

**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-002380**Date Inspected:** 31-Mar-2008**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:** MaKhmun Ashadi**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**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** PQR test plate**Summary of Items Observed:**

Witness Procedure Qualification Record (PQR) qualification test (SW-6): Caltrans Quality Assurance Inspector (QAI) representative Mr. Danny Reyes and Mr. Wai Pau, travel to Japan Steel Works (JSW) Muroran plant to witness an AWS D1.5 standard PQR qualification welding test. The number of PQR qualification welding test is SJ-2942-WP-9 (test plate SW-6). The PQR qualification test utilizing Flux Cored Arc Welding (FCAW) welding processes were conducted by welder Mr. Naoki Murai (05-00434) performed in the flat position (1G). The material used for the PQR qualification test specimens was reported by JSW Welding Engineer Mr. Takaaki Maruya as ASTM A709M-Gr.345T (plate to plate) having a wall thickness measurement of 50mm. The weld joint design used butt joint, single-V-groove weld with 20mm x 75mm backing bar. The filler metal and shield gas used in the test for FCAW is wire TM-95K2, 1.6 diameter with 100% C02 made by Hobart Brothers, USA. The FCAW welding and parameters have been monitored and recorded by CWI inspectors Mr. MaKhmun Ashadi and JSW Welding Engineer Mr. Takaaki Maruya, and were also observed by Caltrans QAI. A total of sixteen interior filler weld passes (#1 to #16) were completed on this date. The preheat temperature of the test plate is to be held at 120 C overnight for the continuation of the welding at tomorrow. Based on Caltrans QA observation, no discrepancies were noted.

**Summary of Conversations:**

As Note within the report above.

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

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# WELDING INSPECTION REPORT

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<b>Inspected By:</b>	Pau, Wai	Quality Assurance Inspector
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<b>Reviewed By:</b>	Brasel, Ron	QA Reviewer
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