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May 12, 2006

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555-0001

Subject: Duke Power Company LLC d/b/a  
Duke Energy Carolinas, LLC (Duke)  
McGuire Nuclear Station Unit 2  
Docket No. 50-370  
Relief Request (RR) 05-MN-003

Pursuant to 10 CFR 50.55a(a)(3), Duke requests approval to use alternatives to Section XI of the ASME Boiler and Pressure Vessel Code. Compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. However, the proposed alternatives will provide an acceptable level of quality and safety. Specific details are described in the attached relief request.

Questions on this matter should be directed to Norman T. Simms, McGuire Regulatory Compliance, at (704) 875-4685.

Sincerely,

G.R. Peterson

Attachments

A047

U.S. Nuclear Regulatory Commission  
May 12, 2006  
Page 2

cc w/attachment:

Mr. W.D. Travers  
Regional Administrator, Region II  
U. S. Nuclear Regulatory Commission  
Atlanta Federal Center  
61 Forsyth Street, SW, Suite 23T85  
Atlanta, Georgia 30303

Mr. J.F. Stang Jr., Project Manager (addressee only)  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
One White Flint North, Mail Stop 08-H4A  
11555 Rockville Pike  
Rockville, MD 20852-2738

Mr. J.B. Brady  
Senior NRC Resident Inspector  
McGuire Nuclear Station

bxo w/o attachments:

N.T. Simms  
R. Branch (MG01WC)  
G.J. Underwood (EC05A)  
R.K. Rhyne (EC05A)  
J.J. Mc Ardle (EC05A)  
J.F. Swan (MG01WC)

bxo w/attachments:

K.L. Crane  
NRIA File/ELL  
Master File # 1.3.2.13

**ATTACHMENT**

**Relief Request 05-MN-003**

**Proposed Relief in Accordance with 10 CFR 50.55a(g)(5)(iii),  
 Inservice Inspection Impracticality  
 Duke Energy Corporation  
 McGuire Nuclear Station – Unit 2 (EOC-16)  
 Second 10-Year Interval – Inservice Inspection Plan  
 Interval Start Date= December 1, 2001 Interval End Date= December 1, 2011  
 ASME Section XI Code – 1989 Edition with No Addenda  
 Code Case N-460 is applicable  
 Examination Dates October 6, 2003-April 14, 2005**

Request Number	I. Limited Area/Weld LD. Number	II. System / Component for Which Relief is Requested: Area or Weld to be Examined	III. Code Requirement from Which Relief is Requested: 100% Exam Volume Coverage Exam Category Item No. Fig. No. Limitation Percentage	IV. & V. Impracticality/ Burden Caused by Compliance	VI. Proposed Alternate Examinations or Testing	VII. Implementation Schedule and Duration	VIII. Justification for Granting Relief
1.	2RPV-W03	NC System Reactor Vessel Lower Shell to Lower Head Circumferential Weld	Exam Category B-A Item No. B01.011.003 Fig. IWB-2500-1 72.76% Volume Coverage	See Paragraph "A" See Attachment 1 Pages 1-40 Attachment 6 Page 1	See Paragraph "E"	See Paragraph "F"	See Paragraph "G" See Attachment 1 Pages 1-40 Attachment 6 Page 1
2.	2RPV-W01	NC System Reactor Vessel Lower Head to Bottom Head Circumferential Weld	Exam Category B-A Item No. B01.021.002 Fig. IWB-2500-3 87.19% Volume Coverage	See Paragraph "B" See Attachment 2 Pages 1-81 Attachment 6 Page 2	See Paragraph "E"	See Paragraph "F"	See Paragraph "H" See Attachment 2 Pages 1-81 Attachment 6 Page 2
3.	2RPV-W15-SE	NC System Reactor Vessel Outlet Nozzle to Safe End Weld (22 degrees)	Exam Category B-F Item No. B05.010.005 and B05.010.005A Fig. IWB-2500-8 84.38% Volume Coverage	See Paragraph "C" See Attachment 3 Pages 1-7 Attachment 6 Page 3	See Paragraph "E"	See Paragraph "F"	See Paragraph "I" See Attachment 3 Pages 1-7 Attachment 6 Page 3
4.	2RPV-W17-SE	NC System Reactor Vessel Outlet Nozzle to Safe End Weld (202 degrees)	Exam Category B-F Item No. B05.010.007 and B05.010.007A Fig. IWB-2500-8 80.24% Volume Coverage	See Paragraph "C" See Attachment 4 Pages 1-7 Attachment 6 Page 3	See Paragraph "E"	See Paragraph "F"	See Paragraph "I" See Attachment 4 Pages 1-7 Attachment 6 Page 3

Request Number	I. Limited Area/Weld I.D. Number	II. System / Component for Which Relief is Requested: Area or Weld to be Examined	III. Code Requirement from Which Relief is Requested: 100% Exam Volume Coverage Exam Category Item No. Fig. No. Limitation Percentage	IV. & V. Impracticality Burden Caused by Compliance	VI. Proposed Alternate Examinations or Testing	VII. Implementation Schedule and Duration	VIII. Justification for Granting Relief
5.	2RPV-W18-SE	NC System Reactor Vessel Outlet Nozzle to Safe End Weld (338 degrees)	Exam Category B-F Item No. B05.010.008 and B05.010.008A Fig. IWB-2500-8 83.34% Volume Coverage	See Paragraph "C" See Attachment 5 Pages 1-7 Attachment 6 Page 3	See Paragraph "E"	See Paragraph "F"	See Paragraph "I" See Attachment 5 Pages 1-7 Attachment 6 Page 3
6.	2NC2F-1-1	NC System Reactor Vessel Outlet Nozzle to Safe End (22 degrees) (Pipe Side Scan)	Exam Category B-F Item No. B05.130.001 and B05.130.001A Fig. IWB-2500-8 84.38% Volume Coverage	See Paragraph "D" See Attachment 3 Pages 1-7 Attachment 6 Page 3	See Paragraph "E"	See Paragraph "F"	See Paragraph "I" See Attachment 3 Pages 1-7 Attachment 6 Page 3
7.	2NC2F-3-1	NC System Reactor Vessel Outlet Nozzle to Safe End (202 degrees) (Pipe Side Scan)	Exam Category B-F Item No. B05.130.009 and B05.130.009A Fig. IWB-2500-8 80.24% Volume Coverage	See Paragraph "D" See Attachment 4 Pages 1-7 Attachment 6 Page 3	See Paragraph "E"	See Paragraph "F"	See Paragraph "I" See Attachment 4 Pages 1-7 Attachment 6 Page 3
8.	2NC2F-4-1	NC System Reactor Vessel Outlet Nozzle to Safe End (338 degrees) (Pipe Side Scan)	Exam Category B-F Item No. B05.130.013 and B05.130.013A Fig. IWB-2500-8 83.34% Volume Coverage	See Paragraph "D" See Attachment 5 Pages 1-7 Attachment 6 Page 3	See Paragraph "E"	See Paragraph "F"	See Paragraph "I" See Attachment 5 Pages 1-7 Attachment 6 Page 3

**IV. & V. Impracticality/Burden caused by Code Compliance**

**Paragraph A:** (The Reactor Vessel Lower Shell to Lower Head Circumferential Weld is carbon steel. The thickness of this weld is 5.300 inches.)

During the ultrasonic examination of this weld, 100% coverage of the required examination volume could not be obtained. Coverage was limited due to the proximity of six Core Support Lugs. Scanning was conducted between and below the obstructing lugs with the scan boundaries maximized by visually assisted positioning of the exam head so that scan starts and stops were as close to the support lugs as tool configuration allowed. Beam angles dual element 45 degree refracted L-wave, single element 45 degree L-waves and single element 45 Shear Wave were used for this examination. This percentage represents the aggregate coverage of all scans performed on the weld and base material. In order to achieve more coverage, the six Core Support Lugs would have to be moved to allow greater access for scanning, this would be impractical. There were no recordable indications found during the inspection of this weld.

**Paragraph B:** (The Reactor Vessel Lower Head to Bottom Head Circumferential Weld is carbon steel. The thickness of this weld is 5.300 inches.)

During the ultrasonic examination of this weld, 100% coverage of the required examination volume could not be obtained. Coverage was limited due to the Lower Head to Bottom Head Weld being at approximately the same position as the peripheral bottom mounted instrumentation tubes (BMI). Scanning was conducted above and between the obstructing penetrations with scan boundaries maximized by visually assisted positioning of the exam head so that scan starts and stops were as close to the tubes as tool configuration allowed. The amount of coverage reported represents the aggregate coverage from all scans performed on the weld and base material. Beam angles, dual element 45-degree L-wave, single element 45 degree L-wave and single element 45 Shear Wave were used for this examination. This percentage represents the aggregate coverage of all scans for the weld. In order to achieve more coverage, the bottom mounted instrumentation tubes would have to be moved to allow greater access for scanning, this would be impractical. There were no recordable indications found during the inspection of this weld.

**Paragraph C:** (The Reactor Vessel Outlet Nozzle to Safe End Weld is stainless steel to carbon steel. The diameter of the weld is 29.00 inches with a wall thickness of 2.312 inches.)

During the ultrasonic examination of this weld, 100% coverage of the required examination volume could not be obtained. Coverage was limited due to the ID configuration which consists of counter-bore and weld root protrusion.

Ultrasonic scans were performed from the ID surface using 70 degree L wave transducers applied in four directions. This exam interrogated the inner 1/3 thickness volume. Eddy Current examination was also employed to examine inner surfaces of the dissimilar metal welds and the

adjacent examination volumes where ID geometry presented a limitation to the detection of axial flaws as defined in the PDQS for the qualified Appendix VIII techniques.

**Paragraph D:** The Reactor Vessel pipe to safe end weld is stainless steel. The diameter of the weld is 29.000 inches with a wall thickness of 2.300 inches.)

During the ultrasonic examination of this weld, 100% coverage of the required examination volume could not be obtained. Coverage was limited due to the ID configuration which consists of counter-bore and weld root protrusion.

Ultrasonic scans were performed from the ID surface using 70 degree L wave transducers applied in four directions. This exam interrogated the inner 1/3 thickness volume. Eddy Current examination was also employed to examine inner surfaces of the similar metal welds and the adjacent examination volumes where ID geometry presented a limitation to the detection of axial flaws as defined in the PDQS for the qualified Appendix VIII techniques.

**VI. Proposed Alternate Examinations or Testing**

**Paragraph E:**

None. The scheduled 10-year code examination was performed on the referenced area/welds and it resulted in the noted limited coverage of the required ultrasonic volume. No additional examinations are planned for the area/weld during the current inspection interval.

**VII. Implementation Schedule and Duration**

**Paragraph F:**

None. The scheduled 10-year code examination was performed on the referenced area/welds and it resulted in the noted limited coverage of the required ultrasonic volume. No additional examinations are planned for the area/weld during the current inspection interval.

**VIII. Justification for Granting Relief**

**Paragraph G:** Ultrasonic examination of this weld was conducted using personnel, equipment and procedures qualified in accordance with ASME Section XI, Appendix VIII, 1995 Edition with the 1996 Addenda as modified by 10 CFR 50.55a(b)(2)(xiv, xv and xvi). Although 100% coverage of the examination volume could not be achieved, the amount of coverage obtained for this examination provides an acceptable level of quality and integrity.

Due to the design of the reactor vessel and location of the Core Guide Lugs it is not feasible to obtain the required examination coverage. This weld is not exposed to significant neutron fluence and is not prone to negative material property changes (i.e., embrittlement) associated with neutron bombardment. If a leak were to occur at the weld in question, there are methods by



which the leak could be identified for prompt Engineering evaluation. The plant is designed to detect the following:

- a) Increased containment humidity. This parameter is indicated in the control room and is monitored periodically by Operations and also monitored by the Containment Ventilation System Engineer. Lower containment humidity, Ventilation Unit Condensate Drain Tank (VUCDT) level, are all recorded in Autolog at the start of each shift.
- b) Increased temperatures in lower containment, Steam Generator compartment, Pressurizer compartment, or incore sump room. These temperatures are monitored continuously by the OAC alarms, and are periodically monitored by the System Engineer. The OAC alarm is set for immediate Operations notification when an alarm set point is exceeded.
- c) Increased input into the VUCDT level. This parameter is monitored continuously by Operations via an OAC alarm and also periodically by the Liquid Radwaste System Engineer and Reactor Coolant System Engineer. The OAC alarm is set for immediate Operations notification when an alarm set point is exceeded.
- d) Increase in unidentified reactor coolant leakage. This parameter would be exhibited during performance of reactor coolant leakage calculation, which is required by Technical Specifications to be performed every 72 hours. The unidentified leakage limit in Technical Specification 3.4.13.1 is 1 gpm.
- e) Increased Containment Floor and Equipment Sump levels. These levels are monitored continuously by the OAC alarms for immediate Operations notification, and are periodically monitored by the System Engineer.
- f) Change in the Volume Control Tank (VCT) level rate (a more negative rate is set to alarm to Operations at -1.0 gpm). This is closely monitored by the Chemical and Volume Control System Engineer.

Note: Although diverse means are available to identify a leak in containment, containment entry would be required to identify the exact source of the leakage.

In addition, a Mode 3 containment walkdown is performed each refueling outage at shutdown and startup to identify any leaks.

**Paragraph H:** Ultrasonic examination of this weld was conducted using personnel, equipment and procedures qualified in accordance with ASME Section XI, Appendix VIII, 1995 Edition with the 1996 Addenda as modified by 10 CFR 50.55a(b)(2)(xiv, xv and xvi). Although 100% coverage of the examination volume could not be achieved, the amount of coverage obtained for this examination provides an acceptable level of quality and integrity.

Due to the design of the reactor vessel and location of the bottom mounted instrumentation (BMI) tubes it is not feasible to obtain the required examination coverage. This weld is not exposed to significant neutron fluence and is not prone to negative material property changes (i.e., embrittlement) associated with neutron bombardment. If a leak were to occur at the weld in

question, there are methods by which the leak could be identified for prompt Engineering evaluation. The plant is designed to detect the following:

- a. Increased containment humidity. This parameter is indicated in the control room and is monitored periodically by Operations and also monitored by the Containment Ventilation System Engineer. Lower containment humidity, Ventilation Unit Condensate Drain Tank (VUCDT) level are all recorded in Autolog at the start of each shift.
- b. Increased temperatures in lower containment, Steam Generator compartment, Pressurizer compartment, or incore sump room. These temperatures are monitored continuously by the OAC alarms, and are periodically monitored by the System Engineer. The OAC alarm is set for immediate Operations notification when an alarm set point is exceeded.
- c. Increased input into the VUCDT level. This parameter is monitored continuously by Operations via an OAC alarm and also periodically by the Liquid Radwaste System Engineer and Reactor Coolant System Engineer. The OAC alarm is set for immediate Operations notification when an alarm set point is exceeded.
- d. Increase in unidentified reactor coolant leakage. This parameter would be exhibited during performance of reactor coolant leakage calculation, which is required by Technical Specifications to be performed every 72 hours. The unidentified leakage limit in Technical Specification 3.4.13.1 is 1 gpm.
- e. Increased Containment Floor and Equipment Sump levels. These levels are monitored continuously by the OAC alarms for immediate Operations notification, and are periodically monitored by the System Engineer.
- f. Change in the Volume Control Tank (VCT) level rate (a more negative rate is set to alarm to Operations at 1.0 gpm). This is closely monitored by the Chemical and Volume Control System Engineer.

Note: Although diverse means are available to identify a leak in containment, containment entry would be required to identify the exact source of the leakage.

In addition, a Mode 3 containment walkdown is performed each refueling outage at shutdown and startup to identify any leaks.

**Paragraph I:**

Ultrasonic examination of this weld was conducted using personnel, equipment and procedures qualified in accordance with ASME Section XI, Appendix VIII, 1995 Edition with the 1996 Addenda as modified by 10 CFR 50.55a(b)(2)(xiv, xv and xvi). Although 100% coverage of the examination volume could not be achieved, the amount of coverage obtained for this examination provides an acceptable level of quality and integrity.

Due to the ID configuration counter-bore and weld root protrusion, it is not feasible to obtain the required examination coverage. This weld is not exposed to significant neutron fluence and is not prone to negative material property changes (i.e., embrittlement) associated with neutron bombardment. If a leak were to occur at the welds in question, there are methods by which the leak could be identified for prompt Engineering evaluation. The plant is designed to detect the following:

- a. Increased containment humidity. This parameter is indicated in the control room and is monitored periodically by Operations and also monitored by the Containment Ventilation System Engineer. Lower containment humidity, Ventilation Unit Condensate Drain Tank (VUCDT) level are all recorded in Autolog at the start of each shift.
- b. Increased temperatures in lower containment, Steam Generator compartment, Pressurizer compartment, or incore sump room. These temperatures are monitored continuously by the OAC alarms, and are periodically monitored by the System Engineer. The OAC alarm is set for immediate Operations notification when an alarm set point is exceeded.
- c. Increased input into the VUCDT level. This parameter is monitored continuously by Operations via an OAC alarm and also periodically by the Liquid Radwaste System Engineer and Reactor Coolant System Engineer. The OAC alarm is set for immediate Operations notification when an alarm set point is exceeded.
- d. Increase in unidentified reactor coolant leakage. This parameter would be exhibited during performance of reactor coolant leakage calculation, which is required by Technical Specifications to be performed every 72 hours. The unidentified leakage limit in Technical Specification 3.4.13.1 is 1 gpm.
- e. Increased Containment Floor and Equipment Sump levels. These levels are monitored continuously by the OAC alarms for immediate Operations notification, and are periodically monitored by the System Engineer.
- f. Change in the Volume Control Tank (VCT) level rate (a more negative rate is set to alarm to Operations at 1.0 gpm). This is closely monitored by the Chemical and Volume Control System Engineer.

Note: Although diverse means are available to identify a leak in containment, containment entry would be required to identify the exact source of the leakage.

In addition, a Mode 3 containment walkdown is performed each refueling outage at shutdown and startup to identify any leaks.

**IX. Other Information**

Jim McArdle (Principal UT NDE Level III Examiner) provided Sections III., IV., V. and part of Section VIII.

Robert W. Kirk (MNS Systems Engineer) provided part of Section VIII.

Gary Underwood (Sponsor) compiled the remaining sections of this relief request.

Sponsored By: Gary Underwood Date 5-10-06

Approved By: R. Kevin Rhyme Date 5/10/06

- |                 |   |
|-----------------|---|
| Attachment 1, 6 | UT Examination Data B01.011.003                   |
| Attachment 2, 6 | UT Examination Data B01.021.002                   |
| Attachment 3, 6 | UT Examination Data B05.010.005 and B05.010.005A  |
| Attachment 4, 6 | UT Examination Data B05.010.007 and B05.010.007A  |
| Attachment 5, 6 | UT Examination Data B05.010.008 and B05.010.008A  |
| Attachment 3, 6 | UT, Examination Data B05.130.001 and B05.130.001A |
| Attachment 4, 6 | UT, Examination Data B05.130.009 and B05.130.009A |
| Attachment 5, 6 | UT, Examination Data B05.130.013 and B05.130.013A |

**REQUEST RELIEF 05-MN-003**

**ATTACHMENT 1**

**PAGES 1-40**

# WesDyne International Reactor Vessel Weld Results Summary

## McGUIRE UNIT 2

WELD NO.	<u>2RPV-W03</u> <u>(B01.011.003)</u>	DESCRIPTION	<u>Lower Shell to Lower</u> <u>Head Circ</u>
	<hr/>		<hr/>
	<hr/>		<hr/>
	<hr/>		<hr/>

LIMITATIONS                      NO                       YES                       COVERAGE = 72.76%


\_\_\_\_\_

RESULTS                      NI                       RI

NO. OF INDICATIONS 0  
STATUS N/A

EXAM DOCUMENTATION	INDICATION DOCUMENTATION
<input checked="" type="checkbox"/> ANALYSIS LOG	<input type="checkbox"/> ASSESSMENT SHEET
<input checked="" type="checkbox"/> ACQUISITION LOG	<input type="checkbox"/> PARAGON HARD COPY
<input checked="" type="checkbox"/> SCAN PRINTOUT	<input type="checkbox"/> OTHER (specify)
<input checked="" type="checkbox"/> COVERAGE BREAKDOWN	_____
	_____

WESDYNE ANALYST



# McGuire Unit 2

## RPV COVERAGE ESTIMATE BREAKDOWNS

DIRECTION / ORIENTATION

PARALLEL SCANS  
PERP. SCANS

CCW/CW  
UP/DN

WELD DESCRIPTION LOWER SHELL TO LOWER HEAD CIRC WELD

WELD NO. 2RPV-W03

### BEAM ANGLES

BEAM DIRECTION	45° L Dual		45° L Single		45° Shear					
	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME
CCW	63.67	22.0	100	80.02	100	80.02				
CW	63.67	22.0	100	80.02	100	80.02				
UP	63.67	63.67	63.67	63.67	81.83	100				
DOWN	63.67	63.67	63.67	63.67	63.67	100				
<b>Combined Average = 72.76%</b>		Limitation due to Core Support Lugs.								

ANALYST *CL*



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PD-HSI-254	REVISION: 7
WELD #	2RPV-W03	WELD TYPE: LOWER SHELL TO LOWER HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W4-1
Analysis Log Sheet No.	W4-1	

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PAR-47-72	1	45L / CCW	X			CHL 3/18/05
W4-PAR-47-72	2	45L / CW	X			CHL 3/18/05
W4-PAR-47-72	3	45L / CCW	X			CHL 3/18/05
W4-PAR-47-72	4	45L / CW	X			CHL 3/18/05
W4-PAR-47-72	5	45S / CCW	X			CHL 3/18/05
W4-PAR-47-72	6	45S / CW	X			CHL 3/18/05
W4-PAR-47-72	7	45S / CW	X			CHL 3/18/05
W4-PAR-47-72	8	45L / CCW	X			CHL 3/18/05
W4-PAR-72-107	1	45L / CCW	X			CHL 3/18/05
W4-PAR-72-107	2	45L / CW	X			CHL 3/18/05
W4-PAR-72-107	3	45L / CCW	X			CHL 3/18/05
W4-PAR-72-107	4	45L / CW	X			CHL 3/18/05
W4-PAR-72-107	5	45S / CCW	X			CHL 3/18/05
W4-PAR-72-107	6	45S / CW	X			CHL 3/18/05
W4-PAR-72-107	7	45L / CW	X			CHL 3/18/05
W4-PAR-72-107	8	45L / CCW	X			CHL 3/18/05

EXAMINER

Chang Hun Lee

LEVEL

III

DATE

03-18-05





ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #	
PROCEDURE:	PD-HSI-254	REVISION:	7
WELD #	2RPV-W03	WELD TYPE:	LOWER SHELL TO LOWER HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No.	W4-1
Analysis Log Sheet No.	W4-2		

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PAR-12-47	1	45LD / CCW	X			LMM 3/18/05
W4-PAR-12-47	2	45LD / CW	X			LMM 3/18/05
W4-PAR-12-47	3	45LS / CCW	X			LMM 3/18/05
W4-PAR-12-47	4	45LS / CW	X			LMM 3/18/05
W4-PAR-12-47	5	45S / CCW	X			LMM 3/18/05
W4-PAR-12-47	6	45S / CW	X			LMM 3/18/05
W4-PAR-12-47	7	45S / CW	X			LMM 3/18/05
W4-PAR-12-47	8	45LD / CCW	X			LMM 3/18/05
W4-PAR-132-167	1	45LD / CCW	X			LMM 3/18/05
W4-PAR-132-167	2	45LD / CW	X			LMM 3/18/05
W4-PAR-132-167	3	45LS / CCW	X			LMM 3/18/05
W4-PAR-132-167	4	45LS / CW	X			LMM 3/18/05
W4-PAR-132-167	5	45S / CCW	X			LMM 3/18/05
W4-PAR-132-167	6	45S / CW	X			LMM 3/18/05
W4-PAR-132-167	7	45L / CW	X			LMM 3/18/05
W4-PAR-132-167	8	45LD / CCW	X			LMM 3/18/05

EXAMINER

Kerry M. McGuire

LEVEL

II

DATE

3-18-05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #	
PROCEDURE:	PDMSI-254	REVISION:	7
WELD #	2RPV-W03	WELD TYPE:	LOWER SHELL TO LOWER HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No.	W4-1
Analysis Log Sheet No.	W4-3		

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PAR-167-192	1	45LD / CCW	X			LMM 3/18/05
W4-PAR-167-192	2	45LD / CW	X			LMM 3/18/05
W4-PAR-167-192	3	45LS / CCW	X			LMM 3/18/05
W4-PAR-167-192	4	45LS / CW	X			LMM 3/18/05
W4-PAR-167-192	5	45S / CCW	X			LMM 3/18/05
W4-PAR-167-192	6	45S / CW	X			LMM 3/18/05
W4-PAR-167-192	7	45S / CW	X			LMM 3/18/05
W4-PAR-167-192	8	45LD / CCW	X			LMM 3/18/05
W4-PAR-347-12	1	45LD / CCW	X			LMM 3/18/05
W4-PAR-347-12	2	45LD / CW	X			LMM 3/18/05
W4-PAR-347-12	3	45LS / CCW	X			LMM 3/18/05
W4-PAR-347-12	4	45LS / CW	X			LMM 3/18/05
W4-PAR-347-12	5	45S / CCW	X			LMM 3/18/05
W4-PAR-347-12	6	45S / CW	X			LMM 3/18/05
W4-PAR-347-12	7	45L / CW	X			LMM 3/18/05
W4-PAR-347-12	8	45LD / CCW	X			LMM 3/18/05

EXAMINER

Harry M. Musgrave

LEVEL

II

DATE

3-18-05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #	
PROCEDURE:	PD-MSI-254	REVISION:	7
WELD #	2RPV-W03	WELD TYPE:	LOWER SHELL TO LOWER HEAD CIRC
Callbration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No.	W4-1
Analysis Log Sheet No.	W4-4		

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PAR-107-132	1	45L / CCW	X			CHL 3/18/05
W4-PAR-107-132	2	45L / CW	X			CHL 3/18/05
W4-PAR-107-132	3	45L / CCW	X			CHL 3/18/05
W4-PAR-107-132	4	45L / CW	X			CHL 3/18/05
W4-PAR-107-132	5	45S / CCW	X			CHL 3/18/05
W4-PAR-107-132	6	45S / CW	X			CHL 3/18/05
W4-PAR-107-132	7	45S / CW	X			CHL 3/18/05
W4-PAR-107-132	8	45L / CCW	X			CHL 3/18/05
W4-PAR-227-252	1	45L / CCW	X			CHL 3/18/05
W4-PAR-227-252	2	45L / CW	X			CHL 3/18/05
W4-PAR-227-252	3	45L / CCW	X			CHL 3/18/05
W4-PAR-227-252	4	45L / CW	X			CHL 3/18/05
W4-PAR-227-252	5	45S / CCW	X			CHL 3/18/05
W4-PAR-227-252	6	45S / CW	X			CHL 3/18/05
W4-PAR-227-252	7	45S / CW	X			CHL 3/18/05
W4-PAR-227-252	8	45L / CCW	X			CHL 3/18/05

EXAMINER

Chang Hun Lee

LEVEL

III

DATE

03-18-05



**ANALYSIS LOG**

PLANT / UNIT		McGUIRE / 2		OPTICAL DISK #	
PROCEDURE:		PDMSI-254	REVISION:		7
WELD #		WELD TYPE:			
2RPV-W03		LOWER SHELL TO LOWER HEAD CIRC			
Calibration Data Sheet No.		LS1 - LS8	Acquisition Log Sheet No.		W4-1
Analysis Log Sheet No.		W4-5			

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PAR-197-227	1	45L / CCW	X			CHL 3/18/05
W4-PAR-197-227	2	45L / CW	X			CHL 3/18/05
W4-PAR-197-227	3	45L / CCW	X			CHL 3/18/05
W4-PAR-197-227	4	45L / CW	X			CHL 3/18/05
W4-PAR-197-227	5	45S / CCW	X			CHL 3/18/05
W4-PAR-197-227	6	45S / CW	X			CHL 3/18/05
W4-PAR-197-227	7	45S / CW	X			CHL 3/18/05
W4-PAR-197-227	8	45L / CCW	X			CHL 3/18/05
W4-PAR-252-287	1	45L / CCW	X			CHL 3/18/05
W4-PAR-252-287	2	45L / CW	X			CHL 3/18/05
W4-PAR-252-287	3	45L / CCW	X			CHL 3/18/05
W4-PAR-252-287	4	45L / CW	X			CHL 3/18/05
W4-PAR-252-287	5	45S / CCW	X			CHL 3/18/05
W4-PAR-252-287	6	45S / CW	X			CHL 3/18/05
W4-PAR-252-287	7	45S / CW	X			CHL 3/18/05
W4-PAR-252-287	8	45L / CCW	X			CHL 3/18/05

EXAMINER

Chang Hun Lee

LEVEL

II

DATE

03-18-05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #	
PROCEDURE:	PDMSI-254	REVISION:	7
WELD #	2RPV-W03	WELD TYPE:	LOWER SHELL TO LOWER HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No.	W4-1
Analysis Log Sheet No.	W4-6		

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PRP-250-289	1	45LD / DN	X			LMM 3/18/05
W4-PRP-250-289	2	45LD / UP	X			LMM 3/18/05
W4-PRP-250-289	3	45LS / DN	X			LMM 3/18/05
W4-PRP-250-289	4	45LS / UP	X			LMM 3/18/05
W4-PRP-250-289	5	45S / DN	X			LMM 3/18/05
W4-PRP-250-289	6	45S / UP	X			LMM 3/18/05
W4-PRP-250-289	7	45S / UP	X			LMM 3/18/05
W4-PRP-250-289	8	45LD / DN	X			LMM 3/18/05
W4-PRP-289-310	1	45LD / DN	X			LMM 3/18/05
W4-PRP-289-310	2	45LD / UP	X			LMM 3/18/05
W4-PRP-289-310	3	45LS / DN	X			LMM 3/18/05
W4-PRP-289-310	4	45LS / UP	X			LMM 3/18/05
W4-PRP-289-310	5	45S / DN	X			LMM 3/18/05
W4-PRP-289-310	6	45S / UP	X			LMM 3/18/05
W4-PRP-289-310	7	45S / UP	X			LMM 3/18/05
W4-PRP-289-310	8	45LD / DN	X			LMM 3/18/05

EXAMINER

Harry M. Murgrave

LEVEL

II

DATE

3-18-05



**ANALYSIS LOG**

PLANT / UNIT		McGUIRE / 2		OPTICAL DISK #	
PROCEDURE:		PDI-SI-254		REVISION: 7	
WELD #		WELD TYPE:			
2RPV-W03		LOWER SHELL TO LOWER HEAD CIRC			
Calibration Data Sheet No.		LS1 - LS8		Acquisition Log Sheet No. W4-1	
Analysis Log Sheet No.		W4-7			

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PAR-287-312	1	45L / CCW	X			CHL 3/18/05
W4-PAR-287-312	2	45L / CW	X			CHL 3/18/05
W4-PAR-287-312	3	45L / CCW	X			CHL 3/18/05
W4-PAR-287-312	4	45L / CW	X			CHL 3/18/05
W4-PAR-287-312	5	45S / CCW	X			CHL 3/18/05
W4-PAR-287-312	6	45S / CW	X			CHL 3/18/05
W4-PAR-287-312	7	45S / CW	X			CHL 3/18/05
W4-PAR-287-312	8	45L / CCW	X			CHL 3/18/05
W4-PAR-312-347	1	45L / CCW	X			CHL 3/18/05
W4-PAR-312-347	2	45L / CW	X			CHL 3/18/05
W4-PAR-312-347	3	45L / CCW	X			CHL 3/18/05
W4-PAR-312-347	4	45L / CW	X			CHL 3/18/05
W4-PAR-312-347	5	45S / CCW	X			CHL 3/18/05
W4-PAR-312-347	6	45S / CW	X			CHL 3/18/05
W4-PAR-312-347	7	45S / CW	X			CHL 3/18/05
W4-PAR-312-347	8	45L / CCW	X			CHL 3/18/05

EXAMINER Chang Hun Lee LEVEL II DATE 03-18-05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDI-ISI-254	REVISION: 7
WELD #	2RPV-W03	WELD TYPE: LOWER SHELL TO LOWER HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W4-1
Analysis Log Sheet No.	W4-8	

DATAFILE	CHANNEL	R.A / DIR	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PRP-190-229	1	45L / DN	X			CHL 3/18/05
W4-PRP-190-229	2	45L / UP	X			CHL 3/18/05
W4-PRP-190-229	3	45L / DN	X			CHL 3/18/05
W4-PRP-190-229	4	45L / UP	X			CHL 3/18/05
W4-PRP-190-229	5	45S / DN	X			CHL 3/18/05
W4-PRP-190-229	6	45S / UP	X			CHL 3/18/05
W4-PRP-190-229	7	45S / UP	X			CHL 3/18/05
W4-PRP-190-229	8	45L / DN	X			CHL 3/18/05
W4-PRP-229-250	1	45L / DN	X			CHL 3/18/05
W4-PRP-229-250	2	45L / UP	X			CHL 3/18/05
W4-PRP-229-250	3	45L / DN	X			CHL 3/18/05
W4-PRP-229-250	4	45L / UP	X			CHL 3/18/05
W4-PRP-229-250	5	45S / DN	X			CHL 3/18/05
W4-PRP-229-250	6	45S / UP	X			CHL 3/18/05
W4-PRP-229-250	7	45S / UP	X			CHL 3/18/05
W4-PRP-229-250	8	45L / DN	X			CHL 3/18/05

EXAMINER

Chang Hun Lee

LEVEL

II

DATE

03-18-05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #	
PROCEDURE:	PDI-ISI-254	REVISION:	7
WELD #	2RPV-W03	WELD TYPE:	LOWER SHELL TO LOWER HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No.	W4-1
Analysis Log Sheet No.	W4-9		

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PRP-310-349	1	45LD / DN	X			LMM 3/19/05
W4-PRP-310-349	2	45LD / UP	X			LMM 3/19/05
W4-PRP-310-349	3	45LS / DN	X			LMM 3/19/05
W4-PRP-310-349	4	45LS / UP	X			LMM 3/19/05
W4-PRP-310-349	5	45S / DN	X			LMM 3/19/05
W4-PRP-310-349	6	45S / UP	X			LMM 3/19/05
W4-PRP-310-349	7	45S / UP	X			LMM 3/19/05
W4-PRP-310-349	8	45LD / DN	X			LMM 3/19/05
W4-PRP-49-70	1	45LD / DN	X			LMM 3/19/05
W4-PRP-49-70	2	45LD / UP	X			LMM 3/19/05
W4-PRP-49-70	3	45LS / DN	X			LMM 3/19/05
W4-PRP-49-70	4	45LS / UP	X			LMM 3/19/05
W4-PRP-49-70	5	45S / DN	X			LMM 3/19/05
W4-PRP-49-70	6	45S / UP	X			LMM 3/19/05
W4-PRP-49-70	7	45S / UP	X			LMM 3/19/05
W4-PRP-49-70	8	45LD / DN	X			LMM 3/19/05

EXAMINER

Harry M. McGuire

LEVEL

II

DATE

3-19-05





**ANALYSIS LOG**

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDHSI-254	REVISION: 7
WELD #	2RPV-W03	WELD TYPE: LOWER SHELL TO LOWER HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W4-1
Analysis Log Sheet No.	W4-10	

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PRP-349-10	1	45L / DN	X			CHL 3/19/05
W4-PRP-349-10	2	45L / UP	X			CHL 3/19/05
W4-PRP-349-10	3	45L / DN	X			CHL 3/19/05
W4-PRP-349-10	4	45L / UP	X			CHL 3/19/05
W4-PRP-349-10	5	45S / DN	X			CHL 3/19/05
W4-PRP-349-10	6	45S / UP	X			CHL 3/19/05
W4-PRP-349-10	7	45S / UP	X			CHL 3/19/05
W4-PRP-349-10	8	45L / DN	X			CHL 3/19/05
W4-PRP-10-49	1	45L / DN	X			CHL 3/19/05
W4-PRP-10-49	2	45L / UP	X			CHL 3/19/05
W4-PRP-10-49	3	45L / DN	X			CHL 3/19/05
W4-PRP-10-49	4	45L / UP	X			CHL 3/19/05
W4-PRP-10-49	5	45S / DN	X			CHL 3/19/05
W4-PRP-10-49	6	45S / UP	X			CHL 3/19/05
W4-PRP-10-49	7	45S / UP	X			CHL 3/19/05
W4-PRP-10-49	8	45L / DN	X			CHL 3/19/05

EXAMINER

Chang Hun Lee

LEVEL

II

DATE

03-19-05



**ANALYSIS LOG**

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PD-HSI-254	REVISION: 7
WELD #	2RPV-W03	WELD TYPE: LOWER SHELL TO LOWER HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W4-1
Analysis Log Sheet No.	W4-11	

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PRP-70-109	1	45LD / DN	X			LMM 3/19/05
W4-PRP-70-109	2	45LD / UP	X			LMM 3/19/05
W4-PRP-70-109	3	45LS / DN	X			LMM 3/19/05
W4-PRP-70-109	4	45LS / UP	X			LMM 3/19/05
W4-PRP-70-109	5	45S / DN	X			LMM 3/19/05
W4-PRP-70-109	6	45S / UP	X			LMM 3/19/05
W4-PRP-70-109	7	45S / UP	X			LMM 3/19/05
W4-PRP-70-109	8	45LD / DN	X			LMM 3/19/05
W4-PRP-109-130	1	45LD / DN	X			LMM 3/19/05
W4-PRP-109-130	2	45LD / UP	X			LMM 3/19/05
W4-PRP-109-130	3	45LS / DN	X			LMM 3/19/05
W4-PRP-109-130	4	45LS / UP	X			LMM 3/19/05
W4-PRP-109-130	5	45S / DN	X			LMM 3/19/05
W4-PRP-109-130	6	45S / UP	X			LMM 3/19/05
W4-PRP-109-130	7	45S / UP	X			LMM 3/19/05
W4-PRP-109-130	8	45LD / DN	X			LMM 3/19/05

EXAMINER

Harry M. Mansgrave

LEVEL

II

DATE

3-19-05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #	
PROCEDURE:	PDHSI-254	REVISION:	7
WELD #	2RPV-W03	WELD TYPE:	LOWER SHELL TO LOWER HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No.	W4-1
Analysis Log Sheet No.	W4-12		

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W4-PRP-130-169	1	45LD / DN	X			LMM 3/19/05
W4-PRP-130-169	2	45LD / UP	X			LMM 3/19/05
W4-PRP-130-169	3	45LS / DN	X			LMM 3/19/05
W4-PRP-130-169	4	45LS / UP	X			LMM 3/19/05
W4-PRP-130-169	5	45S / DN	X			LMM 3/19/05
W4-PRP-130-169	6	45S / UP	X			LMM 3/19/05
W4-PRP-130-169	7	45S / UP	X			LMM 3/19/05
W4-PRP-130-169	8	45LD / DN	X			LMM 3/19/05
W4-PRP-169-190	1	45LD / DN	X			LMM 3/19/05
W4-PRP-169-190	2	45LD / UP	X			LMM 3/19/05
W4-PRP-169-190	3	45LS / DN	X			LMM 3/19/05
W4-PRP-169-190	4	45LS / UP	X			LMM 3/19/05
W4-PRP-169-190	5	45S / DN	X			LMM 3/19/05
W4-PRP-169-190	6	45S / UP	X			LMM 3/19/05
W4-PRP-169-190	7	45S / UP	X			LMM 3/19/05
W4-PRP-169-190	8	45LD / DN	X			LMM 3/19/05

EXAMINER

*Kerry M. McGuire*

LEVEL

*II*

DATE

*3-19-05*



**DATA ACQUISITION LOG**

<b>PLANT / UNIT</b> McGUIRE / 2	<b>INTERVAL:</b> 2	<b>PERIOD:</b> 3	<b>OUTAGE:</b> 2EOC16
<b>PROCEDURE:</b> PDHSI-254	<b>REVISION:</b> 7		
<b>Calibration Data Sheet No. LS1 - LS8</b>		<b>Acquisition Log Sheet No. W4-1- W4-12</b>	

DATAFILE NAME	WELD #	INDEX START	SCAN START	OPERATOR	LEVEL	DATE	COMMENTS
W4-PAR-12-47	2RPV-W03	332.70	12.46	KRS	IT	3/18/05	
W4-PAR-47-72	2RPV-W03	342.34	47.54	KRS	IT	3/18/05	
W4-PAR-72-107	2RPV-W03	332.70	72.46	KRS	IT	3/18/05	
W4-PAR-107-132	2RPV-W03	342.34	107.54	KRS	IT	3/18/05	
W4-PAR-132-167	2RPV-W03	332.70	132.46	KRS	IT	3/18/05	
W4-PAR-167-192	2RPV-W03	342.34	167.54	KRS	IT	3/18/05	
W4-PAR-347-12	2RPV-W03	342.34	347.54	KRS	IT	3/18/05	
W4-PAR-192-227	2RPV-W03	332.70	192.46	KRS	IT	3/18/05	
W4-PAR-227-252	2RPV-W03	342.34	227.54	KRS	IT	3/18/05	
W4-PAR-252-287	2RPV-W03	332.70	252.46	KRS	IT	3/18/05	
W4-PAR-287-312	2RPV-W03	342.34	287.54	KRS	IT	3/18/05	
W4-PAR-312-347	2RPV-W03	332.70	312.46	KRS	IT	3/18/05	
W4-PRP-190-229	2RPV-W03	190.80	329.20	KRS	IT	3/18/05	
W4-PRP-229-250	2RPV-W03	229.00	345.65	KRS	IT	3/18/05	
W4-PRP-250-289	2RPV-W03	250.80	329.20	KRS	IT	3/18/05	
W4-PRP-289-310	2RPV-W03	289.00	345.65	KRS	IT	3/18/05	
W4-PRP-310-349	2RPV-W03	310.80	329.20	KRS	IT	3/18/05	
W4-PRP-349-10	2RPV-W03	349.00	345.65	KRS	IT	3/18/05	
W4-PRP-10-49	2RPV-W03	10.80	329.20	KRS	IT	3/18/05	
W4-PRP-49-70	2RPV-W03	49.00	345.65	KRS	IT	3/18/05	
W4-PRP-70-109	2RPV-W03	70.80	329.20	KRS	IT	3/19/05	
W4-PRP-109-130	2RPV-W03	109.00	345.65	KRS	IT	3/19/05	



WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

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CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-12-47

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	ELEVATION (IN)	AZIMUTH (DEGREES)
TOP LEFT :	332.70	12.46
TOP RIGHT :	332.70	47.54
BOTTOM LEFT :	348.34	12.46
BOTTOM RIGHT :	348.34	47.54

---

Index Size (in) = 0.50  
Number of Indexes Specified = 33  
Number of Indexes Completed = 33

	Time	Date
Scan Started	20:41:00.448	03/18/05
Scan Completed	20:47:24.331	03/18/05

Robot Operator Signature Michael J. Graham, Jr. DATE 3-18-05  
PARAGON Operator Signature Karlson DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-47-72

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	79.00	47.54
TOP RIGHT :	79.00	72.46
BOTTOM LEFT :	75.00	47.54
BOTTOM RIGHT :	75.00	72.46

---

Index Size (in) = 0.50  
Number of Indexes Specified = 14  
Number of Indexes Completed = 14

	Time	Date
Scan Started	21:03:39.645	03/18/05
Scan Completed	21:05:38.743	03/18/05

Robot Operator Signature Michael J. Brubaker DATE 3-18-05

PARAGON Operator Signature Kurt Blinn DATE 3/18/05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PARALLEL SCAN  
Scan Data File Name = W4-PAR-72-107

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	ELEVATION (IN)	AZIMUTH (DEGREES)
TOP LEFT :	332.70	72.46
TOP RIGHT :	332.70	107.54
BOTTOM LEFT :	348.34	72.46
BOTTOM RIGHT :	348.34	107.54

---

Index Size (in) = 0.50  
Number of Indexes Specified = 33  
Number of Indexes Completed = 33

	Time	Date
Scan Started	21:10:20.881	03/18/05
Scan Completed	21:16:45.225	03/18/05

Robot Operator Signature Michael J. Gruber, II DATE 3-18-05  
PARAGON Operator Signature Karlouk DATE 3/18/05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-107-132

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SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	79.00	107.54
TOP RIGHT :	79.00	132.46
BOTTOM LEFT :	75.00	107.54
BOTTOM RIGHT :	75.00	132.46

---

Index Size (in) = 0.50  
Number of Indexes Specified = 14  
Number of Indexes Completed = 14

	Time	Date
Scan Started	21:22:31.663	03/18/05
Scan Completed	21:24:30.527	03/18/05

Robot Operator Signature Michael J. G. Smith, Jr. DATE 3-18-05

PARAGON Operator Signature K. Klein DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-132-167

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SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	ELEVATION (IN)	AZIMUTH (DEGREES)
TOP LEFT :	332.70	132.46
TOP RIGHT :	332.70	167.54
BOTTOM LEFT :	348.34	132.46
BOTTOM RIGHT :	348.34	167.54

---

Index Size (in) = 0.50  
Number of Indexes Specified = 33  
Number of Indexes Completed = 33

	Time	Date
Scan Started	21:27:37.742	03/18/05
Scan Completed	21:34:02.110	03/18/05

Robot Operator Signature Michael J. Brubaker DATE 3-18-05

PARAGON Operator Signature [Signature] DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-167-192

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	79.00	167.54
TOP RIGHT :	79.00	192.46
BOTTOM LEFT :	75.00	167.54
BOTTOM RIGHT :	75.00	192.46

---

Index Size (in) = 0.50  
Number of Indexes Specified = 14  
Number of Indexes Completed = 14

	Time	Date
Scan Started	21:36:42.233	03/18/05
Scan Completed	21:38:40.590	03/18/05

Robot Operator Signature Michael J. Brubaker, Jr DATE 3-18-05

PARAGON Operator Signature K. L. Linn DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-347-12

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	79.00	347.54
TOP RIGHT :	79.00	372.46
BOTTOM LEFT :	75.00	347.54
BOTTOM RIGHT :	75.00	372.46

---

Index Size (in) = 0.50  
Number of Indexes Specified = 14  
Number of Indexes Completed = 14

	Time	Date
Scan Started	21:44:53.176	03/18/05
Scan Completed	21:46:51.674	03/18/05

Robot Operator Signature Michael D. Brubaker, Jr. DATE 3-18-05

PARAGON Operator Signature [Signature] DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-192-227

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	ELEVATION (IN)	AZIMUTH (DEGREES)
TOP LEFT :	332.70	192.46
TOP RIGHT :	332.70	227.54
BOTTOM LEFT :	348.34	192.46
BOTTOM RIGHT :	348.34	227.54

---

Index Size (in) = 0.50  
Number of Indexes Specified = 33  
Number of Indexes Completed = 33

	Time	Date
Scan Started	21:53:11.236	03/18/05
Scan Completed	21:59:35.472	03/18/05

Robot Operator Signature Michael G. Brubaker, Jr. DATE 3-18-05  
PARAGON Operator Signature [Signature] DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-227-252

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	79.00	227.54
TOP RIGHT :	79.00	252.46
BOTTOM LEFT :	75.00	227.54
BOTTOM RIGHT :	75.00	252.46

---

Index Size (in) = 0.50  
Number of Indexes Specified = 14  
Number of Indexes Completed = 14

	Time	Date
Scan Started	22:02:05.212	03/18/05
Scan Completed	22:04:04.351	03/18/05

Robot Operator Signature Michael J. Strubbe, JR DATE 3-18-05

PARAGON Operator Signature K. L. Linn DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-252-287

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	ELEVATION (IN)	AZIMUTH (DEGREES)
TOP LEFT :	332.70	252.46
TOP RIGHT :	332.70	287.54
BOTTOM LEFT :	348.34	252.46
BOTTOM RIGHT :	348.34	287.54

---

Index Size (in) = 0.50  
Number of Indexes Specified = 33  
Number of Indexes Completed = 33

	Time	Date
Scan Started	22:07:06.199	03/18/05
Scan Completed	22:13:30.918	03/18/05

Robot Operator Signature Michael J. Anderson, Jr. DATE 3-18-05  
PARAGON Operator Signature K. L. Sauer DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-287-312

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	79.00	287.54
TOP RIGHT :	79.00	312.46
BOTTOM LEFT :	75.00	287.54
BOTTOM RIGHT :	75.00	312.46

---

Index Size (in) = 0.50  
Number of Indexes Specified = 14  
Number of Indexes Completed = 14

	Time	Date
Scan Started	22:15:59.624	03/18/05
Scan Completed	22:17:58.690	03/18/05

Robot Operator Signature Michael J. Braden, Jr. DATE 3-18-05

PARAGON Operator Signature [Signature] DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W4-PAR-312-347

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	ELEVATION (IN)	AZIMUTH (DEGREES)
TOP LEFT :	332.70	312.46
TOP RIGHT :	332.70	347.54
BOTTOM LEFT :	348.34	312.46
BOTTOM RIGHT :	348.34	347.54

---

Index Size (in) = 0.50  
Number of Indexes Specified = 33  
Number of Indexes Completed = 33

	Time	Date
Scan Started	22:21:26.945	03/18/05
Scan Completed	22:27:55.765	03/18/05

Robot Operator Signature Michael G. [Signature] DATE 3-18-05

PARAGON Operator Signature [Signature] DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PERPENDICUAR SCA  
Scan Data File Name = W4-PRP-190-229

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	ELEVATION (IN)
TOP LEFT :	190.80	329.20
TOP RIGHT :	229.00	329.20
BOTTOM LEFT :	190.80	347.59
BOTTOM RIGHT :	229.00	347.59

---

Index Size (in) = 0.50  
Number of Indexes Specified = 117  
Number of Indexes Completed = 117

	Time	Date
Scan Started	22:37:46.473	03/18/05
Scan Completed	22:48:54.355	03/18/05

Robot Operator Signature Michael J. Brubaker, Jr. DATE 3-18-05  
PARAGON Operator Signature [Signature] DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W4-PRP-229-250

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	229.00	76.80
TOP RIGHT :	250.80	76.80
BOTTOM LEFT :	229.00	75.50
BOTTOM RIGHT :	250.80	75.50

---

Index Size (in) = 0.50  
Number of Indexes Specified = 69  
Number of Indexes Completed = 69

	Time	Date
Scan Started	22:52:51.111	03/18/05
Scan Completed	22:55:59.791	03/18/05

Robot Operator Signature Michael J. Blaher DATE 3-18-05

PARAGON Operator Signature Carlton R. Linn DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PERPENDICUAR SCA  
Scan Data File Name = W4-PRP-250-289

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	ELEVATION (IN)
TOP LEFT :	250.80	329.20
TOP RIGHT :	289.00	329.20
BOTTOM LEFT :	250.80	347.59
BOTTOM RIGHT :	289.00	347.59

---

Index Size (in) = 0.50  
Number of Indexes Specified = 117  
Number of Indexes Completed = 117

	Time	Date
Scan Started	22:58:36.606	03/18/05
Scan Completed	23:09:28.188	03/18/05

Robot Operator Signature Michael Stuber, Jr DATE 3-18-05

PARAGON Operator Signature [Signature] DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W4-PRP-289-310

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	289.00	76.80
TOP RIGHT :	310.80	76.80
BOTTOM LEFT :	289.00	75.50
BOTTOM RIGHT :	310.80	75.50

---

Index Size (in) = 0.50  
Number of Indexes Specified = 69  
Number of Indexes Completed = 69

	Time	Date
Scan Started	23:12:54.527	03/18/05
Scan Completed	23:15:48.266	03/18/05

Robot Operator Signature

Michael J. Brubaker DATE 3-18-05

PARAGON Operator Signature

Karen L. Juran DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PERPENDICUAR SCA  
Scan Data File Name = W4-PRP-310-349

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	ELEVATION (IN)
TOP LEFT :	310.80	329.20
TOP RIGHT :	349.00	329.20
BOTTOM LEFT :	310.80	347.59
BOTTOM RIGHT :	349.00	347.59

---

Index Size (in) = 0.50  
Number of Indexes Specified = 117  
Number of Indexes Completed = 117

	Time	Date
Scan Started	23:19:06.147	03/18/05
Scan Completed	23:30:59.879	03/18/05

Robot Operator Signature Michael Ostrander DATE 3-18-05  
PARAGON Operator Signature Karl Anderson DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W4-PRP-349-10

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	349.00	76.80
TOP RIGHT :	370.80	76.80
BOTTOM LEFT :	349.00	75.50
BOTTOM RIGHT :	370.80	75.50

---

Index Size (in) = 0.50  
Number of Indexes Specified = 69  
Number of Indexes Completed = 69

	Time	Date
Scan Started	23:33:41.326	03/18/05
Scan Completed	23:36:39.740	03/18/05

Robot Operator Signature Michael J. Brubaker, Jr. DATE 3-18-05

PARAGON Operator Signature Karl R. Rimmer DATE 3/18/05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PERPENDICUAR SCA  
Scan Data File Name = W4-PRP-10-49

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	ELEVATION (IN)
TOP LEFT :	10.80	329.20
TOP RIGHT :	49.00	329.20
BOTTOM LEFT :	10.80	347.59
BOTTOM RIGHT :	49.00	347.59

---

Index Size (in) = 0.50  
Number of Indexes Specified = 117  
Number of Indexes Completed = 117

	Time	Date
Scan Started	23:38:28.330	03/18/05
Scan Completed	23:49:57.855	03/18/05

Robot Operator Signature Michael J. Brubaker, Jr. DATE 3-18-05  
PARAGON Operator Signature Karlson Blanton DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W4-PRP-49-70

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	49.00	76.80
TOP RIGHT :	70.80	76.80
BOTTOM LEFT :	49.00	75.50
BOTTOM RIGHT :	70.80	75.50

---

Index Size (in) = 0.50  
Number of Indexes Specified = 69  
Number of Indexes Completed = 69

	Time	Date
Scan Started	23:52:13.255	03/18/05
Scan Completed	23:55:12.276	03/18/05

Robot Operator Signature Michael J. Baker, Jr. DATE 3-18-05

PARAGON Operator Signature Karlson R. Simon DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PERPENDICUAR SCA  
Scan Data File Name = W4-PRP-70-109

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	ELEVATION (IN)
TOP LEFT :	70.80	329.20
TOP RIGHT :	109.00	329.20
BOTTOM LEFT :	70.80	347.59
BOTTOM RIGHT :	109.00	347.59

---

Index Size (in) = 0.50  
Number of Indexes Specified = 117  
Number of Indexes Completed = 117

	Time	Date
Scan Started	23:58:02.673	03/18/05
Scan Completed	00:08:53.173	03/19/05

Robot Operator Signature *Michael D. ...* DATE 3-19-05  
PARAGON Operator Signature *Karl ...* DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN  
Scan Data File Name = W4-PRP-109-130

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	109.00	76.80
TOP RIGHT :	130.80	76.80
BOTTOM LEFT :	109.00	75.50
BOTTOM RIGHT :	130.80	75.50

---

Index Size (in) = 0.50  
Number of Indexes Specified = 69  
Number of Indexes Completed = 69

	Time	Date
Scan Started	00:11:26.413	03/19/05
Scan Completed	00:14:26.210	03/19/05

Robot Operator Signature Michael J. Ambrose DATE 3-19-05  
PARAGON Operator Signature Karlson L. Leman DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD-VESSEL CIRCUMFERENTIAL PERPENDICUAR SCA  
Scan Data File Name = W4-PRP-130-169

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	ELEVATION (IN)
TOP LEFT :	130.80	329.20
TOP RIGHT :	169.00	329.20
BOTTOM LEFT :	130.80	347.59
BOTTOM RIGHT :	169.00	347.59

---

Index Size (in) = 0.50  
Number of Indexes Specified = 117  
Number of Indexes Completed = 117

	Time	Date
Scan Started	00:16:32.700	03/19/05
Scan Completed	00:27:23.199	03/19/05

Robot Operator Signature Michael J. Brubaker, III DATE 3-19-05  
PARAGON Operator Signature Karlson Blum DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W03

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W4-PRP-169-190

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	169.00	76.80
TOP RIGHT :	190.80	76.80
BOTTOM LEFT :	169.00	75.50
BOTTOM RIGHT :	190.80	75.50

---

Index Size (in) = 0.50  
Number of Indexes Specified = 69  
Number of Indexes Completed = 69

	Time	Date
Scan Started	00:29:27.875	03/19/05
Scan Completed	00:32:26.587	03/19/05

Robot Operator Signature Michael J. Ambro, Jr. DATE 3-19-05

PARAGON Operator Signature Karlend Jensen DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**REQUEST RELIEF 05-MN-003**

**ATTACHMENT 2**

**PAGES 1-81**

# WesDyne International Reactor Vessel Weld Results Summary

## McGUIRE UNIT 2

WELD NO.	<u>2RPV-W01</u> <u>(B01.021.002)</u>	DESCRIPTION	<u>Lower Head to Bottom</u> <u>Head Circ</u>
	_____		_____
	_____		_____
	_____		_____

LIMITATIONS                      NO                       YES                       COVERAGE = 87.19%  
Limitation due to proximity  
of Peripheral BMI Tubes.

RESULTS                      NI                      RI  
                     

NO. OF INDICATIONS 9  
STATUS CODE ALLOWABLE

EXAM DOCUMENTATION

INDICATION DOCUMENTATION

ANALYSIS LOG

ASSESSMENT SHEET

ACQUISITION LOG

PARAGON HARD COPY

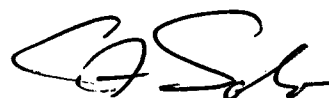
SCAN PRINTOUT

OTHER (specify)

COVERAGE BREAKDOWN

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

WESDYNE ANALYST



# McGuire Unit 2

## RPV COVERAGE ESTIMATE BREAKDOWNS

DIRECTION / ORIENTATION

PARALLEL SCANS CCW/CW  
 PERP. SCANS UP/DN

WELD DESCRIPTION LOWER SHELL TO BOTTOM HEAD CIRC WELD

WELD NO. 2RPV-W01

### BEAM ANGLES

BEAM DIRECTION	45° L Dual		45° L Single		45° Shear					
	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME
CCW	86.6	87.5	100	93	100	93				
CW	86.6	87.5	100	93	100	93				
UP	85.97	81.65	81.29	78.43	78.77	79.07				
DOWN	85.97	77.93	81.29	80.95	78.77	82.37				
<b>Combined Average = 87.19%</b>	Limitation due to proximity of peripheral BMI Tubes.									

ANALYST *SA Solo*





ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #	
PROCEDURE:	PDI-SI-254	REVISION:	7
WELD #	2RPV-W01	WELD TYPE:	LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No.	W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-1		

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-168-175	1	45L / DN	X			LMM 3/19/05
W5-PRP-168-175	2	45L / UP	X			LMM 3/19/05
W5-PRP-168-175	3	45L / DN	X			LMM 3/19/05
W5-PRP-168-175	4	45L / UP	X			LMM 3/19/05
W5-PRP-168-175	5	45S / DN	X			LMM 3/19/05
W5-PRP-168-175	6	45S / UP	X			LMM 3/19/05
W5-PRP-168-175	7	45S / UP	X			LMM 3/19/05
W5-PRP-168-175	8	45L / DN	X			LMM 3/19/05
W5-PRP-145-168	1	45L / DN	X			LMM 3/19/05
W5-PRP-145-168	2	45L / UP	X			LMM 3/19/05
W5-PRP-145-168	3	45L / DN	X			LMM 3/19/05
W5-PRP-145-168	4	45L / UP	X			LMM 3/19/05
W5-PRP-145-168	5	45S / DN	X			LMM 3/19/05
W5-PRP-145-168	6	45S / UP	X			LMM 3/19/05
W5-PRP-145-168	7	45S / UP	X			LMM 3/19/05
W5-PRP-145-168	8	45L / DN	X			LMM 3/19/05

EXAMINER

*Harry M. Musgrave*

LEVEL

*II*

DATE

*3-19-05*



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #	
PROCEDURE:	PDI-SI-254	REVISION:	7
WELD #	2RPV-W01	WELD TYPE:	LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No.	W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-2		

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-135-145	1	45L / DN	X		MISNAMED - W5-PRP-35-145 is actual name.	LMM 3/19/05
W5-PRP-135-145	2	45L / UP	X			LMM 3/19/05
W5-PRP-135-145	3	45L / DN	X			LMM 3/19/05
W5-PRP-135-145	4	45L / UP	X			LMM 3/19/05
W5-PRP-135-145	5	45S / DN	X			LMM 3/19/05
W5-PRP-135-145	6	45S / UP	X			LMM 3/19/05
W5-PRP-135-145	7	45S / UP	X			LMM 3/19/05
W5-PRP-135-145	8	45L / DN	X			LMM 3/19/05
W5-PRP-127-135	1	45L / DN	X			LMM 3/19/05
W5-PRP-127-135	2	45L / UP	X			LMM 3/19/05
W5-PRP-127-135	3	45L / DN	X			LMM 3/19/05
W5-PRP-127-135	4	45L / UP	X			LMM 3/19/05
W5-PRP-127-135	5	45S / DN	X			LMM 3/19/05
W5-PRP-127-135	6	45S / UP	X			LMM 3/19/05
W5-PRP-127-135	7	45S / UP	X			LMM 3/19/05
W5-PRP-127-135	8	45L / DN	X			LMM 3/19/05

EXAMINER

Harry M. M. McGraw

LEVEL

II

DATE

3-19-05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDI-HSI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-3	

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PAR-236-287	1	45L / CW	X			LMM 3/19/05
W5-PAR-236-287	2	45L / CCW	X			LMM 3/19/05
W5-PAR-236-287	3	45L / CW	X			LMM 3/19/05
W5-PAR-236-287	4	45L / CCW	X			LMM 3/19/05
W5-PAR-236-287	5	45S / CW	X			LMM 3/19/05
W5-PAR-236-287	6	45S / CCW	X			LMM 3/19/05
W5-PAR-236-287	7	45S / CCW	X			LMM 3/19/05
W5-PAR-236-287	8	45L / CW	X			LMM 3/19/05
W5-PRP-120-127	1	45L / DN	X			LMM 3/19/05
W5-PRP-120-127	2	45L / UP	X			LMM 3/19/05
W5-PRP-120-127	3	45L / DN	X			LMM 3/19/05
W5-PRP-120-127	4	45L / UP	X			LMM 3/19/05
W5-PRP-120-127	5	45S / DN	X			LMM 3/19/05
W5-PRP-120-127	6	45S / UP	X			LMM 3/19/05
W5-PRP-120-127	7	45S / UP	X			LMM 3/19/05
W5-PRP-120-127	8	45L / DN	X			LMM 3/19/05

EXAMINER

Harry M. Musgrave

LEVEL

II

DATE

3-19-05



**ANALYSIS LOG**

<b>PLANT / UNIT</b>		<b>McGUIRE / 2</b>		<b>OPTICAL DISK #</b>	
<b>PROCEDURE:</b>		<b>PDI-ISI-254</b>		<b>REVISION: 7</b>	
<b>WELD #</b>			<b>WELD TYPE:</b>		
<b>2RPV-W01</b>			<b>LOWER HEAD TO BOTTOM HEAD CIRC</b>		
<b>Calibration Data Sheet No.</b>		<b>LS1 - LS8</b>		<b>Acquisition Log Sheet No.</b>	
				<b>W5-1, W5-2, W5-3</b>	
<b>Analysis Log Sheet No.</b>			<b>W5-4</b>		

DATAFILE	CHANNEL	R.A. / DIR	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-109-120	1	45L / DN		X	Indication # 1	FGD 3/19/05
W5-PRP-109-120	2	45L / UP		X	Indication # 1 Code Allowable	FGD 3/19/05
W5-PRP-109-120	3	45L / DN	X			FGD 3/19/05
W5-PRP-109-120	4	45L / UP	X			FGD 3/19/05
W5-PRP-109-120	5	45S / DN	X			FGD 3/19/05
W5-PRP-109-120	6	45S / UP	X			FGD 3/19/05
W5-PRP-109-120	7	45S / UP	X			FGD 3/19/05
W5-PRP-109-120	8	45L / DN	—	—		FGD 3/19/05

EXAMINER *F. J. Kelly* LEVEL III DATE 03/19/05



**ANALYSIS LOG**

<b>PLANT / UNIT</b> McGUIRE / 2		<b>OPTICAL DISK #</b>	
<b>PROCEDURE:</b> PDHSI-254	<b>REVISION:</b> 7		
<b>WELD #</b> 2RPV-W01		<b>WELD TYPE:</b> LOWER HEAD TO BOTTOM HEAD CIRC	
<b>Calibration Data Sheet No.</b> LS1 - LS8	<b>Acquisition Log Sheet No.</b> W5-1, W5-2, W5-3		
<b>Analysis Log Sheet No.</b> W5-5			

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-62-71	1	45L / DN	X			FGD 3/19/05
W5-PRP-62-71	2	45L / UP	X			FGD 3/19/05
W5-PRP-62-71	3	45L / DN	X			FGD 3/19/05
W5-PRP-62-71	4	45L / UP	X			FGD 3/19/05
W5-PRP-62-71	5	45S / DN	X			FGD 3/19/05
W5-PRP-62-71	6	45S / UP	X			FGD 3/19/05
W5-PRP-62-71	7	45S / UP	X			FGD 3/19/05
W5-PRP-62-71	8	45L / DN	—	—		FGD 3/19/05
W5-PRP-44-62	1	45L / DN	X			FGD 3/19/05
W5-PRP-44-62	2	45L / UP	X			FGD 3/19/05
W5-PRP-44-62	3	45L / DN	X			FGD 3/19/05
W5-PRP-44-62	4	45L / UP	X			FGD 3/19/05
W5-PRP-44-62	5	45S / DN	X			FGD 3/19/05
W5-PRP-44-62	6	45S / UP	X			FGD 3/19/05
W5-PRP-44-62	7	45S / UP	X			FGD 3/19/05
W5-PRP-44-62	8	45L / DN	—	—		FGD 3/19/05

EXAMINER

J. Broderick

LEVEL

III

DATE

03/19/05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDI-SI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-6	

DATAFILE	CHANNEL	R/A / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-35-44	1	45L / DN	X			FGD 3/19/05
W5-PRP-35-44	2	45L / UP	X			FGD 3/19/05
W5-PRP-35-44	3	45L / DN	X			FGD 3/19/05
W5-PRP-35-44	4	45L / UP	X			FGD 3/19/05
W5-PRP-35-44	5	45S / DN	X			FGD 3/19/05
W5-PRP-35-44	6	45S / UP	X			FGD 3/19/05
W5-PRP-35-44	7	45S / UP	X			FGD 3/19/05
W5-PRP-35-44	8	45L / DN	—	—		FGD 3/19/05
W5-PRP-28-35	1	45L / DN	X			FGD 3/19/05
W5-PRP-28-35	2	45L / UP	X			FGD 3/19/05
W5-PRP-28-35	3	45L / DN	X			FGD 3/19/05
W5-PRP-28-35	4	45L / UP	X			FGD 3/19/05
W5-PRP-28-35	5	45S / DN	X			FGD 3/19/05
W5-PRP-28-35	6	45S / UP	X			FGD 3/19/05
W5-PRP-28-35	7	45S / UP	X			FGD 3/19/05
W5-PRP-28-35	8	45S / DN	—	—		FGD 3/19/05

EXAMINER F. Boehm LEVEL III DATE 05/19/05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDI-ISI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-7	

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-18-28	1	45L / DN	X			FGD 3/19/05
W5-PRP-18-28	2	45L / UP	X			FGD 3/19/05
W5-PRP-18-28	3	45L / DN	X			FGD 3/19/05
W5-PRP-18-28	4	45L / UP	X			FGD 3/19/05
W5-PRP-18-28	5	45S / DN	X			FGD 3/19/05
W5-PRP-18-28	6	45S / UP	X			FGD 3/19/05
W5-PRP-18-28	7	45S / UP	X			FGD 3/19/05
W5-PRP-18-28	8	45S / DN	—	—		FGD 3/19/05
W5-PRP-329-18	1	45L / DN		X	Indication # 2	FGD 3/19/05
W5-PRP-329-18	2	45L / UP		X	Indication # 2 Code Allowable	FGD 3/19/05
W5-PRP-329-18	3	45L / DN		X	Indication # 4 Code Allowable	FGD 3/19/05
W5-PRP-329-18	4	45L / UP		X	Indication # 4	FGD 3/19/05
W5-PRP-329-18	5	45S / DN		X	Indication # 4	FGD 3/19/05
W5-PRP-329-18	6	45S / UP		X	Indication # 4	FGD 3/19/05
W5-PRP-329-18	7	45S / UP	X			FGD 3/19/05
W5-PRP-329-18	8	45L / DN	—	—		FGD 3/19/05

EXAMINER

F. Book

LEVEL

III

DATE

03/19/05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDHSI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-8	

DATAFILE	CHANNEL	R/A / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-322-329	1	45L / DN	X			FGD 3/19/05
W5-PRP-322-329	2	45L / UP	X			FGD 3/19/05
W5-PRP-322-329	3	45L / DN	X			FGD 3/19/05
W5-PRP-322-329	4	45L / UP	X			FGD 3/19/05
W5-PRP-322-329	5	45S / DN	X			FGD 3/19/05
W5-PRP-322-329	6	45S / UP	X			FGD 3/19/05
W5-PRP-322-329	7	45S / UP	X			FGD 3/19/05
W5-PRP-322-329	8	45L / DN	—	—		FGD 3/19/05
W5-PRP-314-322	1	45L / DN		X	Indication # 5 Code Allowable	FGD 3/19/05
W5-PRP-314-322	2	45L / UP	X			FGD 3/19/05
W5-PRP-314-322	3	45L / DN	X			FGD 3/19/05
W5-PRP-314-322	4	45L / UP	X			FGD 3/19/05
W5-PRP-314-322	5	45S / DN	X			FGD 3/19/05
W5-PRP-314-322	6	45S / UP	X			FGD 3/19/05
W5-PRP-314-322	7	45S / UP	X			FGD 3/19/05
W5-PRP-314-322	8	45L / DN	X			FGD 3/19/05

EXAMINER

F. Brooks

LEVEL

III

DATE

03/19/05





ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDI-HSI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-9	

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-305-314	1	45L / DN	X			FGD 3/19/05
W5-PRP-305-314	2	45L / UP	X			FGD 3/19/05
W5-PRP-305-314	3	45L / DN	X			FGD 3/19/05
W5-PRP-305-314	4	45L / UP	X			FGD 3/19/05
W5-PRP-305-314	5	45S / DN	X			FGD 3/19/05
W5-PRP-305-314	6	45S / UP	X			FGD 3/19/05
W5-PRP-305-314	7	45S / UP	X			FGD 3/19/05
W5-PRP-305-314	8	45L / DN	—	—		FGD 3/19/05
W5-PRP-298-305	1	45L / DN		X	Indication # 6 Code Allowable	FGD 3/19/05
W5-PRP-298-305	2	45L / UP		X	Indication # 6	FGD 3/19/05
W5-PRP-298-305	3	45L / DN	X			FGD 3/19/05
W5-PRP-298-305	4	45L / UP	X			FGD 3/19/05
W5-PRP-298-305	5	45S / DN	X			FGD 3/19/05
W5-PRP-298-305	6	45S / UP	X			FGD 3/19/05
W5-PRP-298-305	7	45S / UP	X			FGD 3/19/05
W5-PRP-298-305	8	45L / DN	—	—		FGD 3/19/05

EXAMINER

F. Goodley

LEVEL

III

DATE

03/19/05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDHSI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-10	

DATAFILE	CHANNEL	RJA / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-288-298	1	45L / DN	X			FGD 3/19/05
W5-PRP-288-298	2	45L / UP	X			FGD 3/19/05
W5-PRP-288-298	3	45L / DN	X			FGD 3/19/05
W5-PRP-288-298	4	45L / UP	X			FGD 3/19/05
W5-PRP-288-298	5	45S / DN	X			FGD 3/19/05
W5-PRP-288-298	6	45S / UP	X			FGD 3/19/05
W5-PRP-288-298	7	45S / UP	X			FGD 3/19/05
W5-PRP-288-298	8	45L / DN	—	—		FGD 3/19/05
W5-PRP-281-288	1	45L / DN		X	Indication # 7, 8 Code Allowable	FGD 3/19/05
W5-PRP-281-288	2	45L / UP		X	Indication # 7, 8 Code Allowable	FGD 3/19/05
W5-PRP-281-288	3	45L / DN	X			FGD 3/19/05
W5-PRP-281-288	4	45L / UP	X			FGD 3/19/05
W5-PRP-281-288	5	45S / DN	X			FGD 3/19/05
W5-PRP-281-288	6	45S / UP	X			FGD 3/19/05
W5-PRP-281-288	7	45S / UP	X			FGD 3/19/05
W5-PRP-281-288	8	45L / DN	—	—		FGD 3/19/05

EXAMINER

F. hoodless

LEVEL

III

DATE

03/19/05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDHSI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-11	

DATAFILE	CHANNEL	R/A / DIR	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-274-281	1	45L / DN		X	Indication # 9 Code Allowable	FGD 3/19/05
W5-PRP-274-281	2	45L / UP		X	Indication # 9	FGD 3/19/05
W5-PRP-274-281	3	45L / DN	X			FGD 3/19/05
W5-PRP-274-281	4	45L / UP	X			FGD 3/19/05
W5-PRP-274-281	5	45S / DN	X			FGD 3/19/05
W5-PRP-274-281	6	45S / UP	X			FGD 3/19/05
W5-PRP-274-281	7	45S / UP	X			FGD 3/19/05
W5-PRP-274-281	8	45L / DN	—	—		FGD 3/19/05
W5-PRP-235-274	1	45L / DN	X			FGD 3/20/05
W5-PRP-235-274	2	45L / UP	X			FGD 3/20/05
W5-PRP-235-274	3	45L / DN	X			FGD 3/20/05
W5-PRP-235-274	4	45L / UP	X			FGD 3/20/05
W5-PRP-235-274	5	45S / DN	X			FGD 3/20/05
W5-PRP-235-274	6	45S / UP	X			FGD 3/20/05
W5-PRP-235-274	7	45S / UP	X			FGD 3/20/05
W5-PRP-235-274	8	45L / DN	—	—		FGD 3/20/05

EXAMINER

F. Bradley

LEVEL

III

DATE

03/20/05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDMSI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-12	

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-225-235	1	45L / DN	X			FGD 3/20/05
W5-PRP-225-235	2	45L / UP	X			FGD 3/20/05
W5-PRP-225-235	3	45L / DN	X			FGD 3/20/05
W5-PRP-225-235	4	45L / UP	X			FGD 3/20/05
W5-PRP-225-235	5	45S / DN	X			FGD 3/20/05
W5-PRP-225-235	6	45S / UP	X			FGD 3/20/05
W5-PRP-225-235	7	45S / UP	X			FGD 3/20/05
W5-PRP-225-235	8	45L / DN	—	—		FGD 3/20/05
W5-PRP-199-225	1	45L / DN	X			FGD 3/20/05
W5-PRP-199-225	2	45L / UP	X			FGD 3/20/05
W5-PRP-199-225	3	45L / DN	X			FGD 3/20/05
W5-PRP-199-225	4	45L / UP	X			FGD 3/20/05
W5-PRP-199-225	5	45S / DN	X			FGD 3/20/05
W5-PRP-199-225	6	45S / UP	X			FGD 3/20/05
W5-PRP-199-225	7	45S / UP	X			FGD 3/20/05
W5-PRP-199-225	8	45L / DN	—	—		FGD 3/20/05

EXAMINER

J. Goodley

LEVEL

III

DATE

03/20/05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDI-ISI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-13	

DATAFILE	CHANNEL	R/A / DIR	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-191-199	1	45L / DN	X			FGD 3/20/05
W5-PRP-191-199	2	45L / UP	X			FGD 3/20/05
W5-PRP-191-199	3	45L / DN	X			FGD 3/20/05
W5-PRP-191-199	4	45L / UP	X			FGD 3/20/05
W5-PRP-191-199	5	45S / DN	X			FGD 3/20/05
W5-PRP-191-199	6	45S / UP	X			FGD 3/20/05
W5-PRP-191-199	7	45S / UP	X			FGD 3/20/05
W5-PRP-191-199	8	45L / DN	—	—		FGD 3/20/05
W5-PAR-180-224	1	45L / CW	X			CHL 3/19/05
W5-PAR-180-224	2	45L / CCW	X			CHL 3/19/05
W5-PAR-180-224	3	45L / CW	X			CHL 3/19/05
W5-PAR-180-224	4	45L / CCW	X			CHL 3/19/05
W5-PAR-180-224	5	45S / CW	X			CHL 3/19/05
W5-PAR-180-224	6	45S / CCW	X			CHL 3/19/05
W5-PAR-180-224	7	45S / CCW	X			CHL 3/19/05
W5-PAR-180-224	8	45L / CW	X			CHL 3/19/05

EXAMINER

J. Goodness Chang Hun Lee

LEVEL

III

DATE

03/19/05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDHSI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-14	

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PAR-316-17	1	45L / CW	X			CHL 3/19/05
W5-PAR-316-17	2	45L / CCW	X			CHL 3/19/05
W5-PAR-316-17	3	45L / CW	X			CHL 3/19/05
W5-PAR-316-17	4	45L / CCW	X			CHL 3/19/05
W5-PAR-316-17	5	45S / CW	X			CHL 3/19/05
W5-PAR-316-17	6	45S / CCW	X			CHL 3/19/05
W5-PAR-316-17	7	45S / CCW	X			CHL 3/19/05
W5-PAR-316-17	8	45L / CW	X			CHL 3/19/05
W5-PAR-146-180	1	45L / CW	X			CHL 3/19/05
W5-PAR-146-180	2	45L / CCW	X			CHL 3/19/05
W5-PAR-146-180	3	45L / CW	X			CHL 3/19/05
W5-PAR-146-180	4	45L / CCW	X			CHL 3/19/05
W5-PAR-146-180	5	45S / CW	X			CHL 3/19/05
W5-PAR-146-180	6	45S / CCW	X			CHL 3/19/05
W5-PAR-146-180	7	45S / CCW	X			CHL 3/19/05
W5-PAR-146-180	8	45L / CW	X			CHL 3/19/05

EXAMINER

Chang Hun Lee

LEVEL

III

DATE

03-19-05



ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDI-HSI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-15	

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-175-191	1	45L / DN	X			CHL 3/19/05
W5-PRP-175-191	2	45L / UP	X			CHL 3/19/05
W5-PRP-175-191	3	45L / DN	X			CHL 3/19/05
W5-PRP-175-191	4	45L / UP	X			CHL 3/19/05
W5-PRP-175-191	5	45S / DN	X			CHL 3/19/05
W5-PRP-175-191	6	45S / UP	X			CHL 3/19/05
W5-PRP-175-191	7	45S / UP	X			CHL 3/19/05
W5-PRP-175-191	8	45L / DN	X			CHL 3/19/05
W5-PAR-46-61	1	45L / CW	X			LMM 3/19/05
W5-PAR-46-61	2	45L / CCW	X			LMM 3/19/05
W5-PAR-46-61	3	45L / CW	X			LMM 3/19/05
W5-PAR-46-61	4	45L / CCW	X			LMM 3/19/05
W5-PAR-46-61	5	45S / CW	X			LMM 3/19/05
W5-PAR-46-61	6	45S / CCW	X			LMM 3/19/05
W5-PAR-46-61	7	45S / CCW	X			LMM 3/19/05
W5-PAR-46-61	8	45L / CW	X			LMM 3/19/05

EXAMINER

*Harry M. McGuire Chang Hun Lee*

LEVEL

*II / II*

DATE

*3-19-05*







**ANALYSIS LOG**

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #
PROCEDURE:	PDHSI-254	REVISION: 7
WELD #	2RPV-W01	WELD TYPE: LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No. W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-17	

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PAR-61-72a	1	45L / CW	X			SAS 3/19/05
W5-PAR-61-72a	2	45L / CCW	X			SAS 3/19/05
W5-PAR-61-72a	3	45L / CW	X			SAS 3/19/05
W5-PAR-61-72a	4	45L / CCW	X			SAS 3/19/05
W5-PAR-61-72a	5	45S / CW	X			SAS 3/19/05
W5-PAR-61-72a	6	45S / CCW	X			SAS 3/19/05
W5-PAR-61-72a	7	45S / CCW	X			SAS 3/19/05
W5-PAR-61-72a	8	45L / CW	—	—		SAS 3/19/05
W5-PAR-34-46a	1	45L / CW	X			SAS 3/19/05
W5-PAR-34-46a	2	45L / CCW	X			SAS 3/19/05
W5-PAR-34-46a	3	45L / CW	X			SAS 3/19/05
W5-PAR-34-46a	4	45L / CCW	X			SAS 3/19/05
W5-PAR-34-46a	5	45S / CW	X			SAS 3/19/05
W5-PAR-34-46a	6	45S / CCW	X			SAS 3/19/05
W5-PAR-34-46a	7	45S / CCW	X			SAS 3/19/05
W5-PAR-34-46a	8	45L / CW	—	—		SAS 3/19/05

EXAMINER

*[Signature]*

LEVEL

III

DATE

3/19/05



**ANALYSIS LOG**

<b>PLANT / UNIT</b>	McGUIRE / 2	<b>OPTICAL DISK #</b>	
<b>PROCEDURE:</b>	PDHSI-254	<b>REVISION:</b>	7
<b>WELD #</b>	2RPV-W01	<b>WELD TYPE:</b>	LOWER HEAD TO BOTTOM HEAD CIRC
<b>Calibration Data Sheet No.</b>	LS1 - LS8	<b>Acquisition Log Sheet No.</b>	W5-1, W5-2, W5-3
<b>Analysis Log Sheet No.</b>	W5-18		

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PAR-17-34a	1	45L / CW	X			SAS 3/19/05
W5-PAR-17-34a	2	45L / CCW	X			SAS 3/19/05
W5-PAR-17-34a	3	45L / CW	X			SAS 3/19/05
W5-PAR-17-34a	4	45L / CCW	X			SAS 3/19/05
W5-PAR-17-34a	5	45S / CW	X			SAS 3/19/05
W5-PAR-17-34a	6	45S / CCW	X			SAS 3/19/05
W5-PAR-17-34a	7	45S / CCW	X			SAS 3/19/05
W5-PAR-17-34a	8	45L / CW	—	—		SAS 3/19/05
W5-PAR-287-304a	1	45L / CW	X			SAS 3/19/05
W5-PAR-287-304a	2	45L / CCW	X			SAS 3/19/05
W5-PAR-287-304a	3	45L / CW	X			SAS 3/19/05
W5-PAR-287-304a	4	45L / CCW	X			SAS 3/19/05
W5-PAR-287-304a	5	45S / CW	X			SAS 3/19/05
W5-PAR-287-304a	6	45S / CCW	X			SAS 3/19/05
W5-PAR-287-304a	7	45S / CCW	X			SAS 3/19/05
W5-PAR-287-304a	8	45L / CW	—	—		SAS 3/19/05

EXAMINER

*[Signature]*

LEVEL

III

DATE

3/19/05



**ANALYSIS LOG**

PLANT / UNIT		McGUIRE / 2		OPTICAL DISK #	
PROCEDURE:		PDI-SI-254		REVISION: 7	
WELD #		WELD TYPE:			
2RPV-W01		LOWER HEAD TO BOTTOM HEAD CIRC			
Calibration Data Sheet No.		LS1 - LS8		Acquisition Log Sheet No. W5-1, W5-2, W5-3	
Analysis Log Sheet No.		W5-19			

DATAFILE	CHANNEL	R.A. / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PAR-304-316a	1	45L / CW	X			SAS 3/19/05
W5-PAR-304-316a	2	45L / CCW	X			SAS 3/19/05
W5-PAR-304-316a	3	45L / CW	X			SAS 3/19/05
W5-PAR-304-316a	4	45L / CCW	X			SAS 3/19/05
W5-PAR-304-316a	5	45S / CW	X			SAS 3/19/05
W5-PAR-304-316a	6	45S / CCW	X			SAS 3/19/05
W5-PAR-304-316a	7	45S / CCW	X			SAS 3/19/05
W5-PAR-304-316a	8	45L / CW	—	—		SAS 3/19/05
W5-PAR-224-236a	1	45L / CW	X			SAS 3/19/05
W5-PAR-224-236a	2	45L / CCW	X			SAS 3/19/05
W5-PAR-224-236a	3	45L / CW	X			SAS 3/19/05
W5-PAR-224-236a	4	45L / CCW	X			SAS 3/19/05
W5-PAR-224-236a	5	45S / CW	X			SAS 3/19/05
W5-PAR-224-236a	6	45S / CCW	X			SAS 3/19/05
W5-PAR-224-236a	7	45S / CCW	X			SAS 3/19/05
W5-PAR-224-236a	8	45L / CW	—	—		SAS 3/19/05

EXAMINER

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LEVEL

*III*

DATE

*3/19/05*

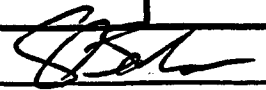


ANALYSIS LOG

PLANT / UNIT	McGUIRE / 2	OPTICAL DISK #	
PROCEDURE:	PDI-HSI-254	REVISION:	7
WELD #	2RPV-W01	WELD TYPE:	LOWER HEAD TO BOTTOM HEAD CIRC
Calibration Data Sheet No.	LS1 - LS8	Acquisition Log Sheet No.	W5-1, W5-2, W5-3
Analysis Log Sheet No.	W5-20		

DATAFILE	CHANNEL	R/A / DIR.	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PAR-134-146b	1	45L / CW	X			SAS 3/19/05
W5-PAR-134-146b	2	45L / CCW	X			SAS 3/19/05
W5-PAR-134-146b	3	45L / CW	X			SAS 3/19/05
W5-PAR-134-146b	4	45L / CCW	X			SAS 3/19/05
W5-PAR-134-146b	5	45S / CW	X			SAS 3/19/05
W5-PAR-134-146b	6	45S / CCW	X			SAS 3/19/05
W5-PAR-134-146b	7	45S / CCW	X			SAS 3/19/05
W5-PAR-134-146b	8	45L / CW	—	—		SAS 3/19/05
W5-PRP-102-109	1	45L / DN	X			CHL 3/19/05
W5-PRP-102-109	2	45L / UP	X			CHL 3/19/05
W5-PRP-102-109	3	45L / DN	X			CHL 3/19/05
W5-PRP-102-109	4	45L / UP	X			CHL 3/19/05
W5-PRP-102-109	5	45S / DN	X			CHL 3/19/05
W5-PRP-102-109	6	45S / UP	X			CHL 3/19/05
W5-PRP-102-109	7	45S / UP	X			CHL 3/19/05
W5-PRP-102-109	8	45L / DN	X			CHL 3/19/05

EXAMINER

 Chang Hun Lee

LEVEL



DATE

3/19/05



**ANALYSIS LOG**

<b>PLANT / UNIT</b>	McGUIRE / 2	<b>OPTICAL DISK #</b>	
<b>PROCEDURE:</b>	PDHSI-254	<b>REVISION:</b>	7
<b>WELD #</b>	2RPV-W01	<b>WELD TYPE:</b>	LOWER HEAD TO BOTTOM HEAD CIRC
<b>Calibration Data Sheet No.</b>	LS1 - LS8	<b>Acquisition Log Sheet No.</b>	W5-1, W5-2, W5-3
<b>Analysis Log Sheet No.</b>	W5-21		

DATAFILE	CHANNEL	R.A. / DIR	N.I.	R.I.	R.I. RESOLUTION / COMMENTS / LIMITATIONS	ANALYST / DATE
W5-PRP-71-102	1	45L / DN	X			CHL 3/19/05
W5-PRP-71-102	2	45L / UP	X			CHL 3/19/05
W5-PRP-71-102	3	45L / DN	X			CHL 3/19/05
W5-PRP-71-102	4	45L / UP	X			CHL 3/19/05
W5-PRP-71-102	5	45S / DN	X			CHL 3/19/05
W5-PRP-71-102	6	45S / UP	X			CHL 3/19/05
W5-PRP-71-102	7	45S / UP	X			CHL 3/19/05
W5-PRP-71-102	8	45L / DN	X			CHL 3/19/05

EXAMINER Chang Hun Lee LEVEL III DATE 03-19-05



**INDICATION ASSESSMENT**

PLANT McGUIRE UNIT 2  
 PROCEDURE PDI-ISI-264 REV. 7  
 ANALYST *SA So* LEVEL m DATE 3/20/08

FILE / BUFFER	DISK	WELD NO.	INDICATION NO.	BEAM ANGLE	BEAM DIRECTION	CLASSIFICATION VOLUMETRIC / PLANAR	APPLICABLE T	FLAW DEPTH MIN / MAX	LENGTH (L)	SURF. / SUB.	S. DIM.	Y VALUE (S / a)	2a DIM. / a DIM.	S / L VALUE (0.50 MAX)	a / %	ALLOWABLE a / %	P E A K				NOTES
																	MAX AMP (% DAC)	X (SWP#)	Yθ	Zθ	
W5-PRP-109-120-2	N/A	2RPV-W01	1	45	UP	P	5.59	1.36 / 1.50	1.1	SUB	1.21	1.0	0.14 / 0.07	0.64	1.25	2.28	32	115.6°	54.5°	1.28	(1)
W5-PRP-329-18-2	N/A	2RPV-W01	2	45	UP	P	5.59	1.32 / 1.00	0.6	SUB	1.17	1.0	0.28 / 0.14	.233	2.5	3.63	49	349.4°	54.2°	1.46	(1)
W5-PAR-72-134-6	N/A	2RPV-W01	3	45	CCW	P	5.59	0.43 / 0.56	1.0	SUB	0.43	1.0	0.125 / 0.063	.063	1.12	2.28	6	57.3°	128.6°	5.20	(1)
W5-PRP-329-16-3	N/A	2RPV-W01	4	45	DN	P	5.59	3.33 / 3.46	.75	SUB	3.18	1.0	0.125 / 0.063	.063	1.12	2.40	99	351.0°	54.7°	3.39	(1)
W5-PRP-314-322-1	N/A	2RPV-W01	5	45	DN	P	5.59	0.45 / 0.57	1.1	SUB	0.3	1.0	0.125 / 0.063	.057	1.12	2.24	62	322.6°	54.9°	0.51	(1)
W5-PRP-298-305-1	N/A	2RPV-W01	6	45	DN	P	5.59	1.44 / 1.56	1.1	SUB	1.29	1.0	0.125 / 0.063	.057	1.12	2.24	98	303.19°	55.6°	1.5	(1)
W5-PRP-298-305-1	N/A	2RPV-W01	7	45	UP	P	5.59	1.06 / 1.19	3.6	SUB	0.91	1.0	0.125 / 0.063	0.17	1.12	2.00	70	283.5°	54.4°	1.12	(1)
W5-PRP-281-288-2	N/A	2RPV-W01	8	45	DN	P	5.59	1.34 / 1.54	1.6	SUB	1.19	1.0	0.20 / 0.10	.063	1.79	2.28	65	289.2°	54.4°	1.44	(1)
W5-PRP-281-288-1	N/A	2RPV-W01	9	45	DN	P	5.59	1.32 / 1.52	1.6	SUB	1.17	1.0	0.20 / 0.10	.063	1.79	2.28	100	281.2°	54.2°	1.42	(1)

NOTES (1) CODE ALLOWABLE PER ASME XI 1989, IWB-3510-1

Calibration Data Sheet No. LS-1 - LS-8  
 Acquisition Log Sheet No. W5-1,2,3  
 Analysis Log Sheet No. W5-4,7,8,9,10,11,18

= W5-PRP-109-120 : Chan 2 - Tops - 45 Dual-up

MCGUIRE UNIT 2  
RVISI 2005  
WELD 2RPV-W01 (B01.021.002)  
Ind #1  
TWE = .14"  
L = 1.1"  
X Position = 115.58 Deg.  
CODE ALLOWABLE per ASME IWB-3510-1

DZ= 0.14 DY= 0.01

Z= 1.502, A= 13%, Y=-54.515

Z= 1.363, A= 32%, Y=-54.527

W5-PRP-329-18 : Chan 2 - Tops - 45 Dual-up



MCGUIRE UNIT 2  
RVISI 2005  
WELD 2RPV-W01 (B01.021.002)  
Ind. #2  
TWE = .28"  
L = 0.6"  
X Position = 349.4 Deg.  
CODE ALLOWABLE per ASME IWB-3510-1

DZ= 0.28 DY= 0.02



Z= 1.602, A= 8%, Y=-54.187  
Z= 1.323, A= 49%, Y=-54.210



McGuire Unit 2  
RVISI 2005  
Weld # 2RPV-W01  
Indication #3  
TWE = 0.125"  
L = 1.0"  
X Position = 57.3 Deg

CODE ALLOWABLE per ASME IWB-3510-1

Z= 5.203, A= 6%, Y=120.504

Z= 5.693, A= 12%, Y=128.601

Vessel O.D.

Item # 801.021.002 878 5-26-05

W5-PRP-329-18 : Chan 3 - Tops - 45 Single-dn

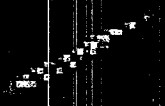
MCGUIRE UNIT 2  
RVISI 2005  
WELD 2RPV-W01 (B01.021.002)  
Ind. #4  
TWE = .125"  
L = 0.75"  
X Position = 351.03 Deg.  
CODE ALLOWABLE per ASME IWB-3510-1

Z= 3.393, A= 99%, Y=-54.714

W5-PRP-314-22 : Chan 1 - Tops - 45 Dual-dn



MCGUIRE UNIT 2  
RVISI 2005  
WELD # 2RPV-W01 (B01.021.002)  
INDICATION #5  
TWE = 0.125"  
L = 1.1"  
X POSITION = 322.61 DEG  
  
CODE ALLOWABLE PER ASME IWB-3510-1

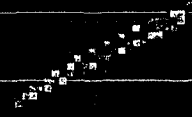


Z= 0.511, A= 62%, Y=-54.911

: Chan 1 - Tops - 45 Dual-dn



MCGUIRE UNIT 2  
RVISI 2005  
WELD 2RPV-W01 (B01.021.002)  
Ind. #6  
TWE = 0.125"  
L = 1.1"  
X Position = 303.19 Deg.  
CODE ALLOWABLE per ASME IWB-3510-1

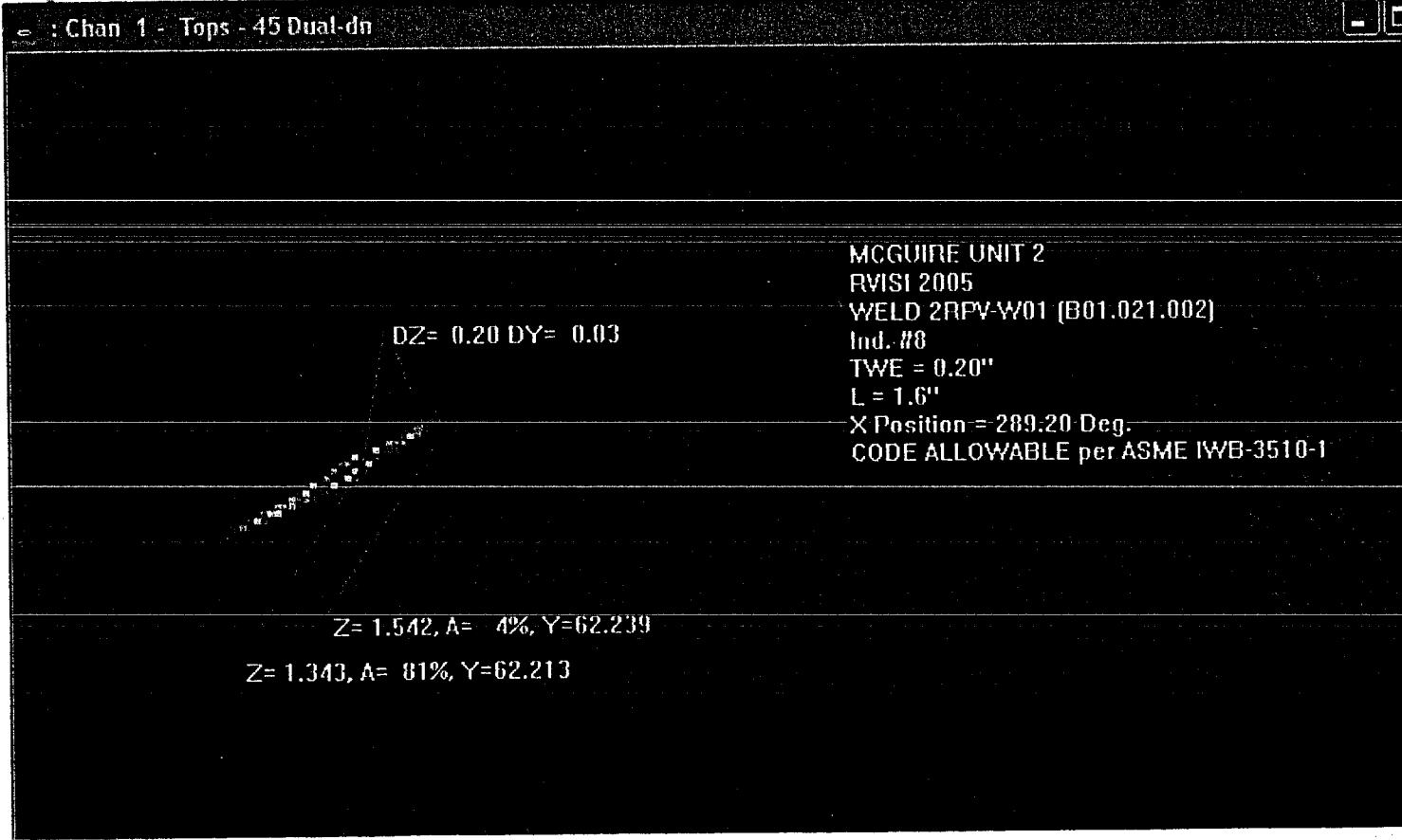


Z= 1.502, A= 98%, Y=-55.555

Chan 2 - Tops - 45 Dual-up

MCGUIRE UNIT 2  
RVISI 2005  
WELD 2RPV-W01 (B01.021.002)  
Ind. #7  
TWE = 0.125"  
L = 3.6"  
X Position = 283.52 Deg.  
CODE ALLOWABLE per ASME IWB-3510-1

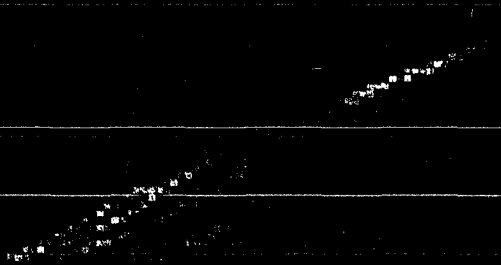
Z= 1.124, A= 70%, Y=-54.427



W5-PRP-274-281 : Chan 1 - Tops - 45 Dual-dn

Z= 1.323, A= 100%, Y=-54.204

Z= 1.522, A= 15%, Y=-54.130



McGuire Unit 2  
RVISI 2005  
Weld 2RPV-W01  
Indication #9  
L = 1.6"  
X Position = 281.15 deg

CODE ALLOWABLE per ASME IWB-3510-1

DZ= 0.20 DY= 0.07

Item # B01.021.002 S/S 5-26-05



**DATA ACQUISITION LOG**

<b>PLANT / UNIT</b> McGUIRE / 2	<b>INTERVAL:</b> 2	<b>PERIOD:</b> 3	<b>OUTAGE:</b> 2EOC16
<b>PROCEDURE:</b> PDHSI-254	<b>REVISION:</b> 7		
<b>Callibration Data Sheet No. LS1 - LS8</b>		<b>Acquisition Log Sheet No. W5-1</b>	

DATAFILE NAME	WELD #	INDEX START	SCAN START	OPERATOR	LEVEL	DATE	COMMENTS
W5-PAR-180-224	2RPV-W01	58.30	180.00	KRS	IT	3/19/05	
W5-PAR-224-236	2RPV-W01	58.30	224.00	KRS	IT	3/19/05	
W5-PAR-236-287	2RPV-W01	58.30	236.25	KRS	IT	3/19/05	
W5-PAR-287-304	2RPV-W01	58.30	287.50	KRS	IT	3/19/05	
W5-PAR-304-316	2RPV-W01	58.30	304.25	KRS	IT	3/19/05	
W5-PAR-316-17	2RPV-W01	58.30	316.00	KRS	IT	3/19/05	
W5-PAR-17-34	2RPV-W01	58.30	17.60	KRS	IT	3/19/05	
W5-PAR-34-46	2RPV-W01	58.30	34.40	KRS	IT	3/19/05	
W5-PAR-46-61	2RPV-W01	58.30	46.00	KRS	IT	3/19/05	
W5-PAR-61-72	2RPV-W01	58.30	61.00	KRS	IT	3/19/05	
W5-PAR-72-134	2RPV-W01	58.30	72.50	KRS	IT	3/19/05	
W5-PAR-146-180	2RPV-W01	58.30	146.30	KRS	IT	3/19/05	
W5-PRP-175-191	2RPV-W01	175.00	58.30	KRS	IT	3/19/05	
W5-PRP-168-175	2RPV-W01	168.25	58.30	KRS	IT	3/19/05	
W5-PRP-145-168	2RPV-W01	145.00	58.30	KRS	IT	3/19/05	
W5-PRP-135-145	2RPV-W01	135.50	58.30	KRS	IT	3/19/05	
W5-PRP-127-135	2RPV-W01	127.00	58.30	KRS	IT	3/19/05	
W5-PRP-120-127	2RPV-W01	120.00	58.30	KRS	IT	3/19/05	
W5-PRP-109-120	2RPV-W01	109.25	58.30	KRS	IT	3/19/05	
W5-PRP-102-109	2RPV-W01	102.00	58.30	KRS	IT	3/19/05	
W5-PRP-71-102	2RPV-W01	71.50	58.30	KRS	IT	3/19/05	





**DATA ACQUISITION LOG**

<b>PLANT / UNIT</b> McGUIRE / 2	<b>INTERVAL:</b> 2	<b>PERIOD:</b> 3	<b>OUTAGE:</b> 2EOC16
<b>PROCEDURE:</b> PDI-ISI-254	<b>REVISION:</b> 7		
<b>Callbration Data Sheet No. LS1 - LS8</b>		<b>Acquisition Log Sheet No. W5-2</b>	

DATAFILE NAME	WELD #	INDEX START	SCAN START	OPERATOR	LEVEL	DATE	COMMENTS
W5-PRP-62-71	2RPV-W01	62.00	58.30	KRS	IT	3/19/05	
W5-PRP-44-62	2RPV-W01	44.50	58.30	KRS	IT	3/19/05	
W5-PRP-35-44	2RPV-W01	35.00	58.30	KRS	IT	3/19/05	
W5-PRP-28-35	2RPV-W01	28.00	58.30	KRS	IT	3/19/05	
W5-PRP-18-28	2RPV-W01	18.50	58.30	KRS	IT	3/19/05	
W5-PRP-329-18	2RPV-W01	329.75	58.30	KRS	IT	3/19/05	
W5-PRP-322-329	2RPV-W01	322.50	58.30	KRS	IT	3/19/05	
W5-PRP-314-322	2RPV-W01	314.50	58.30	KRS	IT	3/19/05	
W5-PRP-305-314	2RPV-W01	305.00	58.30	KRS	IT	3/19/05	
W5-PRP-298-305	2RPV-W01	298.00	58.30	KRS	IT	3/19/05	
W5-PRP-288-298	2RPV-W01	288.50	58.30	KRS	IT	3/19/05	
W5-PRP-281-288	2RPV-W01	281.50	58.30	KRS	IT	3/19/05	
W5-PRP-274-281	2RPV-W01	274.50	58.30	KRS	IT	3/19/05	
W5-PRP-235-274	2RPV-W01	235.00	58.30	KRS	IT	3/19/05	
W5-PRP-225-235	2RPV-W01	225.50	58.30	KRS	IT	3/19/05	
W5-PRP-199-225	2RPV-W01	199.25	58.30	KRS	IT	3/19/05	
W5-PRP-191-199	2RPV-W01	191.25	58.30	KRS	IT	3/19/05	
W5-PAR61-72a	2RPV-W01	58.30	61.00	JCAS	II	3/19/05	
W5-PAR34-46a	2RPV-W01	58.30	164.55	JCAS	II	3/19/05	
W5-PAR17-34a	2RPV-W01	58.30	17.60	JCAS	II	3/19/05	
W5-PAR-287-304a	2RPV-W01	58.30	287.50	JCAS	II	3/19/05	



WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-180-224

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	180.00
TOP RIGHT :	58.30	224.00
BOTTOM LEFT :	50.70	180.00
BOTTOM RIGHT :	50.70	224.00

---

Index Size (in) = 0.50  
Number of Indexes Specified = 25  
Number of Indexes Completed = 25

	Time	Date
Scan Started	02:47:46.675	03/19/05
Scan Completed	03:02:47.987	03/19/05

Robot Operator Signature Michael J. Brubaker, Jr. DATE 3-19-05

PARAGON Operator Signature Karlson Blanton DATE 3-19-05

Comments \_\_\_\_\_ SAS

5-31-05

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Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-224-236

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	224.00
TOP RIGHT :	58.30	236.25
BOTTOM LEFT :	54.30	224.00
BOTTOM RIGHT :	54.30	236.25

---

Index Size (in) = 0.50  
Number of Indexes Specified = 14  
Number of Indexes Completed = 14

	Time	Date
Scan Started	10:19:19.611	03/19/05
Scan Completed	10:20:52.765	03/19/05

Robot Operator Signature

Wms R B DATE 3/19/05

PARAGON Operator Signature

[Signature] DATE 3/19/05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-236-287

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	236.25
TOP RIGHT :	58.30	287.50
BOTTOM LEFT :	50.70	236.25
BOTTOM RIGHT :	50.70	287.50

---

Index Size (in) = 0.50  
Number of Indexes Specified = 25  
Number of Indexes Completed = 25

	Time	Date
Scan Started	03:10:01.806	03/19/05
Scan Completed	03:18:49.965	03/19/05

Robot Operator Signature Michael J. Brubaker DATE 3-19-05

PARAGON Operator Signature Karl Jensen DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-287-304

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	287.50
TOP RIGHT :	58.30	304.25
BOTTOM LEFT :	52.70	287.50
BOTTOM RIGHT :	52.70	304.25

---

Index Size (in) = 0.50  
Number of Indexes Specified = 19  
Number of Indexes Completed = 19

	Time	Date
Scan Started	09:56:20.263	03/19/05
Scan Completed	09:59:06.144	03/19/05

Robot Operator Signature *Mon 10/13* DATE *3/19/05*

PARAGON Operator Signature *J. Calhoun* DATE *3/19/05*

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-304-316

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	304.25
TOP RIGHT :	58.30	316.00
BOTTOM LEFT :	55.00	304.25
BOTTOM RIGHT :	55.00	316.00

---

Index Size (in) = 0.50  
Number of Indexes Specified = 12  
Number of Indexes Completed = 12

	Time	Date
Scan Started	09:49:45.735	03/19/05
Scan Completed	09:51:03.814	03/19/05

Robot Operator Signature

*Mark To By* DATE 3/19/05

PARAGON Operator Signature

*[Signature]* DATE 3/19/05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-316-17

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	316.00
TOP RIGHT :	58.30	377.60
BOTTOM LEFT :	50.70	316.00
BOTTOM RIGHT :	50.70	377.60

---

Index Size (in) = 0.50  
Number of Indexes Specified = 25  
Number of Indexes Completed = 25

	Time	Date
Scan Started	03:28:07.516	03/19/05
Scan Completed	03:35:46.559	03/19/05

Robot Operator Signature Michael G. Brubaker, Jr. DATE 3-19-05  
PARAGON Operator Signature Karl R. Linn DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....MCGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-17-34

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	17.60
TOP RIGHT :	58.30	34.40
BOTTOM LEFT :	52.00	17.60
BOTTOM RIGHT :	52.00	34.40

---

Index Size (in) = 0.50  
Number of Indexes Specified = 21  
Number of Indexes Completed = 21

	Time	Date
Scan Started	09:35:15.029	03/19/05
Scan Completed	09:38:24.061	03/19/05

Robot Operator Signature *Mr. RB* DATE 3/19/05

PARAGON Operator Signature *J. Gaudin* DATE 3/19/05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-34-46

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	34.40
TOP RIGHT :	58.30	46.00
BOTTOM LEFT :	54.30	34.40
BOTTOM RIGHT :	54.30	46.00

---

Index Size (in) = 0.50  
Number of Indexes Specified = 14  
Number of Indexes Completed = 14

	Time	Date
Scan Started	09:26:52.303	03/19/05
Scan Completed	09:28:25.210	03/19/05

Robot Operator Signature

*Mr. To B* DATE 3/19/05

PARAGON Operator Signature

*[Signature]* DATE 3/19/05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-46-61

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	46.00
TOP RIGHT :	58.30	61.00
BOTTOM LEFT :	50.70	46.00
BOTTOM RIGHT :	50.70	61.00

---

Index Size (in) = 0.50  
Number of Indexes Specified = 25  
Number of Indexes Completed = 25

	Time	Date
Scan Started	03:43:49.886	03/19/05
Scan Completed	03:46:23.581	03/19/05

Robot Operator Signature Michael G. ... DATE 3-19-05

PARAGON Operator Signature K. ... DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-61-72

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	61.00
TOP RIGHT :	58.30	72.50
BOTTOM LEFT :	53.10	61.00
BOTTOM RIGHT :	53.10	72.50

---

Index Size (in) = 0.50  
Number of Indexes Specified = 18  
Number of Indexes Completed = 18

	Time	Date
Scan Started	09:15:48.429	03/19/05
Scan Completed	09:17:41.452	03/19/05

Robot Operator Signature

*Mark R. B.* DATE 3/19/05

PARAGON Operator Signature

*J. C. B.* DATE 3/19/05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-72-134

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	72.50
TOP RIGHT :	58.30	134.00
BOTTOM LEFT :	50.70	72.50
BOTTOM RIGHT :	50.70	134.00

---

Index Size (in) = 0.50  
Number of Indexes Specified = 25  
Number of Indexes Completed = 21

	Time	Date
Scan Started	03:50:41.414	03/19/05
Scan Completed	04:05:35.710	03/19/05

Robot Operator Signature Michael J. Brubaker DATE 3-19-05  
PARAGON Operator Signature Karlou Blum DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-146-180

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	146.30
TOP RIGHT :	58.30	180.00
BOTTOM LEFT :	50.70	146.30
BOTTOM RIGHT :	50.70	180.00

---

Index Size (in) = 0.50  
Number of Indexes Specified = 25  
Number of Indexes Completed = 23

	Time	Date
Scan Started	04:11:04.564	03/19/05
Scan Completed	04:18:46.266	03/19/05

Robot Operator Signature Michael J. Bralson, Jr. DATE 3-19-05

PARAGON Operator Signature Karlson P. Lewis DATE 3-19-05

Comments Scan 24 & 25 rough surface rescanned  
3 times same result.

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WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-175-191

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	175.00	58.30
TOP RIGHT :	191.25	58.30
BOTTOM LEFT :	175.00	50.70
BOTTOM RIGHT :	191.25	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 52  
Number of Indexes Completed = 52

	Time	Date
Scan Started	04:27:59.150	03/19/05
Scan Completed	04:35:34.794	03/19/05

Robot Operator Signature

Michael J. Brubaker, II DATE 3-19-05

PARAGON Operator Signature

Karlson Blum DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-168-175

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	168.25	58.30
TOP RIGHT :	175.00	58.30
BOTTOM LEFT :	168.25	50.90
BOTTOM RIGHT :	175.00	50.90

---

Index Size (in) = 0.50  
Number of Indexes Specified = 22  
Number of Indexes Completed = 22

	Time	Date
Scan Started	04:39:08.049	03/19/05
Scan Completed	04:40:47.314	03/19/05

Robot Operator Signature Michael J. Brennan DATE 3-19-05

PARAGON Operator Signature Karlson DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-145-168

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	145.00	58.30
TOP RIGHT :	168.25	58.30
BOTTOM LEFT :	145.00	50.70
BOTTOM RIGHT :	168.25	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 73  
Number of Indexes Completed = 73

	Time	Date
Scan Started	04:42:36.755	03/19/05
Scan Completed	04:48:21.466	03/19/05

Robot Operator Signature Michael J. Bentley, II DATE 3-19-05

PARAGON Operator Signature Karlson Jensen DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-135-145

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	135.50	58.30
TOP RIGHT :	145.00	58.30
BOTTOM LEFT :	135.50	57.30
BOTTOM RIGHT :	145.00	57.30

---

Index Size (in) = 0.50  
Number of Indexes Specified = 31  
Number of Indexes Completed = 31

	Time	Date
Scan Started	04:51:34.764	03/19/05
Scan Completed	04:52:50.746	03/19/05

Robot Operator Signature Michael G. Brubaker, Jr. DATE 3-19-05  
PARAGON Operator Signature Karl P. Plummer DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-127-135

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	127.00	58.30
TOP RIGHT :	135.50	58.30
BOTTOM LEFT :	127.00	50.70
BOTTOM RIGHT :	135.50	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 28  
Number of Indexes Completed = 28

	Time	Date
Scan Started	04:54:28.286	03/19/05
Scan Completed	04:56:38.327	03/19/05

Robot Operator Signature Michael J. Graham, JR DATE 3-19-05  
PARAGON Operator Signature Karlson DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-120-127

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	120.00	58.30
TOP RIGHT :	127.00	58.30
BOTTOM LEFT :	120.00	52.10
BOTTOM RIGHT :	127.00	52.10

---

Index Size (in) = 0.50  
Number of Indexes Specified = 23  
Number of Indexes Completed = 23

	Time	Date
Scan Started	04:58:12.375	03/19/05
Scan Completed	04:59:41.882	03/19/05

Robot Operator Signature Michael G. Stribos, Jr. DATE 3-19-05

PARAGON Operator Signature Karlson Blain DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-109-120

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	109.25	58.30
TOP RIGHT :	120.00	58.30
BOTTOM LEFT :	109.25	50.70
BOTTOM RIGHT :	120.00	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 35  
Number of Indexes Completed = 35

	Time	Date
Scan Started	05:01:00.722	03/19/05
Scan Completed	05:03:42.179	03/19/05

Robot Operator Signature Michael J. Abraham DATE 3-19-05

PARAGON Operator Signature Karlson J. Smith DATE 3/19/05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-102-109

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	102.00	58.30
TOP RIGHT :	109.25	58.30
BOTTOM LEFT :	102.00	52.70
BOTTOM RIGHT :	109.25	52.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 24  
Number of Indexes Completed = 24

	Time	Date
Scan Started	05:05:07.361	03/19/05
Scan Completed	05:06:41.001	03/19/05

Robot Operator Signature Michael J. Brubaker, Jr. DATE 3-19-05  
PARAGON Operator Signature Karlson L. Simon DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-71-102

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	71.50	58.30
TOP RIGHT :	102.00	58.30
BOTTOM LEFT :	71.50	50.70
BOTTOM RIGHT :	102.00	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 95  
Number of Indexes Completed = 95

	Time	Date
Scan Started	05:08:26.513	03/19/05
Scan Completed	05:15:50.793	03/19/05

Robot Operator Signature Michael J. Smith, Jr. DATE 3-18-05

PARAGON Operator Signature Karen R. Smith DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-62-71

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	62.00	58.30
TOP RIGHT :	71.50	58.30
BOTTOM LEFT :	62.00	55.60
BOTTOM RIGHT :	71.50	55.60

---

Index Size (in) = 0.50  
Number of Indexes Specified = 31  
Number of Indexes Completed = 31

	Time	Date
Scan Started	05:18:02.908	03/19/05
Scan Completed	05:19:34.540	03/19/05

Robot Operator Signature Mitchell G. Bullock DATE 3-19-05

PARAGON Operator Signature Karlson DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN  
Scan Data File Name = W5-PRP-44-62

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	44.50	58.30
TOP RIGHT :	62.00	58.30
BOTTOM LEFT :	44.50	50.70
BOTTOM RIGHT :	62.00	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 55  
Number of Indexes Completed = 55

	Time	Date
Scan Started	05:20:56.997	03/19/05
Scan Completed	05:25:11.919	03/19/05

Robot Operator Signature Michael J. [Signature] DATE 3-19-05  
PARAGON Operator Signature Karl [Signature] DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-35-44

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	35.00	58.30
TOP RIGHT :	44.50	58.30
BOTTOM LEFT :	35.00	57.30
BOTTOM RIGHT :	44.50	57.30

---

Index Size (in) = 0.50  
Number of Indexes Specified = 31  
Number of Indexes Completed = 31

	Time	Date
Scan Started	05:26:54.434	03/19/05
Scan Completed	05:28:10.725	03/19/05

Robot Operator Signature Michael J. Brubaker, Jr. DATE 3-19-05  
PARAGON Operator Signature Karl M. Blum DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-28-35

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	28.00	58.30
TOP RIGHT :	35.00	58.30
BOTTOM LEFT :	28.00	50.70
BOTTOM RIGHT :	35.00	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 23  
Number of Indexes Completed = 23

	Time	Date
Scan Started	05:29:19.349	03/19/05
Scan Completed	05:31:03.222	03/19/05

Robot Operator Signature Michael J. Brubaker DATE 3-19-05  
PARAGON Operator Signature Karl P. Lamm DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN  
Scan Data File Name = W5-PRP-18-28

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	18.50	58.30
TOP RIGHT :	28.00	58.30
BOTTOM LEFT :	18.50	55.60
BOTTOM RIGHT :	28.00	55.60

---

Index Size (in) = 0.50  
Number of Indexes Specified = 31  
Number of Indexes Completed = 31

	Time	Date
Scan Started	05:32:30.429	03/19/05
Scan Completed	05:34:03.651	03/19/05

Robot Operator Signature Michael J. Smith, Jr DATE 3-19-05  
PARAGON Operator Signature Karl R. Simon DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN  
Scan Data File Name = W5-PRP-329-18

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	329.75	58.30
TOP RIGHT :	378.50	58.30
BOTTOM LEFT :	329.75	50.70
BOTTOM RIGHT :	378.50	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 152  
Number of Indexes Completed = 152

	Time	Date
Scan Started	05:36:17.293	03/19/05
Scan Completed	05:52:29.654	03/19/05

Robot Operator Signature Michael G. Brubaker DATE 3-19-05

PARAGON Operator Signature Karlson Blum DATE 3-19-05

Comments Scan 44-50 had left off. result - 3/19/05 AS  
Scan result 5-31-05

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-322-329

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	322.50	58.30
TOP RIGHT :	329.75	58.30
BOTTOM LEFT :	322.50	52.10
BOTTOM RIGHT :	329.75	52.10

---

Index Size (in) = 0.50  
Number of Indexes Specified = 24  
Number of Indexes Completed = 24

	Time	Date
Scan Started	05:54:33.086	03/19/05
Scan Completed	05:56:12.876	03/19/05

Robot Operator Signature Michael J. Dabney, Jr. DATE 3-19-05

PARAGON Operator Signature Karlen L. Smith DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-314-322

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	314.50	58.30
TOP RIGHT :	322.50	58.30
BOTTOM LEFT :	314.50	50.70
BOTTOM RIGHT :	322.50	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 26  
Number of Indexes Completed = 26

	Time	Date
Scan Started		
Scan Completed	05:57:50.383	03/19/05
	05:59:51.640	03/19/05

Robot Operator Signature

*Michael J. Huber* DATE 3-19-05

PARAGON Operator Signature

*Karl P. Smith* DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN  
Scan Data File Name = W5-PRP-305-314

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	305.00	58.30
TOP RIGHT :	314.50	58.30
BOTTOM LEFT :	305.00	57.30
BOTTOM RIGHT :	314.50	57.30

---

Index Size (in) = 0.50  
Number of Indexes Specified = 31  
Number of Indexes Completed = 31

	Time	Date
Scan Started	06:02:49.187	03/19/05
Scan Completed	06:04:06.228	03/19/05

Robot Operator Signature Michael J. Rubin, Jr. DATE 3-19-05  
PARAGON Operator Signature Karl R. Rubin DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN  
Scan Data File Name = W5-PRP-298-305

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	298.00	58.30
TOP RIGHT :	305.00	58.30
BOTTOM LEFT :	298.00	50.70
BOTTOM RIGHT :	305.00	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 23  
Number of Indexes Completed = 23

	Time	Date
Scan Started	06:05:22.944	03/19/05
Scan Completed	06:08:38.324	03/19/05

Robot Operator Signature Michael J. Ambrose DATE 3-19-05  
PARAGON Operator Signature Karl R. Quinn DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN  
Scan Data File Name = W5-PRP-288-298

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	288.50	58.30
TOP RIGHT :	298.00	58.30
BOTTOM LEFT :	288.50	55.60
BOTTOM RIGHT :	298.00	55.60

---

Index Size (in) = 0.50  
Number of Indexes Specified = 31  
Number of Indexes Completed = 31

	Time	Date
Scan Started	06:10:05.798	03/19/05
Scan Completed	06:11:37.406	03/19/05

Robot Operator Signature Michael Q. Banks, Jr. DATE 3-19-05

PARAGON Operator Signature Karlson Pfen DATE 3-19-05

Comments Sweep B-9 lift off rerun 3 times  
same result

---

---

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-281-288

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	281.25	58.30
TOP RIGHT :	288.50	58.30
BOTTOM LEFT :	281.25	50.70
BOTTOM RIGHT :	288.50	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 24  
Number of Indexes Completed = 24

	Time	Date
Scan Started	06:13:22.260	03/19/05
Scan Completed	06:16:22.935	03/19/05

Robot Operator Signature Michael J. Subramanian DATE 3-19-05  
PARAGON Operator Signature Karlson DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-274-281

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	274.50	58.30
TOP RIGHT :	281.25	58.30
BOTTOM LEFT :	274.50	50.90
BOTTOM RIGHT :	281.25	50.90

---

Index Size (in) = 0.50  
Number of Indexes Specified = 22  
Number of Indexes Completed = 22

	Time	Date
Scan Started	06:17:39.667	03/19/05
Scan Completed	06:19:18.808	03/19/05

Robot Operator Signature Michael J. Brabner, Jr. DATE 3-19-05  
PARAGON Operator Signature Karlson R. Lamm DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-235-274

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	235.00	58.30
TOP RIGHT :	274.50	58.30
BOTTOM LEFT :	235.00	50.70
BOTTOM RIGHT :	274.50	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 123  
Number of Indexes Completed = 123

	Time	Date
Scan Started	06:20:58.023	03/19/05
Scan Completed	06:31:52.890	03/19/05

Robot Operator Signature Michael J. ... DATE 3-19-05

PARAGON Operator Signature Karl ... DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN  
Scan Data File Name = W5-PRP-225-235

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	225.50	58.30
TOP RIGHT :	235.00	58.30
BOTTOM LEFT :	225.50	57.30
BOTTOM RIGHT :	235.00	57.30

---

Index Size (in) = 0.50  
Number of Indexes Specified = 31  
Number of Indexes Completed = 31

	Time	Date
Scan Started	06:34:36.571	03/19/05
Scan Completed	06:35:52.861	03/19/05

Robot Operator Signature Michael J. Brubaker DATE 3-19-05  
PARAGON Operator Signature Karlson L. Lewis DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN

Scan Data File Name = W5-PRP-199-225

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	199.25	58.30
TOP RIGHT :	225.50	58.30
BOTTOM LEFT :	199.25	50.70
BOTTOM RIGHT :	225.50	50.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 82  
Number of Indexes Completed = 82

	Time	Date
Scan Started	06:37:59.835	03/19/05
Scan Completed	06:44:32.380	03/19/05

Robot Operator Signature Michael J. Bubba, JR DATE 3-19-05

PARAGON Operator Signature Carlson P. Simon DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PERPENDICULAR SCAN  
Scan Data File Name = W5-PRP-191-199

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	MERIDINAL (DEGREES)
TOP LEFT :	191.25	58.30
TOP RIGHT :	199.25	58.30
BOTTOM LEFT :	191.25	52.70
BOTTOM RIGHT :	199.25	52.70

---

Index Size (in) = 0.50  
Number of Indexes Specified = 26  
Number of Indexes Completed = 26

	Time	Date
Scan Started	06:49:08.943	03/19/05
Scan Completed	06:50:50.731	03/19/05

Robot Operator Signature Michael J. Dubray, II DATE 3-19-05  
PARAGON Operator Signature Karlend Lim DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-61-72

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	61.00
TOP RIGHT :	58.30	72.50
BOTTOM LEFT :	53.10	61.00
BOTTOM RIGHT :	53.10	72.50

---

Index Size (in) = 0.50  
Number of Indexes Specified = 18  
Number of Indexes Completed = 18

	Time	Date
Scan Started	09:15:48.429	03/19/05
Scan Completed	09:17:41.452	03/19/05

Robot Operator Signature Michael D. Brubaker DATE 3-19-05  
PARAGON Operator Signature Karen R. Loria DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-34-46

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	34.40
TOP RIGHT :	58.30	46.00
BOTTOM LEFT :	54.30	34.40
BOTTOM RIGHT :	54.30	46.00

---

Index Size (in) = 0.50  
Number of Indexes Specified = 14  
Number of Indexes Completed = 14

	Time	Date
Scan Started	09:26:52.303	03/19/05
Scan Completed	09:28:25.210	03/19/05

Robot Operator Signature Michael J. Strubbe, JR DATE 3-19-05  
PARAGON Operator Signature Karla Blum DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-17-34

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	17.60
TOP RIGHT :	58.30	34.40
BOTTOM LEFT :	52.00	17.60
BOTTOM RIGHT :	52.00	34.40

---

Index Size (in) = 0.50  
Number of Indexes Specified = 21  
Number of Indexes Completed = 21

	Time	Date
Scan Started	09:35:15.029	03/19/05
Scan Completed	09:38:24.061	03/19/05

Robot Operator Signature Michael D. Brubaker, Jr. DATE 3-19-05

PARAGON Operator Signature Karla R. Brubaker DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-287-304

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	287.50
TOP RIGHT :	58.30	304.25
BOTTOM LEFT :	52.70	287.50
BOTTOM RIGHT :	52.70	304.25

---

Index Size (in) = 0.50  
Number of Indexes Specified = 19  
Number of Indexes Completed = 19

	Time	Date
Scan Started	09:56:20.263	03/19/05
Scan Completed	09:59:06.144	03/19/05

Robot Operator Signature Michael J. Bralen, Jr. DATE 3-19-05  
PARAGON Operator Signature Karl L. Simon DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-304-316

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	304.25
TOP RIGHT :	58.30	316.00
BOTTOM LEFT :	55.00	304.25
BOTTOM RIGHT :	55.00	316.00

---

Index Size (in) = 0.50  
Number of Indexes Specified = 12  
Number of Indexes Completed = 12

	Time	Date
Scan Started	09:49:45.735	03/19/05
Scan Completed	09:51:03.814	03/19/05

Robot Operator Signature Michael J. Grubbs, Jr. DATE 3-19-05  
PARAGON Operator Signature Karlson R. Senan DATE 3-19-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-224-236

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	224.00
TOP RIGHT :	58.30	236.25
BOTTOM LEFT :	54.30	224.00
BOTTOM RIGHT :	54.30	236.25

---

Index Size (in) = 0.50  
Number of Indexes Specified = 14  
Number of Indexes Completed = 14

	Time	Date
Scan Started	10:19:19.611	03/19/05
Scan Completed	10:20:52.765	03/19/05

Robot Operator Signature

*Michael J. Brubaker, JR.* DATE 3-19-05

PARAGON Operator Signature

*Kaden L. Linn* DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER .....DUKE POWER  
SITE .....McGUIRE UNIT #2  
OUTAGE .....2EOC16  
VESSEL TYPE .....WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W01

Weld and Scan Type = HEAD CIRCUMFERENTIAL PARALLEL SCAN

Scan Data File Name = W5-PAR-134-146a

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	MERIDINAL (DEGREES)	AZIMUTH (DEGREES)
TOP LEFT :	58.30	134.00
TOP RIGHT :	58.30	146.30
BOTTOM LEFT :	53.40	134.00
BOTTOM RIGHT :	53.40	146.30

---

Index Size (in) = 0.50  
Number of Indexes Specified = 17  
Number of Indexes Completed = 17

	Time	Date
Scan Started	11:09:02.186	03/19/05
Scan Completed	11:11:24.575	03/19/05

Robot Operator Signature *M. K. B.* DATE 3/19/05

PARAGON Operator Signature *Cal. H.* DATE 3/19/05

Comments W5-PAR-134-1466 SAS 5-31-05  
OK

---

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**REQUEST RELIEF 05-MN-003**

**ATTACHMENT 3**

**PAGES 1-7**



# WesDyne International Reactor Vessel Weld Results Summary

## McGUIRE UNIT 2

WELD NO.	2RPV-W15-SE	DESCRIPTION	Outlet Nozzle DM Weld
	(B05.010.005-5A)		@ 22°
	2NC2F-1-1		
	(B05.130-001-1A)		

LIMITATIONS                      NO                       YES                       COVERAGE = 84.38%

RESULTS                      NI                       RI


NO. OF INDICATIONS 0  
STATUS N/A

EXAM DOCUMENTATION	INDICATION DOCUMENTATION
--------------------	--------------------------

- ANALYSIS LOG
- ACQUISITION LOG
- SCAN PRINTOUT
- COVERAGE BREAKDOWN

- ASSESSMENT SHEET
  - PARAGON HARD COPY
  - OTHER (specify)
- 
- 

WESDYNE ANALYST

  
\_\_\_\_\_

# McGUIRE UNIT 2

## RPV COVERAGE ESTIMATE BREAKDOWNS

DIRECTION / ORIENTATION

PARALLEL SCANS  
PERP. SCANS

CCW/CW  
UP/DN

WELD DESCRIPTION OUTLET NOZZLE TO SHELL WELD @ 22°

WELD NO. 2RPV-W15-SE & 2NC2F-1-1

### BEAM ANGLES

BEAM DIRECTION	45° L Dual		45° L Single		45° Shear					
	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME
CCW	* 68.75	* 68.75	* 100	* 100						
CW	* 68.75	* 68.75								
IN	100	100								
OUT	100	100								
<b>UT Coverage = 84.38%</b> <b>Combined Coverage (UT &amp; ET) = 100%</b>			* Circ scans limited as per procedure PDQs due to ID Counterbore and Root configuration. Limitation area from 123.8" to 124.6" from 0° to 44° and 122.95" to 124.38" from 70° to 248° and 285° to 360°. ET used to supplement exam for full coverage.							


ANALYST







DATA ACQUISITION LOG # W15-1

Utility:	DUKE POWER	Plant:	McGUIRE	Unit:	2	Outage:	2EOC16			
Procedure No:	PDI-ISI-254-SE						Procedure Rev. No.:	2		
Applicable Sensitivity Calibration Data Sheet No:	SE-01									
UT Examiner Signature:						Level:	II	Date:	03/18/05	
Data File Name	Weld No.	Index Start	Scan Start	Total # of Sweeps	'AVE' Signal Amplitude	Gain Adj. (dB)	Operator Initials	Date (mm/dd/yy)	Time	Comments
WN22-SE-PAR-DET-ON	2RPV-W15-SE 2NC2F-1-1	122	0°	69	7	0	RAB	03/18/05	1805	
WN22-SE-PAR-DET-ON	2RPV-W15-SE 2NC2F-1-1	122	0°	69	7	0	RAB	03/18/05	1805	
WN22-SE-PRP-DET-ON	2RPV-W15-SE 2NC2F-1-1	0°	109.98	373	10	0	RAB	03/18/05	1936	
WN22-SE-PRP-DET-ON	2RPV-W15-SE 2NC2F-1-1	0°	109.98	373	10	0	RAB	03/18/05	1936	

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER ..... DUKE POWER  
SITE ..... MCGUIRE UNIT #2  
OUTAGE ..... 2EOC16  
VESSEL TYPE ..... WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W15-SE

Weld and Scan Type = NOZZLE SAFE END PARALLEL SCAN  
Scan Data File Name = WN22-SE-PAR-DET-ON

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	DEPTH (IN)	AZIMUTH (DEGREES)
START CW :	122.00	179.90
END CCW :	122.00	-179.90
START CW :	127.50	179.90
END CCW :	127.50	-179.90

---

Index Size (in) = 0.08  
Number of Indexes Specified = 70  
Number of Indexes Completed = 70

	Time	Date
Scan Started	18:05:09.685	03/18/05
Scan Completed	19:22:27.207	03/18/05

Robot Operator Signature Dongchan Ryu DATE 03-18-05  
PARAGON Operator Signature Rose A Brantley DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER ..... DUKE POWER  
SITE ..... McGUIRE UNIT #2  
OUTAGE ..... 2EOC16  
VESSEL TYPE ..... WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W15-SE

Weld and Scan Type = NOZZLE SAFE END PERPENDICULAR SCAN  
Scan Data File Name = WN22-SE-PRP-DET-ON

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	DEPTH (IN)
START CW :	179.90	109.98
END CCW :	-179.90	109.98
START CW :	179.90	125.50
END CCW :	-179.90	125.50

---

Index Size (in) = 0.24  
Number of Indexes Specified = 373  
Number of Indexes Completed = 373

	Time	Date
Scan Started	19:37:05.063	03/18/05
Scan Completed	20:17:38.425	03/18/05

Robot Operator Signature Dongchan Rye DATE 03-18-05  
PARAGON Operator Signature David Brantly DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**REQUEST RELIEF 05-MN-003**

**ATTACHMENT 4**

**PAGES 1-7**



# WesDyne International Reactor Vessel Weld Results Summary

## McGUIRE UNIT 2

WELD NO.	<u>2RPV-W17-SE</u> <u>(B05.010.007-7A)</u> <u>2NC2F-3-1</u> <u>(B05.130-009-9A)</u>	DESCRIPTION	<u>Outlet Nozzle DM Weld</u> <u>@ 202°</u>
----------	--	-------------	---


LIMITATIONS                      NO                       YES                       COVERAGE = 80.24%

RESULTS                      NI                       RI

NO. OF INDICATIONS 0  
STATUS N/A

<u>EXAM DOCUMENTATION</u>	<u>INDICATION DOCUMENTATION</u>
<input checked="" type="checkbox"/> ANALYSIS LOG	<input type="checkbox"/> ASSESSMENT SHEET
<input checked="" type="checkbox"/> ACQUISITION LOG	<input type="checkbox"/> PARAGON HARD COPY
<input checked="" type="checkbox"/> SCAN PRINTOUT	<input type="checkbox"/> OTHER (specify) _____
<input checked="" type="checkbox"/> COVERAGE BREAKDOWN	_____

WESDYNE ANALYST



# McGuire Unit 2

## RPV COVERAGE ESTIMATE BREAKDOWNS

### DIRECTION / ORIENTATION

PARALLEL SCANS  
PERP. SCANS

CCW/CW  
IN/OUT

WELD DESCRIPTION OUTLET NOZZLE DM WELDS @ 202°

WELD NO. 2RPV-W17-SE & 2NC2F-3-1

### BEAM ANGLES

BEAM DIRECTION	45° L Dual		45° L Single		45° Shear					
	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME
CCW	* 60.48	* 60.48	* 100	* 100						
CW	* 60.48	* 60.48								
IN	100	100								
OUT	100	100								
UT Coverage = 80.24%										
Combined Coverage (UT & ET) = 100%		* Circ scans limited as per procedure PDQs due to ID Counterbore and Root configuration. Limitation area from 122.2° to 124.0° from 0° to 193° and 225° to 300° and 332° to 360° . ET used to supplement exam for full coverage.								

ANALYST 

ANALYSIS LOG #

W17-1


Disk No: N/A

Utility:	DUKE POWER	Plant:	McGUIRE	Unit:	2	Outage:	2EOC16	
Procedure No:	PDI-ISI-254-SE					Procedure Rev. No.:	2	
Weld No:	2RPV-W17-SE, 2NC2F-3-1			Weld Type:	DM	Exam. Surface:	ID	
Applicable Sensitivity Calibration Data Sheet No:	SE-01	Acquisition Log No:	W17-1	PARAGON Anal. Release:	6.1.3			
UT Examiner Signature:	<i>Carl J. V...</i>				Level:	II	Date:	03/18/05

Data File Name	UT Channel No.	Beam Angle / Beam Direction <small>(In or out, CW or CCW)</small>	NI	RI	RI Resolution / Comments / Limitations	Examiner ID / Date
WN202-SE-PAR-DET-ON	1	70 CCW	X			CSW / 03/18/05
WN202-SE-PAR-DET-ON	2	70 CW	X			CSW / 03/18/05
WN202-SE-PRP-DET-ON	1	70 IN	X			CSW / 03/18/05
WN202-SE-PRP-DET-ON	2	70 OUT	X			CSW / 03/18/05



**DATA ACQUISITION LOG # W17-1**

Utility:	DUKE POWER	Plant:	McGUIRE	Unit:	2	Outage:	2EOC16			
Procedure No:	PDI-ISI-254-SE	Procedure Rev. No.:				2				
Applicable Sensitivity Calibration Data Sheet No:	SE-01									
UT Examiner Signature:						Level:	II	Date:	03/18/05	
Data File Name	Weld No.	Index Start	Scan Start	Total # of Sweeps	'AVE' Signal Amplitude	Gain Adj. (dB)	Operator Initials	Date (mm/dd/yy)	Time	Comments
WN202-SE-PRP-DET-ON	2RPV-W17-SE 2NC2F-3-1	0	109.98°	373	9	0	DS	03/18/05	0956	
WN202-SE-PRP-DET-ON	2RPV-W17-SE 2NC2F-3-1	0	109.98°	373	10	0	DS	03/18/05	0956	
WN202-SE-PAR-DET-ON	2RPV-W17-SE 2NC2F-3-1	122	0	70	7	0	DS	03/18/05	1251	
WN202-SE-PAR-DET-ON	2RPV-W17-SE 2NC2F-3-1	122	0	70	8	0	DS	03/18/05	1251	

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER ..... DUKE POWER  
SITE ..... McGUIRE UNIT #2  
OUTAGE ..... 2EOC16  
VESSEL TYPE ..... WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W17-SE

Weld and Scan Type = NOZZLE SAFE END PERPENDICULAR SCAN  
Scan Data File Name = WN202-SE-PRP-DET-ON

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	DEPTH (IN)
START CW :	179.90	109.98
END CCW :	-179.90	109.98
START CW :	179.90	125.50
END CCW :	-179.90	125.50

---

Index Size (in) = 0.24  
Number of Indexes Specified = 373  
Number of Indexes Completed = 373

	Time	Date
Scan Started	09:16:04.009	03/18/05
Scan Completed	09:56:52.425	03/18/05

Robot Operator Signature *Calvin J. Jilley* DATE 03-18-05

PARAGON Operator Signature *[Signature]* DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER ..... DUKE POWER  
SITE ..... McGUIRE UNIT #2  
OUTAGE ..... 2EOC16  
VESSEL TYPE ..... WESTINGHOUSE 4-LOOP

---

WELD IDENTIFICATION - 2RPV-W17-SE

Weld and Scan Type = NOZZLE SAFE END PARALLEL SCAN

Scan Data File Name = WN202-SE-PAR-DET-ON

---

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	DEPTH (IN)	AZIMUTH (DEGREES)
START CW :	122.00	179.90
END CCW :	122.00	-179.90
START CW :	127.50	179.90
END CCW :	127.50	-179.90

---

Index Size (in) = 0.08  
Number of Indexes Specified = 70  
Number of Indexes Completed = 70

	Time	Date
Scan Started	11:33:48.077	03/18/05
Scan Completed	12:51:05.710	03/18/05

Robot Operator Signature Carl J. Miller DATE 03-18-05

PARAGON Operator Signature [Signature] DATE 3-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**REQUEST RELIEF 05-MN-003**

**ATTACHMENT 5**

**PAGES 1-7**



# WesDyne International Reactor Vessel Weld Results Summary

## McGUIRE UNIT 2

WELD NO.	<u>2RPV-W18-SE</u> <u>(B05.010.008-8A)</u> <u>2NC2F-4-1</u> <u>(B05.130-013-13A)</u>	DESCRIPTION	<u>Outlet Nozzle DM Weld</u> <u>@ 338°</u>

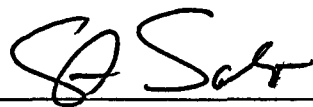
LIMITATIONS                      NO                       YES                       COVERAGE = 83.34%

RESULTS                      NI                       RI

NO. OF INDICATIONS 0  
STATUS N/A

<u>EXAM DOCUMENTATION</u>	<u>INDICATION DOCUMENTATION</u>
<input checked="" type="checkbox"/> ANALYSIS LOG	<input type="checkbox"/> ASSESSMENT SHEET
<input checked="" type="checkbox"/> ACQUISITION LOG	<input type="checkbox"/> PARAGON HARD COPY
<input checked="" type="checkbox"/> SCAN PRINTOUT	<input type="checkbox"/> OTHER (specify)
<input checked="" type="checkbox"/> COVERAGE BREAKDOWN	_____
	_____

WESDYNE ANALYST



# McGuire Unit 2

## RPV COVERAGE ESTIMATE BREAKDOWNS

DIRECTION / ORIENTATION

PARALLEL SCANS  
PERP. SCANS

CCW/CW  
IN / OUT

WELD DESCRIPTION OUTLET NOZZLE DM WELDS @ 338°

WELD NO. 2RPV-W18-SE & 2NC2F-4-1

### BEAM ANGLES


BEAM DIRECTION	45° L Dual		45° L Single		45° Shear					
	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME	WELD	VOLUME
CCW	* 66.67	* 66.67	* 100	* 100						
CW	* 66.67	* 66.67								
UP	100	100								
DOWN	100	100								
<b>Combined Average = 83.34%</b>		* Circ scans limited as per procedure PDQs due to ID Counterbore and Root configuration. Limitation area from 123.0" to 124.6" from 0° to 270°. ET used to supplement exam for full coverage.								

ANALYST 





**DATA ACQUISITION LOG # W18-1**

Utility: <b>DUKE POWER</b>		Plant: <b>McGUIRE</b>			Unit: <b>2</b>	Outage: <b>2EOC16</b>				
Procedure No: <b>PDI-ISI-254-SE</b>						Procedure Rev. No.: <b>2</b>				
Applicable Sensitivity Calibration Data Sheet No: <b>SE-01</b>										
UT Examiner Signature: 				Level: <b>II</b>	Date: <b>03/18/05</b>					
Data File Name	Weld No.	Index Start	Scan Start	Total # of Sweeps	'AVE' Signal Amplitude	Gain Adj. (dB)	Operator Initials	Date (mm/dd/yy)	Time	Comments
PRE-SE-PRP-DET-ON	2RPV-W18-SE 2NC2F-4-1	109.98	0°	6	8	0	RSB	03/18/05	0318	
PRE-SE-PRP-DET-ON	2RPV-W18-SE 2NC2F-4-1	109.98	0°	6	7	0	RSB	03/18/05	0318	
WN338-SE-PRP-DET-ON	2RPV-W18-SE 2NC2F-4-1	109.98	0°	372	9	0	RSB	03/18/05	0327	
WN338-SE-PRP-DET-ON	2RPV-W18-SE 2NC2F-4-1	109.98	0°	372	8	0	RSB	03/18/05	0327	
WN338-SE-PAR-DET-ON	2RPV-W18-SE 2NC2F-4-1	122	0°	70	8	0	DS	03/18/05	1718	
WN338-SE-PAR-DET-ON	2RPV-W18-SE 2NC2F-4-1	122	0°	70	9	0	DS	03/18/05	1718	

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

---

CUSTOMER ..... DUKE POWER  
SITE ..... McGUIRE UNIT #2  
OUTAGE ..... 2EOC16  
VESSEL TYPE ..... WESTINGHOUSE 4-LOOP

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WELD IDENTIFICATION - 2RPV-W18-SE

Weld and Scan Type = NOZZLE SAFE END PERPENDICULAR SCAN

Scan Data File Name = WN338-SE-PRP-DET-ON

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SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	DEPTH (IN)
START CW :	179.90	109.98
END CCW :	-179.90	109.98
START CW :	179.90	125.50
END CCW :	-179.90	125.50

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Index Size (in) = 0.24  
Number of Indexes Specified = 373  
Number of Indexes Completed = 373

	Time	Date
Scan Started	03:28:13.495	03/18/05
Scan Completed	04:09:32.872	03/18/05

Robot Operator Signature Don Chan, Ryan DATE 03-18-05

PARAGON Operator Signature Rose Bentley DATE 03-18-05

Comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WesDyne International  
Reactor Vessel Inservice Examination  
Scan Parameter Execution

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CUSTOMER ..... DUKE POWER  
SITE ..... MCGUIRE UNIT #2  
OUTAGE ..... 2EOC16  
VESSEL TYPE ..... WESTINGHOUSE 4-LOOP

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WELD IDENTIFICATION - 2RPV-W18-SE

Weld and Scan Type = NOZZLE SAFE END PARALLEL SCAN

Scan Data File Name = WN338-SE-PAR-DET-ON

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SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	DEPTH (IN)	AZIMUTH (DEGREES)
START CW :	122.00	179.90
END CCW :	122.00	-179.90
START CW :	127.50	179.90
END CCW :	127.50	-179.90

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Index Size (in) = 0.08  
Number of Indexes Specified = 70  
Number of Indexes Completed = 70

	Time	Date
Scan Started	16:00:53.375	03/18/05
Scan Completed	17:18:10.654	03/18/05

Robot Operator Signature

*Carl J. Miller* DATE 03-18-05

PARAGON Operator Signature

*[Signature]* DATE 3-18-05

Comments \_\_\_\_\_  
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