



GE Nuclear Energy

EXAMINATION SUMMARY SHEET

REPORT NO.:

R-R8-111

PROJECT: WNP2
RFO-8

PROCEDURE: GE-UT-208 REV: 1 FRR: N/A
N/A
N/A

SYSTEM: RECIRCULATION

GE-UT-207 REV: 0 FRR: N/A
N/A
N/A

WELD NO.: 20RRC(6)-8

N/A REV: N/A FRR: N/A
N/A
N/A

CONFIGURATION: PIPE TO VALVE

EXAMINER: PAUL JOHNSON LEVEL: II

☐ MT ☐ PT ☒ UT ☐ VT

EXAMINER: N/A LEVEL: N/A

☒ CIRCUMFERENTIAL

EXAMINER: N/A LEVEL: N/A

WELD TYPE: ☐ LONGITUDINAL ☐ OTHER N/A

DATA SHEET NO.(S): DA-R8-101 & 102

CAL SHEET NO.(S): CA-R8-101 & 102

During the ultrasonic examination of the above referenced weld, one (1) reportable planar indication was recorded with the "Smart 2000" system utilizing a 45° shear wave and 60° refracted longitudinal wave search units. This indication has the following parameters:

Ind. No.	Distance from Zero Reference	Total Length	Thru Wall Dimension	Remaining Ligament	Side of Weld	Type of Reflector	Search Unit
* 1.	-1.0"	3.6"	17.5%	.85"	UPST.	CIRC.	45°S / 60°RL

* The reflector face appears to be smooth and non-faceted without the presence of axial components, which is not typical of IGSCC type indications. This indication straddles "L" zero reference and starts at 1.0" counterclockwise from top dead center.

Supplemental relooks and thru-wall depth sizing were performed with the "Smart 2000" system utilizing the 60° RL search unit. The thru-wall depth of this reflector was determined by the high angle tip diffraction method. The length of this indication was determined by measurements taken from the "Smart 2000" 60° RL data with allowances for beam spread. This indication was sized per NUREG 0313 requirements which are more stringent than ASME Section XI. This indication has not exhibited any noticable thru-wall propagation since it was sized during the previous ISI outage in 1992.

The 45° shear also recorded non-relevant indications, root and inside surface geometry from the upstream side of the weld along with the above referenced indication.

The 60° RL also recorded shear component from the inside surface and the above referenced indication from the upstream side of the weld.

No examination was performed on the downstream side of the weld due to valve configuration.

Previous data was reviewed prior to this summary.

<input checked="" type="checkbox"/> EXAM COMPLETE		<input type="checkbox"/> PARTIALLY EXAMINED (EXPLAIN IN COMMENTS)		<input type="checkbox"/> EXAM COMPLETE IN COMBINATION WITH DATA SHEETS BELOW	
ADDITIONAL DATA SHEETS: <u>N/A</u>				RWP NO.: <u>143</u>	
COMPARED TO: <input type="checkbox"/> PSI <input checked="" type="checkbox"/> ISI REPORT NO.(S): <u>R-R7-55</u> <input checked="" type="checkbox"/> NO CHANGE				NO. OF RECORDABLE INDICATIONS: <u>1</u>	
EXAMINATION RESULTS: <input type="checkbox"/> ACCEPTABLE <input checked="" type="checkbox"/> UNACCEPTABLE				NO. OF REPORTABLE INDICATIONS: <u>1</u>	
SUMMARY BY: <u>Was Money</u>		LEVEL: <u>III</u> DATE: <u>5-13-93</u>		DATE: <u>5-17-93</u>	
GE REVIEWED BY: <u>Donald Witter</u>		LEVEL: <u>II</u> DATE: <u>5-16-93</u>		DATE: <u>5-17-93</u>	
UTILITY ISI ENGINEER REVIEW: <u>DP Ramey</u>		DATE: <u>5-17-93</u>		DATE: <u>5-18-93</u>	
UTILITY CAREVIEW: <u>Con. M. M. M.</u>		DATE: <u>5-17-93</u>		DATE: <u>5-18-93</u>	
PAGE: <u>1</u> OF: <u>15</u>				FORM UT-08 REV. 1	

9306040269 930521
PDR ADOCK 05000397
P PDR



GE Nuclear Energy

WALL THICKNESS PROFILE SHEET

SITE: WNP UNIT: 2

REPORT NO.:

PROJECT: 1DRYP

R-R8-111

SYSTEM: RECIRCULATION

COMPONENT ID NO.: 20RRC(6)-8

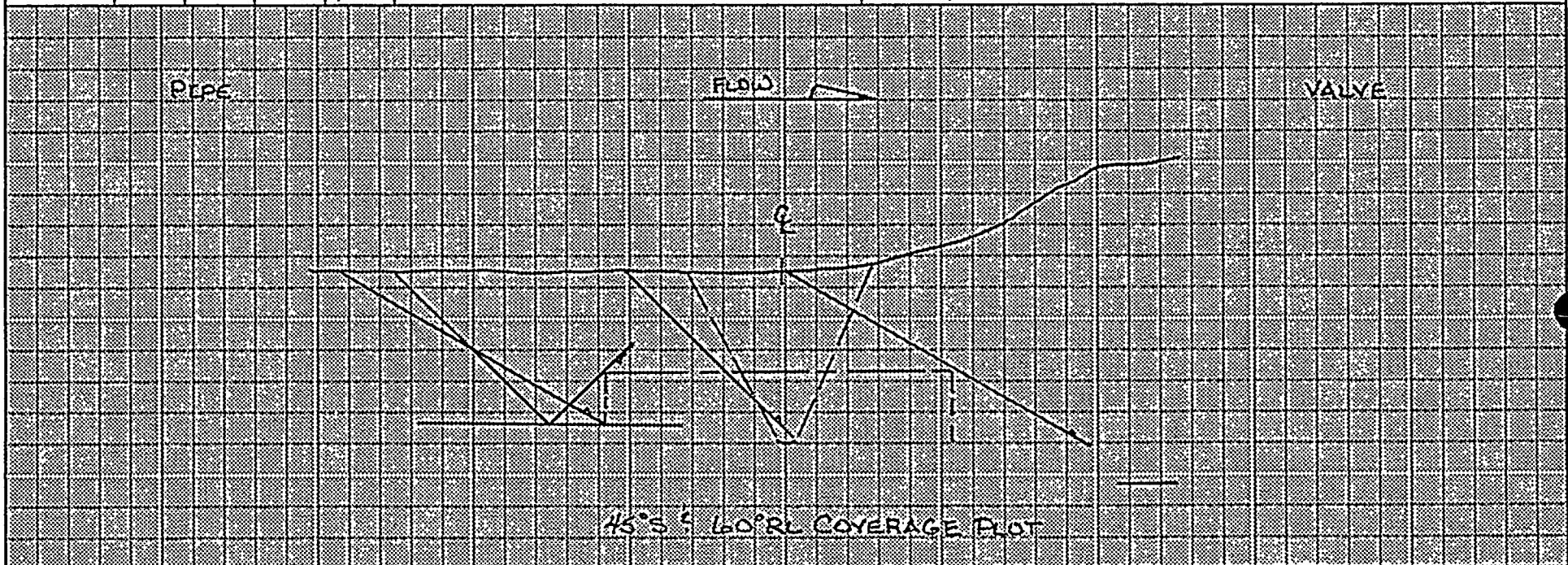
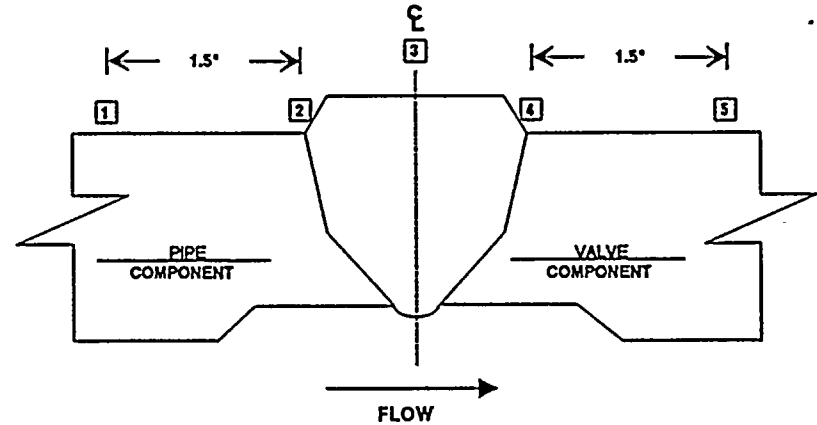
POSITION	0°	90°	180°	270°
1	1.00"	N/A	N/A	N/A
2	.98"	N/A	N/A	N/A
3	1.13"	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A
5	2.06"	N/A	N/A	N/A

CROWN HEIGHT: FLUSH

CROWN WIDTH: 1.2"

NOM DIAMETER: 20"

WELD LENGTH: 63"



TAKEN FROM 1992 GE DATA 5-12-93
DRAWN BY Wes Money LEVEL III DATE 5-13-93
GE REVIEWED BY Wes Money LEVEL III DATE 5-13-93

DPRaney 5-17-93
UTILITY ISI ENGINEER REVIEW DATE
Con Muhl 5-17-93
UTILITY QA REVIEW DATE

Dan Hoggan 5/18/93
AMII REVIEW DATE

PAGE: 2 OF: 15
FORM UT-01 REV. 1

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P. 1

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GE Nuclear Energy

INDICATION PLOT SHEET

SITE: WNP UNIT: 2

REPORT NO.:

PROJECT: 1DRYP

R-R8-111

SYSTEM: RECIRCULATION

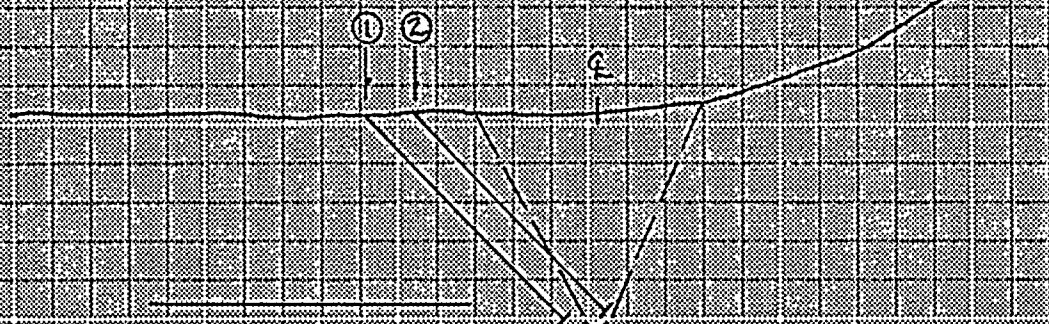
COMPONENT ID NO.: 20RRC(6)-8

CONFIGURATION: PIPE FLOW VALVE

PIPE

FLOW

VALVE



45° SHEAR

① NONGEOMETRIC INDICATION (PLANAR INDICATION #1)
② ROOT GEOMETRY

Wes Money

DRAWN BY

Donald Willett

GE REVIEWED BY

III
LEVEL

5-13-93
DATE

II
LEVEL

5-16-93
DATE

DPRamsey

UTILITY ISI ENGINEER REVIEW

Ch Willett

UTILITY QA REVIEW

5-17-93
DATE

5-17-93
DATE

DMOggan

ANTI REVIEW

5/18/93
DATE

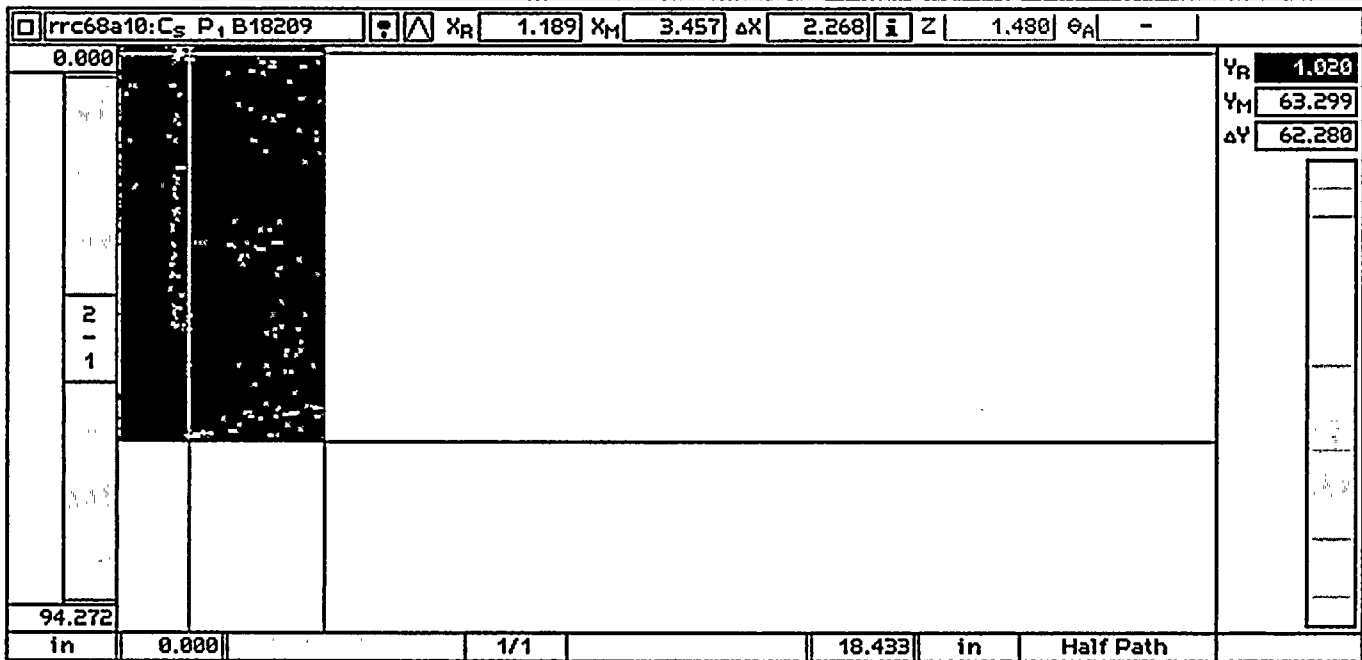
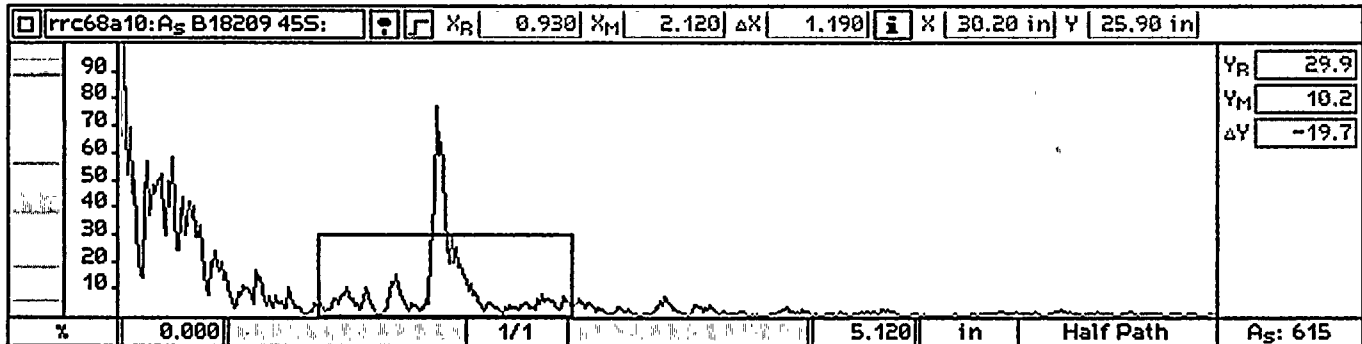
PAGE: 3 OF: 15

FORM UT-02 REV. 1



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ULTRASONIC SCAN DATA PRINT SHEET (AUTOMATED WITH Smart 2000)

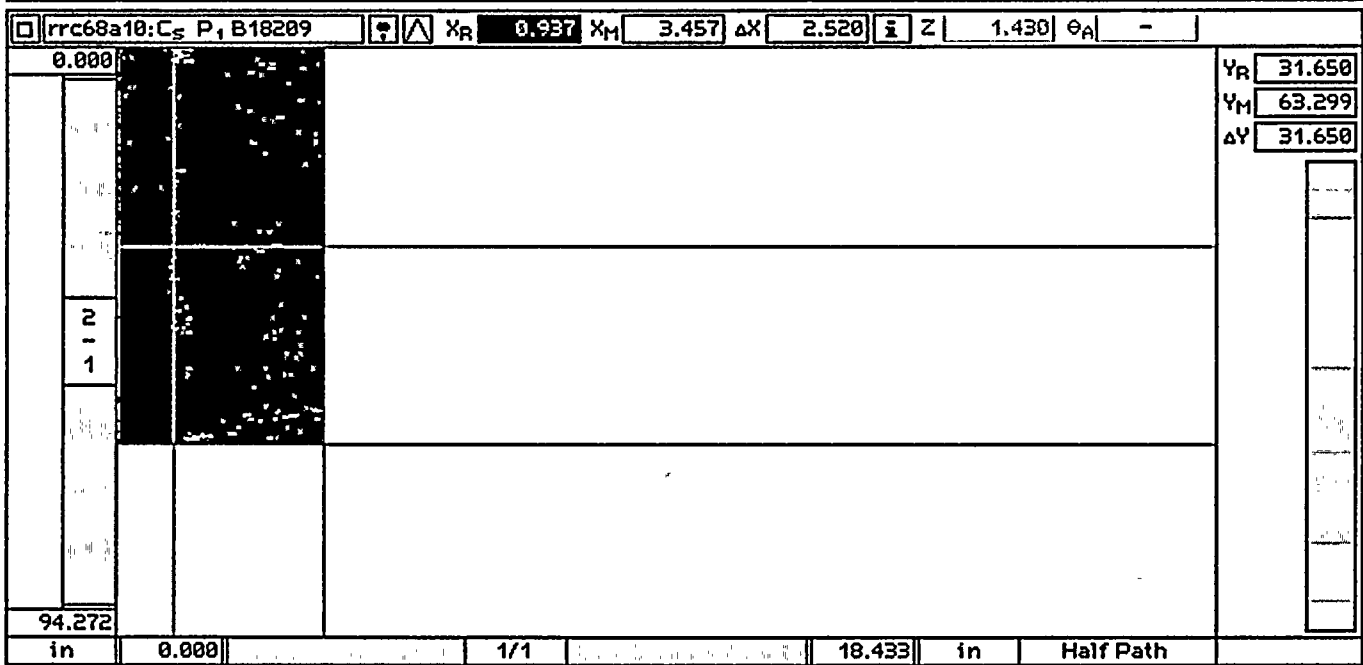
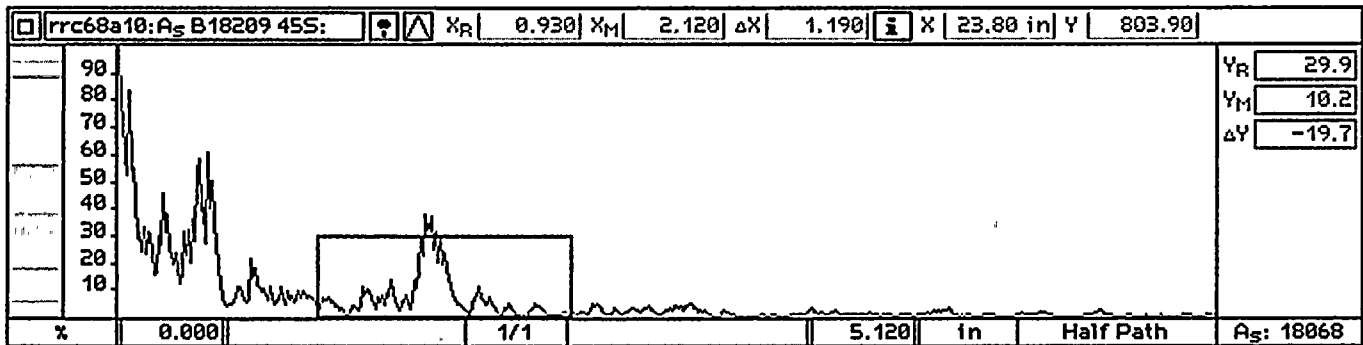


SITE: WNP UNIT: 2 PROJECT NO.: 1DRYP REPORT NO.: R-R8-111
WELD NO.: 20RRC(6)-8 SEARCH UNIT: 45°S INDICATION NO.: 1 PAGE: 4 OF: 15



GE Nuclear Energy

ULTRASONIC SCAN DATA PRINT SHEET (AUTOMATED WITH Smart 2000)



SITE: WNP UNIT: 2 PROJECT NO.: 1DRYP REPORT NO.: R-R8-111
WELD NO.: 20RRC(6)-8 SEARCH UNIT: 45° S INDICATION NO.: 2 PAGE: 5 OF: 15



GE Nuclear Energy

INDICATION PLOT SHEET

SITE: WNP UNIT: 2

REPORT NO.:

PROJECT: 1DRYP

R-R8-111

SYSTEM: RECIRCULATION

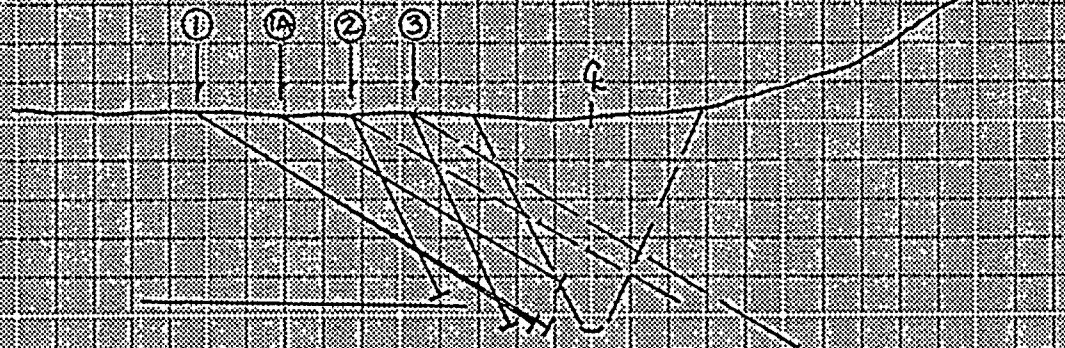
COMPONENT ID NO.: 20RRC(6)-8

CONFIGURATION: PIPE FLOW VALVE

PIPE

FLOW

VALVE



60°RL

- ① NONGEOMETRIC INDICATION (PLANAR INDICATION #1 BASE REFLECTOR)
- ①A NONGEOMETRIC INDICATION (PLANAR INDICATION #1 TIP REFLECTOR)
- ② SHEAR COMPONENT (INSIDE SURFACE GEOMETRY REFLECTOR)
- ③ SHEAR COMPONENT (PLANAR INDICATION #1 BASE REFLECTOR)

Wes Money

DRAWN BY

Arnold Wuttke

GE REVIEWED BY

III

LEVEL

5-13-93

DATE

II

LEVEL

5-16-93

DATE

DPB Ramey

UTILITY ISI ENGINEER REVIEW

Ced Wuttke

UTILITY QA REVIEW

5-17-93

DATE

5-17-93

DATE

Dan Hoggart

API REVIEW

5/18/93

DATE

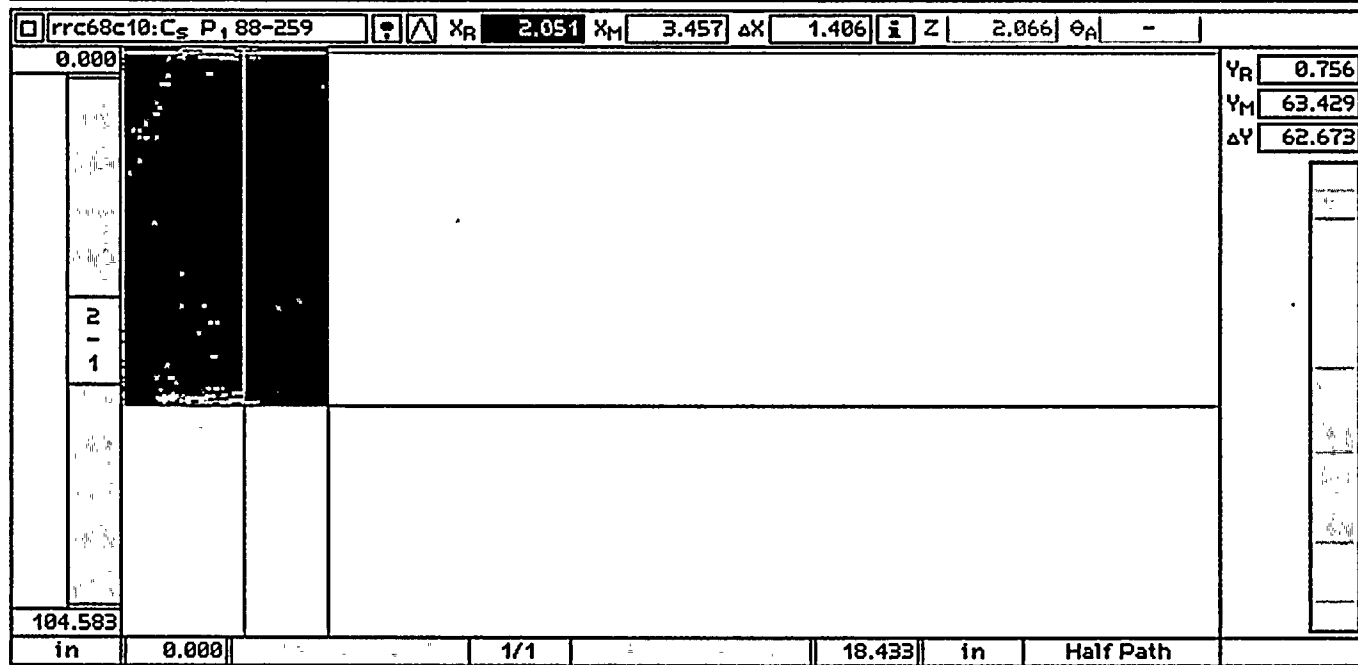
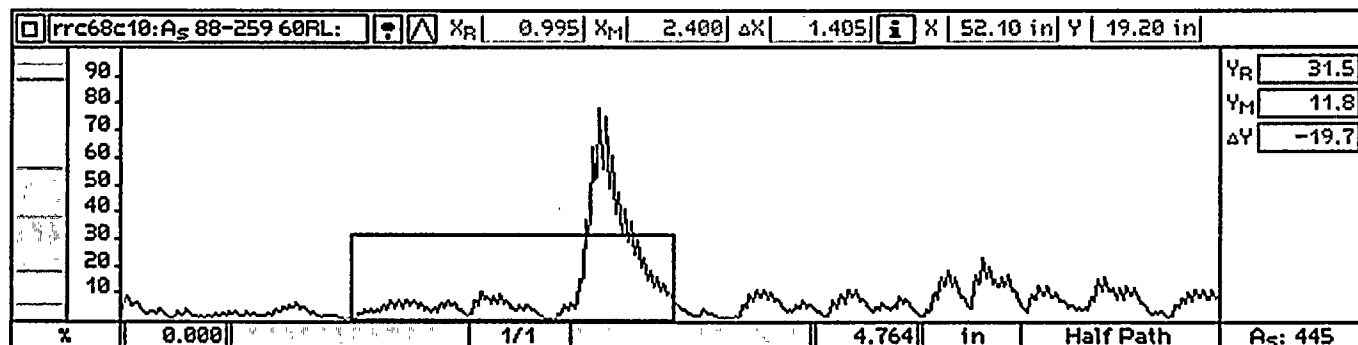
PAGE: 6 OF: 15

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GE Nuclear Energy

ULTRASONIC SCAN DATA PRINT SHEET (AUTOMATED WITH Smart 2000)



SITE: WNP UNIT: 2 PROJECT NO.: 1DRYP REPORT NO.: R-R8-111

WELD NO.: 20RRC(6)-8 SEARCH UNIT: 60° RL INDICATION NO.: 1 PAGE: 7 OF: 15

100-100000

100-100000

100-100000

100-100000

100-100000

100-100000

100-100000

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100-100000

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100-100000

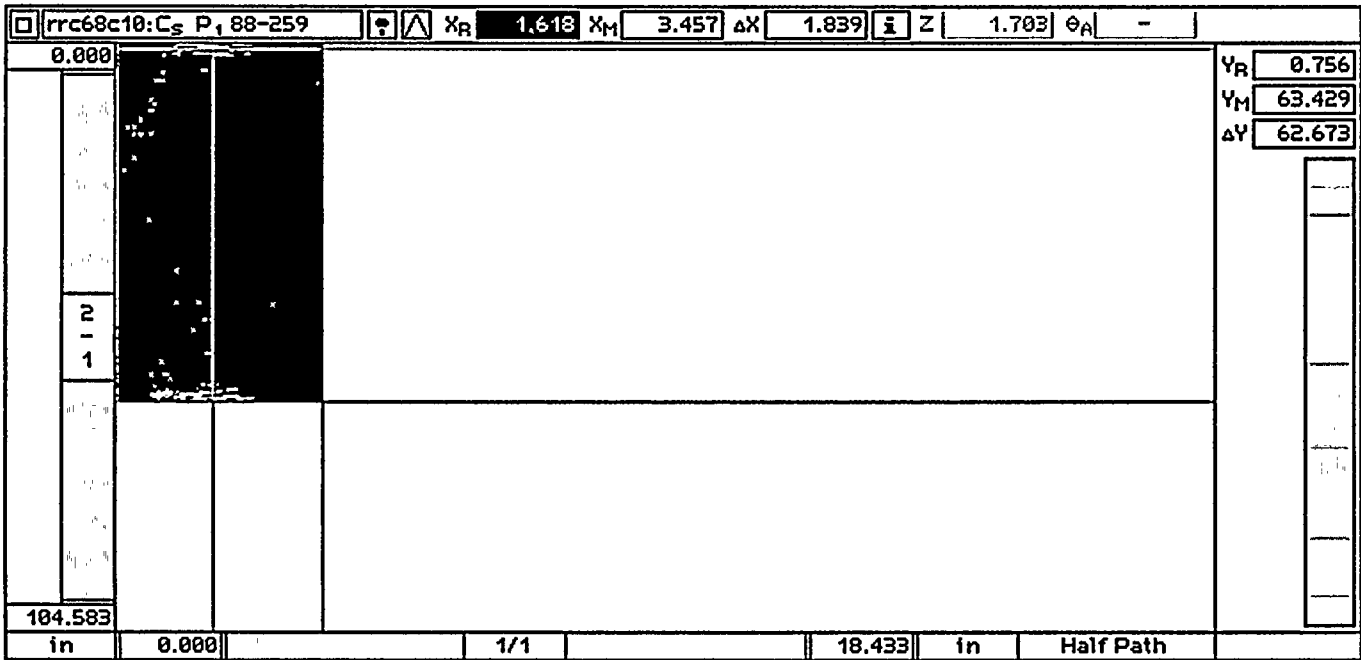
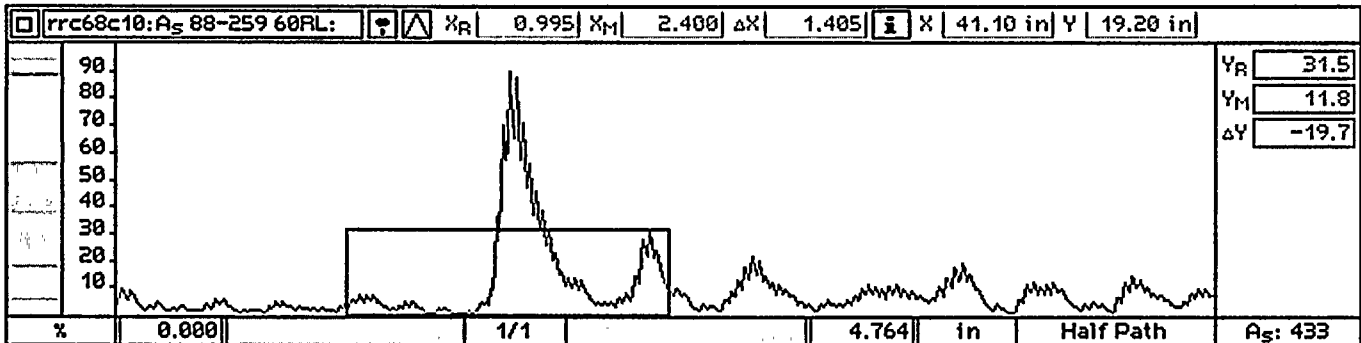
100-100000

100-100000



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ULTRASONIC SCAN DATA PRINT SHEET (AUTOMATED WITH Smart 2000)



*INDICATION TIP SIGNAL

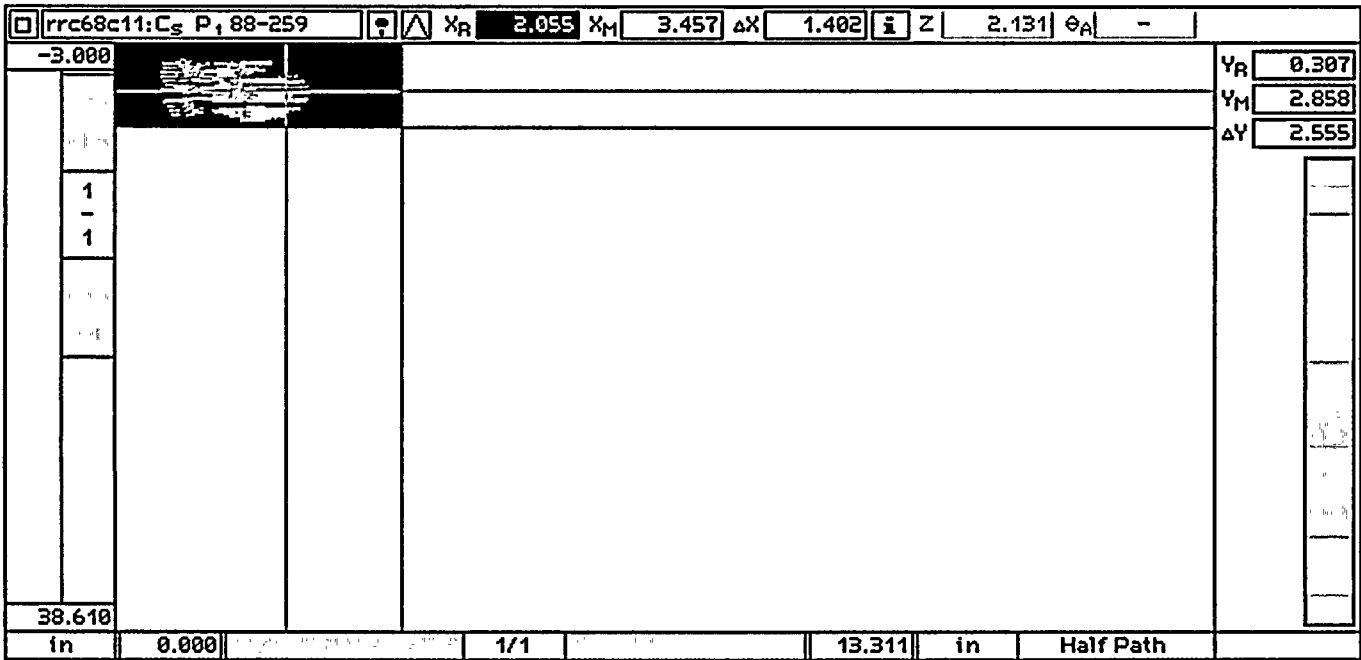
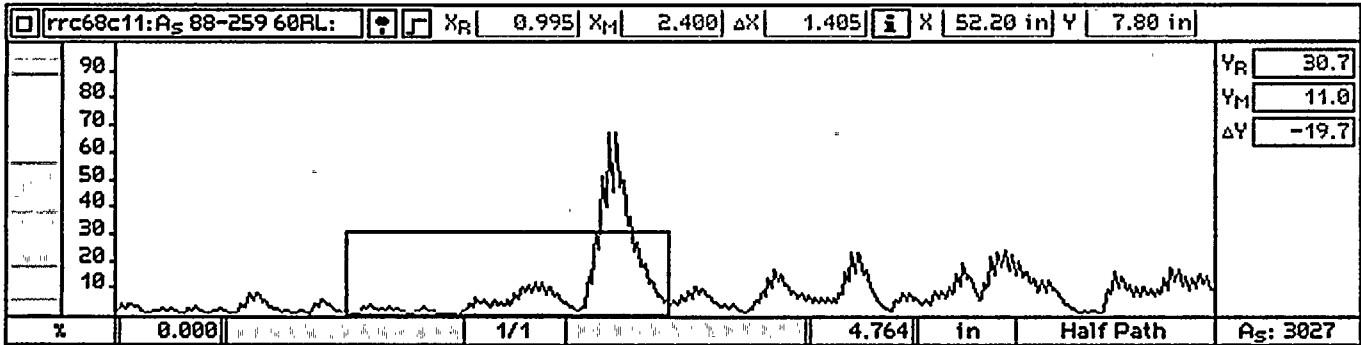
SITE: WNP UNIT: 2 PROJECT NO.: 1DRYP REPORT NO.: R-R8-111

WELD NO.: 20RRC(6)-8 SEARCH UNIT: 60° RL INDICATION NO.: 1A PAGE: 8 OF: 15



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ULTRASONIC SCAN DATA PRINT SHEET (AUTOMATED WITH Smart 2000)

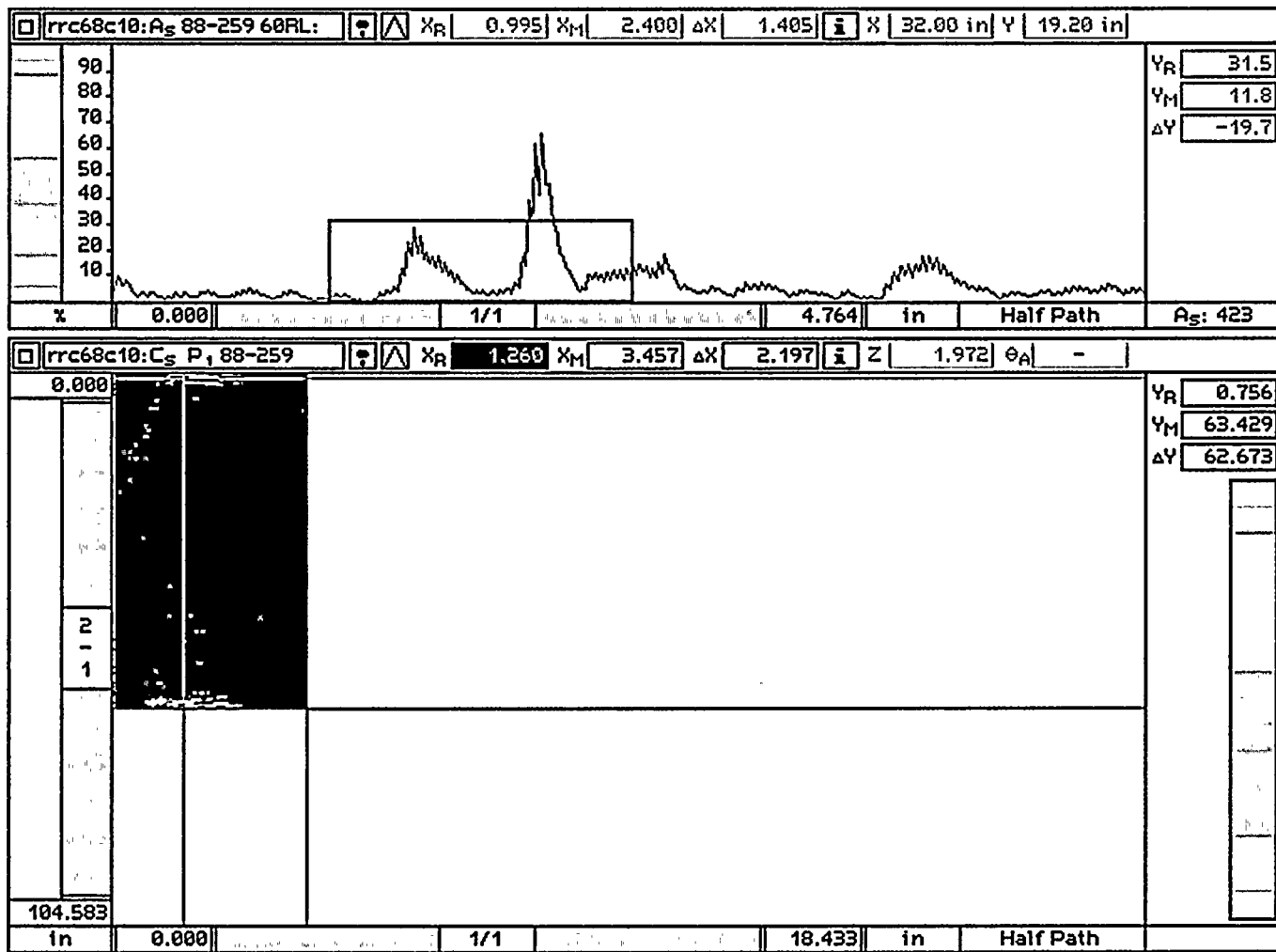


SITE: WNP UNIT: 2 PROJECT NO.: 1DRYP REPORT NO.: R-R8-111
WELD NO.: 20RRC(6)-8 SEARCH UNIT: 60°RL INDICATION NO.: 1 PAGE: 9 OF: 15



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ULTRASONIC SCAN DATA PRINT SHEET (AUTOMATED WITH Smart 2000)



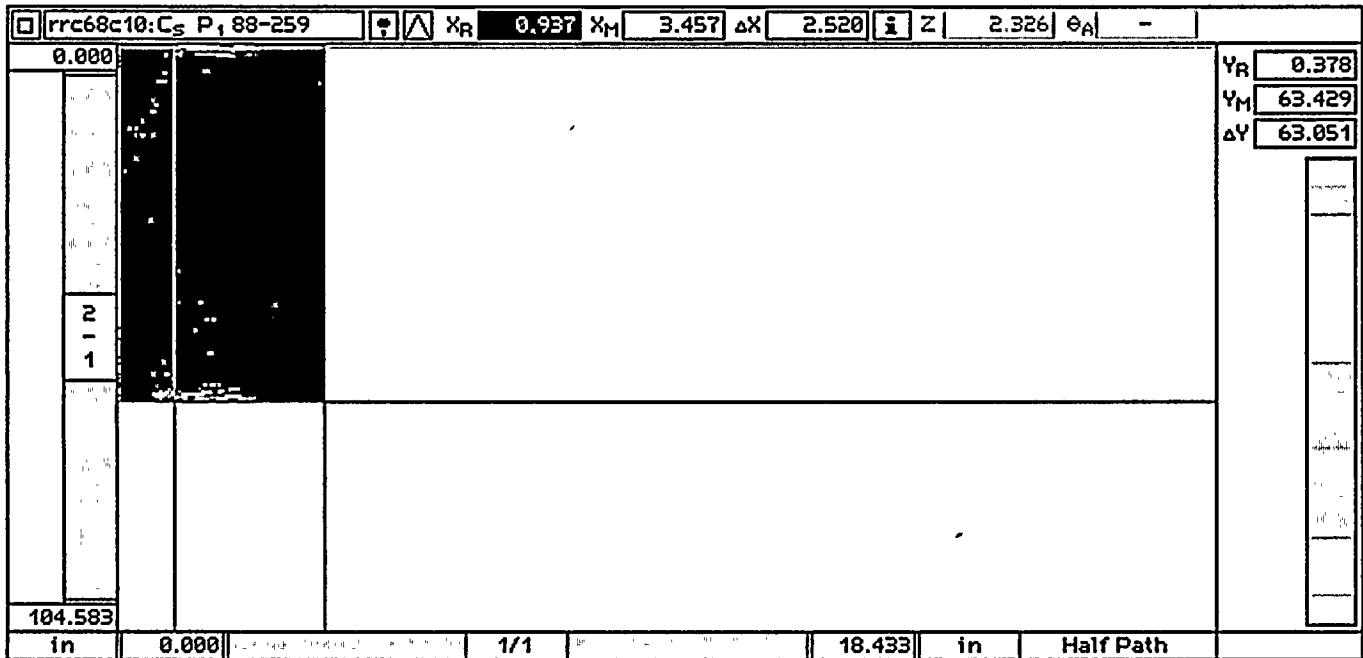
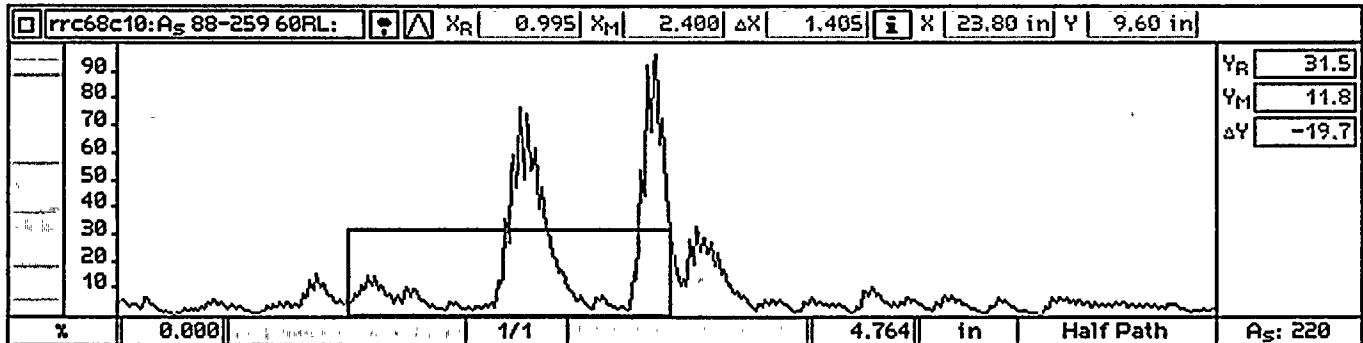
SITE: WNP UNIT: 2 PROJECT NO.: 1DRYP REPORT NO.: R-R8-111

WELD NO.: 20RRC(6)-8 SEARCH UNIT: 60° RL INDICATION NO.: 2 PAGE: 10 OF: 15



GE Nuclear Energy

ULTRASONIC SCAN DATA PRINT SHEET (AUTOMATED WITH Smart 2000)



SITE: WNP UNIT: 2 PROJECT NO.: 1DRYP REPORT NO.: R-R8-111
WELD NO.: 20RRC(6)-8 SEARCH UNIT: 60° RL INDICATION NO.: 3 PAGE: 11 OF: 15



GE Nuclear Energy

ULTRASONIC EXAMINATION DATA SHEET
(AUTOMATED WITH Smart 2000)

SITE: <u>WNP</u>	PROC. NO.: <u>GE-UT-208</u>	REPORT NO.: <u>R-R8-111</u>
UNIT: <u>2</u>	REVISION NO.: <u>1</u>	DATA SHEET NO.: <u>DA-R8-101</u>
PROJECT NO.: <u>1DRYP</u>	FRR NO.: <u>N/A</u>	CALIBRATION SHEET NO.: <u>CA-R8-101</u>

SYSTEM: <u>RECIRCULATION</u>	EXAM SURFACE TEMP: <u>89</u> °F	COUPLANT: <u>SOUNDSAFE</u>	EXAM START: <u>20:30</u>
WELD ID: <u>20RRC(6)-8</u>	THERMOMETER S/N: <u>119372</u>	BATCH NO.: <u>91120</u>	EXAM END: <u>22:40</u>
SEARCH UNIT: <u>45° S</u>	EXAMINATION SURFACE: <u>OD</u>	COMPONENT: <u>PIPE</u>	FLOW <u>→</u> VALVE

SCAN: <u>A10</u>	SCAN DIRECTION: <u>AXUP</u>	GAIN(dB): <u>28</u>	SCAN: <u>A11</u>	SCAN DIRECTION: <u>AXUP</u>	GAIN(dB): <u>26</u>
DISK/SIDE: <u>D-01/A</u>	FILENAME(S): <u>RRC68A10</u>		DISK/SIDE: <u>D-01/A</u>	FILENAME(S): <u>RRC68A11</u>	
EXAMINATION RESULTS:			EXAMINATION RESULTS:		
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<input checked="" type="checkbox"/> ROOT GEOMETRY	<input type="checkbox"/> INSIDE SURFACE GEOMETRY		<input type="checkbox"/> ROOT GEOMETRY	<input type="checkbox"/> INSIDE SURFACE GEOMETRY	
<input type="checkbox"/> COUNTERBORE GEOMETRY	<input checked="" type="checkbox"/> NON-GEOMETRIC INDICATIONS		<input type="checkbox"/> COUNTERBORE GEOMETRY	<input checked="" type="checkbox"/> NON-GEOMETRIC INDICATIONS	
<input checked="" type="checkbox"/> NON-RELEVANT INDICATIONS	<input type="checkbox"/> OTHER: <u>N/A</u>		<input type="checkbox"/> NON-RELEVANT INDICATIONS	<input type="checkbox"/> OTHER: <u>N/A</u>	
COMMENTS: <u>N/A</u>			COMMENTS: <u>SUPPLEMENTAL EXAM OF INDICATION AREA.</u>		
<u>N/A</u>					

SCAN: <u>A50</u>	SCAN DIRECTION: <u>CWUP</u>	GAIN(dB): <u>28</u>	SCAN: <u>A70</u>	SCAN DIRECTION: <u>CCUP</u>	GAIN(dB): <u>28</u>
DISK/SIDE: <u>D-01/A</u>	FILENAME(S): <u>RRC68A50</u>		DISK/SIDE: <u>D-01/A</u>	FILENAME(S): <u>RRC68A70</u>	
EXAMINATION RESULTS:			EXAMINATION RESULTS:		
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COMMENTS: <u>N/A</u>			COMMENTS: <u>N/A</u>		
<u>N/A</u>			<u>N/A</u>		

SCAN: <u>N/A</u>	SCAN DIRECTION: <u>N/A</u>	GAIN(dB): <u>N/A</u>	SCAN: <u>N/A</u>	SCAN DIRECTION: <u>N/A</u>	GAIN(dB): <u>N/A</u>
DISK/SIDE: <u>N/A</u>	FILENAME(S): <u>N/A</u>		DISK/SIDE: <u>N/A</u>	FILENAME(S): <u>N/A</u>	
EXAMINATION RESULTS:			EXAMINATION RESULTS:		
<input type="checkbox"/> NO RECORDABLE INDICATIONS	<input type="checkbox"/> ACOUSTIC INTERFACE		<input type="checkbox"/> NO RECORDABLE INDICATIONS	<input type="checkbox"/> ACOUSTIC INTERFACE	
<input type="checkbox"/> ROOT GEOMETRY	<input type="checkbox"/> INSIDE SURFACE GEOMETRY		<input type="checkbox"/> ROOT GEOMETRY	<input type="checkbox"/> INSIDE SURFACE GEOMETRY	
<input type="checkbox"/> COUNTERBORE GEOMETRY	<input type="checkbox"/> NON-GEOMETRIC INDICATIONS		<input type="checkbox"/> COUNTERBORE GEOMETRY	<input type="checkbox"/> NON-GEOMETRIC INDICATIONS	
<input type="checkbox"/> NON-RELEVANT INDICATIONS	<input type="checkbox"/> OTHER: <u>N/A</u>		<input type="checkbox"/> NON-RELEVANT INDICATIONS	<input type="checkbox"/> OTHER: <u>N/A</u>	
COMMENTS: <u>N/A</u>			COMMENTS: <u>N/A</u>		
<u>N/A</u>			<u>N/A</u>		

REMARKS: NO EXAMINATION PERFORMED ON THE DOWNSTREAM SIDE OF THE WELD DUE TO CONFIGURATION OF VALVE.

<u>Paul Johnson</u> EXAMINER	<u>II</u> LEVEL	<u>5-12-93</u> DATE	<u>DP Ramay</u> UTILITY ISI ENGINEER REVIEW	<u>5-17-93</u> DATE	<u>DeViggoth</u> ANII REVIEW	<u>5/18/93</u> DATE
<u>Wes Money</u> GE REVIEWED BY	<u>III</u> LEVEL	<u>5-13-93</u> DATE	<u>Carlyle</u> UTILITY CA REVIEW	<u>5-17-93</u> DATE	PAGE: <u>12</u> OF: <u>15</u>	
						FORM UT-07 REV. 1



GE Nuclear Energy

ULTRASONIC EXAMINATION DATA SHEET
(AUTOMATED WITH Smart 2000)

SITE: <u>WNP</u>		PROC. NO.: <u>GE-UT-208</u>	REPORT NO.: <u>R-R8-111</u>
UNIT: <u>2</u>		REVISION NO.: <u>1</u>	DATA SHEET NO.: <u>DA-R8-102</u>
PROJECT NO.: <u>1DRYP</u>		FRR NO.: <u>N/A</u>	CALIBRATION SHEET NO.: <u>CA-R8-102</u>

SYSTEM: <u>RECIRCULATION</u>	EXAM SURFACE TEMP: <u>89</u> °F	COUPLANT: <u>SOUNDSAFE</u>	EXAM START: <u>23:03</u>
WELD ID: <u>20RRC(6)-8</u>	THERMOMETER S/N: <u>119372</u>	BATCH NO.: <u>91120</u>	EXAM END: <u>00:25</u>
SEARCH UNIT: <u>60° RL</u>	EXAMINATION SURFACE: <u>OD</u>	COMPONENT: <u>PIPE</u>	FLOW <u> </u> VALVE <u> </u>

SCAN: <u>C10</u>	SCAN DIRECTION: <u>LKDN</u>	GAIN(dB): <u>38</u>	SCAN: <u>C11</u>	SCAN DIRECTION: <u>LKDN</u>	GAIN(dB): <u>36</u>
DISK/SIDE: <u>D-01/A</u>		FILENAME(S): <u>RRC68C10</u>	DISK/SIDE: <u>D-01/A</u>		FILENAME(S): <u>RRC68C11</u>
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COMMENTS:			COMMENTS:		
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COMMENTS:			COMMENTS:		
<u>N/A</u>			<u>N/A</u>		
<u>N/A</u>			<u>N/A</u>		

SCAN: <u>N/A</u>	SCAN DIRECTION: <u>N/A</u>	GAIN(dB): <u>N/A</u>	SCAN: <u>N/A</u>	SCAN DIRECTION: <u>N/A</u>	GAIN(dB): <u>N/A</u>
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EXAMINATION RESULTS:			EXAMINATION RESULTS:		
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COMMENTS:			COMMENTS:		
<u>N/A</u>			<u>N/A</u>		
<u>N/A</u>			<u>N/A</u>		

REMARKS: <u>NO EXAMINATION PERFORMED ON THE DOWNSTREAM SIDE OF THE WELD DUE TO CONFIGURATION OF VALVE.</u>					
<u>SUPPLEMENTAL EXAM TO OBTAIN ADDITIONAL COVERAGE ON THE DOWNSTREAM SIDE OF THE WELD.</u>					

<u>Paul Johnson</u>	<u>II</u>	<u>5-12-93</u>	<u>J. Praney</u>	<u>5-17-93</u>	<u>Don Haggard</u>	<u>5/18/93</u>
EXAMINER	LEVEL	DATE	UTILITY ISI ENGINEER REVIEW	DATE	ANII REVIEW	DATE
<u>Wes Money</u>	<u>III</u>	<u>5-13-93</u>	<u>Don Haggard</u>	<u>5-17-93</u>		
GE REVIEWED BY	LEVEL	DATE	UTILITY QA REVIEW	DATE		

PAGE: 13 OF: 15
FORM UT-02 REV. 1



GE Nuclear Energy

ULTRASONIC SCAN PARAMETER SHEET
(AUTOMATED WITH Smart 2000)

SITE: <u>WNP</u>	PROCEDURE NO.: <u>GE-UT-208</u>	REPORT NO.: <u>R-R8-111</u>
UNIT: <u>2</u>	REVISION NO.: <u>1</u>	DATA SHEET NO.: <u>DA-R8-101</u>
PROJECT NO.: <u>1DRYP</u>	FRR NO.: <u>N/A</u>	CALIBRATION SHEET NO.: <u>CA-R8-101</u>

SYSTEM RECIRCULATION WELD ID: 20RRC(6)-8 MOTOR STEPS: CIR: 752.22/In TRA: 500.00/In
WELD REFERENCE, (GE-ADM-1005): Lo: TOP DEAD CENTER Wo: WELD CENTERLINE SEARCH UNIT: 45°/S

EXAMINATION SETUP

COMPONENT DIA: 20" WELD LENGTH: 63" TRACK DIA: 24" ARM LENGTH: 12" TRACK LOCATION: 9" UPSTREAM FROM WELD CENTERLINE

SCAN PARAMETERS

SCAN: <u>A10</u>	SCAN DIRECTION: <u>AXUP</u>	SKEW: <u>0°±10°</u>	SCAN: <u>A11</u>	SCAN DIRECTION: <u>AXUP</u>	SKEW: <u>-4°</u>
SCANNING °C INDEXING °C			SCANNING °C INDEXING °C		
START: <u>0°</u>	<u>0°</u>	SCANNER ZERO POSITIONS:	START: <u>0°</u>	<u>0°</u>	SCANNER ZERO POSITIONS:
SIZE: <u>3.5"</u>	<u>63"</u>		SIZE: <u>3.0"</u>	<u>8.0"</u>	
OFFSET: <u>0°</u>	<u>0°</u>	CIR: <u>TDC</u>	OFFSET: <u>5°</u>	<u>-3.0°</u>	CIR: <u>3° CCW FROM TDC</u>
RESOLUTION: <u>0360°</u>	<u>1704°</u>	TRA: <u>WELD CL</u>	RESOLUTION: <u>0200°</u>	<u>1502°</u>	TRA: <u>5° UPST FROM WELD CL</u>
MOTOR DIR.: <u>INVERSE</u>	<u>NORMAL</u>	ROT: <u>LKDN</u>	MOTOR DIR.: <u>INVERSE</u>	<u>NORMAL</u>	ROT: <u>LKDN</u>
SCAN: <u>A50</u>	SCAN DIRECTION: <u>CWUP</u>	SKEW: <u>50°±10°</u>	SCAN: <u>A70</u>	SCAN DIRECTION: <u>CCUP</u>	SKEW: <u>-50°±10°</u>
SCANNING °C INDEXING °C			SCANNING °C INDEXING °C		
START: <u>0°</u>	<u>0°</u>	SCANNER ZERO POSITIONS:	START: <u>0°</u>	<u>0°</u>	SCANNER ZERO POSITIONS:
SIZE: <u>63.5"</u>	<u>2.6"</u>		SIZE: <u>63.5"</u>	<u>2.6"</u>	
OFFSET: <u>0°</u>	<u>0°</u>	CIR: <u>TDC</u>	OFFSET: <u>0°</u>	<u>0°</u>	CIR: <u>TDC</u>
RESOLUTION: <u>0359°</u>	<u>2000°</u>	TRA: <u>WELD CL</u>	RESOLUTION: <u>0359°</u>	<u>2000°</u>	TRA: <u>WELD CL</u>
MOTOR DIR.: <u>NORMAL</u>	<u>INVERSE</u>	ROT: <u>LKDN</u>	MOTOR DIR.: <u>NORMAL</u>	<u>INVERSE</u>	ROT: <u>LKDN</u>
SCAN: <u>N/A</u>	SCAN DIRECTION: <u>N/A</u>	SKEW: <u>N/A</u>	SCAN: <u>N/A</u>	SCAN DIRECTION: <u>N/A</u>	SKEW: <u>N/A</u>
SCANNING °C INDEXING °C			SCANNING °C INDEXING °C		
START: <u>N/A</u>	<u>N/A</u>	SCANNER ZERO POSITIONS:	START: <u>N/A</u>	<u>N/A</u>	SCANNER ZERO POSITIONS:
SIZE: <u>N/A</u>	<u>N/A</u>		SIZE: <u>N/A</u>	<u>N/A</u>	
OFFSET: <u>N/A</u>	<u>N/A</u>	CIR: <u>N/A</u>	OFFSET: <u>N/A</u>	<u>N/A</u>	CIR: <u>N/A</u>
RESOLUTION: <u>N/A</u>	<u>N/A</u>	TRA: <u>N/A</u>	RESOLUTION: <u>N/A</u>	<u>N/A</u>	TRA: <u>N/A</u>
MOTOR DIR.: <u>N/A</u>	<u>N/A</u>	ROT: <u>N/A</u>	MOTOR DIR.: <u>N/A</u>	<u>N/A</u>	ROT: <u>N/A</u>

REMARKS: NO EXAMINATION PERFORMED ON THE DOWNSTREAM SIDE OF THE WELD DUE TO VALVE CONFIGURATION.
* NO SKEW OSCILLATION DURING SCAN A11 TO ENHANCE INDICATION SIGNAL RESPONSE.

<u>Paul Johnson</u> EXAMINER	<u>II</u> LEVEL	<u>5-12-93</u> DATE	<u>DPRaney</u> UTILITY ISI ENGINEER REVIEW	<u>5-17-93</u> DATE	<u>Paul Viggart</u> AMI REVIEW	<u>5/18/93</u> DATE
<u>Wes Money</u> GE REVIEWED BY	<u>III</u> LEVEL	<u>5-13-93</u> DATE	<u>Paul Viggart</u> UTILITY QA REVIEW	<u>5-17-93</u> DATE	PAGE: <u>14</u> OF: <u>15</u>	



GE Nuclear Energy

ULTRASONIC SCAN PARAMETER SHEET (AUTOMATED WITH Smart 2000)

SITE: WNP
UNIT: 2
PROJECT NO.: 1DRYP

PROCEDURE NO.: GE-UT-208
REVISION NO.: 1
FRR NO.: N/A

REPORT NO.: R-R8-111
DATA SHEET NO.: DA-R8-102
CALIBRATION SHEET NO.: CA-R8-102

SYSTEM RECIRCULATION WELD ID: 20RRC(6)-8 MOTOR STEPS: CIR: 752.22/In TRA: 500.00/In
WELD REFERENCE, (GE-ADM-1005): Lo: TOP DEAD CENTER Wo: WELD CENTERLINE SEARCH UNIT: 60°/RI

EXAMINATION SETUP

COMPONENT DIA: 20" WELD LENGTH: 63" TRACK DIA: 24" ARM LENGTH: 12" TRACK LOCATION: 9" UPSTREAM FROM WELD CENTERLINE

SCAN PARAMETERS

SCAN: <u>C10</u>	SCAN DIRECTION: <u>LKDN</u>	SKEW: <u>0°±10°</u>	SCAN: <u>C11</u>	SCAN DIRECTION: <u>LKDN</u>	SKEW: <u>0°</u>
<u>SCANNING °C</u> <u>INDEXING °C</u> START: <u>0°</u> <u>0°</u> SIZE: <u>3.5"</u> <u>63.5"</u> OFFSET: <u>0"</u> <u>0"</u> CIR: <u>TDC</u> RESOLUTION: <u>0360°</u> <u>1887"</u> TRA: <u>WELD CL</u> MOTOR DIR.: <u>INVERSE</u> <u>NORMAL</u> ROT: <u>LKDN</u>			<u>SCANNING °C</u> <u>INDEXING °C</u> START: <u>0°</u> <u>0°</u> SIZE: <u>3.5"</u> <u>6.0"</u> OFFSET: <u>0"</u> <u>-3.0"</u> CIR: <u>3° CCW FROM TDC</u> RESOLUTION: <u>0260°</u> <u>1502"</u> TRA: <u>WELD CL</u> MOTOR DIR.: <u>INVERSE</u> <u>NORMAL</u> ROT: <u>LKDN</u>		
<u>SCANNING °C</u> <u>INDEXING °C</u> START: <u>N/A</u> <u>N/A</u> SIZE: <u>N/A</u> <u>N/A</u> OFFSET: <u>N/A</u> <u>N/A</u> CIR: <u>N/A</u> RESOLUTION: <u>N/A</u> <u>N/A</u> TRA: <u>N/A</u> MOTOR DIR.: <u>N/A</u> <u>N/A</u> ROT: <u>N/A</u>			<u>SCANNING °C</u> <u>INDEXING °C</u> START: <u>N/A</u> <u>N/A</u> SIZE: <u>N/A</u> <u>N/A</u> OFFSET: <u>N/A</u> <u>N/A</u> CIR: <u>N/A</u> RESOLUTION: <u>N/A</u> <u>N/A</u> TRA: <u>N/A</u> MOTOR DIR.: <u>N/A</u> <u>N/A</u> ROT: <u>N/A</u>		
<u>SCANNING °C</u> <u>INDEXING °C</u> START: <u>N/A</u> <u>N/A</u> SIZE: <u>N/A</u> <u>N/A</u> OFFSET: <u>N/A</u> <u>N/A</u> CIR: <u>N/A</u> RESOLUTION: <u>N/A</u> <u>N/A</u> TRA: <u>N/A</u> MOTOR DIR.: <u>N/A</u> <u>N/A</u> ROT: <u>N/A</u>			<u>SCANNING °C</u> <u>INDEXING °C</u> START: <u>N/A</u> <u>N/A</u> SIZE: <u>N/A</u> <u>N/A</u> OFFSET: <u>N/A</u> <u>N/A</u> CIR: <u>N/A</u> RESOLUTION: <u>N/A</u> <u>N/A</u> TRA: <u>N/A</u> MOTOR DIR.: <u>N/A</u> <u>N/A</u> ROT: <u>N/A</u>		

REMARKS: NO EXAMINATION PERFORMED ON THE DOWNSTREAM SIDE OF THE WELD DUE TO VALVE CONFIGURATION.
* NO SKEW OSCILLATION DURING SCAN C11 TO ENHANCE INDICATION SIGNAL RESPONSE.

Paul Johnson II 5-12-93
EXAMINER LEVEL DATE
Wes Money III 5-13-93
GE REVIEWED BY LEVEL DATE

DP Ramey 5-17-93
UTILITY ISI ENGINEER REVIEW DATE
Paul Uddell 5-17-93
UTILITY QA REVIEW DATE

Don Haggart 5/18/93
AII REVIEW DATE
PAGE: 15 OF: 15
FORM UT-08 REV. 2



GE Nuclear Energy

ULTRASONIC CALIBRATION DATA SHEET
(AUTOMATED WITH Smart 2000)

SITE: WNP UNIT: 2

CALIBRATION SHEET NO.: CA-R8-101

PROJECT NO.: ID RYP

LINEARITY SHEET NO.: L-101

PROCEDURE NO.: GE-UT-208

REVISION: 1

FRR: N/A

Instrument TECRAD / TOMOSCAN
Manufacturer / ModelTTS10090111
System Serial No.Search Unit KBA
ManufacturerB18209
Serial No.50"
Size2.25 MHz
Freq.45° / SHR
Angle/Mode50"
Incident to wedge frontCable RG-58, RG-58, RG-174
Type250', 25', 3'
Length4
No. of ConnectorsCalibration Standard UT-09
Serial No.SS
Material1.150"
Thickness85 °F
Temp.Thermometer 119372
Serial No.Couplant SOUNDSAFE
Type91120
Batch No.

CALIBRATION

ORIENTATION: CIRC AXIALTYPE: ID NOTCH ID NOTCHDEPTH: 1.150" 1.150"AMPLITUDE: 80% 80%SWEEP: 1.680" 1.770"GAIN: (dB) 24 dB 28 dB☐ TIME☐ DEPTH☒ METAL PATH

BASIC SETTINGS

1. DELAY: .5969 In2. TIMEBASE: 5.1200 In3. FREQUENCY: (MHz) 6.254. RATE: /S 205. UNITS:
☐ DISTANCE ☒ HALF PATH ☐ TIME6. VELOCITY: 124999 In/s7. SAMPLES: 512FIELD SIMULATOR: ROMPAS S/N: CAL-RHOM-010REFLECTOR: NEAR SDH FAR SDHMAX AMPLITUDE: 80% 80%SWEEP: .410" 1.050"GAIN: 18 dB 18 dB

CALIBRATION VERIFICATION

	TIME	DATE	OPER.	COMP. ID	REPORT NO
INITIAL	20:00	05/12/93	<i>PL</i>	20RRC(6)-8	R-R8-111
VERIFIED					
VERIFIED					
VERIFIED					
VERIFIED					
FINAL	22:50	05/12/93	<i>PL</i>	20RRC(6)-8	R-R8-111

PULSER / RECEIVER

1. MODE: ☒ PULSE ECHO ☐ THRU-TRANSMISSION2. PULSER: P1 TO RECEIVER: P13. VOLTAGE: (V) 4004. WIDTH: (Ns) 2285. FILTER: ☐ NONE ☐ 0.5 - 2 MHz ☒ 1 - 5 MHz
☐ 2 - 10 MHz ☐ 5 - 15 MHz6. RECTIFICATION: ☐ NONE ☐ UNIPOLAR + ☐ UNIPOLAR -
☒ BIPOLAR7. SMOOTHING: ☐ NONE ☐ FAST ☐ MEDIUM ☒ SLOWPaul Johnson II 5-12-93
EXAMINER LEVEL DATEWes Money III 5-13-93
GE REVIEWED BY LEVEL DATEDP Ramer 5-17-93
UTILITY ISI ENGINEER REVIEW DATECon Walsh 5-17-93
UTILITY QA REVIEW DATEJim Vogt 5-18-93
ANII REVIEW DATE

PAGE: 1 OF: 1

FORM UT-08 REV. 3



GE Nuclear Energy

ULTRASONIC CALIBRATION DATA SHEET
(AUTOMATED WITH Smart 2000)

SITE: WNP

UNIT: 2

CALIBRATION SHEET NO.: CA-R8-102

PROJECT NO.: ID RYP

LINEARITY SHEET NO.: L-102

PROCEDURE NO.: GE-UT-208

REVISION: 1

FRR: N/A

Instrument TECRAD / TOMOSCAN
Manufacturer / ModelTTS10090111
System Serial No.Search Unit RTD
Manufacturer88-259
Serial No.2(10x18)mm
Size2.0 MHz
Freq.60° / RL
Angle/Mode55°
Incident to wedge frontCable 2(RG-58, RG-58, RG-174)
Type2(250', 25', 3')
Length8
No. of ConnectorsCalibration Standard UT-09
Serial No.SS
Material1.150"
Thickness85 °F
Temp.Thermometer 119372
Serial No.Couplant SOUNDSAFE
Type91120
Batch No.

CALIBRATION

ORIENTATION: CIRC AXIALTYPE: ID NOTCH ID NOTCHDEPTH: 1.150" 1.150"AMPLITUDE: 80% 80%SWEEP: 2.121" 2.121"GAIN: (dB) 38 dB 38 dB☐ TIME☐ DEPTH☒ METAL PATH

BASIC SETTINGS

1. DELAY: 1.2444 In2. TIMEBASE: 4.7636 In3. FREQUENCY: (MHz) 12.54. RATE: /S 205. UNITS: ☐ DISTANCE ☒ HALF PATH ☐ TIME6. VELOCITY: 232598 In/s7. SAMPLES: 512FIELD SIMULATOR: ROMPAS S/N: CAL-RHOM-010

REFLECTOR:	NEAR SDH	FAR SDH
MAX AMPLITUDE:	80%	80%
SWEEP:	.605"	1.303"
GAIN:	28 dB	27 dB

PULSER / RECEIVER

1. MODE: ☐ PULSE ECHO ☒ THRU-TRANSMISSION2. PULSER: P2 TO RECEIVER: R23. VOLTAGE: (v) 4004. WIDTH: (Ns) 2285. FILTER: ☐ NONE ☐ 0.5 - 2 MHz ☒ 1 - 5 MHz☐ 2 - 10 MHz ☐ 5 - 15 MHz6. RECTIFICATION: ☐ NONE ☐ UNIPOLAR + ☐ UNIPOLAR -
☒ BIPOLAR7. SMOOTHING: ☐ NONE ☐ FAST ☐ MEDIUM ☒ SLOW

CALIBRATION VERIFICATION

	TIME	DATE	OPER.	COMP. ID	REPORT NO
INITIAL	22:55	05/12/93	<i>[Signature]</i>	20RRC(6)-8	R-R8-111
VERIFIED					
VERIFIED					
VERIFIED					
VERIFIED					
FINAL	00:35	05/13/93	<i>[Signature]</i>	20RRC(6)-8	R-R8-111

Paul Johnson
EXAMINER*II* 5-12-93
LEVEL DATE*DPR amey*
UTILITY ISI ENGINEER REVIEW5-17-93
DATE*Dan Hoggarth* 5/18/93
ANII REVIEW DATE*Wes Money* *III* 5-12-93
GE REVIEWED BY LEVEL DATE*[Signature]*
UTILITY OF REVIEW5-17-93
DATE

PAGE: 1 OF: 1

FORM UT-08 REV. 3