

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-026364**Date Inspected:** 04-Jan-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) Changxing Island **Location:** Shanghai, China**CWI Name:** Lv Li Qing**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

OBG Bay 14

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No 08026.

Ultrasonic Testing (UT)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG. The weld designations reviewed is as follows:

SEG3007S-008, SEG3007Q-006, SEG3007N-260, SEG3007L-004  
SEG3007J-004, SEG3007G-004, SEG3007E-220, SEG3007C-250  
SEG3007B-135, SEG3007D-219, SEG3007F-002, SEG3007H-139  
SEG3007K-002, SEG3007M-008, SEG3007P-027, SEG3007R-008

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# WELDING INSPECTION REPORT

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## WELDING

### OBG Bay 14

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 Seg3013AD-030 located on Side Panel to the Floor Beam of the OBG Segment 13AW. The welder is identified as 066258. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. 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 Seg3013AD-033 located on Side Panel to the Floor Beam of the OBG Segment 13AW. The welder is identified as 066361. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

#### Flux Cored Arc Welding (FCAW)

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as DP3159-001-259 located on Deck Panel Diaphragm to U-Rib of the OBG Segment 14E. The welder is identified as 062782. ZPMC Quality Control (QC) is identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appeared to comply with WPS-B-T-2133-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3019J-026 located on Floor Beam to Side Plate of the OBG Segment 14E. The welder is identified as 066673. ZPMC Quality Control (QC) is identified as Mr. Wang Xu. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3019J-028 located on Floor Beam to Side Plate of the OBG Segment 14E. The welder is identified as 062782. ZPMC Quality Control (QC) is identified as Mr. Wang Xu. The welding variables recorded by QC appeared to comply with WPS-B-T-2133-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as Seg3019M-037 located on the OBG Segment 14E at PP127. The welder is identified as 68501. ZPMC Quality Control (QC) is identified as Mr. Wang Xu. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as DP3159-001-057 and 061 located on Deck Panel Diaphragm to U-Rib of the OBG Segment 14E. The welder is identified as 217805. ZPMC Quality Control (QC) is identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appeared to comply with WPS-B-T-2133-ESAB. See attached Photos "A" and "B":

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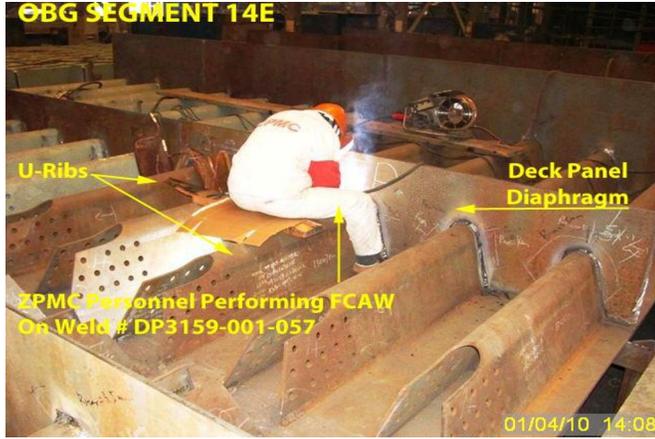
# WELDING INSPECTION REPORT

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Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable 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 Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Singh, Vikram

Quality Assurance Inspector

**Reviewed By:** Patterson, Rodney

QA Reviewer

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