

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023182**Date Inspected:** 03-May-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: 009017

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 12CE. The weld designations reviewed are as follows:

1. CA3005E-289, 290, 291, 292
2. SEG3003C-138, 139

OBG Trail Assembly

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint CA3016A-127, 131, 135, 139 and 143 located Corner Assembly RS Stiffener at panel point 124 to 124.5 of Segment 13CW. ZPMC Welder is identified as 066179. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2114-FCM-1.

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SMAW welding of weld joint CA3016A-107, 111, 115, 119, and 123 located Corner Assembly RS Stiffener at panel point 123 to 123.5 of 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-B-P-2114-FCM-1.

Flux Core Arc Welding (FCAW) welding of weld joint SA3127-001~010-009 and 011 located on bottom plate connected SA3127 at panel point 124 to 124.5 of OBG Segment 13CW. ZPMC Welder is identified as 045143. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

SMAW welding of weld joint SEG3020AQ-025 located on side plate to anchor plate at panel point 125 to 127 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-345-SMAW-1G-(1F)-FCM-Repair-1, which is used as per Critical Welding Repair Report (CWR) B-CWR-2923R1.

SMAW welding of weld joint SEG3020\*-013 and 014 located on deck panel to edge plate of OBG Segment 14W. ZPMC Welder is identified as 037748. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G-(4F)-FCM-Repair-1, which is used as per Welding Repair Report (WRR) B-WRR-20776.

SMAW welding of weld joint SEG3020AH-003 located on Side Plate to Edge Plate of OBG Segment 14W. ZPMC Welder is identified as 037932. 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-2212-Tc-U4b-FCM-1.

FCAW welding of weld joint SEG3020D-038 located on deck panel diaphragm to floor beam at panel point 128.3 of OBG Segment 14W. ZPMC Welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

This QA inspector observed ZPMC personnel performed Magnetic particle Testing (MT) on Deck Panel Diaphragm to Floor Beam Flange Weld at Panel point 123 and 123.5 CB Side of OBG Segment 13BW. The weld number is identified as SEG3015H-002 and SEG3015K-002. See the attached picture.

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

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# WELDING INSPECTION REPORT

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## 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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**Inspected By:** Kumar,Vibin

Quality Assurance Inspector

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**Reviewed By:** Patel,Hiranch

QA Reviewer