

Preservice examination data has been organized by zones under individual zone tabs.

Within each zone, the surface examination data is first, organized by date of examination. Volumetric examination data is last, organized by date of examination.

B411070194 B41030
PDR ADDCK 05000382
Q PDR



The
Virginia Corp.
of Richmond

TITLE

Preservice Examination Data



Don R. Payne ANEI 4/20/82
 Ultrasonic Data Sheet
 for/
 Thickness Measurement

Customer LP+L	Plant Waterford	Unit 3	Loop/Zone 1/41
Component/Piping System Main Steam Header A	Examiner/Level CRS/II	Date 4-2-82	
Procedure ISI 2.5 Rev. 0	Iso/Drawing No. Zone 41, Rev 2	VCR Supervisor Daniel Jones	Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

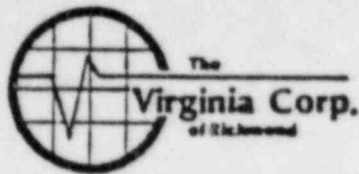
Equipment

Instrument		Transducer		Calibration
Mfgr. Somic	Mfgr. Aerotech	Size .50"	Cal. Block UT-126	
Model ETS Mark I			Cal. Block NA	
S/N 037043ECRS	Freq. 2.25 Mhz		Range Cal. 2.450"	
Reject off	Serial No. J02184		Calibration Checks	
Damp. Min			IN 13.47	
Freq. 2	Coax. Cable 12' BNC		OUT 16.25	
Rep. Rate 1K	Gain 42 db			
Filter Hi				
Video Norm				
Couplant Sonotrace 40 B#8119				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
41-001	12	Bevel	1.396	2.058	41-002	12	1.249	1.372	1.274
41-001	2	Bevel	1.396	2.033	41-003	2	1.274	1.372	1.298
41-001	4	Bevel	1.421	2.033	41-003	4	1.225	1.372	1.323
41-001	6	Bevel	1.421	2.009	41-003	6	1.176	1.323	1.176
41-001	8	Bevel	1.249	2.033	41-003	8	1.176	1.372	1.127
41-001	10	Bevel	1.249	2.033	41-003	10	1.274	1.372	1.176
41-002	12	1.151	1.274	1.176	41-0046A	0"	1.274	1.372	1.372
41-002	2	1.249	1.274	1.200	41-0046A	12"	1.323	1.347	1.347
41-002	4	1.176	1.274	1.176	41-0046A	24"	1.347	1.347	1.347
41-002	6	1.176	1.225	1.176	41-0046A	36"	1.323	1.347	1.372
41-002	8	1.176	1.225	1.200	41-0046A	48"	1.372	1.372	1.347
41-002	10	1.200	1.225	1.176	41-0046B	0"	1.323	1.372	1.372

Sketch/Identification



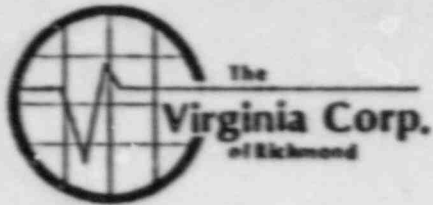
Ultrasonic Data Sheet
 for *D. Payne ANE*
 Thickness Measurement *4/20/82*
 Continuation Page 2 of 3

Customer <i>L.P.+L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>1/41</i>
Component/Piping System <i>Main Steam Header A</i>	Examiner/Level <i>CR [Signature]</i>	Date <i>4-2-82</i>	
Procedure <i>ISI 2.5 Rev. 0</i>	Iso/Drawing No. <i>Zone 41, Rev 2</i>	VCR Supervisor <i>Daniel [Signature]</i>	

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
41-004LB	12"	1.323	1.372	1.372	41-006	10	1.372	1.372	1.470
41-004LB	24"	1.347	1.347	1.372	41-008	12	1.519	1.666	1.421
41-004LB	36"	1.347	1.372	1.372	41-008	2	1.568	1.617	1.372
41-004LB	48"	1.323	1.372	1.372	41-008	4	1.470	1.592	1.372
41-004LB	60"	1.372	1.347	1.347	41-008	6	1.421	1.568	1.372
41-004LB	72"	1.396	1.347	1.347	41-008	8	1.421	1.592	1.421
41-004LB	84"	1.347	1.372	1.372	41-008	10	1.494	1.617	1.421
41-004LB	96"	1.347	1.347	1.347	41-009LB	0"	1.543	1.568	1.519
41-004LB	108"	1.372	1.347	1.347	41-009LA	12"	1.421	1.543	1.421
41-005	12	1.225	1.249	1.372	41-009LA	24"	1.494	1.470	1.470
41-005	2	1.200	1.249	1.372	41-009LA	36"	1.470	1.470	1.494
41-005	4	1.272	1.249	1.372	41-009LA	48"	1.519	1.519	1.470
41-005	6	1.225	1.225	1.372	41-009LB	0"	1.666	1.617	1.617
41-005	8	1.225	1.249	1.396	41-009LB	12"	1.617	1.592	1.568
41-005	10	1.200	1.347	1.372	41-009LB	24"	1.568	1.592	1.568
41-006	12	1.323	1.347	1.421	41-009LB	36"	1.617	1.617	1.568
41-006	2	1.372	1.323	1.445	41-009LB	48"	1.617	1.617	1.568
41-006	4	1.347	1.323	1.470	41-009LB	60"	1.617	1.592	1.568
41-006	6	1.372	1.323	1.470	41-009LB	72"	1.666	1.617	1.568
41-006	8	1.274	1.347	1.421	41-009LB	84"	1.641	1.568	1.568

Sketch/Identification



Ultrasonic Examination Report

D. Payne **FNIT** 4/20/82

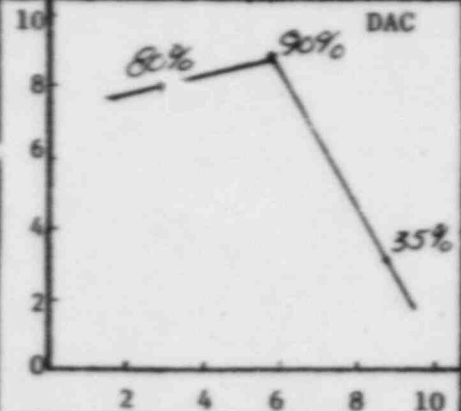
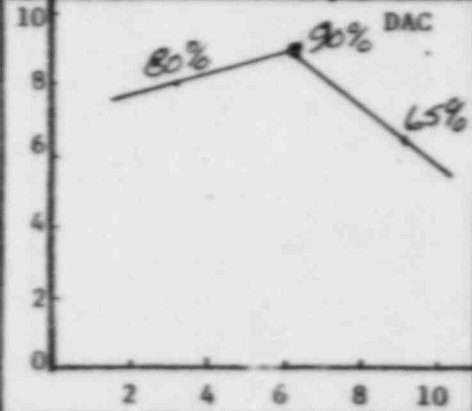
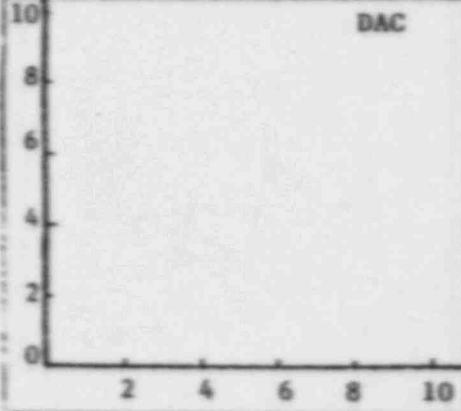
Customer LP AND L		Plant WATERFORD		Unit 3	Loop/Zone 1/41	Iso/Drawing No. ZONE 41, REV 2.	
Procedure ISL 2.2, REVO		Exam Surface O.D.		Examiner/Level CR [Signature]		VCR Supervisor Daniel [Signature]	
Component/Piping System MAIN STEAM HEADER A		Pipe Size 34"	Weld Type BUTT		Cal. Block UT-126		Couplant: SONOTRACE Type 40 Batch No 819
Date 4-5-82							

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number _____

Transducer			Instrument			
0°	45°	60°	Mfr.	SONIC	Model	FISMARK I
S/N	NA	D15041	S/N	05303E	RepRate	1/s
Size		1"	Reject	OFF	Filter	Hi
Frequency		2.25 MHz	Damp.	MIN	Coax	12'
Beam Angle		44.5°	Freq.	2	Video	ANIRAM

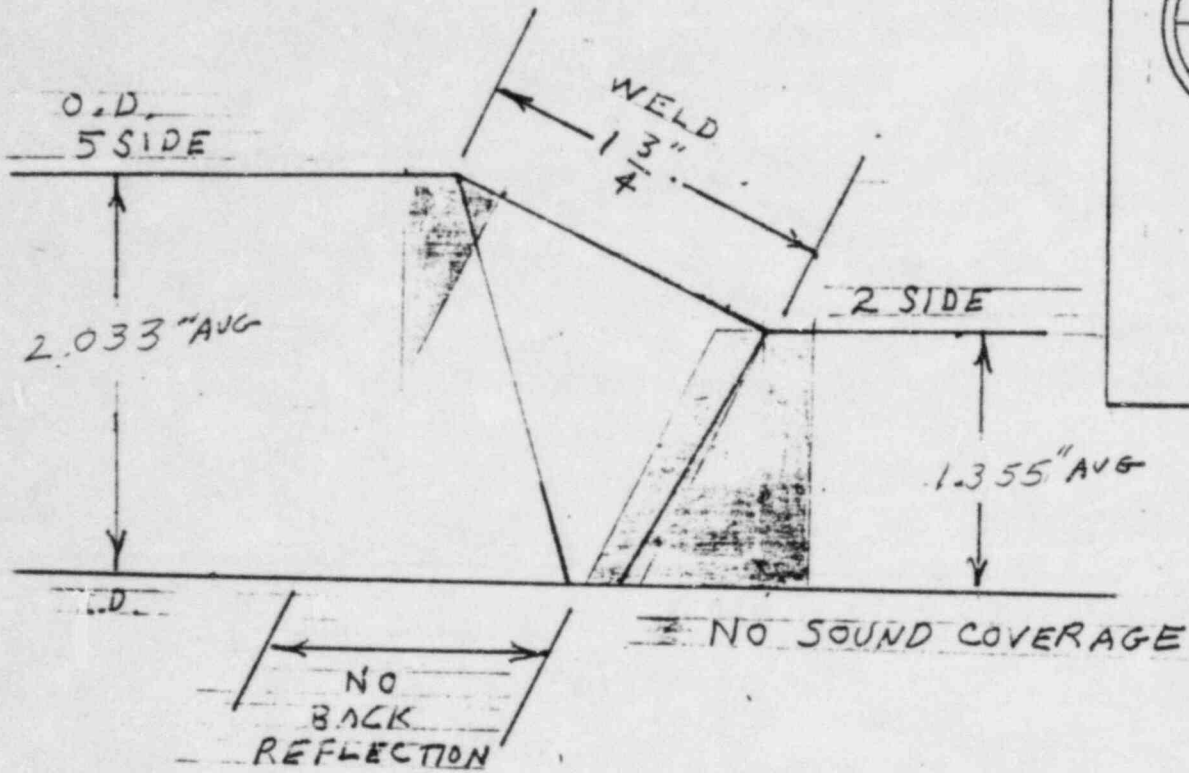
Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1T	NA	NA	80%	3.0			80%	3.4			NA	NA	1057	1155	NA	NA
2T			90%	6.0			90%	6.4			NA	NA	1310	1609	NA	NA
3T			65%	9.0			35%	7.4								
Ref. dB			48				50									



Additional Comments/Sketch

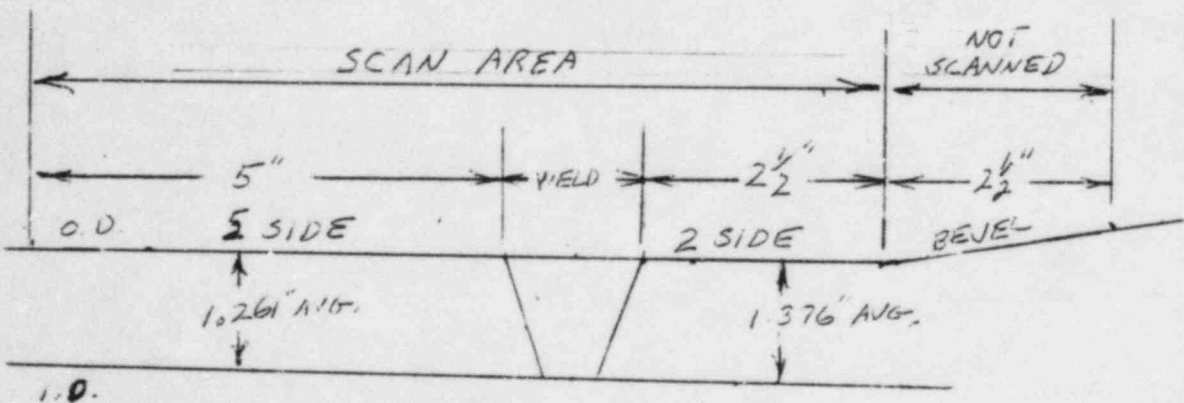
41-001 FLOW DIRECTION → VERTICAL

ADDITIONALLY SCANNED WITH 5 SIDE
FIRST BACK REFLECTION SET TO 80% FSH
AT 57 dB.



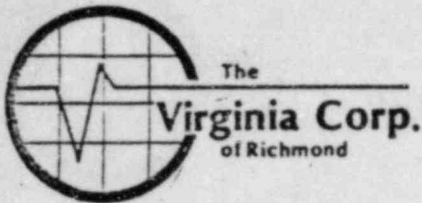
FULL SCALE

41-005 FLOW DIRECTION → HORIZONTAL



1/2 SCALE





Date 4-6-82

Page 3 of 3

To: _____

Subject LOOP 1 / ZONE 41 /
WELD 41-001
ATTACHMENT SHEET

A GEOMETRICAL INDICATION WAS DETECTED
IN THE 5 SCAN EXAMINATION. IT EQUALLED
THE ESTABLISHED DAC LINE AT THE 9.5
SWEEP POSITION AND WAS DETERMINED TO
BE AN O.D. WELD CROWN REFLECTION
DUE TO PART CONFIGURATION. IN ADDITION
IT WAS A CONTINUOUS SIGNAL RUNNING 360°
CIRCUMFERENTIALLY.

Signed CR Stambaugh



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Ultrasonic Examination Report *D. Payne ANEE 4/20/82*

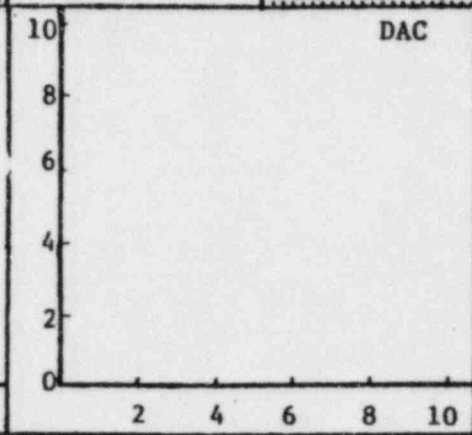
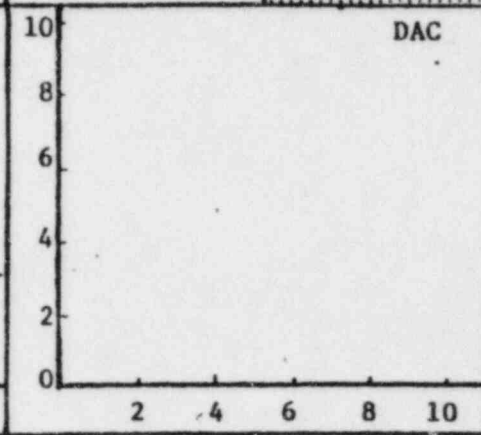
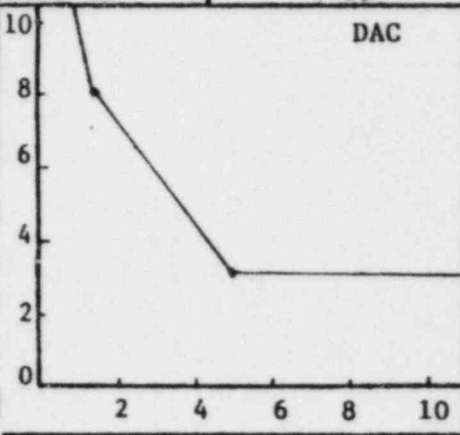
Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone 1/41	Iso/Drawing No. Zone 41 Rev 0
Procedure ISI 2.2 R.O FC.1	Exam Surface OD	Examiner/Level Richard D. Payne II		VCR Supervisor Daniel Jones
Component/Piping System MAIN STEAM A INSIDE CONTAINMENT		Pipe Size 40 3/4"	Weld Type BUTT	Date 4-12-82
Cal. Block UT-127			Couplant: SONOTRACE Type 40	Batch No. 8119

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **1**

Transducer S/N Size Frequency Beam Angle	0°	45°	60°	Instrument			
	44651	NA	NA	Mfr.	SONIC	Model	MARK I
	.5"			S/N	01610E	RepRate	1K
	2.25MHZ			Reject	OFF	Filter	OFF
	0°			Damp	Min.	Coax	6'
			Freq.	2.25 MHz	Video	NORM	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1/4 t	80%	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3:00	4:55	NA	NA	NA	NA
3/4 t	30%	5															
1 t	NA	7															
Ref. dB			41db														



Additional Comments/Sketch



The
Virginia Corp.
of Richmond

Date 4-12-82

Page 1 of 1

To: _____

Subject INSPECTION LIMITATIONS
ON ZONE 41 R.2 F.C.O

41-011 - 0° scan had a partial loss of contact
with the surface due to O.D. weld geometry
on sides 2 & 5 of the weld

41-016 - 0° scan had a partial loss of contact
with the surface due to O.D. weld geometry
on sides 2 & 5 of the weld

Signed Richard Dubrent II



D. PAVLANI 4/20/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LPEL	Plant WATERFORD	Unit 3	Loop/Zone 1/41 R.2 F.C.O
Component/Piping System MAIN STEAM A INSIDE CONTAINMENT	Examiner/Level Richard DeLoe II	Date 4-12-82	
Procedure ISI 2.5 R.O.F.C.O	Iso/Drawing No. 41 Rev. 2 RD	VCR Supervisor Daniel Jensen	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

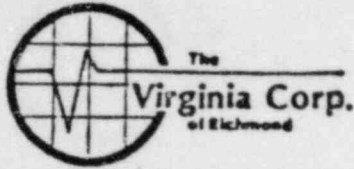
Equipment

Instrument		Transducer		Calibration
Mfgr. SONIC	Mfgr. PANAMETRICS	Size .5"	Cal. Block UT-127	Cal. Block
Model MARK 1	Freq. 2.25 MHz		Range Cal. 7 Dia = 1.5"	
S/N 01610E	Serial No. 44651		Calibration Checks	
Reject OFF	Coax. Cable 6'		3:00	
Damp. MIN.	Gain 41 db		4:55	
Freq. 2 MHz				
Rep. Rate 1K				
Filter OFF				
Video NORM				
Couplant SONOTRACE 40 #8119				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
41-011	12	1.41"	1.46"	1.33"					
	2	1.37"	1.37"	1.31"					
	4	1.39"	1.31"	1.29"					
	6	1.29"	1.33"	1.29"					
	8	1.33"	1.37"	1.29"					
41-016	10	1.37"	1.41"	1.31"					
	12	1.41"	1.48"	1.48"					
	2	1.37"	1.46"	1.46"					
	4	1.37"	1.41"	1.35"					
	6	1.37"	1.41"	1.37"					
	8	1.41"	1.46"	1.41"					
	10	1.46"	1.46"	1.44"					

Sketch/Identification



R. Payne ANII 5/5/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>LP&L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>1/41</i>
Component/Piping System <i>MAIN STEAM A INSIDE CONTAINMENT</i>		Examiner/Level <i>Peter DeL II</i>	Date <i>4-30-82</i>
Procedure <i>ISI-2.5 R.D.F.C.1</i>	Iso/Drawing No. <i>41 REV. 2 F.C.O</i>	VCR Supervisor <i>Daniel Jones</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument	Transducer		Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>PANAMETRICS</i>	Size <i>.5"</i>	Cal. Block <i>UT-127</i>
Model <i>MARK I</i>			Cal. Block
S/N <i>037048</i>	Freq. <i>2.25MHZ</i>		Range Cal. <i>7div = 1.50"</i>
Reflect <i>OFF</i>			Calibration Checks
Damp. <i>MIN</i>	Serial No. <i>44651</i>		
Freq. <i>2MHZ</i>			IN: <i>9:00</i>
Rep. Rate <i>1K</i>	Coax. Cable <i>6' PITCH-CATCH</i>		OUT: <i>12:30</i>
Filter <i>HIGH</i>			
Video <i>NORM</i>	Gain <i>50db</i>		
Couplant <i>SONOTRALE 40 BATCH #8119</i>			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>41-019</i>	<i>2</i>	<i>1.457"</i>	<i>1.628"</i>	<i>1.478"</i>					
	<i>4</i>	<i>1.414"</i>	<i>1.585"</i>	<i>1.457"</i>					
	<i>6</i>	<i>1.457"</i>	<i>1.585"</i>	<i>1.414"</i>					
	<i>8</i>	<i>1.457"</i>	<i>1.607"</i>	<i>1.414"</i>					
	<i>10</i>	<i>1.457"</i>	<i>1.628"</i>	<i>1.457"</i>					
	<i>12</i>	<i>1.414"</i>	<i>1.521"</i>	<i>1.457"</i>					

Sketch/Identification

D. Payne ANEI 5/5/82



Ultrasonic Examination Report

Indication Record

Customer LP&L	Plant WATER FORD	Unit 3	Loop 1
Procedure IST 2.2 Rev D FC.1	Examiner/Level Richard D. II	VCR Supervisor Daniel Jones	Date 4-30-82
Component/Piping System MAIN STEAM A INSIDE CONTAINMENT	ISO Drawing No. 41 Rev. 2 FC.0	Cal. Standard No./Thickness UT-127 1.5"	

Weld No.	Ind No.	Max.% DAC	Indication Length		Minimum Depth S.U. Sweep		Maximum Depth S.U. Sweep		Beam Angle	Beam Dir.	Base Metal Thickness 2 Side	Weld Thick.	Base Metal Thickness 5 Side	Remarks
			From	To	Pos.	Reading	Pos.	Reading						
41-019	1	NA	62 3/4"	NA	1.5	6.6	NA	NA	0°	S	1.585"	1.457"	1.414"	ALL SEARCH UNIT POSITION READINGS TAKEN FROM THE TOE OF THE WELD ON THE S SIDE. *
	2		67 1/2"		1	4.0								
	3		67 1/2"		1	5.0								
	4		71 1/2"		1	5.0								
	5		71 1/2"		1	6.4								
	6		77"	77 1/4"	1 1/4	6.8								
	7		79 1/4"	NA	1 1/4	6.4								
	8		82 1/4"		1 1/4	4.8					1.607"	1.457"	1.414"	
	9		82 1/4"		1 1/4	6.8								
	10		83 1/8"		1	4.2								
	11		83 1/2"		3/4	5.4								
	12		84"		1 1/8	4.0								
	13		85 1/2"		1	7.0								
	14		85 3/4"		1"	4.4								
	15		86 1/4"		1 1/2"	3.2								
	16		86 1/4"		1 1/2"	5.2								
	17		86 3/4"		3/4	2.8								
	18		88 1/2"		3/4	6.0								
	19		106"		3/4	3.2					1.628"	1.457"	1.457"	
	20		106"		3/4	3.6								
	21		106"		3/4	5.6								
	22		106 3/4"		3/4	4.4								
	23		109 1/2"		5/8	5.0								
	24		111"		1"	6.4								
	25		125 9/16"		1/2	6.5					1.521"	1.414"	1.457"	
	26		124 1/4"		1/2	2.8								

* SEE NCR #025 OF ERRATA



Ultrasonic Examination Report

Indication Record

D. Payne ANIZ 5/5/82

Customer LPEL	Plant WATERFORD	Unit 3	Loop 1
Procedure ISI 2.2 Rev. 0 FC-1	Examiner/Level Rick DeSII	VCR Supervisor Donna Jones	Date 4-30-82
Component/Piping System MAIN Steam A INSIDE CONT.	ISO Drawing No. 41 Rev. 2 FC-0	C.V. Standard No./Thickness UT-127 1.5"	

Weld No.	Ind No.	Max. % DAC	Indication Length		Minimum Depth		Maximum Depth		Beam Angle	Beam Dir.	Base Metal Thickness 2 Side	Weld Thick.	Base Metal Thickness 5 Side	Remarks
			From	To	S.U. Pos.	Sweep Reading	S.U. Pos.	Sweep Reading						
41-019	27	NA	63"	NA	1 1/2"	2.6	NA	NA	0°	S	1.585"	1.457"	1.414	All SEARCH UNIT POSITION READINGS TAKEN FROM THE TOE OF THE WELD ON THE S SIDE *
	28		63"		1 1/2"	5.2								
	29		65 1/2"		2 1/2"	4.2								
	30		67"		2 1/4"	4.2								
	31		68 1/2"		4"	3.6								
	32		71 1/8"		2 1/4"	3.6								
	33		73"		4"	4.0								
	34		77"		3"	2.6								
	35		81"		1 1/2"	3.3					1.607"	1.457"	1.414"	
	36		82 1/2"		2 1/4"	3.4								
	37		83"		1 1/2"	3.2								
	38		83"		1 1/2"	3.8								
	39		85 1/4"		3"	5.2								
	40		89"		2 1/2"	3.4								
	41		94 1/4"		4 3/8"	5.5								
	42		97 1/2"		3 5/8"	4.5								
	43		102 1/2"		2 3/4"	5.0					1.628"	1.457"	1.457"	
	44		103 1/2"		3"	3.2								
	45		105 1/4"		1 1/2"	5.0								
	46		106 7/8"		2 3/4"	2.8								
	47		107 1/2"		3 3/4"	4.0								
	48		108"		3 3/8"	5.4								
	49		110"		1 1/2"	5.2								
	50		112 1/4"		1 3/4"	4.0								* SEE NCR #025 OF ERRATA
	51		113 3/4"		2 5/8 to 3 1/2"	4.0								
	52		113 3/4"		1 1/2"	5.2								
	53		114"		1 5/8"	4.8								
	54		114 3/4"		2 1/8"	6.2								
	55		116 1/2"		2 3/8"	4.0								



The
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of Richmond

Date 4-30-82

Page 7 of 9

To: _____

Subject Partial Examinations
of weld 41-019

41-019

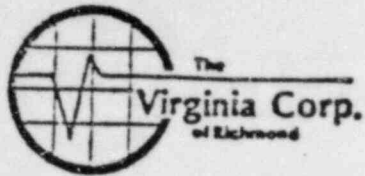
2 direction - Partial exam with 45° on S side heat affected zone due to numerous laminations from 62 3/4" to 124 1/4"

5 direction - Partial exam with 45° on S side heat affected zone and base metal due to numerous laminations from 62 3/4" to 124 1/4".

7 & 3 direction - Partial exam with 45° on E side heat affected zone from 62 3/4" to 124 1/4". Due to numerous laminations weld crown configuration causes partial exam for 360° due to lift off

0 direction - Partial exam due to weld crown configuration which causes lift off for 360°

Signed _____



D. Payne ANII 6/7/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP3L	Plant WATERFORD	Unit 3	Loop/Zone 1 41
Component/Piping System MAIN STEAM	Examiner/Level BURLINGAME JTB	Date 6-2-82	
Procedure ISI-25 TREN	Iso/Drawing No. ECHO 41 REV 2	VCR Supervisor Daniel Jones	Continuation Sheet Attached [X] Yes [] No

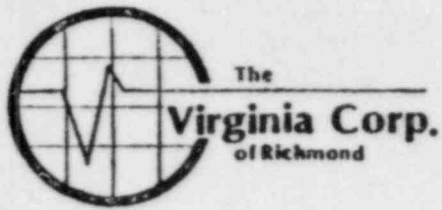
Equipment

Instrument		Transducer		Calibration
Mfgr. SONIC	Mfgr. AEROTECH	Size 1/2"		Cal. Block UT-127
Model FTS-MK1				Cal. Block
S/N 03704E	Freq. 5 MHz			Range Cal.
Reject OFF				Calibration Checks
Damp. MIN	Serial No. F08945			
Freq. 5 MHz				1515
Rep. Rate 3000	Coax. Cable 12'			1650
Filter HI				
Video DIFF	Gain			
Couplant SONOTRACE 40, 8124	40dB G			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
41-018A	0"	1.50	1.46	1.54	41-018B	0	1.54	1.52	1.52
	6"	1.50	1.46	1.50		10"	1.50	1.52	1.50
	12"	1.52	1.46	1.52		20"	1.50	1.54	1.52
	18"	1.52	1.50	1.52		30"	1.50	1.54	1.52
	24"	1.50	1.48	1.52		40"	1.56	1.52	1.50
	30"	1.48	1.46	1.50		50"	1.54	1.54	1.54
	36"	1.50	1.46	1.48		60"	1.68	1.54	1.54
	42"	1.54	1.48	1.50		70"	1.69	1.50	1.52
	48"	1.54	1.50	1.52		80"	1.69	1.52	1.54
	54"	1.52	1.50	1.52		90"	1.54	1.52	1.54
V	60"	1.54	1.52	1.52	V	100"	1.50	1.52	1.53

Sketch/Identification



Ultrasonic Examination Report

D. PAVEL ANIE 6/7/82

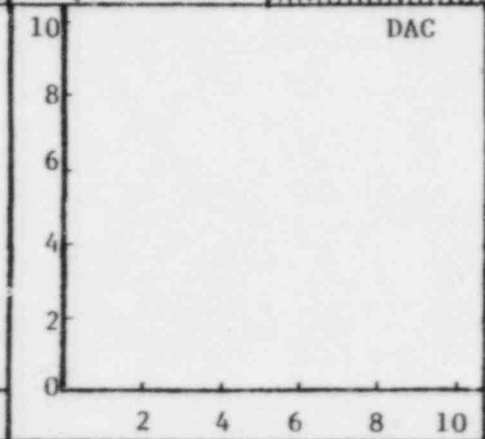
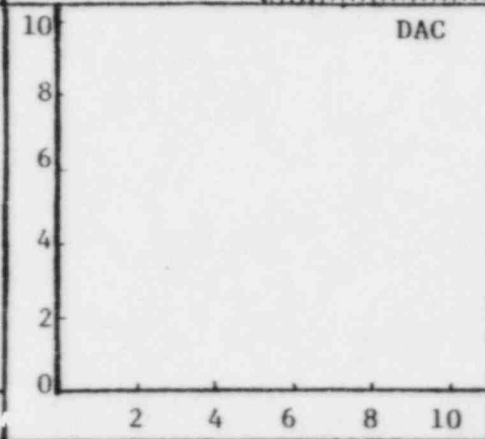
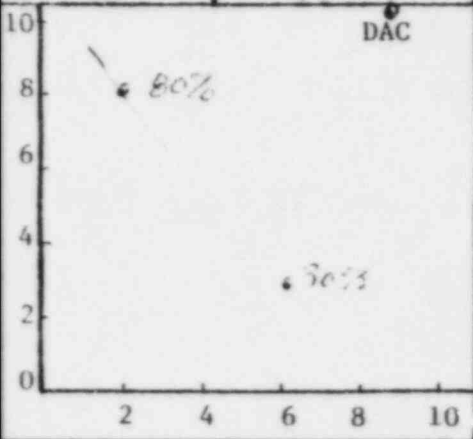
Customer <i>LP3L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>1, 41</i>	Isd/Drawing No. <i>ZONE 41, REV 2, FC-0</i>
Procedure <i>151-22 REV 0 FC-1</i>	Exam Surface <i>OD</i>	Examiner/Level <i>BURLINGAME</i>	VCR Supervisor <i>Daniel Jones</i>	Date <i>6-2-82</i>
Component/Piping System <i>MAIN STEAM</i>	Pipe Size <i>40 1/2" OD.</i>	Weld Type <i>BOIT</i>	Cal. Block <i>UT-127, 1.5"</i>	Couplant: <i>SONOTONE</i> Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

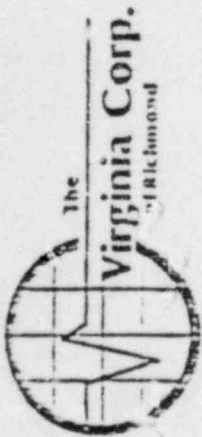
Field Changes:
 Yes No
 IF Yes, Number *FC-1*

Transducer	0°	45°	60°	Instrument			
	S/N <i>FC8945</i>	<i>NA</i>	<i>NA</i>	Mfr. <i>SONIC</i>	Model <i>ETS-MK1</i>	RepRate <i>3000</i>	Filter <i>H1</i>
Size	<i>1/2"</i>			S/N <i>03104E</i>	Reject <i>OFF</i>	Damp <i>MIN</i>	Coax <i>12'</i>
Frequency	<i>5MHz</i>			Freq. <i>5 MHz</i>	Video <i>DIFF</i>		
Beam Angle	<i>0°</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks							
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
<i>1/4 T</i>	<i>80%</i>	<i>1.8</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>1515</i>	<i>1630</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>1/2 T</i>	<i>30%</i>	<i>5.1</i>																
<i>BACK</i>	<i>100%</i>	<i>8.</i>																
Ref. dB	<i>40 dB</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									



Additional Comments/Sketch



Ultrasonic Examination Report

Indication Record

D. Payne ANIZ 9/7/82

Customer: AP 3 L Plant: WATERFORD Unit: 3 Loop: 1

Procedure: ISL-22 BULLO FC-1 Examiner/Level: BURLINGAME II-B VCR Supervisor: Daniel J. Gino Date: 6-2-82

Component/Piping System: MAIN STEAM ISO Drawing No.: Zone 41, REV. 2, FC-1 Cal Standard No./Thickness: UT-127, 1.5"

Weld No.	Ind No.	Max. % DAC	Indication Length From To	Minimum Depth S.U. Pos.	Sweep Reading	Maximum Depth S.U. Pos.	Sweep Reading	Beam Angle	Beam DIR.	Base Metal Thickness 2 Side	Weld Thick.	Base Metal Thickness 5 Side	Remarks
0184A	1	150%	4.5" 14"	3.5"	3.8	NA	NA	0°	S	1.52	1.50	1.52	SMALL
	2	100%	3 1/2" 52"	1.5"	4.0	NA	NA	0°	S	1.54	1.50	1.52	ADJUSTABLE
	3	100%	47" 52"	3.0"	3.3	NA	NA	0°	S	1.52	1.52	1.52	REFLECTORS
	4	110%	52 1/2" 52"	3.5"	3.4	NA	NA	0°	S	1.52	1.50	1.52	IN BASE
	5	150%	59" 52"	3.75"	3.6	NA	NA	0°	S	1.52	1.54	1.52	METAL
0184B	1	80%	6 1/2" 52"	C.L.	4.6	NA	NA	0°	C.L.	1.54	1.68	1.54	WELD METAL
	3	120%	71" 71.5"	C.L.	5.8	FIN	NA	0°	C.L.	1.52	1.69	1.54	REFLECTORS



Ultrasonic Examination Report

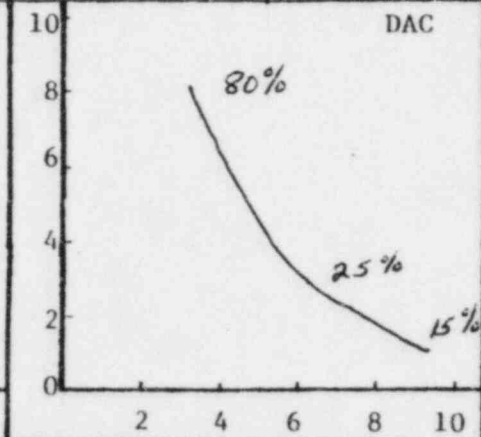
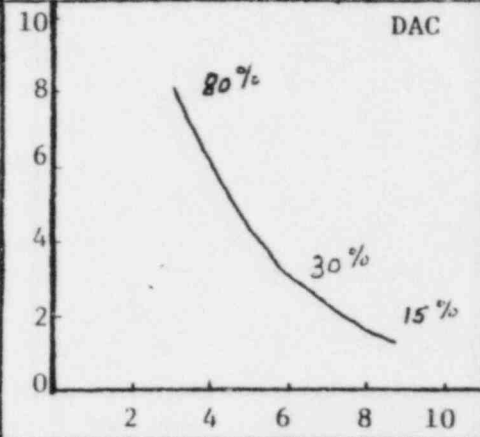
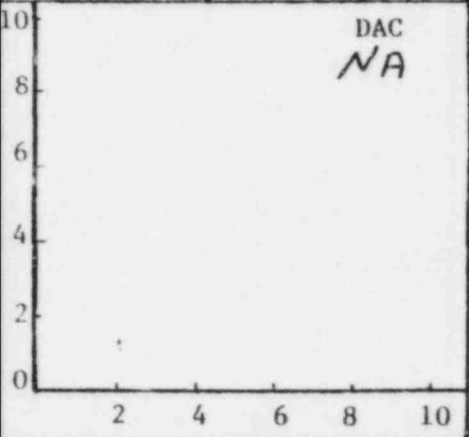
Customer LP+L	Plant Waterford	Unit #3	Loop/Zone 1/41	Iso/Drawing No. Zone 41 Rev. 2 FL. 0
Procedure ISI-2.2 Rev. 0. FL. 1	Exam Surface OD	Examiner/Level Kenneth White/II	VER Supervisor Daniel Jones	Date 6-2-82
Component/Piping System Main Steam Header A.	Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-127	Couplant: Type Sone 40 Batch No. 8124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 IF Yes, Number **FL. 1**

Transducer	0°			45°			60°			Instrument					
	S/N	NA			522935			NA			Mfr.	Sonic		Model	mark I
	Size				1/2"						S/N	5304E		RepRate	1K
	Frequency				2.25						Reject	off		Filter	off
	Beam Angle				45°						Damp	MIN.		Coax	6'
										Freq.	2.25		Video	Norm	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1T	NA	NA	80%	3.0	NA		80%	3.1	NA		NA	NA	9:10^{am}	11:50^{am}	NA	NA
2T			30%	6.0			25%	6.2								
3T			15%	9.0			15%	9.3								
Ref. dB		NA	46 dB				50 dB									



Additional Comments/Sketch



D. Payne ANII 6/14/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP+L	Plant Waterford	Unit 3	Loop/Zone A 41
Component/Piping System Main Steam Header A	Examiner/Level B. ZWINGME I 3	Date 6-11-82	
Procedure ISI 2.5, Rev. 0	Iso/Drawing No. WCR Supervisor Zone 41, Rev. 2	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

Equipment			
Instrument	Transducer		Calibration
Mfgr. Sonic	Mfgr. KB-Aerotech	Size .50"	Cal. Block UT-127
Model ETS Mark I			Cal. Block NA
S/N 780836	Freq. 5 Mhz	Range Cal. 8 div. = 1.5"	
Reject off	Serial No. KB 2897	Calibration Checks	
Damp. Min	Coax. Cable 6'	IN - 8:30 AM	
Freq. 5 Mhz	Gain 71 dB	OUT - 11:40 AM	
Rep. Rate 1000			
Filter hi			
Video Norm			
Couplant Sonotrace 40, B.#8124			

Examination Results									
Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
41-020	12	1.50"	1.534"	1.463"	NA	NA	NA	NA	NA
	2	1.388"	1.50"	1.463"					
	4	1.388"	1.444"	1.444"					
	6	1.406"	1.425"	1.388"					
	8	1.350"	1.425"	1.388"					
✓	10	1.406"	1.50"	1.425"					

Sketch/Identification



The
Virginia Corp.
of Richmond

Ultrasonic Examination Report

D. Payne ANIE 6/14/82

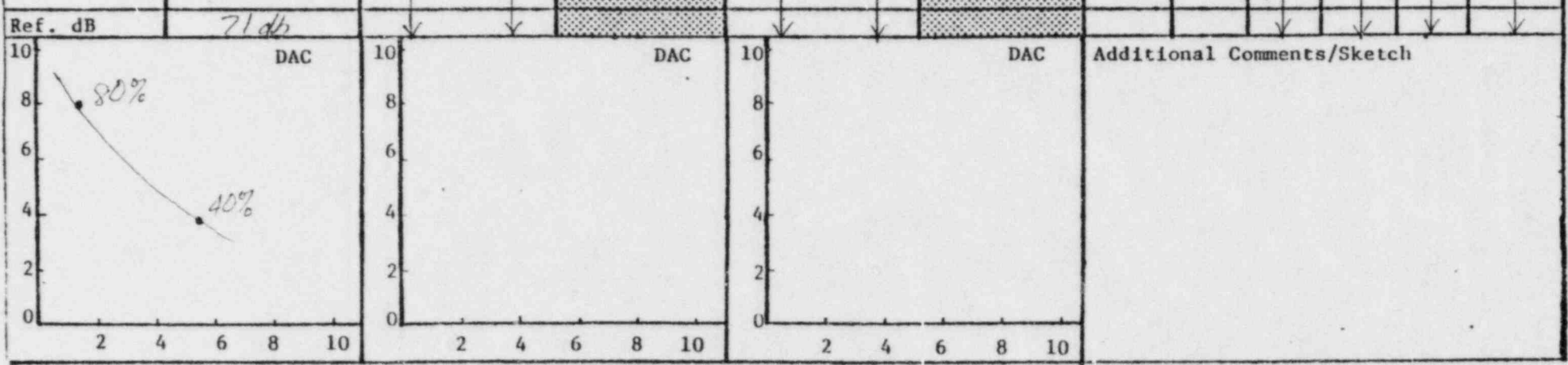
Customer <i>LPEL</i>		Plant <i>Waterford</i>		Unit <i>3</i>	Loop/Zone <i>A/41</i>	Iso/Drawing No. <i>Zone 41 Rev. 2, FC-1</i>	
Procedure <i>FC-2</i> <i>ISE-22, Rev. 1</i>		Exam Surface <i>OD</i>		Examiner/Level <i>BURLINGAME II</i>		VCR Supervisor <i>Nan...</i>	
Component/Piping System <i>Main Steam</i>		Pipe Size <i>40"</i>	Weld Type <i>Butt</i>		Cal. Block <i>UT-127, 1.5"</i>	Couplant: <i>Sonotrace</i> Type <i>40</i> Batch No. <i>8124</i>	

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number *FC-1*
FC-2

	Transducer	0°	45°	60°	Instrument			
	S/N	<i>KB2897</i>	<i>NA</i>	<i>NA</i>	Mfer.	<i>Sonic</i>	Model	<i>Mark I</i>
	Size	<i>1/2"</i>			S/N	<i>7808.36</i>	RepRate	<i>LK</i>
	Frequency	<i>5 MHz</i>			Reject	<i>OFF</i>	Filter	<i>Hi</i>
	Beam Angle	<i>0</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Damp	<i>Min</i>	Coax	<i>6'</i>
					Freq.	<i>5 MHz</i>	Video	<i>Norm.</i>

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1/4 T</i>	<i>80%</i>	<i>6.6</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>0830</i>	<i>1140</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>3/4 T</i>	<i>40%</i>	<i>5.6</i>														
<i>1 T</i>	<i>>100%</i>	<i>8.0</i>														





Ultrasonic Examination Report

D. Payne ANEL 9/14/82

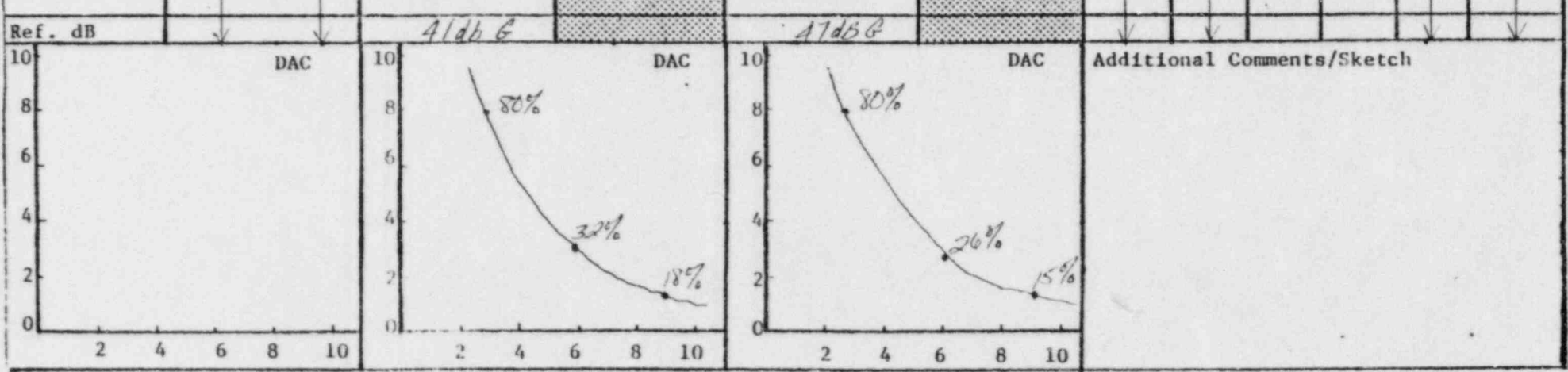
Customer <i>LP&L</i>		Plant <i>Waterford</i>	Unit <i>#3</i>	Loop/Zone <i>A/41</i>	Isd/Drawing No. <i>Zone 41, Res. 2 FC-010A-^{NRM}</i>
Procedure <i>NRM-22 Rev. 0</i>	Exam Surface <i>OD</i>	Examiner/Level <i>BURLINGAME</i>		VCR Supervisor <i>Nanni</i>	Date <i>6-11-82</i>
Component/Piping System <i>Main Steam</i>		Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block <i>UT-127, 1.5"</i>	Couplant: <i>Sonotrace</i> Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number *FC-1 NRM*
FC-2

Transducer	0°	45°	60°	Instrument			
	<i>NA</i>	<i>MOA140</i>	<i>NA</i>	Mfr. <i>Sonic</i>	Model <i>FTS-MK-1</i>	RepRate <i>LK</i>	
S/N				S/N <i>05304E</i>	Filter <i>Off</i>	Coax <i>12'</i>	
Size		<i>1/2"</i>		Reject <i>Off</i>	Damp <i>Min.</i>	Freq. <i>2 MHz</i>	Video <i>Norm.</i>
Frequency		<i>2.25 MHz</i>					
Beam Angle		<i>45°</i>					

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks							
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3.1</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>0840</i>	<i>1135</i>	<i>NA</i>	<i>NA</i>
<i>2T</i>			<i>32%</i>	<i>6</i>				<i>26%</i>	<i>6.2</i>									
<i>3T</i>			<i>18%</i>	<i>9</i>				<i>15%</i>	<i>9.3</i>									



R. Pryme ANET 1/82



Ultrasonic Examination Report

PAGE 1 OF 4

Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone A 41	Iso/Drawing No. ZONE 41 R-2 FC.1
Procedure ISI. 22 R-O FC.2	Exam Surface O.D.	Examiner/Level Nawhongeneclee II	VCR Supervisor Daniel Dena	Date 7-10-82
Component/Piping System MAINTEAM HEADER A	"INSIDE CONT."	Pipe Size 34"	Weld Type BUTT	Cal. Block UT-127
			Couplant: SONO TRACE	Batch No. 8124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

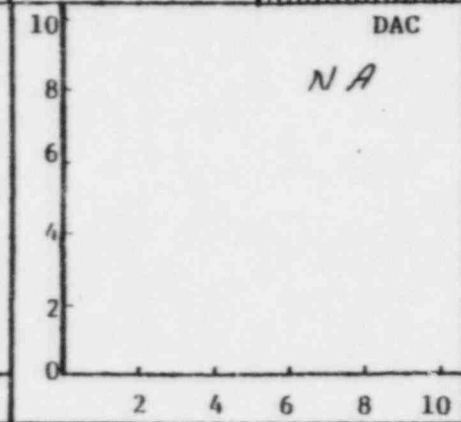
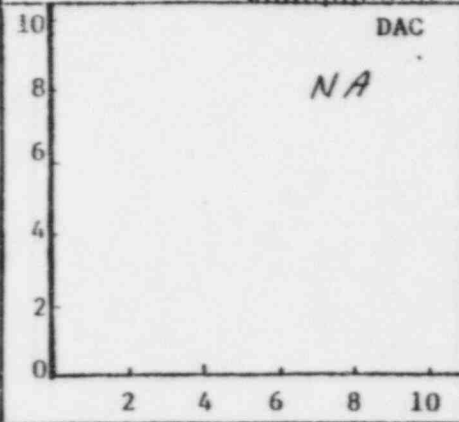
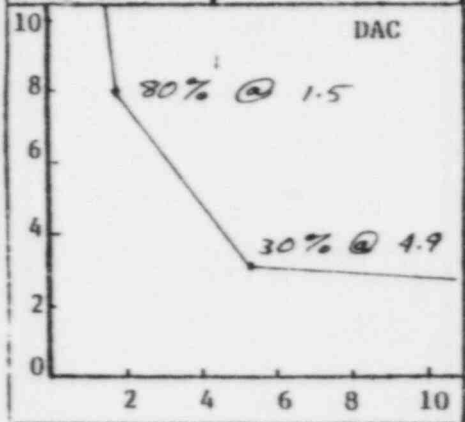
Transducer	0°	45°	60°	Instrument			
	S/N KB2728	NA	NA	Mfr. SONIC	Model MARK 1	RepRate 1 K	
	Size .5" DIA			S/N 01610E	Filter H1	Coax 6'	
	Frequency 2.25 MHz			Reject OFF	Damp MIN.	Viden NORM	
Beam Angle	0°			Freq. 2 MHz.			

Calibration 0°

2 & 5 Scan

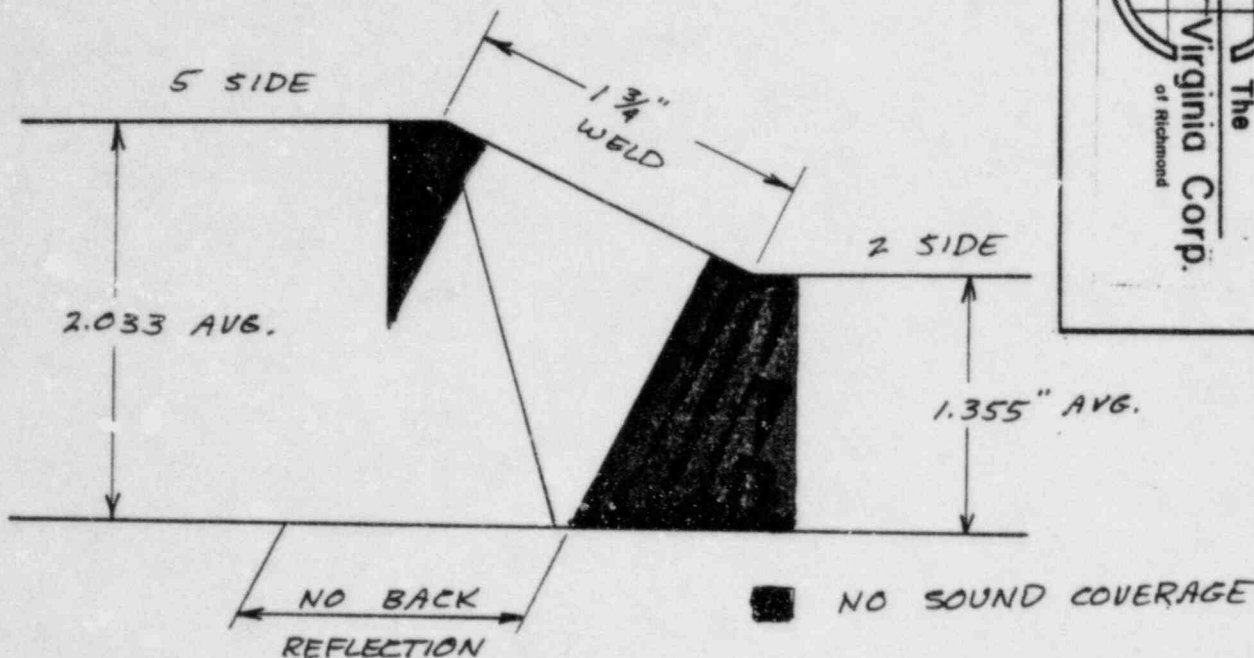
7 & 8 Scan

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks											
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°							
											In	Out	In	Out	In	Out						
1/4 T	80%	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3/4 T	30%	4.9																				
1 T	NA	7.0																				



Additional Comments/Sketch
 RE EXAMINED DUE TO QUESTIONABLE SWEEP POSITIONS AND WRONG CAL BLOCK CAL PREC. EXAM.

WELD NO 41-001

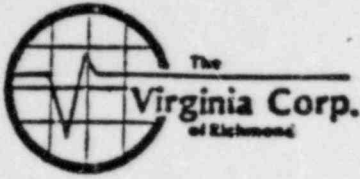


WELD NO 41-002 HAD A LOSS OF APPROX.
10% DUE TO O.D. WELD CROWN.

WELD NO. 41-003 HAD A LOSS OF APPROX.
10% DUE TO O.D. WELD CROWN.

ULTRASONIC SUPPLEMENTAL DATA SHEET

PAGE 4 OF 4



M.R. Martin, ANSF 9-29-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP+L	Plant WATERFORD	Unit 3	Loop/Zone A 41
Component/Piping System MAIN STEAM HEADER A-INSIDE CONT	Examiner/Level Gary Longenecker II	Date 9-26-82	
Procedure ISE 2.5 R-0	Iso/Drawing No. ZONE 41 R-2FC.2	VCR Supervisor Danil Jensen	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. SONIC	Mfgr. KB AEROTSCH	Size .5" D.A.	Cal. Block UT-127	
Model MARK I	Freq. 5.0 MHz		Cal. Block	
S/N 01058 E	Serial No. KB2897		Range Cal. 1.5" @ 60	
Reject OFF	Coax. Cable 6'		Calibration Checks	
Damp. MIN	Gain 79db		CAL IN 1:00	
Freq. 5.0 MHz			CAL OUT 4:35	
Rep. Rate 3K				
Filter HI				
Video NORM				
Couplant SONOTRACE 40 #8124				

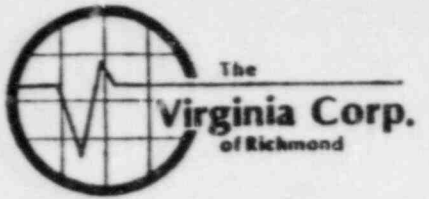
Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
41-022	12	2.2	2.05	NA	NA	NA	NA	NA	NA
41-022	2	2.2	2.05						
41-022	4	2.2	2.025						
41-022	6	2.2	2.025						
41-022	8	2.2	2.025						
41-022	9	2.2	2.05						

Sketch/Identification

5 SIDE TAPERED

W.R. Martin, ANII 9-29-82



Ultrasonic Examination Report PAGE 2 OF 5

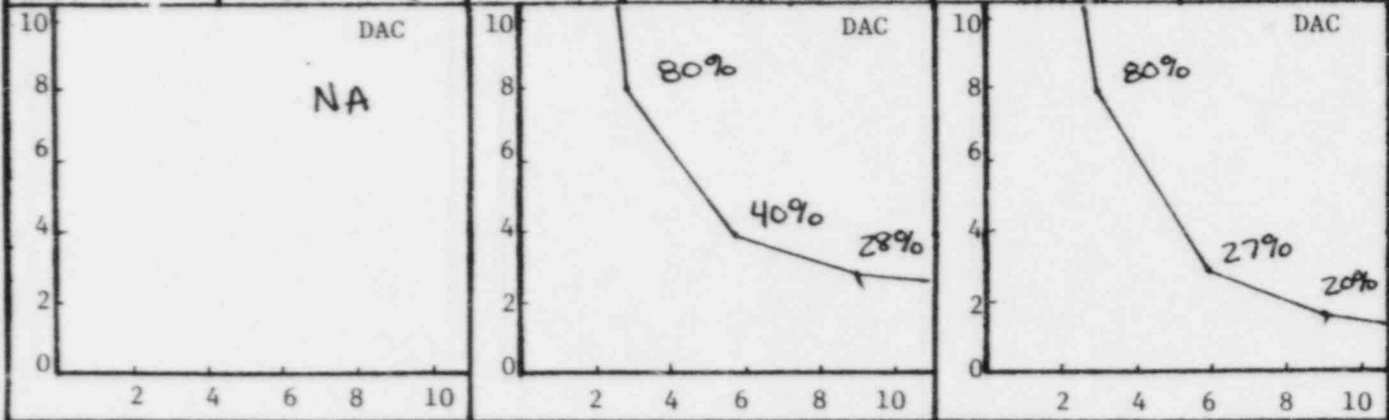
Customer LP&L		Plant WATERFORD	Unit 3	Loop/Zone A 41	Iso/Drawing No. ZONE 41 R-2, F.C.2
Procedure: R-0 & L EST 22 R2FCC	Exam Surface OD.	Examiner/Level Nay Longenecker II		VGR Supervisor Daniel Jensen	Date 19-26-82
Component/Piping System MAIN STEAM HEADERS - INSIDE CONT		Pipe Size 40"	Weld Type Butt	Cal. Block # UT-127	Couplant: SONOTRACE Type 40 Batch No 8124

Continuation Sheet Attached
 Yes No

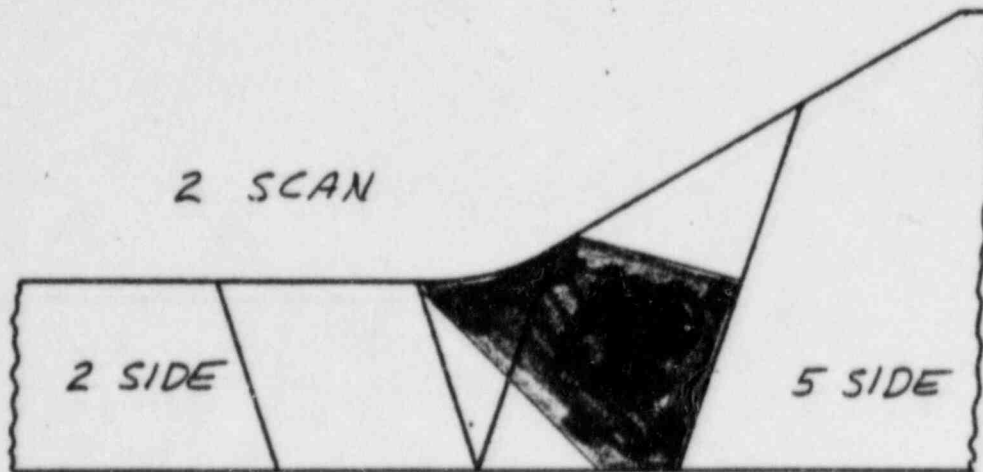
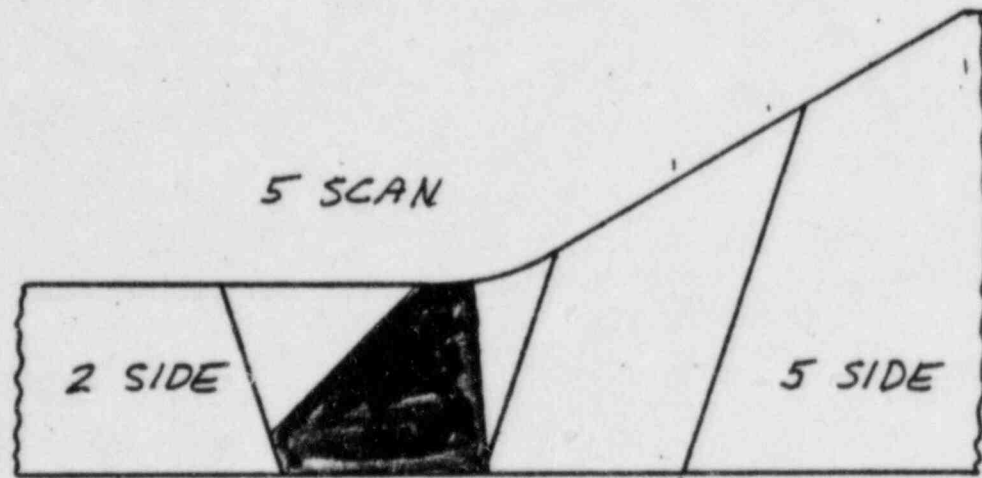
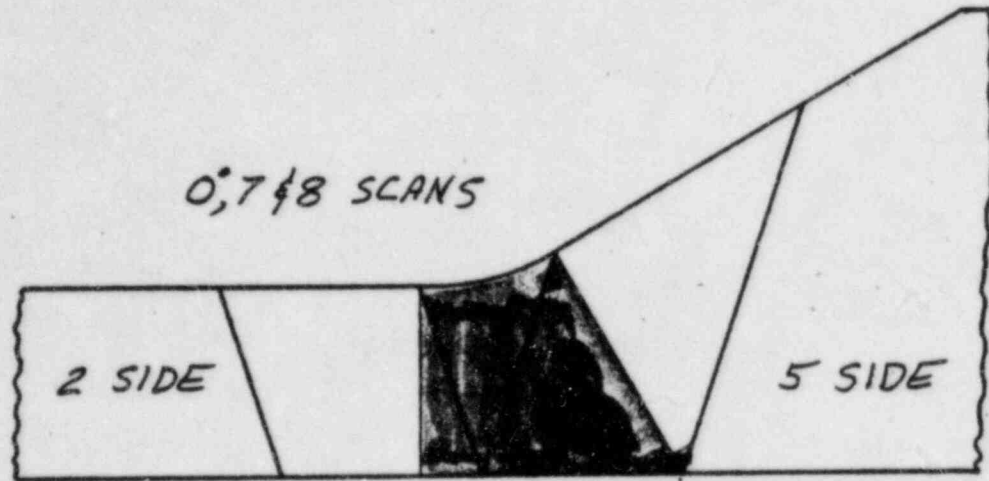
Field Changes:
 Yes No
 If Yes, Number **2**

	Transducer	0°	45°	60°	Instrument			
	S/N	NA	607150	NA	Mfr.	SONIC	Model	MARK I
	Size		1.5" Dia.		S/N	03704E	RepRate	3K
	Frequency		2.25 MHz		Reject	OFF	Filter	H1
	Beam Angle		45°		Damp	MIN	Coax	6'

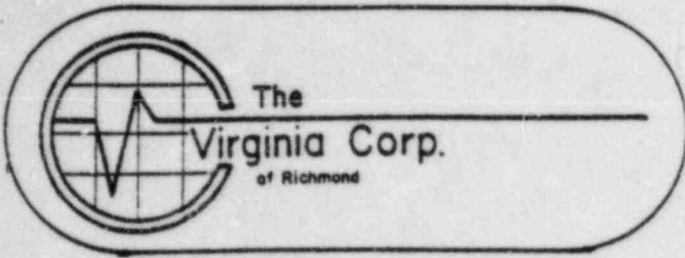
Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks								
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
1T	NA	NA	80%	3.0	NA	NA	NA	80%	3.1	NA	NA	NA	NA	NA	NA	1:04	4:38	NA	NA
2T			40%	5.8				27%	5.9										
3T			28%	9.0				20%	9.0										
Ref. dB			41 db					43 db											



Additional Comments/Sketch



■ AREA NOT COVERED



DATE 9-26-82

PAGE 5 OF 5

TO _____

SUBJECT REMARKS

WELD NO 41-022 IN 5 SCAN GEOMETRY NOTICED WITH
45° SHEAR FROM 1 1/8" (S) @ 6.4 SW.
TRAVELING TO 2 1/2" (S) @ 8.0 SW. JUST
BELOW 50% DAC 360°.
AND FROM 2 1/2" (S) @ 6.4 SW.
TRAVELING TO 5 5/8" (S) @ 9.4 SW. JUST
BELOW 50% DAC 360°
GEOMETRY NOTICED IN 5 SCAN
AT 1 1/8" (Z) @ 9.2 SW 100% DAC 360°

SIGNED Gary Louzener



Ultrasonic Examination Report

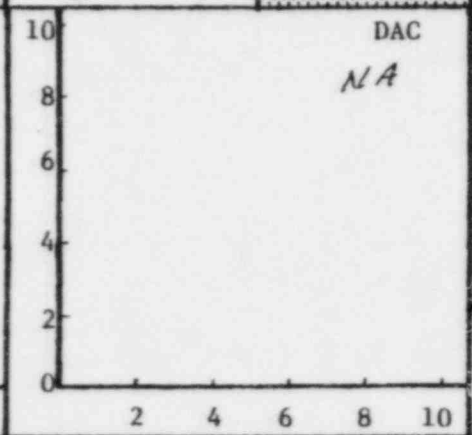
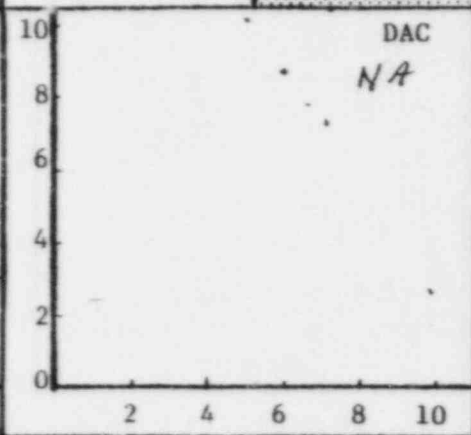
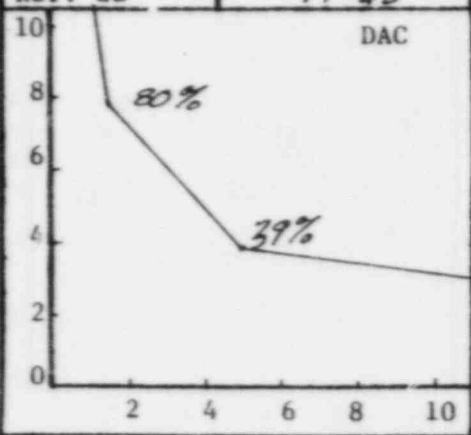
Customer LP & L	Plant WATERFORD	Unit 3	Loop/Zone A 41	Iso/Drawing No. ZONE 41 R-2, F.C. 2
Procedure I.S.I. 22 R0, F.C. 2	Exam Surface O.D.	Examiner/Level Larry Longenecker II	VCR Supervisor Manuel Dymon	Date 9-29-82
Component/Piping System MAIN STEAM HEADER A- CONT.	INSIDE	Pipe Size 40"	Weld Type BUTT	Cal. Block UT-127
			Couplant: SONOTRACE	Type 40 Batch No. 8129

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
	S/N KB2654	NA	NA	Mfr.	SONIC	Model	MARK I
	Size .5" DIA.			S/N	03704E	RepRate	3K
	Frequency 2.25 MHz			Reject	OFF	Filter	H1
	Beam Angle 0°			Damp	MIN.	Coax	6'

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1/4 T	80%	1.5	NA	NA	NA	NANA	NA	NA	NA	NANA						
3/4 T	39%	4.9														
1 T	NA	7.0														
Ref. dB	71 dB															



Additional Comments/Sketch
REEXAMINED DUE TO PAPERWORK ERROR.



The Virginia Corp.
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Magnetic Particle

R. Payne ANII 8/9/82
Examination Report

Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone 3/42
Procedure ISI 4.3, REV.#0	Examiner/Level R. Payne / Level II	VER Supervisor Daniel Jones	Date 6-8-82
Component/Piping System MAIN STEAM HEADER "B" INSIDE CONTAINMENT	ISO Drawing No. ZONE 42, REV.#2	Surface Condition GROUND	
Type of Particles Wet / Dry / <input checked="" type="checkbox"/> Visible / Fluorescent	Manufacturer MAGNAFLUX	Type 3A DRY POWDER	Batch Number 81M110
Current <input checked="" type="checkbox"/> AC / DC / HWDC	Machine Mfr. PARKER RESEARCH	Type/Model CONTOUR PROBE/DA-200	Serial No. 4604
Magnetization <input checked="" type="checkbox"/> Continuous / Residual	Coil N/A Amps. N/A No. Turns	Prods N/A Spacing N/A Amps.	Yoke 6" Spacing

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
42-003		✓		✓	
42-004LA		✓		✓	
42-004LB		✓		✓	
42-005		✓		✓	
42-006		✓		✓	



Magnetic Particle Examination Report

D. Payne ANII 9/11/82

Customer <i>LP&L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B/42</i>
Procedure <i>ISI 4.3, REV. #0</i>	Examiner/Level <i>R. Payne I</i>	VCR Supervisor <i>Donal Denis</i>	Date <i>6-10-82</i>
Component/Piping System <i>MAIN STEAM HEADER, B" INSIDE CONTAINMENT ZONE 42, REV. 7</i>	ISO Drawing No. <i>F.C. 1</i>	Surface Condition <i>GROUND</i>	
Type of Particles <input checked="" type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry <input type="checkbox"/> Visible <input type="checkbox"/> Fluorescent	Manufacturer <i>MAGNA-FLUX</i>	Type <i>DZV POWDER SA</i>	Batch Number <i>81M110</i>
Current <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> HWDC	Machine Mfr. <i>PARKER RESEARCH</i>	Type/Model <i>CONTOUR PROBE/DA-200</i>	Serial No. <i>4604</i>
Magnetization <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Residual	Coil <i>N/A</i> Amps. No. Turns	Prods. <i>N/A</i> Spacing Amps.	Yoke <i>6"</i> Spacing

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
<i>42-016</i>		✓		✓	
<i>42-020</i>		✓		✓	
<i>42-021</i>		✓		✓	
<i>42-022</i>		✓		✓	



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Magnetic Particle
D. Payne ANZI 6/8/82
Examination Report

Customer: L P L Plant: Waterford Unit: III Loop/Zone: 192
 Procedure: I.S.I. 4.3 Rev. 0 PC-0 Examiner/Level: Barry A. Huff L. II V&R Supervisor: Daniel Jen Date: 6/16/82
 Component/Piping System: MAIN STEAM HEADER B - Inside Containment zone #42 ISO Drawing No.: REV. 2 PC-1 Surface Condition: AS GROUNDED
 Type of Particles: Wet Dry Visible Fluorescent Manufacturer: MAGNA-FLUX Type: BA Red Batch Number: 81M110
 Current: AC DC HWDC Machine Mfr.: PARKER RESEARCH Type/Model: Contour Probe Serial No.: 4604
 Magnetization: Continuous Residual Coil: N/A Amps. No. Turns Prods: N/A Spacing Amps. Yoke: 6" Spacing

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
42-019	ADEQUATE FIELD WAS VERIFIED BY USING MPFI. # S/N 15	✓		✓	



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Magnetic Particle
D. Payne ANII 7/19/82
Examination Report

Customer <i>LP&L</i>		Plant <i>Waterford</i>		Unit <i>3</i>	Loop/Zone <i>NA/42</i>
Procedure <i>NAM 109 ISI-4.3 Rev. 0 FC-1</i>		Examiner/Level <i>Dan P. Loftus LVII</i>		VGR Supervisor <i>Manu...</i>	Date <i>7-16-82</i>
Component/Piping System <i>Main Steam Header B - Inside Containment</i>				ISO Drawing No. <i>Zone 42 Rev. 2 FC-1</i>	Surface Condition <i>Ground</i>
Type of Particles <u>Wet</u> <input checked="" type="checkbox"/> <u>Dry</u> <input checked="" type="checkbox"/> <u>Visible</u> <input type="checkbox"/> <u>Flourescent</u> <input type="checkbox"/>		Manufacturer <i>Magnaflux</i>	Type <i>8A-Red</i>	Batch Number <i>81M110</i>	
Current <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> HWDC		Machine Mfr. <i>Parker Research</i>	Type/Model <i>Contour Probe DA-200</i>	Serial No. <i>4604</i>	
Magnetization <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Residual		Coil <u>NA</u> Amps. <u>NA</u> No. Turns	Prods <u>NA</u> Spacing <u>NA</u> Amps.	Yoke <u>6"</u> Spacing	

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
<i>42-011</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	



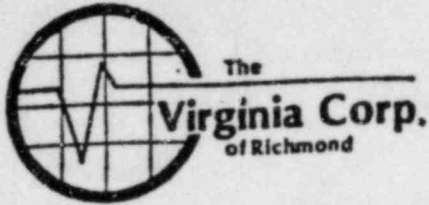
The
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Magnetic Particle

D. Payne ANII 8/6/82
Examination Report

Customer LP+L	Plant Waterford	Unit 3	Loop/Zone N/A / 42
Procedure ISI 4.3 R.O F.C. I	Examiner/Level Robert J. Overstreet II	VCR Supervisor Daniel Jensen	Date 8-5-82
Component/Piping System Main steam header B - inside Containment	ISO Drawing No. ZONE 42 R 2 F.C. 1	Surface Condition BROND	
Type of Particles Wet <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Visible <input checked="" type="checkbox"/> Fluorescent <input type="checkbox"/>	Manufacturer Magnaflux	Type 8 red	Batch Number 81M110
Current <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> HWDC	Machine Mfr. Parker Research	Type/Model Contour probe	Serial No. 4604
Magnetization <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Residual	Coil N/A Amps. N/A No. Turns	Prods N/A Spacing N/A Amps.	Yoke 6" Spacing

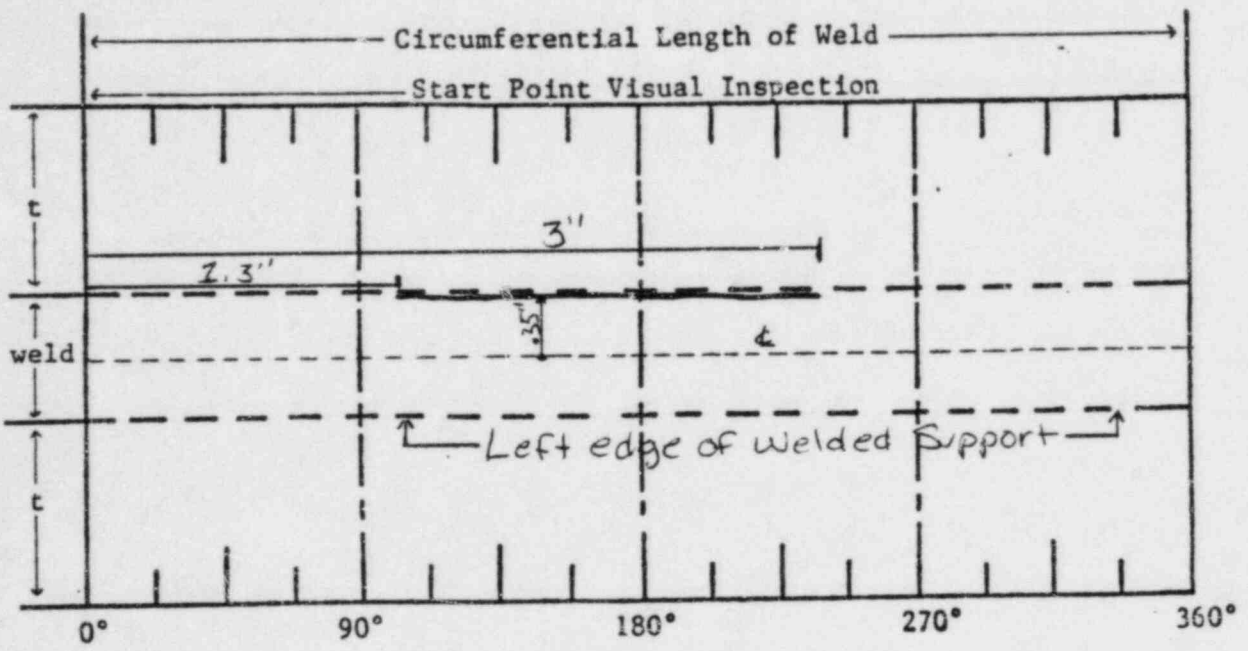
Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
WS1-1	Adequate field was verified using field indicator #17		✓	✓	
	See attached sheet				
WS1-2		✓		✓	
WS1-3		✓		✓	
WS1-4		✓		✓	



Magnetic Particle

D. Payne AMIT 8/6/82
Weld Indication Record

Customer LP+L	Plant Waterford	Unit 3	Loop/Zone N14/42
Procedure 151.43 R.O. F.C.1	Examiner/Level Robert J. Overstreet II	Date 8-5-82	
Component/Piping System Main Steam Header B-inside Containment		VCR Supervisor <i>[Signature]</i>	
Weld No. WS-1-1	ISO/Drawing No. ZONE 42 R.2 F.C.1		



Remarks

Linear Indication approximately 1.7" in length and .35" from weld centerline location along toe of weld.



M. R. Martin, ANII 9-29-82
Magnetic Particle

Examination Report

Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit # <i># 3</i>	Loop/Zone <i>NA / 42</i>
Procedure <i>ISI-4.3 Rev. 0 F.C. 1</i>	Examiner/Level <i>Michael E. Smith II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>9-26-82</i>
Component/Piping System <i>MAIN Steam Header B inside containment</i>	ISO Drawing No. <i>ZONE 42 Rev. 2 F.C. 2</i>	Surface Condition <i>Ground</i>	
Type of Particles Wet <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Visible <input checked="" type="checkbox"/> Flourescent <input type="checkbox"/>	Manufacturer <i>MAGNAFLUX</i>	Type <i>8A Red</i>	Batch Number <i>81M110</i>
Current <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> HWDC	Machine Mfr. <i>Parker Research</i>	Type/Model <i>Contour Probe</i>	Serial No. <i>4604</i>
Magnetization <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Residual	Coil <i>N/A</i> Amps. <i>N/A</i> No. Turns	Prods <i>N/A</i> Spacing <i>N/A</i> Amps.	Yoke <i>6"</i> Spacing

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
<i>42-024</i>	<i>Adequate field was verified using MPFI #17</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<i>42-WS1-1</i>	<i>Re-examined After Repair</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	



D. Payne ANII 6/10/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>LP 3L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B 42</i>
Component/Piping System <i>MAIN STEAM</i>	Examiner/Level <i>BURLINGAME TB</i>	Date <i>6-8-82</i>	
Procedure <i>ISI-3.5 REV. 0</i>	Iso/Drawing No. <i>ZONE 42 REV. 2</i>	VCR Supervisor <i>Daniel Jans</i>	Continuation Sheet Attached [] Yes [<input checked="" type="checkbox"/>] No

Equipment

Instrument		Transducer		Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>KR1</i>	Size <i>1/2"</i>	Cal. Block <i>07-126</i>	
Model <i>FTS-MK-1</i>	Freq. <i>5 MHz</i>		Cal. Block	
S/N <i>780836</i>	Serial No. <i>KR 2897</i>		Range Cal. <i>1.225" = 8 DIV</i>	
Reject <i>OFF</i>	Coax. Cable <i>TWIN 6 COAX</i>		Calibration Checks	
Damp. <i>MIN</i>	Gain <i>70 db</i>		<i>0910</i>	
Freq. <i>5 MHz</i>			<i>1155</i>	
Rep. Rate <i>1000</i>			<i>1250 53</i>	
Filter <i>HI</i>			<i>1500 53</i>	
Video <i>NORM</i>				
Couplant <i>SANCTRAK 40 2819</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>42-003</i>	<i>12</i>	<i>1.19"</i>	<i>1.37"</i>	<i>1.16"</i>	<i>42-004B</i>	<i>B</i>	<i>1.37"</i>	<i>1.34"</i>	<i>1.36"</i>
	<i>2</i>	<i>1.22</i>	<i>1.37"</i>	<i>1.16"</i>		<i>B</i>	<i>1.37"</i>	<i>1.36"</i>	<i>1.36"</i>
	<i>4</i>	<i>1.19"</i>	<i>1.37"</i>	<i>1.16"</i>		<i>C</i>	<i>1.37"</i>	<i>1.34"</i>	<i>1.36"</i>
	<i>6</i>	<i>1.16"</i>	<i>1.34"</i>	<i>1.16"</i>		<i>D</i>	<i>1.36"</i>	<i>1.36"</i>	<i>1.36"</i>
	<i>8</i>	<i>1.16"</i>	<i>1.37"</i>	<i>1.16"</i>		<i>E</i>	<i>1.37"</i>	<i>1.36"</i>	<i>1.36"</i>
	<i>10</i>	<i>1.19"</i>	<i>1.37"</i>	<i>1.16"</i>		<i>F</i>	<i>1.36"</i>	<i>1.34"</i>	<i>1.36"</i>
<i>42-004A</i>	<i>A</i>	<i>1.34"</i>	<i>1.34"</i>	<i>1.34"</i>	<i>42-005</i>	<i>12</i>	<i>1.19"</i>	<i>1.22"</i>	<i>1.37"</i>
	<i>B</i>	<i>1.37"</i>	<i>1.34"</i>	<i>1.37"</i>		<i>2</i>	<i>1.16</i>	<i>1.22"</i>	<i>1.36"</i>
	<i>C</i>	<i>1.37"</i>	<i>1.34"</i>	<i>1.34"</i>		<i>4</i>	<i>1.19"</i>	<i>1.22"</i>	<i>1.36"</i>
	<i>D</i>	<i>1.38"</i>	<i>1.34"</i>	<i>1.34"</i>		<i>6</i>	<i>1.16</i>	<i>1.22"</i>	<i>1.36"</i>
	<i>E</i>	<i>1.34"</i>	<i>1.34"</i>	<i>1.37"</i>		<i>8</i>	<i>1.20</i>	<i>1.22"</i>	<i>1.36"</i>
	<i>F</i>	<i>1.36"</i>	<i>1.34"</i>	<i>1.34"</i>		<i>10</i>	<i>1.19</i>	<i>1.22"</i>	<i>1.36"</i>

Sketch/Identification



The Virginia Company of Richmond

Ultrasonic Examination Report *Byrne ANI 6/10/82*

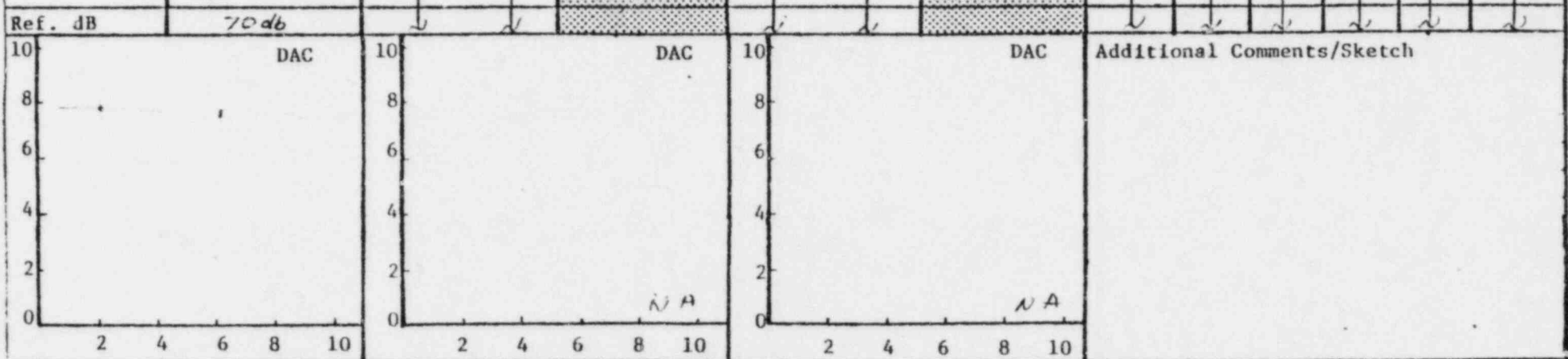
Customer <i>LP 3L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B, 42</i>	Iso/Drawing No. <i>ZONE 42, REV. 2</i>
Procedure <i>FC-1</i>	Exam Surface <i>OD</i>	Examiner/Level <i>BURLINGAME JT</i>	VER Supervisor <i>David Dena</i>	Date <i>6-8-82</i>
ISI-3.2 REV. 0			Cal. Block <i>UT-126</i>	Couplant: <i>SONOTRACE</i>
Component/Plant System <i>MAIN STEAM</i>	Pipe Size <i>34"</i>	Weld Type <i>BUTT</i>	Type <i>90</i>	Batch No. <i>8119</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No *FC-1*
 If Yes, Number

Transducer	0°	45°	60°	Instrument			
S/N	<i>MB 2897</i>	<i>NA</i>	<i>NA</i>	Mfr.	<i>SONIC</i>	Model	<i>FTS-mk1</i>
Size	<i>1/2"</i>			S/N	<i>780876</i>	RepRate	<i>1000</i>
Frequency	<i>5 MHz</i>			Reject	<i>OFF</i>	Filter	<i>N1</i>
Beam Angle	<i>0°</i>			Damp	<i>MIN.</i>	Coax	<i>6'</i>
				Freq.	<i>5 MHz</i>	Video	<i>WORM</i>

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks								
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
<i>1/4T</i>	<i>80%</i>	<i>1.8</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>0910</i>	<i>1155</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>1/2T</i>	<i>80%</i>	<i>5.6</i>																	
<i>BACK</i>	<i>100%</i>	<i>8</i>																	





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Ultrasonic Examination Report

D. Payne ANTE 6/10/82

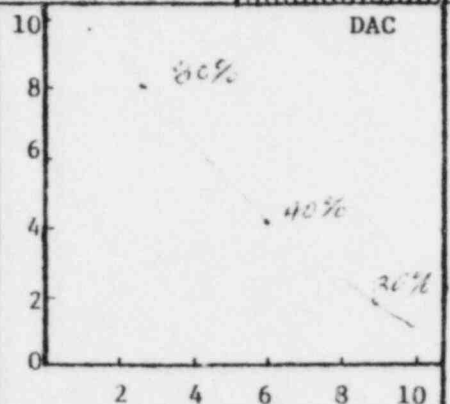
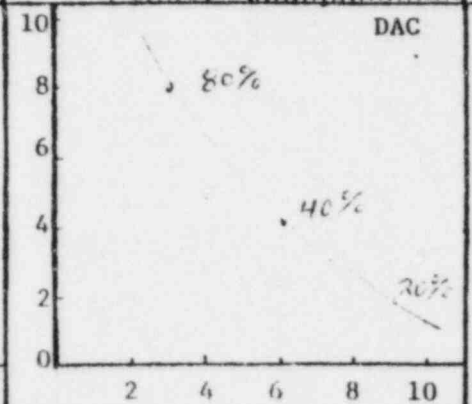
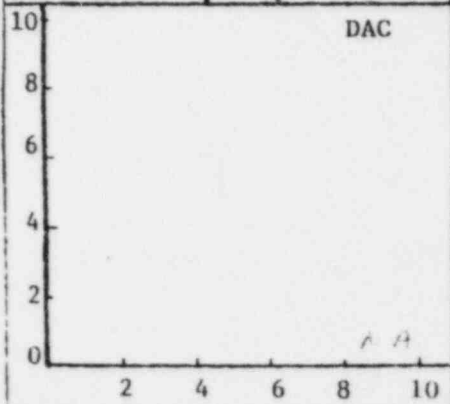
Customer <i>LP3L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B, 42</i>	Iso/Drawing No. <i>ZONE 42, REV 2</i>
Procedure <i>FC-1</i>	Exam Surface <i>OD</i>	Examiner/Level <i>BURLINGAME II-3</i>	VCR Supervisor <i>Daniel J. Gens</i>	Date <i>6-8-82</i>
Component/Piping System <i>MAIN STEAM</i>	Pipe Size <i>34"</i>	Weld Type <i>BOIT</i>	Cal. Block <i>UT-136</i>	Couplant: <i>SONOTRACE</i> Type <i>40</i> Batch No. <i>5119</i>

Continuation Sheet Attached
 Yes No

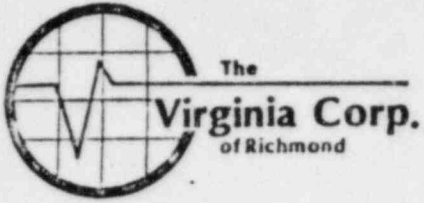
Field Changes:
Yes No *FC-1*
If Yes, Number

Transducer	0°	45°	60°	Instrument			
	S/N <i>NA</i>	<i>J2835</i>	<i>NA</i>	Mfr. <i>SONIC</i>	Model <i>FTS-MK1</i>	RepRate <i>1000</i>	Filter <i>OFF</i>
	Size <i>1/2"</i>	Frequency <i>2.25 MHz</i>	Beam Angle <i>45°</i>	Reject <i>OFF</i>	Damp <i>MIN.</i>	Coax <i>12'</i>	Video <i>NORM</i>
				Freq. <i>2 MHz</i>			

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks							
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>7</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>32</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>0915</i>	<i>1200</i>	<i>NA</i>	<i>NA</i>
<i>2T</i>			<i>40%</i>	<i>6</i>				<i>40%</i>	<i>6.7</i>									
<i>3T</i>			<i>20%</i>	<i>9</i>				<i>20%</i>	<i>9.3</i>									
Ref. dB			<i>42.166</i>					<i>44 dB</i>										



Additional Comments/Sketch



Ultrasonic Examination Report - Continuation Sheet

D. Payne ANET 6/10/82

Customer <i>LPFL</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>B 42</i>	Iso/Drawing No. <i>ZONE 42, REV. 2</i>
Procedure <i>F. C. I ISI-2.2 REV. 0</i>	Exam Surface <i>OD</i>	Examiner/Level <i>BURLINGAME II</i>	VCR Supervisor <i>David L. Jones</i>	Date <i>6-8-82</i>
Component/Piping System <i>MAIN STEAM</i>		Pipe Size <i>34"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-126</i>
Couplant: Type & Batch # <i>SONOTRACE 40 II 8119</i>				

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
<i>42-003</i>	<i>NA</i>	<i>YES</i>	<i>YES</i>	<i>YES</i>	<i>NA</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>NI</i>	<i>SAT</i>		
<i>42-004A</i>	<i>NA</i>	<i>YES</i>	<i>YES</i>	<i>YES</i>	<i>NA</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>NI</i>	<i>SAT</i>		
<i>42-004B</i>	<i>NA</i>	<i>YES</i>	<i>YES</i>	<i>YES</i>	<i>NA</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>NI</i>	<i>SAT</i>		
<i>42-005</i>	<i>NA</i>	<i>PAR</i>	<i>YES</i>	<i>YES</i>	<i>NA</i>	<i>SLOPE OF ELBOW REDUCER</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>NI</i>	<i>SAT</i>	



D. Payne ANIZ 6/10/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>LP3L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B 42</i>
Component/Piping System <i>MAINSTEAM</i>		Examiner/Level <i>BURLINGAME</i>	Date <i>6-8-82</i>
Procedure <i>ISI-35, REL.0</i>	Iso/Drawing No. <i>ZONE 42, REL.2</i>	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached [] Yes [L] No

Equipment

Instrument		Transducer		Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>KBI</i>	Size <i>1/2"</i>	Cal. Block <i>UT-127</i>	
Model <i>FTS-MK-1</i>	Freq. <i>5 MHz.</i>		Cal. Block	
S/N <i>780836</i>	Serial No. <i>KB2897</i>		Range Cal. <i>1.5" = 500</i>	
Reject <i>OFF</i>	Coax. Cable <i>TWIN 6' COA</i>		Calibration Checks	
Damp. <i>MIN</i>	Gain <i>70db</i>		<i>1230</i>	
Freq. <i>5 MHz.</i>			<i>1500</i>	
Rep. Rate <i>1000</i>				
Filter <i>HI</i>				
Video <i>NCRM</i>				
Couplant <i>SONOTRACE 40 # 8119</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>42-017</i>	<i>12</i>	<i>1.42"</i>	<i>1.50"</i>	<i>1.42"</i>	<i>42-018LR</i>	<i>A</i>	<i>1.51"</i>	<i>1.53"</i>	<i>1.52"</i>
	<i>2</i>	<i>1.36"</i>	<i>1.53"</i>	<i>1.38"</i>		<i>B</i>	<i>1.51"</i>	<i>1.53"</i>	<i>1.52"</i>
	<i>4</i>	<i>1.38"</i>	<i>1.53"</i>	<i>1.38"</i>		<i>C</i>	<i>1.52"</i>	<i>1.53"</i>	<i>1.52"</i>
	<i>6</i>	<i>1.38"</i>	<i>1.53"</i>	<i>1.38"</i>		<i>D</i>	<i>1.50"</i>	<i>1.54"</i>	<i>1.52"</i>
	<i>8</i>	<i>1.42"</i>	<i>1.53"</i>	<i>1.38"</i>		<i>E</i>	<i>1.49"</i>	<i>1.54"</i>	<i>1.52"</i>
	<i>10</i>	<i>1.38"</i>	<i>1.53"</i>	<i>1.40"</i>		<i>F</i>	<i>1.50"</i>	<i>1.53"</i>	<i>1.52"</i>
<i>42-018LA</i>	<i>A</i>	<i>1.52"</i>	<i>1.53"</i>	<i>1.54"</i>					
	<i>B</i>	<i>1.50"</i>	<i>1.53"</i>	<i>1.54"</i>					
	<i>C</i>	<i>1.50"</i>	<i>1.52"</i>	<i>1.53"</i>					
	<i>D</i>	<i>1.52"</i>	<i>1.53"</i>	<i>1.52"</i>					
	<i>E</i>	<i>1.52"</i>	<i>1.54"</i>	<i>1.53"</i>					
	<i>F</i>	<i>1.52"</i>	<i>1.54"</i>	<i>1.53"</i>					

Sketch/Identification



The
Virginia Corp.
of Richmond

Ultrasonic Examination Report *D. Payne ANZI 6/10/82*

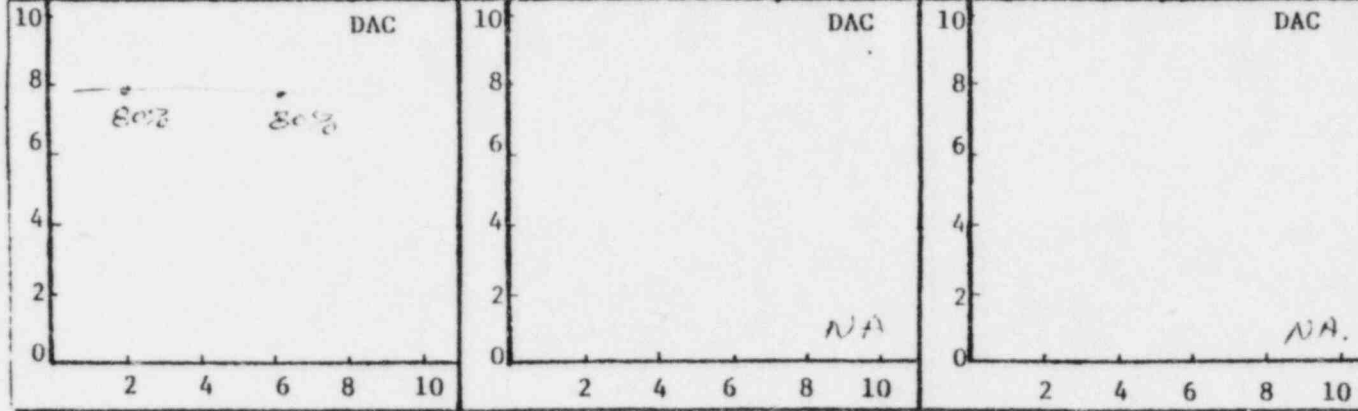
Customer <i>LP3L</i>		Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B, 42</i>	Isos/Drawing No. <i>ZONE 42, REV.2</i>
Procedure <i>FC-1</i>	Exam Surface <i>OD</i>	Examiner/Level <i>BURLINGAME II</i>		VCR Supervisor <i>Daniel D. ...</i>	Date <i>6-8-82</i>
Component/Piping System <i>MAIN STEAM</i>		Pipe Size <i>40"</i>	Weld Type <i>BOTT</i>	Cal. Block <i>UT-127</i>	Couplant: <i>SONOTRACE</i> Type <i>40</i> Batch No. <i>819</i>

Continuation Sheet Attached
 Yes No

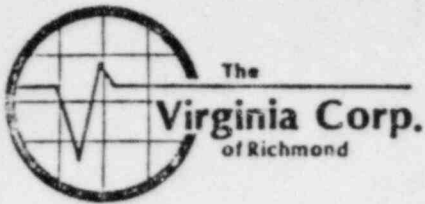
Field Changes:
Yes No *FC-1*
If Yes, Number

	Transducer	0°	45°	60°	Instrument			
	S/N	<i>KB 2897</i>	<i>NA</i>	<i>NA</i>	Mfr.	<i>SONIC</i>	Model	<i>ETS-mk I</i>
	Size	<i>1/2"</i>			S/N	<i>780856</i>	RepRate	<i>1000</i>
	Frequency	<i>5 MHz</i>			Reject	<i>OFF</i>	Filter	<i>HI</i>
Beam Angle	<i>0</i>	<i>0</i>	<i>0</i>	Damp	<i>MIN</i>	Coax	<i>6'</i>	
				Freq.	<i>5 MHz</i>	Videa	<i>NORM.</i>	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1/4T</i>	<i>80%</i>	<i>1.8</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>1250</i>	<i>1500</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>3/4T</i>	<i>80%</i>	<i>5.6</i>														
<i>BACK</i>	<i>100%</i>	<i>8</i>														
Ref. dB	<i>72 db</i>															



Additional Comments/Sketch



D. Payne ANII 6/10/82

Ultrasonic Examination Report - Continuation Sheet

Page of

Customer <i>LP3L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>B 42</i>	Iso/Drawing No. <i>ZONE 42, REV 2</i>
Procedure <i>F.C.I ISI-22, REV C</i>	Exam Surface <i>OD</i>	Examiner/Level <i>BURLINGAME II</i>	VCR Supervisor <i>Daniel Jones</i>	Date <i>6-8-82</i>
Component/Piping System <i>MAIN STEAM</i>	Pipe Size <i>40"</i>	Weld Type <i>BOIT</i>	Cal. Block <i>UT-127</i>	Couplant: Type & Batch # <i>SOUNDTRACE 40 # 8119</i>

Weld No.	Base Metal Scan	Scan Direction	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
			2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
42	O17	YES	NA	NA	NA	YES		CLEAN	GROUND	NI	SAT	
43	O18LA	YES	NA	NA	NA	YES		CLEAN	GROUND	NI	SAT	*
43	O18LB	YES	NA	NA	NA	YES		CLEAN	GROUND	NI	SAT	*
* SEVERAL SMALL LAMINATED INDICATIONS WERE OBSERVED IN THE BASE METAL. INDICATIONS WERE LESS THAN 40% DAC.												



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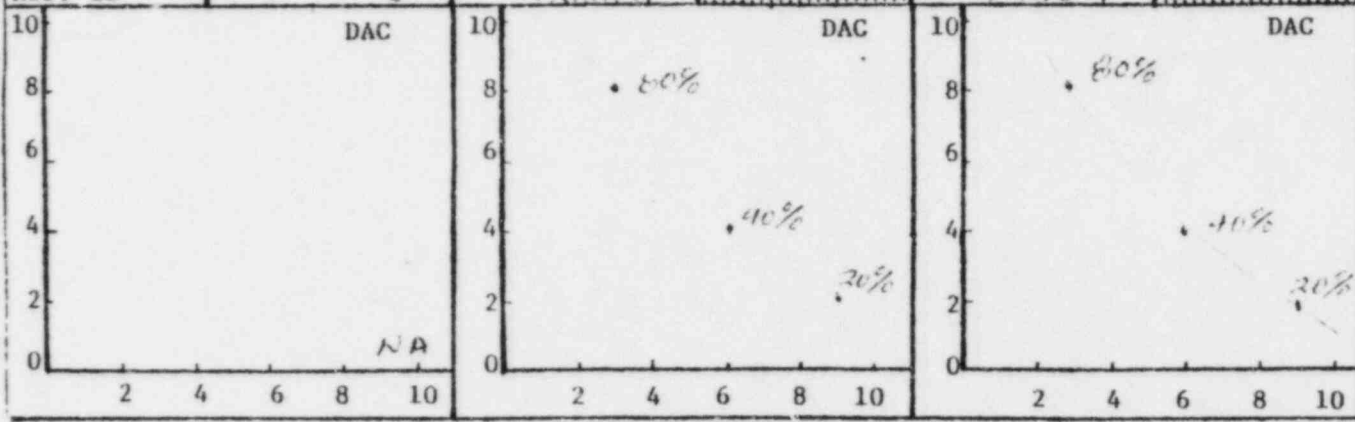
Customer <i>LP/L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B, 42</i>	Iso/Drawing No. <i>ZONE 42, REU. 2</i>
Procedure <i>FC-1</i> <i>ISI-2.2 REU. 0</i>	Exam Surface <i>CD</i>	Examiner/Level <i>BURLINGAME</i>	VER Supervisor <i>Daniel Dens</i>	Date <i>6-8-82</i>
Component/Piping System <i>MAINSTREAM</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-127</i>	Couplant: <i>SONOTRACIE</i> Type <i>40</i> Batch No. <i>8119</i>

Continuation Sheet Attached
 Yes No

Field Changes:
Yes No *FC-1*
If Yes, Number

Transducer S/N Size Frequency Beam Angle	0°	45°	60°	Instrument			
	<i>NA</i>	<i>132935</i>	<i>NA</i>	Mfr.	<i>SONIC</i>	Model	<i>FTS-mk-1</i>
		<i>1/2"</i>		S/N	<i>03704E</i>	RepRate	<i>1000</i>
		<i>3.25m</i>		Reject	<i>OFF</i>	Filter	<i>OFF</i>
	<i>N</i>	<i>45°</i>	<i>1</i>	Damp	<i>MID</i>	Coax	<i>12'</i>

Calibration 0°			2 & 5 Scan			7 & 8 Scan			Calibration Checks									
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC	In	Out	In	Out	In	Out	
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3.2</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>						
<i>2T</i>			<i>40%</i>	<i>6</i>				<i>40%</i>	<i>6.2</i>									
<i>3T</i>			<i>30%</i>	<i>9</i>				<i>30%</i>	<i>7.3</i>									
Ref. JB			<i>43dbG</i>					<i>44dbG</i>										



Additional Comments/Sketch

Dr. Payne ANII 6/10/82

Ultrasonic Examination Report - Continuation Sheet

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Customer <i>AP/L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>B 42</i>	Iso/Drawing No. <i>ZONE 42, REV. 2</i>
Procedure <i>SP-32, REV. 0 AC1</i>	Exam Surface <i>OD</i>	Examiner/Level <i>BURUNGANE III</i>	VCR Supervisor <i>Daniel Payne</i>	Date <i>6-8-82</i>
Component/Piping System <i>45</i> <i>MAIN STEAM</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-137</i>	Couplant: Type & Batch # <i>SONOTRACE 40^J 8119</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
42	<i>017</i>	<i>NA</i>	<i>YES</i>	<i>YES</i>	<i>YES</i>	<i>NA</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>NI</i>	<i>SAT</i>	
42	<i>018LA</i>	<i>NA</i>	<i>YES</i>	<i>YES</i>	<i>YES</i>	<i>NA</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>NI</i>	<i>SAT</i>	
42	<i>018AB</i>	<i>NA</i>	<i>YES</i>	<i>YES</i>	<i>YES</i>	<i>NA</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>NI</i>	<i>SAT</i>	



D. Payne ANEI 6/14/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP3L	Plant WATERFORD	Unit 3	Loop/Zone B, 42
Component/Piping System MAIN STEAM	Examiner/Level BURLINGAME II	Date 6-9-82	
Procedure SI-2.5 REV. 0	Iso/Drawing No. ZONE 42, REV. 2	VCR Supervisor Kenil Jones	Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Equipment

Instrument	Transducer		Calibration
Mfgr. SONIC	Mfgr. KBI	Size 1/2"	Cal. Block UT-127
Model FTS-MK-1			Cal. Block N.A.
S/N 780836	Freq. 5 MHz.		Range Cal. 1.5" = 8 DIV.
Reject OFF	Serial No. KB 2897		Calibration Checks 0.45
Damp. MIN.			1100
Freq. 5 MHz.	Coax. Cable TWIN 6' COAX		
Rep. Rate 1000	Gain 70 dBG		
Filter HI			
Video NORMAL			
Couplant SONOTRACE 40, #8119			

Examination Results

Weld Number	Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
42-006	12	1.462	1.368	1.500	42-009A	A	1.537	1.537	1.563
	2	1.462	1.368	1.500		B	1.540	1.537	1.563
	4	1.462	1.350	1.500		C	1.537	1.537	1.563
	6	1.425	1.312	1.500		D	1.537	1.537	1.563
	8	1.425	1.312	1.500		E	1.562	1.540	1.575
	10	1.387	1.350	1.500		F	1.537	1.537	1.575
42-008	12	1.350	1.537	1.387	42-009B	A	1.612	1.537	1.537
	2	1.500	1.537	1.350		B	1.612	1.537	1.537
	4	1.462	1.575	1.387		C	1.612	1.537	1.537
	6	1.425	1.575	1.425		D	1.593	1.537	1.537
	8	1.387	1.612	1.387		E	1.593	1.537	1.537
	10	1.425	1.575	1.387		F	1.612	1.537	1.537

Sketch/Identification



Ultrasonic Data Sheet
 for *R. Payne ANTI* 6/14/82
 Thickness Measurement
 Continuation Page 2 of 2

Customer <i>LP3L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B 42</i>
Component/Piping System <i>MAIN STEAM</i>	Examiner/Level <i>BURLINGAME II</i>		Date <i>6-9-82</i>
Procedure <i>ISI-2.5, REV. 0</i>	Iso/Drawing No. <i>ZONE 42, REV. 2</i>	VCR Supervisor <i>Ronald Jones</i>	

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
42-010	12	1.350	1.387	1.537					
	2	1.425	1.425	1.537					
	4	1.350	1.425	1.537					
	6	1.462	1.462	1.575					
	8	1.425	1.387	1.575					
	10	1.425	1.350	1.537					

Sketch/Identification



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Ultrasonic Examination Report

D. Payne ANIE 6/14/82

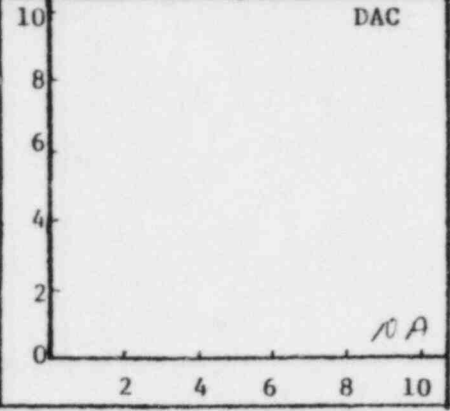
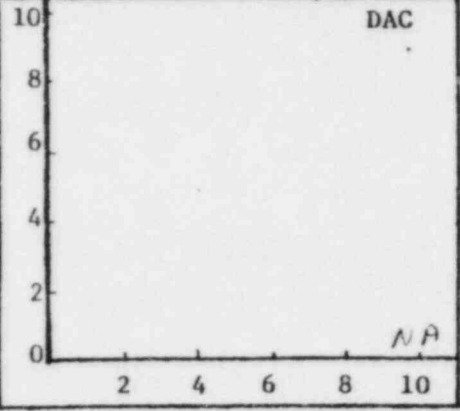
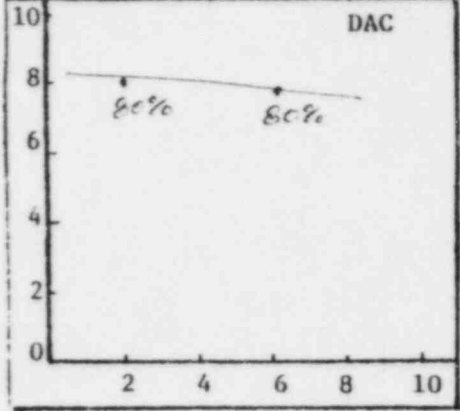
Customer <i>LP3L</i>		Plant <i>WATERFORD</i>		Unit <i>3</i>		Loop/Zone <i>B 42</i>		Iso/Drawing No. <i>ZONE 42, REV. 2</i>	
Procedure <i>FC-1</i> <i>ISI-2.2 REV. C</i>		Exam Surface <i>OT</i>		Examiner/Level <i>BORLINGAME II</i>		VER Supervisor <i>D. Payne</i>		Date <i>6-9-82</i>	
Component/Piping System <i>MAIN STEAM</i>				Pipe Size <i>40"</i>		Weld Type <i>Butt</i>		Cal. Block <i>UT-127, 1.5"</i>	
						Couplant: <i>SCINTRACE</i>		Type <i>40</i> Batch No <i>E119</i>	

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No *FC-1*
 If Yes, Number

Transducer	Beam Angle			Instrument			
	0°	45°	60°	Mfr.	Model	RepRate	Filter
S/N	<i>482877</i>	<i>NA</i>	<i>NA</i>	<i>SONIC</i>	<i>FTS-mk1</i>	<i>1000</i>	<i>H1</i>
Size	<i>1/2"</i>			S/N	<i>780836</i>		
Frequency	<i>5 MHz</i>			Reject	<i>OFF</i>		
Beam Angle	<i>0°</i>			Damp	<i>MIN</i>	Coax	<i>COAX 6'</i>
				Freq.	<i>5 MHz</i>	Video	<i>ARM</i>

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks								
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
<i>1/4T</i>	<i>80%</i>	<i>1.8</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>1315</i>	<i>1650</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>3/4T</i>	<i>80%</i>	<i>5.6</i>																	
<i>BACK</i>	<i>100% +</i>	<i>8</i>																	
Ref. dB	<i>72 db.</i>																		



Additional Comments/Sketch



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Ultrasonic Examination Report *D. Payne ANII 6/14/82*

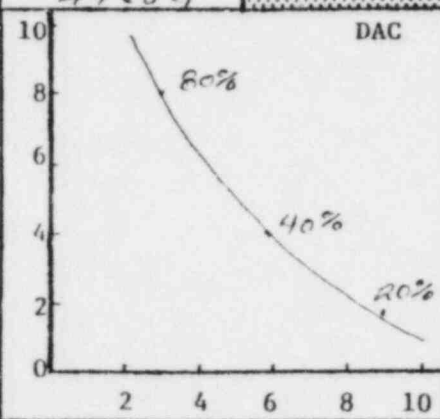
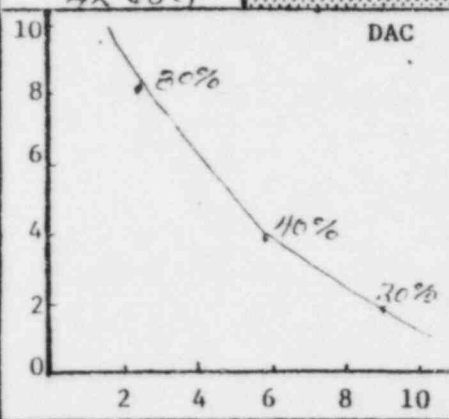
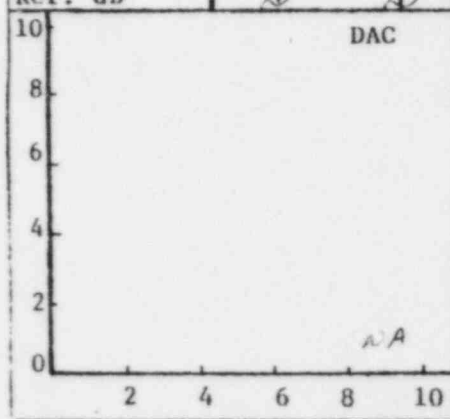
Customer <i>LP³L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B, 42</i>	ISO/Drawing No. <i>ZONE 42 REV 2</i>
Procedure <i>FC-1</i> <i>SI-2.2 REQ O</i>	Exam Surface <i>OD</i>	Examiner/Level <i>BURLINGAME II</i>	VCR Supervisor <i>Daniel Heno</i>	Date <i>6-9-82</i>
Component/Piping System <i>MAIN STEAM</i>	Pipe Size <i>40"</i>	Weld Type <i>BOTT</i>	Cal. Block <i>UT-127, 15"</i>	Couplant: <i>SONOTRACE</i> Type <i>40</i> Batch No. <i>8119</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No *FC-1*
 If Yes, Number

Transducer	0°	45°	60°	Instrument			
	S/N <i>NA</i>	<i>J22935</i>	<i>NA</i>	Mfr. <i>SONIC</i>	Model <i>FTS-MK-1</i>	RepRate <i>1000</i>	Filter <i>OFF</i>
	Size <i>1/2"</i>	Frequency <i>2.25 MHz</i>	Beam Angle <i>45°</i>	Reject <i>OFF</i>	Damp <i>MIN</i>	Coax <i>12'</i>	Video <i>WORM</i>
	Freq.	<i>2 MHz</i>	Video	<i>WORM</i>			

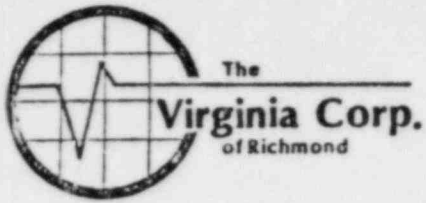
Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>				
<i>2T</i>			<i>40%</i>	<i>6</i>				<i>40%</i>	<i>6</i>							
<i>3T</i>			<i>20%</i>	<i>9</i>				<i>20%</i>	<i>9</i>							
Ref. dB	<i>NA</i>		<i>42 dB</i>					<i>44 dB</i>								



Additional Comments/Sketch

R. Payne ANET 6/14/82

Ultrasonic Examination Report - Continuation Sheet Page 4 of 4



Customer <i>LP#L</i>		Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>B 42</i>	Iso/Drawing No. <i>ZONE 42, REV. 2</i>
Procedure <i>FC-1 151-2.2 REV. 0</i>	Exam Surface <i>OD</i>	Examiner/Level <i>BURLINGAME JR</i>		VCR Supervisor <i>Daniel Jones</i>	Date <i>6-9-82</i>
Component/Piping System <i>MAIN STEAM</i>		Pipe Size <i>40"</i>	Weld Type <i>BOTT</i>	Cal. Block <i>UT-127</i>	Couplant: Type & Batch # <i>SONOTRACE 40 #8119</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
		<i>42-006</i>	<i>NA</i>	<i>YES</i>	<i>YES</i>		<i>YES</i>	<i>NA</i>	<i>CLEAN</i>	<i>GROUND</i>	
<i>42-008</i>		<i>YES</i>	<i>YES</i>	<i>YES</i>		<i>CLEAN</i>	<i>GROUND</i>	<i>N1</i>	<i>SAT</i>		
<i>42-009LA</i>		<i>YES</i>	<i>YES</i>	<i>YES</i>		<i>CLEAN</i>	<i>GROUND</i>	<i>NRI *</i>	<i>SAT</i>		
<i>42-009LB</i>		<i>YES</i>	<i>YES</i>	<i>YES</i>		<i>CLEAN</i>	<i>GROUND</i>	<i>N1</i>	<i>SAT</i>		
<i>42-010</i>	<i>N</i>	<i>YES</i>	<i>YES</i>	<i>YES</i>	<i>N</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>N1</i>	<i>SAT</i>		

* *NRI; ~35" FROM REF. ~1.5" FROM CENTER LINE OF WELD ON 275 SCANS LENGTH ~1/2"*



D. Payne ANIZ 6/16/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>L.P. & L.</i>	Plant <i>Waterford</i>	Unit # <i>3</i>	Loop/Zone <i>B/42</i>
Component/Piping System <i>Main Steam Header B</i>	Examiner/Level <i>Buzzingame II</i>	Date <i>6-11-82</i>	
Procedure <i>ISI-2.5 Rev. 0</i>	Iso/Drawing No. <i>42 R.27C1</i>	NCR Supervisor <i>W. Dennis</i>	Continuation Sheet Attached [] Yes [X] No

Equipment

Instrument		Transducer		Calibration
Mfgr. <i>Sonic</i>	Mfgr. <i>KB-Aerotech</i>	Size <i>.50"</i>	Cal. Block <i>U.T.-127</i>	
Model <i>Mark I</i>	Freq. <i>5 MHz</i>		Cal. Block <i>NA</i>	
S/N <i>780836</i>	Serial No. <i>KB 2897</i>		Range Cal. <i>1.5" = 8 Div.</i>	
Reject <i>Off</i>	Coax. Cable <i>6'</i>		Calibration Checks	
Damp. <i>Min.</i>	Gain <i>71 dB</i>		In - <i>8:30 AM</i>	
Freq. <i>5 MHz</i>			Out - <i>11:40 AM</i>	
Rep. Rate <i>1 K</i>				
Filter <i>Hi</i>				
Video <i>Norm</i>				
Couplant <i>Sonotrace 40, Batch #8124</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>42-016</i>	<i>12</i>	<i>1.425</i>	<i>1.500</i>	<i>1.500</i>	<i>42-021</i>	<i>12</i>	<i>1.350</i>	<i>1.388</i>	<i>1.313</i>
	<i>2</i>	<i>1.463</i>	<i>1.463</i>	<i>1.463</i>		<i>2</i>	<i>1.350</i>	<i>1.313</i>	<i>1.313</i>
	<i>4</i>	<i>1.500</i>	<i>1.463</i>	<i>1.500</i>		<i>4</i>	<i>1.350</i>	<i>1.350</i>	<i>1.350</i>
	<i>6</i>	<i>1.463</i>	<i>1.425</i>	<i>1.500</i>		<i>6</i>	<i>1.388</i>	<i>1.350</i>	<i>1.369</i>
	<i>8</i>	<i>1.425</i>	<i>1.425</i>	<i>1.463</i>		<i>8</i>	<i>1.350</i>	<i>1.463</i>	<i>1.463</i>
	<i>10</i>	<i>1.425</i>	<i>1.425</i>	<i>1.463</i>		<i>10</i>	<i>1.463</i>	<i>1.425</i>	<i>1.425</i>
<i>42-020</i>	<i>12</i>	<i>1.369</i>	<i>1.350</i>	<i>1.369</i>	<i>42-022</i>	<i>12</i>	<i>1.350</i>	<i>1.350</i>	<i>1.350</i>
	<i>2</i>	<i>1.350</i>	<i>1.313</i>	<i>1.350</i>		<i>2</i>	<i>1.388</i>	<i>1.388</i>	<i>1.425</i>
	<i>4</i>	<i>1.388</i>	<i>1.425</i>	<i>1.388</i>		<i>4</i>	<i>1.313</i>	<i>1.425</i>	<i>1.350</i>
	<i>6</i>	<i>1.425</i>	<i>1.463</i>	<i>1.388</i>		<i>6</i>	<i>1.313</i>	<i>1.313</i>	<i>1.388</i>
	<i>8</i>	<i>1.388</i>	<i>1.500</i>	<i>1.350</i>		<i>8</i>	<i>1.275</i>	<i>1.425</i>	<i>1.463</i>
	<i>10</i>	<i>1.425</i>	<i>1.425</i>	<i>1.350</i>		<i>10</i>	<i>1.313</i>	<i>1.350</i>	<i>1.350</i>

Sketch/Identificatio



Ultrasonic Examination Report

Rayne ANIE 6/16/82
NAM
SD

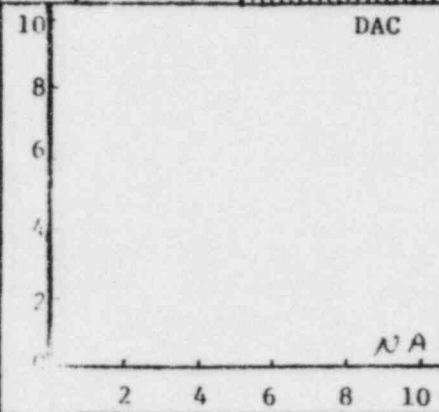
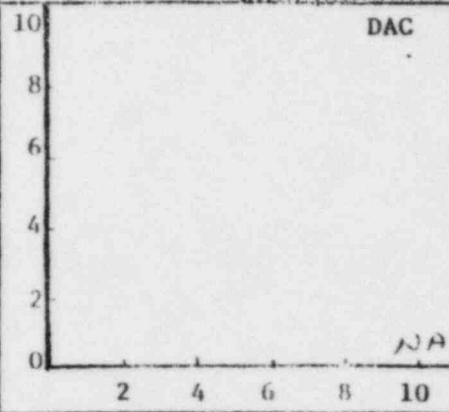
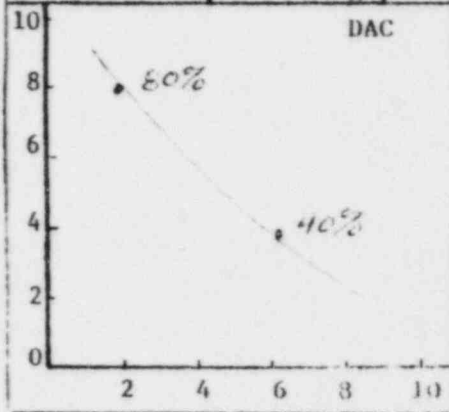
Customer LP 3L		Plant WATERFORD		Unit 3	Loop/Zone B 42	Iso/Brawing No. ZONE 42, REV. 2, FC-81	
Procedure FC-1 FC-2 ISI-3.2 REV 03		Exam Surface OD	Examiner/Level BURLINGAME		VER Supervisor <i>[Signature]</i>		Date 6-11-82
Component/Piping System MAIN STEAM			Pipe Size 40"	Weld Type BUTT	Cal. Block UT-127, 1.5"	Couplant: SONOTRACE Type 40 Batch No. 8124	

Continuation Sheet Attached
 Yes No

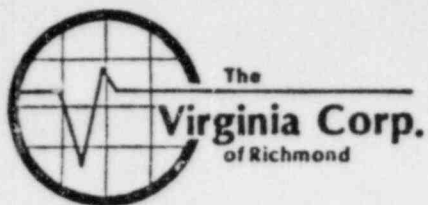
Field Changes:
 Yes No
 If Yes, Number **FC-2, FC-103**

Transducer S/N Size Frequency Beam Angle	0°	45°	60°	Instrument			
	K82897	NA	NA	Mfer.	SONIC	Model	FIS-MK1
	1/2"			S/N	780834	RepRate	1000
	5 MHz			Reject	OFF	Filter	NI
	0			Damp	MIN	Coax	6
				Freq.	5 MHz	Video	NOR.M.

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
					1/4T	80%			16	NA	NA	NA	NA	NA	NA	NA
3/4T	40%	5.6														
1T	7100%	8														
Ref. dB	71db															



Additional Comments/Sketch



R. Payne ANII 6/16/82

Ultrasonic Examination Report - Continuation Sheet

Page of

Customer LP ³ L	Plant WATERFORD	Unit 3	Loop/ Zone B 42	Iso/Drawing No. ZONE 42, REV. 2, FC-5110
Procedure SI-22, REV 0	Exam Surface OD	Examiner/Level BURLINGAME TIB	VCR Supervisor Daniel J...	Date 6-11-82
Component/Piping System MAIN STEAM	Pipe Size 40"	Weld Type BUTT	Cal. Block UT-127	Couplant: Type & Batch # SONOTRACE 40 # B124

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
42-016	YES	NA	NA	NA	YES		CLEAN	GROUND	NI	SAT	
42-020	YES				YES		CLEAN	GROUND	NI	SAT	
42-021	YES				YES		CLEAN	GROUND	NI	SAT	
42-022	YES				YES		CLEAN	GROUND	NI	SAT	



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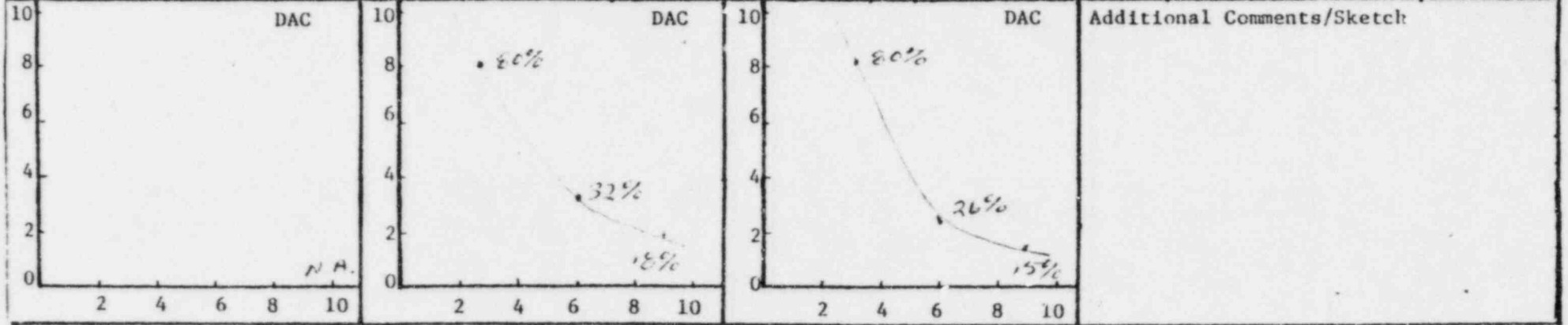
Ultrasonic Examination Report

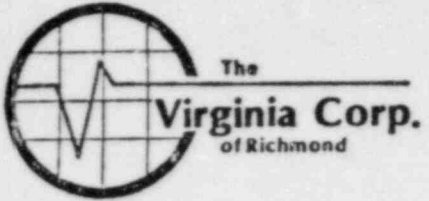
6/16/82

Customer LDPL		Plant WATERFORD	Unit 3	Loop/Zone B, 42	Iso/Drawing No. ZONE 42, REV 2, FC-21	<small>NAME</small> NA
Procedure AS-2.2 REV. 0	Exam Surface OD	Examiner/Level BURLINGAME		VER Supervisor Donna	Date 6-11-82	
Component/Piping System MAIN STEAM		Pipe Size 40"	Weld Type BUTT	Cal. Block # OT-127, 1.5"	Couplant: SONOTRACK	Type 40 Batch No. 8124

Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Transducer	0°	45°	60°	Instrument				
		S/N	NA	M24140	NA	Mfr.	SONIC	Model	FIS-MK-1	
Field Changes: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, Number		Size				S/N	02301E	RepRate	1000	
		Frequency				Reject	OFF	Filter	OFF	
		Beam Angle	↘	45°	↙	Damp	MIN	Coax	12'	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks							
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
						NA	NA				NA	NA	NA	NA	NA	NA	NA	NA
1T	NA	NA	80%	3	NA	NA	NA	80%	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2T			32%	6				26%	6.2									
3T			18%	9				15%	9.3									





Ultrasonic Examination Report - Continuation Sheet

Page of

D. Payne ANII 6/10/82

Customer LDIL		Plant WATERFORD		Unit 3	Loop/Zone B, 42	Iso/Drawing No. ZONE 42, REV. 2, FC-2149	
Procedure FC-1, FC-2 ISIRI 3.2, REV. 0		Exam Surface OD	Examiner/Level BURLINGAME II B		VCR Supervisor Daniel Jensen		Date 6-11-82
Component/Piping System MAIN STEAM			Pipe Size 40"	Weld Type BUTT	Cal. Block UT-127	Couplant: Type & Batch # SONOTRACK 40 # 8124	

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
42-016	NA	YES	YES	YES	NA		CLEAN	GROUND	NI	SAT	
42-020		YES	YES	YES			CLEAN	GROUND	NI	SAT	
42-021		YES	YES	YES			CLEAN	GROUND	NI	SAT	
42-022	↓	YES	YES	YES	↓		CLEAN	GROUND	NI	SAT	



D. Payne ANII 6/2/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP+L	Plant WATERFORD	Unit 3	Loop/Zone B 42
Component/Piping System MAIN STEAM HEADER 8-IN CONTAIN.	Examiner/Level <i>Nary Longenecker II</i>	Date 6-17-82	
Procedure ISE 2.5 REV-0 FC-0	Iso/Drawing No. ZONE 42 REV-2 FC-1	VCR Supervisor <i>Daniel D. Gino</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment			
Instrument	Transducer		Calibration
Mfgr. SONIC	Mfgr. KB AEROTECH	Size 1.5"	Cal. Block UT-127
Model MARK-1	Freq. 5 MHZ		Cal. Block
S/N 05473E	Serial No. KB 2897		Range Cal. 1.50" @ 7.0
Reject OFF	Coax. Cable 6'		Calibration Checks IN 9:20 OUT 12:00
Damp. MIN	Gain 73 DB		
Freq. S			
Rep. Rate 1K			
Filter H1			
Video NORM			
Couplant SONOTRACE 40 SN 8124			

Examination Results									
Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
42-019	12	1.500"	1.371"	1.586"	NA	NA	NA	NA	NA
42-019	2	1.629"	1.393"	1.586"					
42-019	4	1.500"	1.436"	1.586"					
42-019	6	1.457"	1.457"	1.586"					
42-019	8	1.500"	1.350"	1.607"					
42-019	10	1.521"	1.350"	1.607"					

Sketch/Identification



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Ultrasonic Examination Report

D. Payne ANIT 6/21/82

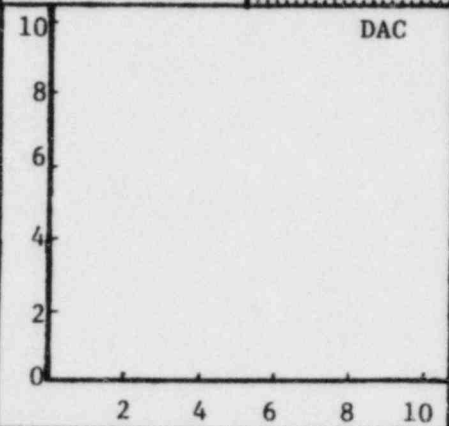
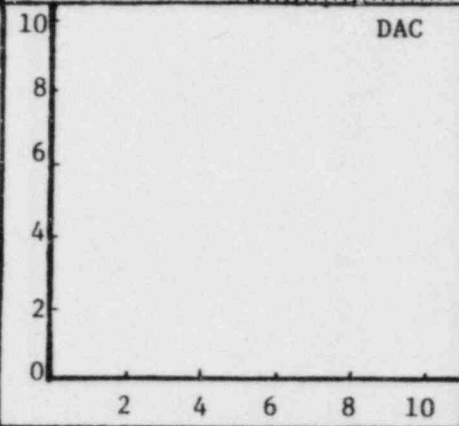
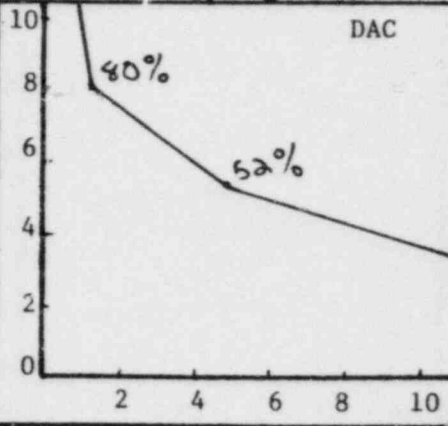
Customer L. P. & L.		Plant Waterford	Unit 3	Loop/Zone B/42	Iso/Drawing No. R.2 GL.
Procedure ISI 22/R-0/SC 1		Exam Surface O.D.	Examiner/Level Nary Longenacker II		VCR Supervisor Daniel Dins
Component/Piping System Main Steam Header B		Pipe/Size 40	Weld Type Butt	Cal. Block UT-127	Couplant: Sonotrace
				Date 6/17/82	Batch No. 4124

Continuation Sheet Attached
 Yes No

Transducer				Instrument			
0°	45°	60°		Mfr.	Model	RepRate	MB
S/N	K82997	N/A	N/A	Sonic		1K	
Size	.5"			S/N	05473E	Filter	High
Frequency	5mhz			Reject	off	Coax	12
Beam Angle	0			Damp	Min.	Video	Norm.
				Freq.	5mhz		

Field Changes:
Yes No
If Yes, Number **1**

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1/4 T	40%	1.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9:20	12:00	N/A	N/A	N/A	N/A
3/4 T	52%	4.4														
1 T	NA	7.0														
Ref. dB	72 DB															



Additional Comments/Sketch



Ultrasonic Examination Report

D. Payne ANII 6/21/82

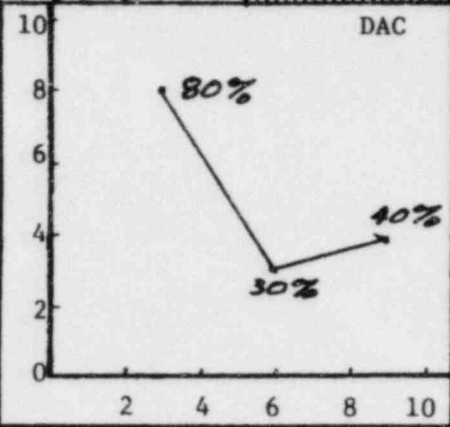
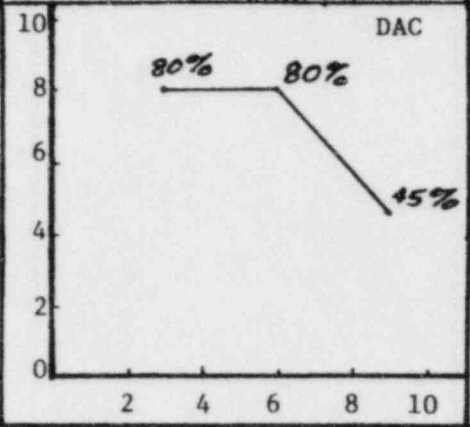
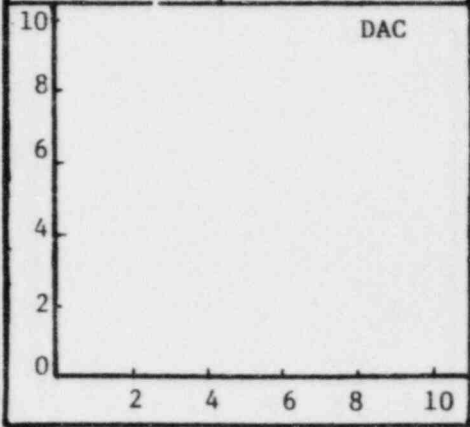
Customer L. P. & L		Plant Waterford		Unit 3	Loop/Zone B/42	Iso/Drawing No. Zone 42 - Rev. 2 - SC 1	
Procedure ISI-2.2-RO-FC1 O.D.		Exam Surface O.D.		Examiner/Level Nancy Longenecker II		VCR Supervisor Nancy Longenecker	
Component/Piping System Main Steam Header (B) Inside Containment		Pipe/Size 40 1/2" 4L	Weld Type Butt	Cal. Block # 127	Couplant: Type 40		Date 6/17/82
				Batch No 8124			

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **1**

	Transducer			Instrument		
	S/N	N/A	L19401	Mfr.	Sonic	Model MK 1
	Size		1"	S/N	05304E	RepRate 1K
	Frequency		2.25 mhz	Reject	off	Filter High
	Beam Angle		45	Damp	min	Coax 12

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1T	N/A	N/A	40%	3.0	N/A	N/A	40%	2.9	N/A	N/A	N/A	N/A	9:40	12:05	N/A	N/A
2T			40%	6.0			30%	6.0								
3T			45%	9.0			40%	9.0								
Ref. dB			53 dB				51 dB									



Additional Comments/Sketch

R. Payne ANII 6/21/82



The
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of Richmond

Ultrasonic Examination Report - Continuation Sheet

Customer <i>LP & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>B 42</i>	Iso/Drawing No. <i>ZONE 42 R-2, FCI</i>
Procedure <i>ISI 2.2 R-0, FCI</i>	Exam Surface <i>O. D.</i>	Examiner/Level <i>Harry Longmitchu</i>	VCR Supervisor <i>Donnie Dina</i>	Date <i>6-17-82</i>
Component/Piping System <i>MAIN STEAM HEADER B</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-127</i>	Couplant: Type & Batch # <i>SONOTRACE 40 8134</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks	
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual		
<i>42-019</i>	<i>NA</i>	<i>PAR</i>	<i>PAR</i>	<i>YES</i>	<i>PAR</i>	<i>YES</i>	<i>SEE ATTACHED SHEET</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>RI</i>	<i>SAT</i>	<i>NA</i>

R. Payne ANI 6/21/82



The
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of Richmond

Ultrasonic Examination Report

Indication Record

Customer <i>LP&L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop <i>B</i>
Procedure <i>I.S.I. 2.2 R-0, F.C. 1</i>	Examiner/Level <i>Nary Longmichur II</i>	VCR Supervisor <i>Daniel D. ...</i>	Date <i>6-17-82</i>
Component/Piping System <i>MAIN STEAM HEADER B</i>	ISO Drawing No. <i>ZONE 42 R-2, F.C. 1</i>	Cal Standard No./Thickness <i>UT-127 1.50"</i>	

Weld No.	Ind No.	Max. Z DAC	Indication Length		Minimum Depth S.U. Sweep		Maximum Depth S.U. Sweep		Beam Angle	Beam Dir.	Base Metal Thickness 2 Side	Weld Thick.	Base Metal Thickness 5 Side	Remarks
			From	To	Pos.	Reading	Pos.	Reading						
<i>42-019</i>	<i>1</i>	<i>165%</i>	<i>5 3/8"</i>	<i>5 7/8"</i>	<i>1 1/16"(S)</i>	<i>3.2</i>	<i>1 5/32"(S)</i>	<i>3.2</i>	<i>0</i>	<i>0</i>	<i>1.371"</i>	<i>1.500</i>	<i>1.586</i>	



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Date 6-17-82

Page 5 of 5

To: _____

Subject INSPECTION LIMITATION
ZONE 42

WELD 42-019 BASE METAL SCAN HAD A PARTIAL ON
THE 2 SIDE FROM 5' TO 5'-5 1/2" IN THE
7 DIRECTION DUE TO NOZZLE
2 SCAN HAD A PARTIAL FROM 5' TO
5'-5 1/2" IN THE 7 DIRECTION DUE TO
NOZZLE
7 & 8 SCAN HAD A PARTIAL DUE TO
SLIGHT WELD CROWN

Signed Larry Longenecker II



D. Payne ANII 6/21/82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>LP&L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>8 42</i>
Component/Piping System <i>MAIN STEAM HEADER B</i>		Examiner/Level <i>Nary Longenecker II</i>	Date <i>6-17-82</i>
Procedure <i>I.S.I. 2.5 RO</i>	Iso/Drawing No. <i>ZONE 92 R-2, FC1</i>	VCR Supervisor <i>Daniel Payne</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument	Transducer		Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>KB-AEROTECH</i>	Size <i>.5"</i>	Cal. Block <i>UT-126</i>
Model <i>MARK-1</i>			Cal. Block
S/N <i>05473E</i>	Freq. <i>5. MHZ.</i>		Range Cal. <i>1.225 @ 7.0</i>
Reject <i>OFF</i>			Calibration Checks
Damp. <i>MIN.</i>	Serial No. <i>KB-2897</i>		
Freq. <i>5</i>			<i>IN 2:20</i>
Rep. Rate <i>1K</i>	Coax. Cable <i>6'</i>		<i>OUT 4:30</i>
Filter <i>H1</i>			
Video <i>NORM</i>	Gain <i>73 db</i>		
Couplant <i>SONOTRACE 40 8129</i>			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>42-002</i>	<i>12</i>	<i>1.173</i>	<i>1.243</i>	<i>1.138</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>42-002</i>	<i>2</i>	<i>1.155</i>	<i>1.260</i>	<i>1.138</i>					
<i>42-002</i>	<i>4</i>	<i>1.155</i>	<i>1.278</i>	<i>1.138</i>					
<i>42-002</i>	<i>6</i>	<i>1.173</i>	<i>1.260</i>	<i>1.138</i>					
<i>42-002</i>	<i>8</i>	<i>1.155</i>	<i>1.225</i>	<i>1.120</i>					
<i>42-002</i>	<i>10</i>	<i>1.138</i>	<i>1.208</i>	<i>1.120</i>					

Sketch/Identification



Ultrasonic Examination Report

6/21/82

Customer L. P. & L	Plant Waterford	Unit 3	Loop/Zone B/42	Iso/Drawing No. Zone 42 - R-2 - SC. 1
Procedure ISS22/RO/KC.1	Exam Surface OD	Examiner/Level Nary Longanich II	VCR Supervisor Denise P...	Date 6/17/82
Component/Piping System Main Steam Header B	Pipe Size 34"	Weld Type Butt	Cal. Block # 126 UT-126	Couplant: Sonotrack Type 40

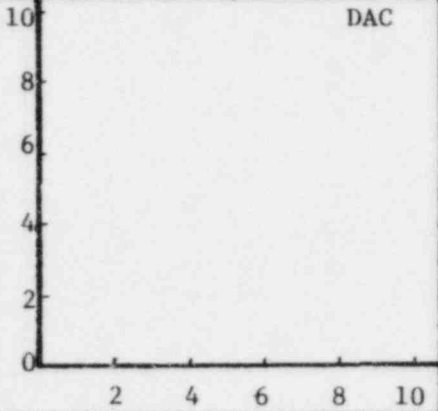
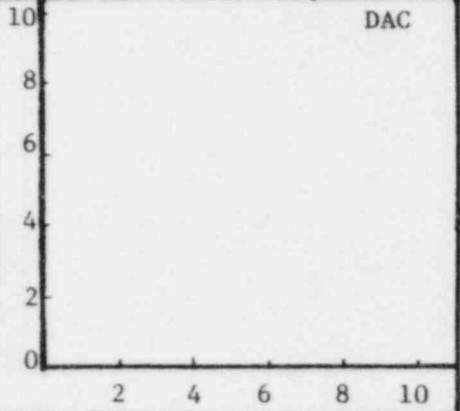
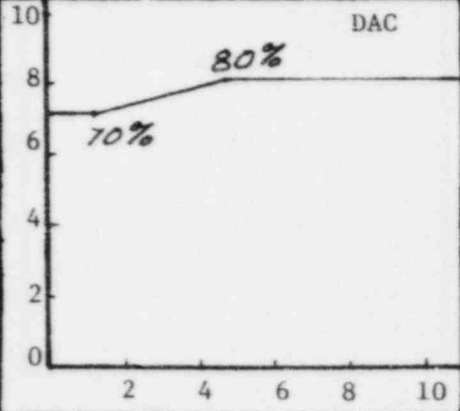
Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **1**

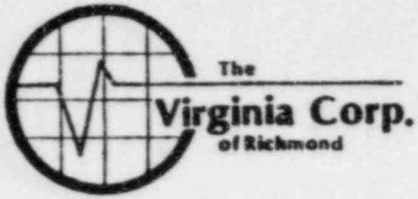
Transducer	Instrument		
	0°	45°	60°
S/N	KB2897	N/A	N/A
Size	.5"		
Frequency	5mhz		
Beam Angle	0	I	I

Mfr.		Model	
Sonic	05473 E	MK 1	1K
S/N		RepRate	
05473 E		High	
Reject		Filter	
OFF		6'	
Damp		Coax	
Min.		Norm	
Freq.		Video	
5mhz			

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1/4 T	70%	1.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2:20	4:30	N/A	N/A	N/A	N/A
3/4 T	40%	4.6															
1 T	NA	7.0															
Ref. dB	73 dB																



Additional Comments/Sketch



Ultrasonic Examination Report

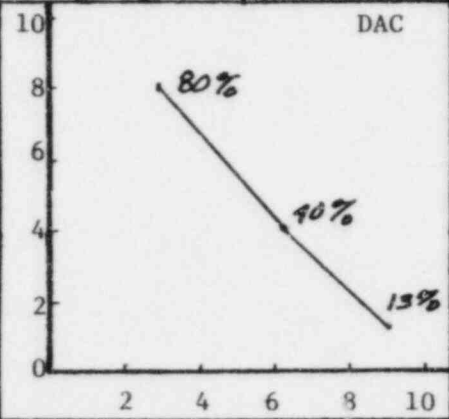
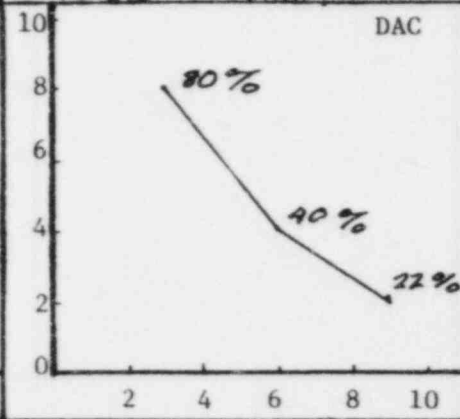
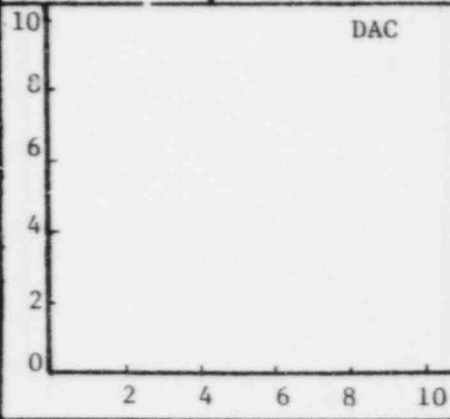
Customer L. P. & L		Plant Waterford	Unit 3	Loop/Zone B/42	Iso/Drawing No. Zone 42 - Rev. 2 - S.C. 2
Procedure ISI 2.2-20-SC.1	Exam Surface O.D.	Examiner/Level Navy Longnickel II		VCR Supervisor Daniel Dims	Date 6/17/82
Component/Piping System Main Steam Header (B) Inside Containment		Pipe/Size 34"	Weld Type Butt	Cal. Block # 61	Couplant: Sonotrace Type 40
				Batch No. 8124	

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **1**

	Transducer	0°	45°	60°	Instrument			
	S/N	N/A	D22063	N/A	Mfgr.	Sonic	Model	MB 2
	Size		.5"		S/N	05304E	RepRate	1B
	Frequency		2.25		Reject	055	Filter	High
	Beam Angle		45°		Damp	min	Coax	6'
					Freq.	2 mhz	Video	Norm.

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks							
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
1T	N/A	N/A	40%	3.0	N/A	N/A	N/A	40%	3.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2T			40%	6.0				40%	6.2									
3T			22%	9.0				13%	9.4									
Ref. dB			40 dB				42 dB											



Additional Comments/Sketch

D. Payne ANII 6/21/82



Ultrasonic Examination Report - Continuation Sheet Page 3 of 3

Customer LP&L	Plant WATERFORD	Unit 3	Loop/ Zone B 42	Iso/Drawing No. ZONE 42 R-2, F.C.1
Procedure I,SI. 2.2 R-2, FAI	Exam Surface O.D.	Examiner/Level Nary Longenecker II	VCR Supervisor Daniel J. Jones	Date 6-17-82
Component/Piping System MAIN STEAM HEADER B	Pipe Size 34"	Weld Type BUTT	Cal. Block UT-126	Couplant: Type & Batch # SONTRACE 40 8129

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
42-002	NA	YES	YES	YES	YES	NA	CLEAN	GROUND	NI	SAT	NA



R. Payne ANII 7/12/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>LP & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B 42</i>
Component/Piping System <i>MAINSTREAM HEADER B</i>		Examiner/Level <i>Navy Longenecker II</i>	Date <i>7-9-82</i>
Procedure <i>I.S.I. 2.5 R-0</i>	Iso/Drawing No. <i>ZONE 42 R-2, FLI</i>	VCR-Supervisor <i>Manuel Gomez</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration	
Mfgr. <i>SONIC</i>	Mfgr. <i>KB AEROTECH</i>	Size <i>.5" DIA</i>	Cal. Block <i>UT-127</i>		
Model <i>MARK 1</i>	Size <i>.5" DIA</i>	Cal. Block			
S/N <i>05473E</i>	Freq. <i>2.25 MHZ.</i>	Range Cal. <i>1.50" @ 7.0</i>			
Reject <i>OFF</i>	Serial No. <i>KB 2728</i>		Calibration Checks		
Damp. <i>MIN.</i>	Coax. Cable <i>6'</i>		<i>CAL. IN 9:30</i>		
Freq. <i>2 MHZ.</i>	Gain <i>64 db</i>		<i>CAL. OUT 11:40</i>		
Rep. Rate <i>1 K</i>					
Filter <i>H1</i>					
Video <i>NORM</i>					
Couplant <i>SONOTRACE 40 #8124</i>					

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>42-001</i>	<i>12</i>	<i>B</i>	<i>1.479</i>	<i>1.993</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>42-001</i>	<i>2</i>	<i>E</i>	<i>1.457</i>	<i>1.993</i>					
<i>42-001</i>	<i>4</i>	<i>V</i>	<i>1.479</i>	<i>1.993</i>					
<i>42-001</i>	<i>6</i>	<i>E</i>	<i>1.457</i>	<i>1.993</i>					
<i>42-001</i>	<i>8</i>	<i>L</i>	<i>1.457</i>	<i>1.993</i>					
<i>42-001</i>	<i>10</i>		<i>1.457</i>	<i>1.971</i>					

Sketch/Identification

D. Payne ANIE 11/6/82



Ultrasonic Examination Report

PAGE 1 OF 7

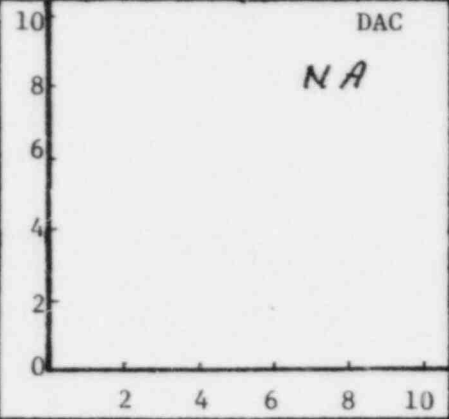
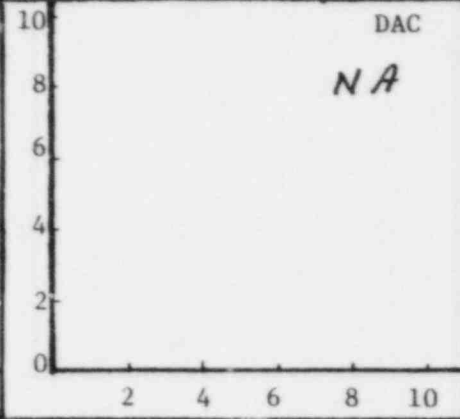
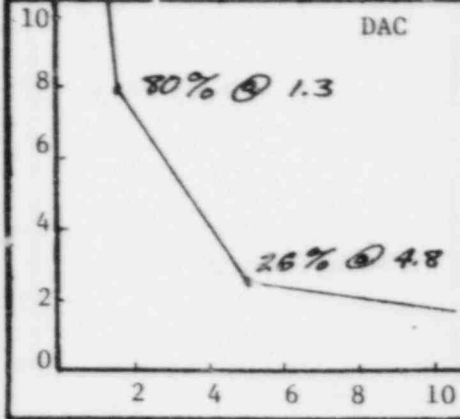
Customer LP & L	Plant WATERFORD	Unit 3	Loop/Zone B 42	Iso/Drawing No. ZONE 42 R-2, FC. 1
Procedure I.S.I. 2.2 R-0, FC. 2	Exam Surface O.D.	Examiner/Level Nary Horgenscher II	VCR Supervisor David Jones	Date 7-9-82
Component/Piping System MAINSTEAM HEADER B INSIDE		Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-127
		Couplant: SONOTRACE		Batch No. 8128

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

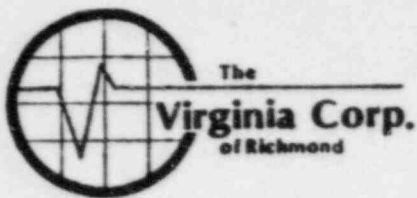
Transducer	0°	45°	60°	Instrument			
S/N	KB2728	NA	NA	Mfgr.	SONIC	Model	MARK I
Size	.5" DIA.			S/N	05473E	RepRate	1K
Frequency	2.25 MHz			Reject	OFF	Filter	H1
Beam Angle	0°			Damp	MIN.	Coax	6'
				Freq.	2. MHz	Video	NORM

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1/4 T	80%	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	9:30	11:40	NA	NA	NA	NA
3/4 T	26%	4.8															
1 T	NA	7.0															
Ref. dB	64 db																



Additional Comments/Sketch

D. Payne ANIE 7/12/82



Ultrasonic Examination Report

PAGE 2 OF 7

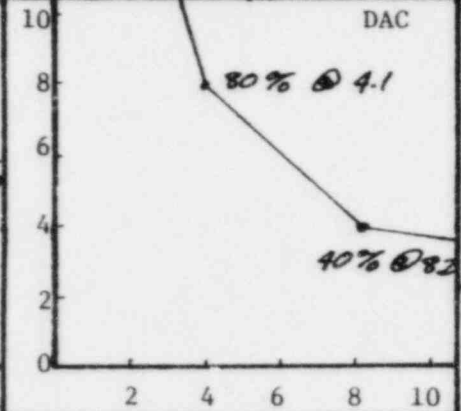
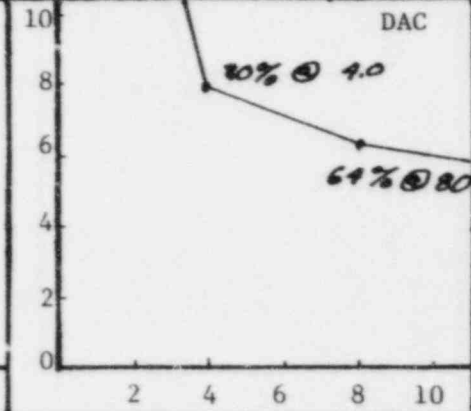
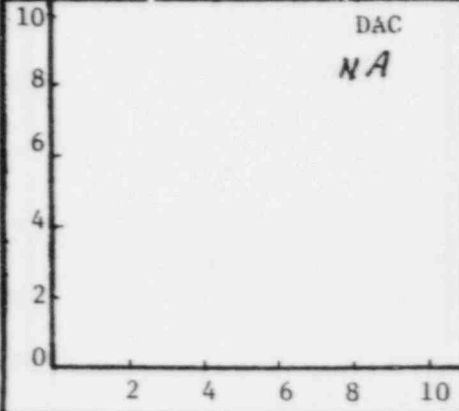
Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone B 42	Iso/Drawing No. ZONE 42 R-2 F.C.1
Procedure ISI 2.2 R.O.F.C.2	Exam Surface O.D.	Examiner/Level Nary Komencher II	VCR Supervisor Nary Komencher	Date 7-9-82
Component/Piping System MAINSTEAM HEADER B COAST.	INSIDE	Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-127
		Couplant: SONOTRACE		Batch No. 8122

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
S/N	NA	F18164	NA	Mfg.	SONIC	Model	MARK I
Size		.5" DIA		S/N	01996E	RepRate	1K
Frequency		2.25 MHz		Reject	OFF	Filter	H1
Beam Angle		45°		Damp	MIN.	Coax	6'
				Freq.	2. MHz	Video	NORM

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1 T	NA	NA	80%	4.0	NA	NA	80%	4.1	NA	NA	NA	NA	9:35	11:45	NA	NA
2 T			64%	8.0			40%	8.2								



Additional Comments/Sketch

D. Payne ANIL 7/12/82



The Virginia Corp. of Richmond

Ultrasonic Examination Report - Continuation Sheet

Page 3 of 7

Customer LP & L	Plant WATERFORD	Unit 3	Loop/ Zone B 42	Iso/Drawing No. ZONE 42 R-Z, FC. 1
Procedure ISI. 2.2 RO, FC. 2	Exam Surface O.D.	Examiner/Level Gary Hogenescher II	VCR Supervisor Merrill Jensen	Date 7-9-82
Component/Piping System MAINSTEAM HEADER B	INSIDE CONT.	Pipe/Size 40"	Weld Type BUTT	Cal. Block UT-127
			Couplant: Type & Batch # SONOTRACE 40 #8124	

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks	
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual		
42001	NA	YES	PAR	PAR	PAR	PAR	SEE ATTACHED SHEETS	SMOOTH	GROUND	RI	SAT	*

* O.D. GEOMETRY NOTED IN 5 SCAN 360°
 AT 170% OF DAC MIN. DEPTH 2 3/8" (5) AT
 8.8 SW. MAX. DEPTH 2 5/8" (5) AT 9.2 SW.
 SIGNAL COULD NOT BE DAMPED AT THE
 SURFACE.



Ultrasonic Examination Report

PAGE 4 OF 7 Indication Record

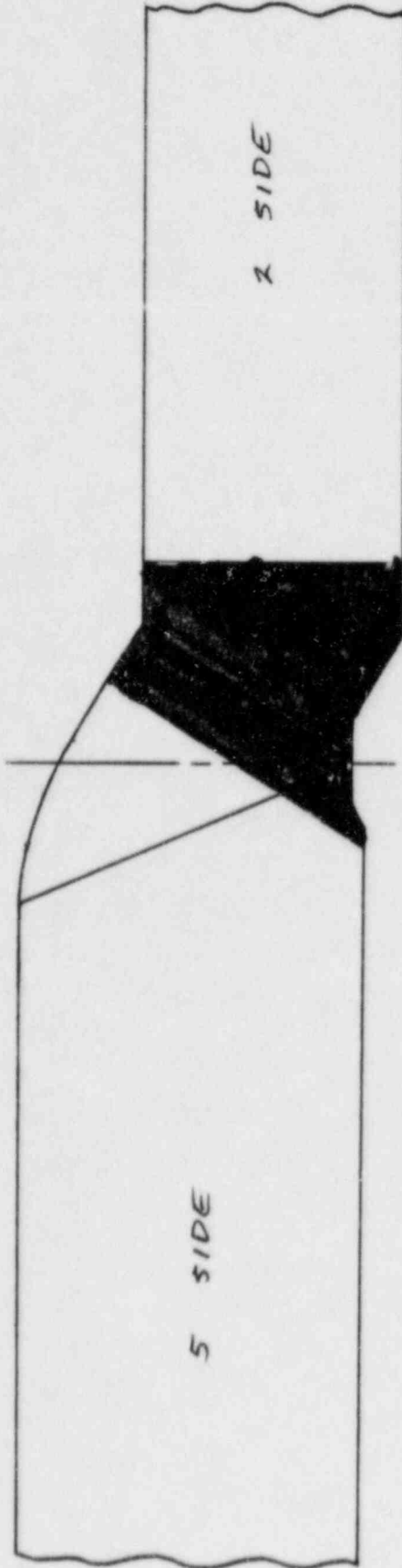
D. Payne ANET 7/12/82

Customer	LP & L	Plant	WATERFORD	Unit	3	Loop	B
Procedure	I.S.I. 2.2 R-O, F.C. 2	Examiner/Level	<i>Vary Longenecker II</i>	VCR Supervisor	<i>Daniel Jensen</i>	Date	7-9-82
Component/Piping System	MAINSTEAM HEADER B	ISO Drawing No.	ZONE 4Z R-2, F.C. 1	Cal. Standard No./Thickness	UT-127		1.50"
	<i>INSIDE</i>		<i>CONT.</i>				

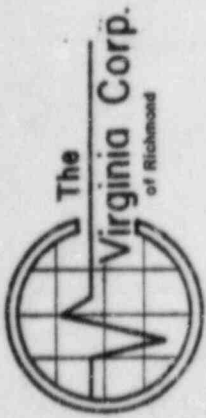
Weld No.	Ind No.	Max. Z DAC	Indication Length		Minimum Depth		Maximum Depth		Beam Angle	Beam Dir.	Base Metal Thickness 2 Side	Weld Thick.	Base Metal Thickness 5 Side	Remarks
			From	To	S.U. Pos.	Sweep Reading	S.U. Pos.	Sweep Reading						
42001	1	133%	46 $\frac{9}{16}$	46 $\frac{3}{4}$	$\frac{5}{8}$ " (Z)	2.6	$\frac{9}{16}$ " (Z)	2.6	0°	0°	1.457	BEVEL	1.993"	



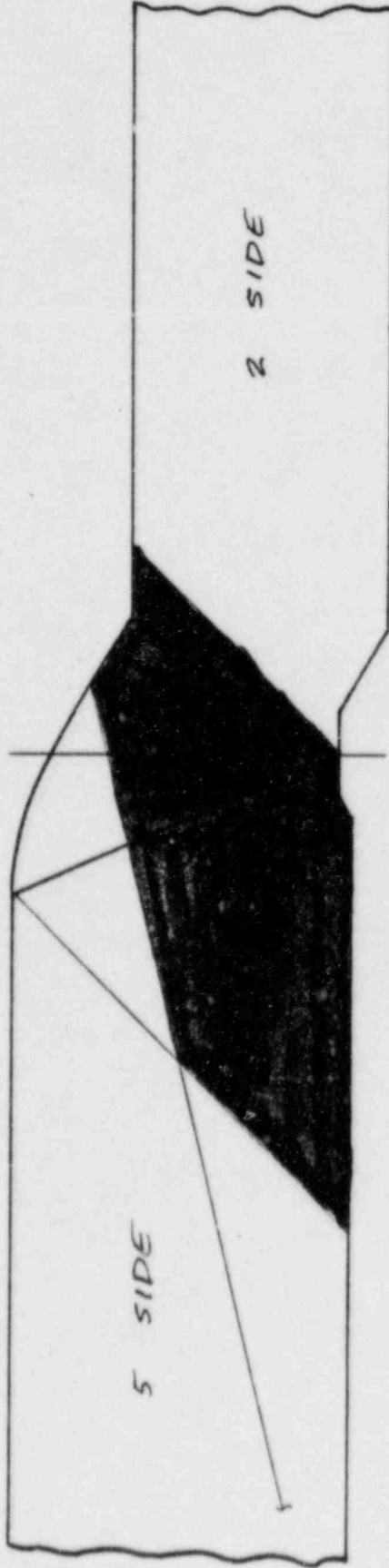
WELD NO. 42-001



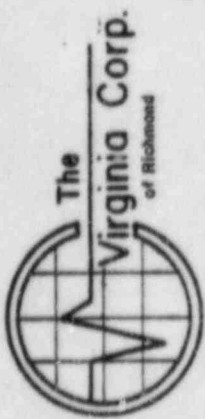
AREA NOT COVERED BY
0°, 7 & 8 SCANS



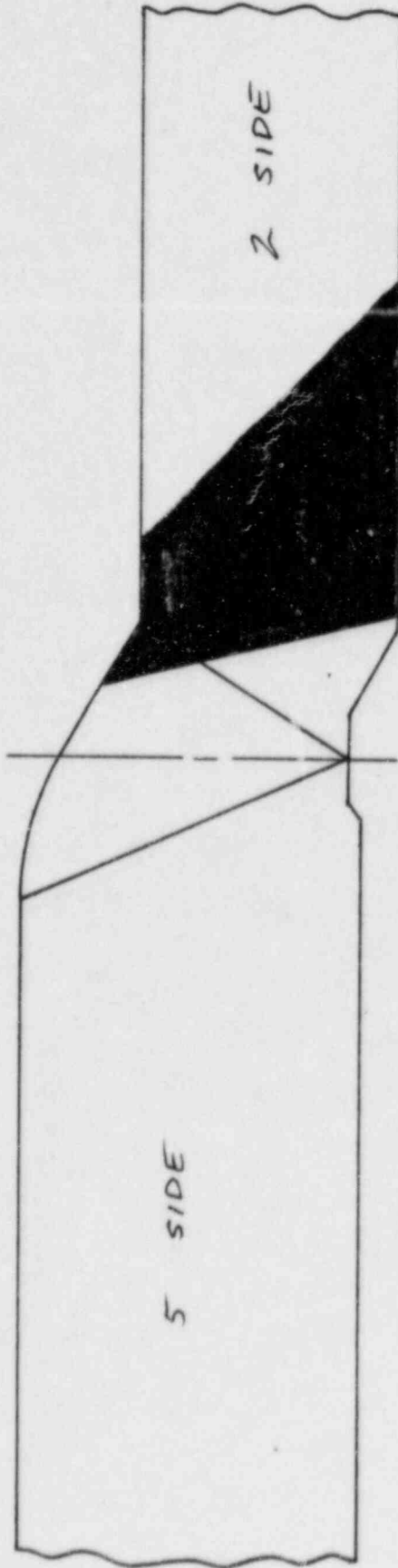
WELD NO. 42-001



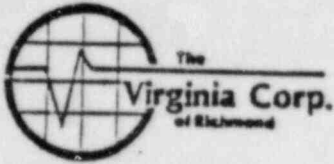
AREA NOT COVERED BY
2 SCAN



WELD NO. 42-001



AREA NOT COVERED
BY 5 SCAN



D. Payne ANII 7/19/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>L P & L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>2142</i>
Component/Piping System <i>Mainsteam Header B-Inside</i>		Examiner/Level <i>David J. Fokem, III</i>	Date <i>7/16/82</i>
Procedure <i>ISI 7.5 REV 0</i>	Iso/Drawing No. <i>Zone 42 Rev 2511</i>	VCR Supervisor <i>David J. Fokem, III</i>	Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

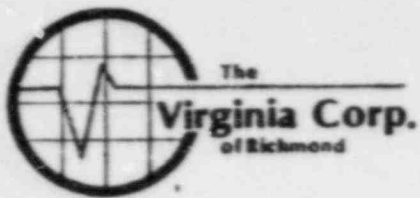
Equipment

Instrument		Transducer		Calibration
Mfgr. <i>Sonic</i>	Mfgr. <i>Parametric</i>	Size <i>.50"</i>	Cal. Block <i>UT-127</i>	
Model <i>MARK I</i>			Cal. Block <i>N/A</i>	
S/N <i>01058E</i>	Freq. <i>2.25 MHz</i>		Range Cal. <i>2.36 ± 100</i>	
Reject <i>OFF</i>			Calibration Checks	
Damp. <i>8</i>	Serial No. <i>44651</i>		Initial <i>12:51</i>	
Freq. <i>2.0 MHz</i>	Coax. Cable <i>6' BNC-Dual</i>		Final <i>2:57</i>	
Rep. Rate <i>1K</i>				
Filter <i>OFF</i>	Gain <i>67 dB</i>			
Video <i>Norm</i>				
Couplant <i>Surface 40 #8/24</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>42-011</i>	<i>12</i>	<i>1.27"</i>	<i>1.27"</i>	<i>1.32"</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<i>42-011</i>	<i>2</i>	<i>1.34"</i>	<i>1.34"</i>	<i>1.34"</i>					
<i>42-011</i>	<i>4</i>	<i>1.34"</i>	<i>1.34"</i>	<i>1.37"</i>					
<i>42-011</i>	<i>6</i>	<i>1.32"</i>	<i>1.41"</i>	<i>1.34"</i>					
<i>42-011</i>	<i>8</i>	<i>1.41"</i>	<i>1.34"</i>	<i>1.39"</i>					
<i>42-011</i>	<i>10</i>	<i>1.23"</i>	<i>1.32"</i>	<i>1.32"</i>					

Sketch/Identification



Ultrasonic Examination Report *D. Payne, ANIZ 7/19/82*

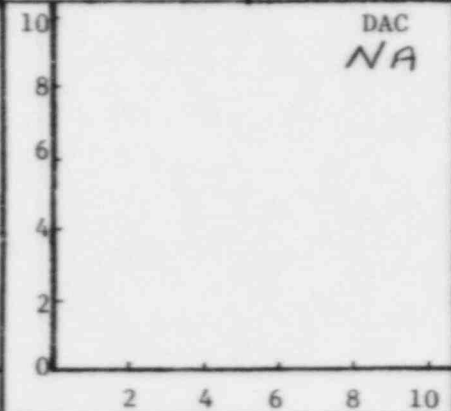
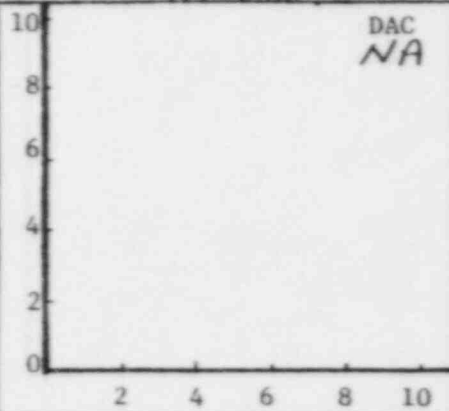
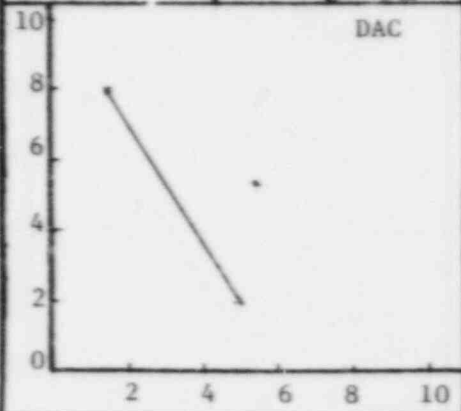
Customer LP + L		Plant Waterford		Unit #3	Loop/Zone 2/42	Iso/Drawing No. zone 42 Rev. 2 FL1	
Procedure ISI-2.8 Rev 124	Exam Surface OD	Examiner/Level Emil J. Fobert		VCR Supervisor Devin J. ...		Date 7-16-82	
Component/Piping System main st. Header B / inside containment		Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-127	Couplant: <small>Schott/Ac</small> Type 40 Batch No. 8124		

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

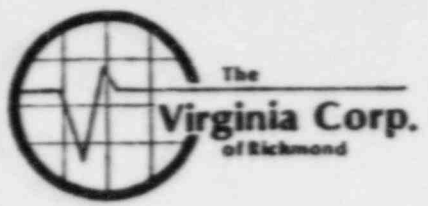
Transducer	0°	45°	60°	Instrument			
S/N	44651	NA	NA	Mfr.	SONIC	Model	MARK I
Size	-50"			S/N	01058E	RepRate	1K
Frequency	2.25 MHz			Reject	off	Filter	off
Beam Angle	0°			Damp	8	Coax	6' Gv. To Act
				Freq.	2.0 MHz	Video	Norm

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1/4 T	80%	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	12:51	2:57	NA	NA	NA	NA
3/4 T	20%	4.5															
Ref. dB	60 dB		NA				NA										



Additional Comments/Sketch

Ultrasonic Examination Report



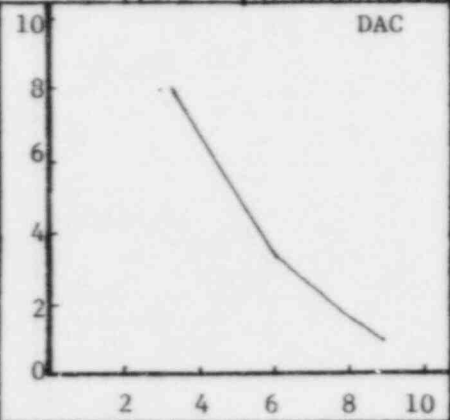
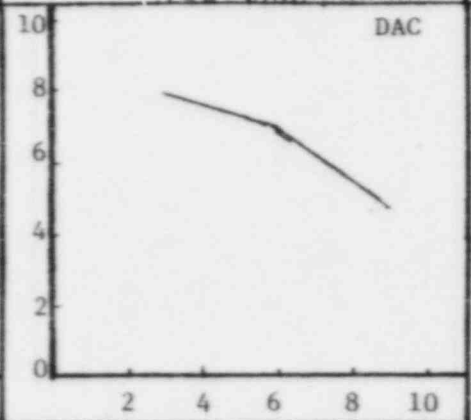
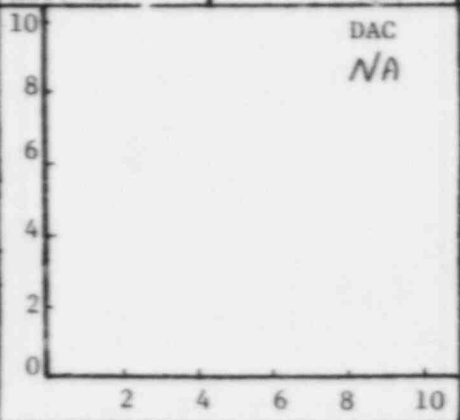
Customer LP+L		Plant Waterford		Unit # 3	Loup/Zone 2 / 42	Iso/Drawing No. ZONE 42 Rev. 2 FL-1	
Procedure ISI-2.8 Rev. 1/82		Exam Surface OD	Examiner/Level David L. Smith		VER Supervisor Dennis [Signature]		Date 7-16-82
Component/Piping System Main St. Header B / Inside Containment			Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-127	Couplant: <small>Sawtooth</small> Type 70 Batch No. 8124	

Continuation Sheet Attached
 Yes No

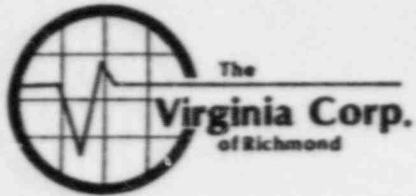
Field Changes:
Yes No
If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
	S/N	NA	L19134	NA	Mfr.	SONIC	Model MARK I
	Size		1"		S/N	05473 E	RepRate 1K
	Frequency		2.25 mhz		Reject	off	Filter off
Beam Angle		45°		Damp	8	Coax 6' BNC type	
				Freq.	2.0 mhz	Video	None

Calibration 0°			2 & 5 Scan					7 & 8 Scan					Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
1T	NA	NA	80%	3.0	NA	NA	NA	80%	3.1	NA	NA	NA	NA	NA	NA	1:03	2:59	NA	NA
2T			75%	6.0				35%	6.2										
3T			50%	9.0				15%	9.3										
Ref. dB		NA	49 dB					49 dB											



Additional Comments/Sketch



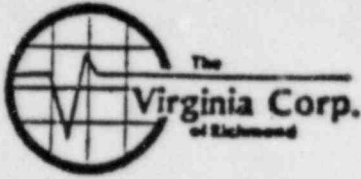
Ultrasonic Examination Report - Continuation Sheet

Page 3 of 3

D. Payne ANII 7/19/82

Customer <i>LFL</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/ Zone <i>2/42</i>	Iso/Drawing No. <i>Zone 42 Rev. 2 E.C.I.</i>
Procedure <i>1512</i>	Exam Surface <i>OP</i>	Examiner/Level <i>David A. Johnson III</i>	VCR Supervisor <i>David Payne</i>	Date <i>7/16/82</i>
Component/Piping System <i>Main Steam Header B-Join</i>	Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block <i>UT-127</i>	Couplant: Type & Batch # <i>Sonotrace 90# 8124</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
42-011	OP	Yes	Yes	OP	OP	Weld crown	Smooth	Contour Ground	NI	Ser.	Intermittent I.D. geom. 5 scan 10°- 25° 50-55° OP, also Intermittent O.D. geom. 20°-210° 2 scan 50-60° Pass



M.R. Martin, ANII 9-29-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>L.P. & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B 42</i>
Component/Piping System <i>MAIN STEAM HEADER B-INSIDE CONT</i>	Examiner/Level <i>Nary Longenecker II</i>	Date <i>9-26-82</i>	
Procedure <i>ISI 2.5 R-0</i>	Iso/Drawing No. <i>ZONE 42 R-2, F.C. 2</i>	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>KB AZROTECH</i>	Size <i>.5" DIA</i>	Cal. Block <i>UT-127</i>	
Model <i>MARK I</i>	Serial No. <i>KB 2897</i>	Freq. <i>5.0 MHz</i>	Cal. Block	
S/N <i>01058 E</i>	Coax. Cable <i>6'</i>	Gain <i>79db</i>	Range Cal. <i>1.5" @ 60</i>	
Reject <i>OFF</i>	Gain		Calibration Checks	
Damp. <i>MIN</i>			<i>CAL IN 1:00</i>	
Freq. <i>5.0 MHz</i>			<i>CAL OUT 4:35</i>	
Rep. Rate <i>3K</i>				
Filter <i>H1</i>				
Video <i>NORM</i>				
Couplant <i>SUNOTRACE 40 #8124</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>42-024</i>	<i>12</i>	<i>2.225</i>	<i>2.05</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>42-024</i>	<i>2</i>	<i>2.20</i>	<i>2.025</i>						
<i>42-024</i>	<i>4</i>	<i>2.20</i>	<i>2.025</i>						
<i>42-024</i>	<i>6</i>	<i>2.20</i>	<i>2.025</i>						
<i>42-024</i>	<i>8</i>	<i>2.20</i>	<i>2.025</i>						
<i>42-024</i>	<i>10</i>	<i>2.175</i>	<i>2.00</i>						

Sketch/Identification

5 SIDE TAPERED

W.R. Martin, ANEF 9-29-82



Ultrasonic Examination Report

PAGE 1 OF 5

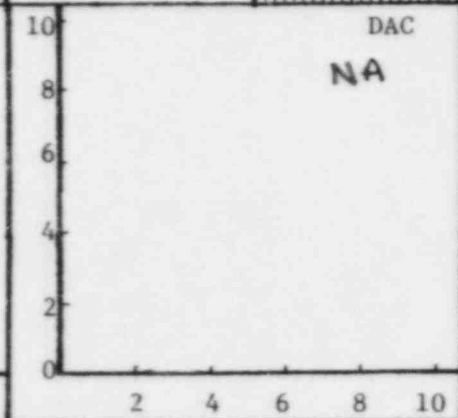
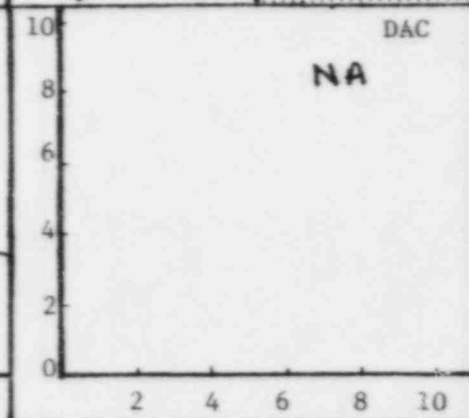
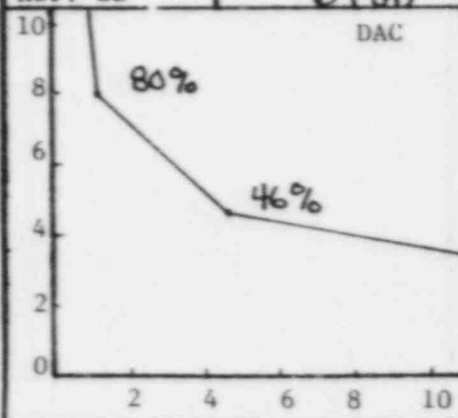
Customer LP+L	Plant WATERFORD	Unit 3	Loop/Zone R 42	Iso/Drawing No. ZONE 42 R-2.F.C.2
Procedure ISO 22 R-2.F.C.2	Exam Surface O.D.	Examiner/Level Ray Longmeyer II	VCR Supervisor Daniel Jensen	Date 9-26-82
Component/Piping System MAIN STEAM HEADER B-INSIDE CONT		Pipe Size 40"	Weld Type BUTT	Cal. Block UT-127
			Couplant: SONOTRACE	Type 40 Batch No 8124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

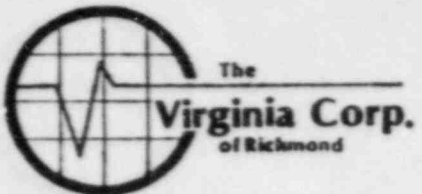
Transducer	0°	45°	60°	Instrument			
S/N	K62897	NA	NA	Mfr.	SONIC	Model	MARK I
Size	5" DIA.			S/N	01058 E	RepRate	3K
Frequency	5.0 MHz			Reject	OFF	Filter	H1
Beam Angle	0	↓	↓	Damp	MIN	Coax	6'
				Freq.	5.0 MHz	Video	Norm

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks							
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
1/4 T	80%	1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1:00	4:35	NA	NA	NA	NA
3/4 T	46%	4.2																
1T	NA	6.0																
Ref. dB	69 db																	



Additional Comments/Sketch

Ultrasonic Examination Report PAGE 2 OF 5



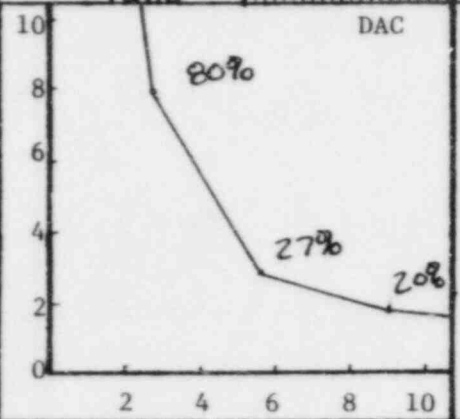
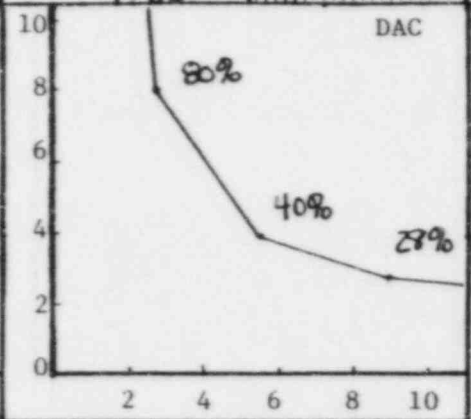
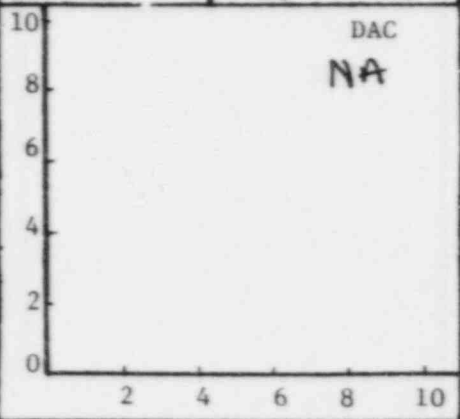
Customer: LP+L Plant: WATERFORD Unit: 3 Loop/Zone: B 42 Iso/Drawing No.: Zone 42 R-2, EC-2
 Procedure: RD & L. Exam Surface: O.D. Examiner/Level: Tom Longenecker II VGR Supervisor: Daniel Jensen Date: 9-26-82
 Component/Piping System: MAIN STEAM HEADER B-INSIDE CONT. Pipe Size: 40" Weld Type: BUTT Cal. Block #: UT-127 Couplant: SONTRACE Type: 40 Batch No: 8124

Continuation Sheet Attached
 Yes No

Field Changes:
Yes No
If Yes, Number: 2

Transducer	0°	45°	60°	Instrument			
S/N	NA	G07150	NA	Mfr.	SONIC	Model	MARK I
Size		.5" Dia		S/N	03704E	RepRate	3K
Frequency		2.25MHz		Reject	OFF	Filter	H1
Beam Angle	↓	45°	↓	Damp.	MIN.	Coax	6'
				Freq.	2.0 MHz	Video	NORM

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks								
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
1T	NA	NA	80%	3.0	NA	NA	NA	80%	3.1	NA	NA	NA	NA	NA	NA	1:04	4:38	NA	NA
2T			40%	5.8				27%	5.9										
3T			28%	9.0				20%	9.0										
Ref. dB																			
							41 db												



Additional Comments/Sketch

W.R. Martin, ANII 9-29-82

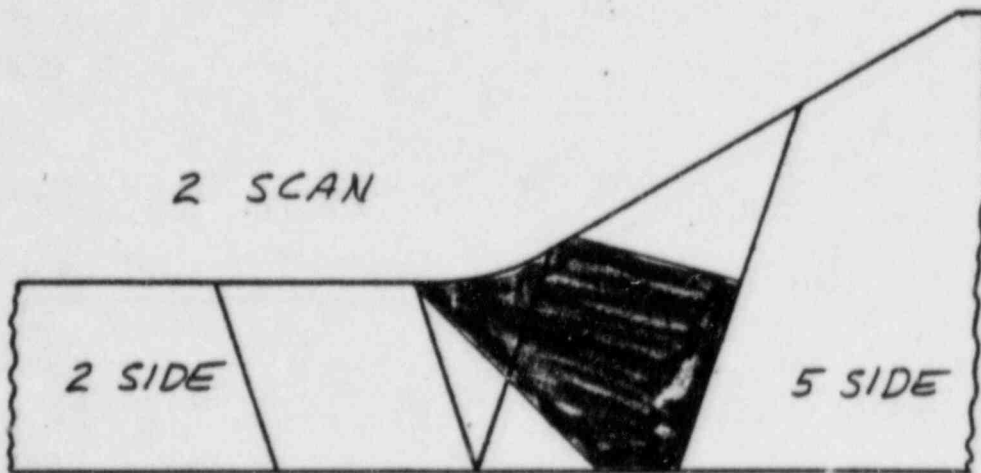
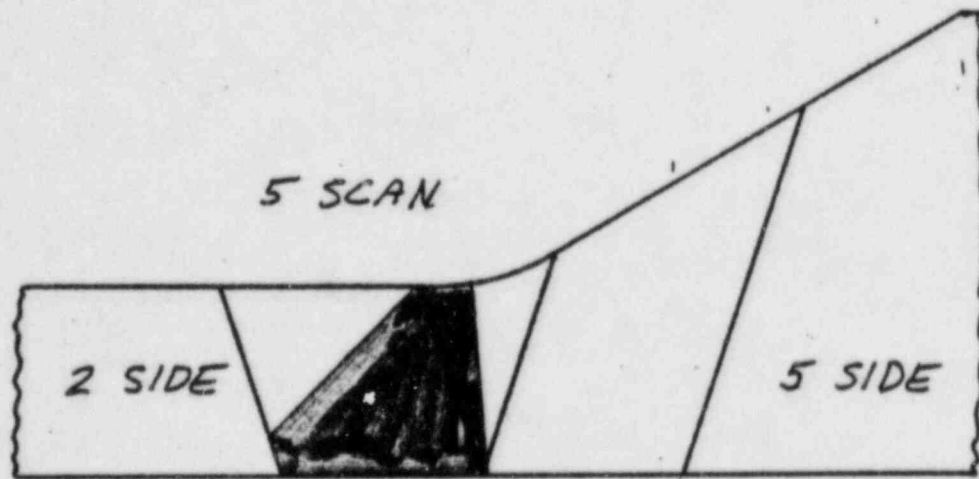
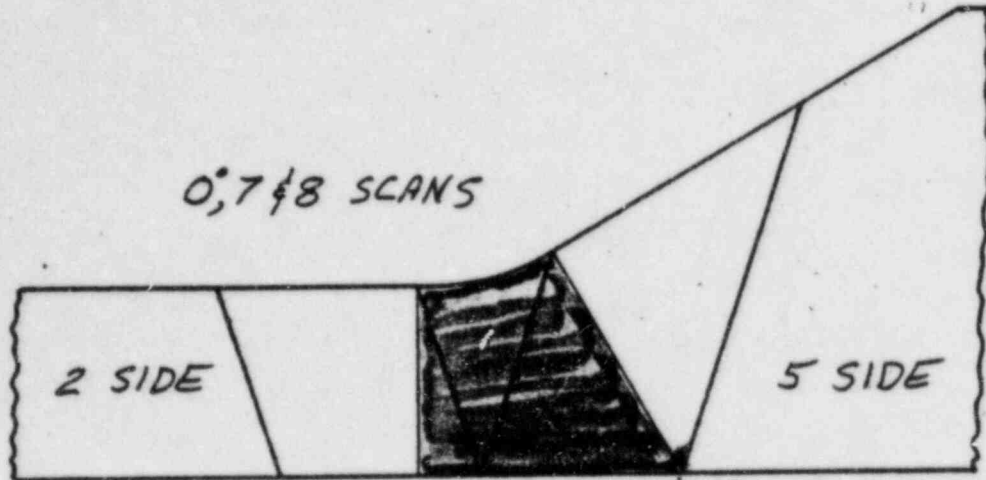


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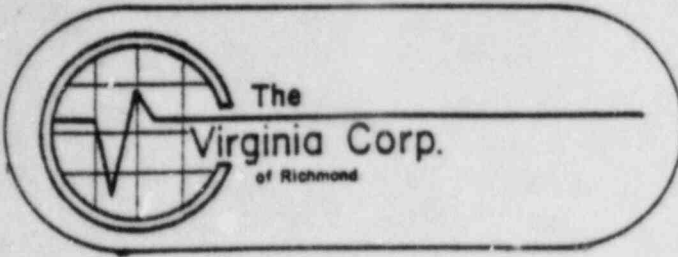
Ultrasonic Examination Report - Continuation Sheet

Customer <i>LP & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>B 42</i>	Iso/Drawing No. <i>ZONE 42 R-2, F.C.2</i>
Procedure <i>ISI. 22 RO, FLCZ</i>	Exam Surface <i>O.O.</i>	Examiner/Level <i>Navy Longenecker II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>9-26-82</i>
Component/Piping System <i>INSIDE MAIN STEAM HEADER B- CONT.</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-127</i>	Couplant: Type & Batch # <i>SONOTRAXE 40 8124</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
42024	NA	PAR	PAR	PAR	PAR	SEE ATTACHED SHEET	CLEAN	GROUND	NI	SAT.	SEE ATTACHED



■ AREA NOT COVERED



DATE 9-26-82

PAGE 5 OF 5

TO _____ SUBJECT REMARKS

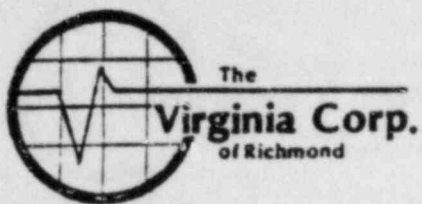
WELD NO. 42-024 IN 5 SCAN GEOMETRY NOTICED
WITH 45° SHEAR FROM 1 1/8" (5) @ 6.4 SW.
TRAVELING TO 2 1/2" (5) @ 8.0 SW. JUST
BELOW 5.7% DAC. 360°.

AND FROM 2 1/2" (5) @ 6.4 SW.
TRAVELING TO 5 5/8" (5) @ 9.4 SW. JUST
BELOW 50% DAC 360°.

GEOMETRY NOTICED IN 5 SCAN
AT 2" (2) @ 8.6 SW. 75% DAC
INTERMITTENT 360°

GEOMETRY NOTICED IN 5 SCAN AT
3" (2) @ 6.6 SW. 135% DAC. 360°

SIGNED Gary Longenecker



M.R. Martin, ANII 10-25-P2
Magnetic Particle
Examination Report

Customer: LP+L Plant: Waterford Unit: 3 Loop/Zone: N/A/43

Procedure: 1514.3 R.O. Examiner/Level: Robert J. Orentlich II VCR Supervisor: Daniel Jones Date: 6-24-82

Component/Piping System: Main Steam Header A- outside ISO Drawing No.: Zone 43 R. 2 F.C. 2 Surface Condition: Ground

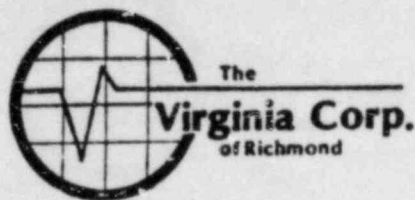
Type of Particles: Wet Dry Visible Fluorescent Manufacturer: Magix flux Type: Far red Batch Number: R1M110

Current: AC DC HWDC Machine Mfr.: Parker Research Type/Model: Contour Probe Serial No.: 4604

Magnetization: Continuous Residual Coil: N/A Amps. No. Turns: N/A Prods: N/A Spacing Amps.: N/A Yoke: ^{See} Comments Spacing below

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
43-005LA-004	6" Pole Spacing	✓		✓	
43-005LA-020	6" Pole Spacing	✓		✓	
43-043	4" Pole Spacing	✓		✓	
43-086	4" Pole Spacing	✓		✓	
43-044	4" Pole Spacing	✓		✓	
43-062	4" Pole Spacing	✓		✓	
43-063	4" Pole Spacing	✓		✓	
43-064	3" Pole Spacing	✓		✓	
43-066	3" Pole Spacing	✓		✓	
43-067	4" Pole Spacing	✓		✓	

Adequate field was verified at all pole spacings using field indicator #15



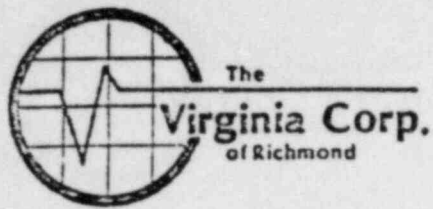
M.R. Martin, ANEI 11-9-82

Magnetic Particle

Examination Report

Customer LP+L	Plant Waterford	Unit 3	Loop/Zone N/A / 43
Procedure ISI-4.3 R.O	Examiner/Level Robert Overstreet II	VCR Supervisor Daniel Jensen	Date 6-24-82
Component/Piping System Main Steam Header A-outside Cont.	ISO Drawing No. ZONE 43 R.2 F.C.2	Surface Condition Ground	
Type of Particles Wet <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Visible <input checked="" type="checkbox"/> Fluorescent <input type="checkbox"/>	Manufacturer Magnaflux	Type Barred	Batch Number 81M110
Current <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> HWDC	Machine Mfr. Parker Research	Type/Model Contour Probe	Serial No. 4604
Magnetization <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Residual	Coil N/A Amps. N/A No. Turns	Prods N/A Spacing N/A Amps.	Yoke See Comments Below

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
43-020	4" Pole spacing	✓		✓	



Magnetic Particle
D. Payne ANEZ 7/2/82
Examination Report

Customer LP+L		Plant Waterford		Unit 3		Loop/Zone N/A / 43	
Procedure 1514.3 R.0		Examiner/Level Robert J. Crestreit II		VGR Supervisor [Signature]		Date 6-30-82	
Component/Piping System Main steam header A-Outside Cont.				ISO Drawing No. ZONE 43 R.2 F.C.3		Surface Condition Ground	
Type of Particles Wet <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Visible <input checked="" type="checkbox"/> Fluorescent <input type="checkbox"/>		Manufacturer Magnaflux		Type Ga-red		Batch Number 814110	
Current <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> HWDC		Machine Mfr. Parker Research		Type/Model Contour Probe		Serial No. 4604	
Magnetization <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Residual	Coil <u>N/A</u> Amps. <u>N/A</u> No. Turns	Prods <u>N/A</u> Spacing <u>N/A</u> Amps.	Yoke <u>5"</u> Spacing				

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
43-040	Adequate field was verified using field indicator #15.	✓		✓	



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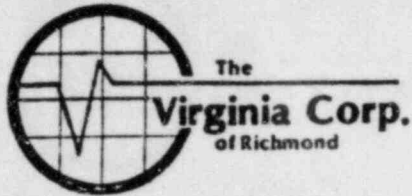
M.R. Martin, ANII 10-7-82

Magnetic Particle

Examination Report

Customer <i>L P & L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA/43</i>
Procedure <i>ISI-4.3 Rev D FC-0</i>	Examiner/Level <i>Ma. A. Stephens II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>7-10-82</i>
Component/Piping System <i>Main Steam Header A-Outside Containment</i>	ISO Drawing No. <i>Zone 43 Rev 2 FC-4</i>	Surface Condition <i>Ground</i>	
Type of Particles <input checked="" type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry <input checked="" type="checkbox"/> Visible <input type="checkbox"/> Fluorescent	Manufacturer <i>Magnaflux</i>	Type <i>8A-Red</i>	Batch Number <i>81M110</i>
Current <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> HWDC	Machine Mfr. <i>Parker Research</i>	Type/Model <i>DA-200 Contact Probe</i>	Serial No. <i>5801</i>
Magnetization <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Residual	Coil <i>NA</i> Amps. <i>NA</i> No. Turns	Prods <i>NA</i> Spacing <i>NA</i> Amps.	Yoke <i>6"</i> Spacing

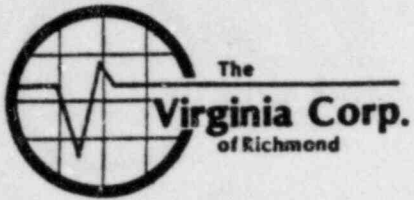
Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
<i>43-083</i>	<i>ADEQUATE FIELD WAS VERIFIED WITH MPFI SA¹⁷</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	



Magnetic Particle
D. Payne ANZI 7/30/82
Examination Report

Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA/43</i>
Procedure <i>IST-43 Rev C EC-1</i>	Examiner/Level <i>Gary M. Hoffmann</i>	VPR Supervisor <i>Daniel Jones</i>	Date <i>7-29-82</i>
Component/Piping System <i>Main Steam Header A Outside Containment</i>		ISO Drawing No. <i>Z10243 Rev 2 EC-4</i>	Surface Condition <i>Ground</i>
Type of Particles Wet <input type="checkbox"/> Dry <input type="checkbox"/> Visible <input checked="" type="checkbox"/> Flourescent <input type="checkbox"/>		Manufacturer <i>Magnaflux</i>	Type <i>8A-Red</i> Batch Number <i>81M110</i>
Current <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> HWDC	Machine Mfr. <i>Parker Research</i>	Type/Model <i>DA-200 Contour</i>	Serial No. <i>4604</i>
Magnetization <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Residual	Coil <i>NH</i> Amps. <i>NH</i> No. Turns	Prods <i>NA</i> Spacing <i>NA</i> Amps.	Yoke <i>7"</i> Spacing

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
<i>43-082</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

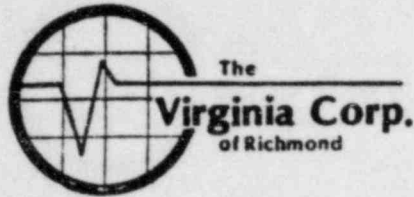


Liquid Penetrant
D. Payne ANET 7/30/82
 Examination Report

Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA/43</i>
Procedure <i>ISI-3.1 Rev. 0 FC-3</i>	Examiner/Level <i>Michael P. ... LVI</i>		Date <i>7-29-82</i>
Component/Piping System <i>Mainstem Header A Outside Cont.</i>	ISO Drawing No. <i>Zone 43 Rev. 2 FC-4</i>	VGR Supervisor <i>Daniel Jones</i>	

	Manufacturer	Type	Batch No.	
Penetrant	<i>Sherwin Inc.</i>	<i>Dubl-Chek</i>	<i>474-015</i>	
Developer	<i>Sherwin Inc</i>	<i>Dubl-Chek</i>	<i>129 F6</i>	
Remover	<i>Sherwin Inc</i>	<i>Dubl-Chek</i>	<i>225 B4</i>	

Weld/Item Number	Comments	PT Results		VT Results	
		NRI	RI	SAT.	UNSAT.
<i>43-056</i>		✓		✓	



W.R. Martin, ANII 9/29/82
Magnetic Particle

Examination Report

Customer *L P & L* Plant *Waterford* Unit # *3* Loop/Zone *1 / 43*

Procedure *ISI-4.3 Rev. 0 EC.1* Examiner/Level *Michael E. Smith II* VGR Supervisor *Donald Jones* Date *9-25-82*

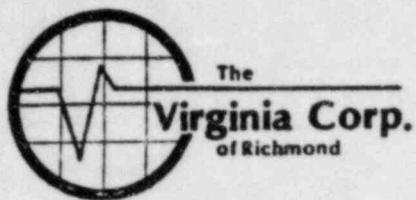
Component/Piping System *Main Steam Header A OUTSIDE CONTAINMENT* ISO Drawing No. *2004 43 Rev. 2 EC. 2* Surface Condition *GROUND*

Type of Particles Wet Dry Visible Flourescent Manufacturer *MAGNAFLUX* Type *8A Red* Batch Number *81M110*

Current AC DC HWDC Machine Mfr. *Parker Research* Type/Model *CONTAIN PROBE* Serial No. *7133*

Magnetization Continuous Residual Coil *N/A* Amps. Prods *N/A* Spacing Yoke *6"* Spacing

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
<i>43-079</i>	<i>Adequate field was verified using</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<i>43-081</i>	<i>MPEI # 17</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<i>43-080LA-079</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<i>43-080LA-079</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<i>43-080LA-081</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<i>43-080LB-081</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

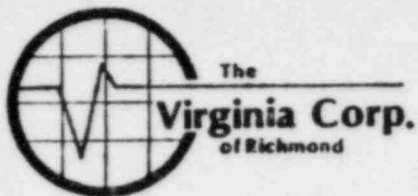


Magnetic Particle

M.R. Martin, ANII 10/5/82
Examination Report

Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit # <i># 3</i>	Loop/Zone <i>N/A / 43</i>
Procedure <i>ISI-4.3 Rev. 0 EC. 1</i>	Examiner/Level <i>Michael E. Smith II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>10-1-82</i>
Component/Piping System <i>Main Steam Header A outside containment</i>	ISO Drawing No. <i>Zone 43 Rev. 2 EC. 6</i>	Surface Condition <i>GROUND</i>	
Type of Particles <input checked="" type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry <input checked="" type="checkbox"/> Visible <input type="checkbox"/> Fluorescent	Manufacturer <i>MAGNAFLUX</i>	Type <i>8A Red</i>	Batch Number <i>81A:110</i>
Current <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> HWDC	Machine Mfr. <i>Parker Research</i>	Type/Model <i>Contour Probe</i>	Serial No. <i>7133</i>
Magnetization <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Residual	Coil <i>N/A</i> Amps. <i>N/A</i> No. Turns	Prods <i>N/A</i> Spacing <i>N/A</i> Amps.	Yoke <i>6"</i> Spacing

Weld / Item	Comments	MT Results		VT Results	
		NRI	RI	Sat	Unsat
<i>43-035</i>	<i>Adequate field was verified</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<i>43-0216A-20</i>	<i>Using MPFI #15</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<i>43-0216A-35</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<i>43-0366A-35</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	



Ultrasonic Examination Report *D. Payne ANII 6/28/82*

Customer <i>L P&L</i>		Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>1143 Zone 43 Rev 2 F.C.Z</i>	Iso/Drawing No.
Procedure <i>F.C.I</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>David J. Tokan III</i>		VCR Supervisor <i>David Lyons</i>	Date <i>6/23/82</i>
Component/Piping System <i>Main Steam Header A</i>		Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block <i>UT-128</i>	Couplant: <i>Sonotrace Type 40</i> Batch No. <i>8129</i>

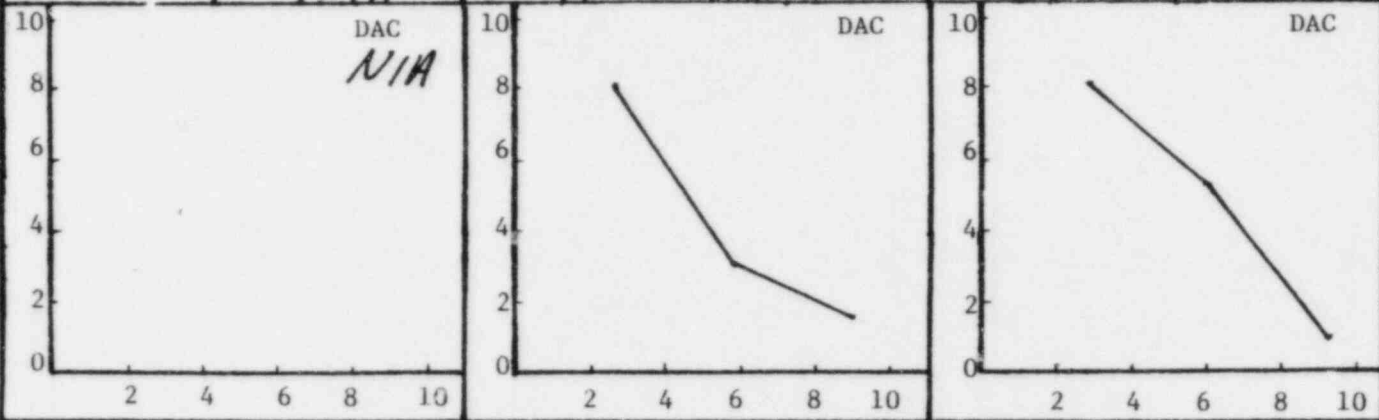
Continuation Sheet Attached
 Yes No

	Transducer	0°	45°	60°	Instrument			
	S/N	<i>N/A</i>	<i>619801</i>	<i>N/A</i>	Mfr.	<i>Sonic</i>	Model	<i>Mark II</i>
	Size		<i>1.0"</i>		S/N	<i>05473E</i>	RepRate	<i>1K</i>
	Frequency		<i>2.25MHz</i>		Reject	<i>OFF</i>	Filter	<i>OFF</i>
Beam Angle		<i>45°</i>		Damp	<i>Min.</i>	Coax	<i>12' AUG-BVC</i>	
				Freq.	<i>2.0MHz</i>	Video	<i>Norm</i>	

Field Changes:
 Yes No
 If Yes, Number *1*

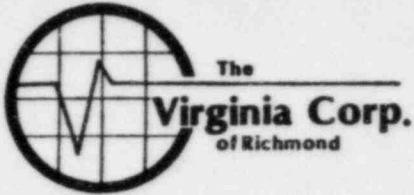
Calibration 0° 2 & 5 Scan 7 & 8 Scan Freq. *2.0MHz* Video *Norm*

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks							
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°			
											In	Out	In	Out	In	Out		
<i>1T</i>	<i>N/A</i>	<i>N/A</i>	<i>80%</i>	<i>3.0</i>	<i>N/A</i>	<i>N/A</i>	<i>80%</i>	<i>3.0</i>	<i>N/A</i>	<i>N/A</i>								
<i>2T</i>			<i>30%</i>	<i>6.0</i>			<i>55%</i>	<i>6.1</i>										
<i>3T</i>			<i>15%</i>	<i>9.0</i>			<i>10%</i>	<i>9.2</i>										
Ref. dB	<i>N/A</i>		<i>47</i>				<i>57</i>											



Additional Comments/Sketch

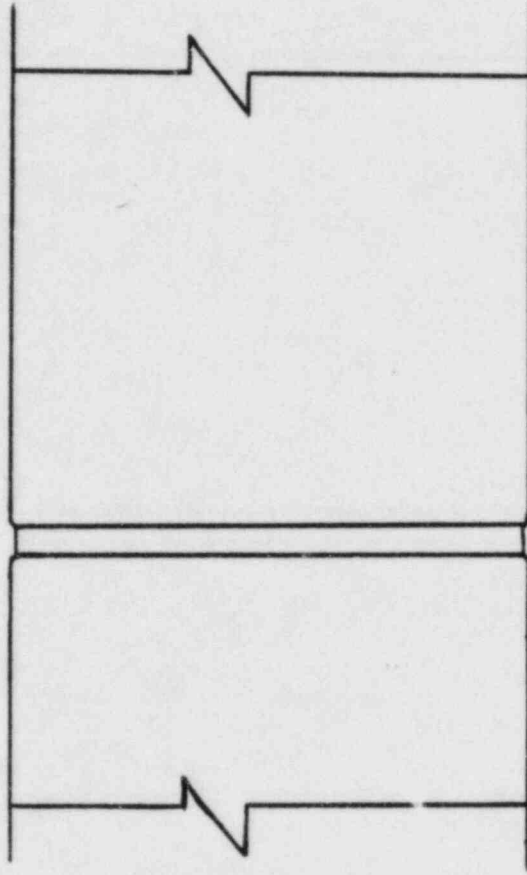
D. Payne ANII 6/28/82



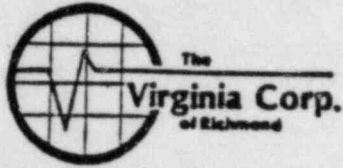
Ultrasonic Examination Report - Continuation Sheet

Customer <i>L P & L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/ Zone <i>1 / 43</i>	Iso/Drawing No. <i>Zone 43 Rev. 2 Fl. 2</i>
Procedure <i>15122 Rev. 0</i>	Exam Surface <i>FC.1 OD</i>	Examiner/Level <i>David L. Foker III</i>	VCR Supervisor <i>Daniel Lyons</i>	Date <i>6/23/82</i>
Component/Piping System <i>Main Steam Header A</i>	Pipe Size <i>40"</i>	Weld Type <i>B.1.H</i>	Cal. Block <i>UT-128</i>	Couplant: Type & Batch # <i>Scotchtrace 40 8124</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
<i>43-035</i>	<i>N/A</i>	<i>Yes</i>	<i>Yes</i>	<i>Par</i>	<i>N/A</i>	<i>Weld contour</i>	<i>Smooth</i>	<i>Ground</i>	<i>N1</i>	<i>Sat.</i>	<i>See pg. 3</i>
<i>43-036</i>	<i>N/A</i>	<i>Yes</i>	<i>Yes</i>	<i>Par</i>	<i>N/A</i>	<i>Weld contour</i>	<i>Smooth</i>	<i>Ground</i>	<i>N1</i>	<i>Sat.</i>	<i>loss of contact</i>
<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>at toe of weld</i>
<i>43-048</i>	<i>N/A</i>	<i>Yes</i>	<i>Yes</i>	<i>Par</i>	<i>N/A</i>	<i>Weld contour</i>	<i>Smooth</i>	<i>Ground</i>	<i>N1</i>	<i>Sat.</i>	<i>loss of contact</i>
											<i>at toe of weld</i>



43-035



D. Payne ANII 6/28/82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>L P + L</i>	Plant <i>Waterford</i>	Unit # <i>3</i>	Loop/Zone <i>1143</i>
Component/Piping System <i>Main Steam Header A</i>	Examiner/Level <i>David J. F. ...</i>	Date <i>6-23-82</i>	
Procedure <i>151 2.5 Rev 0</i>	Iso/Drawing No. <i>Zone 43 Rev 2 F 62</i>	VGR Supervisor <i>...</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument	Transducer		Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>Parametric</i>	Size <i>1.0"</i>	Cal. Block <i>UT-128</i>
Model <i>MARK I</i>			Cal. Block <i>NA</i>
S/N <i>05304E</i>	Freq. <i>2.25 mhz</i>		Range Cal. <i>3.406"</i>
Reject <i>off</i>			Calibration Checks
Damp. <i>MIN</i>	Serial No. <i>48807</i>		
Freq. <i>2.0 mhz</i>			Initial <i>10:41 am</i>
Rep. Rate <i>1K</i>	Coax. Cable <i>12' BNC TO BNC</i>		Final <i>12:40 pm</i>
Filter <i>off</i>			
Video <i>Normal</i>	Gain <i>45 db</i>		
Couplant <i>Sonotrace 40 Batch # 8124</i>			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>43-025</i>	<i>12</i>	<i>2.418</i>	<i>2.793</i>	<i>2.793</i>	<i>43-036LA</i>	<i>10"</i>	<i>2.656</i>	<i>2.793</i>	<i>2.793</i>
	<i>2</i>	<i>2.384</i>	<i>2.793</i>	<i>2.793</i>		<i>20"</i>	<i>2.690</i>	<i>2.793</i>	<i>2.793</i>
	<i>4</i>	<i>2.384</i>	<i>2.793</i>	<i>2.759</i>		<i>30"</i>	<i>2.656</i>	<i>2.759</i>	<i>2.793</i>
	<i>6</i>	<i>2.418</i>	<i>2.759</i>	<i>2.725</i>		<i>40"</i>	<i>2.622</i>	<i>2.793</i>	<i>2.793</i>
	<i>8</i>	<i>2.384</i>	<i>2.759</i>	<i>2.725</i>		<i>50"</i>	<i>2.622</i>	<i>2.793</i>	<i>2.759</i>
<i>✓</i>	<i>10</i>	<i>2.350</i>	<i>2.759</i>	<i>2.725</i>	<i>✓</i>	<i>60"</i>	<i>2.656</i>	<i>2.793</i>	<i>2.725</i>
<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>43-048</i>	<i>12</i>	<i>2.656</i>	<i>2.759</i>	<i>2.725</i>
						<i>2</i>	<i>2.656</i>	<i>2.725</i>	<i>2.725</i>
						<i>4</i>	<i>2.554</i>	<i>2.725</i>	<i>2.725</i>
						<i>6</i>	<i>2.554</i>	<i>2.725</i>	<i>2.725</i>
						<i>8</i>	<i>2.520</i>	<i>2.725</i>	<i>2.759</i>
					<i>↓</i>	<i>10</i>	<i>2.520</i>	<i>2.759</i>	<i>2.793</i>

Sketch/Identification



The
Virginia Corp.
of Richmond

Ultrasonic Examination Report *D. Payne ANII 6/28/82*

Customer <i>LP&L</i>		Plant <i>Waterford</i>		Unit <i>3</i>	Loop/Zone <i>1143 Zone 43 Rev. 2 F.G. 2</i>	Iso/Drawing No.	
Procedure <i>1512.2 Rev. 0</i>		Exam Surface <i>F.CI</i>	Examiner/Level <i>David J. Fokan</i>		VCR Supervisor <i>Dan Jensen</i>		Date <i>6/23/82</i>
Component/Piping System <i>Mainsteam Header A</i>			Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT-128</i>	Couplant: Type <i>40</i> Batch No. <i>8134</i>	

Continuation Sheet Attached
 Yes No

Field Changes:
Yes No
If Yes, Number _____

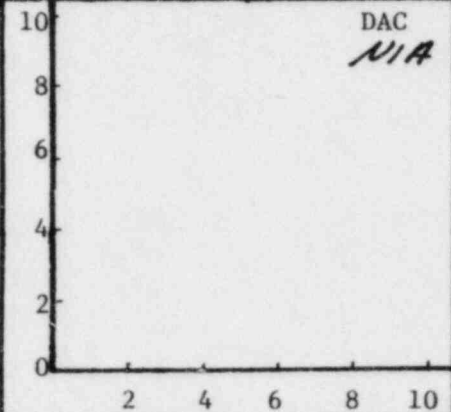
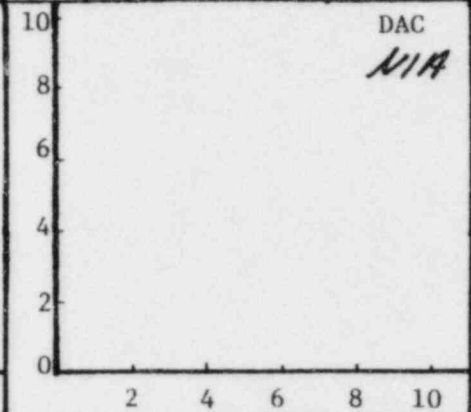
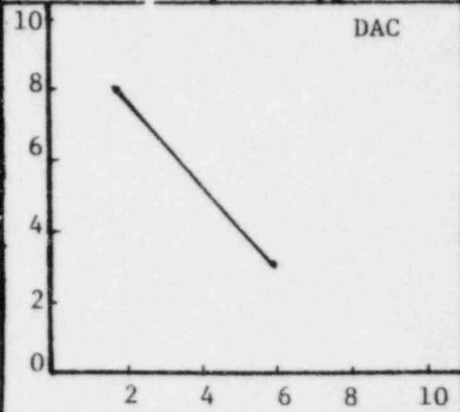
	Transducer			Instrument			
	S/N	<i>48807</i>	<i>NIA</i>	Mfr.	<i>Sonic</i>	Model	<i>MARK I</i>
	Size	<i>1.0"</i>		S/N	<i>05304E</i>	RepRate	<i>1K</i>
	Frequency	<i>2.25MHz</i>		Reject	<i>OFF</i>	Filter	<i>OFF</i>
Beam Angle	<i>0°</i>		Damp	<i>NIA</i>	Coax	<i>12' ENCL-A4</i>	
			Freq.	<i>2.0MHz</i>	Video	<i>Norm</i>	

Calibration *0°*

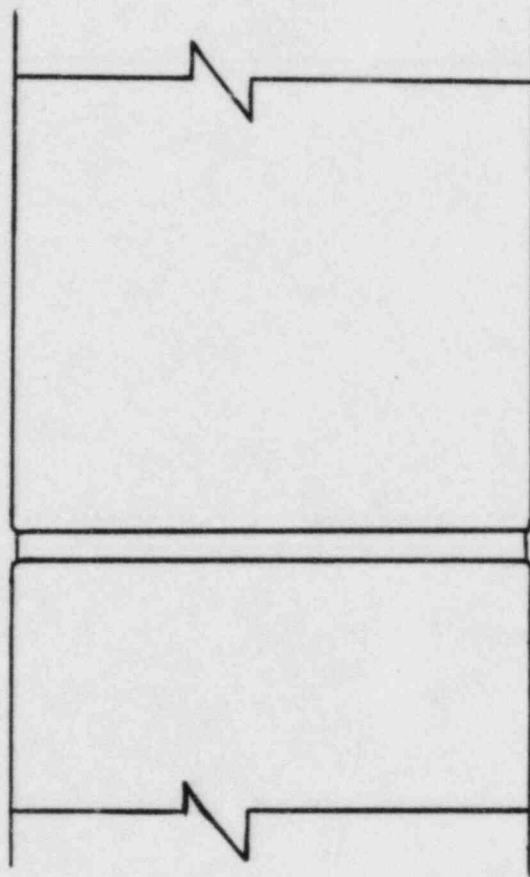
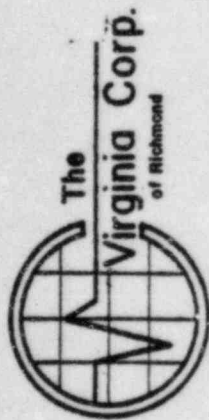
2 & 5 Scan

7 & 8 Scan

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:				Signal Amp.	Sweep	Calibration Checks													
					Scribe Line		50% DAC				0°		45°		60°									
					In	Out	In	Out			In	Out	In	Out	In	Out								
<i>1/4T</i>	<i>80%</i>	<i>2.0</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	
<i>3/4T</i>	<i>30%</i>	<i>6.0</i>																						
Ref. dB	<i>40</i>		<i>NIA</i>				<i>NIA</i>																	



Additional Comments/Sketch



43-035



D. Payne ANIT 6/28/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>LPYL</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>1/43</i>
Component/Piping System <i>Main Steam-A</i>	Examiner/Level <i>David J. Johnson III</i>	Date <i>6/25/82</i>	
Procedure <i>ISI 2.5 REV 0</i>	Iso/Drawing No. <i>Zone 43 Rev. 2562</i>	VCR Supervisor <i>David J. Johnson</i>	Continuation Sheet Attached [] Yes [x] No

Equipment

Instrument		Transducer		Calibration
Mfgr. <i>Sonic</i>	Mfgr. <i>Parameters</i>	Size <i>1.0"</i>	Cal. Block <i>UT-128</i>	
Model <i>Model I</i>	Freq. <i>2.25 MHz</i>		Cal. Block <i>N/A</i>	
S/N <i>05304E</i>	Serial No. <i>48807</i>		Range Cal. <i>3.41"</i>	
Reject <i>OFF</i>			Calibration Checks	
Damp. <i>Min</i>			Initial <i>8.45</i>	
Freq. <i>2.0 MHz</i>	Coax. Cable <i>12' RNC-RNC</i>		Final <i>11.08</i>	
Rep. Rate <i>1K</i>	Gain <i>45dB</i>			
Filter <i>OFF</i>				
Video <i>Norm</i>				
Couplant <i>Scotch 2407 SIM</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-0051A	1'	2.73"	2.76"	2.73"	43-020	12	2.66"	2.79"	2.76"
43-0051A	2'	2.66"	2.76"	2.73"	43-020	2	2.62"	2.73"	2.69"
43-0051A	3'	2.56"	2.73"	2.73"	43-020	4	2.56"	2.73"	2.76"
43-0051A	4'	2.56"	2.78"	2.73"	43-020	6	2.56"	2.73"	2.76"
43-0051A	5'	2.59"	2.73"	2.69"	43-020	8	2.59"	2.73"	2.76"
43-0051A	6'	2.69"	2.69"	2.66"	43-020	10	2.59"	2.73"	2.73"
43-0051A	7'	2.73"	2.66"	2.66"					
43-0051A	8'	2.69"	2.66"	2.66"					

Sketch/Identification

Ultrasonic Examination Report

R Payne ANII 6/28/82



Customer <i>LP&L</i>		Plant <i>Waterford</i>		Unit <i>3</i>	Loop/Zone <i>1143</i>	Iso/Drawing No. <i>Zone 43 Rev. 2 F. 6.2</i>	
Procedure F.C. 1 <i>ISI 2.2 Rev. 0</i>		Exam Surface <i>O.P.</i>		Examiner/Level <i>David J. Fokun</i>		VGR Supervisor <i>Donna J. Jones</i>	
Component/Piping System <i>Main Steam Header-A</i>		Pipe Size <i>40"</i>	Weld Type <i>Butt</i>		Cal. Block # <i>UT-128</i>	Date <i>6/25/82</i>	
				Couplant: <i>Sono-Gace</i>		Type <i>40</i>	
						Batch No. <i>8129</i>	

Continuation Sheet Attached
 Yes No

Transducer			0°		45°		60°		Instrument					
S/N			<i>48807</i>		<i>NIA</i>		<i>NIA</i>		Mfr.	<i>Sonic</i>		Model	<i>Mark I</i>	
Size			<i>1.0"</i>						S/N	<i>053045</i>		RepRate	<i>1K</i>	
Frequency			<i>2.25MHz</i>						Reject	<i>OFF</i>		Filter	<i>OFF</i>	
Beam Angle			<i>0°</i>						Damp	<i>Min.</i>		Coax	<i>12' BNC-BNC</i>	
									Freq.	<i>2.0MHz</i>		Video	<i>Norm</i>	

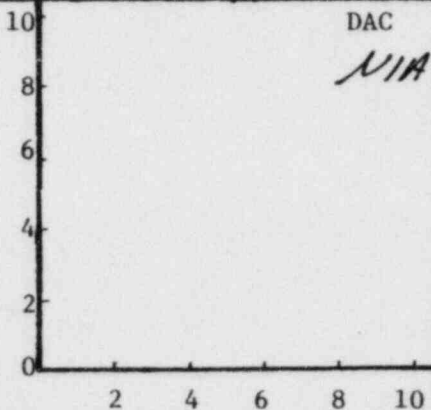
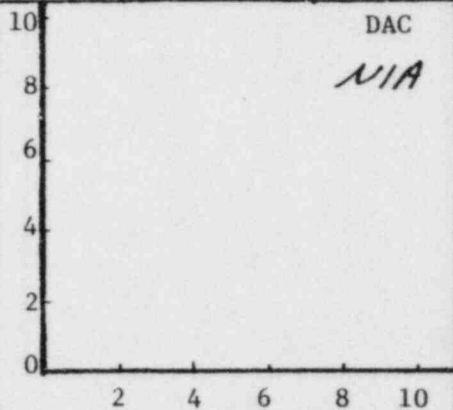
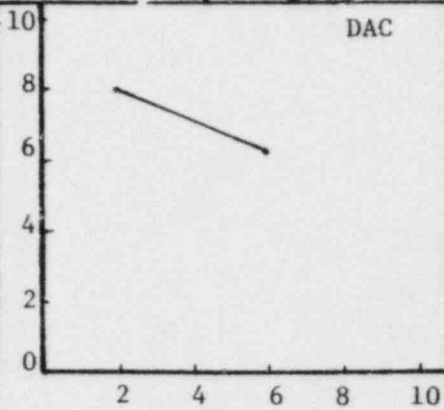
Field Changes:
 Yes No
 If Yes, Number *1*

Calibration 0°

2 & 5 Scan

7 & 8 Scan

Calibration Reflector Location	Signal Amp.	Sweep	2 & 5 Scan				7 & 8 Scan				Calibration Checks								
			Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°				
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out			
<i>4T</i>	<i>80%</i>	<i>2.0</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>	<i>NIA</i>
<i>34T</i>	<i>65%</i>	<i>6.0</i>																	
Ref. dB	<i>50</i>		<i>NIA</i>			<i>NIA</i>			<i>NIA</i>										



Additional Comments/Sketch

Ultrasonic Examination Report

D. Payne ANEI 6/28/82

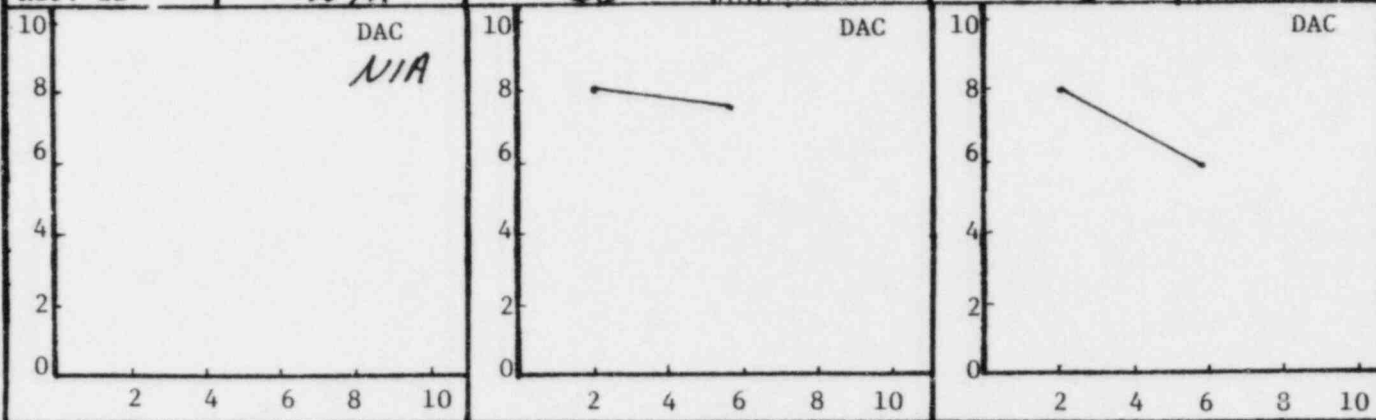


Customer <i>L P&L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone Iso/Drawing No. <i>1/43 Zone 43 Rev. 2 F.G. 2</i>
Procedure F.C. 1 <i>151.2.2 Rev. 0</i>	Exam Surface <i>O.O.</i>	Examiner/Level <i>David J. Johnson</i>	VCR Supervisor <i>David J. Johnson</i>
Component/Piping System <i>Main Steam Header - A</i>		Pipe Size <i>40"</i>	Weld Type <i>Butt</i>
		Cal. Block # <i>UT-128</i>	Couplant: <i>Sonorrace</i> Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

Field Changes: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, Number <i>1</i>	Transducer	0°	45°	60°	Instrument			
	S/N	<i>NIA</i>	<i>L19801</i>	<i>NIA</i>	Mfr.	<i>Senic</i>	Model	<i>Mark I</i>
	Size		<i>1.0"</i>		S/N	<i>03704E</i>	RepRate	<i>1K</i>
	Frequency		<i>2.25MHz</i>		Reject	<i>OFF</i>	Filter	<i>OFF</i>
	Beam Angle		<i>45°</i>		Damp	<i>Min</i>	Coax	<i>12.8KV-BVC</i>
		Freq.	<i>2.0MHz</i>	Video	<i>Norm</i>			

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC	In	Out	In	Out	In	Out
	<i>NIA</i>	<i>NIA</i>			<i>NIA</i>	<i>NIA</i>	<i>NIA</i>			<i>NIA</i>	<i>NIA</i>	<i>NIA</i>					
<i>1/4T</i>			<i>80%</i>	<i>2.0</i>				<i>80%</i>	<i>2.2</i>								
<i>3/4T</i>			<i>75%</i>	<i>6.0</i>				<i>60%</i>	<i>6.3</i>								
Ref. dB	<i>NIA</i>		<i>66</i>					<i>63</i>									



Additional Comments/Sketch

6/28/82
 Dr. Royal ANIZ

Ultrasonic Examination Report - Continuation Sheet Page 2 of 2



Customer: L P & L Plant: Waterloo
 Procedure: ISO 2384 Rev. 05.11 Examiners/Level: David J. Poter...
 Component/Piping System: Main Steam Header-A Pipe Size: 40" Weld Type: BUT
 Loop/Zone: 1/43 VCR Supervisor: Kevin J. Jones
 Iso/Drawing No.: ZONE 4 3 REV 2 F.C. 2 Date: 6/25/82
 Cal. Block Couplant: Type & Batch # 07-128 Soudal 40 # 8/24

Weld No.	Base Metal Scan	Scan Direction			Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8		Base Metal	Weld	UT	Visual	
430014	N/A	Yes	Yes	Yes	N/A	Smooth	Ground Finish	N/A	Sat	N/A
43020	N/A	Yes	Yes	Yes	N/A	Smooth	Ground Finish	N/A	Sat	N/A



D. Payne ANII 7/9/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>L P&L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>1143</i>
Component/Piping System <i>Main Steam Header A-Outside</i>	Examiner/Level <i>David L. Zelen III</i>	Date <i>7/16/82</i>	
Procedure <i>ISI 2.5 REV. 0</i>	Iso/Drawing No. <i>Zone 13 Rev. 2/83</i>	VCR Supervisor <i>Donna J. Dins</i>	Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

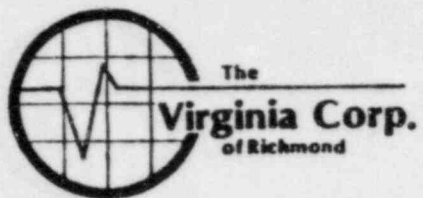
Equipment

Instrument		Transducer		Calibration
Mfgr. <i>Sonic</i>	Mfgr. <i>KB-Aerotech</i>	Size <i>.50"</i>	Cal. Block <i>UT-118</i>	
Model <i>MACH I</i>			Cal. Block <i>NIA</i>	
S/N <i>01610E</i>	Freq. <i>2.25 MHz</i>		Range Cal. <i>1.19" at 10.0</i>	
Reject <i>OFF</i>			Calibration Checks	
Damp. <i>Mid.</i>	Serial No. <i>KB2728</i>		<i>Initial 13:08</i>	
Freq. <i>2.0 MHz</i>	Coax. Cable <i>6' Dual</i>		<i>Final 15:17</i>	
Rep. Rate <i>1K</i>				
Filter <i>OFF</i>				
Video <i>Norm</i>	Gain <i>56 dB</i>			
Couplant <i>Sonacase 40 #8124</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-063	12	.68"	.88"	.71"	43-068	12	.71"	.84"	.71"
43-063	2	.68"	.95"	.71"	43-068	2	.71"	.84"	.71"
43-063	4	.69"	.84"	.67"	43-068	4	.74"	.80"	.71"
43-063	6	.67"	.94"	.68"	43-068	6	.71"	.82"	.71"
43-063	8	.67"	.92"	.69"	43-068	8	.67"	.89"	.71"
43-063	10	.65"	.89"	.70"	43-068	10	.69"	.87"	.71"
43-067	12	.71"	.71"	.83"	43-069	12	.73"	.63"	.82"
43-067	2	.71"	.73"	.82"	43-069	2	.69"	.68"	.83"
43-067	4	.71"	.73"	.83"	43-069	4	.73"	.76"	.84"
43-067	6	.67"	.71"	.77"	43-069	6	.75"	.74"	.93"
43-067	8	.68"	.73"	.78"	43-069	8	.74"	.73"	.89"
43-067	10	.69"	.71"	.83"	43-069	10	.70"	.70"	.77"

Sketch/Identification



Ultrasonic Examination Report

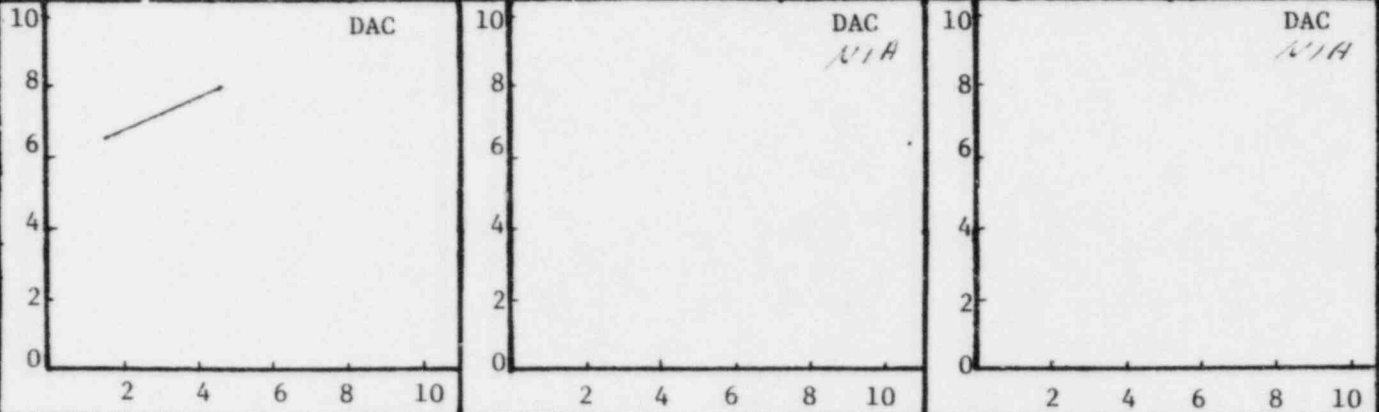
D. Paine ANEE 7/9/82

Customer LP66	Plant Waterford	Unit 3	Loop/Zone 1143	Iso/Drawing No. Zone 4.3 Rev. 2 F.C. 3
Procedure FC 2 15122 Rev. 0	Exam Surface O.D.	Examiner/Level David J. Paine	VCR Supervisor David Paine	Date 7/16/82
Component/Piping System Main Steam Header - S. Outside	Pipe Size 8"	Weld Type Butt	Cal. Block # UT-118	Couplant: Schiotz Couplant Type 40 Batch No. 8124

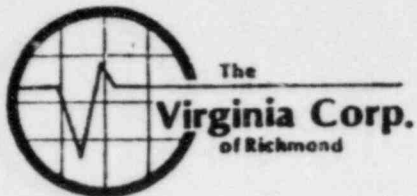
Continuation Sheet Attached
 Yes No

Field Changes: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, Number 2	Transducer	0°	45°	60°	Instrument			
	S/N	KR2728	N/A	N/A	Mfr.	Sonic	Model	Mark I
	Size	.50"			S/N	01610E	RepRate	115
	Frequency	2.25MHz			Reject	OFF	Filter	OFF
Beam Angle	0°			Damp	Min.	Coax	6' Dual	
Freq.	2.0MHz		Video		Norm			

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
34T	65%	1.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13:08	15:17	N/A	N/A	N/A	N/A
34T	80%	4.5														
Ref. dB	62		N/A				N/A									



Additional Comments/Sketch



Ultrasonic Examination Report *D. Payne ANIE 7/9/82*

Customer <i>L P & L</i>		Plant <i>Water Sect</i>		Unit <i>3</i>	Loop/Zone Iso/Drawing No. <i>1143 Zone 43 Rev. 2 F.C. 3</i>	
Procedure <i>1512.2 Rev. 0 F.C. 2</i>		Exam Surface <i>0.0</i>	Examiner/Level <i>David L. Johnson II</i>		VCR Supervisor <i>Daniel J. ...</i>	Date <i>7/16/82</i>
Component/Piping System <i>Main Steam Header - A - Outside</i>			Pipe Size <i>8"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT-118</i>	Couplant: <i>Type 40</i> Batch No. <i>8129</i>

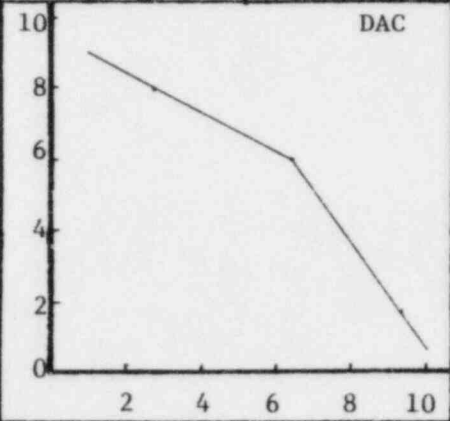
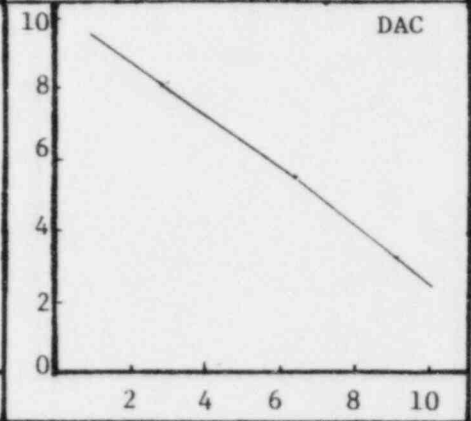
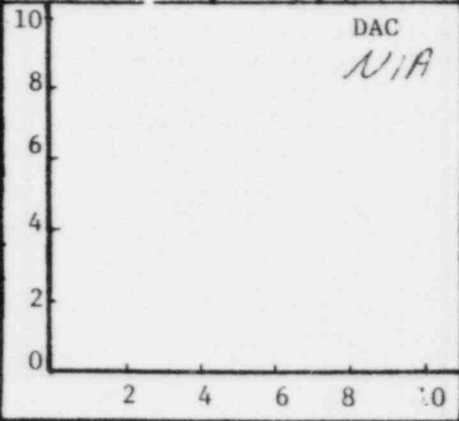
Continuation Sheet Attached
 Yes No

	Transducer			Instrument			
	S/N			Mfr.	Model	Mark I	
	Size			S/N	RepRate	1K	
	Frequency			Reject	Filter	OFF	
	Beam Angle			Damp	Coax	6'BUK-ME	

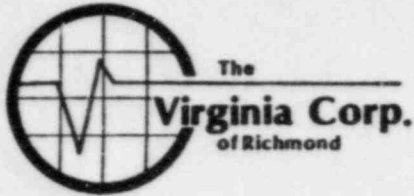
Field Changes:
 Yes No
 If Yes, Number *2*

Calibration 0° 2 & 5 Scan 7 & 8 Scan Freq. *2.0 MHz* Video *None*

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks					
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°	
											In	Out	In	Out	In	Out
<i>1T</i>	<i>N/A</i>	<i>N/A</i>	<i>80%</i>	<i>3.0</i>	<i>N/A</i>	<i>N/A</i>	<i>80%</i>	<i>3.2</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>13:20</i>	<i>15:21</i>	<i>N/A</i>	<i>N/A</i>
<i>2T</i>			<i>55%</i>	<i>6.4</i>			<i>60%</i>	<i>6.5</i>								
<i>3T</i>			<i>30%</i>	<i>9.0</i>			<i>20%</i>	<i>9.6</i>								
Ref. dB		<i>N/A</i>	<i>40</i>				<i>43</i>									



Additional Comments/Sketch

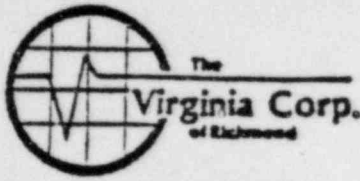


Ultrasonic Examination Report - Continuation Sheet

D. Payne ANZI 7/9/82

Customer LPCL	Plant Waterford	Unit 3	Loop/ Zone 1143	Iso/Drawing No. Zone 43 Rev 2 FC3
Procedure 1512.2 RECCO	Exam Surface O.C.	Examiner/Level David J. Johnson III	VCR Supervisor Daniel J. Jones	Date 7/6/82
Component/Piping System Main Steam Header-A	Pipe Size 8"	Weld Type Butt	Cal. Block UT-118	Couplant: Type & Batch # Sonicose 40 #8124

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
43063	N/A	Par	Yes	Par	N/A	Reducer configuration	Smooth	Ground	NI	Sat.	3 scan limits
N/A		N/A	N/A	N/A		weld contour	N/A	N/A	N/A	N/A	tol" by reduce
43067		Yes	Par	Par		Reducer configuration	Smooth	Ground	NI	Sat.	5 scan limits
N/A		N/A	N/A	N/A		weld contour	N/A	N/A	N/A	N/A	tol" by reduce
43068		Yes	Yes	Par		Weld contour	Smooth	Ground	NI	Sat.	N/A
43069		Yes	Yes	Par		Weld contour	Smooth	Ground	NI	Sat.	



M.R. Martin, ANII 9-20-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>LP&L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>A 43</i>
Component/Piping System <i>CONT. MAIN HEADER A OUTSIDE</i>		Examiner/Level <i>Navy Longenecker II</i>	Date <i>9-17-82</i>
Procedure <i>I.S.I. 2.5 R-0</i>	Iso/Drawing No. <i>ZONE 43 R-2, FC.4</i>	VCR Supervisor <i>Donal Jones</i>	Continuation Sheet Attached [] Yes [<input checked="" type="checkbox"/>] No

Equipment

Instrument	Transducer	Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>K-B AEROTECH</i>	Cal. Block <i>UT-118</i>
Model <i>MARK 1</i>	Size <i>.5" DIA.</i>	Cal. Block
S/N <i>01058E</i>	Freq. <i>2.25 MHZ.</i>	Range Cal. <i>.725 @ 70</i>
Reject <i>OFF</i>		Calibration Checks
Damp. <i>MIN.</i>	Serial No. <i>KB 2728</i>	
Freq. <i>2. MHZ.</i>	Coax. Cable <i>6'</i>	<i>CAL. IN 8:30</i>
Rep. Rate <i>3K</i>		<i>CAL. OUT 9:30</i>
Filter <i>H1</i>		
Video <i>NORM</i>	Gain <i>65 dB</i>	
Couplant <i>SONOTRACE 40 #8124</i>		

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>43-070</i>	<i>12</i>	<i>.756</i>	<i>*</i>	<i>.715</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>43-070</i>	<i>2</i>	<i>.746</i>	<i>*</i>	<i>.704</i>					
<i>43-070</i>	<i>4</i>	<i>.756</i>	<i>*</i>	<i>.715</i>					
<i>43-070</i>	<i>6</i>	<i>.709</i>	<i>*</i>	<i>.694</i>					
<i>43-070</i>	<i>8</i>	<i>.746</i>	<i>*</i>	<i>.704</i>					
<i>43-070</i>	<i>10</i>	<i>.756</i>	<i>*</i>	<i>.704</i>					

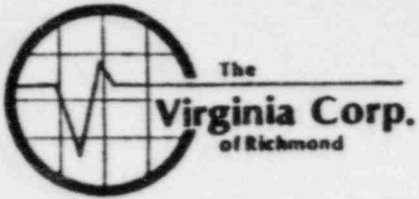
Sketch/Identification

* VALVE ON 2 SIDE

M.R. Martin, AHI 9-20-82

Ultrasonic Examination Report

PAGE 1 OF 3



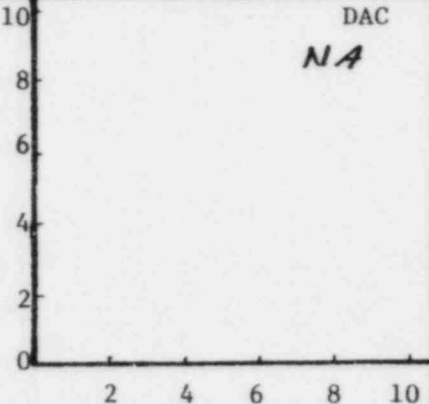
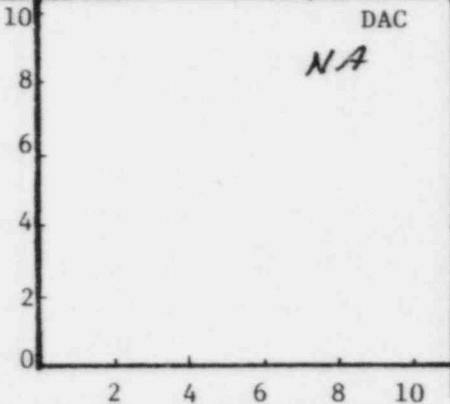
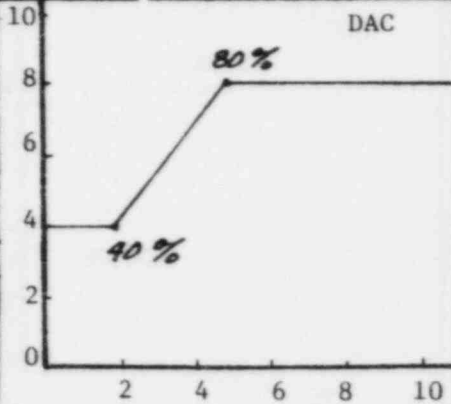
Customer LP & L	Plant WATERFORD	Unit 3	Loop/Zone 1 43	Iso/Drawing No. ZONE 43 R-2, F.C.4
Procedure I.S.I. 2.2 RO, FEZ	Exam Surface O.D.	Examiner/Level Ray Longmire II	VCR Supervisor Daniel Duran	Date 9-17-82
Component/Piping System MAIN HEADER A OUTSIDE CONT.	Pipe Size 8"	Weld Type BUTT	Cal. Block UT-118	Couplant: SONOTRACE Type 40 Batch No. 8124

Continuation Sheet Attached
 Yes No

Transducer	Instrument		
	Mfg.	Model	MARK I
S/N	KB2728	SONIC	MARK I
Size	.5" DIA.	01058E	RepRate 3K
Frequency	2.25 MHz	Reject OFF	Filter H1
Beam Angle	0°	Damp MIN.	Coax 6'
		Freq. 2. MHz.	Video NORM

Field Changes:
 Yes No
 If Yes, Number **2**

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1/4 T	40%	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	8:30	9:30	NA	NA	NA	NA
3/4 T	80%	5.0															
1 T	NA	7.0															
Ref. dB		65 db															



Additional Comments/Sketch



Ultrasonic Examination Report PAGE 2 OF 3

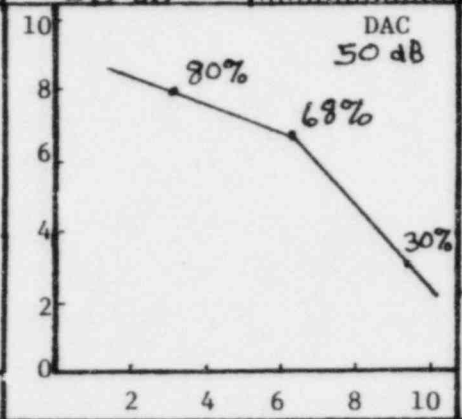
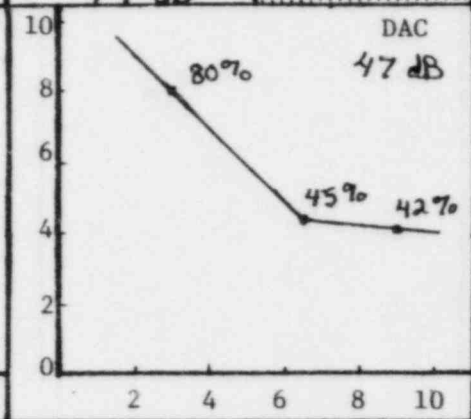
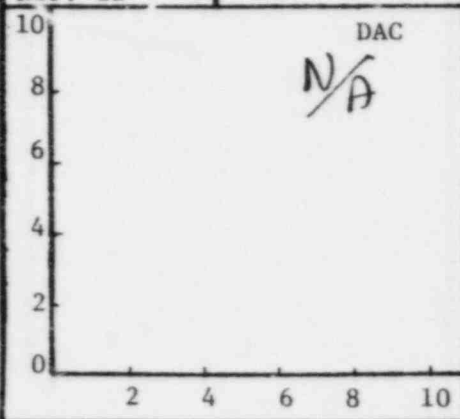
Customer LP&L	Plant Waterford	Unit 3	Loop/Zone 1/43	Iso/Drawing No. Zone 43, R.2, F.C.4
Procedure IST 2.2 R.F.C.3	Exam Surface OD	Examiner/Level Nary Longmeyer II	VCR Supervisor Daniel Deane	Date 9-17-82
Component/Piping System Main Header A - outside Cont.	Pipe Size 8"	Weld Type Butt	Cal. Block UT-118	Couplant: Sonotrace Type 40 Batch No. 8124

Continuation Sheet Attached
 Yes No

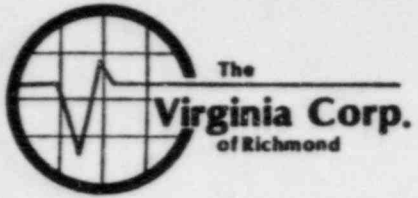
Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
	S/N N/A	D22063	N/A	Mfr. Sonic	Model ETS Mark I	RepRate 3K	Filter Hi
	Size N/A	.50"	N/A	S/N 03704E	Coax 6'	Video NORM	
	Frequency N/A	2.25 MHz	N/A	Reject OFF			
	Beam Angle N/A	45°	N/A	Damp Min			

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1T	N/A	N/A	80%	3.0	N/A	N/A	80%	3.1	N/A	N/A	N/A	N/A	N/A	0840	0935	N/A	N/A
2T			45%	6.3			68%	6.2									
3T			42%	9.0			30%	9.4									
Ref. dB			47 dB				50 dB										



Additional Comments/Sketch



M.R. Martin, ANET 9-20-82

Ultrasonic Examination Report - Continuation Sheet Page 3 of 3

Customer <i>LP & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>1 43</i>	Iso/Drawing No. <i>ZONE 43 R-2, FC. 4</i>
Procedure <i>I.S.I. 2.2 RO, FC. 2</i>	Exam Surface <i>O. D.</i>	Examiner/Level <i>Nary Longenecker II</i>	VCR Supervisor <i>Daniel Jones</i>	Date <i>9-17-82</i>
Component/Piping System <i>CONT. MAIN HEADER A OUTSIDE</i>	Pipe Size <i>8"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-118</i>	Couplant: Type & Batch # <i>SONOTRACE 40 8124</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks	
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual		
<i>43-070</i>	<i>NA</i>	<i>PAR</i>	<i>NO</i>	<i>YES</i>	<i>PAR</i>	<i>PAR</i>	<i>BASE METAL</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>NRI</i>	<i>SAT.</i>	<i>NRI 0° AROUND 12 O'CLOCK</i>



W.R. Martin, ANFI 9-29-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>LP & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>A 43</i>
Component/Piping System <i>OUTSIDE MAIN STEAM HEADER-A-COXT</i>		Examiner/Level <i>Tary Longenecker</i>	Date <i>9-25-82</i>
Procedure <i>I.S.I. 2.5 R-0</i>	Iso/Drawing No. <i>ZONE 43 R-2, F.C. 6</i>	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr.	<i>SONIC</i>	Mfgr.	<i>K-B AEROTECH</i>	Cal. Block <i>UT-128</i>
Model	<i>MARK 1</i>	Size	<i>3/4" DIA.</i>	Cal. Block
S/N	<i>01058E</i>	Freq.	<i>2.25 MHZ.</i>	Range Cal. <i>2.725" @ 7.0</i>
Reject	<i>OFF</i>	Serial No.	<i>L21861</i>	Calibration Checks
Damp.	<i>MIN</i>	Coax. Cable	<i>6'</i>	<i>CAL. IN 6:57</i>
Freq.	<i>2. MHZ.</i>	Gain	<i>43 db</i>	<i>CAL. OUT 9:05</i>
Rep. Rate	<i>3K</i>			
Filter	<i>H1</i>			
Video	<i>NORM</i>			
Couplant	<i>SONOTRACE 40 812F</i>			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>43-079</i>	<i>12</i>	<i>NA</i>	<i>NA</i>	<i>2.803</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	<i>2</i>			<i>2.769</i>					
	<i>4</i>			<i>2.764</i>					
	<i>6</i>			<i>2.803</i>					
	<i>8</i>			<i>2.803</i>					
	<i>10</i>			<i>2.892</i>					

Sketch/Identification

5 SIDE ONLY



Ultrasonic Examination Report

Customer LP+L	Plant Waterford	Unit 3	Loop/Zone A 43	Iso/Drawing No. ZONE 43 R-2, F.C.6
Procedure ^{61. 62} ₂ ISI 2.2 R.F.C. 2	Exam Surface O.D.	Examiner/Level Nary Longenecker II	VGR Supervisor Daniel Jensen	Date 9-25-82
Component/Piping System MAIN STEAM HEADER A - OUTSIDE CONT		Pipe Size 40"	Weld Type BUTT	Cal. Block UT-128
			Couplant: SONOTRACE	Type 40 Batch No 8124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

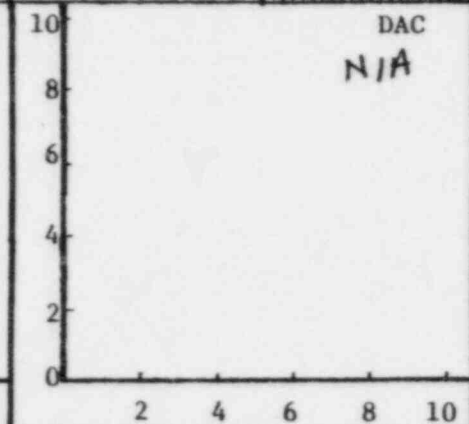
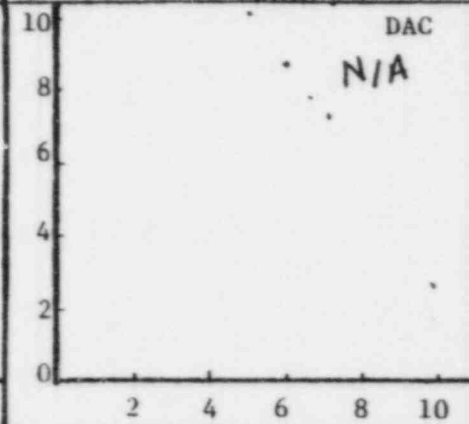
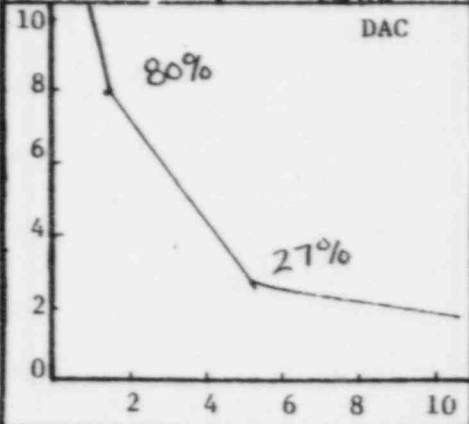
Transducer	0°	45°	60°	Instrument			
	S/N L21861	NA	NA	Mfr.	SONIC	Model	MARK I
	Size .75" DIA			S/N	01058E	RepRate	3K
	Frequency 2.25 MHz			Reject	OFF	Filter	H1
Beam Angle	0			Damp	MIN	Coax	6'
				Freq.	2.0 MHz	Video	NORM

Calibration 0°

2 & 5 Scan

7 & 8 Scan

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks													
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°									
											In	Out	In	Out	In	Out								
1/4 T	80%	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3/4 T	27%	5.3																						
1T	NA	7.0																						
Ref. dB	43db																							



Additional Comments/Sketch



The Virginia Corp.
of Richmond

Ultrasonic Examination Report

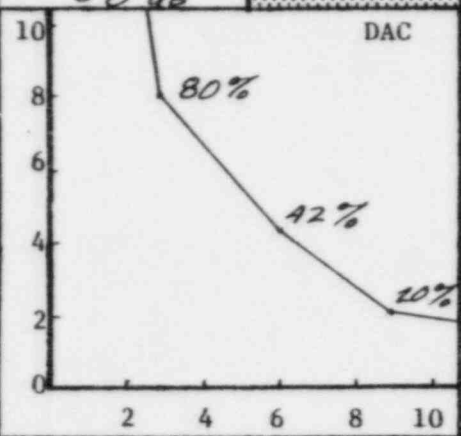
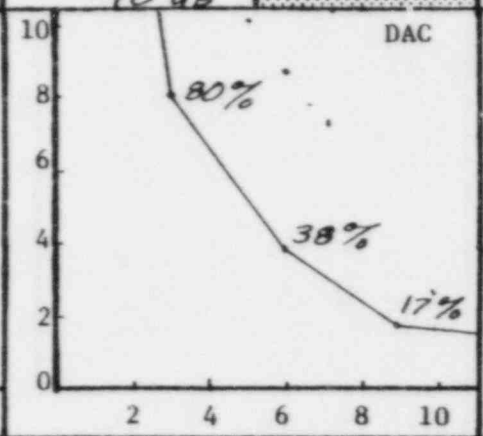
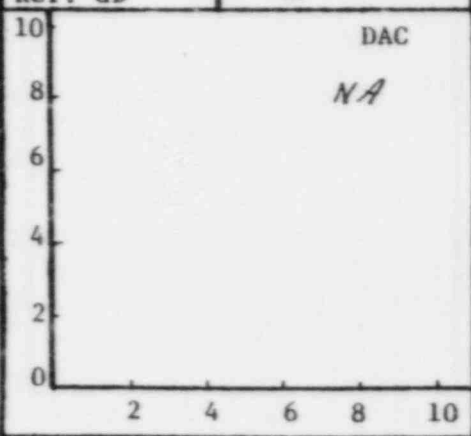
Customer LP & L	Plant WATERFORD	Unit 3	Loop/Zone A 43	Iso/Drawing No. ZONE 43 R-2, FC. 6
Procedure ISI. 2.2 RO, FC. 2	Exam Surface O.D.	Examiner/Level Nary Longenecker II	VCR Supervisor Nani Jensen	Date 9-25-82
Component/Piping System MAINSTEAM HEADER A- CONT.	Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-128	Couplant: SONOTRACE Type 40 Batch No. 812A

Continuation Sheet Attached
 Yes No

Field Changes:
Yes No
If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
S/N	NA	L1913A	NA	Mfer.	SONIC	Model	MARK 1
Size		1.0" DIA.		S/N	03704E	RepRate	3K
Frequency		2.25 MHz		Reject	OFF	Filter	H1
Beam Angle		45°		Damp	MIN.	Coax	6'
				Freq.	2. MHz.	Video	NORM

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1 T	NA	NA	80%	3.0	NA	NA	80%	3.0	NA	NA	NA	NA	NA	7:02	9:07	NA	NA
2 T			38%	6.0			42%	6.2									
3 T			17%	9.0			20%	9.4									
Ref. dB			48 db				58 db										



Additional Comments/Sketch

W.R. Martin, ANII 11-9-82

Ultrasonic Examination Report



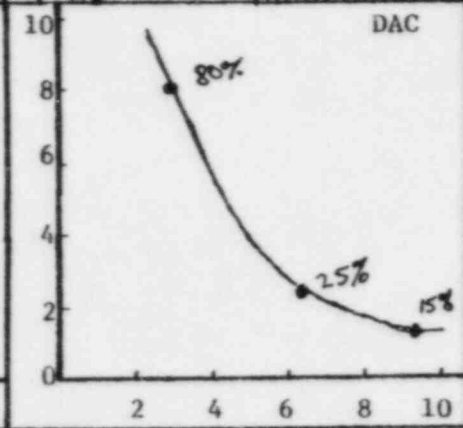
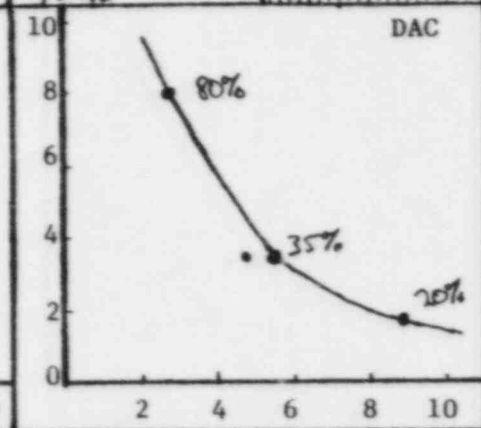
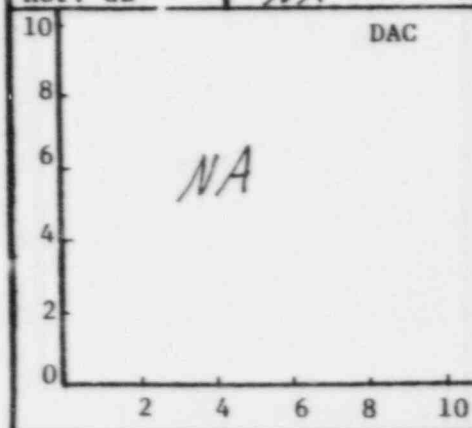
Customer LP+L	Plant Waterford	Unit 3	Loop/Zone NA/43	Iso/Drawing No. Zone 43, R.2, F.C.6
Procedure ISI-2.2 RO, FCA	Exam Surface O.D.	Examiner/Level Kevin White, II	VCR Supervisor Daniel Jensen	Date 9/28/82
Component/Piping System Main Steam Header-A	Pipe Size 40"	Weld Type Butt	Cal. Block UT-127	Couplant: Sonotrace Type 40 Batch No. 8124

Continuation Sheet Attached
 Yes No

Transducer	0°	45°	60°	Instrument			
S/N	NA	322935	NA	Mfr.	Sonics	Model	Mark I
Size		1/2"		S/N	01058E	RepRate	1K
Frequency		2.25 MHz		Reject	off	Filter	Med.
Beam Angle		44°		Damp	Min.	Coax	1/2 BNC to BNC
				Freq.	2	Video	Norm.

Field Changes:
Yes No
If Yes, Number **2**

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1T	NA	NA	80%	3.0	NA		80%	3.2	NA		NA	NA	1:00 PM	4:00 PM	NA	NA
2T			35%	5.8			25%	6.2								
3T			20%	9.0			15%	9.5								
Ref. dB	NA		42 db				47 db									



Additional Comments/Sketch

M.R. Martin, ANEF 11-9-82



Ultrasonic Examination Report - Continuation Sheet

Page of

Customer L.P.+L.	Plant Waterford	Unit 3	Loop/Zone NA/43	Iso/Drawing No. Zone 43, R.2, FC.6
Procedure ISI-2.2, RQFC.8	Exam Surface O.D.	Examiner/Level Kevin White III	VCR Supervisor Daniel Jensen	Date 9/28/82
Component/Piping System Main Steam Header - A	Pipe Size 40"	Weld Type Butt	Cal. Block UT-127	Couplant: Type & Batch # Sonotrace 40, #8124

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
43-001	NA	Par	No	Par	NA	2 scan - Partial due to 2" branch connection located on the bottom of the pipe, 9" from the toe of the weld on the 2 side.	Smooth	Smooth	NI	Sat.	The 5, 7+8 scans will be examined with a 60° transducer.
						5 scan - No due to the 15° slope and thickening of the base metal on the 5 side.					
						7+8 scan - Partial due to the 15° slope and thickening of the base metal on the 5 side.					
						Base metal and 0 scan were previously examined					

M.R. Martin, AMFF, 10-8-82



Ultrasonic Examination Report

Customer L.P.+L.	Plant Waterford	Unit 3	Loop/Zone VA/43	Iso/Drawing No. Zone 43, P.2, F.C.6
Procedure ISI-2.2, ROFC2	Exam Surface O.D.	Examiner/Level Kevin White/II	VCR Supervisor Daniel J. Jones	Date 9/28/82
Component/Piping System Main Steam Header - A	Pipe Size 40"	Weld Type Butt	Cal. Block # UT-127	Couplant: Seventrace Type 40 Batch No. 8124

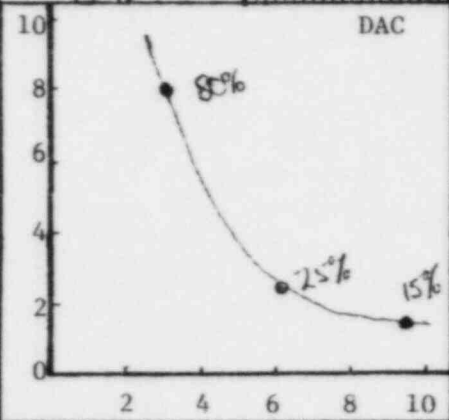
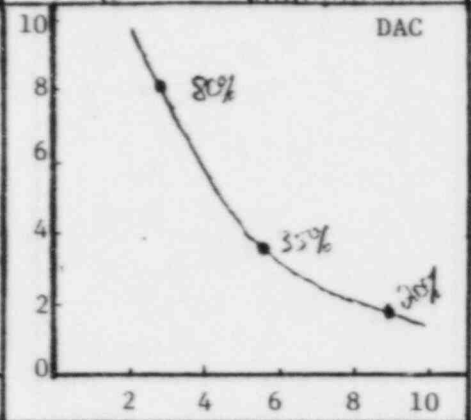
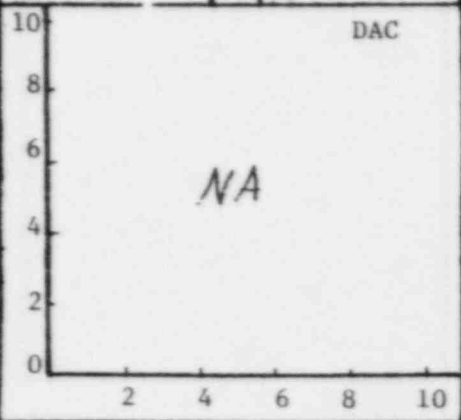
Continuation Sheet Attached
 Yes No

Transducer	0°	45°	60°
S/N	NA	022935	NA
Size		1/2"	
Frequency		2.25 MHz	
Beam Angle	↓	44°	↓

Instrument			
Mfr.	SONICS	Model	Mark I
S/N	01058E	RepRate	1K
Reject	off	Filter	Med
Damp	Min	Coax	12' BAK to BNC
Freq.	2	Video	Norm

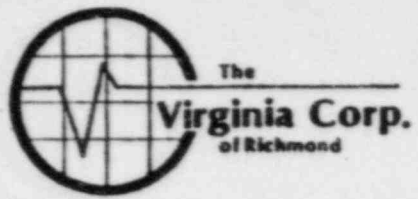
Field Changes:
 Yes No
 If Yes, Number **2**

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1T	NA	NA	80%	3.0	NA		80%	3.2	NA		NA	NA	100% IN	4.00 IN	NA	NA
2T			35%	5.8			25%	6.2								
3T			20%	9.0			15%	9.5								
Ref. dB	NA		42db				47db									



Additional Comments/Sketch

M.R. Martin, ANSE 10-8-82

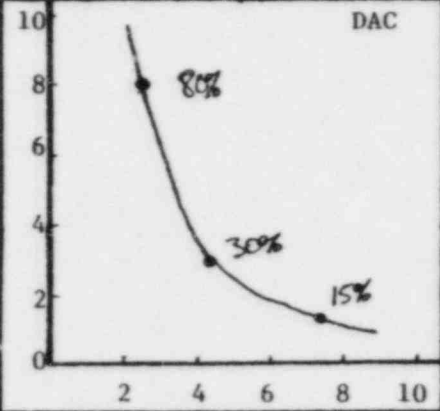
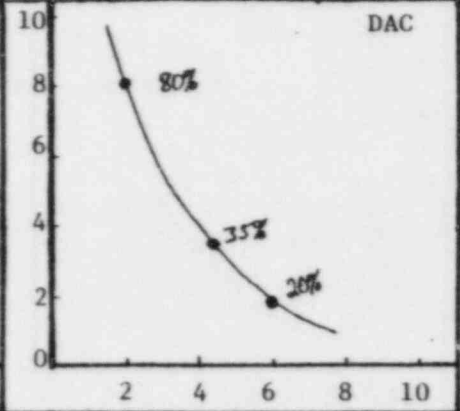
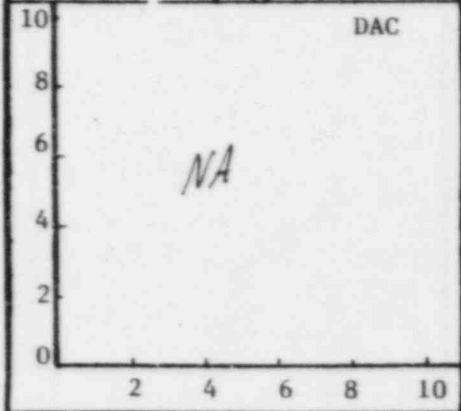


Ultrasonic Examination Report

Customer L.P.+L.	Plant Waterford	Unit 3	Loop/Zone NA/43	Iso/Drawing No. Zone 43, R.2, F.C.7
Procedure ISI-22, R.O, F.C.2	Exam Surface O.D.	Examiner/Level Kumtchik/II	VCR Supervisor Daniel Jones	Date 10/7/82
Component/Piping System Main Steam Header A	Pipe Size 40"	Weld Type Butt	Cal. Block # UT-127	Couplant: Sonotrace Type 40 Batch No. 8124

Continuation Sheet Attached Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Transducer	0°	45°	60°	Instrument				
		S/N	NA	NA	F18164	Mfr.	Sonic	Model	Mark I
Field Changes: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, Number 2	Size			1/2"	S/N	02307E	RepRate	1K	
		Frequency			2.25MHz	Reject	off	Filter	off
		Beam Angle			60°	Damp	Min	Coax	6' BNC-MD.

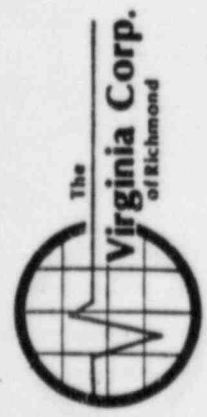
Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1T	NA	NA	80%	2.0	NA		80%	2.4	NA		NA	NA	NA	NA	1:30 PM	3:30 PM
2T			35%	4.2			30%	4.2								
3T			20%	6.0			15%	7.8								
Ref. dB	NA		59db				58db									

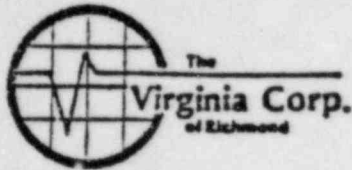


Additional Comments/Sketch
None

W.R. Martin, ANII 10-8-82

Ultrasonic Examination Report - Continuation Sheet										Page	of	
Customer <i>L.P.+L.</i>		Plant <i>Waterford</i>		Unit <i>3</i>	Loop/Zone <i>NA/43</i>	Iso/Drawing No. <i>Zone 43, R. 2, F.C. 7</i>	VCR Supervisor <i>Daniel D. Jones</i>		Date <i>10/7/82</i>			
Procedure <i>ISI-2.2, R.O.F.C. 2</i>		Exam Surface <i>OO.</i>		Examiner/Level <i>Kevin White</i>	Cal. Block <i>UT-127</i>	Compliant: <i>Trace 40, # 2124</i>						
Component/Piping System <i>Main Steam Header A</i>		Pipe Size <i>40"</i>		Weld Type <i>Butt</i>								
Weld No. <i>43-001</i>	Base Metal Scan <i>NA</i>	Scan Direction		Inspection Limitations	Surface Condition		Examination Results		Remarks			
		2 <i>NA</i>	5 <i>Yes</i>		7 & 8 <i>NA</i>	Base Metal <i>Smooth</i>	Weld <i>Smooth</i>	UT <i>NRI</i>	Visual <i>Sat.</i>			
				<i>Base metal, 2 x 0 scans were previously examined.</i>								
				<i>7 + 8 scan previously examined on the B side.</i>								
				<i>I.O. root geometry on the S scan, 0-360° search unit position 1.45" from the center line of the weld, sweep reading 1.6 Ins. Intermittent amplitude 25% thru 280% of DAC, Majority over 50% of DAC.</i>								





W.R. Martin, ANIF 10-8-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit # <i>3</i>	Loop/Zone <i>NA/43</i>
Component/Piping System <i>Main Steam Header A outside cont.</i>		Examiner/Level <i>James R. Soltman LVII</i>	Date <i>9-28-82</i>
Procedure <i>ISI-2.5 Rev. 2 F.C.O</i>	Iso/Drawing No. <i>ZONG 43 Rev. 2 F.C. 6</i>	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument	Transducer		Calibration
Mfgr. <i>Kraut Kramer</i>	Mfgr. <i>KB Aerotech</i>	Size <i>3/4"</i>	Cal. Block <i>VT-127</i>
Model <i>USL-37</i>			Cal. Block
S/N <i>210021</i>	Freq. <i>2.25 MHz</i>		Range Cal. <i>1.875"</i>
Reject <i>off</i>			Calibration Checks
Damp. <i>MIN</i>	Serial No. <i>L21861</i>		<i>CAL IN 12:20</i>
Freq. <i>5</i>	Coax. Cable <i>12' BNC to BNC</i>		<i>CAL OUT 4:00</i>
Rep. Rate <i>1K</i>			
Filter <i>Low</i>			
Video <i>NA</i>	Gain <i>48 dB</i>		
Couplant <i>Sonotrace 70</i>	<i>3124</i>		

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>43-001</i>	<i>12</i>	<i>1.425"</i>	<i>1.350"</i>	<i>NA</i>	<i>43-004</i>	<i>12</i>	<i>1.463"</i>	<i>NA</i>	<i>1.650"</i>
<i>43-001</i>	<i>2</i>	<i>1.444"</i>	<i>1.331"</i>		<i>43-004</i>	<i>2</i>	<i>1.444"</i>		<i>1.650"</i>
<i>43-001</i>	<i>4</i>	<i>1.481"</i>	<i>1.388"</i>		<i>43-004</i>	<i>4</i>	<i>1.500"</i>		<i>1.650"</i>
<i>43-001</i>	<i>6</i>	<i>1.425"</i>	<i>1.425"</i>		<i>43-004</i>	<i>6</i>	<i>1.500"</i>		<i>1.669"</i>
<i>43-001</i>	<i>8</i>	<i>1.388"</i>	<i>1.463"</i>		<i>43-004</i>	<i>8</i>	<i>1.500"</i>		<i>1.669"</i>
<i>43-001</i>	<i>10</i>	<i>1.444"</i>	<i>1.425"</i>		<i>43-004</i>	<i>10</i>	<i>1.425"</i>		<i>1.669"</i>
<i>43-002</i>	<i>12</i>	<i>1.313"</i>	<i>1.625"</i>	<i>1.406"</i>					
<i>43-002</i>	<i>2</i>	<i>1.425"</i>	<i>1.650"</i>	<i>1.369"</i>					
<i>43-002</i>	<i>4</i>	<i>1.406"</i>	<i>1.613"</i>	<i>1.369"</i>					
<i>43-002</i>	<i>6</i>	<i>1.463"</i>	<i>1.650"</i>	<i>1.388"</i>					
<i>43-002</i>	<i>8</i>	<i>1.369"</i>	<i>1.688"</i>	<i>1.388"</i>					
<i>43-002</i>	<i>10</i>	<i>1.463"</i>	<i>1.650"</i>	<i>1.425"</i>					

Sketch/Identification



W.R. Martin, ANII 10-8-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>L P & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>A 143</i>
Component/Piping System <i>MAIN STEAM HEADER "A"</i>	Examiner/Level <i>Michael N Blaw II</i>	Date <i>10-7-82</i>	
Procedure <i>151 2.5 R.O</i>	Iso/Drawing No. <i>ZONE 43 R.2 FC 7</i>	VCR Supervisor <i>Wanil Jones</i>	Continuation Sheet Attached [] Yes [X] No

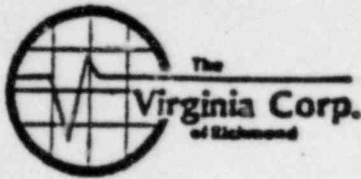
Equipment

Instrument		Transducer		Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>PANAMETRICS</i>	Size <i>1.0" DIA</i>	Cal. Block <i>UT-12B</i>	
Model <i>MARK I</i>	Freq. <i>2.25 MHZ</i>	Serial No. <i>48807</i>	Cal. Block	
S/N <i>04404C</i>	Coax. Cable <i>12' BNC - BNC</i>	Gain <i>56 db</i>	Range Cal. <i>3.406"</i>	
Reject <i>OFF</i>	Video <i>NORM</i>	Couplant <i>SONOGRACE 40 3/4 8124</i>	Calibration Checks	
Damp. <i>MIN</i>			IN <i>7:50</i>	
Freq. <i>2.0</i>			OUT <i>11:10</i>	
Rep. Rate <i>1K</i>				
Filter <i>OFF</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>43-003LA</i>	<i>6"</i>	<i>1.567"</i>	<i>1.567"</i>	<i>1.567"</i>	<i>43-003LA</i>	<i>78"</i>	<i>1.601"</i>	<i>1.567"</i>	<i>1.635"</i>
<i>43-003LA</i>	<i>12"</i>	<i>1.533"</i>	<i>1.567"</i>	<i>1.601"</i>	<i>43-003LB</i>	<i>6"</i>	<i>1.601"</i>	<i>1.533"</i>	<i>1.567"</i>
<i>43-003LA</i>	<i>18"</i>	<i>1.601"</i>	<i>1.567"</i>	<i>1.601"</i>	<i>43-003LB</i>	<i>12"</i>	<i>1.499"</i>	<i>1.533"</i>	<i>1.499"</i>
<i>43-003LA</i>	<i>24"</i>	<i>1.635"</i>	<i>1.567"</i>	<i>1.567"</i>	<i>43-003LB</i>	<i>18"</i>	<i>1.499"</i>	<i>1.499"</i>	<i>1.465"</i>
<i>43-003LA</i>	<i>30"</i>	<i>1.567"</i>	<i>1.567"</i>	<i>1.601"</i>	<i>43-003LB</i>	<i>24"</i>	<i>1.499"</i>	<i>1.499"</i>	<i>1.499"</i>
<i>43-003LA</i>	<i>36"</i>	<i>1.533"</i>	<i>1.567"</i>	<i>1.601"</i>	<i>43-003LB</i>	<i>30"</i>	<i>1.499"</i>	<i>1.499"</i>	<i>1.499"</i>
<i>43-003LA</i>	<i>42"</i>	<i>1.635"</i>	<i>1.567"</i>	<i>1.635"</i>	<i>43-003LB</i>	<i>36"</i>	<i>1.465"</i>	<i>1.567"</i>	<i>1.499"</i>
<i>43-003LA</i>	<i>48"</i>	<i>1.601"</i>	<i>1.567"</i>	<i>1.635"</i>					
<i>43-003LA</i>	<i>54"</i>	<i>1.601"</i>	<i>1.567"</i>	<i>1.635"</i>					
<i>43-003LA</i>	<i>60"</i>	<i>1.601"</i>	<i>1.567"</i>	<i>1.567"</i>					
<i>43-003LA</i>	<i>66"</i>	<i>1.567"</i>	<i>1.567"</i>	<i>1.601"</i>					
<i>43-003LA</i>	<i>72"</i>	<i>1.567"</i>	<i>1.601"</i>	<i>1.601"</i>					

Sketch/Identification



M.R. Martin, ANFI 10-8-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP&L	Plant Waterford	Unit 3	Locp/Zone NA 43
Component/Piping System Mainsteam Header A-Outside Cont.		Examiner/Level Day A. [Signature] II	Date 9-29-82
Procedure ISI 2.5 Rev. 0 F.C.-0	Iso/Drawing No. Zone 43 Rev. 2 F.C.-6	VCR Supervisor Daniel Jensen	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

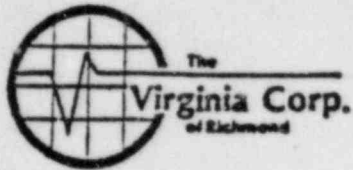
Instrument	Transducer		Calibration
Mfgr. Kraut Kramer	Mfgr. Aerotech	Size 3/4"	Cal. Block UT-127
Model USL-37			Cal. Block
S/N 210021	Freq. 2.25 MHz		Range Cal. 3.75"
Reject Off			Calibration Checks
Damp. Off	Serial No. L21861		
Freq. 5 MHz			Cal. In 1.05
Rep. Rate 1K	Coax. Cable 12' BNC/BNC		Cal. Out 3.35
Filter Low			
Video NA	Gain 48 db		
Couplant Sonatrace 40 8124			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2*	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-001	12	NA	2.663"	1.650"					
43-001	2		2.663"	1.725"					
43-001	4		2.625"	1.650"					
43-001	6		2.775"	1.613"					
43-001	8		2.550"	1.650"					
43-001	10		2.738"	1.650"					

Sketch/Identification

* Readings were taken 5" from toe of weld on 5 side.



W.R. Martin, ANFI 10-8-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA 43</i>
Component/Piping System <i>Main Steam Header A-Outside</i>	Examiner/Level <i>Danny A. Zofka II</i>	Date <i>10-7-82</i>	
Procedure <i>ISI-2.5 R.O FC.0</i>	Iso/Drawing No. <i>Zone 43 R.2 FC-7</i>	VCR Supervisor <i>Daniel Jones</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. <i>Sonic</i>	Mfgr. <i>Parameters</i>	Size <i>1/2"</i>	Cal. Block <i>UT-127</i>	
Model <i>Mark I</i>			Cal. Block	
S/N <i>03704E</i>	Freq. <i>3.5 MHz</i>		Range Cal. <i>2.5"</i>	
Reject <i>OFF</i>			Calibration Checks	
Damp. <i>Min</i>	Serial No. <i># 41874</i>		<i>IN: 1:10</i>	
Freq. <i>2 MHz</i>	Coax. Cable <i>6' BNC-PC</i>		<i>OUT: 3:20</i>	
Rep. Rate <i>3K</i>				
Filter <i>OFF</i>	Gain <i>48 DB</i>			
Video <i>Norm.</i>				
Couplant <i>Sanotape 40 #8124</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>43-001</i>	<i>12</i>	<i>1.375"</i>	<i>1.350"</i>	<i>1.65" 2.20"</i>					
	<i>2</i>	<i>1.425"</i>	<i>1.400"</i>	<i>1.60" 2.20"</i>					
	<i>4</i>	<i>1.325"</i>	<i>1.425"</i>	<i>1.525" 2.25"</i>					
	<i>6</i>	<i>1.350"</i>	<i>1.450"</i>	<i>1.55" 2.25"</i>					
	<i>8</i>	<i>1.500"</i>	<i>1.375"</i>	<i>1.45" 2.30"</i>					
	<i>10</i>	<i>1.325"</i>	<i>1.350"</i>	<i>1.45" 2.25"</i>					

Sketch/Identification

* Readings 3" from toe of weld

Readings taken after additional grinding for angle beam examination.

M.R. Martin, ANEF 10-8-82

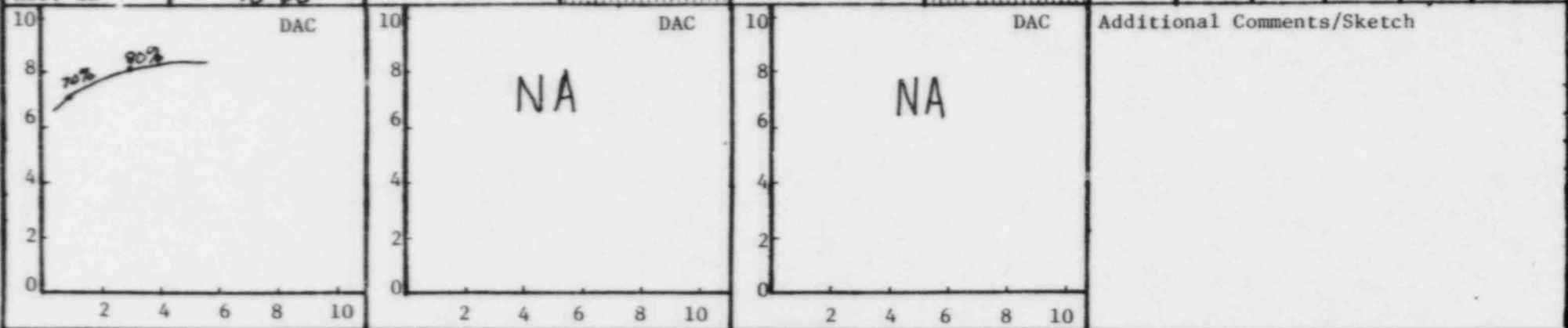


Ultrasonic Examination Report

Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NH/43</i>	Iso/Drawing No. <i>Zone 43 Rev. 2 FG</i>
Procedure <i>ISI-2.2 Rev. FC-2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Ray A. Salter II</i>	VCR Supervisor <i>Daniel J. Jones</i>	Date <i>9-29-82</i>
Component/Piping System <i>Main Steam Header - A Outside Contain.</i>	Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT-127</i>	Couplant: <i>Type Sonac 40</i> Batch No. <i>8124</i>

Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Transducer	0°	45°	60°	Instrument			
	S/N	<i>L21861</i>	<i>NA</i>	<i>NA</i>	Mfr.	<i>Kraut Kramer</i>	Model	<i>LISL-37</i>
Field Changes: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, Number <i>FC-2</i>	Size	<i>3/4"</i>			S/N	<i>210021</i>	RepRate	<i>1K</i>
	Frequency	<i>2.25 MHz</i>			Reject	<i>OFF</i>	Filter	<i>Low</i>
	Beam Angle	<i>0°</i>			Damp	<i>OFF</i>	Coax	<i>12' BNC-BNC</i>

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1/4 T</i>	<i>70%</i>	<i>.9</i>	<i>NA</i>	<i>NA</i>			<i>NA</i>	<i>NA</i>			<i>1:05</i>	<i>3:35</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>3/4 T</i>	<i>80%</i>	<i>2.8</i>														





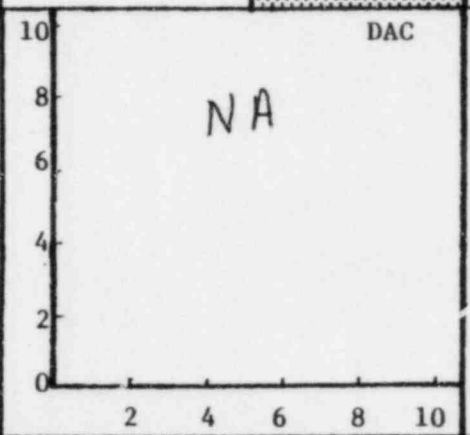
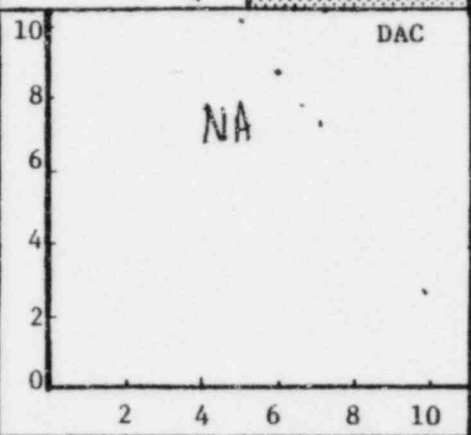
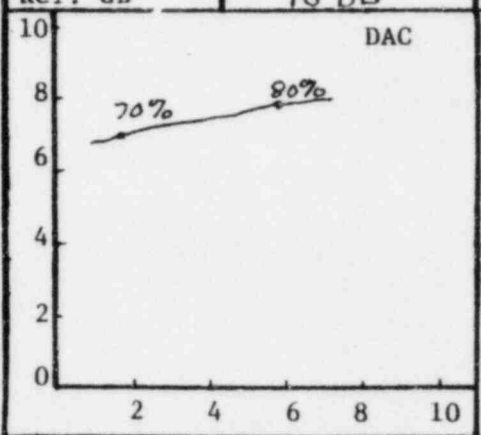
Ultrasonic Examination Report

Customer LP+L	Plant Waterford	Unit 3	Loop/Zone NA/43	Iso/Drawing No. Zone 43 Rev. 2 FC-6
Procedure ISI-2.2 Rev. A FC-2	Exam Surface C.D	Examiner/Level Henry A. Lefkowitz II	VCR Supervisor Daniel Jensen	Date 9-28-82
Component/Piping System Main steam Header A - Outside Contain.	Pipe Size 40"	Weld Type Butt	Cal. Block UT-127	Couplant: Type 40 Batch No. 8124

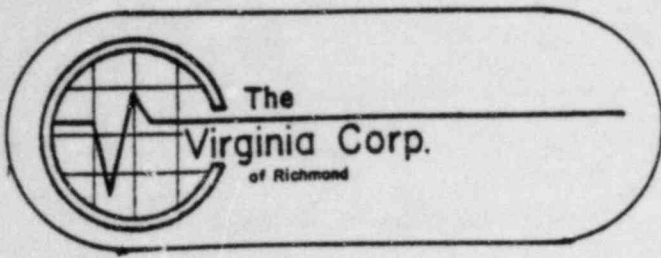
Continuation Sheet Attached
 Yes No

Field Changes: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, Number FC-2	Transducer	0°	45°	60°	Instrument			
	S/N	L21861	NA	NA	Mfr.	KrautKramer	Model	USL-37
	Size	3/4"			S/N	210021	RepRate	IK
	Frequency	2.25 MHz			Reject	OFF	Filter	Low
	Beam Angle	0°			Damp	OFF	Coax	12' BNC-BNC
				Freq.	5 MHz	Video	NA	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1/4 T	70%	1.8	NA	NA			NA	NA			12:20	4:00	NA	NA	NA	NA
3/4 T	80%	5.6														
Ref. dB	48 DB															



Additional Comments/Sketch



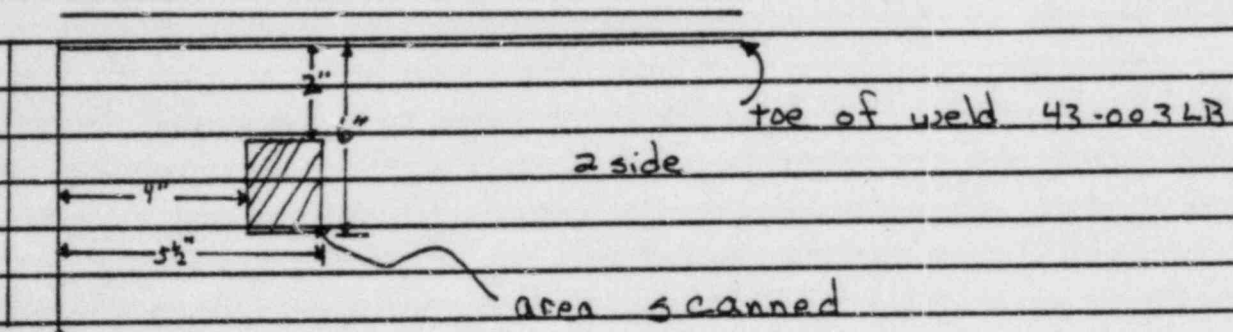
DATE 9-29-82

PAGE 4 OF 4

TO _____

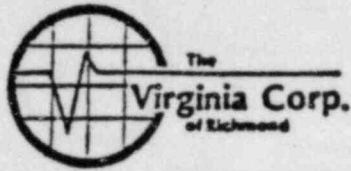
SUBJECT Zone 43
43-003LB

43-003LB - The surface was irregular and lost contact with $\frac{3}{4}$ " transducer, therefore a $\frac{1}{4}$ " transducer was used on area shown below.



toe of weld 43-004

SIGNED Tony A. Lopez II



W.R. Martin, ANEI 10-7-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LPL	Plant Waterford	Unit 3	Loop/Zone N/A/43
Component/Piping System Mainstream Header A-outside	Examiner/Level Doug A. Salthouse	Date 9-29-82	
Procedure 151-2.5 Rev. 0 FC-0	Iso/Drawing No. Zone 43 Rev. 2 FCG	VCR Supervisor Daniel Jones	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument	Transducer		Calibration
Mfgr. KrautKramer	Mfgr. Aerotech	Size 3/4"	Cal. Block UT-127
Model USL-37			Cal. Block
S/N 210021	Freq. 2.25 MHz		Range Cal. 1.875"
Reject OFF	Serial No. L21861		Calibration Checks
Damp. OFF			Cal IN 8.15
Freq. 5	Coax. Cable 12' BNC/BNC		Cal OUT 12.05
Rep. Rate 1K			
Filter Low			
Video N/A	Gain 48 db		
Couplant Sonotrace 40 8124			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-079	12	1.556"	1.594"	N/A					
43-079	2	1.556"	1.594"						
43-079	4	1.500"	1.575"						
43-079	6	1.556"	1.556"						
43-079	8	1.500"	1.556"						
43-079	10	1.575"	1.575"	↓					

Sketch/Identification

W.R. Martin, ANII 10-7-82



The
Virginia Corp.
of Richmond

Ultrasonic Examination Report

Customer <i>LP & L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA / 43</i>	Iso/Drawing No. <i>Zone 43 Rev 2 FC-6</i>
Procedure <i>ISI-2.2 Rev 0 FC2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Mary A. Loftis #</i>	VCR Supervisor <i>Daniel A. Jones</i>	Date <i>9-29-82</i>
Component/Piping System <i>Main steam Header A-Outside Capt.</i>		Pipe Size/ <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT-127</i>
			Couplant: <i>Type Saco 40</i>	Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number *FC-2*

Transducer	<i>0°</i>	<i>45°</i>	<i>60°</i>	Instrument			
	S/N <i>1-21861</i>	<i>NA</i>	<i>NA</i>	Mfr. <i>Krautkramer</i>	Model <i>USL-37</i>		
	Size <i>3/4"</i>			S/N <i>210021</i>	RepRate <i>1K</i>		
	Frequency <i>2.25 MHz</i>			Reject <i>OFF</i>	Filter <i>Low</i>		
Beam Angle <i>0°</i>				Damp <i>OFF</i>	Coax <i>12' BNC-BNC</i>		
				Freq. <i>5 MHz</i>	Video <i>NA</i>		

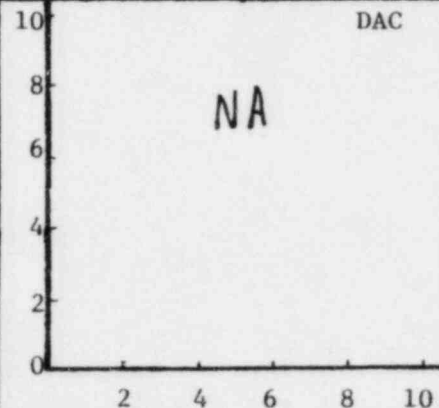
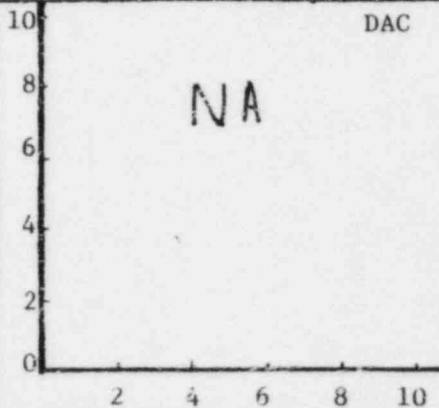
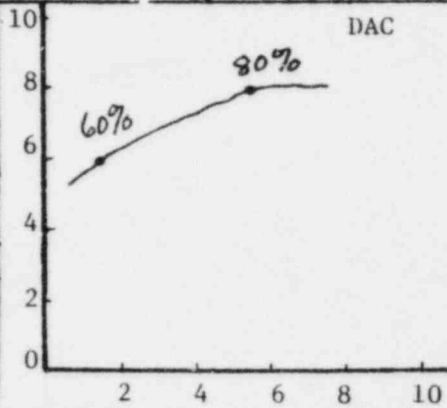
Calibration *0°*

2 & 5 Scan

7 & 8 Scan

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks					
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°	
											In	Out	In	Out	In	Out
<i>1/4T</i>	<i>60%</i>	<i>1.6</i>	<i>NA</i>	<i>NA</i>			<i>NA</i>	<i>NA</i>			<i>8:15</i>	<i>12:05</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>3/4T</i>	<i>80%</i>	<i>5.5</i>														

Ref. dB *48 DB*



Additional Comments/Sketch

W.R. Martin, ANEF 10-7-82



Ultrasonic Examination Report

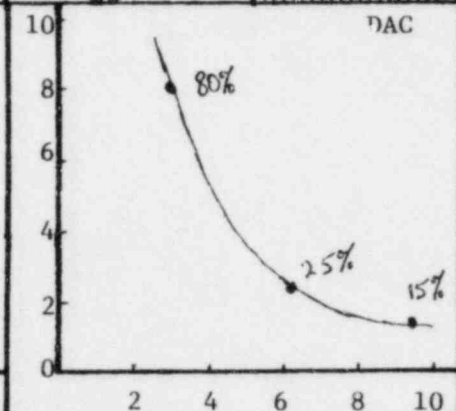
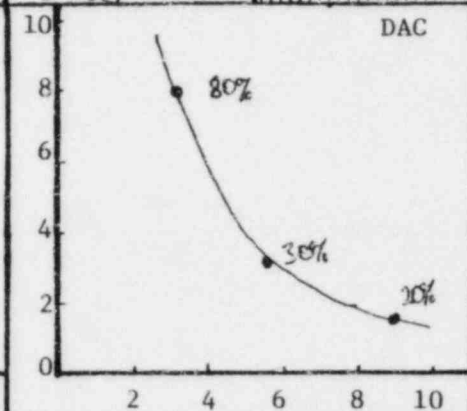
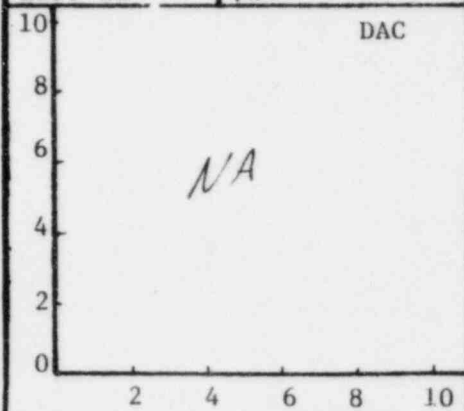
Customer <i>L.P.+L.</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA/43</i>	Iso/Drawing No. <i>Zone 43, R.2.F.C.6</i>
Procedure <i>ISI-2.2.R.O.F.C.2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Kevin White/II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>9/29/82</i>
Component/Piping System <i>Main Steam Header-A</i>	Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT-127</i>	Couplant: <i>Sonotrace</i> Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

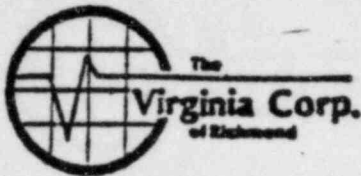
Field Changes:
 Yes No
 If Yes, Number *2*

Transducer	0°	45°	60°	Instrument			
S/N	<i>NA</i>	<i>J22935</i>	<i>NA</i>	Mfr.	<i>Sonics</i>	Model	<i>Mark I</i>
Size		<i>1/2"</i>		S/N	<i>01930E</i>	RepRate	<i>1K</i>
Frequency		<i>2.25MHz</i>		Reject	<i>off</i>	Filter	<i>off</i>
Beam Angle		<i>45°</i>		Damp	<i>Min</i>	Coax	<i>12' BNC-BNC</i>
				Freq.	<i>2</i>	Video	<i>Norm</i>

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3.0</i>	<i>NA</i>		<i>80%</i>	<i>3.2</i>	<i>NA</i>		<i>NA</i>	<i>NA</i>	<i>12:00 PM</i>	<i>2:15 PM</i>	<i>NA</i>	<i>NA</i>
<i>2T</i>			<i>30%</i>	<i>5.8</i>			<i>25%</i>	<i>6.2</i>								
<i>3T</i>			<i>20%</i>	<i>9.0</i>			<i>15%</i>	<i>9.6</i>								
Ref. dB	<i>NA</i>		<i>50db</i>				<i>55db</i>									



Additional Comments/Sketch
None



W.R. Martin, ANIF 10-5-82
**Ultrasonic Data Sheet
 for
 Thickness Measurement**

Customer LP&L	Plant Waterford	Unit 3	Loop/Zone NA 43
Component/Piping System Mainsteam Header Airside Cont	Examiner/Level Maury A. Laffoon II	Date 9/30/82	
Procedure ISI 2.5 Rev.0 F.C.-0	Iso/Drawing No. Zone 43 Rev.2 F.C.6	VCR Supervisor Daniel Jensen	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. Sonic	Mfgr. KB Aerotech	Size 1/2"	Cal. Block UT-127	
Model Mark I	Freq. 5 MHz		Cal. Block	
S/N 0105BE	Serial No. F08945		Range Cal. 1.875"	
Reject OFF	Coax. Cable 12' BNC/BNC		Calibration Checks	
Damp. Min	Gain 32db		Cal. In 2:10	
Freq. 5			Cal. Out 4:25	
Rep. Rate 3K				
Filter OFF				
Video Norm				
Couplant Sono trace 40 8124				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-081	12	1.538"	1.463"	1.631"	43-082	12	1.331"	NA	1.463"
43-081	2	1.350"	1.463"	1.613"	43-082	2	1.294"		1.425"
43-081	4	1.388"	1.388"	1.631"	43-082	4	1.294"		1.406"
43-081	6	1.388"	1.388"	1.613"	43-082	6	1.313"		1.388"
43-081	8	1.481"	1.425"	1.594"	43-082	8	1.388"		1.425"
43-081	10	1.444"	1.481"	1.613"	43-082	10	1.369"		1.463"

Sketch/Identification

M.R. Martin, ANII 10-5-82



The Virginia Corp.
of Richmond

Ultrasonic Examination Report

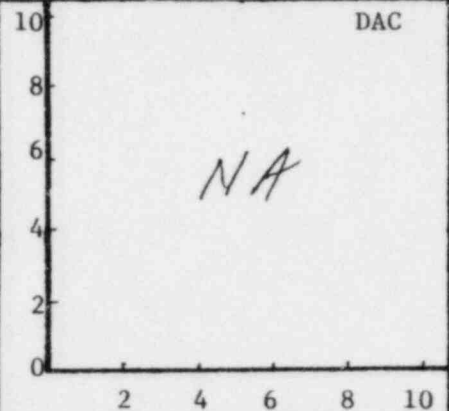
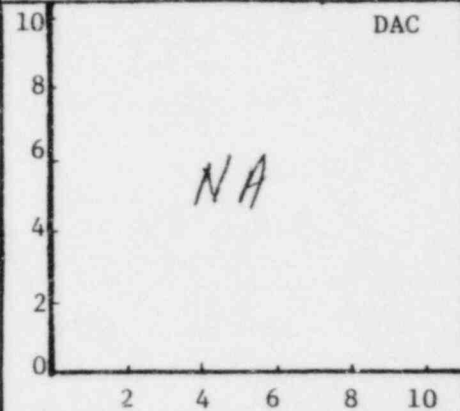
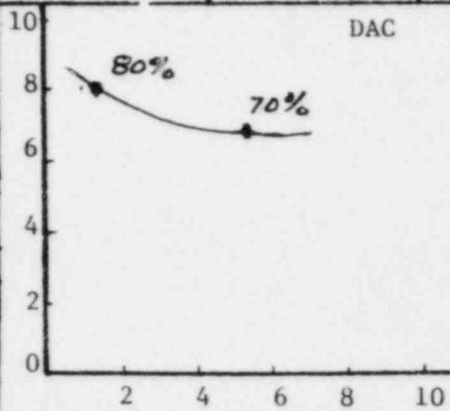
Customer <i>L.P. + L.</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>NA/13</i>	Iso/Drawing No. <i>ZONE 43, REV. 2 F.C. 6</i>
Procedure <i>151-2.2 R.O. F.C. 2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Daryl Lettice II</i>	WOR Supervisor <i>Daniel Jensen</i>	Date <i>9/30/82</i>
Component/Piping System <i>MAIN STEAM HEADER A</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block # <i>LT-127</i>	Couplant: <i>SONOTACE</i> Type <i>40</i> Batch No. <i>8/24</i>

Continuation Sheet Attached
 Yes No

Transducer	<i>0°</i>	<i>45°</i>	<i>60°</i>	Instrument		
S/N	<i>F08845</i>	<i>NA</i>	<i>NA</i>	Mfg.	<i>SONIC</i>	Model <i>MARK I</i>
Size	<i>1/2"</i>			S/N	<i>01058E</i>	RepRate <i>3K</i>
Frequency	<i>5 MHZ</i>			Reject	<i>OFF</i>	Filter <i>OFF</i>
Beam Angle	<i>0°</i>	<i>↓</i>	<i>↓</i>	Damp	<i>MIN.</i>	Coax <i>12' BVC TO BVC</i>
				Freq.	<i>5 MHZ</i>	Videa <i>Norm</i>

Field Changes:
Yes No
If Yes, Number *F.C. - 2*

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1/4 T</i>	<i>80%</i>	<i>1.5</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>		<i>NA</i>	<i>NA</i>	<i>NA</i>		<i>2:10 PM</i>	<i>4:25 PM</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>3/4 T</i>	<i>70%</i>	<i>5.6</i>														
Ref. dB	<i>32 db</i>															



Additional Comments/Sketch

W.R. Martin, ANET 10-5-82



Ultrasonic Examination Report

Customer L.P. & L.	Plant WATERFORD	Unit 3	Loop/Zone NA/43	Iso/Drawing No. ZONE 43, R.2, F.C.6
Procedure ISI-2.2 R.O. F.C.2	Exam Surface O.D.	Examiner/Level W.R. Martin II	VGR Supervisor Daniel Jensen	Date 10/1/82
Component/Piping System MAIN STEAM HEADER A		Pipe Size 40"	Weld Type BUTT	Cal. Block UT-127
		Couplant: SONOTRACE		Batch No. 8124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **F.C.-2**

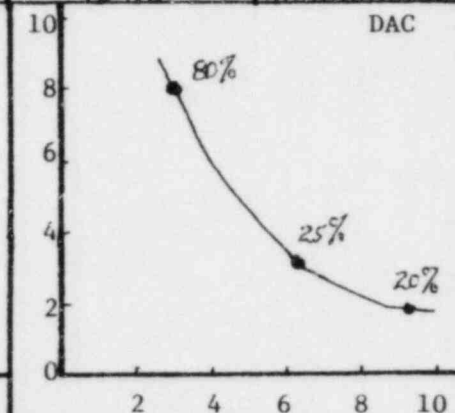
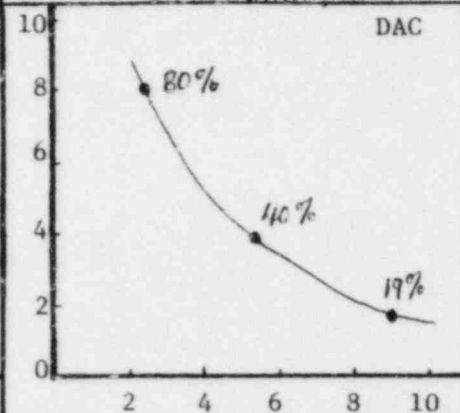
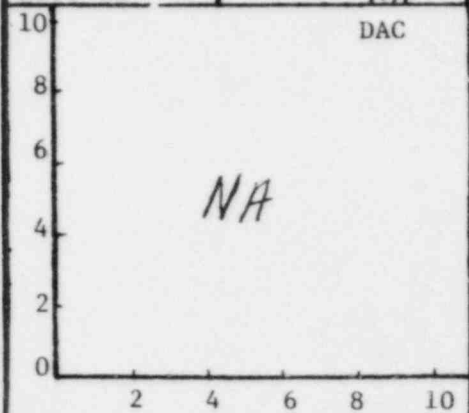
Transducer	0°	45°	60°	Instrument			
S/N	NA	022063	NA	Mfr.	SONIC	Model	MARK I
Size		1/2"		S/N	01058E	RepRate	3k
Frequency		2.5 MHz		Reject	OFF	Filter	OFF
Beam Angle	↓	75°	↓	Damp	MIN.	Coax	6' BNC to MP
				Freq.	2	Video	NORM

Calibration 0°

2 & 5 Scan

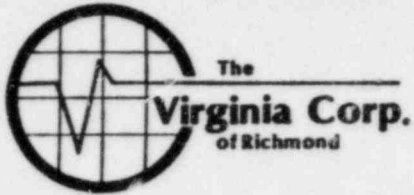
7 & 8 Scan

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks					
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°	
											In	Out	In	Out	In	Out
1T	NA	NA	80%	3.0	NA		80%	3.1	NA		NA	NA	8:00 AM	11:00 AM	NA	NA
2T			40%	5.9			25%	6.1								
3T			19%	9.0			20%	9.6								
Ref. dB																



Additional Comments/Sketch

W.R. Martin, ANII 10-5-82

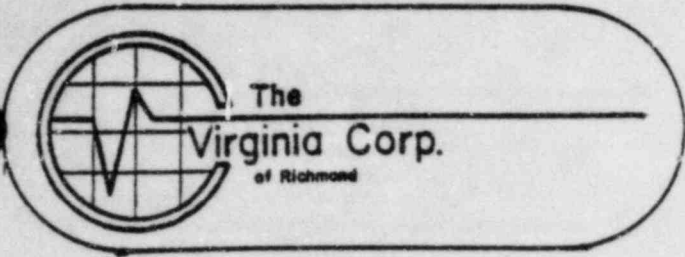


Ultrasonic Examination Report - Continuation Sheet

Page of

Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/ Zone <i>NA/43</i>	Iso/ Drawing No. <i>Zone 43 Rev.2 FC-6</i>
Procedure <i>ISI-2.2 Rev.0 FC-2</i>	Exam Surface <i>J.D.</i>	Examiner/Level <i>Doug Adolpho II</i>	VCR Supervisor <i>Daniel Densen</i>	Date <i>10-1-82</i>
Component/Piping System <i>Main Steam Header A</i>	Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block <i>UT-127</i>	Couplant: Type & Batch # <i>Sonotrace 40 SN: 8124</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
<i>43-081</i>	<i>NA</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>NA</i>		<i>Ground</i>	<i>Ground</i>	<i>NRI</i>	<i>Sat</i>	<i>Geometry See Attached Sheet</i>
<i>43-082</i>	<i>NA</i>	<i>No</i>	<i>Yes</i>	<i>Par</i>	<i>NA</i>	<i>No and Par due to Valve Configuration on 2 side</i>	<i>Ground</i>	<i>Ground</i>	<i>NI</i>	<i>Sat</i>	



The
Virginia Corp.
of Richmond

DATE 10-1-82

PAGE OF

TO _____

SUBJECT Inspection Remarks

43-081

ID WELD GE 2. NOTICED WITH 45° IN THE
2 SCAN BETWEEN 30%-60% DAC. 360°,
2" on 2 side @ 4.8 Screen

ID WELD GEO. WITH 45° IN THE 5 SCAN
BETWEEN 30%-60% DAC. 360° 2" on
5 SIDE @ 4.9 SCREEN

SIGNED

Gay A. Lofgren



M.R. Martin, ANIS 10-7-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer L P & L	Plant WATER FORD	Unit 3	Loop/Zone A / 43
Component/Piping System MAIN STEAM HEADER		Examiner/Level Michael W. Blum II	Date 10-4-82
Procedure ISI 2.5 R.O. FC.O	Iso/Drawing No. ZONE 43 REV 2 FC	VCR Supervisor Daniel Jensen	Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. KRAUTKRAMER	Mfgr. AEROTECH	Size .75"	Cal. Block UT-12B	
Model USL-37			Cal. Block	
S/N 210021	Freq. 2.25 MHz	Range Cal. 3.406"		
Refect M.N			Calibration Checks	
Damp. Fixed	Serial No. L21861	IN 8:15		
Freq. 2.5	Coax. Cable 12' BNC-BNC		OUT 12:10	
Rep. Rate 1K	Gain 42 db		IN 1:20	
Filter LOW			OUT 5:10	
Video NA				
Couplant SONOTRACE 40 1/2 B124				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-036LA	6"	2.55"	2.73"	2.73"	43-049LA	6"	2.73"	2.73"	2.70"
43-036LA	12"	2.66"	2.73"	2.73"	43-049LA	12"	2.70"	2.73"	2.70"
43-036LA	18"	2.66"	2.73"	2.66"	43-049LA	18"	2.73"	2.73"	2.70"
43-036LA	24"	2.62"	2.73"	2.66"	43-049LA	24"	2.66"	2.73"	2.70"
43-036LA	30"	2.62"	2.70"	2.62"	43-049LA	30"	2.70"	2.73"	2.73"
43-036LA	36"	2.52"	2.66"	2.66"	43-049LA	36"	2.62"	2.73"	2.70"
43-036LA	42"	2.59"	2.59"	2.66"	43-049LA	42"	2.73"	2.73"	2.70"
43-036LA	48"	2.55"	2.70"	2.70"	43-049LA	48"	2.80"	2.73"	2.70"
43-036LA	54"	2.59"	2.70"	2.66"	43-049LA	54"	2.73"	2.73"	2.73"
43-036LA	60"	2.59"	2.70"	2.66"	43-049LA	60"	2.76"	2.73"	2.73"
43-036LA	66"	2.49"	2.62"	2.70"	43-049LA	66"	2.80"	2.73"	2.70"
					43-049LA	72"	2.73"	2.73"	2.70"

Sketch/Identification

N.R. Martin, ANET 10-7-82



Ultrasonic Examination Report

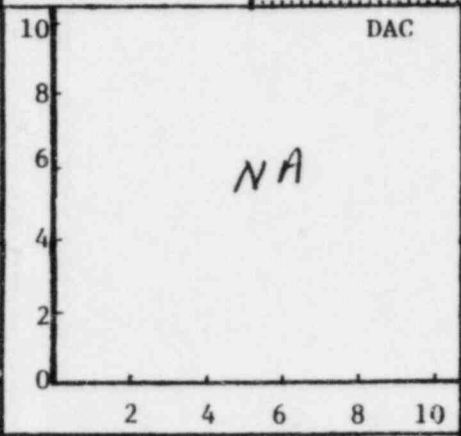
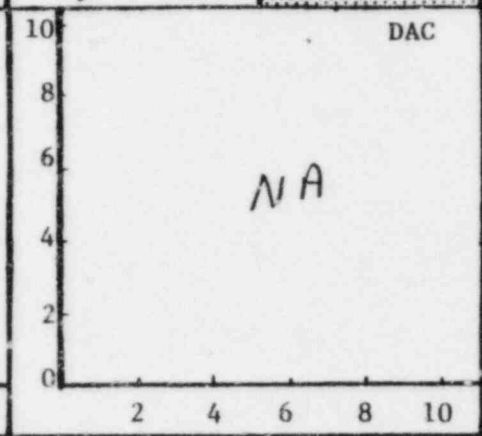
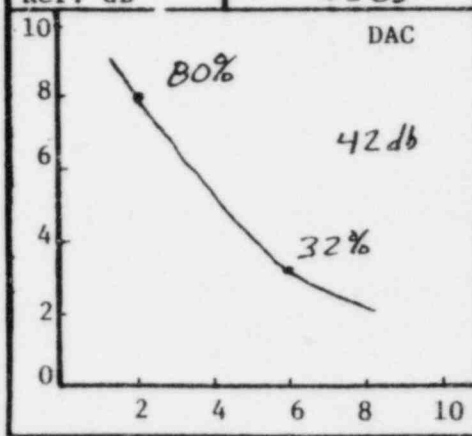
Customer <i>L P & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>A/43</i>	Iso/Drawing No. <i>ZONE 43 REV 2 FC 8</i>	<i>mwb 7</i>
Procedure <i>ISI 2.2 R.O FC 2</i>	Exam Surface <i>O. D.</i>	Examiner/Level <i>Michael W. Blunt</i>	VCR Supervisor <i>Donald Jensen</i>	Date <i>10-4-82</i>	
Component/Piping System <i>MAIN STEAM HEADER "A"</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block # <i>UT-128</i>	Couplant: <i>SONOTRACE Type 40</i>	Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

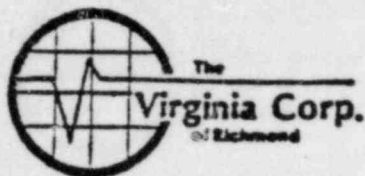
Field Changes:
 Yes No
 If Yes, Number *2*

Transducer	0°	45°	60°	Instrument				
	S/N	<i>LZ1861</i>	<i>NA</i>	<i>NA</i>	Mfr.	<i>KRAUTHRAMER</i>	Model	<i>USL-37</i>
	Size	<i>.75" DIA</i>			S/N	<i>210021</i>	RepRate	<i>1K</i>
	Frequency	<i>2.25MVE</i>			Reject	<i>MIN</i>	Filter	<i>LOW</i>
	Beam Angle	<i>0°</i>			Damp	<i>FIXED</i>	Coax	<i>12 BNC-BNC</i>
				Freq.	<i>2.5</i>	Video	<i>NA</i>	

Calibration 0°			2 & 5 Scan					7 & 8 Scan					Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
			<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>1:20</i>	<i>5:10</i>				
<i>1/4 T</i>	<i>80%</i>	<i>2.0</i>																
<i>3/4 T</i>	<i>32%</i>	<i>6.0</i>																
<i>1 T</i>		<i>8.0</i>																
Ref. dB	<i>42 db</i>																	



Additional Comments/Sketch



M.R. Martin, ANII 10-7-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone A/43
Component/Piping System MAIN STEAM HEADER "A"	Examiner/Level Michael N. Blum II	Date 10-5-82	
Procedure ISI. 2.5 R.O	Iso/Drawing No. ZONE 43 R.2 FC 7	VCR Supervisor Daniel Jensen	Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. KRAUTKRAMER	Mfgr. PANAMETRICS	Size 1.0" DIA.	Cal. Block UT-127	
Model USL-37	Freq. 2.25 MHz.	Cal. Block		
S/N 210021	Serial No. 48807	Range Cal. 1.875"		
Refect MIN	Coax. Cable 12' BNC-BNC	Calibration Checks		
Damp. FIXED	Gain 32 db	IN : 1:00		
Freq. 2.5		OUT : 3:20		
Rep. Rate 1K				
Filter LOW				
Video NA				
Couplant SONOTRACE 40 4/8124				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-080LA	6"	1.763"	1.613"	1.575"	43-080LA	78"	1.725"	1.594"	1.594"
43-080LA	12"	1.763"	1.613"	1.594"	43-080LA	84"	1.781"	1.575"	1.594"
43-080LA	18"	1.781"	1.613"	1.575"	43-080LA	90"	1.781"	1.575"	1.575"
43-080LA	24"	1.763"	1.613"	1.594"	43-080LA	96"	1.763"	1.613"	1.575"
43-080LA	30"	1.800"	1.594"	1.613"	43-080LA	102"	1.725"	1.575"	1.594"
43-080LA	36"	1.781"	1.631"	1.594"	43-080LA	108"	1.725"	1.575"	1.594"
43-080LA	42"	1.744"	1.613"	1.613"	43-080LA	114"	1.725"	1.575"	1.575"
43-080LA	48"	1.781"	1.631"	1.594"	43-080LA	120"	1.725"	1.575"	1.613"
43-080LA	54"	1.800"	1.613"	1.594"					
43-080LA	60"	1.688"	1.613"	1.594"					
43-080LA	66"	1.763"	1.613"	1.594"					
43-080LA	72"	1.763"	1.594"	1.594"					

Sketch/Identification



Ultrasonic Data Sheet
W.R. Martin for ANSI 10-7-82
 Thickness Measurement
 Continuation Page 2 of 2

Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone A / 43
Component/Piping System MAIN STEAM HEADER	Examiner/Level Michael W. Blum II	Date 10-5-82	
Procedure ISI 2.5 R.O	Iso/Drawing No. <small>mwb 7</small> ZONE 43 R.2 FC &	VCR Supervisor Daniel Jensen	

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-080LB	6"	1.669"	1.575"	1.538"	N/A	N/A	N/A	N/A	N/A
43-080LB	12"	1.613"	1.556"	1.519"					
43-080LB	18"	1.575"	1.500"	1.519"					
43-080LB	24"	1.556"	1.519"	1.500"					
43-080LB	30"	1.519"	1.500"	1.500"					
43-080LB	36"	1.575"	1.500"	1.481"					
43-080LB	42"	1.613"	1.500"	1.500"					
43-080LB	48"	1.575"	1.500"	1.500"					
43-080LB	54"	1.613"	1.519"	1.519"					
43-080LB	60"	1.575"	1.538"	1.538"					

Sketch/Identification

M.R. Martin, ANII 10-7-82



Ultrasonic Examination Report

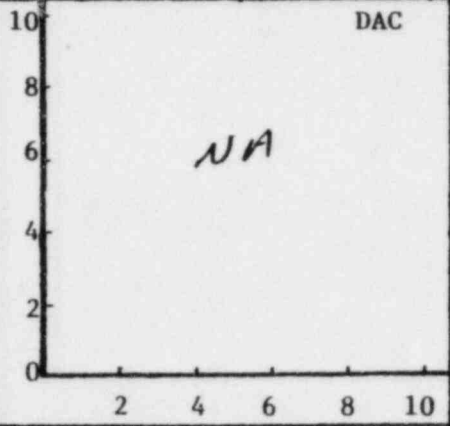
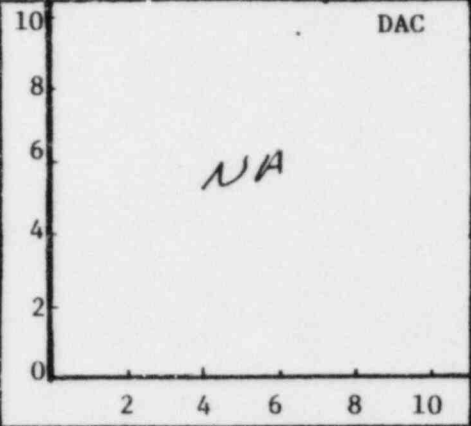
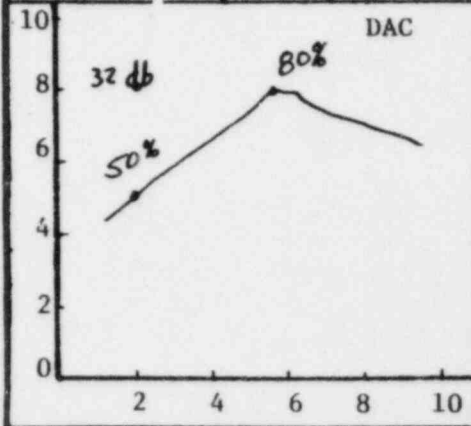
Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone A/43	Iso/Drawing No. ZONE 41 RZ FC 7
Procedure 151-2.2 ROPCZ	Exam Surface O. D.	Examiner/Level Michael W. Blum	VCR Supervisor Daniel Jensen	Date 10-5-82
Component/Piping System MAIN STEAM HEADER A	Pipe Size 40"	Weld Type BUTT	Cal. Block UT-127	Couplant: SONOTRACE Type 40 Batch No B124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

	Transducer	0°	45°	60°	Instrument			
	S/N	48807	NA	NA	Mfr.	KRAUTERAMER	Model	USL-37
	Size	1.0" DIA			S/N	210021	RepRate	1K
	Frequency	2.25MHz			Reject	MIN	Filter	Low
	Beam Angle	0°			Damp	FIXED	Coax	12' BMC-BNC

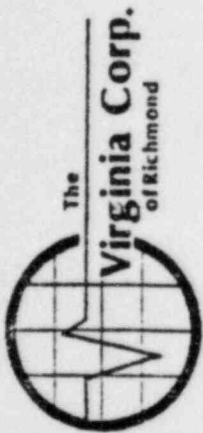
Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
			NA	NA	NA	NA	NA	NA	NA	NA	NA	1:00	3:20	NA	NA	NA	NA
1/4 T	50%	2.0															
3/4 T	80%	5.8															
1 T		8.0															
Ref. dB	32 db																



Additional Comments/Sketch

W.B. Martin, ANII 10-7-84

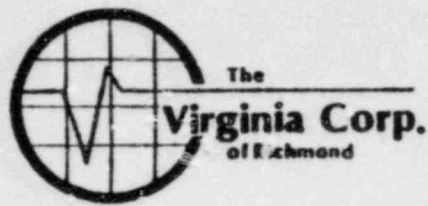
Ultrasonic Examination Report - Continuation Sheet



Customer: L P & L Plant: WATERFORD Unit: 3 Iso/Drawing No.: ZONE 43 REV E FC 7
Procedure: ISI-2.2 R.O.F.E. Exam Surface: O.D. Examiner/Level: Michael R. Ahn VCR Supervisor: Daniel J. Guse Date: 10-5-82
Component/Piping System: MAW STEAM HEADER "A" Pipe Size: 40 Weld Type: BUTT Cal. Block Couplant: Type & Batch #: UT-127 SOURCEFACE 40 70 8124

Table with columns: Weld No., Base Metal Scan, Scan Direction (2, 5, 7 & 8), Inspection Limitations, Surface Condition (Base Metal, Weld), Examination Results (UT, Visual), Remarks.

W.R. Martin, ANSI 10-7-82



Ultrasonic Examination Report

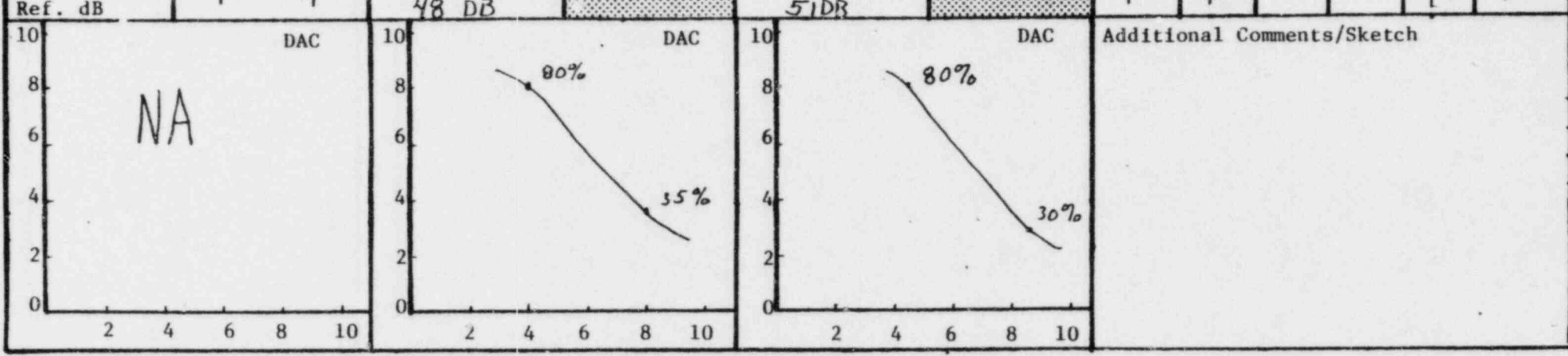
Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA/43</i>	Iso/Drawing No. <i>Zone 43 Rev 2 FC-7</i>
Procedure <i>ISI-2.2 Rev. 0 FC-2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Dan A. Soffner #</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>10-5-82</i>
Component/Piping System <i>Main Steam Header A-Outside</i>	Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT-127</i>	Couplant: <i>Type Son 40 Batch No. 8124</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number *F.C. 2*

Transducer S/N Size Frequency Beam Angle	0°	45°	60°	Instrument			
	<i>NA</i>	<i>J22935</i>	<i>NA</i>	Mfer.	<i>Sonic</i>	Model	<i>Mark I</i>
		<i>1/2"</i>		S/N	<i>03704E</i>	RepRate	<i>1K</i>
		<i>2.25MHz</i>		Reject	<i>OFF</i>	Filter	<i>OFF</i>
		<i>45°</i>		Damp	<i>Min.</i>	Coax	<i>12' BNC-BNC</i>
			Freq.	<i>2</i>	Video	<i>Norm</i>	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>4.2</i>			<i>80%</i>	<i>4.2</i>			<i>NA</i>	<i>NA</i>	<i>1:10</i>	<i>4:35</i>	<i>NA</i>	<i>NA</i>
<i>2T</i>			<i>35%</i>	<i>8.0</i>			<i>30%</i>	<i>8.5</i>								



W.R. Martin, ANII 10-7-82

Ultrasonic Examination Report - Continuation Sheet Page of

Customer: Loop/ Zone NA / 43 Iso/Drawing No. Zone 43 Rev 2 EC-7

Plant Waterford VCR Supervisor Daniel Gino Date 10-5-82

Unit 3 Exam Surface Examiner/Level Day D. Loftho II

Procedure ISI-2.2 Rev 0 EC-2 O.D. Pipe Size 40" Weld Type Butt

Component/Piping System Main Steam Header A-Outside Inspection Limitations Cal. Block Couplant: Type & Batch # UT-127 Sonotrace 40 #8124



Weld No.	Base Metal Scan	Scan Direction			Inspection Limitations	Surface Condition			Remarks
		2	5	7 & 8		Base Metal	Weld	UT	
43-080 LA	NA	Yes	Yes	0	Clean	Ground	NI	Sat.	
43-080 LB	NA	Yes	Yes		Clean	Ground	NI	Sat.	

W.R. Martin, ANII 10-7-82



Ultrasonic Examination Report

		Customer <i>LP&L</i>		Plant <i>Waterford</i>		Unit <i>3</i>		Loop/Zone <i>N/A/43</i>		Iso/Drawing No. <i>ZONE 43 R.2 F.C. 7</i>																											
		Procedure <i>ISI-22 R.O.F.C.2</i>		Exam Surface <i>O.D.</i>		Examiner/Level <i>Henry A. Lott</i>		VCR Supervisor <i>Daniel Jensen</i>		Date <i>10-6-82</i>																											
Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				Transducer		0°		45°		60°		Instrument																									
				S/N				<i>122935</i>				Mfg.		<i>SONIC</i>		Model <i>Mark I</i>																					
Field Changes: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, Number <i>F.C.2</i>				Size				<i>1/2"</i>				S/N		<i>03704E</i>		RepRate <i>1K</i>																					
				Frequency				<i>2.25 MHz</i>				Reject		<i>off</i>		Filter <i>off</i>																					
Calibration 0°		2 & 5 Scan				7 & 8 Scan				Fred.				Video																							
												<i>2</i>		<i>Normal</i>																							
Calibration Reflector Location		Signal Amp.		Sweep		Signal Amp.		Sweep		Sound Entry Point To:		Scribe Line		50% DAC		Signal Amp.		Sweep		Sound Entry Point To:		Scribe Line		50% DAC		Calibration Checks											
																												0°		45°		60°					
<i>1T</i>		<i>N/A</i>		<i>N/A</i>		<i>80%</i>		<i>4.0</i>		<i>N/A</i>		<i>N/A</i>		<i>N/A</i>		<i>80%</i>		<i>4.1</i>		<i>N/A</i>		<i>N/A</i>		<i>N/A</i>		<i>MA</i>		<i>MA</i>		<i>8:50</i>		<i>11:30</i>		<i>N/A</i>		<i>N/A</i>	
<i>2T</i>						<i>23%</i>		<i>8.0</i>								<i>25%</i>		<i>8.6</i>																			
Ref. dB						<i>54 db</i>										<i>63 db</i>																					
10 8 6 4 2 0		DAC				10 8 6 4 2 0		DAC				10 8 6 4 2 0		DAC				Additional Comments/Sketch																			
		<i>N/A</i>																																			
2 4 6 8 10						2 4 6 8 10						2 4 6 8 10																									



W.R. Martin, ANES 10-7-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone NA 43
Component/Piping System MAIN STEAM HEADER A-OUTSIDE CONT.	Examiner/Level <i>Larry Longenecker II</i>	Date 10-6-82	
Procedure ISI 2.5 REV-0 FC-0	Iso/Drawing No. ZONE 43 REV-2 FC-7	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. SONIC	Mfgr. KB AEROTECH	Size 1.5" DIA.	Cal. Block UT-118	
Model MARK I	Size 1.5" DIA.	Cal. Block		
S/N 01930E	Freq. 2.25 MHZ	Range Cal. .725 AT 6		
Reject OFF	Serial No. KB 2654	Calibration Checks		
Damp. MIN	Coax. Cable 6'	CAL IN = 7:35		
Freq. 2	Gain 72 DB	CAL OUT = 9:30		
Rep. Rate 3K				
Filter H1				
Video NORM				
Couplant SONO TRACE 40 5/8 8124				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-062	12	.749"	.701"	NA	NA	NA	NA	NA	NA
43-062	2	.749"	.677"						
43-062	4	.689"	.653"						
43-062	6	.616"	.616"						
43-062	8	.616"	.628"						
43-062	10	.665"	.640"						

Sketch/Identification
.629 MIN. WALL
5 SIDE INACCESSIBLE (HEADER)

M.R. Martin, ANET 10-7-82

Ultrasonic Examination Report



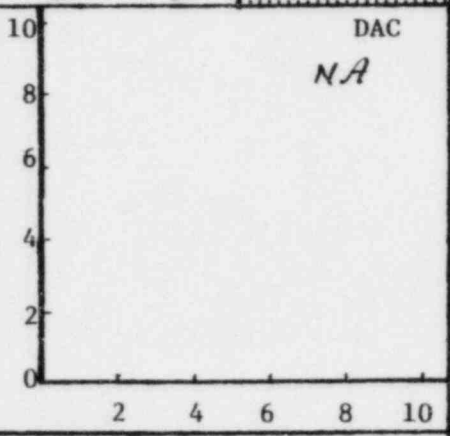
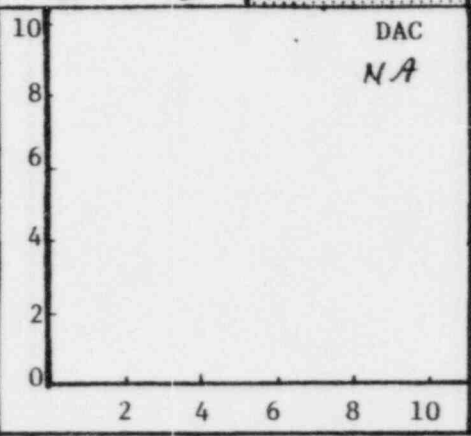
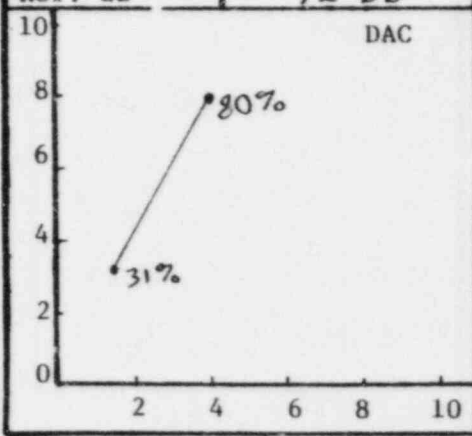
Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone NA 43	Iso/Drawing No. ZONE 43 REV-2 FC-7
Procedure ISI 2.2 REV-0 FC-2	Exam Surface O.D.	Examiner/Level Nary Longenecker II	VCR Supervisor Daniel Dens	Date 10-6-82
Component/Piping System MAIN STEAM HEADER A-OUTSIDE CONT.	Pipe Size 8"	Weld Type BUTT	Cal. Block UT-118	Couplant: SONOTRACE Type 40 Batch No 8124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

Transducer S/N Size Frequency Beam Angle	0°	45°	60°	Instrument			
	KB 2654	NA	NA	Mfr.	SONIC	Model	MARK 2
	.5"			S/N	01930E	RepRate	3K
	2.25 MHZ			Reject	OFF	Filter	H1
	0			Damp	MIN	Coax	6'
			Freq.	2	Video	NORM	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks							
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
						NA	NA				NA	NA	NA	NA	NA	NA	NA	NA
1/4 T	31%	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7:35	9:30	NA	NA	NA	NA
3/4 T	80%	4.0																
1 T	NA	6.0																
Ref. dB	72 DB																	



Additional Comments/Sketch

W.R. Martin, ANEF 10-7-82



Ultrasonic Examination Report

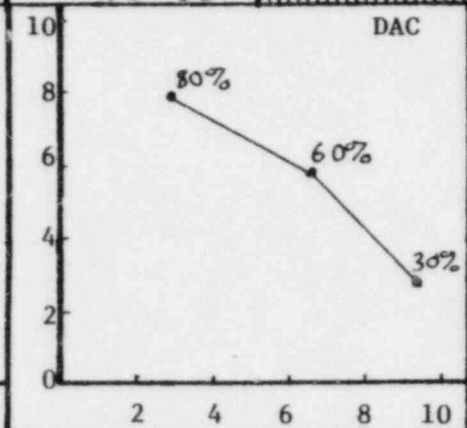
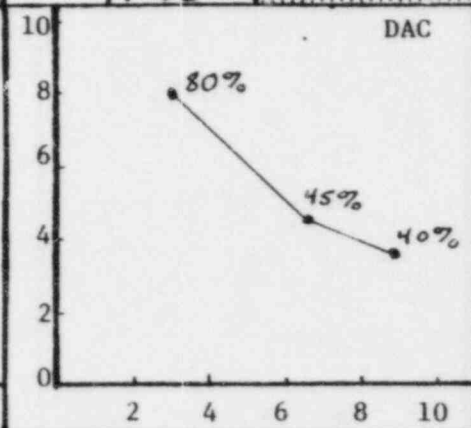
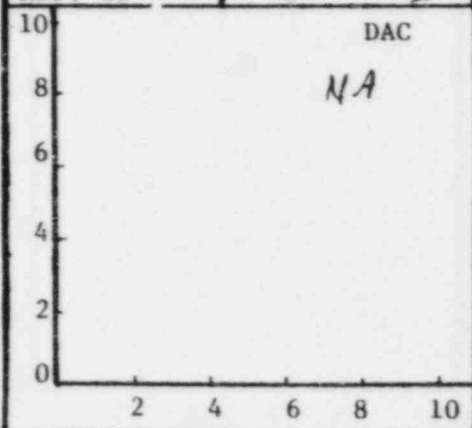
Customer <i>LP & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>NA 43</i>	Iso/Drawing No. <i>ZONE43 REV-2 FC-7</i>
Procedure <i>ISE 2.2 REV-0 FC2</i>	Exam Surface <i>O.P.</i>	Examiner/Level <i>Nary Longenecker II</i>	VCR Supervisor <i>Daniel Jones</i>	Date <i>10-6-82</i>
Component/Piping System <i>MAIN STEAM HEADER A-OUTSIDE CONT.</i>	Pipe Size <i>8"</i>	Weld Type <i>BUTT</i>	Cal. Block # <i>UT-118</i>	Couplant: <i>SONOTRACE</i> Type <i>40</i> Batch No <i>8124</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number *2*

Transducer	0°			45°			60°			Instrument			
	S/N	<i>NA</i>	<i>607152</i>	<i>NA</i>	Mfr.	<i>SONIC</i>	Model	<i>MARK I</i>	S/N	<i>01058E</i>	RepRate	<i>3K</i>	
	Size		<i>1.5"</i>		Reject	<i>OFF</i>	Filter	<i>H1</i>	Damp	<i>MIN</i>	Coax	<i>6'</i>	
	Frequency		<i>2.25MHZ</i>		Freq.	<i>2</i>	Video	<i>NORM</i>					
	Beam Angle		<i>45°</i>										

Calibration 0°			2 & 5 Scan					7 & 8 Scan					Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3.0</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3.1</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>7:40</i>	<i>9:15</i>	<i>NA</i>	<i>NA</i>
<i>2T</i>			<i>45%</i>	<i>6.4</i>				<i>60%</i>	<i>6.4</i>										
<i>3T</i>			<i>40%</i>	<i>9.0</i>				<i>30%</i>	<i>9.5</i>										
Ref. dB			<i>41 DB</i>					<i>45 DB</i>											



Additional Comments/Sketch:

J.R. Martin, ANEE 10-7-82

Ultrasonic Examination Report - Continuation Sheet Page of



The
Virginia Corp.
of Richmond

Customer <i>LP & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>A 43</i>	Iso/Drawing No. <i>ZONE 43 R-2, F.C.7</i>
Procedure <i>ISI 2.2 R.O, F.C.2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Rory Hengencher II</i>	VCR Supervisor <i>Daniel Jones</i>	Date <i>10-6-82</i>
Component/Piping System <i>MAIN STEAM HEADER A - CONT.</i>	OUTSIDE <i>OUTSIDE</i>	Pipe Size <i>14"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-118</i>
		Couplant: Type & Batch # <i>SONOTRACE 40" 8129</i>		

Weld No.	Base Metal Scan	Scan Direction	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
			2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
<i>43-062</i>	<i>NA</i>	<i>PAR</i>	<i>YES</i>	<i>NO</i>	<i>PAR</i>	<i>PAR</i>	<i>*</i>	<i>CLEAN</i>	<i>GROUND</i>	<i>N.I.</i>	<i>SAT.</i>	
<i>* THIS WELD IS FROM 40" HEADER TO 8" PIPE. BASE METAL IS ON 2 SIDE ONLY. 0, 7 & 8 SCANS ARE ON 2 SIDE & WELD ONLY, ALSO LIFT OFF AT 2 SIDE TOE OF WELD.</i>												



M.R. Martin, ANET 10/8/82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone A/43
Component/Piping System MAIN STEAM HEADER "A"	Examiner/Level Michael V Blum II	Date 10-7-82	
Procedure 151-2.5 R.O	Iso/Drawing No. ZONE 43 R2 EC 7	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. SONIC	Mfgr. PANAMETRICS	Size 1.0" DIA	Cal. Block UT-12B	
Model MARK I	Freq. 2.25 MHz	Cal. Block		
S/N 044046 *	Serial No. 48807	Range Cal. 3.406		
Reject OFF	Coax. Cable 12' BNC-BNC	Calibration Checks		
Damp. MIN	Gain 56 db	IN 7:50		
Freq. 2.0		OUT 11:10		
Rep. Rate 1K				
Filter OFF				
Video NORM				
Couplant SONOTRACE 40 4N B124				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-021LA	6"	2.589"	2.657"	2.691"	43-021LA	78"	2.589"	2.657"	2.657"
43-021LA	12"	2.623"	2.691"	2.691"	43-021LA	84"	2.589"	2.657"	2.657"
43-021LA	18"	2.623"	2.657"	2.691"	43-021LA	90"	2.589"	2.657"	2.657"
43-021LA	24"	2.623"	2.657"	2.657"	43-021LA	96"	2.589"	2.657"	2.657"
43-021LA	30"	2.589"	2.657"	2.657"	43-021LA	102"	2.657"	2.657"	2.657"
43-021LA	36"	2.623"	2.691"	2.657"					
43-021LA	42"	2.657"	2.657"	2.691"					
43-021LA	48"	2.623"	2.657"	2.657"					
43-021LA	54"	2.623"	2.657"	2.691"					
43-021LA	60"	2.589"	2.691"	2.657"					
43-021LA	66"	2.623"	2.657"	2.691"					
43-021LA	72"	2.657"	2.657"	2.657"					

Sketch/Identification

* SEE NCR # 028 OF ERRATA SECTION

M. R. Martin, ANII 10-8-82



Ultrasonic Examination Report

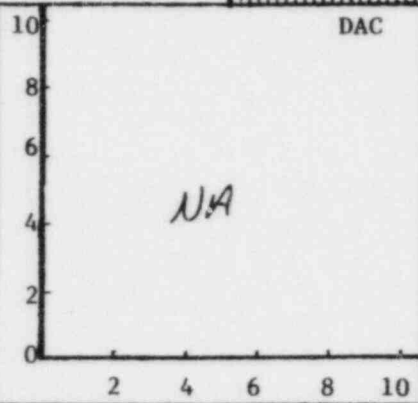
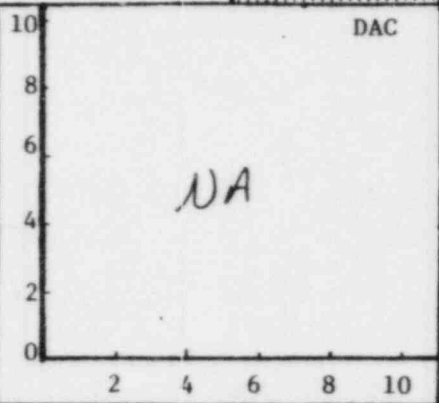
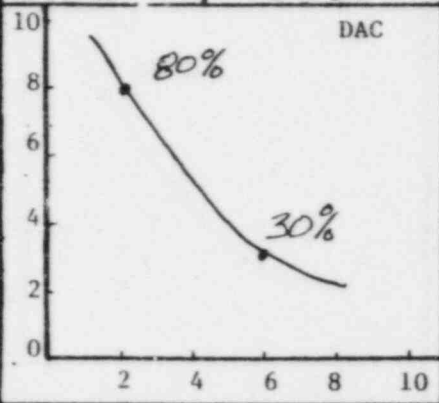
Customer <i>L P & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>A/43</i>	Iso/Drawing No. <i>ZONE 43 R.2 FC. 7</i>
Procedure <i>ISI-2.2 R.O.F.C.2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Michael W. Blum</i>	VCR Supervisor <i>Daniel Dena</i>	Date <i>10-7-82</i>
Component/Piping System <i>MAIN STEAM HEADER "A"</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-128</i>	Couplant: <i>SONOTACE</i> Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number *2*

Transducer	0°	45°	60°	Instrument			
	S/N <i>48807</i>	<i>NA</i>	<i>NA</i>	Mfr. <i>SONIC</i>	Model <i>MARK I</i>	RepRate <i>1K</i>	
	Size <i>1.0" DIA</i>			S/N <i>04404E*</i>	Filter <i>OFF</i>	Coax <i>12 BNC-BNC</i>	
	Frequency <i>2.25 MHz</i>			Reject <i>MIN</i>	Video <i>NORM</i>		
Beam Angle	<i>0°</i>			Freq. <i>2.0</i>			

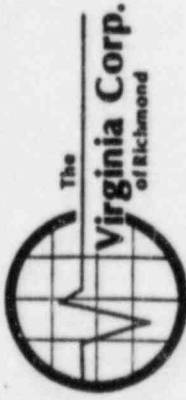
Calibration 0°			2 & 5 Scan					7 & 8 Scan					Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
			<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>7:50</i>	<i>11:10</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>1/4 T</i>	<i>80%</i>	<i>2.0</i>																
<i>3/4 T</i>	<i>30%</i>	<i>6.0</i>																
<i>1 T</i>		<i>8.0</i>																
Ref. dB	<i>56 dB</i>																	



Additional Comments/Sketch
 * SEE NCR #028 OF ERRATA

M.S. Martin, ANII 10-8-82

Ultrasonic Examination Report - Continuation Sheet Page 2 of 2



Customer <i>L P & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>A/43</i>	Iso/Drawing No. <i>ZONE 43 R.2 R.7</i>
Procedure <i>ISI 2.2 ROK.2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Michael J. Bluff</i>	VCR Supervisor <i>...</i>	Date <i>10-7-82</i>
Component/Piping System <i>MAIN STEAM HEADER "A"</i>		Weld Type <i>BUTT</i>	Cal. Block Couplant: Type & Batch # <i>UT-128 Sonotrace 4076 B124</i>	

Weld No.	Base Metal Scan	Scan Direction			Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8		Base Metal	Weld	UT	Visual	
		YES	<i>NA</i>	<i>NA</i>		<i>YES</i>	<i>Smooth</i>	<i>Grainy</i>	<i>UI</i>	
43-021 LA	YES			0						

M.R. Martin, ANIF 10-8-82



Ultrasonic Examination Report

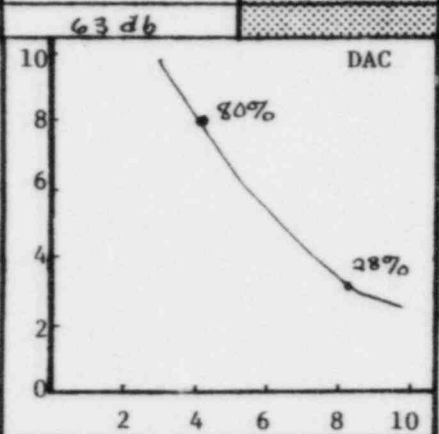
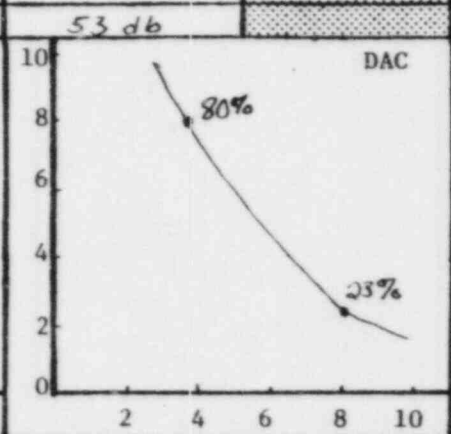
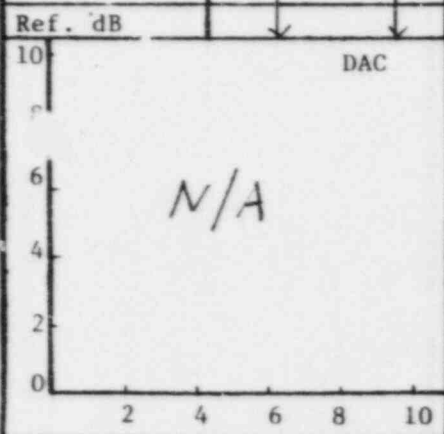
Customer LP&L	Plant Waterford	Unit 3	Loop/Zone N/A/43	Iso/Drawing No. Zone 43 R.2 FC.7
Procedure ISI-22 RCFC-2	Exam Surface O.D.	Examiner/Level Mary A. Lopez II	VCR Supervisor Daniel Adams	Date 10-7-82
Component/Piping System Main Stream Header A- outside	Pipe Size 40"	Weld Type Butt	Cal. Block UT-128	Couplant: Type 40 Batch No. 5/24

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number FC.2

Transducer	0°	45°	60°	Instrument			
S/N	N/A	J20935	N/A	Mfr.	SONIC	Model	Mark I
Size		.5"		S/N	03704E	RepRate	1K
Frequency		2.25 MHz		Reject	OFF	Filter	OFF
Beam Angle		45°		Damp	MIN	Coax	12' BNC to BNC
				Freq.	2 MHz	Video	Normal

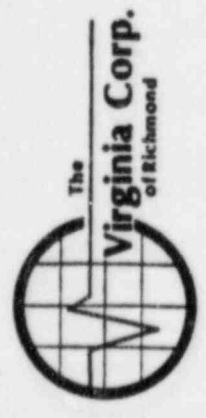
Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1T	N/A	N/A	80%	4.0	N/A	N/A	80%	4.2	N/A	N/A	N/A	N/A	N/A	8:00	11:35	N/A	N/A
2T			23%	8.0			28%	8.5									



Additional Comments/Sketch

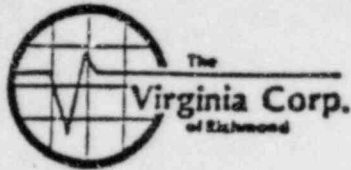
M.R. Martin, AFI 10-8-82

Ultrasonic Examination Report - Continuation Sheet Page 2 of 2



Customer <i>LP&L</i>		Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>N/A/43</i>	Iso/Drawing No. <i>ZONE 43 R3 F.C.7</i>
Procedure <i>ISI-22 R0.F.C.3 O.D.</i>		Exam Surface <i>o.d.</i>	Examiner/Level <i>Mark A. Johnson II</i>	VCR Supervisor <i>Donald Jensen</i>	Date <i>10-7-82</i>
Component/Piping System <i>Main Steam Header A-outside</i>		Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block <i>UT-128</i>	Couplant: Type & Batch # <i>Sonotrace 40 #8124</i>

Weld No.	Base Metal Scan	Scan Direction		Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5		7 & 8	0	UT	Visual	
<i>43-0214</i>	<i>N/A</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Clean</i>	<i>Weld Ground</i>	<i>NI</i>	<i>Sat.</i>



M.R. Martin, ANEF 10/11/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone A/43
Component/Piping System MAIN STEAM HEADER 'A'		Examiner/Level Michael W. Blum II	Date 10-9-82
Procedure ISI 2.5 R.O	Iso/Drawing No. ZUNC 43 R.2 PG.7	VCR Supervisor Alan J. Jensen	Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

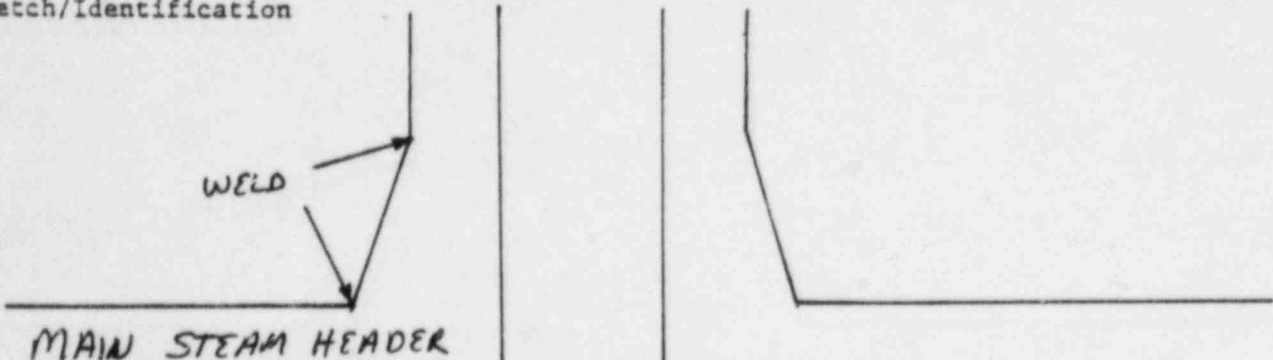
Equipment

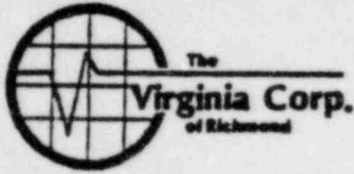
Instrument		Transducer		Calibration
Mfgr. SONIC	Mfgr. AEROTECH	Size .50" DIA	Cal. Block UT-130	
Model MARK I	Size .50" DIA	Cal. Block		
S/N 04405E	Freq. 2.25 MHZ	Range Cal. 2.1875		
Reject OFF	Serial No. 502172	Calibration Checks		
Damp. 7	Coax. Cable 12' BNC-BNC	IN 12:05 AM		
Freq. 2.0	Gain 62 db	OUT 2:05 AM		
Rep. Rate 1K				
Filter OFF				
Video NORM				
Couplant SONOTRACE 40 7-8124				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-006	12	NO	1.750"	NO	43-022	12	NO	1.794"	NO
43-006	2		1.728"		43-022	2		1.794"	
43-006	4		1.750"		43-022	4		1.794"	
43-006	6		1.750"		43-022	6		1.772"	
43-006	8		1.750"		43-022	8		1.794"	
43-006	10		1.750"		43-022	10		1.772"	
43-013	12		1.772"		43-029	12		1.794"	
43-013	2		1.750"		43-029	2		1.794"	
43-013	4		1.772"		43-029	4		1.794"	
43-013	6		1.794"		43-029	6		1.794"	
43-013	8		1.772"		43-029	8		1.794"	
43-013	10		1.794"		43-029	10		1.794"	

Sketch/Identification





Ultrasonic Data Sheet

M.R. Martin for ANFF 10-11-82

Thickness Measurement

Continuation Page 2 of 2

Customer <i>L P & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>A143</i>
Component/Piping System <i>MAIN STEAM HEADER 'A'</i>	Examiner/Level <i>Michael J Blum II</i>	Date <i>10-9-82</i>	
Procedure <i>ISI-2.5 R.O</i>	Iso/Drawing No. <i>ZONE 43 R.2 FC.7</i>	VCR Supervisor <i>Daniel Jensen</i>	

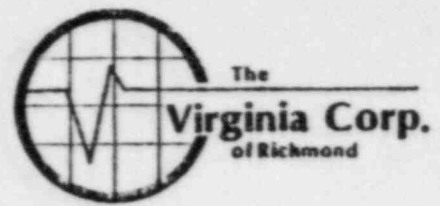
Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>43-037</i>	<i>12</i>	<i>NO</i>	<i>1.794"</i>	<i>NO</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	<i>2</i>		<i>1.772"</i>						
	<i>4</i>		<i>1.772"</i>						
	<i>6</i>		<i>1.794"</i>						
	<i>A</i>		<i>1.838"</i>						
	<i>10</i>		<i>1.794"</i>						
<i>43-050</i>	<i>12</i>		<i>1.794"</i>						
	<i>2</i>		<i>1.794"</i>						
	<i>4</i>		<i>1.772"</i>						
	<i>6</i>		<i>1.772"</i>						
	<i>B</i>		<i>1.772"</i>						
	<i>10</i>	<i>↓</i>	<i>1.772"</i>	<i>↓</i>					

Sketch/Identification

M.R. Martin, ANEF 0-11-82

Ultrasonic Examination Report



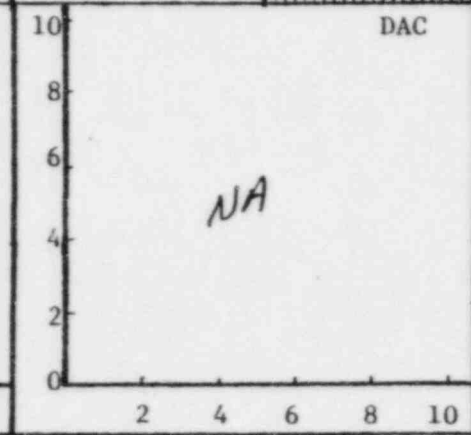
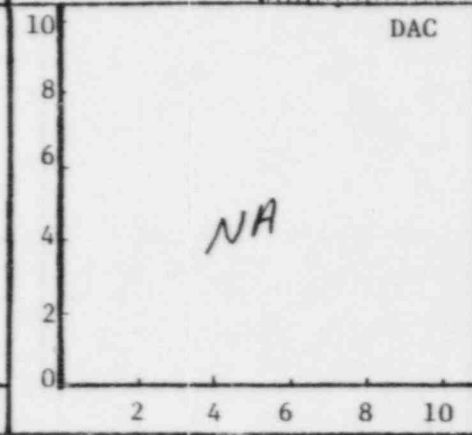
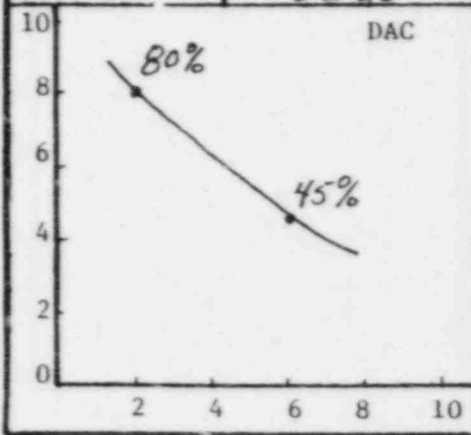
Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone A/43	Iso/Drawing No. ZONE 43 R.2 FC.7
Procedure 151-2.2 R.O FC.2	Exam Surface O.D.	Examiner/Level Michael W. Ble II		VCR Supervisor Daniel Jensen
Component/Piping System MAIN STEAM HEADER "A"		Pipe Size 8"	Weld Type BUTT	Date 10-9-82
Cal. Block # UT-130			Couplant: SONOTRACE Type 40 Batch No 8124	

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
	S/N JD2176	NA	NA	Mfr. SONIC	Model MARK I		
	Size .50" DIA			S/N 04405E	RepRate 1K		
	Frequency 2.25MHz			Reject OFF	Filter OFF		
Beam Angle 0°			Damp 7	Coax 12' BNC-BNC			
Freq.			2.0	Video NORM			

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks								
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
1/4 T	80%	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17:05AM	2:05AM	NA	NA	NA	NA
3/4 T	45%	6.0																	
1 T		8.0																	
Ref. dB	62 db																		



Additional Comments/Sketch

M.R. Martin, ANF E 10-11-82



The Virginia Corp. of Richmond

Ultrasonic Examination Report - Continuation Sheet

Page of

Customer L P & L	Plant WATERFORD	Unit 3	Loop/ Zone A/43	Iso/Drawing No. ZONE 43 R2 FC.7
Procedure ISI-2.2 R.O FC2	Exam Surface O.D.	Examiner/Level Michael W Blum II	VCR Supervisor Daniel Jensen	Date 10-9-82
Component/Piping System MAIN STEAM HEADER "A"	Pipe Size B"	Weld Type BUTT	Cal. Block UT-130	Couplant: Type & Batch # SONOTRACE 40 3/4 8124

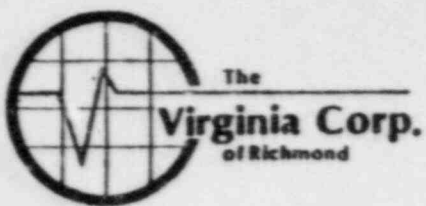
Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
43-006	PAR	NA	NA	NA	PAR	*	Smooth	Ground	NI	SAT	
43-013	PAR				PAR	*	Smooth	Ground	NI	SAT	
43-022	PAR				PAR	*	Smooth	Ground	NI	SAT	
43-029	PAR				PAR	*	Smooth	Ground	NI	SAT	
43-037	PAR				PAR	*	Smooth	Ground	NI	SAT	
43-050	PAR				PAR	*	Smooth	Ground	NI	SAT	

* PARTIAL ON WELD AND S SIDE DUE TO PART CONFIGURATION

* SEE THICKNESS DATA SHEET FOR ADDITIONAL DESCRIPTION OF THE LIMITATIONS.

Daniel Jensen

M.R. Martin, ANIS 10-11-82



Ultrasonic Examination Report

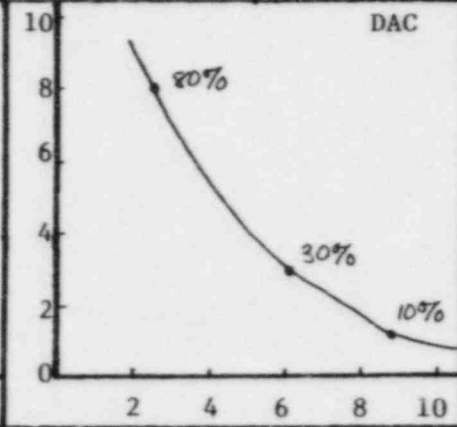
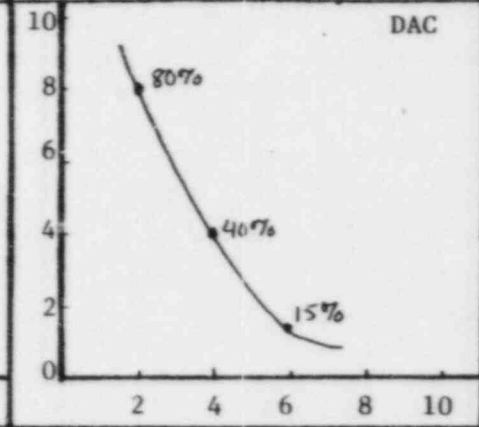
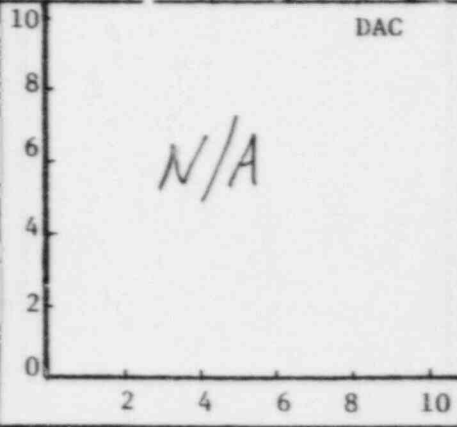
Customer LP+L	Plant Waterford	Unit 3	Loop/Zone N/A/43	Iso/Drawing No. ZONE 43 R2 F.C.7
Procedure ISI-2.2 P.O.F.C.2	Exam Surface O.D.	Examiner/Level Mary A. Saldano II	VCR Supervisor Daniel Jensen	Date 10-9-82
Component/Piping System Main Steam Header A-Outside		Pipe Size 8"	Weld Type Butt	Cal. Block UT-130
		Couplant: Type 40		Batch No. 8124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number EC-2

Transducer	0°	45°	60°	Instrument			
S/N	NA	007152		Mfr.	SONIC	Model	Mark I
Size		.5"		S/N	03704E	RepRate	1K
Frequency		2.25 MHz		Reject	OFF	Filter	off
Beam Angle	↓	45°	↓	Damp	MIN.	Coax	12' BNC to MD
Calibration 0°		2 & 5 Scan		7 & 8 Scan		Freq. 2 MHz Video Normal	

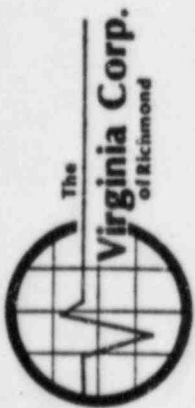
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks							
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°			
											In	Out	In	Out	In	Out		
1T	NA	NA	80%	2.0	NA	NA	80%	2.8	NA	NA	NA	NA						
2T			40%	4.0			30%	4.1										
3T			15%	6.0			10%	9.4										
Ref. dB	↓	↓	45 db				51 db		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓



Additional Comments/Sketch

Dr. R. Martin, ANI 10-11-82

Ultrasonic Examination Report - Continuation Sheet Page of



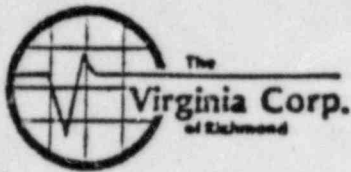
Weld No.	Scan Direction			Inspection Limitations	Surface Condition		Examination Results	Remarks		
	Base Metal Scan	2	5		7 & 8	0			Visual	
										UT
43-006	NA	Yes	No	Par	NA	Clean	Ground	NI	Sat	
43-013	NA	Yes	No	Par	NA	Clean	Ground	NI	Sat	
43-022	NA	Yes	No	Par	NA	Clean	Ground	NI	Sat	
43-029	NA	Yes	No	Par	NA	Clean	Ground	NI	Sat	
43-037	NA	Yes	No	Par	NA	Clean	Ground	NI	Sat	
43-050	NA	Yes	No	Par	NA	Clean	Ground	NI	Sat	With a
						45°	transducer, I.D.		Geometry ranging	
						from 10% - 60%	DAI, 3.0		SCREEN,	
							center of weld		360°	

NO OR ITEM

* PAR ON 5 side only due to part configuration

* SEE THICKNESS DATA SHEET FOR ADDITIONAL DISCUSSION OF THE LIMITATIONS.

David Jensen



M.R. Martin, ANEF 10/11/82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>L P + L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>A 43</i>
Component/Piping System <i>Main Steam Header "A" Outside Cont</i>		Examiner/Level <i>Nary Longenecker II</i>	Date <i>10-9-82</i>
Procedure <i>ISI 2.5 R.O</i>	Iso/Drawing No. <i>Zone 43 R2 FC 7</i>	VCR Supervisor <i>Daniel Dins</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration	
Mfgr.	<i>Sonic</i>	Mfgr.	<i>K-B. Aerotech</i>	Cal. Block	<i>UT-128</i>
Model	<i>Mark 1</i>	Size	<i>.75" Dia.</i>	Cal. Block	
S/N	<i>01058E</i>	Freq.	<i>2.25 MHz</i>	Range Cal.	<i>2.725" ± 0.070</i>
Reject	<i>off</i>	Serial No.	<i>221861</i>	Calibration Checks	
Damp.	<i>MIN</i>	Coax. Cable	<i>12' BNC-BNC</i>	<i>CAL IN 1:30 AM</i>	
Freq.	<i>2. MHz</i>	Gain	<i>43 dB</i>	<i>CAL OUT 5:05 AM</i>	
Rep. Rate	<i>3K</i>				
Filter	<i>HI</i>				
Video	<i>NORM</i>				
Couplant	<i>Sonotrace 40 8124</i>				

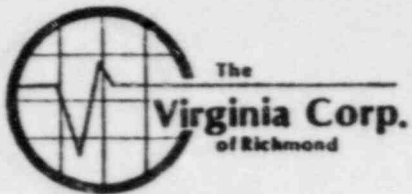
Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>43-035</i>	<i>12</i>	<i>2.375"</i>	<i>2.803"</i>	<i>2.764"</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>43-035</i>	<i>2</i>	<i>2.414"</i>	<i>2.842"</i>	<i>2.803"</i>					
<i>43-035</i>	<i>4</i>	<i>2.336"</i>	<i>2.803"</i>	<i>2.764"</i>					
<i>43-035</i>	<i>6</i>	<i>2.414"</i>	<i>2.803"</i>	<i>2.764"</i>					
<i>43-035</i>	<i>8</i>	<i>2.414"</i>	<i>2.803"</i>	<i>2.764"</i>					
<i>43-035</i>	<i>10</i>	<i>2.336"</i>	<i>2.803"</i>	<i>2.764"</i>					

Sketch/Identification

M.R. Martin, ANIS 10-11-82

Ultrasonic Examination Report



Customer LP & L	Plant WATERFORD	Unit 3	Loop/Zone A 43	Iso/Drawing No. ZONE 43 R-2 F.C. 7
Procedure GL. I.S.I. R-0, F.C. 2	Exam Surface O.D.	Examiner/Level Gary Longenecker II	VCR Supervisor Danil Jensen	Date 10-9-82
Component/Piping System MAIN STEAM HEADER A	OUTSIDE CONT.	Pipe Size 40"	Weld Type BUTT	Cal. Block UT-128
		Couplant: SONOTRACE Type 40		Batch No. 8124

Continuation Sheet Attached

Yes No

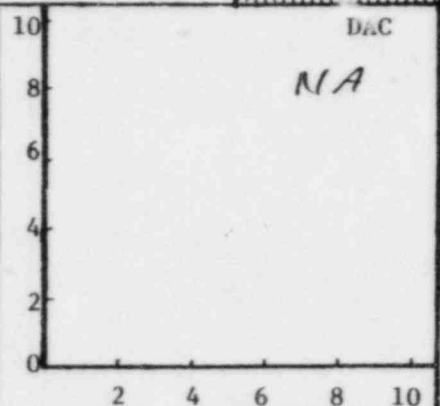
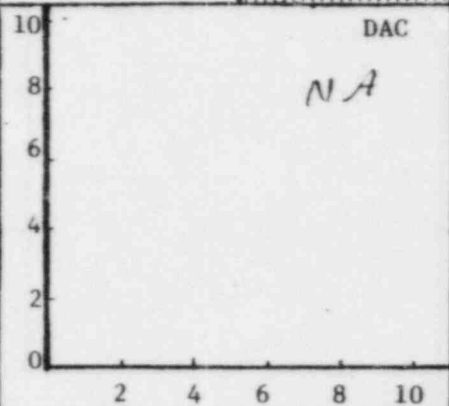
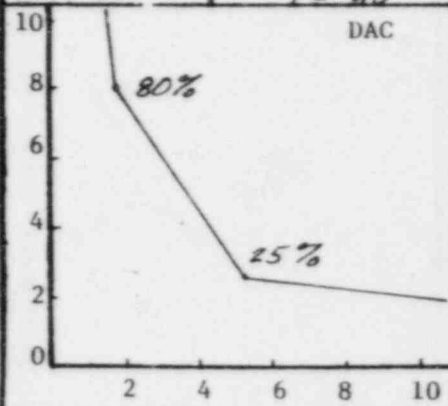
Field Changes:

Yes No

If Yes, Number 2

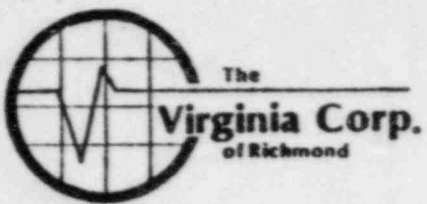
	Transducer	0°	45°	60°	Instrument				
	S/N	L21861	NA	NA	Mfr.	SONIC	Model	MARK I	
	Size	.75" DIA			S/N	01058E	RepRate	3K	
	Frequency	2.25MHz			Reject	OFF	Filter	H1	
	Beam Angle	0°			Damp	MIN.	Coax	12'	
Calibration 0°		2 & 5 Scan			7 & 8 Scan			Freq. 2. MHz. Video NORM	

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks					
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°	
											In	Out	In	Out	In	Out
1/4 T	80%	1.7	NA	NA	NA	NA	NA	NA	NA	NA	1:30	5:05	NA	NA	NA	NA
3/4 T	25%	5.2														
1 T	NA	7.0														
Ref. dB	43 db															



Additional Comments/Sketch

M.R. Martin, ANEE 10-11-82



Ultrasonic Examination Report

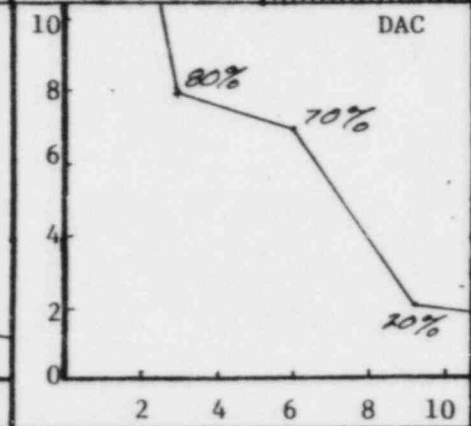
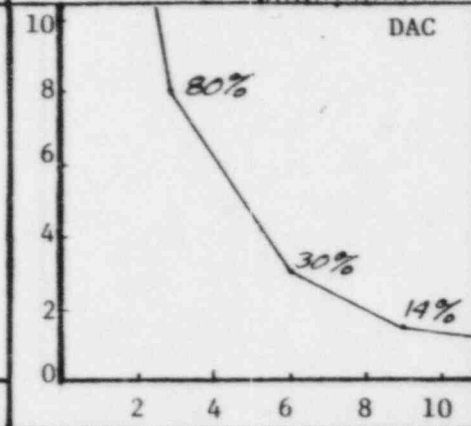
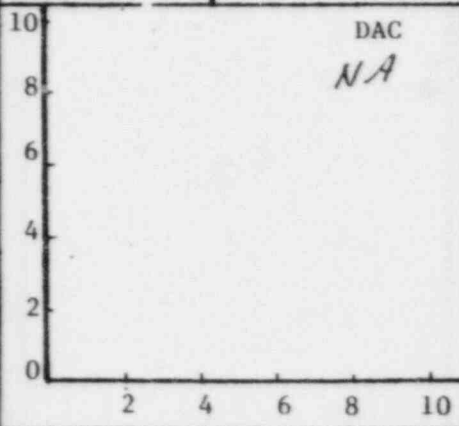
Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone A 43	Iso/Drawing No. ZONE 43 R-2 F.C. 7
Procedure I.S.I. 2.2 RO, F.C. 2	Exam Surface O.D.	Examiner/Level Nary Longenecker II	VCR Supervisor Daniel Denan	Date 10-9-82
Component/Piping System MAIN STEAM HEADER A CONT.	OUTSIDE	Pipe Size 40"	Weld Type BUTT	Cal. Block UT-128
		Couplant: SONOTRACE		Batch No. 8129

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
S/N	NA	L19801	NA	Mfg.	SONIC	Model	MARK I
Size		1.0" DIA.		S/N	01930E	RepRate	3K
Frequency		2.25 MHZ		Reject	OFF	Filter	H1
Beam Angle		45°		Damp	MIN.	Coax	12'
				Freq.	2. MHZ.	Video	NORM

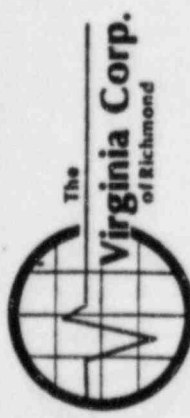
Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks									
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°			
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out		
1 T	NA	NA	80%	3.0	NA	NA	NA	80%	3.2	NA	NA	NA	NA	NA	NA	1:35	5:08	NA	NA	
2 T			30%	6.0				70%	6.2											
3 T			19%	9.0				20%	9.6											
Ref. dB			52 db				67 db													



Additional Comments/Sketch

M.R. Martin ANS 10/11/82

Ultrasonic Examination Report - Continuation Sheet Page of



Customer <u>L P & L</u>	Plant <u>WATERFORD</u>	Unit <u>3</u>	Loop/Zone <u>A 43</u>	Iso/Drawing No. <u>Zone 43 A-2 FC.7</u>
Procedure <u>226-L</u>	Exam Surface <u>O.D.</u>	Examiner/Level <u>Mary Longenecker II</u>	VCR Supervisor <u>Daniel Jensen</u>	Date <u>10-9-82</u>
Component/Piping System <u>Main Steam Header A Outside Cont</u>	Pipe Size <u>40"</u>	Weld Type <u>BUTT</u>	Cal. Block <u>UT 128</u>	Couplant: Type & Batch # <u>Sonotrace 40 8124</u>

Weld No.	Base Metal Scan	Scan Direction	Scan Direction		Inspection Limitations	Surface Condition		Examination Results		Remarks
			2	5		Base Metal	Weld	UT	Visual	
			Yes	Yes		Clean	Ground	RI	Sat.	
<u>#3-035</u>	<u>NA</u>	<u>par.</u>	<u>par.</u>	<u>par.</u>	<u>Weld contour</u>	<u>Clean</u>	<u>Ground</u>	<u>RI</u>	<u>Sat.</u>	

W.R. Martin, ANEI 10-11-82

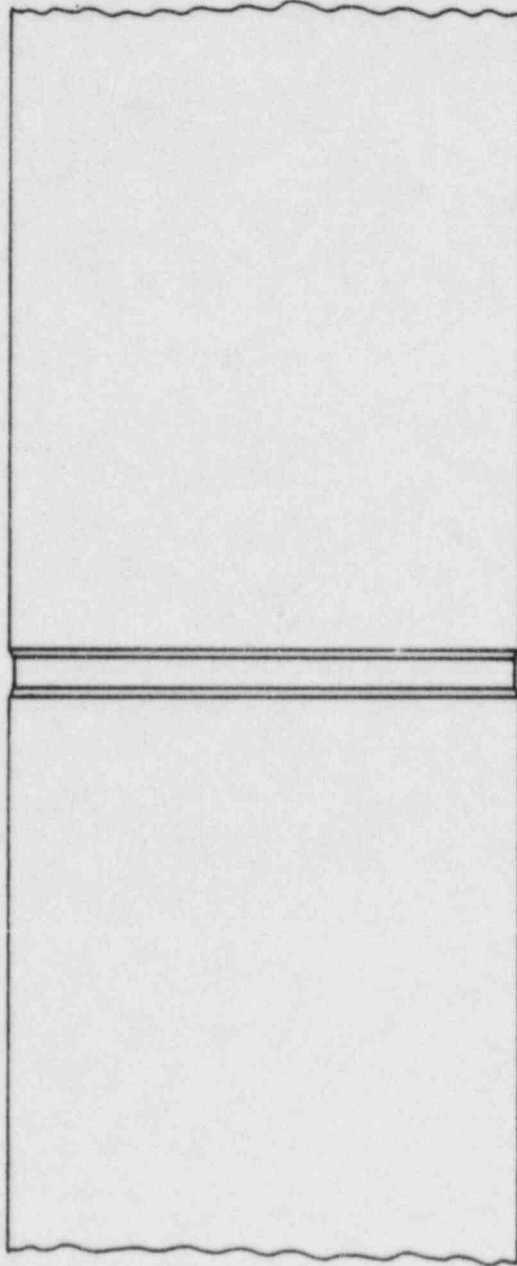
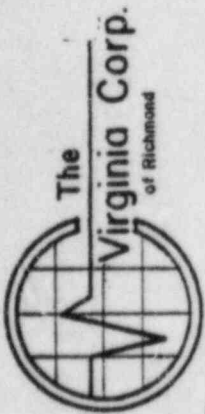


Ultrasonic Examination Report

Indication Record

Customer <i>LP & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop <i>A</i>
Procedure <i>22 GL.</i> <i>ISI 27 R-0 FC. 2</i>	Examiner/Level <i>Navy Longenecker II</i>	VCR Supervisor <i>Daniel Jones</i>	Date <i>10-9-82</i>
Component/Piping System <i>OUTSIDE MAIN STEAM HEADER A - CONT</i>	ISO Drawing No. <i>ZONE 43 R-2 FC. 7</i>	Cal. Standard No./Thickness <i>UT-128 2.725"</i>	

Weld No.	Ind No.	Max. % DAC	Indication Length		Minimum Depth		Maximum Depth		Beam Angle	Beam Dir.	Base Metal Thickness 2 Side	Weld Thick.	Base Metal Thickness 5 Side	Remarks
			From	To	S.U. Pos.	Sweep Reading	S.U. Pos.	Sweep Reading						
<i>43-035</i>	<i>1</i>	<i>63%</i>	<i>16"</i>	<i>16 1/2"</i>	<i>2" (2)</i>	<i>2.8</i>	<i>2 1/6" (2)</i>	<i>2.8</i>	<i>0°</i>	<i>0°</i>	<i>2.842"</i>	<i>2.914"</i>	<i>2.803"</i>	
<i>43-035</i>	<i>2</i>	<i>100%</i>	<i>27 1/4"</i>	<i>27 1/2"</i>	<i>1/2" (2)</i>	<i>2.7</i>	<i>1 3/8" (2)</i>	<i>2.7</i>	<i>0°</i>	<i>0°</i>	<i>2.842"</i>	<i>2.914"</i>	<i>2.803"</i>	
<i>43-035</i>	<i>3</i>	<i>75%</i>	<i>35"</i>	<i>35 1/6"</i>	<i>1 1/8" (2)</i>	<i>2.6</i>	<i>2 1/2" (2)</i>	<i>2.7</i>	<i>0°</i>	<i>0°</i>	<i>2.842"</i>	<i>2.914"</i>	<i>2.803"</i>	



WELD NO. 43-035



W.R. Martin, ANSF 10-14-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone A 43
Component/Piping System MAIN STEAM HEADER A - Outside Cont.		Examiner/Level James W. Smith LVII	Date 10-9-82
Procedure EST 2.5 R.O.F.C.O	Iso/Drawing No. 838 Zone 43 R-2.F.C.6	VCR Supervisor Daniel Jensen	Continuation Sheet Attached [] Yes [X] No

Equipment

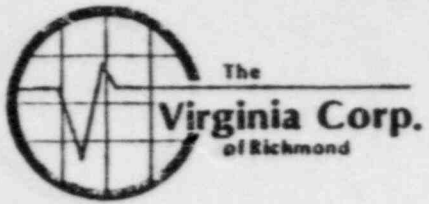
Instrument		Transducer		Calibration
Mfgr. SONIC	Mfgr. KB-ACROTECH	Size .25"	Cal. Block UT-131	
Model MARK I	Freq. 5.0 MHz	Cal. Block		
S/N 03704E	Serial No. KB 2882	Range Cal. .463 @ 60		
Reject OFF	Coax. Cable 6' BNC-P.C.	Calibration Checks		
Damp. MIN.	Gain 65db	CAL IN 6:58		
Freq. 5.0 MHz	Couplant SONOTRACE 40 #8124	CAL OUT 7:58		
Rep. Rate 3K				
Filter H1				
Video Norm				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-056	12	.617	.540	NA	NA	NA	NA	NA	NA
43-056	2	.509	.525						
43-056	4	.509	.525						
43-056	6	.494	.509						
43-056	8	.556	.509						
43-056	10	.525	.540						
43-060	12	.571	NA	.540					
43-060	2	.617		.556					
43-060	4	.571		.540					
43-060	6	.579		.532					
43-060	8	.563		.556					
43-060	10	.610		.563					

Sketch/Identification

SEE ATTACHED DRAWING



Ultrasonic Examination Report

Customer <i>LP/L</i>		Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>A 43</i>	Iso/Drawing No. <i>ZONE 43 R2 FC8</i>	
Procedure <i>1512.2 RD FC 2</i>	Exam Surface <i>O.O.</i>	Examiner/Level <i>James Wright LTD</i>		VCR Supervisor <i>Manuel Jensen</i>	Date <i>10-9-82</i>	
Component/Piping System <i>MAIN STEAM HEADER "A" OUTSIDE CONT</i>		Pipe Size <i>12"</i>	Weld Type <i>BUTT</i>	Cal. Block # <i>UT-131</i>	Couplant: <i>SONOTACE</i>	Type <i>40</i>
				Batch No. <i>8124</i>		

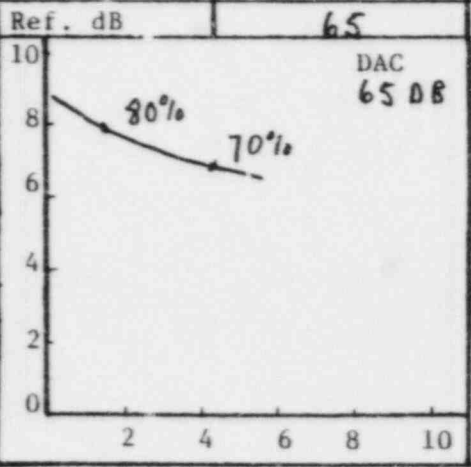
Continuation Sheet Attached
 Yes No

Field Changes:
Yes No
If Yes, Number *2*

	Transducer	0°	45°	60°	Instrument			
	S/N	<i>KB2882</i>	<i>NA</i>	<i>NA</i>	Mfr.	<i>SONIC</i>	Model	<i>MARK I</i>
	Size	<i>.25"</i>			S/N	<i>03704E</i>	RepRate	<i>3K</i>
	Frequency	<i>5.0 MHz</i>			Reject	<i>OFF</i>	Filter	<i>H1</i>
	Beam Angle	<i>0°</i>			Damp	<i>MIN</i>	Coax	<i>6' BNCTO PC</i>
				Freq.	<i>5.0 MHz</i>	Video	<i>NORM</i>	

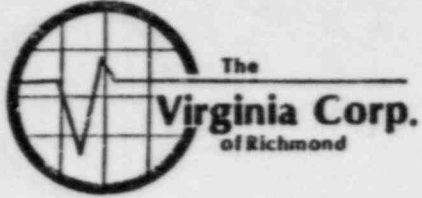
Calibration 0°			2 & 5 Scan				7 & 8 Scan			
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:	
					Scribe Line	50% DAC			Scribe Line	50% DAC
<i>1/4T</i>	<i>80%</i>	<i>1.5</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>		<i>NA</i>	<i>NA</i>	<i>NA</i>	
<i>3/4T</i>	<i>70%</i>	<i>4.5</i>								
<i>1T</i>		<i>6.0</i>								

Calibration Checks					
0°		45°		60°	
In	Out	In	Out	In	Out
<i>6:58</i>	<i>7:58</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>



Additional Comments/Sketch

W.R. Martin, ANEI 10-14-82

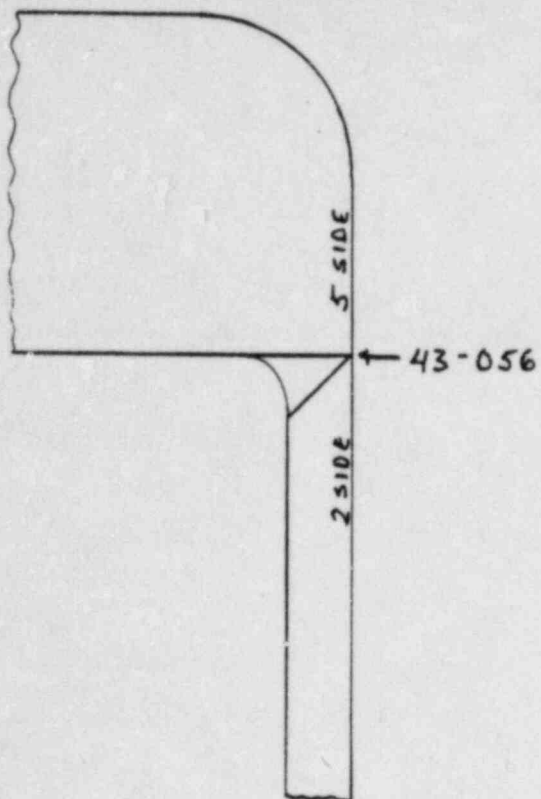


Ultrasonic Examination Report - Continuation Sheet

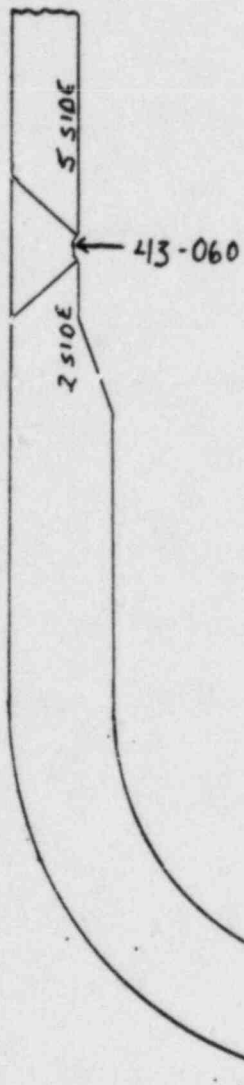
Page of

Customer <i>LPIL</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>A 43</i>	Iso/Drawing No. <i>ZONE 45 R2 FC8</i>
Procedure <i>ISI 2-2 RO FC2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>James Wright I II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>10-9-82</i>
Component/Piping System <i>MAIN STEAM HEADER "A"</i>	Pipe Size <i>12"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-131</i>	Couplant: Type & Batch # <i>SONOTRAC 40 8124</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
43-056	PAR	NA	NA	NA	PAR	SEE ATTACHED DRAWING	SMOOTH	GRIND	NI	SAT	
43-060	PAR	NA	NA	NA	PAR	SEE ATTACHED DRAWING WELD CROWN 2/5 SIDES	SMOOTH	CLEAN	NI	SAT	

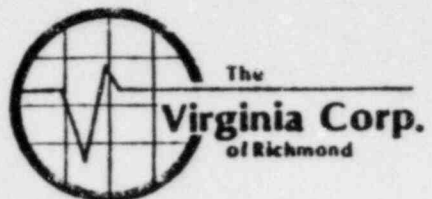


43-056 - DUE TO GREATER THICKNESS CHANGES INSPECTION LIMITED TO BASEMETAL ON 2 SIDE AND PART OF WELD 0°. NO S SIDE



43-060 - DUE TO GREATER THICKNESS CHANGES INSPECTION LIMITED TO BASEMETAL ON S SIDE AND PART OF 2 SIDE

AN31
W.R. Martin, 10-14-82



Ultrasonic Examination Report

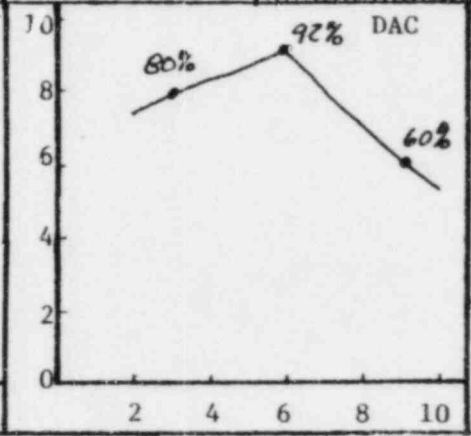
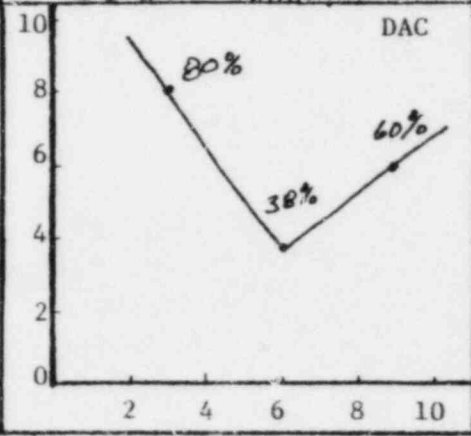
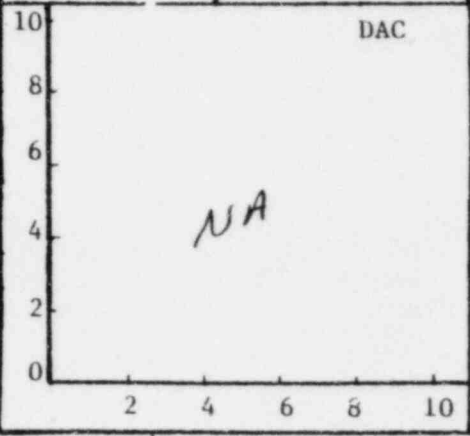
Customer L P & L		Plant WATERFORD		Unit 3	Loop/Zone A/43	Iso/Drawing No. ZONE 43 Rev 2 FC B	
Procedure ISI-2.2 R.O. FCC		Exam. Surface O. D.	Examiner/Level Michael W. Blaw II		VCR Supervisor Daniel Jensen		Date 10-9-82
Component/Piping System MAIN STEAM HEADER "A"			Pipe Size 12"	Weld Type BUTT	Cal. Block # UT-131	Couplant: Type SCOUTSM ACC Batch No. 8124	

Continuation Sheet Attached
 Yes No

Field Changes:
Yes No
If Yes, Number **2**

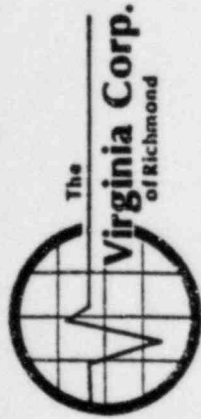
	Transducer	0°	45°	60°	Instrument			
	S/N	NA	G07152	NA	Mfg.	SONIC	Model	MARK I
	Size		.50" dia		S/N	04405E	Rep. Rate	1K
	Frequency		2.25MHz		Reject	OFF	Filter	OFF
Beam Angle		45°		Damp	MIN	Coax	6' BNC-MO	
				Freq.	2.0	Video	NORM	

Calibration 0°			2 & 5 Scan			7 & 8 Scan			Calibration Checks									
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
	NA	NA			NA	NA	NA			NA	NA	NA			6:30	8:35		
1 T			80%	3.0				80%	3.0									
2 T			38%	6.0				92%	6.2									
3 T			60%	9.0				60%	9.4									
Ref. dB			56 db					67 db										



Additional Comments/Sketch

W.R. Martin, AN II 10-14-82

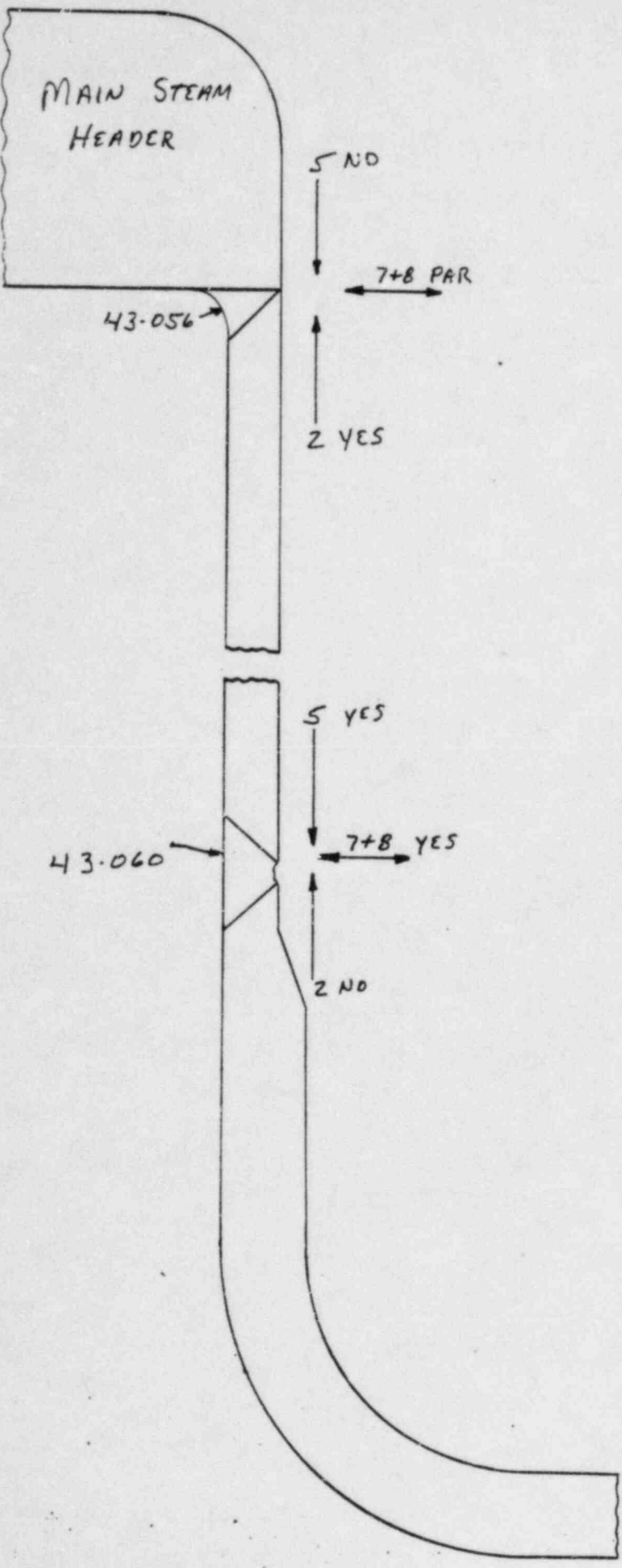
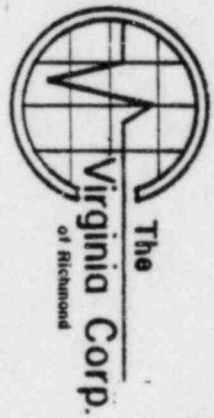


Ultrasonic Examination Report - Continuation Sheet

Page of

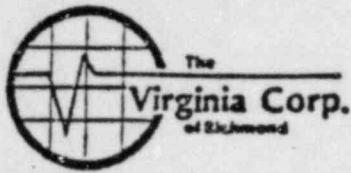
Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone A 143	Iso/Drawing No. ZONE 41 REV 2 FCB
Procedure ISA 2.3 R.0 FC 2	Exam Surface O.P.	Examiner/Level Michael W. Alvar II	VCR Supervisor Daniel J. Jensen	Date 10-9-82
Component/Piping System MAIN STEAM HEADS "A"	Pipe Size 12"	Weld Type BUTT	Cal. Block Compliant: Type & Batch # UT-131 SONOTRACE 40-3/28124	

Weld No.	Base Metal Scan	Scan Direction			Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8		Base Metal	Weld	UT	Visual	
43-056	NA	YES	NO	PAR	NA	CLEAN	GROUND	NA	SAT	
43-060	NA	NO	YES	YES	* *SEE ATTACHED SHEET	CLEAN	GROUND	NA	SAT	



ULTRASONIC SUPPLEMENTAL DATA SHEET

PAGE OF



M.R. Martin, ANSI 10-14-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone A / 43
Component/Piping System MAIN STEAM HEADER "A"		Examiner/Level Michael W. Blum II	Date 10-12-82
Procedure ISI-2.5 R.O	Iso/Drawing No. ZONE 43-R2 FC B	VCR Supervisor Daniel Jensen	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

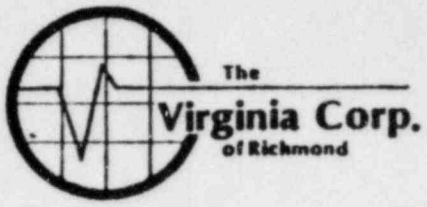
Instrument		Transducer		Calibration
Mfgr. SONIC	Mfgr. PANAMETRICS	Size 1.0" DIA	Cal. Block UT-127	
Model MARK I	Freq. 2.25 MHz	Serial No. 48807	Cal. Block	
S/N 0105AE	Coax. Cable 12' BNC-BNC	Gain 45 db	Range Cal. 2.750"	
Reject OFF	Couplant SONOTRACE 40 4/8 B124	Calibration Checks		
Damp. B			IN	7:40
Freq. 2.0			OUT	10:55
Rep. Rate 1K				
Filter HI				
Video DIFF				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-089	12	1.350"	1.400"	VALVE	NA	NA	NA	NA	NA
43-089	2	1.400"	1.400"						
43-089	4	1.400"	1.375"						
43-089	6	1.400"	1.325"						
43-089	B	1.350"	1.325"						
43-089	10	1.325"	1.350"						

Sketch/Identification

M.R. Marten, ANEI 10-25-82



Ultrasonic Examination Report

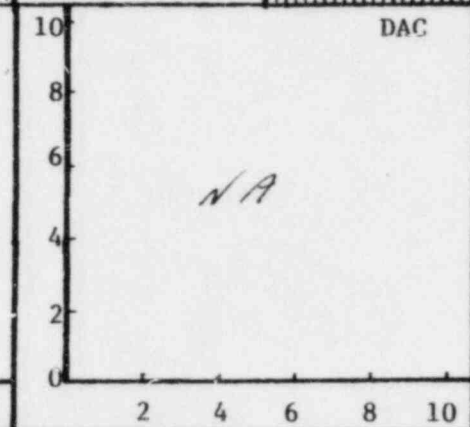
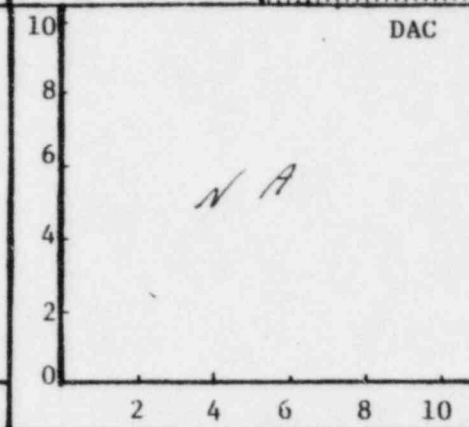
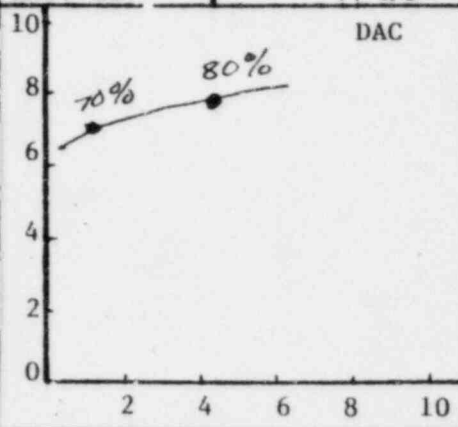
Customer <i>LP+L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>A/43</i>	Iso/Drawing No. <i>Zone 43 Rev. 2 FC. 8</i>
Procedure <i>ISI 2-2 RO FC2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Michael V Blaw II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>10-16-82</i>
Component/Piping System <i>Main Steam Header "A"</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block # <i>UT-127</i>	Couplant: <i>Sonotrace</i> Type <i>40</i> Batch No <i>8/24</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number *2*

Transducer	0°	45°	60°	Instrument			
S/N	<i>48807</i>	<i>NA</i>	<i>NA</i>	Mfr.	<i>Sonic</i>	Model	<i>Mark I</i>
Size	<i>1.0" dia</i>			S/N	<i>01058E</i>	RepRate	<i>3K</i>
Frequency	<i>2.25MHz</i>			Reject	<i>OFF</i>	Filter	<i>off</i>
Beam Angle	<i>0°</i>			Damp	<i>7</i>	Coax	<i>12' BNC-BNC</i>
				Freq.	<i>2.0</i>	Video	<i>NORM</i>

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1/4 T</i>	<i>70%</i>	<i>1.4</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>1:34</i>	<i>2:45</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>3/4 T</i>	<i>80%</i>	<i>4.2</i>														
<i>.1 T</i>		<i>6.0</i>														
Ref. dB	<i>41 db</i>															



Additional Comments/Sketch

Ultrasonic Examination Report



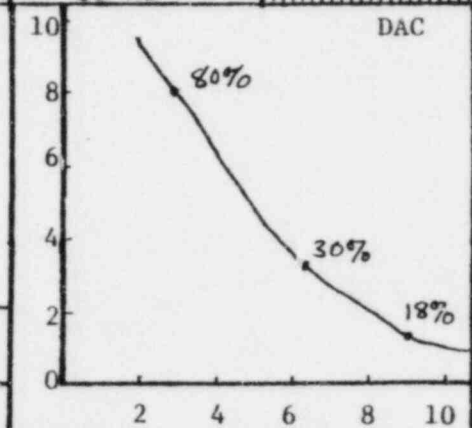
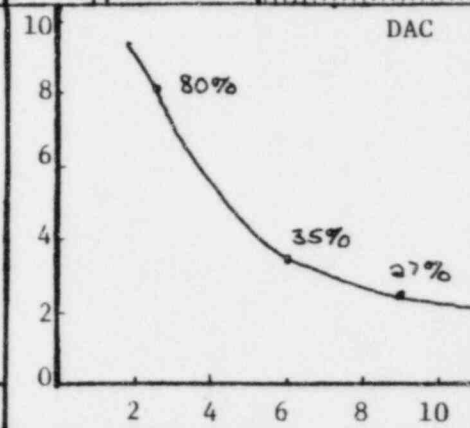
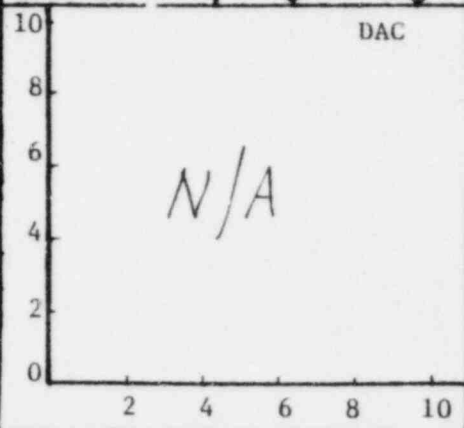
Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>N/A/43</i>	Iso/Drawing No. <i>Zone 43 R.2 F.C.8</i>
Procedure <i>ISI-22 R.O.F.C.2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Mary H. Rothman II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>10-12-82</i>
Component/Piping System <i>Main Steam Header A-outside</i>		Pipe Size/Weld Type <i>40" Butt</i>	Cal. Block # <i>UT-127</i>	Couplant: <i>SONOTRACE</i> Type <i>40</i> Batch No <i>48124</i>

Continuation Sheet Attached
 Yes No

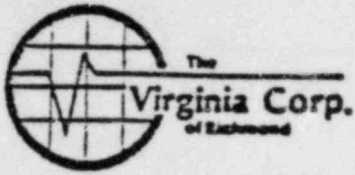
Field Changes:
 Yes No
 If Yes, Number *F.C. 2*

Transducer S/N Size Frequency Beam Angle	0°	45°	60°	Instrument							
	<i>N/A</i>	<i>J22935</i>	<i>N/A</i>	Mfr.	<i>SONIC</i>	Model	<i>Mark I</i>				
		<i>1/2"</i>		S/N	<i>02307E</i>	RepRate	<i>3K</i>				
		<i>2.25MHZ</i>		Reject	<i>off</i>	Filter	<i>off</i>				
		<i>45°</i>		Damp	<i>MIN.</i>	Coax	<i>6'BNC to BNC</i>				
Calibration 0°			2 & 5 Scan		7 & 8 Scan			Freq.	<i>2 MHZ</i>	Video	<i>Normal</i>

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks											
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°							
											In	Out	In	Out	In	Out						
<i>1T</i>	<i>N/A</i>	<i>N/A</i>	<i>80%</i>	<i>3.0</i>	<i>N/A</i>	<i>N/A</i>	<i>80%</i>	<i>3.1</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	
<i>2T</i>			<i>35%</i>	<i>6.1</i>			<i>30%</i>	<i>6.3</i>														
<i>3T</i>			<i>27%</i>	<i>9.0</i>			<i>18%</i>	<i>9.8</i>														
Ref. dB			<i>47 db</i>				<i>50 db</i>															



Additional Comments/Sketch



M.R. Martin, ANII 7-11-83
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP&L	Plant Waterford	Unit 3	Loop/Zone NA/43
Component/Piping System Mainsteam Header A-Outside Cont.		Examiner/Level <i>Kevin White, II</i>	Date 7-8-83
Procedure ISI 2.5, R.1	Iso/Drawing No. Zone 43, R.5	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached [] Yes [X] No

Equipment

Instrument		Transducer		Calibration
Mfgr. <i>Sonic</i>	Mfgr. <i>Aerotech</i>	Size <i>1"</i>	Cal. Block <i>UT-12B</i>	Cal. Block
Model <i>Mark I</i>	Freq. <i>2.25 MHz</i>		Range Cal. <i>3.375"</i>	Calibration Checks
S/N <i>02307E</i>	Serial No. <i>KB-3134</i>		Cal In <i>11:35am</i>	Cal Out <i>2:55pm</i>
Reflect <i>off</i>	Coax. Cable <i>6' BNC-PC</i>			
Damp. <i>Min</i>	Gain <i>80dB</i>			
Freq. <i>2MHz</i>				
Rep. Rate <i>3K</i>				
Filter <i>High</i>				
Video <i>Norm</i>				
Couplant <i>Sonotrace</i>	<i>40, 8225</i>			

Examination Results

Weld Number	Meas. Point	Reading #1 Weld	Reading Scan 2*2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
43-004	2	1.47"	2.68"	NA	NA	NA	NA	NA	NA
43-004	4	1.41"	2.68"						
43-004	6	1.41"	2.88"						
43-004	8	1.47"	2.75"						
43-004	10	1.47"	2.75"						
43-004	12	1.41"	2.75"						

Sketch/Identification

*1 Adjacent to weld on the 2 side
 *2 On the thickest part of 2 side

M.R. Martin, ANII 7-11-83

Ultrasonic Examination Report



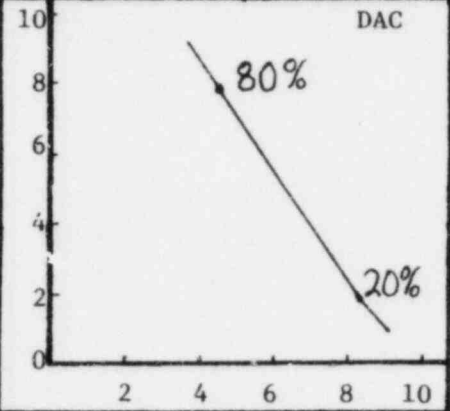
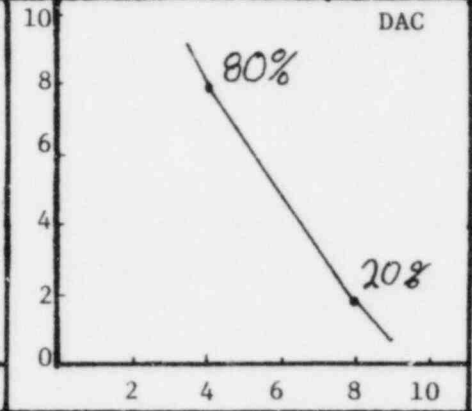
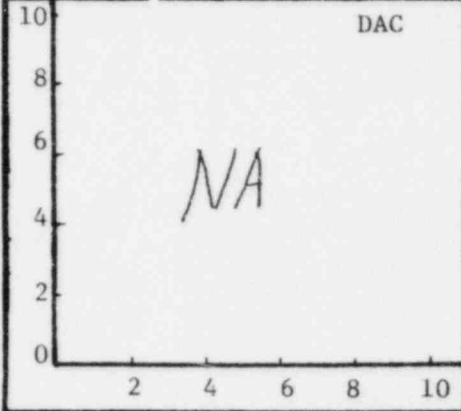
Customer <i>LP&L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA/43</i>	Iso/Drawing No. <i>Zone 43, P.5</i>
Procedure <i>ISI-2.2 R1</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Kevin Willett / Richard Humphrey I</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>7-8-83</i>
Component/Piping System <i>Main Steam Header A - Outside Cont.</i>	Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT-128</i>	Couplant: <i>Sonotrace</i> Type <i>40</i> Batch No. <i>8225</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number

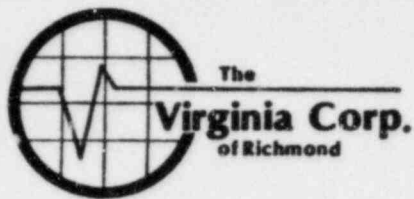
Transducer S/N Size Frequency Beam Angle	0°	45°	60°	Instrument			
	<i>NA</i>	<i>K12915</i>	<i>NA</i>	Mfr.	<i>Sonic</i>	Model	<i>Mark I</i>
		<i>4" x 5"</i>		S/N	<i>04405E</i>	RepRate	<i>3K</i>
		<i>2.25MHz</i>		Reject	<i>OFF</i>	Filter	<i>High mp</i>
	<i>45°</i>		Damp	<i>MIN</i>	Coax	<i>6' BNC-DT-1</i>	
			Freq.	<i>2 MHz</i>	Video	<i>Norm</i>	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>4.0</i>	<i>NA</i>		<i>80%</i>	<i>4.1</i>	<i>NA</i>		<i>NA</i>	<i>NA</i>	<i>12:02pm</i>	<i>2:59pm</i>	<i>NA</i>	<i>NA</i>
<i>2T</i>			<i>20%</i>	<i>8.0</i>			<i>20%</i>	<i>8.3</i>					<i>2:59pm</i>	<i>4:46pm</i>		
Ref. dB			<i>42db</i>				<i>51db</i>									



Additional Comments/Sketch

M.R. Martin, ANII 7-11-83



Ultrasonic Examination Report - Continuation Sheet

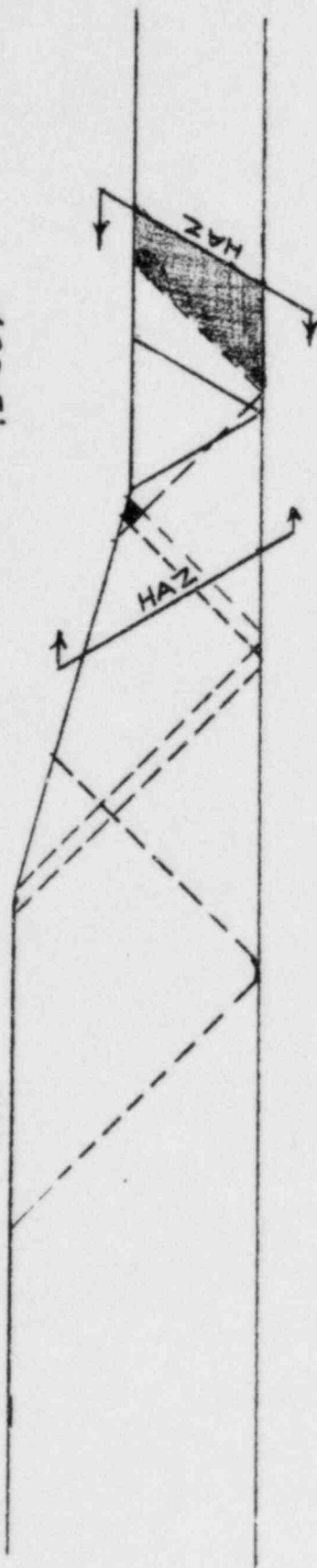
Page of

Customer LP&L	Plant Waterford	Unit 3	Loop/ Zone NA/ 43	Iso/Drawing No. Zone 43, R.5
Procedure ISI-2.2, R1	Exam Surface O.D.	Examiner/Level Kevin White/II	VCR Supervisor Daniel Dene	Date 7-8-83
Component/Piping System Main Steam Header A-Outside Cont.	Pipe Size 40"	Weld Type Butt	Cal. Block UT-128	Couplant: Type & Batch # Sonotrace 40, 8225

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
43-004	Par	Par	No	Par	Par	Partial on the base metal scan due to the transition of the taper on the 2 side. Examinations were performed on the 2 side only.	Smooth	Ground	NR1	Sat	O.D. weld geometry 20°-100° varying amplitudes 40-60 dBae.
						Partial on the 2 scan, unable to obtain full coverage due to the transition of the taper and O.D. weld geometry. See drawing.					
						7+8 scan partial due to the weld transition and contour, also due to the approx 15° slope of the taper directing the beam away from the weld on the 2 side.					
						0 scan scan partial due to O.D. weld geometry.					

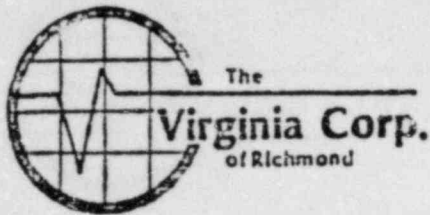
43-004

a side



SHADED AREA NOT COVERED

 <p>The Virginia Corp. of Richmond</p>	TITLE: _____	DATE: _____ ZONE: _____ REVISION: _____
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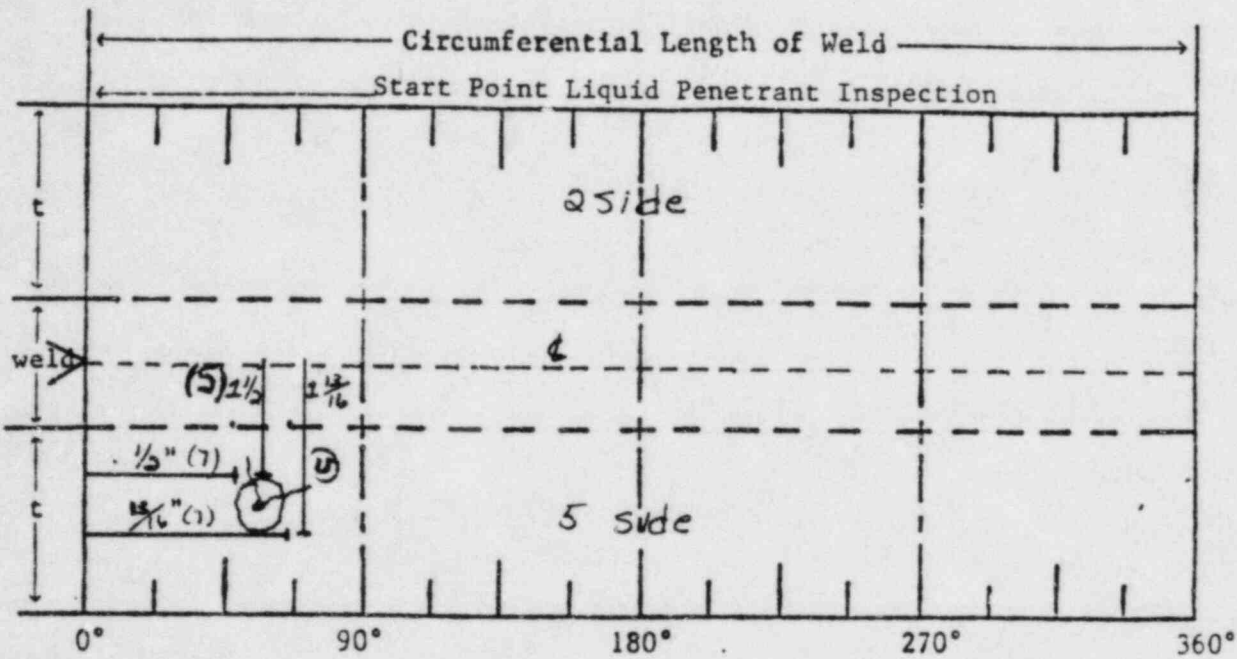


License Permitt

Weld Indication Record

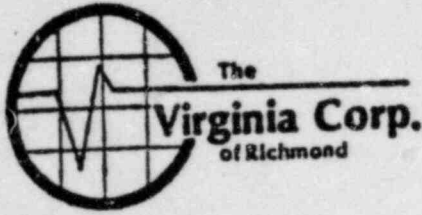
M.R. Martin, ANEI 9-20-82

Customer LP&L	Plant Waterford	Unit 3	Loop/Zone 2/44
Procedure ISI-3.1 R.O.F.C.4	Examiner/Level Robert J Overstreet II	Date 9-16-82	
Component/Piping System Main Steam Header B - outside		VCR Supervisor Daniel Jones	
Weld No. 44-034	ISO/Drawing No. Zone 44 R.2 F.C.2		



Remarks

Rounded indication $\frac{5}{16}$ " in diameter. Small hole approximately in center of indication with two linear indications propagating from center.

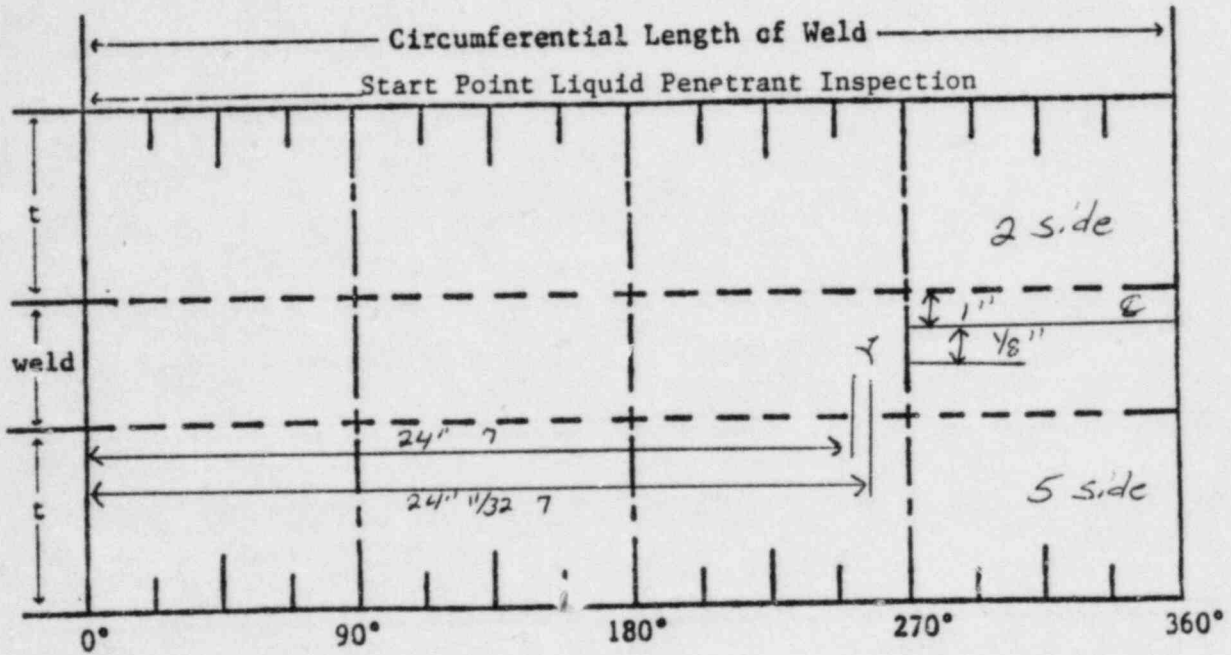


M.R. Martin, ANSI 3-28-83

Liquid Penetrant

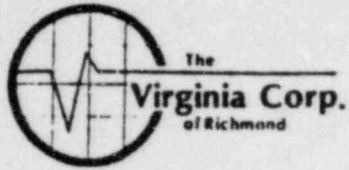
Weld Indication Record

Customer <i>L P+L</i>	Plant <i>Waterford</i>	Unit <i># 3</i>	Loop/Zone <i>2/44</i>
Procedure <i>ISI-3.1 Rev. 0 F.C. 4</i>	Examiner/Level <i>Michael E. Smith II</i>	Date <i>9-25-82</i>	
Component/Piping System <i>Main Steam Header B outside containment</i>		VGR Supervisor <i>Daniel Jensen</i>	
Weld No. <i>44-018</i>	ISO/Drawing No. <i>ZONE 44 Rev. 2 F.C. 5</i>		



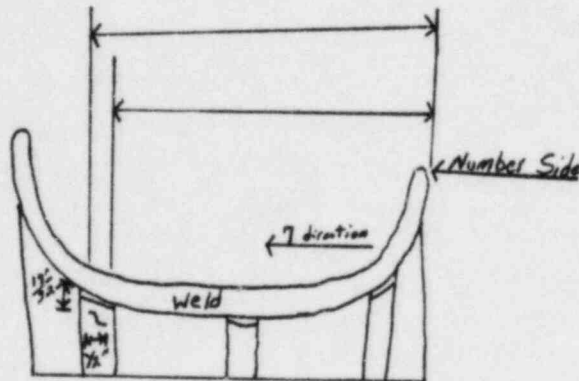
Remarks

* $1/32$ " linear indication located at $24"$ to $24 \frac{1}{32}"$ from Datum in 7 direction at $\frac{1}{2}$ of weld and extends for $1/8"$ from $\frac{1}{2}$ on 5 side



M.R. Martin, ANEF 11-12-82
Liquid Penetrant
Indication Record

Customer LP+L	Plant Waterford	Unit # 3	Loop/Zone NA / 44
Procedure ISI-3.1 Rev. 0 EC. 4	Examiner/Level Michael E. Smith II	Date 9-27-82	
Component/ Piping System Main Steam Header B outside containment		VCR Supervisor Daniel Jensen	
Weld No. 44-WS1	ISO/Drawing No. Zone 44 Rev. 2 EC. 5		



Comments: $\frac{1}{2}$ " linear Indication located $33\frac{1}{2}$ " to 34" from Number side
in 7 direction AND's $1\frac{7}{32}$ " down from the toe of the weld.



M.R. Martin, AN IF 9-3-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>LP&L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>2 44</i>
Component/Piping System <i>MAIN HEADER B OUTSIDE CONT.</i>		Examiner/Level <i>Larry Longenecker II</i>	Date <i>8-27-82</i>
Procedure <i>I.S.I. 2.5 R.O</i>	Iso/Drawing No. <i>ZONE 44 R-2, F.C.Z</i>	VCR Supervisor <i>Daniel Dyer</i>	Continuation Sheet Attached [] Yes [<input checked="" type="checkbox"/>] No

Equipment

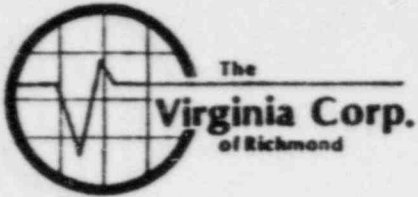
Instrument		Transducer		Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>K-B AEROTECH</i>	Size <i>.5" DIA.</i>	Cal. Block <i>UT-127</i>	
Model <i>MARK 1</i>	Freq. <i>2.25 MHZ.</i>	Serial No. <i>KB 2728</i>	Cal. Block	
S/N <i>01058E</i>	Coax. Cable <i>6'</i>	Gain <i>64 db</i>	Range Cal. <i>1.5" @ 7.0</i>	
Reject <i>OFF</i>	Couplant <i>SONOTRACE 40 B124</i>		Calibration Checks	
Damp. <i>MIN.</i>			<i>CAL. IN 1:50</i>	
Freq. <i>2. MHZ.</i>			<i>CAL. OUT 3:15</i>	
Rep. Rate <i>3K</i>				
Filter <i>41</i>				
Video <i>NORM</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-086-LA85</i>	<i>0"</i>	<i>1.586</i>	<i>1.543</i>	<i>1.607</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>44-086-LA85</i>	<i>2"</i>	<i>1.736</i>	<i>1.629</i>	<i>1.629</i>					
<i>44-086-LA85</i>	<i>4"</i>	<i>1.714</i>	<i>1.629</i>	<i>1.629</i>					
<i>44-086-LA87</i>	<i>10'-1/2"</i>	<i>1.736</i>	<i>1.586</i>	<i>1.629</i>					
<i>44-086-LA87</i>	<i>10'-2 1/2"</i>	<i>1.736</i>	<i>1.629</i>	<i>1.629</i>					
<i>44-086-LA87</i>	<i>10'-4 1/2"</i>	<i>1.714</i>	<i>1.607</i>	<i>1.607</i>					

Sketch/Identification

M.R. Martin, ANEF 9-3-82



Ultrasonic Examination Report

PAGE 1 OF 3

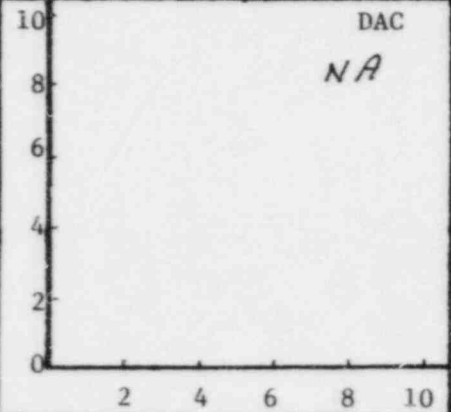
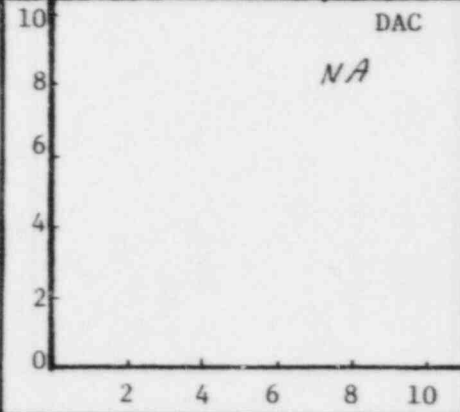
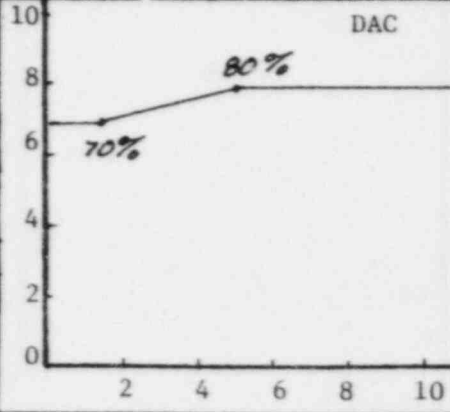
Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone 2 44	Iso/Drawing No. ZONE 44 R-2, F.C. 2
Procedure ISI 2.2 R-0, F.C. 2	Exam Surface O.D.	Examiner/Level Ray Longenecker II	VCR Supervisor Daniel Jensen	Date 8-31-82
Component/Piping System MAIN HEADER B OUTSIDE CONT.		Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-127
		Couplant: SONOTRACE		Type 40 Batch No. 8129

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
S/N	J02172	NA	NA	Mfgr.	K-B	Model	USL-37
Size	.5" DIA.			S/N	210021	RepRate	1K
Frequency	2.25 MHz			Reject	OFF	Filter	H1
Beam Angle	0°			Damp	FIXED	Coax	6'
				Freq.	2.25 MHz.	Video	N/A

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1/4 T	70%	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	9:05	10:20	NA	NA	NA	NA
3/4 T	80%	4.9															
1 T	NA	7.0															
Ref. dB	32 dB																



Additional Comments/Sketch

W.R. Martin, ANSF 9-3-82



Ultrasonic Examination Report

PAGE 2 OF 3

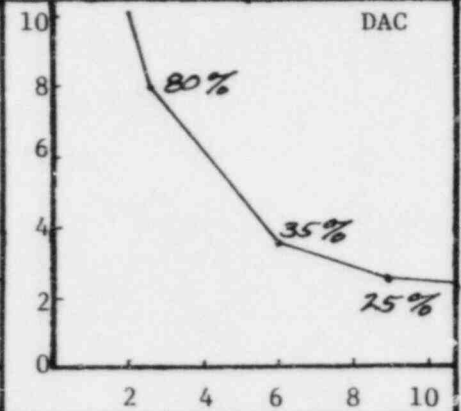
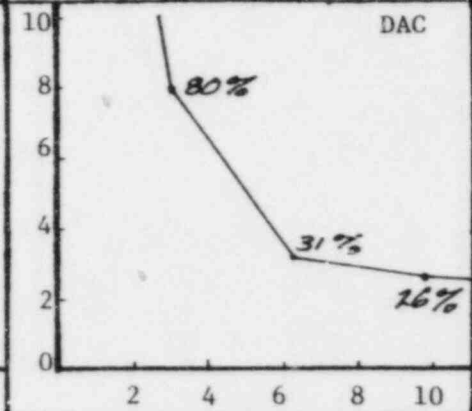
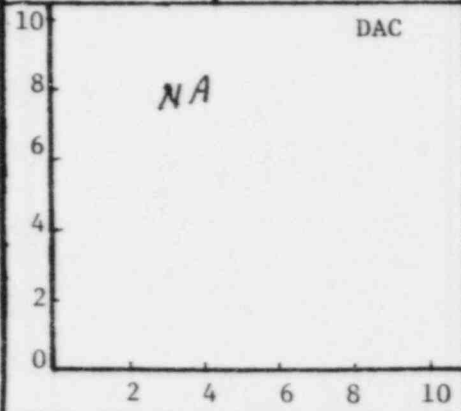
Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone 2 44	Iso/Drawing No. ZONE 44 R-2, F.C. 2
Procedure ISI. 2.2 R-2, F.C. 2	Exam Surface O. D.	Examiner/Level Navy Longenecker II	VCR Supervisor Daniel Jones	Date 8-31-82
Component/Piping System MAIN HEADER B OUTSIDE CONT.		Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-127
		Couplant: SONOTRACE		Batch No. 8124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument				
	S/N	NA	607150	NA	Mfgt.	SONIC	Model	MARK I
	Size		.5" DIA.		S/N	01058E	RepRate	3K
	Frequency		2.25 MHZ		Reject	OFF	Filter	H1
	Beam Angle		45°		Damp	MIN.	Coax	6'
				Freq.	2. MHZ.	Video	NORM	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1 T	NA	NA	80%	3.1	NA	NA	80%	3.0	NA	NA	NA	NA	9:15	10:25	NA	NA
2 T			31%	6.2			35%	5.9								
3 T			26%	9.7			25%	9.0								
Ref. dB			76 db				80 db									



Additional Comments/Sketch



W.R. Martin, ANSI 9-16-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>LP&L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>2/44</i>
Component/Piping System <i>Main Header B - outside contain</i>	Examiner/Level <i>Navy Longenecker II</i>	Date <i>9-14-82</i>	
Procedure <i>IST 2.5 R.O</i>	Iso/Drawing No. <i>Zone 44, R.2, F.C.2</i>	VCR Supervisor <i>Meriel Jensen</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. <i>Sonic</i>	Mfgr. <i>KB-Aerotech</i>	Size <i>.50" DIA</i>	Cal. Block <i>UT-127</i>	
Model <i>FTS Mark I</i>			Cal. Block <i>NA</i>	
S/N <i>010583</i>	Freq. <i>2.25 Mhz</i>		Range Cal. <i>6 div = 1.50"</i>	
Reject <i>off</i>	Serial No. <i>KR-2897</i>		Calibration Checks	
Damp. <i>Min</i>	Coax. Cable <i>6'</i>		<i>IN - 12:45 PM</i>	
Freq. <i>2 Mhz</i>	Gain <i>71 dB</i>		<i>OUT - 3:02 PM</i>	
Rep. Rate <i>3X</i>				
Filter <i>Hi</i>				
Video <i>Norm</i>				
Couplant <i>Sonotrace 40 R#8124</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-089</i>	<i>12</i>	<i>1.28"</i>	<i>1.88"</i>	<i>1.35"</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
	<i>2</i>	<i>1.28"</i>	<i>2.00"</i>	<i>1.38"</i>					
	<i>4</i>	<i>1.33"</i>	<i>2.10"</i>	<i>1.38"</i>					
	<i>6</i>	<i>1.35"</i>	<i>2.10"</i>	<i>1.40"</i>					
	<i>8</i>	<i>1.33"</i>	<i>2.10"</i>	<i>1.40"</i>					
	<i>10</i>	<i>1.38"</i>	<i>2.13"</i>	<i>1.38"</i>					

Sketch/Identification

Mr. R. Martin, ANIE 9-16-82



Ultrasonic Examination Report

PAGE 1 OF 3

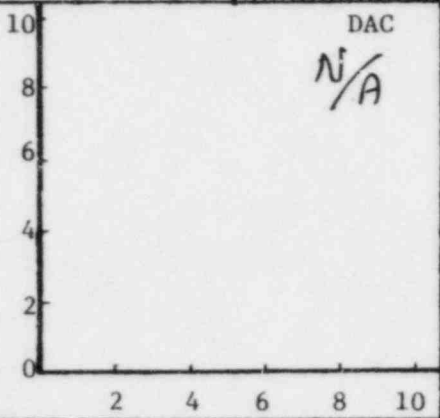
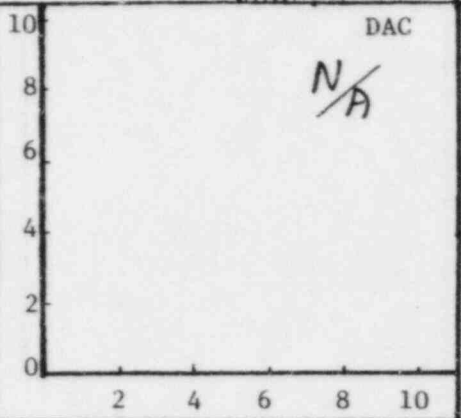
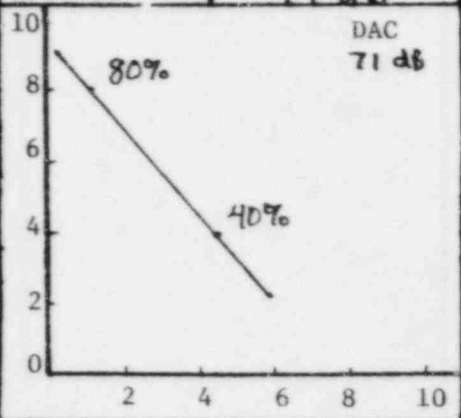
Customer LP&L	Plant Waterford	Unit 3	Loop/Zone 2/44	Iso/Drawing No. Zone 44, R.2, E.C.2
Procedure ISI 2.2, A, D, E, C, 2	Exam Surface OD	Examiner/Level Navy Longenecker II	VCR Supervisor Denil Dms	Date 9-14-82
Component/Piping System Main Header A - outside contin.	Pipe Size 40"	Weld Type Butt	Cal. Block UT-127	Couplant: Sonotrace Type 40 Batch No. 8124

Continuation Sheet Attached
 Yes No

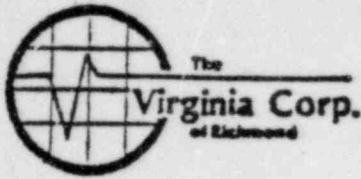
Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
S/N	KR2897	N/A	N/A	Mfr.	Sonic	Model	ETS Mark I
Size	.50"			S/N	010585E	RepRate	3K
Frequency	2.25 MHz			Reject	off	Filter	Hi
Beam Angle	0°			Damp	Min	Coax	6'
				Freq.	2 MHz	Video	Norm

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks							
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
1/4 T	80%	1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1245	1502	N/A	N/A	N/A	N/A
3/4 T	40%	4.2																
1 T	N/A	6.0																



Additional Comments/Sketch



M.R. Martin, ANS 9-16-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone 2 44
Component/Piping System MAIN HEADER B OUTSIDE CONT.		Examiner/Level Sam Longenecker II	Date 9-14-82
Procedure I.S.I. 2.5 R-0	Iso/Drawing No. ZONE 44 R-2, FC. 2	VCR Supervisor W. J. [Signature]	Continuation Sheet Attached [] Yes [4] No

Equipment

Instrument		Transducer		Calibration	
Mfgr.	SONIC	Mfgr.	K-B AEROTECH	Size	.5" DIA.
Model	MARK 1			Cal. Block	UT-118
S/N	03704E	Freq.	2.25 MHz.	Cal. Block	
Reject	OFF			Range Cal.	.725" @ 7.0
Damp.	MIN.	Serial No.	K-B 2728	Calibration Checks	
Freq.	2. MHz.	Coax. Cable	6'	CAL. IN	12:40
Rep. Rate	3 K			CAL. OUT	3:00
Filter	H1	Gain	70 dB		
Video	NORM				
Couplant	SONOTRACE 40 #8124				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
44-073	12	.725	.746	.818	44-075	12	.818	.735	.860
44-073	2	.694	.746	.808	44-075	2	.787	.746	.891
44-073	4	.673	.735	.808	44-075	4	.829	.777	.932
44-073	6	.673	.715	.808	44-075	6	.766	.735	.953
44-073	8	.673	.735	.798	44-075	8	.808	.694	1.015
44-073	10	.715	.777	.839	44-075	10	.787	.715	.984
44-074	12	.725	.808	.735					
44-074	2	.704	.818	.725					
44-074	4	.725	.860	.735					
44-074	6	.766	.932	.756					
44-074	8	.777	.974	.787					
44-074	10	.715	.870	.746					

Sketch/Identification

M.R. Martin ANIF 9-16-82



Ultrasonic Examination Report

PAGE 1 OF 4 G.L.

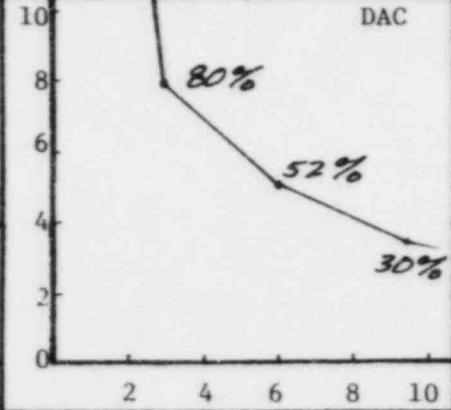
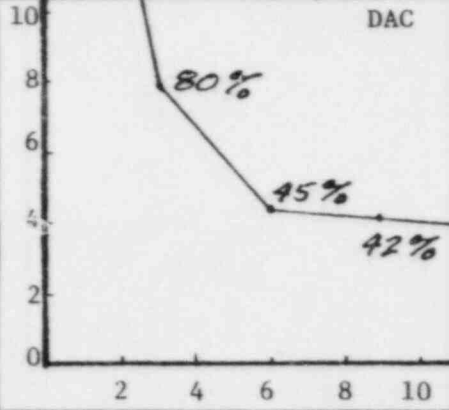
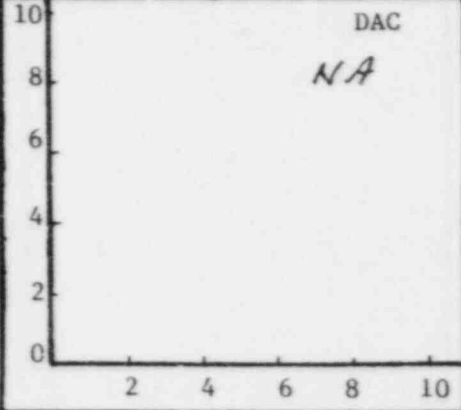
Customer LP & L	Plant WATERFORD	Unit 3	Loop/Zone 2 44	Iso/Drawing No. ZONE 44 R-2, F.C. 2
Procedure I.S.I. 2.2 RO, FCC	Exam Surface O. D.	Examiner/Level Rajesh Chandra II	VCR Supervisor Dani Jensen	Date 9-10-82
Component/Piping System MAIN HEADER B OUTSIDE CONT.	Pipe/Size 8"	Weld Type BUTT	Cal. Block # UT-118	Couplant: SONOTRACE Type 40 Batch No. 8124

Continuation Sheet Attached
 Yes No

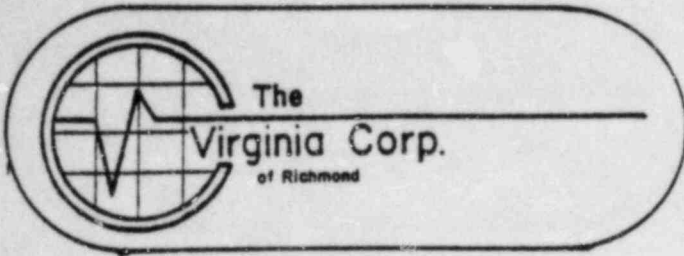
Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
S/N	NA	D22063	NA	Mfr.	SONIC	Model	MARK I
Size		.5" DIA.		S/N	01058E	RepRate	3K
Frequency		2.25 MHz		Reject	OFF	Filter	H/
Beam Angle		45°		Damp	MIN.	Coax	6'
				Freq.	2	Video	NORM

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1 T	NA	NA	80%	3.0	NA	NA	80%	3.1	NA	NA	NA	NA	NA	9:30	12:25	NA	NA
2 T			75%	6.3			52%	6.0									
3 T			42%	9.0			30%	9.4									
Ref. dB			42 db				45 db										



Additional Comments/Sketch



DATE 9-10-82

PAGE 3 OF 3 GL

TO _____

SUBJECT INSPECTION LIMITATIONS
& REMARKS

WELD NO. 44-073 7 & 8 SCANS HAD APPROX.
10% LOSS OF CONTACT DUE TO
O.D. WELD GEO.

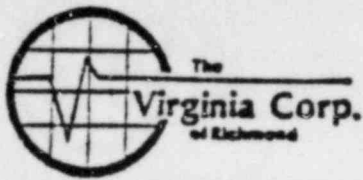
WELD NO. 44-074 7 & 8 SCANS HAD APPROX.
10% LOSS OF CONTACT DUE TO
O.D. WELD GEO.

I.D. COUNTERBORE NOTICED
IN 2 SCAN; FROM 25 1/2", GOING
PAST DATUM TO 6 1/2". AROUND 3.8 SW.
⊙ 2.25" ON THE 2 SIDE 100% DAC.

WELD NO. 44-075 7 & 8 SCANS HAD APPROX.
10% LOSS OF CONTACT DUE TO
O.D. WELD GEO.

SIGNED

Very Longenecker



W.R. Martin, ANIF 9-29-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>LP & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B 44</i>
Component/Piping System <i>CONT. MAIN HEADER B OUTSIDE</i>		Examiner/Level <i>Harry Langenecker II</i>	Date <i>9-23-82</i>
Procedure <i>I.S.I. 2.5 R-0</i>	Iso/Drawing No. <i>ZONE 44 R2, F.C.A.</i>	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached [] Yes [x] No

Equipment

Instrument		Transducer		Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>PANAMETRICS</i>	Size <i>1." DIA</i>	Cal. Block <i>UT-128</i>	
Model <i>MARK 1</i>	Freq. <i>2.25 MHZ.</i>	Serial No. <i>48807</i>	Cal. Block	
S/N <i>01058E</i>	Coax. Cable <i>12'</i>	Gain <i>46 db</i>	Range Cal. <i>2.725" @ 7.0</i>	
Reject <i>OFF</i>	Video <i>NORM</i>	Couplant <i>SONOTRACE 40 #8124</i>	Calibration Checks	
Damp. <i>MIN.</i>			<i>CAL IN 9:22</i>	
Freq. <i>2. MHZ.</i>			<i>CAL. OUT 11:40</i>	
Rep. Rate <i>3 K</i>				
Filter <i>H1</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-009</i>	<i>12</i>	<i>*</i>	<i>2.842</i>	<i>*</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>44-009</i>	<i>2</i>	<i>"</i>	<i>2.803</i>	<i>"</i>					
<i>44-009</i>	<i>4</i>	<i>"</i>	<i>2.803</i>	<i>"</i>					
<i>44-009</i>	<i>6</i>	<i>"</i>	<i>2.764</i>	<i>"</i>					
<i>44-009</i>	<i>8</i>	<i>"</i>	<i>2.803</i>	<i>"</i>					
<i>44-009</i>	<i>10</i>	<i>"</i>	<i>2.842</i>	<i>"</i>					
<i>44-025</i>	<i>12</i>	<i>2.647</i>	<i>2.803</i>	<i>2.803</i>					
<i>44-025</i>	<i>2</i>	<i>2.647</i>	<i>2.803</i>	<i>2.842</i>					
<i>44-025</i>	<i>4</i>	<i>2.647</i>	<i>2.803</i>	<i>2.608</i>					
<i>44-025</i>	<i>6</i>	<i>2.764</i>	<i>2.764</i>	<i>2.764</i>					
<i>44-025</i>	<i>8</i>	<i>2.608</i>	<i>2.725</i>	<i>2.764</i>					
<i>44-025</i>	<i>10</i>	<i>2.647</i>	<i>2.764</i>	<i>2.803</i>					

Sketch/Identification

** TO BE EXAMINED WITH UT-127 CAL.*

M.R. Martin, ANII 9-29-82



Ultrasonic Examination Report PAGE 1 OF 4

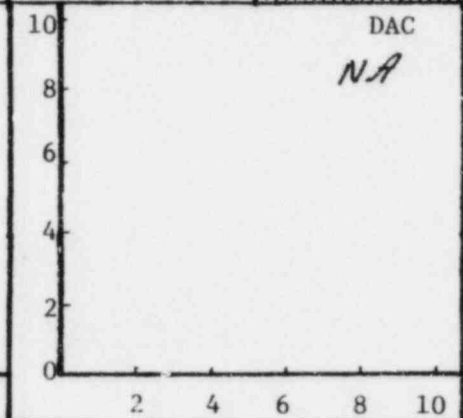
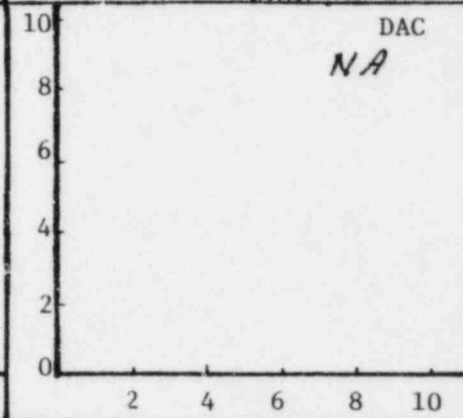
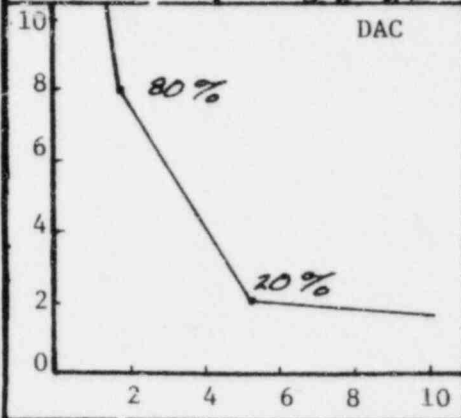
Customer LP & L	Plant WATERFORD	Unit 3	Loop/Zone B 44	Iso/Drawing No. ZONE 44 R-2, F.C. 4
Procedure I.S.I. 22 ROFLZ	Exam Surface O.D.	Examiner/Level Dary Longenecker II	VCR Supervisor Daniel Jensen	Date 9-22-82
Component/Piping System CONT. MAIN HEADER B OUTSIDE	Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-128	Couplant: SONOTRACE Type 40 Batch No. 8139

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument				
	S/N	48807	NA	NA	Mfer.	SONIC	Model	MARK 1
	Size	1. DIA.			S/N	01058E	RepRate	3K
	Frequency	2.25 MHz			Reject	OFF	Filter	H1
Beam Angle	0°			Damp	MIN.	Coax	12'	
				Freq.	2. MHz.	Video	NORM	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1/4T	80%	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	9:22	11:40	NA	NA	NA	NA
3/4T	20%	5.2															
1T	NA	7.0															
Ref. dB	36 db																



Additional Comments/Sketch

W.R. Martin, ANII 9-29-82



The
Virginia Corp.
of Richmond

Ultrasonic Examination Report PAGE 2 OF 4

Customer LP & L	Plant WATERFORD	Unit 3	Loop/Zone B 44	Iso/Drawing No. ZONE 44 R-2, F.C. 4
Procedure ISI. 22 RO, F.C. 2	Exam Surface O.D.	Examiner/Level Nary Longenecker I	VCR Supervisor Daniel Jensen	Date 9-22-82
Component/Piping System MAIN HEADER B OUTSIDE CONT.	Pipe/Size 40"	Weld Type BUTT	Cal. Block UT-128	Couplant: SONOTRACE Type 40 Batch No. 8124

Continuation Sheet Attached
 Yes No

Field Changes:
Yes No
If Yes, Number **2**

	Transducer			Instrument				
	S/N			Mfr.	Model		MARK I	
	Size			S/N	RepRate		3K	
	Frequency			Reject	Filter		H I	
	Beam Angle			Damp	Coax		12'	

Calibration 0°

2 & 5 Scan

7 & 8 Scan

Freq. **2. MHZ.**

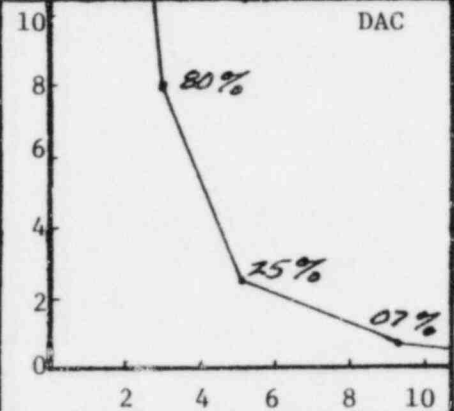
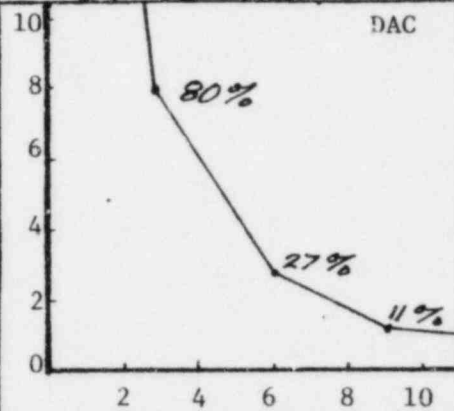
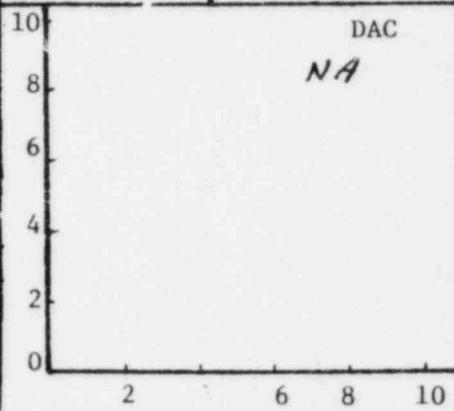
Video **NORM G.L.**

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks					
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°	
											In	Out	In	Out	In	Out
1 T	NA	NA	80%	3.0	NA	NANA	80%	3.2	NA	NANA	NA	NA	9:25	11:42	NA	NA
2 T			27%	6.0			25%	6.4								
3 T			11%	9.0			07%	9.4								

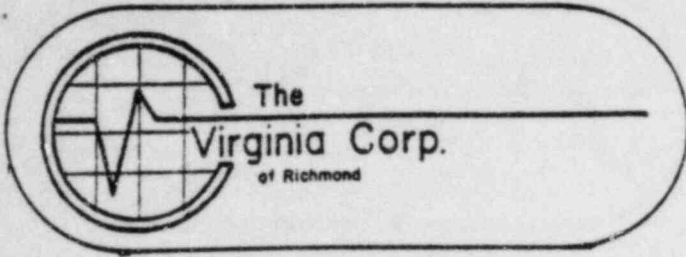
Ref. dB

57 db

68 db



Additional Comments/Sketch



DATE 9-22-82

PAGE 4 OF 4

TO _____

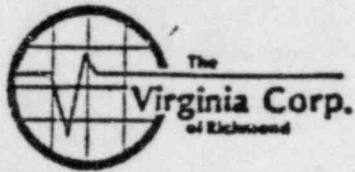
SUBJECT INSPECTION LIMITATIONS
AND REMARKS

WELD NO. 44-009 THE WELD AND 5 SIDE IS TO BE
EXAMINED WITH CAL. ON UT-127.
THE 2 SIDE IS TO BE EXAMINED WITH
CAL. ON UT-128
THE BASE METAL SCAN WAS
PERFORMED ON 2 SIDE ONLY
0°, 7 & 8 SCAN WAS PERFORMED
ON 2 SIDE ONLY.
BEVEL BEGINNING AT 2 SIDE
TOE OF WELD

WELD NO. 44-025 0°, 7 & 8 SCANS HAD APPROX. 05%
LOSS OF CONTACT DUE TO O.D. WELD
GEO.
O.D. WELD GEO. NOTICED WITH
45° IN THE 2 SCAN AT 100% DAC.
FROM 3" IN 8 DIRECTION CONTINUING
PAST DATUM TO 3" IN 7 DIRECTION.
3 1/2" ON 2 SIDE @ 5.6 SWEEP.

SIGNED

Larry Longenecker



G.R. Martin, ANET 10-8-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>L P & L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>B 44</i>
Component/Piping System <i>Main Steam Header B, Outside Cont</i>		Examiner/Level <i>John J. Sullivan II</i>	Date <i>9-24-82</i>
Procedure <i>ISI 2.5 Rev 0 FCO</i>	Iso/Drawing No. <i>Zone 44 Rev 2 F.C.S</i>	WCR Supervisor <i>Daniel J. Jones</i>	Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

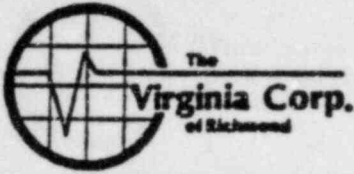
Equipment

Instrument		Transducer		Calibration
Mfgr. <i>Krautkramer</i>	Mfgr. <i>Panametric</i>	Size <i>1" dia</i>	Cal. Block <i>UT-127</i>	
Model <i>USL-37</i>	Freq. <i>2.25 MHz</i>	Cal. Block		
S/N <i>210021</i>	Serial No. <i>48807</i>	Range Cal. <i>1.875"</i>		
Reject <i>off</i>	Calibration Checks			
Damp. <i>Min.</i>	Coax. Cable <i>12' BNC-BNC</i>	Cal in <i>9:55^{am}</i> Cal out <i>1:30^{am}</i>		
Freq. <i>2.5</i>	Gain <i>36 db</i>	Cal in <i>2:35^{am}</i> Cal out <i>3:30^{am}</i>		
Rep. Rate <i>1K</i>	Cal in <i>3:45^{am}</i> Cal out <i>5:45^{am}</i>			
Filter <i>Low</i>				
Video <i>N/A</i>				
Couplant <i>Sonotrace 40 5124</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
44-001	12	1.500"	1.444"	N/A	44-005	12	1.500"	1.575"	1.613"
44-001	2	1.519"	1.425"		44-005	2	1.500"	1.650"	1.650"
44-001	4	1.425"	1.388"		44-005	4	1.631"	1.631"	1.650"
44-001	6	1.481"	1.350"		44-005	6	1.444"	1.575"	1.594"
44-001	8	1.444"	1.369"		44-005	8	1.500"	1.538"	1.556"
44-001	10	1.481"	1.444"		44-005	10	1.650"	1.575"	1.575"
44-003	12	1.369"	1.613"	1.481"	44-007	12	1.463"	1.350"	1.613"
44-003	2	1.444"	1.631"	1.463"	44-007	2	1.444"	1.388"	1.594"
44-003	4	1.388"	1.575"	1.406"	44-007	4	1.388"	1.388"	1.594"
44-003	6	1.425"	1.594"	1.388"	44-007	6	1.463"	1.388"	1.575"
44-003	8	1.350"	1.631"	1.388"	44-007	8	1.425"	1.388"	1.575"
44-003	10	1.519"	1.613"	1.463"	44-007	10	1.463"	1.388"	1.613"

Sketch/Identification



Ultrasonic Data Sheet
M.R. Martin for ANSI 10-P-82
 Thickness Measurement
 Continuation Page 2 of 2

Customer <i>L P + L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>B 44</i>
Component/Piping System <i>Main Steam Header B, Outside Cont.</i>	Examiner/Level <i>J. J. Salter II</i>	Date <i>9-24-82</i>	
Procedure <i>ISI 2.5 Rev. D FC 0</i>	Iso/Drawing No. <i>Zone 44 Rev. 2 FC 5</i>	VCR Supervisor <i>Daniel J. Jones</i>	

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-008</i>	<i>12</i>	<i>1.425"</i>	<i>1.444"</i>	<i>1.406"</i>					
<i>44-008</i>	<i>2</i>	<i>1.594"</i>	<i>1.500"</i>	<i>1.406"</i>					
<i>44-008</i>	<i>4</i>	<i>1.519"</i>	<i>1.481"</i>	<i>1.406"</i>					
<i>44-008</i>	<i>6</i>	<i>1.463"</i>	<i>1.425"</i>	<i>1.406"</i>					
<i>44-008</i>	<i>8</i>	<i>1.538"</i>	<i>1.388"</i>	<i>1.406"</i>					
<i>44-008</i>	<i>10</i>	<i>1.500"</i>	<i>1.425"</i>	<i>1.406"</i>					
<i>44-087</i>	<i>12</i>	<i>1.331"</i>	<i>1.369"</i>	<i>1.631"</i>					
<i>44-087</i>	<i>2</i>	<i>1.350"</i>	<i>1.369"</i>	<i>1.613"</i>					
<i>44-087</i>	<i>4</i>	<i>1.331"</i>	<i>1.425"</i>	<i>1.613"</i>					
<i>44-087</i>	<i>6</i>	<i>1.388"</i>	<i>1.500"</i>	<i>1.613"</i>					
<i>44-087</i>	<i>8</i>	<i>1.369"</i>	<i>1.463"</i>	<i>1.594"</i>					
<i>44-087</i>	<i>10</i>	<i>1.331"</i>	<i>1.406"</i>	<i>1.650"</i>					

Sketch/Identification

Blank area for sketch or identification.



M.R. Martin, ANEF 10-8-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP & L	Plant WATERFORD	Unit 3	Loop/Zone B / 44
Component/Piping System MAIN STEAM HEADER "B"		Examiner/Level Michael W. Blew II	Date 10-7-82
Procedure ISI-2.5 R.O	Iso/Drawing No. ZONE 44 R2 FC 6	VCR Supervisor Nanilo Jensen	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr.	SONIC	Mfgr.		Cal. Block UT-128
Model	MARK I	Size	1.0" DIA	Cal. Block
S/N	04404E *	Freq.	2.25 MHZ	Range Cal. 3.406"
Reject	OFF	Serial No.	48807	Calibration Checks
Damp.	MIN	Coax. Cable	12' BNC-BNC	
Freq.	2.0	Gain	56 db	IN 7:50
Rep. Rate	1K			OUT 11:10
Filter	OFF			
Video	NORM			
Couplant	SONOTRACE 40 3/4 B124			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
44-0041A	6"	1.635"	1.567"	1.533"	44-0061A	18"	1.533"	1.567"	1.533"
44-0041A	12"	1.635"	1.567"	1.533"	44-0061B	6"	1.635"	1.533"	1.499"
44-0041A	18"	1.601"	1.567"	1.533"	44-0061B	12"	1.567"	1.499"	1.499"
44-0041B	6"	1.601"	1.533"	1.533"	44-0061B	18"	1.533"	1.499"	1.533"
44-0041B	12"	1.601"	1.499"	1.499"	44-0061B	24"	1.533"	1.499"	1.499"
44-0041B	18"	1.601"	1.499"	1.499"	44-0061B	30"	1.533"	1.499"	1.533"
44-0041B	24"	1.635"	1.499"	1.499"	44-0061B	36"	1.533"	1.499"	1.499"
44-0041B	30"	1.635"	1.533"	1.499"	44-0061B	42"	1.567"	1.533"	1.533"
44-0041B	36"	1.635"	1.533"	1.533"					
44-0041B	42"	1.635"	1.499"	1.499"					
44-0061A	6"	1.601"	1.533"	1.533"					
44-0061A	12"	1.635"	1.533"	1.533"					

Sketch/Identification

* SEE NCR #028 OF ERRATA SECTION

W.R. Martin, ANIS 10-8-82

Ultrasonic Examination Report



Customer LP&L	Plant Waterford	Unit 3	Loop/Zone B/44	Iso/Drawing No. Zone 44 Rev. 2 FC-25
Procedure ISI-2.2 Rev. D FC-2	Exam Surface OD	Examiner/Level Henry D. Lippman II	VCR Supervisor Daniel Jensen	Date 9-24-82
Component/Piping System Main Steam Header B- Outside Containment	Pipe Size 40"	Weld Type Butt	Cal. Block # UT-127	Couplant: Type Sono 40 Batch No. 8124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **FC-2**

Transducer S/N Size Frequency Beam Angle	0°	45°	60°	Instrument			
	48807	NA	NA	Mfr.	KrautKramer	Model	USA-37
	1"			S/N	210021	RepRate	1K
	2.25 MHz			Reject	OFF	Filter	L0
	0°			Damp	Min.	Coax	12' BNC-BNC

Calibration 0°

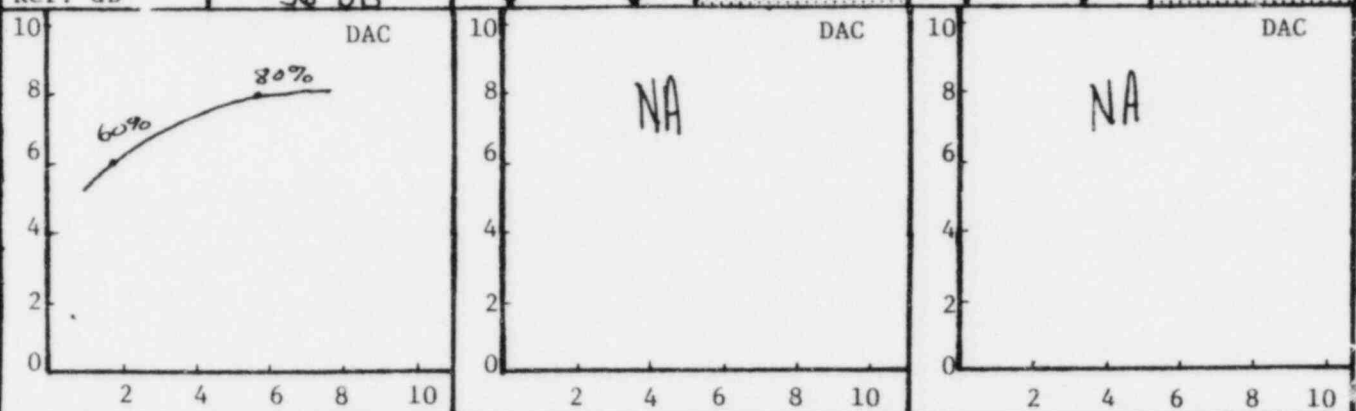
2 & 5 Scan

7 & 8 Scan

Freq. **2.5 MHz**

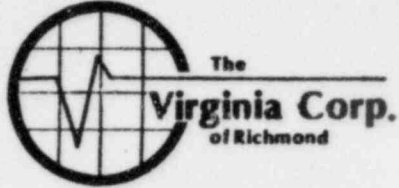
Video **NA**

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks					
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°	
											In	Out	In	Out	In	Out
1/4 T	60%	1.7	NA	NA			NA	NA			9:55	1:30	NA	NA	NA	NA
3/4 T	80%	5.6									2:35	3:30				
											3:45	5:45				



Additional Comments/Sketch

W.R. Martin, ANEF 10-8-82



Ultrasonic Examination Report - Continuation Sheet

Page **of**

Customer <i>LP&L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>B1 44</i>	Iso/Drawing No. <i>ZONE 44 REV 2 FC 5</i>
Procedure <i>ISI-2.2 Rev 0 FC2</i>	Exam Surface <i>O. D.</i>	Examiner/Level <i>Mary A. Schlemmer F</i>	VCR Supervisor <i>Daniel Jones</i>	Date <i>9-24-82</i>
Component/Piping System <i>MAIN STEAM HEADER "B"</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-127</i>	Couplant: Type & Batch # <i>SONOTRACE 40 7/8 8124</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks	
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual		
44-004	LA	YES	NA	NA	NA	YES	CLEAN	Ground	NI	SAT		
44-004	LB	YES	NA	NA	NA	YES	CLEAN	Ground	NI	SAT		
44-006	LA	YES	NA	NA	NA	YES	CLEAN	Ground	NI	SAT		
44-006	LB	YES	NA	NA	NA	YES	CLEAN	Ground	NI	SAT		
44-087		YES	NA	NA	NA	PAR	CLEAN	Ground	NI	SAT		
44-001		PAR	NA	NA	NA	PAR	2 SIDE ONLY, S SIDE TO BE EXAMINED	CLEAN	Ground	NI	SAT	
44-003		YES	NA	NA	NA	PAR	*	CLEAN	Ground	NI	SAT	
44-005		YES	NA	NA	NA	PAR	*	CLEAN	Ground	NI	SAT	
44-007		YES	NA	NA	NA	PAR	*	CLEAN	Ground	NI	SAT	
44-008		YES	NA	NA	NA	PAR	*	CLEAN	Ground	NI	SAT	
							*PARTIAL DUE TO WELD CROWN APPROX. 10% LOSS OF CONTACT AT TOE OF WELD					

M.R. Martin, ANEF 10-P-82



Ultrasonic Examination Report

Customer LP+L	Plant Waterford	Unit 3	Loop/Zone B/44	Iso/Drawing No. Zone 44 Rev 2 FC-X5	<i>Doc</i>
Procedure IST-2.2 Rev D FC-2	Exam Surface O.D.	Examiner/Level <i>Michael J. Lopez #</i>	VCR Supervisor <i>Daniel Jensen</i>	Date 9-25-82	
Component/Piping System Mainsteam Header B - Outside Contain.	Pipe Size 40"	Weld Type Butt	Cal. Block UT-127	Couplant: Type Sone 40	Batch No 8124

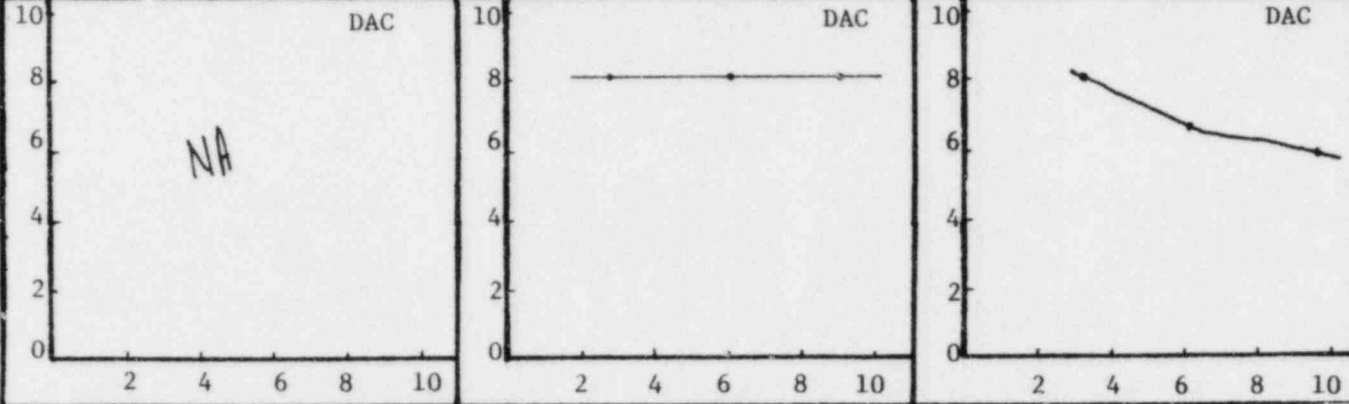
Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **FC-2**

Transducer	0°	45°	60°	Instrument			
S/N	NA	L19801	NA	Mfer.	Sonic	Model	Mark I
Size		1"		S/N	01930E	RepRate	3K
Frequency		2.25MHz		Reject	OFF	Filter	OFF
Beam Angle		46°		Damp	Min.	Coax	12'BNC-BNC
				Freq.	2.25 MHz	Video	Norm

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1T	NA	NA	80%	3.0			80%	3.1			NA	NA	8:40	12:35	NA	NA
2T			80%	6.0			65%	6.3					2:15	4:30		
3T			80%	9.0			60%	9.7								

Ref. dB			57 DB			61 DB										
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Additional Comments/Sketch

W.R. Martin, ANIS 10-8-82



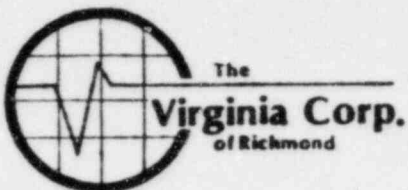
Ultrasonic Examination Report - Continuation Sheet

Page **of**

Customer <i>L PPL</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/ Zone <i>B/44</i>	Iso/Drawing No. <i>ZONE 44 REV 2 RCS</i>
Procedure <i>ISI 2.2 R.O RCS</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Doug A. Sotell II</i>	VCR Supervisor <i>Daniel Jones</i>	Date <i>9-25-82</i>
Component/Piping System <i>MAINSTEAM HEADER "B"</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-127</i>	Couplant: Type & Batch # <i>SONOTRACE 40 1/4 8124</i>

Weld No.	Base Metal Scan	Scan Direction				Inspection Limitations	Surface Condition		Examination Results		Remarks
		2	5	7 & 8	0		Base Metal	Weld	UT	Visual	
44-001	NA	YES	NO	YES	NA	2 SIDE ONLY, 5 SIDE TO BE EXAMINED	CLEAN	Ground	NI	SAT	
44-003	NA	YES	YES	PAR	NA	*	CLEAN	Ground	NI	SAT	
44-005	NA	YES	YES	PAR	NA	*	CLEAN	Ground	NI	SAT	
44-007	NA	YES	YES	PAR	NA	*	CLEAN	Ground	NI	SAT	
44-008	NA	YES	YES	PAR	NA	*	CLEAN	Ground	NI	SAT	
						*PARTIAL DUE TO WELD CROWN APPROX. 10% LOSS OF CONTACT AT TOE OF WELD					

M.R. Martin ANSI 10-8-82



Ultrasonic Examination Report

Customer LP+L	Plant Waterford	Unit 3	Loop/Zone B/44	Iso/Drawing No. Zone 44 Rev. 2 EC-2
Procedure IST-22 Rev. 0 EC-2	Exam Surface OD	Examiner/Level Mary R. Johnson II	VCR Supervisor Daniel Jensen	Date 9-26-82
Component/Piping System Main steam Header B-Outside Contain.	Pipe Size 40"	Weld Type Butt	Cal. Block UT-127	Couplant: Type Sono 40
			Batch No. 8124	

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **EC-2**

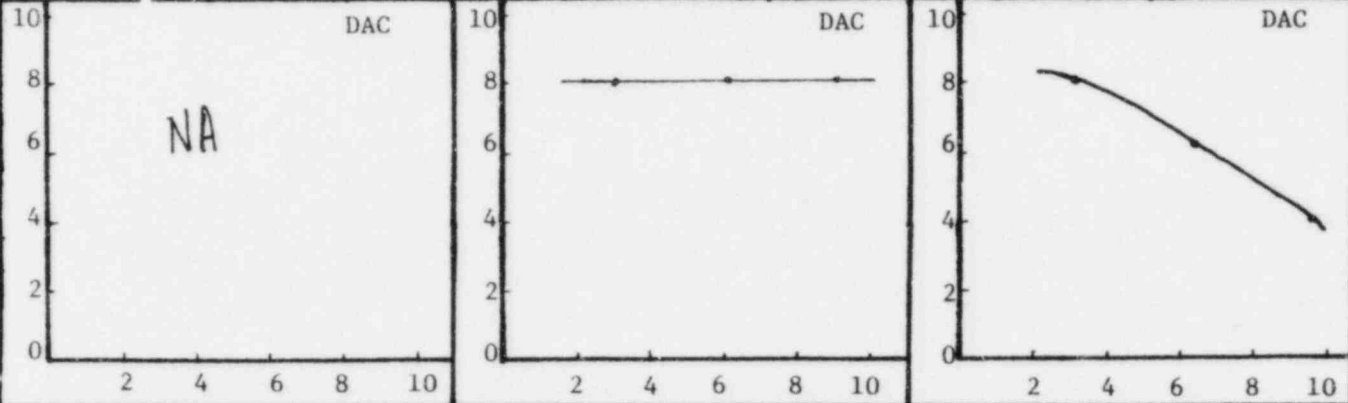
Transducer	0°	45°	60°	Instrument			
S/N	NA	L19801	NA	Mfr.	Sonic	Model	Mark I
Size		1"		S/N	01930E	RepRate	3K
Frequency		2.25 MHz		Reject	OFF	Filter	OFF
Beam Angle		46°		Damp	Min.	Coax	12' BNC-BNC
			Freq.	2.25 MHz	Video	Norm.	

Calibration 0°			2 & 5 Scan				7 & 8 Scan			
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:	
					Scribe Line	50% DAC			Scribe Line	50% DAC
1T	NA	NA	80%	3.0			80%	3.1		
2T			80%	6.0			65%	6.3		
3T			80%	9.0			40%	9.7		

Calibration Checks					
0°		45°		60°	
In	Out	In	Out	In	Out
NA	NA	7:40	11:30	NA	NA

Ref. dB: 0° 45° 60°

56 DB 59 DB



Additional Comments/Sketch



M.R. Martin, ANII, 10-1-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP & L	Plant WATERFORD	Unit 3	Loop/Zone B 49
Component/Piping System MAIN STEAM HEADER-B-CONT		Examiner/Level Law Longenecker II	Date 9-25-82
Procedure ISI 2.5 R-0	Iso/Drawing No. ZONE 44 R2.F.C.S	VCR Supervisor Manuel Jensen	Continuation Sheet Attached [4] Yes [] No

Equipment

Instrument		Transducer		Calibration
Mfgr. SONIC	Mfgr. K-B AEROTECA	Size 3/4" DIA.	Cal. Block UT-128	
Model MARK 1	Freq. 2.25	Cal. Block		
S/N 01058E	Serial No. L21861	Range Cal. 2.725" @ 7.0		
Reject OFF	Coax. Cable 6'	Calibration Checks		
Damp. MIN.	Gain 43 db	CAL IN 9:00		
Freq. 2. MHZ.	CAL OUT 11:35			
Rep. Rate 3K	CAL IN 1:40			
Filter H1	CAL OUT 5:30			
Video NORM	CAL. IN 6:57, CAL OUT 9:05			
Couplant SONOTRACE 40 8124				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
44-010-LA	1'	2.725	2.764	2.608	44-041-LA5A	63"	2.803	2.803	2.803
44-010-LA	2'	2.725	2.686	2.647	44-041-LA5A	66"	2.803	2.764	2.803
44-010-LA	3'	2.725	2.725	2.725	44-041-LA5A	69"	2.608	2.608	2.608
44-010-LA	4'	2.764	2.725	2.725	44-055-LA-5A	0"	2.686	2.686	2.686
44-010-LA	5'	2.725	2.725	2.686	44-055-LA-5A	3"	2.803	2.764	2.686
44-010-LA	6'	2.725	2.725	2.725	44-055-LA-5A	6"	2.764	2.764	2.725
44-010-LA	7'	2.725	2.764	2.647	44-054	12	2.764	2.803	2.803
44-010-LA	8'	2.725	2.764	2.725	44-054	2	2.725	2.803	2.803
44-010-LA	9'	2.686	2.686	2.647	44-054	4	2.725	2.764	2.803
44-026-LA25	0"	2.647	2.647	2.647	44-054	6	2.647	2.725	2.803
44-026-LA25	3"	2.686	2.647	2.725	44-054	8	2.725	2.764	2.803
44-026-LA25	6"	2.764	2.725	2.764	44-054	10	2.608	2.764	2.803

Sketch/Identification



Ultrasonic Data Sheet
W.R. Martin for ANFF 10-1-82

Thickness Measurement
Continuation Page 2 of 2

Customer <i>LP & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B 44</i>
Component/Piping System <i>MAIN STEAM HEADER B- CONT</i>	Examiner/Level <i>Gary Longenecker II</i>	Date <i>9.25-82</i>	
Procedure <i>I.S.I. 25 R-0</i>	Iso/Drawing No. <i>ZONE 44 R-2, F.C.5</i>	VCR Supervisor <i>Donald Jensen</i>	

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-055 LABS</i>	<i>92"</i>	<i>2.686</i>	<i>2.725</i>	<i>2.725</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>44-055 LABS</i>	<i>95"</i>	<i>2.686</i>	<i>2.725</i>	<i>2.764</i>					
<i>44-085</i>	<i>12</i>	<i>NA</i>	<i>NA</i>	<i>2.803</i>					
<i>44-085</i>	<i>2</i>			<i>2.764</i>					
<i>44-085</i>	<i>4</i>			<i>2.764</i>					
<i>44-085</i>	<i>6</i>			<i>2.764</i>					
<i>44-085</i>	<i>8</i>			<i>2.764</i>					
<i>44-085</i>	<i>10</i>			<i>2.764</i>					

Sketch/Identification

5 SIDE ONLY FOR 44-085

Ultrasonic Examination Report



The Virginia Corp.
of Richmond

Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone B 44	Iso/Drawing No. ZONE 44 R-2.F.C.6	5 G.L.
Procedure 0 62 65 ISE 2.2 R-Z F.C.6	Exam Surface O.D.	Examiner/Level Pary Longenecker II	VCR Supervisor Daniel Jensen	Date 9-25-82	
Component/Piping System MAINSTEAM HEADER B - OUTSIDE CONT	Pipe/Size 40"	Weld Type BUTT	Cal. Block # UT-128	Couplant: SONOTRACE	Batch No 8124

Continuation Sheet Attached

Yes No

Field Changes:

Yes No

If Yes, Number **2**

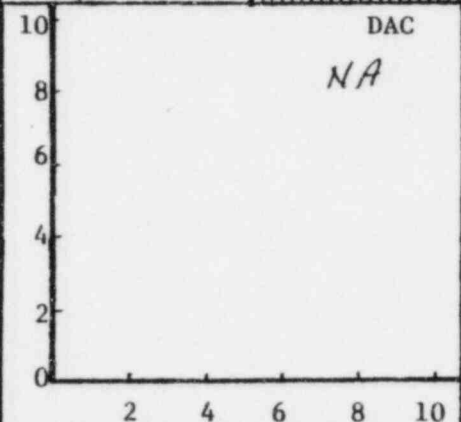
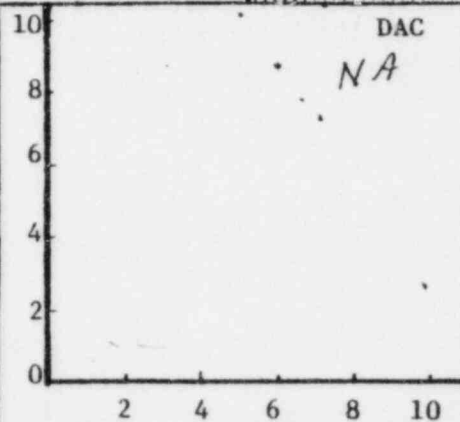
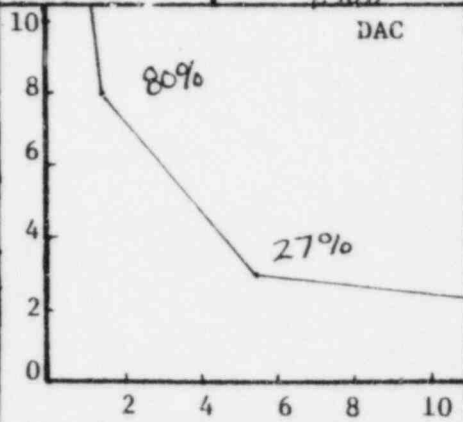
	Transducer	0°	45°	60°	Instrument			
	S/N	LZ1861	NA	NA	Mfr.	SONIC	Model	MARK I
	Size	.75" DIA			S/N	01058E	RepRate	3K
	Frequency	2.25MHz			Reject	OFF	Filter	HI
Beam Angle	0	↓	↓	Damp.	MIN	Coax	6'	
Freq.	2.0 MHz	Video	NORM					

Calibration 0°

2 & 5 Scan

7 & 8 Scan

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			Calibration Checks					
					Scribe Line	50% DAC				Scribe Line	50% DAC		0°		45°		60°	
						In	Out				In	Out	In	Out				
1/4 T	80%	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	9:00	11:35	NA	NA	NA	NA	
3/4 T	27%	5.3										6:57	9:05					
1 T	NA	7.0																
Ref. dB	43db																	



Additional Comments/Sketch

W.R. Martin, ANEE 10-1-82

Ultrasonic Examination Report

PAGE 2 OF 5



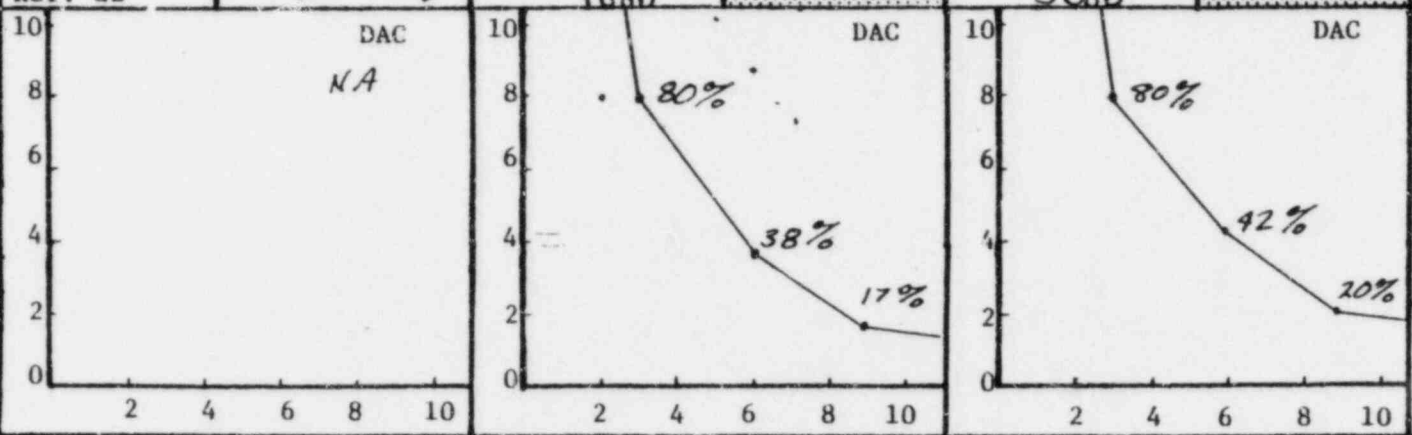
Customer <i>LP+L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B 44</i>	Iso/Drawing No. <i>ZONE 44 R-2 F.C. 5</i>
Procedure <i>ISI 2.2 R-2, F.C. 5</i>	Exam Surface <i>C.D.</i>	Examiner/Level <i>Nary Longenecker II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>9-25-82</i>
Component/Piping System <i>MAINSTEAM HEADER B-OUTSIDE CONT</i>		Pipe/Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block # <i>UT-128</i>
		Couplant: SONOTRACE Type <i>40</i>		Batch No <i>8124</i>

Continuation Sheet Attached
 Yes No

Field Changes:
Yes No
If Yes, Number *2*

Transducer	0°	45°	60°	Instrument				
	NA	L19134	NA	Mfg.	SONIC	Model	MARK I	
		10' Dia.		S/N	03704E	RepRate	3K	
		2.25 MHz		Reject	OFF	Filter	H1	
Beam Angle	<input checked="" type="checkbox"/>	45°	<input checked="" type="checkbox"/>	Damp	MIN	Coax	6'	
Calibration	2 & 5 Scan		7 & 8 Scan		Freq.	2.0 MHz	Video	NORM

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			Calibration Checks						
					Scribe Line	50% DAC	NA			Scribe Line	50% DAC	NA	0°		45°		60°		
													In	Out	In	Out	In	Out	
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3.0</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3.0</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>9:10</i>	<i>11:40</i>	<i>NA</i>	<i>NA</i>
<i>2T</i>			<i>38%</i>	<i>6.0</i>				<i>42%</i>	<i>6.2</i>							<i>7:02</i>	<i>9:07</i>		
<i>3T</i>			<i>17%</i>	<i>9.0</i>				<i>20%</i>	<i>9.4</i>										



Additional Comments/Sketch

W.R. Martin, ANEF 10-1-82

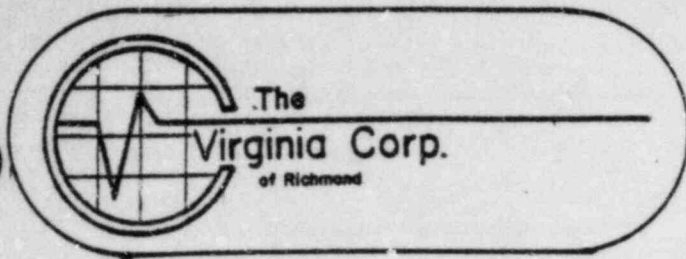


Ultrasonic Examination Report

PAGE 4 OF 5 Indication Record

Customer <i>LP&L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop <i>B</i>
Procedure <i>I.S.I. 2.2 R-0, F.C.2</i>	Examiner/Level <i>Nary Longenecha II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>9-25-82</i>
Component/Piping System <i>MAINSTEAM HEADER B - CONT.</i>	ISO Drawing No. <i>ZONE 44 R-2, F.C.6</i>	Cal. Standard No./Thickness <i>6.45 UT-128 2.725"</i>	

Weld No.	Ind No.	Max.% DAC	Indication Length		Minimum Depth S.U. Sweep		Maximum Depth S.U. Sweep		Beam Angle	Beam Dir.	Base Metal Thickness 2 Side	Weld Thick.	Base Metal Thickness 5 Side	Remarks
			From	To	Pos.	Reading	Pos.	Reading						
<i>AA-010</i> <i>LA</i>	<i>1</i>	<i>100%</i>	<i>50^{3/4}"</i>	<i>51"</i>	<i>5^{7/8}" (2)</i>	<i>3.5</i>	<i>6^{1/4}" (2)</i>	<i>3.5</i>	<i>0°</i>	<i>0°</i>	<i>2.725</i>	<i>2.764</i>	<i>2.725</i>	



DATE 9-25-82

PAGE 5 OF 5

TO _____

SUBJECT INSPECTION LIMITATIONS

WELD NO. 44-010-LA ALL SCANS WERE OBSTRUCTED
FROM 12° TO 18° IN 7 DIRECTION BY
SADDLE SUPPORT 415-1

WELD NO. 44-055-LA-085 7 SCAN IS YES ALL OTHER
SCANS ARE PAR ON 8 SIDE OF LONG
SIDE DUE TO CONFIGURATION AND
THICKNESS.

WELD NO. 44-085 THE WELD AND 2 SIDE IS TO BE
EXAMINED WITH CAL. ON UT-127.
THE 5 SIDE IS TO BE EXAMINED
WITH CAL. ON UT-128
THE BASE METAL SCAN, 0°, 7 & 8
SCANS WERE PERFORMED ON 5
SIDE ONLY.
BEVEL BEGINNING AT 5 SIDE
TOE OF WELD.

SIGNED Sory Longenecker



M.R. Martin, ANSI 9-29-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>L.P.+L.</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA/44</i>
Component/Piping System <i>Main Steam Header - B</i>	Examiner/Level <i>Kevin White/II</i>	Date <i>9/26/82</i>	
Procedure <i>ISI-2.5, R.O</i>	Iso/Drawing No. <i>Zone 44, R2, FC 5</i>	VCR Supervisor <i>Daniel Jones</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument	Transducer		Calibration
Mfgr. <i>Kraut-Krummer</i>	Mfgr. <i>K-B-Aerotech</i>	Size <i>1/2"</i>	Cal. Block <i>UT-118</i>
Model <i>USL-37</i>			Cal. Block
S/N <i>210021</i>	Freq. <i>2.25MHz.</i>		Range Cal. <i>1.036"</i>
Reject <i>off</i>			Calibration Checks
Damp. <i>Min</i>	Serial No. <i>KR-2728</i>		
Freq. <i>2.5</i>			<i>2:35PM IN</i>
Rep. Rate <i>1K</i>	Coax. Cable <i>PC to BNC. 6'</i>		<i>6:15PM OUT</i>
Filter <i>H</i>			
Video <i>NA</i>	Gain <i>68db</i>		
Couplant <i>Syntrace 40 # 8124</i>			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-068</i>	<i>2</i>	<i>.787</i>	<i>.787</i>	<i>* See note below.</i>	<i>44-069</i>	<i>2</i>	<i>.642</i>	<i>1.000</i>	<i>.766</i>
	<i>4</i>	<i>.746</i>	<i>.746</i>			<i>4</i>	<i>.704</i>	<i>.870</i>	<i>.796</i>
	<i>6</i>	<i>.787</i>	<i>.704</i>			<i>6</i>	<i>.663</i>	<i>.891</i>	<i>.684</i>
	<i>8</i>	<i>.787</i>	<i>.725</i>			<i>8</i>	<i>.642</i>	<i>1.000</i>	<i>.704</i>
	<i>10</i>	<i>.829</i>	<i>.766</i>			<i>10</i>	<i>.642</i>	<i>1.000</i>	<i>.787</i>
<i>↓</i>	<i>12</i>	<i>.829</i>	<i>.766</i>	<i>↓</i>	<i>↓</i>	<i>12</i>	<i>.684</i>	<i>.891</i>	<i>.787</i>

Sketch/Identification

* 48-068, There wasn't enough room on the S side of the weld to place the search unit between the weld crown and the extruded head to get thickness measurements.

M.R. Martin, ANSI 9-27-82



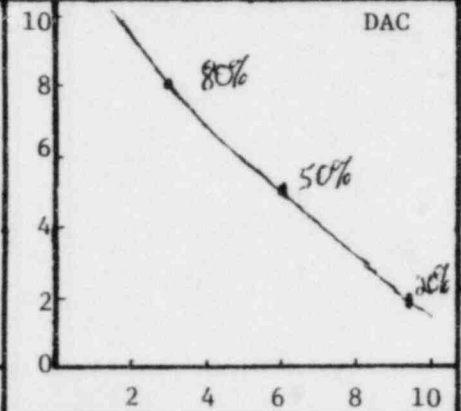
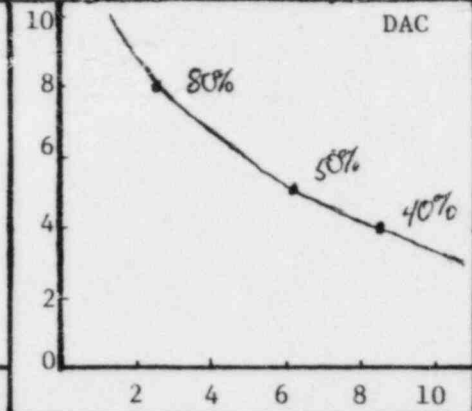
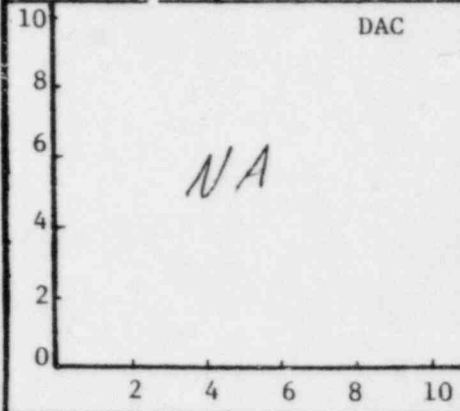
Ultrasonic Examination Report

Customer L.P.+L.	Plant Waterford	Unit 3	Loop/Zone NA/44	Iso/Drawing No. Zone 44, R2, FC 5
Procedure ISI-22, R.O.F.C.2	Exam Surface OD	Examiner/Level Timothy H.	VOR Supervisor Daniel Jones	Date 9/26/82
Component/Piping System Main Steam Header - B	Pipe Size 8	Weld Type Butt	Cal. Block # UT-118	Couplant: Sonotrace Type 40 Batch No 2124

Continuation Sheet Attached
 Yes No

Field Changes: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, Number 2	Transducer	0°	45°	60°	Instrument			
	S/N	NA	607152	NA	Mfr.	Sonics	Model	Mark I
	Size		1/2"		S/N	02307E	RepRate	1K
	Frequency		2.25MHz		Reject	off	Filter	off
	Beam Angle		45°		Damp	Min.	Coax	BNC to Mod. 6'
					Freq.	2	Video	Norm

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
1T	NA	NA	80%	3.0	NA		80%	3.2	NA		NA	NA	3:40 PM	6:25 PM	NA	NA
2T			50%	6.4			50%	6.4								
3T			40%	9.0			20%	9.6								
Ref. dB	NA		47db				47db									



Additional Comments/Sketch



M.R. Martin, ANSI 9-29-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer L.P.+L.	Plant Waterford	Unit 3	Loop/Zone NA/44
Component/Piping System Main Steam Header B	Examiner/Level Kevin White	Date 9/27/82	
Procedure ISI-2.5, R.O	Iso/Drawing No. Zone 44, R.2, F.C.5	VGR Supervisor Daniel Jensen	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. Sonics	Mfgr. KB-Aerotech	Size 1/2"	Cal. Block UT-118	
Model Mark I			Cal. Block	
S/N 01058E	Freq. 2.25 MHz		Range Cal. 1.036"	
Reject off	Serial No. KB-2728		Calibration Checks	
Damp. Min			8:40 AM IN	
Freq. 2	Coax. Cable P. to BMC 6'		11:30 AM OUT	
Rep. Rate 1K	Gain 63db			
Filter off				
Video Norm				
Couplant Sonotrace 40 #8124				

Examination Results

Weld Number	Mes. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Mes. Point	Reading Weld	Reading Scan 2	Reading Scan 5
44-076	2	.766	*See note	.746					
	4	.766	below	.808					
	6	.787		.766					
	8	.766		.766					
	10	.787		.725					
	12	.787		.725					

Sketch/Identification

* 2 side inaccessible due to steam dump valve body configuration.

M.R. Martin, ANII 9-29-82



Ultrasonic Examination Report

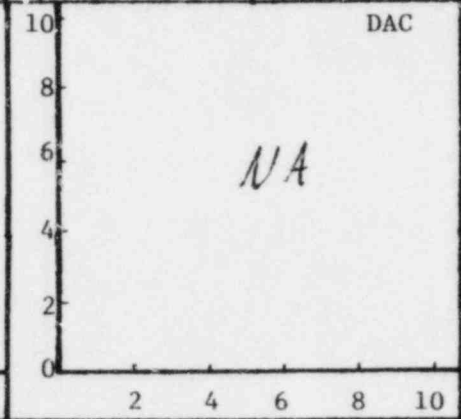
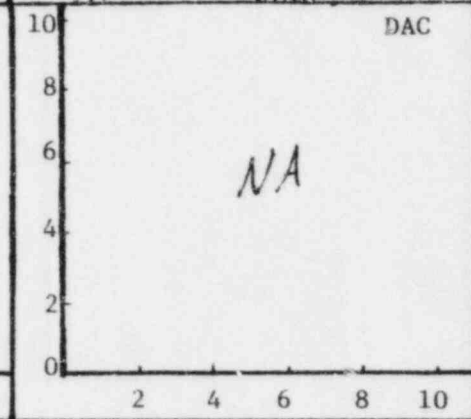
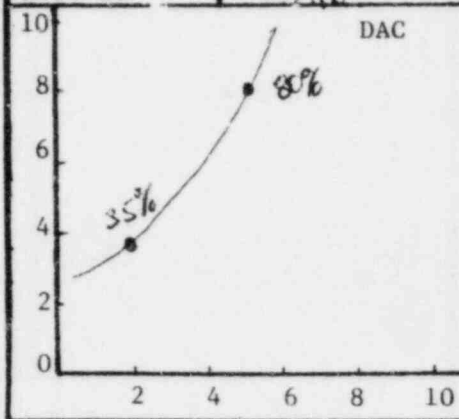
Customer <i>L.P.+L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA/44</i>	Iso/Drawing No. <i>Zone 44, R.2, FC 5</i>
Procedure <i>ISI-2.2, RC, FC 2</i>	Exam Surface <i>OD</i>	Examiner/Level <i>Kevin White III</i>	VCR Supervisor <i>Daniel Jones</i>	Date <i>9/27/82</i>
Component/Piping System <i>Main Steam Header-B</i>	Pipe Size <i>8"</i>	Weld Type <i>Butt</i>	Cal. Block <i>UT-118</i>	Couplant: <i>Sonotrace</i> Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

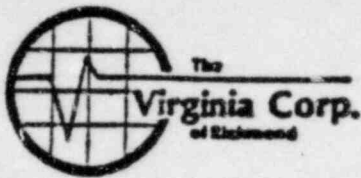
Field Changes:
 Yes No
 If Yes, Number *2*

Transducer	Instrument		
	S/N	Model	Mark I
<i>KB-2128</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
Size	<i>1/2"</i>	<i>CI058E</i>	RepRate <i>1K</i>
Frequency	<i>2.25MHz</i>	Reject <i>off</i>	Filter <i>off</i>
Beam Angle	<i>0</i>	Damp <i>Min</i>	Coax <i>Ret. BNC, 6'</i>
		Freq. <i>2</i>	Video <i>Norm</i>

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1/4T</i>	<i>35%</i>	<i>2.0</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>		<i>NA</i>	<i>NA</i>	<i>NA</i>		<i>8:10 AM</i>	<i>11:30 AM</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>3/4T</i>	<i>80%</i>	<i>5.0</i>														
Ref. dB	<i>63 db</i>		<i>NA</i>				<i>NA</i>									



Additional Comments/Sketch
None



W.R. Martin, ANFF 10-5-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>LPdL</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA 44</i>
Component/Piping System <i>Main steam Header B-Outside Cont</i>		Examiner/Level <i>Dary A. Lofthe II</i>	Date <i>9-29-82</i>
Procedure <i>ISI 2.5 Rev. D.F.C.-0</i>	Iso/Drawing No. <i>Zone 44 Rev. 2 EC-5</i>	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

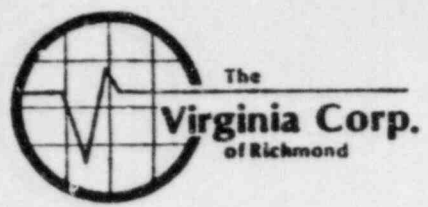
Instrument		Transducer		Calibration
Mfgr. <i>Kraut Kramer</i>	Mfgr. <i>Aerotech</i>	Size <i>3/4"</i>	Cal. Block <i>UT-127</i>	
Model <i>USL-37</i>	Freq. <i>2.25 MHz</i>	Cal. Block		
S/N <i>210021</i>	Serial No. <i>L21861</i>	Range Cal. <i>1.875</i>		
Reject <i>OFF</i>	Coax. Cable <i>12' BNC/BNC</i>	Calibration Checks		
Damp. <i>OFF</i>	Gain <i>48 db</i>	Cal IN <i>8.15</i>		
Freq. <i>5</i>		Cal OUT <i>12.05</i>		
Rep. Rate <i>LK</i>				
Filter <i>Low</i>				
Video <i>NA</i>				
Couplant <i>Sonotrace 40 8124</i>				

Examination Results

Weld Number	Mens. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Mens. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-009</i>	<i>12</i>	<i>1.331"</i>	<i>NA</i>	<i>1.425"</i>	<i>44-085</i>	<i>12</i>	<i>1.481"</i>	<i>1.613"</i>	<i>NA</i>
<i>44-009</i>	<i>2</i>	<i>1.369"</i>		<i>1.463"</i>	<i>44-085</i>	<i>2</i>	<i>1.500"</i>	<i>1.594"</i>	
<i>44-009</i>	<i>4</i>	<i>1.350"</i>		<i>1.463"</i>	<i>44-085</i>	<i>4</i>	<i>1.481"</i>	<i>1.631"</i>	
<i>44-009</i>	<i>6</i>	<i>1.350"</i>		<i>1.388"</i>	<i>44-085</i>	<i>6</i>	<i>1.444"</i>	<i>1.594"</i>	
<i>44-009</i>	<i>8</i>	<i>1.350"</i>		<i>1.331"</i>	<i>44-085</i>	<i>8</i>	<i>1.500"</i>	<i>1.594"</i>	
<i>44-009</i>	<i>10</i>	<i>1.388"</i>		<i>1.388"</i>	<i>44-085</i>	<i>10</i>	<i>1.538"</i>	<i>1.613"</i>	

Sketch/Identification

W.R. Martin, ANFF 10-5-P2



Ultrasonic Examination Report

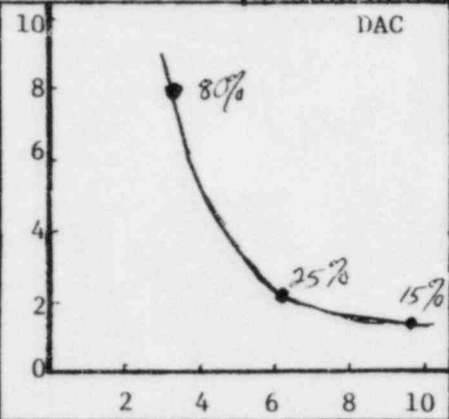
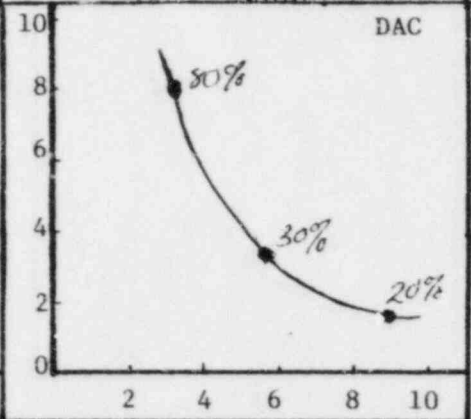
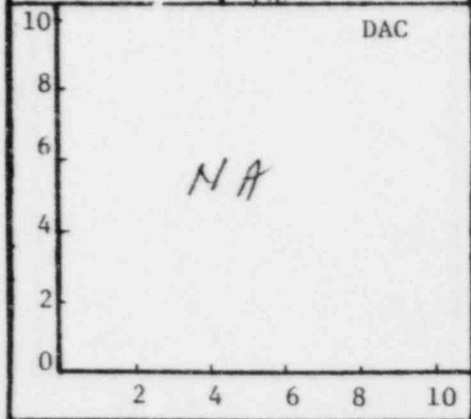
Customer <i>L.P.F.L.</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>NA/44</i>	Iso/Drawing No. <i>ZONE 44, R.2, F.C.5</i>
Procedure <i>1.5-1.2.2, R.O.F.C.2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Kevin White/H</i>	VCR Supervisor <i>Daniel Denson</i>	Date <i>9/29/82</i>
Component/Piping System <i>MAIN STEAM HEADER - B</i>	Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT 127</i>	Couplant: <i>SONITRADE</i> Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number *2*

Transducer	0°	45°	60°	Instrument			
	S/N <i>NA</i>	<i>J22935</i>	<i>NA</i>	Mfr. <i>SONICS</i>	Model <i>MARK I</i>		
	Size	<i>1/2"</i>		S/N <i>01930E</i>	RepRate <i>1K</i>		
	Frequency	<i>2.25 MHz</i>		Reject <i>Off</i>	Filter <i>Off</i>		
	Beam Angle	<i>45°</i>		Damp <i>MIN.</i>	Coax <i>12' BNC TO BNC</i>		
Calibration 0°	2 & 5 Scan		7 & 8 Scan		Freq.	Video	

Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		Calibration Checks					
					Scribe Line	50% DAC			Scribe Line	50% DAC	0°		45°		60°	
											In	Out	In	Out	In	Out
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3.0</i>	<i>NA</i>		<i>80%</i>	<i>3.2</i>	<i>NA</i>		<i>NA</i>	<i>NA</i>	<i>12:00 PM</i>	<i>2:15 PM</i>	<i>NA</i>	<i>NA</i>
<i>2T</i>			<i>30%</i>	<i>5.8</i>			<i>25%</i>	<i>6.2</i>								
<i>3T</i>			<i>20%</i>	<i>9.0</i>			<i>15%</i>	<i>9.6</i>								
Ref. dB	<i>NA</i>		<i>50 db</i>				<i>55 db</i>									



Additional Comments/Sketch

M.R. Martin, ANEF 10-5-82



Ultrasonic Examination Report

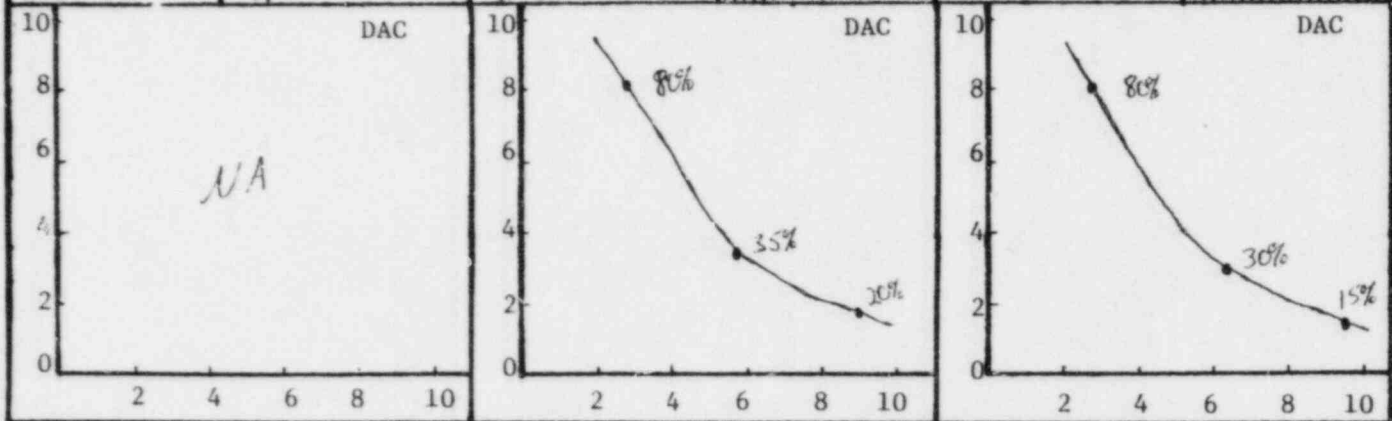
Customer <i>L.P.+L.</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA/44</i>	Iso/Drawing No. <i>Zone 44, R.2, F.C.5</i>
Procedure <i>ISI-2.2.R.C.F.C.2</i>	Exam Surface <i>OD</i>	Examiner/Level <i>Kevin White/II</i>	VCR Supervisor <i>Daniel O. Jensen</i>	Date <i>9/29/82</i>
Component/Piping System <i>Main Steam Header-B</i>	Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT-127</i>	Couplant: <i>Sonotrace</i> Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

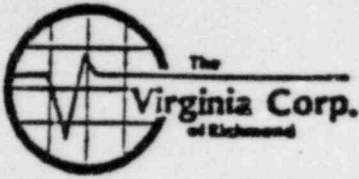
Field Changes:
 Yes No
 If Yes, Number *2*

Transducer S/N Size Frequency Beam Angle	0°	45°	60°	Instrument			
	<i>NA</i>	<i>22935</i>	<i>NA</i>	Mfr.	<i>Sevic</i>	Model	<i>Mark I</i>
		<i>1/2"</i>		S/N	<i>01930E</i>	RepRate	<i>1K</i>
		<i>2.25MHz</i>		Reject	<i>off</i>	Filter	<i>off</i>
		<i>45°</i>		Damp	<i>Min.</i>	Coax	<i>12' BVC to BVC</i>
			Freq.	<i>2</i>	Video	<i>Norm</i>	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>3.0</i>	<i>NA</i>		<i>80%</i>	<i>3.2</i>	<i>NA</i>		<i>NA</i>	<i>NA</i>	<i>900.011</i>	<i>1100.011</i>	<i>NA</i>	<i>NA</i>
<i>2T</i>			<i>35%</i>	<i>5.8</i>			<i>30%</i>	<i>6.2</i>								
<i>3T</i>			<i>20%</i>	<i>9.0</i>			<i>15%</i>	<i>9.6</i>								
Ref. dB	<i>NA</i>		<i>51dB</i>				<i>55dB</i>									



Additional Comments/Sketch



J.R. Martin, ANEI 10-5-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>LP&L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>NA 44</i>
Component/Piping System <i>Mainsteam Header B-Outside Cont.</i>	Examiner/Level <i>Darryl L. Lofgren II</i>	Date <i>9-29-82</i>	
Procedure <i>TSI 2.5 Rev.0 FC-0</i>	Iso/Drawing No. <i>Zone 44 Rev.2 F.C-5</i>	VER Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument	Transducer		Calibration
Mfgr. <i>Kraut Kramer</i>	Mfgr. <i>Aerotech</i>	Size <i>3/4"</i>	Cal. Block <i>UT-127</i>
Model <i>USL-37</i>			Cal. Block
S/N <i>210021</i>	Freq. <i>2.25 MHz</i>		Range Cal. <i>3.75</i>
Reject <i>OFF</i>			Calibration Checks
Damp. <i>OFF</i>	Serial No. <i>L21861</i>		
Freq. <i>5</i>			<i>Cal In 1.05</i>
Rep. Rate <i>1K</i>	Coax. Cable <i>12' BNC/BNC</i>		<i>Cal Out 3.35</i>
Filter <i>Low</i>			
Video <i>NA</i>	Gain <i>48 db</i>		
Couplant <i>Sonotrac 40 8124</i>			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2 *	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-001</i>	<i>12</i>	<i>NA</i>	<i>2.700"</i>	<i>1.613"</i>					
<i>44-001</i>	<i>2</i>		<i>2.700"</i>	<i>1.650"</i>					
<i>44-001</i>	<i>4</i>		<i>2.700"</i>	<i>1.688"</i>					
<i>44-001</i>	<i>6</i>		<i>2.775"</i>	<i>1.613"</i>					
<i>44-001</i>	<i>8</i>		<i>2.625"</i>	<i>1.650"</i>					
<i>44-001</i>	<i>10</i>		<i>2.625"</i>	<i>1.575"</i>					

Sketch/Identification

* Readings were taken 5" from toe of weld on 5 side.

M.R. Martin ANEF 10-5-82



Ultrasonic Examination Report

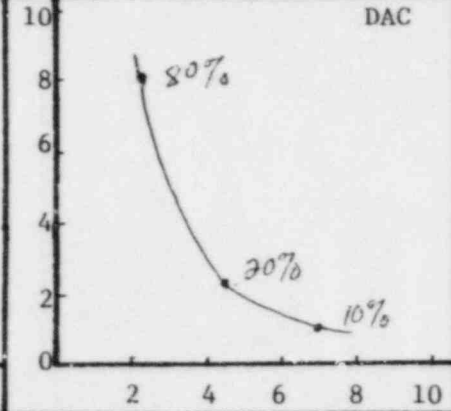
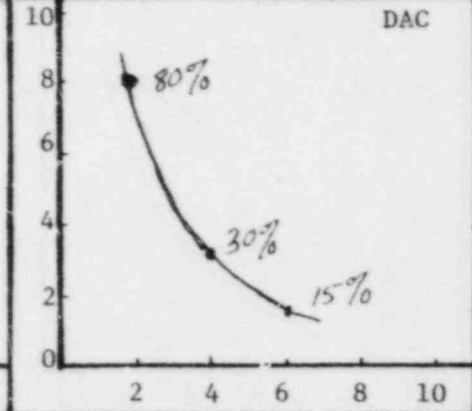
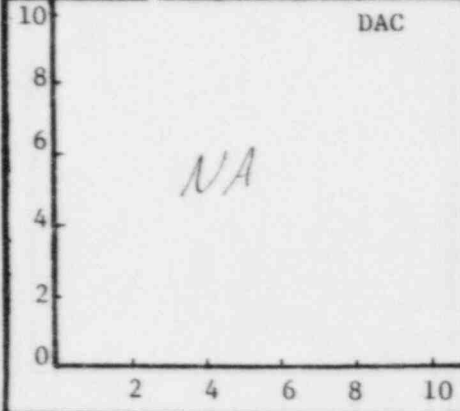
Customer <i>L.P.&L.</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>NA/44</i>	Iso/Drawing No. <i>Zone 44 R.2, F.C.5</i>
Procedure <i>1512.2, R.O, F.C.2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Kevin M. H. / III</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>9/29/82</i>
Component/Piping System <i>MAIN STEAM HEADER B</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block <i>UT-127</i>	Couplant: <i>SONOTACE</i> Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

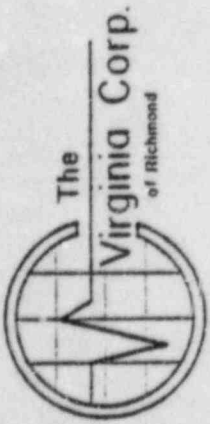
Transducer	0°			45°			60°			Instrument				
	S/N	Size	Frequency	Beam Angle	S/N	Size	Frequency	Beam Angle	Mfr.	S/N	RepRate	Filter	Coax	Video
	<i>NA</i>	<i>NA</i>	<i>2.25 MHz</i>	<input checked="" type="checkbox"/>	<i>NA</i>	<i>1/2"</i>	<i>2.25 MHz</i>	<input checked="" type="checkbox"/>	<i>SONIC</i>	<i>01930E</i>	<i>1K</i>	<i>OFF</i>	<i>6' BNC TO BNC</i>	<i>None</i>

Field Changes:
 Yes No
 If Yes, Number *2*

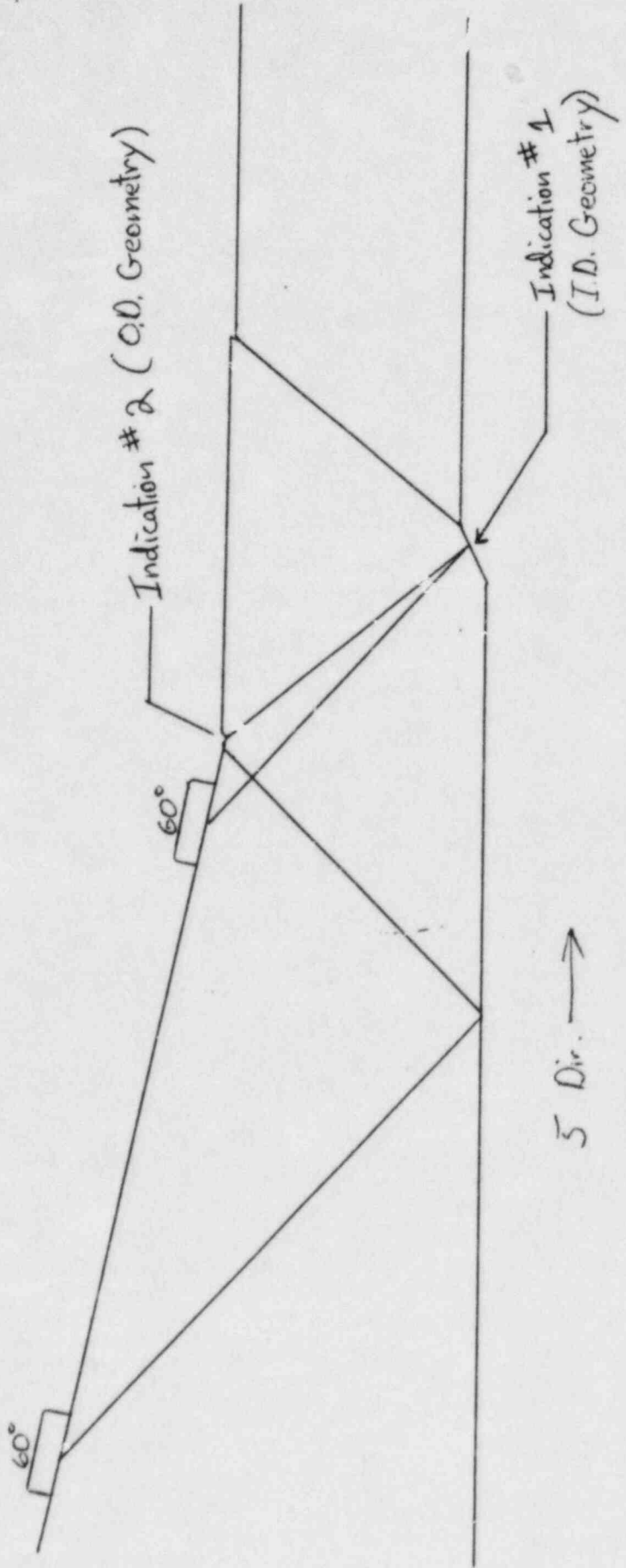
Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks					
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°	
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>2.0</i>	<i>NA</i>		<i>80%</i>	<i>2.4</i>	<i>NA</i>		<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>5:45 PM</i>	<i>7:30 PM</i>
<i>2T</i>			<i>30%</i>	<i>4.0</i>			<i>20%</i>	<i>4.2</i>								
<i>3T</i>			<i>15%</i>	<i>6.0</i>			<i>10%</i>	<i>7.2</i>								
	<i>NA</i>															
Ref. dB	<i>NA</i>		<i>61 db</i>				<i>59 db</i>									



Additional Comments/Sketch
None



Weld # - 44-001





M.R. Martin, ANIS 10-7-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>LP&L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B / 44</i>
Component/Piping System <i>Main Steam Header "B"</i>	Examiner/Level <i>Michael W. Blas II</i>	Date <i>10-4-82</i>	
Procedure <i>ISI 2.5 R.O</i>	Iso/Drawing No. <i>ZONE 44 R2 FC.5</i>	VCR Supervisor <i>Daniel Dens</i>	Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Equipment

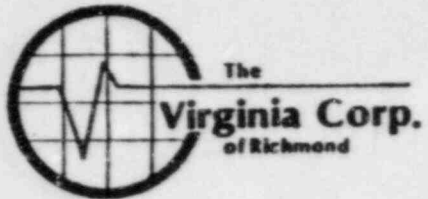
Instrument		Transducer		Calibration
Mfgr. <i>Krautkramer</i>	Mfgr. <i>Aerotech</i>	Size <i>.75"</i>	Cal. Block <i>UT-128</i>	Cal. Block <i>-</i>
Model <i>USL-37</i>	Freq. <i>2.25 MHz</i>	Range Cal. <i>3.406"</i>	Calibration Checks	
S/N <i>210021</i>	Serial No. <i>L21861</i>	CAL IN : 8:15		
Reject <i>Min.</i>	Coax. Cable <i>12' BNC-BNC</i>	CAL OUT : 12:10		
Damp. <i>Fixed</i>	Gain <i>42 db</i>	CAL IN : 1:30		
Freq. <i>2.5</i>		CAL OUT : 5:10		
Rep. Rate <i>1K</i>				
Filter <i>Low</i>				
Video <i>NA</i>				
Couplant <i>Sonotrace 40 8124</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-041LA</i>	<i>6"</i>	<i>2.73"</i>	<i>2.73"</i>	<i>2.73"</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>44-041LA</i>	<i>12"</i>	<i>2.73"</i>	<i>2.73"</i>	<i>2.73"</i>					
<i>44-041LA</i>	<i>18"</i>	<i>2.70"</i>	<i>2.73"</i>	<i>2.76"</i>					
<i>44-041LA</i>	<i>24"</i>	<i>2.73"</i>	<i>2.73"</i>	<i>2.76"</i>					
<i>44-041LA</i>	<i>30"</i>	<i>2.73"</i>	<i>2.73"</i>	<i>2.76"</i>					
<i>44-041LA</i>	<i>36"</i>	<i>2.76"</i>	<i>2.73"</i>	<i>2.76"</i>					
<i>44-041LA</i>	<i>42"</i>	<i>2.73"</i>	<i>2.76"</i>	<i>2.76"</i>					
<i>44-041LA</i>	<i>48"</i>	<i>2.80"</i>	<i>2.76"</i>	<i>2.76"</i>					
<i>44-041LA</i>	<i>54"</i>	<i>2.76"</i>	<i>2.76"</i>	<i>2.76"</i>					
<i>44-041LA</i>	<i>60"</i>	<i>2.73"</i>	<i>2.76"</i>	<i>2.76"</i>					
<i>44-041LA</i>	<i>66"</i>	<i>2.73"</i>	<i>2.73"</i>	<i>2.76"</i>					
<i>44-041LA</i>	<i>72"</i>	<i>2.73"</i>	<i>2.73"</i>	<i>2.76"</i>					

Sketch/Identification

M.R. Martin, ANIS 10-7-82



Ultrasonic Examination Report

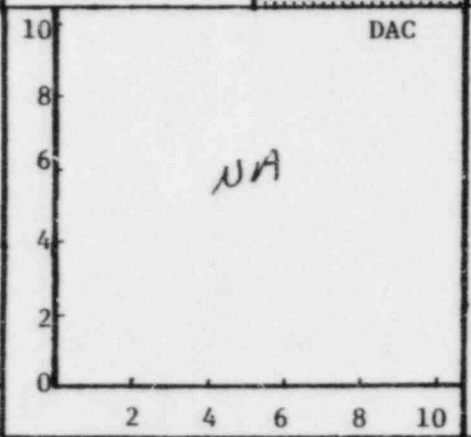
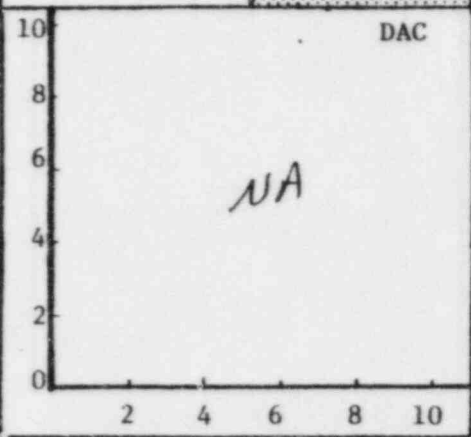
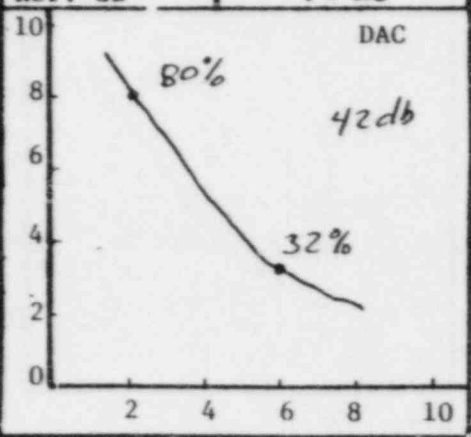
Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone B/44	Iso/Drawing No. ZONE 44 R.2 FC 5
Procedure ISI 2.2 R.0 FC 2	Exam Surface O.D.	Examiner/Level Michael W Bl II	VCR Supervisor Daniel Dims	Date 10-4-82
Component/Piping System MAIN STEAM HEADER	Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-128	Couplant: Type 30 NOTRACE 40 Batch No 8124

Continuation Sheet Attached
 Yes No

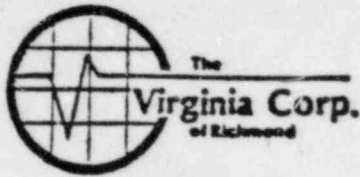
Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument			
S/N	L21861	NA	NA	Mfgt.	KRAUTKRAMER	Model	USL-37
Size	.75" DIA			S/N	210021	RepRate	1K
Frequency	2.25 MHz			Reject	MIN	Filter	LOW
Beam Angle	0°			Damp	FIXED	Coax	12' BNC-8MC
				Freq.	2.5	Video	NA

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks								
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
1/4 T	80%	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8:15	12:10	NA	NA	NA	NA
3/4 T	32%	6.0												1:20	5:10				
1 T		8.0																	
Ref. dB	42 db																		



Additional Comments/Sketch



W.R. Martin, ANII 10-7-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>L P & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B / 44</i>
Component/Piping System <i>MAIN STEAM HEADER "B"</i>		Examiner/Level <i>Michael W. Blaw II</i>	
Date <i>10-5-82</i>		Procedure <i>151-2.5 R.O</i>	
Iso/Drawing No. <i>ZONE 44 R.2 RCG</i>		VCR Supervisor <i>Daniel Jensen</i>	
Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

Equipment

Instrument	Transducer	Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>AEROTECH</i>	Cal. Block <i>UT-127</i>
Model <i>MARK I</i>	Size <i>.50" DIA.</i>	Cal. Block
S/N <i>01930E</i>	Freq. <i>2.25 MHz</i>	Range Cal. <i>1.875"</i>
Reject <i>OFF</i>	Serial No. <i>JO2172</i>	Calibration Checks
Damp. <i>7</i>	Coax. Cable <i>12' BNC-BNC</i>	
Freq. <i>2.0</i>	Gain <i>46 db</i>	<i>IN: 10:30</i>
Rep. Rate <i>1K</i>		<i>OUT: 12:00</i>
Filter <i>OFF</i>		
Video <i>NORM</i>		
Couplant <i>SONOTRACE 40 3/4 8124</i>		

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
44-086LB	6"	1.725"	1.650"	1.650"	44-086LB	78"	1.725"	1.613"	1.613"
44-086LB	12"	1.725"	1.575"	1.613"	44-086LB	84"	1.744"	1.613"	1.613"
44-086LB	18"	1.669"	1.613"	1.613"	44-086LB	90"	1.744"	1.613"	1.594"
44-086LB	24"	1.725"	1.613"	1.631"	44-086LB	96"	1.744"	1.613"	1.613"
44-086LB	30"	1.725"	1.613"	1.613"	44-086LB	102"	1.781"	1.575"	1.613"
44-086LB	36"	1.744"	1.613"	1.613"	44-086LB	108"	1.688"	1.575"	1.594"
44-086LB	42"	1.763"	1.613"	1.631"	44-086LB	114"	1.688"	1.575"	1.575"
44-086LB	48"	1.744"	1.613"	1.613"	44-086LB	120"	1.706"	1.575"	1.575"
44-086LB	54"	1.744"	1.594"	1.669"	44-086LB	126"	1.725"	1.594"	1.631"
44-086LB	60"	1.744"	1.613"	1.631"					
44-086LB	66"	1.763"	1.613"	1.613"					
44-086LB	72"	1.725"	1.613"	1.594"					

Sketch/Identification



W.R. Martin, ANIS 10-7-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone 1 B / 44
Component/Piping System MAIN STEAM HEADER "B"	Examiner/Level Michael W. Blum II	Date 10-5-82	
Procedure ISI-2.5 R.O	Iso/Drawing No. ZONE 44 P.2 FC 6	VCR Supervisor Daniel Jensen	Continuation Sheet Attached [] Yes [X] No

Equipment

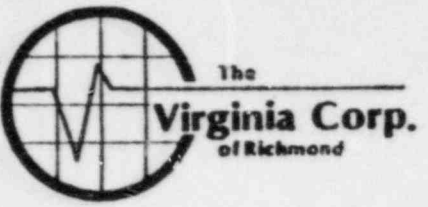
Instrument		Transducer		Calibration
Mfgr. KRAUTKRAMER	Mfgr. PANAMETRICS	Size 1.0" DIA.	Cal. Block UT-127	
Model USL-37	Freq. 2.25 MHz.	Cal. Block		
S/N 210021	Serial No. 48807	Range Cal. 1.875"		
Reject MIN	Coax. Cable 12' BNC-BNC	Calibration Checks		
Damp. FIXED	Gain 32 db	IN: 1:00		
Freq. 2.5		OUT: 3:20		
Rep. Rate 1K				
Filter LOW				
Video NA				
Couplant SONOTRACE 40 7/8 B124				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
44-086 LA	6"	1.613"	1.575"	1.575"	NA	NA	NA	NA	NA
44-086 LA	12"	1.613"	1.556"	1.556"					
44-086 LA	18"	1.594"	1.538"	1.519"					
44-086 LA	24"	1.556"	1.556"	1.519"					
44-086 LA	30"	1.556"	1.556"	1.519"					
44-086 LA	36"	1.538"	1.500"	1.500"					
44-086 LA	42"	1.556"	1.500"	1.519"					
44-086 LA	48"	1.594"	1.538"	1.556"					
44-086 LA	54"	1.613"	1.575"	1.575"					
44-086 LA	60"	1.650"	1.556"	1.575"					

Sketch/Identification

W.R. Martin, ANII 10-7-82



Ultrasonic Examination Report

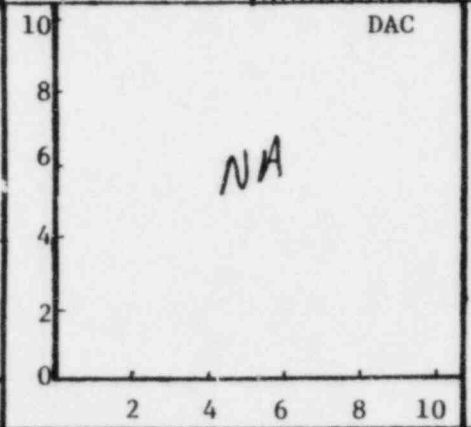
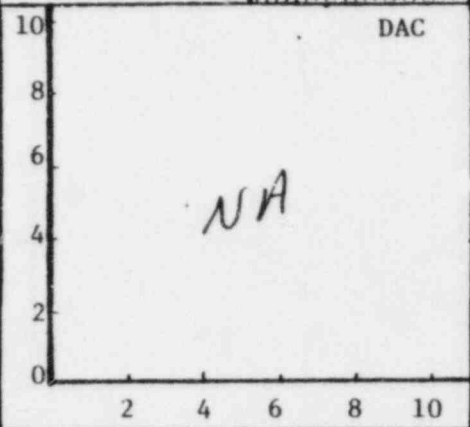
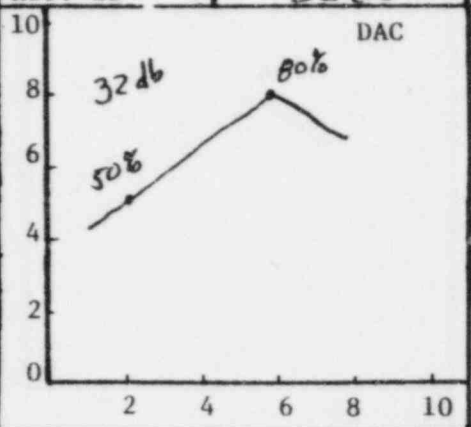
Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone B/44	Iso/Drawing No. ZONE 44 REV 2 FC 6
Procedure ISI-2.2 R.9 FCZ	Exam Surface O.D.	Examiner/Level Michael V. Blawie II	VCR Supervisor Daniel Jensen	Date 10-5-82
Component/Piping System MAIN STEAM HEADER "B"	Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-127	Couplant: Type 40 Batch No. B124

Continuation Sheet Attached
 Yes No

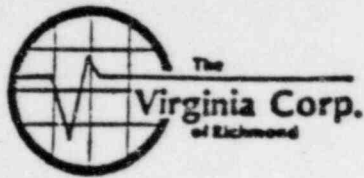
Field Changes:
 Yes No
 If Yes, Number **2**

Transducer	0°	45°	60°	Instrument				
	S/N	48807	N/A	N/A	Mfg.	KRAUTKRAMER	Model	USC-37
	Size	1.0" DIA			S/N	210021	RepRate	1K
	Frequency	2.25MHz			Reject	MIN	Filter	LOW
Beam Angle	0°			Damp	FIXED	Coax	12' DMC-BNC	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks								
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1:00	3:20	N/A	N/A	N/A	N/A
1/4 T	50%	2.0																	
3/4 T	80%	5.8																	
1 T		8.0																	
Ref. dB	32 db																		



Additional Comments/Sketch



M.R. Martin, ANES 10-7-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone B 44
Component/Piping System MAIN STEAM HEADER B		Examiner/Level Michael W. Blue II	Date 10-6-82
Procedure ISI 2.5 R-O	Iso/Drawing No. ZONE 44 R-2.F.C.6	VCR Supervisor Daniel Jensen	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr.	SONIC	Mfgr.	Size	Cal. Block UT-128
Model	MARK I	PANAMETRIC	1.0" DIA	Cal. Block
S/N	02307E	Freq.		Range Cal. 3.406"
Reject	OFF		2.25 MHz	Calibration Checks
Damp.	Min.	Serial No.	48807	
Freq.	2.0 MHz	Coax. Cable	12' BNC-BNC	CAL. IN 8:15
Rep. Rate	3K	Gain	44db	CAL. OUT 10:50
Filter	H1			
Video	NORM			
Couplant	SONO TRACE 40 8124			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
44-040	12	2.418"	2.793"	2.793"	44-055LA	42"	2.725"	2.725"	2.725"
44-040	2	2.384"	2.759"	2.793"	44-055LA	48"	2.691"	2.725"	2.691"
44-040	4	2.384"	2.759"	2.759"	44-055LA	54"	2.657"	2.759"	2.691"
44-040	6	2.453"	2.725"	2.759"	44-055LA	60"	2.657"	2.725"	2.725"
44-040	8	2.384"	2.725"	2.759"	44-055LA	66"	2.623"	2.725"	2.725"
44-040	10	2.384"	2.759"	2.759"	44-055LA	72"	2.623"	2.725"	2.725"
44-055LA	6"	2.657"	2.725"	2.691"	44-055LA	78"	WELDED SUP PORT		
44-055LA	12"	2.725"	2.725"	2.725"	44-055LA	84"	2.725"	2.725"	2.691"
44-055LA	18"	2.657"	2.725"	2.725"	44-055LA	90"	2.657"	2.725"	2.725"
44-055LA	24"	2.691"	2.725"	2.725"					
44-055LA	30"	2.725"	2.725"	2.725"					
44-055LA	36"	2.691"	2.725"	2.725"					

Sketch/Identification

W.R. Martin, ANEI 10-7-82

Ultrasonic Examination Report



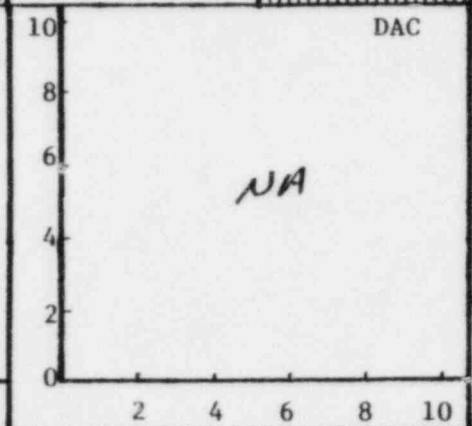
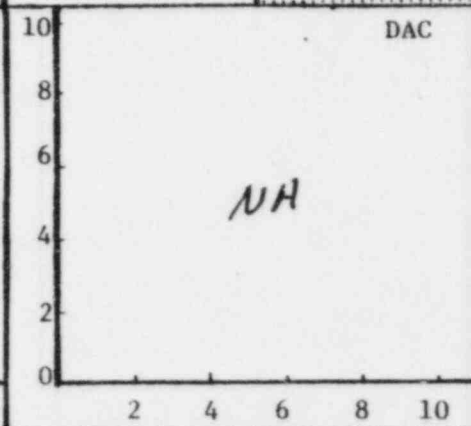
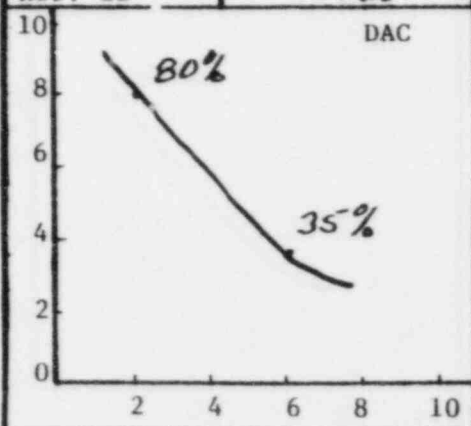
Customer L P & L		Plant WATERFORD		Unit 3	Loop/Zone B/44	Iso/Drawing No. ZONE 44 REV 2 FC 6	
Procedure 1512-2 R.D. FC 2		Exam Surface O. D.	Examiner/Level Michael W. Blas II		VCR Supervisor Daniel Jensen		Date 10-6-82
Component/Piping System MAIN STEAM HEADER "B"			Pipe Size 40"	Weld Type BUTT	Cal. Block # UT-128	Couplant: SO. TRACE Type 40 Batch No B124	

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

	Transducer	0°	45°	60°	Instrument			
	S/N	48807	NA	NA	Mfr.	SONIC	Model	MARK I
	Size	1.0" DIA	↓	↓	S/N	02307E	RepRate	3K
	Frequency	2.25MHz	↓	↓	Reject	OFF	Filter	HI
	Beam Angle	0°	↓	↓	Damp	MIN	Coax	12" BNC-BNC
Freq.		2.0		Video		NORM		

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1/4 T	80%	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	8:15	10:50	NA	NA	NA	NA
3/4 T	35%	6.0															
1 T		8.0															
Ref. dB	44 db																



Additional Comments/Sketch

M.R. Martin, ANEI 10-7-82



Ultrasonic Examination Report

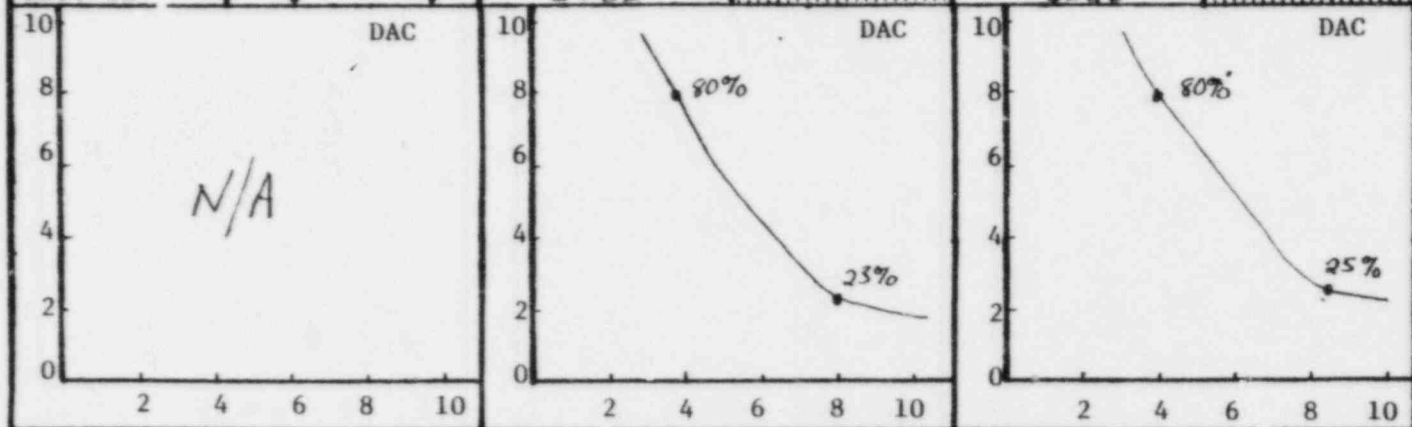
Customer <i>LP+L</i>	Plant <i>Waterford</i>	Unit <i>3</i>	Loop/Zone <i>N/A/44</i>	Iso/Drawing No. <i>ZONE 44 R.2 F.C.6</i>
Procedure <i>ISI-2.2 R.O.F.C.2</i>	Exam Surface <i>O.D.</i>	Examiner/Level <i>Henry A. Lohman II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>10-6-82</i>
Component/Piping System <i>Main Steam Header B-Outside</i>	Pipe Size <i>40"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT-128</i>	Couplant: <i>Sonotrace</i> Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number *F.C.2*

Transducer	0°			45°			60°			Instrument			
	S/N	<i>NA</i>	<i>322935</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	Mfr.	<i>SONIC</i>	Model	<i>Mark 1</i>			
	Size		<i>1/2"</i>				S/N	<i>03704E</i>	RepRate	<i>1K</i>			
	Frequency		<i>2.25 MHz</i>				Reject	<i>OFF</i>	Filter	<i>off</i>			
	Beam Angle		<i>45°</i>				Damp	<i>MIN.</i>	Coax	<i>12' BAK to BNC</i>			
							Freq.	<i>2</i>	Video	<i>Normal</i>			

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
<i>1T</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>9.0</i>	<i>NA</i>	<i>NA</i>	<i>80%</i>	<i>4.1</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>8:50</i>	<i>11:30</i>	<i>NA</i>	<i>NA</i>
<i>2T</i>			<i>23%</i>	<i>8.0</i>			<i>25%</i>	<i>8.6</i>									



Additional Comments/Sketch



W.R. Martin, ANET 10/11/82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>L P & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B / 44</i>
Component/Piping System <i>MAIN STEAM HEADER "B"</i>		Examiner/Level <i>Michael W. Blaw II</i>	Date <i>10-8-82</i>
Procedure <i>151-2.5 R.O</i>	Iso/Drawing No. <i>ZONE 44 R.2 FC 6</i>	VCR Supervisor <i>[Signature]</i>	Continuation Sheet Attached <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

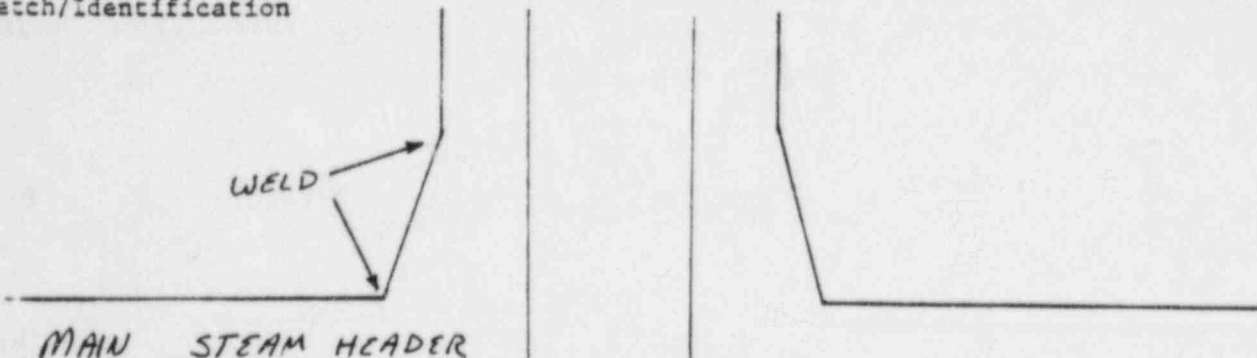
Equipment

Instrument		Transducer		Calibration
Mfgr. <i>SONIC</i>	Mfgr. <i>ACROTECH</i>	Size <i>.50" DIA</i>	Cal. Block <i>UT-130</i>	
Model <i>MARK I</i>	Freq. <i>2.25 MHZ</i>	Cal. Block		
S/N <i>04405E</i>	Serial No. <i>J02172</i>	Range Cal. <i>2.1875"</i>		
Reject <i>OFF</i>	Coax. Cable <i>12' BNC-BNC</i>	Calibration Checks		
Damp. <i>7</i>	Gain <i>62 db</i>	<i>IN 1:45</i>		
Freq. <i>2.0</i>		<i>OUT 3:15</i>		
Rep. Rate <i>1K</i>				
Filter <i>OFF</i>				
Video <i>NDRM</i>				
Couplant <i>SONOTRACE 40 3/4 8124</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-011</i>	<i>12</i>	<i>NO</i>	<i>1.794"</i>	<i>NO</i>	<i>44-027</i>	<i>12</i>	<i>NO</i>	<i>1.772"</i>	<i>NO</i>
<i>44-011</i>	<i>2</i>		<i>1.794"</i>		<i>44-027</i>	<i>2</i>		<i>1.750"</i>	
<i>44-011</i>	<i>4</i>		<i>1.794"</i>		<i>44-027</i>	<i>4</i>		<i>1.772"</i>	
<i>44-011</i>	<i>6</i>		<i>1.794"</i>		<i>44-027</i>	<i>6</i>		<i>1.772"</i>	
<i>44-011</i>	<i>8</i>		<i>1.794"</i>		<i>44-027</i>	<i>8</i>		<i>1.794"</i>	
<i>44-011</i>	<i>10</i>		<i>1.794"</i>		<i>44-027</i>	<i>10</i>		<i>1.794"</i>	
<i>44-018</i>	<i>12</i>		<i>1.794"</i>		<i>44-034</i>	<i>12</i>		<i>1.794"</i>	
<i>44-018</i>	<i>2</i>		<i>1.794"</i>		<i>44-034</i>	<i>2</i>		<i>1.772"</i>	
<i>44-018</i>	<i>4</i>		<i>1.794"</i>		<i>44-034</i>	<i>4</i>		<i>1.772"</i>	
<i>44-018</i>	<i>6</i>		<i>1.794"</i>		<i>44-034</i>	<i>6</i>		<i>1.794"</i>	
<i>44-018</i>	<i>8</i>		<i>1.794"</i>		<i>44-034</i>	<i>8</i>		<i>1.750"</i>	
<i>44-018</i>	<i>10</i>		<i>1.794"</i>		<i>44-034</i>	<i>10</i>		<i>1.772"</i>	

Sketch/Identification





Ultrasonic Data Sheet

M.R. Martin for ANII 10/11/82

Thickness Measurement

Continuation Page 2 of 2

Customer <i>L P & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>8 / 44</i>
Component/Piping System <i>MAIN STEAM HEADER "B"</i>	Examiner/Level <i>Michael W. Blow II</i>	Date <i>10-8-82</i>	
Procedure <i>ISI-2.5 R.O</i>	Iso/Drawing No. <i>ZONE 44 RZ FL. 6</i>	VCR Supervisor <i>Daniel Jones</i>	

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-042</i>	<i>12</i>	<i>NO</i>	<i>1.794"</i>	<i>NO</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>44-042</i>	<i>2</i>		<i>1.772"</i>						
<i>44-042</i>	<i>4</i>		<i>1.772"</i>						
<i>44-042</i>	<i>6</i>		<i>1.772"</i>						
<i>44-042</i>	<i>8</i>		<i>1.772"</i>						
<i>44-042</i>	<i>10</i>		<i>1.794"</i>						
<i>44-056</i>	<i>12</i>		<i>1.838"</i>						
<i>44-056</i>	<i>2</i>		<i>1.794"</i>						
<i>44-056</i>	<i>4</i>		<i>1.794"</i>						
<i>44-056</i>	<i>6</i>		<i>1.816"</i>						
<i>44-056</i>	<i>8</i>		<i>1.859"</i>						
<i>44-056</i>	<i>10</i>	<i>∇</i>	<i>1.859"</i>	<i>∇</i>					

Sketch/Identification

M.R. Martin, ANEF 10-11-82



Ultrasonic Examination Report

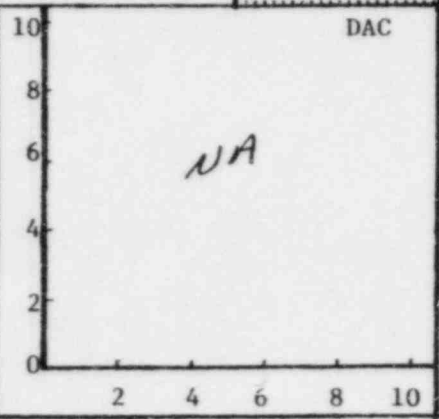
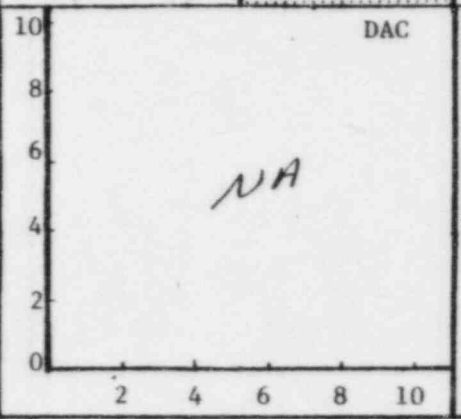
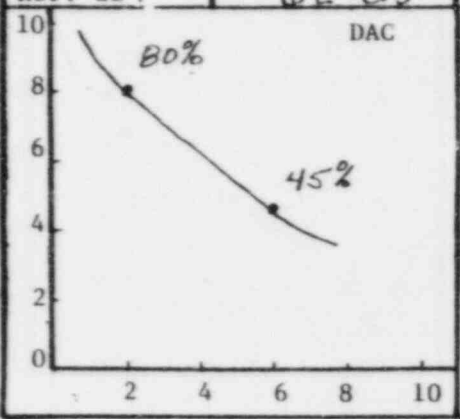
Customer LP&L	Plant WATERFORD	Unit 3	Loop/Zone B/44	Iso/Drawing No. ZONE 44 R2 FC 16
Procedure ISI 2.2 R.O.F.C.2	Exam Surface O.D	Examiner/Level Michael W. Blum II	VCR Supervisor Daniel Jensen	Date 10-8-82
Component/Piping System MAIN STEAM HEADER "B"		Pipe Size 8"	Weld Type BUTT	Cal. Block UT-130
		Couplant: SONOTRACE Type 40		Batch No 8129

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number **2**

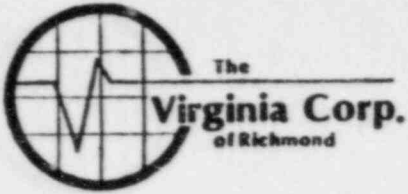
Transducer	0°	45°	60°	Instrument			
	S/N JO2172	NA	NA	Mfr. SONIC	Model MAR E	RepRate 1K	Filter OFF
	Size .50" DIA			S/N 04405E	Coax 12' BAC-BAC	Video NORM	
	Frequency 2.25 MHz			Reject OFF	Damp 7		
Beam Angle	0°			Freq. 2.0			

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks								
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
1/4 T	80%	2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1:45	3:15	NA	NA	NA	NA
3/4 T	75%	6.0																	
1 T		8.0																	
Ref. dB.	62 db																		



Additional Comments/Sketch

M.R. Martin, ANEI 10-11-82



Ultrasonic Examination Report

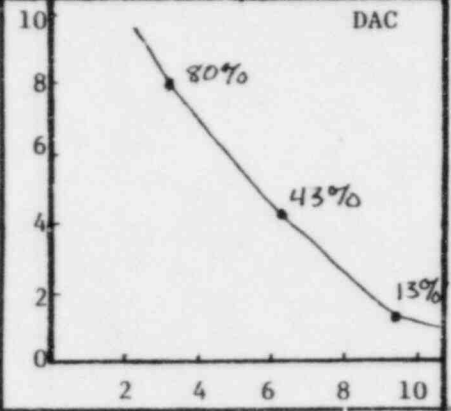
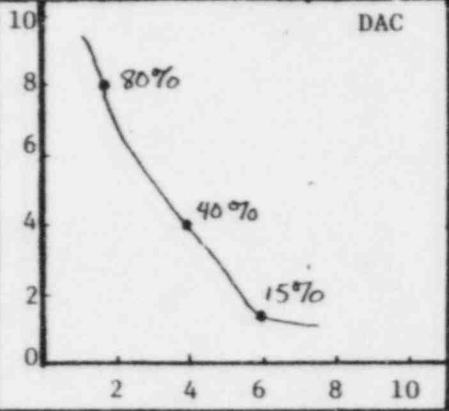
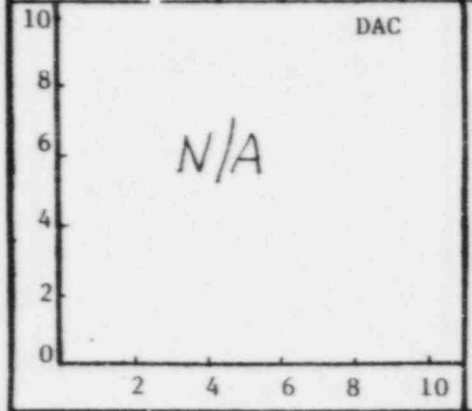
Customer LP&L	Plant Waterford	Unit 3	Loop/Zone N/A/44	Iso/Drawing No. Zone 44 R.2 F.C.6
Procedure 151-28 ROFC.2	Exam Surface O.D.	Examiner/Level Merry L. Latham II	VCR Supervisor Daniel Jensen	Date 10-8-82
Component/Piping System Main Steam Header R-outside	Pipe Size 8"	Weld Type BUTT	Cal. Block UT-130	Couplant: SONOTRACE Type 40 Batch No. 8124

Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number

Transducer	0°			45°			60°			Instrument				
	S/N	N/A			G07152						Mfr.	SONIC	Model	Mark I
	Size				5"						S/N	03704E	RepRate	1K
	Frequency				2.25 MHz						Reject	OFF	Filter	OFF
	Beam Angle	↓			45°			↓			Damp	MIN	Coax	12' BNC to MP
										Freq.	2 MHz	Video	Normal	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
1T	N/A	N/A	80%	2.0	N/A	N/A	80%	2.8	N/A	N/A	N/A	N/A	N/A	1.30	2.25	N/A	N/A
aT			40%	4.0			43%	6.1									
3T			15%	6.0			13%	9.4									
Ref. dB	↓	↓	45 db				53 db				↓	↓	↓	↓	↓	↓	↓



Additional Comments/Sketch



M.R. Martin, ANIS 10-11-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone B / 44
Component/Piping System MAW STEAM HEADER "B"		Examiner/Level Michael W Blw II	Date 10-8-82
Procedure 151-2.5 R.O	Iso/Drawing No. ZONE 44 R2 FC.6	VCR Supervisor Wanil D...	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

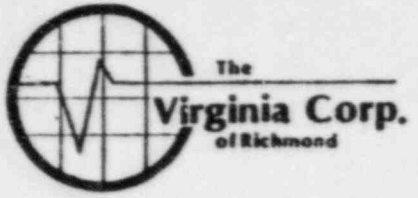
Equipment				
Instrument		Transducer		Calibration
Mfgr.	SONIC	Mfgr.	PANAMATICS	Cal. Block UT-12B
Model	MARK I	Size	1.0" DIA	Cal. Block
S/N	04405E	Freq.	2.25 MHZ	Range Cal. 3.406"
Reject	OFF	Serial No.	48807	Calibration Checks
Damp.	MIN	Coax. Cable	12' BNC-BNC	IN - 7:50
Freq.	2.0	Gain	56 db	OUT - 8:55
Rep. Rate	1K			
Filter	OFF			
Video	NORM			
Couplant	SONOTRACE 40% BIZY			

Examination Results									
Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
44-026 LA	6"	2.725"	2.725"	2.725"	44-026 LA	78"	2.691"	2.725"	2.725"
44-026 LA	12"	2.793"	2.725"	2.793"	44-026 LA	84"	2.725"	2.725"	2.691"
44-026 LA	18"	2.725"	2.725"	2.759"	44-026 LA	90"	2.725"	2.691"	2.725"
44-026 LA	24"	2.725"	2.725"	2.725"	44-026 LA	96"	2.657"	2.691"	2.725"
44-026 LA	30"	2.725"	2.725"	2.725"	44-026 LA	102"	2.657"	2.657"	2.725"
44-026 LA	36"	2.793"	2.725"	2.759"					
44-026 LA	42"	2.793"	2.725"	2.759"					
44-026 LA	48"	2.827"	2.793"	2.759"					
44-026 LA	54"	2.793"	2.691"	2.725"					
44-026 LA	60"	2.793"	2.725"	2.691"					
44-026 LA	66"	2.793"	2.725"	2.691"					
44-026 LA	72"	2.725"	2.759"	2.725"					

Sketch/Identification

M.R. Martin, ANEI 10-11-82

Ultrasonic Examination Report



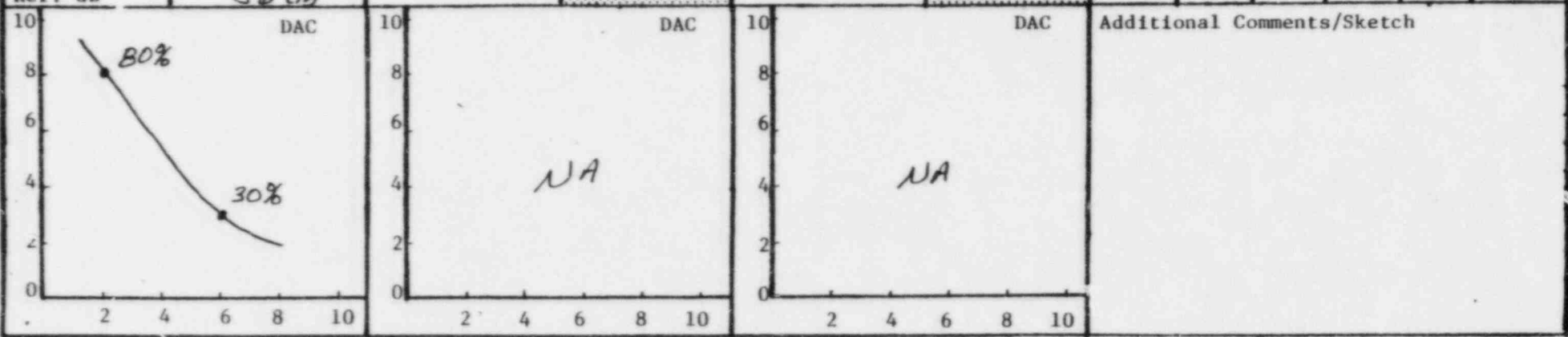
Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone B/44	Iso/Drawing No. ZONE 44 R2 FC 6
Procedure ISI-2.2 R.O FC.2	Exam Surface O. D.	Examiner/Level Michael W. Blair II	VCR Supervisor Daniel J. ...	Date 10-8-82
Component/Piping System MAIN STEAM HEADER "B"	Pipe Size 40"	Weld Type BUTT	Cal. Block UT-12B	Couplant: Type 40 Batch No B124

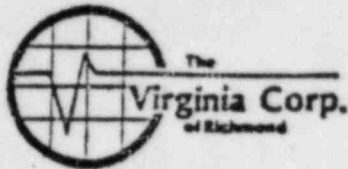
Continuation Sheet Attached
 Yes No

Field Changes:
 Yes No
 If Yes, Number _____

Transducer	0°	45°	60°	Instrument			
	S/N 48807	NA	NA	Mfr.	SONIC	Model	MARK I
	Size 1.0" DIA			S/N	04405E	RepRate	1K
	Frequency 2.25 MHz			Reject	OFF	Filter	OFF
Beam Angle 0°			Damp	MIN.	Coax	IC-BUC-00C	
			Freq.	2.0	Video	NORM	

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks						
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:		Signal Amp.	Sweep	Sound Entry Point To:		0°		45°		60°		
					Scribe Line	50% DAC			Scribe Line	50% DAC	In	Out	In	Out	In	Out	
			NA	NA	NA	NA	NA	NA	NA	NA	NA	7:50	BJS	NA	NA	NA	NA
1/4 T	80%	2.0															
3/4 T	30%	6.0															
1 T		8.0															





W.R. Martin, AN II 10-14-82
 Ultrasonic Data Sheet
 for
 Thickness Measurement

Customer <i>LP+L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>8 44</i>
Component/Piping System <i>Main Steam Header B Outside Cont</i>		Examiner/Level <i>Larry Langenbacher</i>	Date <i>10-9-82</i>
Procedure <i>ISI 25 R.O. #44</i>	Iso/Drawing No. <i>Zone 44 R.2 K. 6</i>	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr. <i>Sonic</i>	Mfgr. <i>K-B-Aerotech</i>	Size <i>.50"</i>	Cal. Block <i>UT-131</i>	
Model <i>Mark 1</i>			Cal. Block	
S/N <i>05304E</i>	Freq. <i>5 MHz</i>		Range Cal. <i>.463" @ 60</i>	
Reject <i>off</i>			Calibration Checks	
Damp. <i>Min.</i>	Serial No. <i>KB2897</i>		<i>CAL IN 3:15 AM</i>	
Freq. <i>5 MHz</i>			<i>CAL OUT 5:00 AM</i>	
Rep. Rate <i>1K</i>	Coax. Cable <i>6' BNC-PC</i>			
Filter <i>off</i>				
Video <i>Norm.</i>	Gain <i>66 db</i>			
Couplant <i>Sonotrace 40 8124</i>				

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-062</i>	<i>12</i>	<i>.579"</i>	<i>.586"</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>44-062</i>	<i>2</i>	<i>.502"</i>	<i>.563"</i>						
<i>44-062</i>	<i>4</i>	<i>.432"</i>	<i>.540"</i>						
<i>44-062</i>	<i>6</i>	<i>.540"</i>	<i>.524"</i>						
<i>44-062</i>	<i>8</i>	<i>.509"</i>	<i>.524"</i>						
<i>44-062</i>	<i>10</i>	<i>.509"</i>	<i>.563"</i>	<i>↓</i>					
<i>44-063</i>	<i>12</i>	<i>.509"</i>	<i>NA</i>	<i>.563"</i>					
<i>44-063</i>	<i>2</i>	<i>.509"</i>		<i>.563"</i>					
<i>44-063</i>	<i>4</i>	<i>.509"</i>		<i>.540"</i>					
<i>44-063</i>	<i>6</i>	<i>.509"</i>		<i>.524"</i>					
<i>44-063</i>	<i>8</i>	<i>.486"</i>		<i>.540"</i>					
<i>44-063</i>	<i>10</i>	<i>.509"</i>	<i>↓</i>	<i>.540"</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>

Sketch/Identification

WELD NO. 44-062 NA ON 5 SIDE DUE TO PART CONFIGURATION

WELD NO. 44-063 NA ON 2 SIDE DUE TO BEVEL ON I.D. & INCREASED THICKNESS



Ultrasonic Examination Report

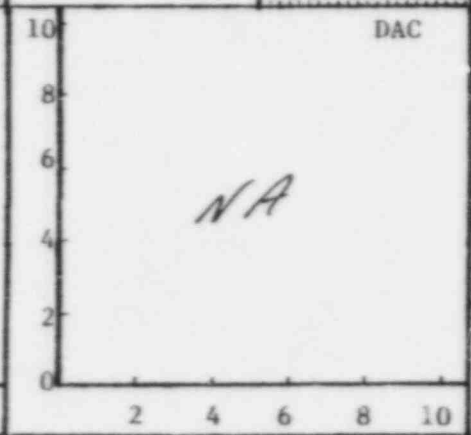
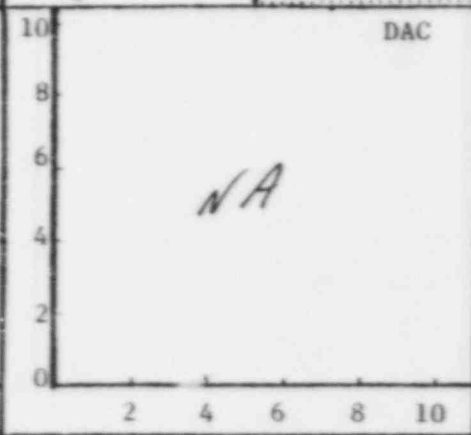
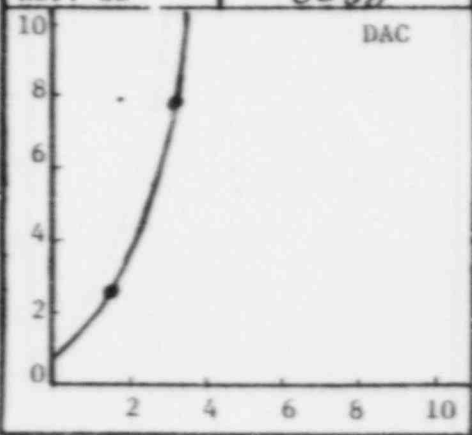
Customer <i>LP+L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B 44</i>	Iso/Drawing No. <i>20NF44 R2 F.C.6</i>	<i>7 6L</i>
Procedure <i>ISI 2.2 R0 R2</i>	Exam Surface <i>00</i>	Examiner/Level <i>Navy Longenecker II</i>	VCR Supervisor <i>Daniel Jena</i>	Date <i>10-9-82</i>	
Component/Piping System <i>Main Steam Header "B" Outside Cont.</i>	Pipe Size <i>12"</i>	Weld Type <i>Butt</i>	Cal. Block # <i>UT-131</i>	Couplant: <i>Sonotrace</i>	Type <i>40</i> Batch No. <i>8124</i>

Continuation Sheet Attached
 Yes No

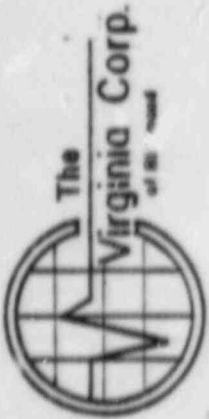
Field Changes:
 Yes No
 If Yes, Number *2*

Transducer	0°	45°	60°	Instrument			
S/N	<i>KB2897</i>	<i>NA</i>	<i>NA</i>	Mfer.	<i>Sonic</i>	Model	<i>Mark I</i>
Size	<i>.50"</i>			S/N	<i>05304E</i>	RepRate	<i>1K</i>
Frequency	<i>5MHZ</i>			Reject	<i>off</i>	Filter	<i>off</i>
Beam Angle	<i>0°</i>			Damp	<i>Min</i>	Coax	<i>6' BNC-PC</i>
				Freq.	<i>5. MHZ</i>	Video	<i>Norm</i>

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks								
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
<i>1/4 T</i>	<i>28%</i>	<i>1.5</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>3:15 PM</i>	<i>5:00 PM</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>3/4 T</i>	<i>80%</i>	<i>3.6</i>																	
<i>1T</i>	<i>NA</i>	<i>6.0</i>																	
Ref. dB	<i>66 db</i>																		



Additional Comments/Sketch



BASE METAL SCAN
2 SIDE ONLY, 0° SCAN
2 SIDE AND PARTIAL OF
WELD (2 SIDE)

BASE METAL SCAN PARTIAL
ON 2 SIDE DUE BEVEL ON I.D.
AND INCREASED THICKNESS.
0° SCAN, SLIGHT PARTIAL AT
2 SIDE HAZ.

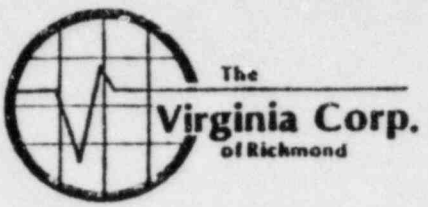


WELD NO. 4-063



WELD NO. 44-062

Ultrasonic Examination Report



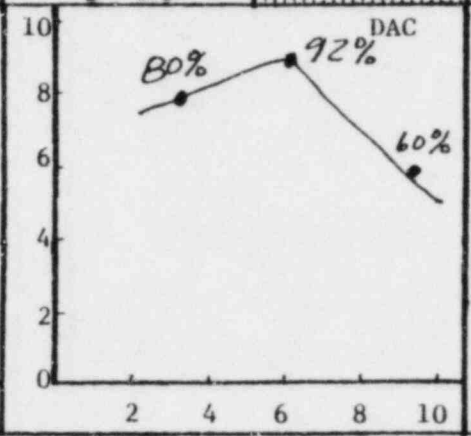
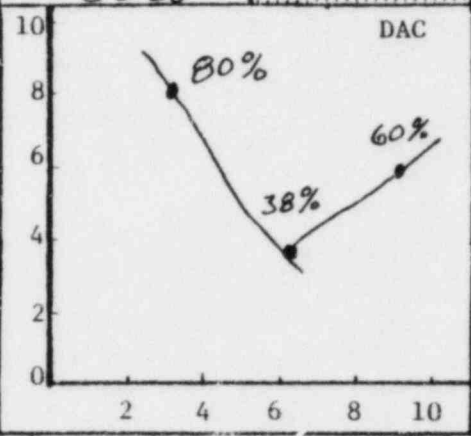
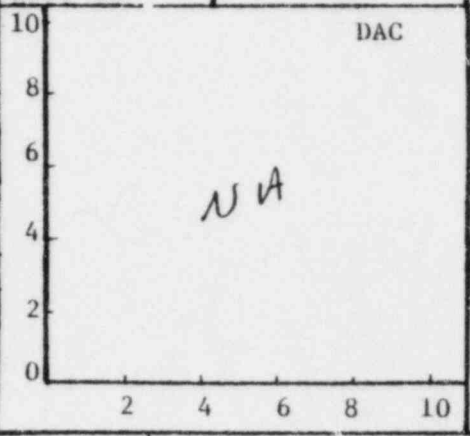
Customer L P & L	Plant WATERFORD	Unit 3	Loop/Zone B/44	Iso/Drawing No. Zone 44 Rev 2 FC 8	MWB 7
Procedure ISI-2.2 R.O.F.C.2	Exam Surface O.D.	Examiner/Level Michael J. Allen II	VCR Supervisor Daniel Jones	Date 10-9-82	
Component/Piping System MAIN STEAM HEADER "B"	Pipe Size 12"	Weld Type Butt	Cal. Block UT-131	Couplant: SONOTRACE Type 40	Batch No. 8124

Continuation Sheet Attached
 Yes No

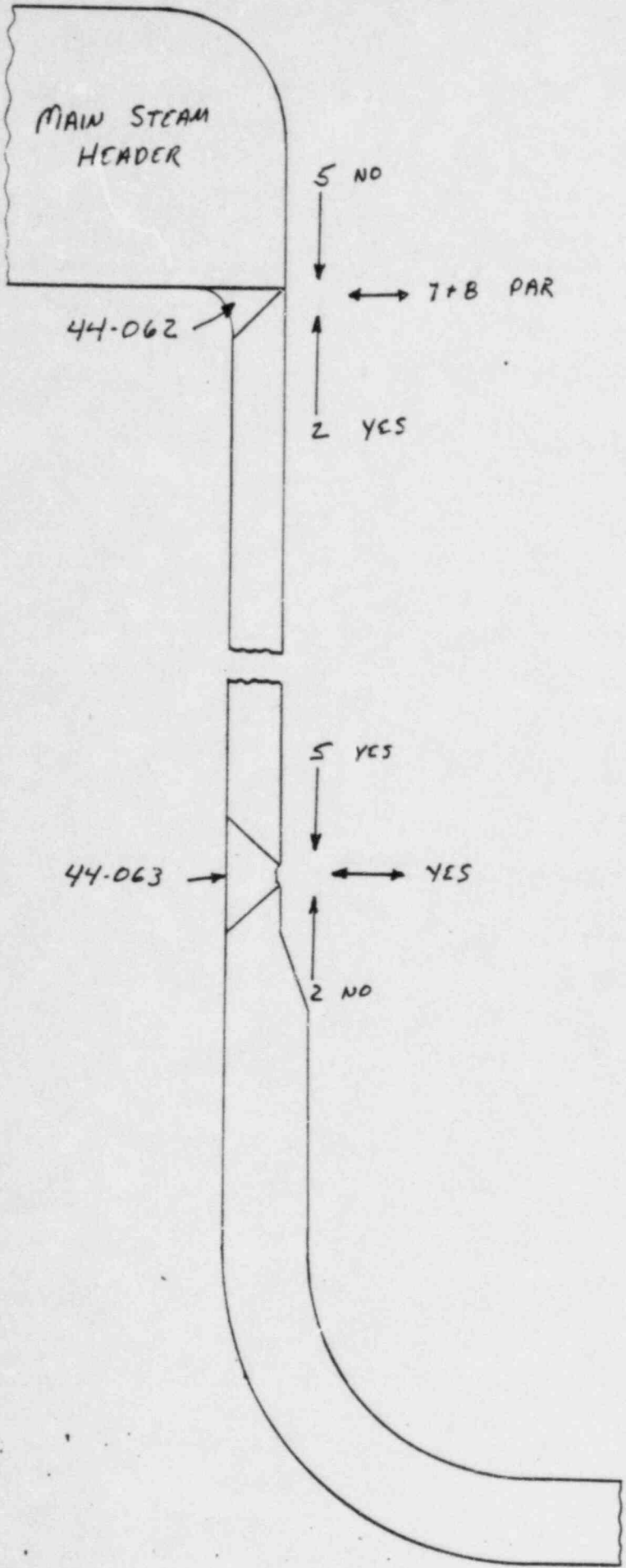
Field Changes:
 Yes No
 If Yes, Number **2**

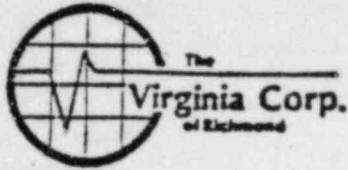
Transducer	0°	45°	60°	Instrument			
S/N	NA	607152	NA	Mfg.	SONIC	Model	MARK I
Size		.50" DIA		S/N	04405E	RepRate	1K
Frequency		2.25MHz		Reject	OFF	Filter	OFF
Beam Angle		45°		Damp	MIN	Coax	6' BNC-MD
				Freq.	2.0	Video	NORM

Calibration 0°			2 & 5 Scan			7 & 8 Scan			Calibration Checks									
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°	
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out
	NA	NA			NA	NA	NA			NA	NA	NA			6:30	8:35		
1T			80%	3.0				80%	3.0									
2T			38%	6.0				92%	6.2									
3T			60%	9.0				60%	9.4									
Ref. dB																		



Additional Comments/Sketch





W.R. Martin, ANSI 10-25-82
Ultrasonic Data Sheet
 for
Thickness Measurement

Customer <i>L P & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B / 44</i>
Component/Piping System <i>MAIN STEAM HEADER "B"</i>		Examiner/Level <i>Michael W. Blaw</i>	Date <i>10-12-82</i>
Procedure <i>ISI-2.5 R.O</i>	Iso/Drawing No. <i>ZONE 44 R.2 FC7</i>	VCR Supervisor <i>Daniel Jensen</i>	Continuation Sheet Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Equipment

Instrument		Transducer		Calibration
Mfgr.	<i>SONIC</i>	Mfgr.	<i>PANMETRICS</i>	Cal. Block <i>UT-127</i>
Model	<i>MARK I</i>	Size	<i>1.0" DIA</i>	Cal. Block
S/N	<i>0105BE</i>	Freq.	<i>2.25 MHz</i>	Range Cal. <i>2.750</i>
Reject	<i>OFF</i>	Serial No.	<i>48807</i>	Calibration Checks
Damp.	<i>B</i>	Freq.	<i>2.0</i>	
Rep. Rate	<i>1K</i>	Coax. Cable	<i>12' BNC - BNC</i>	<i>IN - 7:40</i>
Filter	<i>H1</i>	Gain	<i>45db</i>	<i>OUT - 10:55</i>
Video	<i>DIFF</i>			
Complant	<i>SONOTRACE 40 9/16 8124</i>			

Examination Results

Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5	Weld Number	Meas. Point	Reading Weld	Reading Scan 2	Reading Scan 5
<i>44-093</i>	<i>12</i>	<i>1.500"</i>	<i>1.500"</i>	<i>VALVE</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>44-093</i>	<i>2</i>	<i>1.400"</i>	<i>1.500"</i>						
<i>44-093</i>	<i>4</i>	<i>1.375"</i>	<i>1.450"</i>						
<i>44-093</i>	<i>6</i>	<i>1.475"</i>	<i>1.500"</i>						
<i>44-093</i>	<i>8</i>	<i>1.475"</i>	<i>1.500"</i>						
<i>44-093</i>	<i>10</i>	<i>1.400"</i>	<i>1.500"</i>	<i>↓</i>					

Sketch/Identification

W.R. Martin, ANIF 10-25-82



Ultrasonic Examination Report

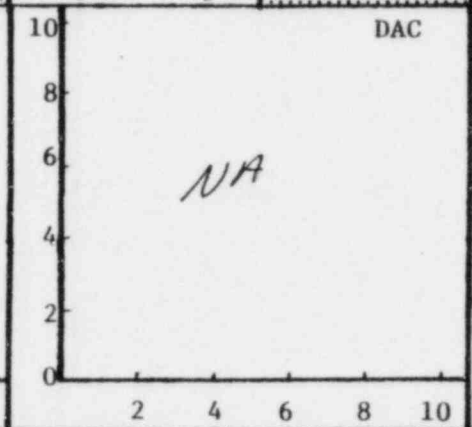
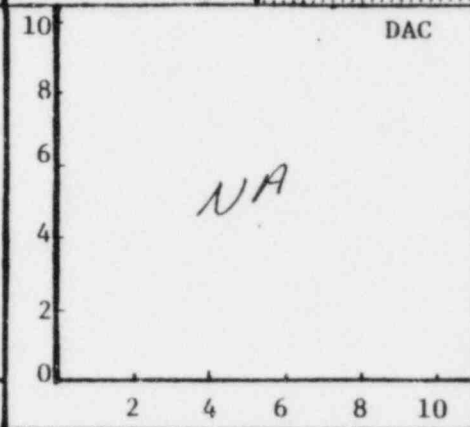
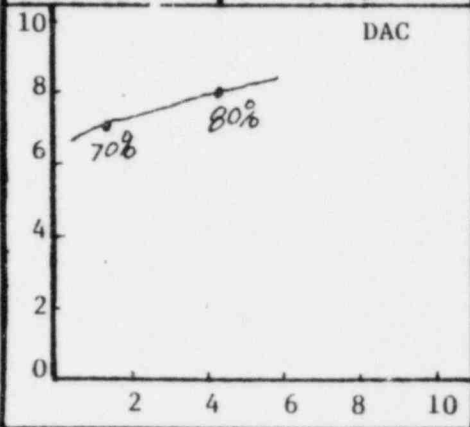
Customer <i>L P & L</i>	Plant <i>WATERFORD</i>	Unit <i>3</i>	Loop/Zone <i>B/44</i>	Iso/Drawing No. <i>ZONE 44 REV 2 FC. 7</i>
Procedure <i>ISI-2.2 R.O FC 2</i>	Exam Surface <i>O. D.</i>	Examiner/Level <i>Michael Z Blaw II</i>	VCR Supervisor <i>Daniel Jensen</i>	Date <i>10-16-82</i>
Component/Piping System <i>MAIN STEAM HEADER "B"</i>	Pipe Size <i>40"</i>	Weld Type <i>BUTT</i>	Cal. Block # <i>UT-127</i>	Complent: <i>SONOTRACE</i> Type <i>40</i> Batch No <i>8124</i>

Continuation Sheet Attached
 Yes No

Field Changes:
Yes No
If Yes, Number *2*

Transducer	<i>0°</i>	<i>45°</i>	<i>60°</i>	Instrument			
S/N	<i>48807</i>	<i>NA</i>	<i>NA</i>	Mfr.	<i>SONIC</i>	Model	<i>MARK E</i>
Size	<i>1.0" DIA</i>			S/N	<i>01058E</i>	RepRate	<i>3K</i>
Frequency	<i>2.25MHz</i>			Reject	<i>OFF</i>	Filter	<i>OFF</i>
Beam Angle	<i>0°</i>			Damp	<i>7</i>	Coax	<i>12' BNC-BNC</i>
				Freq.	<i>2.0</i>	Video	<i>NDRM</i>

Calibration 0°			2 & 5 Scan				7 & 8 Scan				Calibration Checks								
Calibration Reflector Location	Signal Amp.	Sweep	Signal Amp.	Sweep	Sound Entry Point To:			Signal Amp.	Sweep	Sound Entry Point To:			0°		45°		60°		
					Scribe Line	50% DAC				Scribe Line	50% DAC		In	Out	In	Out	In	Out	
<i>4/4 T</i>	<i>70%</i>	<i>1.4</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>1:34</i>	<i>2:45</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
<i>3/4 T</i>	<i>80%</i>	<i>4.2</i>																	
<i>1 T</i>		<i>6.0</i>																	
Ref. dB	<i>41db</i>																		



Additional Comments/Sketch

