

Mano K. Nazar Site Vice President Prairie Island Nuclear Generating Plant Nuclear Management Company, LLC 1717 Wakonade Dr. East • Welch MN 55089

May 31, 2002

10 CFR Part 50 Section 50.55a

U S Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

Docket No. 50-306 License No. DPR-60

Request for Relief No. 12 for the Unit 2 3rd 10-year Interval Inservice Inspection Program

On November 15, 1994 we submitted for review our third 10-year Inservice Inspection Examination Plan for Unit 2 and, on April 19, 1995, relief request revisions associated with that plan. The NRC issued its evaluation of the 3rd 10-year Interval Program Plan on February 22, 1996.

The purpose of this letter is to submit a relief request for "limited examinations" associated with that plan. Attached is Unit 2 Relief Request No. 12, Revision 0 which addresses those limited examinations. We are requesting relief pursuant to 10 CFR Part 50, Section 50.55a(g)(5)(iii) due to the impracticality of obtaining "100%" examination coverage for the affected items.

In this letter we have made no new Nuclear Regulatory Commission commitments. Please contact Jack Leveille (651-388-1121, Ext. 4142) if you have any questions related to this letter.

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Mano K. Nazar Site Vice President Prairie Island Nuclear Generating Plant

c: (next page)



USNRC May 31, 2002 Page 2

c: Regional Administrator - Region III, NRC Senior Resident Inspector, NRC NRR Project Manager, NRC Chief Boiler Inspector, State of MN P. Fisher, Hartford Insurance

Enclosure: ISI Relief Request No. 12 (Rev. 0), Prairie Island Unit 2, 3rd Interval, with attached examination reports

ISI Relief Request No. 12 (Rev. 0)

Limited Examination

SYSTEM: Various Category: Various Class: 1 and 2 Item: Various

Impractical Examination Requirements:

ASME Section XI (1989 no addenda) Code requires full examination of inservice inspection (ISI) components per Table IWB-2500-1, and IWC-2500-1. Reg. Guide 1.147 endorses Code Case N-460, "Alternative Examination Coverage for Class 1 and Class 2 Welds." This code case allows greater than 90% coverage of a weld to meet the "essentially 100%" requirement.

NRC Information Notice 98-42 "Implementation of 10 CFR 50.55a(g) Inservice Inspection requirements" Dec. 1, 1998, states "The NRC has adopted and further refined the definition of ""essentially 100 percent"" to mean greater than 90 percent " in 10 CFR 50.55a(g)(6)(ii)(A)(2) for required examination coverage of reactor pressure vessel welds. This standard has been applied to all examination of welds or other areas required by ASME Section XI.

The Prairie Island construction permit was issued in 1967. This facility was designed and constructed with limited accessibility due to component configurations and/or physical barriers for which 100% coverage is not achievable on some ISI components examined for the Third Ten Year Interval.

Basis for Relief:

The following 10 CFR 50.55a paragraphs apply to the inservice inspection of components in accordance with the ASME Section XI code:

50.55a(g)(1): For a boiling or pressurized water-cooled nuclear power facility whose construction permit was issued prior to January 1, 1971, components (including supports) must meet the requirements of paragraphs (g) (4) and (5) of this section to the extent practical.

50.55a(g)(4): Throughout the service life of a boiling or pressurized water-cooled nuclear power facility, components (including supports) which are classified as ASME Code Class 1, Class 2, and Class 3 must meet the requirements, except design and access provisions and pre-service examination requirements, set forth in Section XI of editions of the ASME Boiler and Pressure Vessel Code ... to the extent practical within the limitations of design, geometry and materials of construction of the components.

50.55a(g)(5)(iv): Where an examination requirement by the code or addenda is determined to be impractical by the licensee and is not included in the revised inservice inspection program as permitted by paragraph (g)(4) of this section, the basis for this determination must be demonstrated to the satisfaction of the Commission ...

Prairie Island was designed and constructed prior to development of ASME XI, therefore design for accessibility and inspection coverage is not, in many cases, sufficient to permit satisfying the current Code requirements. Limitations to inspections are primarily due to obstructions, interference and design configurations.

Summary of the limited examinations are described below and also included in the Table, which follows.

Part A: Category B-J, "Pressure Retaining Welds in Piping"

Summary No. 501125, W-1, Reactor Coolant Pump to Pipe Weld, is limited to volumetric (UT) examination to 49.2% coverage. The limited examination coverage is the result of interference from a 6" branch connection at 270 degrees, 3" from toe of weld.

Summary No. 501140, W-1, Reactor Coolant Nozzle to Elbow Weld, is limited to volumetric (UT) examination to 55.35% coverage. The limited examination coverage is the result of the design configuration of the nozzle to elbow weld, which prohibits one of the four directional scans required.

Summary No. 501638, W-7, Reactor Coolant Valve to 45 degree Elbow Weld, is limited to volumetric (UT) examination one sided examination 50.00% coverage. PDI UT procedure is not qualified for the detection of flaws on the far side of single side access examinations. The technique provided by the PDI procedure was used for a best effort examination for flaws on the far side of the weld. Valve to elbow configuration limits this examination to single side.

Summary No. 501804, W-9, Reactor Coolant Elbow to pipe weld, is limited to volumetric (UT) examination to 58.75% coverage. The limited examination coverage is the result of interference from an install box restraint close to the weld toe that prevents four directional scanning of complete weld. <u>Part B</u>: Category C-C "Integral attachments for Vessels, Piping, Pumps and Valves"

Summary No. 500978, Main Steam Hanger H-2, Integral attached welds, is limited to surface examination of only 74.3% of surface area due to restraint configuration.

Summary No. 500985, Main Steam Hanger H-3, Integral attached welds, is limited to surface examination of only 74.3% of surface area due to restraint configuration.

Summary No. 500988, Main Steam Hanger H-3, Integral attached welds, is limited to surface examination of only 74.3% of surface area due to restraint configuration.

<u>Part C</u>: Category C-F-1 "Pressure Retaining Welds in Austenitic Stainless Piping"

Summary No. 500251, W-17, Safety Injection Pipe to Valve weld, is limited to volumetric examination coverage of 50.00%. PDI UT procedure is not qualified for the detection of flaws on the far side of single side access examinations. The technique provided by the PDI procedure was used for a best effort examination for flaws on the far side of the weld. Pipe to Valve configuration limits this examination to single side.

Summary No. 502388, W-1, Safety Injection Valve to Pipe weld is limited to volumetric examination coverage of 50.00%. PDI UT procedure is not qualified for the detection of flaws on the far side of single side access examinations. The technique provided by the PDI procedure was used for a best effort examination for flaws on the far side of the weld. Valve to Pipe configuration limits this examination to single side.

Summary No. 502147, W-18/LSU, Residual Heat Removal Pipe to Flange weld is limited to volumetric examination coverage of 75.00%. PDI UT procedure is not qualified for the detection of flaws on the far side of single side access examinations. The technique provided by the PDI procedure was used for a best effort examination for flaws on the far side of the weld. Pipe to Flange configuration limits this examination to single side.

Summary No. 502372, W-1/LSD, Residual Heat Removal Valve to Reducer weld is limited to volumetric examination coverage of 50.00%. PDI UT procedure is not qualified for the detection of flaws on the far side of single side access examinations. The technique provided by the PDI procedure was used for a best effort examination for flaws on the far side of the weld. Valve to reducer configuration limits this examination to single side.

Summary No. 502392, W-5/LSD, Residual Heat Removal Valve to Reducer weld is limited to volumetric examination coverage of 50.00%. PDI UT procedure is not qualified for the detection of flaws on the far side of single side access examinations. The technique provided by the PDI procedure was used for a best effort examination for flaws on the far side of the weld. Valve to reducer configuration limits this examination to single side.

<u>Part D</u>: Category C-F-2 " Pressure Retaining Welds in Ferritic and low alloy Piping."

Summary No. 500830, W-14/LSU, Main Steam Pipe-Flanged Nozzle weld is limited to surface examination coverage of 83.3%. Interference from a Hanger installed top dead center of weld prohibits adequate surface examination coverage.

Additional Means of Establishing Integrity:

In addition, system pressure tests and associated visual inspections (VT-2) required by Section XI are performed at required frequency to ensure the piping system is capable of maintaining pressure integrity. System integrity is monitored during normal operation by many direct and indirect methods, e.g., containment radiation monitoring, containment air monitoring, containment sump monitoring, containment temperature monitoring, system walk downs, surveillance testing, etc.

For all listed B-J Category weld with UT volumetric limitations the associated required surface examination (PT or MT) was performed in accordance with Section XI.

For all listed C-C Category integral attached welds with surface examination limitations the associated required visual examination (VT-3) has been performed.

For all listed C-F-1 Category, austenitic piping welds with UT volumetric limitations the associated required surface (PT) examination was performed in accordance with Section XI.

All in-service inspection at Prairie Island Unit 2 have been done to the greatest extent practical. When limitation to required inspections are encountered procedure ISI-LTS-1 is applied which requires approved alternative examination techniques be considered, or applied to gain the maximum obtainable inspection coverage practical. In all of the

above items identified, this procedure was used and the maximum inspection coverage has been achieved for the components listed to ensure pressure and structural integrity.

Alternate Examination:

The limitations have been noted on the ISI examination reports and are included in the ISI Outage Summary Report. NMC will continue to document the limitations. No additional alternative examinations are proposed.

Limitations are due to configuration design, geometry, and materials of construction of the components or limitations of approved Performance Demonstration Initiated (PDI) examination procedures for the detection of flaws. NMC will continue to utilize the most current approved PDI techniques available for future examinations.

Table: Limited Examinations-Prairie Island Unit 2 – 2002 Refueling Outage.

Category	Item No.	SYSTEM	ISO	Component	Description	Method	% Coverage	REPORT	Limitation
		<u> </u>		ld.					
B-J	B9.11	Reactor Coolant	2-ISI-32C	W-1 501125	Pump to Pipe	Volumetric UT	49.2%		Examination Limited due to 6" branch connection at 270 degrees, 3" downstream from weld toe. See attached report 2002U035
B-J	B9.11	Reactor coolant	2-ISI-33B	W-1 501140	Nozzle to Elbow	Volumetric UT	55.3%	2002U045	Examination limited due to the nozzle configuration at weld toe. See attached report 2002U045.
B-J	B9.11	Reactor Coolant	2-ISI-28	W-7 501638	Valve to 45 Elbow	Volumetric UT	50.00%	2002U038	Single Sided examination- PDI examination limitation. PDI procedure is not qualified for the detection of flaws on the far side of single side access exams. See attached report 2002U038
B-J	B9.11	Reactor Coolant	2-ISI-20A	W-9 501804	Elbow to Pipe	Volumetric UT	58.75%	2002U033	Examination limited due to box restraint prohibiting access to weld. See attached report 2002U033
C-C	F-A,B,C	Main Steam	2-ISI-47A	H-1 500978	Rupture Restraint	Surface MT	74.30%	2002M025	Weld area inaccessible due to restraint configuration. See report 2002M025
C-C	F-A,B,C	Main Steam	2-ISI-47A	H-2 500985	Seismic Restraint	Surface MT	74.30%	2002M024	Weld area inaccessible due to restraint configuration. See report 2002M024
C-C	F-A,B,C	Main Steam	2-ISI-47A	H-3 500988	Seismic Restraint	Surface MT	74.30%	2002M021	Weld area inaccessible due to restraint configuration. See attached report 2002M021

Nuclear Management Company PRAIRIE ISLAND UNIT 2, 3RD INTERVAL

INSERVICE INSPECTION EXAMINATION PLAN

C-F-1	C5.11	Safety Injection	2-ISI-72	W-17	Pipe to Valve	Volumetric UT	50.00%	2002U036	Single Sided examination- PDI examination limitation.
				500251		01			PDI procedure is not
									qualified for the detection of
									flaws on the far side of
									single side access exams.
									See attached report
									2002U036
C-F-1	C5.11	Safety Injection	2-ISI-70	W-1	Valve to Pipe	Volumetric	50.00%	2002U037	Single Sided examination-
						UT			PDI examination limitation.
				502388					PDI procedure is not
									qualified for the detection of
									flaws on the far side of
									single side access exams.
									See attached report
C-F-1	C5.10	Residual Heat	2-ISI-51	W-18/LSU	Pipe to	Volumetric	75.00%	2002U001	2002U037
		Removal	2 101 01	W 10/200	Flange	UT	75.00%	20020001	Axial examination performed from pipe side
				502147	i lango				only, due to Pipe to Flange
									Configuration. PDI
									procedure is not qualified
									for the detection of flaws on
									the far side of single side
									access exams. See
									attached report 2002U001
C-F-1	C5.10	Residual Heat	2-ISI-50	W-1/LSD	Valve to	Volumetric	50.00%	2002U028	Single Sided examination-
		Removal			Reducer	UT			PDI examination limitation.
				502372					PDI procedure is not
									qualified for the detection of
		a a start a st							flaws on the far side of
									single side access exams.
									See attached report
L									2002U028

Nuclear Management Company PRAIRIE ISLAND UNIT 2, 3RD INTERVAL

INSERVICE INSPECTION EXAMINATION PLAN

C-F-1	C5.10	Residual Heat Removal	2-ISI-50	W-5/LSD 502392	Valve to Reducer	Volumetric UT	50.00%	2002U026	Single Sided examination- PDI examination limitation. PDI procedure is not qualified for the detection of flaws on the far side of single side access exams. See attached report 2002U026
C-F-2	C5.80	Main Steam	2-ISI-46B	W-14/LSU 500830	Pipe Flanged Nozzle	Surface MT	83.00%	2002M016	Surface examination is limited due to hanger interference at top dead center. See attached report 2002M016

Attached reports in the following order (same as the order in the Table):

1. UT Pipe Weld Examination 2002U035	4 pages
2. UT Pipe Weld Examination 2002U045	4 pages
3. UT Pipe Weld Examination 2002U038	3 pages
4. UT Pipe Weld Examination 2002U033	5 pages
5. Magnetic Particle Examination 2002M025	6 pages
6. Magnetic Particle Examination 2002M024	6 pages
7. Magnetic Particle Examination 2002M021	6 pages
8. UT Pipe Weld Examination 2002U036	3 pages
9. UT Pipe Weld Examination 2002U037	3 pages
10. UT Pipe Weld Examination 2002U001	3 pages
11. UT Pipe Weld Examination 2002U028	3 pages
12.UT Pipe Weld Examination 20002U026	3 pages
13. Magnetic Particle Examination 2002M016	4 pages

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UT Pipe Weld Examination

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Limitation Record

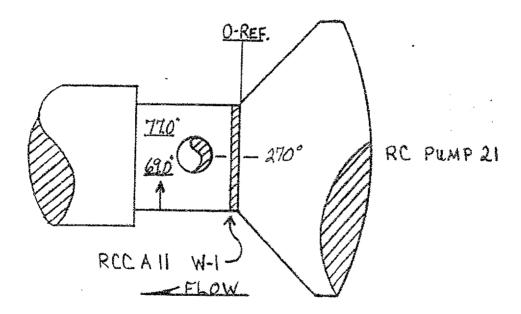
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Description of Limitation:

6" Branch connection at 270 degrees, 3" downstream from weld toe.

Sketch of Limitation:

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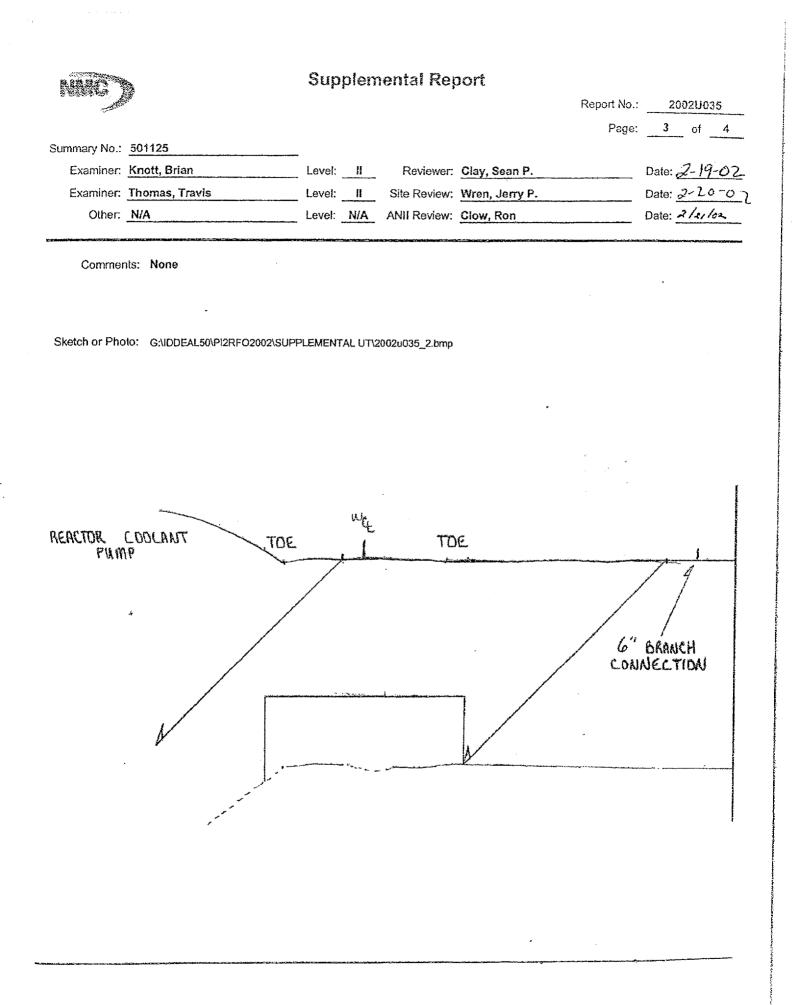


Limitations removal requirements: .

N/A

Radiation field: N/A

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Other	Level	N/A	Signature		ANII Review	. Signature	Date
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Determination of Percent Coverage for UT Examinations - Pipe

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UT Pipe Weld Examination

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Radiation field: N/A

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Examiner	Level	11	Signature /	Date	Reviewer		Signature	Date
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Examiner	Level		M. Spnature 14	Date	Site Review	\sim	- Signature	Date
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Determination of Percent Coverage for UT Examinations - Pipe

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Scan 2	100.000	% Length X	100.000	% volume of length / 100 =	100.000	% total for Scan			
Scan 3	100.000	% Length X	60.700	% volume of length / 100 =	60.700	% total for Scan			
Scan 4	100.000	% Length X	60.700	% volume of length / 100 =	60.700	% total for Scan 4			
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<u>Other deg</u>	0	(to be used for	supplemental	scans)		•			
<u>Other deg</u>	0	(to be used for	supplemental		· · ·				
<u>Other deg</u>	0	(to be used for	supplemental that was not o	scans)	0.000	% total for Scan			
<u>Other deg</u> The data to	- 0 be listed below 0.000	(to be used for w is for coverage t	supplemental that was not o 0.000	scans) btained with the 45 deg scans.					
<u>Other deg</u> The data to Scan 1	- 0 be listed below 0.000	(to be used for w is for coverage t % Length X	supplemental that was not o 0.000 0.000	scans) btained with the 45 deg scans. % volume of length / 100 =	0.000	% total for Scan			
Other deg The data to Scan 1 Scan 2	- 0 be listed below 0.000 0.000 0.000	(to be used for w is for coverage t % Length X % Length X	supplemental that was not o 0.000 0.000 0.000	scans) btained with the 45 deg scans. % volume of length / 100 = % volume of length / 100 =	0.000	% total for Scan % total for Scan % total for Scan % total for Scan			

Add totals for each scan required and divide by # of scans to determine;

55.350 % Total for complete exam

Site Field Supervisor: <u>Jen P. W.</u> Date: <u>Z-21-02</u>

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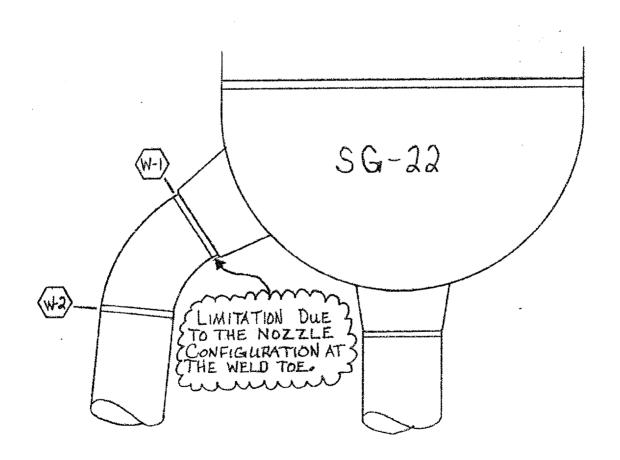
Supplemental Report

3 States State						Report No.:	2002U045
						Page:	4 of
Summary No.:	501140						
Examiner:	Knott, Brian	Level:		Reviewer:	Clay, Sean P.		Date: <u>2-20-02</u>
Examiner:	Potter, Michael E.	Level:		Site Review:	Wren, Jerry P.		Date: 2-21-02
Other:	<u>N/A</u>	Level:	<u>N/A</u>	ANII Review:	Clow, Ron		Date: 2/21/02

Comments: None

ASSACT.

Sketch or Photo: G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL UT\2002u045_4.bmp





UT Pipe Weld Examination

Summa	Site/Unit: NMC / PI2 Summary No.: 501638 Workscope: ISI				Procedure Revis	ion/FC:	ISI-UT-1 1 / 010694	a) and		Outage No Report No Page	:2		38		
Code: Drawing No.: System ID:	RC	1989	2-151	- 28	······································	Code Cat.:	B-J Description: V		Location	1:		Containme			
Component ID: Limitations:		ide acce	ess due	to cont	figuration.	See attac	ched sheets.		Size/Length:	.90" / 21. Start Time:		hickness/Dia Finish			/ 8.0"
Examination Si			le [] d Center		tside 🖌	ation:	Surface Cond			0	4.0				
Temp. Tool Mf							NSP 185					Batch I	No.:	#00	0143
Cal. Sheet No. Angle Used Scanning dB Indication(s): Comments:	0 N/A Yes [41.8	45T 41.8	60 66.8	20020	SA071, 200	2CA072	ostream 🗌	Downstream	☑ cw		cw 🗹			
See Limitation	NAD 🔽				GEO 🗌	-			•						
Percent Of Cov	erage Ol	otained >	> 90%:		No		Reviewed Previou	is Data:	-110- 46	55 72-19-0	2				
Timm, Jeremy Examiner L Griebel, David	evel II	1)	Signature Signature Signature		2/14/2002 Date 2/14/2002	Reviewer Clay, Sean Site Review Wren, Jerry ANII Review Clow, Ron	/ y P. v		tope s	ignature Ignature P.M. Ignature	7	2-19	Date

NING)	

Limitation Record

Site/Unit:	NMC	1	Pl2	Procedure:	ISI-UT-16A		ISI-UT-16A Outage No		Outage No.:	PI2RF2002		002
Summary No.:		5016	538	Procedure Revision/FC:	1	1		Report No.:	20)02U()38	
Workscope:		ISI		Work Order No.:	0106946		6	Page:	2	of	3	

Description of Limitation:

Single sided exam - Although the exam was performed through 100% of the code required volume. Procedure ISI-UT-16A is not qualified for the detection of flaws on the far side of single side access exams. The techniques provided by this procedure were used for a best effort exam for flaws on the far side of the weld.

Sketch of Limitation:

G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL UT\2002u038_1.bmp

VALVE VALVE VSGOR VSGOR VSGOR VSGOR VSGOR VSGOR

WELD W-7

COVERAGE

Limitations removal requirements: N/A

Radiation field: N/A

Examiner	Level	11	Signature	Date	Reviewer	Signature	Date
Timm, Jeremy	y T.	14	La Cons	2/14/2002	Clay, Sean P.	1 Strels Lill	2-18-02
Examiner	Level	11	Signature	Date	Site Review	Signature	Date
Griebel, David	1 M.	1	DIATT	2/14/2002	Wren, Jerry P.	Man P.Wm	2-19-02
Other	Level	N/A	Signature	Date	ANII Review	Signature	Date
N/A		1			Clow, Ron	1 CEE :	2/19/02



Determination of Percent Coverage for UT Examinations - Pipe

Summary No.: _ Workscope:	50163 ISI	PI2 8 Proc	Procedu edure Revision/I Work Order N	FC: <u>1 /</u>	Outage N Report N Pa	lo.: 2002U038
-• 		······································				
<u>45 deg</u>	400.000					-
Scan 1	100.000	% Length X	50.000	% volume of length / 100 =	50.000	_% total for Scan 1
Scan 2	100.000	% Length X	50.000	% volume of length / 100 =	50.000	% total for Scan 2
Scan 3	100.000	% Length X	50.000	% volume of length / 100 =	50.000	% total for Scan 3
Scan 4	100.000	% Length X	50.000	% volume of length / 100 =	50.000	% total for Scan 4
					, , , , , , , , , , , , , , , , , , , ,	•
<u>Other deg</u> The data to		(to be used for s w is for coverage t		ans) ined with the 45 deg scans.		
Scan 1	0.000	% Length X	0.000	% volume of length / 100 =	0.000	% total for Scan 1
Scan 2	0.000	% Length X	0.000	% volume of length / 100 =	0.000	% total for Scan 2
Scan 3	0.000	% Length X	0.000	% volume of length / 100 =	0.000	% total for Scan 3
Scan 4 _	0.000	% Length X	0.000	% volume of length / 100 =	0.000	% total for Scan 4

Percent complete coverage

Add totals for each scan required and divide by # of scans to determine;

50.000 % Total for complete exam

Site Field Supervisor: Date: 2-19-02

t



UT Pipe Weld Examination

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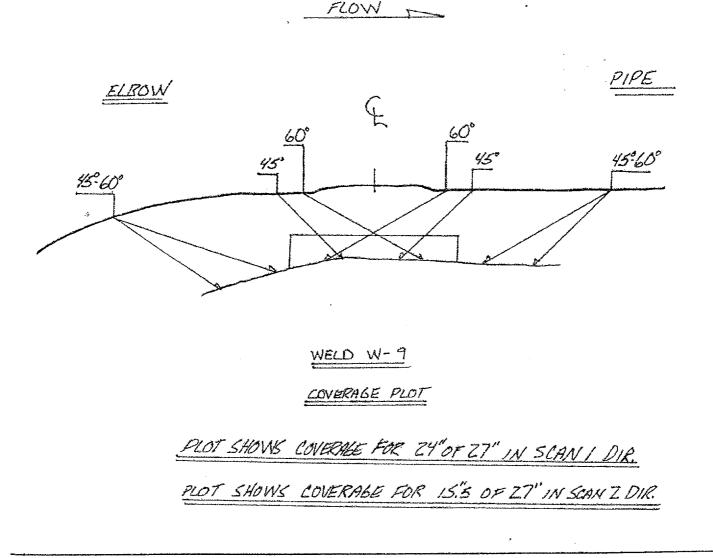
.

Summa Work Code: Drawing No.:			Code	Procedure: Procedure Revision/FC: Work Order No.: Code Cat.: B-J Description: Elbow to Pipe			ISI-UT-16 1 / 0106946 Location:		Outa Rep 22	212RF20 2002U0: of	33			
Component ID: Limitations:	W- 9 See atta	ched lin	nitation	sheet.					Size/Length:Sta	.95" / 27" art Time:	Thickne	ss/Diameter: Finish Time:		/ 8" .15
Examination Su Lo Location: _ Temp. Tool Mfg Cal. Sheet No.:	Ext		of Elbo	w			NSP 185	Veld	Topped Couplant: Surface Temp.:			Batch No.:	#00	143
Angle Used Scanning dB Indication(s): Comments: Reference PT	0 N/A Yes []	No		60 70.0				stream 🗹	Downstream 🗹	CW 🗹	CCW 🔽			
Percent Of Cove Examiner Le Timm, Jeremy T	evel II	-	ND [] 90%:		GEO No	F	2/12/2002 Date	Reviewer Clay, Sean Site Review	/	1 200	Signatur Signatur	Le III	- 5	Date 2-/7-0;2 Date
the second se	evel N/A	\ \ 		ę	Signature		1	Wren, Jerr ANII Review Clow, Ron		+ Fen		<u> </u>	119/02	-0 Z

AINSO	\$	Supplemental Report											
	×					Report No .:	20	02U0	33				
						Page:	2	_ of	5				
Summary No.:	501804												
Examiner:	Timm, Jeremy T.	Level:		Reviewer:	Clay, Sean P.		Date:	2-17	-02				
Examiner:	Griebel, David M.	Level:		Site Review:	Wren, Jerry P.		Date:	2-18	501				
Other:	<u>N/A</u>	Level:	N/A	ANII Review:	Clow, Ron		Date:	2/1	9/02				

Comments: None

Sketch or Photo: G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL UT\2002u033_2.bmp



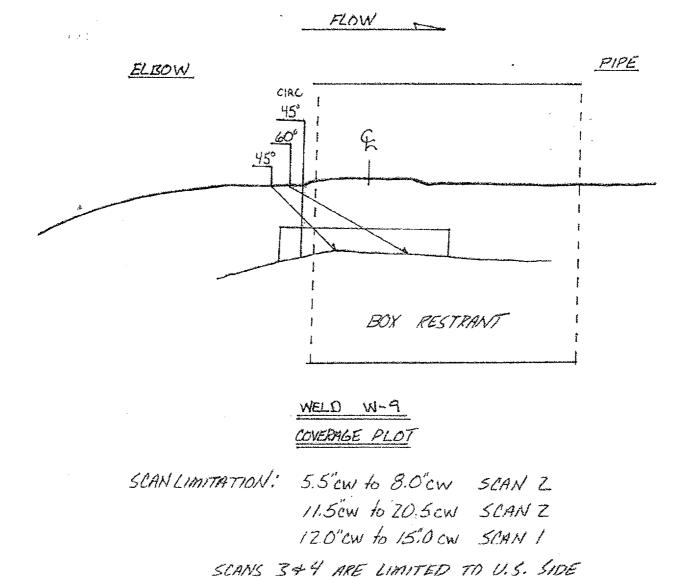


Supplemental Report

- AL					Report No .:	2002U033		
					Page:	3	of	5
Summary No.:	501804							
Examiner:	Timm, Jeremy T.	Level: II	Reviewer:	Clay, Sean P.		Date: o	2-17-	02
Examiner:	Griebel, David M.	Level: II	Site Review:	Wren, Jerry P.		Date:	218	50
Other:	<u>N/A</u>	Level: N/A	ANII Review:	Clow, Ron		Date:	2/14/	02

Comments: None

Sketch or Photo: G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL UT\2002u033_3.bmp



NE WIFIN THE RLM

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Limitation Record

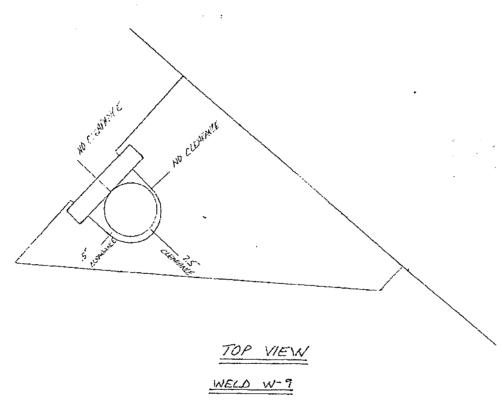
Site/Unit:	NMC	1	PI2	Procedure:	ISI-UT-16A		Outage No.:	PI2RF20		002	
Summary No.:		501804		Procedure Revision/FC:	1	1 /		Report No.:	20	02U)33
Workscope:		151		Work Order No.:	0106946					of	

Description of Limitation:

Reference PT report #2002P038 for pictures.

Sketch of Limitation:

G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL UT\2002u033_1.bmp



Limitations removal requirements:

N/A

Radiation field: N/A

Examiner	Level	11	Signature	Date	Reviewer	ç	Signature	Date
Timm, Jere	emy T.		OA Bally FOIT I	MA 2/12/2002	Clay, Sean P.	1	Aluple	1.11 2-17-02
Examiner	Level	!!	Signature		Site Review		Signature	Date
Griebel, Da	avid M.	1	Diant	2/12/2002	Wren, Jerry P.	16	In the	2-18-01
Other	Level	N/A	Signature (Date	ANII Review		Signature	Date
N/A		1	r		Clow, Ron	16	<u>e</u> ee	2/19/02



Determination of Percent Coverage for UT Examinations - Pipe

Site/Unit:	NMC /	P12	Proced	ure: ISI-UT-16A	Outage N	lo.: PI2RF200
nmary No.:	50180	4 Proce	edure Revision/	/FC: <u>1 /</u>	Report N	No.: 2002U033
Vorkscope: _	ISI		Work Order 1	No.: 0106946	Pa	ge: <u>5</u> of
<u>45 deg</u> Scan 1	89.000	% Length X	26.300	% volume of length / 100 =	23.407	% total for Scan
Scan 2	57.500	% Length X	26.300	% volume of length / 100 =	15.123	 % total for Scan
Scan 3	100.000	% Length X	25.000		25.000	% total for Scan
Scan 4	100.000	% Length X	25.000	% volume of length / 100 =	25.000	% total for Scan
					_	
	Add totals and	l divide by # scan	s =22.132	_ % total for 45 deg		
	Add totals and	l divide by # scan	s = <u>22.132</u>	_ % total for 45 deg	2 1 - 2 1	
<u>Other deg</u>		divide by # scan		<u> </u>	*	
<u>Other deg</u>	- 60	(to be used for s	supplemental so	<u> </u>	*	
<u>Other deg</u>	- 60	(to be used for s	supplemental so nat was not obt	cans)	89.000	
<u>Other deg</u> The data to	- <u>60</u> be listed below	(to be used for s w is for coverage th	supplemental so nat was not obt 100.000	cans) ained with the 45 deg scans.		
<u>Other deg</u> The data to Scan 1	- 60 be listed belov 89.000	(to be used for s w is for coverage the second seco	supplemental so nat was not obt 100.000 100.000	cans) ained with the 45 deg scans. % volume of length / 100 =	57.500	% total for Scar
Other deg The data to Scan 1 Scan 2	- 60 be listed below 89.000 57.500	(to be used for s w is for coverage the second seco	supplemental so hat was not obt 100.000 100.000 0.000	cans) ained with the 45 deg scans. % volume of length / 100 = % volume of length / 100 =	57.500 0.000	% total for Scar % total for Scar % total for Scar % total for Scan
Other deg The data to Scan 1 Scan 2 Scan 3	- 60 be listed below 89.000 57.500 0.000	(to be used for s w is for coverage th % Length X % Length X % Length X	supplemental so hat was not obt 100.000 100.000 0.000	cans) ained with the 45 deg scans. % volume of length / 100 = % volume of length / 100 = % volume of length / 100 =	57.500 0.000	% total for Scar % total for Scar
Other deg The data to Scan 1 Scan 2 Scan 3	- 60 be listed below 89.000 57.500 0.000	(to be used for s w is for coverage th % Length X % Length X % Length X	supplemental so hat was not obt 100.000 100.000 0.000	cans) ained with the 45 deg scans. % volume of length / 100 = % volume of length / 100 = % volume of length / 100 =	57.500 0.000	% total for Scar % total for Scar
Other deg The data to Scan 1 Scan 2 Scan 3 Scan 4	- 60 be listed below 89.000 57.500 0.000	(to be used for s w is for coverage the % Length X % Length X % Length X % Length X	supplemental so hat was not obt 100.000 100.000 0.000	cans) ained with the 45 deg scans. % volume of length / 100 = % volume of length / 100 = % volume of length / 100 =	57.500 0.000	% total for Scar % total for Scar

58.757 % Total for complete exam

Au P.Un 20.111 Date: 2-18-02 Site Field Supervisor:



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Magnetic Particle Examination

Site	e/Unit:	NMC /	Pl2		Proced	lure:	ISI-MT-1	1			RF2002	<u>!</u>
Summai	ry No.:	5	00978	ł	Procedure Rev	/FC:	2 /	884 	Report No.:	20	02M025	
Works	scope:		ISI		Work Order	No.:	0106946	5	Page:		of	6
					Cat.: <u>C-</u> (ent		
Drawing No.	.:	2-IS	I- 47A		Description	: Rupture R	estaint					
System ID:	MS											
Component	ID: H-1								Size/Length:		N/A	
Limitations:	See a											
Light Mete	er Mfg.:		N/A		Serial	No.:	N/A		Illumination:	N/A	uw	//cm²
	ol Mfg.:					No.:			Surface Temp.:			
			Not Us									
Cal Block	Serial No.:		······································						As Welde			
Lo Locatio	on:	•	Top Dead (Center		Field Orie	ntation:		Longitudi	nal		
Magnetic	Particle M	laterial										
Brand:	i	Magnaflu	E X		Wet 🗌	Mixed:	Yes 🗌		Applied By:	D	usting [
Type:		No. 1 Gra	y		Dry 🗹		No 🗹		•	Sp	raying [
Batch No .:		84A04	47	Fa	uorescent 🗌	With:		N/A		Flo	ooding [
Equipment	t: <u></u>		F	Parker Re	search				7	817		
Head Shot	t 🗌		N/A	Ampere	S	Fixed Sp	acing			AC 🔽] '
Adj. Spacir	ng 🗹		2 - 6	inches		Encirclin	g Coils	<u> </u>	N/A Tu	mš		
Prods. Spa	acing 🗌		<u>N/A</u>	inches		Current (machine s	etting)	□ <u>N/A</u>		Ampere	s
Indication	Loc	Loc	Diameter	Length	Турө			R	emarks			
No.	L	w			R/L							
		<u> </u>	+					. <u></u>				
										·····		[
	l								*			
	-											
Comments	:	.	- L						*********			
Reference	exam Rep	ort No:	98-0273, 98	3-0274.	- 0-1 - 1 Z							
Results:	NAD		IND		9943-02 10 -		·. · ·					
Percent Of	Coverage	Obtained	> 90%:			Reviewed	Previous	Data:	Yes			
Examiner	Level		Signa	ature		Reviewer			Signature			ate
Loredo, Qu		14				Halling, Da		15	29 Kg V	ly Z	:-21-0	
Examiner Potter, Micł	Level nael E.	1/	M. Signa	the		Site Review Wren, Jerry		\sim	En P.W.	- ^V -	21-8 2	ate
Other	Level	N/A	Signa	ture		ANII Review	*****		Signature		Da	ate
N/A		1				Clow, Ron		1.1	2. CX =	21	21/02	Ī

Limitation Record

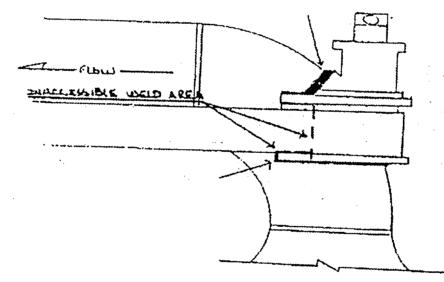
Site/Unit:	NMC	1	P12	Procedure:		SI-MT	-1	Outage No.:	Pl	2RF2	002
Summary No.:		500	978	Procedure Revision/FC:	12	/		Report No.:	20	02M	025
Workscope:		IS	4	Work Order No.:		010694	16	Page:	2	of	6

Description of Limitation:

East Side. See supplemental sheets for additional photos.

Sketch of Limitation:

G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL MT\2002m021_1.bmp



Limitations removal requirements: N/A

Radiation field: N/A

Examiner Loredo, Qui	Level	13	Signature		Reviewer Halling, David A.	Signature	Date
Examiner Potter, Mich	Level	11	M. Signature H	- Date	Site Review Wren, Jerry P.	Signature	Date
Other	Level	N/A	Signature		ANII Review	· Signature	Date
N/A		1	1		Clow, Ron	I all .	2/21/02



						Report No.:	2002M025				
						Page:	3	_ of	6		
Summary No.:	500978										
Examiner:	Loredo, Quirino	Level:		Reviewer:	Halling, David A.		Date:	2-2	1.02		
Examiner:	Potter, Michael E.	Level:	11	Site Review:	Wren, Jerry P.		Date:	2-2	1-02		
Other:	<u>N/A</u>	Level:	<u>N/A</u>	ANII Review:	Clow, Ron		Date:	2/21	102		

Comments: Top View (Looking Down).

入調局

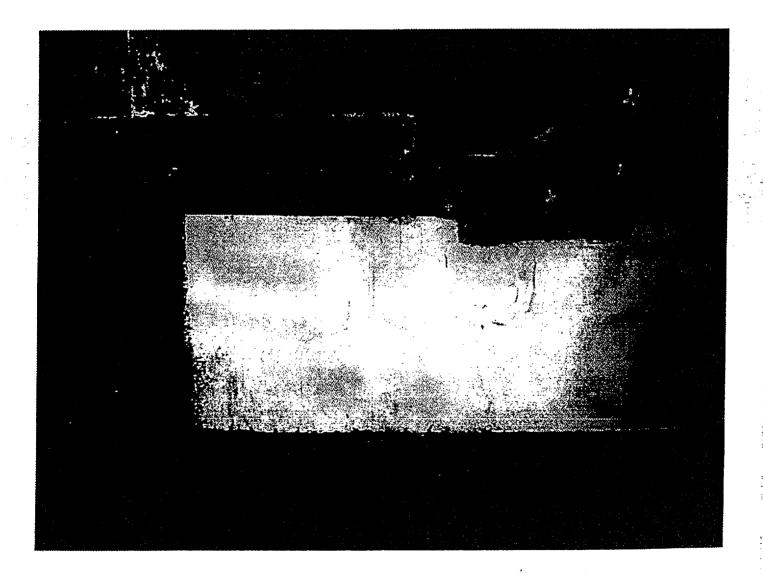
Sketch or Photo: G:\IDDEAL50\PI2RF02002\SUPPLEMENTAL MT\2002m024_2.bmp



	•	Supplemental Report									
FINTS .					Report No.:	2	002M0				
					Page:	4	_ of	6			
Summary No.:	500978										
Examiner:	Loredo, Quirino	Level:I	Reviewer:	Halling, David A.		Date:	Z- [21-0	2		
Examiner:	Potter, Michael E.	Level:I	Site Review:	Wren, Jerry P.		Date:	2-7	1-0	ζ		
Other:	<u>N/A</u>	Level: N/A	ANII Review:	Clow, Ron		Date:	2/2	1/02			

Comments: Side View.

Sketch or Photo: G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL MT\2002m024_3.bmp

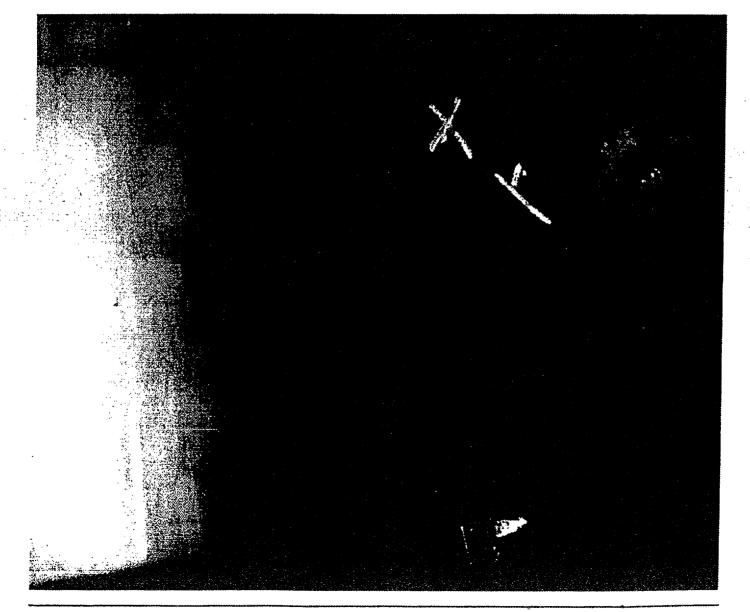


Supplemental Report

						Report No.:	2002M025			
						Page:	5	of <u>6</u>		
Summary No.:	500978									
Examiner:	Loredo, Quirino	Level:		Reviewer:	Halling, David A.		Date:	2-21-	<u>02</u>	
Examiner:	Potter, Michael E.	Level:		Site Review:	Wren, Jerry P.		Date:	2-21-	و ک	
Other:	<u>N/A</u>	Level:	<u>N/A</u>	ANII Review:	Clow, Ron		Date:	2/21/0	2_	

Comments: Inaccessible Weld.

Sketch or Photo: G:\IDDEAL50\Pi2RF02002\SUPPLEMENTAL MT\2002m024_4.bmp





Determination of Percent Coverage for Surface Examinations

Site/Unit:	NMC	1	PI2	Procedure:		ISI-MT	-1	Outage No .:	Pl2	RF2	002
Summary No.:		5009	78	Procedure Revision/FC:	12	1		Report No.:	20	02M0	025
Workscope:		ISI		Work Order No.:		010694	46	Page:	6	of	6

Area Required (as shown in applicable code reference drawing)

12-21-02 2.0/3.0 al Length Width ~ 0:000 = Total Area required ~0:000- square inches 813 3-21-02

Coverage Achieved

		Area examined	 604.000	sq. in. / Total area required (100%)
	=	Percent coverage	0.696	% (area required - area of limitations = area examined)
			74.3%	8m - 21-02
•		- - -		0-2-21-0 4

To determine length of a circumferential weld

Note - Diameter refers to actual external diameter not pipe size (see table below)

Diameter 0.000 * (Pi) 3.1416

= Length ______ inches

Pipe Size	Actual Diameter	(Length) Circumference	Pipe Size	Actual Diameter	(Length) Circumference
2	2.375	7.46	12	12.75	40.06
2.5	2.875	9.03	14	14.0	43.98
3	3.5	11.0	16	16.0	50.27
3.5	4.0	12.57	18	18.0	56.55
4	4.5	14.14	20	20.0	62.83
5	5.563	17.48	22	22.0	69.12
6	6.625	20.81	24	24.0	75.40
8	8.625	27.10	30	30.0	94.25
10	10.75	33.77			

Site Field Supervisor:

-c·

Fill Date: 2-21-02



Magnetic Particle Examination

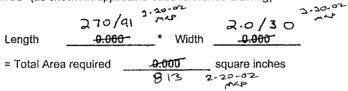
Site	/Unit:	NMC /	Pl2		Procedu	ure:	ISI-MT-1		Outage No.:	PI2RF	2002
Summary	/ No.:	50	0985	Pr	ocedure Rev/	FC:1	2 /		Report No .:	20021	1024
					Work Order N				Page:	<u>1</u> of	6 <u>6</u>
Code:					at.: C- C					ent	
Drawing No.:					Description:						
	MS										
Component I	D: H-2			<u></u>					Size/Length:	N/A	<u></u>
Limitations:	See a	ttached s									
Light Mete	r Mfa.:		N/A		Serial N	lo.:	N/A	11	umination:	N/A	uw/cm²
Temp. Too						 اماند			urface Temp.:	< 60	<u>0</u> °F
Resolution											
Cal Block S							ondition:	-			
Lo Location	n:	<u> </u>	op Dead (Center		Field Orie	entation:		Longitudir	nal	
Magnetic I						1.1	•				
Brand:					Wet 🗌	Mixed:			Applied By:	Dus	ting 🗹
Туре:		No. 1 Gra	y	 	Dry 🗹	. =	No 🗹	•	· · · ·	Spray	/ing 🗌
Batch No .:		84A04	.7	Flu	orescent	With:		N/A		Flood	ling 🗌
Equipment	·		F	Parker Res	earch		S	Serial No.:	7	817	
Head Shot		I	N/A	Amperes	-	Fixed S	pacing		· /		ж 🗌
Adj. Spacir	ng 🗹	2	2 - 6	inches		Encirclir	ng Coils	□	N/A Tu	rns	
Prods. Spa	icing 📋]	N/A	inches		Current	(machine s	etting)	N/A	Ar	nperes
Indication	Loc	Loc	Diameter	Length	Туре			Rei	marks		
No.	L	w			R/L						·
	•										
Comments:											
Reference	exam Re	port No:	98-0273 ar	nd 98-0274							
Results:	NA		IND 🗌		-	<u></u>					<u></u>
Percent Of	Coverage	Obtained	> 90%:	<u>N</u>)	Reviewe	d Previous	Data:	Yes		
Examiner	Level	11	Sign	ature	Date				Signature	<u>`````````````````````````````````````</u>	Date
Loredo, Qu		14	14		⇒ 2/9/2002	·		14	A. Hall	Ly 2.2	
Examiner	Level	11	M: Silin	stute //	Date 2/9/2002	1		\square	Signature	・LV/田 - フィフ	こ Date
Potter, Micl Other	Level	<u>' /'</u> N/A	Signa	ature		ANII Revie			Signature	<u> </u>	Date
NA	20101			-		Clow, Ron			<u>KK</u>	2/21	102



Determination of Percent Coverage for Surface Examinations

Site/Unit:	NMC	/	PI2	Procedure:	IS	I-MT-1	 Outage No.:	PI	2RF2	002
Summary No.:		5009	85	Procedure Revision/FC:	12	1	 Report No.:	2(002MC)24
Workscope:		ISI		Work Order No.:	01	06946	 Page:	2	of	6

Area Required (as shown in applicable code reference drawing)



Coverage Achieved

			813 2-20102
Area examined	604.000	sq. in. / Total area required (100%)	9.000 sq. in.
= Percent coverage	0.835	% (area required - area of limitations =	area examined)
	74.3%	2-20-02 MRP	

To determine length of a circumferential weld

Note - Diameter refers to actual external diameter not pipe size (see table below)

* (Pi) <u>3.1416</u> Diameter 0.000

0.000 inches = Length

Pipe Size	Actual Diameter	(Length) Circumference		Pipe Size	Actual Diameter	(Length) Circumference
2	2.375	7.46		12	12.75	40.06
2.5	2.875	9.03		14	14.0	43.98
3	3.5	11.0		16	16.0	50.27
3.5	4.0	12.57	Γ	18	18.0	56.55
4	4.5	14.14		20	20.0	62.83
5	5.563	17.48		22	22.0	69.12
6	6.625	20.81		24	24.0	75.40
8	8.625	27.10		30	30.0	94.25
10	10.75	33.77				

Site Field Supervisor:

Jen P. Um Date: 2-21-02

NINC)

Limitation Record

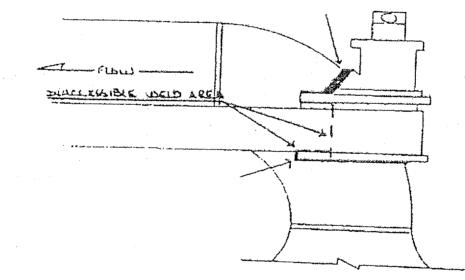
Site/Unit:	NMC	7	P12	Procedure:	ISI-MT-1		Outage No.:	PI2RF2002		02	
Summary No.:		5009	85	Procedure Revision/FC:	12	1		Report No.:	20	02M0	24
Workscope:		IS	l	Work Order No .:		010694		Page:		of	6
			والمراجع المتحد والمراجع المحمد والمحمد والمحمد والمحمد والمحمد والمحمد والمحمد والمحمد والمحمد والمحمد والمحم				AND TOTAL OF A DESCRIPTION OF A DESCRIPR				

Description of Limitation:

East Side. See supplemental sheets for additional photos.

Sketch of Limitation:

G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL MT\2002m021_1.bmp



Limitations removal requirements: N/A

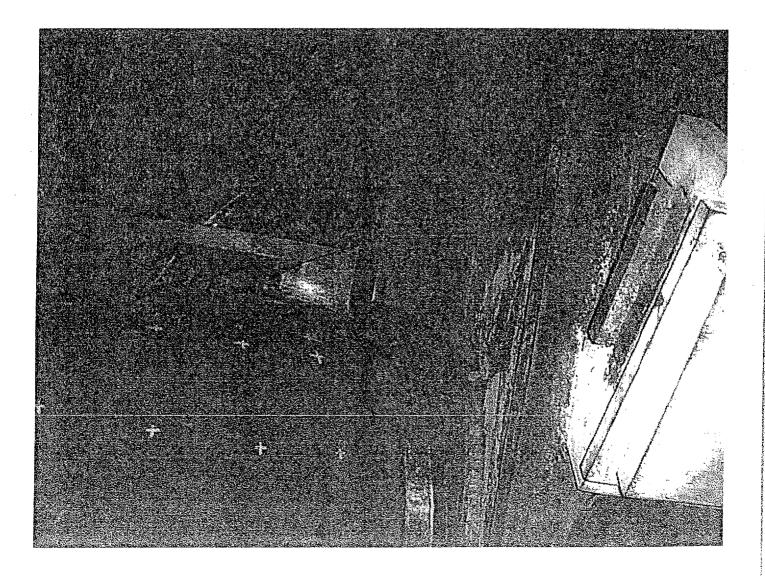
Radiation field: N/A

Examiner Level II	Signature D	e Reviewer	Signature Date
Loredo, Quirino		2 Halling, David A.	1 WA landly 2-21-02
Examiner Level II	Assignature DI D	e Site Review	Signature Date
Potter, Michael E.	1 hihrer 2.19/20	2 Wren, Jerry P.	KAcy P.Um 2-21-02
Other Level N/A		e ANII Review	Signature Date
N/A	1	Clow, Ron	100 2/21/02

Supplemental Report NIA Report No.: 2002M024 4 Page: of 6 Summary No.: 500985 Date: 2-21-02 Examiner: Loredo, Quirino Level: II Reviewer: Halling, David A. Date: 2-21-02 Examiner: Potter, Michael E. Level: II Site Review: Wren, Jerry P. Date: -2/2//02 Other: N/A Level: N/A ANII Review: Clow, Ron

Comments: Top View (Looking Down).

Sketch or Photo: G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL MT\2002m024_2.bmp



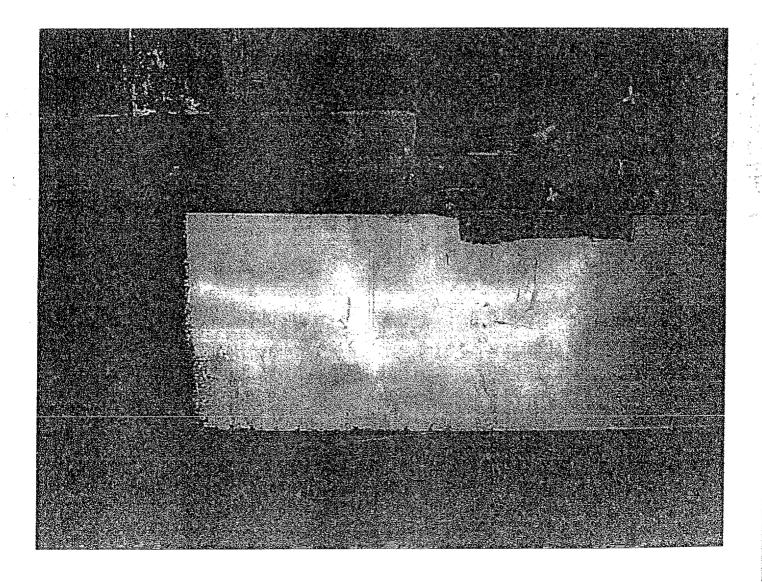
Supplemental Report

**************************************						2002M024			
						Page:	5 (of <u>6</u>	
Summary No.:	500985								
Examiner:	Loredo, Quirino	Level:		Reviewer:	Halling, David A.	······	Date: 2	-21-02	
Examiner:	Potter, Michael E.	Level:	<u> </u>	Site Review:	Wren, Jerry P.		Date: 2	-21-02	
Other:	<u>N/A</u>	Level:	N/A	ANII Review:	Clow, Ron		Date: 2	121/02	

Comments: Side View.

NING

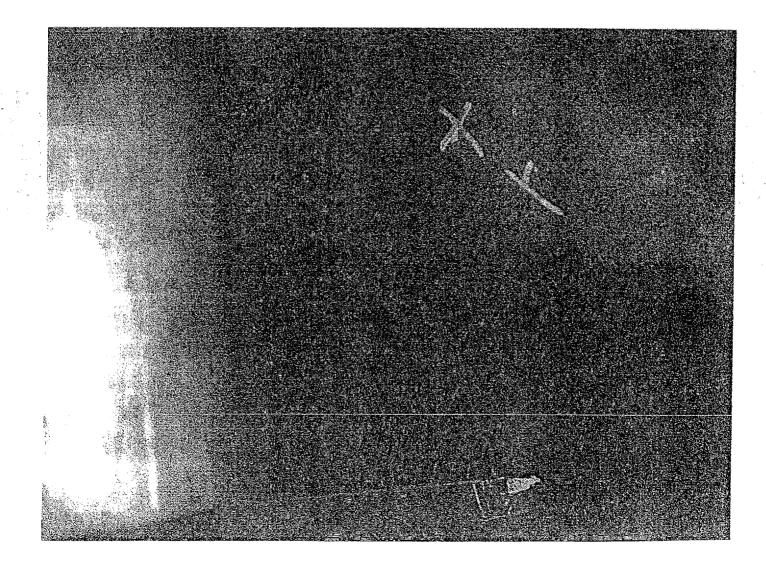
Sketch or Photo: G:\/DDEAL50\PI2RF02002\SUPPLEMENTAL MT\2002m024_3.bmp



NRC			Supplemental Report										
						Report No.:	21	002M0:	24				
						Page:	6	of	6				
Summary No.:	500985							_					
Examiner:	Loredo, Quirino	Level:	<u> </u>	Reviewer:	Halling, David A.		Date:	2-21	-02				
Examiner:	Potter, Michael E.	Level:	11	Site Review:	Wren, Jerry P.	·····	Date:	2-2	1-02				
Other:	<u>N/A</u>	Level:	N/A	ANII Review:	Clow, Ron		Date:	212	1/02				

Comments: Inaccessible Weld.

Sketch or Photo: G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL MT\2002m024_4.bmp





A second second

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Magnetic Particle Examination

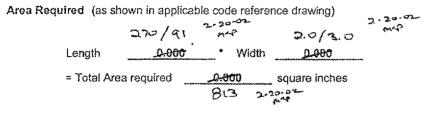
Si	te/Unit:	NMC	/ Pl2	2	Proce	dure:	ISI-A	AT-1	Outa	ige No.:	PI2RF	2002
Summa	iry No.:		500988	F	Procedure Rev	v/FC:	12	/	Rep	ort No.:	20021	8021
Work	scope:		ISI		Work Order	No.:	0106	946		Page:	<u>1</u> o	f _ 6
					Cat.: C-					ontainme		
Drawing No).;	2-19	I- 47A		Description	n: Seismia	: Restrain	ŧ				
System ID:	MS											
Component	ID: <u>H-3</u>								Size/Le	ength:	N/A	
Limitations:	See :	attached	sheets.									
Light Met	er Míg.:					No.:		*****			N/A	
Temp. To	ol Mfg.:				Serial					Femp.:	< 60() °F
Resolution	n:		N/A									
								·				
Lo Locatio	on:		Top Dead	Center		Field C	rientation		Lo	ngitudin	al	
-	Particle M											
Brand:					Wet 🗌	Mixed	: Yes		Appl	ied By:	Dust	ing 🗹
			y		Dry 🗹		No					ing 🗌
Batch No.:	;	84A0	47	Flu	iorescent 🗌	With:		N/A			Flood	ng 🗌
Equipmen	t:				search			Serial No	.:	78	17	****
Head Shot	t []		N/A		,	Fixed	Spacing			A	C 🗹 D	C 🗌
Adj. Spaci	ng 🗹	·		inches		Encirc	ling Coils	\Box _	N/A		าร	
Prods. Spa	acing	***********	N/A	inches		Currer	t (machin	e setting)	□	N/A	Am	peres
Indication	Loc	Loc	Diameter	Length	Туре			ł	Remarks			
Ňo.	٤	W			R/L							
									<u> </u>	<u></u>		

	<u> </u>		<u> </u>			-			-			
Comments:	;				***************		****	*******				
Reference				d 98-0274								
Results:	NAD				-							
Percent Of	Coverage	Obtained	> 90%:	No	} 	Review	ed Previor	us Data:	Ye	S		and the state of the
Examiner	Level 1	}	Signa	lure	Date	Reviewer			- Sigr	nature		Date
Thomas, Tr			drawhon	hungan		Halling, D		/ (4	JA.K	Uli	fannannanna	1-02
Examiner Potter, Mich	Level j nael E.	l /	Sigha	"	Date 2/16/2002	Site Revie Wren, Jer		\sim	E Sigr		24.11	3
Other	Level N		Signa	ture		ANII Revie			<u>Sier</u>	ature	2-21-	Date
N/A		1				Clow, Ros	3	16		-	Starlo	2



Determination of Percent Coverage for Surface Examinations

Site/Unit:	NMC	/ PI2		Procedure:	ISI-MT-1		Outage No.:		2RF2(002	
Summary No.:		50098	8	Procedure Revision/FC:	12	1	***	Report No .:	20	02MC	121
Workscope:				Work Order No.:		106946		Page:	2	of	6



Coverage Achieved

je Achieved			
			813 2.22
Area examined	604.000	sq. in. / Total area required (100%)	sq. in.
= Percent coverage	0.860	% (area required - area of limitations	= area examined)
· · · · ·	74,3%	2-20-02	

To determine length of a circumferential weld

Note - Diameter refers to actual external diameter not pipe size (see table below)

Diameter 0.000 * (Pi) 3.1416

= Length ______ inches

Pipe Size	Actual Diameter	(Length) Circumference	Pipe Size	Actual Diameter	(Length) Circumference
2	2.375	7.46	12	12.75	40.06
2.5	2.875	9.03	14	14.0	43.98
3	3.5	11.0	16	16.0	50.27
3.5	4.0	12.57	18	18.0	56.55
4	4.5	14.14	20	20.0	62.83
5	5.563	17.48	22	22.0	69.12
6	6.625	20.81	24	24.0	75.40
8	8.625	27.10	30	30.0	94.25
10	10.75	33.77			

Site Field Supervisor:

Amp. Wh

Date: 2-21-02



Limitation Record

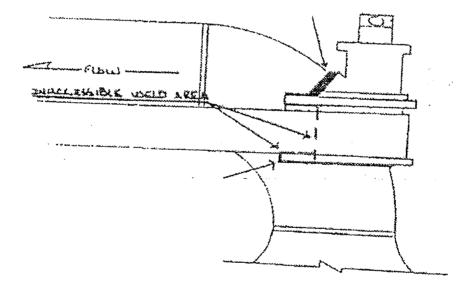
Site/Unit:	NMC	/ Pl2		Procedure:	ISI-MT-1		•	Outage No.:	PI2RF2		
Summary No.:		5009	88	Procedure Revision/FC:		/		Report No.:		02M()21
Workscope:		IS	}	Work Order No.:		010694	46	Page:	3	of	6

Description of Limitation:

East Side. See supplemental sheets for additional photos.

Sketch of Limitation:

G:\IDDEAL50\P:2RFO2002\SUPPLEMENTAL MT\2002m021_1.bmp



Limitations removal requirements: N/A

		·····	,				
Examiner	Level	31	Signature	Date	Reviewer	Signature	Date
Thomas, Tr	ravis	!	As Open-	2/16/2002	Halling, David A.	1) & hellin	2.20.02
Examiner	Level	8	A Signature,	Date	Site Review	Signature	Date
Potter, Mich	hael E.	1	Minhal S. Hother	2/16/2002	Wren, Jerry P.	May Puh	- 2-21-02
Other	Level	NIA	Signature	Date	ANII Review	, Signature	Date
N/A		/			Clow, Ron	1 Rel.	2/21/02

NINC	>	Supplemental Report										
- and the second					Report No .:	20	02340	21				
						Page:	4	of	6			
Summary No.:	500988											
Examiner:	Thomas, Travis	Level:		Reviewer:	Halling, David A.		Date:	2-2	0.02			
Examiner:	Potter, Michael E.	Level:		Site Review:	Wren, Jerry P.		Date:	2-2	1-02			
Other:	<u>N/A</u>	Level:	NIA	ANII Review:	Clow, Ron		Date:	2/21	loz			

Comments: Top View (Looking Down).

Sketch or Photo: G:\IDDEAL50\Pi2RF02002\SUPPLEMENTAL MT\2002m024_2.bmp



Supplemental Report

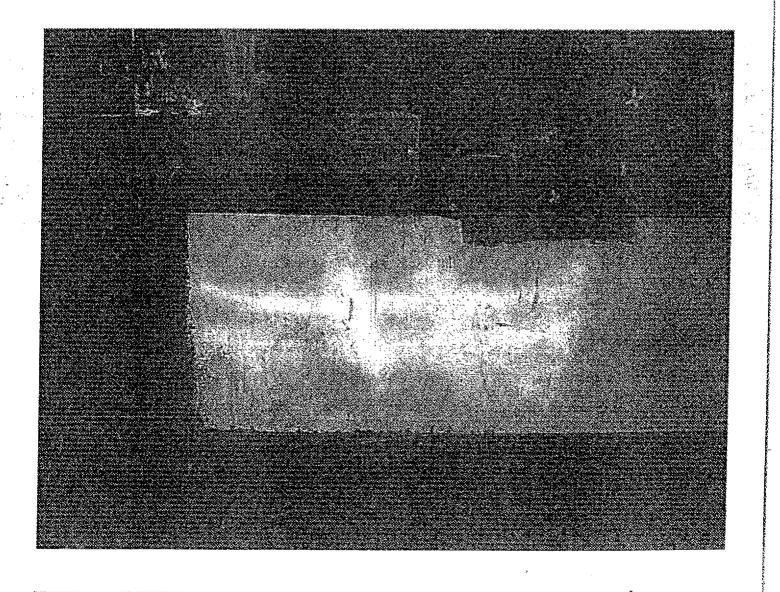
a care and	¥					Report No.:	20	02M02	1
						Page:	5	of	6
Summary No.:	500988								
Examiner:	Thomas, Travis	Level:	11	Reviewer:	Halling, David A.		Date:	2.20	2-0-2
Examiner:	Potter, Michael E.	Level:	11	Site Review:	Wren, Jerry P.	<u> </u>	Date:	2-2	1-02
Other:	<u>N/A</u>	Level:	N/A	ANII Review:	Clow, Ron		Date:	2/21	102

Comments: Side View.

NIMC:

ŝ.

Sketch or Photo: G:\IDDEAL50\P!2RF02002\SUPPLEMENTAL MT\2002m024_3.bmp



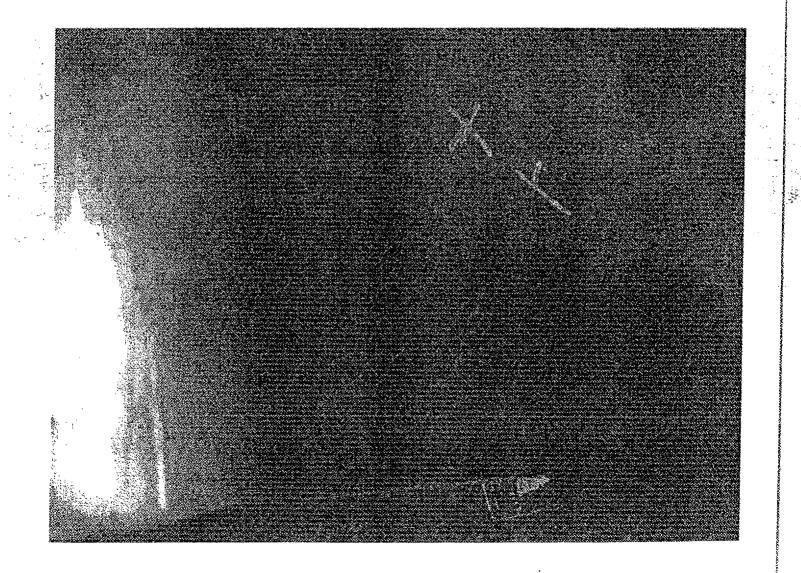
Supplemental Report

2 70 2 70 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	9°				F	Report No.:	200	2M021
						Page:	6	of <u>6</u>
Summary No.:	500938							
Examiner:	Thomas, Travis	Level:		Reviewer:	Halling, David A.		Date: 2	2-20.02
Examiner:	Potter, Michael E.	Level:		Site Review:	Wren, Jerry P.		Date: _	21-02
Other:	<u>N/A</u>	Level:	N/A	ANII Review:	Clow, Ron		Date: 2	2/21/02

Comments: Inaccessible Weld.

NINC?

Sketch or Photo: G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL MT\2002m024_4.bmp



MIRC D		U	IT Pipe Weld Exa	mination		
Site/Unit: Summary No.: Workscope:	**************************************		Procedure: Procedure Revision/FC: Work Order No.:	1 /	nangalarian ang baranga katalarian katalarian katalarian katalarian katalarian katalarian katalarian katalarian	2RF2002 002U036 of 3
Code: Drawing No.: System ID: <u>SI</u>	1989 2-ISI- 72	Code Cat.:	C-F-1 Description: Pipe to Val	Location:	Containment	
Component ID: W-17 Limitations: Single s	ide access due to con	figuration. See attac	hed sheets.	Size/Length:Start Tin	0935 -	.740" / 8.0" 1000
Examination Surface:		utside 🖌 Wo Location:	Surface Condition: Flat Centerline of Weld			#00143
Temp. Tool Mfg.: Cal. Sheet No.:	Telatemp	Serial No.: 2002CA071, 2002	NSP 185 2CA072	Surface Temp.:	_ 80 °F	
Angle Used 0 Scanning dB N/A Indication(s): Yes C Comments: See Limitation Sheet.	41.8 41.8 66.8	Sca	n Coverage: Upstream 🗹	Downstream 🗌	cw 🗹 ccw 🗹	
Results: NAD <u>▼</u> Percent Of Coverage OI	IND	GEO	Reviewed Previous Data:	<u>-No- YES</u> 2	2-18-62 Jon	
ExaminerLevel IITimm, Jeremy T.ExaminerLevel IIGriebel, David M.OtherLevel N/N/A	1 / m	Signature Signature	Date Reviewer 2/14/2002 Clay, Sea Date Site Revie 2/14/2002 Wren, Jen Date ANII Revie Clow, Ro	r ry P. / < ew	Signature	Date 2-18-02 Date 2-18-02 Date 2/19/02

.....

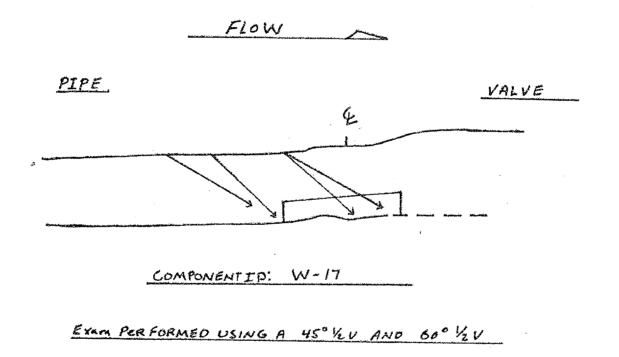
				Limitation Red	cord						
Site/Unit:	NMC	/	PI2	Procedure:	15	il-UT-1	6A	Outage No.:	PI2F	F2002	2
Summary No.:	······································	5002	51	Procedure Revision/FC:	1	1		Report No.:	200:	20036	
Workscope:		ISI	l	Work Order No.:	(010694	6	Page:	2	of	3

Description of Limitation:

Single sided exam - Although the exam was performed through 100% of the code required volume. Procedure ISI-UT-16A is not qualified for the detection of flaws on the far side of single side access exams. The techniques provided by this procedure were used for a best effort exam for flaws on the far side of the weld.

Sketch of Limitation:

G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL UT\2002u036_1.bmp



Limitations removal requirements: N/A

Examiner	Level	11	Signature	Date	Reviewer	Şignature	Date
Timm, Jer	emy T.	1	(marting	2/14/2002	Clay, Sean P.	ITTU Stritte 1	02-18-07
Examiner	Level	[]	Signature	Date	Site Review	Signature	Date
Griebel, D	avid M.	1	Wrat-1	2/14/2002	Wren, Jerry P.	Nry P.W.	2-19-02
Other	Level	N/A	Signature	Date	ANII Review	Signature	Date
N/A		1			Clow, Ron	1 ACC	2/19/02



Determination of Percent Coverage for UT Examinations - Pipe

Site/Unit:	NMC /	PI2	Proced	ure: ISI-UT-16A	Outage	No.: PI2RF2002
Summary No.:	50025	51 Pr	rocedure Revision/	FC: <u>1 /</u>	Report	No.: 2002U036
Workscope:	ISI		Work Order I	No.: 0106946	Pa	age: <u>3</u> of <u>3</u>
	Carphan and an	Station Court for a decay control as a project of the second of the seco	<u></u>	n an		
<u>45 deg</u>						
Scan 1	100.000	% Length X	50.000	% volume of length / 100 =	50.000	% total for Scan 1
Scan 2	100.000	% Length X	50.000	% volume of length / 100 =	50.000	% total for Scan 2
Scan 3	100.000	% Length X	50.000	% volume of length / 100 =	50.000	% total for Scan 3
Scan 4	100.000	% Length X	50.000	% volume of length / 100 =	50.000	% total for Scan 4
Other dea	- 60	fto be used fr	or supplemental sc	2005)		
Other deg The data to			•••	ans) ained with the 45 deg scans.		
Scan 1	0.000	% Length >	0.000	_ % volume of length / 100 = _	0.000	% total for Scan 1
Scan 2	0.000	% Length >	(0.000	_ % volume of length / 100 = _	0.000	% total for Scan 2
Scan 3	0.000	% Length X	0.000	_ % volume of length / 100 = _	0.000	% total for Scan 3
Scan 4	0.000	% Length X	0.000	% volume of length / 100 = _	0.000	% total for Scan 4
					:	
:						

Percent complete coverage

Add totals for each scan required and divide by # of scans to determine;

50.000 % Total for complete exam

Site Field Supervisor: ______ Duty Date: 2-19-02

UT Pipe Weld Examination

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بوير محتفور الارار

Summ Wor	Site/Unit: hary No.: rkscope:		50238 ISI	******			Procedure Revi	sion/FC:	ISI-UT 1 / 0106				Outage No Report No Pag	.:2	002U03	37
Code: Drawing No.: System ID:	SI	1989	2-ISI-	70	Co	de Cat.:	C-F-1 Description:		Locatio	on:			Containme	ent		
Component ID: Limitations:		ide acce	ss due	to config	juration. S	iee attacl	ned sheets.	· · · · · · · · · · · · · · · · · · ·	Size/Length		0" / 21.0 ' Time:	ר <u>'</u> 0800	Thickness/Dia Finist	meter: Time:	.740" 08	······································
Examination S		Inside			de 🔽		Surface Conc	fition: Flat T	opped		·····				He repaired a labor	
Lo Location:	T	op Dead	Center		Wo Locati	on:	Centerline of I	Neld	Couplant:		Sonotrac	е 40	Batch	No.:	#00	143
Temp. Tool M	lfg.:	Tela	itemp				NSP 185							÷		
Cal. Sheet No	•.:				2002CA							······				
Angle Used Scanning dB Indication(s): Comments: See Limitatio Results: Percent Of Cov	NAD 🗹	41.8					n Coverage: Up		Downstream	n 🗹	CW 🗹		cw 🗹			
			3076:	•	No	٦ 	Reviewed Previou	is Data:	-No-)	<u>VES</u>	2-19-07	-				
Timm, Jeremy Examiner I Griebel, David	Level II	/ 	ЪĴ.	CC Sig	mature mature gnature	/	2/14/2002 Date 2/14/2002	Reviewer Clay, Sean Site Review Wren, Jerry ANII Review Clow, Ron	P.	 	Jes O	<u>si</u> Si	ignature L 1, I ignature MU ignature			Date

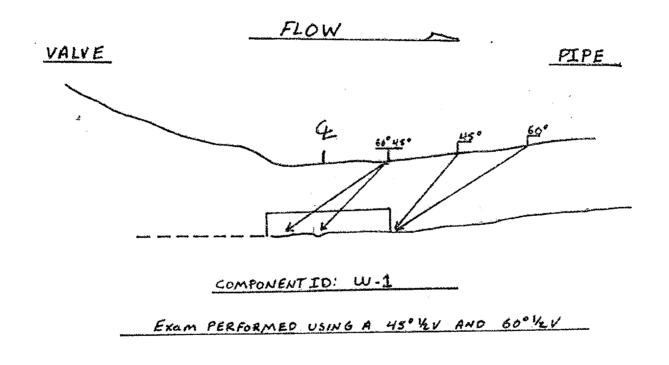
NING				Limitation Red	cord						
Site/Unit:	NMC	1	P12	Procedure:	15	SI-UT-1	6A	Outage No.:	PI	2RF20	02
Summary No.:		5023	88	Procedure Revision/FC:	1	1		Report No.:	20	00200	37
Workscope:		ISI		Work Order No.:	(010694	16	Page:	2	of	3

Description of Limitation:

Single sided exam - Although the exam was performed through 100% of the code required volume. Procedure ISI-UT-16A is not qualified for the detection of flaws on the far side of single side access exams. The techniques provided by this procedure were used for a best effort exam for flaws on the far side of the weld.

Sketch of Limitation:

G:\IDDEAL50\PI2RF02002\SUPPLEMENTAL UT\2002u037_1.bmp



Limitations removal requirements: N/A

Examiner Timm, Jerei	Level my T.	II /	Signature	Reviewer Clay, Sean P.	Signature Date
Examiner Griebel, Dav	Level vid M.	11	Signature	Site Review Wren, Jerry P.	Signature Date
Other N/A	Level	N/A /	Signature	ANII Review Clow, Ron	Signature Date



Determination of Percent Coverage for UT Examinations - Pipe

Site/Unit:	NMC /	Pl2	Proce	dure: ISI-UT-16A	Outage I	No.: PI2RF2002
Immary No.:	50238	8 Proc	edure Revisio	n/FC: <u>1 /</u>	Report I	No.: 2002U037
Workscope: _	ISI		Work Order	No.: 0106946	Pa	age: <u>3</u> of
<u>45 deg</u>						
Scan 1	100.000	% Length X	50.000	% volume of length / 100 =	50.000	% total for Scan 1
Scan 2	100.000	% Length X	50.000	% volume of length / 100 =	50.000	% total for Scan 2
Scan 3	100.000	% Length X	50.000	% volume of length / 100 =	50.000	% total for Scan 3
Scan 4	100.000	% Length X	50.000	_ % volume of length / 100 =	50.000	% total for Scan 4
ļ	Add totals and	divide by # scan	is = 50.000	% total for 45 deg		
ļ	Add totals and	divide by # sc an	s = <u>50.000</u>	% total for 45 deg		• •
/ <u>Other deg</u>		divide by # scan (to be used for s		T		• •
<u>Other deg</u>	60	(to be used for s	supplemental s	T		• • •
<u>Other deg</u>	60	(to be used for s	supplemental s hat was not ob	cans)	0.000	% total for Scan
<u>Other deg</u> The data to	- <u>60</u> be listed below	(to be used for s v is for coverage ti	supplemental s hat was not ob	ccans) tained with the 45 deg scans.		
Other deg The data to Scan 1	- <u>60</u> be listed below 0.000	(to be used for s v is for coverage ti % Length X	supplemental s hat was not ob 0.000 0.000	icans) tained with the 45 deg scans. % volume of length / 100 =		% total for Scan
Other deg The data to Scan 1 Scan 2	- <u>60</u> be listed below 0.000 0.000	(to be used for s v is for coverage ti % Length X % Length X	supplemental s hat was not ob 0.000 0.000 0.000	scans) tained with the 45 deg scans. % volume of length / 100 = % volume of length / 100 =	0.000	% total for Scan % total for Scan % total for Scan % total for Scan

Add totals for each scan required and divide by # of scans to determine;

50.000 % Total for complete exam

Jun P. Wm Date: 2-19-02 Site Field Supervisor:

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NIMC >>>
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فللمشرق فيتعصي يستريه

UT Pipe Weld Examination

a gy en e Standarde fa fan it wie e energen an en er en were e strene e allemate a omder dere eerste en mendelige eerste

Summ	Site/Unit: ary No.: rkscope:		/ 5021/ ISI				Procedure Ro	Procedure: evision/FC: Order No.:	ISI-UT-16 1 / 0106946			Chineye	2RF2002 002U001 of <u>3</u>
Code: Drawing No.: System ID:	RH	1989	2-151	- 51		Code Cat.:		F-1 : Pipe to Flan	Location: ge		Ē	3 RHR Pit	
Component ID: Limitations:			No scar	ns dow	nstream of	f weld - 18.			Size/Length:	12" art Time:	Thick 1200	ness/Diameter: _ _ Finish Time: _	.375" 1220
Examination \$	Surface:	Insid	e 🗌	Ou	itside 🔽		Surface Co	ondition: As N	/elded		······		
Lo Location:	<u> </u>	op Dead	Center		Wo Loo	ation:	<u>Centerline</u>	of Weld	Couplant:	Sonotra	ce 40	Batch No.:	#00143
Temp. Tool M	1íg.:	Tela	atemp		Seria	al No.:	NSP 1	62	Surface Temp.	: 80	٩Ŀ		
Cal. Sheet No	».:				20020	CA002, 200	2CA003						
Angle Used Scanning dB	0	45 47.0	45T	60	70 55.0								
Indication(s): Comments:	Yes [] No				Sca	n Coverage:	Upstream 🗹	Downstream [] cw 🖢	j ccwi		
Single sided of flaws on t far side of th	na lar alu	លេ ៤៖ ៦៣ខ្មែ	he aine	acces:	s exams. I	rformed thi he techniq	rough 100% o ues provided	f the code req by this proce	uired volume. P dure were used	rocedure IS for a BEST	I-UT-16A is EFFORT EX	not qualified for AMINATION for	[·] the detection flaws on the
Results:	NAD 🗹]			GEO 🗌								
Percent Of Co	verage O	btained >	· 90%:	, 	No		Reviewed Prev	/ious Data:	N/A		<u></u>		
Johnson, Jeff	Level II	1	J.h.	<u></u>	Signature Signature		1/30/200 Da	ite Reviewer 02 Clay, Sear ite Site Review 02 Wren, Jerr	N	1	Signa UNDU Šigna	= hu lil	02-05-02 Date
	Level N/	'A /	<u> </u>		Signature			te ANII Revie Clow, Ron	W	-' \ 1 (\$	Signa	JM	<u>Z-5-02</u> Date

NINC	
and the second se	

Limitation Record

Site/Unit:	NMC	1	Pi2	Procedure:	Procedure: ISI-UT-16A Outage No.:				PI2RF2002	
Summary No.:		5021	47	Procedure Revision/FC:	1	1	244	Report No.:	0200	201
Workscope:	<u> </u>	IS		Work Order No.:		01069	46	Page:	 of	3

Description of Limitation:

Axial examination performed from the pipe side only due to Pipe to Flange configuration.

Sketch of Limitation:

G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL UT\2002u001_1.bmp

45 Ę 45-60.70 45-60-70

i

WELD W- 18/LSU

Limitations removal requirements: None

Radiation field:

					L. R. W. H.		
Examiner	Level II	Signature	Date	Reviewer	,, v	Signature ,	Date
Johnson, J	effrey M. /	Implan	1/30/2002	Clay, Sean P.	1	Http://	2.05-02
Examiner	Level II	/ sigpature	Date	Site Review		Signature	Date
Griebel, Da	vid M. /	2010-1	1/30/2002	Wren, Jerry P.	\sim	Jast. Wh	2-5-02
Other	Level N/A	Signature	Date	ANII Review	U	Signature	Date
N/A	1			Clow, Ron	16	C.	218/02



Determination of Percent Coverage for UT Examinations - Pipe

Scan 2 Scan 3		% Length X	edure Revision/f Work Ordef N 0.000			rt No.: <u>2002U00</u> Page: <u>3</u> of _
45 deg Scan 1 Scan 2 Scan 3	100.000 %		2000-08-07-08-04-09-09-09-09-08-0-0-0	na grindine ne vertro zakraz na nakrava z kravno	n di Soff Killer Krist II. Sun di Kanang Panang Panang	Page: <u>3</u> of _
Scan 1 Scan 2 Scan 3			0.000	% volume of length / 100		
Scan 1 Scan 2 Scan 3			0.000	% volume of longth / top		
Scan 2 Scan 3			0.000	% volume of longth / top		
Scan 3	<u>100.000</u> %			76 VOIDHIE OF IENGUT / TUU) =0.000	% total for Scan
		% Length X	0.000	% volume of length / 100) =	% total for Scan
Cons d	100.000 %	% Length X	100.000	% volume of length / 100) =100.000	% total for Scan
Scan 4	100.000 %	% Length X	100.000	% volume of length / 100	= 100.000	% total for Scan
۸dd	totals and div	ida hy # scon	e == 50.000	% total for 45 deg		
Ada	totais and div	lue by # scan	s = <u>-00.000</u>	% total for 45 deg		
Other deg -	70 (to	o be used for s	upplemental sci	ans)		
			•	ined with the 45 deg sca		
The Gala to be	ISLEU DEIUW IS	ioi welaye ii		ined with the 45 deg scal	15.	
Scan 1	100.000	% Length X	50 000	% volume of length / 10	0 = 50.000	% total for Sca
		% Length X		% volume of length / 10		
				•		
Scan 3		% Length X				
Scan 4		% Length X _	<u></u>	% volume of length / 10) =	% total for Sca
					-	
			1			
Percent compl	ete coverage					
I GIOGINI VOILIPI				dele setter		
			• • J1 / • • • • • • • •			
Add totals for ea			by # of scans to	aetermine;		
Add totals for ea	ach scan requir Fetal for comp		by # of scans to	aətermine;		
Add totals for ea						
Add totals for ea	fotal for comp	blete exam		Lui, TIT Date:	2-5-02	_



UT Pipe Weld Examination

с., н

Summ	Site/Unit: hary No.: rkscope:		/ 5023 ISI				Procedure Revis						2002U0)28
Code: Drawing No.: System ID:	RH	1989	2-151	- 50	(Code Cat.:	C-F-1 Description: V		Location:		Co	ntainment		
Component ID: Limitations:	·		arn.						Size/Length:	1.0" / 27.0" art Time:	Thick 1300	ness/Diameter: Finish Time:		/ 10.0"
Examination & Lo Location: Temp. Tool M Cal. Sheet No	T		Center	r	Seria		Surface Cond Centerline of V NSP 185	Veld	Couplant:			Batch No.:	#0	0143
Angle Used Scanning dB Indication(s): Comments: No scan 2 du		43.4 No		60 69.2			an Coverage: Up	stream 🗔	Downstream 🗹] cw 🗹	CCW	2		
Results: Percent Of Co	verage Ob				GEO 🗌 No	-	Reviewed Previou	s Data:	Yes					
Grlebel, David Examiner Timm, Jeremy	Level II	 	<u>)</u> -{}		Signature Signature Signature	2	2/14/2002 Date 2/14/2002 Date	Reviewer Clay, Sean Site Review Wren, Jerr ANII Review Clow, Ron	/ y P. v	1 2 1 2 1 2	Signal Signal			Date 18-02 Date 19-02 Date

NNC				Limitation Rec	cord						
Site/Unit:	NMC	1	Pl2 Procedure: ISI-UT-16A				Outage No.:	Pl	2RF2(002	
Summary No.:	502372		372	Procedure Revision/FC:	1 /		Report No .:	20	02U0	28	
Workscope:	ISI		1	Work Order No.:	0106946			Page:	2	3	

Description of Limitation:

Single sided exam - Although the examination was performed through 100% of the code required volume. Procedure ISI-UT-16A is not qualified for the detection of flaws on the far side of single side access exams. The techniques provided by this procedure were used for a best effort exam for flaws on the far side of the weld.

Sketch of Limitation:

G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL UT\2002u028_1.bmp

FLOW VALVE FMILER 0:55 45460° ് WELD COVERAGE PLOT

Limitations removal requirements:

N/A

		/	Λ	وراجع والمحدي في المحدي المحديث المحديث المحديد		
Examiner Leve	11	Signature	Date	Reviewer	Signature	Date
Griebel, David M.	1	N/m/1+	2/14/2002	Clay, Sean P.	I'l allfell !!	J 02:18-02
Examiner Leve	1	Signatura	Date	Site Review	Signature	Date
Timm, Jeremy T.	1	11	2/14/2002	Wren, Jerry P.	May PUM	2-19-02
Other Leve	I N/A	Signature	Date	ANII Review	Signature	Date
N/A	/			Clow, Ron	I KU =	2/19/02



Determination of Percent Coverage for UT Examinations - Pipe

Site/Unit:	NMC	P12	Procedure: ISI-			T-16A Outage No.:			PI2RF2002			
Summary No.:		50237	2 Pi	ocedure Revisior	n/FC:	1 /		Report	No.:	20	02U02	8
Workscope:		ISI		Work Order	No.:	010694	6	P	age:	3	of	3
				an a fa se in Carsin da anna an Anna an Anna	an a					i di, i si aktori da et		
<u>45 deg</u>												
Scan 1	100.	000	% Length X	50.000	_ % volu	ume of length /	100 =	50.000	%	total fo	or Scar	า 1
Scan 2	100.	000	% Length X	50.000	_ % volu	ume of length /	100 =	50.000	%	total fo	or Scar	12
Scan 3	100.0	000	% Length X	50.000	_ % volu	ume of length /	100 =	50.000	%	total fo	r Scar	13
Scan 4	100.0	000	% Length X	50.000	% volu	ume of length /	100 =	50.000	% t	total fo	r Scan	n 4
	Add total	s and	I divide by # so	ans =50.000	% to	tal for 45 deg						
								•				
									·			
Other deg	- 6	0	(to be used fo	or supplemental s	cans)							
The data to	o be listec	i belo	w is for coverag	e that was not ob	tained w	vith the 45 deg	scans.					
Scan 1	0.0	00	% Length X	0.000	% vol	lume of length	/ 100 = _	0.000	%	total f	or Sca	n 1
Scan 2	0.0	00	% Length X	0.000	% vol	lume of length	100 = _	0.000	%	total f	or Sca	n 2
Scan 3	0.00	00	% Length X	0.000	% vo!	lume of length i	100 =	0.000	%	total fo	or Scal	n 3
Scan 4	0.00	00	% Length X	0.000	% vol	ume of length	100 =	0.000	%	total fo	or Sca	n 4

Percent complete coverage

Add totals for each scan required and divide by # of scans to determine;

50.000 % Total for complete exam

Site Field Supervisor: ______ Q. W. Date: _____ Date: _____

					Ľ.	JT Pipe Weld	Exam	ination					
Site/L	Unit: <u>NM</u>	<u>c /</u>	Pl2			Proced	lure:	ISI-UT-	-16A			Outage No.:	PI2RF2002
Summary	No.:	5023	92			Procedure Revision	/FC:	1 /	-			Report No.:	2002U026
Worksco	ope:	IS				Work Order	No.:	01069	946			Page:	1 of
Code:	19	89		Co	ode Cat.:	C-F-1		Locatio	on:		t .	Containment	van kranska kranska se
Drawing No.: System ID: RH	-i	2-15	- 50			Description: Valv	e to Redi	lcer					
Component ID: W-	- 5/LSD						· · · · · · · · · · · · · · · · · · ·	Size/Length:	: 1	.0" / 27.0"	Th	nickness/Diamete	r: .8" / 10"
Limitations: Se	e Commer	its.		······	·······				Start	Time:	1350	Finish Time	e: 1430
Examination Surfa	ace: In	side 📋	Out	side 🗹		Surface Condition	n: <u>Grour</u>	d		27.87872.28.00.08.00.00.00.00.00.00.00.00.00.00.00		**************************************	₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩
Lo Location:	Top D	ead Cente	<u>r</u>	Wo Locat	ion:	Centerline of Weld	d	Couplant:		Sonotrac	e 40	Batch No.:	#00143
Temp. Tool Mfg.:		Felatemp		Serial	No.:	NSP 185		Surface Terr	np.: _	90	۰F		
Cal. Sheet No.:				2002CA	049, 200	J2CA050							
Angle Used	0 45	5 45T	60										
Scanning dB	N/A 43	.4 43.4	N/A										
Indication(s):	Yes 📋	No 🗹			Sc	an Coverage: Upstre	eam 门	Downstream	n 🗹	CW 🗹	cc	:W 🗹	
Comments:													
See Limitation F	Record.												
Results: N	AD 🗹]	GEO 🗌									
Percent Of Covera	age Obtaine	ed > 90%:	· · ·	No		Reviewed Previous D	Data:	Yes				*****	
Examiner Lev	/el 11		\										
Griebel, David M.	••		1 mg	Signature		Date Re 2/13/2002 CI		P.		AT	571-1	gnature	02-18-
	/el II		7 5	Signature			te Review					gnature	<u></u>
Timm, Jeremy T.					>	2/13/2002 W				Ac	s P	Uh	2-19-0
Other Lev N/A	/el N/A	6 - M.	:	Signature			VII Reviev	V			J-JSi	gnature	2/19/02

สมารณระดีรากรากระรากระจากของสมารณ์ประวัตรณ์สุขภัณฑ์ หรือรากกระการกระรากรณศรีกรีกรณฑ์เป็นสาราชสำนัดของสูง "สมารณ -

NINC				Limitation Re							
Site/Unit:	NMC / PI2			Procedure:	Outage No.:	PI	2RF20	02			
Summary No.:	502392		92	Procedure Revision/FC:	1 /			Report No.:	20	02U0	26
Workscope:	ISI		<u>i</u>	Work Order No.:	0106946			Page:	2	of	3

Description of Limitation:

Single sided exam - Although the examination was performed through 100% of the code required volume. Procedure ISI-UT-16A is not qualified for the detection of flaws on the far side of single side access exams. The techniques provided by this procedure were used for a best effort examination for flaws on the far side of the weld.

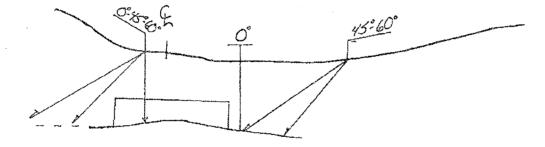
Sketch of Limitation:

G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL UT\2002u026_1.bmp

VALVĚ

FLOW

FINCER



WERAGE PLO

Limitations removal requirements: N/A

	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1					
Examiner	Level	11	/ Signature /	Date	Reviewer	Signature Date
Griebel, Dav	id M.	1	Um	2/13/2002	Clay, Sean P.	1 SLAPLA 1.II 03-18:03
Examiner	Level	11	Signature	Date	Site Review	Signature Date
Timm, Jeren	ny T.	1	Im Ctoo	2/13/2002	Wren, Jerry P.	Aug V.Wh 211-02
Other	Level	N/A	Signature Signature	Date	ANII Review	Signature Date
N/A		1			Clow, Ron	10202 2/19/02



Determination of Percent Coverage for UT Examinations - Pipe

Site/Unit: Summary No.: Workscope:	Summary No.: 502392			Procedure: vision/FC: Order No.:	ISI-UT 1 / 01069		Outage Report Pa	-	2RF200 02U02 of	
<u>45 deg</u>										
Scan 1	100.000	% Lengt	h X50.00	0 % v	olume of length	n / 100 =	50.000	% total fo	or Scan	1
Scan 2	100.000	% Lengt	h X50.00	0% v	olume of length	n / 100 =	50.000	% total fo	or Scan	2
Scan 3	100.000	% Lengt	h X50.00	0%v	olume of length	1/ 100 =	50.000	_ % total fo	or Scan	3
Scan 4	100.000	% Lengt	h X50.00	0%v	olume of length	/ 100 =	50.000	% total fo	r Scan	4
	Add totals and	divide by i	≠ scans = <u>5</u>	<u>0.000</u> %	total for 45 de	a				
Other deg	- 60	(to be use	ed for suppleme	ntal scans)						
The data to	o be listed belov	v is for cove	rage that was n	iot obtainec	l with the 45 de	g scans.				
Scan 1	0.000	% Leng	th X0.00	0%	volume of lengti	h / 100 =	0.000	% total f	or Scar	ז 1
Scan 2	0.000	% Leng	th X0.00	0 %	volume of length	h / 100 =	0.000	% total f	or Scar	12
Scan 3	0.000	% Leng	th X0.00	0 %	olume of length	h / 100 =	0.000	% total f	or Scar	ı 3
Scan 4	0.000	% Leng	th X <u>0.00</u>	<u>0 </u> % v	volume of length	n / 100 =	0.000	% total f	or Scar	ı 4

Percent complete coverage

Add totals for each scan required and divide by # of scans to determine;

50.000 % Total for complete exam

Site Field Supervisor: Jug P. Wn Date: 2-19-02

2



Magnetic Particle Examination

	-		/ Pi		Proce	edure:	ISI-MT	.1	Outage No	.: <u> </u>	'12RF2002
Summa	ary No.: _		500830		Procedure Re	v/FC: 1	2 /		Report No.	.:	2002M016
Worl	kscope:		ISI		Work Orde	r No.:	010694	6	Page	: 1	of
					Cat.: C-I						
Drawing No	o.:	2-15	3I- 46B		Description	n: Pipe-Flan	ged Nozzl	e			
System ID:	MS					<u></u>					
Componen	t ID: W-1	4/LSU							Size/Length:	1	6" / 72"
Limitations:	Han	ger at Toj	Dead Cer	ther							
Light Met	er Mfg.:		N/A			No.:			lilumination:		
					Serial	No.:	N/A		Surface Temp.:		<u>< 600</u> °F
			Not Us								
						Surface Co					
			Top Dead	Center		Field Orie	intation:		Longitud	inal	
-	Particle I						. <u> </u>				
					Wet		Yes 🗌		Applied By:		Dusting 🔽
			iy 17		Dry 🗹		No 🗹		,		Spraying 🗌
					uorescent						Rooding
Head Sho			N/A								
Adj. Spaci			2 ~ 6		5		acing				
Prods. Spa			N/A	-			g Coils				
			1	-			machine s	etting)	□ <u>N/A</u>		Amperes
Indication	1		Diameter	Length	Туре			R	emarks		
No.		W			R/L	_					
	ļ										

******			1						~		

•·····	L										
Comments: See sketch											
Results:	NAD										
Percent Of				No	~	Dourieure d		·····			
			- 3078.		/ 	Reviewed	PTEVIOUS 8	Jata:	Yes		MODERATION OF CONTRACT OF CONTRACT
Examiner	Levei	H /	Signa	ture 50/		Reviewer			Signature		Date
Potter, Mich Examiner	Level	·····	//what Signa	ture		Halling, Dav Site Review	id A.	10	Signature	b	2-18-02
Loredo, Qui		. 1 /		ne C		Wren, Jerry	Р.	NA.	en P.IMA	~ 1	WAT Date 2-18-0 Z
Other N/A	Level M	N/A	Signa	ture	1	ANII Review			Signature -		Date
285 A		1				Clow, Ron		1/2		2	118/02

NURC
100 Mar 100

Limitation Record

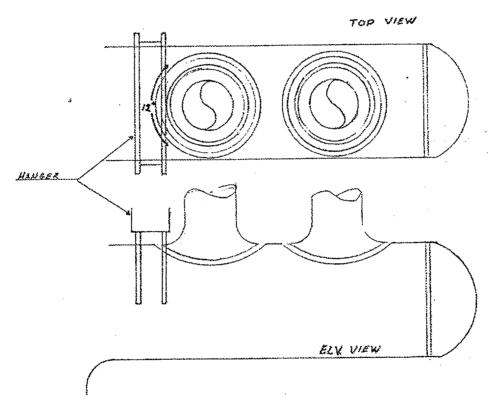
Site/Unit:	NMC / PI2			Procedure:	re: <u>ISI-MT-1</u>			Outage No.:		002	
Summary No.:		500	830	Procedure Revision/FC:	12			Report No .:		02M(016
Workscope:	<u>ISI</u>		- 	Work Order No.:				Page:	2	of	4

Description of Limitation:

Hanger at Top Dead Center.

Sketch of Limitation:

G:\IDDEAL50\Pi2RFO2002\SUPPLEMENTAL MT\2002m016_1.bmp



Limitations removal requirements: N/A

Examiner	Level	11	M Sibpature,	Date	Reviewer	Signature	Date
Potter, Mich	hael E.]	/ minut Fotom	2/12/2002	Halling, David A.	1 DAbellin	2-18-02
Examiner	Level	11	Signature	Date	Site Review	Signature/	Date
Loredo, Qui	irino	1	Davel	2/12/2002	Wren, Jerry P.	Man P.UM	2-18-02
Other	Level	N/A	Signature	Date	ANII Review	·	Date
N/A		1			Clow, Ron	1 Coll :	2118/02



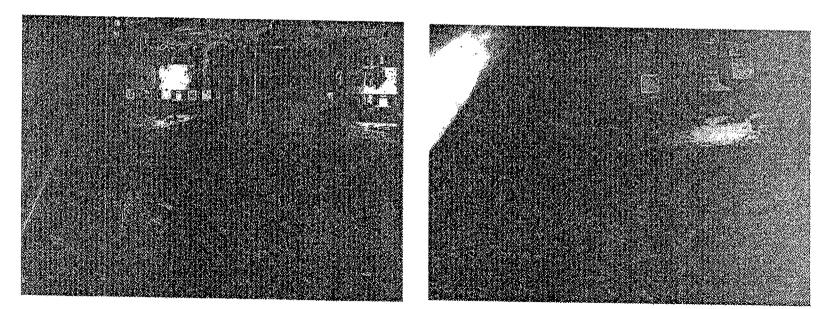
Supplemental Report

					Report No.:	2002M016
Summary No.:	500830				Page:	3 of 4
Examiner:	Potter, Michael E.	Level: II	Reviewer	Halling, David A.		• • • • • • • • • • • • • • • • • • •
Examiner:	Loredo, Quirino	Level: II		Wren, Jerry P.		Date: 2-18-02
Other:	N/A		ANII Review:			Date: 2-18-02
						Date: ~?/18/02

Comments: None

Sketch or Photo: G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL MT\2002m016_2.bmp

G:\IDDEAL50\PI2RFO2002\SUPPLEMENTAL MT\2002m016_3.bmp





Determination of Percent Coverage for Surface Examinations

Site/Unit:	NMC	1	P12			Proced	dure:		ISI-	MT-1			Outag	e No.:	P	126	2F20	02
Summary No.:	.: 500830				Procedure Revision/FC: 12 /				unu		Report No.: 2002			2M01	M016			
Workscope:		ISI			Worl	k Order	No.: _		010	6946				Page:	4		of	4
Area Requir	red (as s	shown i	n applicable	code re	eference	e drawin	ıg)								#C		******	****
Length* Width2.250																		
= Total Area required162.000 square inches																		
												•						
Coverage Ac	chieved		******		- -	indening Southern				***		Shipphinen 			pcolenane.com	*****	********	
	Area exa	nined	135.		sq. in	. / Total	area re	equired	(100)%)		62.00		sq. in				
= Percent coverage (area required - area of limitations = area examined) 83.3 7.																		
	**************************************	, 				1.10.11.00.00.00.00.00.00				9 -1-1-1-1-1- -	·····							

To determine length of a circumferential weld

Note - Diameter refers to actual external diameter not pipe size (see table below)

Diameter 0.000 * (Pi) 3.1416

= Length 0.000 inches

Pipe Size	Actual Diameter	(Length) Circumference	Pipe Size		(Length) Circumference
2	2.375	7.46	12	12.75	40.06
2.5	2.875	9.03	14	14.0	43.98
3	3.5	11.0	16	16.0	50.27
3.5	4.0	12.57	18	18.0	56.55
4	4.5	14.14	20	20.0	62.83
5	5.563	17.48	22	22.0	69.12
6	6.625	20.81	24	24.0	75.40
8	8.625	27.10	30	30.0	94.25
10	10.75	33.77			

Site Field Supervisor:

Jan P. Wm Lu. TIL Date: 2-18-02