

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020639**Date Inspected:** 15-Feb-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. Li Yan 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. Yang Yunfeng, stencil 215553 used shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-FCM-Repair to make a weld repair of ultrasonic rejections to OBG segment 14E weld SEG3019AA-026. ZPMC QC informed this QA Inspector that critical weld repair document B-CWR-2755 documents this weld repair. This QA Inspector measured a welding current of approximately 240 amps and Mr. Yang Yunfeng appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Fang Xinyou stencil 037748 used shielded metal arc welding procedure WPS-B-P-2214-TC-U4B-FCM to make OBG segment 14E weld DP3019E-2-151. This QA Inspector measured a welding current of approximately 180 amps and Mr. Fang Xinyou appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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# WELDING INSPECTION REPORT

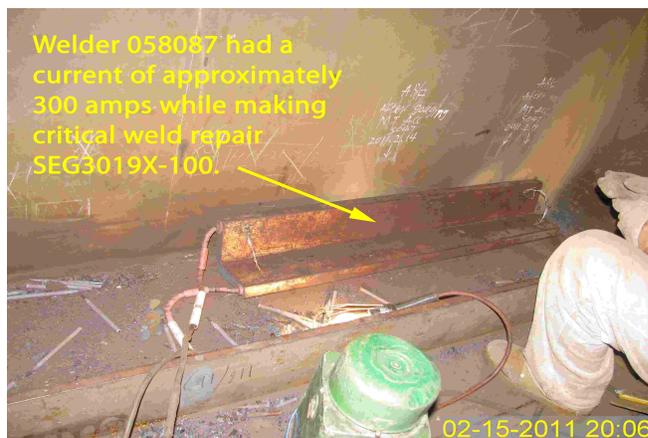
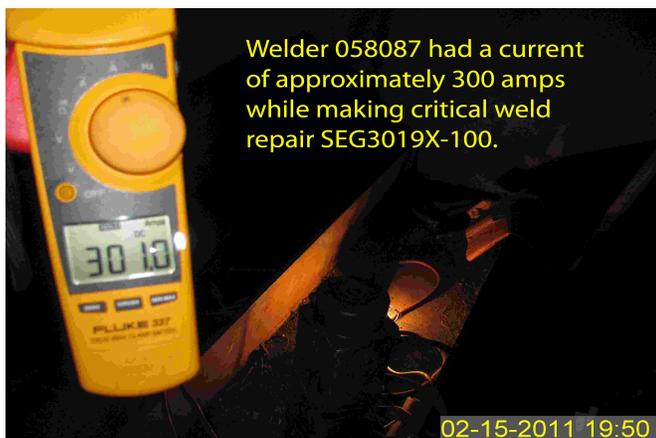
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This QA Inspector observed ZPMC welder Mr. Ye Bing stencil 066733 used flux cored welding procedure specification WPS-B-T-2233-ESAB to perform OBG segment 14E welds SEG3019N-138, 143, 148, 153, 158, SEG3019L-304, 306, 308, 310 and 312. This QA Inspector observed Mr. Ye Bing appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Ren Zhi, stencil 058087 used shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-FCM-Repair to make a weld repair of ultrasonic rejections to OBG segment 14E weld SEG3019X-100. ZPMC QC informed this QA Inspector that critical weld repair document B-CWR-2615 documents this weld repair. This QA Inspector measured a welding current of approximately 300 amps and Mr. Chen Ren Zhi appeared to be certified to make this weld. The maximum welding current listed in the welding procedure specification is 240 amps and Mr. Chen Ren Zhi had a welding current that was approximately 60 amps above this maximum limit. This QA Inspector showed ZPMC QC Inspector Mr. Wang Li Yang the welding meter and he had Mr. Chen Ren Zhi adjust the welding machine to have a current of approximately 220 amps. Following adjustment of the welding machine, items observed on this date appeared to generally comply with applicable contract documents. See the photographs below for additional information.



### 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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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Riley,Ken	QA Reviewer

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