

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022794**Date Inspected:** 22-Apr-2011**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. Sun Tian Liang**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 Segment**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.

Magnetic Particle Testing (MT) – NWIT Document No's: 008891

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 members are identified as OBG Segment 13CW. The weld designations reviewed are as follows:

1. SEG3015C-061, 065, 069, 073, 077, 081, 085, 089, 093, 097
2. SEG3015C-101, 105, 109, 113, 117, 121, 125, 129, 015, 017

OBG Trail Assembly

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint DP3148-001-246 located on Deck Panel Diaphragm to Longitudinal Diaphragm at panel point 123 of OBG Segment 13CW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2931.

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## WELDING INSPECTION REPORT

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SMAW welding of weld joint DP3148-001-249 located on Deck Panel Diaphragm to Longitudinal Diaphragm at panel point 123.5 of OBG Segment 13CW. ZPMC Welder is identified as 067588. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2931.

SMAW welding of weld joint DP3148-001-253 located on Deck Panel Diaphragm to Longitudinal Diaphragm at panel point 124 of OBG Segment 13CW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2931.

SMAW welding of weld joint SEG3015K-266 and 267 located on Floor Beam RS Stiffener to RS Stiffeners at panel point 122.5 of OBG Segment 13CW. ZPMC Welder is identified as 067588. ZPMC Quality Control (QC) is identified as Mr. She Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-B-U2-FCM-1.

This QA inspector observed ABF personnel performed Ultrasonic Testing (UT) on Deck Panel to Deck Panel of OBG Segment 13BW and OBG Segment 13CW. The weld number is identified as OBW13A-016 See the attached picture.

This QA inspector observed ZPMC personnel performed Magnetic particle Testing (MT) on Floor Beam to Corner assembly hold back area at panel point 122.5 to 124.5 cross beam side of OBG Segment 13CW.

Bay 14

This QA Inspector observed the following work in progress:

SMAW welding of weld joint SEG3020AG-002 located on Edge Plate to Deck Panel at panel point 125 to 126 of OBG Segment 14W. ZPMC Welder is identified as 066361. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. 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 SEG3020BB-066 located on Anchor Plate to Vertical Shear Plate at panel point 125 to 127 of OBG Segment 14W. ZPMC Welder is identified as 066261. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3020L-028 located on Deck panel diaphragm to Floor Beam Flange at panel point 127 of OBG Segment 14W. ZPMC Welder is identified as 066421. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

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# WELDING INSPECTION REPORT

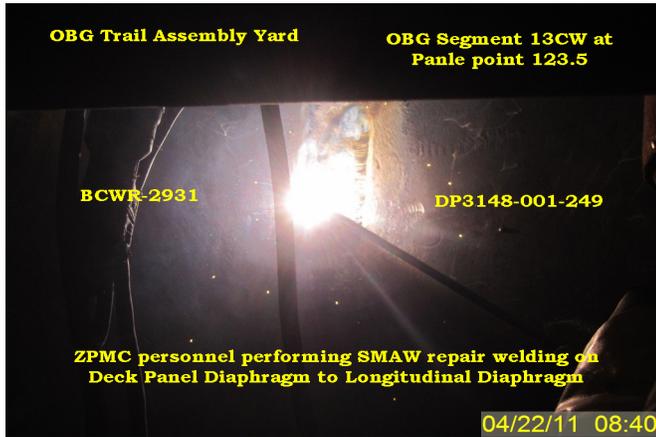
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FCAW) welding of weld joint SEG3020K-002 located on Deck panel diaphragm to Floor Beam Flange at panel point 127.3 of OBG Segment 14W. ZPMC Welder is identified as 066881. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

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



### 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.

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<b>Inspected By:</b>	Kumar,Vibin	Quality Assurance Inspector
<b>Reviewed By:</b>	Patel,Hiranch	QA Reviewer

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