TENNESSEE VALLEY AUTHORITY	EXAMINATION SUMMARY AND RESOLUTION SHEET	REPORT NUMBER: R-P0651

PROJECT: *WBN* UNIT: *2*	CYCLE *00*		COMPONENT ID: *SIF-B-T142-01*		
EXAMINATION METHOD			SYSTEM: SIS	ISI DWG NO: *ISI-2063-W-13 REV 0*	
MT ☐	PT ☐	UT ☑	VT ☐	CONFIGURATION:	CATEGORY
PROCEDURE: *N-UT-84*	REV *0*	TC: *N/A*	*P TO BRCN*		*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 49.2 %

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° TO 80° SHEAR WAVE SECTOR SCAN DISPLAY WAS UTILIZED TO PERFORM THE EXAMINATION.

SCAN LIMITATION DUE TO BRANCH CONNECTION

49.2 % EXAMINATION VOLUME ACHIEVED.

NO RECORDABLE INDICATIONS

RESOLUTION BY:	REVIEWED BY:	ANII:
JASON POLISENSKY		DATE: 7/29/09
LEVEL II DATE: 07/09/09	LEVEL: III DATE: 7-14-09	Page: 1 OF 25

ACCESS: FORMS DATABASE R-10/04/01

JPN 7-13-09

TENNESSEE VALLEY AUTHORITY	PHASED ARRAY ULTRASONIC CALIBRATION DATA SHEET	REPORT NUMBER: R-P0651

PROJECT: WBN UNIT 2 CYCLE: 0	CALIBRATION DATE: 07/09/09
PROC.: N-UT-84 REV: 0 TC: N/A	CALIBRATION BLOCK NO.: WB-20 TEMP: 71.8°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/	12.0 / 80%	40 / .448	18.0
CIRCUMFERENTAIL	.343	/A	12.0 / 80%	40 / .448	18.0

INSTRUMENT SETTINGS

GAIN TOGGLE:	dBD: 0.0	dBA: 18.0

PROBE DATA		SCAN DATA	
		ELECTRONIC	*SCAN PATTERN*
PROBE MFG: GEIT	MODEL: 115-500-012	TYPE: SECTOR	ANGLE START: 35
S/N: 01TL8P	APERTURE SIZE: .315	FOCAL POINT: UNFOCUSED	ANGLE STOP: 80
ELEMENTS: 8	PITCH: .040	WAVE TYPE: SHEAR	ANGLE STEP: 1.0
FREQ: 2.0	ELEVATION: .354	RL FOCAL LAW: N/A	
CONFIGURATION: ARRAY	SHAPE: RECT	LEG: 1.0	MATERIAL THICKNESS: .400

WEDGE DATA		APERTURE	
PROBE CHECK: ☒ PRE-EXAM ☒ POST EXAM			
WEDGE MFG: GEIT	VELOCITY: 0.0920	NUMBER OF STEPS: 1	FIRST ELEMENT: 1
MODEL: 360-141-160	X OFFSET: .413	APERTURE SIZE: 8	APERTURE STEP: 1
WEDGE ANGLE: 38°	Z OFFSET: .413	DISPLAY DATA	ANGLE CORRECTION ☒ON ☐OFF
CONTOUR: FLAT	ELEMENT 1 POSITION: LOW		

PART DATA		UT DATA			
		BASE	*PULSER*	*RECIEVER*	*NRM/TCG*
MATERIAL: STEEL STNLSS	VELOCITY: .1220	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		

CALIBRATION TIMES				
INITIAL TIME: 0745	FINAL TIME: 1000			
VERF. TIMES	0906	0938	N/A	N/A

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-T077-01
	SIF-B-T142-01

EXAMINER: JASON POLISENSKY	EXAMINER: N/A	REVIEWER:	ANII:
			DATE: 7/29/09
LEVEL:	LEVEL:	LEVEL: III DATE: 7.14.09	PG. 2 OF 5

TENNESSEE VALLEY AUTHORITY	MANUAL ULTRASONIC PIPING EXAMINATION DATA SHEET	REPORT NUMBER R-P0651

PROJECT: WBN UNIT/CYCLE 2 / 00
SYSTEM: SIS
WELD I.D.: SIF-B-T142-01
CONFIG.: P TO BRCN
FLOW

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

EXAMINATION DATE 07/09/09
START TIME: 0940 END TIME: 0946
EXAM SURFACE ☐ ID ☒ OD
MATERIAL TYPE: ☐ CS ☒ SS ☐ CSCL ☐ CCSS
SURFACE TEMP.: 80.1 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 DUE TO BRANCH CONN.
								5	35-70	☒	LIMITED, SEE REMARKS
								6	35-70	☒	LIMITED, SEE REMARKS
										☐	
										☐	

REMARKS/LIMITATIONS
LIMITED EXAM (NO SCAN 4) DUE TO BRANCH CONNECTION
MAINTAINED 5% - 20% ID ROLL
DUE TO CONFIGURATION, SCANS 5&6 LIMITED ON PIPE SIDE TO WELD ℄

EXAMINER: 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

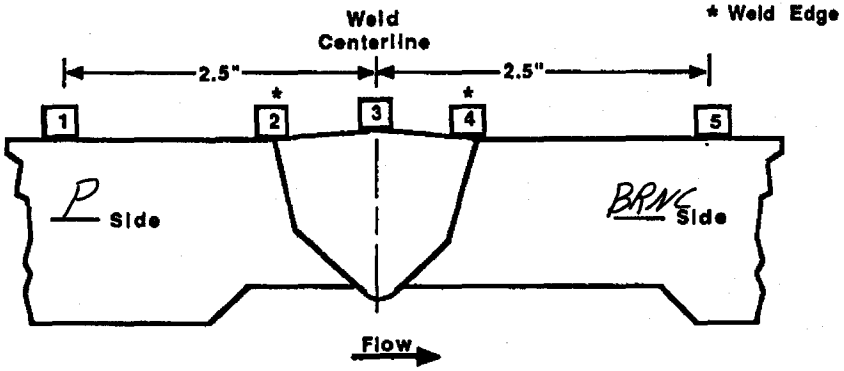
ACCESS: FORMS DATABASE 10/18/01

TVA	WALL THICKNESS PROFILE SHEET	REPORT NO: R-P0651

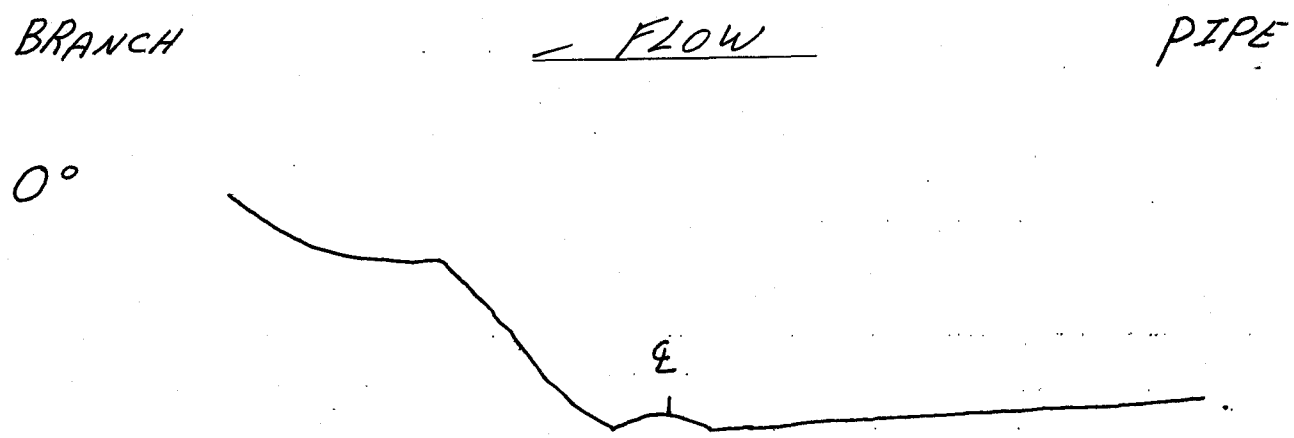
PROJECT: WATTS BAR NUCLEAR
UNIT: 2
WELD NO: SIF-B-T142-01
SYSTEM: SIS

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

Position	0°	90°	180°	270°
1	.28			
2	.28	N		
3	.26			
4	.26		A	
5	N/A			



CROWN HEIGHT: 0.0625
DIAMETER: 1.50
CROWN WIDTH: .50
WELD LENGTH: 6.25



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

REVIEWED BY:
LEVEL: III
DATE: 7.14.09

ANII:
DATE: 7/29/09
PAGE 4 OF 5

TVA 19668 (NP-5-89)

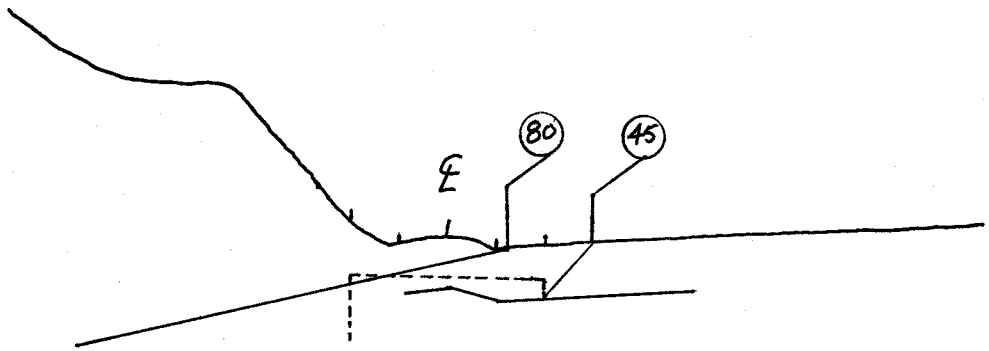
1-108-999-44

TVA Office of Nuclear Power	PROJECT: WATTS BAR NUCLEAR SYSTEM: SIS UNIT: 2 WELD NO: SIF-B-T142-01	REPORT NO.: R-P0651

FLOW

BRANCH

PIPE



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

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

R.P 0651

Watts Bar Unit 2

TVA Procedure N-GP-31
Attachments 3 & 4

Worksheet Version 1.0 dated 07/01/09

WELD NUMBER SIF-B-T142-01

		Measured Fields		Calculated Fields	
Item 1	Required examination Volume in sq. in. **(width x height)**	1	0.13	0.13	sq. in.
Item 2	Number of **scan directions**			4	directions
Item 3	Total Scan **volume** in sq. in.			0.52	sq. in.
Item 4	Total **length** of weld			6.25	inches
Item 5	Total required **exam volume** in cubic inches			3.25	cu. in.
Item 6	**Exam volume acheived** (sq. in.) in direction 1 X **length of weld achieved**	0.12625	6.25	0.7890625	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**	0.065	6.25	0.40625	cu. In.
Item 9	**Exam volume acheived** (sq. in.) in direction 4 X **length of weld achieved**	0.065	6.25	0.40625	cu. In.
Item 10	Determined the **acheived exam volume** add 6, 7, 8 & 9			1.6015625	cu. In.
Item 11	Exam **volume percentage** item 10/item 5 x 100			**49.28**	%

Comments SINGLE SIDED DUE TO BRANCH CONNECTION. AS WELDED

SCANS 5&6, DUCER SKEWED IN TOWARDS WELD

Initials JCP

Date 07/09/09

INFORMATION ONLY