



# Fermi National Accelerator Laboratory

Technical Division-Machine Shop

## Welder Performance Qualification Record

Welder's Name	William Gatfield			FNAL #	04609N	ASME #	W-12
Welding Process:	1st	GTAW	Type	Manual	2nd	Type	
Performed in accordance with:	Fermi WPS-SS-8-001						

Joint:	Fillet:	Production Weld		Test Coupon			
Groove:	Double Welded:	Yes	No	With Solid Backing		Without Solid Backing	
	Square Butt Groove	Metal Fused		Metal Non-Fused	Non-Metal	Open/closed Root	Consumable-Insert

Base Metal:	Specification:	SA 240, Type 304	TO	SA 240, Type 304	ASME P #8, Gp 1	TO	ASME P # 8, Gp 1
Plate		Pipe				Tube	
Actual Thickness:	0.035"	Nominal Diameter:	Actual Diameter		Overall Diameter:		
Qualified Range:	0.070 Maximum	Wt/Schedule:	Qualified Thickness Range		Wall:		
		Actual Thickness	Qualified Diameter Range:		Qualified Thickness Range:		
Qualified Diameter Range: 2.875" Ø Minimum						Qualified Diameter Range:	

Filler:	1 <sup>st</sup> Process			2 <sup>nd</sup> Process		
	Specification: 5.9	Class: 308/308L		Specification:	Class:	
	Diameter(s): .035" & 1/16"			Diameter(s):		
	F #: 6			F #:		
	Deposit Thickness: 0.035	Range Qualification: 0.070 Maximum		Deposit Thickness:	Range Qualification:	

Welding Position:	IG	If Vertical:	Flat		Root Side Backing - Argon 99.9%		
Gas (Type & Composition):			Shielding: Argon 99.9%				
Electrical Characteristics	Type Current	AC	DC/EP	DCEN	Non-Pulsing		
	Transfer	GMAW	Spray	Globular	Pulse	Short Circuit	

Visual Inspection						
Appearance:	Satisfactory	Undercut:	None Visually Observed		Piping Porosity:	None Visually Observed

Guided Bend Test QW 462.3					
Tensile	Fracture/Results	Type and Figure	Results	Type and Figure	Results
001 Cross Weld	Haz/Ductile	003 Face Bend	Pass	005 Root Bend	Pass
002 Cross Weld	Weld Ductile	004 Face Bend	Pass	006 Root Bend	Pass
Test Conducted by:				Reference #: T914242	Date: 12/07/2009

Radiographic Test			
Results:	Satisfactory		Per ASME IX-2007
Radiographer:	Examiner:	Register #	Date:

Fillet Weld Test Results			
Fracture Test:			
(Location, Nature, and size of Crack or Tear in Specimen)			
Length of Weld:	Length of Defect:	Percent of Defect	
Macro Test: Fusion			
Appearance: Fillet Size	inch X	inch	<input type="checkbox"/> Convex <input type="checkbox"/> Concave
Test Conducted by:		Lab Test #:	

Test Verified by:	Mike Reynolds 03993N	Signature	Verification Report #11272009-1-RH	11/27/2009
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We certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of ASME IX-2007		Fermi National Accelerator Laboratory	
By: Roger Hiller 00362N	Signature	Date:	12/7/2009
Authorized Representative			