

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002796**Date Inspected:** 26-May-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		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A
Component:	Tower, Jacking and Deviation Saddles		

Bridge No: 34-0006**Summary of Items Observed:**

On this date OSM Quality Assurance (QA) Representative Daniel L. Reyes was present during the repair welding of the Saddle Castings and the following was observed:

At the start of the shift, the QA inspector traveled to the Foundry Shop to observe the continued repair welding of the rib build-up areas on the West Deviation Saddle Casting identified as W2E1. The repair welding is being conducted at Lane 3 of the Foundry Shop at the designated area identified as "The Welding Area." The QA inspector observed the welding performed by Japan Steel Welding, Ltd. (JSW) welding personnel Hitoshi Sato ID 69-2697 on the repair area of rib 7L identified as 2-6 and Akira Takenami ID 06-8001 performing the repair welding on rib 8L identified as repair area 2-2. The welders performed the repair welding in the horizontal (2G) position with the work in the vertical plane and the axis of the weld horizontal and utilized the Shielded Metal Arc Welding (SMAW) process as per the Welding Procedure Specification (WPS) identified as SJ-3026-2.

At the conclusion of verifying the preheat temperature of 200 degrees Celsius at the weld repair area identified as 2-2, the QA inspector verified the Alternate Current (AC) welding parameters and shortly thereafter, verified the preheat temperature of 205 degrees Celsius at the weld repair area identified as 3-10, prior to verifying the AC welding parameters. The welding parameters appeared to comply with the contract documents.

The consumable utilized by the welders 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.

Later during this shift the QA inspector, at random intervals, observed the Shop Welding Supervisor and the welding personnel verify the welding parameters, minimum and maximum surface temperatures.

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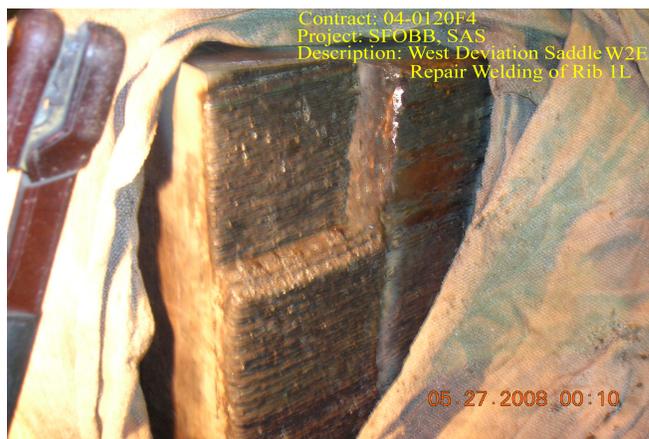
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QA Observation Summary

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 JSW personnel appeared to perform the welding and the verification tasks as per the contract documents. The welding was not completed during this shift and appeared to be in general compliance with the contract documents.

See Weld Joints in Progress Inspected, below, in regards to QA observation of the welding parameters recorded during this shift on this date.

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



Item	Weld Identification	Applicable WPS	CWI Name	Amperage	Voltage	TravelSpeed	Preheat Temp	Remarks
1	W2E1, Rib 7L/2-6	SJ-3026-2		219 AC	25.5 AC	160 mm/m	190 Degrees C.	Hitoshi Sato
2	W2E1, Rib 1L/3-10	SJ-3026-2		206 AC	26 AC	180 mm/m	200 Degrees C.	Akira Takenami

Summary of Conversations:

There were no pertinent conversations relative to this project on this date.

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.

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Inspected By:	Reyes, Danny	Quality Assurance Inspector
Reviewed By:	Lanz, Joe	QA Reviewer
