

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002947**Date Inspected:** 10-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2230**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 830**Contractor:** Japan Steel Works, Ltd.**Location:** Muroran, Japan

CWI Name:	N/A	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:	Tower, Jacking and Deviation Saddles	

Summary of Items Observed:

On this date OSM Quality Assurance (QA) Representative Daniel L. Reyes observed the repair welding on the saddle casting scheduled on this date. The following was observed:

Foundry Shop

At the start of the shift the QA inspector traveled to the Foundry Shop to observe the continued repair welding of the ribs on the West Deviation Saddle identified as W2E1. The repair welding of the saddle casting is located in Lane Number 1 at the designated area identified as, "The Gouging and Grinding Area" of the shop.

The welding was performed by Japan Steel Works, Ltd. (JSW) personnel Hitoshi-Sato who utilized the Welding Procedure Specification (WPS) SJ-3026-2 during the repair welding on the casting rib identified as 5L. The WPS was also used by the QA inspector as a reference during the verification of the welding parameters.

The repair welding was performed in the horizontal (2G) position with the work in the vertical plane and the axis of the weld horizontal. The Shielded Metal Arc Welding (SMAW) process was used during the performance of the welding and the consumable utilized by the JSW welder appeared to be a Hobart Brothers Product identified as LB-106, with the diameter size of 5.0 mm which appeared to comply with the AWS Specification A5.5 and the AWS Classification E10016-G.

At the conclusion of verifying the preheat temperature of 195 degrees Celsius at the weld repair area, the QA inspector verified the Alternate Current (AC) welding parameters. The welding parameters appeared to comply with the contract documents and were observed as follows, 182 AC amps and 24 AC volts with a travel speed measured at 180 mm/m.

Later in the shift, the welder Hitoshi-Sato completed the repair welding on the casting rib 2L and relocated to rib 7L. The QA inspector verified the preheat temperatures of 225 degrees Celsius and the welding parameters which

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

were observed as follows, 187 AC amps and 24 volts with a travel speed measured at 174 mm/m. Later during this shift, the QA inspector, at random intervals verified the welding parameters, minimum and maximum surface temperatures and observed the in process welding.

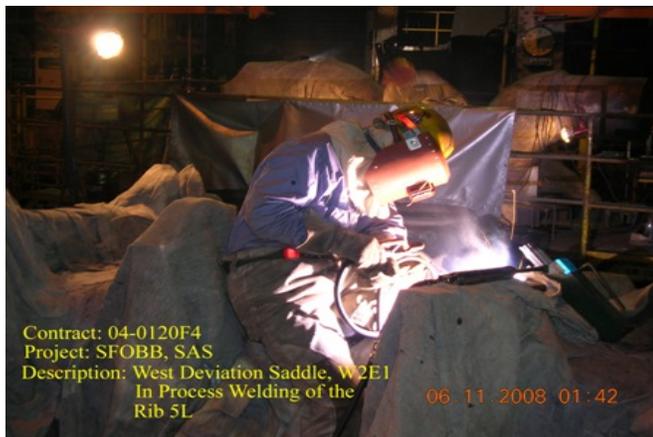
QA Observation Summary

This QA inspector randomly observed the in process Shielded Metal Arc Welding (SMAW) for the repair welding of the ribs on the West Deviation Saddles identified as W2E1. This QA inspector noted that it appeared the approved and latest revised WPS's were posted at the appropriate welding station and that each approved welder was entered in the latest revised Welding Personnel Log issued by Japan Steel Works, Ltd. The welding parameters, preheat and interpass temperatures were verified as noted by this QA inspector utilizing a Fluke 337 clamp meter for the electrical welding parameters and Tempilstik temperature indicators for preheat and interpass temperatures. The filler metal utilized at the welding stations was also verified. The welding and inspection was not completed during this shift and appeared to be in general compliance with the contract documents.

Fabrication Shop # 4

At approximately 01:00 hours the QA inspector was informed by JSW personnel, Kunio Nagaya that the welding scheduled on this date has been canceled, due to the shop personnel revising the gas burners for preheat purposes and the turning process of the West Deviation Saddle.

The following digital photograph illustrate the observations of the activities performed on this date.



Summary of Conversations:

There were no general conversations relative to this project on this date except as "noted 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) 967-6363, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Inspected By: Reyes,Danny

Quality Assurance Inspector

Reviewed By: Lanz,Joe

QA Reviewer