

**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-001809**Date Inspected:** 24-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Le Feng, Ye Yong Jun**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:** Tower Mock-ups and OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

**Production Monitoring Tests Macro Etches**

The Quality Assurance Inspector performed a visual inspection of 8 sets of production monitoring tests (PMT) macro etch samples. The following are the PMT identification numbers; DP-067-001/DP-002, DP-002-001/DP137-001, DP-075-001, DP-272-001/DP083-001, DP-041-001/DP066-001, DP-037-001, DP-216-001, DP-002-001/DP-137-001, and DP-067-001/DP-002-002. The Quality Assurance Inspector recorded one sample with penetration less than 80%, 1 sample that appears to be a crack, 6 samples with linear type indications, and 2 samples that appear to have some type of inclusion. The Quality Assurance Inspector and American Bridge/Fluor representative Art Peterson met and discussed the anomalies discovered and Mr. Peterson agreed on every one except for the crack like indication. Mr. Peterson stated he would classify the indication as a jagged linear indication in the root of the weld. The Quality Assurance Inspector recorded the data from the previously mentioned production monitoring test macro etch samples in an onsite Macro Etch Log. The Data was forwarded to Structures Material Representative Patrick Lowry and Assistant Structures Material Representative Ady Valasco for review.

ZPMC Quality Control Inspector Sun Wei inspected an additional four sets of production monitoring test macro etch samples. The Quality Assurance Inspector immediately performed a review of two of the sets as Mr. Sun completed his inspection. The two sets of Macro samples were identified as DP-067-001/DP-002 and

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DP-002-001/DP137-001. American Bridge/Fluor representative Art Peterson was reviewing the other two sets at the end of the Quality Assurance Inspectors shift.

The Quality Assurance Inspector and American Bridge/Fluor representative Art Peterson met and it was discovered that 12 sets of production monitoring test macro etch samples Quality Assurance has not inspected. It was the Quality Assurance Inspectors understanding that all samples completed by ZPMC would be placed on the top shelf in designated area in Bay 1. The Samples were located on the bottom shelf. The Quality Assurance Inspector confronted Mr. Sun pertaining to the issue. Mr. Sun relayed that in the future all samples completed by ZPMC would be placed on the top shelf of the designated area in Bay 1.

### Summary of Conversations:

As stated in the contents of the above report.

### 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bertlesman,Greg	Quality Assurance Inspector
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<b>Reviewed By:</b>	Cuellar,Robert	QA Reviewer
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