



Fermi National Accelerator Laboratory

Technical Division-Machine Shop

Welder Performance Qualification Record

Welder's Name	William Garfield			FNAL #	04609N	ASME #	W-12
Welding Process:	1st	GTAW	Type	Manual	2nd	Type	
Performed in accordance with:	Fermi WPS-SS2-001						

Joint:	Fillet:	Production Weld		Test Coupon			
Groove:	Double Welded:	Metal-Fused	Metal Non-Fused	Non-Metal	Open Root	Consumable Insert	
	Single Welded:	With Solid Backing	Without Solid Backing				

Base Metal:	Specification:	SA-240 Type 304	TO	SA 240 Type 304	ASME P # 8, Group 1	TO	ASME P # 8, Group 1
	Plate	Pipe				Tube	
Actual Thickness:	.105"	Nominal Diameter:	Actual Diameter:		Overall Diameter:		
Qualified Range:	.210"	W/Schedule:	Qualified Thickness Range		Wall:		
	Actual Thickness:	Qualified Diameter Range:		Qualified Thickness Range:			
				Qualified Diameter Range: 2.875" Minimum			

Filler:	Autogenous	1 st Process		2 nd Process			
Specification:		Class:		Specification:		Class:	
Diameter(s):				Diameter(s):			
F #:				F #:			
Deposit Thickness:		Range Qualification:		Deposit Thickness:		Range Qualification:	

Welding Position:	1 G Flat	If Vertical	Uphill	Downhill	Root Side Backing		Argon 99.9%
Gas (Type & Composition):		Shielding:	Argon 99.9%				
Electrical Characteristics	Type Current	AC	DCRP	DCEN			
	Transfer	GMAW	Spray	Globular	Pulse	Short Circuit	

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

Guided Bend Test					
Type and Figure	Results	Type and Figure	Results	Type and Figure	Results
Tensile 001	HAZ/Ductile	Face 003	Pass	Root 005	Pass
Tensile 002	HAZ/Ductile	Face 004	Pass	Root 006	Pass
Test Conducted by: Exova Inc.			Lab Test #: T914241	Date: 12/07/2009	

Radiographic Test	N/A
Results:	Satisfactory
Radiographer: Inc.	Examiner:
Test #:	Date:

Fillet Weld Test Results			N/A
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 #:	

Welding Verified by:	Roger Hiller	Fermi ID #: 00362	Verification Report # 11272009-2RH	Date: 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 & AWS D1.1-06 **Fermi National Accelerator Laboratory**

By: Roger Hiller	Date: 1/15/2010
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Authorized Representative