

**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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016484**Date Inspected:** 22-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Geng Wei and Mr. Xu Tao**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 Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Bay 14

This QA inspector observed ZPMC qualified welding personnel identified as 044771 perform Submerged Arc Welding (SAW) Welding on OBG Segment 13BW, weld joint identified as SEG3009N-002. ZPMC QC is identified as Mr. Wang Xu. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

This QA inspector observed ZPMC qualified welding personnel identified as 044771 perform SAW Welding on OBG Segment 13AE, weld joint identified as SEG3011A-013. ZPMC QC is identified as Mr. Wang Xu. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

Bay 19

This QA inspector observed ZPMC qualified welding personnel identified as 062783 perform Flux Core Arc Welding (FCAW) repair welding on suspender bracket, weld joint identified as SB019-078-004, 007, and 049. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G (2F)-Repair.

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

This QA inspector observed ZPMC qualified welding personnel identified as 062807 perform FCAW repair welding on suspender bracket, weld joint identified as SB019-072-004, 008, and 011. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G (2F)-Repair.

This QA inspector observed ZPMC qualified welding personnel identified as 062807 perform FCAW repair welding on suspender bracket, weld joint identified as SB019-072-001 and 005. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-1G (1F)-Repair.

This QA inspector observed ZPMC qualified welding personnel identified as 062761 perform FCAW repair welding on suspender bracket, weld joint identified as SB019-074-004, 008, 019, 043 and 055. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G (2F)-Repair.

Visual Inspection Details: During random Quality Assurance Visual review of cope holes located on OBG Suspender bracket at bay 19, this Quality Assurance Inspector (QA) discovered 4 mm porosity on inside of cope hole; the weld joint number is identified as SB020-084-067 and suspender bracket is identified as 84E. The weld repair area is clearly marked on the material near the holes. The suspender bracket is identified as SPCM. See the attached pictures

Bay 13

During random Quality Assurance Visual review of OBG Segment 13 lift Bottom Plates, this Quality Assurance Inspector (QA) observed machining of 100mm bottom plate at bay 13. The bottom plate is identified as OBG segment 13AE bottom plate BP3032. The bottom plate is identified as SPCM.

Outside Yard OBG Segment

This QA inspector observed ZPMC personnel performed Ultrasonic Testing (UT) on OBG Segment 11EE, weld joint identified as SSD10A-PP108-128. See the attached picture.

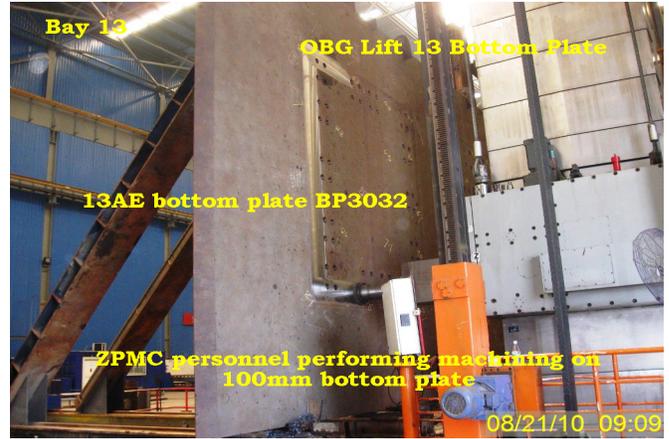
Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---



## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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

---

**Inspected By:** Kumar,Vibin

Quality Assurance Inspector

---

**Reviewed By:** McClendon,Timothy

QA Reviewer