

**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-015662**Date Inspected:** 17-Jul-2010**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:** Wu Zhi Zhang**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 day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TRIAL ASSEMBLY YARD

ULTRASONIC INSPECTION

OBG SEGMENT 9BE-9CE

ABF Request No: 07162010-1

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a data sheet that Caltrans QA generates after performing a joint inspection. The members are identified as the side panel splice weld between OBG segment 9BE and 9CE (cross beam side). Inspection was carried out on repair areas. The weld designations are as follows.

OBE9B- 006 (OBG 9BE-9CE- S.P, C.B side)

TRIAL ASSEMBLY YARD

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## WELDING INSPECTION REPORT

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This QA Inspector randomly observed the following work in progress.

### OBG SEGMENT 9DE-9EE

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 054458 performing Submerged Arc Welding process for weld 008 located on PCMK OBE9A. ZPMC QC Mr. Wu Zhi Zhang monitoring this welding.

The welding variables recorded by QC appeared to comply with the WPS-B-T-223 (2)1T-2.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067765 performing Shielded Metal Arc Welding process for weld 018 located on PCMK DP699-001. ZPMC QC Mr. Liu Hua Jia monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4114-1.

### OBG SEGMENT 9BW-9CW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045280 performing Flux Cored Arc Welding process for weld 007 located on PCMK OBW9B. ZPMC QC Mr. Wang Zhu monitoring this welding.

The welding variables recorded by QC appeared to comply with the WPS-B-T-2233T-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045240 performing Flux Cored Arc Welding process for weld 006 located on PCMK OBW9B. ZPMC QC Mr. Wang Zhu monitoring this welding.

The welding variables recorded by QC appeared to comply with the WPS-B-T-2233T-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045196 performing Shielded Metal Arc Welding process for weld 006 located on PCMK OBW9-006. ZPMC QC Mr. Wang Zhu monitoring this welding.

The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-u2-fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045143 performing Flux Cored Arc Welding process for weld 009 located on PCMK OBW9B. ZPMC QC Mr. Wang Zhu monitoring this welding.

The welding variables recorded by QC appeared to comply with the WPS-B-T-2233T-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 069683 performing Flux Cored Arc Welding process for weld 010 located on PCMK OBW9B. ZPMC QC Mr. Wang Zhu monitoring this welding.

The welding variables recorded by QC appeared to comply with the WPS-B-T-2233T-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066326 performing Shielded Metal Arc Welding process for weld 044 located on PCMK SEG051\*. ZPMC QC Mr. Wang Zhu monitoring this welding.

The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-Tc-u4b-fcm-1.

## MAGNETIC PARTICLE INSPECTION

### OBG SEGMENT 9BE-9CE

ABF Request No: 07162010-1

This QA Inspector Witnessed ABF personal performing Magnetic particle Testing (MT) on the side panel splice welds between OBG segment 9BE and 9CE (cross beam side). Inspection was carried out on repair areas. Weld identification number were.

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# WELDING INSPECTION REPORT

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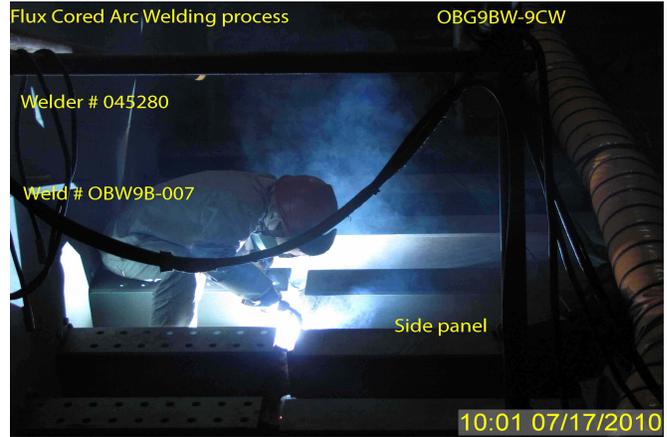
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OBE9B-006 (OBG 9BE-9CE, S.P, CB side)

No relevant indications were observed.

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



## Summary of Conversations:

Only general conversation was held between QA and QC

## 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, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Utekar,Shrikant

Quality Assurance Inspector

**Reviewed By:** Peterson,Art

QA Reviewer

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