

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 70.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002285**Date Inspected:** 12-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** Japan Steel Works**Location:** Muroran, Japan

CWI Name:	Welding Engineer Imai Jomio			CWI Present:	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
Bridge No:	34-0006			Delayed / Cancelled:	Yes	No	N/A
				Component:	PQR test		

Summary of Items Observed:

Witness Procedure Qualification Record (PQR) qualification test:

Caltrans quality assurance Inspector (QAI) representative, Mr. Wai Pau, travel to Japan Steel Works (JSW)

Muroran plant to witness a casting repair Procedure Qualification Record (PQR) qualification welding test and the identification number of PQR welding test is SJ-2941-WP1

The welder Mr. Sato Hitoshi (ID 692697) performs back gouging on the other side of weld joint. Approximately 18mm sound wall thick has been gouged out. The back gouging area has been re-bevel to the required design joint by grinding and the beveled surface was observed to be free of the scale, traces of oxide films and other contaminants. After back gouging and re-bevel was completion, the welder Mr. Morohashi Satoshi (ID 912255) performs Flux Cored Arc Welding (FCAW) backing welding on the back gouging weld joint. A total six inter passes have been completed on backing welding with flat position (1G). The filler metal and shield gas used in the test is Metalloy-90 (AWS E-90C-K3) with 0.045mm diameter wire, made by Hobart brothers, USA using 80% argon mixed with 20% carbon dioxide (CO₂) shielding. The parameters used for this PQR welding were conducted in accordance with JSW written procedure SJ-2941-WP1. The repair PQR welding was monitored and recorded by Japan Welding Engineer Mr. Imai Jomio. Based on Caltrans observation, the PQR welding test process is appears to meet the requirements of ASME IX 2005 and Caltrans contract.

Summary of Conversations:

JSW Welding Engineer Mr. Imai Jomio informed to QAI that repair PQR SJ-2941-WP1 will be test by in house NDE (the procedure is for JSW quality assurance) prior to 11 hours post heat treatment.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

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remedial efforts please contact Venkatesh Iyer (858)697-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
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Reviewed By:	Brasel,Ron	QA Reviewer
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