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SCE&G®
A SCANA COMPANY

June 21, 2012
RC-12-0097

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir / Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS) UNIT 1
DOCKET NO. 50-395
OPERATING LICENSE NO. NPF-12
REQUEST FOR WELD RECATEGORIZATION FOR VCSNS STEAM GENERATOR NOZZLE TO SAFE END WELDS
[PRELIMINARY SUBMITTAL – RR-III-08]

Pursuant to 10CFR50.55a(g)(6)(ii)(F)(2), South Carolina Electric & Gas Company (SCE&G), acting for itself and as an agent for South Carolina Public Service Authority (Santee Cooper), hereby submits the attached requests for recategorization for the Steam Generator Nozzle Dissimilar Metal Welds.

Due to the June 21, 2011 rulemaking change to 10CFR50.55a [FR36232 Volume 76, Number 119], the primary steam generator (SG) nozzle to safe end welds are required to have a baseline inspection performed in the first outage following January 20, 2012. For VCSNS the next outage is RF-20 scheduled for Fall 2012. The rulemaking requires the use of ASME Boiler & Pressure Vessel Code (BPVC) Code Case N-770-1 with conditions specified in 10CFR50.55a(g)(6)(ii)(F). VCSNS is requesting for alternative categorization to inspection Item G of Code Case N-770-1 and an alternative to the implementation date requirements contained in 10CFR50.55a(g)(6)(ii)(F)(3) to be provided at a later date. Enclosure 1 provides the basis for the proposed weld recategorization and addresses the concerns provided within NRC document "Summary of Public Meeting Between the Nuclear Regulatory Commission Staff and Industry Representatives on Implementation of ASME Code Case N-770-1," [ML112240818] dated August 12, 2011.

Per teleconference between the NRC and VCSNS, the station is providing this preliminary supporting information for recategorization of the steam generator nozzle safe end welds. VCSNS will provide the remainder of the bases for recategorization and will request approval of an alternative inspection date, in accordance with paragraphs 10CFR50.55a(a)(3)(ii), in a later submittal. It is anticipated that the remainder of the information required for the recategorization and the relief request will be submitted in the third week of July 2012.

A047
NRR

SCE&G will be requesting NRC approval of the proposed alternatives by October 12, 2012 to support refueling milestones and compliance with 10CFR50.55a(g)(6)(ii)(F)(3).

This letter contains no commitments. Should you have any questions, please call Bruce L. Thompson at 803-931-5042.

Very truly yours,

Thomas D. Gatlin

JG/TDG/gr

Enclosure 1: Request For Weld Recategorization
- Attachment 1: Replacement Steam Generator Primary Inlet/Outlet Nozzle to Safe End Weld Design
- Attachment 2: Final NDE Inspection Reports
- Attachment 3: First Inservice Inspection for Steam Generator "A"

c: Without Attachments 2 and 3 unless noted with an *

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South Carolina Electric & Gas Co. (SCE&G)
Virgil C. Summer Nuclear Station Unit 1 (VCSNS)
Request For Weld Recategorization

1. ASME Code Component(s) Affected

The affected components are the VCSNS, Steam Generator Nozzle (Hot and Cold Leg) to Safe End Welds which are Alloy 82 with an Alloy 152 inlay that was originally installed during fabrication. The VCSNS third 10-year inservice inspection (ISI) interval ends December 31, 2013.

Table 1

Examination Category	Inspection Item	Description
N-770-1	A-2	Weld CGE-1-4100A-31DM, Steam Generator "A" Hot Leg Nozzle
N-770-1	B	Weld CGE-1-4100A-32DM, Steam Generator "A" Cold Leg Nozzle
N-770-1	A-2	Weld CGE-1-4200A-28DM, Steam Generator "B" Hot Leg Nozzle
N-770-1	B	Weld CGE-1-4200A-29DM, Steam Generator "B" Cold Leg Nozzle
N-770-1	A-2	Weld CGE-1-4300A-29DM, Steam Generator "C" Hot Leg Nozzle
N-770-1	B	Weld CGE-1-4300A-30DM, Steam Generator "C" Cold Leg Nozzle

2. Applicable Code Edition and Addenda

ASME Code Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1998 Edition through 2000 Addenda.

3. Applicable Code Requirement

Code Case N-770-1, "Alternative Examination Requirements and Acceptance Standards for Class 1 PWR Piping and Vessel Nozzle Butt Welds Fabricated with UNS N06082 or UNS W86182 Weld Filler Material With or Without Application of Listed Mitigation Activities Section XI, Division 1."

ASME Code Section XI, Division 1, "Rules for Inspection and Testing of Components of Light Water Cooled Plants."

Article IWB-2500, "Examination and Pressure Test Requirements"
Table IWB-2500-1, "Examination Categories"

4. Reason for Request

Recategorization is being requested due to the imposed rulemaking change to 10CFR50.55a [FR36232 Volume 76, Number 119], issued June 21, 2011. The rulemaking change requires the use of ASME Boiler & Pressure Vessel Code (BPVC) Code Case N-770-1 with conditions specified in 10CFR50.55a(g)(6)(ii)(F) specifically for Class 1 Piping and Nozzle Dissimilar-Metal Butt Welds. As stated within 10CFR50.55a(g)(6)(ii)(F)(2):

> "...all other butt welds that rely on Alloy 82/182 for structural integrity shall be categorized as Inspection Items A–1, A–2 or B until the NRC staff has reviewed the mitigation and authorized an alternative code case Inspection Item for the mitigated weld..."

VCSNS is requesting an alternative categorization to inspection items specific to the six replacement Steam Generator Nozzle (Hot and Cold Leg) to Safe End Welds which are Alloy 82 with an Alloy 152 inlay that was originally applied during fabrication. Based on the manufacturing process of the replacement steam generators (RSG) and guidance from Code Case N-770-1, the VCSNS Steam Generator Nozzles' (Hot and Cold Leg) Safe End Welds should be categorized as Inspection Item G, "Uncracked Butt Weld Mitigated With An Inlay."

5. Proposed Alternative and Basis for Use

VCSNS is requesting an alternative categorization for replacement Steam Generator Nozzles (Hot and Cold Leg) Safe End Welds. Due to the imposed rulemaking change to 10CFR50.55a, VCSNS Steam Generator Nozzles (Hot and Cold Leg) to Safe End Welds are categorized as Code Case N-770-1 Inspection Items A-2 and B. Based on the manufacturing process of the replacement steam generators and guidance from Code Case N-770-1, VCSNS Steam Generator Nozzle (Hot and Cold Leg) Safe End Welds should be categorized as Inspection Item G, "Uncracked Butt Weld Mitigated With An Inlay."

VCSNS has three Delta-75 steam generators that were installed as replacements in fall 1994 (RF8). The replacement steam generators (RSG) were placed in service in December 1994 and have been in service for 17 calendar years. The steam generators are vertical shell and U-tube evaporators with integral moisture separating equipment. The units are primarily carbon steel and the interior surfaces of the reactor coolant channel head and nozzles are clad with austentic stainless steel. The Steam Generator Nozzles (Hot and Cold Leg) and Safe Ends are joined by Alloy 82 with an Alloy 152 inlay that was originally applied during fabrication. The design basis for the Hot Leg Operating Temperature at full power is 621.9 degrees Fahrenheit and at the Cold Leg 552 degrees Fahrenheit.

The VCSNS steam generators were fabricated with factory welded forged stainless steel safe ends, attached to the primary inlet/outlet nozzles with Alloy 82 welds. The

Alloy 82 weld material is sealed with Alloy 152 cladding on the channel head integral nozzle inside diameter (including the Alloy 82 weld deposited buttering) and with inlays of Alloy 152 on the inside surface of the dissimilar metal (DM) nozzle to safe end welds, so as to avoid primary water contact with the Primary Water Stress Corrosion Cracking (PWSCC) susceptible Alloy 82 weld material. This configuration is shown on Attachment 1 of this enclosure. According to the requirements of the now mandatory Code Case N-770-1, these DM weld regions must be inspected at a higher frequency (5 years and 7 years for replacement steam generators (RSG) primary inlet and outlet nozzle DM welds respectively) than the 10 year frequency normally required by ASME Section XI.

Since the DM welds of these nozzles do not have susceptible material exposed to the primary water environment because of the Alloy 152 cladding and weld inlay on the inside wetted surfaces, it would be beneficial to categorize them as Inspection Item G "Un-cracked butt weld mitigated with an inlay" according to the Code Case, but the DM welds for these nozzles are currently being categorized as Inspection Items A-2 and B "unmitigated butt welds".

South Carolina Electric & Gas Company (SCE&G) is providing the following information that was discussed within Question 29 from "Summary Of Public Meeting Between The Nuclear Regulatory Commission Staff And Industry Representatives On Implementation Of ASME Code Case N-770-1," [ML112240818] dated August 12, 2011.

Item	Description
1	***pre-inlay/onlay examinations performed including eddy current examination and acceptance criteria followed,***

[VCSNS Response]
Channel head nozzle base metal surface – Magnetic particle test (MT) prior to weld buttering per NB-5130 requirements with the additional restriction of 0.06" maximum length for NB-5130(b) laminar type imperfections.

Channel head nozzle with weld buttering machined bore surface – Penetrant test (PT) prior to weld overlay per NB-5000 requirements with the additional restriction of 0.25" maximum length for the NB-5130(b) laminar type imperfections.

Channel head nozzle as overlayed/clad bore surface – Ultrasonic test (UT) for lack of bond and for defects per Section V, Article 5, paragraph T-543, techniques 1 & 2.

Channel head nozzle with machined safe end prep – PT the ID, OD and end prep per NB-5000 requirements with the additional restriction of 0.25" maximum length for the NB-5130(b) laminar type imperfections.

Nozzle to safe end weld prior to final machining – UT per IWB-2500 requirements and PT per NB-5000 requirements with the additional restriction of 0.25" maximum length for the NB-5130(b) laminar type imperfections. Radiographic test (RT) examine the entire nozzle end weld buttering and the ID tie-in, the safe end weld and 0.50" minimum to each side per NB-5000 requirements.

Final machined surfaces (the primary nozzle safe end forging, the safe end weld, the nozzle buttering, the nozzle ID overlay/cladding and nozzle OD forging) – PT per NB-5000 requirements. Indications with major dimensions greater than 0.03" shall be reported to engineering for information.

Reference Attachment 2, for the Final NDE Inspection Reports.

2	***repairs performed and any fillers materials used***

[VCSNS Response]
Weld repairs were performed on the nozzle to safe end DM welds for all three Steam Generators.

For the shop order 12148 RSG, the Outlet Nozzle (W-Z) had a linear indication in the weld inlay and several rounded indications in the buttered nozzle overlay of the nozzle to safe end welds. All indications were removed by grinding, re-inspected to confirm removal, and the areas were welded with Alloy 52. The inlet nozzle (W-X) had no indications.

For the shop order 12149 RSG, the Inlet Nozzle (W-X) had three linear indications in the buttered nozzle overlay. All indications were removed by grinding the inside diameter (ID) and the areas were welded with Alloy 52. Also for the shop order 12149 RSG, Outlet Nozzle (W-Z) had two areas on the outside diameter (OD) with lack of fusion and one area on the ID with defects within the nozzle to safe end groove weld. All areas were machined to remove the areas of lack of fusion and defects then the OD and ID grooves were welded with Alloy 82 followed by the final 0.27 inch inlay on the ID being welded with Alloy 152.

For the shop order 12150 RSG, the Inlet Nozzle (W-X) had 5 locations with defects in nozzle buttering found while welding the OD of nozzle to safe end weld. All defects were removed by grinding the OD and the areas were welded with Alloy 82. Also, for the shop order 12150 RSG, the Outlet Nozzle (W-Z) had one area of lack of fusion located 1.75 inches deep from the ID surface. The area was removed by grinding and welded with Alloy 152. The Outlet Nozzle (W-Z) also had two other areas with linear indications and lack of fusion that were located at 1.3 inches to 1.65 inches from the ID surface. These areas were removed by grinding then the ID grooves were completely welded with Alloys 52 and 152.

In each case, the thickness of the inlay after the repair was not affected, as the inlay was reworked to design requirements.

3	***inlay/onlay materials used, including chromium content and the method used to determine the as-deposited weld bead chromium content***

[VCSNS Response]
A summary of the weld metal with Chromium content is provided in Table 2.

Table 2

Steam Generator	A	B	C
Shop Order Number	SG3L-12148	SG3L-12150	SG3L-12149
Channel Head Assembly S/N	3591J	3590J	3589J
Channel Head	0.15% Cr	0.18% Cr	0.16% Cr
Safe Ends	16.70% Cr	16.75% Cr	16.75% Cr
Nozzle Alloy 82 Buttering	19.38% Cr	20.25% Cr	20.58% Cr
Nozzle/Buttering Bore Alloy 152 Cladding	28.78% Cr	28.78% Cr	28.78% Cr
Nozzle to Safe End Groove Alloy 82 Weld	19.38% Cr	20.34% Cr	19.38% Cr
Nozzle to Safe End Alloy 152 Weld Inlay	29.02% Cr	28.84% Cr	28.78% Cr

4	***methods used to identify the dissimilar metal weld fusion zones and the accuracy of the methods used,***

[VCSNS Response]
There is no issue regarding identification of the edges of the dissimilar metal welds, to ensure the coverage is complete, for the replacement steam generators. As shown in Attachment 1, the inlay merges with the stainless cladding at a location over the carbon steel nozzles, so even if there was incomplete coverage, the susceptible materials would not be exposed. At the upper end of the configuration, the Alloy 52/152 extends to the edge of the weld preparation groove, thus ensuring that the coverage will be complete. Further verification that the coverage is complete comes from the NDE performed on the weld region before the replacement steam generators left the shop.

5	***qualifications of the weld procedure specifications, welders and welding operators***
[VCSNS Response] To be provided upon completion of flaw evaluation.	
6	***pre- and post-weld heat treatment or temper bead welding requirements followed***
[VCSNS Response] The channel head nozzles were post-weld heat treated after the nozzle ends were buttered with Alloy 82 and the nozzle inside diameter was clad with Alloy 152, at 1125 +/- 25 degrees Fahrenheit for 1.75 to 2.25 hours. The inlay requires a minimum of 30 minutes at the same temperature range, so it was done coincident with the longer heat treatment.	
7	***design and analysis requirements used, in detail,***
[VCSNS Response] The design and analytical requirements for these replacement Steam Generators were taken directly from Section III of the ASME Code. The stress and fatigue evaluation requirements are contained in NB-3000 of the Code, and the stress report confirms that all applicable limits were met by the design. There were no additional requirements imposed, as Code Case N-770 did not exist at the time.	

8	***preservice and inservice inspections performed since installation of the inlays/onlays***

[VCSNS Response]
The Section XI pre-service inspections were performed by Wesdyne International on all three generators in July of 1994. Both UT and liquid penetrant exams were performed, and no recordable indications were detected in any of the three steam generators.

As required by Section XI, an in-service examination was performed in October of 1997 on one steam generator. Again, both UT and liquid particle exams were performed that time by Raytheon. As before, there were no reportable indications.

SCE&G submitted and received NRC approval under Relief Request RR-II-07 that approved Risk-Informed Inservice Inspections as an alternative to ASME Section XI inspection requirements. VCSNS Risk-Informed Inservice Inspection Program was developed in accordance with NRC approved EPRI Technical Report (TR)-112657 [ML993190474]. Under this program VCSNS determined the Steam Generator Nozzles (Hot and Cold Leg) Safe End Welds as Low Risk as defined within ASME Code Case N-578 guidance. As Low Risk welds, volumetric exams were not required but pressure/leak testing was still maintained. The NRC review of the quality and safety of the program was approved on May 12, 2003 [ML031320443] then reaffirmed on September 6, 2005 [ML052300616].

Reference Attachment 3, for the First Inservice Inspection for Steam Generator "A".

9	***ASME Code Editions and Addenda associated with requirements used, where applicable, and figures, as applicable, to assist in describing the information submitted in conjunction with the request for alternative categorization***

[VCSNS Response]
The replacement Steam Generators were fabricated to the 1971 edition of Section III, with addenda up to and including Summer 1971. The material properties used for the replacement generators were taken from the 1986 edition of the ASME code, for materials not available in the 1971 Code. The Alloy 690 and 52/152 properties were taken from Code Cases N-20 and N-474, and from the 1992 edition of the ASME Code, Section III. The specification for Alloy 690 and Alloy 52/152 was not contained in the earlier editions.

The plant is now using the 1998 edition of Section XI, with the 2000 Addenda.

10	***thickness of inlay/onlay***

[VCSNS Response]
As shown in Attachment 1 of this enclosure, the nominal thickness for the Alloy 152 applied over the buttering was 0.25 inches, while the nominal thickness of the Alloy 152 applied over the dissimilar metal weld was 0.13 inches.

The fabrication sequence as documented in the manufacturing records is summarized as follows:

- The carbon steel channel head integral nozzle end is buttered with weld-deposited Alloy 82 and preliminarily machined per drawing.
- The channel head nozzle inside diameter is clad with weld deposited stainless steel to within approximately 2 inches of the top of the buttered nozzle end per drawing. The first layer of cladding is 309L stainless steel followed by 308L stainless steel for the remaining layers.
- The nozzle inner diameter region from the stainless steel cladding to the end of the Alloy 82 buttered nozzle end is clad with weld-deposited Alloy 152.
- The nozzle end is machined with the safe end weld prep.
- Post-weld heat treat the channel head nozzle end for 1.75 to 2.25 hours at 1125 ± 25 degrees Fahrenheit is performed.
- The safe end forging is welded to the channel head nozzle with a double V-groove Alloy 82 weld.
- The final 0.27 inch of the nozzle inside diameter V-groove Alloy 152 weld (or inlay) is completed.
- The OD and the ID of the nozzle with safe end are final machined.
- A shop hydrotest is performed and shipping covers are welded to the end of the nozzle safe end.
- The safe end is machined at site with the piping side weld prep.

11	***flaw evaluation to show adequate thickness against stress corrosion cracking.*** [VCSNS Response] To be provided upon completion of flaw evaluation.
12	***for primary water stress corrosion crack growth rates for Alloy 52/152 weld materials, at this time, NRC recommends using the Alloy 182 crack growth rate curve provided in MRP-115, with an improvement factor (IF) of 100 for Alloy 52 welds and an IF of 10 for Alloy 152 welds.*** [VCSNS Response] To be provided upon completion of flaw evaluation.

6. Duration of Proposed Alternative:

This request for an alternative categorization for Steam Generator Nozzles (Hot and Cold Leg) to Safe End Welds will be a permanent change to the program for the duration of the operating license and license renewal. The Facility Operating License (NPF-12) was issued August 6, 1982 and was superseded by Renewed Facility Operating License issued on April 23, 2004. VCSNS is in the last period of its third 10 year inservice inspection (ISI) interval that will end December 31, 2013.

Per 10CFR50.55a(g)(6)(ii)(F)(3) the baseline examination shall be completed by the end of the next refueling outage after January 20, 2012. VCSNS will also be requesting relief under a later submittal to this letter to delay the baseline examination to 2014 (RF21).

7. Precedents:

None.

8. References:

Proprietary documents may be viewed at the Westinghouse Rockville, MD. office.

1. 10CFR50-55a, Codes and Standards
2. FR36232 Volume 76, Number 119, issued June 21, rulemaking change to 10CFR50.55a
3. Public Meeting Summary ASME N-770-1 [ML112240818]
4. Virgil C. Summer Nuclear Station – Relief Request (RR-II-07) Associated with the Risk-Informed Inservice Inspection (RI-ISI) Program (TAC NO. MB6523) [ML031320443]
5. ASME CODE CASE N-770-1
6. ASME Boiler and Pressure Vessel Code, Section XI, 1998 Edition through 2000 Addenda, American Society of Mechanical Engineers, New York.
7. EPRI 1010087 MRP-139
8. VCSNS Drawings [PROPRIETARY]
    a. 1MS-07-400-0001, Machining and Assembly - Channel Head Welding (6145E22)
    b. 1MS-07-400-0003, Primary Nozzle - Channel Head Welding (6145E22)

c. 1MS-07-400-0004, Nozzle Safe End Weld - Channel Head Welding (6145E22)
d. 1MS-07-400-0005, Safe End Final Machining - Channel Head Welding (6145E22)
e. 1MS-07-400-0007, General Notes - Channel Head Welding (6145E22)
f. CGE-1-4100A-31DM, Weld Profile, Steam Generator "A" Hot Leg Nozzle
g. CGE-1-4100A-32DM, Weld Profile, Steam Generator "A" Cold Leg Nozzle
h. CGE-1-4200A-28DM, Weld Profile, Steam Generator "B" Hot Leg Nozzle
i. CGE-1-4200A-29DM, Weld Profile, Steam Generator "B" Cold Leg Nozzle
j. CGE-1-4300A-29DM, Weld Profile, Steam Generator "C" Hot Leg Nozzle
k. CGE-1-4300A-30DM, Weld Profile, Steam Generator "C" Cold Leg Nozzle

9. Westinghouse LTR-SGDA-12-27 [PROPRIETARY], V. C. Summer Unit 1 Replacement Steam Generators – Manufacturing Records for Channel Head Primary Inlet/Outlet Nozzle to Safe End Welds, Dated June 18, 2012.

South Carolina Electric & Gas Co. (SCE&G)
Virgil C. Summer Nuclear Station Unit 1 (VCSNS)

Attachment 1

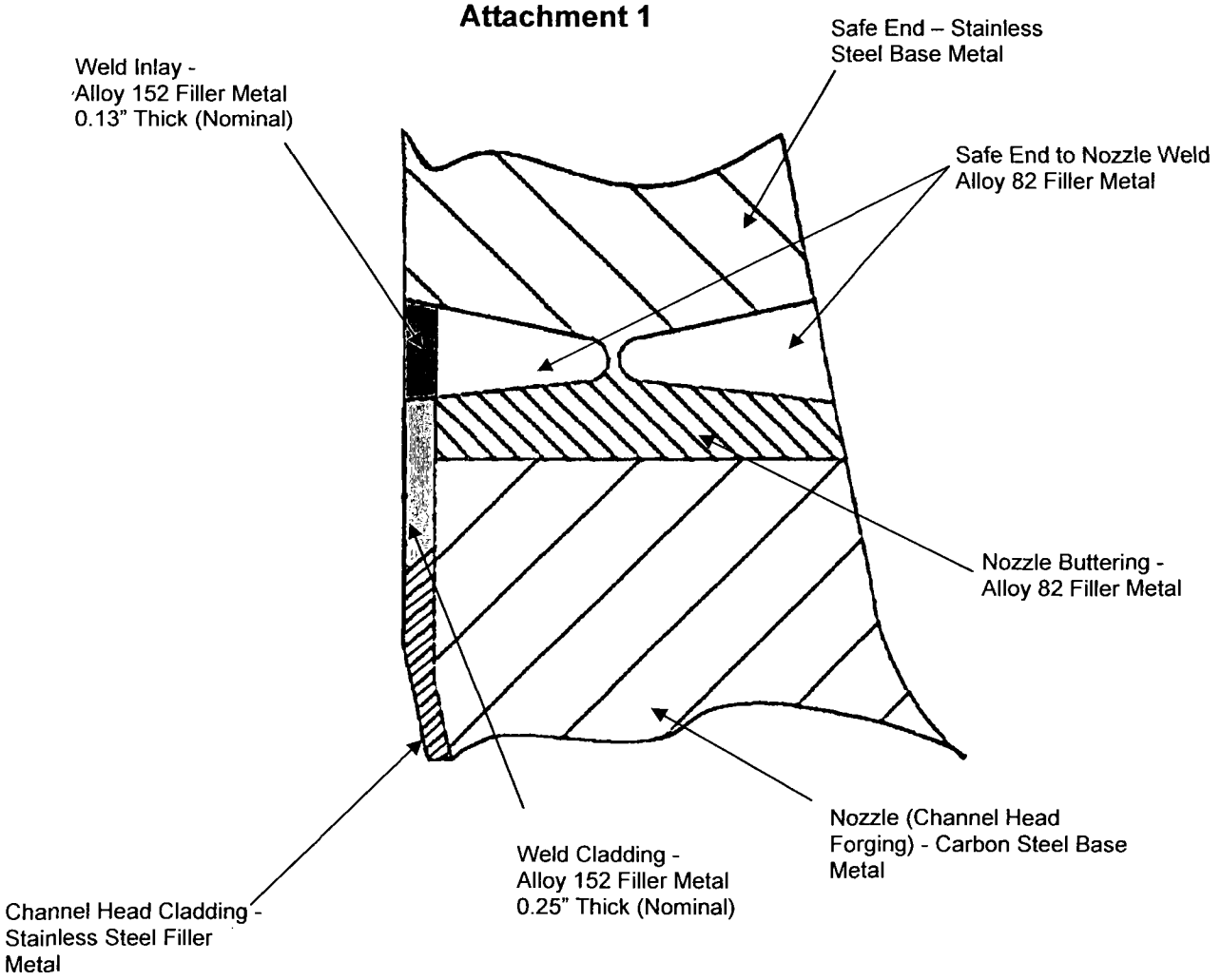


Figure 1
V. C. Summer Unit 1 Replacement Steam Generator
Primary Inlet/Outlet Nozzle to Safe End Weld Design

Note: Westinghouse design drawing 6144E65 identifies the channel head forging material as SA-508 Class 3a per Westinghouse specification A508C22.

Document Control Desk
Attachment 2
CR-12-00556
RC-12-0097
164 pages

South Carolina Electric & Gas Co. (SCE&G)
Virgil C. Summer Nuclear Station Unit 1 (VCSNS)

Attachment 2
Final NDE Inspection Reports

Steam Generator	A		C		B	
Shop Order Number	**SG3L-12148**		**SG3L-12149**		**SG3L-12150**	
Lower Assembly S/N	2984J		2985J		2986J	
Channel Head Assembly S/N	3591J		3589J		3590J	
Channel Head Forging Heat	RW27		RV85		RW21	
Safe End Forging Heats	RY17	RY18	RY13	RY16	RY14	RY15

SCE&G - SG3L12148
LOWER ASSEMBLY COMPLETE - SN 2984J

FINAL NDE/INSPECTION REPORTS

ROUTING	DESCRIPTION	PAGE
6145E22 T01	CHANNEL HEAD NOZZLE & MANWAY BUTTERING	539
6145E22 T02	CHANNEL HEAD BORE CLADDING	548
6145E22 T03	CHANNEL HEAD BOWL CLAD	553
6145E22 G01	CHANNEL HEAD	563
6145E39 G02	PLUG ASSEMBLY (2): 4077J & 4078J	608
6145E71 G01	AVB ASSEMBLY	611
6145E85 G01	LOWER ASSEMBLY COMPLETE	836 ~~845~~
9741D82 G01	AVB END CAP ASSEMBLY	880
9742D06 H01	SAFE END MACHINING (2)	893

SCE&G - SG3L12148
LOWER ASSEMBLY COMPLETE - SN 2984J

6145E22 T01 SN 3591J

OPN	*NDE*	*DESCRIPTION*	*PAGE*
020	MT	PRIMARY NOZZLE BUILD UP AREAS	540
045	VT	W-X PRIMARY NOZZLE BUILD UP AREA	541
225	VT	W-Z PRIMARY NOZZLE BUILD UP AREA	542
410	VT	Y-Z PRIMARY MANWAY BUILD UP AREA	543
455	VT	Y-X PRIMARY MANWAY BUILD UP AREA	544
630	PT	PRIMARY NOZZLE MACHINING AND BUILD UPS (ID & OD)	545
640	RT	PRIMARY NOZZLE BUILD UPS	546

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	T01	01	N/A	3591J	020	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	00	N/A	N/A	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH N&MW BU	MT two nozzles

INSPECTOR	DATE	LEVEL II	STAMP
R W COOKE	04/16/93		W 139

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: N/A

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER: N/A
WPP I.D. NUMBER: A-32-7
TEST WEIGHT I.D. NUMBER: A-38-2

POWDER: [X] MAGNAFLUX [ ] OTHER: N/A
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER:
W HEAT CODE NUMBER: RH480

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 4-17-93

F8820 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12450	6145E22	T01	04	N-A	3591J	045	N-A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N-A	N-A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION	STAMP
C/H	W-X NOZZLE Build UP	
LEVEL II INSPECTOR: R Curran	INSPECTION DATE: 4-16-93	
( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass ( )Backgouge ( )Other:		

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [X] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 8/12/94

F8608 - 01

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	To1	02	N/A	3591J	225	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH N4MW BU	W-E Nozzle Surface Cleanliness

INSPECTOR	DATE	LEVEL II	STAMP
L. Edmonds	5-11-93 ~~05/12/93~~ LE		

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: N/A

VISUAL AIDS USED: (X) NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL (X) FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: For JRO DATE: 5/13/93

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	T01	03	N/A	3591J	630	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	00	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH N&MW BU	NOZZLES W-X & W-Z ,(ID & OD MACHINE & BUILD-UPS

INSPECTOR	DATE	LEVEL II	STAMP
J E AINSLEY	07/29/93		W 82

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RT49
REMOVER	MAGNAFLUX	SKC-S	RT49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

NOTE: REF MDR 354443 WRITTEN ON FALSE CUTS ON W-X NOZZLE, (PT'd CLEAR) JCC

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 7-30-93

F8105 - 02

JRO SCE&G

H-14

Shop Order No. 12150

(W) NCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Page 1 of 1

CHECK ONE:	SUPPLIER	QIP NO.	REV.	THICKNESS	MATERIAL TYPE
( ) CASTING (X) WELDMENT ( ) OTHER	(W) PP	8332	01	*5 5/8"	P-3/INC

ASSEMBLY NO.	(W) H/C IDENTIFIERS	DRAWING NO.	ITEM	SUB	COMP. DESCRIPTION	OPER.	WELD NO.	IQI
3591J	N/A	6145E22	T01	04	CH N&MW BU	640	W-X BU NOZZLE	TYPE ASME SIZE #50's MATL SS

ISOTOPES	CURIES	SFD	SIZE (FSS)	X-RAY	FSS	FFD	SHIM SIZE & MATL
192 ( ) IRIDIUM 60 (X) COBALT	23	20 1/4"	.100 x - .106	____ MEV ____ KV N/A ____ MA	N/A	N/A	NONE

EXPOSURE TIME OR KRADS	ACCEPTANCE STANDARDS:	LEAD SCREENS	WELD PROC.#
2 HRS	(X) SECTION III ( ) SECTION VIII ( ) OTHER ( ) NG ( ) ND (X) NB	FRONT: ( ) .005" (X) .010" ( ) OTHER BACK: ( ) .005" ( ) .010" (X) OTHER .040	WPS-4532

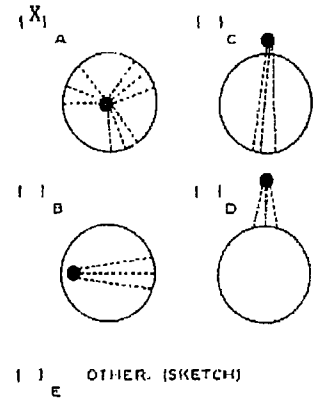
RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER	* USE WHEN TECHNIQUE VARIATIONS REQUIRE
0-1	✓																✓		✓					*RT'd AFTER CLADDING IN PROCESS BUTTERING
1-2	✓																✓	*	✓					*MACH. FALSE CUT OUT OF AREA OF INTEREST O.D. SURFACE CONDITION
2-3	✓																✓	*	✓					
3-4	✓																✓	*	✓					
4-5	✓																		✓					
5-6	✓																✓		✓					
6-7	✓																		✓					
7-8	✓																	*	✓					
8-9	✓																		✓					
9-0	✓																		✓					

REMARKS	TYPE OF EXPOSURE:
IQI * O.A.I. IQI * O.A.I. * O.A.I. IQI IQI IQI * O.A.I	(X) PANORAMIC ( ) OTHER ( ) 90° SHOT NO. OF EXPOSURE(S) 1

FILM: T EKC
TYPE ____ MFG. ____
SIZE 7 X 17
NO. OF FILMS 20 CASST. 10

SET-UP PERSONNEL & LEVEL
J.E.AINSLEY&G.ANTONE II's

RADIOGRAPHY SET-UP
CHECK ONE:



( ) E OTHER (SKETCH)

(W) NCD Level II RT Interpreter	Date	MRN/MRR No.	( ) Final X-Ray	R.I.R. Number Is The:
J.E. AINSLEY	9-10-93	N/A Ref. MRN/MRR No. N/A	(X) In-Process X-Ray	NCD X-Ray Log No. 62839

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA.

F-NCD-31622B, Rev. 3

JRO SCE&G

5/6

SCE&G - V.C. SUMMER SGR PROJ; P.O.: Q594687 PAGE

A.H.

Shop Order No. 12150

ⓦNCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Page 1 of 1

CHECK ONE: [ ] CASTING [X] WELDMENT [ ] OTHER | SUPPLIER: ⓦPP | QIP NO.: 8332 | REV.: 01 | THICKNESS: #5 5/8" | MATERIAL TYPE: P-3/INC

ASSEMBLY NO.	ⓦH/C IDENTIFIERS	DRAWING NO.	ITEM	SUB	COMP. DESCRIPTION	OPER.	WELD NO.	IQI TYPE / SIZE / MATL
3591J	N/A	6145E22	T01	04	CH N&MW BU	640	N-Z BU NOZZLE	ASME / #50 / SS

ISOTOPES	CURIES	SFD	SIZE (FSS)	X-RAY	FSS	FFD	SHIM SIZE & MATL
[ ] IRIDIUM 192 [X] COBALT 60	23	20 1/4"	.100 x .106	____ MEV ____ KV N/A MA	N/A	N/A	NONE

EXPOSURE TIME OR KRADS: 2 HRS

ACCEPTANCE STANDARDS: [X] SECTION III [ ] SECTION VIII [ ] OTHER [ ] NG [ ] ND [X] NB

LEAD SCREENS: FRONT: [ ].005" [X].010" [ ]OTHER .040 BACK: [ ].005" [ ].010" [X]OTHER

WELD PROC.#: WPS-4532

RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER	REMARKS
0-1	✓																		✓					IQI
1-2	✓																✓		✓					
2-3	✓																✓		✓					IQI
3-4	✓																✓							
4-5	✓																		✓					IQI
5-6	✓																		✓					
6-7	✓																		✓					
7-8	✓																		✓					IQI
8-9	✓																		✓					
9-0	✓																		✓					

* USE WHEN TECHNIQUE VARIATIONS REQUIRE

REMARKS: *RT'd AFTER CLADDING INPROCESS BUTTERING

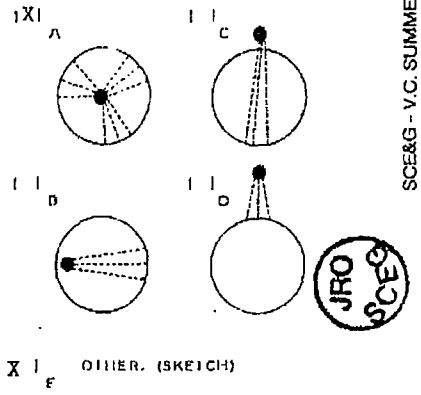
FILM: TYPE T MFG. EKC; SIZE 7 X 17; NO. OF FILMS 20 CASST. 10

TYPE OF EXPOSURE: [X] PANORAMIC [ ] OTHER; [ ] 90° SHOT; NO. OF EXPOSURE(S) 1

SET-UP PERSONNEL & LEVEL: J.AINSLEY & G.ANTONE II's

RADIOGRAPHY SET-UP

CHECK ONE:



JRO SCE&G

ⓦNCD Level II RT Interpreter: J.E. AINSLEY — Date: 9-9-93

MRN/MRR No.: N/A — Ref. MRN/MRR No.: N/A

( ) Final X-Ray (X) In-Process X-Ray

R.I.R. Number Is The: NCD X-Ray Log No. 62838

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA.

F-NCD-31622B, Rev. 3

SCE&G - V.C. SUMMER SGR PROJ; P.O.: 0594687 PAGE 547

SCE&G - SG3L12148
LOWER ASSEMBLY COMPLETE - SN 2984J

6145E22 T02 SN 3591J

OPN	*NDE*	*DESCRIPTION*	*PAGE*
030	VT	W-X PRIMARY NOZZLE BORE	549
103	VT	W-Z PRIMARY NOZZLE BORE	550
190	VT	Y-Z PRIMARY MANWAY BORE	551
280	VT	X-Y PRIMARY MANWAY BORE	552

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	T02	02	N/A	3591J	030	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH BORE CL	W-X NOZZLE CLEAN PRIOR TO WELDING

INSPECTOR	DATE	LEVEL II	STAMP
K J EDMONDS	08/10/93		W QA173

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: N/A

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: HG DATE: 8-11-93

F8629 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	T02	02	N/A	3591J	103	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH BORE CL	NOZZLE W2

INSPECTOR	DATE	LEVEL II	STAMP
J H SHERWOOD	07/31/93		

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [ ] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power
[X] White Glove

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: NC DATE: 8-2-93

F8629 - 00

JRO
SCE&G

SCE&G - SG3L12148
LOWER ASSEMBLY COMPLETE - SN 2984J

6145E22 T03 SN 3591J

OPN	*NDE*	*DESCRIPTION*	*PAGE*
080	VT	CHANNEL HEAD BOWL	554
200	VT	W-X PRIMARY NOZZLE TIE IN AREA	555
240	VT	W-Z PRIMARY NOZZLE TIE IN AREA	556
260	VT	Y-Z PRIMARY MANWAY TIE IN AREA	557
300	VT	X-Y PRIMARY MANWAY TIE IN AREA	558
340	VT	Y-Z PRIMARY MANWAY TIE IN AREA (1ST LAYER)	559
350	VT	X-Y PRIMARY MANWAY TIE IN AREA (1ST LAYER)	560
365	VT	W-X PRIMARY NOZZLE TIE IN AREA (1ST LAYER)	561
380	VT	W-Z PRIMARY NOZZLE TIE IN AREA (1ST LAYER)	562

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	T03	04	N/A	3571J	080	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CLOSURENESS OF CH HD.

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
J.E. Ainsley	3-18-93	W 82

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: (X) NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: (X) NATURAL [ ] FLASH LIGHT (X) DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: Kam DATE: 8/12/94

JRO SCE&G

F8629 - 01

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	T03	01	N/A	3591J	200	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH BOWL CL	CLEANLINESS OF W-X NOZZLE TIE IN AREA ONLY

INSPECTOR	DATE	LEVEL II	STAMP
J.E. AINSLEY	03/30/93		

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other:_____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

JRO SCE&G

APPROVED: [signature] DATE: 3/31/93

F8629 - 00

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	T03	4	N/A	3591J	240	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION	CLEANLINESS
ch. HD Bowl CID	W-2 NOZZLE	TIG IN

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
[signature]	4-1-93	W 103

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 6/22/94

F8629 - 01

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	T03	04	N/A	3591J	365	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	N/A	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH. HD	W-X Nozzle

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
[signature]	4-3-93	W 121 4 3 93

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: Cleanliness

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [X] NATURAL [ ] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 4-3-93

F8629 - 01

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E12	T03	01	N/A	35915	380	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH-Bowl-CL	Verified Chemistries of 2nd layer of Clad @ WS-2-102

INSPECTOR	DATE	LEVEL II	STAMP
R.M. Tow	04/06/93		W 83

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: N/A

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: JRO SCE&G HG DATE: 4/7/93

F8629 - 00

SCE&G - SG3L12148
LOWER ASSEMBLY COMPLETE - SN 2984J

6145E22 G01 SN 3591J

OPN	NDE	DESCRIPTION	PAGE
289	UT	CHANNEL HEAD BOWL, NOZZLE AND MANWAY CLADDING	564
295	PT	CHANNEL HEAD BOWL, NOZZLE AND MANWAY CLADDING	569
317	PT	CHANNEL HEAD NOZZLE WELD PREPS AND MANWAY FACE CLAD	571
325	MT	GROUND AREAS	574
		AFTER POST WELD HEAT TREAT	
390	MT	THERMOCOUPLE REMOVAL AREAS	575
395	PT	CLAD THERMOCOUPLE REMOVAL AREAS	576
400	PT	ALL CLADDING AND SAFE END WELD PREPS	577
520	PT	PARTITION PLATE WELD PREP	580
540	VT	SAFE END TO W-X NOZZLE TACK WELDS	582
610	VT	SAFE END TO W-Z NOZZLE TACK WELDS	583
665	RT	SAFE END TO W-Z NOZZLE WELD	584
670	RT	SAFE END TO W-Z NOZZLE WELD	586
704	VT	CLOSURE RING WELDS	587
705	PT	CLOSURE RING WELDS	588
725	VT	PARTITION PLATE TO CHANNEL HEAD TACK WELDS	589
837	VT	PARTITION PLATE TO CHANNEL HEAD WELD	591
840	PT	PARTITION PLATE TO CHANNEL HEAD WELD	594
842	UT	CLADDING UNDER PARTITION PLATE	597
855	VT	SAFE END TO W-X NOZZLE WELD	598
856	PT	SAFE END TOF W-X NOZZLE WELD	599
873	VT	SAFE END TO W-Z NOZZLE WELD	600
875	PT	SAFE END TOF W-Z NOZZLE WELD	601
879	UT	MANWAY GASKET SEATS	602
885	VT	MANWAY GASKET SEATS	603
887	PT	MANWAY GASKET SEATS	604
890	MT	CHANNEL HEAD WELD PREP	606
899	MT	PADS AND ALL GROUND AREAS	607

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	BOWL CLADDING

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	10/6/93 ~~10/07/93~~ BW	II	W 103

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS 0
RECORDABLE INDICATIONS* 0
AREA SCANNED SURFACE OF BOWL CLADDING *
*Complete Sketch!

FLAW DETECTOR: SM90 D S/N L-29-4 CALIBRATION DATE 10-4-93

	0 LONGITUDINAL	45	60	
SENSITIVITY	40-12-4.5			
SWEEP DELAY	6.46			
SWEEP RANGE	.5			
PULSE POSITION	9.28			
REP RATE	H			
SEARCH UNIT:		N/A	N/A	N/A
MFR/F SERIAL NO.	ULTRAN/143402			
SIZE	½"			
FREQUENCY	5.0 mHz			
SINGLE/DUAL	DUAL			

COUPLANT: ECHO GEL 3000 GRADE-25 BATCH NO./HEAT CODE 090317

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	10/6/93	5:00 am	BRW
	10/6/93	11:45 AM	BRW
	10/6/93	2:30 pm	BRW
END	10/6/93	3:30 pm	BRW

CAL.BLOCK L-30-18
REF.REFLECTOR ⅛" FBH
SCANNING SENSITIVITY:
+ 6 dB
of REF

COMMENTS: * EXCLUDING CENTER PORTION WHICH WAS NEIDED WITH SMAW, THIS AREA WILL BE DONE WITH A DIFFERENT CAL. BLOCK

APPROVED: [signature] DATE: 10/15/93

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	BOWL CLADDING

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	10/07/93	II	W 103

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS 0
RECORDABLE INDICATIONS* 0
AREA SCANNED SURFACE OF BOWL CLADDING * *Complete Sketch!

FLAW DETECTOR: SM90 D S/N L-28-4 CALIBRATION DATE 10-4-93

	0 LONGITUDINAL	45	60		
SENSITIVITY	40-12-4.5				
SWEEP DELAY	6.96				
SWEEP RANGE	5				
PULSE POSITION	9.28				
REP RATE	A				
SEARCH UNIT:		N/A	N/A	N/A	N/A
MFR/F SERIAL NO.	ULTRAN/143402				
SIZE	1/2"				
FREQUENCY	5.0 MHz				
SINGLE/DUAL	DUAL				

COUPLANT: ECHO GEL 3000 GRADE-25 BATCH NO./HEAT CODE 090217

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	10/7/93	8:30 AM	[illegible]
	10/7/93	12:30 pm	[illegible]
END	10/7/93	4:30 pm	[illegible]

CAL.BLOCK L-30-18
REF.REFLECTOR 1/8" FBH
SCANNING SENSITIVITY:
+ 6 db
@ REF

COMMENTS: * EXCLUDING CENTER PORTION WHICH WAS WELDED WITH SMAW, THIS AREA WILL BE DONE WITH A DIFFERANT CAL. BLOCK

APPROVED: [illegible] DATE: 8/10/94

F8565 - 00

JRO SCEG

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Bowl Cladding

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	10/07/93	A	W 103

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS
RECORDABLE INDICATIONS*
AREA SCANNED Bowl Clad (CENTER 12" Ø) * *Complete Sketch!

FLAW DETECTOR: SM90D S/N L-28-4 CALIBRATION DATE 10-4-93

	0 LONGITUDINAL	45	60
SENSITIVITY	40-14-4.5		
SWEEP DELAY	6.46		
SWEEP RANGE	.5		
PULSE POSITION	9.28		
REP RATE	H		
SEARCH UNIT:			
MFR/F SERIAL NO.	M1TRAN/143402	N/A	N/A
SIZE	1/2"		
FREQUENCY	5.0 MHz		
SINGLE/DUAL	DUAL		
COUPLANT:	Echo GEL 3000		BATCH NO./ HEAT CODE 090217

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	~~BN 9-30-93~~		
	10-7-93	1:00pm	BGL
END	10-7-93	3:30pm	BGL

CAL.BLOCK L-30-14
REF.REFLECTOR 1/8" FBH
SCANNING SENSITIVITY: REF

COMMENTS: * ALSO KNUCKLE RADIUS ON NOZZLES & MANWAYS & MANWAY BORES

APPROVED: Ken DATE: 8/10/94

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:02

S/O No	Drawing	Item	Sub	DR.	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	NOZZLE I.D.'S

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	10/11/93	II	W 103

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS 0
RECORDABLE INDICATIONS* 0
AREA SCANNED NOZZLES I.D. *Complete Sketch!

FLAW DETECTOR: SNOOD S/N L-28-4 CALIBRATION DATE 10-4-93

	0 LONGITUDINAL	45	60	
SENSITIVITY	40-14-5			
SWEEP DELAY	6.46			
SWEEP RANGE	.5			
PULSE POSITION	9.38			
REP RATE	H	N/A	N/A	N/A
SEARCH UNIT:				
MFR/F SERIAL NO.	WTRAN/143402			
SIZE	½"			
FREQUENCY	5.0 mHz			
SINGLE/DUAL	DUAL			

COUPLANT: Echo GEL 300 GRADE-25 BATCH NO./ HEAT CODE 090217

CALIBRATION:

	DATE	TIME	INITIALS
INITIAL	10/11/93	11:00am	BW
	10/11/93	1:30 pm	BW
END	10/11/93	1:30pm	BW

CAL.BLOCK L-30-10
REF.REFLECTOR ⅛" FBH
SCANNING SENSITIVITY: REF

COMMENTS:

APPROVED: Kam DATE: 8/10/94

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8563 REV:01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	THICKNESS OF CLADDING

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	10/11/93	H	W 103

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS
RECORDABLE INDICATIONS* N/A
AREA SCANNED 12" POINTS IN BOWL *Complete Sketch!

FLAW DETECTOR: SM90D S/N L-28-4 CALIBRATION DATE 10-4-93

	0 LONGITUDINAL	45	60	
SENSITIVITY	40-14-5			
SWEEP DELAY	6.46			
SWEEP RANGE	5			
PULSE POSITION	9.28			
REP RATE	H			
SEARCH UNIT:		N/A	N/A	N/A
MFR/F SERIAL NO.	143402			
SIZE	½"			
FREQUENCY	5.0 mHz			
SINGLE/DUAL	DUAL			

COUPLANT: Echo GEL 3000 GRADE-ZS BATCH NO./HEAT CODE 090217

CALIBRATION: INITIAL	DATE	TIME	INITIALS
	~~8:00pm~~		
	10/11/93	2:00PM	TBN
END	10/11/93	3:00pm	TBN

CAL.BLOCK L-30-7
REF.REFLECTOR cladding
SCANNING SENSITIVITY: REF

COMMENTS: ALL AREAS MEET MIN. CLADDING REQUIREMENTS

APPROVED: Ken DATE: 8/10/94

F8563 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	—	3591J	295	—

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	00	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	I.D. OF NOZZLES AND MANWAYS

INSPECTOR	DATE	LEVEL II	STAMP
J K ABERNATHY	10/12/93	II	

(X) Weld ( ) Weld Prep ( ) Base Metal ( ) Root Pass
( ) Backgouge ( ) Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 10/12/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	295	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	01	360372	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	BOWL CLAD, MANWAY & NOZZLE BORES

INSPECTOR	DATE	LEVEL II	STAMP
J R MCCREA	10/27/93	II	N/A

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: (CLADDING)

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

25 AREAS NOTED ON PART
TO GRIND & PERHAPS WELD REPAIR

APPROVED: [signature] DATE: 11/16/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	317	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	0	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	"W-Z" Nozzle Weld Prep

INSPECTOR	DATE	LEVEL II	STAMP
R YANCY	10/30/93	II	10-30-93

(✓)Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	R456
REMOVER	MAGNAFLUX	SKC-S	R456
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: _____ DATE: 11/1/93

F8105 - 02

JAO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	359J	317	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	00	N/A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HEAD	NOZZLE LOCATED BETWEEN X & W-AXIS.

INSPECTOR	DATE	LEVEL II	STAMP
D. ARRINGTON	10/29/93		

( )Weld (X)Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: HG DATE: 11-2-93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code (Ident.)
12150	6145E22	601	04	N/A	3591J	325	3591J

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	00	N/A	N/A	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
Channel Head	MT Ground AREAS Channel Head O.D.

INSPECTOR	DATE	LEVEL II	STAMP
[signature]	10/30/93		W 139

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: N/A

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER: N/A
WPP I.D. NUMBER: B-32-5
TEST WEIGHT I.D. NUMBER: B-38-2

POWDER: [X] MAGNAFLUX [ ] OTHER: N/A
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: N/A
W HEAT CODE NUMBER: 13H80

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 11/1/93

F8820 - 00

JRO SCE&G

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	390	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	0	N/A	N/A	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	T.C. REMOVAL AREAS (4) PLCS

INSPECTOR	DATE	LEVEL II	STAMP
J R MCCREA	11/05/93	II	

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backcouge ( )Other: _____

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER: _____
WPP I.D. NUMBER: R-32.5
TEST WEIGHT I.D. NUMBER: R-38-2

POWDER: [X] MAGNAFLUX [ ] OTHER: _____
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: _____
W HEAT CODE NUMBER: RH80

SKETCH CR DESCRIPTION OF INDICATION(S):

APPROVED: AG DATE: 11-11-93

F8820 - 00

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	395	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	P.T. Removal Areas of Thermocouple

INSPECTOR	DATE	LEVEL II	STAMP
W R PHILLIPS	11/05/93	II	

( )Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT50
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: NG DATE: 11-7-93

F8105 - 02

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	✓	3591J	400	

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	0	N-A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION,
CHANNEL HD	SAFE END weld Prep ; MANWAYS ONLY

INSPECTOR	DATE	LEVEL II	STAMP
D E ARRINGTON	11/05/93		WP QA186

(X)Weld (X)Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: AG DATE: 11-7-93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	/	359J	400	—

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	0	N/A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HEAD	ALL CLADDING I.D. OF BOWL

INSPECTOR	DATE	LEVEL II	STAMP
ARRINGTON	11/11/93		W QA136

( )Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: CLADDING

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT50
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 11-11-93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	400	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	0	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	QUADRANT ADJ "A" NOZZLE @ I.D.

INSPECTOR	DATE	LEVEL II	STAMP
J R MCCREA	11/10/93	II	W QA167

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other:_____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 11/16/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	n/a	35915	540	n/a

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-X NOZZLE CLEANLINESS

INSPECTOR	DATE	LEVEL II	STAMP
[signature]	11-19-93	II	W 103

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] R. [signature] DATE: 6/28/94

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	610	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-2 NOZZLE CLANINESS

INSPECTOR	DATE	LEVEL II	STAMP
[signature]	12-10-93	II	W 103

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 6/28/94

F8608 - 00

JRO SCE&G

NCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Shop Order No. 12150 — Page 1 of 1

CHECK ONE: [ ] CASTING [X] WELDMENT [ ] OTHER — SUPPLIER: WAP — QIP NO. 8332. — REV. C1 — THICKNESS: — MATERIAL TYPE: SS

ASSEMBLY NO.	H/C IDENTIFIERS	DRAWING NO.	ITEM	SUB	COMP. DESCRIPTION	OPER.	WELD NO.	IQI
3591J	RY17/3591J	614SE22	G01	04	SAFE END CHANNEL HD	65	W-X NOZZLE	TYPE 45/10 SIZE 5 MATL SS

ISOTOPES	CURIES	SPD	SIZE (FSS)	X-RAY	FSS	FFD	SHIM SIZE & MATL
[ ] IRIDIUM [X] COBALT 192 60	21.5	20½	.105 x .106	N/A MEV ____ KV ____ MA	N/A	N/A	N/A

EXPOSURE TIME OR KRADS: 1HR.

ACCEPTANCE STANDARDS: [X] SECTION III [ ] NG [ ] ND [X] NB [ ] SECTION VIII [ ] OTHER

LEAD SCREENS — FRONT: [ ].005" [X].010" [ ] OTHER — BACK: [ ].005" [ ].010" [X] OTHER .040

WELD PROC.# N/A

RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACES	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SPD OR FFD *	FILM TYPE *	OTHER	* USE WHEN TECHNIQUE VARIATIONS REQUIRE — REMARKS
0-1	✓																		✓					SAFE END IQI
1-2	✓																		✓					
2-3	✓																		✓					IQI
3-4	✓																		✓					
4-5	✓																✓		✓					
5-6	✓																		✓					IQI.
6-7	✓																		✓					
7-8	✓																		—					IQI
8-9	✓																		✓					
9-0	✓																		✓					

FILM: TYPE AA MFG. AFC SIZE 7X17 NO. OF FILMS 20 CASST. 10

TYPE OF EXPOSURE: [X] PANORAMIC [ ] OTHER [ ] 90° SHOT NO. OF EXPOSURE(S) 1

SET-UP PERSONNEL & LEVEL: C. McCOY II

RADIOGRAPHY SET-UP CHECK ONE:

[X] A [ ] C [ ] B [ ] D [ ] E OTHER (SKETCH)

NCD Level II RT Interpreter: [signature] — Date: 01/24/94

MRN/MRR No. N/A — Ref. MRN/MRR No. N/A

[X] Final X-Ray [ ] In-Process X-Ray

R.I.R. Number Is The: NCD X-Ray Log No. C-2885

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA.

F-NCD-31622B, Rev. 3

SCE&G - V.C. SUMMER SGR PROJ; P.O.: 0594687 PAGE 584

JRO SCE&G

RADIOGRAPHIC INSPECTION RECORD

COMPONENT	SHOP ORDER	SERIAL NUMBER
	12150	3591J

DESCRIPTION OF AREA OR WELD	DRAWING	SUB	ITEM
CHANNEL HD SAFE END WELD	6145E22		G01

WPP EXPOSURE NUMBER	WELDING PROCESS	QIP NUMBER	WELD SEAM IDENTITY
62888	n/a	8332	W-X SAFE END

SKETCH APPROVED BY MC Weatherly DATE 1/27/94

V. C. SUMMER PROJECT

SAFE END WELD

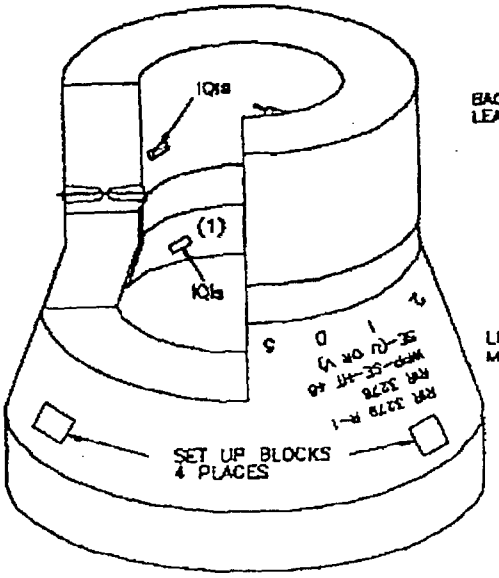


FIG. 4: NOZZLE MOCKUP SHOWING QUADRANT
(1) IF REQUIRED

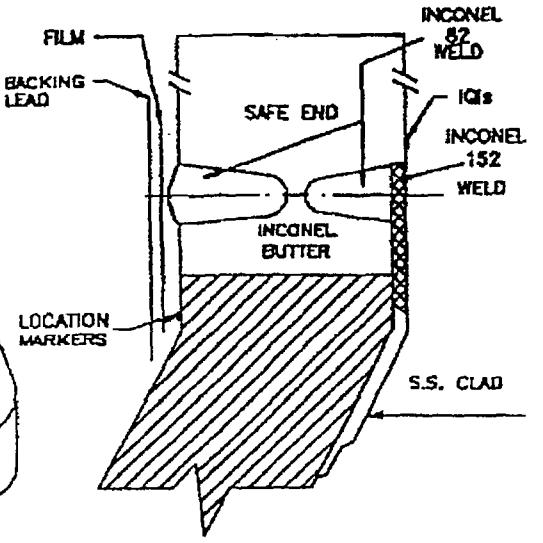


FIG. 4: SAFE END WELD CROSS SECTION

NOTES SEE PROCEDURE QIP-3288 GUIDELINES FOR LAYOFF OF WELD SEAMS

JRO SCE&G

ⓦNCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Shop Order No. 12150 — Page 1 of 1

CHECK ONE: [ ] CASTING [X] WELDMENT [ ] OTHER	SUPPLIER CBPP	QIP NO. 53332.	REV. 01	THICKNESS: .5"	MATERIAL TYPE: C-Mn-Si SA-516 Gr 70
ASSEMBLY NO. 3591J	ⓦH/C IDENTIFIERS RY/18-3591J	DRAWING NO. 6145E22	ITEM 601	SUB 04	COMP. DESCRIPTION Channel HD See Card	OPER. 60	WELD NO. W-2 Nozzle
ISOTOPES [ ] IRIDIUM 192 [X] COBALT 60	CURIES 21.5	SFD 22½	SIZE (FSS) .100 x .106	X-RAY ____ MEV ____ KV n/a ____ MA	FSS n/a	FFD n/a	IQI TYPE ASME-1 SIZE 2-20 MATL SS SHIM SIZE & MATL 1 @ 1/2
EXPOSURE TIME OR KRADS 1 Hr.	ACCEPTANCE STANDARDS: [X] SECTION III [ ] SECTION VIII [ ] OTHER [ ] NG [ ] ND [X] NB	LEAD SCREENS FRONT: [ ].005" [X].010" [ ] OTHER BACK: [ ].005" [ ].010" [X] OTHER, Cu	WELD PROC.# n/a

RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER
0-1	/																		/				
1-2	/																		/				
2-3	/																		/				
3-4	/																		/				
4-5	/																		/				
5-6	/																/		/				
6-7	/																		/				
7-8	/																		/				
8-9	/																		/				
9-0	/																		/				
4	L.E. Jones AUT 1-25-94																						

* USE WHEN TECHNIQUE VARIATIONS REQUIRE

REMARKS: See c.16

IQI

IQI

IQI

IQI

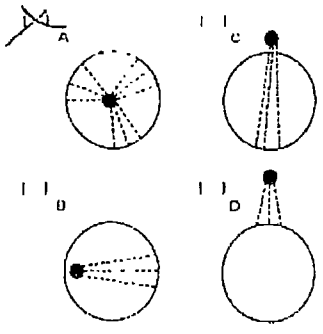
FILM: TYPE AA MFG. AGFA SIZE 2X17 NO. OF FILMS 20 CASST. 10

TYPE OF EXPOSURE: [X] PANORAMIC [ ] OTHER [ ] 90° SHOT

NO. OF EXPOSURE(S) 1

SET-UP PERSONNEL & LEVEL Cpl Lee / II

RADIOGRAPHIC SET-UP CHECK ONE:



ⓦNCD Level II RT Interpreter: [signature] Date 01/24/94

MRN/MRR No. n/a

Ref. MRN/MRR No. n/a

[X] Final X-Ray ( ) In-Process X-Ray

R.I.R. Number Is The: NCD X-Ray Log No. C-7.889

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA.

F-NCD-31622B, Rev. 3

SCE&G - V.C. SUMMER SGR PROJ; P.O.: Q5946B7 PAGE 5F6

F37599

RADIOGRAPHIC INSPECTION RECORD

COMPONENT	SHOP ORDER	SERIAL NUMBER
	12150	3591J

DESCRIPTION OF AREA OR WELD	DRAWING	SUB	ITEM
Channel HD Side End	6145E22	04	G01

WPP EXPOSURE NUMBER	WELDING PROCESS	QIP NUMBER	WELD SEAM IDENTITY
62889	N/A	9332	W-Z Safe End

SKETCH APPROVED BY MC Watkins DATE 1/24/94

V. C. SUMMER PROJECT

SAFE END WELD

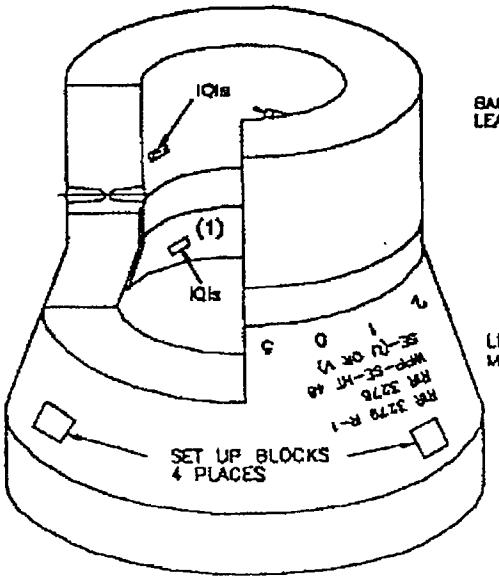


FIG. 4: NOZZLE MOCKUP SHOWING QUADRANT
(1) IF REQUIRED

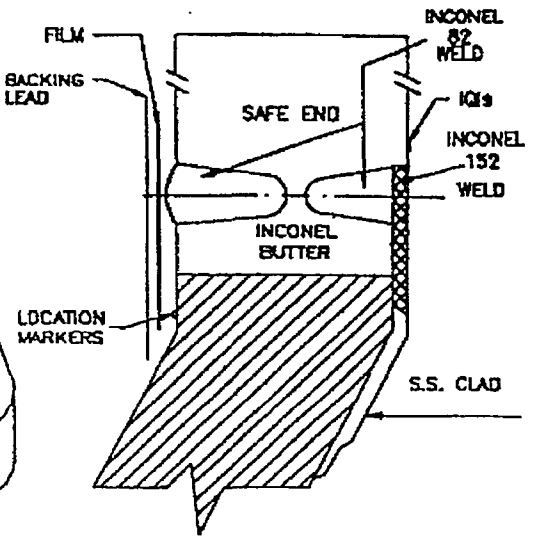


FIG. 4: SAFE END WELD CROSS SECTION

NOTES SEE PROCEDURE QIP-3288 GUIDELINES FOR LAYOFF OF WELD SEAMS

JRO
SCEG

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	704	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	I.D. AND O.D. WELDS OF CLOSURE RINGS

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
J K ABERNATHY	6-11-94	

(X) Weld ( ) Weld Prep ( ) Base Metal ( ) Root Pass
( ) Backgouge ( ) Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 6/14/94

JRO SCE&G

F8608 - 01

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:08

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	705	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	10	N/A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	I.D. AND O.D. WELDS OF CLOSURE RINGS

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
J K ABERNATHY	6-11-94	

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S,SKL-SP	SB50
PRE-CLEANER	MAGNAFLUX	SKC-S	SB54
REMOVER	MAGNAFLUX	SKC-S	SB54
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RE16

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 6/12/94

F8105 - 04

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	/	3591J	837	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	/	/

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	"B" side

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
K E GIBBS	6-26-94	W QAL69

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: [signature] JRO SCE&G DATE: 6/27/94

F8608 - 01

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	837	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	FINAL PARTITION PLATE. WELD # weld overlay cladding SIDE "B" ONLY

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
J K ABERNATHY	7-1-94	VT Q4134

(X) Weld ( ) Weld Prep ( ) Base Metal ( ) Root Pass
( ) Backgouge ( ) Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

NOTE! SIDE "B" ONLY

APPROVED: [signature] DATE: 7/1/94

F8608 - 01

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:08

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	840	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	/	/	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	"B" side

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
K E GIBBS	6-26-94	W QA169

(✓)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S, SKL-SP	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	SBS1
REMOVER	MAGNAFLUX	SKC-S	SBS1
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RZ16

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: [signature] DATE: 6/27/94

F8105 - 04

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:08

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	840	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	00	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION	
CHANNEL HD	FINAL PARTITION PLATE weld & weld overlay cladding SIDE "B" ONLY	
LEVEL II INSPECTOR J K ABERNATHY	INSPECTION DATE 7-1-94	STAMP
(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass ( )Backgouge ( )Other:		

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S, SKL-SP	RZ87
PRE-CLEANER	MAGNAFLUX	SKC-S	SB51
REMOVER	MAGNAFLUX	SKC-S	SB51
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RZ16

SKETCH OR DESCRIPTION OF INDICATION(S):
NOTE: SIDE "B" ONLY

APPROVED: [signature] DATE: 7/1/94

F8105 - 04

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	855	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION	
CHANNEL HD	W-X safe end	
LEVEL II INSPECTOR K E GIBBS	INSPECTION DATE 6-23-94	STAMP W QA169
(✓)Weld ( )Weld Prep (✓)Base Metal ( )Root Pass ( )Backgouge ( )Other: _____		

VISUAL AIDS USED: [✓] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [✓] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: [signature] DATE: 6/23/94

F8608 - 01

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:08

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	856	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	~~N/A~~	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-X safe end ID=OD

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
K E GIBBS	6-23-94	

(✓)Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other:_____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S,SKL-SP	5B50
PRE-CLEANER	MAGNAFLUX	SKC-S	5B51
REMOVER	MAGNAFLUX	SKC-S	5B51
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RZ16

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: [signature] DATE: 6/23/94

F8105 - 04

JRO
SCEG

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	873	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-Z NO22/E-SAFE END WELD

INSPECTOR	DATE	LEVEL II	STAMP
K J EDMONDS	03/14/94		

(X) Weld ( ) Weld Prep (X) Base Metal ( ) Root Pass
( ) Backgouge ( ) Other: N/A

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: NG DATE: 3-15-94

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	875	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	01	36/029	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-E NOZZLE SAFE END I.D. & O.D. WELD.

INSPECTOR	DATE	LEVEL II	STAMP
K J EDMONDS	03/14/94		

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: N/A

N/A

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT50
PRE-CLEANER	MAGNAFLUX	SKC-S	RZ86
REMOVER	MAGNAFLUX	SKC-S	RZ86
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RZ84

SKETCH OR DESCRIPTION OF INDICATION(S):

① 3/16" LINEAR IND. ON I.D. of SAFE END. SEE MDR FOR LOCATION.

② 5 ROUNDED IND. ON I.D. GREATER THAN .030 REPORTED FOR ENG. INFO. ONLY AS REQUIRED PER DWG. NOTE 34.

APPROVED: HG DATE: 3-15-94

F8105 - 02

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	890	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	N/A	N/A	N/A	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Weld Prep

INSPECTOR	DATE	LEVEL II	STAMP
R GUSS	02/21/94		W 121 2 21 94

( )Weld (X)Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other:

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER:
WPP I.D. NUMBER: R-32-8
TEST WEIGHT I.D. NUMBER: R-38-2

POWDER: [X] MAGNAFLUX [ ] OTHER:
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER:
W HEAT CODE NUMBER: KH80

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: NC DATE: 2-21-94

F8820 - 00

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:04

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	6145E22	G01	04	N/A	3591J	899	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	N/A	N/A	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	PAD COUNTERBORE AREAS

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
J H SHERWOOD	07/03/94	

( )Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER: _____
WPP I.D. NUMBER: R-32-2
TEST WEIGHT I.D. NUMBER: R-38-2

POWDER: [X] MAGNAFLUX [ ] OTHER: _____
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: _____
W HEAT CODE NUMBER: N/A07

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: JRO SCE&G DATE: 7-11-94

F8820 - 01

SCE&G - SG3L12148
LOWER ASSEMBLY COMPLETE - SN 2984J

9742D06 H01 (RY17, RY18)

OPN	*NDE*	*DESCRIPTION*	*PAGE*
030	PT	MACHINED SURFACES	884

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	9742D06	H01	02	NA	00001	030	RY 17

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	NA	NA	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
SAFE END M	Entire Surface

INSPECTOR	DATE	LEVEL II	STAMP
F G CURRAN	10/11/93	✓	W QA32

( )Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (✓)Other: all Mach. Surfaces

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS-12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY-56
REMOVER	MAGNAFLUX	SKC-S	RY-56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT-51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 10/11/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12150	9742D06	H01	02	N/a	00002	030	N/a

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
1	0	N/a	N/a	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
SAFE END M	Face opposite weld prep only

INSPECTOR	DATE	LEVEL II	STAMP
W R PHILLIPS	12/03/93	II	W 04192

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT 50
PRE-CLEANER	MAGNAFLUX	SKC-S	RY 56
REMOVER	MAGNAFLUX	SKC-S	RY 56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT 51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 12-5-93

F8105 - 02

JRO SCE&G

SCE&G - SG3L 12149
LOWER ASSEMBLY COMPLETE - SN 2985J

FINAL NDE/INSPECTION REPORTS

ROUTING	DESCRIPTION	PAGE
6145E22 T01	CHANNEL HEAD NOZZLE & MANWAY BUTTERING	642
6145E22 T02	CHANNEL HEAD BORE CLADDING	649
6145E22 T03	CHANNEL HEAD BOWL CLAD	654
6145E22 G01	CHANNEL HEAD	664
6145E39 G02	PLUG ASSEMBLY (2)	712
6145E71 G01	AVB ASSEMBLY	715
6145E85 G01	LOWER ASSEMBLY COMPLETE	803
9741D82 G01	AVB END CAP ASSEMBLY	834
9742D06 H01	SAFE END MACHINING (2)	837

SCE&G - SG3L 12149
LOWER ASSEMBLY COMPLETE - SN 2985J

6145E22 T01 SN 3589J

OPN	*NDE*	*DESCRIPTION*	*PAGE*
020	MT	PRIMARY NOZZLE BUILD UP AREAS	643
045	VT	W-X PRIMARY NOZZLE BUILD UP AREA	644
225	VT	W-Z PRIMARY NOZZLE BUILD UP AREA	645
410	VT	Y-Z PRIMARY MANWAY BUILD UP AREA	646
455	VT	Y-X PRIMARY MANWAY BUILD UP AREA	647
630	PT	PRIMARY NOZZLE MACHINING AND BUILD UPS (ID & OD)	648

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T01	01	N/A	3589J	020	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.		
01	N/A	N/A	N/A	[x] Yoke [x] Visible	[x] Dry

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH N&MW BU	NOZZLE FACE

INSPECTOR	DATE	LEVEL II	STAMP
W L ANDREWS	02/02/93	II	W QA170

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER: _____
WPP I.D. NUMBER: R-32-3
TEST WEIGHT I.D. NUMBER: R-38-3

POWDER: [X] MAGNAFLUX [ ] OTHER: _____
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: _____
W HEAT CODE NUMBER: RH80

SKETCH OR DESCRIPTION OF INDICATION(S):

NONE.

APPROVED: HG DATE: 2-8-93

F8820 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV: 03 02 7/24/94

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T01	01	N/A	3589J	045	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH N & MW BU	W-X PRIMARY NOZZLE BUILD UP AREA

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
Jack R. McClain	02-04-93	W QA167

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: _____ DATE: 7/25/94

F8608 - 01 JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV: 02 R4

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T01	01	NA	35895	225	NA

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	NA	NA

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH N4 MW BU	W-2 PRIMARY NOZZLE BUILD UP AREA

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
[signature]	02/08/93	W QA165 2/08/93

( )Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [✓] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [✓] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: JRO SCE&G [signature] DATE: 7/29/94

F8608 - 01

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T01	01	N-A	3589J	410	N-A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N-A	N-A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH N&MW BU	14"-12" MANWAY

INSPECTOR	DATE	LEVEL II	STAMP
R G CURRAN	02/07/93	II	W QA175

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [X] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 2-8-93

F8608 - 00

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T01	01	N/A	3589J	455	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH N&MW BU	"X-Y" MANWAY cleanliness before clad

INSPECTOR	DATE	LEVEL II	STAMP
R YANCY	02/04/93	II	02-04-93

( )Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [✓] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [✓] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 2-8-93

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	<IT> T01	01	n/a	3589J	630	n/a

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	00	n/a	n/a	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH n & mW BU	Nozzle W-X & W-Z

INSPECTOR	DATE	LEVEL II	STAMP
D. Ward	04/12/93	LEVEL II	4/12/93 101 Kanw 7/21/94

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS1Y
PRE-CLEANER	MAGNAFLUX	SKC-S	RT49
REMOVER	MAGNAFLUX	SKC-S	RT49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 4/15/93

F8105 - 01

SCE&G - SG3L 12149
LOWER ASSEMBLY COMPLETE - SN 2985J

6145E22 T02 SN 3589J

OPN	*NDE*	*DESCRIPTION*	*PAGE*
030	VT	W-X PRIMARY NOZZLE BORE	650
103	VT	W-Z PRIMARY NOZZLE BORE	651
190	VT	Y-Z PRIMARY MANWAY BORE	652
280	VT	X-Y PRIMARY MANWAY BORE	653

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T02	02	N/A	3589J	030	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
ch BORE c/l	"W" - "X" NOZZLE

INSPECTOR	DATE	LEVEL II	STAMP
[signature]	4-22-93 ~~06/16/93~~ [signature]	II	W 103

( )Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: CLEANLINESS

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 6-17-93

F8629 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T02	01	N/A	3589J	103	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH BORE CL	W-Z AXIS NOZZLE CLEANLINESS VERIFICATION.

INSPECTOR	DATE	LEVEL II	STAMP
K J EDMONDS	05/03/93		W QA173

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: N/A

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: [signature] DATE: 5/4/93

F8629 - 00

JRO SCE&G

SCE&G - SG3L 12149
LOWER ASSEMBLY COMPLETE - SN 2985J

6145E22 T03 SN 3589J

OPN	*NDE*	*DESCRIPTION*	*PAGE*
080	VT	CHANNEL HEAD BOWL	655
200	VT	W-X PRIMARY NOZZLE TIE IN AREA	656
240	VT	W-Z PRIMARY NOZZLE TIE IN AREA	657
260	VT	Y-Z PRIMARY MANWAY TIE IN AREA	658
300	VT	X-Y PRIMARY MANWAY TIE IN AREA	659
340	VT	Y-Z PRIMARY MANWAY TIE IN AREA (1ST LAYER)	660
350	VT	X-Y PRIMARY MANWAY TIE IN AREA (1ST LAYER)	661
365	VT	W-X PRIMARY NOZZLE TIE IN AREA (1ST LAYER)	662
380	VT	W-Z PRIMARY NOZZLE TIE IN AREA (1ST LAYER)	663

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV: ~~11~~ 09 RC

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T03	01	NA	3589J	080	N-A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	NA

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH BOWL CL	CLEANLINESS OF CHANNEL HEAD I.D.

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
R Cowan	01/08/93	W QA175

(X) Weld ( ) Weld Prep (X) Base Metal ( ) Root Pass
( ) Backgouge ( ) Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: Kam DATE: 7/19/94

F8629 - 01

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV: 11 09
R1

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T03	01	NA	3589J	200	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	NA

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH BOWL CL	W-X PRIMARY NOZZLE TIE IN AREA

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
Russ Yancy	01/29/93	01/29/93

(✓)Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [✓] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [✓] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: Kam DATE: 7/19/94

F8629 - 01

JRO
SCEG

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:09

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T03	01	N/A	35895	240	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	N/A	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH BOWL CL	NOZZLE BETWEEN W-Z AXIS

INSPECTOR	DATE	LEVEL II	STAMP
Wayne T Andrews	01/22/93	II	W QA170 D1

( )Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):
VERIFY CLEANLINESS OF NOZZLE TIE IN BETWEEN W-Z AXIS.

APPROVED: HG DATE: 2-8-93

F8629 - 00

JRO SCEG

SCE&G - V.C. SUMMER SGR PROJ; P.O.: Q594687 PAGE 657

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV: ~~11~~ 09 HW

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T03	01	NA	3589J	365	NA

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	NA

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH BOWL CL	W-X PRIMARY NOZZLE TIE IN AREA

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
M. White	01/30/93	89 Kam 7/21/94

(X) Weld ( ) Weld Prep (X) Base Metal ( ) Root Pass
( ) Backgouge ( ) Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [X] NATURAL [ ] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: Kam DATE: 7/19/94

F8629 - 01

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:09

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	T03	01	N/A	3589J	380	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	N/A	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
N/A	"W-2" NOZZLE Y Nozzle Knuckle Area KAM 8/3/94

INSPECTOR	DATE	LEVEL II	STAMP
[signature]	01/24/93		W 121 1/24/93

( )Weld ( )Weld Prep ( )Base Metal (X)Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 1-24-93

F8629 - 00

JRO SCEG

SCE&G - SG3L 12149
LOWER ASSEMBLY COMPLETE - SN 2985J

6145E22 G01 SN 3589J

OPN	NDE	DESCRIPTION	PAGE
289	UT	CHANNEL HEAD BOWL, NOZZLE AND MANWAY CLADDING	665
295	PT	CHANNEL HEAD BOWL, NOZZLE AND MANWAY CLADDING	673
317	PT	CHANNEL HEAD NOZZLE WELD PREPS AND MANWAY FACE CLAD	676
325	MT	GROUND AREAS	677
		AFTER POST WELD HEAT TREAT	
390	MT	THERMOCOUPLE REMOVAL AREAS	678
395	PT	CLAD THERMOCOUPLE REMOVAL AREAS	679
400	PT	ALL CLADDING AND SAFE END WELD PREPS	680
520	PT	PARTITION PLATE WELD PREP	685
540	VT	SAFE END TO W-X NOZZLE TACK WELDS	686
610	VT	SAFE END TO W-Z NOZZLE TACK WELDS	687
665	RT	SAFE END TO W-X NOZZLE WELD	688
670	RT	SAFE END TO W-Z NOZZLE WELD	689
704	VT	CLOSURE RING WELDS	692
705	PT	CLOSURE RING WELDS	693
725	VT	PARTITION PLATE TO CHANNEL HEAD TACK WELDS	694
837	VT	PARTITION PLATE TO CHANNEL HEAD WELD	696
840	PT	PARTITION PLATE TO CHANNEL HEAD WELD	698
842	UT	CLADDING UNDER PARTITION PLATE	702
855	VT	SAFE END TO W-X NOZZLE WELD	703
856	PT	SAFE END TOF W-X NOZZLE WELD	704
873	VT	SAFE END TO W-Z NOZZLE WELD	705
875	PT	SAFE END TOF W-Z NOZZLE WELD	706
879	UT	MANWAY GASKET SEATS	707
885	VT	MANWAY GASKET SEATS	708
887	PT	MANWAY GASKET SEATS	709
890	MT	CHANNEL HEAD WELD PREP	710
899	MT	PADS AND ALL GROUND AREAS	711

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	02	N/A	3589J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Bowl CLAD

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	07/16/93	H	W 103

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS N/A
RECORDABLE INDICATIONS* N/A
AREA SCANNED Bowl CLAD *Complete Sketch!

FLAW DETECTOR: SM90D S/N L-28-3 CALIBRATION DATE 7-9-93

	0 LONGITUDINAL	45	60	
SENSITIVITY	20-26-5.5			
SWEEP DELAY	6.14			
SWEEP RANGE	5			
PULSE POSITION	8.72			
REP RATE	H			
SEARCH UNIT:		N/A	N/A	N/A
MFR/F SERIAL NO.	57A8653			
SIZE	1/2" Ø			
FREQUENCY	5.0 MHz			
SINGLE/DUAL	DUAL			

COUPLANT: Echo Gel 3000 GRADE-25 BATCH NO./HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	7/6/93	8:00 AM	BW
	7/16/93	11:15 AM	BW
END	7/16/93	3:00 pm	BW

CAL.BLOCK L-30-13
REF.REFLECTOR 1/8" Ø FBH
SCANNING SENSITIVITY: REF

COMMENTS:

APPROVED: [signature] DATE: 7/20/93

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	02	N/A	3589J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	N/A	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CLAD

INSPECTOR	DATE	LEVEL II	STAMP
R GUSS R Guss	07/17/93		W 121 7/17/93

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS N/A
RECORDABLE INDICATIONS* N/A
AREA SCANNED 100% Bowl *Complete Sketch!

FLAW DETECTOR: SM90D S/N L-28-5 CALIBRATION DATE 7-9-93

	0 LONGITUDINAL	45	60	
SENSITIVITY	20-26-5			
SWEEP DELAY	6-16			
SWEEP RANGE	.5			
PULSE POSITION	8.44			
REP RATE	—	N/A	N/A	
SEARCH UNIT:	AIL			
MFR/F SERIAL NO.	7A8653			
SIZE	.50			
FREQUENCY	5.0			
SINGLE/DUAL	D			

COUPLANT: Echo Gel 3000 BATCH NO./ HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	7-17-93	00:15	
	7-17-93	4:20 AM	
	7-17-93	7:50	
END			

CAL.BLOCK L-30-13
REF.REFLECTOR 1/8 Ø
SCANNING SENSITIVITY: Ref

COMMENTS:

APPROVED: [signature] DATE: 7/20/93

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	02	N/A	3589J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	N/A	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CLAD

INSPECTOR	DATE	LEVEL II	STAMP
R GUSS R Guss	07/17/93		W 121 7/18/93

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS N/A
RECORDABLE INDICATIONS* N/A
AREA SCANNED 100% Bowl *Complete Sketch!

FLAW DETECTOR: SM90D S/N L-28-5 CALIBRATION DATE 7-9-93

	0 LONGITUDINAL	45	60	
SENSITIVITY	20-26-5			
SWEEP DELAY	6-16			
SWEEP RANGE	.5			
PULSE POSITION	8.44			
REP RATE	—	N/A	N/A	
SEARCH UNIT:	AIT			
MFR/F SERIAL NO.	7A8653			
SIZE	.50			
FREQUENCY	5.0			
SINGLE/DUAL	D			

COUPLANT: Echo Gel 3000 BATCH NO./ HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	7-17-93	11:40 PM	[illegible]
	7-18-93	3:30 AM	[illegible]
END	7-18-93	7:20 AM	[illegible]

CAL.BLOCK L-30-13
REF.REFLECTOR 1/8 Ø
SCANNING SENSITIVITY: Ref

COMMENTS:

APPROVED: [signature] DATE: 7/20/93

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	02	N/A	3589J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	BowL CLAD

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	07/17/93	II	W 103

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS N/A
RECORDABLE INDICATIONS* N/A
AREA SCANNED BowL CLADDING *Complete Sketch!

FLAW DETECTOR: SONOD S/N L-28-3 CALIBRATION DATE 7/7/93

	0 LONGITUDINAL	45		60	
SENSITIVITY	20-26-5.5				
SWEEP DELAY	6.14				
SWEEP RANGE	5				
PULSE POSITION	8.92				
REP RATE	A	N/A		N/A	N/A
SEARCH UNIT:					
MFR/F SERIAL NO.	57A8653				
SIZE	1/2" Ø				
FREQUENCY	5.0 mHz				
SINGLE/DUAL	DUAL				

COUPLANT: ECHO GEL 3000 GRADE-25 BATCH NO./HEAT CODE 092017

CALIBRATION:

	DATE	TIME	INITIALS
INITIAL	7/12/93	8:20 AM	RBW
	7/12/93	11:00 AM	RBW
END	7/12/93	3:00 pm	RBW

CAL.BLOCK L-30-13
REF.REFLECTOR 1/8 Ø FBH
SCANNING SENSITIVITY: REF

COMMENTS:

APPROVED: [signature] DATE: 7/20/93

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	02	N/A	3589J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	(NOZZLE 5) I.D. CLAD

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	07/18/93	II	W 103

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS 0
RECORDABLE INDICATIONS* 0
AREA SCANNED NOZZLE I.D. CLAD *Complete Sketch!

FLAW DETECTOR: SM90D S/N L-28-3 CALIBRATION DATE 7/9/93

	0 LONGITUDINAL	45	60
SENSITIVITY	20-30-5.5		
SWEEP DELAY	6.20		
SWEEP RANGE	.5		
PULSE POSITION	8.92		
REP RATE	A	N/A	N/A
SEARCH UNIT:			
MFR/F SERIAL NO.	578653		N/A
SIZE	1/2 ∅		
FREQUENCY	5.0 mHz		
SINGLE/DUAL	DUAL		

COUPLANT: ECHO GEL 3000 GRADE-2S BATCH NO./HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	7/18/93	8:00 AM	BW
	7/18/93	11:00 AM	BW
END	7/18/93	2:00 pm	BW

CAL.BLOCK L-30-10
REF.REFLECTOR 1/8" ∅ FBH
SCANNING SENSITIVITY: REF.

COMMENTS:

APPROVED: [signature] DATE: 7/20/93

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	02	N/A	3589J	289	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	INCONEL BAND I.D. OF NOZZLES

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	07/19/93	II	W 103

IN-PROCESS [ ] REPAIR [ ] FINAL [X]
REPORTABLE INDICATIONS 00
RECORDABLE INDICATIONS* 00
AREA SCANNED INCONEL BAND I.D. NOZZLES *Complete Sketch!

FLAW DETECTOR: SM90D S/N L-28-3 CALIBRATION DATE 7-9-93

	0 LONGITUDINAL	45	60	
SENSITIVITY	20-26-8			
SWEEP DELAY	0.14			
SWEEP RANGE	5			
PULSE POSITION	8.92			
REP RATE	A	N/A	N/A	N/A
SEARCH UNIT:				
MFR/F SERIAL NO.	57A8653			
SIZE	1/2" Ø			
FREQUENCY	5.0 mHz			
SINGLE/DUAL	DUAL			

COUPLANT: ECHO GEL 3000 GRADE-2S BATCH NO./ HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	~~9:00 AM~~ BW		
	7-19-93	9:00Am	BW
END	7-19-93	10:30Am	BW

CAL.BLOCK L-30-11
REF.REFLECTOR 1/8" Ø FBH
SCANNING SENSITIVITY: REF

COMMENTS:

APPROVED: [signature] DATE: 7/20/93

F8565 - 00 JRO SCE&G

Westinghouse Pensacola Plant
CLADDING THICKNESS MEASUREMENT
RECORDING FORM
QIP 8563 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
1214B	6145E22	G01	9802 Rem 7/1/94	NA	35895	289	NA

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	NA

ROUTING DESCRIPTION	MEASUREMENT LOCATION
CHANNEL HEAD	CHANNEL HEAD CLAD THICKNESS

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
R.E. BOLLING	7-19-93	W QAI8

FLAW DETECTOR:
MODEL SM90D
SER. NO. L-28-4
CALIBRATION 7-09-93

DRAWING NO. 6145E22

ITEM NO. G01

TRANSDUCER:
MFR'R. AUTOMATION INDUSTRIES
SIZE/FREQ. ½" ϕ 5.0 MHz

COUPLANT MANUFACTURER ECHO GEL 3000

COUPLANT BATCH NO. 092017

CALIBRATION BLOCK ID L-30-7

SKETCH: (Include reference points, axes to allow repeatibility of measurements. Only if cladding does not meet min. reqmnts)

NA

APPROVED: HC DATE: 7-1-94

F3158 - 03

JRO SCEG

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	02	N/A	3589J	295	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	00	N/A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	*BOTH NOZZLES AND BOTH MANWAYS ONLY.

INSPECTOR	DATE	LEVEL II	STAMP
J E AINSLEY	07/19/93		W 82

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RT49
REMOVER	MAGNAFLUX	SKC-S	RT49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

*NOTE: OP# 295 LEFT INPROCESS WITH A SHORT STAMP NOTE ADDED.

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: _____ DATE: 7/20/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	02	N/A	3589J	295	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-Z / W-X Quad of I.D. Bowl Clad ONLY

INSPECTOR	DATE	LEVEL II	STAMP
W R PHILLIPS	07/20/93	II	W Q4192

(✓)Weld ( )Weld Prep ~~(X)~~ (WRP) (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: Bowl Clad Channel Head

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RT49
REMOVER	MAGNAFLUX	SKC-S	RT49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: [signature] DATE: 7/20/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	02		3589J	295	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	C.H. Bowl Cladding

INSPECTOR	DATE	LEVEL II	STAMP
W R PHILLIPS	07/21/93	II	W 04192

(✓)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: Channel Head Bowl Cladding

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS 12
PRE-CLEANER	MAGNAFLUX	SKC-S	RT 49
REMOVER	MAGNAFLUX	SKC-S	RT 49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT 51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: NG DATE: 7-22-93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	02	N/A	3589J	317	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	N/A	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	NOZZLE PREP O.D. & MANWAY FACE CLAD

INSPECTOR	DATE	LEVEL II	STAMP
W L ANDREWS	07/26/93	II	W QA170

( )Weld (X)Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: CLAD FACE

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT50
PRE-CLEANER	MAGNAFLUX	SKC-S	RT49
REMOVER	MAGNAFLUX	SKC-S	RT49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

PATROL MDR #354499 WRITTEN FOR 3 LINEAR INDICATIONS ON I.D. OF NOZZLE BETWEEN W-X AXIS. STARTING AT OUTER SET-UP BLOCK ON DETAIL F. 2½" DOWN FROM WELD PREP, MOVING TOWARD X AXIS FOR A DISTANCE OF 2½" THERE IS A .140 LINEAR INDICATION, .700 FOR THE FIRST IS A .150 LINEAR INDICATION, AND 3 INCHES FROM THE SECOND IS A .140 LINEAR INDICATION.

(THE Following INDICATIONS FOUND DURNING THE ABOVE OPERATION)

APPROVED: CJS DATE: 12/8/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	03	N/A	3589J	325	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	0	N/A	N/A	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	GROUND AREAS ON O.D. OF CHAN HEAD

INSPECTOR	DATE	LEVEL II	STAMP
J R MCCREA	08/04/93	II	W QA167

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER: _____
WPP I.D. NUMBER: ~~R-38~~ R-32-5
TEST WEIGHT I.D. NUMBER: R-38-2

POWDER: [X] MAGNAFLUX [ ] OTHER: _____
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: _____
W HEAT CODE NUMBER: RH80

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 8-16-93

F8820 - 00

JRO SCEG

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	03	NA	3589J	390	NA

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	NA	NA	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	T.C. Removal Areas.

INSPECTOR	DATE	LEVEL II	STAMP
R E ANTONE	08/24/93		W 83

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: T.C. Removal Areas.

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER: NA
WPP I.D. NUMBER: R-32-3
TEST WEIGHT I.D. NUMBER: R-38-2

POWDER: [X] MAGNAFLUX [ ] OTHER: NA
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: NA
W HEAT CODE NUMBER: BH80

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HC DATE: 8-26-93

F8820 - 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	N/A	3589J	395	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	00	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	TC REMOVAL AREAS ON I.D. CLADDING

INSPECTOR	DATE	LEVEL II	STAMP
J E AINSLEY	09/02/93		

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT50
PRE-CLEANER	MAGNAFLUX	SKC-S	RY46
REMOVER	MAGNAFLUX	SKC-S	RY46
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: _____ DATE: 9/3/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	NA	3589J	400	NA

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
1	0	NA	NA	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	SAFE END WELD PREPS

INSPECTOR	DATE	LEVEL II	STAMP
R BOLLING	08/30/93	YES	W QAI8

( )Weld (✓)Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: NA

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT50
PRE-CLEANER	MAGNAFLUX	SKC-S	RT49
REMOVER	MAGNAFLUX	SKC-S	RT49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

NONE

APPROVED: [signature] DATE: 9/3/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04		3589J	400	NA

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1				[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Z-W

INSPECTOR	DATE	LEVEL II	STAMP
K E GIBBS	08/31/93		W QA169

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT50
PRE-CLEANER	MAGNAFLUX	SKC-S	RT49
REMOVER	MAGNAFLUX	SKC-S	RT49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

None

Z-W gradient accepted
Y-Z runout accepted

APPROVED: _____ DATE: 9/1/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	N/A	3589J	400	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-X Quad ONLY Pt. of Channel HD. Cladding in Bowl & Nozzle

INSPECTOR	DATE	LEVEL II	STAMP
W R PHILLIPS	09/01/93	II	W QA192

(√)Weld ( )Weld Prep (√)Base Metal ( )Root Pass
( )Backgouge ( )Other: Cladding of Channel Head

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	R+50
PRE-CLEANER	MAGNAFLUX	SKC-S	R+49
REMOVER	MAGNAFLUX	SKC-S	R+49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	R+51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 9/2/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	___	3589J	540	___

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	NA	NA

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Fitup of Safe End W-X

INSPECTOR	DATE	LEVEL II	STAMP
G A HALLFORD	09/09/93		W QA157

(✓)Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [ ] NONE [ ] BORESCOPE [ ] CAMERA
[✓] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [✓] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: NG DATE: 9-14-93

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	N/A	3589J	610	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	SAFE END TACKS W-2

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	10/22/93		W 103

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: TACKS

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 10/25/93

F8608 - 00

JRO SCEG

OPERATIONS 1/06/1994

Shop Order No. 12148

ⓦNCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Page 2 of 2

CHECK ONE: [ ] CASTING [X] WELDMENT [ ] OTHER	SUPPLIER WPP	QIP NO. 8332	REV. 01	THICKNESS. .5"	MATERIAL TYPE: A351 GR CF8		
ASSEMBLY NO. 3589J	ⓦH/C IDENTIFIERS 3589J/RY16	DRAWING NO. 6145E12	ITEM G01	SUB 04	COMP. DESCRIPTION CH/HD	OPER. 60.5	WELD NO. "V" NOZZLE SAFE END
ISOTOPES [ ] IRIDIUM 192 [X] COBALT 60	CURIES 21.5	SFD	SIZE (FSS) .100" x .106	X-RAY ____ MEV N/A ____ KV ____ MA	FSS N/A	FFD N/A	IQI TYPE 45 SIZE MATL SS SHIM SIZE & MATL .106 SS
EXPOSURE TIME OR KRADS 63 MINS	ACCEPTANCE STANDARDS: [X] SECTION III [ ] SECTION VIII [ ] OTHER [ ] NG [ ] ND [X] NB	LEAD SCREENS FRONT: [ ] .005" [X] .010" [ ] OTHER BACK: [ ] .005" [ ] .010" [X] OTHER .040					WELD PROC.# N/A

RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER	REMARKS
0-1	✓																/		✓					IQI
1-2	✓																		✓					
2-3	✓																		✓					IQI
3-4	✓																		✓					
4-5	✓																		/					
5-6	✓																		✓					IQI
6-7	✓																		/					
7-8	✓																✓		✓					IQI
8-9	✓																		✓					
9-0	/																		/					
	/																							

[signature] MRT 1/6/94

* USE WHEN TECHNIQUE VARIATIONS REQUIRE

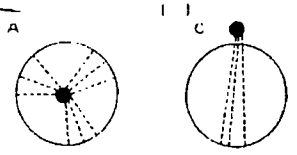
FILM: TYPE T-4 MFG. EKC SIZE 7X17 NO. OF FILMS 21 CASST. 10

TYPE OF EXPOSURE: [X] PANORAMIC [ ] OTHER [ ] 90° SHOT NO. OF EXPOSURE(S) 1

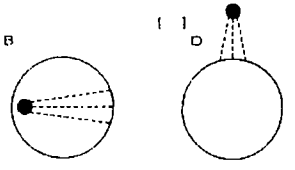
SET-UP PERSONNEL & LEVEL Cillo / II

RADIOGRAPHY SET-UP CHECK ONE:

[X] A [ ] C



[ ] B [ ] D



[ ] F OTHER. (SKETCH)

JRO SCE&G

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA.

ⓦNCD Level II RT Interpreter [signature] Date 01/15/94

MRN/MRR No. N/A

Ref. MRN/MRR No.

[X] Final X-Ray

( ) In-Process X-Ray

R.I.R. Number Is The:

NCD X-Ray Log No. 6C876

NCD-31622B, Rev. 3

SCE&G - V.C. SUMMER SGR PROJ; P.O.: Q594687 PAGE 8 of 9

RADIOGRAPHIC INSPECTION RECORD

COMPONENT	SHOP ORDER	SERIAL NUMBER
CH/HD	12148	3589J

DESCRIPTION OF AREA OR WELD	DRAWING	SUB	ITEM
Safe end	6145E22	04	C-1

WPP EXPOSURE NUMBER	WELDING PROCESS	QIP NUMBER	WELD SEAM IDENTITY
62876	1/4	8332	X-W Safe end

SKETCH APPROVED BY MC Weatherly DATE 1/27/94

V. C. SUMMER PROJECT

SAFE END WELD

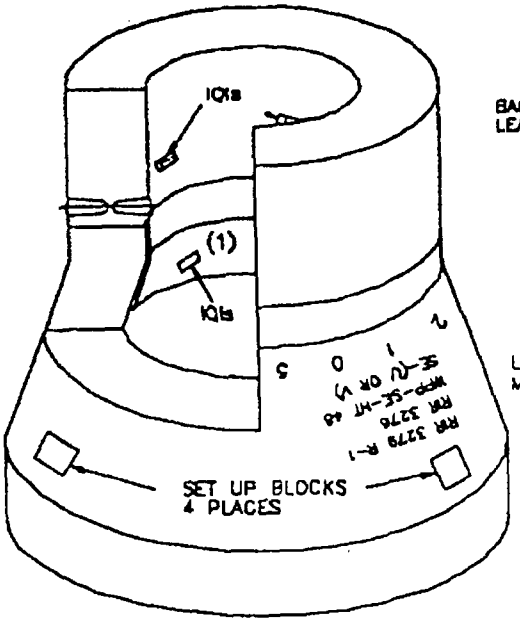


FIG. 4: NOZZLE MOCKUP SHOWING QUADRANT

(1) IF REQUIRED

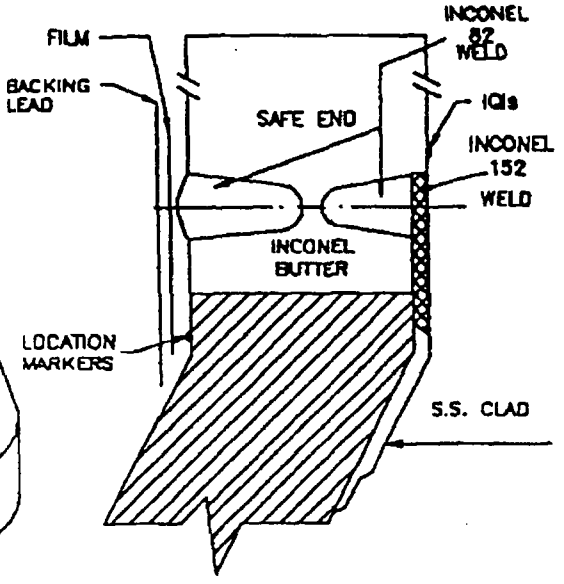


FIG. 4: SAFE END WELD CROSS SECTION

NOTES SEE PROCEDURE QIP-3288 GUIDELINES FOR LAYOFF OF WELD SEAMS.

JRO SCEG

NCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Ship Order No. 12148 — Page 1 of 1

CHECK ONE: [ ] CASTING [X] WELDMENT [ ] OTHER	SUPPLIER WPP	QIP NO. B332	REV. C1	THICKNESS: .5"	MATERIAL TYPE: CS/SS, 8 SS
ASSEMBLY NO. 3589J	H/C IDENTIFIERS 350CJ/RY13	DRAWING NO. 614SE22	ITEM G01	SUB 04	COMP. DESCRIPTION CH/HD	OPER. 670	WELD NO. "U" NOZZLE SAFE END
ISOTOPES 192 IRIDIUM / 60 [X] COBALT	CURIES 21.5	SFD	SIZE (FSS) .100" x .106"	X-RAY ____ MEV n/a ____ KV ____ MA	FSS n/a	FFD n/a
EXPOSURE TIME OR KRADS 63 mins	ACCEPTANCE STANDARDS: [X] SECTION III [ ] SECTION VIII [ ] OTHER [ ] NG [ ] ND [X] NB	LEAD SCREENS FRONT: [ ] .005" [X] .010" [ ] OTHER BACK: [ ] .005" [ ] .010" [X] OTHER .040	WELD PROC.# n/a
IQI TYPE ASME SIZE 1 2/S MATL SS SHIM SIZE & MATL .06									

RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER	REMARKS
0-1	✓																✓		✓					IQI
1-2	✓																✓		✓					
2-3	✓																		✓					IQI
3-4	✓																✓		✓					
4-5	✓																		✓					
5-6	✓																		✓					IQI
6-7	✓																		✓					
7-8	✓																		✓					IQI
8-9	✓																		✓					
9-0	✓																✓		✓					
2																								

[signature] AM 1/21/94

* USE WHEN TECHNIQUE VARIATIONS REQUIRE

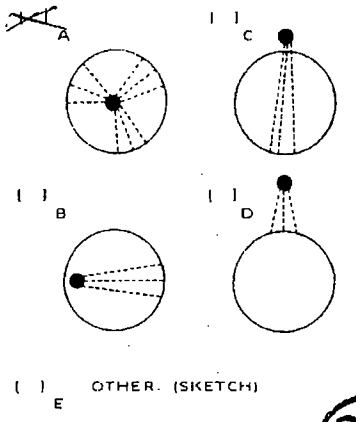
FILM: TYPE AA MFG: EKC SIZE 7X17 NO. OF FILMS 20 CASST. 2

TYPE OF EXPOSURE: [X] PANORAMIC [ ] OTHER [ ] 90° SHOT

NO. OF EXPOSURE(S) 1

SET-UP PERSONNEL & LEVEL Colley II

RADIOGRAPHY SET-UP CHECK ONE:



JRO SCE&G

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA.

NCD Level II RT Interpreter	Date	MRN/MRR No.	[X] Final X-Ray	R.I.R. Number Is The:
[signature]	01/15/94	Ref. MRN/MRR No.	( ) In-Process X-Ray	NCD X-Ray Log No. 62875

NCD-31622B, Rev. 3

690

SCE&G - V.C. SUMMER SGR PROJ; P.O.: Q594687 PAGE ____

F37599

RADIOGRAPHIC INSPECTION RECORD

COMPONENT	SHOP ORDER	SERIAL NUMBER
CH/HD SAFE END	12148	3585J

DESCRIPTION OF AREA OR WELD	DRAWING	SUB	ITEM
SAFE END	614SE22	04	G01

WPP EXPOSURE NUMBER	WELDING PROCESS	QIP NUMBER	WELD SEAM IDENTITY
62873	N/A	8332	W-2 AXIS NOZZLE

SKETCH APPROVED BY MC Weatherly DATE 1/24/94

V. C. SUMMER PROJECT

SAFE END WELD

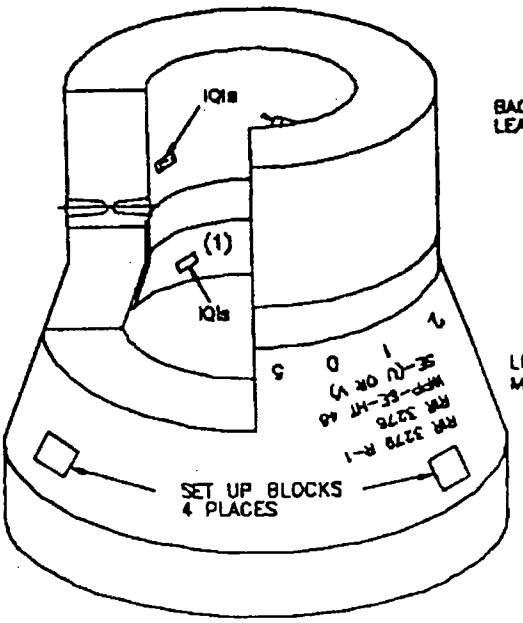


FIG. 4: NOZZLE MOCKUP SHOWING QUADRANT

(1) IF REQUIRED

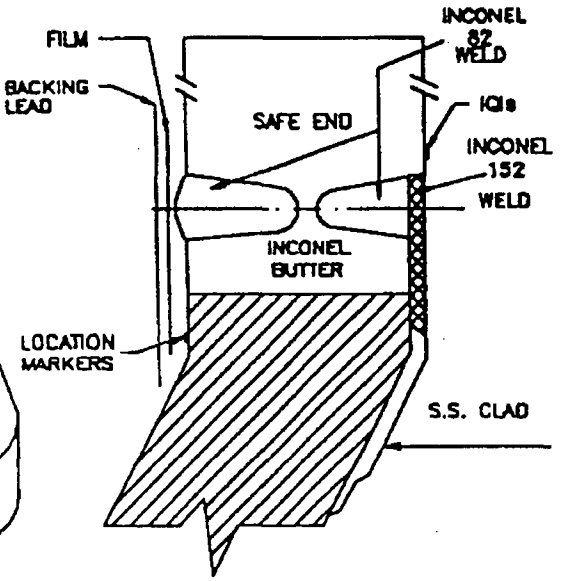


FIG. 4: SAFE END WELD CROSS SECTION

NOTES SEE PROCEDURE QIP-3288 GUIDELINES FOR LAYOFF OF WELD SEAMS.

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	N/A	3589J	704	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CLOSURE RING welds

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
J E AINSLEY	06/06/94	

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: HC DATE: 6-8-94

F8608 - 01

JRO SCEG

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:08

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident
12148	6145E22	G01	04	N/A	3589J	705	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	00	N/A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	01 - Nozzle Ring a w-x"

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
J E AINSLEY	06-06-94	

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S,SKL-SP	5B50
PRE-CLEANER	MAGNAFLUX	SKC-S	5B54
REMOVER	MAGNAFLUX	SKC-S	5B54
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RZ84

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: HC DATE: 6-8-94

F8105 - 04

JRO SCEG

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:08

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	N/A	3589J	705	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	00	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	02 - Nozzle Ring "W-Z"

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
J E AINSLEY	06-13-94	

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S, SKL-SP	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RZ85
REMOVER	MAGNAFLUX	SKC-S	RZ85
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RZ84

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: _____ DATE: 6/14/94

F8105 - 04

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	N/A	3589J	855	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-X NOZ SAFE END

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	01/29/94	II	W 103

(X) Weld ( ) Weld Prep (X) Base Metal ( ) Root Pass
( ) Backgouge ( ) Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: DATE: 2-8-94

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	N/A	3589J	856	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	0	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	SAFE END & W-X NOZ I.D. & O.D

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	01/29/94	A	W 103

( )Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S ~~2~~ / SKD-S2	RZ16

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 2-8-94

F8105 - 02

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	—	3589J	873	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-Z NOZ SAFE END

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	01/29/94	II	W 103

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 2-8-94

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	N/A	3589J	875	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	01	360987	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-2 NOZ SAFE END & WELD F.D & O.D

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	01/31/94	II	QA103

(X) Weld ( ) Weld Prep (X) Base Metal ( ) Root Pass
( ) Backgouge ( ) Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS17
PRE-CLEANER	MAGNAFLUX	SKC-S	R456
REMOVER	MAGNAFLUX	SKC-S	R456
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RZ16

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 2-8-94

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	NA	3589J	890	NA

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	NA	NA	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Weld Prep

INSPECTOR	DATE	LEVEL II	STAMP
F G CURRAN	01/26/94	✓	W 9A32

( )Weld (✓)Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MANUFACTURER:

MT UNIT: [✓] PARKER [ ] OTHER: _____
WPP I.D. NUMBER: R-32-3
TEST WEIGHT I.D. NUMBER: R-38-3

POWDER: [ ] MAGNAFLUX [ ] OTHER: _____
COLOR: [✓] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: _____
W HEAT CODE NUMBER: RH 80

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HC DATE: 1-28-94

F8820 - 00

JRO SCE&G

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	6145E22	G01	04	N/A	3589J	899	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	0	N/A	N/A	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	PADS AND All ground AREAS

INSPECTOR	DATE	LEVEL II	STAMP
J A COLLEY	02/07/94		W 147

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other:_____

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER:_____
WPP I.D. NUMBER: ~~R38 3Qe~~ R323
TEST WEIGHT I.D. NUMBER: ~~R323~~ R383

POWDER: [X] MAGNAFLUX [ ] OTHER:_____
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER:_____
W HEAT CODE NUMBER: RH80

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HC DATE: 2-8-94

F8820 - 00

JRO SCEG

SCE&G - SG3L 12149
LOWER ASSEMBLY COMPLETE - SN 2985J

9742D06 H01 (RY13, RY16)

OPN	*NDE*	*DESCRIPTION*	*PAGE*
030	PT	MACHINED SURFACES	838

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	9742D06	H01	02	N/A	00002	030	RY16

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
1	0	N/A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
SAFE END M	MACHINED SURFACE

INSPECTOR	DATE	LEVEL II	STAMP
F L DAY	08/28/93	II	W QA35

( )Weld (✓)Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT50
PRE-CLEANER	MAGNAFLUX	SKC-S	RT49
REMOVER	MAGNAFLUX	SKC-S	RT49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 8/31/93

F8105 - 02

JRO SCE&G

SCE&G - SG3L12150
LOWER ASSEMBLY COMPLETE - SN 2986J

FINAL NDE/INSPECTION REPORTS

ROUTING	*DESCRIPTION*	*PAGE*
6145E22 T01	CHANNEL HEAD NOZZLE & MANWAY BUTTERING	589
6145E22 T02	CHANNEL HEAD BORE CLADDING	598
6145E22 T03	CHANNEL HEAD BOWL CLAD	603
6145E22 G01	CHANNEL HEAD	613
6145E39 G02	PLUG ASSEMBLY (2)	663
6145E71 G01	AVB ASSEMBLY	666
6145E85 G01	LOWER ASSEMBLY COMPLETE 898	
9741D82 G01	AVB END CAP ASSEMBLY	920
9742D06 H01	SAFE END MACHINING (2)	933

SCE&G - SG3L12150
LOWER ASSEMBLY COMPLETE - SN 2986J

6145E22 T01 SN 3590J

OPN	*NDE*	*DESCRIPTION*	*PAGE*
020	MT	PRIMARY NOZZLE BUILD UP AREAS	590
045	VT	W-X PRIMARY NOZZLE BUILD UP AREA	591
225	VT	W-Z PRIMARY NOZZLE BUILD UP AREA	592
410	VT	Y-Z PRIMARY MANWAY BUILD UP AREA	593
455	VT	Y-X PRIMARY MANWAY BUILD UP AREA	594
630	PT	PRIMARY NOZZLE MACHINING AND BUILD UPS (ID & OD)	595
640	RT	PRIMARY NOZZLE BUILD UPS	596

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	T01	01	N/A	3590J	020	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
1	0	N/A	N/A	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH N&MW BU	W-X-N024 W-Z-N02 Face Plus ½" ID + OD.

INSPECTOR	DATE	LEVEL II	STAMP
R E ANTONE	03/18/93		W 83

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: N/A

MANUFACTURER:

MT UNIT: [4] PARKER [ ] OTHER:
WPP I.D. NUMBER: A-32-3
TEST WEIGHT I.D. NUMBER: A-38-3

POWDER: [X] MAGNAFLUX [ ] OTHER: N/A
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: N/A
W HEAT CODE NUMBER: RH80

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: Arthur J. Dale DATE: 3/15/93

F8820 - 00

JRO SCEG

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	T01	01	N/A	3590J	045	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH NE MW BU	CLEANLINESS CHECK FOR B.U.

INSPECTOR	DATE	LEVEL II	STAMP
[signature]	3-28-93	II	W 103

( )Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: CLEANLINESS

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 8/12/94

F8608 - 10

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	T01	04	N/A	3590J	225	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HEAD	cleanings for Nozzle B.U. "W-Z"

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
J.E. Ainsley	3-18-93	

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [X] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: Kam DATE: 8/12/94

F8608 - 01

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	614SE22	701	02	N/A	35905	455	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH NFMW BU	CLEANLINESS

INSPECTOR	DATE	LEVEL II	STAMP
[signature]	4/5/93 ~~9/19/93~~ MW	II	W 103

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: S. Shuey DATE: 09/28/93

F8608 - 00

JRO
SCEG

A.H.

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	~~<IT>~~ 101	01	N/A	3590J	630	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	00	N/A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH N&MW BU	Nozzle W-X & W-Z

INSPECTOR	DATE	LEVEL II	STAMP
D E WARD	04/20/93		4/20/93

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RT49
REMOVER	MAGNAFLUX	SKC-S	RT49
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 6-25-93

F8105 - 01

JRO SCE&G

Shop Order No. 12149

Ⓦ NCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Page 1 of 1

CHECK ONE: [ ] CASTING [X] WELDMENT [ ] OTHER	SUPPLIER Ⓥ PP		QIP NO. 8332	REV. 01	THICKNESS: 5 1/8"	MATERIAL TYPE: CS/INC					
ASSEMBLY NO. 3590 J Rev 3589J	Ⓦ H/C IDENTIFIERS N/A	DRAWING NO. 6145E22	ITEM T01	SUB 01	COMP. DESCRIPTION CH N&MW BU	OPER. 640	WELD NO "W-Z" NOZZLE	IQI TYPE ASME SIZE #50's MATL SS			
ISOTOPES [ ] IRIDIUM 192 [X] COBALT 60		CURIES 24	SFD 20 1/4"	SIZE (FSS) .100 - x - .106	X-RAY ____ MEV ____ KV N/A ____ MA	FSS N/A	FFD N/A	SHIM SIZE & MATL. prior			
EXPOSURE TIME OR KRADS 1 HR 25 MIN	ACCEPTANCE STANDARDS: [X] SECTION III [ ] SECTION VIII [ ] OTHER [ ] NG [ ] ND [X] NB				LEAD SCREENS FRONT: [ ] .005" [X] .010" [ ] OTHER BACK: [ ] .005" [ ] .010" [X] OTHER .040			WELD PROC.# WPS-4532			

RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER	REMARKS
0-1	✓																		✓					IQI
1-2	✓																		✓					
2-3	✓																		✓					IQI
3-4	✓																✓		✓					
4-5	✓																		✓					IQI
5-6	✓																✓		✓					
6-7	✓																		✓					
7-8	✓																		✓					IQI
8-9	✓																		✓					
9-0	✓																		✓					

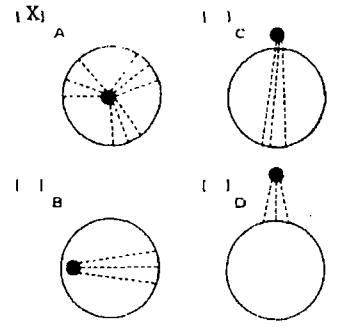
* USE WHEN TECHNIQUE VARIATIONS REQUIRE

FILM: TYPE T MFG. EKC SIZE 7 X 17 NO. OF FILMS 20 CASST. 10

TYPE OF EXPOSURE: [X] PANORAMIC [ ] OTHER [ ] 90° SHOT NO. OF EXPOSURE(S) 1

SET-UP PERSONNEL & LEVEL: GENE ANTONE II&J.AINSLEY II

RADIOGRAPHY SET-UP CHECK ONE:



[ ] E OTHER. (SKETCH)

JRO SCE&G

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA.

Ⓦ NCD Level II RT Interpreter J.E. AINSLEY	Date 4/21/93	MRN/MRR No. N/A Ref. MRN/MRR No. N/A	( ) Final X-Ray (X) In-Process X-Ray
R.I.R. Number Is The: NCD X-Ray Log No. 62799			

F-NCD-31622B, Rev. 3

BOOREL PRINTING CO. INC

SCE&G - V.C. SUMMER SGR PROJ; P.O.: Q594687 PAGE 596

Ⓦ NCD PENSACOLA

Shop Order No. 12149

RADIOGRAPHIC INSPECTION REPORT

CHECK ONE: [ ] CASTING [X] WELDMENT [ ] OTHER	SUPPLIER Ⓦ PP		QIP NO. 8332	REV. 01	THICKNESS: 5 1/8"	MATERIAL TYPE: CS/INC					
ASSEMBLY NO. 3590J	Ⓦ H/C IDENTIFIERS N/A	DRAWING NO. 6145E22	ITEM T01	SUB 01	COMP. DESCRIPTION CH N&MW BU	OPER. 640	WELD NO. "W-X" NOZZLE	IQI TYPE ASME SIZE #50's MATL SS			
ISOTOPES [ ] IRIDIUM 192 [X] COBALT 60	CURIES 24	SFD 20 1/4"	SIZE (FSS) .100 x .106	X-RAY ____ MEV ____ KV N/A ____ MA	FSS N/A	FFD N/A	SHIM SIZE & MATL NONE				
EXPOSURE TIME OR KRADS 1 HR 25 MIN	ACCEPTANCE STANDARDS: [X] SECTION III [ ] SECTION VIII [ ] OTHER [ ] NG [ ] ND [X] NB	LEAD SCREENS FRONT: [ ].005" [X].010" [ ] OTHER BACK: [ ].005" [ ].010" [ ] OTHER .040	WELD PROC.# WPS-4532								

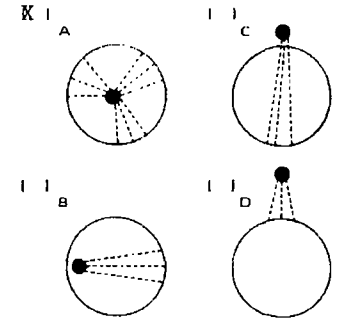
RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER	* USE WHEN TECHNIQUE VARIATIONS REQUIRE / REMARKS
0-1	✓																		✓					IOI
1-2	✓																		✓					
2-3	✓																		✓					IOI
3-4	✓																		✓					
4-5	✓																		✓					IOI
5-6	✓																		✓					
6-7	✓																		✓					
7-8	✓																		✓					IOI
8-9	✓																		✓					
9-0	✓																		✓					

FILM: TYPE T MFG. EKC SIZE 7 X 17 NO. OF FILMS 20 CASST 10

TYPE OF EXPOSURE: [X] PANORAMIC [ ] OTHER [ ] 90° SHOT NO. OF EXPOSURE(S) 1

SET-UP PERSONNEL & LEVEL: C. ANTONE & J.AINSLEY II's

RADIOGRAPHY SET-UP CHECK ONE:



JRO SCE&G

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA.

Ⓦ NCD Level II RT Interpreter: J.E. AINSLEY Date: 4/22/93

MRN/MRR No. N/A

Ref. MRN/MRR No. N/A

( ) Final X-Ray

(X) In-Process X-Ray

R.I.R. Number Is The: NCD X-Ray Log No. 62800

F-NCD-31622B, Rev. 3

BOONE PRINTING

SCE&G - V.C. SUMMER SGR PROJ; P.O.: Q594687 PAGE 597

SCE&G - SG3L12150
LOWER ASSEMBLY COMPLETE - SN 2986J

6145E22 T02 SN 3590J

OPN	NDE	DESCRIPTION	PAGE
030	VT	W-X PRIMARY NOZZLE BORE	599
103	VT	W-Z PRIMARY NOZZLE BORE	600
190	VT	Y-Z PRIMARY MANWAY BORE	601
280	VT	X-Y PRIMARY MANWAY BORE	602

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	T02	02	N/A	35905	030	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH BOFE CL	C/BANNISS

INSPECTOR	DATE ~~5/13/93~~ ~~07/19/93~~	LEVEL II	STAMP
		II	

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: JRO SCE&G DATE: 8/19/93

F8629 - 00

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV:11

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	T02	02	N/A	35905	103	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CH BORE C/	CLEANLINESS

INSPECTOR	DATE ~~07/19/93~~ 8/21/93 BH	LEVEL II	STAMP
B Whaite		II	W 103

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: DATE: 8/19/93

F8629 - 00

JRO SCEG

SCE&G - SG3L12150
LOWER ASSEMBLY COMPLETE - SN 2986J

6145E22 T03 SN 3590J

OPN	NDE	DESCRIPTION	PAGE
080	VT	CHANNEL HEAD BOWL	604
200	VT	W-X PRIMARY NOZZLE TIE IN AREA	605
240	VT	W-Z PRIMARY NOZZLE TIE IN AREA	606
260	VT	Y-Z PRIMARY MANWAY TIE IN AREA	607
300	VT	X-Y PRIMARY MANWAY TIE IN AREA	608
340	VT	Y-Z PRIMARY MANWAY TIE IN AREA (1ST LAYER)	609
350	VT	X-Y PRIMARY MANWAY TIE IN AREA (1ST LAYER)	610
365	VT	W-X PRIMARY NOZZLE TIE IN AREA (1ST LAYER)	611
380	VT	W-Z PRIMARY NOZZLE TIE IN AREA (1ST LAYER)	612

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV: ~~11~~ 10
AY

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-I	I Code/Ident.
12149	6145E22	T03	04	N/A	359QJ	080		N/A

Number Inspected	Number Rejected	MDR No.	Ref	MDR No.
01	0	N/A		N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION	
"CH. Bowl Clad"	CH. HD. Bowl Cleanliness	Prior to welding

INSPECTOR	DATE	LEVEL II	STAMP
R. [illegible]	~~08/12/94~~ 2-18-93	II	W QA165

( )Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

2-18-93

VISUAL AIDS USED: [✓] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [✓] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: S. C. Smith DATE: 08/12/94

F8629 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV: ~~11~~ 10

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-I	P Code/Ident.
12149	6145E22	T03	04	N/A	3590J	200		N/A

Number Inspected	Number Rejected	MDR No.	Ref MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
"CH. HD. Bowl Clad"	w-x Nozzle Tie-In (Knuckle Radius Area)

INSPECTOR	DATE	LEVEL II	STAMP
R. [illegible]	~~08/12/94~~ 3-2-93	II	W QA165 3-2-93

( )Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [✓] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [✓] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: S.C. [illegible] DATE: 08/12/94

F8629 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV: ~~11~~ 10 BW 2/4/99

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	614SF22	T03	04	N/A	35905	240	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
ch BOWL CL	W-2 NOZZ. TIE IN

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
[signature]	3-9-93	W 103

(X) Weld ( ) Weld Prep ( ) Base Metal ( ) Root Pass
( ) Backgouge ( ) Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 8/12/94

F8629 - 01

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV: 10

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-I	I Code/Ident.
12149	6145E22	T03	04	N/A	3590J	365		N/A

Number Inspected	Number Rejected	MDR No.	Ref MDR No.
01	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
"CH. HD. Bowl Clad"	W-X Nozzle Tie-In (Before BAL. layers)

INSPECTOR	DATE	LEVEL II	STAMP
K. [illegible]	~~08/12/94~~ 3-5-93	II	W QA165 3-5-93

(✓)Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [✓] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [✓] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: S.C. Shaw DATE: 03/12/94

F8629 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8629 REV: 11 10

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	703	04	N/A	3590J	380	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
Ch Bowl CL	CLEANLINESS

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
[signature]	3-11-93	

( )Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: CLEAN

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 8/12/94

F8629 - 01

SCE&G - SG3L12150
LOWER ASSEMBLY COMPLETE - SN 2986J

6145E22 G01 SN 3590J

OPN	NDE	DESCRIPTION	PAGE
289	UT	CHANNEL HEAD BOWL, NOZZLE AND MANWAY CLADDING	614
295	PT	CHANNEL HEAD BOWL, NOZZLE AND MANWAY CLADDING	618
317	PT	CHANNEL HEAD NOZZLE WELD PREPS AND MANWAY FACE CLAD	619
325	MT	GROUND AREAS	620
		AFTER POST WELD HEAT TREAT	
390	MT	THERMOCOUPLE REMOVAL AREAS	621
395	PT	CLAD THERMOCOUPLE REMOVAL AREAS	622
400	PT	ALL CLADDING AND SAFE END WELD PREPS	623
520	PT	PARTITION PLATE WELD PREP	626
540	VT	SAFE END TO W-X NOZZLE TACK WELDS	627
610	VT	SAFE END TO W-Z NOZZLE TACK WELDS	628
665	RT	SAFE END TO W-X NOZZLE WELD	629
670	RT	SAFE END TO W-Z NOZZLE WELD	633
704	VT	CLOSURE RING WELDS	641
705	PT	CLOSURE RING WELDS	642
725	VT	PARTITION PLATE TO CHANNEL HEAD TACK WELDS	643
837	VT	PARTITION PLATE TO CHANNEL HEAD WELD	644
840	PT	PARTITION PLATE TO CHANNEL HEAD WELD	645
842	UT	CLADDING UNDER PARTITION PLATE	651
855	VT	SAFE END TO W-X NOZZLE WELD	652
856	PT	SAFE END TOF W-X NOZZLE WELD	653
873	VT	SAFE END TO W-Z NOZZLE WELD	654
875	PT	SAFE END TOF W-Z NOZZLE WELD	655
879	UT	MANWAY GASKET SEATS	657
885	VT	MANWAY GASKET SEATS	658
887	PT	MANWAY GASKET SEATS	660
890	MT	CHANNEL HEAD WELD PREPS	661
899	MT	PADS AND ALL GROUND AREAS	662

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8563 REV:01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	03	~A	3590J	289	~A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	~A	~A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CHANNEL HEAD CLAD SURFACES

INSPECTOR	DATE	LEVEL II	STAMP
R BOLLING	08/~~14~~ 27/93 Rev 9/27/94	YES	W QA18

IN-PROCESS [~~X~~ Rev 9/27/94 REPAIR [ ] FINAL [ ]
REPORTABLE INDICATIONS 0
RECORDABLE INDICATIONS* 0
AREA SCANNED DOME, NOZZLES & MANWAYS I.D. *Complete Sketch!

FLAW DETECTOR: SM900 S/N L-28-1 CALIBRATION DATE 7-9-93

	0 LONGITUDINAL	45	60	
SENSITIVITY	40-28-8.0			
SWEEP DELAY	5.60			
SWEEP RANGE	5			
PULSE POSITION	8.74	~A	~A	~A
REP RATE	H			
SEARCH UNIT:				
MFR/F SERIAL NO.	J 86028			
SIZE	½" Ø			
FREQUENCY	5.0MHz			
SINGLE/DUAL	DUAL			

COUPLANT: ECHO GEL 1000 BATCH NO.: HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	8-14-93	0815	RBS
	8-14-93	1200	RBS
	/	/	/
END	8-14-93	1400	RBS

CAL.BLOCK L-30-7
REF.REFLECTOR CLAD INTERFACE
SCANNING SENSITIVITY:
AS NOTED

COMMENTS: NONE

APPROVED: HC DATE: 6-23-94

F8563 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:02

PAGE: 1 of 3

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	03	NA	3590J	289	NA

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	NA

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CHANNEL HEAD CLAD

INSPECTOR	DATE	LEVEL II	STAMP
R BOLLING	08/27/93	YES	W QA/8

IN-PROCESS [ ] REPAIR [ ] FINAL [✓]
REPORTABLE INDICATIONS 0
RECORDABLE INDICATIONS* 0
AREA SCANNED CHANNEL HEAD BOWL, MANWAY & NOZZLE I.D. *Complete Sketch!

FLAW DETECTOR: SM90 D S/N L-28-4 CALIBRATION DATE 7.9.93

	0 LONGITUDINAL	45		60		
SENSITIVITY	40-0-5.0					
SWEEP DELAY	5.38					
SWEEP RANGE	1.5					
PULSE POSITION	8.92	NA		NA		NA
REP RATE	H					
SEARCH UNIT:						
MFR/F SERIAL NO.	C84007					
SIZE	1/2" Ø					
FREQUENCY	5.0MHz					
SINGLE/DUAL	DUAL					

COUPLANT: ECHO GEL 3000 BATCH NO. HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	8.27.94	1545	RBS
	8.27.94	1900	RBS
	8.27.94	2300	RBS
END	8.27.94	2345	RBS

CAL.BLOCK L-30-13
REF.REFLECTOR 1/8"Ø FBH
SCANNING SENSITIVITY:
+6dB

COMMENTS:
NONE

APPROVED: HC DATE: 6-24-94

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	03	NA	3590J	289	NA

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	NA

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CHANNEL HEAD CLAD

INSPECTOR	DATE	LEVEL II	STAMP
R BOLLING	08/27/93	YES	W QAIB

IN-PROCESS [ ] REPAIR [ ] FINAL [✓]
REPORTABLE INDICATIONS 0
RECORDABLE INDICATIONS* 0
AREA SCANNED NOZZLE 2, BOWL TIE IN *Complete Sketch!

FLAW DETECTOR: 5770 D S/N L-28-4 CALIBRATION DATE 7.9.93

	0 LONGITUDINAL	45	60	
SENSITIVITY	40-2-5.0			
SWEEP DELAY	5.38			
SWEEP RANGE	5			
PULSE POSITION	8.72	NA	NA	NA
REP RATE	H			
SEARCH UNIT:				
MFR/F SERIAL NO.	C 84 007			
SIZE	½" Ø			
FREQUENCY	5.0 MHz			
SINGLE/DUAL	DUAL			

COUPLANT: ECHO GEL 3000 BATCH NO. HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	8.27.94	1445	BES
	/	/	/
END	8.27.94	1545	BES

CAL.BLOCK L-30-14
REF.REFLECTOR ½" Ø FOH
SCANNING SENSITIVITY: +6dB

COMMENTS: NONE

APPROVED: HC DATE: 6-29-94

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF CLADDING
RECORDING FORM
QIP 8565 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	03	NA	3590J	289	NA

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	NA

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CHANNEL HEAD CLAD

INSPECTOR	DATE	LEVEL II	STAMP
R BOLLING	08/27/93	YES	W QA/S

IN-PROCESS [ ] REPAIR [ ] FINAL [✓]
REPORTABLE INDICATIONS 0
RECORDABLE INDICATIONS* 0
AREA SCANNED INCONNEL BANDS *Complete Sketch!

FLAW DETECTOR: SM90A S/N L-28-4 CALIBRATION DATE 7-9-93

	0 LONGITUDINAL	45	60	
SENSITIVITY	40-0-5.0			
SWEEP DELAY	5.38			
SWEEP RANGE	.5			
PULSE POSITION	8.96	NA	NA	NA
REP RATE	1+			
SEARCH UNIT:				
MFR/F SERIAL NO.	C84007			
SIZE	1/2" Ø			
FREQUENCY	5.0MHz			
SINGLE/DUAL	DUAL			

COUPLANT: ECHO GEL 3000 BATCH NO./HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	8-27-94	1230	RBS
	/	/	/
END	8-27-94	1430	RBS

CAL.BLOCK L-30-8
REF.REFLECTOR 1/8" Ø FBH
SCANNING SENSITIVITY: + 6 dB

COMMENTS: NONE

APPROVED: HC DATE: 6-24-94

F8565 - 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	295	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	01	359976		

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	(2) MANWAYS (2) NOZZLES & BOWL COMPLETE.

INSPECTOR	DATE	LEVEL II	STAMP
J A COLLEY	09/12/93		

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: CLADDING

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT-50
PRE-CLEANER	MAGNAFLUX	SKC-S	RY-56
REMOVER	MAGNAFLUX	SKC-S	RY-56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT-51

SKETCH OR DESCRIPTION OF INDICATION(S):

(1) ~~Z-X~~ Y-X MANWAY BORE HAS (2) INDS.
(2) W-Z NOZZLE (SHOULDER) (2) INDS.
(3) BETWEEN W-Z NOZZLE AND Z-Y MANWAY (5) INDS.

APPROVED: NG DATE: 9-11-93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	317	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	0	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	MANWAY FACE CLAD (2plcs) Nozzle Weld Preps (2plcs)

INSPECTOR	DATE	LEVEL II	STAMP
J A COLLEY	09/27/93	II	

( )Weld (X)Weld Prep (\ )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY46
REMOVER	MAGNAFLUX	SKC-S	RY46
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 9-28-93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	325	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Yoke [x] Dry [x] Visible
01	00	N/A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CH. HEAD SCAR/BLENDED AREAS ON O.D.

INSPECTOR	DATE	LEVEL II	STAMP
K J EDMONDS	09/23/93		

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER: N/A
WPP I.D. NUMBER: R-32-7
TEST WEIGHT I.D. NUMBER: R-38-2

POWDER: [X] MAGNAFLUX [ ] OTHER: N/A
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: _____
W HEAT CODE NUMBER: RH80

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: HG DATE: 9-23-93

F8820 - 00

JRO SCE&G

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	390	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	0	N/A	N/A	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	(3 plcs) on O.D. T.C. Removal A/PWHT

INSPECTOR	DATE	LEVEL II	STAMP
J A COLLEY	10/11/93	II	147

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge (X)Other: T/C Removal AREAS

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER:
WPP I.D. NUMBER: R 32-1
TEST WEIGHT I.D. NUMBER: R 38-3

POWDER: [X] MAGNAFLUX [ ] OTHER:
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER:
W HEAT CODE NUMBER: RH80

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 10/11/93

F8820 - 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	395	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	0	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	T/C Removal Alpwhr (4plcs) on I.D.

INSPECTOR	DATE	LEVEL II	STAMP
J A COLLEY	10/11/93	II	W 147

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge (X)Other: T/C Removal Areas

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 10/11/93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	400	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	00	N/A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	MANWAYS&NOZZLE BORES WITH KNUCKLE RADIUSES

INSPECTOR	DATE	LEVEL II	STAMP
J E AINSLEY	10/20/93		W 82

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: S.C. Boyle DATE: 10-20-93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	400	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	N/A	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	BOWL CLAD

INSPECTOR	DATE	LEVEL II	STAMP
W L ANDREWS	10/15/93	II	W QA170

(Y)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: CLAD SEE BELOW

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT5C
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

NONE

PT ACCEPTED AREA FROM CENTER OF BOWL OUT TO A RADIUS OF 35 INCHES

APPROVED: S.C. Shoaf DATE: 10-20-93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	540	RY14

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-X SAFE END Fit UP & Alignment & TACKS.

INSPECTOR	DATE	LEVEL II	STAMP
K J EDMONDS	01/19/94		

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge (X)Other: TACK Welds

VISUAL AIDS USED: [ ] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[X] MAGNIFYING LENS 5 Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: [signature] DATE: 1/2-/94

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	610	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-2 NO2 w/Weld Prep Fit Up, Surfaces

INSPECTOR	DATE	LEVEL II	STAMP
R E ANTONE	01/07/94		W 83

( )Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: Tack Welds & Cleanliness

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: [signature] DATE: 1/10/94

F8608 - 00

JRO SCE&G

NCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Shop Order No. 12149 — Page 1 of 1

CHECK ONE	SUPPLIER	QIP NO.	REV.	THICKNESS	MATERIAL TYPE
[ ] CASTING [X] WELDMENT [ ] OTHER	WFP	03.32	C	5	SS 316

ASSEMBLY NO.	H/C IDENTIFIERS	DRAWING NO.	ITEM	SUB	COMP. DESCRIPTION	OPER.	WELD NO.	IQI
3590J	/3590J	6145E22	601	04	CH/HD	0665	10A SEAM	TYPE 45 SS-E

ISOTOPES	CURIES	SFD	SIZE (FSS)	X-RAY	FSS	FFD	IQI (cont.)
[ ] IRIDIUM 192 [X] COBALT 60	21	20¼"	.101" x .106	____ MEV N/A; ____ KV ____ MA	N/A	N/A	SIZE 2T (5T) MATL SS; SHIM SIZE & MATL N/A

EXPOSURE TIME OR KRADS	ACCEPTANCE STANDARDS	LEAD SCREENS	WELD PROC.#
65 MINS	[X] SECTION III [ ] SECTION VIII [ ] OTHER; [ ] NG [ ] ND [X] NB	FRONT: [ ] .005" [X] .010" [ ] OTHER; BACK: [ ] .005" [ ] .010" [X] OTHER .04	N/A

RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER	REMARKS
0-1	/																		/					IQI
1-2		X												X										Linear
2-3		/												X			/							IQI
3-4		X												X										
4-5		X												X										
5-6		X												X										IQI
6-7	/																/							
7-8		X												X										IQI
8-9	/																/							
9-0	/																		/					

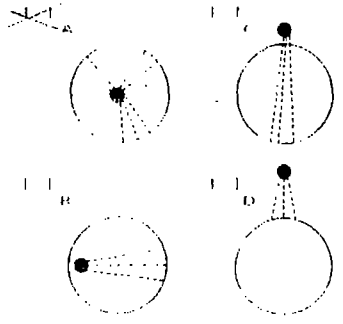
* USE WHEN TECHNIQUE VARIATIONS REQUIRE

FILM: TYPE AA MFG. EKC; SIZE 2X17; NO. OF FILMS 20 CASST. 2

TYPE OF EXPOSURE: [X] PANORAMIC [ ] OTHER; [ ] 180 SHOT; NO. OF EXPOSURE(S) 1

SET-UP PERSONNEL & LEVEL: Collins II

RADIOGRAPHY SET-UP CHECK ONE:



[ ] OTHER (SKETCH)

NCD Level II RT Interpreter	Date	MRN/MRR No.		R.I.R. Number Is The:
	04/23/94	361210	[X] Final X-Ray [ ] In-Process X-Ray	NCD X-Ray Log No. 67854
		Ref. MRN/MRR No. N/A		

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA

F-NCD-31622B, Rev. 3

JRO SCE&G

SCE&G - V.C. SUMMER SGR PROJ; P.O.: Q594687 PAGE 629

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

6145E22 G01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	M361210	R01	04	N/A	3590J	830	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	361210

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Blended Area (O.D. SURF "W-X" SAFE END)

INSPECTOR	DATE	LEVEL II	STAMP
J E AINSLEY	02/25/94		W 82

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other:_____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____Power

LIGHTING: [X] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HC DATE: 2-25-94

F8608 - 00

JRO SCE&G

ⓦNCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Shop Order No. 12149 — Page 1 of 1

CHECK ONE	SUPPLIER	QIP NO.	REV.	THICKNESS	MATERIAL TYPE
( ) CASTING (X) WELDMENT ( ) OTHER	(W)PP	8332	01	5"	INC/SS/CS

ASSEMBLY NO.	ⓦH/C IDENTIFIERS	DRAWING NO.	ITEM	SUB	COMP. DESCRIPTION	OPER.	WELD NO.	IQI
3590J	RY14 (SAFE END) 3590J (CH HD)	6145E22	G01	04	CHANNEL HEAD (SAFE END)	* 840	"W-X"	TYPE ASME #50's; SIZE SS; MATL

ISOTOPES	CURIES	SFD	SIZE (FSS)	X-RAY	FSS	FFD	SHIM SIZE & MATL
( ) IRIDIUM 192 (X) COBALT 60	21	20 1/4"	.100" x .106	____ MEV ____ KV N/A ____ MA	N/A	N/A	NONE

EXPOSURE TIME OR KRADS	ACCEPTANCE STANDARDS	LEAD SCREENS	WELD PROC.#
65 MIN	(X) SECTION III ( ) SECTION VIII ( ) OTHER ( ) NG ( ) ND (X) NB	FRONT: ( ) .005" (X) .010" ( ) OTHER BACK: ( ) .005" ( ) .010" (X) OTHER .040	N/A

RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER	REMARKS
0-1	✓																✓		✓					IQI
1-2	✓																✓		✓					
2-3	✓																✓		✓					IQI
3-4	✓																		✓					
4-5	✓																		✓					
5-6	✓																✓		✓					IQI
6-7	✓																✓		✓					
7-8	✓																		✓					IQI
8-9	✓																		✓					
9-0	✓																		✓					

*FINAL AFTER O.D. SURF BLEND PER MDR

* USE WHEN TECHNIQUE VARIATIONS REQUIRE

FILM: TYPE AA MFG. EKC; SIZE 7 X 17; NO. OF FILMS 20 CASST. 10

TYPE OF EXPOSURE: (X) PANORAMIC ( ) OTHER; ( ) 90° SHOT; NO. OF EXPOSURE(S) 1

SET-UP PERSONNEL & LEVEL II's: J. COLLEY & G. ANTONE

RADIOGRAPHY SET-UP CHECK ONE:

(X) A ( ) C ( ) B ( ) D

(X) E OTHER (SKETCH)

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA.

ⓦNCD Level II RT Interpreter: J.E. AINSLEY — Date: 02/25/94

MRN/MRR No.: N/A; Ref. MRN/MRR No. MDR# 361210

(X) Final X-Ray ( ) In-Process X-Ray

R.I.R. Number Is The: NCD X-Ray Log No. 62898

F-NCD-31622B, Rev. 3

SCE&G - V.C. SUMMER SGR PROJ; P.O.: Q594687 PAGE 631

JRO SCE&G

F37599

RADIOGRAPHIC INSPECTION RECORD

COMPONENT	SHOP ORDER	SERIAL NUMBER
CHANNEL HEAD	12149	3590J

DESCRIPTION OF AREA OR WELD	DRAWING	SUB	ITEM
SAFE END	6145E22	04	G01

WPP EXPOSURE NUMBER	WELDING PROCESS	QIP NUMBER	WELD SEAM IDENTITY
WPP 62898	N/A	8332	"W-X" SAFE END

SKETCH APPROVED BY MC Weatherly DATE 1/24/94

V. C. SUMMER PROJECT

SAFE END WELD

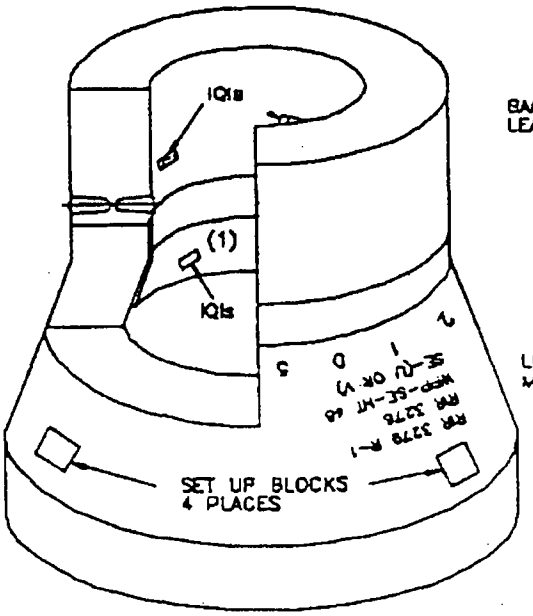


FIG. 4: NOZZLE MOCKUP SHOWING QUADRANT

(1) IF REQUIRED

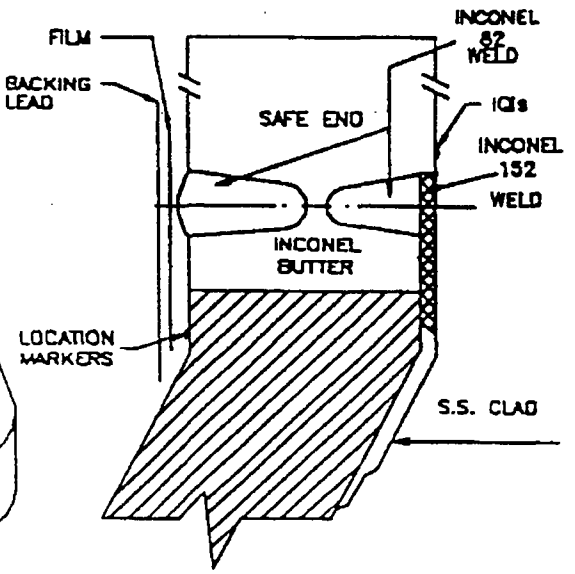


FIG. 4: SAFE END WELD CROSS SECTION

NOTES SEE PROCEDURE QIP-3288 GUIDELINES FOR LAYOFF OF WELD SEAMS.

JRO SCE&G

2.24.1

NCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Shop Order No. 12,145 — Page 1 of 1

CHECK ONE: [ ] CASTING [X] WELDMENT [ ] OTHER	SUPPLIER: WPP	QIP NO.: 8352	REV.: 01	THICKNESS: 5"	MATERIAL TYPE: INC/SS/CS		
ASSEMBLY NO.: 3590J	H/C IDENTIFIERS: RY15 (SAFE END) 3590J (CL/HD)	DRAWING NO.: 6145E22	ITEM: G01	SUB: 04	COMP. DESCRIPTION: CHANNEL HEAD/SAFE END	OPER.: 670	WELD NO.: "W-2"
ISOTOPES: 192 [ ] IRIDIUM [X] 60 COBALT	CURIES: 21	SFD: 20 1/4"	SIZE (FSS): .100 x .106	X-RAY: ____ MEV ____ KV N/A MA	FSS: N/A	FFD: N/A	IQI: ASME TYPE: #50 SIZE: MATL: SS SHIM SIZE & MATL: NONE
EXPOSURE TIME OR KRADS: 57 min.	ACCEPTANCE STANDARDS: [X] SECTION III [ ] SECTION VIII [ ] OTHER [ ] NG [ ] ND [X] NB	LEAD SCREENS: FRONT: [ ] .005" [X] .010" [ ] OTHER BACK: [ ] .005" [ ] .010" [X] OTHER .040					WELD PROC.#: N/A

RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER	REMARKS
0-1	✓																✓		✓					
1-2		✓												✓										1 1/4" INDICATION
2-3	✓																		✓					
3-4	✓																		✓					
4-5	✓																		✓					
5-6	✓																		✓					
6-7	✓																		✓					
7-8	✓																		✓					
8-9	✓																		✓					
9-0	✓																✓		✓					

W. Jones 5/31/94

9MDR

NCD Level III R/T Interpreter: [signature] Date: 3/8/94

MRN/MRR No.: 36211 Ref. MRN/MRR No.:

[X] Final X-Ray [ ] In-Process X-Ray

R.I.R. Number Is The: NCD X-Ray Log No. 62896

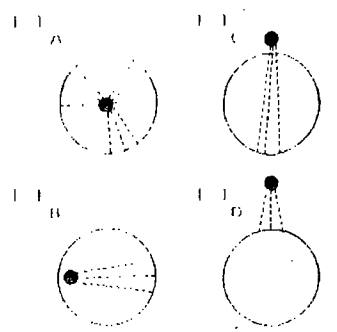
* USE WHEN TECHNIQUE VARIATIONS REQUIRE

FILM: TYPE AA MFG EKC SIZE 7X17 NO. OF FILMS 20 CASST. 10

TYPE OF EXPOSURE: [X] PANORAMIC [ ] OTHER [ ] 90° SHOT NO. OF EXPOSURE(S) ____

SET-UP PERSONNEL & LEVEL: ~~J. SHERWOOD II~~

RADIOGRAPHY SET-UP CHECK ONE:



[ ] OTHER (SKETCH)

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA

JRO SCE&G

F-NCD-31622B, Rev. 3

633

SCE&G - V.C. SUMMER SGR PROJ: P.O.: Q594687 PAGE

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	M361211	R01	—	—	3590J	814	

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
61	0		361211	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	GRIND OUT AREA IN NOZZLE

INSPECTOR	DATE	LEVEL II	STAMP
D E ARRINGTON	03/13/94		W QA186

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RZ17
REMOVER	MAGNAFLUX	SKC-S	RZ17
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RZ16

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HE DATE: 3-15-84

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF WELDS
RECORDING FORM QIP 8567 REV:01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	M361211	R01	—	—	3590J	816	NA

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	361211

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-2 NOZZLE SAFE-END WELD FOR VERIFICATION OF DEFECT REMOVAL

INSPECTOR	DATE	LEVEL II	STAMP
R BOLLING	03/13/94	YES	W QA/8

IN-PROCESS [✓] REPAIR [ ] FINAL [ ]
ACCEPT [✓] REJECT [ ] RECORDABLE
REPORTABLE INDICATIONS 0 INDICATIONS* 0
AREA SCANNED O.D. & I.D. SURFACE OF SAFE END *Complete Sketch!

FLAW DETECTOR: SM90A S/N L28-3 CALIBRATION DATE 1-4-94

	0 LONGITUDINAL	45° LONG	70° LONG	
SENSITIVITY		40-10-6.0		
SWEEP DELAY		4.15		
SWEEP RANGE		5		
PULSE POSITION	NA	9.10	NA	NA
REP RATE		H		
SEARCH UNIT:				
MFR/F SERIAL NO.		92-881		
SIZE		2(15x25)		
FREQUENCY		2MHz		
SINGLE/DUAL		DUAL		

COUPLANT: ECHO GEL 3000 BATCH NO. // HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	3-13-94	1630	RES
	/	/	/
END	3-13-94	1730	RES

CAL.BLOCK L-30.21
REF.REFLECTOR 1/4"ØSDH
SCANNING SENSITIVITY: +14 dB

COMMENTS: NONE

APPROVED: [signature] DATE: 6/24/94

F8567 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	M361211	R01			3590J	817	

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	0		361211

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Weld Prep of GRINDOUT

INSPECTOR	DATE	LEVEL II	STAMP
D E ARRINGTON	03/13/94		W QA186

[X] Weld ( ) Weld Prep ( ) Base Metal ( ) Root Pass
( ) Backgouge ( ) Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 3-15-94

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	M361211	R01	—	—	3590J	827	NA

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	361211

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-Z NOZZLE REPAIRED AREA

INSPECTOR	DATE	LEVEL II	STAMP
R BOLLING	03/13/94	YES	W QA18

( )Weld (Y)Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: NA

VISUAL AIDS USED: [Y] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS NA Power

LIGHTING: [Y] NATURAL [ ] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

NONE

APPROVED: [signature] DATE: 6/24/94

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
ULTRASONIC INSPECTION OF WELDS
RECORDING FORM QIP 8567 REV:01

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	M361211	R01	—	—	3590J	835	—

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	361211

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-Z NOZZLE REPAIR

INSPECTOR	DATE	LEVEL II	STAMP
R BOLLING	03/13/94	YES	W QA/S

IN-PROCESS [ ] REPAIR [✓] FINAL [ ]
ACCEPT [✓] REJECT [ ] RECORDABLE
REPORTABLE INDICATIONS 0 INDICATIONS* 0
AREA SCANNED O.D. & I.D W.Z NOZZLE REPAIR *Complete Sketch!

FLAW DETECTOR: S7900 S/N L-28-3 CALIBRATION DATE 1-4-94

	0 LONGITUDINAL	45° LONG	70° LONG	
SENSITIVITY	H-20-0-4.0	40-16-8.5		
SWEEP DELAY	4.76	4.12		
SWEEP RANGE	5	5		
PULSE POSITION	9.32	9.18	NA	NA
REP RATE	H	H		
SEARCH UNIT:				
MFR/F SERIAL NO.	183196			
SIZE	1" ϕ			
FREQUENCY	2.25 MHz			
SINGLE/DUAL	SINGLE			

COUPLANT: ECHO GEL 3000 BATCH NO./ HEAT CODE 092017

CALIBRATION:	DATE	TIME	INITIALS
INITIAL	3-13-94	2230	REB
	/	/	/
END	3-13-94	2315	REB

CAL.BLOCK L-30.21
REF.REFLECTOR 1/4"ϕSDH
SCANNING SENSITIVITY: +14dB

COMMENTS: NONE

APPROVED: [signature] DATE: 6/24/94

F8567 - 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	M361211	R01	—		3590J	836	NA

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
1	0	NA	361211	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	W-2 NOZZLE REPAIR AREA

INSPECTOR	DATE	LEVEL II	STAMP
R BOLLING	03/13/94	YES	W QA18

(✓)Weld ( )Weld Prep (✓)Base Metal ( )Root Pass
( )Backgouge ( )Other: NA

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	SB-50
PRE-CLEANER	MAGNAFLUX	SKC-S	RZ-85
REMOVER	MAGNAFLUX	SKC-S	RZ-85
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RZ-1L

SKETCH OR DESCRIPTION OF INDICATION(S):

NA

APPROVED: [signature] DATE: 6/24/94

F8105 - 02

JRO SCE&G

ⓦNCD PENSACOLA
RADIOGRAPHIC INSPECTION REPORT

Shop Order No. 12149 — Page 1 of 1

CHECK ONE: [ ] CASTING [X] WELDMENT [ ] OTHER	SUPPLIER: WPP	QIP NO.: 8332	REV.: 01	THICKNESS: 5"	MATERIAL TYPE: CARBON S.S.				
ASSEMBLY NO.: 35905	ⓦH/C IDENTIFIERS: R4/15 / 35905	DRAWING NO.: M361211	ITEM: R01	SUB: N/A	COMP. DESCRIPTION: CH/HD	OPER.: 838	WELD NO.: W-2 NOZZLE	IQI TYPE: ASME SIZE: #50 MAT'L: SS	
ISOTOPES: [ ] IRIDIUM 192 [X] COBALT 60	CURIES: 20	SFD: 20 1/4 ~~20 1/4~~	SIZE (FSS): .100" x .100"	X-RAY: ____ MEV N/A, ____ KV ____ MA	FSS: N/A	FFD: N/A	SHIM SIZE & MAT'L: N/A		
EXPOSURE TIME OR KRADS: 57 mins	ACCEPTANCE STANDARDS: [X] SECTION III [ ] SECTION VIII [ ] OTHER; [ ] NG [ ] ND [X] NB	LEAD SCREENS: FRONT: [ ] .005" [X] .010" [ ] OTHER .040; BACK: [ ] .005" [ ] .010" [X] OTHER .040						WELD PROC.#: N/A	

RADIOGRAPH NUMBER	ACCEPT	REJECT	GAS & BLOWHOLES	SAND INCLUSION	INTERNAL SHRINKAGE	HOT TEARS	UNFUSED CHAPLETS	BURN THROUGH	COLD SHUTS	CRACKS	POROSITY	SLAG INCLUSIONS	TUNGSTEN INCLUSIONS	INCOMPLETE FUSION	INADEQUATE PENETRATION	UNDERCUT	FILM ARTIFACTS	SURFACE	NO APPARENT DEFECTS	EXPOSURE TIME OR KRADS *	SFD OR FFD *	FILM TYPE *	OTHER	* USE WHEN TECHNIQUE VARIATIONS REQUIRE / REMARKS
1-2	/										/						/		/					
L	/	VD Jones			ANI				5/3/94															REPAIR
																								REF. G145E22 G01

FILM: TYPE AA MFG. EKC; SIZE 7x17; NO. OF FILMS 2 CASST. 1

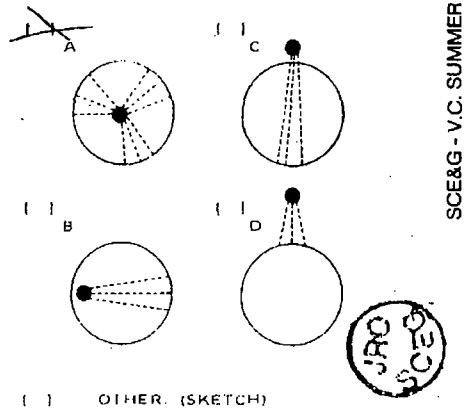
TYPE OF EXPOSURE: [X] PANORAMIC [ ] OTHER; [ ] 90° SHOT

NO. OF EXPOSURE(S) 1

SET-UP PERSONNEL & LEVEL: G. Bass (T) & Shacklewood II

RADIOGRAPHY SET-UP

CHECK ONE:



ⓦNCD Level II RT Interpreter: [signature]	Date: 5/17/94	MRN/MRR No.	[X] Final X-Ray; ( ) In-Process X-Ray
		Ref. MRN/MRR No. 361211	R.I.R. Number Is The: NCD X-Ray Log No. 62970

NOTE: SEE QIP FOR ADDITIONAL SET-UP DATA.

F-NCD-31622B, Rev. 3 [signature] LEVEL III 5-17-94

SCE&G - V.C. SUMMER SGR PROJ; P.O.: Q594687 PAGE 640

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	704	N/A

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
01	00	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CLOSURE RINGS WELDS - 2 PLACES Item 04

INSPECTOR	DATE	LEVEL II	STAMP
K J EDMONDS	11/21/93		

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: N/A

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [ ] FLASH LIGHT [X] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: AG DATE: 11-21-93

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	705	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	00	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Item 04 Closure Rings (2 each)

INSPECTOR	DATE	LEVEL II	STAMP
K J EDMONDS	11/21/93		

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: N/A

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RT50
PRE-CLEANER	MAGNAFLUX	SKC-S	RY56
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S): N/A

APPROVED: HG DATE: 11-21-93

F8105 - 02

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	M360132	R01	N/A	N/A	3590J	815	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	00	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHAN HEAD	"X" SIDE GROUND AREAS

INSPECTOR	DATE	LEVEL II	STAMP
B R WISCOMBE	12/01/93	FF	

(X)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: GROUND AREAS

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RU56
REMOVER	MAGNAFLUX	SKC-S	RU56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 12-2-93

F8105 - 02

JRO SCE&G

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	NA	3590J	855	3590J

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	NA	NA

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Safe End Weld W-X Joint

INSPECTOR	DATE	LEVEL II	STAMP
F G CURRAN	03/04/94	✓	QA32

(✓)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [✓] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [✓] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: JRO SCE&G HG DATE: 3-7-94

F8608 - 00

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	NA	3590J	856	3590J

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
1	0	NA	NA	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	Weld Seam W-X Nozzle

INSPECTOR	DATE	LEVEL II	STAMP
F G CURRAN	03/04/94	✓	W QA32

(✓)Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RY51
REMOVER	MAGNAFLUX	SKC-S	RY56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: JRO SCE&G DATE: 3-7-94

F8105 - 02

Westinghouse Pensacola Plant
VISUAL EXAMINATION
RECORDING FORM
QIP 8608 REV:02

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/R	3590J	873	N/R

Number Inspected	Number Rejected	MDR No.	Ref. MDR No.
1	0	N/A	N/A

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	2½ of IE to DE Weld to Machined Surfaces.

INSPECTOR	DATE	LEVEL II	STAMP
R E ANTONE	02/17/94		W 83

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

VISUAL AIDS USED: [X] NONE [ ] BORESCOPE [ ] CAMERA
[ ] MIRROR [ ] TELESCOPE [ ] FIBER OPTICS
[ ] MAGNIFYING LENS _____ Power

LIGHTING: [ ] NATURAL [X] FLASH LIGHT [ ] DROP LIGHT

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: DATE: 2-17-94

F8608 - 00

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:07

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	NA	3590J	875	NA

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
1	1	M361C03	NA	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	MCL-W-2 SAFE End to Nozzle IB TOE

INSPECTOR	DATE	LEVEL II	STAMP
R E ANTONE	02/17/94		QA 33

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	BS12
PRE-CLEANER	MAGNAFLUX	SKC-S	BZ17
REMOVER	MAGNAFLUX	SKC-S	BZ17
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	BZ16

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HG DATE: 2-17-94

F8105 - 02

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:08

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	M361003	R01	0	NA	3590J	815	3590J

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
01	NA	NA	NA	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	I.D. SAFE END NOZ. W-Z

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
H R REINHARDT	07-16-94	W Q205

(X)Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other:

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S, SKL-SP	SB50
PRE-CLEANER	MAGNAFLUX	SKC-S	SB51
REMOVER	MAGNAFLUX	SKC-S	SB51
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	~~BZ16~~ RZ16

SKETCH OR DESCRIPTION OF INDICATION(S):
NO INDICATIONS FOUND EXCEEDING .010.Ø

APPROVED: JRQ SCE&G HG DATE: 7-18-94

F8105 - 04

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:03

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	890	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	N/A	N/A	N/A	[x] Yoke [x] Dry [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	CHANNEL HEAD WELD PREPS & machined *

INSPECTOR	DATE	LEVEL II	STAMP
R GUSS	03/08/94		W 121 3 8 94

( )Weld (X)Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MANUFACTURER:

MT UNIT: [X] PARKER [ ] OTHER: _____
WPP I.D. NUMBER: R-32-8
TEST WEIGHT I.D. NUMBER: R-38-3

POWDER: [X] MAGNAFLUX [ ] OTHER: _____
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: _____
W HEAT CODE NUMBER: NK07

SKETCH OR DESCRIPTION OF INDICATION(S):

* SURFACE CD

APPROVED: HC DATE: 3-9-94

F8820 - 00

Westinghouse Pensacola Plant
MAGNETIC PARTICLE EXAMINATION
RECORDING FORM
QIP 8820 REV:04

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	6145E22	G01	04	N/A	3590J	899	N/A

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Yoke [x] Dry [x] Visible
01	0	N/A	36165 3	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
CHANNEL HD	4 MACHINED SUPPORT PADS

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
J R MCCREA	7-22-94	QA167

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MANUFACTURER:

MT UNIT: [Y] PARKER [ ] OTHER: _____
WPP I.D. NUMBER: R-32-2
TEST WEIGHT I.D. NUMBER: R-38-2

POWDER: [X] MAGNAFLUX [ ] OTHER: _____
COLOR: [X] RED [ ] GRAY [ ] BLACK
[ ] YELLOW [ ] OTHER: N/A
W HEAT CODE NUMBER: ~~AK02~~ NK07
7/22/94

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: HC DATE: 7-22-94

F8820 - 01

JRO SCE&G

SCE&G - SG3L12150
LOWER ASSEMBLY COMPLETE - SN 2986J

9742D06 H01 (RY14, RY15)

OPN	NDE	DESCRIPTION	PAGE
030	PT	MACHINED SURFACES	934

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV ~~08~~ 07 RDG 6/28/94

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12148	9742D06	H01	02	N/A	00002	030	RY14

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	
01	0	N/A	N/A	[x] Solvent-Removable [x] Visible

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
SAFE END MCH	MACHINED SURFACES COMP.

LEVEL II INSPECTOR	INSPECTION DATE	STAMP
Joe R McClain	12-03-93	WP QA167

( )Weld ( )Weld Prep (X)Base Metal ( )Root Pass
( )Backgouge ( )Other: _____

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	~~SKL-HP~~/S,SKL-SP	RS12
PRE-CLEANER	MAGNAFLUX	SKC-S	RZ85
REMOVER	MAGNAFLUX	SKC-S	RZ85
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	RT51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: _____ DATE: 6/24/94

F8105 - 04

JRO SCE&G

Westinghouse Pensacola Plant
LIQUID PENETRANT EXAMINATION
RECORDING FORM
QIP 8105 REV:06

S/O No	Drawing	Item	Sub	DR	SN/Lot	Opn.No.	W-HT Code/Ident.
12149	9742D06	H01	02	N/A	00001	030	RV 15

No.Insp.	No. Rej.	MDR No.	Ref. MDR No.	[x] Solvent-Removable [x] Visible
1	0	N/A	N/A	

ROUTING DESCRIPTION	JOINT/SEAM IDENTIFICATION
SAFE END M	Partial Surface

INSPECTOR	DATE	LEVEL II	STAMP
F G CURRAN	10/11/93	✓	W QA32

( )Weld ( )Weld Prep ( )Base Metal ( )Root Pass
( )Backgouge (X)Other: All Mach Surface

MATERIAL	MANUFACTURER	DESIGNATION	W HEAT CODE
PENETRANT	MAGNAFLUX	SKL-HF/S	PS-12
PRE-CLEANER	MAGNAFLUX	SKC-S	PV 56
REMOVER	MAGNAFLUX	SKC-S	PV. 56
DEVELOPER	MAGNAFLUX	SKD-S/SKD-S2	PT 51

SKETCH OR DESCRIPTION OF INDICATION(S):

APPROVED: _____ DATE: 10/11/93

F8105 - 02

JRO SCE&G

Document Control Desk
Attachment 3
CR-12-00556
RC-12-0097
5 pages

South Carolina Electric & Gas Co. (SCE&G)
Virgil C. Summer Nuclear Station Unit 1 (VCSNS)

Attachment 3
Inservice Inspection for Steam Generator "A"

Penetrant Inspection and Ultrasonic
CGE-1-4100A, Steam Generator "A"

ORIGINAL ISI

Raytheon - Engineers & Constructors

LIQUID PENETRANT INSPECTION REPORT

Procedure/Revision SCEG-PT-89-1 R.1 Thickness SEE REEMRK. Iso No. CGE-I-4100A

*Temperature SEE REMARKS Gauge ID 173392 Other N / A

A. Component ID / B. Report No.	Examination Results NRI	RI	Length	Location of Indications	Remarks
A. I-4100A-29 / B. 96Q3050	X	N/A	N/A	N / A	T=2.5" CAT.BJ TEMP.=94°F.
A. I-4100A-31(DM) / B. 96Q3050	X	N/A	N/A	N / A	T=2.6" CAT.BF TEMP.=94°F.
A. I-4100A-3 / B. 96Q3050	X	N/A	N/A	N / A	T.= CAT.BJ TEMP.-94°F.
A. / B. N					
A. / B.					
A. / B.					
A. / B.					
A. / B.					A

Catagory: SEE REMARKS Item Number: B9.11

*List different temperatures of exams in the remarks column.

	Manufacturer	Type	Batch No.
Penetrant	sherwin	dp-51	423J47
Cleaner / Remover	sherwin	dr-60	412A4
Developer	Sherwin	d-100	426A6

Inspector/Level R.G. AUER Lvl. II Date: 10-14-97

Inspector/Level S.T. FOSS Lvl. II Date: 10-14-97

Reviewed (Raytheon) Date: 10-15-97

Reviewed (Client) Date: 10-16-97

Reviewed (ANII) Date: 10/29/97

Examination Type

[ ] ADDL-Additional

[ ] AUGM-Augment

[ ] BASE-Baseline

[X] SCHD-Scheduled

[ ] SUCC-Successive

[ ] SUPP-Supplemental

[ ] REEX-Reexamination

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ORIGINAL

ISI

Raytheon - Engineers & Constructors

Page 1 of 1

LIQUID PENETRANT INSPECTION REPORT

Procedure/Revision: SCEG-PT-89-1/1 Thickness: See Remarks Iso No.: CGE-1-4100A

*Temperature: 88°F Gauge ID: 173527 Other: System - RC

A. Component ID / B. Report No.	Examination Results NRI	RI	Length	Location of Indications	Remarks
A. 1-4100A-30 / B. 96Q3050	✓	N/A	N/A	N/A	Category B-J B9.11 Thickness 2.5"
A. 1-4100A-32 (DM) / B. 96Q3050	✓	N/A	N/A	N/A	Category B-F B5.70 Thickness 2.6"
A. 1-4100A-8 / B. 96Q3050	✓	N/A	N/A	N/A	Category B-J B9.11 Thickness 2.6"
A. / B.					
A. / B.					
A. / B.			N	A	
A. / B.					
A. / B.					

Catagory: See Remarks Item Number: See Remarks

*List different temperatures of exams in the remarks column.

	Manufacturer	Type	Batch No.
Penetrant	SHERWIN	DP-S1	423J47
Cleaner / Remover	SHERWIN	DR-60	S14L4
Developer	SHERWIN	D-100	828C6

Inspector/Level: Scott Hamilton II Date: 10-14-97

Inspector/Level: Rick Davis II Date: 10-14-97

Reviewed (Raytheon): Date: 10-15-97

Reviewed (Client): Date: 10-16-97

Reviewed (ANII): Date: 10/29/97

Examination Type

[ ] ADDL-Additional

[ ] AUGM-Augment

[ ] BASE-Baseline

[✓] SCHD-Scheduled

[ ] SUCC-Successive

[ ] SUPP-Supplemental

[ ] REEX-Reexamination

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Raytheon Engineers& Constructors ORIGINAL ISI Page 13 of 17

ULTRASONIC CALIBRATION DATA SHEET

Client SCE&G | Iso No. CGE-1-4100A | Project VC Summer

System RC | Procedure / Rev. SCEG-UT-89-1 Rev. 1 | Date 10-14-97

Line Number N/A | Report Number 96Q3050

Cal Blk Number 9741 D22 | Blk. Temperature 70°F

Type of Exam: Axial [X] Circ. [ ] | 0° Base Metal [ ] 0° Lam. Scan [ ] Other [ ]

Reflector Type: SDH's [ ] EDH's [ ] Notches [X]

Components Examined	Temperature	Results
1) CGE-1-4100A-31 (Dm)	82°F	RI [ ] NRI [X] Geometry [ ]
2) CGE-1-4100A-32 (Dm)	82°F	RI [ ] NRI [X] Geometry [ ]
3) N/A	N/A	RI [ ] NRI [ ] Geometry [ ]
4)		RI [ ] NRI [ ] Geometry [ ]

Search Unit

Manufacturer KBA | Single [ ] | Dual [X]
Style SP ALPHA | S/N C12493 / C12496
Size 1.0"x1.0" | Freq. 1 MHZ
Nom. Angle 45° | Meas. Ang. 45°
Mode Longitudinal | Batch No. 95325
Couplant UITRAGEL II

Instrument

Manufact. Staveley | S/N 136-502G
Model Sonic 136 | Damping 500 Ω
Freq. 1 MHZ | Pulse/ns 498
Rep. Rate. 1 KHZ | Reject off
Filter No. 2 | Velocity .232
Range In. 10.00" | Delay/In. 1.43

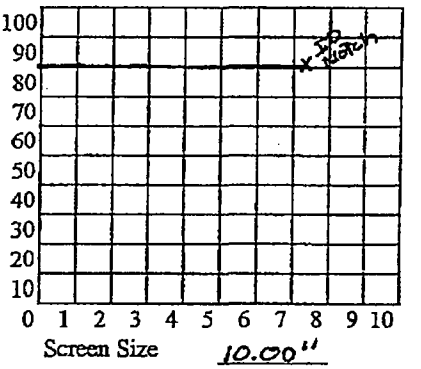
Cable: Type RG58 | Single [ ] Dual [X] | Length 6' | Connectors Ø

Cal.Type: Metal Path [X] Depth [ ]
Primary Ref.Response: ID Notch @ 80% FSH

Reference Sens.	Axial	86.4dB	Circ.	N/A
Hole Sens.	Axial	N/A	Circ.	N/A
Scan Sens.	Axial	92.4dB	Circ.	N/A
Noise Level	Axial	10%	Circ.	N/A

Cal. Chk.	Date	Time	Acceptable
Initial	10-14-97	14:19	Yes
Intermed.	10-14-97	15:30	Yes
Intermed.	10-14-97	16:50	Yes
Intermed.	10-14-97	17:20	Yes
Final	10-14-97	18:48	Yes

Item # ____



Comments: SCANNED FROM SAFE-END SIDE ONLY DUE TO SAFE-END CONFIGURATION.

Inspector/Level/Date II 10-14-97 | Inspector/Level/Date II 10-14-97

Reviewed (Raytheon) 10-15-97 | Reviewed (Client) 10-17-97

Reviewed (ANII) 10/29/97 | Other

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ULTRASONIC CALIBRATION DATA SHEET

96Q3050

Client	SCE&G	Iso No.	CGE-1-4100A	Project	VCSummer
System	RC	Procedure / Rev.	SCEG-UT-89-1 Rev. 1	Date	10-14-97

Line Number	NA	Report Number	96Q3050		
Cal Blk Number	9741DZ2	Blk. Temperature	70°F	Reflector Type SDH's [ ] EDH's [ ] Notches [X]	
Type of Exam	Axial [ ] Circ. [X]	0° Base Metal [ ] 0° Lam. Scan [ ]	Other [ ]		

Components Examined	Temperature	Results		
1) CGE-1-4100A-31 (PM)	82°F	RI [ ]	NRI [X]	Geometry [ ]
2) CGE-1-4100A-32 (PM)	82°F	RI [ ]	NRI [X]	Geometry [ ]
3) N/A	N/A	RI [ ]	NRI [ ]	Geometry [ ]
4)		RI [ ]	NRI [ ]	Geometry [ ]

Search Unit

Manufacturer	KBA	Single	[ ]
Style	SP. ALPHA	Dual	[X]
Size	1.0"x 1.0"	S/N	C12495/C12496
Nom. Angle	45°	Freq.	1mhz
Mode	Longitudinal	Meas. Ang.	45°
Couplant	ULTRAGEL II	Batch No.	95325

Instrument

Manufact.	Staveley	S/N	136-5026
Model	Sonic 136	Damping	500Ω
Freq.	1mHz	Pulse/ns	498
Rep. Rate.	1KHz	Reject	off
Filter No.	2	Velocity	.232
Range In.	10.00"	Delay/In.	1.43

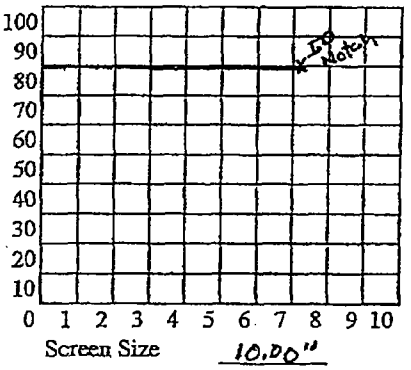
Cable: Type R658 Single [ ] Dual [X] Length 6' Connectors Ø

Cal.Type: Metal Path [X] Depth [ ]
Primary Ref.Response ID Notch @ 80% FSH

Reference Sens.	Axial	N/A	Circ.	90.0dB
Hole Sens.	Axial	N/A	Circ.	N/A
Scan Sens.	Axial	N/A	Circ.	96.0dB
Noise Level	Axial	N/A	Circ.	10%

Cal. Chk.	Date	Time	Acceptable
Initial	10-14-97	14:17	Yes
Intermed.	10-14-97	15:00	Yes
Intermed.	10-14-97	16:20	Yes
Intermed.	10-14-97	17:19	Yes
Final	10-14-97	18:49	Yes

Item #



Comments: SCANNED FROM SAFE-END SIDE ONLY DUE TO SAFE-END CONFIGURATION.

Inspector/Level/Date	I 10-14-97	Inspector/Level/Date	II 10-14-97
Reviewed (Raytheon)	10/15/97	Reviewed (Client)	10-17-97
Reviewed (ANII)	10/29/97	Other	

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