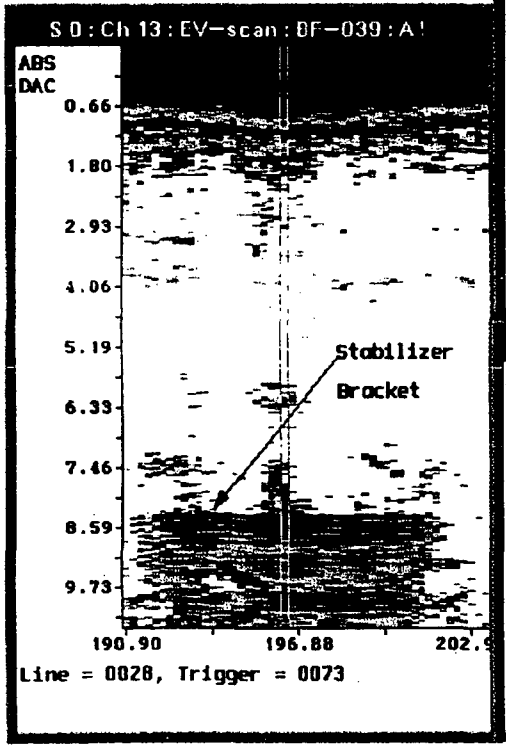


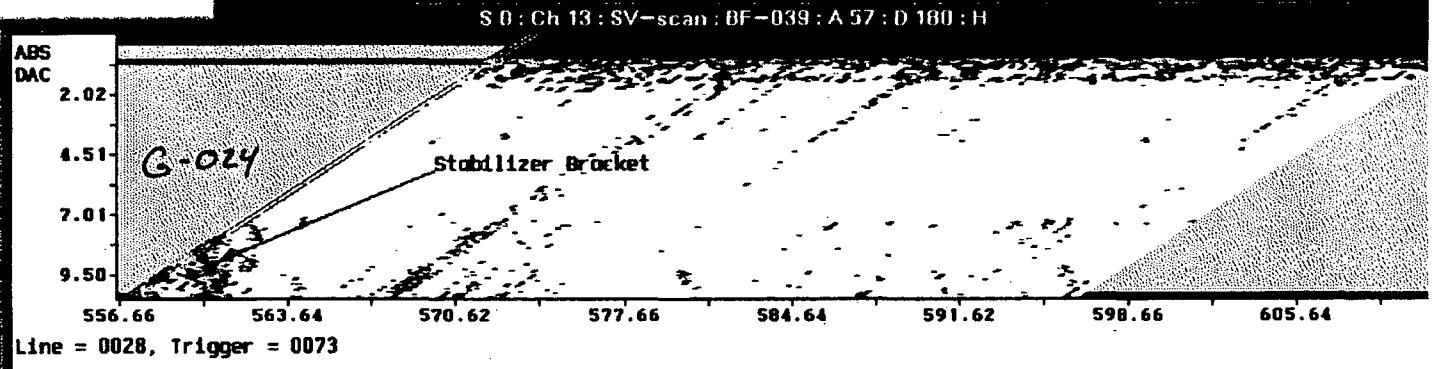


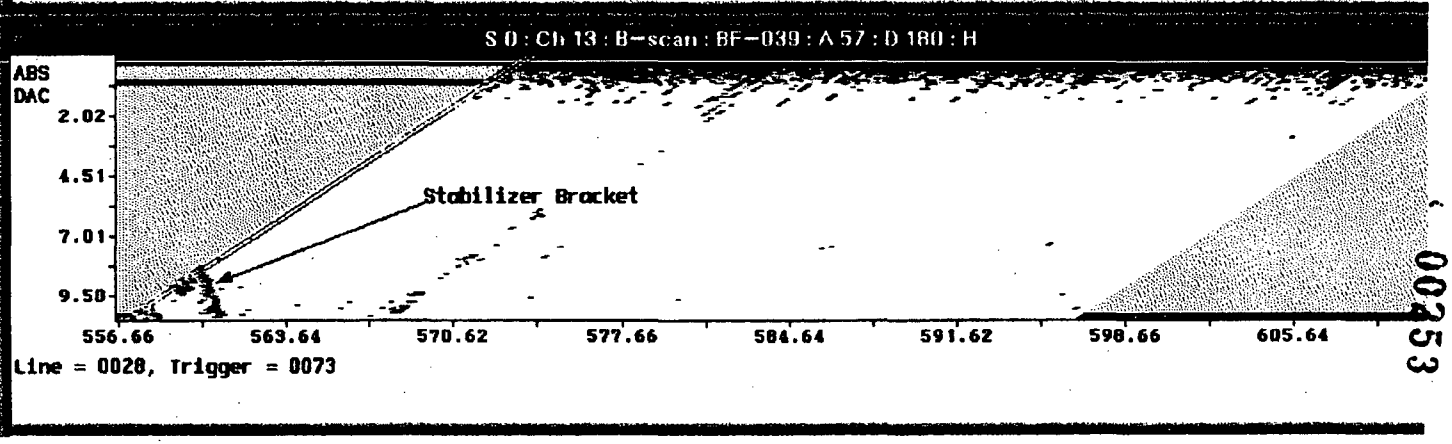




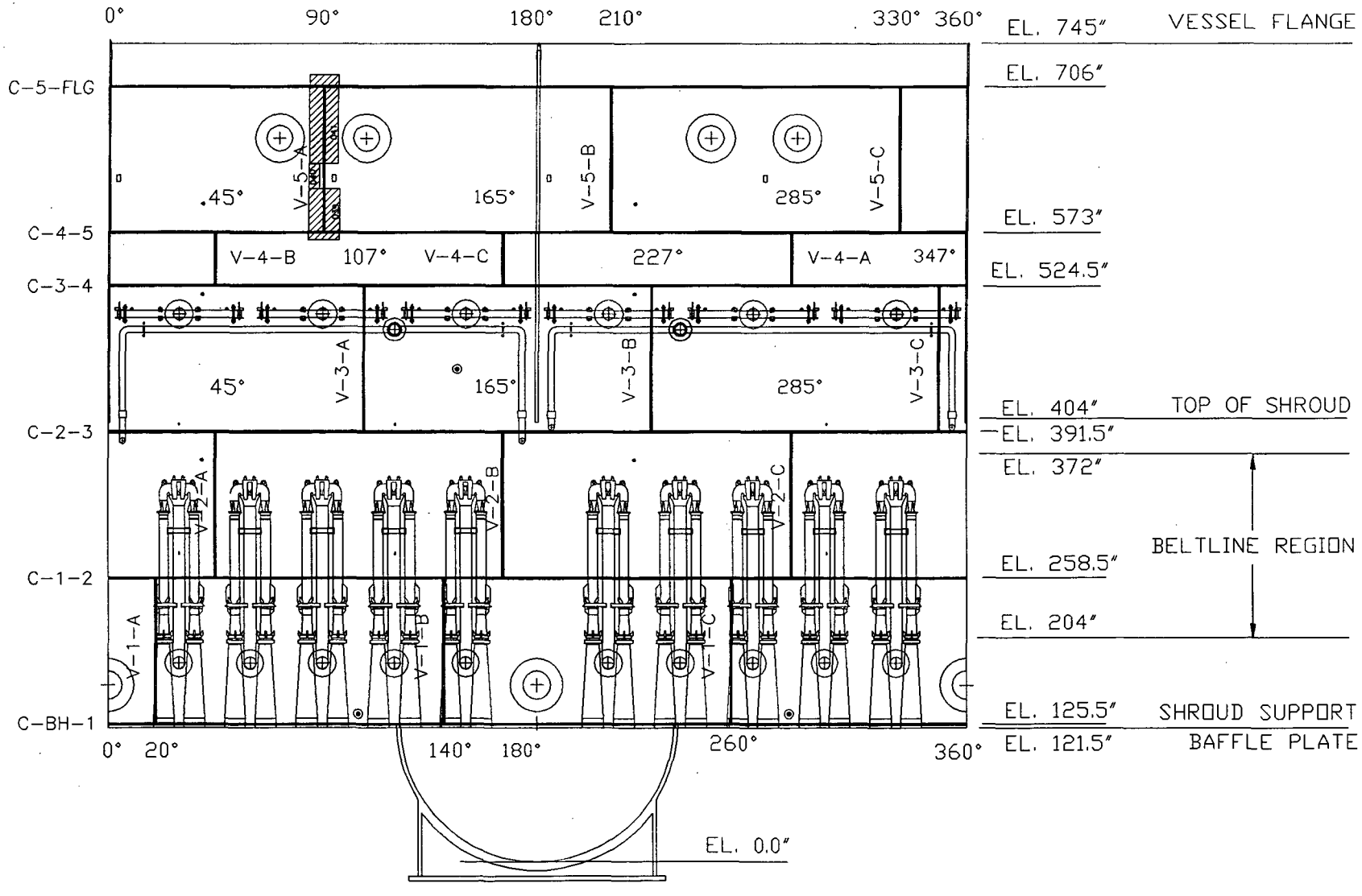




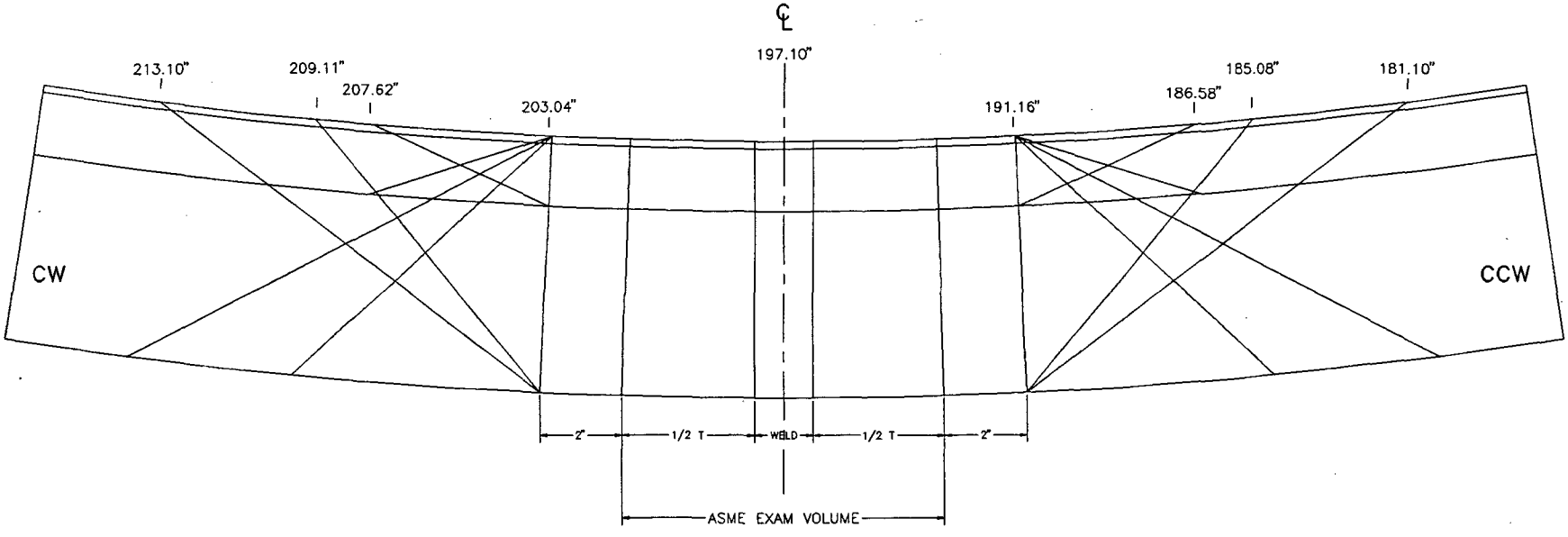




BROWNS FERRY UNIT-3 WELD LOCATIONS



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	191.16	203.04
2	0 W	90	191.16	203.04
3	70 UP	0	191.16	203.04
4	70 CW	90	186.58	203.04
5	70 DN	180	191.16	203.04
6	70 CCW	270	191.16	207.62
7	45 UP	0	191.16	203.04
8	45 CW	90	185.08	203.04
9	45 DN	180	191.16	203.04
10	45 CCW	270	191.16	209.11
11	60 UP	0	191.16	203.04
12	60 CW	90	181.10	203.04
13	60 DN	180	191.16	203.04
14	60 CCW	270	191.16	213.10
15	0 BM	0	191.16	213.10
16	0 BM	90	181.10	203.04

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

00255

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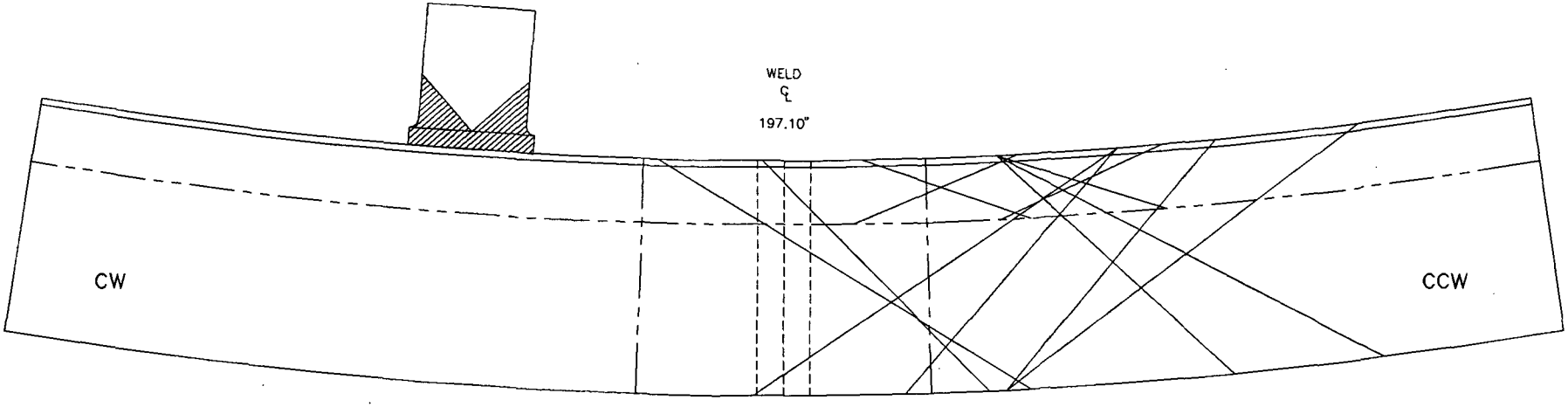
20 of 27



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

GE NUCLEAR ENERGY	BROWNS FERRY UNIT 3	STM DYR BRKT AUTOMATED SCAN LIMIT	SCALE: NONE	DWG. V5ADYBKT	REV. 0

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GE Nuclear Energy

ULTRASONIC EXAMINATION DATA SHEET

(MANUAL RPV VESSEL WELDS)

SITE: Browns Ferry	PROCEDURE NO.: GE-UT-300	REPORT NO.: E-17
UNIT: 3	REVISION NO.: 6	DATA SHEET NO.: D-003
PROJECT NO.: 00387	FRR NO.: 004	CALIBRATION SHEET NO.: 0° C-104 45° N/A 60° N/A

SYSTEM: RPV EXAM SURFACE TEMP: 69 °F COUPLANT: ULTRAGEL II EXAM START: 1638

WELD ID: V-5-A THERMOMETER S/N: L0281CL BATCH NO.: 093011 EXAM END.: 1652

BEAM ANGLE: ☒ 0° ☐ 45° ☐ 60° ☐ OTHER N/A SURFACE CONDITION: ☒ SMOOTH ☐ GROUND ☐ OTHER N/A

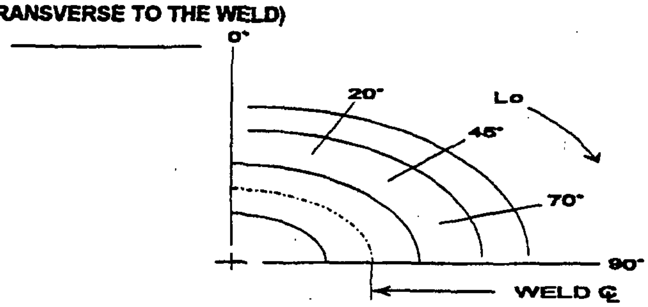
MATERIAL TYPE: ☒ CS ☐ SS ☐ OTHER N/A EXAM SURFACE: ☐ ID ☒ OD

Lo REFERENCE Toe of Weld C-5-FLG 0° SCAN SENSITIVITY 48.6 dB

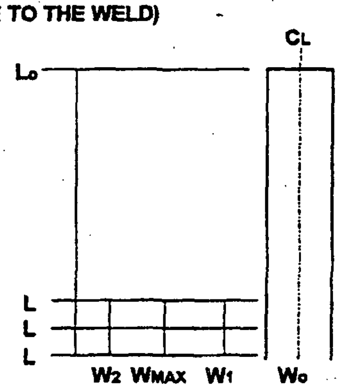
Wo REFERENCE Weld ℄ 45° SCAN SENSITIVITY N/A dB

60° SCAN SENSITIVITY N/A dB

NOZZLE WELD REFERENCE SYSTEM (Lo AND Wo ARE INTERCHANGED WHEN SCANNING FOR REFLECTORS TRANSVERSE TO THE WELD)



WELD REFERENCE SYSTEM (Lo AND Wo ARE INTERCHANGED WHEN SCANNING FOR REFLECTORS TRANSVERSE TO THE WELD)



L/R	% DAC (MAX)	W1 20% DAC	WF1 50% DAC	WM MAX DAC	WF2 50% DAC	W2 20% DAC	MP1 20% DAC	MPF1 50% DAC	MP MAX DAC	MPF2 50% DAC	MP2 20% DAC	CONTINUOUS (C) OR SPOT (S) TRANSVERSE (T) OR PARALLEL (P)	CW/CCW TOP OR BOTTOM
		NO RECORDABLE INDICATIONS, WELD EXAM											

REMARKS: EXAMINED FROM AN Elevation OF 599" TO 706"

[signature] EXAMINED BY	II LEVEL	10-18-93 DATE	[signature] UTILITY REVIEW	1/26/94 DATE
[signature] GE REVIEWED BY		12/1/93 DATE	[signature] ANII REVIEW	8/26/94 DATE

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GE Nuclear Energy

ULTRASONIC EXAMINATION DATA SHEET
(MANUAL RPV 0° BASE MATERIAL)

SITE BFNP	PROCEDURE NO. GE-UT-300	REPORT NO. E-17
UNIT 3	REVISION 6	DATA SHEET NO. D-004
PROJECT NO. 00387	FRR NO. 004	CALIBRATION SHEET 0° C-104

SYSTEM RPV SURFACE TEMP 69 °F COUPLANT ULTRAGEL II EXAM START 1554

WELD ID V-5-A THERMOMETER S/N L0281CL BATCH NO. 093011 EXAM END 1603

SURFACE CONDITION: ☑ SMOOTH ☐ GROUND ☐ OTHER N/A

MATERIAL TYPE: ☑ CS ☐ SS ☐ OTHER N/A EXAM SURFACE: ☐ ID ☑ OD

Lo REFERENCE TOE OF C-5 FLG Wo REFERENCE WELD ℄ 0° SCANNING SENSITIVITY 33 dB

IND. No.	L	% LOSS BW	AMP	W1 50%	W1 100%	W2 100%	W2 50%	CW/CCW TOP/BOTTOM
* 1	70.7	100	N/A	N/A	7.0	10.5	N/A	CW
	77.0	100	N/A	N/A	7.0	10.5	N/A	CW

REMARKS EXAMINED FROM ELEVATION OF 599" TO 706", BASE METAL EXAM
* LOSS OF BACKWALL DUE TO STEAM DRYER LUG

EXAMINED BY	II LEVEL	10-18-93 DATE	UTILITY REVIEW	1-26-94 DATE	PAGE: 1 OF: 1
GE REVIEWED BY		12/1/93 DATE	ANII REVIEW	8/26/94 DATE	FORM UT_OBASE REV.0

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GE Nuclear Energy

ULTRASONIC EXAMINATION DATA SHEET

(MANUAL RPV VESSEL WELDS)

SITE: BROWNS FERRY | PROCEDURE NO.: GE-UT-300 | REPORT NO.: E-17

UNIT: 3 | REVISION NO.: 6 | DATA SHEET NO.: D-005

PROJECT NO.: 00387 | FRR NO.: 004 | CALIBRATION SHEET NO.: 0° N/A

45° C-105 60° N/A

SYSTEM: RPV | EXAM SURFACE TEMP: 69 °F | COUPLANT: ULTRAGEL II | EXAM START: 1655

WELD ID: V-5-A | THERMOMETER S/N: L0281CL | BATCH NO.: 093011 | EXAM END.: 1734

BEAM ANGLE: ☐ 0° ☒ 45° ☐ 60° ☐ OTHER N/A | SURFACE CONDITION: ☒ SMOOTH ☐ GROUND ☐ OTHER N/A

MATERIAL TYPE: ☒ CS ☐ SS ☐ OTHER N/A | EXAM SURFACE: ☐ ID ☒ OD

Lo REFERENCE Toe of Weld C-5-FLG.

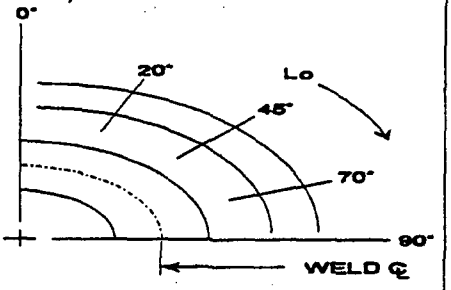
Wo REFERENCE WELD ℄

0° SCAN SENSITIVITY N/A dB

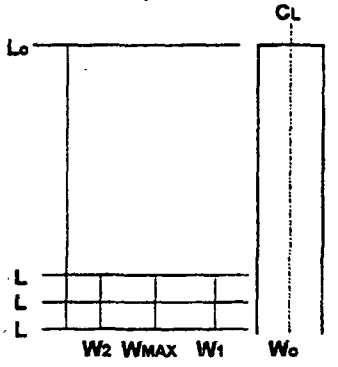
45° SCAN SENSITIVITY 57.2 dB

60° SCAN SENSITIVITY N/A dB

NOZZLE WELD REFERENCE SYSTEM (Lo AND Wo ARE INTERCHANGED WHEN SCANNING FOR REFLECTORS TRANSVERSE TO THE WELD)



WELD REFERENCE SYSTEM (Lo AND Wo ARE INTERCHANGED WHEN SCANNING FOR REFLECTORS TRANSVERSE TO THE WELD)



L/R	% DAC (MAX)	W1 20% DAC	WF1 50% DAC	WM MAX DAC	WF2 50% DAC	W2 20% DAC	MP1 20% DAC	MPF1 50% DAC	MP MAX DAC	MPF2 50% DAC	MP2 20% DAC	CONTINUOUS (C) OR SPOT (S) TRANSVERSE (T) OR PARALLEL (P)	CW/CCW TOP OR BOTTOM
		NO RECORDABLE INDICATIONS.											

REMARKS: EXAMINED FROM AN Elevation of 599" TO 706"

EXAMINED BY [signature] LEVEL II DATE 10-18-93

GE REVIEWED BY [signature] DATE 12/1/93

UTILITY REVIEW [signature] DATE 1-26-94

ANII REVIEW [signature] DATE 8/26/94

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GE Nuclear Energy

ULTRASONIC EXAMINATION DATA SHEET

(MANUAL RPV VESSEL WELDS)

SITE: BROWNS FERRY | PROCEDURE NO.: GE-UT-300 | REPORT NO.: E-17

UNIT: 3 | REVISION NO.: 6 | DATA SHEET NO.: D-006

PROJECT NO.: 00387 | FRR NO.: 004 | CALIBRATION SHEET NO.: 0° N/A

45° N/A 60° C-106

SYSTEM: RPV | EXAM SURFACE TEMP: 69 °F | COUPLANT: Ultragel II | EXAM START: 1536

WELD ID: V-5-A | THERMOMETER S/N: L02810L | BATCH NO.: 093011 | EXAM END.: 1553

BEAM ANGLE: ☐ 0° ☐ 45° ☒ 60° ☐ OTHER N/A | SURFACE CONDITION: ☒ SMOOTH ☐ GROUND ☐ OTHER N/A

MATERIAL TYPE: ☒ CS ☐ SS ☐ OTHER N/A | EXAM SURFACE: ☐ ID ☒ OD

Lo REFERENCE TOE OF WELD C-5-FLG.

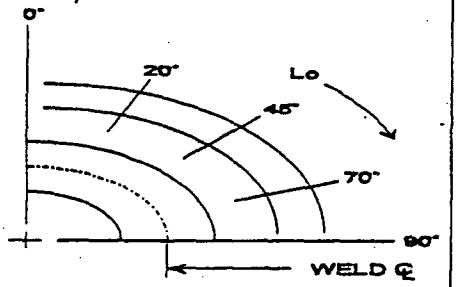
Wo REFERENCE WELD ℄

0° SCAN SENSITIVITY N/A dB

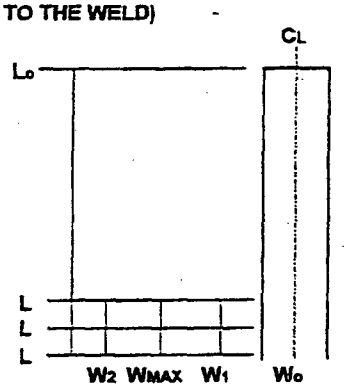
45° SCAN SENSITIVITY N/A dB

60° SCAN SENSITIVITY 60 dB

NOZZLE WELD REFERENCE SYSTEM (Lo AND Wo ARE INTERCHANGED WHEN SCANNING FOR REFLECTORS TRANSVERSE TO THE WELD)



WELD REFERENCE SYSTEM (Lo AND Wo ARE INTERCHANGED WHEN SCANNING FOR REFLECTORS TRANSVERSE TO THE WELD)



L/R	% DAC (MAX)	W1 20% DAC	WF1 50% DAC	WM MAX DAC	WF2 50% DAC	W2 20% DAC	MP1 20% DAC	MPF1 50% DAC	MP MAX DAC	MPF2 50% DAC	MP2 20% DAC	CONTINUOUS (C) OR SPOT (S) TRANSVERSE (T) OR PARALLEL (P)	CW/CCW TOP OR BOTTOM
		NO RECORDABLE INDICATIONS.											

REMARKS: EXAMINED FROM AN ELEVATION OF 599" TO 706"

EXAMINED BY	LEVEL II	DATE 10-18-93	UTILITY REVIEW	DATE 1-26-94	PAGE: 1 OF: 1
GE REVIEWED BY		DATE 12/1/93	ANII REVIEW	DATE 8/26/94	

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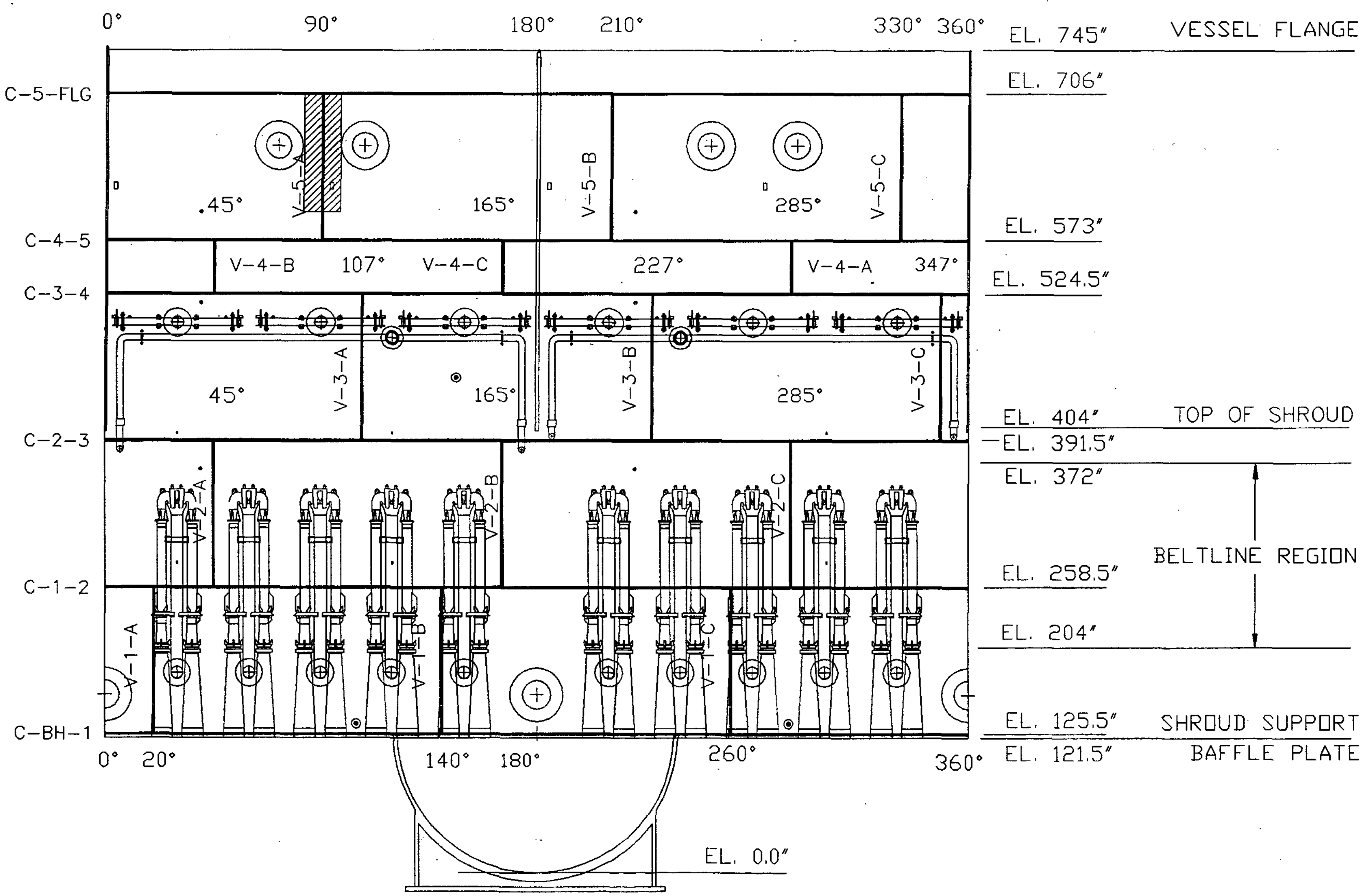
BROWNS FERRY UNIT-3 WELD LOCATIONS



GE NUCLEAR ENERGY	BROWNS FERRY UNIT 3	VESSEL ROLLOUT & MANUAL PICKUP AREAS	BF-3-VMA	REV 0

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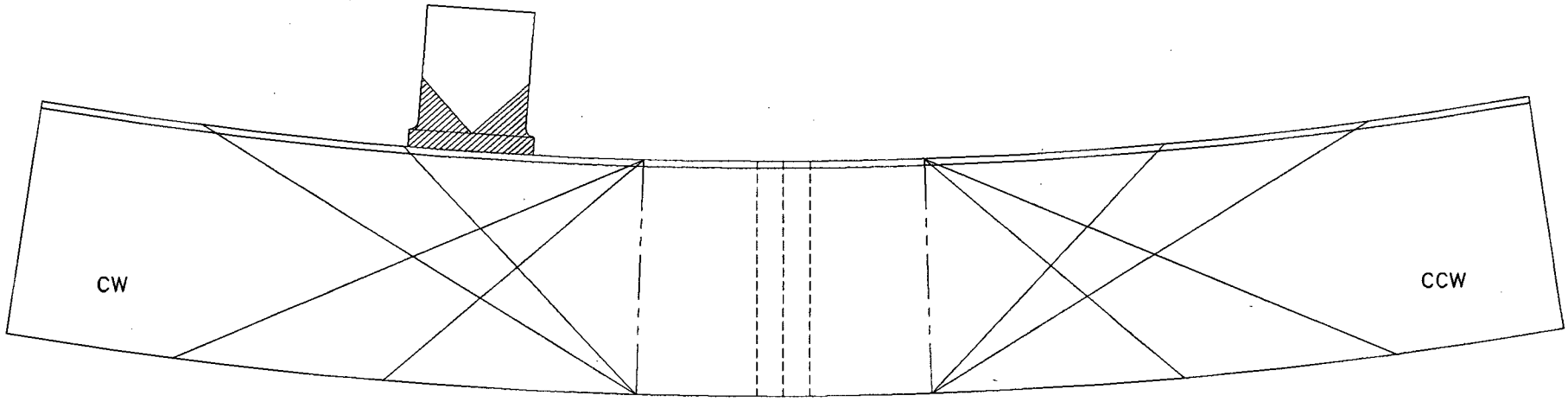

207.00"

WELD
℄

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

GE NUCLEAR ENERGY	BROWNS FERRY UNIT 3	WELD V-5-A MANUAL PICKUP	SCALE: NONE	DWG. MANV-5-A	REV. 0