

R1163



GE Nuclear Energy

# GERIS 2000 Examination Summary Sheet

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

**System:** Reactor Pressure Vessel

**Weld ID:** V-3-A

**ASME Code Category:** B-A

**Calibration Sheets:** C-004, C-115, C-116 and C-117

**Supporting Data:** Examination Data Sheets E-09-00 thru E-09-03, Indication Data Sheets 09-001 thru 09-004, Sheets, Screen Prints, Exam Patch Location Map, Exam Coverage Plots, GERIS 2000 Setup Records and Manual Examination Data Sheets D-030, D-031, D-038 and D-042.

## Examination Summary

The ultrasonic examination of weld V-3-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 feedwater sparger and core spray downcomer. Areas that could not be examined using the GERIS 2000 and accessible from the outside surface were examined by the manual technique utilizing Procedure No. GE-UT-300, Rev. 6, FRR-004. 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 and 45° shear wave scans that were evaluated and found to be acceptable per the referencing Code section.

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 examine the weld and adjacent base material.

No indications were recorded with the manual technique.

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

GERIS Analyst: *Ch MA*

GE Reviewer: *Deena Kimball*

LEVEL: *III* DATE: *12/15/93*

LEVEL: *III* DATE: *12-15-93*

UTILITY Review: *J. Woody*

ANII Review:

TITLE: *III* DATE: *1/26/94*

TITLE: *Albert Ladd* DATE: *9/8/94*

R1163



GE Nuclear Energy

# GERIS 2000 Examination Data Sheet

**Project:** TVA, Browns Ferry, Unit 3  
**Weld ID:** V-3-A  
**Exam Data Sheet:** E-09-00

**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-051R	E-09-03	10/15/93	1515	1550	220.5	248.25	515.25	535.50	51B	ROF
BF-052R	E-09-01	10/18/93	0907	1019	220.5	248.25	424.00	470.00	67A	ROF
BF-053	E-09-02	10/27/93	1331	1558	215.25	253.25	383.75	426.00	104A	ROF
BF-051	E-09-03	10/14/93	0155	0235	220.5	248.25	515.25	535.50	48A	JCG
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~

**Comments:** BF-051 was used for Ch. 14, 15 and 16 due to store process errors on BF-051R.

**Limitations:** Examination limited due to Feedwater Sparger and Core Spray Downcomer.

Analyst: CA May  
 Level: III      Date: 12/12/93

Reviewed By: Jan C. D'...  
 Level: II      Date: 12/13/93

R1163



GE Nuclear Energy

# GERIS 2000 Examination Data Sheet

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

Exam Data Sheet No.: E-09-01  
Patch ID: BF-052R  
Ind. Data Sheet Series: 09-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	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~

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: CA MA

Reviewed By: J. C. [Signature]

Level: III Date: 12/12/93

Level: II Date: 12/13/93

R1163



GE Nuclear Energy

# GERIS 2000 Examination Data Sheet

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

**Exam Data Sheet No.:** E-09-02  
**Patch ID:** BF-053  
**Ind. Data Sheet Series:** 09-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	09-001	09-002	~	~	~
4	70 RL	90 CW	NRI	~	~	~	~	~
5	70 RL	180 DN	NRI	~	~	~	~	~
6	70 RL	270 CCW	NRI	~	~	~	~	~
7	45 RS	0 UP	1	09-003	~	~	~	~
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	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~

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: CA MS

Reviewed By: [Signature]

Level: III Date: 12/12/93

Level: III Date: 12/13/93

R1163



GE Nuclear Energy

# GERIS 2000 Examination Data Sheet

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

**Exam Data Sheet No.:** E-09-03  
**Patch ID:** BF-051R  
**Ind. Data Sheet Series:** 09-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	1	09-004	~	~	~	~
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	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~

**Comments:** Ch. 14, 15 and 16 from BF-051 due to store process errors.

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: CE Mas

Reviewed By: J. C. D. [Signature]

Level: III Date: 12/12/93

Level: II Date: 12/13/93

R1163



**GE Nuclear Energy**

# GERIS 2000 Indication Data Sheet

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

**Weld ID:** V-3-A

**Cal. ID:** C-004

**Exam Data Sheet No.:** E-09-02

**Patch ID:** BF-053

**Ind. Data Sheet No.:** 09-001

**Indication:** 09-001

**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
28.6%	232.75	~	~	~	~	389.20	28.96	~	~	~	~	~
44.3%	233.00	~	~	~	~	389.20	28.80	~	~	~	~	~
41.6%	233.25	~	~	~	~	389.20	28.60	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~

**Comments:** No apparent tip signals.

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

Analyst: CB MA

Level: III Date: 12/16/93

Reviewed By: R.O. Forman

Level: II Date: 12-16-93

R1163



GE Nuclear Energy

# GERIS 2000 Indication Data Sheet

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

**Exam Data Sheet No.:** E-09-02  
**Patch ID:** BF-053  
**Ind. Data Sheet No.:** 09-002

**Indication:** 09-002      **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
23.7%	239.75	~	~	~	~	390.20	26.48	~	~	~	~	~
30.4%	240.00	~	~	~	~	390.20	26.40	~	~	~	~	~
26.9%	240.25	~	~	~	~	390.20	26.40	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~

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

Analyst: Q M  
Level: III      Date: 12/16/93

Reviewed By: R.O. Foman  
Level: II      Date: 12-16-93



GE Nuclear Energy

# GERIS 2000 Indication Data Sheet

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

Exam Data Sheet No.: E-09-02  
Patch ID: BF-053  
Ind. Data Sheet No.: 09-003

Indication: 09-003

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
23.7%	239.85	391.25	2.13	~	~	391.50	1.94	~	~	391.75	1.76	~
36.7%	240.10	391.25	2.18	~	~	391.50	2.00	~	~	392.00	1.59	~
22.3%	240.35	~	~	~	~	391.50	1.94	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~

Comments: No apparent tip signals.  
Thruwall determined by the Reg. Guide 20% beam spread corrected method.  
Indication has no determinable thruwall dimension and is acceptable to IWB-3510-1.

TW = 0                  L = 0.5                  S = 1.41

Analyst: CG Ma  
Level: III                  Date: 12/12/93

Reviewed By: John C. ...  
Level: III                  Date: 12/13/93



R1163



GE Nuclear Energy

# GERIS 2000 Indication Data Sheet

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

Exam Data Sheet No.: E-09-02  
Patch ID: BF-051R  
Ind. Data Sheet No.: 09-004

Indication: 09-004

Channel: 5

Angle: 70

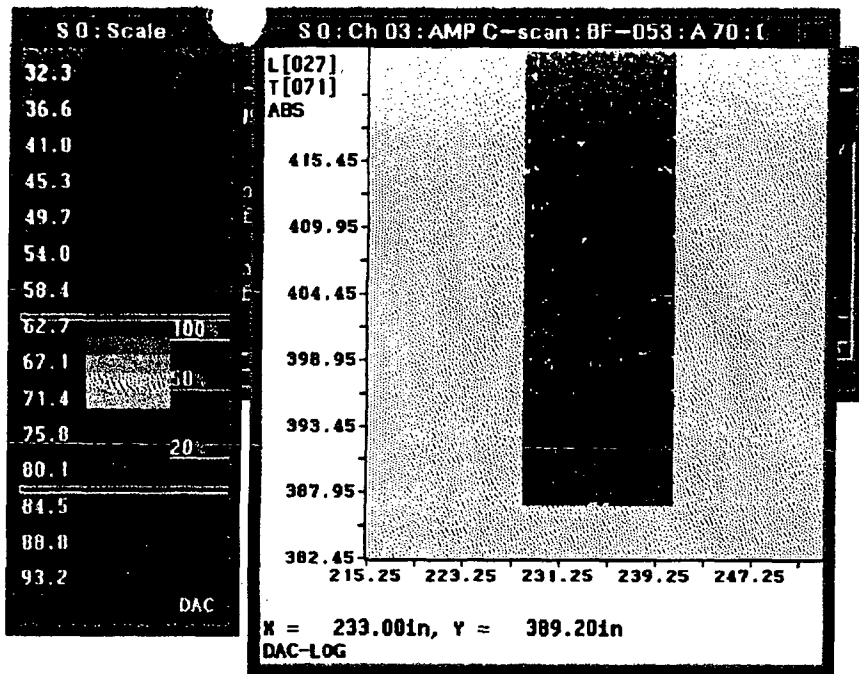
Direction: 180

Amp.	X	20% Min Y	TOF	50% Min Y	TOF	@ Max Y	TOF	50% Max Y	TOF	20% Max Y	TOF	Remarks
30.4%	229.60	~	~	~	~	527.20	18.16	~	~	~	~	~
47.2%	229.85	~	~	~	~	527.20	18.08	~	~	~	~	~
60.6%	230.10	~	~	~	~	526.95	16.16	~	~	~	~	~
28.6%	230.35	~	~	~	~	526.95	16.32	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~	~	~

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

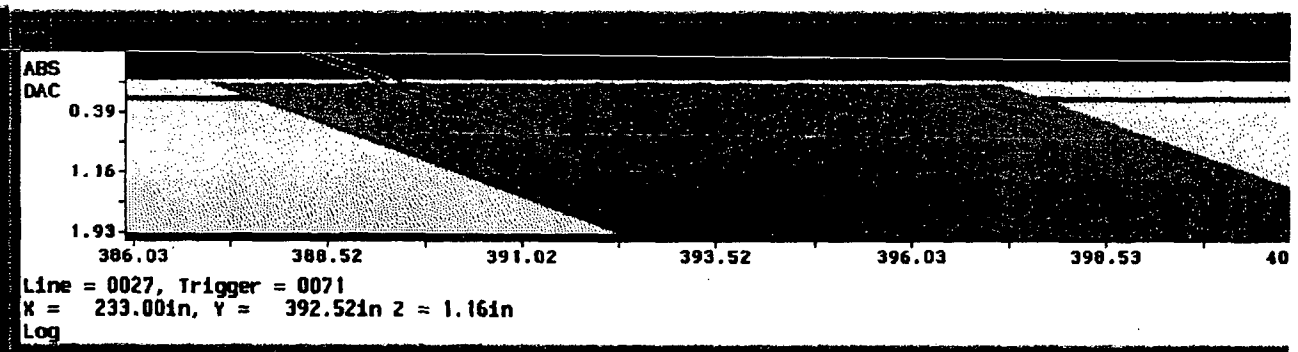
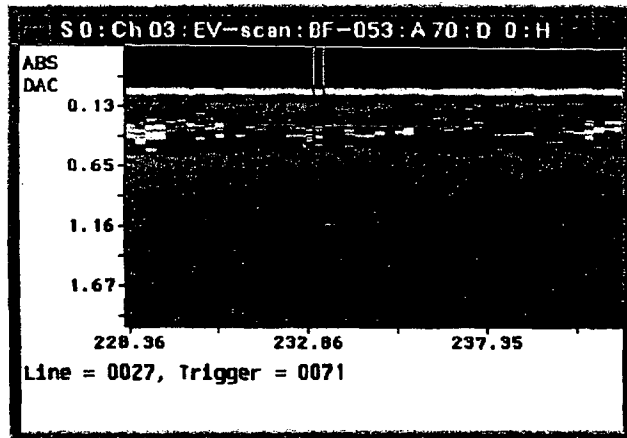
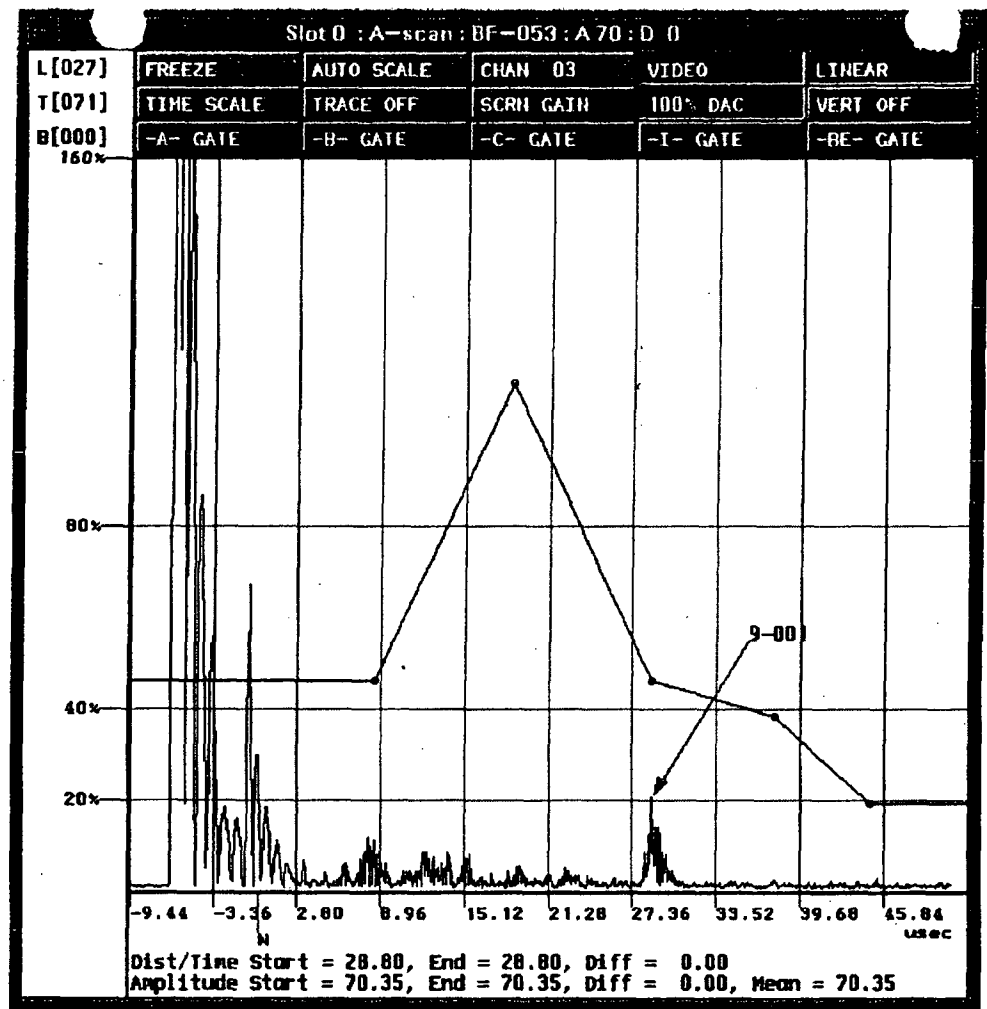
Analyst: *CG Meadows*  
Level: *III*      Date: *12/12/93*

Reviewed By: *Joe C. Davis*  
Level: *II*      Date: *12/13/93*



Top Terminal  
on 3/9-001

# 00078



10 OF 21

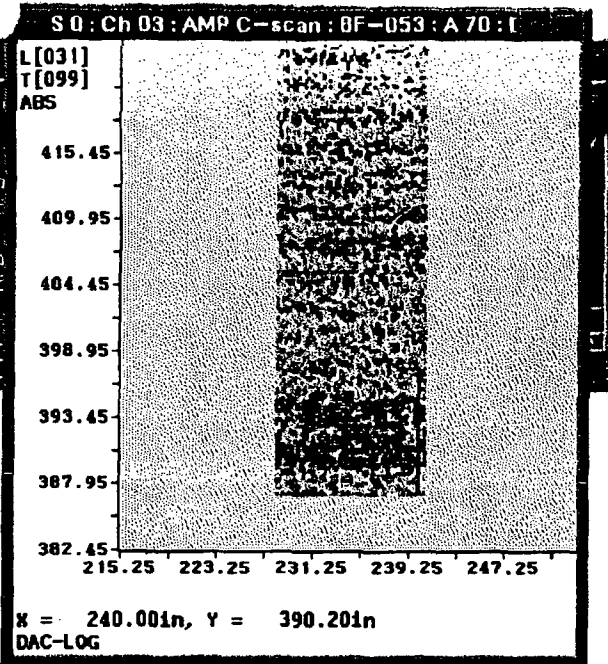
R1163

S 0 : Scale

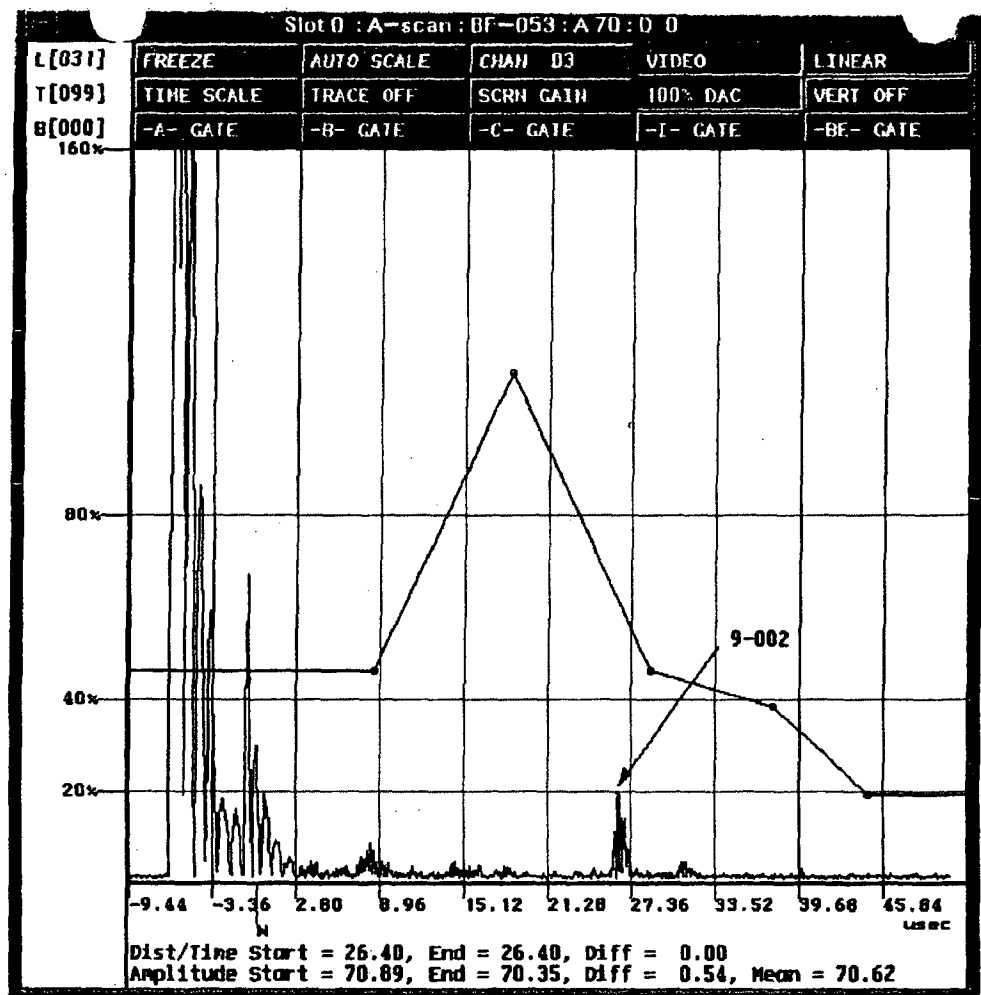
32.3  
36.6  
41.0  
45.3  
49.7  
54.0  
58.4  
62.7  
67.1  
71.4  
75.0  
80.1  
84.5  
88.0  
93.2

100  
50  
20

DAC

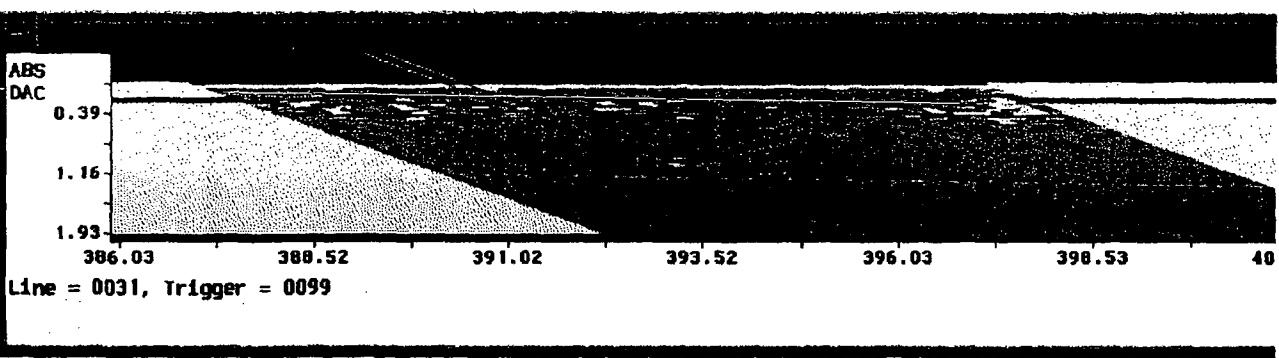
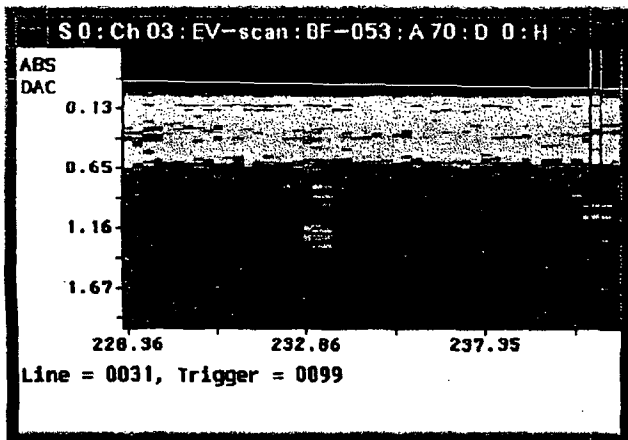


Top Terminal  
03/8-002

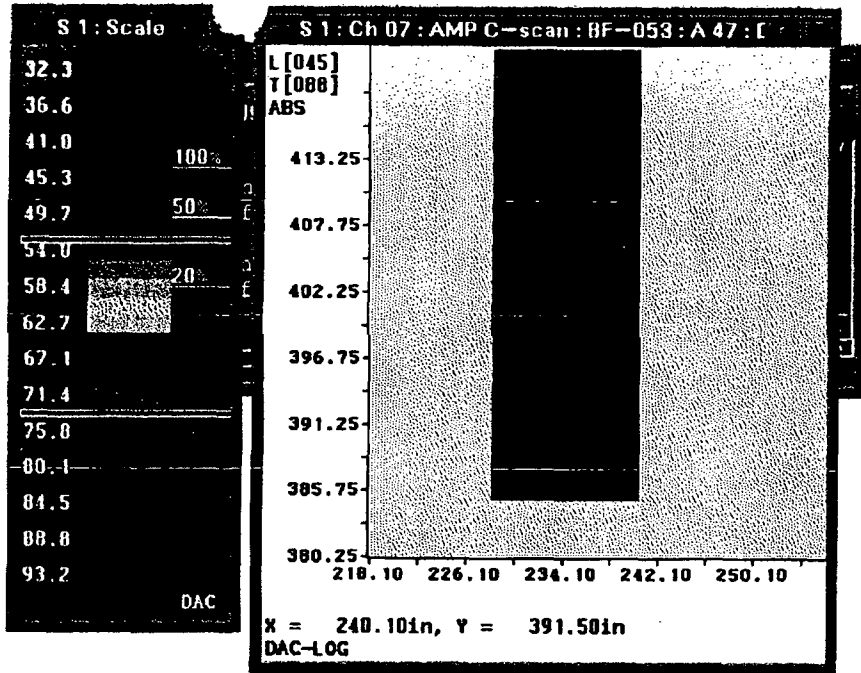


R1163 0000 0078

\* 00079

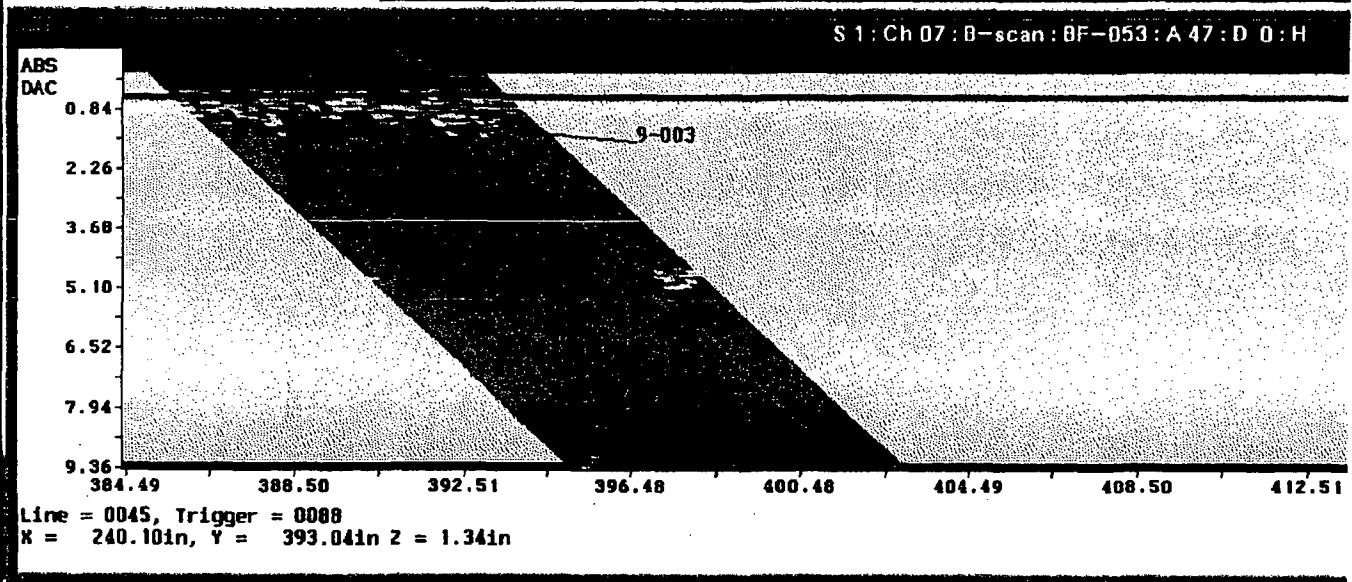
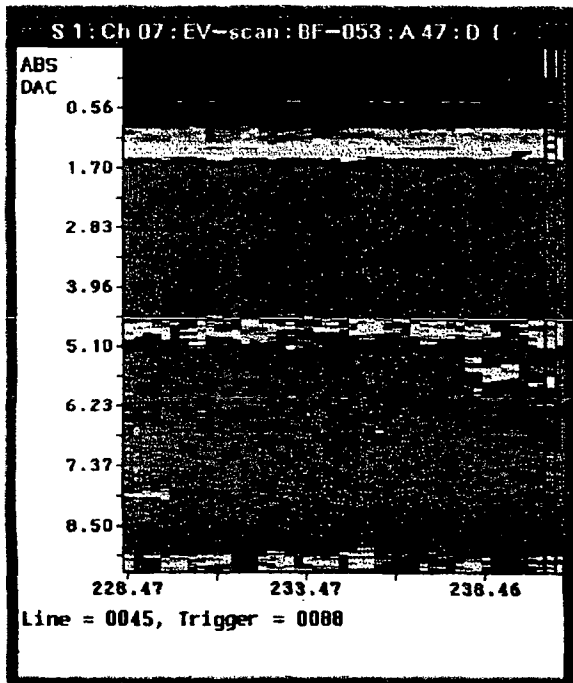
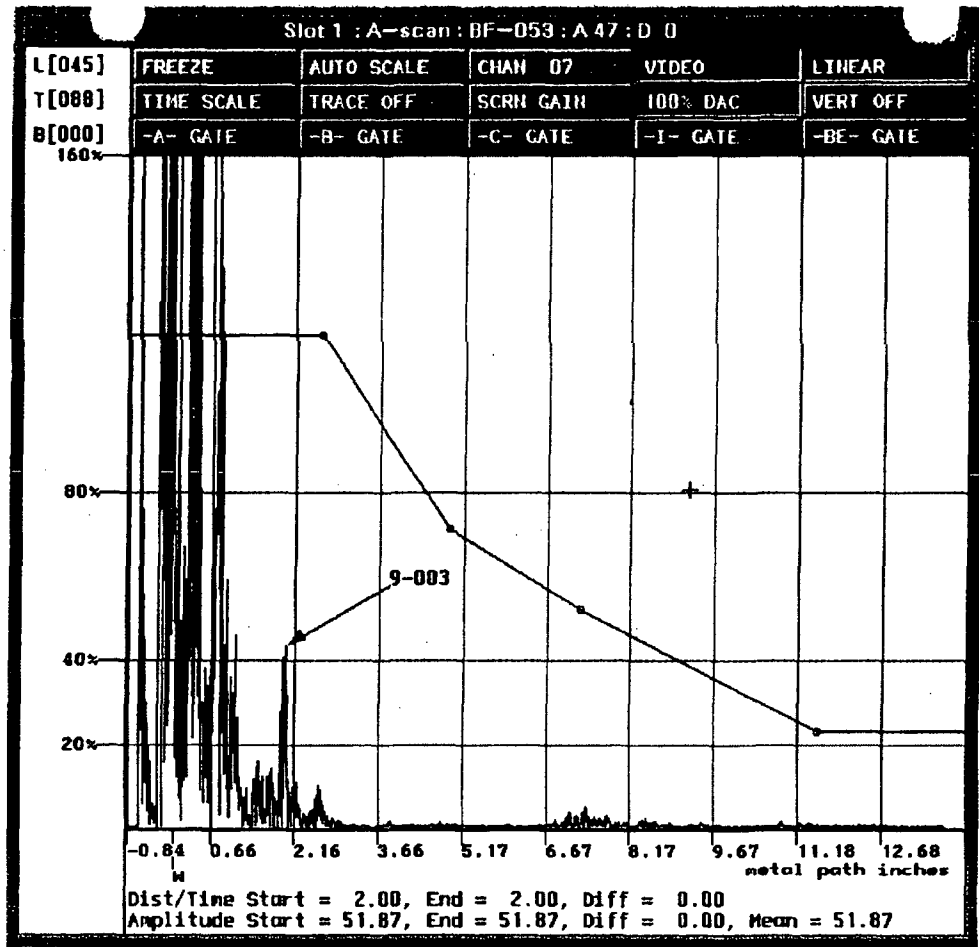


11 OF 21 R1163



Top Terminal

03



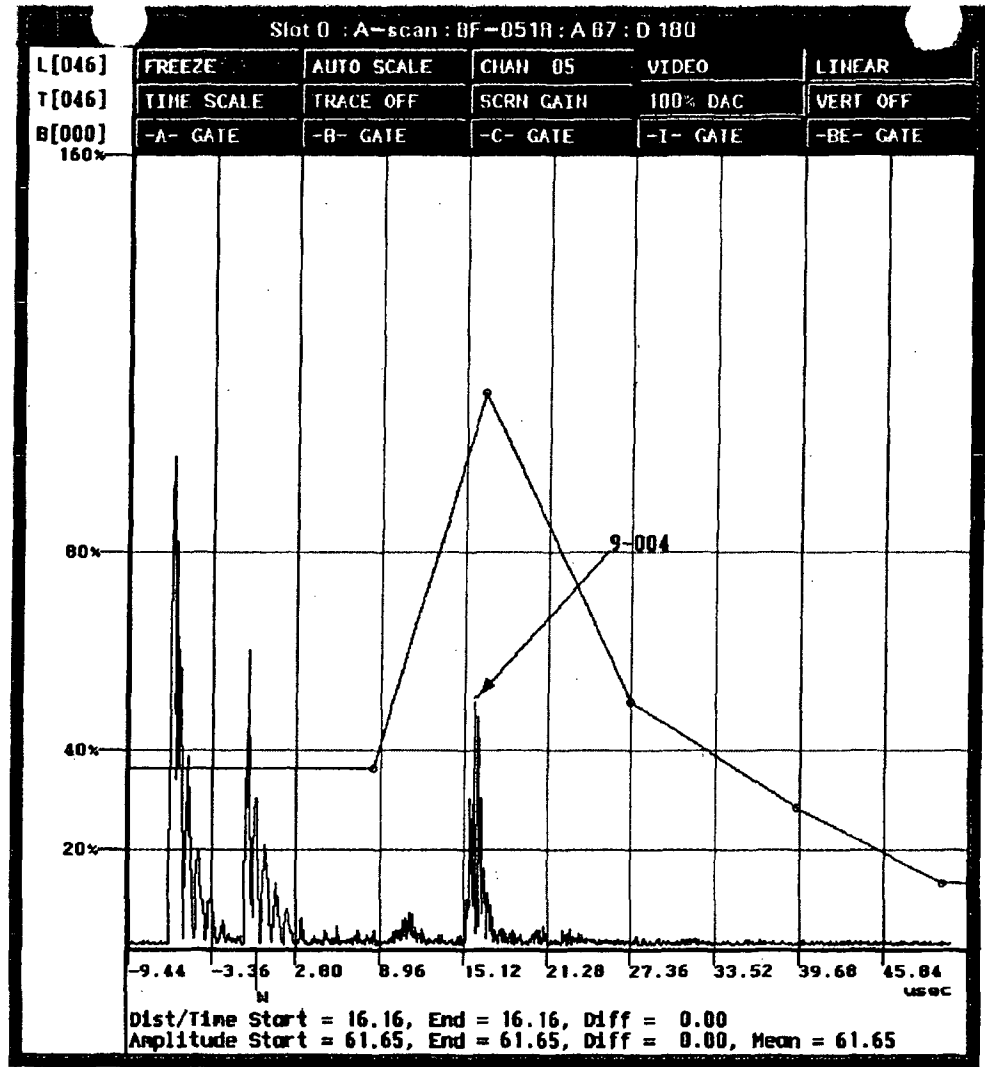
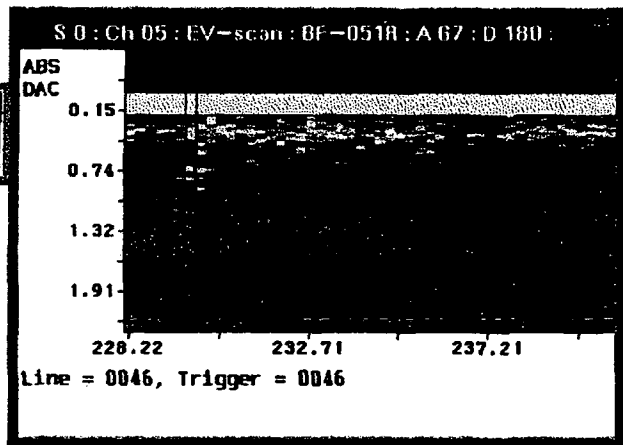
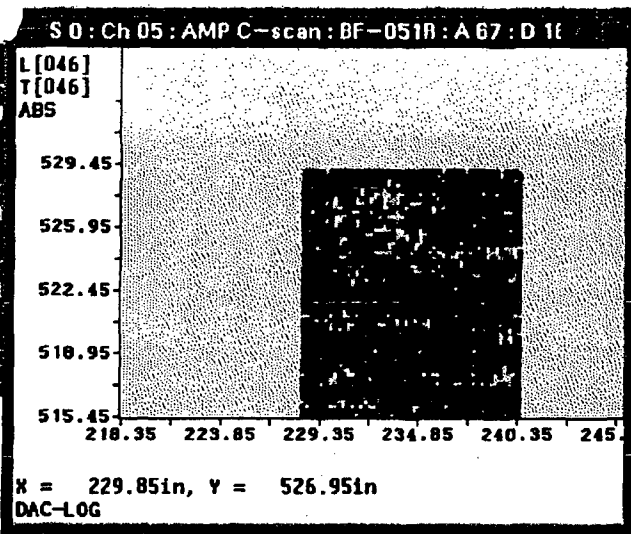
0000 0578  
 120521  
 00080  
 K11105

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

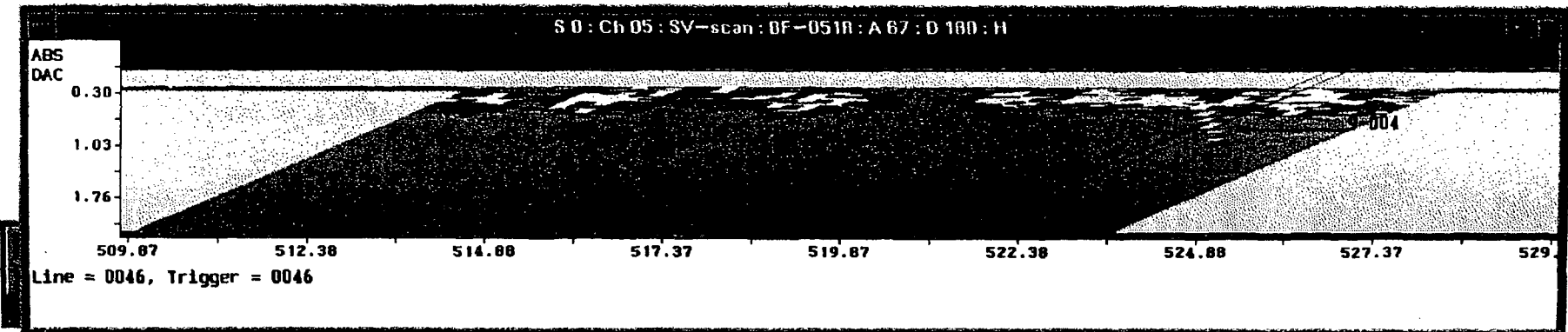
100%  
50%  
20%

DAC



18000

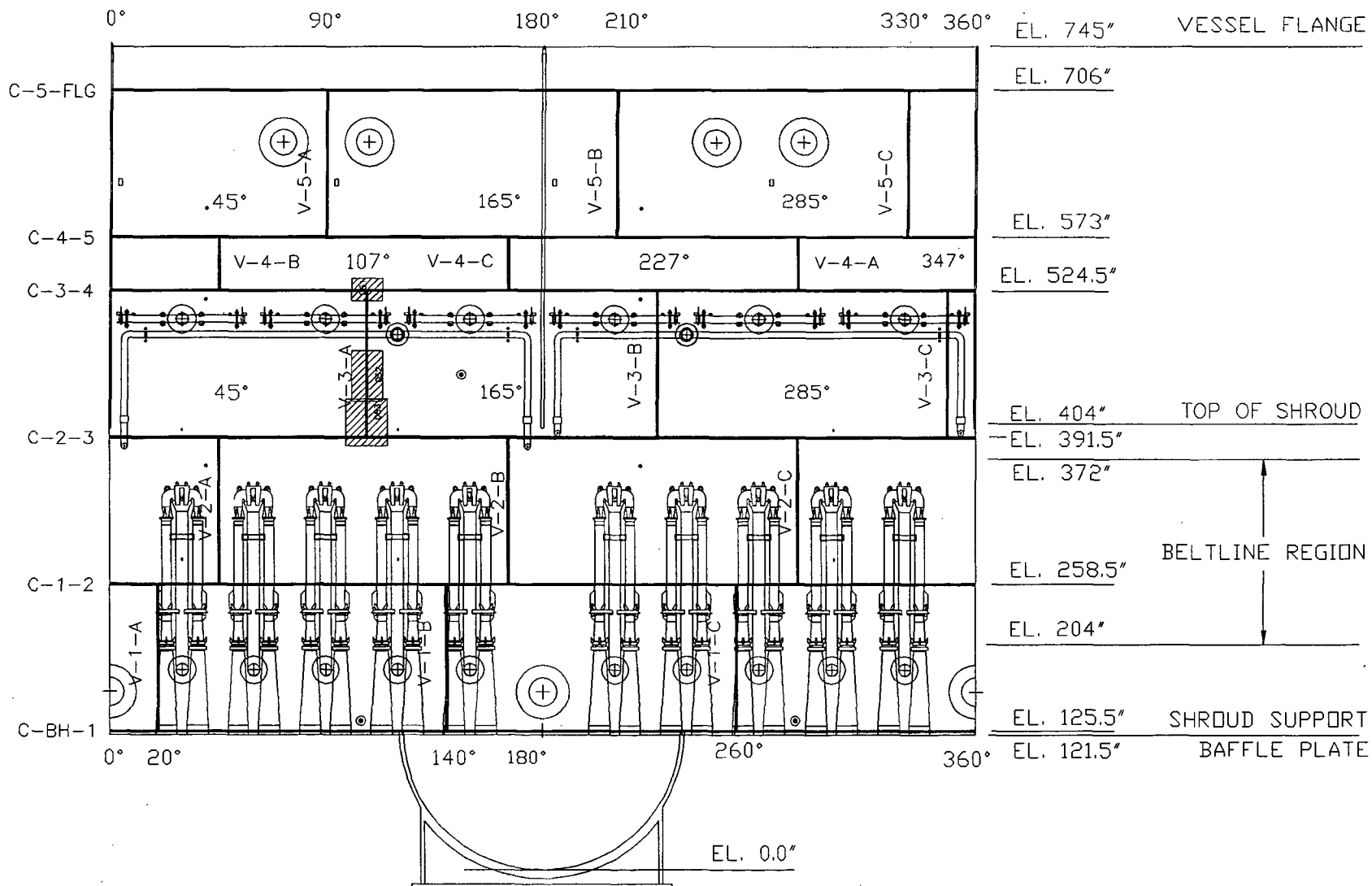
Top Terminal  
04



130F21

R1163

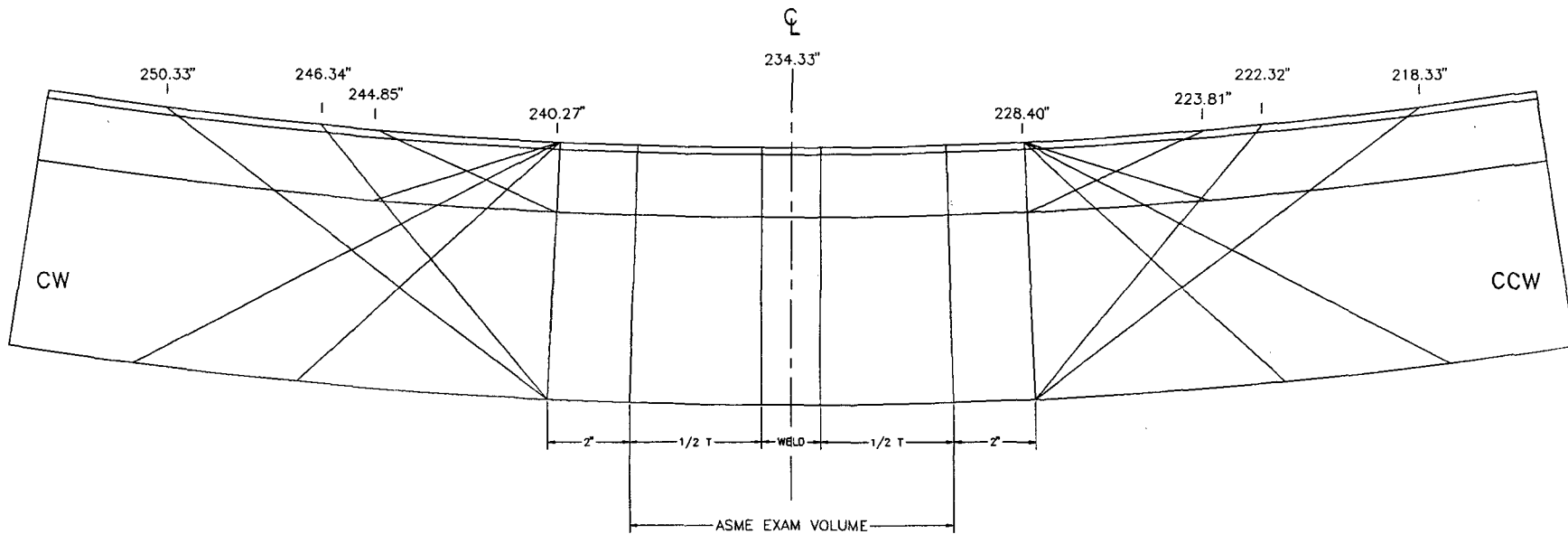
# BROWNS FERRY UNIT-3 WELD LOCATIONS



28000 00082

14 OF 21  
R1163

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	228.40	240.27
2	0 W	90	228.40	240.27
3	70 UP	0	228.40	240.27
4	70 CW	90	223.81	240.27
5	70 DN	180	228.40	240.27
6	70 CCW	270	228.40	244.85
7	45 UP	0	228.40	240.27
8	45 CW	90	222.32	240.27
9	45 DN	180	228.40	240.27
10	45 CCW	270	228.40	246.34
11	60 UP	0	228.40	240.27
12	60 CW	90	218.33	240.27
13	60 DN	180	228.40	240.27
14	60 CCW	270	228.40	250.33
15	0 BM	0	228.40	250.33
16	0 BM	90	218.33	240.27

2 00083

15 OF 21  
 R1163



GE Nuclear Energy

ULTRASONIC EXAMINATION DATA SHEET

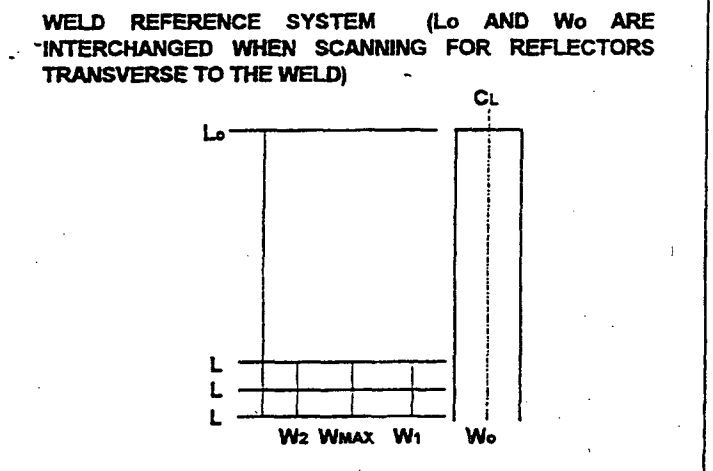
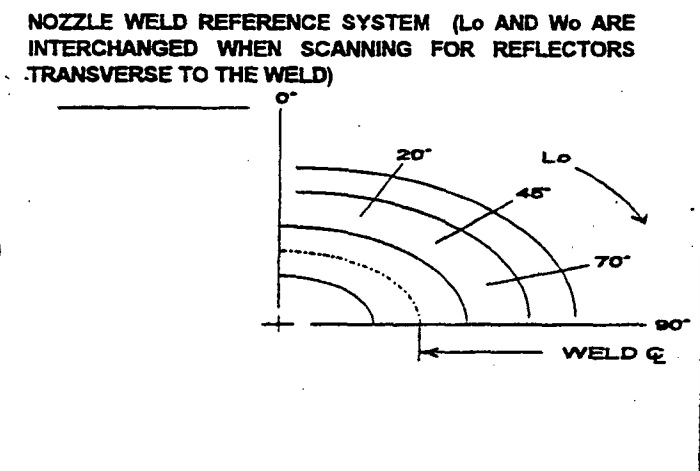
(MANUAL RPV VESSEL WELDS)

SITE: <u>BROWNS FERRY</u>	PROCEDURE NO.: <u>GE-UT-300</u>	REPORT NO.: <u>E-09</u>
UNIT: <u>3</u>	REVISION NO.: <u>6</u>	DATA SHEET NO.: <u>D-030</u>
PROJECT NO.: <u>00387</u>	FRR NO.: <u>004</u>	CALIBRATION SHEET NO.: <u>0° C-115</u> 45° <u>N/A</u> 60° <u>N/A</u>

SYSTEM: RPV EXAM SURFACE TEMP: 73 °F COUPLANT: ULTRAGEL EXAM START: 1112  
 WELD ID: K-3-A THERMOMETER S/N: LD250CL BATCH NO.: 093011 EXAM END: 1117

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-3-4 0° SCAN SENSITIVITY 61 dB  
 Wo REFERENCE WELD C 45° SCAN SENSITIVITY N/A dB  
 60° SCAN SENSITIVITY N/A dB



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/CW TOP OR BOTTOM
N/A RECORDABLE INDICATIONS, WELD EXAM													

REMARKS: EXAMINED FROM AN ELEVATION OF 471.5" TO 524.5" Area below elevation 471.5" was not examined due to the proximity of an insulation ring and non-removable insulation.

<u>Ernest Carter II</u> EXAMINED BY	<u>11-4-93</u> LEVEL	<u>DATE</u>	<u>J. M. Wood</u> UTILITY REVIEW	<u>12/15/93</u> DATE
<u>CE MA</u> GE REVIEWED BY	<u>12/1/93</u> DATE	<u>Albert Hill</u> ANII REVIEW	<u>9/25/94</u> DATE	PAGE: <u>1</u> OF: <u>1</u>



R 1163



GE Nuclear Energy

# ULTRASONIC EXAMINATION DATA SHEET

(MANUAL RPV VESSEL WELDS)

SITE: Browns Ferry

PROCEDURE NO.: GE-UT-300

REPORT NO.: E-09

UNIT: 3

REVISION NO.: 6

DATA SHEET NO.: D-031

PROJECT NO.: 00387

FRR NO.: 004

CALIBRATION SHEET NO.: 0° C-115

45° N/A 60° N/A

SYSTEM: RPV EXAM SURFACE TEMP: 73 °F COUPLANT: Ultragel II EXAM START: 1105

WELD ID: V-3-A THERMOMETER S/N: L0250CL BATCH NO.: 093011 EXAM END: 1112

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

L<sub>0</sub> REFERENCE TOP OF WELD C-3-4

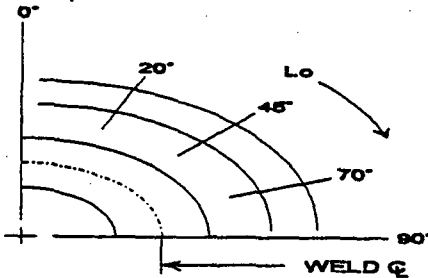
0° SCAN SENSITIVITY 61 dB

W<sub>0</sub> REFERENCE WELD E

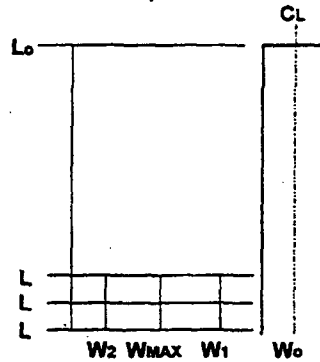
45° SCAN SENSITIVITY N/A dB

60° SCAN SENSITIVITY N/A dB

NOZZLE WELD REFERENCE SYSTEM (L<sub>0</sub> AND W<sub>0</sub> ARE INTERCHANGED WHEN SCANNING FOR REFLECTORS TRANSVERSE TO THE WELD)



WELD REFERENCE SYSTEM (L<sub>0</sub> AND W<sub>0</sub> 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	MPP1 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, BASE METAL EXAM													

REMARKS: EXAMINED FROM AN ELEVATION OF 471.5 TO 524.5" Area below elevation 471.5" was not examined due to the proximity of an insulation ring and non-removable insulation.

Eugene Carter II 11-4-93  
EXAMINED BY LEVEL DATE  
CE M5 12/1/93  
GE REVIEWED BY DATE

Albert Todd 12/15/93  
UTILITY REVIEW DATE  
Albert Todd 8/25/94  
ANII REVIEW DATE

PAGE: 1 OF: 1

R1163



GE Nuclear Energy

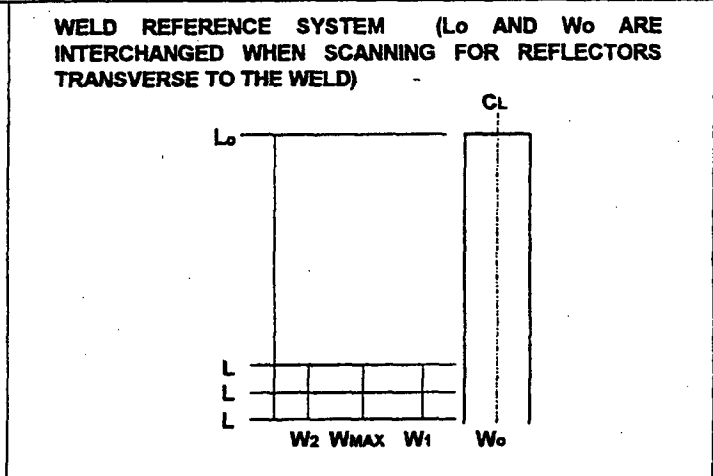
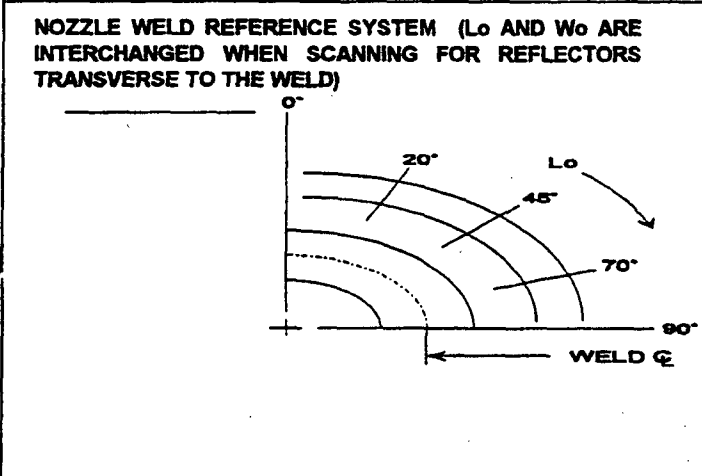
ULTRASONIC EXAMINATION DATA SHEET  
(MANUAL RPV VESSEL WELDS)

SITE: Browns FERRY      PROCEDURE NO.: GE-UT-300      REPORT NO.: E-09  
 UNIT: 3      REVISION NO.: 6      DATA SHEET NO.: D-038  
 PROJECT NO.: 00387      FRR NO.: 004      CALIBRATION SHEET NO.: 0° N/A  
 45° C-116      60° N/A

SYSTEM: RPV      EXAM SURFACE TEMP: 73 °F      COUPLANT: Ultragel IF      EXAM START: 1119  
 WELD ID: V-3-A      THERMOMETER S/N: L0250CL      BATCH NO.: D93011      EXAM END: 1128

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 C-3-4 WELD      0° SCAN SENSITIVITY N/A dB  
 Wo REFERENCE weld E      45° SCAN SENSITIVITY 65.6 dB  
 60° SCAN SENSITIVITY N/A dB



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/CW TOP OR BOTTOM
NO RECORDABLE INDICATIONS													

REMARKS: Examined from an elevation of 471.5" to 524.5" Area Below elevation 476.5 was not examined due to the proximity of a insulation ring and non-removable insulation.

Exam & Cator J 11-4-93      Utility Review Jenbo 12/15/93  
 EXAMINED BY      LEVEL      DATE      UTILITY REVIEW      DATE  
Cl M5 12/1/93      ANI Review Albert 8/25/94  
 GE REVIEWED BY      DATE      ANI REVIEW      DATE      PAGE: 1 OF: 1



GE Nuclear Energy

# ULTRASONIC EXAMINATION DATA SHEET

(MANUAL RPV VESSEL WELDS)

R 1163

SITE: Browns FERRY

PROCEDURE NO.: GE-UT-300

REPORT NO.: E-09

UNIT: 3

REVISION NO.: 6

DATA SHEET NO.: D-042

PROJECT NO.: 00382

FRR NO.: 004

CALIBRATION SHEET NO.: 0° N/A

45° N/A 60° C-117

SYSTEM: RPV EXAM SURFACE TEMP: 73 °F COUPLANT: Ultrasel II EXAM START: 1130

WELD ID: V-3-A THERMOMETER S/N: L0250CL BATCH NO.: 093011 EXAM END: 1138

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

L<sub>0</sub> REFERENCE TDE OF C-3-4 WELD

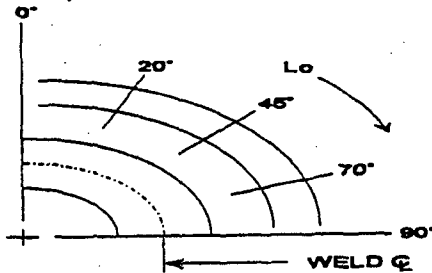
0° SCAN SENSITIVITY N/A dB

W<sub>0</sub> REFERENCE WELD &

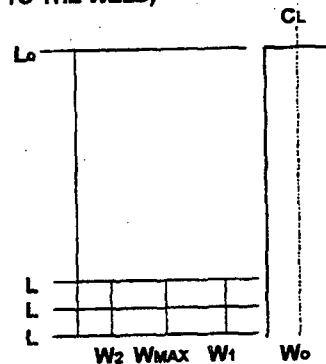
45° SCAN SENSITIVITY N/A dB

60° SCAN SENSITIVITY 73 dB

NOZZLE WELD REFERENCE SYSTEM (L<sub>0</sub> AND W<sub>0</sub> ARE INTERCHANGED WHEN SCANNING FOR REFLECTORS TRANSVERSE TO THE WELD)



WELD REFERENCE SYSTEM (L<sub>0</sub> AND W<sub>0</sub> ARE INTERCHANGED WHEN SCANNING FOR REFLECTORS TRANSVERSE TO THE WELD)



LR	% 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
<u>N/A RECORDABLE INDICATIONS</u>													

REMARKS: Examined from an elevation of 471.5" to 524.5" Area below elevation 471.5" was not examined due to the proximity of an insulation ring and non-removable insulation.

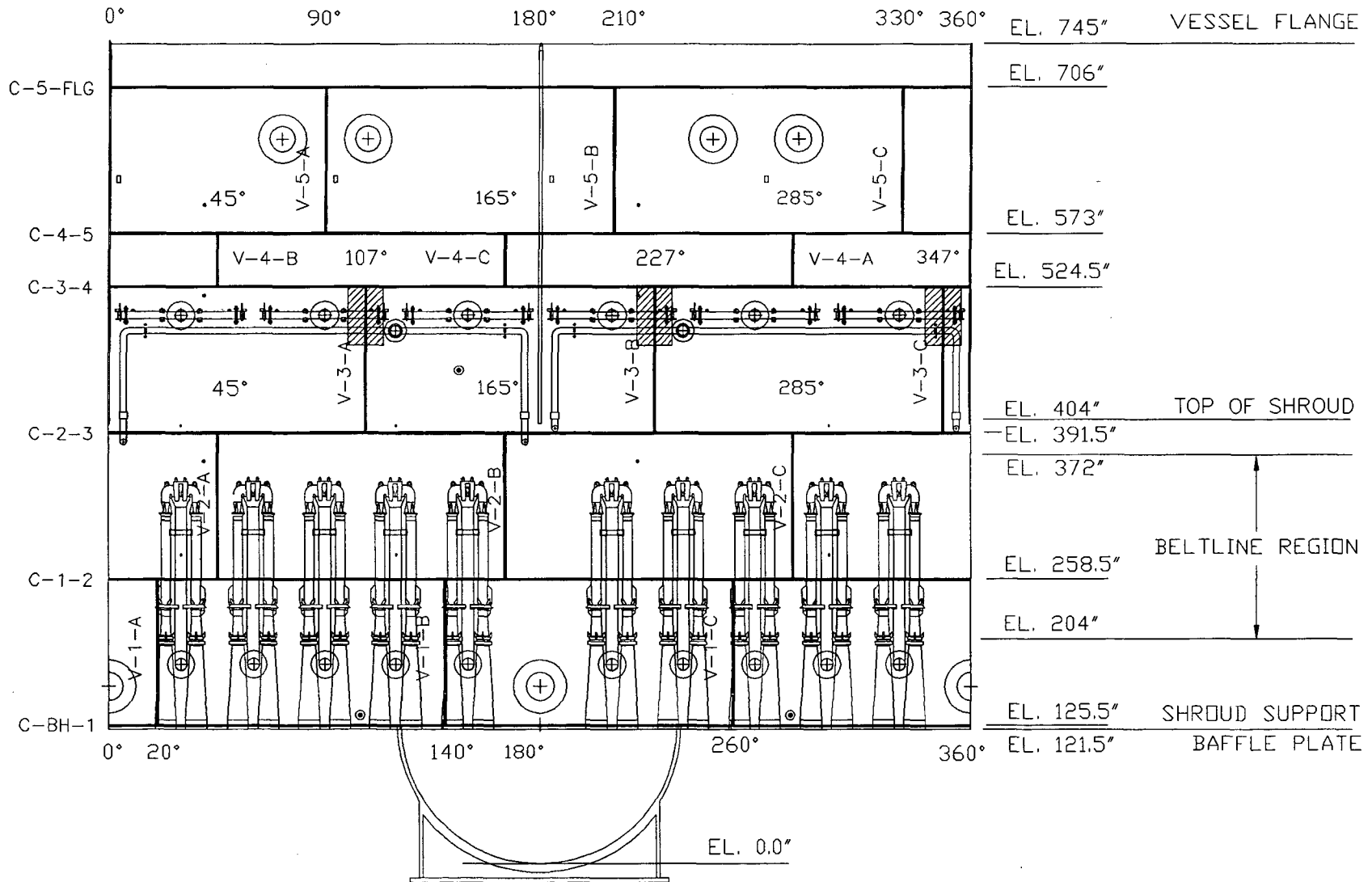
Examined by Robert Caton II 11-4-93  
LEVEL DATE  
Cl M 12/1/93  
DATE

UTILITY REVIEW 2/22/94 12/15/93  
DATE  
ANII REVIEW Albert 8/25/94  
DATE

PAGE: 1 OF: 1

FORM UT-14 REV. 8

# BROWNS FERRY UNIT-3 WELD LOCATIONS



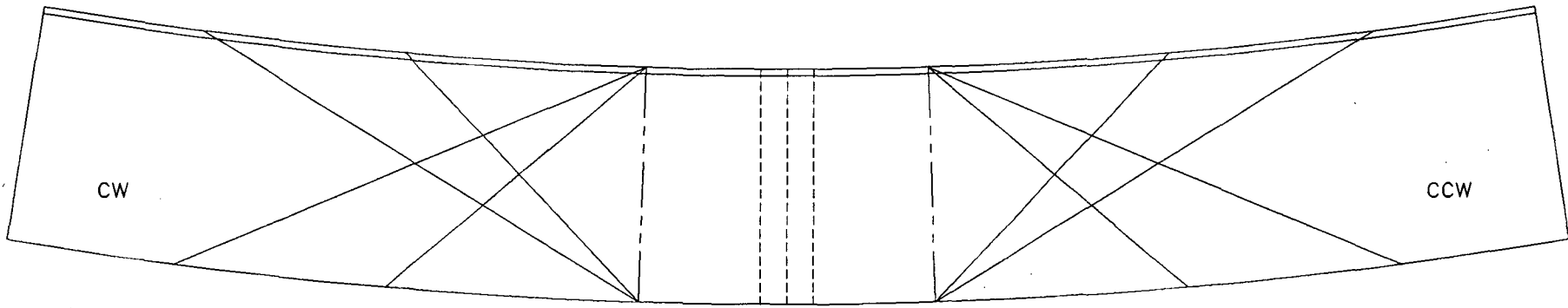
88008 20 OF 21

00000 00000 R1103

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

0000 0000 0000

R1163



246.10"

WELD  
☿

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

680089  
210F21

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