

**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-024562**Date Inspected:** 02-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Changxing Island **Location:** Shanghai, China**CWI Name:** Li Ying**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**Summary of Items Observed:**

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

NDT

TA-Yard

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No 09010.

Magnetic Particle Testing (MT)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an MT report for this date. The member is identified as OBG 12AE. The weld designations reviewed is as follows:

CA3001-001

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No 09011.

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## Magnetic Particle Testing (MT)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an MT report for this date. The member is identified as OBG 13BE. The weld designations reviewed is as follows:

SEG3009F-067, 068, 069, 071, 072, 073, 075, 076, 077, 079, 080, 081, 083, 084, 085, 087, 088, 089, 091, 092, 093, 095, 096, 097, 099, 100, 101, 103, 104, 105, 107, 108, 109, 111, 112, 113, 115, 116, 117, 119, 120, 121, 123, 124, 125, 127, 128, 129, 131, 132, 133, 135, 136, 137

SEG3009F-139, 065

## WELDING

### TA-Yard

This QA Inspector randomly observed the following work in progress:

#### Shielded Metal Arc Welding (SMAW)

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020F-001 located on floor beam to edge plate of the OBG Segment 14W. The 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 WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020AL-087 located on bottom plate I-Rib to floor beam of the OBG Segment 14W. The welder is identified as 067707. ZPMC Quality Control (QC) is identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair and B-CWR2906.

#### Flux Cored Arc Welding (FCAW)

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020V-024 located on deck panel diaphragm to anchor plate of the OBG Segment 14W. The 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 WPS-B-T-2232-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020D-038 located on floor beam flange to deck panel diaphragm of the OBG Segment 14W. The welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin.. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

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

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# WELDING INSPECTION REPORT

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contract documents.

**Summary of Conversations:**

No relevant conversations were reported on this date.

**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 James Devey-15000026784, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Singh, Vikram	Quality Assurance Inspector
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<b>Reviewed By:</b>	Riley, Ken	QA Reviewer
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