



Technical Services, Inc.

P. O. Box 721139, Houston, Texas 77272-1139
www.ndttechnicalservices.com

Phone: (281) 341-0469
Cell: (281) 389-4304
E-mail: NDTServices@aol.com

SUMMARY AND ASSESSMENT OF EOC - RE-INSPECTION PERFORMED ON GIRTH WELDS

In accordance with the approved PG&E Inspection Test Plan (ITP), on November 13 & 15, 2013 a re-inspection utilizing radiographic examination was performed on five (5) girth welds on the WV-132-13 project in Milpitas, CA. Once each of the welds were re-radiographed they were "fingerprinted" (weld features compared against original images to verify that the original radiographic film images of the weld matched the images of the re-inspected girth weld.

The following weld numbers were re-inspected:

<u>Original Weld Id Number</u>	<u>Reinspection Weld Id Number</u>
W-31	W-31-RI
W-32	W-32-RI
W-33	W-33-RI
TI-9	TI-9-RI
TI-10	TI-10-RI

The following were the results of these-inspections:

Weld Number: W-31-RI Comments: Weld matched fingerprint and weld was determined to be acceptable to API 1104, 20th edition.

Weld Number: W-32-RI Comments: Weld matched fingerprint and weld was determined to be acceptable to API 1104, 20th edition.

Weld Number: W-33-RI Comments: Weld matched fingerprint and weld was determined to be acceptable to API 1104, 20th edition.

Weld Number: TI-9-RI Comments: Weld ***did not*** match fingerprint. However, after performing further investigation it was ultimately determined that this weld was originally identified as weld number W-34 which was acceptable as originally radiographed. Its fingerprint was matched and the weld was

determined to be acceptable to API 1104, 20th edition. On November 15th the next weld down from weld number W-34 was re-radiographed and this weld matched the fingerprint for the original weld number identified as TI-9 and the weld was determined to be acceptable to API 1104, 20th edition.

Weld Number: TI-10-RI Comments: Weld matched fingerprint and weld was determined to be acceptable to API 1104, 20th edition.

Upon a detailed review of the pipeline alignment sheets, PG&E was able to determine that the original weld number TI-9 was actually one weld joint east of the location for weld number W-34. On November 15, 2013 the field site was further excavated to locate the actual location for weld number TI-9 and the weld was re-radiographed, the fingerprint matched that of the original film images for TI-9, was evaluated and determined to be acceptable to API 1104, 20th edition.

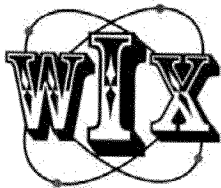
Copies of WIX's Radiographic Testing Inspection reports indicating the results of their evaluation of welds examined are attached.

This summary completes the evaluation and documentation of the re-inspections performed on the five (5) identified girth welds on the WV-132-13 project in Milpitas, CA.

Respectfully submitted,

Redacted

President
ASNT/ACCP Professional Level III – 2820



Western Industrial X-Ray, Inc.
 P.O. Box 238 Fairfield, CA
 (707) 425-4673
 (888) For X-Ray
 info@wixinc.net
 www.wixinc.net

Date 12/13/2013 Page 1 Of 1
 Radiographic Report or Control # RIG-D
 Customer PGE
 Address _____
 Customer's P.O. Number 2500904964
 Job Location MILPITAS, CA LINE 132 RE-INSPECTION
 Job Number 30677902/41960097
 Item Description 20" GIRTH WELDS
 100% Insp. Spot Insp. _____ Percent _____

Nondestructive Inspection Report

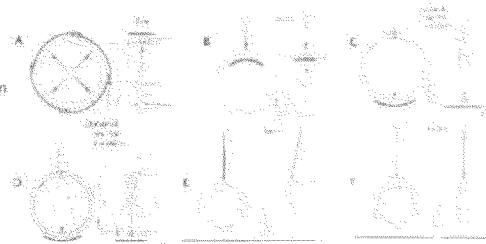
Piece or Joint #s	Weld Number	Film No.	A C C E P T	R E J E C T	Defect Code	Comments	Work Summary			
							Amount	Description		
20"X.375/.500	TI-9-RI	3	✓		IUC	IUC@62.5"×2"IN 12"	4	Travel Hours	3	# Persons
							0830	In Time	1530	Out Time
							7	Work Hours		
20"X.375/.500	W-33-RI	3	✓			PROCESSING MARKS	0	Standby Hours		
						@24"×29"	11	Total Hours		
							NO	Per Diem		# Persons
20X.375/.800	W-32-RI	3	✓			PROCESSING MARKS	150	Mileage One Way		Round Trip <input checked="" type="checkbox"/>
						@56"×24"×29"	5	Weld	20"	in. dia.
								Weld		in. dia.
								Weld		in. dia.
20X.375/.800	W-31-RI	3	✓				15	Film	3.5" × 24"	Type D-7
								Film		Type
20"X.375/.375	TI-10-RI	3	✓		ESI	ESI@9.25"-10"	Technique Date/Procedure Qualification			
					ESI	ESI@14-14.5"	Inspection Specification <u>API-1104</u>			
					P	P@57"×3/32"	Acceptance Standard <u>20TH</u>			
							RT Procedure No. <u>RT-7</u> Shooting Sketch (RSSS) <u>D</u>			
							View <u>DWF</u> <u>SWV</u> Source <u>Ir192</u> Cunes <u>87</u>			
							Physical Source Size: <u>106X126</u> Effective Focal Spot: <u>165</u>			
							Pb Screens: Front <u>005</u> Center <u>N/A</u> Back <u>005</u>			
							Dia. <u>20"</u> Material Type: <u>X60</u> Thickness: <u>375</u> Reinf: <u>125</u>			
							SFD: <u>20.47</u> Source To Obj: <u>20.1</u> IQI Essential Wire: <u>013</u>			
							Exp. Time: <u>1</u> min. <u>15</u> sec. Dev. Time: <u>6</u> @ <u>69</u> deg.			
							Film Manufacturer: <u>Agfa</u> Speed: <u>D-7</u> No. of Exp. <u>3</u> Film <u>3</u>			
							Geometric Unsharpness (Ug): <u>004</u> Avg. Density: _____			
							Dia. <u>20"</u> Material Type: <u>X60</u> Thickness: <u>375</u> Reinf: <u>125</u>			
							SFD: <u>20.47</u> Source To Obj: <u>20.1</u> IQI Essential Wire: <u>013</u>			
							Exp. Time: <u>1</u> min. <u>20</u> sec. Dev. Time: <u>6</u> @ <u>69</u> deg.			
							Film Manufacturer: <u>Agfa</u> Speed: <u>D-7</u> No. of Exp. <u>3</u> Film <u>3</u>			
							Geometric Unsharpness (Ug): <u>004</u> Avg. Density: _____			
							Dia. <u>20"</u> Material Type: <u>X60</u> Thickness: <u>375</u> Reinf: <u>125</u>			
							SFD: <u>20.47</u> Source To Obj: <u>20.1</u> IQI Essential Wire: <u>013</u>			
							Exp. Time: <u>1</u> min. <u>30</u> sec. Dev. Time: <u>6</u> @ <u>69</u> deg.			
							Film Manufacturer: <u>Agfa</u> Speed: <u>D-7</u> No. of Exp. <u>3</u> Film <u>3</u>			
							Geometric Unsharpness (Ug): <u>004</u> Avg. Density: _____			

Defect Code

- BT - Burn Through
- C - Crack
- CV - Root Concavity
- CX - Root Convexity
- ICP - Inadequate Cross Penetration
- IF - Incomplete Fusion
- IP - Incomplete Penetration
- IPD - Inadequate Penetration Due to High/Low
- P - Porosity
- SL - Slag Lines
- SI - Slag Inclusions
- UC - Undercut
- TI - Tungsten Inclusion

Redacted

Level II
 Level I



The person signing this document represents that they have the authority to sign on the behalf of the customer. This report does not guarantee or warranty the condition of the materials tested. Western Industrial X-Ray, Inc. is not liable for any interpretation of results or losses attributable to any testing performed. There is no warranty for these services. Any liability is limited to the amount paid for the service in question. This fee interpretation is the responsibility of the customer.

Redacted

Date 11/13/2013

Customer's Signature

Report Form WIX-101

