

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-002394**Date Inspected:** 23-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1800**Contractor:** Japan Steel Works**Location:** Muroran, Japan

<b>CWI Name:</b>	Mr. Chung Kuan		
<b>Inspected CWI report:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A

<b>CWI Present:</b>	Yes	No	
<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved WPS:</b>	Yes	No	N/A
<b>Delayed / Cancelled:</b>	Yes	No	N/A

**Bridge No:** 34-0006**Component:** Welder qualification welding test**Summary of Items Observed:**

Witnessing AWS D1.5 standard SMAW welder qualification welding test: Caltrans QAI representative Mr. Wai Pau witnessed a welder qualification test. The qualification welding tests utilizing the Shielded Metal Arc Welding (SMAW) process was conducted by welders performed in the vertical position (3G). The names of welder for SMAW test are Mr. Hiroshi Fukuyama (08-5155), Makoto Famazaki (08-5156) and Yuichi Arai (08-5157). The material used for the welder qualification test specimens was reported by JSW Welding Engineer Mr. Takaaki Maruya as ASTM a 709M-HPS-485WT plate having a wall thickness measurement of 25mm. The weld joint design used butt joint, single-V-groove weld with 25mm backing bar. The proper filler metal used in the test for SMAW is Hoballoy 9018-M with 5mm diameter electrode made by Hobart Brothers, USA. The SMAW welding process and parameters have been monitored and recorded by CWI inspector Mr. Chung Kuan. Based on Caltrans QA observation, the welder qualification tests appeared to be in general compliance with requirements of AWS D1.5 2002 Section 5 and Caltrans contract documents. A Caltrans Lot# B88-115-08, B88-117-08 and B88-119-08 were assigned on this welder test for tracking propose.

Witnessing AWS D1.5 standard FCAW welder qualification welding test: Caltrans QAI representative Mr. Wai Pau witnessed a welder qualification test. The qualification welding tests utilizing the Flux Cored Arc Welding (FCAW) welding processes was conducted by welder performed in the flat position (1G). The names of welder for FCAW test are Mr. Hiroshi Fukuyama (08-5155), Makoto Famazaki (08-5156) and Yuichi Arai (08-5157). The material used for the welder qualification test specimens was reported by JSW Welding Engineer Mr. Takaaki Maruya as ASTM a 709M-HPS-485WT plate having a wall thickness measurement of 25mm. The weld joint design used butt joint, single-V-groove weld with 25mm backing bar. The filler metal and shield gas used in the test for FCAW is Hoballoy wire TM-95K2, 1.6 diameter with 100% CO2 made by Hobart Brothers, USA. The FCAW welding process and parameters have been monitored and recorded by CWI inspectors Mr. Chung Kuan.

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# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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Based on Caltrans QA observation, the welder qualification tests appeared to be in general compliance with requirements of AWS D1.5 2002 Section 5 and Caltrans contract documents. A Caltrans Lot# B88-116-08, B88-118-08 and B88-120-08 were assigned on this welder test for tracking propose.

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

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