TENNESSEE VALLEY AUTHORITY	EXAMINATION SUMMARY AND RESOLUTION SHEET	REPORT NUMBER: R. P0152

PROJECT: *WBN* UNIT: *2* CYCLE *00*				COMPONENT ID: *RCF-G1-4*	
EXAMINATION METHOD				SYSTEM: RCS	ISI DWG NO: *ISI-2068-W-01* Rev. 0
MT ☐	PT ☐	UT ☑	VT ☐	CONFIGURATION:	CATEGORY
PROCEDURE: *N-UT-33*		REV 11	TC: N/A	*EL* TO *PU*	*B-J*

EXAMINER:	EXAMINER:	EXAMINER:	EXAMINER:
Jason Nissen	N	N	N
LEVEL: II	LEVEL: A	LEVEL: A	LEVEL: A

Total coverage calculated to be approximately 75 %

An ultrasonic examination was performed to meet the requirements of ASME Section XI preservice inspection.

A 45° Refracted Longitudinal wave was calibrated and used for this examination.

Examination was limited on one side due to pump geometry.

No recordable indications observed.

75% examination volume coverage achieved.

RESOLUTION BY:	REVIEWED BY:	ANII:
Jason Nissen	Darlene Tuley	DATE: 3/9/09
LEVEL II DATE: 2-19-09	LEVEL: III DATE: 2-24-09	Page: 1 OF 5

ACCESS: FORMS DATABASE R-10/04/01

TENNESSEE VALLEY AUTHORITY	DIGITAL ULTRASONIC CALIBRATION DATA SHEET	REPORT NUMBER R-P0152

PROJECT *WBN* UNIT/CYCLE *2/00*
PROCEDURE: *N-UT-33* REV: 11 TC: N/A

TRANSDUCER

MANUFAC SWRI MODEL: TVA-1
ELEMENTS: 2 SHAPE: Rectangle
S/N 2952 SIZE: .5 x ~~.10~~ 1.0 FREQ: 1.0 MHz
CONTOUR: N/A FOCUS: N/A
CABLE TYPE RG174 LENGTH: 6' # CNT: N/A

MODE: ☐ SHEAR ☐ LONG ☒ RL

CALIBRATION DATE: 02/19/09
CALIBRATION BLOCK NO. WB60 TEMP: 69.4°F
SIMULATOR BLOCK: DSC Block
THERMOMETER S/N: 558271 DUE DATE: 06/24/09
COUPLANT: Ultragel II BATCH: 07225E

ANGLE VERIFICATION

BLOCK TYPE DSC Block S/N: A03671
NOMINAL ANGLE: 45 RL ACTUAL ANGLE 45 RL°

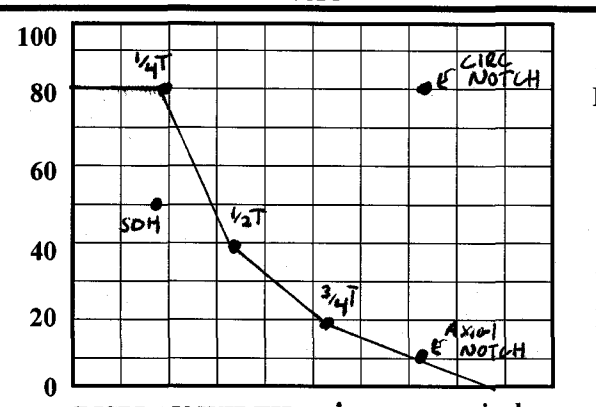
INSTRUMENT

MANUFACTURER: Krautkramer DUE DATE: 06/23/09
MODEL NO.: USN 60 S/N: E36304

REFLECTOR			REFERENCE SENSITIVITY	MEMORY NUMBER
SCAN DIRECT.	NTC	SDH		
AXIAL	☒	☐	58.0 dB	FIL-45RL-CCSS
CIRC.	☒	☐	74.2 dB	FIL-45RL-CCSS

RANGE: 6.000 inches *FREQ: 1.0 MHz
PROBE DELA 13.2144 msec *RECTIFY: Fullwave
VELOCITY .2373 msec DUAL ☒ ON ☐ OFF
DISP DELAY: 0.000 *REJECT: 0 %
*ENERGY: HIGH *DISP. START: IP
*DAMPING: 1k ohms DET: ☒ Peak ☐ Flank
*PRR/PRF: Autohigh TCG: ☐ ON ☒ OFF
ANGLE: 45 RL deg
ZERO: N/A msec *PULSER: Dual

DAC



DISPLAY WIDTH 6.0 inches 3-9-09

REF. REFLECTOR: DSC Block SDH GAIN: 49.0 dB
AMPLITUDE: 50 % METAL PATH: 1.03

CALIBRATION TIMES

INITIAL TIME: 0855 FINAL TIME: 1227

VERIFICATION TIMES	1) 1002	2) 1029	3) N/A	4) N/A	5) N/A	6) N/A	7) N/A	8) N/A	9) N/A

***PDI QUALIFIED INSTRUMENT SETTINGS:**
VERIFY INSTRUMENT SETTINGS AND CALIBRATION SEQUENCE ARE IN ACCORDANCE WITH TABLE 2 OF THE APPLICABLE PDI QUALIFICATION IMPLEMENTATION PROCEDURE!

LINEARITY CHECK

VERTICAL	SIGNAL 1		100	90	80	70	60	50	40	30	20
	SIGNAL 2		50	45	40	35	30	25	20	15	10
ATTENUATOR	GAIN	SET	-6 dB		-12dB		SET		+12	SET	+6
	AMP	80%	32 TO 48		16 TO 24		20%		64 TO 96	40%	64 TO 96
				40		20			80		80

COMMENTS	WELD / ITEMS EXAMINED
	RCF-G1-4

EXAMINER: Jason Nissen LVL.: II
EXAMINER: Jose Alejandro LVL.: II
REVIEWER: Darren Dinsey LVL.: III DATE: 3-24-09

ANII: W
DATE: 3/9/09
PAGE 2 OF 5

ACCESS: FORMS DATABASE 07-25-07

TENNESSEE VALLEY AUTHORITY	MANUAL ULTRASONIC PIPING EXAMINATION DATA SHEET	REPORT NUMBER R-P0152

PROJECT: WBN UNIT/CYCLE 2/00
SYSTEM: RCS
WELD I.D.: RCF-G1-4
CONFIG.: EL TO PU
FLOW

EXAMINATION DATE 02/19/09
START TIME: 1005 END TIME: 1627
EXAM SURFACE ☐ ID ☒ OD
MATERIAL TYPE: ☐ CS ☐ SS ☐ CSCL ☒ CCSS
SURFACE TEMP.: ~~558271~~ 69.1° JPN 2/19/09 PYRO NO. 558271

PROCEDURE: N-UT-33 REV: 11 TC: N/A
Wo REFERENCE: ℄ of weld
Lo REFERENCE: Outside radius of Elbow

EXAMINATION ANGLE	45RL DEG.	N/A	DEG.
AXIAL SCAN SENSITIVITY	61.0 dB		dB
CIRC. SCAN SENSITIVITY	64.0 dB		dB

IND NO.	L (in) FROM REF. L1	L Max	L2	AT MAX AMP W MAX	MP MAX	D MAX	MAX AMP % DAC	EXAM NO. 3-14	NOM. ANG.	NRI	INDICATION INFORMATION: TYPE, DAMPING, ETC.
								3	45RL	☒	
								5	45RL	☒	
								6	45RL	☒	
										☐	
										☐	
										☐	

REMARKS/LIMITATIONS No exam 4 scans from downstream side due to pump configuration. Examination performed maintaining 10-25% ID roll

EXAMINER: Jason Nissen LEVEL: II
EXAMINER: Jose Alejandro LEVEL: II
REVIEWED BY: LEVEL: II DATE: 2-24-09

ANII:
DATE: 3/9/09
PAGE 3 OF 5

ACCESS: FORMS DATABASE 10/18/01

TVA	WALL THICKNESS PROFILE SHEET	REPORT NO: R-P0152

PROJECT: WBN

UNIT: 2

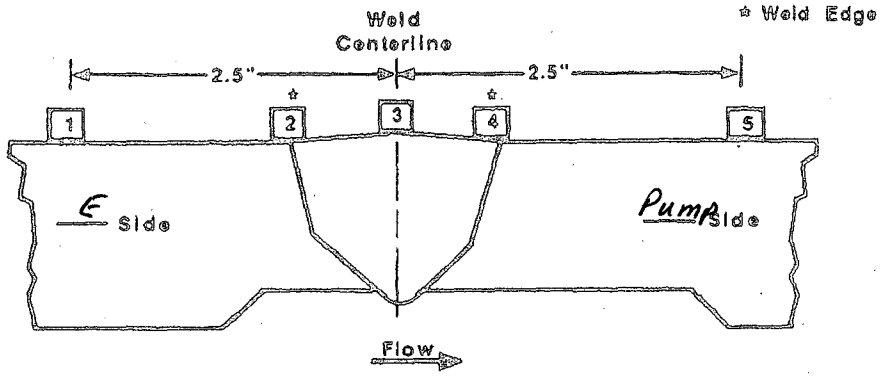
~~WELD~~ SYSTEM NO: RCS

~~SYSTEM~~ weld no: RCF-G1-4

3-9-09

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

Position	0°	90°	180°	270°
1	3.16	3.06	2.66	3.37
2	3.23	3.37	3.23	3.13
3	3.30	3.36	3.30	3.39
4	3.95	3.89	3.81	3.69
5	N/A	N/A	N/A	N/A

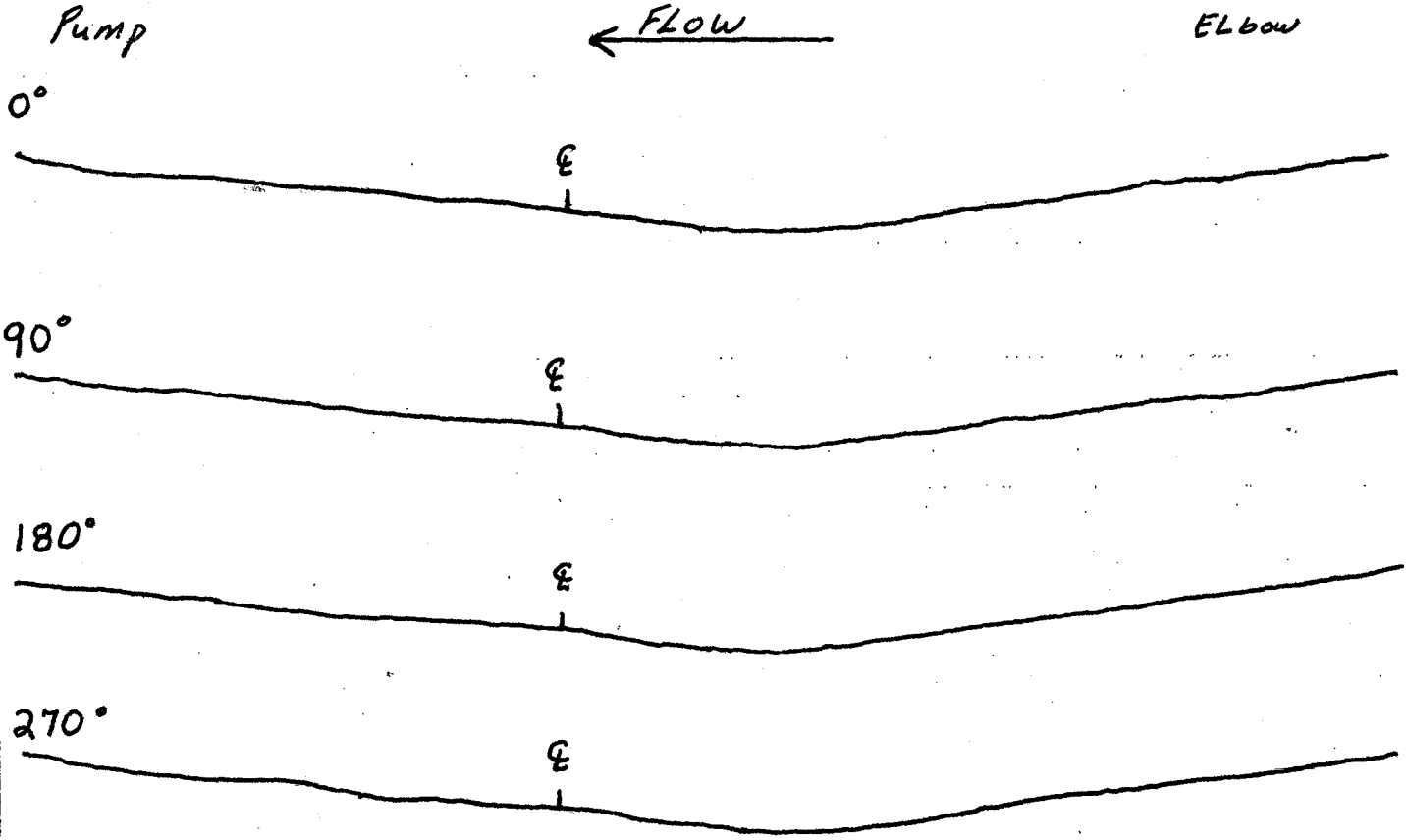


CROWN HEIGHT: Flush

DIAMETER: 31.0

CROWN WIDTH: 3"

WELD LENGTH: 119.5"



EXAMINER: Jose Alejandro Chapuda II

LEVEL: II

DATE: 02-17-09

REVIEWED BY: Darren Dudley

LEVEL: III

DATE: 3-24-09

ANII: [signature]

DATE: 3/9/09

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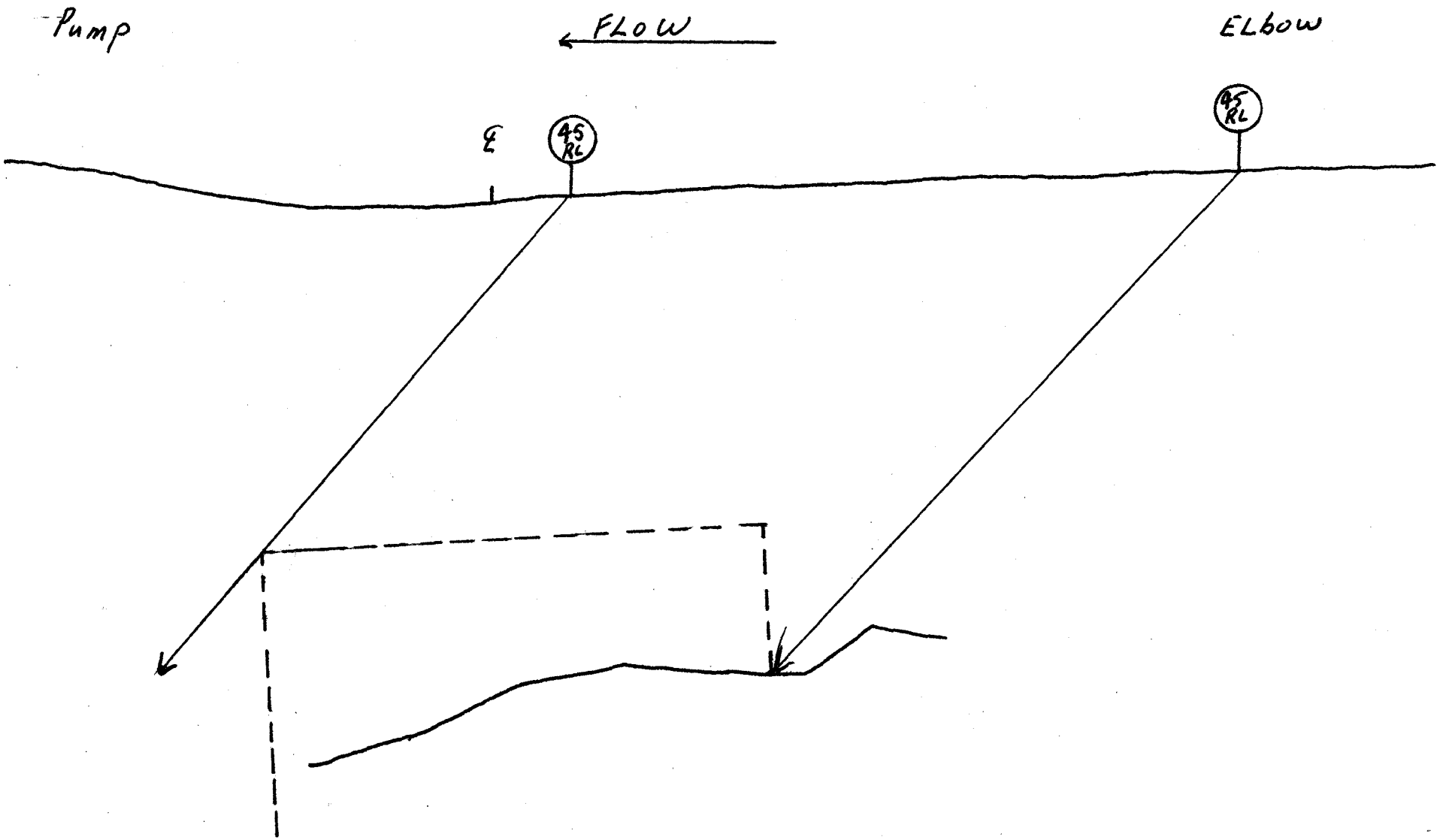
TVA 19668 (NP-5-69)

1-108-999-04

TVA Office of Nuclear Power	PROJECT: WBN SYSTEM: RCS UNIT: 2 WELD NO: RCF-G1-4	REPORT NO.: R P0152



BY: Jose Alejandro LEVEL: II DATE: 2-17-09 PAGE 5 OF 5