

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 #: 69.21**WELDING WITNESS REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000468**Date Inspected:** 22-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**Witness:** **Procedure Qualification Record**
Welding **NDT****Welder Qualification**
Mechanical Testing, describe: Macro Etch, Charpy Vee
Fracture Critical
Notch (CVN), Round,
All-weld Tension and
Reduced Section Tension
Tests.**Index Lot #:** B59-149-07**Witness Lot #:** B97-001-07**Bridge No:** 34-0006**Component:** Procedure Qualification Record (PQR) Test Samples**Welder:** Zhang Xingjin**ID #:** N/A**Joint Description:** Double Bevel Butt Joint with Backing N/A**WPS ID #:** PWPS-B-T-2231 N/A**Base Metal:** ASTM A709 Gr345**PQR ID #:** HP2007259 N/A**Thickness:** 26mm**Process:** FCAW N/A**Electrode Spec/Class:** E71T-1**Positions:** 1G N/A**Backing Material:** ASTM A709-50-2**CWI:** Huang Wei N/A**Average Amps:** 304.3**AWS Code:** D1.5 2002 N/A**Average Volts:** 29.4**Applicable Sec:** 5.13 N/A**Travel Speed:** 436.0 mm/min**Heat Input:** 1.23 KJ/mm N/A**Preheat:** 87 degrees Centigrade

N/A

Summary of Items Observed:

On this date, the Caltrans Quality Assurance (QA) representative, John P. Tracy, performed a witness of Procedure Qualification Records (PQR) mechanical testing samples. Two of the three macro etch samples had noted indication of entrapped slag. It was determined, by Huang Wei of ZPMC, that the two samples be rejected and that two new macro etch samples be cut, prepped and etched. The remaining mechanical samples had their individual examinations performed and they appeared to conform to the criteria set forth in contractual documents in regards to tensile, impact and bending properties. See 04-0120F3-6034_B97-001-07 report for further details.

Summary of Conversations:

At the completion of the mechanical testing the Certified Welding Inspector / Quality Control Inspector, Huang Wei, of ZPMC reported that macro etch samples were rejectable and that new samples were to be done. He also stated that the remaining mechanical tests were found to be acceptable in accordance with the criteria set forth

WELDING WITNESS REPORT

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within the contractual documents.

Observed welding, testing or results:

is in general conformance with the contract requirements.

is not in conformance with the contract requirements.

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.

Inspected By:

Tracy, John

Quality Assurance Inspector

Reviewed By:

Cuellar, Robert

QA Reviewer