

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.22P.B**WELDING WITNESS REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000352**Date Inspected:** 13-Jul-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**Witness:** **Procedure Qualification Record**  
**Welding** **NDT****Welder Qualification**  
**Mechanical Testing, describe:** PQR Fillet Weld Soundness  
**Fracture Critical**  
Macroetch Tests**Index Lot #:** B71-035-07a**Witness Lot #:** B26-030-07**Bridge No:** 34-0006**Component:** Bid 52**Welder:** Zhu Hai Ping**ID #:** N/A**Joint Description:** Figure 2.3 fillet welds

N/A

**WPS ID #:** PWPS-B-T-3112

N/A

**Base Metal:** A709-HPS 485W T2/Z

N/A

**PQR ID #:** HP2007146-1

N/A

**Thickness:** 90 mm

N/A

**Process:** SMAW

N/A

**Electrode Spec/Class:** AWS 5.5/E9018M-H4R

N/A

**Positions:** 3-F (single pass)

N/A

**Backing Material:** N/A

N/A

**CWI:** Xu Bing

N/A

**Average Amps:**

N/A

**AWS Code:** AWS D1.5 2002

N/A

**Average Volts:**

N/A

**Applicable Sec:** AWS 5.10.3

N/A

**Travel Speed:**

N/A

**Heat Input:**

N/A

**Preheat:**

N/A

**Summary of Items Observed:**

PQR HP2007146-1-Fillet Weld Soundness-Macroetch Tests-QA Lot # B26-030-07

The Caltrans QA Inspector observed two fillet weld soundness welds that have been welded on to one test specimen. One side of the fillet weld soundness test macroetch was measured to an approximate 12mm single pass fillet weld and also a 12mm multiple pass fillet weld on the other side of the tee configuration. The Caltrans QA Inspector observed that in addition to the recorded CWI listed above, Mr. Jeff Evans of ABF and Ms Xie Ping are also present. The initial observation of the three (3) macroetch specimens was performed by Ms Xie Ping of ZPMC who applied two scribed lines that reference the junction point where the depth of the fillet weld is required to satisfy. The Caltrans QA Inspector allowed Ms. Xie Ping to utilize the Caltrans QA Inspectors 7x eye magnifier at her own discretion. Ms. Xie Ping concluded her interpretation of the fillet weld soundness tests and voiced to Mr. Huang Wei in Chinese language that the three macroetch specimens are not acceptable due to the lack of penetration. ABF representative Mr. Jeff Evans and the Caltrans QA Inspector performed an examination of the presented fillet weld soundness test macroetch samples utilizing Lupe 7x eye magnifier. Based on the observation of the fillet weld soundness macroetch test samples it appears that such samples do not comply with

