

**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-000428**Date Inspected:** 10-Aug-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Lefeng**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:** N/A**Summary of Items Observed:**

The CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the tack welder qualification test held on the ZPMC Testing Center scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge. Third Party Moody International Certified Welder Inspector Zhu Yadong was conducting the tack welder qualification test for 16 ZPMC tack welders. Base metal was designated as A-709 Grade 50. ZPMC was using the Gas Metal Arc Welding (GMAW) process with gas composition of 80% Ar, 15% CO<sub>2</sub> and 5% O<sub>2</sub>, in the horizontal (2F) position with the 1.2 mm diameter electrode designated as ER70S-6/AWS A5.18, brand name JM-56 following the welding procedure specification (WPS) WPS-B-T-2142-U3 (U-rib). The QA Inspector randomly verified joint fit up and welding parameters. The QA inspector found that the welding parameters appeared to be in compliance with the contract documents.

The QA inspector had a conversation with ABF QA inspector Danny McDonald. Mr. McDonald relayed to the QA inspector that Moody International would have another inspection crew to witness the fillet weld mechanical (breaking) test for the 16 test specimens welded on this day. Third party Moody International scheduled the completion of the test on later date. In addition, Mr. McDonald stated that all the welders tested on this date passed the visual weld examination conducted by Moody International.

The digital photographs below show Mr. Zhu performing visual inspections to the test coupons.

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

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

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

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