

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-019000**Date Inspected:** 24-Dec-2010**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. Sheng Qing Quan

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.

OBG Bay 14

Segments 13E and 14E

This QA Inspector observed ZPMC welder Mr. Kuai Wenshan, stencil 054013 used shielded metal arc welding procedure specification WPS-345-SMAW-3G(2F)-FCM-Repair-1 to make repairs of visual weld rejections of OBG segment 14E Anchor Plate weld AP3031-620. This QA Inspector observed a welding current of approximately 165 amps and the base materials did not appear to have been preheated prior to welding. This QA Inspector did not observe any ZPMC or ABF inspection personnel near where this welding was taking place. This QA Inspector phoned ABF CWI Mr. Mr. Sheng Qing Quan and informed him of this lack of preheat. ABF CWI Mr. Sheng Qing Quan came to where this welding had taken place and after he confirmed that the base material adjacent to the weld was at an ambient temperature Mr. Bao Qian informed this QA Inspector that ZPMC will grind off the weld material and ZPMC will perform magnetic particle (MT) inspections of this area prior to additional welding. This QA Inspector observed the weld material being ground off and Mr. Kua Wenshan appeared to be certified to make this weld. Items observed on this date do not appear to fully comply with

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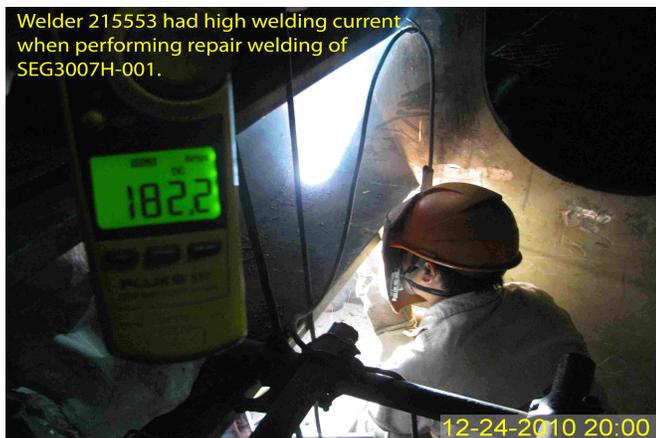
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applicable contract documents. See the photographs below for additional information.

This QA Inspector observed ZPMC welder Mr. Yang Yunfeng, stencil 215553 used shielded metal arc welding procedure WPS-345-SMAW-1G(1F)-FCM-Repair to make a weld repair of ultrasonic rejections to OBG segment 13AE weld SEG3007H-001. This QA Inspector observed a welding current of approximately 182 amps. The maximum welding current listed in the welding procedure specification is 160 amps and Mr. Yang Yunfeng had a welding current that was approximately 22 amps above this maximum limit. Mr. Sheng Qing Quan informed Mr. Sun Lingling the welding current was too high. Mr. Sun Lingling adjusted this welding machine to approximately 155 amps. This QA Inspector asked ZPMC QC Inspectors and ABF CWI Mr. Sheng Qing Quan what weld repair document authorizes this weld repair and the Inspectors stated this weld was being repaired as authorized by B-WR-19064. Following adjustment of the welding machine, items observed on this date appeared to generally comply with applicable contract documents.

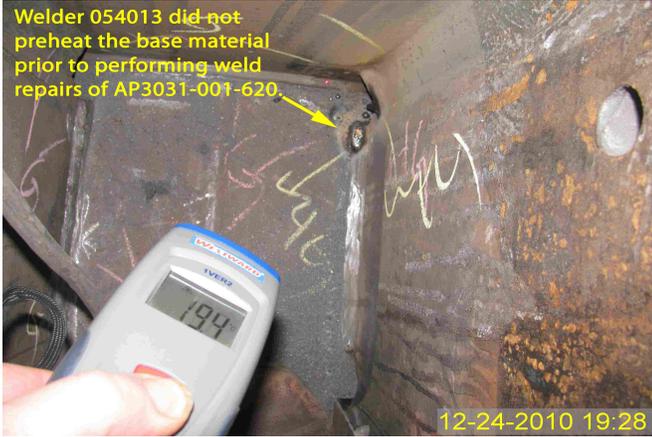
This QA Inspector observed ZPMC welder Mr. Wang Zhengbin, stencil 216086 used shielded metal arc welding procedure WPS-345-SMAW-1G(1F)-FCM-Repair to make a weld repair of ultrasonic rejections to OBG segment 13AE weld SEG3007F-025. ZPMC has issued weld repair document B-WR-19084 that documents the repair of this weld. This QA Inspector measured a welding current of approximately 140 amps and Mr. Wang Zhengbin 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 Mingliu, stencil 204339 used shielded metal arc welding procedure specification WPS-B-P-2213-FCM-1 to tack weld OBG segment 14E floor beams FB3282A, FB3283A and FB3276A to longitudinal diaphragm plates at panel points PP127.5 and PP128. This QA Inspector observed ZPMC workers used an acetylene torch to preheat the base materials prior to welding and ABF CWI Mr. Sheng Qing Quan monitored these workers. Mr. Chen Mingliu 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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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.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
