

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023142**Date Inspected:** 23-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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:** OBG**Summary of Items Observed:**

CWI Inspector: Mr. Cui Zheng Hua

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Wang Changfa, stencil 058102 used shielded metal arc welding procedure specification WPS-B-P-2211-B-U2 to make OBG segment 14E root pass weld SEG3019*-010. This QA Inspector observed a welding current of approximately 170 amperes (amps), the base material had been preheated with electric heaters and Mr. Wang Changfa appeared to be certified to make this weld. Later in the shift Mr. Wang Changfa used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019AH-001. This QA Inspector observed a welding current of approximately 165 amps, the base material had been preheated with electric heaters. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Li, stencil 044772 used shielded metal arc welding procedure specification WPS-B-P-2211-B-U2 to make OBG segment 14E root pass weld SEG3019*-010. This

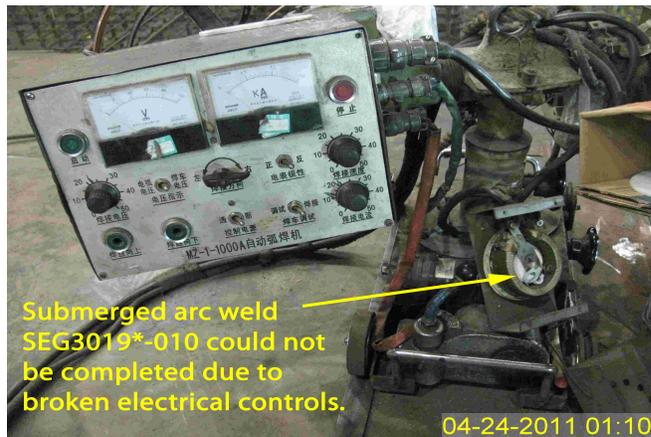
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QA Inspector observed a welding current of approximately 160 amps, the base material had been preheated with electric heaters and Mr. Wang Li appeared to be certified to make this weld. Later in the shift Mr. Wang Li used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019AH-003. This QA Inspector observed a welding current of approximately 180 amps and the base material had been preheated with electric heaters and Mr. Wang Li appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

Following completion of the root pass of OBG segment 14E root pass weld SEG3019*-010 this QA Inspector observed ABF personnel performing magnetic particle inspection of weld SEG3019*-010. Magnetic particle inspections revealed approximately four locations that required grinding and rewelding and these areas were reinspected prior to installation of heaters in preparation for submerged arc welding. This QA Inspector observed ZPMC welder Ms. Duan Ziuzhi, stencil 050502 preparing to use submerged arc welding procedure specification WPS-B-T-2221-B-L2C-S-2 to complete OBG segment 14E groove weld SEG3019*-010. This QA Inspector observed Ms. Duan Ziuzhi disassembling the electrical control panel on the submerged arc welding machine and this QA Inspector observed some of the components inside the control panel appear to have broken. ABF Inspector Mr. Zhang Qi Li informed this QA Inspector that no submerged arc welding will be performed this shift due to broken electrical controls. See the photograph below for additional information.

This QA Inspector observed ZPMC welder Mr. Yang Junping, stencil 501946 used shielded metal arc welding procedure WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019*014. This QA Inspector observed a welding current of approximately 180 amps, the base materials were heated with a torch and Mr. Yang Junping appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

See 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 James Devey +8615000026784, who represents the Office of Structural Materials for your project.

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Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer
