TENNESSEE VALLEY AUTHORITY	EXAMINATION SUMMARY AND RESOLUTION SHEET	REPORT NUMBER: R-P0646

PROJECT: *WBN* UNIT: *2* CYCLE *00*				COMPONENT ID: *SIF-B-T107-04*	
EXAMINATION METHOD				SYSTEM: SIS	ISI DWG NO: *ISI-2063-W-14* REV 0
MT ☐	PT ☐	UT ☑	VT ☐	CONFIGURATION:	CATEGORY
PROCEDURE: *N-UT-84*	REV *0*	TC: *N/A*		*P* TO *FLG*	*B-J*
EXAMINER: JASON POLISENSKY	EXAMINER: N/A	EXAMINER: N/A	EXAMINER: N/A		
LEVEL: II	LEVEL:	LEVEL:	LEVEL:		

Total coverage calculated to be approximately 50.0 %

A SINGLE SIDED PHASED ARRAY ULTRASONIC EXAMINATION WAS PERFORMED TO MEET THE REQUIREMENTS OF ASME SECTION XI PRESERVICE INSPECTION.

A PHASED ARRAY 2.0 MHZ, 8 ELEMENT PROBE WITH A 35°-80° SHEAR WAVE SECTOR SCAN DISPLAY WAS UTILIZED TO PERFORM THE EXAMINATION.

SCAN LIMITATION DUE TO FLANGE

50.0 % EXAMINATION VOLUME ACHIEVED

NO RECORDABLE INDICATIONS

RESOLUTION BY:	REVIEWED BY:	ANII:
Jason Polisensky JASON POLISENSKY	Darlene Dudley	DATE: 7/29/09
LEVEL II DATE: 07/07/09	LEVEL: III DATE: 7.14.09	Page: 1 OF 5

ACCESS: FORMS DATABASE R-10/04/01

TENNESSEE VALLEY AUTHORITY	PHASED ARRAY ULTRASONIC CALIBRATION DATA SHEET	REPORT NUMBER: R-P0646

PROJECT: WBN UNIT 2 CYCLE: 0	CALIBRATION DATE: 07/07/09
PROC.: N-UT-84 REV: 0 TC: N/A	CALIBRATION BLOCK NO.: WB-20 TEMP: 72.6°F
INSTR. MFG: GEIT DUE DATE: 12/19/09	SIMULATOR BLOCK NO: 790916
MODEL/TYPE: PHASOR XS M & TE ID: E41379	THERMOMTER S/N: E39053 DUE DATE: 08/12/09
SOFTWARE REVISION: 1.20	COUPLANT ULTRAGEL II BATCH: 06225 F
EXAM TYPE: SHEAR☒ LONG☐ RL☐	EXAM: ISI☐ PSI☒ LIMITATIONS: Y☒ N☐
CABLE TYPE: 1D LENGTH: 2M #CNT: 0	

ANGLE VERIFICATION

BLOCK TYPE: ROMPAS	S/N: 790916		NOMINAL ANGLE		ACTUAL ANGLE	
REFLECTOR			LOW: 35	HIGH: 80	LOW: 35	HIGH: 80
SCAN DIRECTION	NOTCH DEPTH	SDH. DEPTH	REF. SENS/AMPL		ANGLE / METAL PATH	EXAM SENS.
AXIAL	.343	N/A	11.0 / 80%		40 / .448	18.0
CIRCUMFERENTAIL	.343		11.0 / 80%		40 / .448	18.0

INSTRUMENT SETTINGS

GAIN TOGGLE:	dBD: 0.0	dBA: 18.0

PROBE DATA

PROBE MFG: GEIT	MODEL: 115-500-012
S/N: 01TL8P	APERTURE SIZE: .315
ELEMENTS: 8	PITCH: .040
FREQ: 2.0	ELEVATION: .354
CONFIGURATION: ARRAY	SHAPE: RECT

WEDGE DATA

PROBE CHECK: ☒ PRE-EXAM	☒ POST EXAM
WEDGE MFG: GEIT	VELOCITY: 0.0920
MODEL: 360-141-160	X OFFSET: .413
WEDGE ANGLE: 38°	Z OFFSET: .413
CONTOUR: FLAT	ELEMENT 1 POSITION: LOW

PART DATA

MATERIAL: STEEL STNLSS	VELOCITY: .1220

CALIBRATION TIMES

INITIAL TIME: 0950	FINAL TIME: 1315		
VERF. TIMES	1218	1244	1300	N/A

SCAN DATA

ELECTRONIC		SCAN PATTERN	
TYPE:	SECTOR	ANGLE START:	35
FOCAL POINT:	UNFOCUSED	ANGLE STOP:	80
WAVE TYPE:	SHEAR	ANGLE STEP:	1.0
RL FOCAL LAW:	N/A		
LEG: 1.0		MATERIAL THICKNESS:	.350

APERTURE

NUMBER OF STEPS:	1	FIRST ELEMENT:	1
APERTURE SIZE:	8	APERTURE STEP:	1

DISPLAY DATA ANGLE CORRECTION ☒ON ☐OFF

UT DATA

BASE	PULSER	RECIEVER	NRM/TCG
DELAY: 0.0	VOLT: 150	FREQ: BB 0.6-6.5	CYC GAIN CNTL 0.0
	WIDTH: 250	ASCAN RECT: FULLWAVE	
MATERIAL: STEEL STNLSS	PRF VALUE: AH		

LINEARITY CHECK

VERTICAL	SIGNAL 1	100	90	80	70	60	50	40	30	20	10
	SIGNAL 2	50	45	40	35	30	25	20	15	10	5

ATTENUATOR	GAIN	SET	-6 dB	-12 dB	SET	+12	SET	+6
	AMP	80	32-48	16-24	20	64-96	40	64-96
			40	20		80		80

COMMENTS:	WELDS/ITEMS EXAMINED:
	SIF-B-T154-01
	SIF-B-T107-26
	SIF-B-T107-04, SIF-B-T107-05

EXAMINER: JASON POLISENSKY	EXAMINER: N/A	REVIEWER:	ANII:
			DATE: 7/29/09
LEVEL: II	LEVEL:	LEVEL: II DATE: 7-14-09	PG. 2 OF 5

TENNESSEE VALLEY AUTHORITY	MANUAL ULTRASONIC PIPING EXAMINATION DATA SHEET	REPORT NUMBER R-P0646

PROJECT: WBN UNIT/CYCLE 2/00
SYSTEM: SIS
WELD I.D.: SIF-B-T107-04
CONFIG.: P TO FLG
FLOW

PROCEDURE: N-UT-84 REV: 0 TC: N/A
Wo REFERENCE: WELD CENTERLINE
Lo REFERENCE: TDC

EXAMINATION DATE 07/07/09
START TIME: 1228 END TIME: 1232
EXAM SURFACE ☐ ID ☒ OD
MATERIAL TYPE: ☐ CS ☒ SS ☐ CSCL ☐ CCSS
SURFACE TEMP.: 79.2 PYRO NO. E39053

EXAMINATION ANGLE	35-80 DEG.	35-70 DEG.
AXIAL SCAN SENSITIVITY	18.0 dB	N/A dB
CIRC. SCAN SENSITIVITY	N/A dB	18.0 dB

IND NO.	L (in) FROM REF.			AT MAX AMP			MAX AMP % DAC	EXAM NO. 3-14	NOM. ANG.	NRI	INDICATION INFORMATION: TYPE, DAMPING, ETC.
	L1	L Max	L2	W MAX	MP MAX	D MAX					
								3	35/80	☒	
								4	N/A	☐	NO SCAN 4 DUE TO FLANGE
								5	35/70	☒	LIMITED, SEE REMARKS
								6	35/70	☒	LIMITED, SEE REMARKS
										☐	
										☐	

REMARKS/LIMITATIONS
SINGLE SIDED EXAMINATION (NO SCAN 4) DUE TO FLANGE
DUE TO CONFIGURATION, SCANS 5&6 LIMITED ON PIPE SIDE TO WELD &
MAINTAINED 5% - 20% ID ROLL DURING EXAMINATION

EXAMINER: Jason Polisensky (JASON POLISENSKY) LEVEL: II
EXAMINER: N/A LEVEL: N/A
REVIEWED BY: [signature] LEVEL: III DATE: 7.14.09

ANII: [signature]
DATE: 7/29/09
PAGE 3 OF 5

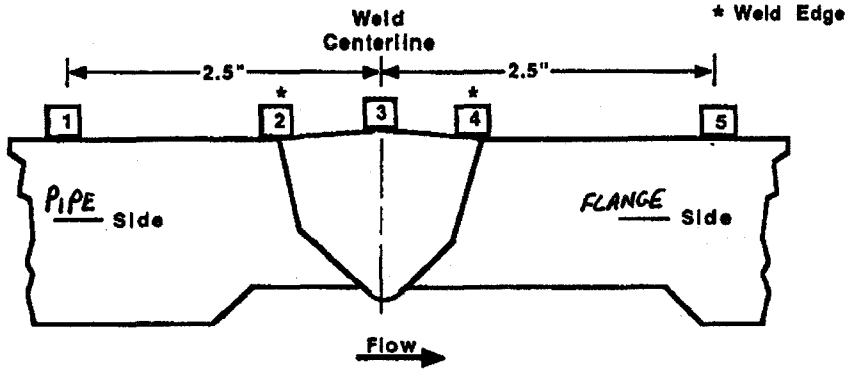
ACCESS: FORMS DATABASE 10/18/01

TVA	WALL THICKNESS PROFILE SHEET	REPORT NO: R-P0646

PROJECT: WBN
UNIT: 2
WELD NO: SIF-B-T107-04
SYSTEM: SIS

Record Thickness Measurements As Indicated, Including Weld Width, Edge-To-Edge At 0°

Position	0°	90°	180°	270°
1	.27			
2	.27			
3	.23			
4	.24			
5	N/A			



CROWN HEIGHT: 0.0625
DIAMETER: 1.50
CROWN WIDTH: .450
WELD LENGTH: 6.25

EXAMINER: JASON POLISENSKY
LEVEL: II
DATE: 07/07/09

REVIEWED BY:
LEVEL: II
DATE: 7/14/09

ANII:
DATE: 7/29/09

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TVA 19668 (NP-5-89)

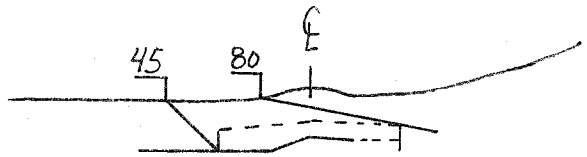
1-108-999-44

TVA Office of Nuclear Power	PROJECT: WBN SYSTEM: SIS UNIT: 2 WELD NO: SIF-B-T107-H	REPORT NO.: R-P0646

PIPE

FLOW

FLANGE



EXAMINATION PERFORMED TO QUALIFIED SECTOR SCAN
ANGLES OF 35° TO 80° AX AND 35° TO 70° CIRC

BY: JASON POLISENSKY LEVEL: II DATE: 07/07/09 PAGE 5 OF 5

R.P0646

Watts Bar Unit 2

TVA Procedure N-GP-31
Attachments 3 & 4

Worksheet Version 1.0 dated 07/01/09

WELD NUMBER SIF-B-T107-04

		Measured Fields		Calculated Fields	
Item 1	Required examination Volume in sq. in. **(width x height)**	0.95	0.13	0.1235	sq. in.
Item 2	Number of **scan directions**			4	directions
Item 3	Total Scan **volume** in sq. in.			0.494	sq. in.
Item 4	Total **length** of weld			6.25	inches
Item 5	Total required **exam volume** in cubic inches			3.0875	cu. in.
Item 6	**Exam volume acheived** (sq. in.) in direction 1 X **length of weld achieved**	0.1235	6.25	0.771875	cu. In.
Item 7	**Exam volume acheived** (sq. in.) in direction 2 X **length of weld achieved**	0	6.25	0	cu. In.
Item 8	**Exam volume acheived** (sq. in.) in direction 3 X **length of weld achieved**	0.06175	6.25	0.3859375	cu. In.
Item 9	**Exam volume acheived** (sq. in.) in direction 4 X **length of weld achieved**	0.06175	6.25	0.3859375	cu. In.
Item 10	Determined the **acheived exam volume** add 6, 7, 8 & 9			1.54375	cu. In.
Item 11	Exam **volume percentage** item 10/item 5 x 100			**50.00**	%

Comments SINGLE SIDED DUE TO FLANGE

AS WELDED

Initials JAP

Date 07/07/09

INFORMATION ONLY