

**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-002615**Date Inspected:** 17-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1330**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2230**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Sun Wei**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 and OBG Fabrication**Summary of Items Observed:**

Caltrans 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. The QA Inspector observed the following:

Orthotropic Box Girder (OBG) Fabrication:

Production Monitoring Tests Macro Etches

The QA Inspector performed visual and dimensional inspections of fifteen (15) each closed rib production monitoring tests (PMT) macro etch samples representing deck plates DP-194-001 and DP-574-001 closed rib welds that were welded today. ZPMC QC CWI Inspector Mr. Sun Wei had previously inspected and accepted these macroetch samples. Sample 194-1-2 and sample 194-4-4 both appear to have incomplete fusion and the remaining thirteen macroetch samples and visually appear to comply with project specifications. All fifteen PMP macro etch samples appeared to contain weld penetration greater than 80 percent. The results of these inspections are documented on an Excel spreadsheet titled "SAS OBG PMT Macroetch Log-05-16-2008" and a copy of this file is posted on the Caltrans "Team China" internal sever computer system. The QA Inspector also made digital photographs of each of the macroetch samples and copies of these photographs are posted on the Caltrans "Team China" common drive which is accessible to Quality Assurance Task Leaders and Structural Materials Representatives. Below are digital photographs showing incomplete fusion indications in macroetch sample 194-1-2.

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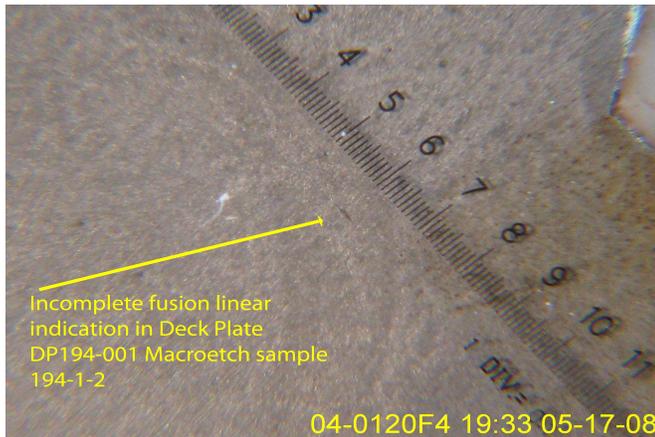
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# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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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 Patrick Lowry (858) 344-2712, 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>	Carreon,Albert	QA Reviewer

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