

**INSERVICE INSPECTION REPORT**  
**UNIT 3 OCONEE 1993 REFUELING**  
**OUTAGE 14**

**Location: Hwy 130/183, Seneca, South Carolina 29679**

**NRC Docket No. 50-287**

**Commercial Service Date: December 16, 1974**

**Owner: Duke Power Company**  
**526 South Church St.**  
**Charlotte, N. C. 28201-1006**

**Revision 1**

**Prepared By:**

*R. G. Lowe*

**Date**

*5/16/94*

**Reviewed By:**

*J. M. Baughman*

**Date**

*5/16/94*

**Approved By:**

*J. R. Barlow*

**Date**

*5/16/94*

**Copy No.**

2

**Assigned To**

NRC Document Control

**Controlled**

X

**Uncontrolled**

9405270304 940523  
PDR ADDCK 05000287  
PDR

Revision 1

**FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTION S**

As required by the Provisions of the ASME Code Rules

- 1. Owner: Duke Power Company, 526 South Church St., Charlotte, NC 28201-1006  
(Name and Address of Owner)
- 2. Plant: Oconee Nuclear Station, Highway 130/183, Seneca, SC 29679  
(Name and Address of Plant)
- 3. Plant Unit: 3     4. Owner Certificate of Authorization (if required) N/A
- 5. Commercial Service Date: December 16, 1974     6. National Board Number for Unit N/A
- 7. Components Inspected:

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Providence No.	National Board No.
See Section 1 Paragraph 1.5 in the Attached Report				

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-1 (back)

8. Examination Dates 9/26/92 to 2/24/94 9. Inspection Interval from 12/16/84 to 12/16/94  
10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. See attached report.  
11. Abstract of Conditions Noted. See attached report.  
12. Abstract of Corrective Measures Recommended and Taken. See attached report.

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Date 5/16 19 94 Signed Duke Power Co. By [Signature]  
Owner

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of N. C. and employed by \*The HSBI&I Co. of Hartford Cn. have inspected the components described in this Owners Data Report during the period 9-26-92 to 2-24-94 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report in accordance with the requirements of the ASME code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners' Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 5-16-94 19 94

[Signature] Commissions NC914  
Inspector's Signature National Board, State, Province and No.

\*The Hartford Steam Boiler Inspection & Insurance Co.  
200 Ashford Center North  
Suite 300  
Atlanta Ga., 30338

**CONTROLLED DISTRIBUTION**

Copy No.

Assigned To

Original

Duke Power Company Quality  
Assurance Technical Services

1

Oconee Component Engineering

2

NRC Document Control

**UNCONTROLLED DISTRIBUTION**

3

Hartford Steam Boiler Inspection  
and Insurance Company (AIA)  
c/o C. A. Ireland

4

L. A. Wiens  
Office of NRR  
USNRC  
Washington, DC 20555

## TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Revision</u>
1.	<i>General Information</i>	0
2.	<i>Summary of Inservice Inspections for Outage 14</i>	0
3.	<i>Second Ten Year Inspection Status</i>	0
4.	<i>Final Inservice Inspection Plan for Outage 14</i>	0
5.	<i>Results of Inspections Performed During Outage 14</i>	0
6.	<i>Reportable Indications</i>	1
7.	<i>Personnel, Equipment, and Material Certifications</i>	0
8.	<i>Corrective Action</i>	0
9.	<i>Reference Documents</i>	1
10.	<i>Class 1 and 2 Repairs and Replacements</i>	0

## 1.0 General Information

This report describes the Inservice Inspection of Duke Power Company's Oconee Nuclear Station, Unit 3, during the 1993 Refueling Outage (also referred to as Outage 14). Outage 14 is in the Third Inspection Period of the Second Ten Year Interval.

Included in this report are the final Inservice Inspection Plan, the inspection results for each item, a summary for each category of examination and corrective action taken when unacceptable conditions were found. In addition, there is a section included for repairs and replacements required since September 26, 1992.

## 1.1 Identification Numbers

<u>Item</u>	<u>Manufacturer or Installer</u>	<u>Manufacturer or Installer Serial No.</u>	<u>State or Province No.</u>	<u>National Board No.</u>
Reactor Vessel	Babcock & Wilcox	620-0009-51-52	N/A	N-125
Steam Generator A	Babcock & Wilcox	620-0009-55-1	N/A	N-127
Steam Generator B	Babcock & Wilcox	620-0009-55	N/A	N-128
Pressurizer	Babcock & Wilcox	620-0009-59	N/A	N-126

## 1.2 Authorized Nuclear Inservice Inspector(s)

Name: M. B. Chapman

Employer: The Hartford Steam Boiler Inspection & Insurance Company

Business Address: The Hartford Steam Boiler Inspection & Insurance Co.  
200 Ashford Center North  
Suite 300  
Atlanta, GA 30338

## 2.0 Summary of Inservice Inspection for Outage 14

The information shown below provides an abstract of ASME Section XI Class 1, Class 2, and Augmented Items scheduled and examined during Outage 14 at Oconee Nuclear Station Unit 3.

### 2.1 *Class 1 Inspection*

#### Examination Category B-A      Pressure Retaining Welds in Reactor Vessel

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B01.010	<i>Shell Welds</i>		
B01.011	Circumferential	3	3
B01.012	Longitudinal	0	0
B01.020	<i>Head Welds</i>		
B01.021	Circumferential	1	1
B01.022	Meridional Welds	0	0
B01.030	<i>Shell to Flange Welds</i>	1	1
B01.040	<i>Head to Flange Welds</i>	0	0
B01.050	<i>Repair Welds</i>		
B01.051	Beltline Region	N/A	N/A
<b>TOTALS</b>		5	5

**Examination Category B-B Pressure Retaining Welds in Vessels Other than Reactor Vessels**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<b><i>Pressurizer</i></b>		
B02.010	<b><i>Shell to Head Welds</i></b>		
B02.011	Circumferential	0	0
B02.012	Longitudinal	0	0
B02.020	<b><i>Head Welds</i></b>		
B02.021	Circumferential	NA	NA
B02.022	Meridional Welds	NA	NA
	<b><i>Steam Generator</i></b>		
B02.030	<b><i>Head Welds</i></b>		
B02.031	Circumferential	N/A	N/A
B02.032	Meridional	N/A	N/A
B02.040	<b><i>Tubesheet to Head Weld</i></b>	0	0
	<b><i>Heat Exchangers (Primary Side)</i></b>		
B02.050	<b><i>Head Welds</i></b>		
B02.051	Circumferential	0	0
B02.052	Meridional	NA	NA
B02.060	Tubesheet to Head Welds	1	1
<b>TOTALS</b>		1	1



**Examination Category B-D**

**Full Penetration Welds of Nozzles in Vessels  
Inspection Program B**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<b>Reactor Vessel</b>		
B03.090	Nozzle to Vessel Welds	8	8
B03.100	Nozzle Inside Radius Section	8	8
	<b>Pressurizer</b>		
B03.110	Nozzle to Vessel Welds	3	3
B03.120	Nozzle Inside Radius Section	3	3
	<b>Steam Generators (Primary Side)</b>		
B03.130	Nozzle to Vessel Welds	0	0
B03.140	Nozzle Inside Radius Section	3	3
	<b>Heat Exchangers (Primary Side)</b>		
B03.150	Nozzle to Vessel Welds	2	2
B03.160	Nozzle Inside Radius Section	0	0
<b>TOTALS</b>		<b>27</b>	<b>27</b>

**Examination Category B-E**

**Pressure Retaining Partial Penetration Welds  
in Vessels**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B04.010	<b>Partial Penetration Welds</b>		
B04.011	Vessel Nozzles	NA	NA
B04.012	Control Rod Drive Nozzles	0	0
B04.013	Instrumentation Nozzles	0	0
	<b>Pressurizer</b>		
B04.020	Heater Penetration Welds	NA	NA
<b>TOTALS</b>		<b>0</b>	<b>0</b>

## Examination Category B-F

## Pressure Retaining Dissimilar Metal Welds

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B05.010	Nominal Pipe Size $\geq 4$ " Nozzle to Safe End Butt Welds	2	2
B05.011	Nominal Pipe Size $< 4$ " Nozzle to Safe End Butt Weld	NA	NA
B05.012	Nozzle to Safe End Socket Welds	NA	NA
	<i>Pressurizer</i>		
B05.020	Nominal Pipe Size $\geq 4$ " Nozzle to Safe End Butt Welds	0	0
B05.021	Nominal Pipe Size $< 4$ " Nozzle to Safe End Butt Weld	NA	NA
B05.022	Nozzle to Safe End Socket Welds	NA	NA
	<i>Steam Generators</i>		
B05.030	Nominal Pipe Size $\geq 4$ " Nozzle to Safe End Butt Welds	NA	NA
B05.031	Nominal Pipe Size $< 4$ " Nozzle to Safe End Butt Weld	NA	NA
B05.032	Nozzle to Safe End Socket Welds	NA	NA
	<i>Heat Exchangers</i>		
B05.040	Nominal Pipe Size $\geq 4$ " Nozzle to Safe End Butt Welds	NA	NA
B05.041	Nominal Pipe Size $< 4$ " Nozzle to Safe End Butt Weld	NA	NA
B05.042	Nozzle to Safe End Socket Welds	NA	NA

Examination Category B-F (Continued)

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Piping</i>		
B05.050	Nominal Pipe Size $\geq 4$ " Dissimilar Metal Butt Welds	0	0
B05.051	Nominal Pipe Size $< 4$ " Dissimilar Metal Butt Welds	0	0
B05.052	Dissimilar Metal Socket Welds	NA	NA
<b>TOTALS</b>		2	2

Examination Category B-G-1 Pressure Retaining Bolting, Greater Than 2" in Diameter

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B06.010	Closure Head Nuts	0	0
B06.020	Closure Studs (in place)	NA	NA
B06.030	Closure Studs, (when removed)	0	0
B06.040	Threads in Flange	0	0
B06.050	Closure Washers, Bushings	0	0
	<i>Pressurizer</i>		
B06.060	Bolts and Studs	0	0
B06.070	Flange Surface (when connection disassembled)	1	0 (connection not disassembled)
B06.080	Nuts, Bushings and Washers	0	0
	<i>Steam Generators</i>		
B06.090	Bolts and Studs	NA	NA
B06.100	Flange Surface (when connection disassembled)	NA	NA

Examination Category B-G-1 (Continued)

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B06.110	Nuts , Bushings and Washers	NA	NA
	<i>Heat Exchangers</i>		
B06.120	Bolts and Studs	NA	NA
B06.130	Flange Surface (when connection disassembled)	NA	NA
B06.140	Nuts , Bushings and Washers	NA	NA
	<i>Piping</i>		
B06.150	Bolts and Studs	NA	NA
B06.160	Flange Surface (when connection disassembled)	NA	NA
B06.170	Nuts , Bushings and Washers	NA	NA
	<i>Pumps</i>		
B06.180	Bolts and Studs	2	2
B06.190	Flange Surface (when connection disassembled)	1	0 (connection not disassembled)
B06.200	Nuts , Bushings and Washers	2	2
	<i>Valves</i>		
B06.210	Bolts and Studs	NA	NA
B06.220	Flange Surface (when connection disassembled)	NA	NA
B06.230	Nuts , Bushings and Washers	NA	NA
<b>TOTALS</b>		6	4

Examination Category B-G-2 Pressure Retaining Bolting, 2" and Less in Diameter

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B07.010	Bolts, Studs, and Nuts	NA	NA
	<i>Pressurizer</i>		
B07.020	Bolts, Studs, and Nuts	0	0
	<i>Steam Generators</i>		
B07.030	Bolts, Studs, and Nuts	0	0
	<i>Heat Exchangers</i>		
B07.040	Bolts, Studs, and Nuts	NA	NA
	<i>Piping</i>		
B07.050	Bolts, Studs, and Nuts	NA	NA
	<i>Pumps</i>		
B07.060	Bolts, Studs, and Nuts	NA	NA
	<i>Valves</i>		
B07.070	Bolts, Studs, and Nuts	1	1
	<i>CRD Housings</i>		
B07.080	Bolts, Studs, and Nuts	2	2
<b>TOTALS</b>		3	3

**Examination Category B-H Integral Attachments for Vessels**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B08.010	Integrally Welded Attachments	0	0
	<i>Pressurizer</i>		
B08.020	Integrally Welded Attachments	0	0
	<i>Steam Generators</i>		
B08.030	Integrally Welded Attachments	0	0
	<i>Heat Exchangers</i>		
B08.040	Integrally Welded Attachments	NA	NA
<b>TOTALS</b>		0	0

**Examination Category B-J Pressure Retaining Welds in Piping**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B09.010	Nominal Pipe Size $\geq 4''$		
B09.011	Circumferential Welds	13	13
B09.012	Longitudinal Welds*	0	0
B09.020	Nominal Pipe Size $< 4''$		
B09.021	Circumferential Welds	1	1
B09.022	Longitudinal Welds	NA	NA
B09.030	Branch Pipe Connection Welds		

\* Longitudinal welds that intersect circumferential welds are examined as required by Table IWB 2500-1, Category B-J. However, for reporting purposes, the totals do not reflect the number of longitudinal welds examined during this outage.

Examination Category B-J (Continued)

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B09.031	Nominal Pipe Size ≥4"	0	0
B09.032	Nominal Pipe Size <4"	0	0
B09.040	Socket Welds	2	2
<b>TOTALS</b>		16	16

Examination Category B-K-1 Integral Attachments for Piping, Pumps and Valves

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Piping</i>		
B10.010	Integrally Welded Attachments	0	0
	<i>Pumps</i>		
B10.020	Integrally Welded Attachments	0	0
	<i>Valves</i>		
B10.030	Integrally Welded Attachments	NA	NA
<b>TOTALS</b>		0	0

Examination Category B-L-1, B-M-1 Pressure Retaining Welds in Pump Casings and Valve Bodies  
 B-L-2, B-M-2 Pump Casings and Valve Bodies

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pumps</i>		
B12.010	Pump Casing Welds	0	0
B12.020	Pump Casing	0	0
B12.030	Valves, Nominal Pipe Size <4" Valve Body Welds	NA	NA
B12.031	Valves, Nominal Pipe Size ≥4" Valve Body Welds	NA	NA
B12.040	Valve Body, Exceeding 4" Nominal Pipe Size	0	0
<b>TOTALS</b>		0	0

Examination Category B-N-1 Interior of Reactor Vessel  
 B-N-2 Integrally Welded Core Support Structures and Interior Attachments to Reactor Vessels  
 B-N-3 Removable Core Support Structures

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B13.010	Vessel Interior	1	1
	<i>Reactor Vessel (BWR)</i>		
B13.020	Interior Attachments	NA	NA
B13.021	Core Support Structure	NA	NA
	<i>Reactor Vessel (PWR)</i>		
B13.030	Core Support Structure	1	1
<b>TOTALS</b>		2	2



Examination Category B-O

Pressure Retaining Welds in Control Rod Housings

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B14.010	Welds in CRD Housing	0	0
<b>TOTALS</b>		0	0

Examination Category B-P

All Pressure Retaining Components

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B15.010	Pressure Retaining Boundary	0	0
B15.011	Pressure Retaining Boundary	1	1
	<i>Pressurizer</i>		
B15.020	Pressure Retaining Boundary	0	0
B15.021	Pressure Retaining Boundary	1	1
	<i>Steam Generators</i>		
B15.030	Pressure Retaining Boundary	0	0
B15.031	Pressure Retaining Boundary	2	2
	<i>Heat Exchangers</i>		
B15.040	Pressure Retaining Boundary	0	0
B15.041	Pressure Retaining Boundary	2	2
	<i>Piping</i>		
B15.050	Pressure Retaining Boundary	1	1

Examination Category B-P (Continued)

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B15.051	Pressure Retaining Boundary	10	10
	<i>Pumps</i>		
B15.060	Pressure Retaining Boundary	0	0
B15.061	Pressure Retaining Boundary	4	4
	<i>Valves</i>		
B15.070	Pressure Retaining Boundary	Covered in B15.050	Covered in B15.050
B15.071	Pressure Retaining Boundary	Covered in B15.051	Covered in B15.051
<b>TOTALS</b>		21	21

Examination Category B-Q Steam Generator Tubing

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B16.010	Steam Generator Tubing in Straight Tube Design	**	**
B16.020	Steam Generator Tubing in U-Tube Design	NA	NA
<b>TOTALS</b>		NA	NA

\*\* Steam Generator Tubing is examined and documented by the Diversified Services Group of the Generation Services Department as required by the Station Technical Specifications and is not included in this report.

### F1.1 Component Supports

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
F1.01	Reference Section 4.0 of this report	2	2
<b>TOTALS</b>		2	2

### 2.2 Class 2 Inspections

#### Examination Category C-A Pressure Retaining Welds in Pressure Vessel

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
C01.010	Shell Circumferential Weld	0	0
C01.020	Head Circumferential Welds	2	2
C01.030	Tubesheet to Shell Weld	1	1
<b>TOTALS</b>		3	3

#### Examination Category C-B Pressure Retaining Nozzle Welds in Vessels

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
C02.010	Nozzles in Vessels $\leq 1/2$ " Nominal Thickness	0	0
C02.020	Nozzles in Vessels $> 1/2$ " Nominal Thickness	NA	NA

Examination Category C-B (Continued)

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
C02.021	Nozzle to Shell (or Head Welds)	1	1
C02.022	Nozzle Inside Radius Section	1	1
<b>TOTALS</b>		2	2

Examination Category C-C Pressure Retaining Nozzle Welds in Vessels

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pressure Vessels</i>		
C03.010	Integrally Welded Attachments	2	2
	<i>Piping</i>		
C03.040	Integrally Welded Attachments	0	0
	<i>Pumps</i>		
C03.070	Integrally Welded Attachments	NA	NA
	<i>Valves</i>		
C03.100	Integrally Welded Attachments	NA	NA
<b>TOTALS</b>		2	2

Examination Category C-D

Pressure Retaining Bolting Greater Than 2" in Diameter

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pressure Vessels</i>		
C04.010	Bolts and Studs	NA	NA
	<i>Piping</i>		
C04.020	Bolts and Studs	NA	NA
	<i>Pumps</i>		
C04.030	Bolts and Studs	NA	NA
	<i>Valves</i>		
C04.040	Bolts and Studs	NA	NA
<b>TOTALS</b>		NA	NA

Examination Category C-F

Pressure Retaining Welds in Piping

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
C05.010	Piping Welds $\leq 1/2$ " Nominal Wall Thickness		
C05.011	Circumferential Weld	13	13
C05.012	Longitudinal Welds ***	6	6
C05.020	Piping Welds $> 1/2$ " Nominal Wall Thickness		
C05.021	Circumferential Welds	1	1
C05.022	Longitudinal Welds ***	0	0
C05.030	Pipe Branch Connections		
C05.031	Circumferential Welds	0	0
C05.032	Longitudinal Welds ***	0	0
<b>TOTALS</b>		20	20

\*\*\* Longitudinal welds that intersect circumferential welds were examined as required by Table IWC-2500-1, Category C-F. However, for reporting purposes, the totals do not reflect the number of longitudinal welds examined during this outage.

**Examination Category C-G      Pressure Retaining Welds in Pumps and Valves**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pumps</i>		
C06.010	Pump Casing Welds	NA	NA
	<i>Valves</i>		
C06.020	Valve Body Welds	NA	NA
<b>TOTALS</b>		NA	NA

**Examination Category C-H      All Pressure Retaining Components**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pressure Vessel</i>		
C07.010	Pressure Retaining Boundary	0	0
C07.011	Pressure Retaining Boundary	4	4
	<i>Piping</i>		
C07.020	Pressure Retaining Boundary	0	0
C07.021	Pressure Retaining Boundary	22	22
	<i>Pumps</i>		
C07.030	Pressure Retaining Boundary	0	0
C07.031	Pressure Retaining Boundary	0	0
	<i>Valves</i>		
C07.040	Pressure Retaining Boundary	Covered in C07.020	Covered in C07.020
C07.041	Pressure Retaining Boundary	Covered in C07.021	Covered in C07.021
<b>TOTALS</b>		26	26

## F1.2 Component Supports

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
F1.02	Reference Section 4.0 of this report	0	0
<b>TOTALS</b>		0	0

## 2.3 Augmented Inspections

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
E01.001	Reactor Coolant Pump Flywheel	0	0
E02.001	Steam Generator Tube Examinations	Ref. footnote for Item No. B16.010	Ref. footnote for Item No. B16.010
E03.001	Alternate Examinations	2	2
E04.001	HPI Safe End Examinations	0	0
E05.001	Augmented Pressurizer Surge Line Examinations	2	2
E06.001	Augmented Weld Inspection	0	0
E07.001	Thermal Stress Piping (NRC Bulletin 88-08)	0	0
E08.001	Pressurizer Spray Piping Thermal Transient Inspection (Ref. PIR 1-O89-0003)	0	0
E09.001	Auxiliary Feedwater Header Water Hammer Examinations (PSC21-82)	14	14

**Augmented Inspections (Continued)**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
E10.001	Pressurizer Sensing/ Sampling Nozzle Safe Ends	0	0
<b>TOTALS</b>		18	18

A detailed description of each examination listed in Sections 2.1 through 2.3 are located in Section 3 of this report. Results of each examination are located in Section 4 of this report.



### 3.0 Second Ten Year Inspection Status

The completion status of inspections required by the 1980 ASME Section XI Code, including Addenda through Winter 1980, is summarized in this section. The requirements are listed by the ASME Section XI Examination Category as defined in Table IWB-2500-1 for Class 1 Inspections, and in Table IWC-2500-1 for Class 2 Inspections. Augmented inspections are also included.

#### Class 1 Inspections

<u>Examination Category</u>	<u>Description</u>	<u>Inspections Required</u>	<u>Inspections Completed</u>	<u>Percentage Completed</u>	<u>† Deferral Allowed</u>
B-A	Pressure Retaining Welds in Reactor Vessel	8 Welds	8 Welds	100%	Yes
B-B	Pressure Retaining Welds in Vessels Other than Reactor Vessel	14 Welds	14 Welds	100%	No
B-D	Full Penetration Welds of Nozzles in Vessels	62 Inspections	62 Inspections	100%	Partial
B-E	Pressure Retaining Partial Penetration Welds in Vessels	31 Welds	31 Welds	100%	No
B-F	Pressure Retaining Dissimilar Metal Welds	38 Welds	38 Welds	100%	No
B-G-1	Pressure Retaining Bolting Greater than 2 Inch Diameter	551 Items	551 Items	100%	Yes
B-G-2	Pressure Retaining Bolting 2 Inches and Less in Diameter	46 Connections	46 Connections	100%	No
B-H	Integral Attachment for Vessels	12 Attachments	12 Attachments	100%	No
B-J	Pressure Retaining Welds in Piping	105 Welds	105 Welds	100%	No

† Deferral of inspection to the end of the interval as allowed by ASME Section XI Tables IWB and IWC 2500-1.

### Class 1 Inspections (Continued)

<u>Examination Category</u>	<u>Description</u>	<u>Inspections Required</u>	<u>Inspections Completed</u>	<u>Percentage Completed</u>	<u>† Deferral Allowed</u>
B-K-1	Integral Attachments for Piping, Pumps and Valves	1 Attachments	1 Attachments	100%	No
B-L-1	Pressure Retaining Welds in Pump Casings	1 Weld	1 Weld	100%	Yes
B-L-2	Pump Casings	1 Casing	1 Casing	100%	Yes
B-M-1	Pressure Retaining Welds in Valve Bodies	None	N/A	N/A	N/A
B-M-2	Valve Body > 4 in. Nominal Pipe Size	2 Valves	2 Valves	100%	Yes
B-N-1	Interior of Reactor Vessel	3 Items	3 Items	100%	No
B-N-2	Integrally Welded Core Support Structures and Interior Attachments to Reactor Vessels	None	N/A	N/A	N/A
B-N-3	Removable Core Support Structures	1 Item	1 Item	100%	Yes
B-O	Pressure Retaining Welds in Control Rod Housings	3 Housings	3 Housings	100%	Yes
B-P	All Pressure Retaining Components				No
	System Leakage Test	121 Components	121 Components	100%	
	System Hydrostatic Test	20 Components	19 Components	95%	
B-Q	Steam Generator Tubing	As stated in Station Technical Specifications	100% Station Technical Specifications Met		N/A
F1.01	Class 1 Component Supports	85 Supports	85 Supports	100%	No

† Deferral of inspection to the end of the interval as allowed by ASME Section XI Tables IWB and IWC 2500-1.

## Class 2 Inspections

<u>Examination Category</u>	<u>Description</u>	<u>Inspections Required</u>	<u>Inspections Completed</u>	<u>Percentage Completed</u>	<u>† Deferral Allowed</u>
C-A	Pressure Retaining Welds in Pressure Vessels	10 Welds	10 Welds	100%	No
C-B	Pressure Retaining Nozzle Welds in Vessels	5 Welds	5 Welds	100%	No
C-C	Integral Attachments for Vessels, Piping, Pumps and Valves	58 Attachments	58 Attachments	100%	No
C-D	Pressure Retaining Bolting Exceeding 2 Inches in Diameter	1 Item	1 Item	100%	No
C-F	Pressure Retaining Welds in Piping	227 Welds	227 Welds	100%	No
C-G	Pressure Retaining Welds in Pumps and Valves	None	N/A	N/A	N/A
C-H	All Pressure Retaining Components				No
	System or Component Functional Test	36 Components	35 Components	97.22%	
	System Hydrostatic Test	55 Components	51 Components	92.72%	
F1.02	Class 2 Component Supports	347 Supports	347 Supports	100%	No

† Deferral of inspection to the end of the interval as allowed by ASME Section XI Tables IWB and IWC 2500-1.

### Augmented Inspections

<u>Description</u>	<u>Percentage Complete</u>
Reactor Coolant Pump Flywheels	100% of Technical Specifications met
High Pressure Injection and Make-Up Nozzle Safe-Ends	100%
Thermal Stress Piping	100% of requirements for Outages 11 and 12
Pressurizer Surge Line Drain Line	100%

### Alternate Inspections

<u>Description</u>	<u>Percentage Complete</u>
Reactor Coolant Pump 3A2 and 3B1 Flange Joint, Studs, Adjacent Areas	100% of requirements for Outages 11 and 12

#### 4.0 Final Inservice Inspection Plan For Outage 14

The final ISI Plan shown in this section lists all ASME Section XI Class 1 and ASME Section XI Class 2, and Augmented examinations credited for Outage 14 at Oconee Nuclear Station Unit 3.

The information shown below is a field description for the reporting format included in this section of the report:

##### A. Items examined by NDE methods

Item Number	=	ASME Section XI Tables IWB-2500-1 (Class 1), IWC-2500-1 (Class 2), IWF-2500-1 (Class 1 and Class 2), Augmented Requirements
ID Number	=	Unique Identification Number
Drawing Number	=	Location and/or Detail Drawing
Locs.	=	Location
Insp. Req.	=	Examination Technique - Magnetic Particle, Dye Penetrant, etc.
Proc. Numbers	=	Examination Procedures
Material Type/Grade	=	General Description of Material
Diam./Thick	=	Diameter/Thickness
Calib. Block	=	Calibration Block Number
Comments	=	General and/or Detail Description

PROGRAM: NISIRONB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B01

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 1  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ. NUMBERS	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B01.011.000	REACTOR VESSEL	CIRCUMFERENTIAL***** SHELL WELDS*****	=====	***	*****	*****	---	****	***** *****
B01.011.001	3RPV-WR1A	ISI-OCN3-001 OM-2201-96 & O-2479A	=====	UT	ISI-138	CS	09.500	40393	CIR SEAM 87 TO 165 CAL BLOCK 50304 MAY BE USED
B01.011.002	3RPV-WR1	ISI-OCN3-001 OM-2201-96 & O-2479A	=====	UT	ISI-138	CS	09.500	40393	CIR SEAM 165 TO 166 CAL BLOCK 50304 MAY BE USED
B01.011.003	3RPV-WR18	ISI-OCN3-001 OM-2201-96 & O-2479A	=====	UT	ISI-138	CS	12.000	40393	CIR SEAM 86 TO 87 CAL BLOCK 50304 MAY BE USED 73.4% COVERAGE REF.RFR 94-01
B01.021.000	REACTOR VESSEL	HEAD WELDS***** CIRCUMFERENTIAL*****	=====	***	*****	*****	---	****	***** *****
B01.021.002	3RPV-WR34	ISI-OCN3-001 OM-2201-96 & O-2479A	=====	UT	ISI-138	CS	05.500	40392	CIR SEAM 36 TO 166 CAL BLOCK 40393 & 50304 MAY BE USED 43.5% COVERAGE REF.RFR 94-01
B01.030.000	REACTOR VESSEL	SHELL TO FLANGE WELD *****	=====	***	*****	*****	---	****	***** *****
B01.030.001	3RPV-WR19	ISI-OCN3-001 OM-2201-96 & O-2479A	=====	UT	ISI-138	CS	12.000	40390	PC 7 TO 86 UT FROM VESSEL ID CAL BLOCK 50304 MAY BE USED 67.9% COVERAGE REF.RFR 94-01

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B01

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 2  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ. NUMBERS	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B01.030.001B	3RPV-WR19	ISI-0CN3-001 OM-2201-96 & 0-2479A	_____	UT	NDE-650	CS	12.000	50304	PC 7 TO 86 VESSEL FLANGE 180 TO 0 DEG FROM FLANGE SURFACE 95% COVERAGE OBTAINED
B01.040.000	REACTOR VESSEL	HEAD TO FLANGE WELDS *****	_____	***	*****	*****	_____	*****	***** ***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B02

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 3  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B02.011.000	***PRESSURIZER	SHELL TO HEAD WELDS CIRCUMFERENTIAL*****	_____	***	*****	*****	____.____	*****	***** *****
B02.012.000	***** PRESSURIZER	SHELL TO HEAD WELDS* LONGTUDINAL *****	_____	***	*****	*****	____.____	*****	***** *****
B02.031.000	*** STEAM GENERATOR	HEAD WELDS ***** CIRCUMFERENTIAL ***	_____	***	*****	*****	____.____	_____	***** *****
B02.040.000	***** STEAM	GENERATORS TUBESHEET TO HEAD WELDS*****	_____	***	*****	*****	____.____	*****	***** *****
B02.060.000	*** HEAT EXCHANGER	TUBESHEET TO SHELL** OR HEAD WELDS *****	_____	***	*****	*****	____.____	*****	*** INSPECTOR TO RECORD *** ** COOLER S\N ON INSP. DATA **
B02.060.001	3-LDCA-IN-V3	OM-2201-1419	_____	UT	NDE-600	SS	08.62 00.875	40411	LDC-A INL.TUBE SHT\CHNL. BODY PC.3 TO 2, INSPECTOR REC. S\N 100% COVERAGE OBTAINED



PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 4  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B03.090.000	REACTOR VESSEL	NOZZLE TO VESSEL**** WELDS*****	_____	***	*****	*****	_____ _____	*****	***** *****
B03.090.001	3RPV-WR13	ISI-OCN3-001 OM-2201-96 & O-2479A	_____	UT	ISI-138	CS	60.00 12.000	40390	X-OUTLET NOZZLE PC 19 TO 86 & 87 UT FROM VESSEL ID CAL BLOCK 50304 MAY BE USED 47.6% COVERAGE REF.RFR 94-01
B03.090.001A	3RPV-WR13	ISI-OCN3-001 OM-2201-96 & O-2479A	_____	UT	ISI-138	CS	60.00 12.000	50304	X-OUTLET NOZZLE PC 19 TO 86 & 87 UT FROM NOZ. ID ONS-014  47.6% COVERAGE REF.RFR 94-01
B03.090.002	3RPV-WR13A	ISI-OCN3-001 OM-2201-96 & O-2479A	_____	UT	ISI-138	CS	60.00 12.000	40390	Z-OUTLET NOZZLE PC 19 TO 86 & 87 UT FROM VESSEL ID CAL BLOCK 50304 MAY BE USED 47.6% COVERAGE REF.RFR 94-01
B03.090.002A	3RPV-WR13A	ISI-OCN3-001 OM-2201-96 & O-2479A	_____	UT	ISI-138	CS	60.00 12.000	50304	Z-OUTLET NOZZLE PC 19 TO 86 & 87 UT FROM NOZ. ID ONS-014  47.6% COVERAGE REF.RFR 94-01
B03.090.003	3RPV-WR12	ISI-OCN3-001 OM-2201-96 & O-2479A	_____	UT	ISI-138	CS	48.00 12.000	40390	W-X INLET NOZZLE PC 18 TO 86 & 87 UT FROM VESSEL ID CAL BLOCK 50304 MAY BE USED 71.7% COVERAGE REF.RFR 94-01
B03.090.003A	3RPV-WR12	ISI-OCN3-001 OM-2201-96 & O-2479A	_____	UT	ISI-138	CS	48.00 12.000	50304	W-X INLET NOZZLE PC 18 TO 86 & 87 UT FROM NOZZLE ID  71.7% COVERAGE REF.RFR 94-01
B03.090.004	3RPV-WR12A	ISI-OCN3-001 OM-2201-96 & O-2479A	_____	UT	ISI-138	CS	48.00 12.000	40390	X-Y INLET NOZZLE PC 18 TO 86 & 87 UT FROM VESSEL ID CAL BLOCK 50304 MAY BE USED 71.7% COVERAGE REF.RFR 94-01

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: O'CONNOR UNIT 3  
 KEY: ITEM NUMBER B03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 O'CONNOR 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 5  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ. NUMBERS	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM. THICK	CALIB BLOCK	COMMENTS
B03.090.004A	3RPV-WR12A	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	48.00 12.000	50304	X-Y INLET NOZZLE PC 18 TO 86 & 87 UT FROM NOZZLE ID  71.7% COVERAGE REF.RFR 94-01
B03.090.005	3RPV-WR12B	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	48.00 12.000	40390	Y-Z INLET NOZZLE PC 18 TO 86 & 87 UT FROM VESSEL ID CAL BLOCK 50304 MAY BE USED 71.7% COVERAGE REF.RFR 94-01
B03.090.005A	3RPV-WR12B	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	48.00 12.000	50304	Y-Z INLET NOZZLE PC 18 TO 86 & 87 UT FROM NOZZLE ID  71.7% COVERAGE REF.RFR 94-01
B03.090.006	3RPV-WR12C	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	48.00 12.000	40390	Z-W INLET NOZZLE PC 18 TO 86 & 87 UT FROM VESSEL ID CAL BLOCK 50304 MAY BE USED 71.7% COVERAGE REF.RFR 94-01
B03.090.006A	3RPV-WR12C	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	48.00 12.000	50304	Z-W INLET NOZZLE PC 18 TO 86 & 87 UT FROM NOZZLE ID  71.7% COVERAGE REF.RFR 94-01
B03.090.007	3RPV-WR54	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	25.00 12.000	40390	CORE FLOOD NOZ W-AXIS PC 17 TO 86 UT FROM VESSEL ID CAL BLOCK 50304 MAY BE USED 87.9% COVERAGE REF.RFR 94-01
B03.090.007A	3RPV-WR54	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	25.00 12.000	40390	CORE FLOOD NOZ W-AXIS PC 17 TO 86 UT FROM NOZZLE ID CAL BLOCK 50304 MAY BE USED 87.9% COVERAGE REF.RFR 94-01
B03.090.008	3RPV-WR54A	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	25.00 12.000	40390	CORE FLOOD NOZ Y-AXIS PC 17 TO 86 UT FROM VESSEL ID CAL BLOCK 50304 MAY BE USED 87.9% COVERAGE REF.RFR 94-01

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 6  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM. THICK	CALIB BLOCK	COMMENTS
B03.090.008A	3RPV-WR54A	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	25.00 12.000	40390	CORE FLOOD NOZ Y-AXIS PC 17 TO 86 UT FROM NOZZLE ID CAL BLOCK 50304 MAY BE USED 87.9% COVERAGE REF.RFR 94-01
B03.100.000	REACTOR VESSEL	*****NOZZLE INSIDE RADIUS SECTION*****	=====	***	*****	*****	--- ---	*****	***** *****
B03.100.001	3RPV-WR13	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	60.00 12.000	50304	X-OUTLET NOZZLE PC 19 TO 86 & 87 UT FROM NOZ. ID ONS-014
B03.100.002	3RPV-WR13A	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	60.00 12.000	50304	Z-OUTLET NOZZLE PC 19 TO 86 & 87 UT FROM NOZ. ID ONS-014
B03.100.003	3RPV-WR12	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	48.00 12.000	50304	H-X INLET NOZ PC 18 TO 86 & 87 UT FROM NOZZLE ID 68.4% COVERAGE REF.RFR 94-01
B03.100.004	3RPV-WR12A	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	48.00 12.000	50304	X-Y INLET NOZ PC 18 TO 86 & 87 UT FROM NOZZLE ID 68.4% COVERAGE REF.RFR 94-01
B03.100.005	3RPV-WR12B	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	48.00 12.000	50304	Y-Z INLET NOZ PC 18 TO 86 & 87 UT FROM NOZZLE ID 68.4% COVERAGE REF.RFR 94-01
B03.100.006	3RPV-WR12C	ISI-0CN3-001 OM-2201-96 & 0-2479A	=====	UT	ISI-138	CS	48.00 12.000	50304	Z-W INLET NOZ PC 18 TO 86 & 87 UT FROM NOZZLE ID 68.4% COVERAGE REF.RFR 94-01

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 7  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM. THICK	CALIB BLOCK	COMMENTS
B03.100.007	3RPV-WR54	ISI-OCN3-001 OM-2201-96 & σ-2479A	_____	UT	ISI-138	CS	25.00 12.000	40390	CORE FLOOD NOZ W-AXIS PC 17 TO 86 UT FROM NOZZLE ID CAL BLOCK 50304 MAY BE USED 50.0% COVERAGE REF.RFR 94-01
B03.100.008	3RPV-WR54A	ISI-OCN3-001 OM-2201-96 & σ-2479A	_____	UT	ISI-138	CS	25.00 12.000	40390	CORE FLOOD NOZ Y-AXIS PC 17 TO 86 UT FROM NOZZLE ID CAL BLOCK 50304 MAY BE USED 50.0% COVERAGE REF.RFR 94-01
B03.110.000	***PRESSURIZER	NOZZLE TO VESSEL*** WELDS*****	_____	***	*****	*****	_____	*****	***** *****
B03.110.009	3PZR-WP26-1	ISI-OCN3-002	_____	UT	NDE-620 NDE-640	CS	06.188	40338	PZR SEN & SAMPLING NOZ BET W&X ID 30 TO 04 RFR 94-01; (34.39% COVERAGE)
B03.110.011	3PZR-WP26-3	ISI-OCN3-002	_____	UT	NDE-620 NDE-640	CS	06.188	40338	PZR SENSING/SAMPLING NOZZLE 47 DEGREES OFF W-AXIS ID 30 TO 04 RFR 94-01; (35.5% COVERAGE)
B03.110.012	3PZR-WP26-7	ISI-OCN3-002	_____	UT	NDE-620 NDE-640	CS	06.188	40338	PZR SENSING/SAMPLING NOZZLE 40 DEGREES OFF W-AXIS ID 30 TO 04 RFR 94-01 (34.39% COVERAGE)
B03.120.000	***PRESSURIZER	NOZZLE INSIDE RADIUS SECTION*****	_____	***	*****	*****	_____	*****	***** *****
B03.120.009	3PZR-WP26-1	ISI-OCN3-002	_____	UT	NDE-680	CS	06.188	40338	SAMPLING NOZZLE BETWEEN W & X PC 30 TO 4 INSIDE RADIUS RFR 94-01; (60.6% COVERAGE)

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 8  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM. THICK	CALIB BLOCK	COMMENTS
B03.120.011	3PZR-WP26-3	ISI-0CN3-002	_____	UT	NDE-680	CS	06.188	40338	SAMPLING NOZZLE 47 DEGREES OFF W AXIS PC 30 TO 4 INSIDE RAD. RFR 94-01 (166.7% COVERAGE)
B03.120.012	3PZR-WP26-7	ISI-0CN3-002	_____	UT	NDE-680	CS	06.188	40338	SAMPLING NOZZLE 40 DEGREES OFF W AXIS PC 30 TO 4 INSIDE RAD. RFR 94-01; (60.6% COVERAGE)
B03.130.000	*****STEAM	GENERATOR NOZZLE TO VESSEL WELDS*****	_____	***	*****	*****	___	*****	***** *****
B03.140.000	*****STEAM	GENERATOR NOZZLE*** INSIDE RADIUS*****	_____	***	*****	*****	___	*****	***** *****
B03.140.002	3SGA-WG50-1	ISI-0CN3-003	_____	UT	NDE-680	CS	38.38 08.000	40393	3A Y-Z AXIS OUT. NOZZLE INSIDE RADIUS SECTION PC 65 TO 07 RFR 94-01 (80% COVERAGE)
B03.140.005	3SGA-WG25	ISI-0CN3-003	_____	UT	NDE-680	CS	48.63 08.000	40393	3A INLET NOZZLE INSIDE RADIUS SECTION ID 70 TO 08 RFR 94-01 (74% COVERAGE)
B03.140.006	3SGB-WG25	ISI-0CN3-004	_____	UT	NDE-680	CS	48.63 08.000	40393	3B INLET NOZZLE INSIDE RADIUS SECTION ID 70 TO 08 RFR 94-01; (74% COVERAGE)
B03.150.000	HEAT EXCHANGER	NOZZLE TO VESSEL*** WELDS*****	_____	***	*****	*****	___	*****	**** INSPECTOR TO RECORD **** ** COOLER S\N ON INSP. DATA **

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 9  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B03.150.003	3-LDCB-IN-V1	OM-2201-1419	_____	UT	NDE-600	SS	03.00 00.875	40411	LDC-B TUBESIDE INL. NOZ.,PC.5 TO 3, INSPECTOR RECORD S\N
B03.150.004	3-LDCB-OUT-V2	OM-2201-1419	_____	UT	NDE-600	SS	03.00 00.875	40411	LDC-B TUBESIDE OUT. NOZ.,PC.5 TO 3, INSPECTOR RECORD S\N
B03.160.000	HEAT EXCHANGER	NOZZLE INSIDE RADIUS SECTION*****	_____	***	*****	*****	_____ _____	*****	**** INSPECTOR TO RECORD **** ** COOLER S\N ON INSP. DATA **

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B04

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 10  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B04.012.000	***** PARTIAL	PENETRATION WELDS*** CRD NOZZLES *****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B04.013.000	***** PARTIAL	PENETRATION WELDS*** INSTRUMENTATION ****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B05

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 11  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM. THICK	CALIB BLOCK	COMMENTS
B05.010.000	REACTOR VESSEL	NOZZLE TO SAFE END** BUTT WELDS*****	_____	***	*****	*****	_____ _____ _____	*****	NOMINAL PIPE SIZE GREATER THAN OR EQUAL TO 4 INCH
B05.010.001A	3RPV-WR53	ISI-0CN3-001 OM-2201-96 & Ø-2479A	_____	UT	ISI-138 NDE-610	CS/SS	15.63 01.688	40388	A SIDE CORE FLD W-AXIS SAFE END UT FROM NOZZLE SIDE CAL BLOCK 40389 MAY BE USED
B05.010.001B	3RPV-WR53	ISI-0CN3-001 OM-2201-96 & Ø-2479A	_____	UT	ISI-138 NDE-610	CS/SS	15.63 01.688	40389	A SIDE CORE W-AXIS SAFE END UT FROM SAFE END SIDE CAL BLOCK 40388 MAY BE USED
B05.010.002A	3RPV-WR53A	ISI-0CN3-001 OM-2201-96 & Ø-2479A	_____	UT	ISI-138 NDE-610	CS/SS	15.63 01.688	40388	B SIDE CORE FLD Y-AXIS SAFE END UT FROM NOZZLE SIDE CAL BLOCK 40389 MAY BE USED
B05.010.002B	3RPV-WR53A	ISI-0CN3-001 OM-2201-96 & Ø-2479A	_____	UT	ISI-138 NDE-610	CS/SS	15.63 01.688	40389	B SIDE CORE FLD Y-AXIS SAFE END UT FROM SAFE END SIDE CAL BLOCK 40388 MAY BE USED
B05.020.000	***PRESSURIZER	NOZZLE TO SAFE END** BUTT WELDS	_____	***	*****	*****	_____ _____ _____	*****	NOMINAL PIPE SIZE > OR EQUAL TO 4 INCHES
B05.021.000	*****PRESSURIZER	NOZZLE-TO-SAFE END BUTT WELDS *****	_____	***	*****	_____	_____ _____ _____	_____	NOMINAL PIPE SIZE < 4 IN. **** *****
B05.050.000	CLASS 1 PIPING	DISSIMILAR METAL**** BUTT WELDS*****	_____	***	*****	*****	_____ _____ _____	*****	NOMINAL PIPE SIZE 4 IN. & OVER *****



PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B05

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 12  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./THICK	CALIB BLOCK	COMMENTS
B05.051.000	CLASS 1 PIPING	DISSIMILAR METAL*** BUTT WELDS*****	_____	***	*****	*****	_____	****	NOMINAL PIPE SIZE < 4 INCH*** *****

PROGRAM: NISSAQB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B06

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 13  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	INSP LOCS.	PROC. REQ.	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B06.010.000	****REACTOR VESSEL	CLOSURE HEAD NUTS ** *****	___	___	___	___	___	***** *****
B06.030.000	REACTOR VESSEL	CLOSURE STUDS***** *****	___	***	*****	___	___	WHEN REMOVED***** *** REFERENCE NCI-01498 *****
B06.040.000	REACTOR VESSEL	THREADS IN FLANGE*** *****	___	***	*****	___	****	***** *****
B06.050.000	REACTOR VESSEL	CLOSURE WASHERS AND* BUSHINGS*****	___	***	*****	___	****	***** *****
B06.060.000	***PRESSURIZER	BOLTS AND STUDS **** *****	___	***	*****	___	****	***** *****
B06.070.000	***PRESSURIZER	FLANGE SURFACES**** *****	___	***	*****	___	****	INSPECT WHEN CONNECTION DISASSEMBLED
B06.080.000	***PRESSURIZER	NUTS, BUSHINGS, AND WASHERS*****	___	***	*****	___	****	***** *****
B06.180.000	*CLASS 1 PUMPS	BOLTS AND STUDS***** *****	___	***	*****	___	****	GREATER THAN 2 INCH***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B06

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 14  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM. THICK	CALIB BLOCK	COMMENTS
B06.180.003	3RCP-3B1-F	OM-1201-1217 OM-2201-1134-001	_____	UT	NDE-44	CS	03.75 32.000	40362	B1 RCP MAIN FLG.STUDS PC.19 , TOTAL 20 STUDS
B06.180.004	3RCP-3B2-F	OM-1201-1217 OM-2201-1134-001	_____	UT	NDE-44	CS	03.75 32.000	40362	B2 RCP MAIN FLG.STUDS PC.19 , TOTAL 20 STUDS
B06.190.000	*CLASS 1 PUMPS	FLANGE SURFACE ***** *****	_____	***	*****	*****	-._-	*****	WHEN CONNECTION DISASSEMBLED** *****
B06.200.000	*CLASS 1 PUMPS	NUTS,BUSHINGS,AND WASHERS *****	_____	***	*****	*****	-._-	*****	***** *****
B06.200.003	3RCP-3B1-NUTS	OM-1201-1217 OM-2201-1134-001	_____	VT1	QAL-13	-----	-._-	-----	3RCP-3B1-MAIN FLG NUTS, BUSHINGS & WASHERS
B06.200.004	3RCP-3B2-NUTS	OM-1201-1217 OM-2201-1134-001	_____	VT1	QAL-13	-----	-._-	-----	3RCP-3B2-MAIN FLG NUTS, BUSHINGS & WASHERS

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B07

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B07.020.000	***PRESSURIZER	BOLTS,STUDS,AND NUTS *****	_____	***	*****	*****	__.	****	2 IN. AND LESS IN DIAMETER *** *****
B07.030.000	*** STEAM GENERATOR	BOLTS,STUDS AND NUTS	_____	***	*****	*****	__.	****	***** *****
B07.070.000	CLASS 1 VALVES	BOLTS,STUDS,AND NUTS *****	_____	***	*****	*****	__.	****	***** *****
B07.070.018	3-50-LP131	OM-245-1085	_____	VT1	QAL-13	_____	01.50	_____	AUX. PRESS. SPRAY , VLV. LP131 BOLTING.( BASELINE OUTAGE 10 )
B07.080.000	**CRD HOUSINGS	BOLTS,STUDS,AND NUTS *****	_____	***	*****	*****	__.	****	INSPECT ONLY IF HOUSING IS*** DISASSEMBLED*****
B07.080.001	3RPV-CRD-BOLTS	B&W 149902E B&W 149919E	_____	VT1	QAL-13	CS	__.	-----	8 BOLTS PER CRD HOUSING REQUEST FOR RELIEF ONS-012 14 CONN. INSP. TO DATE
B07.080.002	3RPV-CRD-RINGS	B&W 149902E B&W 149919E	_____	VT1	QAL-13	CS	__.	-----	1 PAIR PER CRD HOUSING REQ.FOR REL.ONS-011 & ONS-012 14 CONN. INSP. TO DATE

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B08

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 16  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B08.020.000	***PRESSURIZER	INTEGRALLY WELDED ATTACHMENTS*****	_____	***	*****	*****	____.	*****	***** *****
B08.030.000	STM GENERATORS	INTEGRALLY WELDED ATTACHMENTS*****	_____	***	*****	*****	____.	*****	***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B09

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 17  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B09.011.000	***** CLASS 1	CIRCUMFERENTIAL***** WELDS*****	_____	***	*****	*****	_____ _____	*****	NOMINAL PIPE SIZE 4 IN. & OVER *****
B09.011.014	3PDA1-8	ISI-OCN3-011	_____	UT	ISI-138	CS	33.50 03.000	40350	A1 DISCH TERMINAL END PC 38 TERMINAL END TO REACTOR VESSEL CAL BLOCK 50304 MAY BE USED
B09.011.028	3PDA2-8	ISI-OCN3-012	_____	UT	ISI-138	CS	33.50 03.000	40350	A2 DISCHARGE TERMINAL END PC 38 TO REACTOR VESSEL NOZ CAL BLOCK 50304 MAY BE USED
B09.011.042	3PDB1-8	ISI-OCN3-013	_____	UT	ISI-138	CS	33.50 03.000	40350	B1 DISCHARGE TERMINAL END PC 38 TO STEAM REACTOR VESSEL NOZ CAL BLOCK 50304 MAY BE USED
B09.011.056	3PDB2-8	ISI-OCN3-014	_____	UT	ISI-138	CS	33.50 03.000	40350	B2 DISCHARGE TERMINAL END PC 38 TO REACTOR VESSEL NOZ. CAL BLOCK 50304 MAY BE USED
B09.011.057	3PHA-1	ISI-OCN3-005	_____	UT	ISI-138	CS	42.75 03.000	50304	A HOT LEG TERMINAL END PC 19 TO 32 ONS-014; CAL BLOCK 40350 MAY ALSO BE USED
B09.011.069	3PHB-1	ISI-OCN3-006	_____	UT	ISI-138	CS	42.75 03.000	50304	B HOT LEG TERMINAL END PC 19 TO 32 ONS-014 CAL BLOCK 50304 MAY BE USED
B09.011.104	3PSL-2	ISI-OCN3-015	_____	UT	NDE-600 NDE1001	SS	10.75 01.000	40399	SELECTION CRITERIA 4.2.1

PROGRAM: NISIRONB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B09

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 18  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B09.011.104A	3PSL-2	ISI-OCN3-015		PT	NDE-35	SS	10.75 01.000		SELECTION CRITERIA 4.2.1
B09.011.105	3PSL-3	ISI-OCN3-015		UT	NDE-600 NDE1001	SS	10.75 01.000	40399	SELECTION CRITERIA 4.2.1
B09.011.105A	3PSL-3	ISI-OCN3-015		PT	NDE-35	SS	10.75 01.000		SELECTION CRITERIA 4.2.1
B09.011.106	3PSL-4	ISI-OCN3-015		UT	NDE-600 NDE1001	SS	10.75 01.000	40399	SELECTION CRITERIA 4.2.1
B09.011.106A	3PSL-4	ISI-OCN3-015		PT	NDE-35	SS	10.75 01.000		SELECTION CRITERIA 4.2.1
B09.011.107	3PSL-6	ISI-OCN3-015		UT	NDE-600 NDE1001	SS	10.75 01.000	40399	SELECTION CRITERIA 4.2.1
B09.011.107A	3PSL-6	ISI-OCN3-015		PT	NDE-35	SS	10.75 01.000		SELECTION CRITERIA 4.2.1
B09.011.108	3PSL-7	ISI-OCN3-015		UT	NDE-600 NDE1001	SS	10.75 01.000	40399	SELECTION CRITERIA 4.2.1

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B09

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 19  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B09.011.108A	3PSL-7	ISI-0CN3-015		PT	NDE-35	SS	10.75 01.000		SELECTION CRITERIA 4.2.1
B09.011.151	3-53A-15.1-44	SYS 53A ISO 15 P1 OM-2201-96 & O-2479A		UT	ISI-138	SS	14.00 01.250	40388	CORE FLOOD A TERMINAL END REQUEST FOR RELIEF ONS-001 CAL BLOCK 40389 MAY BE USED 85.0% COVERAGE REF. RFR94-01
B09.011.159	3-53A-16-01	SYS 53A ISO 16 OM-2201-96 & O-2479A		UT	ISI-138	SS	14.00 01.250	40388	CORE FLOOD SYSTEM TERMINAL END CAL BLOCK 40389 MAY BE USED 85.0% COVERAGE REF. RFR 94-01
B09.012.000	***** CLASS 1	LONGITUDINAL***** WELDS*****		***	*****	*****	--- ---	*****	NOMINAL PIPE SIZE 4 IN. & OVER *****
B09.021.000	***** CLASS 1	CIRCUMFERENTIAL***** WELDS*****		***	*****	*****	--- ---	*****	NOMINAL PIPE SIZE < 4 IN. **** *****
B09.021.125	3-51A-63-30	SYS 51A ISO 63		PT	NDE-35	SS	02.50 00.375	----	3A1 HIGH PRESSURE INJECTION
B09.031.000	***** BRANCH PIPE	CONNECTION WELDS *** *****		***	*****	*****	--- ---	*****	NOMINAL PIPE SIZE 4 IN. & OVER *****
B09.032.000	***** BRANCH PIPE	CONNECTION WELDS *** *****		***	*****	*****	--- ---	*****	NOMINAL PIPE SIZE < 4 IN. **** *****



PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B09

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 20  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B09.040.000	***** SOCKET WELDS	***** *****	_____	***	*****	*****	_____ _____	*****	***** *****
B09.040.003	3-50-152-05	SYS 50 ISO 152	_____	PT	NDE-35	SS	01.50 00.281	-----	AUX. PRESSURIZER SPRAY LINE
B09.040.004	3-50-152-07	SYS 50 ISO 152	_____	PT	NDE-35	SS	01.50 00.281	-----	AUX. PRESSURIZER SPRAY LINE

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: O'CONNOR UNIT 3  
 KEY: ITEM NUMBER B10

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 O'CONNOR 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 21  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP PROC. REQ. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B10.010.000	*** CLASS 1 PIPING	INTEGRALLY WELDED ** ATTACHMENTS *****	_____	*** *****	*****	_____	*****	***** ***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B12

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 22  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B12.040.000	CLASS 1 VALVE	BODIES EXCEEDING**** 4 INCH NPS*****	_____	***	*****	*****	_____	****	INSPECT IF DISASSEMBLED***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B13

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 23  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B13.010.000	REATOR VESSEL	VESSEL INTERIOR***** *****	_____	***	*****	*****	____.	****	***** *****
B13.010.001	3RPV-INT SUR	ISI-0CN3-001 -----	_____	VT3	QAL-14	SS	____.	----	INTERIOR SURFACES OF VESSEL USE PROCEDURE ISI-354 ALSO
B13.030.000	REACTOR VESSEL	CORE SUPPORT***** STRUCTURE*****	_____	***	*****	*****	____.	****	***** *****
B13.030.001	3RPV-INTERNALS	----- -----	_____	VT3	QAL-14	SS	____.	----	CORE SUPPORT STRUCTURES HELDS, BOLTING, AND SURFACES

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B14

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 24  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B14.010.000	REACTOR VESSEL	CRD HOUSING WELDS*** *****	_____	***	*****	*****	_____	*****	INSPECT IF DISASSEMBLED***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B15

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 25  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM. THICK	CALIB BLOCK	COMMENTS
B15.010.000	REACTOR VESSEL	PRESSURE RETAINING** BOUNDARY*****	_____	***	*****	*****	__.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B15.011.000	REACTOR VESSEL	PRESSURE RETAINING** BOUNDARY*****	_____	***	*****	*****	__.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B15.020.000	***PRESSURIZER	PRESSURE RETAINING BOUNDARY*****	_____	***	*****	*****	__.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B15.021.000	***PRESSURIZER	PRESSURE RETAINING** BOUNDARY*****	_____	***	*****	*****	__.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B15.030.000	*****STEAM	GENERATORS PRESSURE* RETAINING BOUNDARY**	_____	***	*****	*****	__.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B15.031.000	*****STEAM	GENERATORS PRESSURE* RETAINING BOUNDARY**	_____	***	*****	*****	__.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B15.040.000	HEAT EXCHANGER	PRESSURE RETAINING BOUNDARY	_____	---	-----	-----	__.	-----	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B15.041.000	HEAT EXCHANGER	PRESSURE RETAINING BOUNDARY	_____	---	-----	-----	__.	-----	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B15

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 26  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B15.051.000	CLASS 1 PIPING	PRESSURE RETAINING** BOUNDARY*****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B15.060.000	*CLASS 1 PUMPS	PRESSURE RETAINING** BOUNDARY*****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B15.061.000	*CLASS 1 PUMPS	PRESSURE RETAINING** BOUNDARY*****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
B15.071.000	CLASS 1 VALVES	PRESSURE RETAINING** BOUNDARY*****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B16

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 27  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP PROC. REQ. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B16.011.000	*** STEAM GENERATOR	TUBING ***** *****	_____	*** ***** *****	_____	____	_____	**** STRAIGHT TUBE DESIGN **** *****



PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER C01

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 28  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
C01.010.000	*****SHELL	CIRCUMFERENTIAL**** WELDS*****	=====	***	*****	*****	---. ---	*****	***** PRESSURE VESSEL ***** *****
C01.020.000	*****HEAD	CIRCUMFERENTIAL**** WELDS*****	=====	***	*****	*****	---. ---	*****	***** PRESSURE VESSELS ***** *****
C01.020.001	3-CFTA-UH-SHL	B&W 148732E -----	=====	UT	NDE1002 NDE-640	CS	02.375	40410	CORE FLD TK 3CF-T1A TOP HD TO SHL. PROC NDE-620 MAY BE USED. 98.9% COVERAGE
C01.020.005	3-CFTB-LH-SHL	B&W 148732E -----	=====	UT	NDE1002 NDE-640	CS	02.375	40410	CORE FLD TK 3CF-T1B BOT. HD TO SHL. PROC. NDE-620 MAY BE USED 96.6% COVERAGE
C01.030.000	*****CLASS 2	TUBESHEET TO SHELL WELDS*****	=====	***	*****	*****	---. ---	*****	***** PRESSURE VESSELS ***** *****
C01.030.005	3LPCB-SH-TUBE	B&W 36-43-004-00 -----	=====	UT	NDE-630	SS	00.750	40385	LP COOLER B S/S SHELL TO TUBE SHEET FLANGE 100% COVERAGE OBTAINED

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER C02

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 29  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./THICK	CALIB BLOCK	COMMENTS
C02.010.000	*****NOZZLES	IN VESSELS***** *****	_____	***	*****	*****	__.	****	1/2 IN. NOMINAL THICKNESS *** AND LESS *****
C02.021.000	*****NOZZLE	TO SHELL OR HEAD*** WELDS*****	_____	***	*****	*****	00.500	****	***** *****
C02.021.006	3-CFTB-OUTLET	B&W 148732E	_____	UT	NDE-620 NDE-640	CS	20.50 02.875	40410	CORE FLD TK 3CF-T1B OUTLET NOZZLE PC 6 TO 11 NDE-1002 MAY BE USED 92.88% COVERAGE
C02.021.006A	3-CFTB-OUTLET	B&W 148732E OM 201-1021	_____	MT	NDE-25	CS	20.50 02.875	-----	CORE FLD TK 3CF-T1B OUTLET NOZZLE PC 6 TO 11 REF PIR 4-091-0093 SECT 10
C02.022.000	*****NOZZLE	INSIDE RADIUS***** SECTION*****	_____	***	*****	*****	__.	****	***** *****
C02.022.006	3-CFTB-OUTLET	B&W 148732E	_____	UT	NDE-680 NDE1002	CS	20.50 02.875	40410	CORE FLOOD TANK 3CF-T1B OUTLET NOZZLE PC 6 TO 11 RFR 94-01 (72% COVERAGE)

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER C03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 30  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
C03.010.000	*****PRESSURE	VESSELS INTEGRALLY** WELDED ATTACHMENTS**		***	*****	*****		*****	***** *****
C03.010.017	3-CFTA-WT18-X	B&W 148732E		MT	NDE-25	CS	02.000	----	CORE FLD TK SUPPORT ATTACH. X QUADRANT PC 18 TO 12
C03.010.022	3-CFTB-WT18-W	B&W 148732E		MT	NDE-25	CS	02.000	----	CORE FLD TK SUPPOT ATTACH. W QUADRANT PC 18 TO 12
C03.040.000	CLASS 2 PIPING	INTEGRALLY WELDED ATTACHMENTS*****		***	*****	*****		*****	***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER C05

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 31  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
C05.011.000	*** CLASS 2 PIPING	CIRCUMFERENTIAL WELD *****		***	*****	*****		*****	NOMINAL WALL THICKNESS ***** 1/2 IN, OR LESS *****
C05.011.002	3-53B-33-58	SYS 53B ISØ 33		PT	NDE-35	SS	14.00 00.250		
C05.011.003	3-53B-33-56	SYS 53B ISØ 33		PT	NDE-35	SS	14.00 00.250		
C05.011.065	3-53B-47-08	SYS 53B ISØ 47		PT	NDE-35	SS	08.00 00.250		
C05.011.066	3-53B-47-02	SYS 53B ISØ 47		PT	NDE-35	SS	10.00 00.250		
C05.011.074	3-53B-50-42	SYS 53B ISØ 50		PT	NDE-35	SS	06.00 00.134		
C05.011.075	3-53B-50-26	SYS 53B ISØ 50		PT	NDE-35	SS	10.00 00.250		
C05.011.232	3-54B-8-36	SYS 54B ISØ 8		PT	NDE-35	SS	08.00 00.250		

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER C05

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 32  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
C05.011.233	3-54B-8-36A	SYS 54B ISO 8		PT	NDE-35	SS	08.00 00.250		
C05.011.234	3-54B-8-43	SYS 54B ISO 8		PT	NDE-35	SS	08.00 00.250		
C05.011.235	3-54B-6-32	SYS 54B ISO 6		PT	NDE-35	SS	08.00 00.250		
C05.011.236	3-54B-6-23A	SYS 54B ISO 6		PT	NDE-35	SS	08.00 00.250		
C05.011.237	3-54B-6-23	SYS 54B ISO 6		PT	NDE-35	SS	08.00 00.250		
C05.011.269	3-51A-50-44	SYS 51A ISO 50		PT	NDE-35	SS	06.00 00.280		
C05.012.000	*** CLASS 2 PIPING	LONGITUDINAL WELDS *****		***	***** *****				NOMINAL WALL THICKNESS ***** 1/2 IN. OR LESS *****
C05.012.062	3-54B-6-23AL	SYS 54B ISO 6		PT	NDE-35	SS	08.00 00.250		LONG SEAM FOR C05.011.236

PROGRAM: NISIRUMB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER C05

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 33  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
C05.012.063	3-54B-6-23L	SYS 54B ISO 6		PT	NDE-35	SS	08.00 00.250		LONG SEAM FOR C05.011.237
C05.012.064	3-53B-33-58L	SYS 53B ISO 33		PT	NDE-35	SS	14.00 00.250		LONG SEAM FOR C05.011.002
C05.012.065	3-53B-33-56L	SYS 53B ISO 33		PT	NDE-35	SS	14.00 00.250		LONG SEAM FOR C05.011.003;HEEL OF 90
C05.012.065A	3-53B-33-56L1	SYS 53B ISO 33		PT	NDE-35	SS	14.00 00.250		LONG SEAM FOR C05.011.003;TOE OF 90
C05.012.066	3-53B-50-26L	SYS 53B ISO 50		PT	NDE-35	SS	10.00 00.250		LONG SEAM FOR C05.011.075
C05.021.000	*** CLASS 2 PIPING	CIRCUMFERENTIAL WELD *****		***	*****	*****	---	*****	NOMINAL WALL THICKNESS ***** > 1/2 INCH *****
C05.021.001	3-53A-15.2-76	SYS 53A ISO 15 PT 2		UT	NDE-600	SS	10.00 01.125	40354	
C05.021.001A	3-53A-15.2-76	SYS 53A ISO 15 PT 2		PT	NDE-35	SS	10.00 01.125		

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER C05

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 34  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
C05.022.000	*** CLASS 2 PIPING	LONGITUDINAL WELDS *****	_____	***	***** *****	_____	____.	_____	NOMINAL WALL THICKNESS ***** > 1/2 INCH *****
C05.031.000	CLASS 2 PIPING	BRANCH CONNECTION WELDS *****	_____	***	*****	*****	____.	*****	***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER C07

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 35  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./THICK	CALIB BLOCK	COMMENTS
C07.011.000	*****PRESSURE	VESSELS***** *****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
C07.021.000	*****PIPING	***** *****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
C07.031.000	*****PUMPS	***** *****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
C07.040.000	*****VALVES	***** *****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
C07.041.000	*****VALVES	***** *****	_____	***	*****	*****	____.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO



PROGRAM: NISIRUNB-QAISIO2  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER D01

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 36  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. PROC. REQ. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
D01.012.000	*****SYSTEM	HYDROSTATIC TEST*** *****	_____	*** *****	*****	_____	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER D02

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 37  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM. THICK	CALIB BLOCK	COMMENTS
D02.012.000	*****SYSTEM	HYDROSTATIC***** TEST*****	=====	***	*****	*****	-. -.	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO
D02.020.000	*****INTEGRAL	ATTACHMENTS***** *****	=====	***	*****	*****	-. -.	*****	COMPONENT SUPPORTS AND RESTRAINTS*****
D02.030.000	*****INTEGRAL	ATTACHMENTS***** *****	=====	***	*****	*****	-. -.	*****	MECHANICAL AND HYDRAULIC***** SNUBBERS*****
D02.040.000	*****INTEGRAL	ATTACHMENTS***** *****	=====	***	*****	*****	-. -.	*****	SPRING TYPE SUPPORTS***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER D03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 38  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP PROC. REQ. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
D03.012.000	*****SYSTEM	HYDROSTATIC TEST**** *****	_____	*** *****	*****	_____	*****	REF. PRESSURE TEST PROGRAM MAINTAINED BY QATS-GO

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER E01

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 39  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP PROC. REQ. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
E01.001.000	REACTOR COOL. PUMP	FLYWHEEL INSPECTIONS *****		*** ***** *****				***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER E03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 40  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ. NUMBERS	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./THICK	CALIB BLOCK	COMMENTS
E03.001.000	****ALTERNATE	EXAMINATIONS***** *****	_____	***	*****	*****	____.	*****	***** *****
E03.001.003	3RCP-3A2	OM1201-1217	_____	VT1	QAL-13	SS	____.	_____	INSP. FLG. JOINT, STUDS AND ADJ AREA PER REQ. FOR REL. ONS-010 INSP PER REQ. FOR REL. ONS-010
E03.001.004	3RCP-3B1	OM1201-1217	_____	VT1	QAL-13	SS	____.	_____	INSP. FLG. JOINT, STUDS AND ADJ AREA PER REQ. FOR REL. ONS-010 INSP PER REQ. FOR REL. ONS-010

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER E04

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 41  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
E04.001.000	**** HPI SAFE END	EXAMINATIONS ***** *****	_____	***	***** *****	_____	_____	_____	***** *****

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER E05

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 42  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
E05.001.002	3PSL-133	ISI-0CN3-015	_____	UT	NDE-600	SS	10.75 01.000	40399	ELBOW PC 80 TO 83 EXAM 3" BAND PER VOL 1 SECT 7.1.6
E05.001.003	3PSL-142	ISI-0CN3-015	_____	UT	NDE-600	SS	10.75 01.000	40399	ELBOW PC 80 TO 82 EXAM 3" BAND PER VOL 1 SECT 7.1.6

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER E09

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 43  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB. BLOCK	COMMENTS
E09.001.000	*AUXILIARY FEEDWATER	HEADER*****	*****	***		*****			* (PSC21-82) WATER***** * HAMMER EXAMINATIONS *****
E09.001.014	3-03A-147-10	SYS03A ISO 147		MT	NDE-25	CS	03.00 00.300		3B AUX. FDMTR. HEADER 3" FLANGE TO ELL
E09.001.015	3-03A-147-4VEN	SYS03A ISO 147		MT	NDE-25	CS	04.62 00.938		3B AUX. FDMTR. HEADER 3" FLANGE NOZZLE TO 6" HEADER
E09.001.016	3-03A-147-12	SYS03A ISO 147		MT	NDE-25	CS	03.00 00.300		3B AUX. FDMTR. HEADER 3" FLANGE TO ELL
E09.001.017	3-03A-147-5VEN	SYS03A ISO 147		MT	NDE-25	CS	04.62 00.938		3B AUX. FDMTR. HEADER 3" FLANGE NOZZLE TO 6" HEADER
E09.001.018	3-03A-147-14	SYS03A ISO 147		MT	NDE-25	CS	03.00 00.300		3B AUX. FDMTR. HEADER 3" FLANGE TO ELL
E09.001.019	3-03A-147-6VEN	SYS03A ISO 147		MT	NDE-25	CS	04.62 00.938		3B AUX. FDMTR. HEADER 3" FLANGE NOZZLE TO 6" HEADER
E09.001.020	3-03A-147-4	SYS03A ISO 147		MT	NDE-25	CS	03.00 00.300		3B AUX. FDMTR. HEADER 3" FLANGE TO ELL



PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER E09

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 44  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM. THICK	CALIB BLOCK	COMMENTS
E09.001.021	3-03A-147-7VEN	SYS03A ISO 147	_____	MT	NDE-25	CS	04.62 00.938	_____	3B AUX. FDWTR. HEADER 3" FLANGE NOZZLE TO 6" HEADER
E09.001.022	3-03A-147-6	SYS03A ISO 147	_____	MT	NDE-25	CS	03.00 00.300	_____	3B AUX. FDWTR. HEADER 3" FLANGE-TO-ELL
E09.001.023	3-03A-147-8VEN	SYS03A ISO 147	_____	MT	NDE-25	CS	04.62 00.938	_____	3B AUX. FDWTR. HEADER 3" FLANGE NOZZLE TO 6" HEADER
E09.001.024	3-03A-147-8	SYS03A ISO 147	_____	MT	NDE-25	CS	03.00 00.300	_____	3B AUX. FDWTR. HEADER 3" FLANGE-TO-ELL
E09.001.025	3-03A-147-9VEN	SYS03A ISO 147	_____	MT	NDE-25	CS	04.62 00.938	_____	3B AUX. FDWTR. HEADER 3" FLANGE NOZZLE TO 6" HEADER
E09.001.026	3-03A-147-1VEN	SYS03A ISO 147	_____	RT	NDE-12	CS	06.00 00.432	_____	3B AUX. FDWTR. HEADER HEADER PIPE-TO-TEE
E09.001.027	3-03A-147-16	SYS03A ISO 147	_____	RT	NDE-12	CS	06.00 00.432	_____	3B AUX. FDWTR. HEADER HEADER PIPE-TO-CAP

PROGRAM: NISIRUNB-QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER F1.

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION LISTING RFO #14

PAGE 45  
 DATE 04/11/94

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
F1.01.000	***** CLASS 1	SUPPORTS ***** *****	_____	***	***** *****	_____	____.	_____	***** *****
F1.01.140	3SGA-SKIRT	OM-2201-222 ISI-OCN3-003	_____	VT	QCL-14	_____	____.	_____	3SGA SUPPORT SKIRT
F1.01.141	3SGB-SKIRT	OM-2201-222 ISI-OCN3-004	_____	VT	QCL-14	_____	____.	_____	3SGB SUPPORT SKIRT
F1.02.000	***** CLASS 2	SUPPORTS ***** *****	_____	***	***** *****	_____	____.	_____	***** *****
F1.03.000	***** CLASS 3	SUPPORTS ***** *****	_____	***	***** *****	_____	____.	_____	***** *****

**B. Items examined by Pressure Testing**

Item Number = ASME Section XI Tables IWB-2500-1 (Class 1),  
IWC-2500-1 (Class 2)

Drawing Number = Number of the Flow Diagram

Revision = Revision of the Flow Diagram

Test = Type of Pressure Test

Comp = Vessel, Piping or Pump

Comp Name = Example: Reactor Vessel, etc.; for piping -  
System designation will be used

Req. Insp. = Type inspection performed, i.e., VT2

Req. Proc = Required inspection procedure

Comments = General and/or Detail Description

OCONEE UNIT NUMBER 3  
CLASS A (CATEGORY B-P) REQUIREMENTS  
FOR OUTAGE NUMBER 14

ITEM NO.	DRAWING	REV	TEST	COMP	COMP NAME	REQ. INSP	REQ. PROC	COMMENTS
B15.011.001	OFD-100A-3.1	11	HYDRO	VESSEL	UNIT 3 REACTOR	VT-2	QAL-15	
B15.021.001	OFD-100A-3.2	07	HYDRO	VESSEL	PRESSURIZER	VT-2	QAL-15	
B15.031.001	OFD-100A-3.1	11	HYDRO	VESSEL	STEAM GENERATOR 3A	VT-2	QAL-15	
B15.031.002	OFD-100A-3.1	11	HYDRO	VESSEL	STEAM GENERATOR 3B	VT-2	QAL-15	
B15.041.001	OFD-101A-3.1	11	HYDRO	VESSEL	LETDOWN COOLER 3AVT-2	VT-2	QAL-15	
B15.041.002	OFD-101A-3.1	11	HYDRO	VESSEL	LETDOWN COOLER 3BVT-2	VT-2	QAL-15	
B15.050.003	OFD-101A-3.4	14	LEAK	PIPING	HPI SYSTEM	VT-2	QAL-15	
B15.051.001	OFD-100A-3.1	11	HYDRO	PIPING	RC SYSTEM	VT-2	QAL-15	
B15.051.001A	OFD-100A-3.2	07	HYDRO	PIPING	RC SYSTEM	VT-2	QAL-15	
B15.051.002	OFD-101A-3.1	11	HYDRO	PIPING	HPI SYSTEM	VT-2	QAL-15	
B15.051.003	OFD-101A-3.4	14	HYDRO	PIPING	HPI SYSTEM	VT-2	QAL-15	
B15.051.004	OFD-102A-3.1	17	HYDRO	PIPING	LPI SYSTEM	VT-2	QAL-15	
B15.051.005	OFD-102A-3.2	10	HYDRO	PIPING	LPI SYSTEM	VT-2	QAL-15	
B15.051.006	OFD-102A-3.3	05	HYDRO	PIPING	LPI SYSTEM	VT-2	QAL-15	
B15.051.007	OFD-110A-3.1	09	HYDRO	PIPING	CA SYSTEM	VT-2	QAL-15	
B15.051.009	OFD-100A-3.3	07	HYDRO	PIPING	RC SYSTEM	VT-2	QAL-15	
B15.051.010	OFD-110A-3.4	02	HYDRO	PIPING	CA SYSTEM	VT-2	QAL-15	
B15.061.001	OFD-100A-3.1	11	HYDRO	PUMP	RCP-3A1	VT-2	QAL-15	
B15.061.002	OFD-100A-3.1	11	HYDRO	PUMP	RCP-3A2	VT-2	QAL-15	
B15.061.003	OFD-100A-3.1	11	HYDRO	PUMP	RCP-3B1	VT-2	QAL-15	

OCONEE UNIT NUMBER 3  
CLASS A (CATEGORY B-P) REQUIREMENTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>REV</u>	<u>TEST</u>	<u>COMP</u>	<u>COMP NAME</u>	<u>REQ. INSP</u>	<u>REQ. PROC</u>	<u>COMMENTS</u>
B15.061.004	OFD-100A-3.1	11	HYDRO	PUMP	RCP-3B2	VT-2	QAL-15	

OCONEE UNIT NUMBER 3  
CLASS B (CATEGORY C-H) REQUIREMENTS  
FOR OUTAGE NUMBER 14

ITEM NO.	DRAWING	REV	TEST	COMP	COMP NAME	REQ. INSP	REQ. PROC	COMMENTS
C07.011.001	OFD-121B-3.3	09	HYDRO	VESSEL	STEAM GENERATOR 3A	VT-2	QAL-15	
C07.011.002	OFD-121B-3.3	09	HYDRO	VESSEL	STEAM GENERATOR 3B	VT-2	QAL-15	
C07.011.003	OFD-102A-3.3	05	HYDRO	VESSEL	CORE FLOOD TANK 3A	VT-2	QAL-15	
C07.011.004	OFD-102A-3.3	05	HYDRO	VESSEL	CORE FLOOD TANK 3B	VT-2	QAL-15	
C07.021.003	OFD-101A-3.2	11	HYDRO	PIPING	HPI SYSTEM	VT-2	QAL-15	
C07.021.004	OFD-101A-3.3	07	HYDRO	PIPING	HPI SYSTEM	VT-2	QAL-15	
C07.021.005	OFD-101A-3.4	14	HYDRO	PIPING	HPI SYSTEM	VT-2	QAL-15	
C07.021.007	OFD-102A-3.1	17	HYDRO	PIPING	LPI SYSTEM	VT-2	QAL-15	
C07.021.008	OFD-102A-3.2	10	HYDRO	PIPING	LPI SYSTEM	VT-2	QAL-15	
C07.021.009	OFD-102A-3.3	05	HYDRO	PIPING	LPI SYSTEM	VT-2	QAL-15	
C07.021.011	OFD-104A-3.1	14	HYDRO	PIPING	SF SYSTEM	VT-2	QAL-15	
C07.021.017	OFD-110A-3.1	09	HYDRO	PIPING	CA SYSTEM	VT-2	QAL-15	
C07.021.019	OFD-116A-3.1	01	HYDRO	PIPING	R.PRGE	VT-2	QAL-15	See PIP Number 3-094-0425
C07.021.020	OFD-116C-3.1	02	HYDRO	PIPING	N.PRGE	VT-2	QAL-15	
C07.021.021	OFD-121B-3.3	09	HYDRO	PIPING	FDW SYSTEM	VT-2	QAL-15	
C07.021.022	OFD-121B-3.5	10	HYDRO	PIPING	FDW SYSTEM	VT-2	QAL-15	
C07.021.023	OFD-121D-3.1	16	HYDRO	PIPING	FDW SYSTEM	VT-2	QAL-15	
C07.021.024	OFD-121D-1.2	08	HYDRO	PIPING	FDW SYSTEM	VT-2	QAL-15	
C07.021.025	OFD-122A-3.1	11	HYDRO	PIPING	MS SYSTEM	VT-2	QAL-15	

OCONEE UNIT NUMBER 3  
CLASS B (CATEGORY C-H) REQUIREMENTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>REV</u>	<u>TEST</u>	<u>COMP</u>	<u>COMP NAME</u>	<u>REQ. INSP</u>	<u>REQ. PROC</u>	<u>COMMENTS</u>
C07.021.026	OFD-122A-3.2	08	HYDRO	PIPING	MS SYSTEM	VT-2	QAL-15	
C07.021.027	OFD-122A-3.3	08	HYDRO	PIPING	MS SYSTEM	VT-2	QAL-15	
C07.021.028	OFD-122A-3.4	14	HYDRO	PIPING	MS SYSTEM	VT-2	QAL-15	
C07.021.029	OFD-122B-3.1	06	HYDRO	PIPING	LPS SYSTEM	VT-2	QAL-15	
C07.021.032	OFD-127B-3.2	08	HYDRO	PIPING	N SYSTEM	VT-2	QAL-15	
C07.021.033	OFD-137A-3.2	02	HYDRO	PIPING	BA SYSTEM	VT-2	QAL-15	
C07.021.034	OFD-137B-1.2	09	HYDRO	PIPING	IA SYSTEM	VT-2	QAL-15	

OCONEE UNIT NUMBER 3  
CLASS C (CATEGORY D-A) REQUIREMENTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>REV</u>	<u>TEST</u>	<u>COMP</u>	<u>COMP NAME</u>	<u>REQ. INSP</u>	<u>REQ. PROC</u>	<u>COMMENTS</u>
D01.012.002	OFD-101A-3.1	11	HYDRO	PIPING	HPI SYSTEM	VT-2	QAL-15	
D01.012.003	OFD-101A-3.2	11	HYDRO	PIPING	HPI SYSTEM	VT-2	QAL-15	
D01.012.007	OFD-106A-3.2	04	HYDRO	PIPING	CT SYSTEM	VT-2	QAL-15	
D01.012.008	OFD-109A-3.1	04	HYDRO	PIPING	DW SYSTEM	VT-2	QAL-15	Reference TER 3.4.3.4 for Request for Relief testing.



OCONEE UNIT NUMBER 3  
CLASS C (CATEGORY D-B) REQUIREMENTS  
FOR OUTAGE NUMBER 14

ITEM NO.	DRAWING	REV	TEST	COMP	COMP NAME	REQ. INSP	REQ. PROC	COMMENTS
D02.012.001A	OFD-110A-3.3	02	HYDRO	PIPING	CA SYSTEM	VT-2	QAL-15	
D02.012.003	OFD-121A-3.7	15	HYDRO	PIPING	C SYSTEM	VT-2	QAL-15	
D02.012.005	OFD-121B-3.3	09	HYDRO	PIPING	FDW SYSTEM	VT-2	QAL-15	
D02.012.006	OFD-121B-3.5	10	HYDRO	PIPING	FDW SYSTEM	VT-2	QAL-15	
D02.012.007	OFD-121D-3.1	16	HYDRO	PIPING	FDW SYSTEM	VT-2	QAL-15	
D02.012.008	OFD-121D-1.2	08	HYDRO	PIPING	FDW SYSTEM	VT-2	QAL-15	
D02.012.022	OFD-124A-3.1	07	HYDRO	PIPING	LPS SYSTEM	VT-2	QAL-15	
D02.012.023	OFD-124A-3.3	10	HYDRO	PIPING	LPS SYSTEM	VT-2	QAL-15	
D02.012.024	OFD-124B-3.1	14	HYDRO	PIPING	LPS SYSTEM	VT-2	QAL-15	
D02.012.025	OFD-124B-3.2	06	HYDRO	PIPING	LPS SYSTEM	VT-2	QAL-15	
D02.012.026	OFD-124B-3.4	06	HYDRO	PIPING	LPS SYSTEM	VT-2	QAL-15	
D02.012.027	OFD-124A-1.1	13	HYDRO	PIPING	LPS SYSTEM	VT-2	QAL-15	
D02.012.029	OFD-124C-3.2	12	HYDRO	PIPING	HPS SYSTEM	VT-2	QAL-15	

OCONEE UNIT NUMBER 3  
CLASS C (CATEGORY D-C) REQUIREMENTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>REV</u>	<u>TEST</u>	<u>COMP</u>	<u>COMP NAME</u>	<u>REQ. INSP</u>	<u>REQ. PROC</u>	<u>COMMENTS</u>
D03.012.001	OFD-104A-3.1	14	HYDRO	PIPING	SF SYSTEM	VT-2	QAL-15	
D03.012.002	OFD-104A-3.2	09	HYDRO	PIPING	SF SYSTEM	VT-2	QAL-15	

5.0 Results Of Inspections Performed During Outage 14

The results of each examination shown in the final ISI Plan (Section 4 of this report) are included in this section. The completion date and status for each examination are shown. Limited examinations are described in further detail in Section 5.2. All examinations revealing reportable indications are described in further detail in Section 6.

5.1 The information shown below is a field description for the reporting format included in this section of the report:

A. Items examined by NDE methods

Item Number	=	ASME Section XI Tables IWB-2500-1 (Class 1), IWC-2500-1 (Class 2), IWF-2500-1 (Class 1 and Class 2), Augmented Requirements
ID Number	=	Unique Identification Number
Inspection Date	=	Date of Examination
Inspection Status	=	CLR Clear REC Recordable REP Reportable
Inspection Limited	=	<u>L</u> Limited _ No
Geo. Ref. (Geometric Reflector applies only to UT)	=	<u>Y</u> Yes <u>N</u> No
Comments	=	General and/or Detail Description

PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER B01

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 1  
DATE 04/11/94

ITEM NUMBER	ID NUMBER	INSPECTION DATE	INSPECTION STATUS	INSPECTION LIMITED	GEØ. REF.	COMMENTS
B01.011.001	3RPV-WR1A	01/21/94	REC	-	Y	
B01.011.002	3RPV-WR1	01/23/94	REC	-	Y	
B01.011.003	3RPV-WR18	01/22/94	REC	L	Y	73.4% COVERAGE REF.RFR 94-01
B01.021.002	3RPV-WR34	01/27/94	REC	L	Y	43.5% COVERAGE REF.RFR 94-01
B01.030.001	3RPV-WR19	01/24/94	REC	L	Y	67.9% COVERAGE REF.RFR 94-01
B01.030.001B	3RPV-WR19	01/05/94	CLR	L	N	95% COVERAGE OBTAINED

PROGRAM: NISIRUND-QAISIO4  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER B02

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 2  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
B02.060.001	3-LDCA-IN-V3	01/31/94	CLR	L	N	100% COVERAGE OBTAINED

PROGRAM: NISIRUND-QAISI04  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 3  
 DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
B03.090.001	3RPV-WR13	01/22/94	REC	L	Y	47.6% COVERAGE REF.RFR 94-01
B03.090.001A	3RPV-WR13	01/26/94	REC	L	Y	47.6% COVERAGE REF.RFR 94-01
B03.090.002	3RPV-WR13A	01/25/94	REC	L	Y	47.6% COVERAGE REF.RFR 94-01
B03.090.002A	3RPV-WR13A	01/26/94	REC	L	Y	47.6% COVERAGE REF.RFR 94-01
B03.090.003	3RPV-WR12	01/22/94	REC	L	Y	71.7% COVERAGE REF.RFR 94-01
B03.090.003A	3RPV-WR12	01/27/94	REC	L	Y	71.7% COVERAGE REF.RFR 94-01
B03.090.004	3RPV-WR12A	01/21/94	REC	L	Y	71.7% COVERAGE REF.RFR 94-01
B03.090.004A	3RPV-WR12A	01/21/94	REC	L	Y	71.7% COVERAGE REF.RFR 94-01
B03.090.005	3RPV-WR12B	01/26/94	REC	L	Y	71.7% COVERAGE REF.RFR 94-01
B03.090.005A	3RPV-WR12B	01/27/94	REC	L	Y	71.7% COVERAGE REF.RFR 94-01
B03.090.006	3RPV-WR12C	01/26/94	REC	L	Y	71.7% COVERAGE REF.RFR 94-01
B03.090.006A	3RPV-WR12C	01/27/94	REC	L	Y	71.7% COVERAGE REF.RFR 94-01
B03.090.007	3RPV-WR54	01/22/94	REC	L	Y	87.9% COVERAGE REF.RFR 94-01
B03.090.007A	3RPV-WR54	01/22/94	REC	L	Y	87.9% COVERAGE REF.RFR 94-01
B03.090.008	3RPV-WR54A	01/24/94	REC	L	Y	87.9% COVERAGE REF.RFR 94-01

PROGRAM: NISIRUND-QAISI04  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B03

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 4  
 DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
B03.090.008A	3RPV-WR54A	01/24/94	REC	L	Y	87.9% COVERAGE REF.RFR 94-01
B03.100.001	3RPV-WR13	01/23/94	REC	-	Y	_____
B03.100.002	3RPV-WR13A	01/24/94	REC	-	Y	_____
B03.100.003	3RPV-WR12	01/22/94	REC	L	Y	68.4% COVERAGE REF.RFR 94-01
B03.100.004	3RPV-WR12A	01/21/94	CLR	L	-	68.4% COVERAGE REF.RFR 94-01
B03.100.005	3RPV-WR12B	01/23/94	REC	L	Y	68.4% COVERAGE REF.RFR 94-01
B03.100.006	3RPV-WR12C	01/25/94	REC	L	Y	68.4% COVERAGE REF.RFR 94-01
B03.100.007	3RPV-WR54	01/22/94	REC	L	Y	50.0% COVERAGE REF.RFR 94-01
B03.100.008	3RPV-WR54A	01/24/94	REC	L	Y	50.0% COVERAGE REF.RFR 94-01
B03.110.009	3PZR-WP26-1	01/28/94	CLR	L	-	RFR 94-01; (34.39% COVERAGE)
B03.110.011	3PZR-WP26-3	02/02/94	CLR	L	-	RFR 94-01; (35.5% COVERAGE)
B03.110.012	3PZR-WP26-7	01/28/94	CLR	L	-	RFR 94-01 (34.39% COVERAGE)
B03.120.009	3PZR-WP26-1	01/28/94	CLR	L	-	RFR 94-01; (60.6% COVERAGE)
B03.120.011	3PZR-WP26-3	02/02/94	CLR	L	-	RFR 94-01 (66.7% COVERAGE)
B03.120.012	3PZR-WP26-7	01/28/94	CLR	L	-	RFR 94-01; (60.6% COVERAGE)

PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER B03

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 5  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEO. REF. =====	COMMENTS =====
B03.140.002	3SGA-WG50-1	01/10/94	CLR	L	-	RFR 94-01 (80% COVERAGE)
B03.140.005	3SGA-WG25	01/06/94	CLR	L	-	RFR 94-01 (74% COVERAGE)
B03.140.006	3SGB-WG25	01/06/94	CLR	L	-	RFR 94-01; (74% COVERAGE)
B03.150.003	3-LDCB-IN-V1	01/31/94	REC	-	Y	_____
B03.150.004	3-LDCB-OUT-V2	01/31/94	CLR	-	-	_____



PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER B05

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 6  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
B05.010.001A	3RPV-WR53	01/27/94	REC	-	Y	_____
B05.010.001B	3RPV-WR53	01/27/94	REC	-	Y	_____
B05.010.002A	3RPV-WR53A	01/27/94	REC	-	Y	_____
B05.010.002B	3RPV-WR53A	01/27/94	REC	-	Y	_____

PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: O'CONNOR UNIT 3  
KEY: ITEM NUMBER B06

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
O'CONNOR 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 7  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEO. REF. =====	COMMENTS =====
B06.180.003	3RCP-3B1-F	01/17/94	CLR	-	-	_____
B06.180.004	3RCP-3B2-F	01/17/94	CLR	-	-	_____
B06.200.003	3RCP-3B1-NUTS	01/12/94	CLR	-	-	_____
B06.200.004	3RCP-3B2-NUTS	01/12/94	CLR	-	-	_____

PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER B07

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 8  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
B07.070.018	3-50-LP131	01/13/94	CLR	-	-	_____
B07.080.001	3RPV-CRD-BOLTS	01/24/94	REC	-	N	_____
B07.080.002	3RPV-CRD-RINGS	01/24/94	REP	-	N	_____

PROGRAM: NISLOND-QAISI04  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER B09

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 9  
 DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEO. REF. =====	COMMENTS =====
B09.011.014	3PDA1-8	01/23/94	REC	-	Y	
B09.011.028	3PDA2-8	01/22/94	CLR	-	-	
B09.011.042	3PDB1-8	01/24/94	REC	-	Y	
B09.011.056	3PDB2-8	01/26/94	REC	-	Y	
B09.011.057	3PHA-1	01/27/94	CLR	-	-	
B09.011.069	3PHB-1	01/24/94	CLR	-	-	
B09.011.104	3PSL-2	01/11/94	REC	-	Y	
B09.011.104A	3PSL-2	01/16/94	CLR	-	-	
B09.011.105	3PSL-3	01/11/94	REC	-	Y	
B09.011.105A	3PSL-3	01/06/94	CLR	-	-	
B09.011.106	3PSL-4	01/11/94	REC	-	Y	
B09.011.106A	3PSL-4	01/06/94	CLR	-	-	
B09.011.107	3PSL-6	01/11/94	REC	-	Y	
B09.011.107A	3PSL-6	01/06/94	CLR	-	-	
B09.011.108	3PSL-7	01/11/94	REC	-	Y	

PROGRAM: NISIROND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER B09

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 10  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
B09.011.108A	3PSL-7	01/06/94	CLR	-	-	_____
B09.011.151	3-53A-15.1-44	01/27/94	REC	L	Y	85.0% COVERAGE REF. RFR94-01
B09.011.159	3-53A-16-01	01/27/94	REC	L	Y	85.0% COVERAGE REF. RFR 94-01
B09.021.125	3-51A-63-30	01/16/94	CLR	-	-	_____
B09.040.003	3-50-152-05	01/05/94	CLR	-	-	_____
B09.040.004	3-50-152-07	01/05/94	CLR	-	-	_____

PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER B13

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 11  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
B13.010.001	3RPV-INT SUR	01/27/94	REC	L	-	_____
B13.030.001	3RPV-INTERNALS	01/20/94	REC	-	-	_____

PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER C01

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 12  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
C01.020.001	3-CFTA-UH-SHL	01/24/94	REC	L	-	98.9% COVERAGE
C01.020.005	3-CFTB-LH-SHL	01/24/94	REC	L	-	96.6% COVERAGE
C01.030.005	3LPCB-SH-TUBE	12/01/93	CLR	L	-	100% COVERAGE OBTAINED

PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER C02

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 13  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEO. REF. =====	COMMENTS =====
C02.021.006	3-CFTB-OUTLET	01/29/94	CLR	L	-	92.88% COVERAGE
C02.021.006A	3-CFTB-OUTLET	01/24/94	CLR	-	-	REF PIR 4-091-0093 SECT 10
C02.022.006	3-CFTB-OUTLET	01/29/94	CLR	L	-	RFR 94-01 (72% COVERAGE)



PROGRAM: NISIROND-QAISI04  
FILE: C007133  
PLANT: O'CONNOR UNIT 3  
KEY: ITEM NUMBER C03

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
O'CONNOR 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 14  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEO. REF. =====	COMMENTS =====
C03.010.017	3-CFTA-WT18-X	01/25/94	CLR	-	-	_____
C03.010.022	3-CFTB-WT18-W	01/24/94	CLR	-	-	_____

PROGRAM: NISIRUND-QAISI04  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER C05

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 15  
 DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
C05.011.002	3-53B-33-58	01/24/94	CLR	-	-	
C05.011.003	3-53B-33-56	01/24/94	CLR	-	-	
C05.011.065	3-53B-47-08	12/13/93	CLR	-	-	
C05.011.066	3-53B-47-02	12/13/93	CLR	-	-	
C05.011.074	3-53B-50-42	12/09/93	CLR	-	-	
C05.011.075	3-53B-50-26	01/25/94	CLR	-	-	
C05.011.232	3-54B-8-36	12/13/93	CLR	-	-	
C05.011.233	3-54B-8-36A	12/13/93	CLR	-	-	
C05.011.234	3-54B-8-43	01/16/94	CLR	-	-	
C05.011.235	3-54B-6-32	01/05/94	CLR	-	-	
C05.011.236	3-54B-6-23A	01/05/94	CLR	-	-	
C05.011.237	3-54B-6-23	01/05/94	CLR	-	-	
C05.011.269	3-51A-50-44	01/24/94	CLR	-	-	
C05.012.062	3-54B-6-23AL	01/20/94	CLR	-	-	
C05.012.063	3-54B-6-23L	01/20/94	CLR	-	-	

PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER C05

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 16  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
C05.012.064	3-53B-33-58L	01/24/94	CLR	-	-	_____
C05.012.065	3-53B-33-56L	01/24/94	CLR	-	-	_____
C05.012.065A	3-53B-33-56L1	01/24/94	CLR	-	-	_____
C05.012.066	3-53B-50-26L	01/25/94	CLR	-	-	_____
C05.021.001	3-53A-15.2-76	01/04/94	REC	-	Y	_____
C05.021.001A	3-53A-15.2-76	12/13/93	CLR	-	-	_____

PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER E03

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 17  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
E03.001.003	3RCP-3A2	01/13/94	CLR	-	N	INSP PER REQ.FOR REL.ONS-010
E03.001.004	3RCP-3B1	01/12/94	CLR	-	N	INSP PER REQ.FOR REL.ONS-010

PROGRAM: NISIRUND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER E05

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 18  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEQ. REF. =====	COMMENTS =====
E05.001.002	3PSL-133	01/11/94	CLR	-	-	_____
E05.001.003	3PSL-142	01/11/94	CLR	-	-	_____

PROGRAM: NISIRUND-QAISI04  
 FILE: C007133  
 PLANT: OCONEE UNIT 3  
 KEY: ITEM NUMBER E09

DUKE POWER COMPANY  
 QUALITY ASSURANCE DEPARTMENT  
 PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 19  
 DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEQ. REF. =====	COMMENTS =====
E09.001.014	3-03A-147-10	01/18/94	CLR	-	-	_____
E09.001.015	3-03A-147-4VEN	01/18/94	CLR	-	-	_____
E09.001.016	3-03A-147-12	01/18/94	CLR	-	-	_____
E09.001.017	3-03A-147-5VEN	01/18/94	CLR	-	-	_____
E09.001.018	3-03A-147-14	01/18/94	CLR	-	-	_____
E09.001.019	3-03A-147-6VEN	01/18/94	CLR	-	-	_____
E09.001.020	3-03A-147-4	01/18/94	CLR	-	-	_____
E09.001.021	3-03A-147-7VEN	01/18/94	CLR	-	-	_____
E09.001.022	3-03A-147-6	01/18/94	CLR	-	-	_____
E09.001.023	3-03A-147-8VEN	01/18/94	CLR	-	-	_____
E09.001.024	3-03A-147-8	01/18/94	CLR	-	-	_____
E09.001.025	3-03A-147-9VEN	01/18/94	CLR	-	-	_____
E09.001.026	3-03A-147-1VEN	01/19/94	CLR	-	-	_____
E09.001.027	3-03A-147-16	01/19/94	CLR	-	-	_____

PROGRAM: NISIROND-QAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 3  
KEY: ITEM NUMBER F1.

DUKE POWER COMPANY  
QUALITY ASSURANCE DEPARTMENT  
PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 3 INSERVICE INSPECTION RESULTS RFO #14

PAGE 20  
DATE 04/11/94

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEØ. REF. =====	COMMENTS =====
F1.01.140	3SGA-SKIRT	01/10/94	REC	-	-	_____
F1.01.141	3SGB-SKIRT	01/10/94	REC	-	-	_____

**B. Items examined by Pressure Testing**

Item Number = ASME Section XI Tables IWB-2500-1  
(Class 1), IWC-2500-1 (Class 2)

Drawing = Number of the Flow Diagram

Examination Date = Latest examination date

Condition = Partial or Complete test

Status = Clear, Recordable or Reportable

Comments = General and/or Detail Description



OCONEE UNIT NUMBER 3  
CLASS A (CATEGORY B-P) RESULTS  
FOR OUTAGE NUMBER 14

ITEM NO.	DRAWING	DATE LAST EXAMINED	CONDITION	STATUS	COMMENTS
B15.011.001	OFD-100A-3.1	02/24/94	COMPLETE	CLEAR	
B15.021.001	OFD-100A-3.2	02/24/94	COMPLETE	CLEAR	
B15.031.001	OFD-100A-3.1	02/24/94	COMPLETE	CLEAR	
B15.031.002	OFD-100A-3.1	02/24/94	COMPLETE	CLEAR	
B15.041.001	OFD-101A-3.1	02/24/94	COMPLETE	CLEAR	
B15.041.002	OFD-101A-3.1	02/24/94	COMPLETE	CLEAR	
B15.050.003	OFD-101A-3.4	02/24/94	COMPLETE	CLEAR	
B15.051.001	OFD-100A-3.1	02/24/94	COMPLETE	CLEAR	
B15.051.001A	OFD-100A-3.2	02/24/94	COMPLETE	CLEAR	
B15.051.002	OFD-101A-3.1	02/24/94	COMPLETE	CLEAR	
B15.051.003	OFD-101A-3.4	02/24/94	PARTIAL	RECORDABLE	
B15.051.004	OFD-102A-3.1	02/24/94	COMPLETE	RECORDABLE	
B15.051.005	OFD-102A-3.2	02/24/94	COMPLETE	CLEAR	
B15.051.006	OFD-102A-3.3	02/24/94	COMPLETE	CLEAR	
B15.051.007	OFD-110A-3.1	02/24/94	COMPLETE	CLEAR	
B15.051.009	OFD-100A-3.3	02/24/94	COMPLETE	CLEAR	
B15.051.010	OFD-110A-3.4	02/24/94	COMPLETE	CLEAR	
B15.061.001	OFD-100A-3.1	02/24/94	COMPLETE	CLEAR	
B15.061.002	OFD-100A-3.1	02/24/94	COMPLETE	CLEAR	
B15.061.003	OFD-100A-3.1	02/24/94	COMPLETE	RECORDABLE	

OCONEE UNIT NUMBER 3  
CLASS A (CATEGORY B-P) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
B15.061.004	OFD-100A-3.1	02/24/94	COMPLETE	CLEAR	

OCONEE UNIT NUMBER 3  
CLASS B (CATEGORY C-H) RESULTS  
FOR OUTAGE NUMBER 14

ITEM NO.	DRAWING	DATE LAST EXAMINED	CONDITION	STATUS	COMMENTS
C07.011.001	OFD-121B-3.3	02/24/94	COMPLETE	CLEAR	
C07.011.002	OFD-121B-3.3	02/24/94	COMPLETE	CLEAR	
C07.011.003	OFD-102A-3.3	02/24/94	COMPLETE	CLEAR	
C07.011.004	OFD-102A-3.3	02/24/94	COMPLETE	CLEAR	
C07.021.003	OFD-101A-3.2	11/10/93	COMPLETE	CLEAR	
C07.021.004	OFD-101A-3.3	02/06/94	PARTIAL	CLEAR	
C07.021.005	OFD-101A-3.4	02/24/94	PARTIAL	CLEAR	
C07.021.007	OFD-102A-3.1	01/31/94	COMPLETE	CLEAR	
C07.021.008	OFD-102A-3.2	01/31/94	COMPLETE	CLEAR	
C07.021.009	OFD-102A-3.3	02/24/94	COMPLETE	CLEAR	
C07.021.011	OFD-104A-3.1	10/20/92	COMPLETE	CLEAR	
C07.021.017	OFD-110A-3.1	02/24/94	COMPLETE	CLEAR	
C07.021.019	OFD-116A-3.1	02/17/94	COMPLETE	CLEAR	See PIP Number 3-094-0425
C07.021.020	OFD-116C-3.1	02/01/94	COMPLETE	CLEAR	
C07.021.021	OFD-121B-3.3	02/24/94	COMPLETE	CLEAR	
C07.021.022	OFD-121B-3.5	02/24/94	COMPLETE	RECORDABLE	
C07.021.023	OFD-121D-3.1	02/24/94	COMPLETE	CLEAR	
C07.021.024	OFD-121D-1.2	02/07/94	COMPLETE	CLEAR	
C07.021.025	OFD-122A-3.1	02/24/94	COMPLETE	RECORDABLE	
C07.021.026	OFD-122A-3.2	02/24/94	COMPLETE	CLEAR	

OCONEE UNIT NUMBER 3  
CLASS B (CATEGORY C-H) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
C07.021.027	OFD-122A-3.3	02/24/94	COMPLETE	CLEAR	
C07.021.028	OFD-122A-3.4	02/24/94	COMPLETE	CLEAR	
C07.021.029	OFD-122B-3.1	02/24/94	COMPLETE	CLEAR	
C07.021.032	OFD-127B-3.2	02/15/94	COMPLETE	CLEAR	
C07.021.033	OFD-137A-3.2	02/15/94	COMPLETE	CLEAR	
C07.021.034	OFD-137B-1.2	02/01/94	COMPLETE	CLEAR	

OCONEE UNIT NUMBER 3  
CLASS C (CATEGORY D-A) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
D01.012.002	OFD-101A-3.1	02/06/94	COMPLETE	CLEAR	
D01.012.003	OFD-101A-3.2	01/08/94	COMPLETE	CLEAR	
D01.012.007	OFD-106A-3.2	10/20/92	COMPLETE	CLEAR	
D01.012.008	OFD-109A-3.1	11/03/93	PARTIAL	CLEAR	Reference TER 3.4.3.4 for Request for Relief testing.

OCONEE UNIT NUMBER 3  
CLASS C (CATEGORY D-B) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
D02.012.001A	OFD-110A-3.3	11/09/93	PARTIAL	CLEAR	
D02.012.003	OFD-121A-3.7	02/05/94	COMPLETE	CLEAR	
D02.012.005	OFD-121B-3.3	02/24/94	COMPLETE	CLEAR	
D02.012.006	OFD-121B-3.5	02/07/94	PARTIAL	CLEAR	
D02.012.007	OFD-121D-3.1	02/09/94	COMPLETE	CLEAR	
D02.012.008	OFD-121D-1.2	02/09/94	COMPLETE	CLEAR	
D02.012.022	OFD-124A-3.1	01/26/94	COMPLETE	RECORDABLE	
D02.012.023	OFD-124A-3.3	01/26/94	COMPLETE	CLEAR	
D02.012.024	OFD-124B-3.1	02/05/94	COMPLETE	RECORDABLE	
D02.012.025	OFD-124B-3.2	01/26/94	COMPLETE	CLEAR	
D02.012.026	OFD-124B-3.4	01/26/94	COMPLETE	CLEAR	
D02.012.027	OFD-124A-1.1	01/26/94	COMPLETE	CLEAR	
D02.012.029	OFD-124C-3.2	02/05/94	COMPLETE	CLEAR	

OCONEE UNIT NUMBER 3  
CLASS C (CATEGORY D-C) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
D03.012.001	OFD-104A-3.1	11/02/93	COMPLETE	CLEAR	
D03.012.002	OFD-104A-3.2	11/02/93	COMPLETE	CLEAR	

5.2 Limited examinations (i.e., less than 90% of the required examination coverage obtained) identified during Outage 14 are shown below. A copy of the Request for Relief is contained in Section 9.0 of this report

<u>Item Number</u>	<u>Request for Relief Serial Number</u>
B01.011.003	94-01
B01.021.002	94-01
B01.030.001	94-01
B03.090.001	94-01
B03.090.001A	94-01
B03.090.002	94-01
B03.090.002A	94-01
B03.090.003	94-01
B03.090.003A	94-01
B03.090.004	94-01
B03.090.004A	94-01
B03.090.005	94-01
B03.090.005A	94-01
B03.090.006	94-01
B03.090.006A	94-01
B03.090.007	94-01
B03.090.007A	94-01
B03.090.008	94-01
B03.090.008A	94-01
B03.100.001	94-01
B03.100.002	94-01
B03.100.003	94-01
B03.100.004	94-01
B03.100.005	94-01
B03.100.006	94-01
B03.100.007	94-01
B03.100.008	94-01
B03.110.009	94-01
B03.110.011	94-01
B03.110.012	94-01
B03.120.009	94-01
B03.120.011	94-01
B03.120.012	94-01
B03.140.002	94-01
B03.140.005	94-01
B03.140.006	94-01
C02.022.006	94-01



6.0 Reportable Indications

Outage 14 had one reportable indication. Item Number B07.080.002 (3RPV-CRD-RINGS) had to be replaced due to degradation of the material. Reference Request for Relief Serial Numbers ONS-011 and ONS-012 in Section 9 of this report.

## 7.0 Personnel, Equipment and Material Certifications

All personnel who performed or evaluated the results of inservice inspections from September 26, 1992 to February 24, 1994 at Oconee Nuclear Station, Unit 3, were certified in accordance with the requirements of 1980 Edition of ASME Section XI with Addenda through Winter 1980. The appropriate certification records for each Duke Power Company inspector are on file at Oconee Nuclear Station or copies can be obtained by contacting Duke Power's Corporate Office in Charlotte, North Carolina. The certification records for the Babcock & Wilcox inspectors are on file at the Babcock & Wilcox Offices in Lynchburg, Virginia.

Records of periodic calibration of Duke Power Company inspection equipment are on file at Oconee Nuclear Station or copies can be obtained by contacting Duke Power's Corporate Office in Charlotte, North Carolina. Records of periodic calibration of Babcock & Wilcox inspection equipment are on file at the Babcock & Wilcox Offices in Lynchburg, Virginia.

8.0 Corrective Action

Problem Investigation Process report serial numbers 3-O94-0150, 0-O94-0155 and 3-094-0425 were originated during Outage 14. Copies of these reports are contained in Section 9 of this report.

## 9.0 Reference Documents

The following reference documents apply to the inservice inspection performed during Outage 14 at Oconee 3.

B&W's Reactor Vessel Examination Report (Copy not included, due to size of report. This report can be reviewed by contacting Duke Power's Corporate Office in Charlotte, North Carolina).

Duke Power Company Request for Relief ONS-011

Duke Power Company Request for Relief ONS-012

Duke Power Company Request for Relief 92-14

Duke Power Company Request for Relief 94-01

TER 3.4.3.4 Request for Relief

Problem Investigation Process Report, Serial Number 3-O94-0150

Problem Investigation Process Report, Serial Number 0-094-0155

Problem Investigation Process Report, Serial Number 3-094-0425

Duke Power Company  
Oconee Nuclear Station  
Second Ten Year Interval  
Request for Relief 88-10

I. Component for which relief is requested: SA

Control Rod Drive Mechanism (CRDM) motor tube to nozzle pressure retaining bolting.

ISI Class 1 Duke Class A

II. Reference Code requirement that has been determined to be impractical:

ASME Boiler and Pressure Vessel Code Section XI, 1980 Edition (with Addenda through Winter 1980) paragraph IWB 2430(a) which requires that bolting showing indications exceeding the standards allowed by IWB-3000 require an additional number of components equivalent in number to that initially sampled be examined. The purpose of this Code requirement is to assure other CRDM bolting material is not degraded due to the same cause.

III. Basis for requesting relief:

During each refueling outage since December 1980 all CRDMs have been visually examined for evidence of RCS leakage. This inspection is documented as part of the Oconee response to Generic Letter 88-05 and IE Bulletin 82-02. During the Unit 3 end of cycle 11 refueling outage, 11 CRDMs exhibited evidence of RCS leakage (see attached figures). Each of these CRDMs were disassembled and examined pursuant to the requirements of Table IWB 2500 Item 87.80. This process involved approximately 24 person-rem of exposure.

Of the 11 disassembled CRDMs only 1/2 of 1 nut ring exceeded the criteria of IWB-3000. Damage to this nut ring was specifically due to corrosion as a result of exposure to RCS leakage. As a result of this indication, IWB 2430(a) requires an additional 11 CRDMs be examined.

The requirements of IWB 2430(a) have been determined to be impractical, because it may unnecessarily require disassembly and VT-1 examination of CRDM bolting material which was not affected by RCS leakage. Further, disassembly and VT-1 examination of the additional CRDMs will involve approximately 20-25 person-rem of radiation exposure to personnel, as well as unnecessary extension of the Unit 3 end of cycle 11 refueling outage by approximately 15 days.

Request for Relief 89-10, Page 2

IV. Alternate Examination:

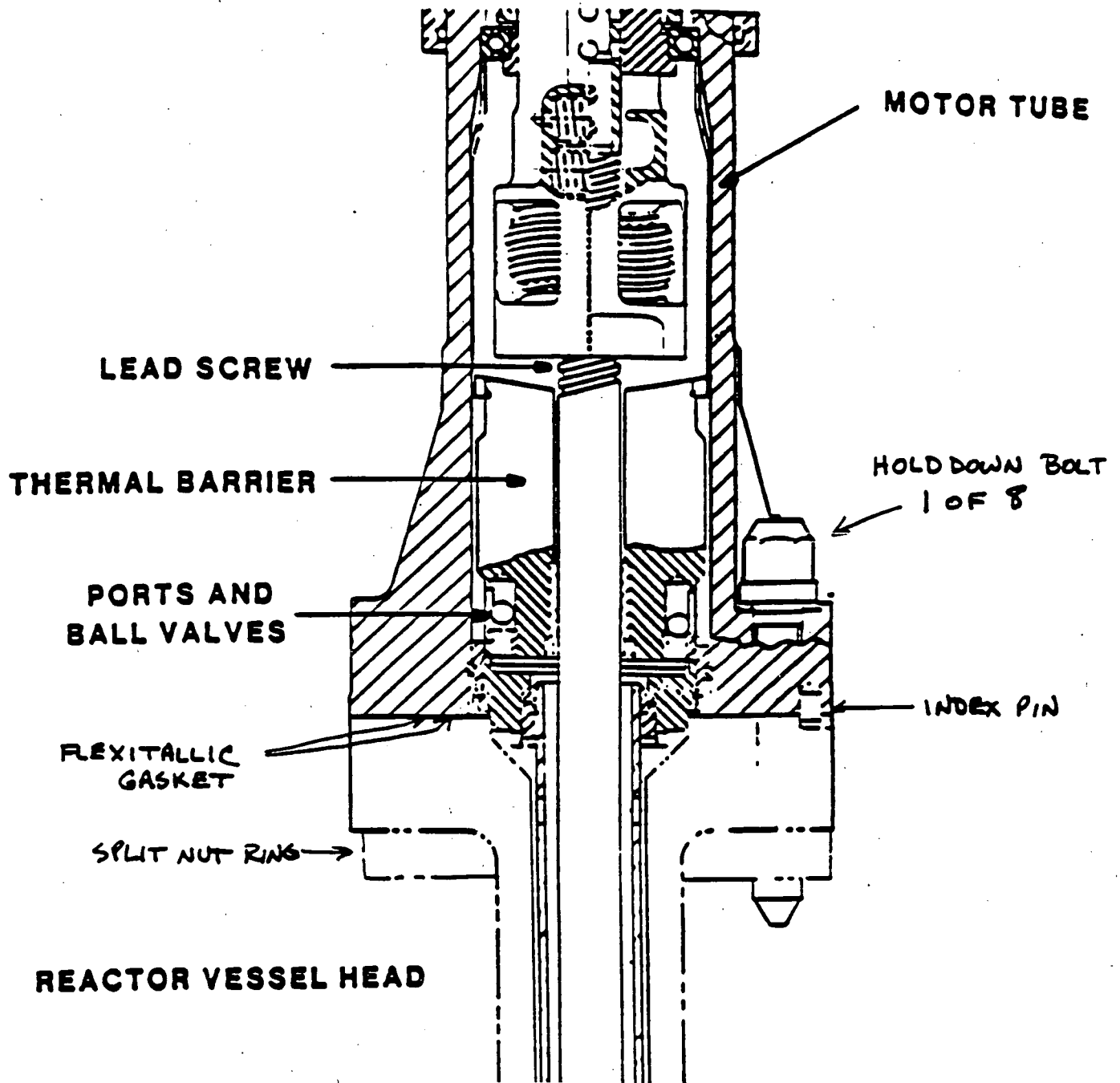
Each refueling outage all CRDM flanges will be visually examined per station procedures for evidence of leakage in compliance with the Oconee Nuclear Station response to NRC Generic Letter 85-05 and IE Bulletin 82-02. Corrective action will be based upon the results of those examinations, and will include replacement of all affected bolting. Inspection of any required additional samples of bolting material during CRDM maintenance not associated with flange leakage will be performed in accordance with the requirements of IWB-2430(a).

V. Acceptability of proposed alternate testing with respect to the level of quality and safety as well as public health and safety:

The Oconee Nuclear Station program for inspection of CRDMs for RCS leakage assures that CRDM bolting material exposed to RCS leakage will be replaced. Following CRDM disassembly for maintenance not associated with flange leakage, required additional samples will be examined in accordance with IWB-2430(a).

VI. Implementation schedule:

To be placed in effect for all Oconee units for the remainder of the interval commencing with the current Oconee Unit 3 end of cycle 11 refueling outage.



Duke Power Company  
Oconee Nuclear Station  
Second Ten Year Interval  
Request for Relief 89-11

I. Component for which relief is requested:

Control Rod Drive Mechanism (CRDM) motor tube to nozzle pressure retaining bolting.

ISI Class I Duke Class A

II. Reference Code requirement that has been determined to be impractical:

ASME Boiler and Pressure Vessel Code Section XI, 1980 Edition (with Addenda through Winter 1980) Table IWB-2500 Item B7.80 which requires CRDM bolting material to undergo VT-1 visual examination when disassembled. The intent of this code requirement is to assure the disassembled bolting material is acceptable for re-use and to increase confidence that there is not a generic problem occurring that should be further investigated through additional inspections.

III. Basis for requesting relief:

Per Oconee Nuclear Station Policy CRDM bolting material removed due to exposure to RCS leakage is not re-used because the excessive boron deposit degradation destroys it for further use. It is replaced during maintenance for flange leakage by new material that has a pre-service examination performed on it prior to installation. The boron deposit degradation makes it virtually impossible to perform a meaningful inservice inspection. As a result, table IWB 2500 Item B7.80 requirements for VT-1 examination of bolting material (when CRDMs are disassembled due to RCS leakage indications) are unnecessary since the material will not be re-used and is in no condition to disclose any possible generic problems. In addition VT-1 examination of the bolting material which will not be re-used involves significant unnecessary radiation exposure to personnel.

IV. Alternate examination:

Each refueling outage all CRDM flanges will be visually examined per station procedures for evidence of leakage in compliance with the Oconee Nuclear Station response to NRC Generic Letter 85-05 and IE Bulletin 82-02. Corrective action (including replacement of affected bolting) will be based upon the results of those examinations. Inspection of bolting material during CRDM maintenance not associated with flange leakage will be performed in accordance with the requirements of Table IWB 2500 Item B 7.80.

V. Acceptability of proposed alternate testing with respect to the level of quality and safety as well as public health and safety:

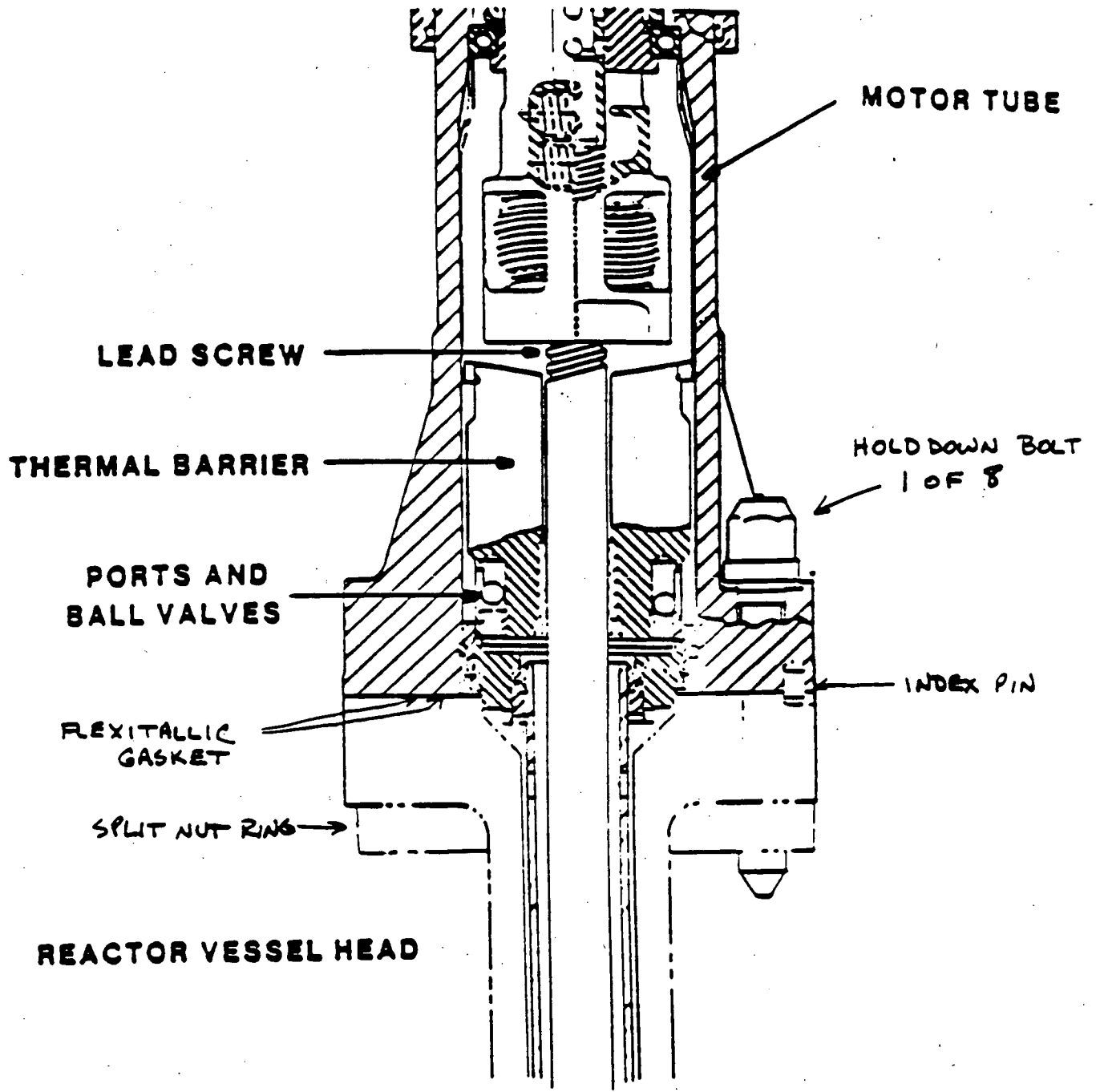
Automatic replacement of bolting material removes the necessity for examination of the material for continued service. Pre-service



examination of replacement material ensures the achievement of an acceptable level of safety for the replacement material.

VI. Implementation schedule:

To be placed in effect for all Oconee Units for the remainder of the interval commencing with the upcoming, April 1990 Oconee Unit 1 end of cycle 12 refueling outage.



TITLE: <b>CONTROL ROD DRIVE MECHANISM</b>	NOTES: <b>THERMAL BARRIER</b>	88-0C-PNS-CRD-10, DATE 12-3- Diamond Power 70325510: DMC / ARB <i>KPB</i> <b>TRANS USE ONLY</b>
--	----------------------------------	--

## DUKE POWER COMPANY

Request for Relief From  
Inservice Inspection Requirement

Station: Oconee

Unit: 1, 2 and 3

Requesting Department: Nuclear Generation Department

Reference Code: ASME Section XI, 1980 Edition, with Winter 1980 Addenda

## I. Component for which exemption is requested:

- a. Name and Identification Number: Letdown Coolers for Units 1, 2 and 3. The following Item Numbers are affected:

<u>UNIT 1</u>	<u>UNIT 2</u>	<u>UNIT 3</u>
B03.160.001	B03.160.001	B03.160.001
B03.160.002	B03.160.002	B03.160.002
B03.160.007	B03.160.003	B03.160.003
B03.160.008	B03.160.004	B03.160.004

- b. Function: The letdown cooler reduces the temperature of the letdown flow from the Reactor Coolant System to a temperature suitable for demineralization.
- c. ASME Section XI Code Class: Class 1
- d. Construction Code and Class (If Applicable): NA
- e. Valve Category (If Applicable): NA
- f. Drawing Number: OM-201-3107

II. Reference Code Requirement that has been determined to be impractical:

Table IWB-2500, Examination Category B-D, Item Number B3.160  
 This table requires that an inside radius volumetric examination be performed on heat exchanger nozzles.

III. Basis for Requesting Relief:

Due to the size and geometry of the nozzle inside radius on the Letdown Coolers we have been unable to perform a meaningful, (i.e., unable to get sound into the area of interest) volumetric examination.

IV. Alternate Examination:

Perform the volumetric examination on the weld volume, as required by ASME Section XI, Table IWB-2500-1, Examination Category B-D, Item Number B3.150. This will provide adequate assurance of the integrity of the welded connection.

The alternate proposed inservice testing will provide an acceptable level of quality and safety and ensures the level of public health and safety is not reduced.

V. Implementation Schedule:

<u>RFO</u>	<u>UNIT 1</u>	<u>RFO</u>	<u>UNIT 2</u>	<u>RFO</u>	<u>UNIT 3</u>
9	B03.160.001	8	B03.160.001	11	B03.160.001
12	B03.160.002	13	B03.160.002	11	B03.160.002
14	B03.160.007	12	B03.160.003	14	B03.160.003
14	B03.160.008	13	B03.160.004	14	B03.160.004

Evaluated By:

*R. S. Roman*

Date

11/23/92

Reviewed By:

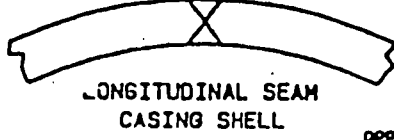
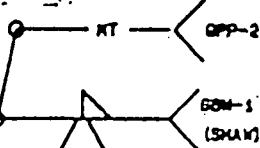
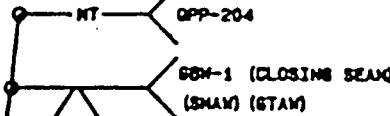
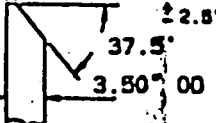
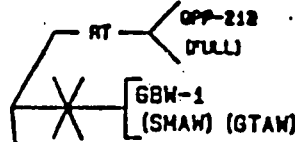
*J. P. Carlson*

Date

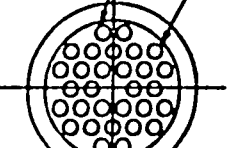
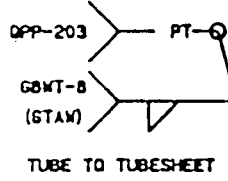
11/23/92

3 1/4"

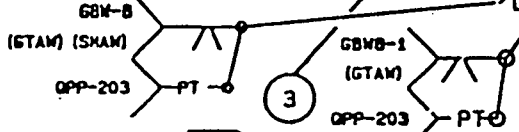
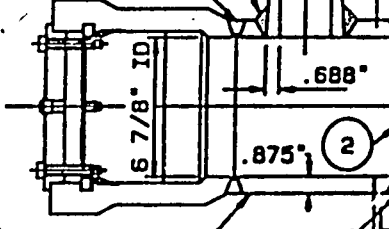
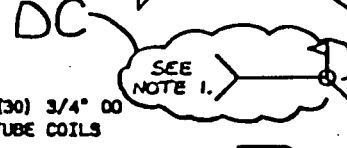
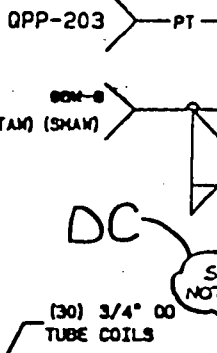
2.624" ID .094" <sup>+0</sup> <sub>-.005</sub>



*Welds Identified For Relief*



SECTION "B-B"



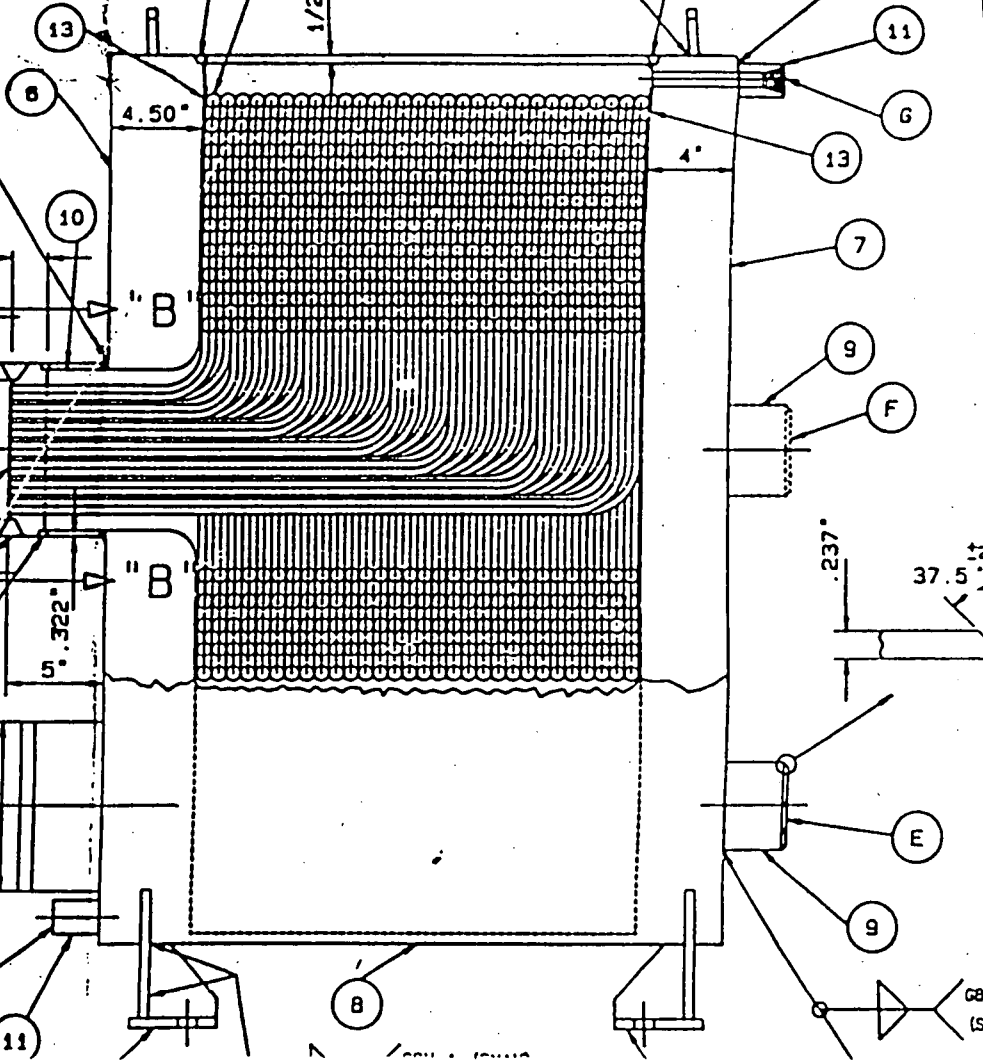
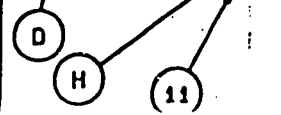
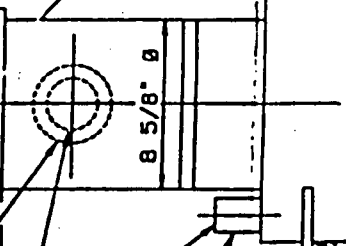
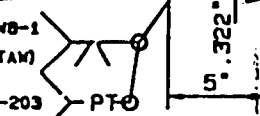
*DC*  
*BLE INSERT CONSUMABLE*

CHEMICAL CONNECTOR PER ANCHOR/DARLING DWG 93-15799 (TYP)

REFER TO UNIT PLAN FOR LOCATION OF NOZZLES (TYP)

MARKS

6



## DUKE POWER COMPANY

Request for Relief From  
Inservice Inspection Requirement

Station: Oconee

Unit: 3

Requesting Department: Nuclear Generation

Reference Code: ASME Section XI, 1980 Edition, with the Winter 1980 Addenda

## I. Component for which exemption is requested:

## a. Name and Identification Number:

## Pressurizer Nozzle To Vessel Welds

<u>Weld Numbers</u>	<u>Item Numbers</u>
3PZR-WP26-1	B03.110.009
3PZR-WP26-3	B03.110.011
3PZR-WP26-7	B03.110.012

## Pressurizer Nozzles, Inside Radius

<u>Weld Numbers</u>	<u>Item Numbers</u>
3PZR-WP26-1	B03.120.009
3PZR-WP26-3	B03.120.011
3PZR-WP26-7	B03.120.012

## Steam Generator Nozzles, Inside Radius

<u>Weld Numbers</u>	<u>Item Numbers</u>
3SGA-WG50-1	B03.140.002
3SGA-WG25	B03.140.005
3SGB-WG25	B03.140.006

## Core Flood Tank Nozzle, Inside Radius

<u>Weld Number</u>	<u>Item Number</u>
3-CFTB-Outlet	C02.022.006

## Reactor Vessel

<u>Weld Numbers</u>	<u>Item Numbers</u>	<u>Weld Numbers</u>	<u>Item Numbers</u>
3RPV-WR18	B01.011.003	3RPV-WR12C	B03.090.006A
3RPV-WR34	B01.021.002	3RPV-WR54	B03.090.007
3RPV-WR19	B01.030.001	3RPV-WR54	B03.090.007A
3RPV-WR13	B03.090.001	3RPV-WR54A	B03.090.008
3RPV-WR13	B03.090.001A	3RPV-WR54A	B03.090.008A
3RPV-WR13A	B03.090.002	3RPV-WR12	B03.100.003
3RPV-WR13A	B03.090.002A	3RPV-WR12A	B03.100.004
3RPV-WR12	B03.090.003	3RPV-WR12B	B03.100.005
3RPV-WR12A	B03.090.003A	3RPV-WR12C	B03.100.006
3RPV-WR12A	B03.090.004	3RPV-WR54	B03.100.007
3RPV-WR12A	B03.090.004A	3RPV-WR54A	B03.100.008
3RPV-WR12B	B03.090.005		
3RPV-WR12B	B03.090.005A		
3RPV-WR12C	B03.090.006		

## b. Function:

Pressurizer - Maintains the RCS pressure during operation & limits pressure changes during transients.

Steam Generator - Provides steam to the turbine.

Core Flood Tank - Core flooding tanks are provided as part of the ECCS to re-flood the core during the initial stages of a LOCA resulting from large pipe breaks.

Reactor Vessel - Contains the fission process.

## c. ASME Section XI Code Class:

Pressurizer, Steam Generator and Reactor Vessel - Class 1

Core Flood Tank - Class 2

## d. Construction Code and Class (If Applicable):

Pressurizer (ASME Section III, 1965 with Summer 1967 Addenda, Class 1),  
 Steam Generator (ASME Section III, 1965 with Summer 1967 Addenda, Class 1)  
 Core Flood Tank, (USAS - B31.7, 1967 Class II) and Reactor Vessel,  
 (ASME Section III, 1965 with Summer 1967 Addenda, Class 1)

## e. Valve Category (If Applicable):

Not Applicable

II. Reference Code Requirement that has been determined to be impractical:

Figure IWB-2500-7, Examination Category B-D, Nozzle-to-Shell or Head Weld Joints - 100 % examination coverage.

Table IWB 2500-1, Examination Category B-A, Pressure Retaining Welds in Reactor Vessel, "Note 2: Includes 100% of the weld length"

Figure IWB-2500- 8, Examination Category B-J, Pressure Retaining Welds in Piping, "Note 3: Includes 100% of the weld length"

Figure IWC-2500-4, Examination Category C-B, Nozzle-to-Shell or Head Weld Joints - Inside Radius Section

III. Basis for Requesting Relief:

The Construction Permit for Oconee was issued on November 6, 1967. 10 CFR 50.55a(g) allows for plants whose Construction Permit was issued prior to January 1, 1971 to meet the requirements of ASME Section XI to the extent practical within the limitations of design, geometry and materials of construction of the components.

Due to part geometry and actual physical barriers, obtaining examination coverage on at least 90% of the weld volume as required by ASME Section XI, 1980 Edition as modified by Code Case N-460 was not possible.

The attached examination reports document the amount of Code required examination coverage obtained. To supplement this coverage, additional non-Code examination UT techniques were used in an effort to obtain as much examination coverage as possible.

The Reactor Coolant System meets the design requirements specified in 10 CFR 50 Appendix A (addressed in Chapter 3 of Oconee's Final Safety Analysis Report) and is constructed so as to have an exceedingly low probability of a gross rupture or significant leakage throughout its design life. Additionally, the reactor containment building is designed to sustain the initial effects of gross equipment failure. Technical Specification 3.1.6 limits the amount of acceptable leakage in the reactor containment building. Specifically, Technical Specification 3.1.6.2 limits unknown reactor coolant leakage to 1 gallon per minute, if that value is exceeded, then the reactor must be brought to cold shutdown within 24 hours.

All of the welds contained in this request are located within the reactor containment building. The reactor containment building is designed to contain any leakage, so if these were to fail any release would be contained within the reactor containment building. Section 15.14 of the FSAR addresses the loss of coolant accident and documents that any releases that



Based on the above evaluations, not meeting the requirements of ASME Section XI while performing these examinations will not endanger the health and safety of the general public.

IV. Alternate Examination:

The Class 1 welds will be included in the Class 1 pressure test performed at the end of each refueling outage. The Class 2 weld on the Core Flood Tank Nozzle has been examined by means of the system pressure test as required by Paragraph IWC-5000, ASME Section XI, 1980 Edition with Winter 1980 Addenda.

The use of radiography as an alternate volumetric examination method is not possible on pressure vessel welds, due to the impracticality of using double wall technique, no location to place film, etc.). Additionally, inservice radiography on pipe welds, in some cases will not be feasible due to physical barriers that would prohibit gaining access for the placement of number bands, film, etc.

Ultrasonic examinations will continued to be performed to the maximum extent possible during future inservice inspections.

V. Implementation Schedule:

Unit 3, Refueling Outage 14 (current outage December 1993 thru February 1994).

Evaluated By: R. R. Rouse Date 3/24/94

Level III Review: James C. McCallister Date 3/25/94

Component Engineering Review: T. J. Coleman Date 4/4/94

Reviewed By: J. Barbare Date 3/24/94

ASME Class 1 and 2 Components NDE Inservice Inspection Request For Relief  
For Oconee Unit 3 Based On ASME Section XI - 1980 Code Through Winter 1980 Addenda

Item No.	Exam Category/ Figure No.	System Or Component	Function	Area To Be Examined	Reason for Request	Proposed Alternate Examination
B01.011.003	B-A Figure IWB-2500-1	Reactor Vessel	Contains the fission process	Circ. Shell Weld	Limited scan due to weld location being between nozzles, 13" below the nozzle centerline. Actual coverage obtained = 73.4%.	None
B01.021.002	B-A Figure IWB-2500-3	Reactor Vessel	Contains the fission process	Circ. Head Weld	Limited scan due to Core catcher lugs Actual coverage obtained = 43.5%.	None
B01.030.001	B-A Figure IWB-2500-4	Reactor Vessel	Contains the fission process	Shell to Flange Weld	Limited scan due to location of clad patches. Actual coverage obtained in the areas of these patches= 67.9%.	None
B03.090.001	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Outlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 47.6%.	None
B03.090.001A	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Outlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 47.6%.	None
B03.090.002	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Outlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 47.6%.	None
B03.090.002A	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Outlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 47.6%.	None
B03.090.003	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 71.7%.	None
B03.090.003A	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 71.7%.	None
B03.090.004	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 71.7%.	None
B03.090.004A	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 71.7%.	None
B03.090.005	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 71.7%.	None
B03.090.005A	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 71.7%.	None

ASME Class 1 and 2 Components NDE Inservice Inspection Request For Relief  
For Oconee Unit 3 Based On ASME Section XI - 1980 Code Through Winter 1980 Addenda

Item Nol	Exam Category Figure No.	System Of Component	Function	Area To Be Examined	Reason for Request	Proposed Alternate Examination
B03.090.006	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 71.7%.	None
B03.090.006A	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 71.7%.	None
B03.090.007	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Core Flood Nozzle to Shell Weld	Limited scan due to part geometry (Core Flood Nozzle is blocked by flange taper on top side). Actual coverage obtained = 87.9%.	None
B03.090.007A	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Core Flood Nozzle to Shell Weld	Limited scan due to part geometry (Core Flood Nozzle is blocked by flange taper on top side). Actual coverage obtained = 87.9%.	None
B03.090.008	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Core Flood Nozzle to Shell Weld	Limited scan due to part geometry (Core Flood Nozzle is blocked by flange taper on top side). Actual coverage obtained = 87.9%.	None
B03.090.008A	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Core Flood Nozzle to Shell Weld	Limited scan due to part geometry (Core Flood Nozzle is blocked by flange taper on top side). Actual coverage obtained = 87.9%.	None
B03.100.003	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld Inside Radius	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 68.4%.	None
B03.100.004	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld Inside Radius	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 68.4%.	None
B03.100.005	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld Inside Radius	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 68.4%.	None
B03.100.006	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Inlet Nozzle to Shell Weld Inside Radius	Limited scan due to part geometry (nozzle configuration). Actual coverage obtained = 68.4%.	None
B03.100.007	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Core Flood Nozzle to Shell Inside Radius	Limited scan due to part geometry (Core Flood Nozzle is blocked by flange taper on top side). Actual coverage obtained = 50%.	None

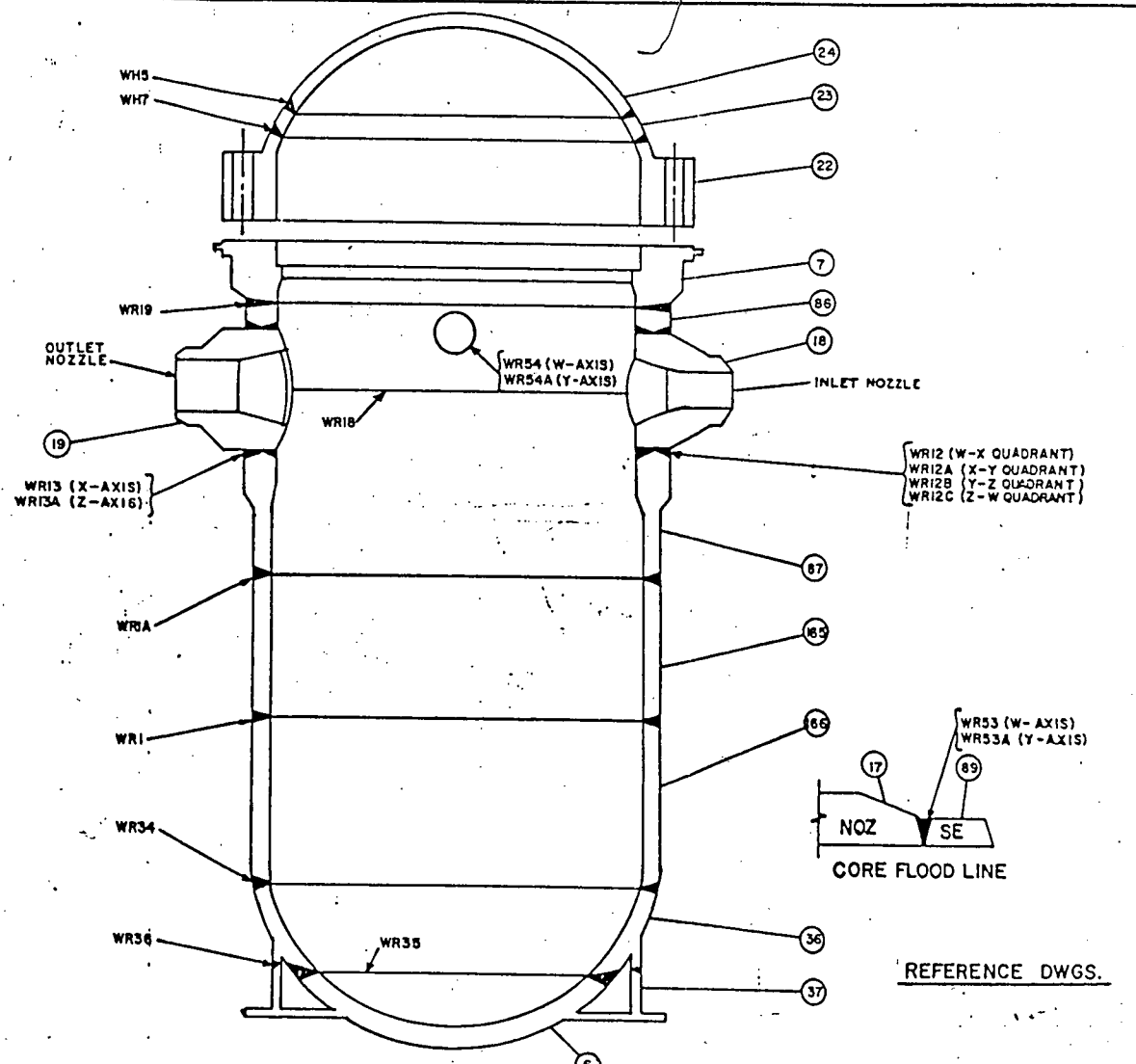
ASME Class 1 and 2 Components NDE Inservice Inspection Request For Relief  
For Oconee Unit 3 Based On ASME Section XI - 1980 Code Through Winter 1980 Addenda

Item No.	Exam Category/ Figure No.	System Or Component	Function	Area To Be Examined	Reason for Request	Proposed Alternate Examination
B03.100.008	B-D Figure IWB-2500-7	Reactor Vessel	Contains the fission process	Core Flood Nozzle to Shell Inside Radius	Limited scan due to part geometry (Core Flood Nozzle is blocked by flange taper on top side). Actual coverage obtained = 50%.	None
B03.110.009	B-D Figure IWB2500-7	Pressurizer	Maintains the RCS pressure during operation & limits pressure changes during transients	Nozzle to vessel weld	Limited scan due to part geometry (nozzle configuration, heater bundle and lower head). Actual coverage obtained = 34.39%.	None
B03.110.011	B-D Figure IWB2500-7	Pressurizer	Maintains the RCS pressure during operation & limits pressure changes during transients	Nozzle to vessel weld	Limited scan due to part geometry (head configuration). Actual coverage obtained = 35.5%.	None
B03.110.012	B-D Figure IWB2500-7	Pressurizer	Maintains the RCS pressure during operation & limits pressure changes during transients	Nozzle to vessel weld	Limited scan due to part geometry (nozzle configuration, heater bundle and lower head). Actual coverage obtained = 34.39%.	None
B03.120.009	B-D Figure IWB2500-7	Pressurizer	Maintains the RCS pressure during operation & limits pressure changes during transients	Nozzle inside radius	Limited scan due to part geometry (heater bundle). Actual coverage obtained = 60.6%.	None
B03.120.011	B-D Figure IWB2500-7	Pressurizer	Maintains the RCS pressure during operation & limits pressure changes during transients	Nozzle inside radius	Limited scan due to part geometry (heater bundle). Actual coverage obtained = 66.7%.	None
B03.120.012	B-D Figure IWB2500-7	Pressurizer	Maintains the RCS pressure during operation & limits pressure changes during transients	Nozzle inside radius	Limited scan due to part geometry (heater bundle). Actual coverage obtained = 60.6%.	None
B03.140.002	B-D Figure IWB2500-7	Steam Generator A	Provides steam to the turbine	Outlet nozzle inside radius	Limited scan due to part geometry (support skirt). Actual coverage obtained = 80%.	None
B03.140.005	B-D Figure IWB2500-7	Steam Generator A	Provides steam to the turbine	Inlet nozzle inside radius	Limited scan due to part geometry (support skirt). Actual coverage obtained = 74%.	None
B03.140.006	B-D Figure IWB2500-7	Steam Generator B	Provides steam to the turbine	Inlet nozzle inside radius	Limited scan due to part geometry (support skirt). Actual coverage obtained = 74%.	None

ASME Class 1 and 2 Components NDE Inservice Inspection Request For Relief  
For Oconee Unit 3 Based On ASME Section XI - 1980 Code Through Winter 1980 Addenda

Item No.	Exam Category / Figure No.	System Or Component	Function	Area To Be Examined	Reason for Request	Proposed Alternate Examination
C02.022.006	C-B Figure IWC-2500-4	Core Flood Tank B	Part of the ECCS to re-flood the core during the initial stages of a LOCA resulting from large pipe breaks	Nozzle to Shell Inside radius	Limited scan due to part geometry. Actual coverage obtained = 72%.	None

IAL	MATL.
	CLI SA533 GRB
	SA508 CL2
LE	SA508 CL2
	SA508 CL2
	SA508 CL2
GE	SA508 CL2
	SA508 CL2
	SA533 GRB CLI
	SA508 CL2
	SA516 GR70
NG	SA508 CL2
NG	SA508 CL2
	SA336-65 F8M
ING	SA508 CL2
ING	SA508 CL2

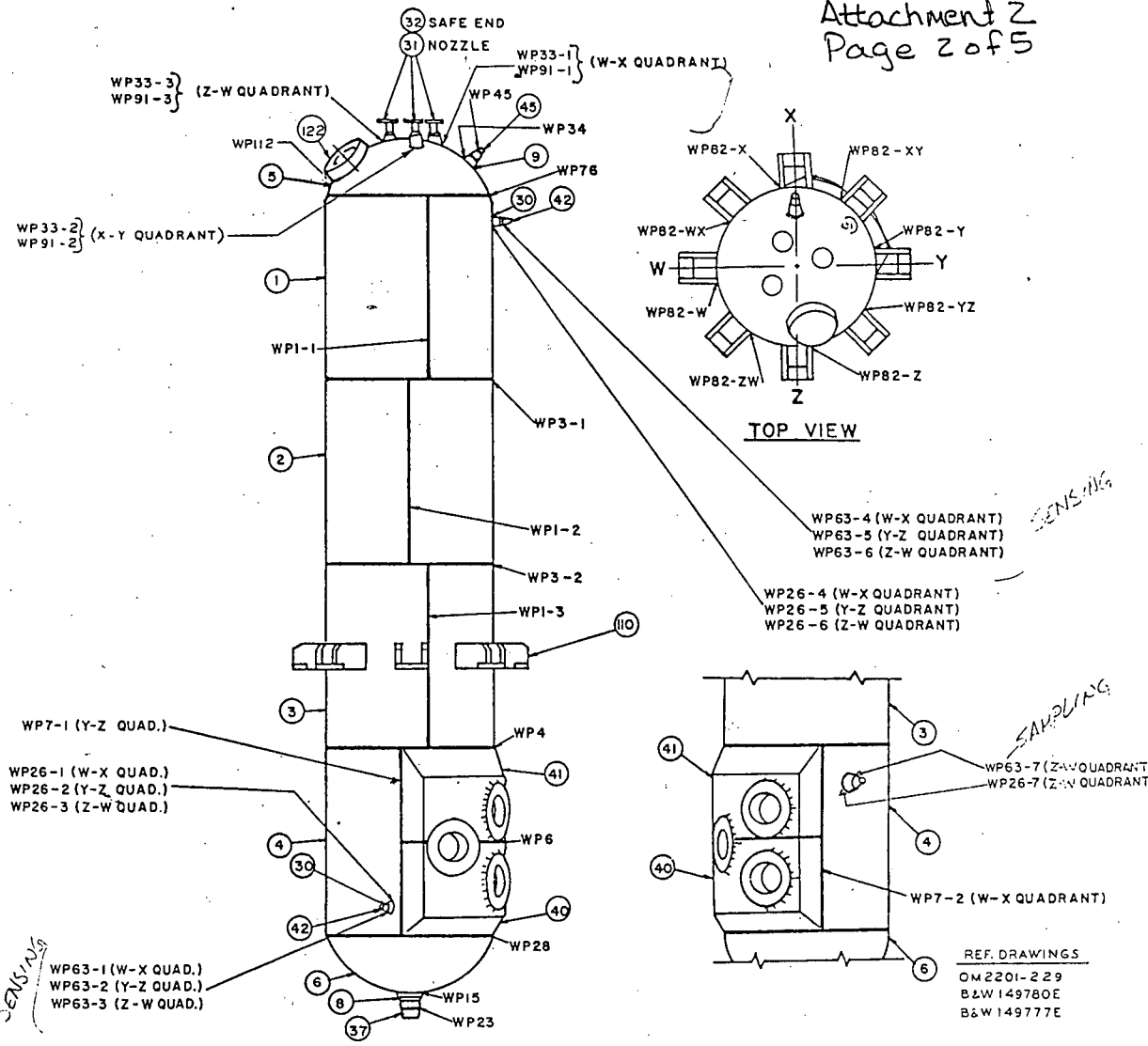


**UNCONTROLLED**  
 THIS COPY WILL NOT BE UPDATED

<b>NOTES:</b>				TITLE				
1. ALL ID NUMBERS SHALL BE PRECEDED BY "JRPV-".				REACTOR VESSEL				
2. PIECE NUMBERS ARE SHOWN IN CIRCLES.				WELD OUTLINE				
0	ORIG.	AWC	TMH	JFC				
		7-8-81	2-5-83	2-18-92				
NO.	REVISION	DRWN	RVWD	APPD	DWG NO.		REV.	
		DATE	DATE	DATE	[SI-OCN3-001]		0	

Serial No. 94-01  
 Attachment 2  
 Page 2 of 5

MATL.	
SA 516	GR. 70
SA 516	GR. 70
SA 516	GR. 70
SA 516	GR. 70
SA 516	GR. 70
SA 516	GR. 70
SA 516	GR. 70
SA 516	GR. 70
SA 508	CL. 1
SA 508	CL. 1
SA 508	GR. B
SA 508	CL. 1
SA 182	F316
SA 336	CL. F8M
SA 508	CL. 1
SA 508	CL. 1
SB-166	
SB-166	
SA-516	GR. 70
SA-508	CL. 1
THICK.	
1.000	
1.000	
1.000	
1.1875	
4.750	



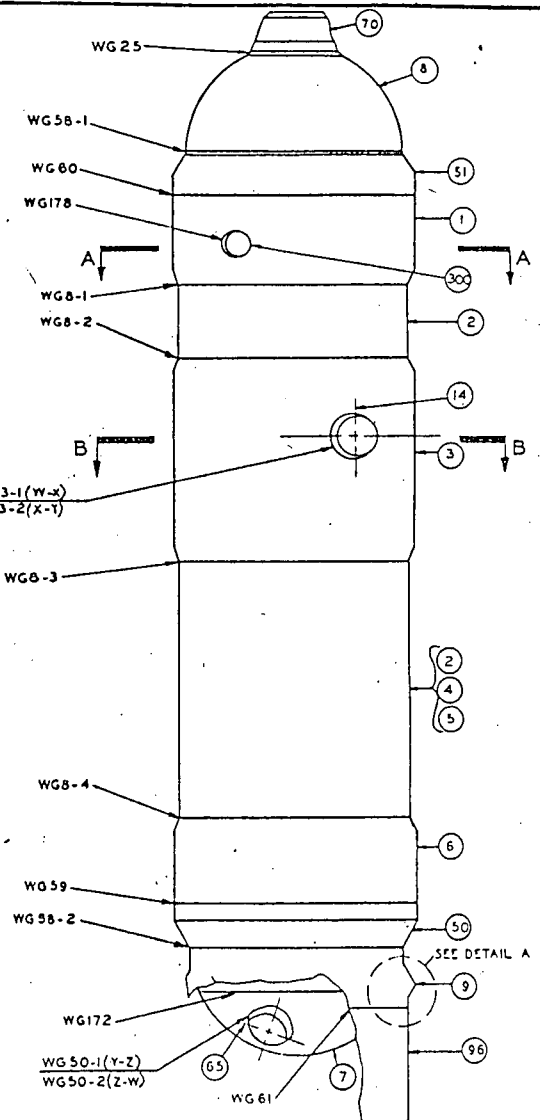
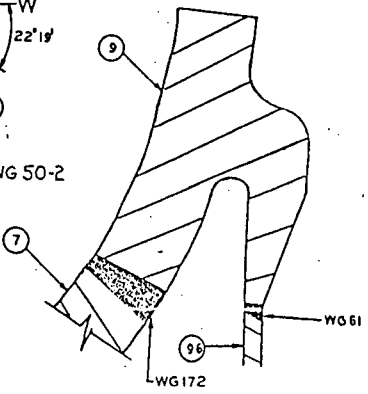
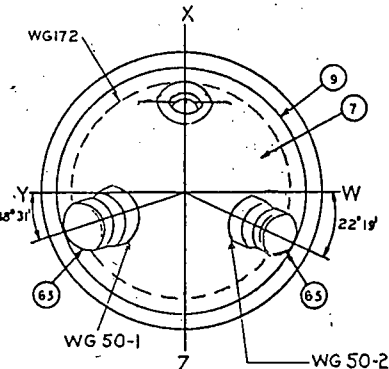
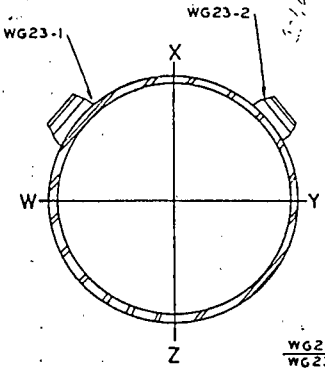
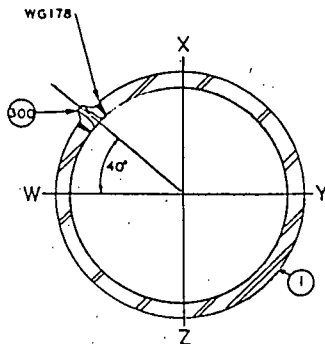
UNCONTROLLED  
 THIS COPY WILL NOT BE UPDATED

NOTES:  
 1. ALL I.D. NUMBERS SHALL BE PRECEDED BY "3PRZ"  
 2. PIECE NUMBERS ARE SHOWN IN CIRCLES.

1	REV. WELD OUTLINE	TLT	ACW	JEL	TITLE
0	ORIGINAL	WSB	TPM	WJD	PRESSURIZER WELD OUTLINE
NO.	REVISION	DRWN	RVWD	APPD	DWG NO.
		DATE	DATE	DATE	ISI-OCN3-002
					REV. 1

REF. DRAWINGS  
 OM 2201-229  
 B&W 149780E  
 B&W 149777E

DESCRIPTION	MATL.
HEAD	SA 516 GR. 70
	SA 516 GR. 70
	SA 516 GR. 70
	SA 516 GR. 70
	SA 516 GR. 70
	SA 516 GR. 70
	SA 302 GR. B
	SA 302 GR. B
SHROUDDING	SA 508 CL 2
NOZZLE	SA 508 CL 1
LET	SA 508 CL 2
LET	SA 508 CL 2
	SA 508 CL 1
	SA 508 CL 1
LET	SA 533 GR. B
NOZZLE	SA 508 CL 1



- REFERENCE DWGS.
- OM 2201-6
  - OM 2201-222
  - OM 2201-480
  - B&W III 450
  - B&W I 49830

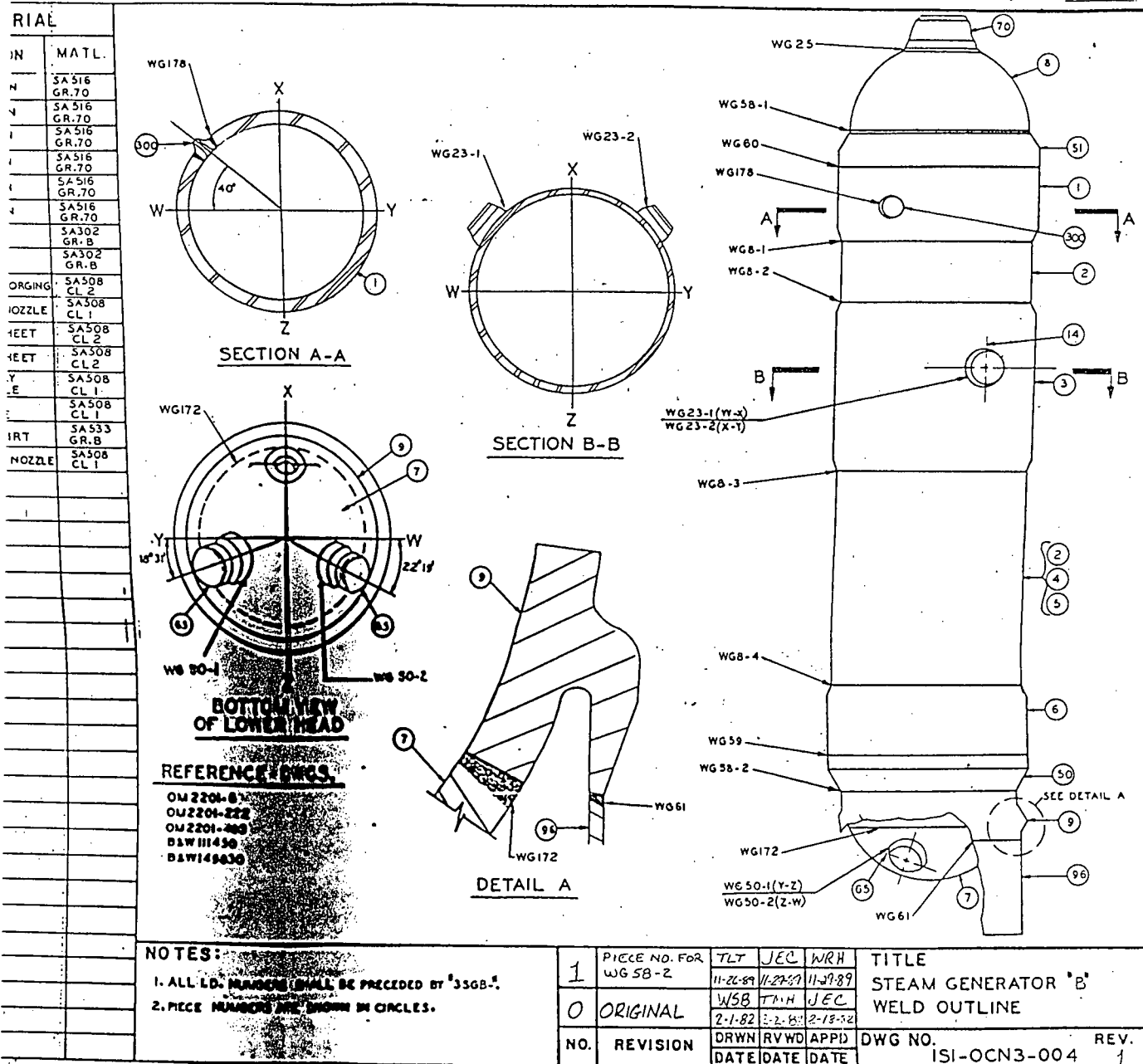
NOTES:

- ALL I.D. NUMBERS SHALL BE PRECEDED BY "3SGA".
- PIECE NUMBERS ARE SHOWN IN CIRCLES.

NO.	REVISION	DRWN	RVWD	APPD	DATE	DATE	DATE	TITLE	DWG NO.	REV.
0	ORIGINAL	WSB	TMH	JEC	2-1-82	2-2-82	2-18-82			

UNCONTROLLED  
THIS COPY WILL NOT BE UPDATED



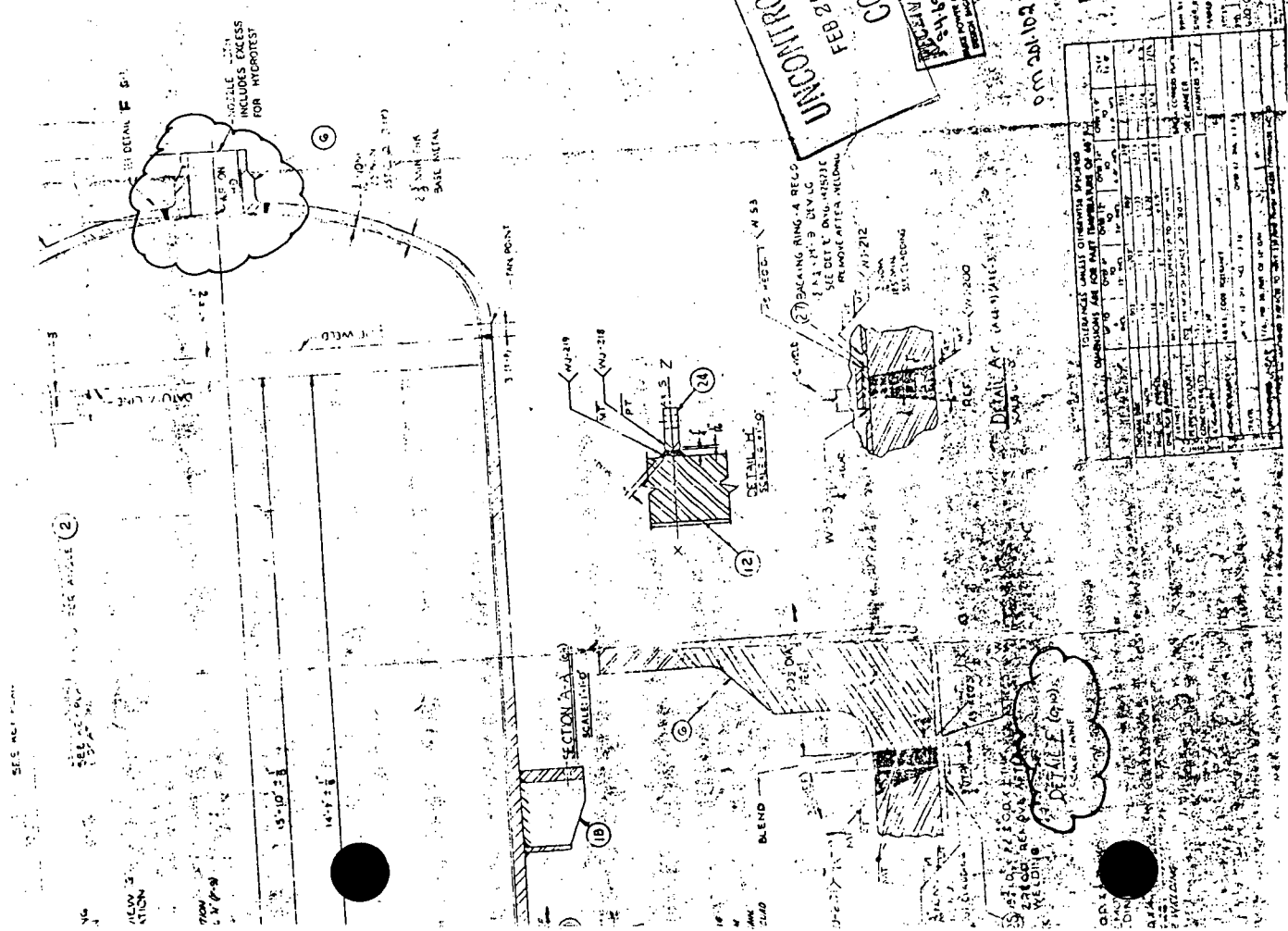


**UNCONTROLLED**  
THIS COPY WILL NOT BE UPDATED

CORE FLOODING TANK

**UNCONTROLLED**  
 THIS COPY WILL NOT BE UPDATED

NO.	REV.	DATE	DESCRIPTION
1		11/27/88	ISSUED FOR CONSTRUCTION
2		12/15/88	REVISED DETAIL F 51
3		1/15/89	REVISED DETAIL F 51
4		2/15/89	REVISED DETAIL F 51



REFERENCES	
NO.	NO.
1	11/27/88
2	12/15/88
3	1/15/89
4	2/15/89

**NOTES**

- FOR GENERAL NOTES, SEE DRAWING REVISIONS FOR LEVEL OF CHANGING TO BE APPLICABLE FOR CHINA & SUBSEQUENT REVISIONS.
- IF CHINA & SUBSEQUENT REVISIONS HAVE ISOLATED WORK AREAS OR SHOR IN NATURE, OR NOT ON THE SAME PRESSURE BOUNDARY, AND DO NOT EXCEED THE MINIMUM THICKNESS REQUIREMENTS, ALL WELT OR RAISED METAL IS TO BE REMOVED AND SHARP EDGES OF ALL WELT ARE TO BE FILED TO A FINISH.
- SYMBOL DESIGNATION:
- SYMBOL PENETRANT TEST
- MAGNETIC PARTICLE TEST
- ULTRASONIC TEST
- RADIOPHOTOGRAPHIC TEST
- WELT SPECIFICATION NUMBER

**UNCONTROLLED**  
 FEB 25 1989

**APPROVED**

DATE FOR CONSTRUCTION: 11/27/88

COMMENTS: *FILE*

DUKE POINT

**CONCRETE**

ASSEMBLY: *061*

CORE FLOODING TANK

NO.	REV.	DATE	DESCRIPTION
1		11/27/88	ISSUED FOR CONSTRUCTION
2		12/15/88	REVISED DETAIL F 51
3		1/15/89	REVISED DETAIL F 51
4		2/15/89	REVISED DETAIL F 51

### Limited Exam Data Sheet

Station ROONEE Unit 3 I.D. # 3PER-WP26-1  
 By Rory Maubler Date 1-28-94 Item # BO3.110.009  
 Checked By \_\_\_\_\_ Date \_\_\_\_\_ Page 3 of 10

DETERMINING THE CUMULATIVE TOTAL OF WELD VOLUME INSPECTED  
 (in percentage)

Total Cross Sectional Area 61.11 x (Number of Scans) 11 = 672.21 (% Factor)

Vessels:

Area Loss : Zone #1 83.13  
 Zone #2 94.82  
 Zone #3 255.84

Total Zone Loss 433.79 / (% Factor) 672.21 x 100 = 64.5 % of Loss

Lump Sum Loss From Other Limitations + 1.11 %

Total Loss 65.61 %

100% - (Total Loss) 65.61 = 34.39 % of Coverage

( Additional 0 % of Partial Coverage)

Qualifies for Request for Relief  Yes  No

Piping:

Axial Scan \_\_\_\_\_ (Loss) \_\_\_\_\_ / \_\_\_\_\_ (% Factor) x 100 = \_\_\_\_\_ % of Loss

Circumferential Scan Over Root Area  Yes  No \_\_\_\_\_ % of Loss

Axial Loss \_\_\_\_\_ + Circ. Loss \_\_\_\_\_ = \_\_\_\_\_ / 2 = \_\_\_\_\_ % Loss

Additional Losses (Due to hangers, restraints, etc.) + \_\_\_\_\_ % Loss

Explain: \_\_\_\_\_ Total % Loss

100% - (Total Loss) \_\_\_\_\_ = \_\_\_\_\_ % of Coverage

Qualifies for Request for Relief  Yes  No

Disposition:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Date: \_\_\_\_\_

Station KONKE Unit 3 Rev. \_\_\_\_\_ File No. 3PER-WP26-1 Sheet \_\_\_\_\_ Of \_\_\_\_\_  
 Subject LIMITED EXAM DATA  
 By Larry Moulder Date 1-28-94  
 Prob No. B03.110.009 Checked By \_\_\_\_\_ Date page 4 of 10

### SUMMARY:

TO DETERMINE % FACTOR TOTAL EXAM AREA X NUMBER OF SCANS

$$61.11 \text{ SQ. IN.} \times 11 \text{ SCANS} = \underline{672.21} \quad \% \text{ FACTOR}$$

AREA LOSSES: DUE TO NOZZLE CONFIGURATION

AREA FOR	ZONE	AREA	UNIT
	1	83.13	SQ. IN.
	2	94.82	SQ. IN.
	3	255.84	SQ. IN.
		<u>433.79</u>	<u>SQ. IN.</u>

$$433.79 \div 672.21 \times 100 = 64.5\% \text{ LOSS}$$

### LOSS DUE TO LIMITATIONS:

DUE TO HEATER BUNDLE	1.04%
DUE TO LOWER HEAD	0.7%
	<u>1.11%</u>

$$64.5 + 1.11 = 65.61\% \text{ LOSS}$$

$$100\% - 65.61\% = \underline{\underline{34.39\% \text{ COVERAGE}}}$$

Station OCONEC Unit 3 Rev. \_\_\_\_\_ File No. 3PER-WP26-1 Sheet \_\_\_\_\_ Of \_\_\_\_\_  
 Subject LIMITED EXAM DATA  
 By Randy Mauldin Date 1-28-94  
 Prob No. B03.110.009 Checked By \_\_\_\_\_ Date Page 5 of 10

ZONE 1

AREA of LOSS:

35°	1 TO 2	$= \frac{1.5 \times .9}{2} =$	.375	SQ IN.
35°	2 TO 1	$= \frac{6.8 \times .8}{2} + \frac{4.1 \times 6.8}{2} =$	16.66	SQ IN.
45°	1 TO 2	$= \frac{.4 \times 1.1}{2} =$	.22	SQ IN.
45°	2 TO 1	$= \frac{6.8 \times 1.4}{2} + \frac{5.1 \times 6.8}{2} =$	18.7	SQ IN.
60°	1 TO 2	$= \frac{.6 \times .25}{2} =$	.075	SQ IN.
60°	2 TO 1	$= \frac{4.1 \times 6.8}{2} + \frac{6.8 \times 4.9}{2} =$	20.4	SQ IN.
35°	CCW	$= \frac{6.5 \times .2}{2} + \frac{6.5 \times 1.6}{2} =$	5.85	SQ IN.
35°	CCW		5.85	SQ IN.
45°	CCW		5.85	SQ IN.
45°	CCW		5.85	SQ IN.
0°		$= \frac{5.5 \times 1.2}{2} =$	3.3	SQ IN.

TOTAL AREA of LOSS 83.13 SQ IN.

ZONE 2

AREA of LOSS:

35°	1 TO 2	$= \frac{4.7 \times .3}{2} + \frac{4.7 \times 2.3}{2} + \frac{1.8 \times 1}{2} =$	7.01	SQ IN.	
35°	2 TO 1	TOTAL LOSS	10.05	SQ IN.	
45°	1 TO 2	$= \frac{3.7 \times 1.35}{2} + \frac{2.3 \times 2.7}{2} + \frac{1.8 \times 1}{2} =$	4.65	SQ IN.	
45°	2 TO 1	TOTAL LOSS	10.05	SQ IN.	
60°	1 TO 2	$= \frac{2.8 \times .2}{2} + \frac{2.3 \times 1.4}{2} + \frac{1.8 \times 1}{2} =$	2.79	SQ IN.	
60°	2 TO 1	TOTAL LOSS	10.05	SQ IN.	
35°	CCW	TOTAL LOSS	10.05	SQ IN.	
35°	CCW	TOTAL LOSS	10.05	SQ IN.	
45°	CCW	TOTAL LOSS	10.05	SQ IN.	
45°	CCW	TOTAL LOSS	10.05	SQ IN.	
0°		$\frac{.1 \times .6}{2} = .03$	10.05 - .03 =	10.02	SQ IN.

Station OCONEE Unit 3 Rev. \_\_\_\_\_ File No. 3PER-WP26-1 Sheet \_\_\_\_\_ Of \_\_\_\_\_

Subject LIMITED EXAM DATA

By Larry Mauldin Date 1-28-94

Prob No. 303.110.009 Checked By \_\_\_\_\_ Date Page 6 of 10

ZONE 2 (CONT.)

TOTAL AREA OF LOSS 94.82 SQ. IN.

ZONE 3

AREA OF LOSS:

<u>35°</u>	<u>1 TO 2</u>	$\frac{1.4 \times 2.0}{2} = 1.4$ (COVERABLE)	<u>27.7 - 1.4 =</u>	<u>26.3</u>	<u>SQ. IN.</u>
<u>35°</u>	<u>2 TO 1</u>	<u>TOTAL LOSS</u>		<u>27.7</u>	<u>SQ. IN.</u>
<u>45°</u>	<u>1 TO 2</u>	$\frac{3.1 \times 3.35}{2} = 5.19$	<u>27.7 - 5.19 =</u>	<u>22.5</u>	<u>SQ. IN.</u>
<u>45°</u>	<u>2 TO 1</u>	<u>TOTAL LOSS</u>		<u>27.7</u>	<u>SQ. IN.</u>
<u>60°</u>	<u>1 TO 2</u>	$\frac{4.8 \times 3.1}{2} + \frac{5.7 \times 2.5}{2} = 14.565$	<u>27.7 - 14.565 =</u>	<u>13.14</u>	<u>SQ. IN.</u>
<u>35°</u>	<u>CW</u>	<u>TOTAL LOSS</u>		<u>27.7</u>	<u>SQ. IN.</u>
<u>35°</u>	<u>CCW</u>	<u>"</u>		<u>27.7</u>	<u>SQ. IN.</u>
<u>45°</u>	<u>CW</u>	<u>"</u>		<u>27.7</u>	<u>SQ. IN.</u>
<u>45°</u>	<u>CCW</u>	<u>"</u>		<u>27.7</u>	<u>SQ. IN.</u>
<u>0°</u>	<u>"</u>	<u>"</u>		<u>27.7</u>	<u>SQ. IN.</u>
<u>TOTAL AREA OF LOSS</u>				<u>255.84</u>	<u>SQ. IN.</u>

PRESSURIZER SAMPLING NOZZLE

PER SIDE

ITEM # B03.110.009

-DL

I.D.# 3PER-WP264

NOZZLE SIDE

$$+ \frac{6.188 \times 1.35}{2} = 23.36 \text{ sq. in.}$$

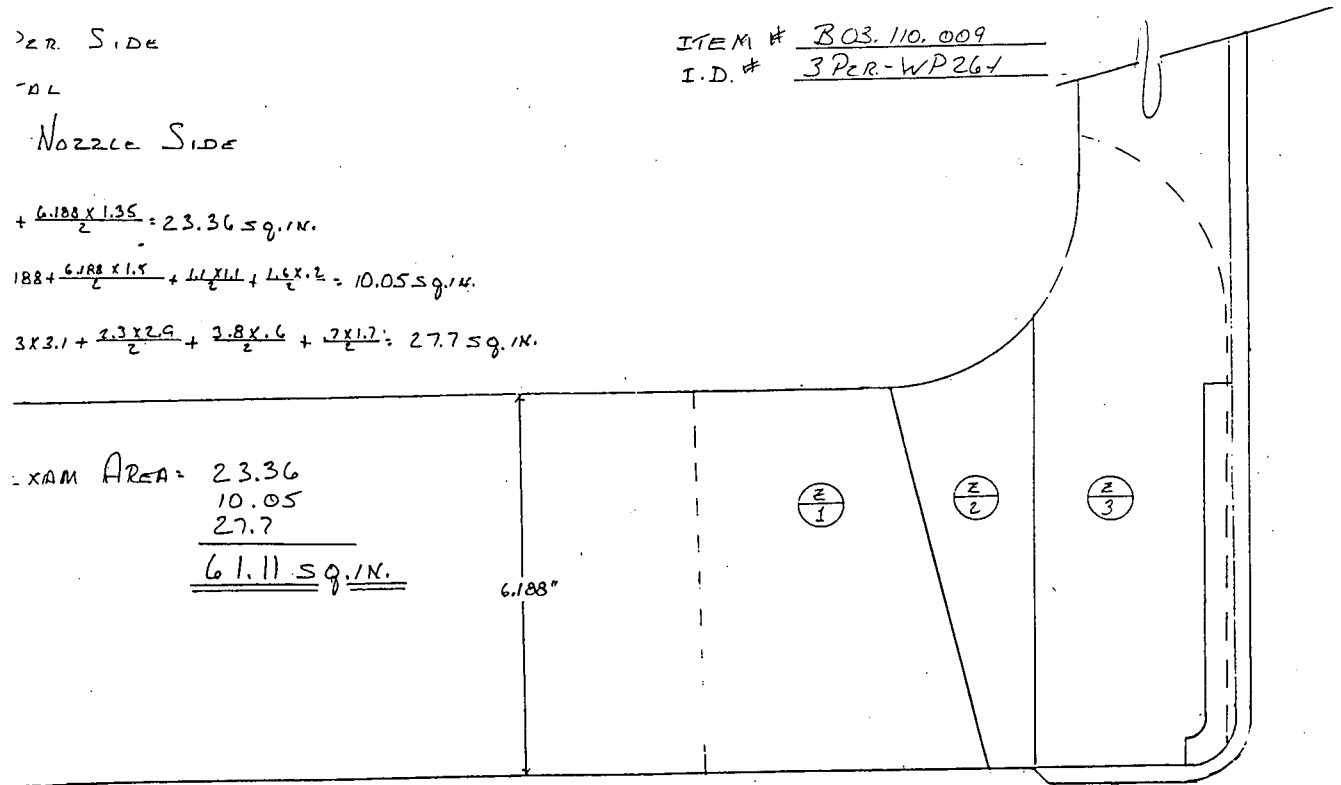
$$188 + \frac{6.188 \times 1.5}{2} + \frac{11 \times 11}{2} + \frac{4 \times 2}{2} = 10.05 \text{ sq. in.}$$

$$3 \times 3.1 + \frac{2.3 \times 2.9}{2} + \frac{2.8 \times 6}{2} + \frac{2 \times 1.2}{2} = 27.7 \text{ sq. in.}$$

SAM AREA =

23.36
10.05
27.7
61.11 sq. in.

6.188"

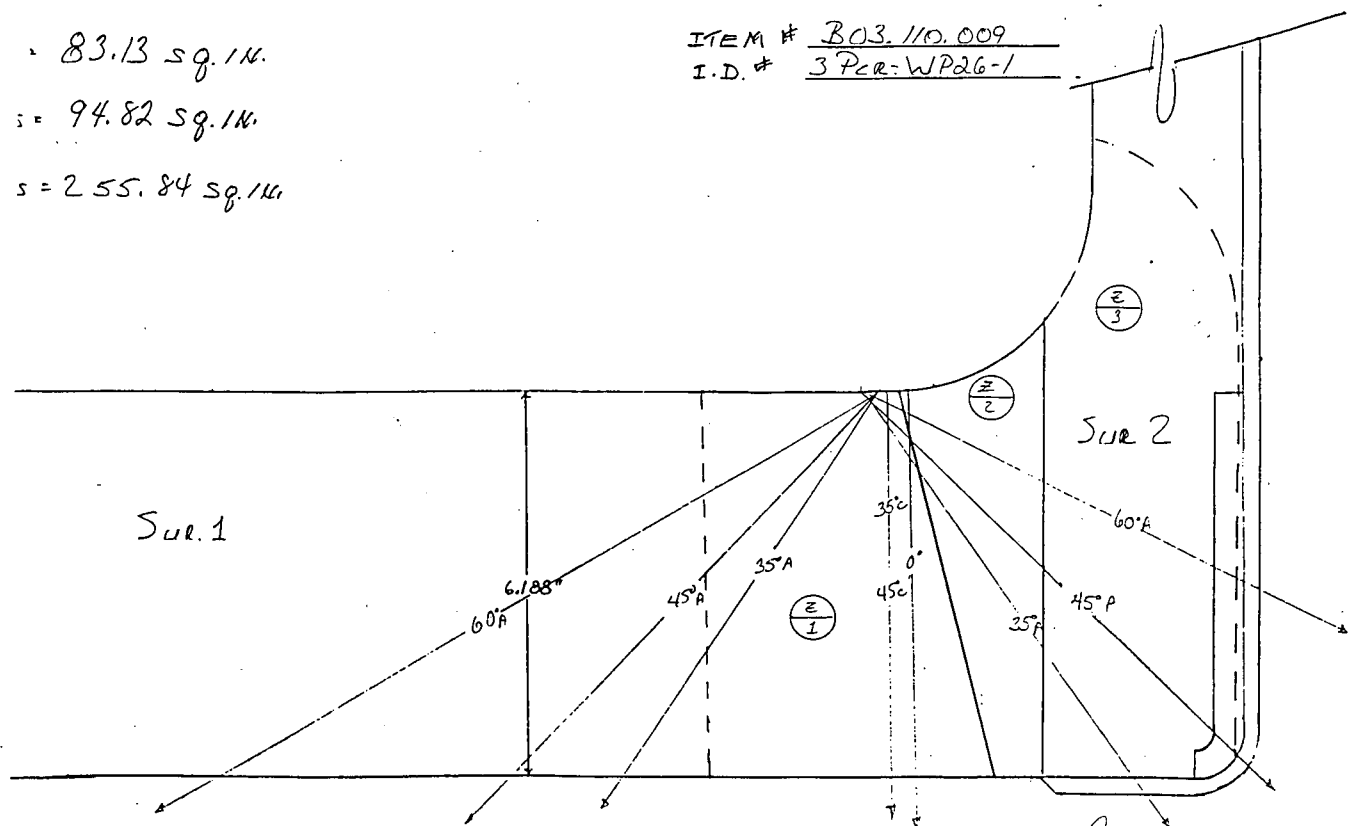


Larry Thould

PRESSURIZER SAMPLING NOZZLE

- 83.13 sq. in.
- 94.82 sq. in.
- 255.84 sq. in.

ITEM # B03.110.009  
I.D. # 3 PER-WP26-1



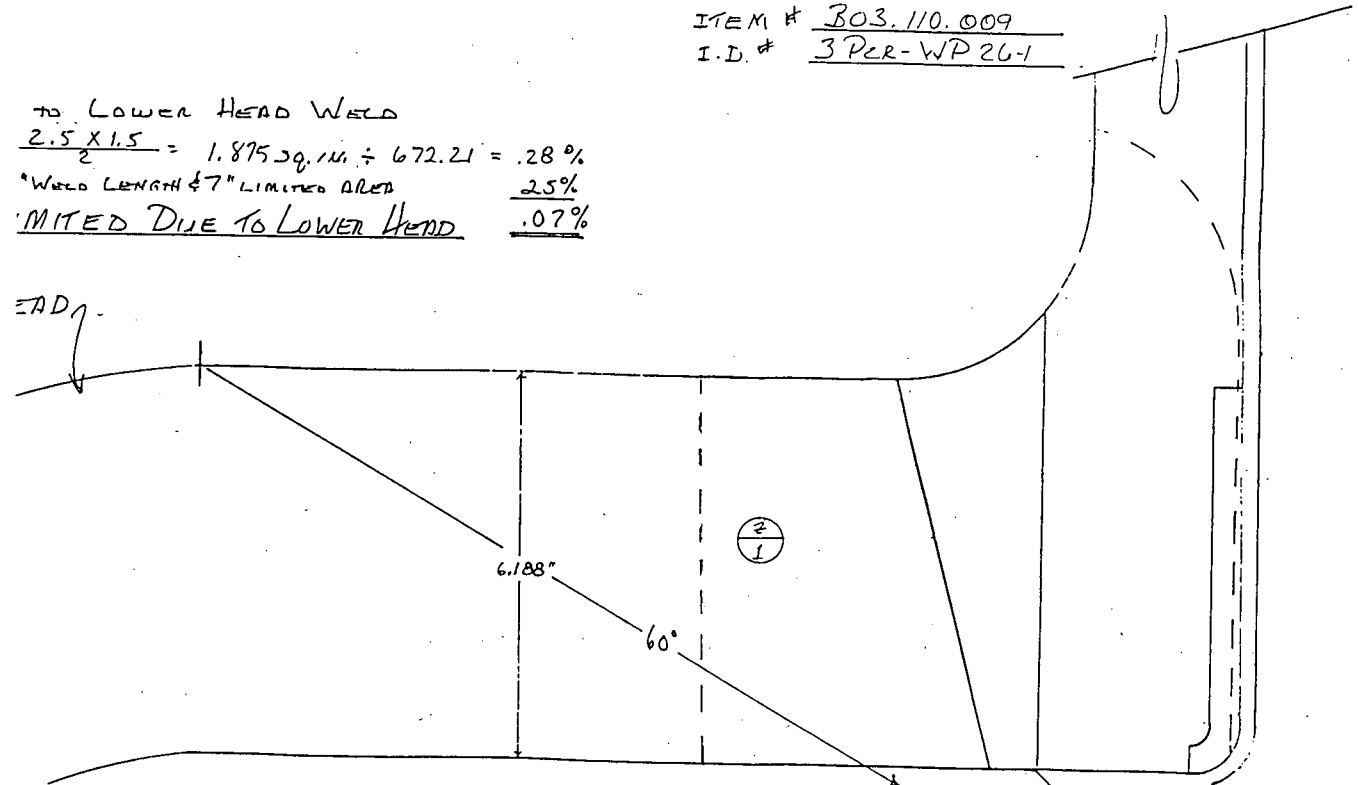
Larry Mauldin



PRESSURIZER SAMPLING NOZZLE

ITEM # 303.110.009  
I.D. # 3 PER-WP 26-1

to LOWER HEAD WELD  
 $\frac{2.5 \times 1.5}{2} = 1.875 \text{ sq. in.} \div 672.21 = .28\%$   
\*WELD LENGTH 47" LIMITED AREA 25%  
MITED DISE TO LOWER HEAD .07%



*Randy Thacker*

PRESSURIZER SAMPLING NOZZLE

LOSS DUE TO HEATER BUNDLE

ITEM # 303.110.009  
I.D.# 3 PER-WP 261

$$33.35 \text{ sq. in.} \div 672.21 \times 100 = 4.96$$

LENGTH OF WELD 28' 6" LIMITED AREA = 21% of WELD

1.04 ADDITIONAL LOSS

$$+ \frac{6.5 \times .5}{2} = 6.455 - .375 = 6.08 \text{ sq. in. (35°)}$$

$$= 2.4 - .22 = 2.18 \text{ sq. in. (45°)}$$

$$= 1.125 - .075 = 1.05 \text{ sq. in. (60°)}$$

9.31 sq. in.

ADDITIONAL LOSS FOR HEATER BUNDLE

$$7.01 = 3.04 \text{ sq. in. (35°)}$$

$$= .91$$

$$7.1 = 9.14 - 4.65 = 4.49 \text{ sq. in. (45°)}$$

$$\frac{3.2 \times .8}{2} = 6.03$$

$$1.03 = 4.02 - 2.79 = 1.23 \text{ sq. in. (60°)}$$

$$\frac{4.3 \times .5}{2} = 5.88$$

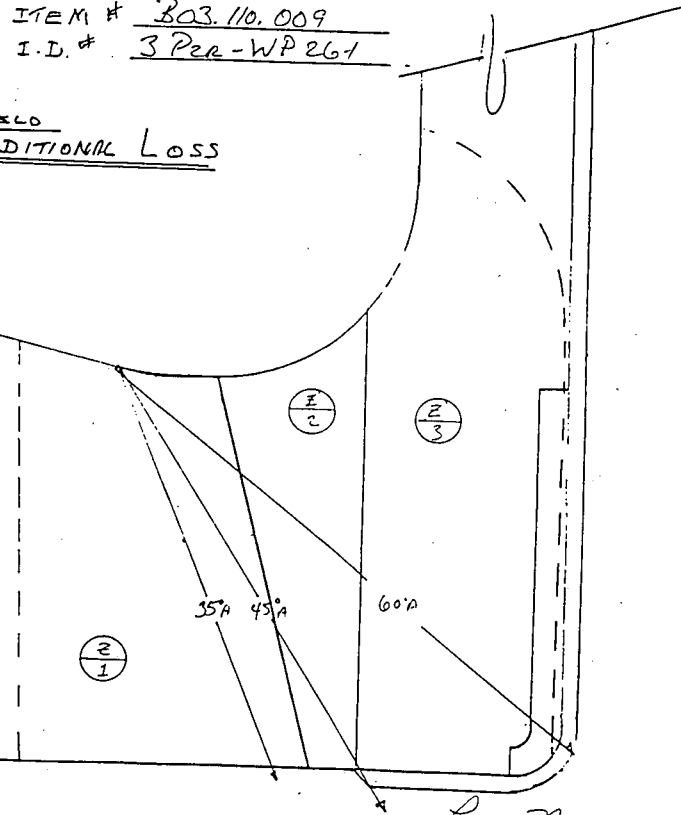
$$5.88 = 21.82 - 13.14 = 8.68 \text{ sq. in. (60°)}$$

$$1.4 \text{ sq. in. (35°)}$$

$$5.2 \text{ sq. in. (45°)}$$

$$22.5 =$$

15.28 sq. in.



Larry Mauldin

Station OCONEE Unit 3 Rev. \_\_\_\_\_ File No. 3PER-WP26.3 Sheet \_\_\_\_\_ of \_\_\_\_\_  
 Subject LIMITED EXAM DATA  
 By Larry Mauldin Date 2.2.94  
 Prob No. B03.110.011 Checked By \_\_\_\_\_ Date Apr 3 of 7

## SUMMARY:

TO DETERMINE % FACTOR,  
 TOTAL EXAM AREA X NUMBER OF SCANS  
 $61.11 \text{ sq. in.} \times 11 \text{ SCANS} = 672.21 \text{ FACTOR}$

## AREA OF LOSSES:

DUE TO NOZZLE CONFIGURATION

ZONE 1	83.13	sq. in.
ZONE 2	94.82	sq. in.
ZONE 3	255.84	sq. in.
	<u>433.79</u>	<u>sq. in.</u>

$$433.79 \div 672.21 \times 100 = 64.5\% \text{ LOSS}$$

$$\underline{100 - 64.5 = 35.5\% \text{ COVERAGE}}$$

Station OCONEE Unit 3 Rev. \_\_\_\_\_ File No. 3P2R-WP26-3 Sheet \_\_\_\_\_ of \_\_\_\_\_  
 Subject LIMITED EXAM DATA  
 By Rory Thaulden Date 2-2-94  
 Prob No. B03.110.011 Checked By \_\_\_\_\_ Date Page 4 of 7

ZONE 2 (CONT.)

TOTAL AREA of LOSS 94.82 sq. in.

ZONE 3

AREA of LOSS:

35°	1 TO 2	$\frac{1.4 \times 2.0}{2} = 1.4$ (COVERAGE)		
			$27.7 - 1.4 =$	<u>26.3</u> sq. in.
35°	2 TO 1		TOTAL LOSS	<u>27.7</u> sq. in.
45°	1 TO 2	$\frac{3.1 \times 3.35}{2} = 5.19$		
			$27.7 - 5.19 =$	<u>22.5</u> sq. in.
45°	2 TO 1		TOTAL LOSS	<u>27.7</u> sq. in.
60°	1 TO 2	$\frac{4.8 \times 2.1}{2} + \frac{5.7 \times 2.5}{2} = 14.565$		
			$27.7 - 14.565 =$	<u>13.14</u> sq. in.
35°	CW		TOTAL LOSS	<u>27.7</u> sq. in.
35°	CCW		"	<u>27.7</u> sq. in.
45°	CW		"	<u>27.7</u> sq. in.
45°	CCW		"	<u>27.7</u> sq. in.
0°			"	<u>27.7</u> sq. in.
TOTAL AREA of LOSS				<u>255.84</u> sq. in.

Station Ocone Unit 3 Rev. \_\_\_\_\_ File No. 322-WP26-3 Sheet \_\_\_\_\_ of \_\_\_\_\_  
 Subject LIMITED EXAM DATA  
 By Larry Maulden Date 2.2.94  
 Prob No. B03.116.011 Checked By \_\_\_\_\_ Date PAGE 5 OF 7

ZONE 1

AREA of LOSS:

35°	1 TO 2	$= \frac{1.5 \times 4}{2} =$	.375	SQ IN.
35°	2 TO 1	$= \frac{6.8 \times 8}{2} + \frac{4 \times 6.8}{2} =$	16.66	SQ IN.
45°	1 TO 2	$= \frac{4 \times 1.1}{2} =$	.22	SQ IN.
45°	2 TO 1	$= \frac{6.8 \times 1.4}{2} + \frac{4.1 \times 6.8}{2} =$	18.7	SQ IN.
60°	1 TO 2	$= \frac{6 \times 2.5}{2} =$	.075	SQ IN.
60°	2 TO 1	$= \frac{4.1 \times 6.8}{2} + \frac{6.8 \times 1.9}{2} =$	20.4	SQ IN.
35°	CW	$= \frac{6.5 \times 2}{2} + \frac{6.5 \times 1.6}{2} =$	5.85	SQ IN.
35°	CCW		5.85	SQ IN.
45°	CW		5.85	SQ IN.
45°	CCW		5.85	SQ IN.
0°		$\frac{5.5 \times 1.2}{2} =$	3.3	SQ IN.

TOTAL AREA of LOSS 83.13 SQ IN.

ZONE 2

AREA of LOSS:

35°	1 TO 2	$= \frac{4.7 \times 3}{2} + \frac{4.7 \times 2.3}{2} + \frac{1.8 \times 1}{2} =$	7.01	SQ IN.	
35°	2 TO 1	TOTAL LOSS	10.05	SQ IN.	
45°	1 TO 2	$= \frac{3.7 \times 3.5}{2} + \frac{2.3 \times 2.7}{2} + \frac{1.8 \times 1}{2} =$	4.65	SQ IN.	
45°	2 TO 1	TOTAL LOSS	10.05	SQ IN.	
60°	1 TO 2	$= \frac{2.8 \times 2}{2} + \frac{2.3 \times 1.4}{2} + \frac{1.8 \times 1}{2} =$	2.79	SQ IN.	
60°	2 TO 1	TOTAL LOSS	10.05	SQ IN.	
35°	CW	TOTAL LOSS	10.05	SQ IN.	
35°	CCW	TOTAL LOSS	10.05	SQ IN.	
45°	CW	TOTAL LOSS	10.05	SQ IN.	
45°	CCW	TOTAL LOSS	10.05	SQ IN.	
0°		$\frac{1 \times 6}{2} = .03$	10.05 - .03 =	10.02	SQ IN.

PRESSURIZER SAMPLING NOZZLE

PER SIDE

ITEM # 303.110.011  
 I.D. # 3 PZR-WP26-3

TOTAL

AL NOZZLE SIDE

$$38 + \frac{6.188 \times 1.35}{2} = 23.36 \text{ sq. in.}$$

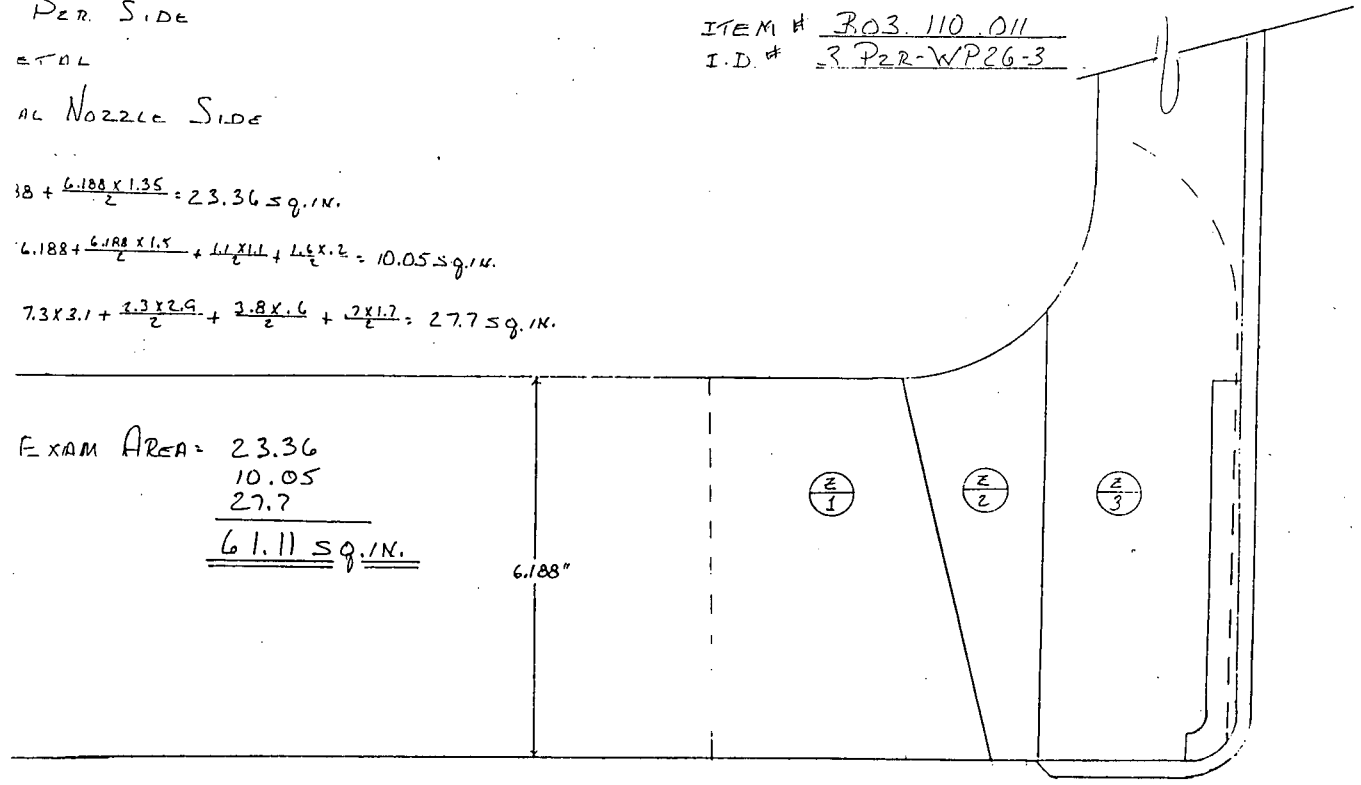
$$6.188 + \frac{6.188 \times 1.5}{2} + 1.1 \times 1.1 + 1.6 \times 2 = 10.05 \text{ sq. in.}$$

$$7.3 \times 3.1 + \frac{2.3 \times 2.9}{2} + \frac{2.8 \times 1.6}{2} + \frac{2 \times 1.7}{2} = 27.7 \text{ sq. in.}$$

EXAM AREA =

23.36
10.05
27.7
61.11 sq. in.

6.188"



*Ray Mauldin*

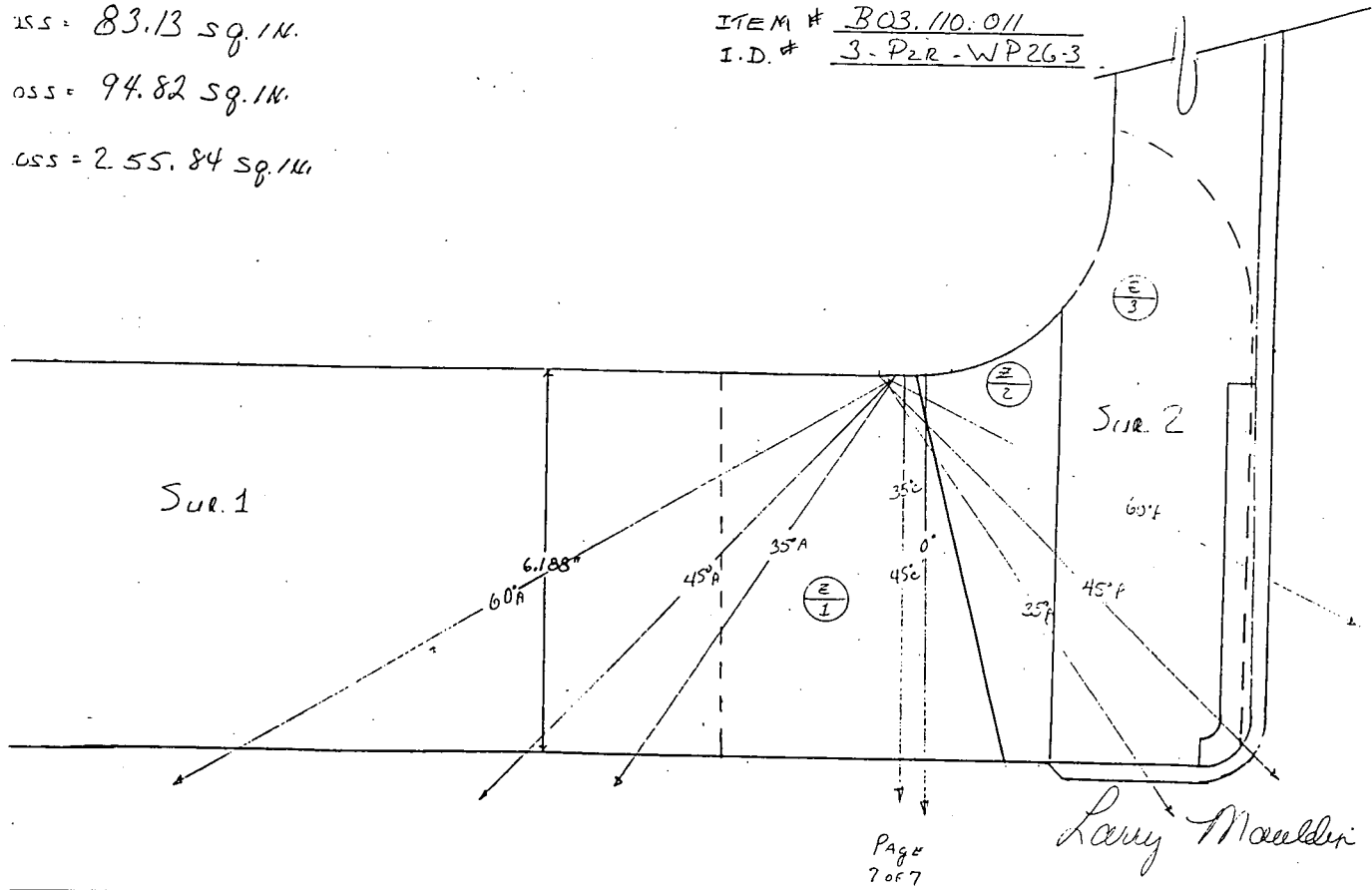
PRESSURIZER SAMPLING NOZZLE

ISS = 83.13 sq. in.

OSS = 94.82 sq. in.

GSS = 255.84 sq. in.

ITEM # B03.110.011  
I.D. # 3-PZR-WP26-3



### Limited Exam Data Sheet

Station OGONEE Unit 3 I.D. # 3P2R-WP26-7  
Larry Maulder Date 1-28-94 Item # B03.110.012  
Checked By \_\_\_\_\_ Date \_\_\_\_\_ Page 3 Of 10

#### DETERMINING THE CUMULATIVE TOTAL OF WELD VOLUME INSPECTED (in percentage)

Total Cross Sectional Area 61.11 x (Number of Scans) 11 = 672.21 (% Factor)

#### Vessels:

Area Loss : Zone #1 83.13  
Zone #2 94.82  
Zone #3 255.84

Total Zone Loss 433.79 / (% Factor) 672.21 x 100 = 64.5 % of Loss

Lump Sum Loss From Other Limitations +1.11 %

Total Loss 65.61 %

100% - (Total Loss) 65.61 = 34.39 % of Coverage

( Additional 0 % of Partial Coverage)

Qualifies for Request for Relief  Yes  No

#### Piping:

Axial Scan \_\_\_\_\_ (Loss) \_\_\_\_\_ / \_\_\_\_\_ (% Factor) x 100 = \_\_\_\_\_ % of Loss

Circumferential Scan Over Root Area  Yes  No \_\_\_\_\_ % of Loss

Axial Loss \_\_\_\_\_ + Circ. Loss \_\_\_\_\_ = \_\_\_\_\_ / 2 = \_\_\_\_\_ % Loss

Additional Losses (Due to hangers, restraints, etc.) + \_\_\_\_\_ % Loss

Explain: \_\_\_\_\_ Total % Loss

100% - (Total Loss) \_\_\_\_\_ = \_\_\_\_\_ % of Coverage

Qualifies for Request for Relief  Yes  No

#### Disposition:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_



Station CONEE Unit 3 Rev. \_\_\_\_\_ File No. 3PER-WP26-7 Sheet \_\_\_\_\_ Of \_\_\_\_\_  
 Subject LIMITED EXAM DATA  
 By Ray Mauden Date 1-28-94  
 Prob No. B03.110.012 Checked By \_\_\_\_\_ Date Page 4 of 10

### SUMMARY:

TO DETERMINE % FACTOR TOTAL EXAM AREA X NUMBER OF SCANS

$$61.1 \text{ SQ. IN.} \times 11 \text{ SCANS} = \underline{672.21} \text{ \% FACTOR}$$

AREA LOSSES:	DUE TO NOZZLE CONFIGURATION
AREA FOR ZONE 1	83.13 SQ. IN.
ZONE 2	94.82 SQ. IN.
ZONE 3	255.84 SQ. IN.
	<u>433.79</u> SQ. IN.

$$433.79 \div 672.21 \times 100 = 64.5\% \text{ LOSS}$$

### LOSS DUE TO LIMITATIONS:

DUE TO HEATER BUNDLE	1.04%
DUE TO LOWER HEAD	<u>0.07%</u>
	1.11%

$$64.5 + 1.11 = 65.61\% \text{ LOSS}$$

$$100\% - 65.61\% = \underline{\underline{34.39\% \text{ COVERAGE}}}$$

Station OCONEE Unit 3 Rev. \_\_\_\_\_ File No. 3P22WP26-7 Sheet \_\_\_\_\_ Of \_\_\_\_\_  
 Subject LIMITED EXAM DATA  
 By Larry Mauldin Date 1-28-94  
 Prob No. 303.110.012 Checked By \_\_\_\_\_ Date PAGE 5 OF 10

ZONE 1

AREA of LOSS:

35°	1 TO 2	$= \frac{1.5 \times 1.9}{2} =$	.375	SQ IN.
35°	2 TO 1	$= \frac{6.8 \times 8}{2} + \frac{4.8 \times 6.8}{2} =$	16.66	SQ IN.
45°	1 TO 2	$= \frac{1.4 \times 1.1}{2} =$	.22	SQ IN.
45°	2 TO 1	$= \frac{6.8 \times 1.4}{2} + \frac{4.1 \times 6.8}{2} =$	18.7	SQ IN.
60°	1 TO 2	$= \frac{.6 \times .25}{2} =$	.075	SQ IN.
60°	2 TO 1	$= \frac{4.1 \times 6.8}{2} + \frac{6.8 \times 1.9}{2} =$	20.4	SQ IN.
35°	CW	$= \frac{6.5 \times 1.2}{2} + \frac{6.5 \times 1.6}{2} =$	5.85	SQ IN.
35°	CCW		5.85	SQ IN.
45°	CW		5.85	SQ IN.
45°	CCW		5.85	SQ IN.
0°		$= \frac{5.5 \times 1.2}{2} =$	3.3	SQ IN.

TOTAL AREA of LOSS 83.13 SQ IN.

ZONE 2

AREA of LOSS:

35°	1 TO 2	$= \frac{4.7 \times 1.3}{2} + \frac{4.7 \times 2.3}{2} + \frac{1.8 \times 1}{2} =$	7.01	SQ IN.	
35°	2 TO 1	TOTAL LOSS	10.05	SQ IN.	
45°	1 TO 2	$= \frac{3.7 \times 1.35}{2} + \frac{2.3 \times 2.7}{2} + \frac{1.8 \times 1}{2} =$	4.65	SQ IN.	
45°	2 TO 1	TOTAL LOSS	10.05	SQ IN.	
60°	1 TO 2	$= \frac{2.8 \times .2}{2} + \frac{2.3 \times 1.4}{2} + \frac{1.8 \times 1}{2} =$	2.79	SQ IN.	
60°	2 TO 1	TOTAL LOSS	10.05	SQ IN.	
35°	CW	TOTAL LOSS	10.05	SQ IN.	
35°	CCW	TOTAL LOSS	10.05	SQ IN.	
45°	CW	TOTAL LOSS	10.05	SQ IN.	
45°	CCW	TOTAL LOSS	10.05	SQ IN.	
0°		$= \frac{.1 \times .6}{2} = .03$	10.05 - .03 =	10.02	SQ IN.

Station OCONEE Unit 3 Rev. \_\_\_\_\_ File No. SPER-WP26-7 Sheet \_\_\_\_\_ Of \_\_\_\_\_  
 Subject LIMITED EXAM DATA  
 By Larry Mauldin Date 1-28-94  
 Prob No. 303.110.012 Checked By \_\_\_\_\_ Date Page 6 of 10

ZONE 2 (CONT.)

TOTAL AREA of LOSS 94.82 SQ IN.

ZONE 3

AREA of LOSS:

35°	1 TO 2	$\frac{1.4 \times 2.0}{2} = 1.4$ (COVERAGE)	27.7 - 1.4 =	26.3	SQ IN.
35°	2 TO 1		TOTAL LOSS	27.7	SQ IN.
45°	1 TO 2	$\frac{3.1 \times 3.35}{2} = 5.19$	27.7 - 5.19 =	22.5	SQ IN.
45°	2 TO 1		TOTAL LOSS	27.7	SQ IN.
60°	1 TO 2	$\frac{4.8 \times 2.1}{2} + \frac{5.7 \times 2.5}{2} = 14.565$	27.7 - 14.565 =	13.14	SQ IN.
35°	CW		TOTAL LOSS	27.7	SQ IN.
35°	CCW		"	27.7	SQ IN.
45°	CW		"	27.7	SQ IN.
45°	CCW		"	27.7	SQ IN.
0°			"	27.7	SQ IN.
TOTAL AREA of LOSS				255.84	SQ IN.

PRESSURIZER SAMPLING NOZZLE

PER SIDE

ITEM # B03.110.012

COL

I.D. # 3PER-WP26.7

NOZZLE SIDE

$$+ \frac{6.188 \times 1.35}{2} = 23.36 \text{ sq. in.}$$

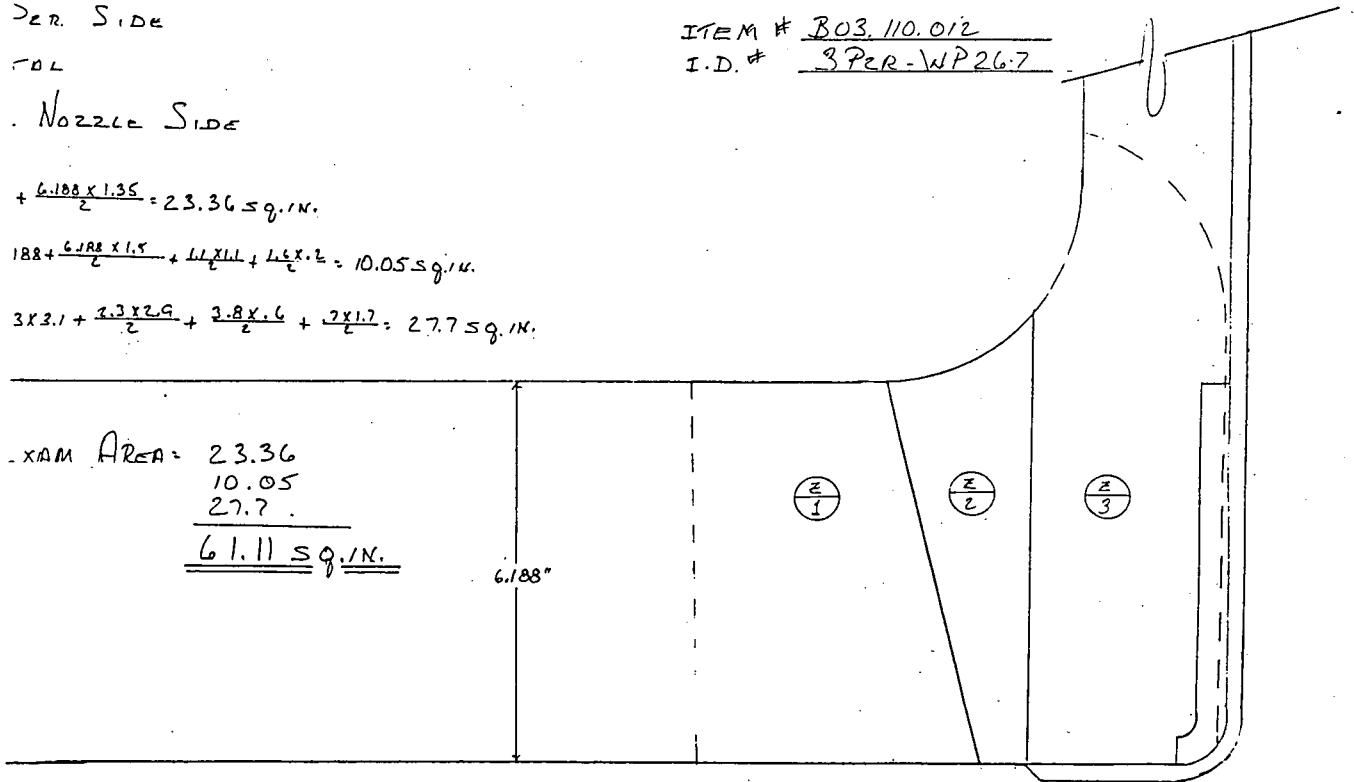
$$188 + \frac{6.188 \times 1.5}{2} + \frac{11 \times 11}{2} + \frac{16 \times 2}{2} = 10.05 \text{ sq. in.}$$

$$3 \times 3.1 + \frac{2.3 \times 2.9}{2} + \frac{2.8 \times 6}{2} + \frac{2 \times 1.7}{2} = 27.7 \text{ sq. in.}$$

XAM AREA =

23.36
10.05
27.7
61.11 sq. in.

6.188"



Larry Mauldin

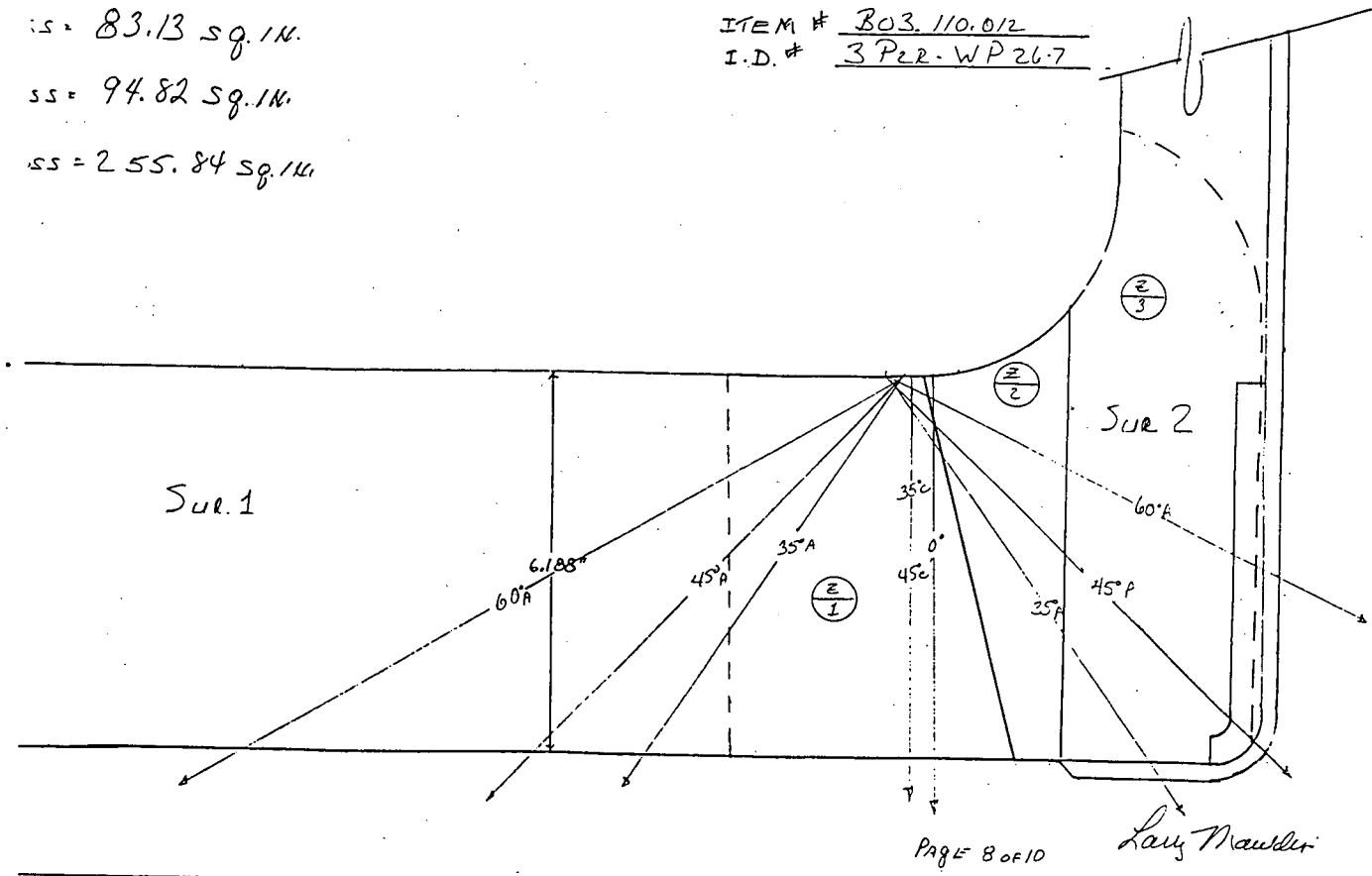
PRESSURIZER SAMPLING NOZZLE

SS = 83.13 sq. in.

SS = 94.82 sq. in.

SS = 255.84 sq. in.

ITEM # BO3.110.012  
I.D. # 3 PER-WP26.7

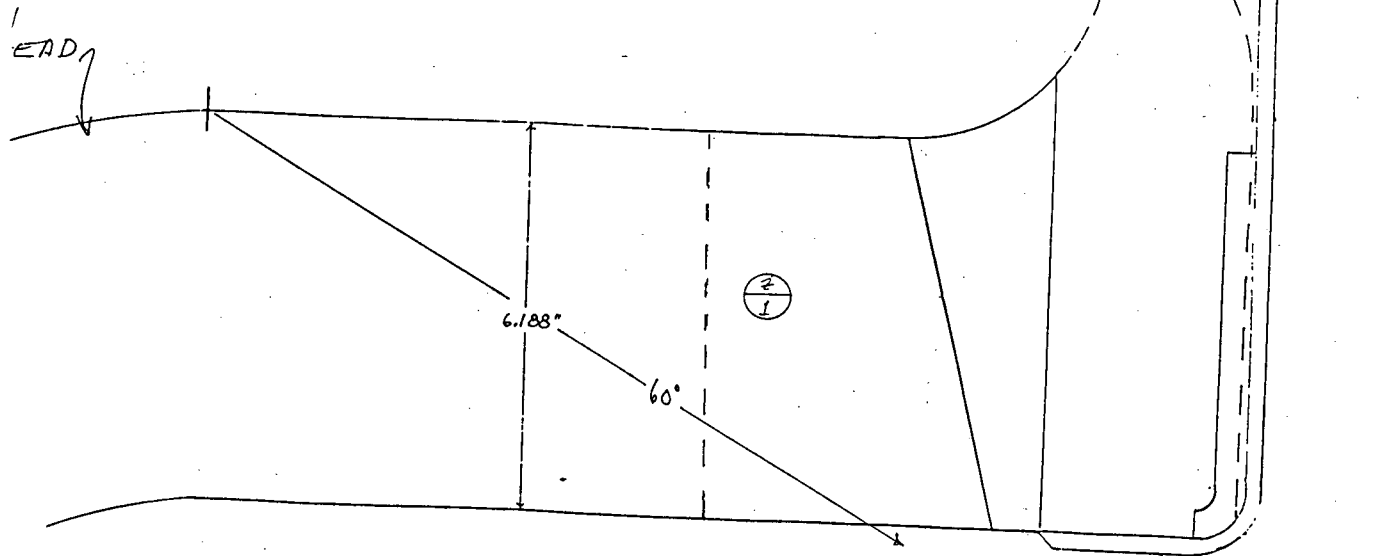


Lauy Maulder

PRESSURIZER SAMPLING NOZZLE

ITEM # B03.110.012  
I.D. # 3P2R-WP26-7

: TO LOWER HEAD WELD  
 $\frac{2.5 \times 1.5}{2} = 1.875 \text{ sq. in.} \div 672.21 = .28\%$   
8" WELD LENGTH & 7" LIMITED AREA .25%  
LIMITED DIE TO LOWER HEAD .07%



*Larry Maddux*

PRESSURIZER SAMPLING NOZZLE

LOSS DUE TO HEATER BUNDLE

ITEM # 803.110.012  
I.D. # 3PER-WP26.7

$$33.35 \text{ sq. in.} \div 672.21 \times 100 = 4.96$$

LENGTH OF WELD 2B<sup>2</sup> 6" LIMITED AREA = 21% d WELD

$$+ \frac{6.5 \times .5}{2} = 6.455 - .375 = 6.08 \text{ sq. in. (35°)} \quad \underline{1.04 \text{ ADDITIONAL LOSS}}$$

$$= 2.4 - .22 = 2.18 \text{ sq. in. (45°)}$$

$$= 1.125 - .075 = 1.05 \text{ sq. in. (60°)}$$

ADDITIONAL LOSS FOR HEATER BUNDLE

$$\underline{9.31 \text{ sq. in.}}$$

$$7.01 = 3.04 \text{ sq. in. (35°)}$$

$$= .91$$

$$9.1 = 9.14 - 4.65 = 4.49 \text{ sq. in. (45°)}$$

$$\frac{3.2 \times .8}{2} = 6.03$$

$$10.03 = 4.02 - 2.79 = 1.23 \text{ sq. in. (60°)}$$

$$\frac{4.3 \times .5}{2} = 5.88$$

$$5.88 = 21.82 - 13.14 = 8.68 \text{ sq. in. (60°)}$$

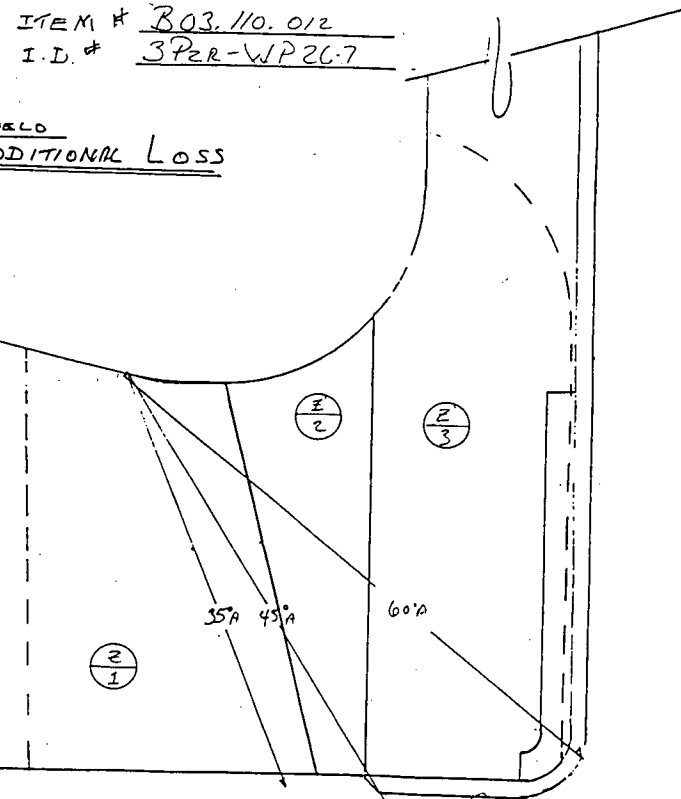
$$26.3 =$$

$$22.5 =$$

$$1.4 \text{ sq. in. (35°)}$$

$$5.2 \text{ sq. in. (45°)}$$

$$\underline{15.28 \text{ sq. in.}}$$



### Limited Exam Data Sheet

Station DOONEK Unit 3 I.D. # 3PER-WP26-1  
By Larry Mauldin Date 1-28-98 Item # 303.120.009  
Checked By \_\_\_\_\_ Date \_\_\_\_\_ Page 3 Of 6

#### DETERMINING THE CUMULATIVE TOTAL OF WELD VOLUME INSPECTED (in percentage)

Total Cross Sectional Area 4.47 x (Number of Scans) N/A = 4.47 (% Factor)

#### Vessels:

Area Loss : Zone #1 N/A  
Zone #2 N/A  
Zone #3 N/A

(INNER RADIUS INSPECTION)

Total Zone Loss N/A 1(% Factor) 4.47 x 100 = 33.33 % of Loss

Lump Sum Loss From Other Limitations + 6.04 %

Total Loss 39.4 % (ROUNDED UP)

100% - (Total Loss) 39.4 = 60.6 % of Coverage

( Additional 0 % of Partial Coverage)

Qualifies for Request for Relief  Yes  No

#### Piping:

Axial Scan \_\_\_\_\_ (Loss) \_\_\_\_\_ / \_\_\_\_\_ (% Factor) x 100 = \_\_\_\_\_ % of Loss

Circumferential Scan Over Root Area  Yes  No \_\_\_\_\_ % of Loss

Axial Loss \_\_\_\_\_ + Circ. Loss \_\_\_\_\_ = \_\_\_\_\_ / 2 = \_\_\_\_\_ % Loss

Additional Losses (Due to hangers, restraints, etc.) + \_\_\_\_\_ % Loss

Explain: \_\_\_\_\_ Total % Loss \_\_\_\_\_

100% - (Total Loss) \_\_\_\_\_ = \_\_\_\_\_ % of Coverage

Qualifies for Request for Relief  Yes  No

#### Disposition:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_



Serial No. 94-01  
Attachment 6  
Page 2 of 4

SUMMARY:

EXAM AREA	4.47	sq. in.	
AREA OF LOSS	1.49	sq. in.	(33.33%)
ADDITIONAL LOSS DUE TO HENTER BUNDLE	.27	sq. in.	(6.04%)
TOTAL AREA OF LOSS	<u>1.76</u>		

$$1.76 \div 4.47 \times 100 = 39.4\% \text{ LOSS}$$

$$\underline{\underline{100 - 39.4 = 60.6\% \text{ COVERAGE}}}$$

PRESSURIZER SAMPLING NOZZLE  
INNER RADIUS

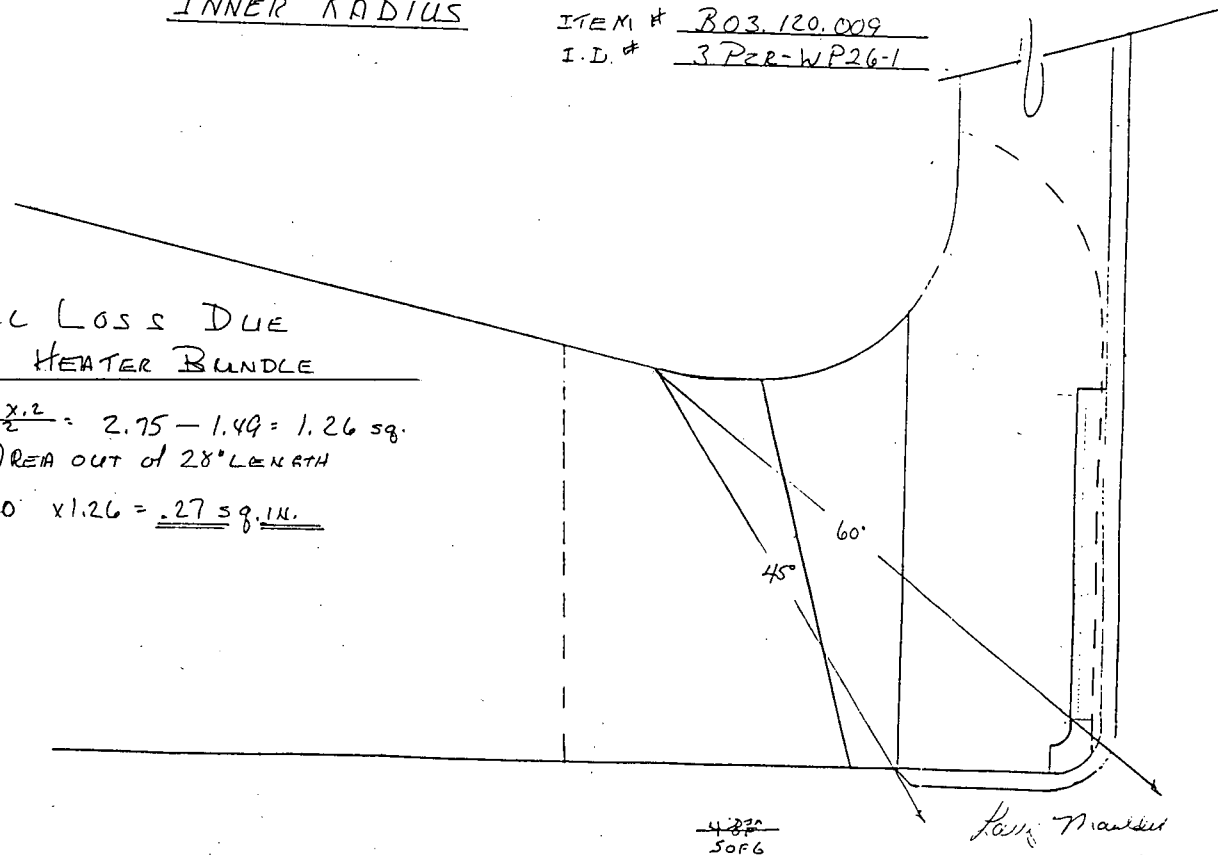
ITEM # B03.120.009  
I.D.# 3PER-WP26-1

ADDITIONAL LOSS DUE  
TO HEATER BUNDLE

$$4 \times .5 + \frac{5 \times .2}{2} = 2.75 - 1.49 = 1.26 \text{ sq.}$$

LIMITED AREA OUT OF 28" LENGTH

$$\% = 28 \times 100 \times 1.26 = \underline{\underline{.27 \text{ sq. IN.}}}$$



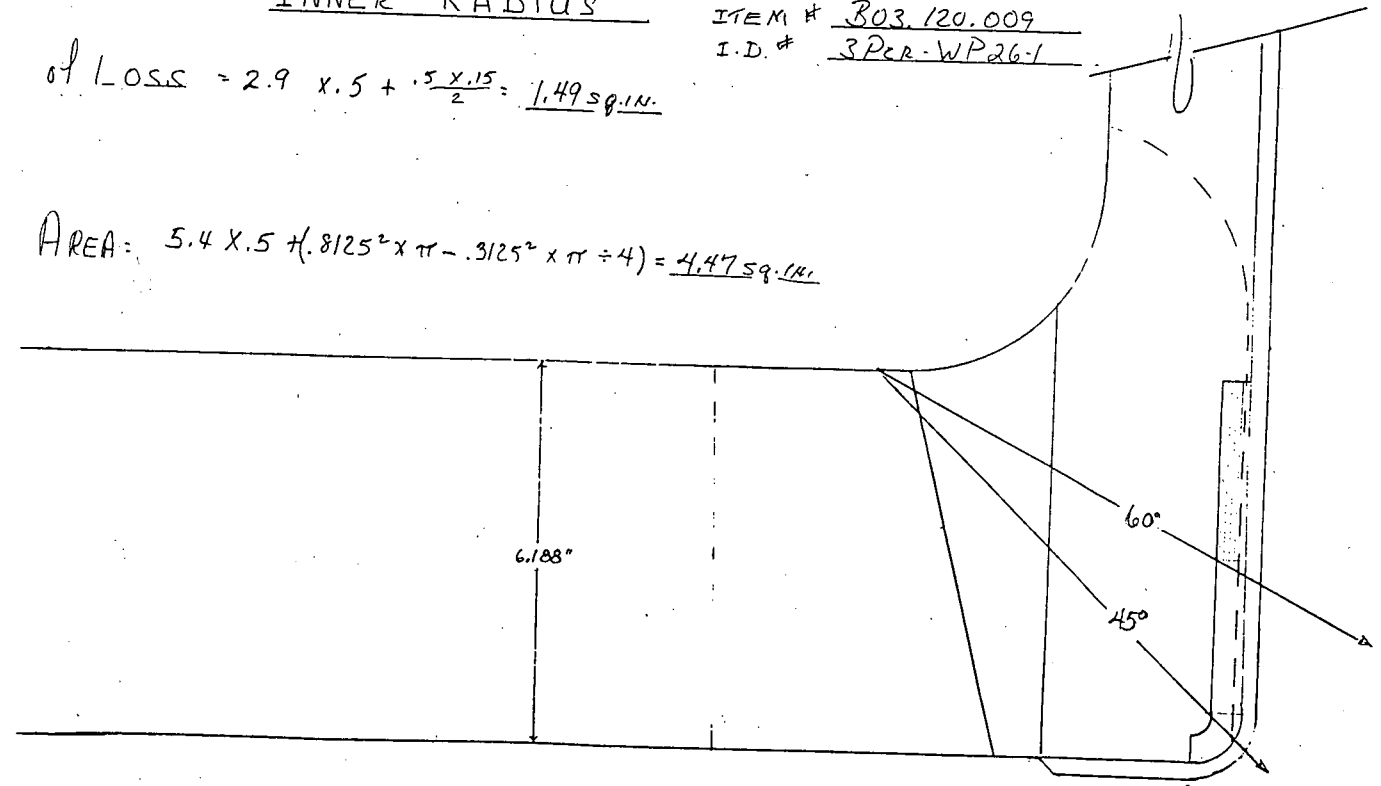
PRESSURIZER SAMPLING NOZZLE

INNER RADIUS

ITEM # 303.120.009  
I.D. # 3PER-WP26-1

of LOSS =  $2.9 \times 5 + \frac{.5 \times .15}{2} = 1.49 \text{ sq. in.}$

AREA:  $5.4 \times 5 + (.8125^2 \times \pi - .3125^2 \times \pi \div 4) = 4.47 \text{ sq. in.}$



Larry Mauldin

Station BCONEK Unit 3 Rev. \_\_\_\_\_ File No. 3 PER-WP-26-3 Sheet \_\_\_\_\_ Of \_\_\_\_\_

Subject LIMITED EXAM DATA

By Larry Maulder Date 2-2-94

Job No. B03.120.011 Checked By \_\_\_\_\_ Date Page 3 of 4

SUMMARY:

Serial No. 94-01  
Attachment 7  
Page 1 of 2

EXAM AREA 4.47 sq. in.

AREA OF LOSS 1.49 sq. in.

$1.49 \div 4.47 \times 100 = 33.3\%$

$100 - 33.3 = 66.7\% \text{ COVERAGE}$

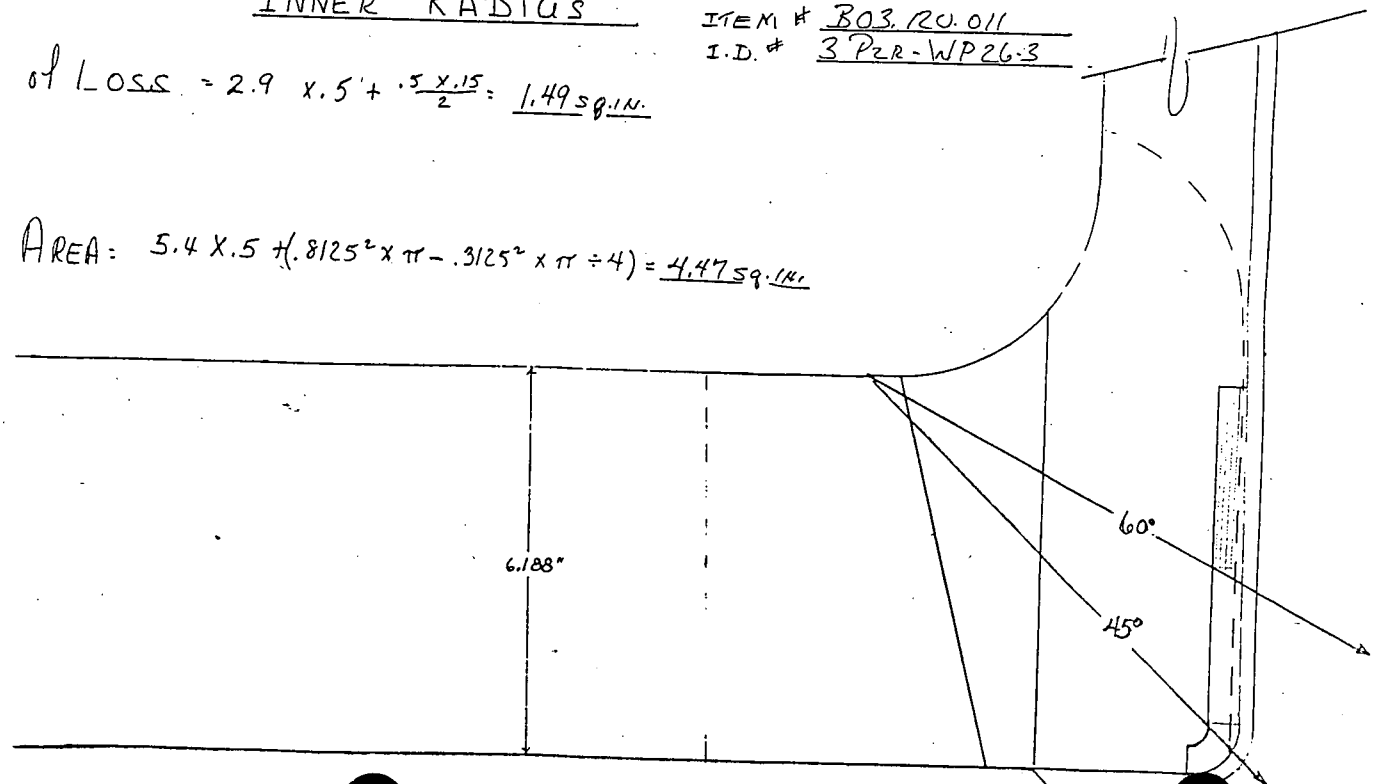
PRESSURIZER SAMPLING NOZZLE

INNER RADIUS

ITEM # B03.R0.011  
I.D. # 3 PZR-WP26-3

of LOSS =  $2.9 \times .5 + \frac{.5 \times .15}{2} = \underline{1.49 \text{ sq. in.}}$

AREA =  $5.4 \times .5 + (.8125^2 \times \pi - .3125^2 \times \pi \div 4) = \underline{4.47 \text{ sq. in.}}$



### Limited Exam Data Sheet

Station BOONE Unit 3 I.D. # 3PER-WP 26-7  
 By Larry Mauldin Date 1-28-94 Item # 303.120.012  
 Checked By \_\_\_\_\_ Date \_\_\_\_\_ Page 3 Of 6

#### DETERMINING THE CUMULATIVE TOTAL OF WELD VOLUME INSPECTED (in percentage)

Total Cross Sectional Area 4.47 x (Number of Scans) N/A = 4.47 (% Factor)

#### Vessels:

Area Loss : Zone #1 N/A  
 Zone #2 N/A  
 Zone #3 N/A (INNER RADIUS INSPECTION)

Total Zone Loss N/A 1(% Factor) 4.47 x 100 = 33.33 % of Loss

Lump Sum Loss From Other Limitations + 6.04 % (ROUNDED OFF)

Total Loss 39.4 %

100% - (Total Loss) 39.4 = 60.6 % of Coverage

( Additional 0 % of Partial Coverage)

Qualifies for Request for Relief  Yes  No

#### Piping:

Axial Scan \_\_\_\_\_ (Loss) \_\_\_\_\_ / \_\_\_\_\_ (% Factor) x 100 = \_\_\_\_\_ % of Loss

Circumferential Scan Over Root Area  Yes  No \_\_\_\_\_ % of Loss

Axial Loss \_\_\_\_\_ + Circ. Loss \_\_\_\_\_ = \_\_\_\_\_ / 2 = \_\_\_\_\_ % Loss

Additional Losses (Due to hangers, restraints, etc.) \_\_\_\_\_ + \_\_\_\_\_ % Loss

Explain: \_\_\_\_\_ Total % Loss \_\_\_\_\_

100% - (Total Loss) \_\_\_\_\_ = \_\_\_\_\_ % of Coverage

Qualifies for Request for Relief  Yes  No

#### Disposition:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_

Serial No 94-01  
Attachment 8  
Page 2 of 4

SUMMARY:

EXAM AREA	4.47 sq. in.	
AREA OF LOSS	1.49 sq. in.	(33.33%)
ADDITIONAL LOSS DUE TO HEATER BUNDLE	.27 sq. in.	(6.04%)
TOTAL AREA OF LOSS	<u>1.76</u>	

$$1.76 \div 4.47 \times 100 = 39.4\% \text{ LOSS}$$

$$\underline{\underline{100 - 39.4 = 60.6\% \text{ COVERAGE}}}$$

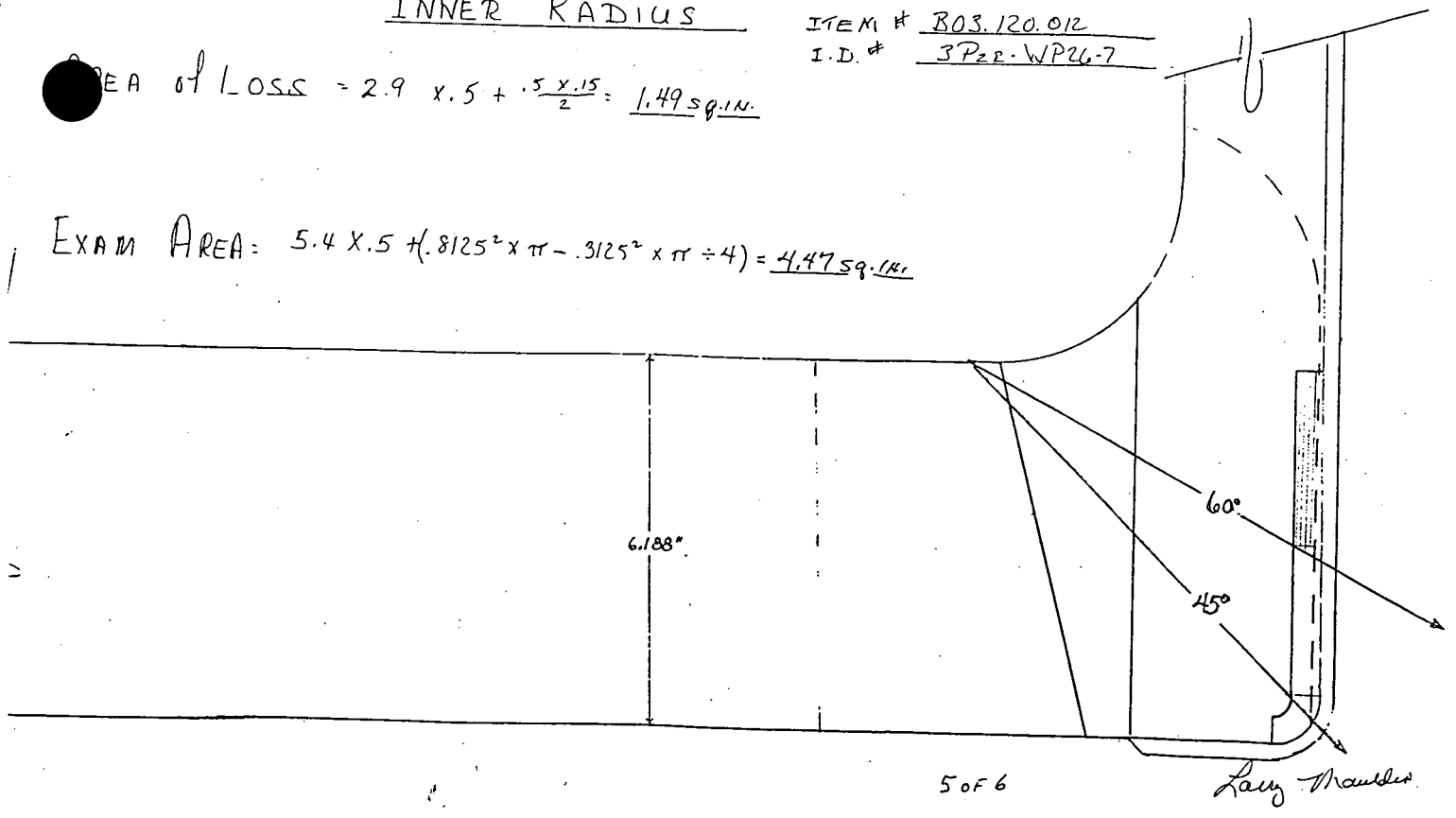
PRESSURIZER SAMPLING NOZZLE

INNER RADIUS

ITEM # BOS.120.012  
I.D.# 3PER-WP26-7

AREA of LOSS =  $2.9 \times .5 + \frac{.5 \times .15}{2} = \underline{1.49 \text{ sq. in.}}$

EXAM AREA =  $5.4 \times .5 + (.8125^2 \times \pi - .3125^2 \times \pi \div 4) = \underline{4.47 \text{ sq. in.}}$



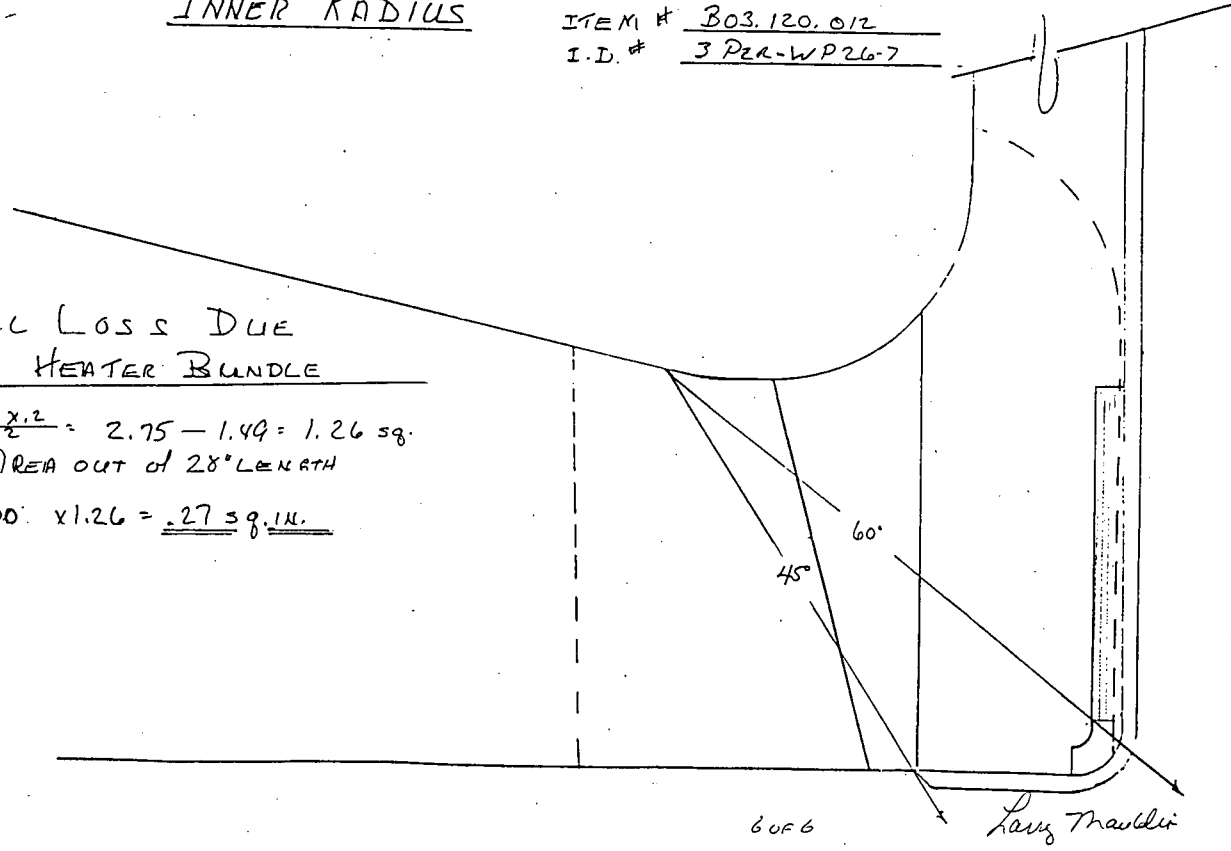


PRESSURIZER SAMPLING NOZZLE  
INNER RADIUS

ITEM # B03.120.012  
 I.D. # 3 PER-WP26-7

ADDITIONAL LOSS DUE  
TO HEATER BUNDLE

$1.5 + \frac{1.5 \times 1.2}{2} = 2.75 - 1.49 = 1.26 \text{ sq.}$   
 LIMITED AREA OUT OF 28" LENGTH  
 $\div 28 \times 100 \times 1.26 = \underline{\underline{27 \text{ sq. IN.}}}$



### Limited Exam Data Sheet

Station OCONEE Unit 3 I.D. # 3SGA-WG50-1  
 by Larry Mauldin Date 1-10-94 Item # B03.140.002  
 Checked By \_\_\_\_\_ Date \_\_\_\_\_ Page 4 Of 4

**DETERMINING THE CUMULATIVE TOTAL OF WELD VOLUME INSPECTED**  
 (in percentage)

Total Cross Sectional Area 4.98 x (Number of Scans) N/A = N/A (% Factor)

**Vessels:**

Area Loss : Zone #1 N/A  
 Zone #2 N/A  
 Zone #3 N/A

Total Zone Loss N/A / (% Factor) N/A x 100 = N/A % of Loss

Lump Sum Loss From Other Limitations + 20 %

Total Loss 20 %

100% - (Total Loss) 20 = 80 % of Coverage

( Additional 0 % of Partial Coverage)

Qualifies for Request for Relief  Yes  No

**Piping:**

Axial Scan \_\_\_\_\_ (Loss) \_\_\_\_\_ / \_\_\_\_\_ (% Factor) x 100 = \_\_\_\_\_ % of Loss

Circumferential Scan Over Root Area  Yes  No \_\_\_\_\_ % of Loss

Axial Loss \_\_\_\_\_ + Circ. Loss \_\_\_\_\_ = \_\_\_\_\_ / 2 = \_\_\_\_\_ % Loss

Additional Losses (Due to hangers, restraints, etc.) + \_\_\_\_\_ % Loss

Explain: \_\_\_\_\_ Total % Loss

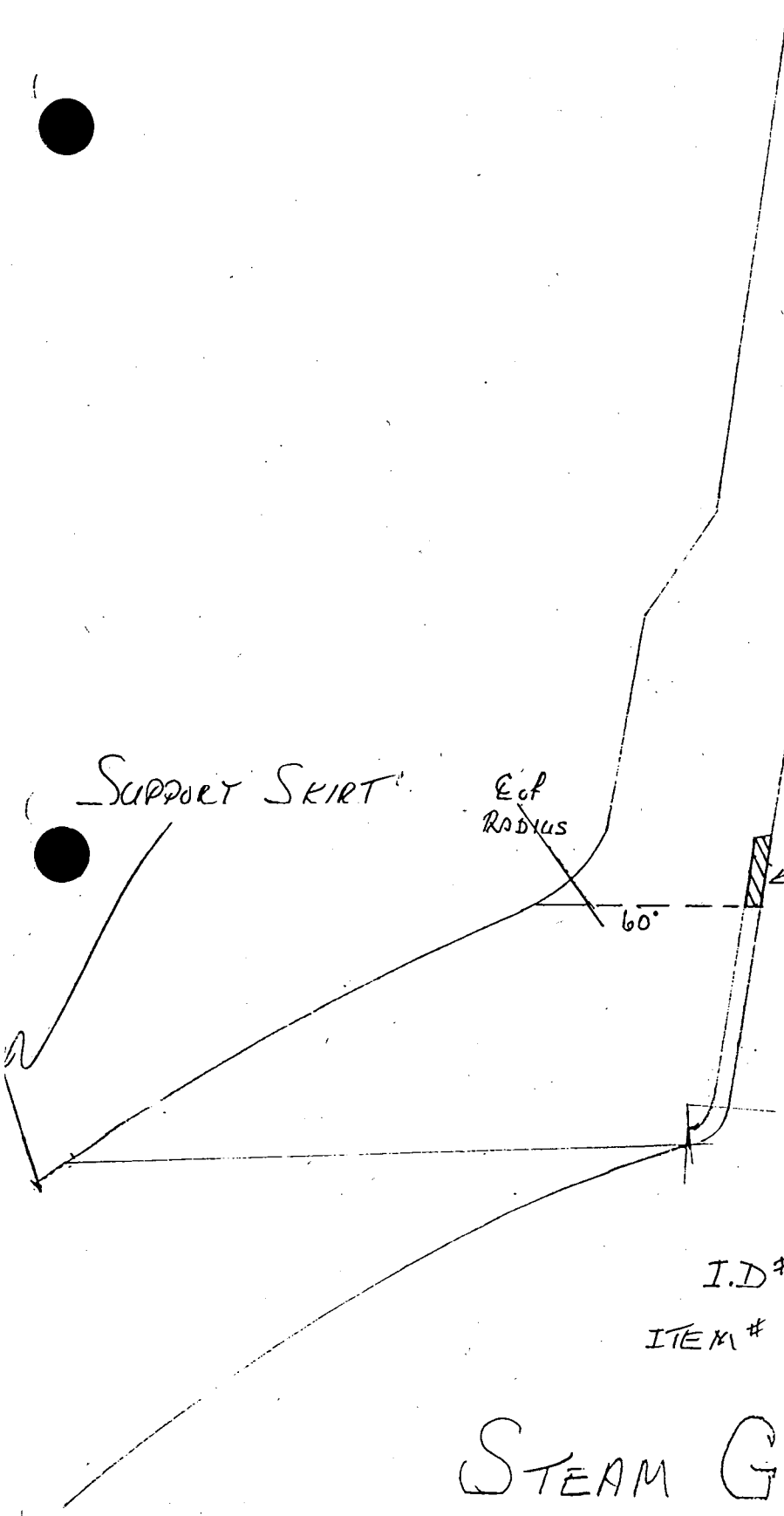
100% - (Total Loss) \_\_\_\_\_ = \_\_\_\_\_ % of Coverage

Qualifies for Request for Relief  Yes  No

**Disposition:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

by: \_\_\_\_\_ Date: \_\_\_\_\_



CROSS SECTIONAL AREA =  
 $8" \times 5" + 1.5'^2 \times \pi - 1.0''^2 \times \pi \div 4 =$   
4.98 sq. in.

AREA NOT SCANNED  
 $2" \times 5" = 1.0 \text{ sq. in.}$   
 $1.0 \div 4.98 \times 100 = 20\%$   
 $100 - 20 = 80\%$   
80% COVERAGE

I.D # 3 SGA-WG 50-1  
ITEM # B03.140.002  
Larry Merrill  
1-10-94

STEAM GENERATOR  
OUTLET NOZZLE

### Limited Exam Data Sheet

Station OCONEE Unit 3 I.D. # 3SGA-WG25  
By Larry Mauldin Date 1-6-94 Item # B03.140.005  
Checked By Larry Moss Date 1-10-94 Page      Of     

#### DETERMINING THE CUMULATIVE TOTAL OF WELD VOLUME INSPECTED

(in percentage)  
Total Cross Sectional Area N/A x (Number of Scans) N/A = N/A (% Factor)

#### Vessels:

Area Loss : Zone #1 N/A  
                  Zone #2 N/A  
                  Zone #3 N/A

Total Zone Loss N/A / (% Factor) N/A x 100 = N/A % of Loss

Lump Sum Loss From Other Limitations + 26 %

Total Loss 26 %

100% - (Total Loss) 26 = 74 % of Coverage

( Additional 0 % of Partial Coverage)

Qualifies for Request for Relief  Yes  No

#### Piping:

Axial Scan \_\_\_\_\_ (Loss) \_\_\_\_\_ / \_\_\_\_\_ (% Factor) x 100 = \_\_\_\_\_ % of Loss

Circumferential Scan Over Root Area  Yes  No \_\_\_\_\_ % of Loss

Axial Loss \_\_\_\_\_ + Circ. Loss \_\_\_\_\_ = \_\_\_\_\_ / 2 = \_\_\_\_\_ % Loss

Additional Losses (Due to hangers, restraints, etc.) + \_\_\_\_\_ % Loss

Explain: \_\_\_\_\_ Total % Loss

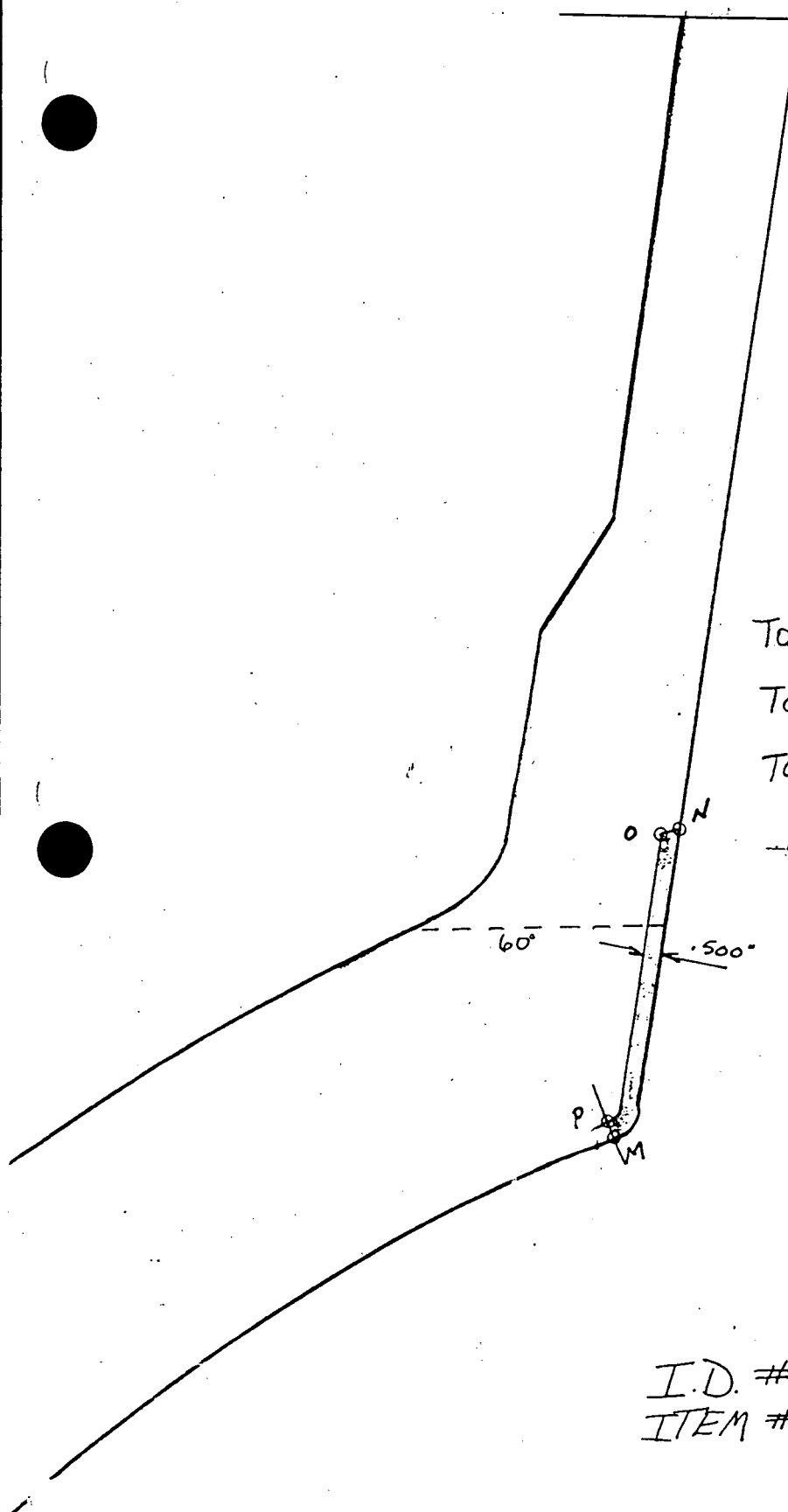
100% - (Total Loss) \_\_\_\_\_ = \_\_\_\_\_ % of Coverage

Qualifies for Request for Relief  Yes  No

#### Disposition:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_



TOTAL EXAM AREA -  $7.5 \times .5 = 4.75 \text{ IN}^2$

TOTAL AREA NOT SCANNED -  $.5 \times 2.5 = 1.25 \text{ IN}^2$

TOTAL PERCENT OF LOSS

$$1.25 \div 4.75 = .263 \times 100 = 26\%$$

TOTAL LOSS of 26%

By: Larry Mauldin  
1-6-94

I.D. # 35GA-WG25  
ITEM # B03.140.005

INLET NOZZLE  
INNER RADIUS EXAM VOLUME

### Limited Exam Data Sheet

Station BOONEE Unit 3 I.D. # 35RB-6025  
By Larry Mauldin Date 1-6-94 Item # B03.140.006  
Checked By Larry Moss Date 1-10-94 Page 4 of 4

#### DETERMINING THE CUMULATIVE TOTAL OF WELD VOLUME INSPECTED (in percentage)

Total Cross Sectional Area N/A x (Number of Scans) N/A = N/A (% Factor)

#### Vessels:

Area Loss: Zone #1 N/A  
Zone #2 N/A  
Zone #3 N/A

Total Zone Loss N/A (% Factor) N/A x 100 = N/A % of Loss

Lump Sum Loss From Other Limitations + 26 %

Total Loss 26 %

100% - (Total Loss) 26 = 74 % of Coverage

(Additional 0 % of Partial Coverage)

Qualifies for Request for Relief  Yes  No

#### Piping:

Axial Scan \_\_\_\_\_ (Loss) \_\_\_\_\_ / \_\_\_\_\_ (% Factor) x 100 = \_\_\_\_\_ % of Loss

Circumferential Scan Over Root Area  Yes  No \_\_\_\_\_ % of Loss

Axial Loss \_\_\_\_\_ + Circ. Loss \_\_\_\_\_ = \_\_\_\_\_ / 2 = \_\_\_\_\_ % Loss

Additional Losses (Due to hangers, restraints, etc.) + \_\_\_\_\_ % Loss

Explain: \_\_\_\_\_ Total % Loss

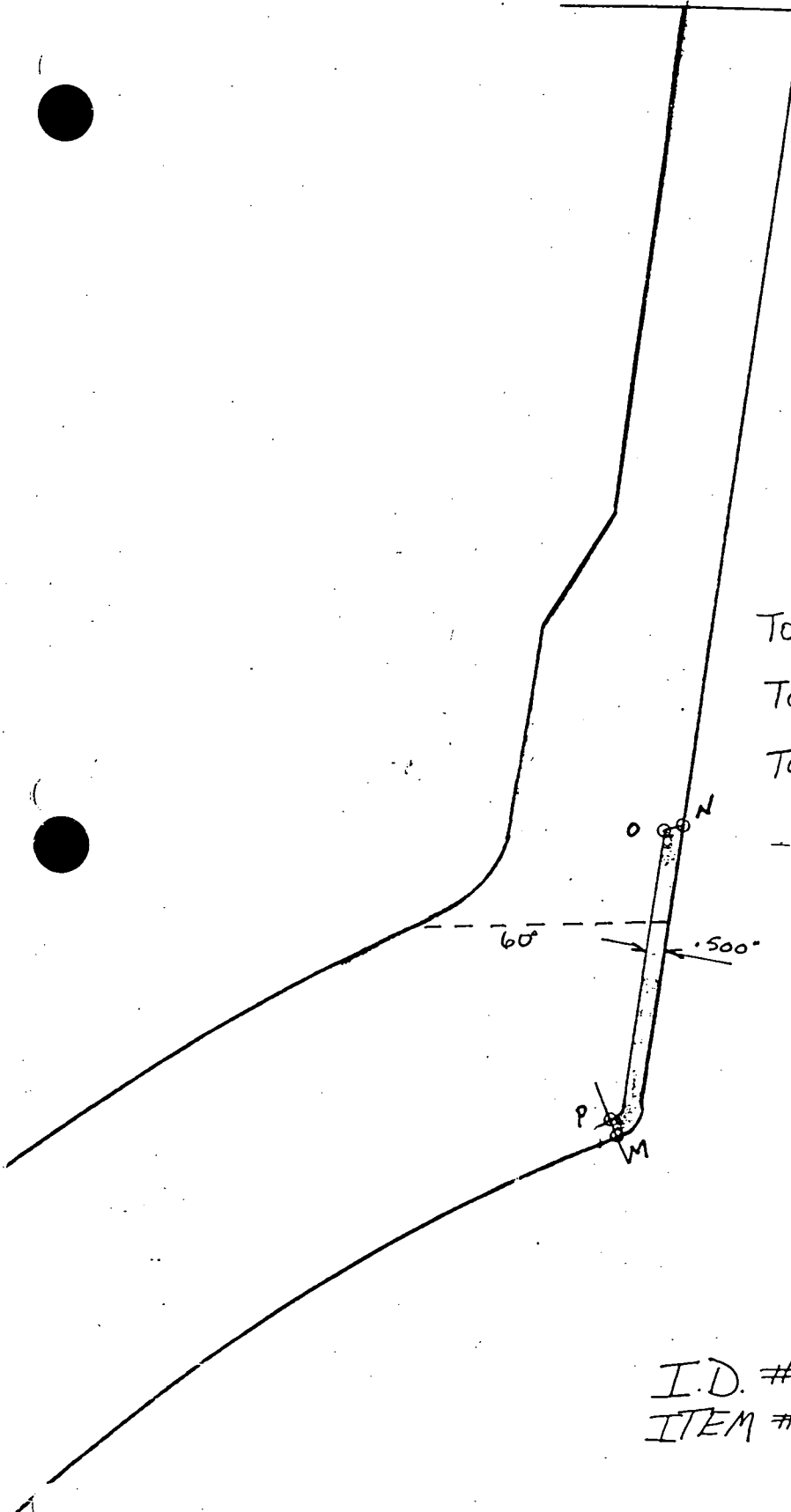
100% - (Total Loss) \_\_\_\_\_ = \_\_\_\_\_ % of Coverage

Qualifies for Request for Relief  Yes  No

#### Disposition:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_



TOTAL EXAM AREA -  $9.5 \times .5 = 4.75 \text{ IN}^2$

TOTAL AREA NOT SCANNED -  $.5 \times 2.5 = 1.25 \text{ IN}^2$

TOTAL PERCENT OF LOSS

$$1.25 \div 4.75 = .263 \times 100 = 26\%$$

TOTAL LOSS of 26%

By: Larry Marden

1-6-94

I.D. # 3 SGB-6G25  
ITEM # B03.140.006

INLET NOZZLE  
INNER RADIUS EXAM VOLUME

### Limited Exam Data Sheet

Station OCONEE Unit 3 I.D. # 3CF7B-OUTLET  
By Jana W. Steg Date 1-13-94 Item # CO2.022.06  
Checked By \_\_\_\_\_ Date \_\_\_\_\_ Page 3 of 4

#### DETERMINING THE CUMULATIVE TOTAL OF WELD VOLUME INSPECTED

(in percentage)  
Total Cross Sectional Area N/A x (Number of Scans) N/A = \_\_\_\_\_ (% Factor)

#### Vessels:

Area Loss : Zone #1 \_\_\_\_\_  
Zone #2 N/A  
Zone #3 N/A

Total Zone Loss \_\_\_\_\_ / (% Factor) \_\_\_\_\_ x 100 = \_\_\_\_\_ % of Loss

Lump Sum Loss From Other Limitations + 28 %

Total Loss 28 %

100% - (Total Loss) 28 = 72 % of Coverage

(Additional N/A % of Partial Coverage)

Qualifies for Request for Relief  Yes  No

#### Piping:

Axial Scan \_\_\_\_\_ (Loss) \_\_\_\_\_ / \_\_\_\_\_ (% Factor) x 100 = \_\_\_\_\_ % of Loss

Circumferential Scan Over Root Area  Yes  No \_\_\_\_\_ % of Loss

Axial Loss \_\_\_\_\_ + Circ. Loss \_\_\_\_\_ = \_\_\_\_\_ / 2 = \_\_\_\_\_ % Loss

Additional Losses (Due to hangers, restraints, etc.) + \_\_\_\_\_ % Loss

Explain: N/A \_\_\_\_\_ Total % Loss

100% - (Total Loss) \_\_\_\_\_ = \_\_\_\_\_ % of Coverage

Qualifies for Request for Relief  Yes  No

#### Disposition:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_



Station ONS Unit 3 Rev. File No. Sheet 01

Subject LIMITATION OF CFT B DISCHARGE NOZZLES / IR

CO2.022.006 I.R.

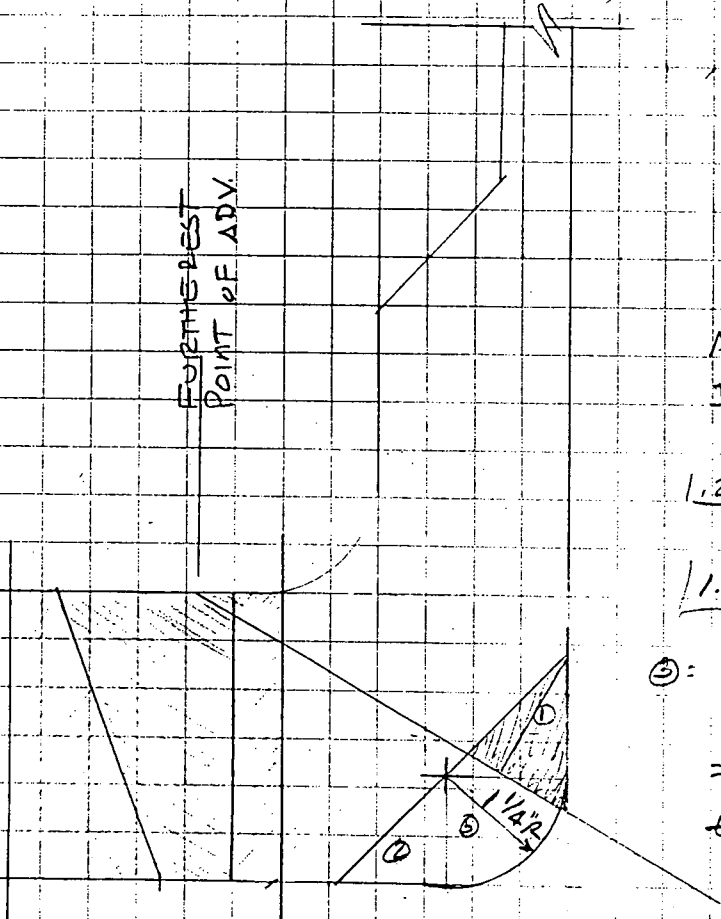
By Jana Wooley

Date 1-17-94

Prob No. CO2.021.006

Checked By

Date Page 4 of 4



AREA OF IR

$$\frac{1.25 \times 1.25}{2} \times 2 = 1.5$$

1.5 sq in

$$\textcircled{3} = \frac{\pi R^2}{4} = \frac{\pi \times 1.25^2}{4}$$

= 1.227

$$\text{TOTAL AREA} = 1.2 + 1.5 = 2.7 \text{ IN}^2$$

AREA LOSS =

$$\frac{1.375 \times .375}{2} + \frac{1.375 \times .75}{2}$$

= .77 sq in loss

**DEFINITIONS APPLICABLE TO THE REACTOR VESSEL  
EXAMINATION**

**AGGREGATE** - Combined coverage using different transducers and different directions due to problems scanning the welds.

**PARTIAL AGGREGATE COVERAGE** - The amount of coverage obtained had there been no physical interferences. This includes but is not limited to configuration, surface condition (i.e. clad patches), etc.

**ACTUAL AGGREGATE COVERAGE** - The amount of coverage obtained due to the physical interferences.

Serial No. 94-01  
Attachment 13  
Page 2 of 8

Formula:

Aggregate Coverage =

$$\begin{aligned} & [ (\% 70^\circ \text{ Axial} + \% 70^\circ \text{ Circ}) \times \text{in}^2 \text{ NS} \\ & + (\% 60^\circ \text{ Circ} + \% 45^\circ \text{ Circ} + \% 0^\circ) \times \text{Total Area} \\ & + (\% 60^\circ + \% 45^\circ) \text{ Axial} \times (\text{in}^2 \text{ Weld} \times 2 + \text{in}^2 \text{ T/2}) ] / \\ & [ \text{in}^2 \text{ NS} \times 2 + \text{in}^2 \text{ Total Area} \times 3 + (\text{in}^2 \text{ Weld} \times 2 + \text{in}^2 \text{ T/2}) \times 2 ] \end{aligned}$$

Notes:

Weld volumes do not include the clad region.

The Near Surface Area extends 1" into the base metal.

Angle requirements are as follows:

0° 100 % of Total Volume,

45° & 60° 100 % of Weld from 4 directions, 100 % of T/2  
from 2 Circ directions, 100 % of T/2 from 1 Axial  
direction,

70° 100 % of Near Surface from 1 Axial & 1 Circ directions,

70° 100 % of Inside Radius from 1 Axial & 1 Circ directions.

The 45° is used from the Nozzle Bore to examine the Near Surface of the Nozzle-to-Shell Weld in the Axial direction. Additionally only one direction is possible from the Nozzle Bore, and the 0° (or 15°) replaces the 60°.

Serial No. 94-01  
Attachment B  
Page 3 of 8

WR19

(B01.030.001)

Total Exam Area = 184.56 in<sup>2</sup> (Near Surface + Weld + T/2)

Near Surface Area = 15.40 in<sup>2</sup> (Cross-Section)

Weld Area = 24.14 in<sup>2</sup> (Cross-Section)

T/2 Area = 160.42 in<sup>2</sup> (Cross-Section)

CIRC 0° Gets 101.06 in<sup>2</sup> of Total Exam Area (54.8 %)

60° & 45° Get 138.27 in<sup>2</sup> of Weld & T/2 Areas (74.9 %)

70° Gets 11.52 in<sup>2</sup> of Near Surface Area (74.8 %)

AXIAL 70° Gets 13.14 in<sup>2</sup> of Near Surface Area (85.3 %)

45° Gets 122.43 in<sup>2</sup> of T/2 Area

45°-UP Gets 22.02 in<sup>2</sup> of Weld Area

45°-DOWN Gets 2.44 in<sup>2</sup> of Weld Area

45° Coverage =  $\frac{22.02 + 2.44 + 122.43}{24.14 + 24.14 + 160.42} = 70.4 \%$

60° Gets 135.74 in<sup>2</sup> of T/2 Area

60°-UP Gets 23.12 in<sup>2</sup> of Weld Area

60°-DOWN Gets 5.75 in<sup>2</sup> of Weld Area

60° Coverage =  $\frac{23.12 + 5.75 + 135.74}{24.14 + 24.14 + 160.42} = 78.9 \%$

Serial No. 94-01  
Attachment 13  
Page 4 of 8

WR19  
(Bol. 030.001)

<u>AXIAL</u>			<u>CIRC</u>			
<u>70</u>	<u>60</u>	<u>45</u>	<u>70</u>	<u>60</u>	<u>45</u>	<u>0</u>
85.3	78.9	70.4	74.8	74.9	74.9	54.8

Aggregate Coverage =

$$\begin{aligned}
 & [ (85.3 + 74.8) \times 15.40 + (74.9 + 74.9 + 54.8) \times 184.56 \\
 & + (78.9 + 70.4) \times (24.14 \times 2 + 160.42) ] / \\
 & [ 14.50 \times 2 + 184.56 \times 3 + (24.14 \times 2 + 160.42) \times 2 ]
 \end{aligned}$$

Partial Aggregate Coverage = 71.4 %

(MAXIMUM COVERAGE SCANNING OVER CLAD PATCHES)

Serial No. 94-01  
Attachment 13  
Page 5 of 8

WR19  
(B01.030.001)

Due to Clad Patches, the entire circumference of the vessel could not be scanned. One side of the vessel was completely scanned, however. On the other side, only 1/2 of an Axial scan was performed over a clad patch. The circumferential distance lost due to each patch was 8 degrees. The partial Axial scan resulted in a loss of only 4 degrees. There are 3 clad patches on each side of the vessel, one over each nozzle.

The 70° Axial, the 0° and the 45° & 60° Axial-UP lost 20 degrees of circumference (5.6 %). The Circ Scans lost 24 degrees (6.7 %). Axial-DOWN scans (from the Taper) were not affected. In the area of the clad patches, the following coverages were obtained:

AXIAL 70° Gets 3.07 in<sup>2</sup> of Near Surface Area (19.9 %)

45° Gets 49.73 in<sup>2</sup> of T/2 Area

45°-UP Gets 0.61 in<sup>2</sup> of Weld Area

45°-DOWN Gets 2.44 in<sup>2</sup> of Weld Area

$$45^\circ \text{ Coverage} = \frac{0.61 + 2.44 + 49.73}{24.14 + 24.14 + 160.42} = 25.3 \%$$

60° Gets 73.85 in<sup>2</sup> of T/2 Area

60°-UP Gets 13.42 in<sup>2</sup> of Weld Area

60°-DOWN Gets 5.75 in<sup>2</sup> of Weld Area

$$60^\circ \text{ Coverage} = \frac{13.42 + 5.75 + 73.85}{24.14 + 24.14 + 160.42} = 44.6 \%$$

$$70^\circ \text{ Axial Coverage} = 340 \times 85.3 + 20 \times 19.9 / 360 = 81.7 \%$$

$$60^\circ \text{ Axial Coverage} = 340 \times 78.9 + 20 \times 44.6 / 360 = 77.0 \%$$

$$45^\circ \text{ Axial Coverage} = 340 \times 70.4 + 20 \times 25.3 / 360 = 67.9 \%$$

Serial No. 94-01  
Attachment 13  
Page 6 of 8

WR19

(B01.030.001)

<u>AXIAL</u>			<u>CIRC</u>			
<u>70</u>	<u>60</u>	<u>45</u>	<u>70</u>	<u>60</u>	<u>45</u>	<u>0</u>
81.7	77.0	67.9	70.6	69.8	69.8	51.8

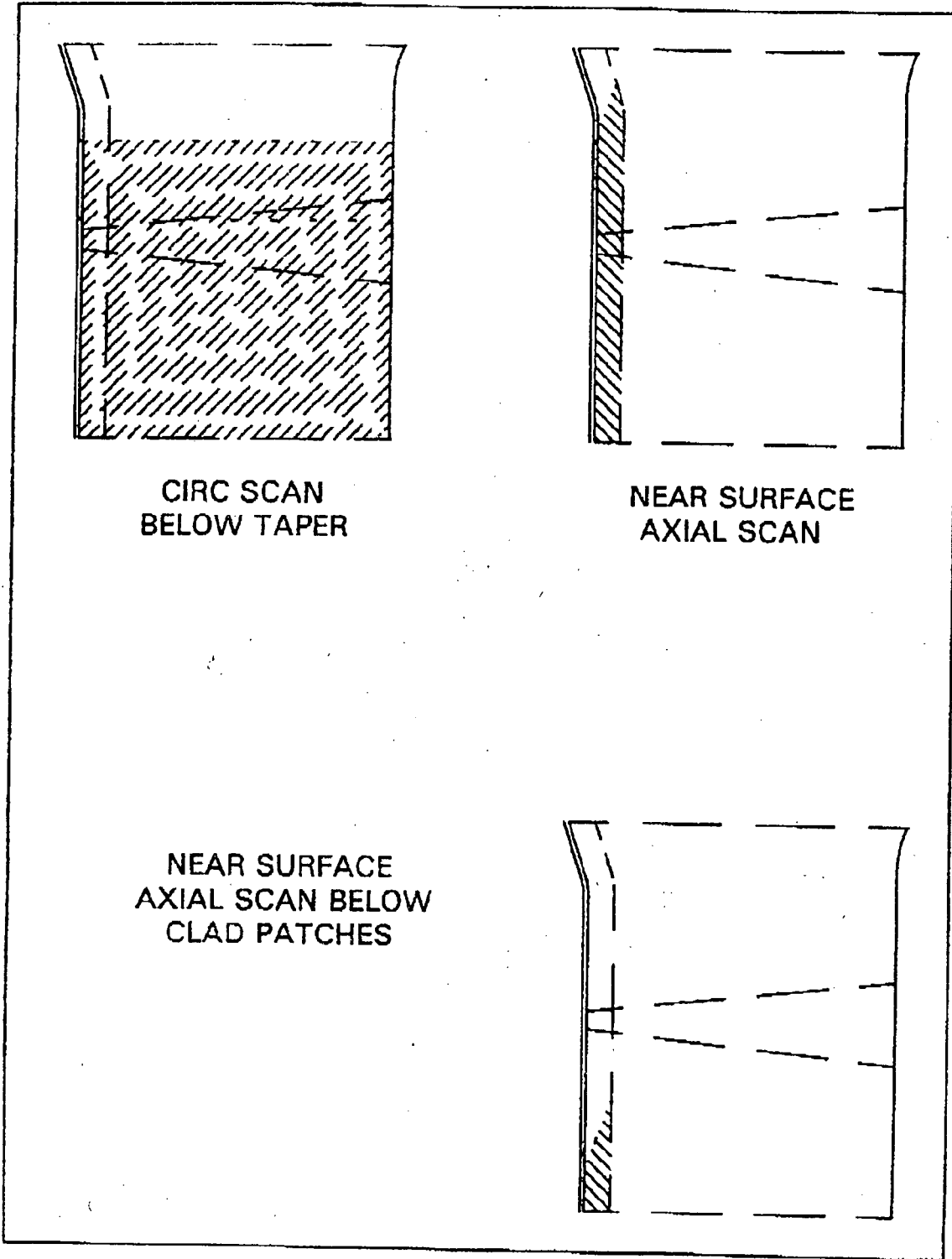
Aggregate Coverage =

$$\begin{aligned}
 & [ (81.7 + 70.6) \times 15.40 + (69.8 + 69.8 + 51.8) \times 184.56 \\
 & + (77.0 + 67.9) \times (24.14 \times 2 + 160.42) ] / \\
 & [ 14.50 \times 2 + 184.56 \times 3 + (24.14 \times 2 + 160.42) \times 2 ]
 \end{aligned}$$

Actual Aggregate Coverage = 67.9 %

(ACTUAL COVERAGE OBTAINED DUE TO CLAD PATCHES)

Serial No. 94-01  
Attachment 13  
Page 7 of 8



CIRC SCAN  
BELOW TAPER

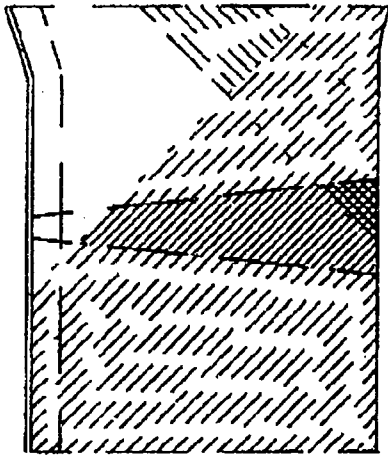
NEAR SURFACE  
AXIAL SCAN

NEAR SURFACE  
AXIAL SCAN BELOW  
CLAD PATCHES

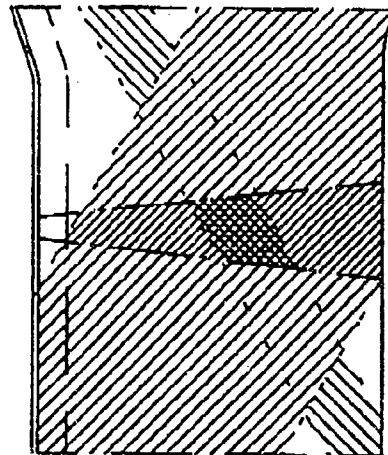
**FLANGE TO SHELL WELD**  
(B01.030.001)



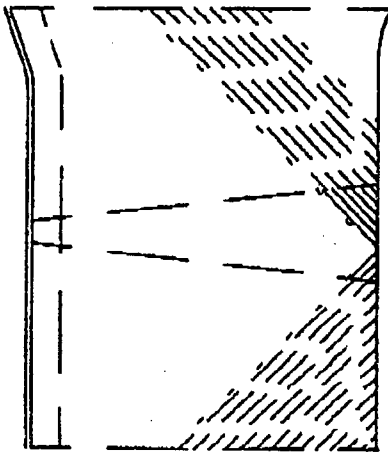
Serial No. 94-01  
Attachment 13  
Page 8 of 8



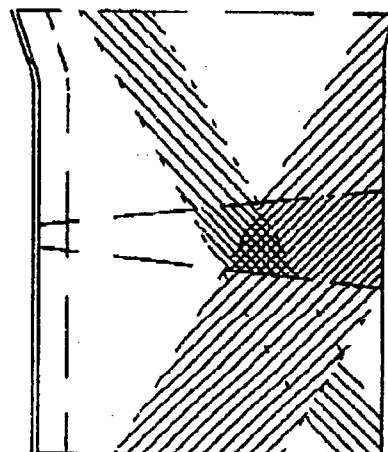
45° SCANS OUTSIDE  
CLAD PATCH AREAS



60° SCANS OUTSIDE  
CLAD PATCH AREAS



45° SCAN IN  
CLAD PATCH AREAS



60° SCAN IN  
CLAD PATCH AREAS

**FLANGE TO SHELL WELD AXIAL SCAN**

(B01.030.001)

Serial No. 94-01  
Attachment 14  
Page 1 of 5

WR34  
(BOL.021.002)

Total Exam Area = 53.27 in<sup>2</sup> (Near Surface + Weld + T/2)  
Near Surface Area = 8.31 in<sup>2</sup> (Cross-Section)  
Weld Area = 7.59 in<sup>2</sup> (Cross-Section)  
T/2 Area = 45.68 in<sup>2</sup> (Cross-Section)

CIRC 0° Gets 16.89 in<sup>2</sup> of Total Exam Area (31.7 %)  
60° & 45° Get 35.69 in<sup>2</sup> of Weld & T/2 Areas (67.0 %)  
70° Gets 5.58 in<sup>2</sup> of Near Surface Area (67.1 %)

AXIAL 70° Gets 7.24 in<sup>2</sup> of Near Surface Area (87.1 %)

45° Gets 100 % Coverage of T/2 Area

45°-UP Gets 100 % Coverage of Weld Area

45°-DOWN Gets 7.55 in<sup>2</sup> of Weld Area

45° Coverage =  $\frac{7.59 + 7.55 + 45.68}{7.59 + 7.59 + 45.68} = 99.9\%$

60° Gets 45.59 in<sup>2</sup> of T/2 Area

60°-UP Gets 100 % of Weld Area

60°-DOWN Gets 6.28 in<sup>2</sup> of Weld Area

60° Coverage =  $\frac{7.59 + 6.28 + 45.59}{7.59 + 7.59 + 45.68} = 97.7\%$

Serial No. 94-01  
Attachment 14  
Page 2 of 5

WR34

(B01.021.002)

<u>AXIAL</u>			<u>CIRC</u>			
<u>70</u>	<u>60</u>	<u>45</u>	<u>70</u>	<u>60</u>	<u>45</u>	<u>0</u>
87.1	97.7	99.9	67.1	67.0	67.0	31.7

**Aggregate Coverage =**

$$\begin{aligned}
 & [ (87.1 + 67.1) \times 8.31 + (67.0 + 67.0 + 31.7) \times 53.27 \\
 & + (97.7 + 99.9) \times (7.59 \times 2 + 45.68) ] / \\
 & [ 8.31 \times 2 + 53.27 \times 3 + (7.59 \times 2 + 45.68) \times 2 ]
 \end{aligned}$$

**Partial Aggregate Coverage = 74.2 %**

Serial No. 94-01  
Attachment 14  
Page 3 of 5

WR34

(B01.021.002)

Due to the Core Catcher Lugs the entire circumference of the vessel could not be scanned. Scanning was conducted between each of the 12 lugs. Based on the configuration of the alternate head, the 0°, 70° Axial and all Circ scans obtained 15.3 degrees out of 30 (51 %). The 45° & 60° Axial scans obtained 19.5 degrees out of 30 (65 %).

Actual Coverage was as follows:

WR34

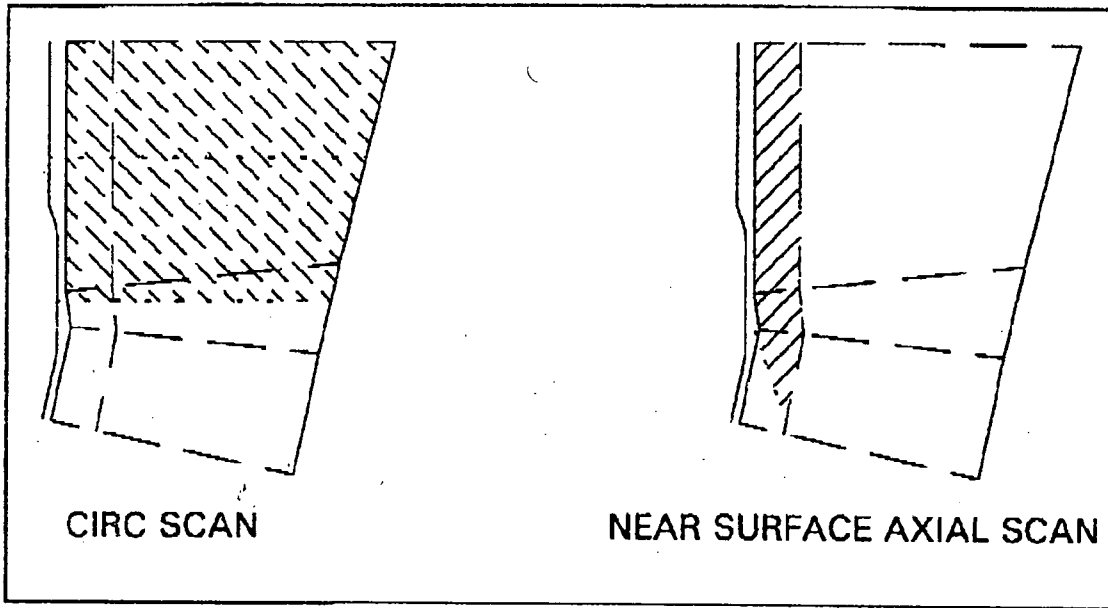
<u>AXIAL</u>			<u>CIRC</u>			
<u>70</u>	<u>60</u>	<u>45</u>	<u>70</u>	<u>60</u>	<u>45</u>	<u>0</u>
44.4	63.4	64.8	34.2	34.2	34.2	16.2

Aggregate Coverage =

$$\begin{aligned} & [ (44.4 + 34.2) \times 8.31 + (34.2 + 34.2 + 16.2) \times 53.27 \\ & + (63.4 + 64.8) \times (7.59 \times 2 + 45.68) ] / \\ & [ 8.31 \times 2 + 53.27 \times 3 + (7.59 \times 2 + 45.68) \times 2 ] \end{aligned}$$

Actual Aggregate Coverage = 43.5 %

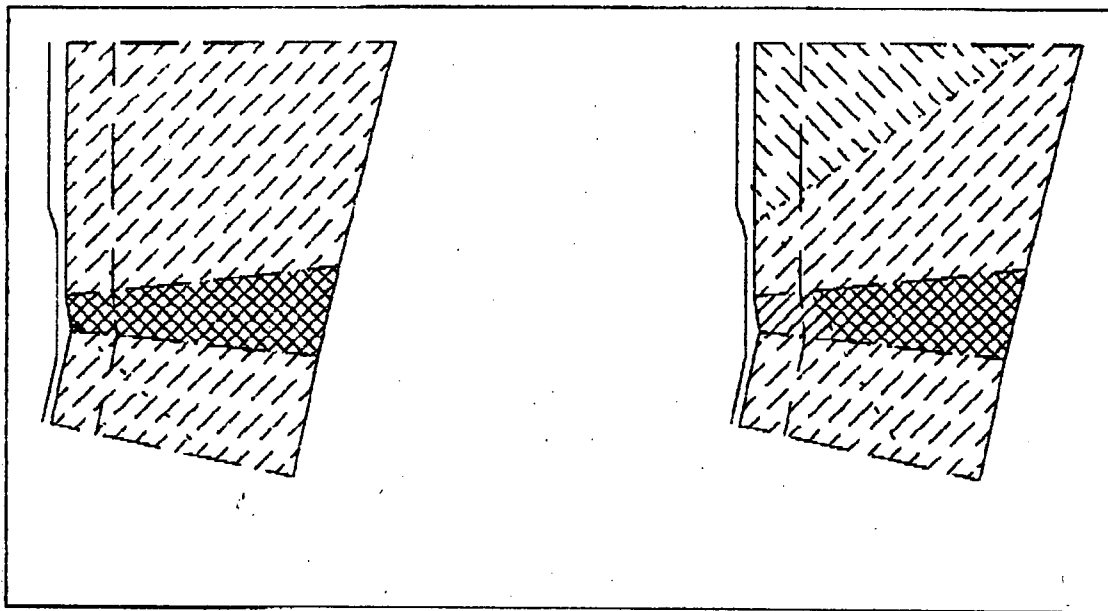
Serial No. 94-01  
Attachment 14  
Page 4 of 5



**LOWER HEAD TO SHELL**

(B01.021.002)

Serial No. 94-01  
Attachment 14  
Page 5 of 5



**LOWER HEAD TO SHELL WELD AXIAL SCAN**

(Bol. 021.002)

Serial No. 94-01  
Attachment 15  
Page 1 of 2

WR18  
(BD1.011.003)

Total Exam Area = 183.27 in<sup>2</sup> (Near Surface + Weld + T/2)  
Near Surface Area = 15.27 in<sup>2</sup> (Cross-Section)  
Weld Area = 24.14 in<sup>2</sup> (Cross-Section)  
T/2 Area = 159.13 in<sup>2</sup> (Cross-Section)

**CIRC**      70° Gets 100 % Coverage of Near Surface Area  
              60° & 45° Get 100 % Coverage of Weld & T/2 Areas  
              0° Gets 100 % Coverage of Total Exam Area

**AXIAL**     70° Gets 100 % Coverage of Near Surface Area  
              45° Gets 100 % Coverage of Weld & T/2 Areas  
              60° Gets 100 % Coverage of Weld & T/2 Areas

WR18

<u>AXIAL</u>			<u>CIRC</u>			
<u>70</u>	<u>60</u>	<u>45</u>	<u>70</u>	<u>60</u>	<u>45</u>	<u>0</u>
100	100	100	100	100	100	100

Aggregate Coverage =

$$\frac{[(100 + 100) \times 15.27 + (100 + 100 + 100) \times 159.13 + (100 + 100) \times (24.14 \times 2 + 159.13)]}{[15.27 \times 2 + 159.13 \times 3 + (24.14 \times 2 + 159.13) \times 2]}$$

Partial Aggregate Coverage = 100 %

Serial No. 9401  
Attachment 15  
Page 2 of 2

WR18  
(B01.011.003)

This weld is located between nozzles, 13" below the nozzle centerline. The nozzles themselves form obstructions to 100 % coverage.

Between Inlet Nozzles, below the Core Flood Nozzle (2 regions), 25.7 degrees out of 32.5 degrees was scanned. The weld extends out on either side of this region intersecting the Inlet Nozzle-to-Shell welds.

Between each Inlet Nozzle and Outlet Nozzle (4 regions) 19.6 degrees out of 27.8 degrees was scanned. The weld extends out on either side of this region intersecting the Inlet and Outlet Nozzle-to-Shell welds. Extra coverage was lost in these regions due to the Outlet Nozzle lip.

$$\begin{aligned} \text{Actual Aggregate Coverage} &= [ 25.7 / 32.5 \times 2 + 19.6 / 27.8 \times 4 ] / 5 \\ &= 73.4 \% \end{aligned}$$



Serial No. 94-01  
Attachment 16  
Page 1 of 9

Nozzle Formula:

Aggregate Coverage =

$$\frac{[ \% 70^\circ \text{ Circ x in}^2 \text{ NS} + (\% 0^\circ/15^\circ/45^\circ \text{ Axial} \\ + \% 60^\circ \text{ Circ} + \% 45^\circ \text{ Circ} + \% 0^\circ) \times \text{Total Area} ] /}{[ \text{in}^2 \text{ NS} + \text{in}^2 \text{ Total Area} \times 4 ]}$$

Nozzle Notes:

Weld volumes do not include the clad region.

The Near Surface Area extends 1" into the base metal.

The Inside Radius Area extends 1/2" into the base metal.

Angle requirements are as follows:

- 0° 100 % of Total Volume,
- 45° & 60° 100 % of Weld from 4 directions, 100 % of T/2  
from 2 Circ directions, 100 % of T/2 from 1 Axial  
direction,
- 70° 100 % of Near Surface from 1 Axial & 1 Circ directions,
- 70° 100 % of Inside Radius from 1 Axial & 1 Circ directions.

Only one angle direction is required from the Nozzle Bore, and coverage is estimated based on the combined extent of the 0°, 15° & 45°. Additionally, there is no near surface requirement from the Vessel ID for the Axial direction.

3RPV-WR12 (B03.090.003 &amp; 003A)

3RPV-WR12A (B03.090.004 &amp; 004A)

● 3RPV-WR12B (B03.090.005 & 005A) WRIN

3RPV-WR12C (B03.090.006 &amp; 006A)

Serial No. 94-01  
Attachment 16  
Page 2 of 9

## VERTICAL SECTION

Total Exam Area =	292.94 in <sup>2</sup>	(Near Surface + Weld + T/2)
Near Surface Area =	15.06 in <sup>2</sup>	(Cross-Section)
Weld Area =	24.34 in <sup>2</sup>	(Cross-Section)
T/2 Area =	268.60 in <sup>2</sup>	(Cross-Section)
Inside Radius Area =	6.83 in <sup>2</sup>	(Cross-Section)

CIRC	0° Gets 219.74 in <sup>2</sup> of Total Exam Area	(75.0 %)
	60° & 45° Get 219.74 in <sup>2</sup> of Weld & T/2 Areas	(75.0 %)
	70° Gets 100 % Coverage of Near Surface Area	
	70° Gets 5.03 in <sup>2</sup> of Inside Radius Area	(73.6 %)

● AXIAL	0°, 15° & 45° Get 281.98 in <sup>2</sup> of Weld & T/2 Area	(96.3 %)
	70° Gets 100 % Coverage of Inside Radius Area	

3RPV-WR12 (B03.100.003)

3RPV-WR12A (B03.100.004)

3RPV-WR12B (B03.100.005)

3RPV-WR12C (B03.100.006)

3RPV-WR1Z (B03.090.003 &amp; 003A)

3RPV-WR1ZA (B03.090.004 &amp; 004A)

3RPV-WR1ZB (B03.090.005 &amp; 005A)

3RPV-WR1ZC (B03.090.006 &amp; 006A)

Serial No. 94-01

Attachment 16

Page 3 of 9

WRIN

## HORIZONTAL SECTION

Total Exam Area = 269.15 in<sup>2</sup> (Near Surface + Weld + T/2)  
 Near Surface Area = 13.97 in<sup>2</sup> (Cross-Section)  
 Weld Area = 22.72 in<sup>2</sup> (Cross-Section)  
 T/2 Area = 246.43 in<sup>2</sup> (Cross-Section)  
 Inside Radius Area = 7.20 in<sup>2</sup> (Cross-Section)

CIRC 0° Gets 153.64 in<sup>2</sup> of Total Exam Area (57.1 %)  
 60° & 45° Get 153.64 in<sup>2</sup> of Weld & T/2 Areas (57.1 %)  
 70° Gets 100 % Coverage of Near Surface Area  
 70° Gets 0 % Coverage of Inside Radius Area

AXIAL 0°, 15° & 45° Get 210.63 in<sup>2</sup> of Weld & T/2 Area (78.3 %)  
 70° Gets 100 % Coverage of Inside Radius Area

3RPV-WR1Z (B03.100.003)

3RPV-WR1ZA (B03.100.004)

3RPV-WR1ZB (B03.100.005)

3RPV-WR1ZC (B03.100.006)

3RPV-WR12 (B03.090.003 & 003A)  
 3RPV-WR12A (B03.090.004 & 004A)  
 3RPV-WR12B (B03.090.005 & 005A)  
 3RPV-WR12C (B03.090.006 & 006A)

Serial No. 94-01  
 Attachment 16  
 Page 4 of 9

WRIN

3RPV-WR12 (B03.100.003)  
 3RPV-WR12A (B03.100.004)  
 > RPV-WR12B (B03.100.005)  
 > RPV-WR12C (B03.100.006)

## VERTICAL SECTION

<u>AXIAL</u>	<u>CIRC</u>			
<u>0/15/45</u>	<u>70</u>	<u>60</u>	<u>45</u>	<u>0</u>
96.3	100	75.0	75.0	75.0

Aggregate Coverage =

$$\frac{[ 100 \times 15.06 + (96.3 + 75.0 + 75.0 + 75.0) \times 292.94 ]}{[ 15.06 + 292.94 \times 4 ]}$$

Actual Aggregate Coverage = 80.6 %

## HORIZONTAL SECTION

<u>AXIAL</u>	<u>CIRC</u>			
<u>0/15/45</u>	<u>70</u>	<u>60</u>	<u>45</u>	<u>0</u>
78.3	100	57.1	57.1	57.1

Aggregate Coverage =

$$\frac{[ 100 \times 13.97 + (78.3 + 57.1 + 57.1 + 57.1) \times 269.15 ]}{[ 13.97 + 269.15 \times 4 ]}$$

Actual Aggregate Coverage = 62.9 %

RPV-WR1Z (B03.090.003 & 003A)  
 RPV-WR1ZA (B03.090.004 & 004A)  
 RPV-WR1ZB (B03.090.005 & 005A)  
 RPV-WR1ZC (B03.090.006 & 006A)  
 RPV-WR1Z (B03.100.003)  
 RPV-WR1ZA (B03.100.004)  
 RPV-WR1ZB (B03.100.005)  
 RPV-WR1ZC (B03.100.006)

Serial No. 94-01  
 Attachment 16  
 Page 5 of 9

WRINNozzle-to-Shell Weld

Actual Average Coverage = [ 80.6 + 62.9 ] / 2 = 71.7 %

Additionally, Coverage of the Inside Radius is as follows:

Axial Coverage = [ 100 + 100 ] / 2 = 100 %

Circ Coverage = [ 73.6 + 0 ] / 2 = 36.8 %

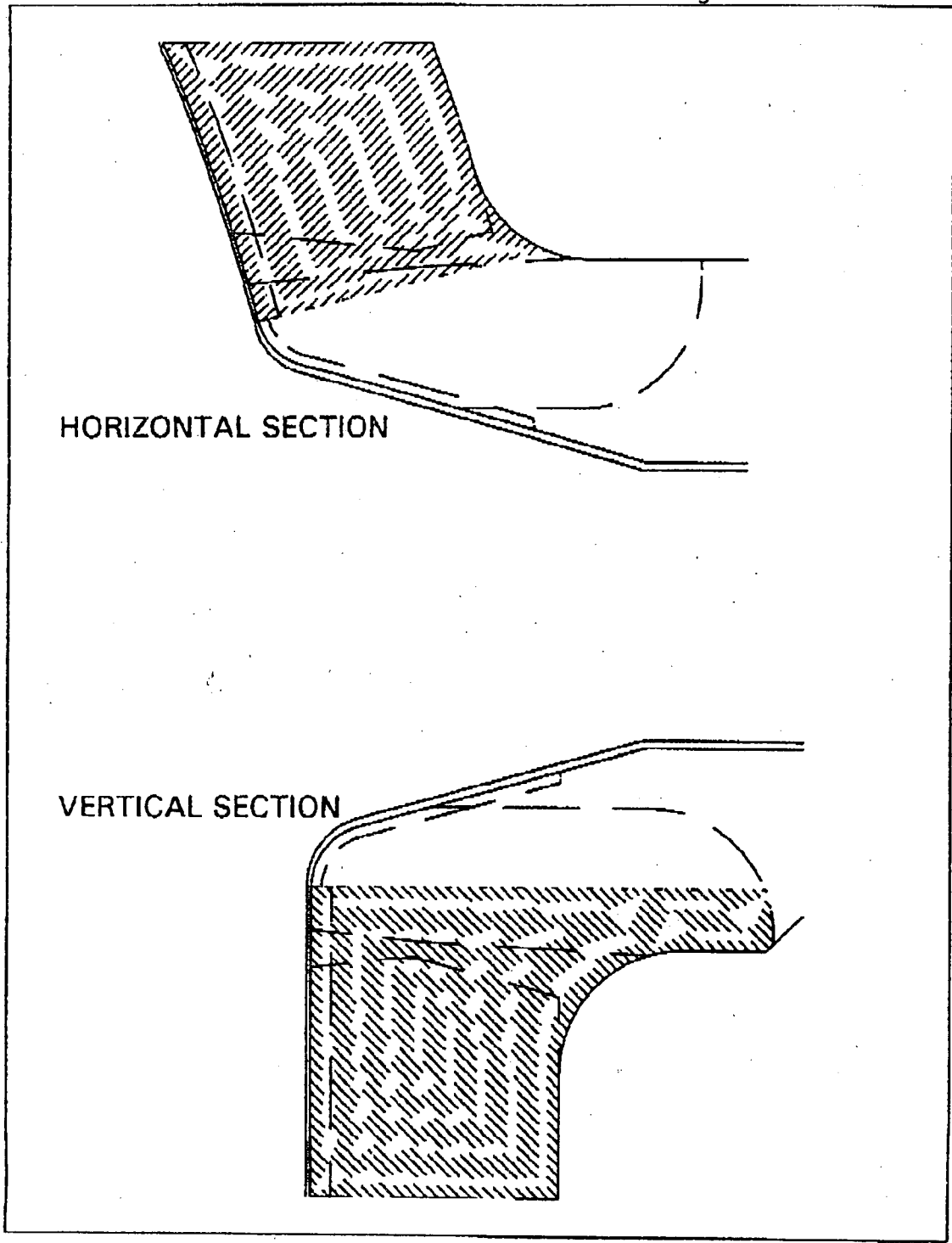
Actual Average Coverage = 68.4 %

Coverage of the Nozzle-to-Pipe Weld is 100 %

Serial No. 94-01

Attachment 16

Page 6 of 9



**INLET NOZZLE TO SHELL WELD  
CIRC SCAN FROM VESSEL ID**

3RPV-WR12 (B03.090.003 & 003A)

3RPV-WR12A (B03.090.004 & 004A)

3RPV-WR12B (B03.090.005 & 005A)

3RPV-WR12C (B03.090.006 & 006A)

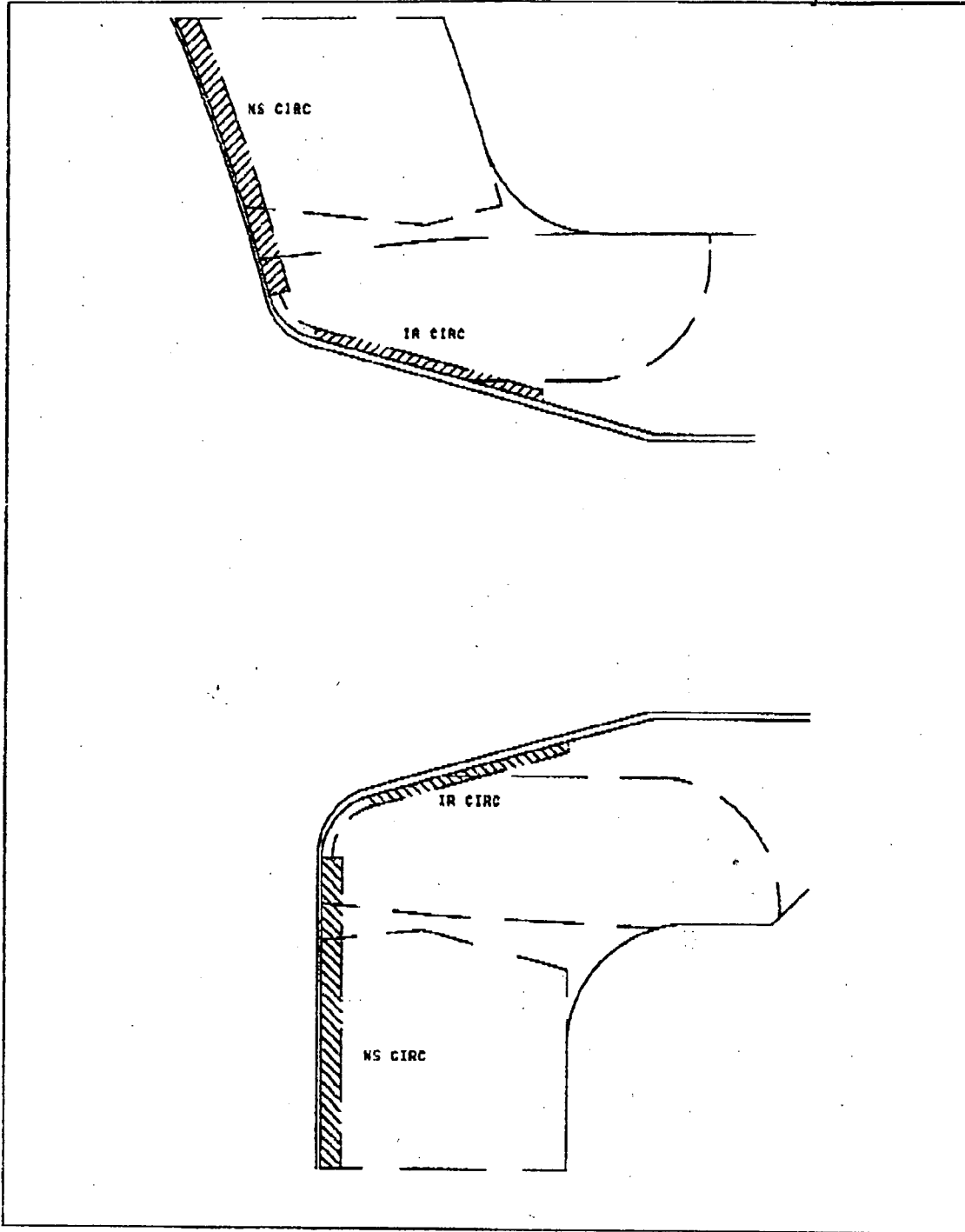
3RPV-WR12 (B03.100.003)

3RPV-WR12A (B03.100.004)

3RPV-WR12B (B03.100.005)

3RPV-WR12C (B03.100.006)

Serial No. 94-01  
Attachment 16  
Page 7 of 9



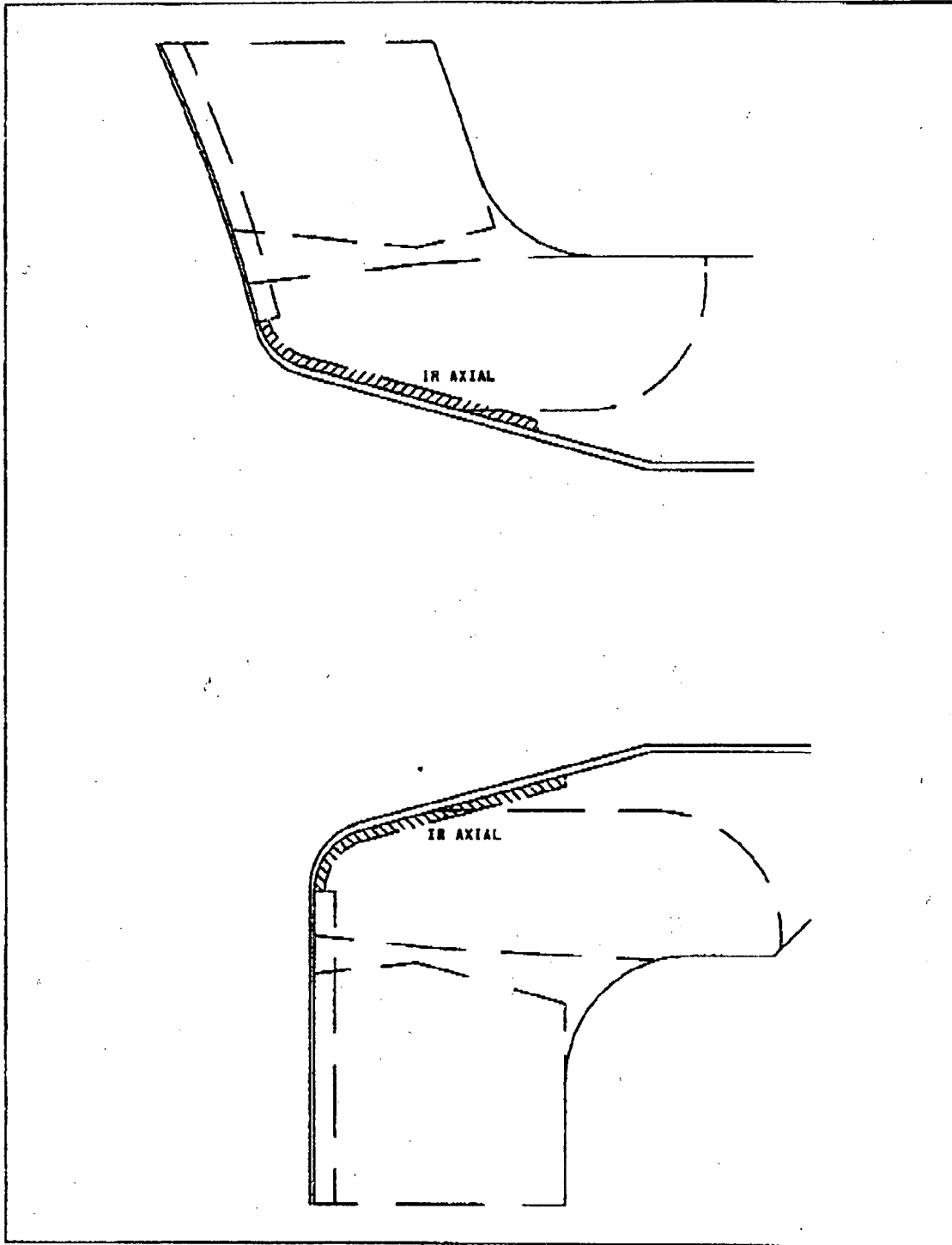
**INLET NOZZLE TO SHELL WELD NEAR SURFACE FROM VESSEL ID  
AND INNER RADIUS CIRC SCAN FROM NOZZLE ID**

3RPV-WR12 (B03.090.003 & 003A)  
3RPV-WR12A (B03.090.004 & 004A)  
3RPV-WR12B (B03.090.005 & 005A)  
3RPV-WR12C (B03.090.006 & 006A)

3RPV-WR12 (B03.100.003)  
3RPV-WR12A (B03.100.004)  
3RPV-WR12B (B03.100.005)  
3RPV-WR12C (B03.100.006)

Page 21

Serial No. 94-01  
Attachment 16  
Page 8 of 9

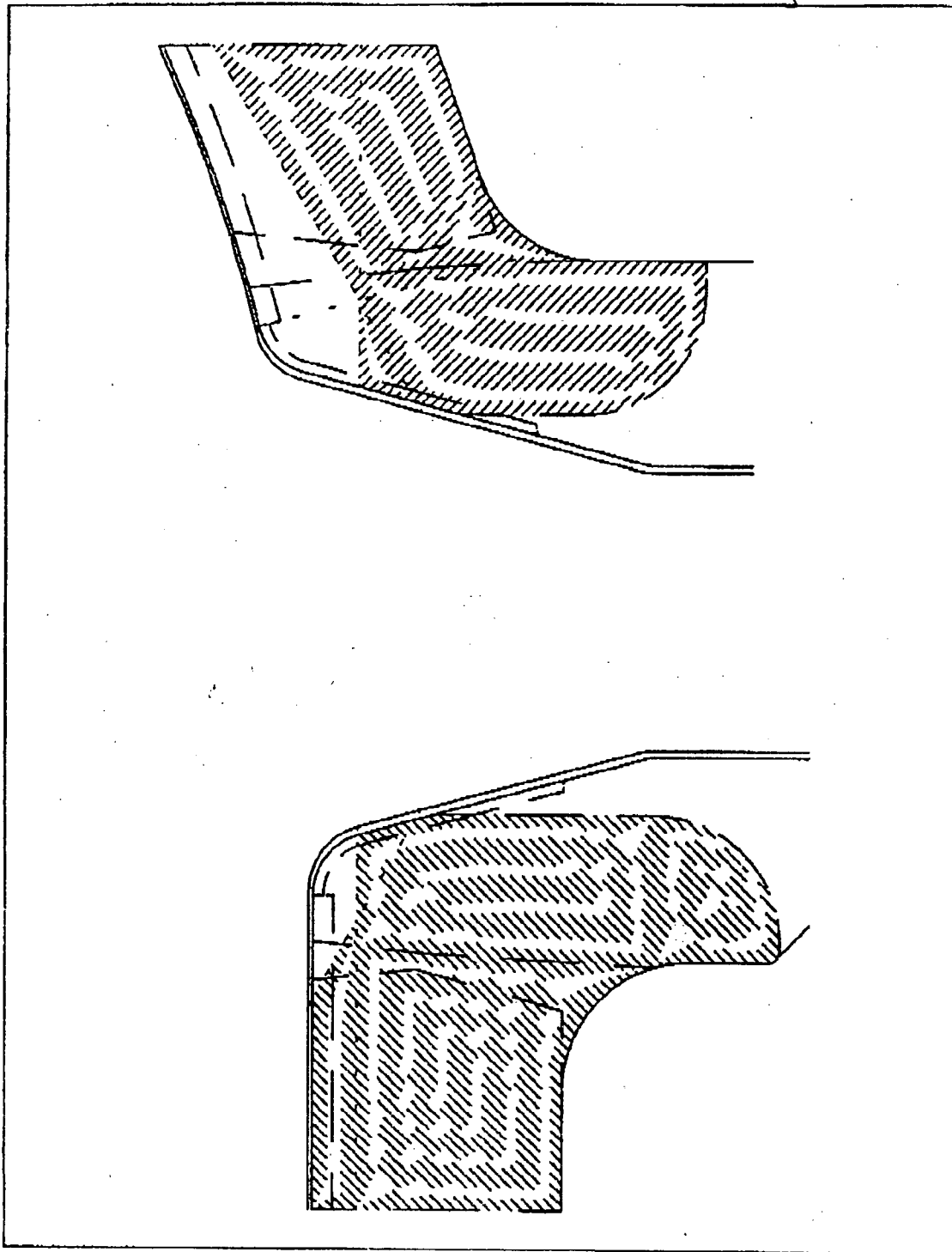


**INLET NOZZLE INNER RADIUS  
AXIAL SCAN FROM NOZZLE ID**

- |                                 |                          |
|---------------------------------|--------------------------|
| 3RPV-WR12 (B03.090.003 & 003A)  | 3RPV-WR12 (B03.100.003)  |
| 3RPV-WR12A (B03.090.004 & 004A) | 3RPV-WR12A (B03.100.004) |
| 3RPV-WR12B (B03.090.005 & 005A) | 3RPV-WR12B (B03.100.005) |
| 3RPV-WR12C (B03.090.006 & 006A) | 3RPV-WR12C (B03.100.006) |



Serial No. 94-01  
Attachment 16  
Page 9 of 9



**INLET NOZZLE TO SHELL WELD  
SCAN FROM NOZZLE ID**

3RPV-WR12 (B03.090.003 & 003A)

3RPV-WR12 (B03.100.003)

3RPV-WR12A (B03.090.004 & 004A)

3RPV-WR12A (B03.100.004)

3RPV-WR12B (B03.090.005 & 005A)

3RPV-WR12B (B03.100.005)

3RPV-WR12C (B03.090.006 & 006A)

3RPV-WR12C (B03.100.006)

3RPV-WR13 (B03.090.001 &amp; 001A)

Serial No. 94-01

Attachment 17

Page 1 of 8

3RPV-WR13A (B03.090.002 &amp; 002A)

3RPV-WR13 (B03.100.001)

WROUT

3RPV-WR13A (B03.100.002)

## VERTICAL SECTION

Total Exam Area = 301.06 in<sup>2</sup> (Near Surface + Weld + T/2)  
 Near Surface Area = 14.02 in<sup>2</sup> (Cross-Section)  
 Weld Area = 25.52 in<sup>2</sup> (Cross-Section)  
 T/2 Area = 275.54 in<sup>2</sup> (Cross-Section)  
 Inside Radius Area = 7.26 in<sup>2</sup> (Cross-Section)

CIRC 0° Gets 95.16 in<sup>2</sup> of Total Exam Area (31.6 %)  
 60° & 45° Get 136.87 in<sup>2</sup> of Weld & T/2 Areas (45.5 %)  
 70° Gets 11.03 in<sup>2</sup> of Near Surface Area (78.7 %)  
 70° Gets 100 % Coverage of Inside Radius Area

AXIAL 0°, 15° & 45° Get 295.92 in<sup>2</sup> of Weld & T/2 Area (98.3 %)  
 70° Gets 100 % Coverage of Inside Radius Area

3RPV-WR13 (B03.090.001 &amp; 001A)

3RPV-WR13A (B03.090.002 &amp; 002A)

3RPV-WR13 (B03.100.001)  
3RPV-WR13A (B03.100.002)Serial No. 94-01  
Attachment 17  
Page 2 of 8WROUT**HORIZONTAL SECTION**

Total Exam Area = 298.71 in<sup>2</sup> (Near Surface + Weld + T/2)  
 Near Surface Area = 13.62 in<sup>2</sup> (Cross-Section)  
 Weld Area = 23.45 in<sup>2</sup> (Cross-Section)  
 T/2 Area = 275.26 in<sup>2</sup> (Cross-Section)  
 Inside Radius Area = 8.02 in<sup>2</sup> (Cross-Section)

CIRC      0° Gets 47.69 in<sup>2</sup> of Total Exam Area      (16.0 %)  
           60° & 45° Get 87.46 in<sup>2</sup> of Weld & T/2 Areas      (29.3 %)  
           70° Gets 11.33 in<sup>2</sup> of Near Surface Area      (83.2 %)  
           70° Gets 6.88 in<sup>2</sup> of Inside Radius Area      (85.8 %)

AXIAL      0°, 15° & 45° Get 247.16 in<sup>2</sup> of Weld & T/2 Area (82.7 %)  
           70° Gets 7.74 in<sup>2</sup> of Inside Radius Area      (96.5 %)

3RPV-WR13 (B03.090.001 & 001A)  
 3RPV-WR13A (B03.090.002 & 002A)  
 3RPV-WR13 (B03.100.001)  
 3RPV-WR13A (B03.100.002)

Serial No. 94-01  
 Attachment 17  
 Page 3 of 8

WROUT

## VERTICAL SECTION

<u>AXIAL</u>	<u>CIRC</u>			
<u>0/15/45</u>	<u>70</u>	<u>60</u>	<u>45</u>	<u>0</u>
98.3	78.7	45.5	45.5	31.6

Aggregate Coverage =

$$\frac{[ 78.7 \times 14.02 + (98.3 + 45.5 + 45.5 + 31.6) \times 301.06 ]}{[ 14.02 + 301.06 \times 4 ]}$$

Actual Aggregate Coverage = 55.5 %

## HORIZONTAL SECTION

<u>AXIAL</u>	<u>CIRC</u>			
<u>0/15/45</u>	<u>70</u>	<u>60</u>	<u>45</u>	<u>0</u>
82.7	83.2	29.3	29.3	16.0

Aggregate Coverage =

$$\frac{[ 83.2 \times 13.62 + (82.7 + 29.3 + 29.3 + 16.0) \times 298.71 ]}{[ 13.62 + 298.71 \times 4 ]}$$

Actual Aggregate Coverage = 39.8 %

3RPV-WR13 (B03.090.001 & 001A)

Serial No. 94-01

Attachment 17

Page 4 of 8

3RPV-WR13A (B03.090.002 & 002A)

3RPV-WR13 (B03.100.001)

WROUT

3RPV-WR13A (B03.100.002)

Nozzle-to-Shell Weld

Actual Average Coverage = [ 55.5 + 39.8 ] / 2 = 47.6 %

Additionally, Coverage of the Inside Radius is as follows:

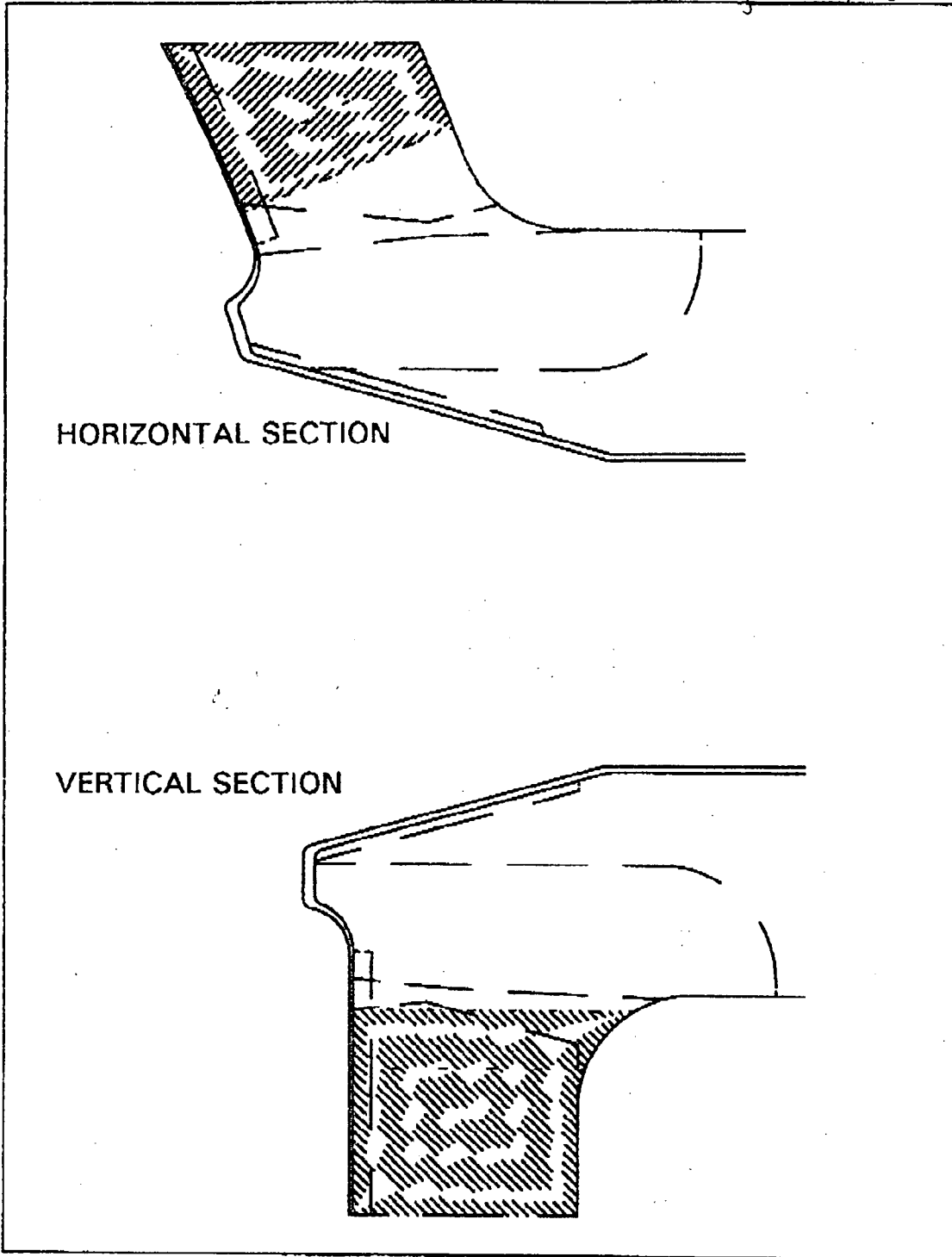
Axial Coverage = [ 100 + 96.5 ] / 2 = 98.2 %

Circ Coverage = [ 100 + 85.8 ] / 2 = 92.9 %

Actual Average Coverage = 95.6 %

Coverage of the Nozzle-to-Pipe Weld is 100 %

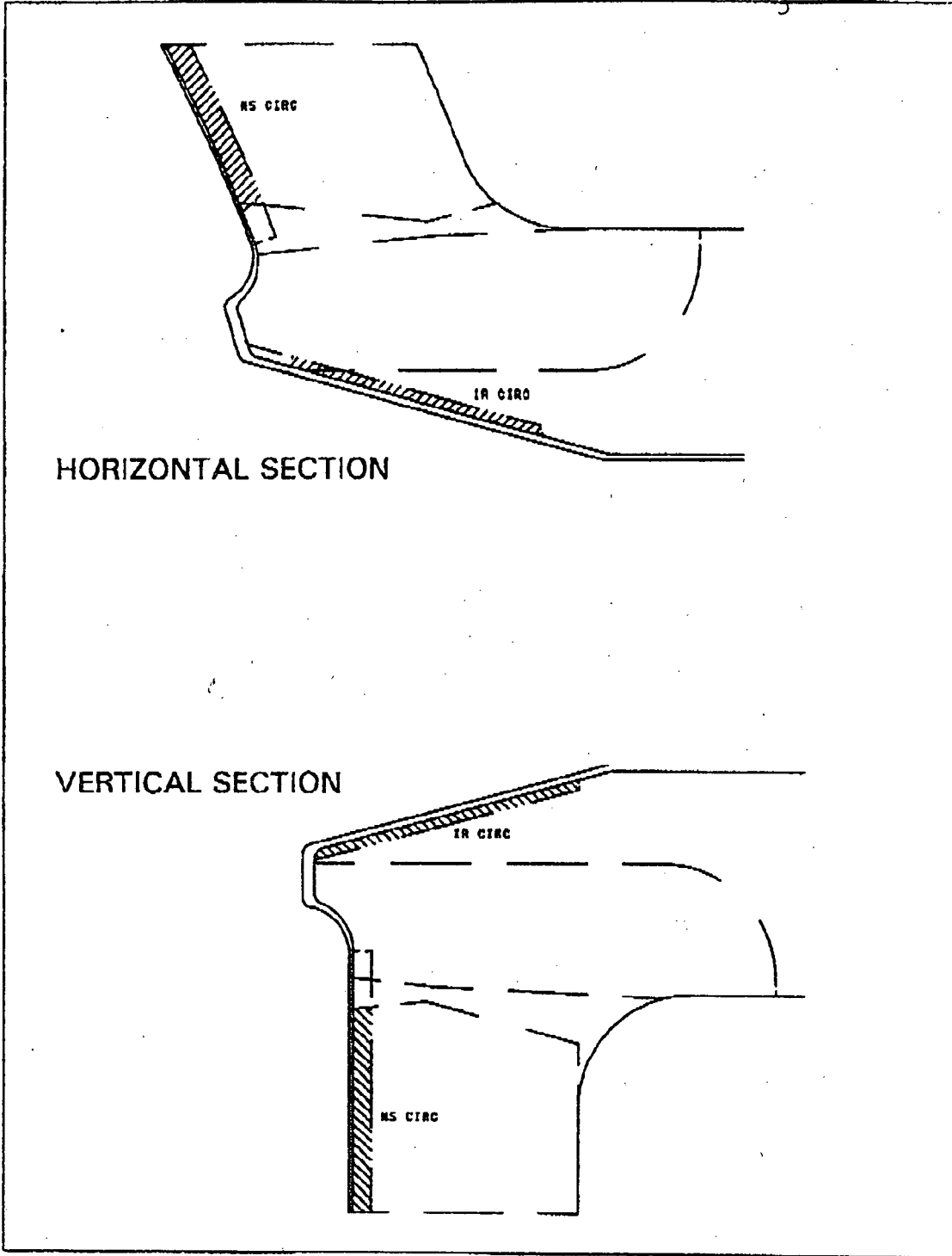
Serial No. 94-01  
Attachment 17  
Page 5 of 8



**OUTLET NOZZLE TO SHELL WELD CIRC SCAN  
FROM VESSEL ID**

- 3RPV-WR13 (B03.090.001 & 001A)
- 3RPV-WR13A (B03.090.002 & 002A)
- 3RPV-WR13 (B03.100.001)
- 3RPV-WR13A (B03.100.002)

Serial No. 94-01  
Attachment 17  
Page 6 of 8



HORIZONTAL SECTION

VERTICAL SECTION

**OUTLET NOZZLE TO SHELL WELD NEAR SURFACE FROM VESSEL ID  
AND INNER RADIUS CIRC SCAN FROM NOZZLE ID**

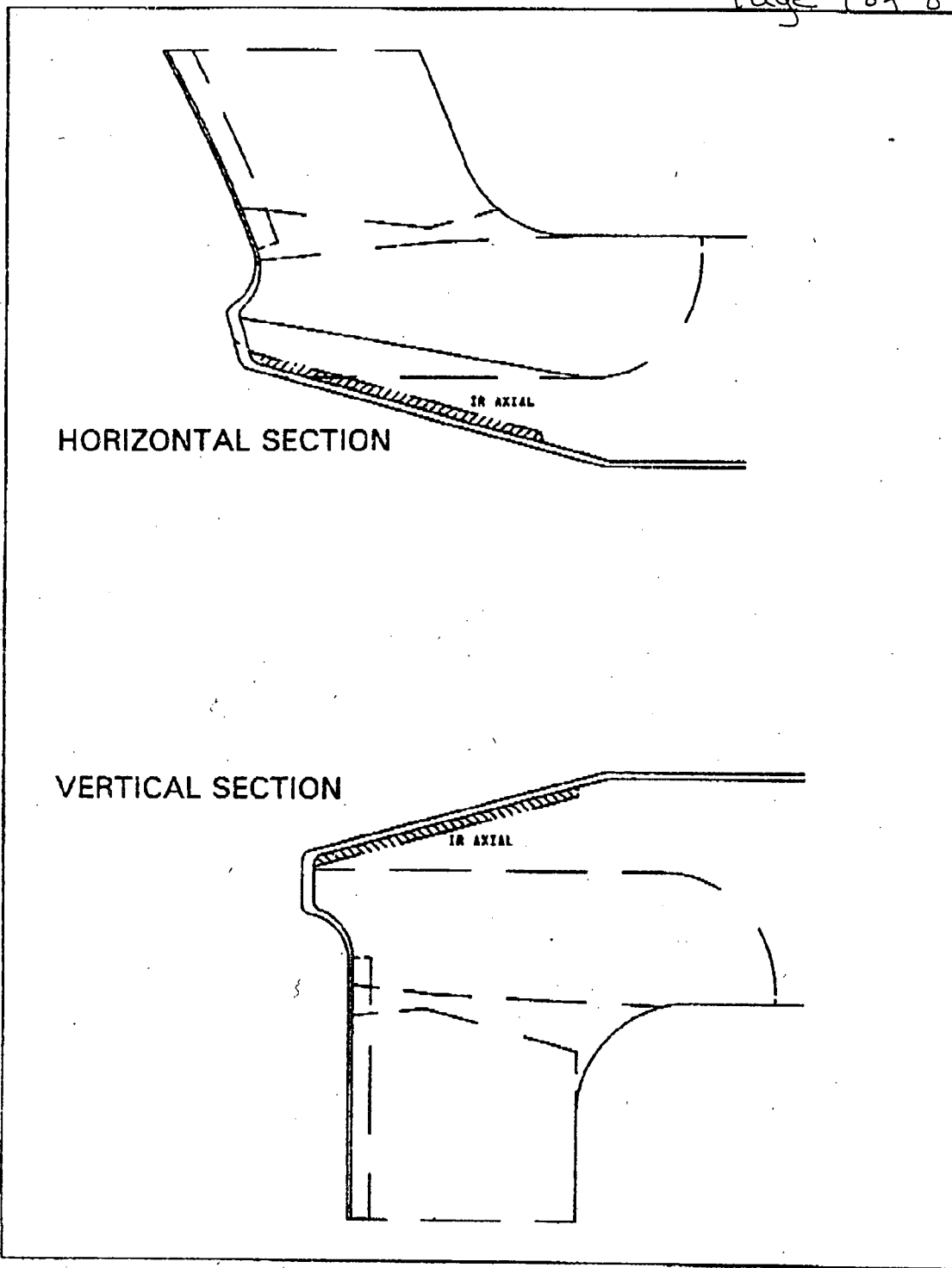
3RPV-WR13 (B03.090.001 & 001A)

3RPV-WR13A (B03.090.002 & 002A)

3RPV-WR13 (B03.100.001)

3RPV-WR13A (B03.100.002)

Serial No. 94-01  
Attachment 17  
Page 7 of 8

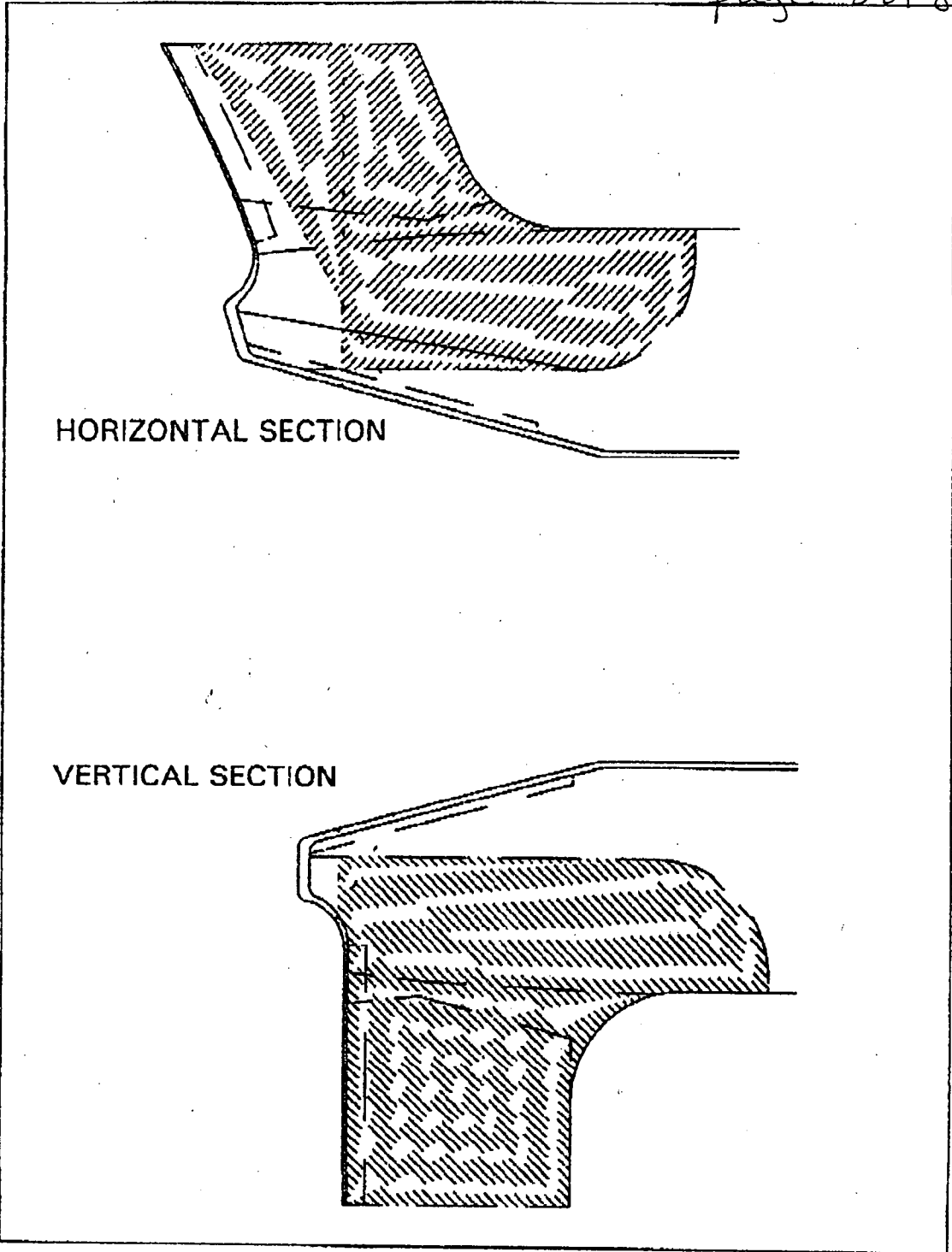


**OUTLET NOZZLE INNER RADIUS  
AXIAL SCAN FROM NOZZLE ID**

- 3RPV-WR13 (B03.090.001 & 001A)
- 3RPV-WR13A (B03.090.002 & 002A)
- 3RPV-WR13 (B03.100.001)
- 3RPV-WR13A (B03.100.002)



Serial No. 94-01  
Attachment 17  
Page 8 of 8



HORIZONTAL SECTION

VERTICAL SECTION

**OUTLET NOZZLE TO SHELL WELD  
SCAN FROM NOZZLE ID**

- 3RPV-WR13 (B03.090.001 & 001A)
- 3RPV-WR13A (B03.090.002 & 002A)
- 3RPV-WR13 (B03.100.001)
- 3RPV-WR13A (B03.100.002)

3RPV-WR 54 (B03.090.007 &amp; 007A)

3RPV-WR 54A (B03.090.008 &amp; 008A)

3RPV-WR 54 (B03.100.007 & 007A) <sup>err</sup>3RPV-WR 54A (B03.100.008 & 008A) <sup>err</sup>Serial No. 94-01  
Attachment 18  
Page 1 of 12WRCE

## VERTICAL SECTION

Total Exam Area = 189.61 in<sup>2</sup> (Near Surface + Weld + T/2)Near Surface Area = 12.98 in<sup>2</sup> (Cross-Section)Weld Area = 19.01 in<sup>2</sup> (Cross-Section)T/2 Area = 170.60 in<sup>2</sup> (Cross-Section)CIRC 0° Gets 170.69 in<sup>2</sup> of Total Exam Area (90.0 %)60° & 45° Get 170.69 in<sup>2</sup> of Weld & T/2 Areas (90.0 %)

70° Gets 100 % Coverage of Near Surface Area

AXIAL 70° Gets 100 % Coverage of Near Surface Area

45° Gets 162.44 in<sup>2</sup> of T/2 Area

45°-IN Gets 100 % Coverage of Weld Area

45°-OUT Gets 7.92 in<sup>2</sup> of Weld Area45° Coverage =  $\frac{19.01 + 7.92 + 162.44}{19.01 + 19.01 + 170.60} = 90.8 \%$ 60° Gets 161.18 in<sup>2</sup> of T/2 Area

60°-IN Gets 100 % Coverage of Weld Area

60°-OUT Gets 5.02 in<sup>2</sup> of Weld Area60° Coverage =  $\frac{19.01 + 5.02 + 161.18}{19.01 + 19.01 + 170.60} = 88.8 \%$

3RPV-WRS4 (B03.090.007 &amp; 007A)

Serial No. 94-01

3RPV-WRS4A (B03.090.008 &amp; 008A)

Attachment 18

Page 2 of 12

3RPV-WRS4 (B03.100.007 & 007A) <sup>R/S</sup>WRCE3RPV-WRS4A (B03.100.008 & 008A) <sup>R/S</sup>

## HORIZONTAL SECTION

Total Exam Area = 222.71 in<sup>2</sup> (Near Surface + Weld + T/2)Near Surface Area = 15.50 in<sup>2</sup> (Cross-Section)Weld Area = 21.32 in<sup>2</sup> (Cross-Section)T/2 Area = 201.39 in<sup>2</sup> (Cross-Section)CIRC 0° Gets 191.77 in<sup>2</sup> of Total Exam Area (86.1 %)60° & 45° Get 191.77 in<sup>2</sup> of Weld & T/2 Areas (86.1 %)

70° Gets 100 % Coverage of Near Surface Area

AXIAL 70° Gets 100 % Coverage of Near Surface Area

45° Gets 199.35 in<sup>2</sup> of T/2 Area

45°-IN Gets 100 % Coverage of Weld Area

45°-OUT Gets 8.72 in<sup>2</sup> of Weld Area45° Coverage =  $\frac{21.32 + 8.72 + 199.35}{21.32 + 21.32 + 201.39} = 94.0 \%$ 60° Gets 198.96 in<sup>2</sup> of T/2 Area

60°-IN Gets 100 % Coverage of Weld Area

60°-OUT Gets 5.74 in<sup>2</sup> of Weld Area60° Coverage =  $\frac{23.12 + 5.74 + 198.96}{23.12 + 23.12 + 201.39} = 93.4 \%$

3RPV-WR 54 (B03.090.007 &amp; 007A)

Serial No. 94-01

Attachment 18

Page 3 of 12

3RPV-WR 54A (B03.090.008 & 008A) WRCF3RPV-WR 54 (B03.100.007 & 007A) <sup>RSC</sup> VERTICAL SECTION3RPV-WR 54A (B03.100.008 & 008A) <sup>RSC</sup>

AXIAL			CIRC			
70	60	45	70	60	45	0
100	88.8	90.8	100	90.0	90.0	90.0

Aggregate Coverage =

$$\begin{aligned} & [ (100 + 100) \times 12.98 + (90.0 + 90.0 + 90.0) \times 189.61 \\ & + (88.8 + 90.8) \times (19.01 \times 2 + 170.60) ] / \\ & [ 12.98 \times 2 + 189.61 \times 3 + (19.01 \times 2 + 170.60) \times 2 ] \end{aligned}$$

Partial Aggregate Coverage = 90.2 %

## HORIZONTAL SECTION

AXIAL			CIRC			
70	60	45	70	60	45	0
100	93.4	94.0	100	86.1	86.1	86.1

Aggregate Coverage =

$$\begin{aligned} & [ (100 + 100) \times 15.50 + (86.1 + 86.1 + 86.1) \times 222.71 \\ & + (93.4 + 94.0) \times (21.32 \times 2 + 201.39) ] / \\ & [ 15.50 \times 2 + 222.71 \times 3 + (21.32 \times 2 + 201.39) \times 2 ] \end{aligned}$$

Partial Aggregate Coverage = 89.6 %

Page 34

3RPV-WR 54 (B03.090.007 &amp; 007A)

3RPV-WR 54A (B03.090.008 &amp; 008A)

3RPV-WR 54 (B03.100.007 & 007A) <sup>RWP</sup>3RPV-WR 54A (B03.100.008 & 008A) <sup>RWP</sup>WRCF

Serial No. 94-01

Attachment 18

Page 4 of 12

Coverage of the Core Flood Nozzle is blocked by the flange taper on the top side. 114 degrees of coverage is reduced. Coverage is also blocked on both sides by the adjacent inlet nozzles. 60 degrees of coverage is reduced on each side. Reduction in the top coverage affects the vertical section only. Reduction in the side coverage affects both the horizontal and vertical coverage.

## REDUCED VERTICAL SECTION

AXIAL 60° Gets 132.28 in<sup>2</sup> of T/2 Area60°-IN Gets 16.16 in<sup>2</sup> of Weld Area60°-OUT Gets 5.02 in<sup>2</sup> of Weld Area

$$60^\circ \text{ Coverage} = \frac{16.16 + 5.02 + 132.28}{19.01 + 19.01 + 170.60} = 73.6 \%$$

AXIAL			CIRC			
70	60	45	70	60	45	0
100	73.6	90.8	100	90.0	90.0	90.0

Aggregate Coverage =

$$\begin{aligned} & [ (100 + 100) \times 12.98 + (90.0 + 90.0 + 90.0) \times 189.61 \\ & + (73.6 + 90.8) \times (19.01 \times 2 + 170.60) ] / \\ & [ 12.98 \times 2 + 189.61 \times 3 + (19.01 \times 2 + 170.60) \times 2 ] \end{aligned}$$

Actual Aggregate Coverage = 87.0 %

3RPV-WR 54 (B03.090.001 & 001A)

3RPV-WR 54A (B03.090.008 & 008A)

3RPV-WR 54 (B03.100.007 & 007A) <sup>Rise</sup>

3RPV-WR 54A (B03.100.008 & 008A) <sup>Rise</sup>

Serial No. 94-01

Attachment 18

Page 5 of 12

REDUCED HORIZONTAL SECTION

AXIAL 70° Gets 11.93 in<sup>2</sup> of Near Surface Area (77.0 %)

60° Gets 166.86 in<sup>2</sup> of T/2 Area

60°-IN Gets 19.83 in<sup>2</sup> of Weld Area

60°-OUT Gets 5.74 in<sup>2</sup> of Weld Area

60° Coverage =  $\frac{19.83 + 5.74 + 166.86}{23.12 + 23.12 + 201.39} = 78.9 \%$

AXIAL			CIRC			
70	60	45	70	60	45	0
77.0	78.9	94.0	100	86.1	86.1	86.1

Aggregate Coverage =

$$\frac{[(77.0 + 100) \times 15.50 + (86.1 + 86.1 + 86.1) \times 222.71 + (78.9 + 94.0) \times (21.32 \times 2 + 201.39)]}{[15.50 \times 2 + 222.71 \times 3 + (21.32 \times 2 + 201.39) \times 2]}$$

Actual Aggregate Coverage = 86.3 %

Actual Coverage is as follows:

$$\frac{[ \text{Reduced Vertical (A)} \times 94^\circ + \text{Vertical (B)} \times 48^\circ + \text{Horizontal (C)} \times 98^\circ + \text{Reduced (Vertical + Horizontal) (D)} / 2 \times 120^\circ ]}{360} =$$

$$= 87.0 \times 94^\circ + 90.2 \times 48^\circ + 89.6 \times 98^\circ + (87.0 + 86.3) \times 60^\circ / 360$$

Total Actual Coverage = 88.0 %

Total Actual Coverage = 88.0%

3RPV-WR 54 (B03.090.007 &amp; 007A)

Serial No. 94-01

3RPV-WR 54A (B03.090.008 &amp; 008A)

Attachment 18

3RPV-WR 54 (B03.100.007 & 007A) <sup>R/S</sup>WRCF

Page 6 of 12

3RPV-WR 54A (B03.100.008 & 008A) <sup>R/S</sup>

Additionally, Coverage of the Inside Radius is as follows:

Axial Coverage = 100 %

Circ Coverage = 0 %

Actual Average Coverage = 50 %

Additionally, Coverage of the Nozzle-to-Safe End Weld is limited by the counterbore. Coverage is as follows:

Circ Coverage

Inner T/3 1.804 in<sup>2</sup> out of 2.587 in<sup>2</sup> (69.7 %)

Outer T/3 .986 in<sup>2</sup> out of 1.343 in<sup>2</sup> (73.4 %)

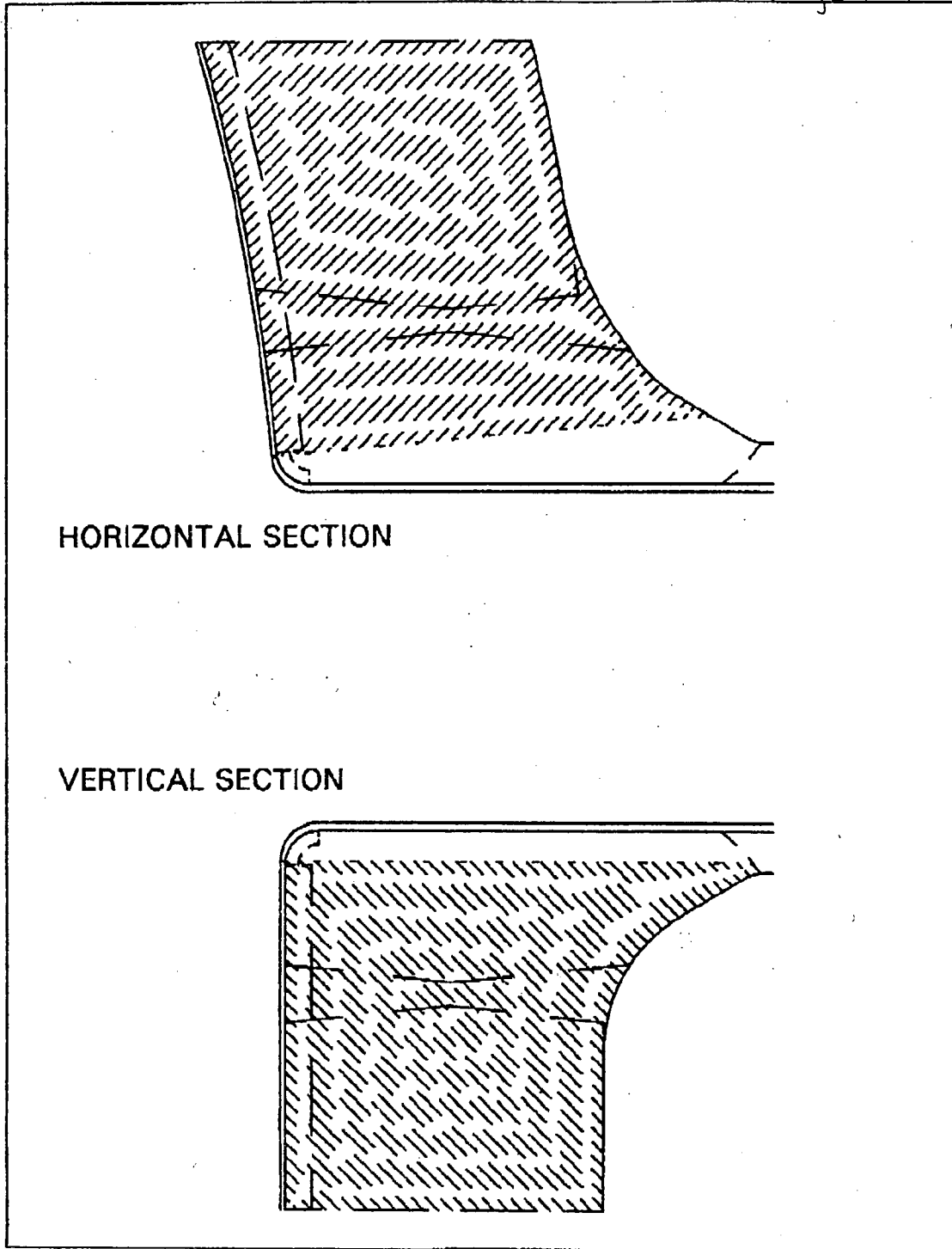
Axial Coverage

Inner T/3 2.428 in<sup>2</sup> out of 2.587 in<sup>2</sup> (93.9 %)  
(Limited in OUT direction only)

$$\begin{aligned} \text{Actual Average Coverage} &= [ 69.7 + 69.7 + 73.4 + 73.4 \\ &\quad + 93.9 + 100 + 100 + 100 ] / 8 \\ &= 85.0 \% \end{aligned}$$

Additionally Coverage of the Safe End-to-Pipe Weld is 100 %

Serial No. 94-01  
Attachment 18  
Page 7 of 12



HORIZONTAL SECTION

VERTICAL SECTION

**CORE FLOOD NOZZLE TO SHELL WELD  
CIRC SCAN FROM VESSEL ID**

3RPV-WRS4 (B03.090.007 & 007A)

Page 38

3RPV-WRS4A (B03.090.008 & 008A)

3RPV-WRS4 (B03.100.007 & ~~007A~~) RSR

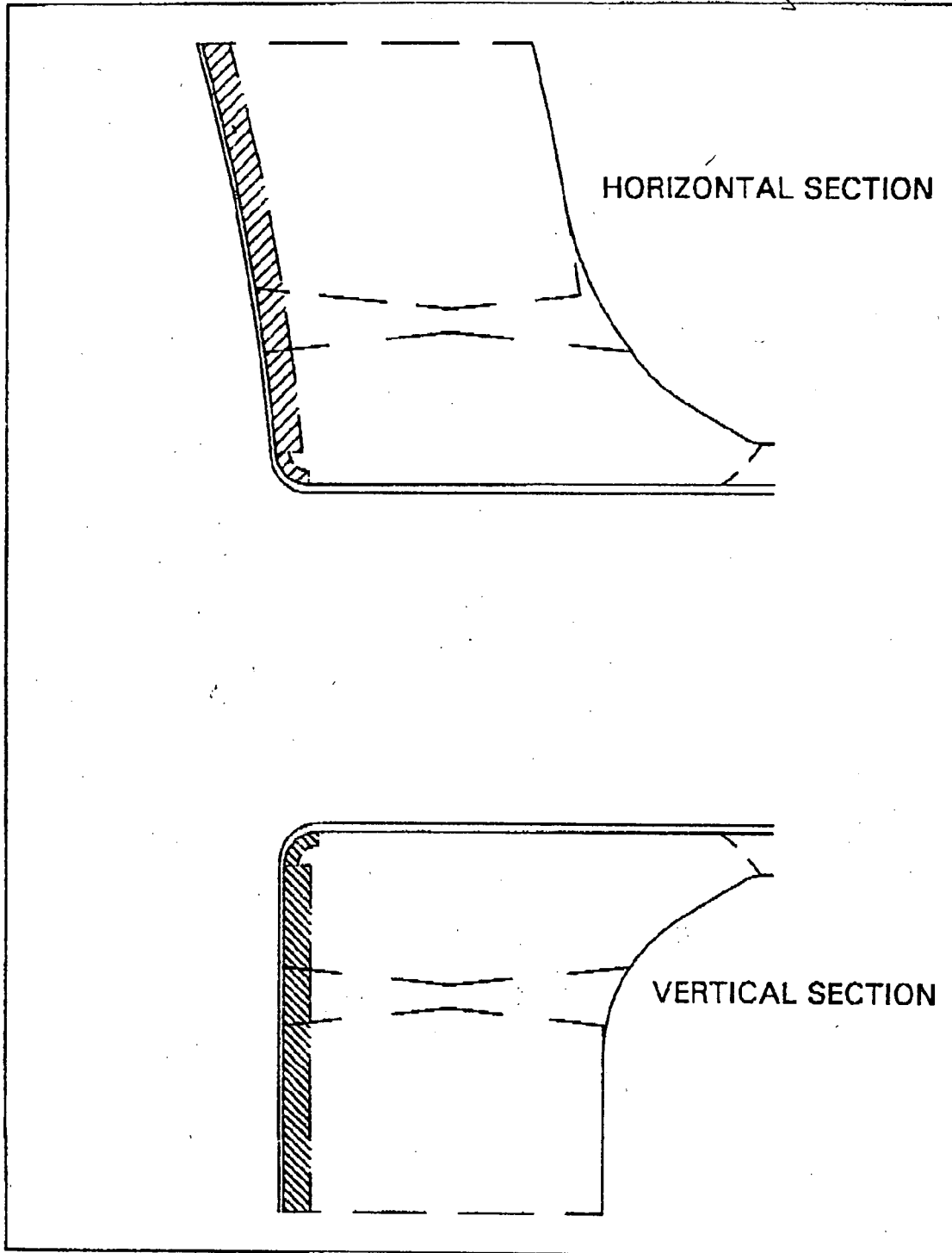
3RPV-WRS4A (B03.100.008 & ~~008A~~) RSR



Serial No. 94-01

Attachment 18

Page 8 of 12



**CORE FLOOD NOZZLE TO SHELL WELD NEAR  
SURFACE AND INNER RADIUS FROM VESSEL ID**

3RPV-WR 54 (B03.090.007 & 007A)

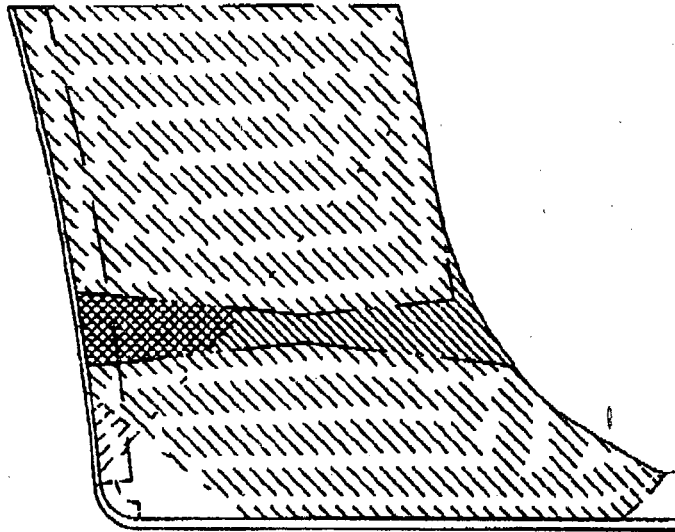
Page 39

3RPV-WR 54A (B03.090.008 & 008A)

3RPV-WR 54 (B03.100.007 & 007A) RSR

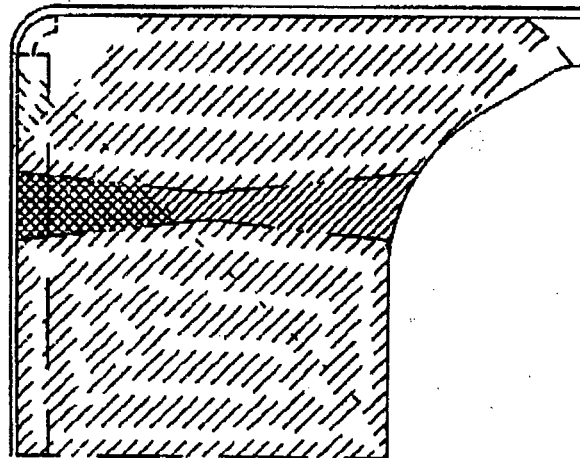
3RPV-WR 54A (B03.100.008 & 008A) RSR

Serial No. 94-01  
Attachment 18  
Page 9 of 12



HORIZONTAL SECTION

VERTICAL SECTION



**CORE FLOOD NOZZLE TO SHELL WELD  
45° AXIAL SCAN FROM VESSEL ID**

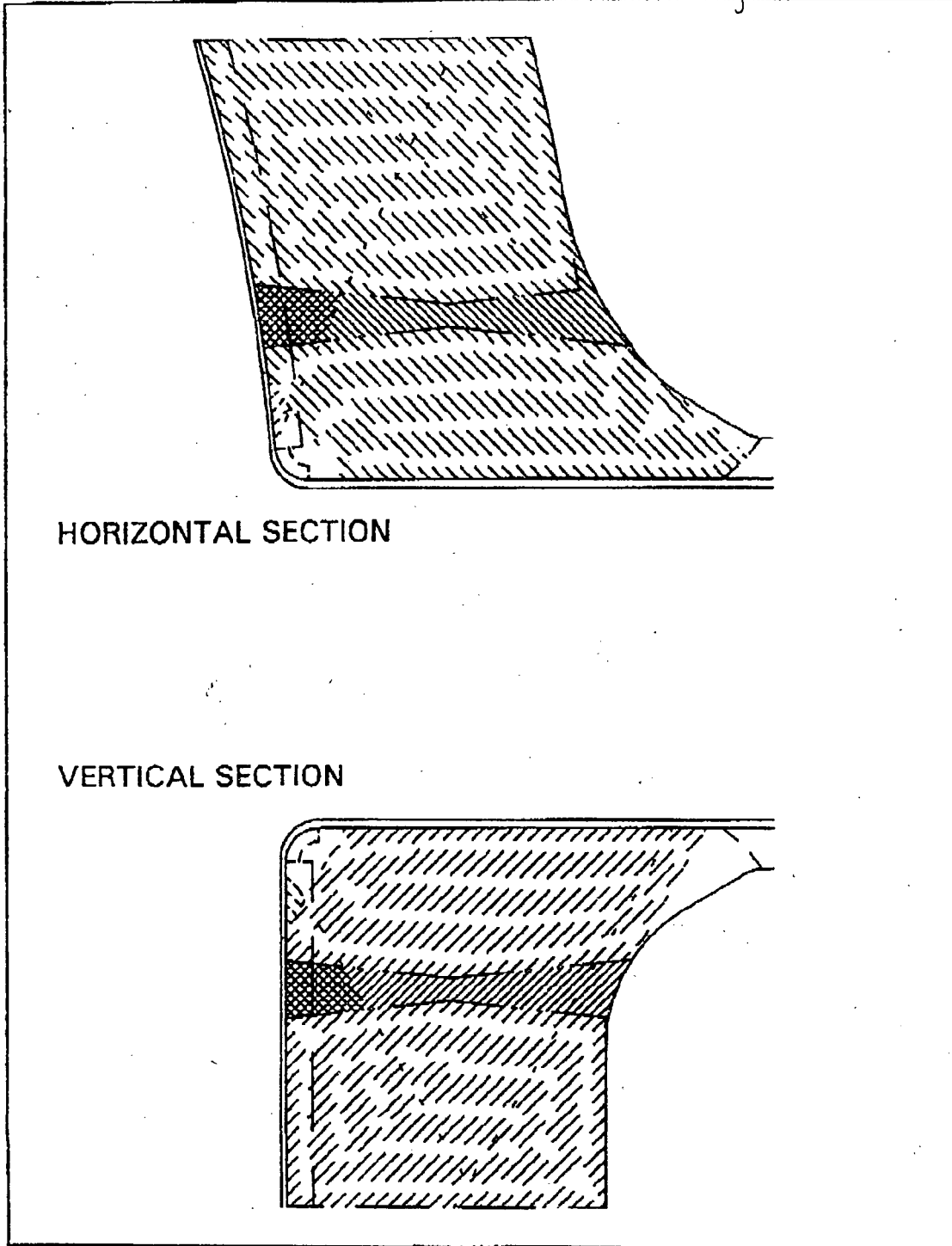
3RPV-WRS4 (B03.090.007 & 007A)

3RPV-WRS4A (B03.090.008 & 008A)

3RPV-WRS4 (B03.100.007 & 007A) R4K

3RPV-WRS4A (B03.100.008 & 008A) R4K

Serial No 94-01  
Attachment 18  
Page 10 of 12



HORIZONTAL SECTION

VERTICAL SECTION

**CORE FLOOD NOZZLE TO SHELL WELD  
60° AXIAL SCAN FROM VESSEL ID**

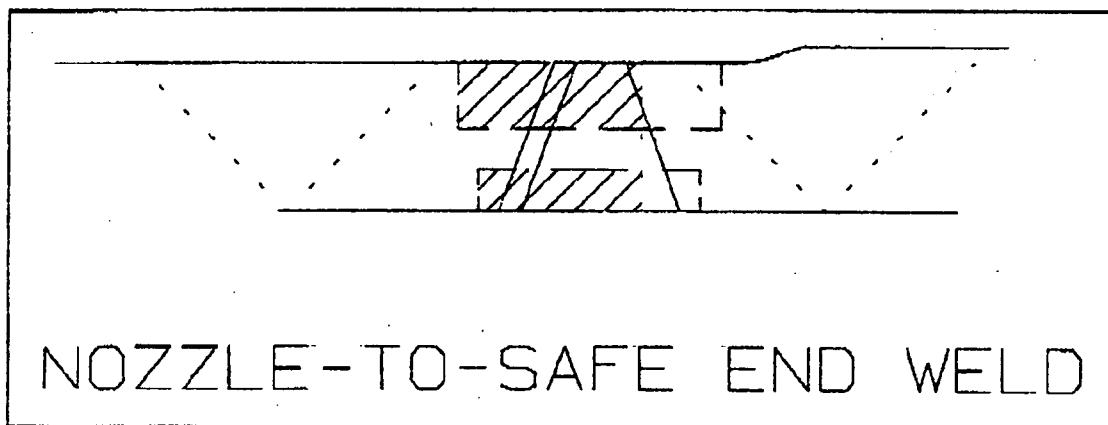
3RPV-WRS4 (B03.090.007 & 007A)

3RPV-WRS4 (B03.090.008 & 008A)

3RPV-WRS4 (B03.100.007 & 007A) R52

3RPV-WRS4 (B03.100.008 & 008A) R52

Serial No. 94-01  
Attachment 18  
Page 11 of 12



**CORE FLOOD NOZZLE TO SAFE  
END WELDS FROM ID**

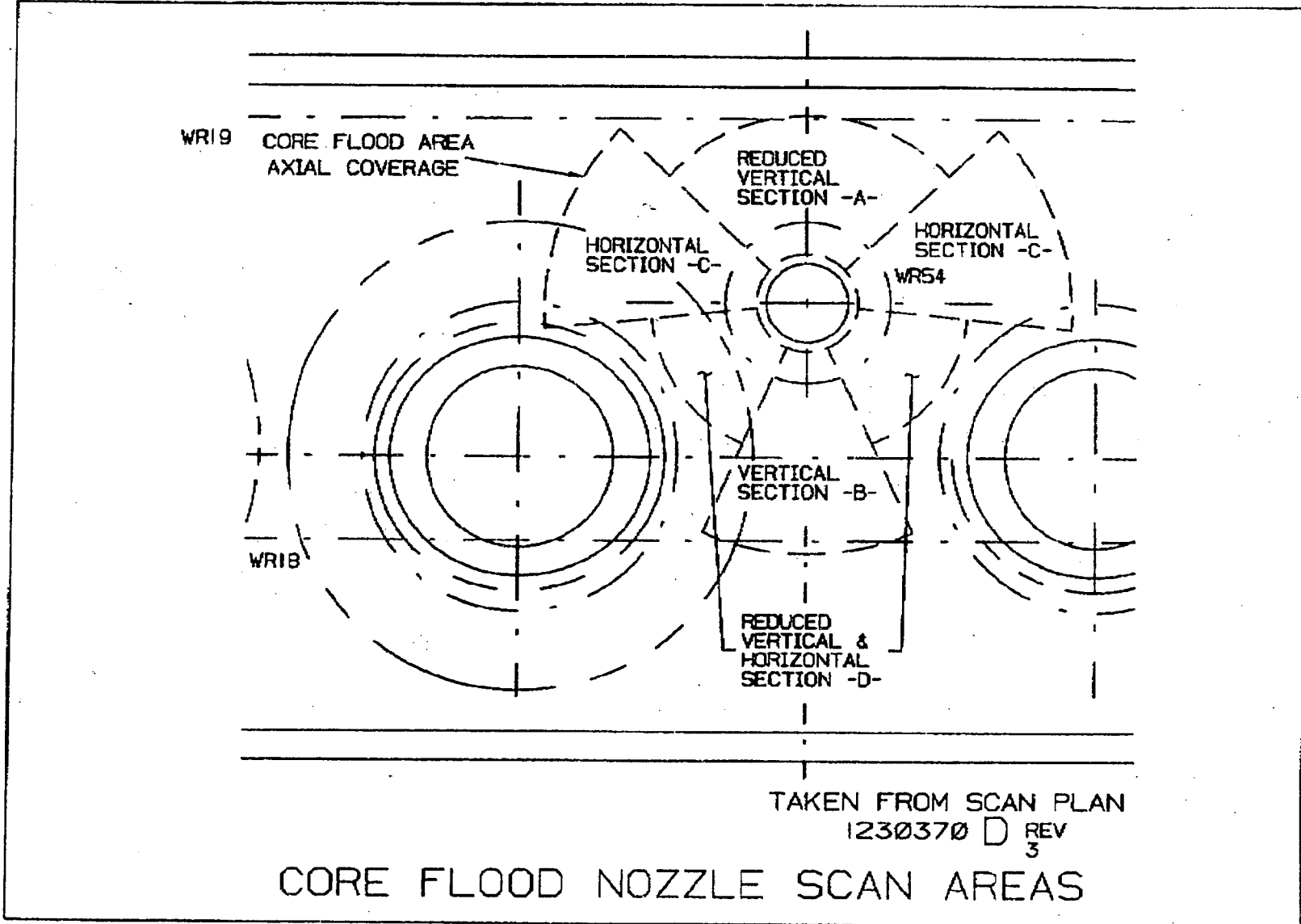
3RPV-WR 54 (B03.090.007 & 007A)

3RPV-WR 54A (B03.090.008 & 008A)

3RPV-WR 54 (B03.100.007 & 007A) RSR

3RPV-WR 54A (B03.100.008 & 008A) RSR

Serial No: 94-01  
Attachment 18  
Page 12 of 12



TAKEN FROM SCAN PLAN  
1230370 D REV  
3

### CORE FLOOD NOZZLE SCAN AREAS

3 RPN-WR 574 (B03.090.007 & 007A) 3 RPN-WR 574 (B03.100.001 & 007A) <sup>P582</sup>

3 RPN-WR 574 (B03.090.008 & 008A) 3 RPN-WR 574 (B03.100.008 & 008A) <sup>P582</sup>

3.4.3.4 Hydrostatic Testing of Class 3 Purification Demineralizer Piping,  
Units 1, 2, and 3, IWA-5240

Code Requirements

IWA-5241 requires visual examination (VT-2) to be conducted by examining the accessible external exposed surfaces of pressure-retaining components for evidence of leakage. For components whose external surfaces are inaccessible for direct visual examination, only the examination of surrounding area, including floor areas or equipment surfaces located underneath the components, for evidence of leakage shall be required.

Code Relief Request

Relief is requested from visual examination of Purification Demineralizer Piping during hydrostatic testing.

Proposed Alternative Examination

Piping will be hydrostatically tested during the 10-year inservice inspection by performing a pressure drop test.

Licensee's Basis for Requesting Relief

Piping from the demineralizer to the point where the piping penetrates the floor cannot be inspected due to the fact that radiation dose at the demineralizer is in excess of 250 R.

Evaluation

Visual examination of the Purification Demineralizer Piping cannot be performed due to the unacceptably high radiation dosage that would be received by inspectors. The licensee has proposed as an alternate to perform a pressure drop test on the subject piping. IWA-5244 addresses such a test to be performed on buried components. A pressure loss test is an acceptable alternative for the inaccessible Purification Demineralizer Piping.

### Conclusions and Recommendations

Based on the above evaluation, it is concluded that for the piping discussed above, the Code requirements are impractical. It is further concluded that the proposed alternative examination will provide adequate assurance of structural reliability. Therefore, relief is recommended as requested.

### References

References 28 and 29.

Today's Date : 04/07/94  
Time : 13:42  
Page No.: 1  
PIP Serial No. : 3-094-0150

MSE Serial No. :  
LER Serial No.:  
Other Rpt. No. :

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

**I. Problem ID**

Occurred Time/Date: 16:00 01/18/94      Discovered Time/Date: 10:59 01/24/94

Unit(s): 3	Status at Time Discovered:	Unit 1	Unit 2	Unit 3
	Mode:	N/A	N/A	NO MODE
	% Power:	N/A	N/A	N/A

Unit Status Remarks: ALL FUEL IS REMOVED FROM THE REACTOR VESSEL

System(s) Affected:

1). RX = Reactor Building

Problem Found While Working With Work Order No.:

Location of Problem - Bldg: R      Elev: 816'6"      Column Line:  
Location Remarks: REACTOR VESSEL FLANGE

**Method Used To Discover Problem:**

DISCUSSION WITH ROD EMORY (REACTOR VESSEL ENGINEER)

**Brief Problem Description:**

ARIS ORIENTED 180 DEGREES FROM DESIRED LOCATION

**Detailed Problem Description:**

DURING DISCUSSION WITH ROD EMORY (REACTOR VESSEL ENGINEER) IT WAS DETERMINED THAT THE ARIS INSPECTION TOOL WAS ORIENTATED 180 ° FROM ITS INTENDED LOCATION.

Originated by: TJCOLEM  
Group: CES      Date: 01/27/94

Other Units/Components/Systems/Areas Affected (Y,N,U): UNK

**Immediate Corrective Actions:**

No immediate actions taken.

Originated by: TJCOLEM      Group: CES      Date: 02/14/94

Corrective Action Work Order No.:

Problem Identified By: TJCOLEM	Group: CES	Date: 01/27/94
Problem Entered By : TJCOLEM	Group: CES	Date: 01/27/94



Today's Date : 04/07/94  
Time : 13:42  
Page No.: 2  
PIP Serial No. : 3-094-0150

MSE Serial No. :  
LER Serial No.:  
Other Rpt. No. :

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

**II. Significance**

Is the Problem Significant? N      Action Category: 3  
MSE No.:                      LER No.:                      Other Report No.:  
OEP No.:

Event Code(s) :  
1). M2a = Wrong or did not know location

Screening Remarks:

Responsible Group(s) for Proposed Resolution :

	Original Due Date	Current Due Date	# Ext.
1). CES = Component Engineering	02/23/94	02/23/94	0

Responsible Group for Cause Code Evaluation : CES Due Date: 02/23/94

Responsible Group for Overall PIP Approval : CES Due Date: 05/01/94

Screened By: TKROYAL      Group: CES      Date: 01/28/94

**III. Problem Evaluation**

System(s) Affected :  
1). RX = Reactor Building

Affected Equipment: WMS Equipment ID No.	Comp. Code	Manufacturer Name
---	---------------	----------------------

Most Probable Group Causing Event      Status: CLSRDY

Group      INPO Cause Code(s) :  
1). CES - A3f = Pertinent information not transmitted  
2). VEN - B4c = Omission of relevant information

Cause(s) of Problem:

ARIS II Examination Tool was placed on the Reactor Vessel 180 degrees from its intended location. The reasons that this happened is because of a procedure deficiency, no documented evidence that proper location drawings were used. Verbial

Today's Date : 04/07/94  
Time : 13:42  
Page No.: 3  
PIP Serial No. : 3-094-0150

MSE Serial No. :  
LER Serial No.:  
Other Rpt. No. :

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

communication was used to establish the 0 degree reading on the  
Reactor Vessel that most drawing reference with W, X, Y and Z  
coordinates.

Originated by: TJCOLEM Group: CES Date: 02/09/94

Is Cause Determination Complete (y,n) : Yes

Assigned To : TJCOLEMA / TKROYAL

Mgmt Exception: No

Orig Due Date : 02/23/94 Curr Due Date: 02/23/94

# of Ext.: 0

Approved By :

Group: CES

App Date : / /

Proposed Resolution From: CES

Grp Status: CLSRDY

B&W Nuclear Technologies will revise their inspection procedure providing a step to verify proper placement of the ARIS tool on the Reactor Vessel. The Inservice Inspection (ISI) Plan will be revised by the Quality Assurance Technical Services (QATS) Section indicating the appropriate drawings to be used for verifying proper positioning of the ARIS tool. B&W and the appropriate Duke personnel will decide on the resolution for inspection data that references the incorrect item number (weld number).

Originated by: TJCOLEM Group: CES Date: 02/09/94

Is Proposed Resolution ready for approval? (y,n): Yes

Assigned To : TJCOLEMA / TKROYAL

Mgmt Exception: No

Orig Due Date : 02/23/94 Curr Due Date : 02/23/94

# of Ext.: 0

Approved By :

Group :

App Date : / /

Remarks:

Today's Date : 04/07/94  
Time : 13:42  
Page No.: 4  
PIP Serial No. : 3-094-0150

MSE Serial No. :  
LER Serial No.:  
Other Rpt. No. :

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

**IV. Corrective Actions**

Brief Proposed Corrective Action:

Resp Grp: DTD

Orig Grp: CES

- 1 B&W to revise their procedure to address obtaining written direction as to the reactor building/reactor vessel coordinates prior to installing reactor vessel inspection tool. This change to be reviewed by GSD/DTD/NDE.

Prop CAC: A3      Actual CAC:      Outage :

Work Orders/Requests:

MOD Info:

Mode:

RGC Item :

RGC Item:

SRG Item :

QVD Item:

INPO Item:

Actual Corrective Action Resolution From: DTD      Grp Status: OPEN

Is Corrective Action ready for approval? (y,n): No

Assigned To : /

Mgmt Exception: No

Orig Due Date : 04/24/94      Curr Due Date: 06/30/94      # of Ext.: 0

Approved By :

Group:

App Date : / /

Brief Proposed Corrective Action:

Resp Grp: CES

Orig Grp: CES

- 2 Revise Oconee 3rd period 10 year ISI plan to include reference to a drawing which identifies the reactor building, reactor vessel, and other components' WXYZ coordinates.

Prop CAC: A      Actual CAC:      Outage :

Work Orders/Requests:

MOD Info:

Mode:

RGC Item :

RGC Item:

SRG Item :

QVD Item:

INPO Item:

Actual Corrective Action Resolution From: CES      Grp Status: OPEN

Is Corrective Action ready for approval? (y,n): No

Today's Date : 04/07/94  
Time : 13:42  
Page No.: 5  
PIP Serial No. : 3-094-0150

MSE Serial No. :  
LER Serial No.:  
Other Rpt. No. :

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

Assigned To : / Mgmt Exception: No  
Orig Due Date : 04/24/94 Curr Due Date: 06/30/94 # of Ext.: 0  
Approved By : Group: App Date : / /

Brief Proposed Corrective Action: Resp Grp: CES  
Orig Grp: CES  
3 Verify information taken during Unit 3 cycle 14 refueling out-  
tage on the reactor vessel is in a format that a person re-  
viewing the information in 2004 will know where to look for id-  
entified indications.

Prop CAC: A1 Actual CAC: Outage :

Work Orders/Requests:

MOD Info: Mode:  
RGC Item : RGC Item:  
SRG Item : QVD Item:  
INPO Item:  
Actual Corrective Action Resolution From: CES Grp Status: OPEN

Is Corrective Action ready for approval? (y,n): No  
Assigned To : / Mgmt Exception: No  
Orig Due Date : 04/24/94 Curr Due Date: 06/30/94 # of Ext.: 0  
Approved By : Group: App Date : / /

**V. Final and Overall PIP Approval**

Criterion XVI Review:

XVI Review Not Required for this PIP

Overall PIP Approval:

Assigned To: TJCOLEMA / TKROYAL Due Date: 05/01/94  
Approved By: Group: CES Date: / /

End of the Document FOR PIP No.: 3-094-0150  
The Status of this PIP No. is : OPEN

Today's Date : 04/07/94  
Time : 13:43  
Page No.: 1  
PIP Serial No. : 0-094-0155

MSE Serial No. :  
LER Serial No. :  
Other Rpt. No. : NRC INSPECTION 287/94-400 & 0

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

**I. Problem ID**

Occurred Time/Date:            /   /            Discovered Time/Date:            01/27/94

Unit(s): 0	Status at Time Discovered:	Unit 1	Unit 2	Unit 3
	Mode:	1	1	6
	% Power:	100	100	0

Unit Status Remarks:

System(s) Affected:

- 1). N/A = Not Related to a Unit's System.

Problem Found While Working With Work Order No.:

Location of Problem - Bldg:            Elev:            Column Line:  
Location Remarks:

**Method Used To Discover Problem:**

NRC Inspection 287/94-400 and 94-03

**Brief Problem Description:**

UT Examination Sketches do not reflect actual conditions

**Detailed Problem Description:**

During NRC Inspections 287/94-400 and 94-03 the NRC inspectors noted several examples of where UT Examination sketches were not accurate representations of the conditions found during the examination. This was cited as a Deviation from Code based on IWA-2232 of ASME Section XI and Procedure NDE-600. One of the Inspectors indicated this problem had been identified previously. The NDE Level III indicated training had been performed to correct this weakness, but based on NRC's review of documentation generated during the current Unit 3 outage, it appears this was ineffective in resolving this concern.

Three weaknesses were also identified which need to be evaluated and the appropriate action taken.

- 1) RT Film packages reviewed for the Unit 3 outage had more than expected artifacts.
- 2) Procedure NDE-940 does not provide guidance on how to document UT readings when scanning an area.
- 3) From the review of UT documentation it appeared there was inconsistencies in classifying Beam Re-direction and Mode

Today's Date : 04/07/94  
Time : 13:43  
Page No.: 2  
PIP Serial No. : 0-094-0155

MSE Serial No. :  
LER Serial No.:  
Other Rpt. No. : NRC INSPECTION 287/94-400 & 0

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

Conversion. It was also unclear as to the process used by the inspectors to reach their conclusions for these calls.

Originated by: DWDALTON Group: RGC Date: 01/27/94

Revised by: DWDALTON Group: RGC Date: 01/28/94

Other Units/Components/Systems/Areas Affected (Y,N,U): YES

Immediate Corrective Actions:

No immediate action is needed. This concern involves a documentation problem and the results of previous examinations are not being questioned. The NRC Inspectors did indicate this had been identified previously and at other Duke locations.

Originated by: DWDALTON Group: RGC Date: 01/27/94

Revised by: DWDALTON Group: RGC Date: 01/28/94

Corrective Action Work Order No.:

Problem Identified By: DWDALTON Group: RGC Date: 01/27/94  
Problem Entered By : DWDALTON Group: RGC Date: 01/27/94

II. Significance

Is the Problem Significant? N Action Category: 3  
MSE No.: LER No.: Other Report No.: NRC INSPECTION 287/94-400  
OEP No.:

Event Code(s) :  
1). 01 = NRC

Screening Remarks:

This concern was raised during an NRC Inspection. It was also indicated this had been observed at other Duke locations.

Responsible Group(s) for Proposed Resolution :

	Original Due Date	Current Due Date	# Ext.
1). DTD = Diversified Technology	02/26/94	02/26/94	0

Today's Date : 04/07/94  
Time : 13:43  
Page No.: 3  
PIP Serial No. : 0-094-0155

MSE Serial No. :  
LER Serial No.:  
Other Rpt. No. : NRC INSPECTION 287/94-400 & 0

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

Responsible Group for Cause Code Evaluation : DTD Due Date: 02/26/94

Responsible Group for Overall PIP Approval : RGC Due Date: / /

Screened By: DWDALTON Group: RGC Date: 01/27/94

**III. Problem Evaluation**

System(s) Affected :

1). N/A = Not Related to a Unit's System.

Affected Equipment:

WMS Equipment ID No.

Comp.

Code

Manufacturer

Name

Most Probable Group Causing Event

Group INPO Cause Code(s) :

Status: OPEN

Cause(s) of Problem:

Is Cause Determination Complete (y,n) : No

Assigned To : /

Mgmt Exception: No

Orig Due Date : / / Curr Due Date: 02/26/94

# of Ext.: 0

Approved By :

Group: DTD

App Date : / /

Proposed Resolution From: DTD

Grp Status: OPEN

Is Proposed Resolution ready for approval? (y,n): No

Assigned To : /

Mgmt Exception: No

Orig Due Date : 02/26/94 Curr Due Date : 02/26/94

# of Ext.: 0

Approved By :

Group :

App Date : / /

Remarks:

**IV. Corrective Actions**

**V. Final and Overall PIP Approval**

Today's Date : 04/07/94  
Time : 13:43  
Page No.: 4  
PIP Serial No. : 0-094-0155

MSE Serial No. :  
LER Serial No.:  
Other Rpt. No. : NRC INSPECTION 287/94-400 & 0

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

Criterion XVI Review:

XVI Review Not Required for this PIP

Overall PIP Approval:

Assigned To: /

Due Date: / /

Approved By:

Group: RGC

Date: / /

---

End of the Document FOR PIP No.: 0-094-0155

The Status of this PIP No. is : OPEN



Today's Date : 04/07/94  
Time : 13:43  
Page No.: 1  
PIP Serial No. : 3-094-0425

MSE Serial No. : 3-094-0425  
LER Serial No.:  
Other Rpt. No. : N/A

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

**I. Problem ID**

Occurred Time/Date:            /   /            Discovered Time/Date: 15:30 03/23/94

Unit(s): 3	Status at Time Discovered:	Unit 1	Unit 2	Unit 3
	Mode:	N/A	N/A	5
	% Power:	N/A	N/A	0

Unit Status Remarks:

System(s) Affected:  
1). PR = Purge

Problem Found While Working With Work Order No.: N/A

Location of Problem - Bldg: R            Elev: ?            Column Line: ?  
Location Remarks: Penetration #20

**Method Used To Discover Problem:**

Data Review

**Brief Problem Description:**

VT-2 Inspection Not Performed on Penetration #20

**Detailed Problem Description:**

During EOC14 for Unit 3, a performance test (Appendix J) was used in lieu of a System Pressure Test (Item Number C07.021.019, Drawing OFD-116A-3.1, Penetration #20) without filing for a Request for Relief or requesting use of Code Case N-522 from the NRC. This problem was identified during the review of Pressure Test documentation at the end of the outage. This situation may also be applicable to other penetrations tested during EOC13 and EOC14 for Unit 3.

Originated by: JMBOUGHM Group: QAT Date: 03/28/94

Other Units/Components/Systems/Areas Affected (Y,N,U): YES

**Immediate Corrective Actions:**

None

Originated by: JMBOUGHM Group: QAT Date: 03/28/94

Today's Date : 04/07/94  
Time : 13:43  
Page No.: 2  
PIP Serial No. : 3-094-0425

MSE Serial No. : 3-094-0425  
LER Serial No.:  
Other Rpt. No. : N/A

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

Corrective Action Work Order No.:

Problem Identified By: JMBOUGHM    Group: QAT    Date: 03/28/94  
Problem Entered By : JMBOUGHM    Group: QAT    Date: 03/28/94

**II. Significance**

Is the Problem Significant? Y    Action Category: 2  
Significance Code: 2    - Reportable to regulatory agencies  
MSE No.: 3-094-0425    LER No.:    Other Report No.: N/A  
OEP No.: N/A

Event Code(s) :  
1). 03 = Industry Codes

**Screening Remarks:**

This item is POTENTIALLY REPORTABLE because NRC has not approved the ASME code case however the ASME code case was used by ONS personnel to avoid the penetration inspections.

Originated by: RFCOLE    Group: QAT    Date: 03/28/94

Screened By: KWSCHMID    Group: QAT    Date: 03/28/94

Operability:    Status: CLOSED  
Sys/Comp PRESENT Operable?(Y,N,C,E): Y    Rqd Mode:  
Resp. Grp for Present Operability :    Due Date: / /  
Evaluated By : HDUMEYER    Group : SRG    Act Date: 03/29/94

Comments:

Sys/Comp PAST Operable ?(Y,N,C,E) : Y    Status: CLOSED  
Resp. Grp for Past Operability :    Due Date: / /  
Evaluated By : HDUMEYER    Group : SRG    Act Date: 03/29/94

Comments:

Reportability:  
Problem Reportable? (Y,N,E) : N  
Reportable Per:

Today's Date : 04/07/94  
Time : 13:43  
Page No.: 3  
PIP Serial No. : 3-094-0425

MSE Serial No. : 3-094-0425  
LER Serial No.:  
Other Rpt. No. : N/A

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

Responsible Group for Reportability: Due Date: / /  
Evaluated By : HDUMEYER Group : SRG Act Date: 03/29/94

Comments: Per conver. with D. Dalton of RGC

**Notifications Made:**

Regulatory Agency Contactee :  
Duke Power Company Contactor : Date : / /  
Date NRC Res. Inspector Notified: / /  
Date Notified VP or Sta. Mgr. : / /  
Date Notified NS Duty Engineer : / /

**Investigation Report:**

Resp. Group for Invest. Report : Date : / /  
Investigator : Group: Act Date : / /  
Date Due to V.P. or Station Mgr.: / /  
Date Regulatory Agency Rpt. Due : / /  
Date Investigation Report Apprvd: / /

NRC Cause Code(s) :

Responsible Group(s) for Proposed Resolution :

	Original Due Date	Current Due Date	# Ext.
1). CES = Component Engineering	04/22/94	04/22/94	0

Responsible Group for Cause Code Evaluation : CES Due Date: 04/22/94

Responsible Group for Overall PIP Approval : SRG Due Date: / /

**III. Problem Evaluation**

System(s) Affected :

1). PR = Purge

Affected Equipment:

WMS Equipment ID No.	Comp. Code	Manufacturer Name
----------------------	---------------	----------------------

Most Probable Group Causing Event  
Group INPO Cause Code(s) :

Status: OPEN

Cause(s) of Problem:

Today's Date : 04/07/94  
Time : 13:43  
Page No.: 4  
PIP Serial No. : 3-094-0425

MSE Serial No. : 3-094-0425  
LER Serial No.:  
Other Rpt. No. : N/A

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

Is Cause Determination Complete (y,n) : No  
Assigned To : VBDIXON / TKROYAL Mgmt Exception: No  
Orig Due Date : 04/22/94 Curr Due Date: 04/22/94 # of Ext.: 0  
Approved By : Group: CES App Date : / /  
SRG Concurrence: Date : / /

Proposed Resolution From: CES Grp Status: OPEN

Is Proposed Resolution ready for approval? (y,n): No  
Assigned To : VBDIXON / TKROYAL Mgmt Exception: No  
Orig Due Date : 04/22/94 Curr Due Date : 04/22/94 # of Ext.: 0  
Approved By : Group : App Date : / /  
SRG Concurrence: Date : / /

Remarks:

IV. Corrective Actions

V. Final and Overall PIP Approval

Criterion XVI Review:  
XVI Status : Required - Not Under Review Yet GO PIP No.:  
Assigned To: / Due Date: / /  
Approved By: Group: Date: / /  
Overall PIP Approval:  
Assigned To: / Due Date: / /  
Approved By: Group: SRG Date: / /  
Microfilm Roll/Frame : /

End of the Document FOR PIP No.: 3-094-0425  
The Status of this PIP No. is : OPEN

---

Today's Date : 04/07/94

Time : 13:43

Page No.: 5

PIP Serial No. : 3-094-0425

MSE Serial No. : 3-094-0425

LER Serial No.:

Other Rpt. No. : N/A

**OCONEE NUCLEAR STATION**  
**Problem Investigation Process**  
**Problem Investigation Form**

**10.0 Class 1 and 2 Repairs and Replacements**

As required by ASME Section XI 1980 Edition, a record of the Class 1 and Class 2 Repairs and Replacements for work performed from September 26, 1992 through February 24, 1994 is provided and is included in this section of the report. The individual work request documents are on file at Oconee Nuclear Station.