TENNESSEE VALLEY AUTHORITY	EXAMINATION SUMMARY AND RESOLUTION SHEET	REPORT NUMBER: R-P0590

PROJECT: *WBN* UNIT: *2*	CYCLE *00*		COMPONENT ID: *SIF-B-T076-06*		
EXAMINATION METHOD			SYSTEM: SIS	ISI DWG NO: *ISI-2063-W-14* Rev 0	
MT ☐	PT ☐	UT ☑	VT ☐	CONFIGURATION:	CATEGORY
PROCEDURE: *N-UT-84*	REV 8	TC: *N/A*		*P TO FLG*	*B-J*
EXAMINER: PATRICK MAHONEY	EXAMINER: JASON POLISENSKY	EXAMINER: N/A		EXAMINER: N/A	
LEVEL: II	LEVEL: II	LEVEL:		LEVEL:	

Total coverage calculated to be approximately 50 %

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

A PHASED ARRAY 2 MHZ, 8 ELEMENT PROBE WITH A 35°-80° SHEAR WAVE SECTOR SCAN DISPLAY WAS UTILIZED TO PERFORM THE EXAMINATION.

NO RECORDABLE INDICATIONS OBSERVED.

LIMITED EXAMINATION DUE TO FLANGE CONFIGURATION.

50% EXAMINATION VOLUME ACHIEVED

RESOLUTION BY:	REVIEWED BY:	ANII:
LEVEL II DATE: 6/29/09	LEVEL: II DATE: 6-30-09	DATE: 7/20/09
		Page: 1 OF 5

ACCESS: FORMS DATABASE R-10/04/01

TENNESSEE VALLEY AUTHORITY	PHASED ARRAY ULTRASONIC CALIBRATION DATA SHEET	REPORT NUMBER: R-P0590

PROJECT: WBN UNIT 2 CYCLE: 0	CALIBRATION DATE: 06/29/09
PROC.: N-UT-84 REV: 0 TC: N/A	CALIBRATION BLOCK NO.: WB-20 TEMP: 72.5°F
INSTR. MFG: GEIT DUE DATE: 12/19/09	SIMULATOR BLOCK NO: N/A
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: 06225F
EXAM TYPE: SHEAR☒ LONG☐ RL☐	EXAM: ISI☐ PSI☒ LIMITATIONS: Y☒ N☐
CABLE TYPE: 1D LENGTH: 2M #CNT: Ø	

ANGLE VERIFICATION

BLOCK TYPE: ROMPAS	S/N: 790390		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	10.0 / 80%		40 / .444	14.0
CIRCUMFERENTAIL	.343		10.0 / 80%		40 / .443	14.0

INSTRUMENT SETTINGS

GAIN TOGGLE:	dBD: 0.0	dBA: 14.0

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: .350

WEDGE DATA		APERTURE	
PROBE CHECK: ☒ PRE-EXAM ☒ POST EXAM			
WEDGE MFG: GEIT	VELOCITY: .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: 1210	FINAL TIME: 1345			
VERF. TIMES	N/A	N/A	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-T076-01
	SIF-B-T076-06
	SIF-B-T076-23

EXAMINER:	EXAMINER: JASON POLISENSKY	REVIEWER:	ANII:
Patrick Mahoney			DATE: 7/20/09
LEVEL: II	LEVEL: II	LEVEL: III DATE: 6-30-09	PG. 2 OF 5

TENNESSEE VALLEY AUTHORITY	MANUAL ULTRASONIC PIPING EXAMINATION DATA SHEET	REPORT NUMBER R-P590

PROJECT: WBN UNIT/CYCLE 2/00
SYSTEM: SIS
WELD I.D.: SIF-B-T076-06
CONFIG.: P TO FLG
FLOW

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

EXAMINATION DATE 06/29/09
START TIME: 1240 END TIME: 1310
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	14.0 dB	N/A dB
CIRC. SCAN SENSITIVITY	N/A dB	14.0 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 EXAM DUE TO FLANGE
								5	35/70	☒	
								6	35/70	☒	
										☐	
										☐	

REMARKS/LIMITATIONS NO SCAN 4 DUE TO FLANGE

MAINTAINED 5-20% ID ROLL

EXAMINER: P. Mahoney LEVEL: II
EXAMINER: Jason Poulsenog LEVEL: II
REVIEWED BY: [illegible] LEVEL: III DATE: 6-30-09

ANII: [illegible]
DATE: 7/20/09
PAGE 3 OF 5

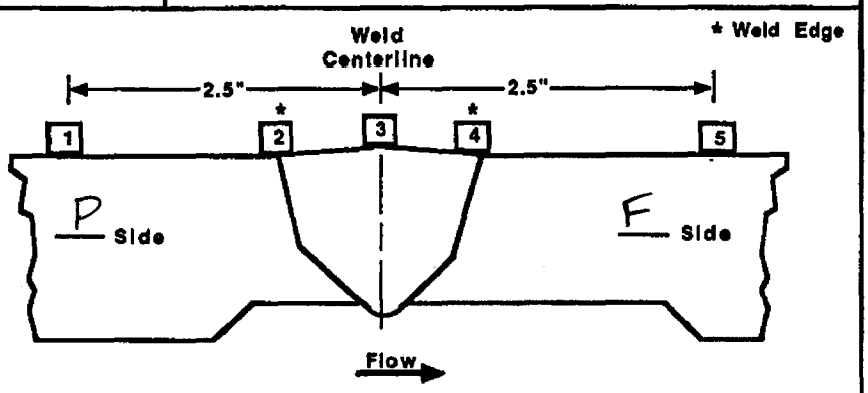
ACCESS: FORMS DATABASE 10/18/01

TVA	WALL THICKNESS PROFILE SHEET	REPORT NO: R-P590

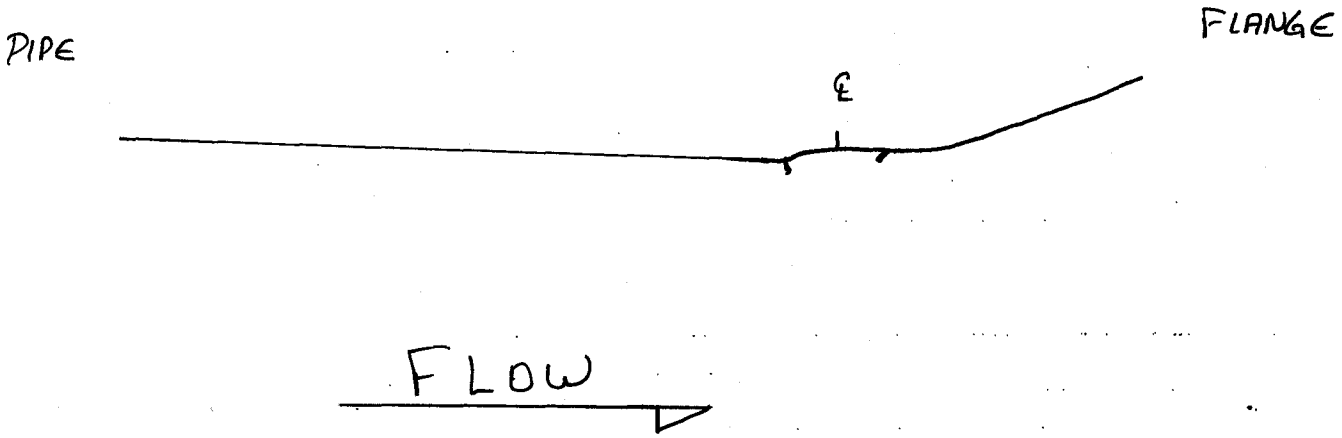
PROJECT: WBN
UNIT: 2
WELD NO: SIF-B-T076-6
SYSTEM: SIS (63)

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

Position	0°	90°	180°	270°
1	N/A	.276		
2	N/A	.272	N	
3	N/A	.259		A
4	N/A	.379		
5	N/A	N/A		



CROWN HEIGHT: .0625"
CROWN WIDTH: .5"
DIAMETER: 1.5"
WELD LENGTH: 6.5"



EXAMINER: Robert M Mahoney P.Mahoney
LEVEL: II
DATE: 6/29/09

REVIEWED BY: Darlene Dailey
LEVEL: III
DATE: 6/30/09

ANII: SW
DATE: 7/20/09

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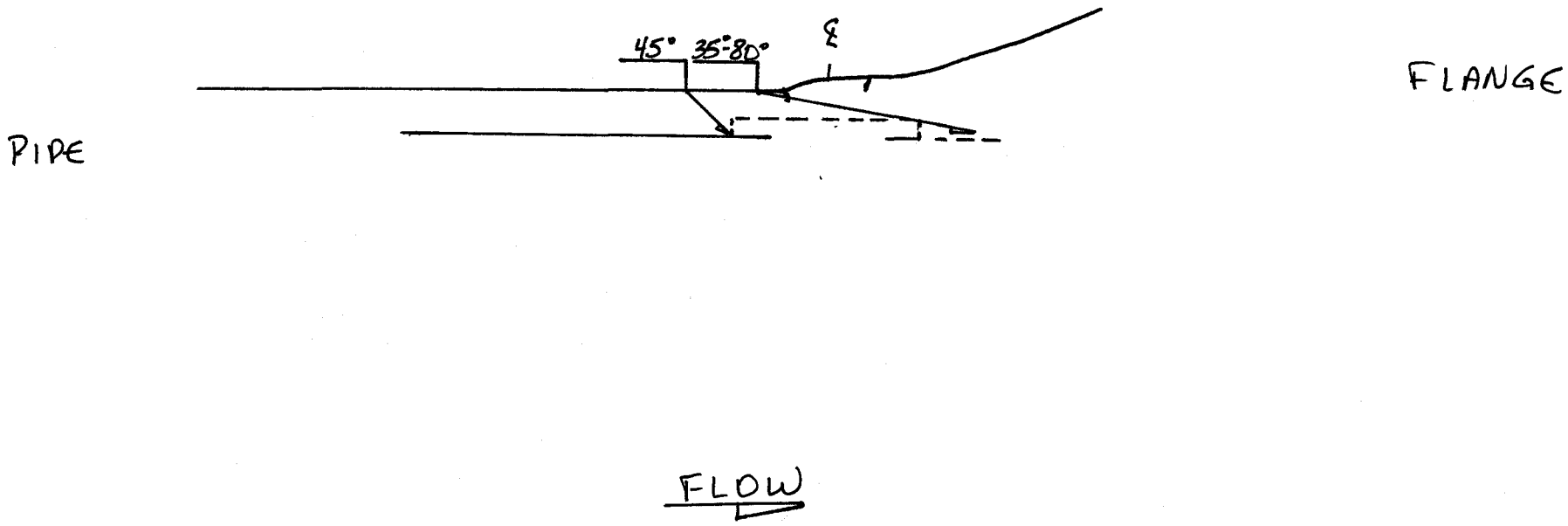
TVA 19668 (NP-5-89)

1-108-999-44

TVA Office of Nuclear Power	PROJECT: WBN SYSTEM: SIS (063) UNIT: 2 WELD NO: SIF-B-T076-6	REPORT NO.: R-P0590



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

BY: P Mahoney LEVEL: II DATE: 6/29/09 PAGE 5 OF 5

R- P0590

TVA Procedure
N-GP-31

Weld # SIF-B-T076-6

Attachment 3

Item 1	Required examination Volume in sq. in. **(width x height)**	1	0.109	0.109	sq. in.
Item 2	Number of **scan directions**			4	directions
Item 3	Total Scan **volume** in sq. in.			0.436	sq. in.
Item 4	Total **length** of weld			6.5	inches
Item 5	Total required **exam volume** in cubic inches			2.834	cu. in.
Item 6	**Exam volume achieved** (sq. in.) in direction 1 X **length of weld achieved**	0.109	6.5	0.7085	cu. In.
Item 7	**Exam volume achieved** (sq. in.) in direction 2 X **length of weld achieved**	0.109		0	cu. In.
Item 8	**Exam volume achieved** (sq. in.) in direction 3 X **length of weld achieved**	0.0545	6.5	0.35425	cu. In.
Item 9	**Exam volume achieved** (sq. in.) in direction 4 X **length of weld achieved**	0.0545	6.5	0.35425	cu. In.
Item 10	Determined the **achivied exam volume** add 6, 7, 8 & 9			1.417	cu. In.
Item 11	Exam **volume percentage** item 10/item 5 x 100			50	%

Directions 3 & 4 (Circ Scan directions 5 & 6) were restricted to pipe side of weld.
This was a single sided examination

Level: II Date: 6/29/09

INFORMATION ONLY