

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-010191**Date Inspected:** 16-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**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 Components**Summary of Items Observed:**

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

Segment 7AW

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as OBG Components. The weld designations reviewed are as follows:

-(DP87A-007, 008, 010, 013, 014, 016, 018, 019, 022, 023, 025, 028, 027, 031, 032, 034)

-(DP276A-007, 008, 010, 013, 014, 016, 018, 019, 022, 023, 025, 028, 027, 031, 032, 034)

-(Seg033C-002, 006, 015, 016, 017, 003)

-(Seg033C-012)- Rejectable indication found

-(SSD13A-PP48-102, 100, 098, 096, 094, 106, 107, 108, 111, 112, 113, 114)

-(SSD39-PP48.5-087, 088, 089, 090, 091, 092, 093, 094)

-(SSD39-PP48.5-095~106)

-(CSD9-PP48-087, 088, 091, 092, 073, 074)

-(CSD2-PP48.5-001, 002, 007, 008, 011, 012, 017, 018)

-(CSD2-PP48.5-085, 086, 091, 092, 095, 096, 101, 102)

-(CSD6-PP48-025, 026, 029, 030, 011, 012)

During a random 10% Magnetic Particle (MT) verification at segment 7AW, Caltrans Quality Assurance (QA) Inspector discovered a Longitudinal Crack inside the cope hole of weld # Seg033C-012. The indication was

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

measured at 15mm in length. This weld was previously tested and accepted by ZPMC QC MT. For further information, please see the attached pictures below.

During a random observation of Magnetic Particle (MT) Testing performed by ABFJV MT technicians and ZPMC MT technicians of the OBG Segment 7AW welds. The Caltrans Quality Assurance (QA) inspector observed a total five (5) Transverse Cracks located at welds SSD13-PP48-004, 005 and SSD13-PP49-004, 005. ZPMC personal completed these weld repairs without prior Engineer approval or utilizing an approved critical weld repair procedure (CWR). For further information, please see the attached pictures below.

Bay#13

SMAW welding of weld joint Seg068A-024 located on Segment 11BE. Welder is identified as 044772 (4G). ZPMC QC is identified as Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint Seg068A-026 located on Segment 11BE. Welder is identified as 067752 (4G). ZPMC QC is identified as Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

FCAW welding of weld joint SSD11-PP99-106~123 located on Segment 11BW. Welder is identified as 044765 (2F). ZPMC QC is identified as Zhang Qiao. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132.

FCAW welding of weld joint SSD11A-PP99-068~087 located on Segment 11BW. Welder is identified as 044774 (2F). ZPMC QC is identified as Zhang Qiao. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132.

FCAW welding of weld joint SSD11-PP99-124, 125 located on Segment 11BW. Welder is identified as 058551 (2F). ZPMC QC is identified as Zhang Qiao. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132.

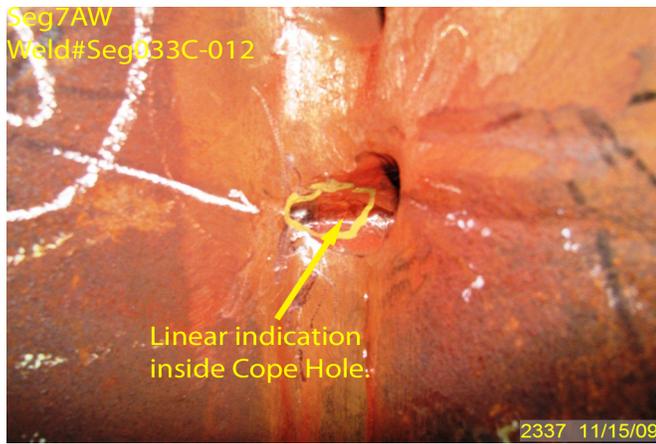
FCAW welding of weld joint SSD11A-PP99-007, 008 located on Segment 11BW. Welder is identified as 044765 (2F). ZPMC QC is identified as Zhang Qiao. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132.

Unless otherwise noted, all observed on this date appeared to generally comply with applicable contract documents.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

No relevant conversations.

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 Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Patel,Hiranch	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer
