

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004772**Date Inspected:** 14-Nov-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. Shen Fu Yon**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:** 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:

**OBG Assembly Bay #2**

This QA Inspector performed random final visual and ultrasonic (UT) inspections of welds SEG021b-003, 004, 012, 022, SEG021c-004, 005, 012, 023 and 031. ZPMC ultrasonic inspectors have marked the following welds as being ultrasonically rejected: SEG021c-002, 005, 023, 031, SEG021b-002, 003 and 022. The QA Inspector observed all of the welds listed above appear to have never been identified as being visually accepted by ZPMC QC personnel and most of the weld terminations are in the 'as welded' condition and have never been ground smooth. One of the welds also has welding slag covering portions of the weld surface. The welds that were ultrasonically inspected by this QA Inspector appear to comply with AWS D1.5 UT requirements. The QA Inspector asked ABF representatives Mr. Bao Qian and Li Hao for assistance in obtaining a ZPMC CWI to visually inspect these welds and instead of obtaining a CWI they had ZPMC QC representatives Mr. Shang Lin and Mr. John Wu Shigao look at the two welds. Neither of these QC representatives were AWS CWI Inspectors. The QA Inspector asked both the ABF representatives and both of the QC Inspectors to have the CWI that is responsible for the welding in OBG Assembly bay #2 come and look at the visually rejected welds. Neither of the QC Inspectors knew which CWI is responsible for the welding inspection activities in OBG Assembly Bay #2, and after a 30 minute wait ZPMC CWI Mr. Shen Fu Yon arrived and he agreed the weld terminations need to be

---

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

ground. See the photographs below for additional information.

OBG Bay #7

The QA Inspector was preparing to perform ultrasonic inspection of welds FB003-069-104 and FB003-069-105 and the QA Inspector observed ZPMC UT inspection personnel have ultrasonically rejected both of these welds.



### 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 Ady Velasco 13816942685, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Dawson,Paul

Quality Assurance Inspector

---

**Reviewed By:** Carreon,Albert

QA Reviewer