

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009600**Date Inspected:** 10-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 645**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Yumin Xu**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:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Larry Viars was present during the times noted above for observations relative to the work being performed.

OBG Trial Assembly-

This QA Inspector observed the following work in progress: Submerged Arc Welding (SAW) Critical Weld Repair (CWR) OBG segment 1AAW to 1AW welds, OBW1-001 and 010 from Y location 650 to 6650 mm (from cross beam side). ZPMC welder was identified as 046830. ZPMC QC was identified as Yumin Xu. The weld CWR was for transverse linear indications. The Critical weld repair report was CWR B-829 and the welding procedure specification was WPS-345-1G(2F)- Repair-1. The following welding variables were recorded by QA during repair, amperage 510, volts 30.2, travel speed of 520 with a heat input of 1.77 kJ/mm. QA observed ZPMC personnel perform "Ultrasonic Impact Treatment" (peening) the weld surface and fusion boundaries on an intermediate weld pass. ZPMC also performed Post Weld Heat Treatment with a hold time of 2 hours and a temperature range of 230 to 315 degrees Celsius after completion of welding. Critical Weld Repair report CWR B-829 did not describe the use of ultrasonic impact treatment". Caltrans QA issued an incident report for the above mentioned peening on this date. For further detail please see attached photos.

Bay 9-

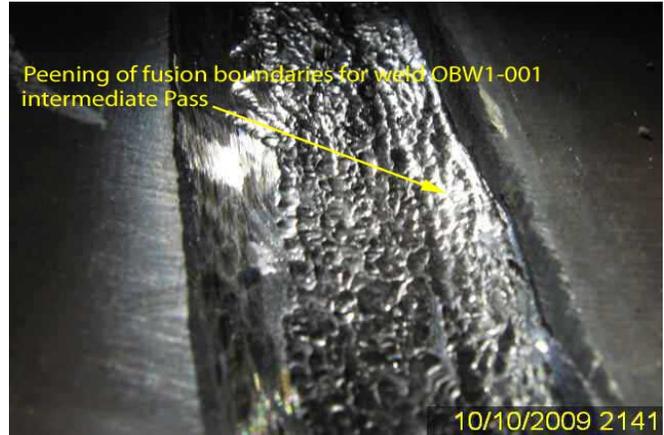
This QA Inspector performed Ultrasonic Testing (UT) verification of the areas previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members were

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identified as OBG Deck Panel internal U rib diaphragm plates. The weld identification are as follows:
DP3069-001-205, 206, 215, 216, 185, 186, 195 and 196 .

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation occurred between QC and QA 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 Eric Tsang, 150 0042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer
