

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.22P.A**WELDING WITNESS REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000304**Date Inspected:** 19-Jun-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**                      **Fracture Critical**  
**Mechanical Testing, describe:** Charpy Vee Notch Testing of  
HAZ Specimens

**Index Lot #:** B72-037-07**Witness Lot #:** B26-014-07**Bridge No:** 34-0006**Component:** Bid: 52,55 Tower & Girder**Welder:** Zhu Hai Ping**ID #:** N/A**Joint Description:** B-U2a

N/A

**WPS ID #:** PWPS-B-T-3214

N/A

**Base Metal:** A709M-HPS-485W

N/A

**PQR ID #:** HP200778-1

N/A

**Thickness:** 25 millimeters

N/A

**Process:** SMAW

N/A

**Electrode Spec/Class:** AWS A5.5/ E9018M MR

N/A

**Positions:** Overhead 4G

N/A

**Backing Material:** A709M-HPS-485W

N/A

**CWI:** Wei Huang

N/A

**Average Amps:**

N/A

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

N/A

**Average Volts:**

N/A

**Applicable Sec:** Paragraph 5.13

N/A

**Travel Speed:**

N/A

**Heat Input:**

N/A

**Preheat:**

N/A

**Summary of Items Observed:**

Charpy Vee Notch Testing of ZPMC PQR HP200778-1.

The Caltrans QA Inspector is present at the ZPMC testing center as requested by ZPMC for the purpose of observing scheduled charpy vee notch testing of specimens for a PQR identified as HP200778-1. The Caltrans QA Inspector observed that ABF representative Mr. Warren Buehler is present along with ZPMC representative Mr. Lu Jian Hua. The Caltrans QA Inspector observed that ZPMC has prepared the following specimens for testing as follows,

**Five Charpy Vee Notch Test Specimens**

The Caltrans QA Inspector observed that ZPMC has prepared specimen numbers BBW778-1-17, BBW778-1-18, BBW778-1-19, BBW778-1-20 and BBW778-1-21. These charpy vee notch specimens have been prepared from the heat affected zone (HAZ) of the procedure qualification record test plate. The charpy vee notch test specimens have been tested at -18 degrees Celsius and were observed and recorded as having impact energy values of 121 Joules, greater than 150 Joules, greater than 150 Joules, greater than 150 Joules and greater than 150 Joules. Based on the observation of these charpy impact tests and the recorded values, it appears that the

